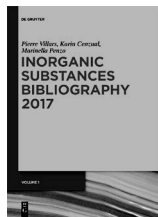
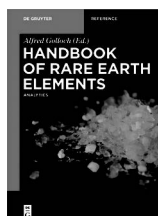


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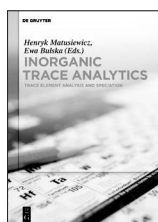
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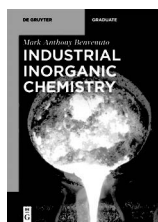
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Preface

Handbook of Inorganic Substances 2017

Over 100 000 different inorganic substances (also called compounds or phases) have been structurally characterized since the discovery of X-ray diffraction in 1912. The information has been published in some 200 000 publications spread over more than 1 000 different scientific journals. The aim of this handbook is to provide the researcher and student with a comprehensive compilation of presently defined crystallographically identified inorganic substances within one volume. The selection of data included in this volume is based on a qualitative approach – all data having passed a quality check. In contrast, the companion publication “Inorganic Substances Bibliography” tries to give a quantitative overview of relevant publications.

This handbook is a product of the PAULING FILE project¹ (see below). An inorganic substance is defined in the PAULING FILE by the chemical system and the crystal structure, and has been given a unique name where the chemical formula is followed by a specification (*e.g.* ht, orth) when relevant. The crystal structure is defined by referring to a prototype (structure type), if known. For not yet (fully) investigated structures, partial structural information is given if available, *e.g.* the complete Pearson symbol may be replaced by t** (tetragonal) or cI* (cubic body-centered).

How to read the Data

System	Substance	Prototype	H-M	Unit Cell Parameters <i>a,b,c,α,β,γ</i> (nm,°)	Family	Color	<i>D</i> _x	C	Ref.
Ga-Na-O	NaGaO ₂ rt	NaFeO ₂ , oP16,33	<i>Pna</i> 2 ₁	0.5515,0.7192, 0.5298,90,90,90	adamantane structure	colorless	3.94	X	26763
Alphabetically sorted chemical elements	Chemical formula	Prototype (structure type): type-defining compound, Pearson symbol, space group number	Hermann-Mauguin symbol for the space group	Standardized cell parameters	Mineral name or structural family		Density (Mg m ⁻³) calculated from the chemical formula and unit cell volume	Code indicating the level of structural studies (see list of abbreviations below)	Reference number, link to a data source listed in the Reference section

A: no atom coordinates refined (or published), but prototype assigned

F: parent type assigned for a filled-up derivative

N: no atom coordinates refined (or published), prototype not assigned

P: part of atom coordinates not refined (proton sites ignored)

X: atom coordinates refined or fixed

Pearson symbol: first letter of the crystal system (c: cubic, h: hexagonal/trigonal, t: tetragonal, o: orthorhombic,

m: monoclinic, a: anorthic triclinic) followed by the Bravais lattice Bravais lattice (P: primitive, S: one-face centered, I: body centered, R: rhombohedrally centered, F: all-face centered) and the sum of the multiplicities of all partly or fully occupied sites in the unit cell (or estimated number of atoms in the unit cell for unknown structures); proton sites are ignored

Table 1 Content of the main table.

All the data has been processed and critically evaluated by the editor team of the PAULING FILE, using a unique software package. For the numerous cases where the same inorganic substance has been investigated several times, representative data has been selected (130 000 selected from 288 000 processed entries).

The data has been sorted in first priority according to the number of chemical elements in the chemical system, in second priority in alphabetic order of the chemical system, and in third priority according to the chemical formula (automatic alphabetic order). Systems with 6-10 chemical elements have been grouped together and sorted according to the first three elements of the alphabetically sorted element-system, and then to the chemical formula.

The data part is followed by a reference part, giving minimal information required to uniquely identify the scientific publications. The short document names contain the following parts: CODEN, year, volume, issue/article, first page, last page. A table listing the CODENs and conventional abbreviated names of the near 1 000 quoted journals is given after the preface.

The prototype assignment is a well-known concept in inorganic chemistry, where often a large number of compounds crystallize with very similar atom arrangements. The compilation 'Strukturbericht' started to catalogue crystal structures into types, named by codes such as A1, B1 or A15. These notations are still in use, however, nowadays prototypes are generally referred to by the name of the compound for which this particular kind of atom arrangement was first identified, *i.e.* for the types enumerated above: Cu, NaCl, Cr₃Si. The PAULING FILE uses a longer notation, which also includes the Pearson symbol and the number of the space group in the International Tables for Crystallography: Cu,cF4,225, NaCl,cF8,225, Cr₃Si,cP8,223. All data sets with published coordinates in the PAULING FILE are classified into prototypes, following criteria defined in TYPPIX². According to this definition, isotypic compounds must crystallize in the same space group, have similar cell parameter ratios and occupy the same Wyckoff positions in the standardized description with the same or similar values of the atom coordinates. If all these criteria are fulfilled, the atomic environments should be similar. No distinction is made between structures with fully and partly occupied atom sites. When possible, a prototype has also been assigned to data sets without atom coordinates. The prototype is often stated in the publication, in other cases it has been assigned by the editors. The assigned type may, in some cases, be an approximation of the real structure, ignoring for instance, a certain disorder.

The elements in the chemical formula are sorted according to an internal list and selected chemical units (water, phosphate, sulfate, *etc.*) are emphasized in square brackets. The cell parameters have been standardized², so that they always refer to the first description in the International Tables for Crystallography (Niggli-reduced cell for triclinic structures, unique axis *b* for monoclinic structures, triple hexagonal cell for rhombohedral structures). This is also true for the Hermann-Mauguin symbol. When relevant, the space group, and/or the cell, has been corrected in order to take into consideration all of the symmetry elements contained in the proposed structure model. Priority has been given to cell parameters determined at ambient conditions, but may not always be the case. The reference number links the data row to the source of the (originally published) cell parameters, whereas the colour or mineral name may come from another publication. The structure class was assigned by the editors.

Due to lack of space, some columns have been omitted, or their content shortened, for multinary element-systems. For more than three chemical elements, the Hermann-Mauguin symbol has been left out and the typedefining compound replaced by "idem", when identical to the chemical formula in the same row. For the last section, containing data for systems with more than five elements, the complete expression for the prototype has been replaced by the Pearson symbol and the space group number.

Crystallographic data of approx. 10 000 inorganic substances are published yearly in literature world-wide, representing about 5 000 distinct substances. The information is contained in approx. 7 000 scientific publications. Each new edition of the handbook contains data for new substances, in addition to the updated information for substances contained in the preceding edition.

PAULING FILE project

One of the most challenging tasks in materials science is the design of new materials with distinct properties. In general, two different approaches are explored:

1. The first one is to simulate the motion of the atoms in the material as well as their electronic interactions as close to reality as possible by using calculations on the quantum-mechanical level. This is an extremely demanding task, especially if the calculation of the property under investigation requires a long-time simulation. However, at least in theory, there is no input other than the laws of quantum mechanics, so using these calculations the material properties can be understood right away from *first principles*. Based on this understanding, it should be possible to design new materials with distinct properties just by computer simulations.
2. The second approach seems to be less challenging at first glance, since it does not ask for the really fundamental principles but remains on a more pragmatic level: Most of our current knowledge in chemistry and materials science has been collected *empirically*, just by searching for patterns and rules in experimental results published in the literature. During the past 100 years or so, a huge pile of various types of corresponding data like crystal structures, powder diffraction patterns, phase diagrams and physical properties has been collected for a large variety of compounds. This information is mainly available in various materials databases.

Beside the classical use of these databases for analysis, phase identification and teaching purposes, it should be worthwhile trying to use modern computer technology to search for additional rules and correlations implied in these data and use them in materials design.

Both approaches have their own advantages and problems: While the first one does (at least in principle) not rely on experiments and should result in a really deep understanding of fundamental correlation in solids, it is computationally extremely demanding and can currently only be applied to a limited number of rather simple solids. The second approach needs by far less computational effort and may thus (at least in the beginning) lead to faster success; however, it is extremely depending on the availability of a sufficiently large number of experimental data of appropriate quality. An additional problem concerning this second empirical approach is that, up to now, the relevant data types have been stored in separate, isolated databases, each using its own proprietary retrieval software. This made the investigations rather tedious and prohibited the user from performing an overall data analysis in order to discover hidden patterns and correlations.

These shortcomings of the empirical approach provided the basic motivation for the initiation of the PAULING FILE project, which started in 1995 as a collaboration between Japan Science and Technology Corporation (JST), Material Phases Data System (MPDS), and The University of Tokyo, RACE. Since 2002 the project is under the leadership of MPDS.

The first goal is to create and maintain a comprehensive materials database for all non-organic (no C-H bonds) solid state materials (systems), covering crystallographic data, phase diagrams, diffraction patterns and physical properties. An important aspect, along with completeness, is the quality of the data. The data have been checked with extreme care, since unrecognized errors will at least confuse the correlation tools, if not result in wrong rules that may be deduced.

Notes

¹ P. Villars, M. Berndt, K. Brandenburg, K. Cenxual, J. Daams, F. Hulliger, T. Massalski, H. Okamoto, K. Osaki, A. Prince, H. Putz, S. Iwata, The PAULING FILE, Binaries Edition, *J. Alloys Compd.* 367 (2004) 293–297; <http://paulingfile.com>

² E. Parthé, L. Gelato, B. Chabot, M. Penzo, K. Cenxual, R. Gladyshevskii, *Gmelin Handbook of Inorganic and Organometallic Chemistry*, 8th Ed., *TYPIX – Standardized Data and Crystal Chemical Characterization of Inorganic Structure Types*, 4 volumes, Heidelberg: Springer 1993, 1994.

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List of journal CODENs

11TNAQ	Proc. U. N. Int. Conf. Peaceful Uses At. Energy, 2nd	AENGAB	At. Energy.	BNSKAK	Bunseki Kagaku
12KYAL	Plutonium 1960, Proc. Int. Conf. Plutonium Metall., 2nd	AENMFY	Adv. Eng. Mater.	BOCQAX	Bol. Soc. Chil. Quim. (1949-2002)
12XNAJ	Extr. Phys. Metall. Plutonium Alloys, Symp.	AFMDC6	Adv. Funct. Mater.	BPACQE	Bull. Pol. Acad. Sci. Chem.
14OQAV	Vopr. Teor. Primen. Redkozem. Met., Mater. Soveshch.	AGHUE7	Acta Geol. Hung.	BPCMFX	Bioceram., Proc. Int. Symp. Ceram. Med.
14PCAS	Carbides Nucl. Energy, Proc. Symp.	AGKGAA	Kenkyu Hokoku - Asahi Garasu Kogyo Gijutsu Shoreikai	BPSMA6	Bull. Acad. Pol. Sci., Cl. 3
17HBA6	Struct. Alloys Certain Systems Cont. Uranium Thorium	AGSIDP	Acta Geol. Sin. Engl. Transl.	BSCBAG	Bull. Soc. Chim. Belg.
17XIA5	Chem. Ext. Defects Non-Met. Solids, Proc. Inst. Adv. Study	AGSREJ	Arab Gulf J. Sci. Res.	BSCFAS	Bull. Soc. Chim. Fr.
18IPAQ	Plansee Proc. Pap. Plansee Semin. "De Re Met.", 2nd	AHUT44	Arch. Hutn.	BSRSA6	Bull. Soc. R. Sci. Liege
18IP50	Plansee Proc. Pap. Plansee Semin. "De Re Met.", 11th	AIVLQA	Atti - Ist. Veneto Sci., Lett., Arti, Cl. Sci. Mat., Nat.	BTC181	Bin. Tern. Carbide Nitride Uebergangsmetalle Phasenbeziehungen
18IP52	Plansee Proc. Pap. Plansee Semin. "De Re Met.", 12th	AJBOAA	Am. J. Bot.	BTITA5	Bull. Tokyo Inst. Technol.
18JWAI	Proc. Conf. Rare Earth Res., 2nd	AJCHAS	Aust. J. Chem.	BUFCAE	Bull. Soc. Fr. Mineral. Cristallogr.
18JXAL	Proc. Conf. Rare Earth Res., 3rd	AJCHEW	Asian J. Chem.	BUGMAF	Geol. Soc. Am. Bull.
18JYAO	Proc. Conf. Rare Earth Res., 4th	AJCRDR	Arabian J. Chem.	BULMD9	Bull. Mineral.
18LCA2	Proc. Int. Conf. Peaceful Uses At. Energy, 3rd	AJSCAP	Am. J. Sci.	BUMSDW	Bull. Mater. Sci.
19EVAV	Plutonium 1965, Proc. Int. Conf., 3rd	AKMGAE	Ark. Kemi Mineral. Geol.	BUPSAA	Bull. Russ. Acad. Sci., Phys. Ser.
20EFAZ	Anisotropy Single-Cryst. Refract. Compd., Proc. Int. Symp.	ALOSAX	Arch. Lagerstaettenforsch. Ostalpen	BYGSAR	Brigham Young Univ. Geol. Stud.
20EZAR	Thermodyn. Nucl. Mater., Proc. Symp.	ALUMAB	Aluminium (Isernhagen, Ger.)	CAAJBI	Chem. Asian J.
20ZRA6	Diagrammy Sostoyaniya Met. Sist., Mater. Vses. Soveshch.	AMATEB	Acta Metall. Mater.	CALEER	Catal. Lett.
23HWAI	Proc. Rare Earth Res. Conf., 7th	AMCICK	Acta Microsc.	CAMIA6	Can. Mineral.
24RIAX	Proc. Rare Earth Res. Conf., 9th	AMETAR	Acta Metall.	CASCFN	C. R. Acad. Sci., Ser. IIC
24WEAC	Diagrammy Sostoyaniya Met. Sist., Mater. Vses. Soveshch., 4th	AMLDAE	Adv. Mater. Lett.	CCACAA	Croat. Chem. Acta
25CZAG	Redkozem. Met. Splavy, Vses. Soveshch. Redkozem. Elem. (Mater.), 6th	AMMDAJ	IMD Spec. Rep. Ser.	CCCCAC	Collect. Czech. Chem. Commun.
29SDAO	Strukt. Faz, Fazovye Prevrashch. Diagrammy Sostoyaniya Met. Sist.	AMMIAY	Am. Mineral.	CCCTD6	CALPHAD
30NNAD	Proc. Rare Earth Res. Conf., 11th	AMNGAX	Ark. Mineral. Geol.	CCJDAO	J. Chem. Soc. D
31XGAD	Thermodyn. Nucl. Mater., Proc. Symp., 4th	AMNVAA	Arch. Math. Naturvidensk.	CCLEE7	Chin. Chem. Lett.
33DSAV	Proc. Rare Earth Res. Conf., 10th	AMPCCX	Adv. Mater. Phys. Chem.	CCMPA7	Clays Clay Miner., Proc. Conf.
33IYA6	Plutonium 1975 Other Actinides, Proc. Int. Conf., 5th	AMREFI	Adv. Mater. Res. Zuerich	CCNRA1	Cement Concr. Res.
33WQAI	Proc. Rare Earth Res. Conf., 12th	AMSAEE	Acta Metall. Sin. Engl. Ed., Ser. A	CCOMA8	Chem. Commun. (London)
38NEA6	Valence Instab. Relat. Narrow-Band Phenom., Proc. Int. Conf.	AMSBEE	Acta Metall. Sin. Engl. Ed., Ser. B	CCUSBN	Chem. Commun. (Stockholm Univ.)
38QEAL	Nek. Vopr. Eksp. Teor. Fiz.	ANCEAD	Angew. Chem.	CEJCAZ	Cent. Eur. J. Chem.
39NVAU	High-Pressure Low-Temp. Phys., Proc. Int. Conf.	ANCHAM	Anal. Chem.	CESPDK	Ceram. Eng. Sci. Proc.
40JAAx	Handb. Phys. Chem. Rare Earths	ANCPAC	Ann. Chim. (Paris)	CETREW	Ceram. Trans.
43GQAH	Fast Ion Transp. Solids Electrodes Electrolytes, Proc. Int. Conf.	ANCRAI	Ann. Chim. (Rome)	CEUJED	Chem. Eur. J.
44JWAN	Proc. Int. Conf. Zeolites, 5th	ANPYA2	Ann. Phys. (Leipzig)	CGDEUF	Cryst. Growth Des.
45ITAG	Thermodyn. Nucl. Mater. 1979, Proc. Int. Symp.	ANQUEX	An. Quim. (1990-1995)	CHBEAM	Chem. Ber.
46NDAY	Ternary Supercond., Proc. Int. Conf.	ANSCEN	Anal. Sci.	CHBRFW	Chem. Ber./Recl.
47SFA4	Fazovye Ravnovesiya Met. Splavakh	APAMFC	Appl. Phys. A	CHCOFS	Chem. Commun. (Cambridge)
48YNAV	Valence Instab., Proc. Int. Conf.	APASAP	Acta Phys. Austriaca	CHDBAN	C. R. Seances Acad. Sci., Ser. B
48ZAAV	Cryst. Electr. Field Eff. f-Electron Magn., Proc. Int. Conf., 4th	APBOEM	Appl. Phys. B: Lasers Opt.	CHDCAQ	C. R. Seances Acad. Sci., Ser. C
49YJQA	Proc. Int. Conf. Rapidly Quenched Met., 4th	APCPCS	AIP Conf. Proc.	CHDDAT	C. R. Seances Acad. Sci., Ser. D
50IDAE	Supercond. d- f-Band Met., Proc. Conf., 4th	APEPC4	Appl. Phys. Express	CHEIDI	Chem. Ind. (Dekker)
51BLA8	Issled. Primen. Splavov Tugoplavkikh Met.	APHSEU	Acta Phys. Sin. Overseas Ed.	CHEMA0	Chem. Met. Alloys
52TTAR	Proc. Int. Conf. Magn. Rare-Earths Actinides	APHUE2	Acta Phys. Hung.	CHEMM5	ChemPlusChem
54JZA9	Weglikki, Azotki, Borki, Miedzynar. Konf., 3rd	APHYCC	Appl. Phys. (Berlin)	CHIMAD	Chimia
54NMAO	Solid State Phys. Pressure: Recent Adv. Anvil Devices	APPLAB	Appl. Phys. Lett.	CHINAG	Chem. Ind. (London)
55HCA5	Prog. Metall. Res.: Fundam. Appl. Aspects, Proc. Int. Conf.	APSFDB	Appl. Phys. A	CHJPBS	Chin. J. Phys. Peking
AAFCAX	Ann. Acad. Sci. Fenn., Ser. A2	AQIEFZ	An. Quim. Int. Ed.	CHPHD2	Chin. Phys.
AAFFPA	Ann. Acad. Sci. Fenn., Ser. A6	AQVUA7	Av. Quim.	CHPHF4	Chin. Phys. (Beijing, China)
AANLAW	Atti Accad. Naz. Lincei, Cl. Sci. Fis., Mat. Nat., Rend.	AREIAT	Arch. Eisenhuettenwes.	CHPLBC	Chem. Phys. Lett.
AASRFC	Adv. Appl. Sci. Res.	ARKEAD	Ark. Kemi	CHSPA4	Jinshu Xuebao
AATFAA	Atti Accad. Sci. Torino, Cl. Sci. Fis., Mat. Nat.	ARSFAM	An. R. Soc. Esp. Fis. Quim., Ser. A	CHZVAN	Chem. Zvesti
ACACBN	Acta Crystallogr. A	ASBSDK	Acta Crystallogr. B	CINNDH	Ceram. Int.
ACACEQ	Acta Crystallogr. A	ASETE5	Adv. Sci. Technol. (Faenza, Italy)	CJWYAO	Year Book - Carnegie Inst. Washington
ACAGE4	Appl. Catal., A	ASGVAH	Arch. Sci.	CJASFA	Can. J. Anal. Sci. Spectrosc.
ACAPCT	Acta Chem. Scand. A	ASMQAW	ASM Trans. Q.	CJCHAG	Can. J. Chem.
ACAWIN	Am. Crystallogr. Assoc., Winter Meet.	ASRBAC	Appl. Sci. Res., Sect. B	CJGEEV	Chin. J. Geochem.
ACBCAR	Acta Crystallogr. B	ASUEE6	Appl. Sci. Res., Sect. B	CMJTE4	Chin. J. Met. Sci. Technol.
ACCRA9	Acta Crystallogr.	ATKEAR	Appl. Supercond.	CJOCEV	Chin. J. Chem.
ACGHAX	Acta Geol. Hisp.	ATKEDU	Atomkernenergie	CJPAW	Chin. J. Phys. (Taipei)
ACHSE7	Acta Chem. Scand.	ATPLB6	Atomkernenergie / Kerntech.	CJPHAD	Can. J. Phys.
ACIEAY	Angew. Chem. Int. Ed. Engl.	ATVAA2	Acta Phys. Pol. A	CJSPEM	Can. J. Appl. Spectrosc.
ACIEF5	Angew. Chem. Int. Ed.	AUCGAY	Atti Soc. Toscana Sci. Nat. Pisa, Mem., Ser. A	CLADA8	Cryst. Lattice Defects
ACMAFD	Acta Mater.	AUCPAS	Acta Univ. Carol., Geol.	CLASAJ	Clay Sci.
ACPYAR	Acta Physicochim. URSS	AUNVAW	Aust. J. Phys.	CLCMAB	Clays Clay Miner.
ACSA44	Acta Chem. Scand.	AUSEA6	Avh. Nor. Vidensk.-Akad., 1: Mat. Naturvidensk. Kl.	CLHEAC	Chalcogenide Lett.
ACSBDA	Acta Crystallogr. B	AXRAAA	Acta Mineral. Petrogr.	CLMIAF	Clay Miner.
ACSCEE	Acta Crystallogr. C	AZKZAU	Adv. X-Ray Anal.	CMATEX	Chem. Mater.
ACSCGG	Acta Crystallogr. C	BACCAT	Azerbai. Khim. Zh.	CMCAEQ	C. R. Acad. Sci., Ser. IIB
ACSEBH	Acta Crystallogr. E	BAPCAQ	Bull. Acad. Sci. USSR, Div. Chem. Sci.	CMLTAG	Chem. Lett.
ACSECI	Acta Crystallogr. E	BASNA6	Bull. Acad. Pol. Sci., Ser. Sci. Chim.	CMPEAP	Contrib. Mineral. Petrol.
ACSIEW	Acta Chim. Sin. Engl. Ed.		Bull. - Acad. Serbe Sci. Arts, Cl. Sci. Math. Nat.: Sci. Nat.	COBAAP	Cobalt Engl. Ed.
ACSL77	Acta Chim. Slov.			COINAV	Colloq. Int. C. N. R. S.
ACSMC8	ACS Symp. Ser.	BBPCAX	Ber. Bunsen-Ges.	COREAF	C. R. Hebd. Seances Acad. Sci.
ACDSAJ	Adv. Chem. Ser.	BCPREL	Br. Ceram. Proc.	CPBHAJ	Chin. Phys. B
ADVMEW	Adv. Mater.	BCSAAF	Bull. Cl. Sci., Acad. R. Belg.	CPDDT0	Comp. Phase Diagram Data, Ternary Phase Equil. TM-B-C-Si, AFML-Tr-65-2, Part V
AELCH	Al'tern. Energ. Ekol.	BCSJA8	Bull. Chem. Soc. Jpn.		Chin. Phys. Lett.
		BGGUA9	Bull. Groenl. Geol. Unders.	CPLEEU	C. R. Acad. Sci., Ser. II
		BIMADU	Biomaterials	CRAUAX	C. R. (Dokl.) Acad. Sci. URSS
		BJAPAJ	Br. J. Appl. Phys.	CRBNAH	Carbon
		BJPHD5	Bulg. J. Phys.	CRCOCR	C. R. Chim.
		BJPHE6	Braz. J. Phys.	CRUCUD	Chem. Res. Chin. Univ.
		BKCSDE	Bull. Korean Chem. Soc.	CRCEF4	CrystEngComm
		BKKIS1	Tezizy Dokl. Vses. Konf. Kristallokhim. Internet. Soeden., 1st	CRGOAB	C. R. Geosci.
			Tezizy Dokl. Vses. Konf. Kristallokhim. Internet. Soeden., 1st	CRSUDO	C. R. Seances Acad. Sci., Ser. 2
		BKKIS2	Tezizy Dokl. Vses. Konf. Kristallokhim. Internet. Soeden., 2nd	CRTEDF	Cryst. Res. Technol.
			Tezizy Dokl. Vses. Konf. Kristallokhim. Internet. Soeden., 2nd	CRYEF8	Cryst. Eng.
		BKKIS3	Tezizy Dokl. Vses. Konf. Kristallokhim. Internet. Soeden., 3rd	CRYOAX	Cryogenics
			Tezizy Dokl. Vses. Konf. Kristallokhim. Internet. Soeden., 3rd	CRYSBC	Crystals
		BKKIS4	Tezizy Dokl. Vses. Konf. Kristallokhim. Internet. Soeden., 4th	CSBUEF	Chin. Sci. Bull.
			Tezizy Dokl. Vses. Konf. Kristallokhim. Internet. Soeden., 4th	CSCMCS	Cryst. Struct. Commun.
		BKKIS5	Tezizy Dokl. Vses. Konf. Kristallokhim. Internet. Soeden., 5th	CSRPB9	Chem. Scr.
		BKNSAW	Bull. Boris Kidric Inst. Nucl. Sci.	CSSPAD	Spec. Publ. - Chem. Soc.
		BMUPA4	Beitr. Mineral. Petrogr.	CTCPDB	Changchun Dizhi Xueyuan Xuebao
				CUSCAM	Curr. Sci.

CYSTE3	Crystallogr. Rep.	HETCE8	Heteroat. Chem.	JCOMEL	J. Phys.: Condens. Matter
CYXUEV	Cailiao Yanjiu Xuebao	HHHPA4	Huaxue Xuebao	JCORBX	J. Crystallogr.
CZYPAO	Czech. J. Phys.	HHHPD7	Hangzhou Daxue Xuebao, Ziran Kexueban	JCPBAN	J. Chim. Phys. Phys.-Chim. Biol.
DABBBA	Diss. Abstr. Int. B	HITEA4	High Temp.	JCPKBH	J. Chem. Soc., Perkin Trans. 2
DAKNEQ	Dokl. Akad. Nauk	HITSAC	High Temp. Sci.	JCPSA6	J. Chem. Phys.
DALTFG	Dalton (2000)	HMHHAF	Xiamen Daxue Xuebao, Ziran Kexueban	JCPTCB	J. Crystall. Process Technol.
DANKAS	Dokl. Akad. Nauk SSSR	HPACAK	Helv. Phys. Acta	JCREDB	J. Crystallogr. Spectrosc. Res.
DANND6	Dopov. Akad. Nauk Ukr. RSR, Ser. B	HPRSEL	High Pressure Res.	JCRGAE	J. Cryst. Growth
DANSEM	Dokl. Akad. Nauk Ukr. SSR	HSHAF7	Han'guk Seramik Hakhoechi	JCSBB5	J. Chem. Sci. (Bangalore, India)
DANTAL	Dokl. Akad. Nauk Tadzh. SSR	HTHPAK	High Temp. - High Pressures	JCSCEB	J. Cluster Sci.
DAUREK	Dopov. Akad. Nauk Ukr. RSR	HUXUFP	Huozhayao Xuebao	JCSDAA	J. Chem. Soc., Dalton Trans.
DAZRA7	Dokl. Akad. Nauk Az. SSR	HYINDN	Hyperfine Interact.	JCSIAP	J. Chem. Soc. A
DBANAD	Dokl. Bolg. Akad. Nauk	HYIYFM	Huaxue Yanjiu Yu Yingyong	JCSJEW	J. Ceram. Soc. Jpn.
DBANEH	Dokl. Bulg. Akad. Nauk	IAFMAF	Izv. Akad. Nauk Az. SSR, Ser. Fiz.-Tekh. Mat. Nauk	JCSOA9	J. Chem. Soc.
DBGGAM	Dopov. Akad. Nauk Ukr. RSR, Ser. B			JCSPDF	J. Chem. Soc. Pak.
DBLRAC	Dokl. Akad. Nauk BSSR	IANFAY	Izv. Akad. Nauk SSSR, Ser. Fiz.	JCTBDC	J. Chem. Technol. Biotechnol.
DDFEAP	Def. Diff. Forum	IASKA6	Izv. Akad. Nauk SSSR, Ser. Khim.	JCTLA5	J. Catal.
DESOAP	Dokl. Earth Sci.	ICACEC	Indian J. Chem., Sect. A	JCUGEX	J. China Univ. Geosci.
DHWHAB	Taehan Hwahakhoe Chi	ICCI10	Abstr. 10th Int. Conf. Crystal Chem. Internet. Compd.	JDREAF	J. Dent. Res.
DIASA9	Diss. Abstr.	ICCI11	Abstr. 11th Int. Conf. Crystal Chem. Internet. Compd.	JECMA5	J. Electron. Mater.
DIKARM	Diss. Univ. Karlsruhe			JECNEC	JAERI-Conf.
DIKEEL	Diqui Kexue	ICCI12	Abstr. 12th Int. Conf. Crystal Chem. Internet. Compd.	JECSEJ	J. Eur. Ceram. Soc.
DKCHAY	Dokl. Chem.			JEJOAC	J. Electrochem. Soc. Jpn.
DKOKAZ	Denki Kagaku oyobi Kogyo Butsuri Kagaku	ICCIC6	Abstr. 6th Int. Conf. Crystal Chem. Internet. Compd.	JELJA7	J. Electron Microsc.
DKPCAG	Dokl. Phys. Chem.			JERNAF	Jernkontorets Ann.
DKQIFA	Dizhi Keji Quingbao	ICCIC7	Abstr. 7th Int. Conf. Crystal Chem. Internet. Compd.	JESOA9	J. Electrochem. Soc.
DNAUFL	Dopov. Nats. Akad. Nauk Ukr.			JFHGAJ	J. Fac. Sci., Hokkaido Univ., Ser. 4
DNUKEM	Dopov. Akad. Nauk Ukr.	ICCIC8	Abstr. 8th Int. Conf. Crystal Chem. Internet. Compd.	JFLCAR	J. Fluorine Chem.
DNUNDU	Dopov. Akad. Nauk Ukr. RSR, Ser. A			JGCHA4	J. Gen. Chem. USSR
DOPHFU	Dokl. Phys.	ICCIC9	Abstr. 9th Int. Conf. Crystal Chem. Internet. Compd.	JGOEBM	J. Geosci.
DSTSO9	Diagrammy Sostoyaniya Tugoplavkikh Sistem			JGREA2	J. Geophys. Res.
DTARAF	Dalton Trans.	ICCOFP	Inorg. Chem. Commun.	JGSC55	J. Geol. Soc. China
DUKABM	Dopov. Akad. Nauk Ukr. RSR, Ser. A	ICHAA3	Inorg. Chim. Acta	JHAPAP	J. Sci. Hiroshima Univ., Ser. A-2
DUKRA4	Dopov. Akad. Nauk Ukr. RSR	ICICC6	Teziy Dokl. Sov. Kristallokhim. Neorg. Koord. Soeden., 6th	JHMAD9	J. Hazard. Mater.
DWUXUES	Diwen Wuli Xuebao			JHPCAR	J. Sci. Hiroshima Univ., Ser. A
ECCMF9	Electrochem. Commun.	IECRED	Ind. Eng. Chem. Res.	JHUADF	Jiegou Huaxue
ECGLAL	Econ. Geol.	IEMGAQ	IEEE Trans. Magn.	JICSAH	J. Indian Chem. Soc.
ECM012	Abstr. Eur. Crystallogr. Meet., 12th	IERME5	Intermetallics	JIMCEN	J. Inclusion Phenom. Mol. Recognit. Chem.
ECM013	Abstr. Eur. Crystallogr. Meet., 13th	IFEREU	Integr. Ferroelectr.	JIMEAP	J. Inst. Met.
ECM014	Abstr. Eur. Crystallogr. Meet., 14th	IINTEY	ISIJ Int.	JINCAO	J. Inorg. Nucl. Chem.
ECM015	Abstr. Eur. Crystallogr. Meet., 15th	IJACCP	Int. J. Appl. Ceram. Technol.	JIPCFS	J. Inclusion Phenom. Macrocyclic Chem.
ECM376	Abstr. Eur. Crystallogr. Meet., 3rd	IUCADU	Indian J. Chem., Sect. A	JISLAX	J. Iron Steel Inst., London
ECM782	Abstr. Eur. Crystallogr. Meet., 7th	IUCGDE	Int. J. Coal Geol.	JJAPA5	Jpn. J. Appl. Phys.
ECSSC6	Eur. Conf. Solid State Chem., 6th	IJCNCY	Int. J. Chem.	JJAPB6	Jpn. J. Appl. Phys.
EECTFA	Electrochemistry (Tokyo)	IJHEDX	Int. J. Hydrogen Energy	JJGBDU	J. Geophys. Res. B
EELCBY	ECS Electrochem. Lett.	IJMCR	Int. J. Inorg. Mater.	JJSEEW	JJAP Ser.
EGMME1	Proc. 1st Egypt Conf. Min. Met. Technol.	IJMAE	Int. J. Magn.	JKCSBW	J. Korean Ceram. Soc.
EGYJS0	Egypt. J. Solids	IJMRFV	Int. J. Mater. Res.	JKCSEZ	J. Korean Chem. Soc.
EJICFO	Eur. J. Inorg. Chem.	IJOCAJ	Indian J. Chem.	JKPSDV	J. Korean Phys. Soc.
EJMIER	Eur. J. Mineral.	IJOPAU	Indian J. Pure Appl. Phys.	JLTPAC	J. Low Temp. Phys.
EJOSFY	Eur. J. Org. Chem.	IPBEV	Int. J. Mod. Phys. B	JLUMA8	J. Lumin.
EJSC55	Eur. J. Solid State Inorg. Chem.	IPYAS	Indian J. Phys.	JMACEP	J. Mater. Chem.
EJSSBG	ECS J. Solid State Sci. Technol.	INMIAR	Indian Miner.	JMATE8	J. Mater. Sci. Technol. (Sofia)
ELCAAV	Electrochim. Acta	INOCAR	Inorg. Chem.	JMCAET	J. Mater. Chem. A
EMLLAE	Electron. Mater. Lett.	INOMAF	Inorg. Mater.	JMCCCX	J. Mater. Chem. C
EPAPFV	Eur. Phys. J.: Appl. Phys.	INUCAF	Inorg. Nucl. Chem. Lett.	JMCCF2	J. Mol. Catal. A
EPJBFI	Eur. Phys. J. B	IONIFA	Ionics	JMICAR	J. Micros. (Oxford)
EPLAC4	EPL	IPHSAC	Conf. Ser. - Inst. Phys.	JMMMD	J. Magn. Magn. Mater.
EPSLA2	Earth Planet. Sci. Lett.	IRAFEO	Izv. Ross. Akad. Nauk, Ser. Fiz.	JMOIA7	Joannea Mineral.
ESLEF6	Electrochem. Solid-State Lett.	IRJPFW	Int. Res. J. Pure Appl. Chem.	JMOSB4	J. Mol. Struct.
ESP184	EPS Conf. Electron. Struct. Prop. Rare Earth Actinide Internet.	ISCJAF	Iowa State Coll. J. Sci.	JMPSCA	J. Mineral. Petrol. Sci.
	Environ. Sci. Technol. Libr.	ISJCAT	Isr. J. Chem.	JMPTEF	J. Mater. Process. Technol.
ESTLFX	Environ. Sci. Technol. Libr.	ITUFAW	Izv. Akad. Nauk Turkm. SSR, Ser. Fiz.-Tekh. Khim. Geol. Nauk	JMREEE	J. Mater. Res.
EULEEJ	Europhys. Lett.			JMSLD5	J. Mater. Sci. Lett.
FCMLAS	Finn. Chem. Lett.	IVNMAW	Izv. Akad. Nauk SSSR, Neorg. Mater.	JMTSAS	J. Mater. Sci.
FDISE6	Faraday Discuss.	IVUKAR	Izv. Vyssh. Uchebn. Zaved., Khim. Khim. Tekhnol.	JNBAAR	J. Res. Natl. Bur. Stand., Sect. A
FDRSDG	Fukuoka Daigaku Rigaku Shuho			JNCSBJ	J. Non-Cryst. Solids
FELEDJ	Ferroelectr., Lett. Sect.	IVUMAX	Izv. Vyssh. Uchebn. Zaved., Chern. Metall.	JNMSD3	J. Nucl. Med. Allied Sci.
FEROAS	Ferroelectrics	IVUTAK	Izv. Vyssh. Uchebn. Zaved., Tsvetn. Metall.	JNNOAR	J. Nanosci. Nanotechnol.
FHPTAY	Fudan Xuebao, Ziran Kexueban	IZFMBL	Izv. Akad. Nauk Mold. SSR, Ser. Fiz.-Tekh. Mat. Nauk	JNUMAM	J. Nucl. Mater.
FKTTA7	Fiz. Khim. Tverd. Tila			JOAMF2	J. Optoelectron. Adv. Mater.
FKYYDG	Fenzi Kexue Yu Huaxue Yanjiu	IZNMAQ	Izv. Akad. Nauk SSSR, Met.	JOCEAH	J. Org. Chem.
FMMTAK	Fiz. Met. Metalloved.	IZSKAB	Izv. Sib. Otd. Akad. Nauk SSSR, Ser. Khim. Nauk	JOCSET	J. Braz. Chem. Soc.
FMNBB6	Fortschr. Mineral., Beih.			JOELFJ	J. Electroceram.
FMRLAL	Fortschr. Mineral.	JACGAR	J. Appl. Crystallogr.	JOEMDK	J. Energ. Mater.
FMUAB4	Funct. Mater.	JACOCJ	J. Adv. Ceram.	JOMRA4	J. Magn. Reson.
FNTEDE	Fiz. Nizk. Temp. (Kiev)	JACSAT	J. Am. Chem. Soc.	JOPQAG	J. Phys. (Paris)
FOFUA7	Funtai Oyobi Funmatsu Yakini	JACTAW	J. Am. Ceram. Soc.	JORCAI	J. Organomet. Chem.
FSDKES	Fujian Shifan Daxue Xuebao, Ziran Kexueban	JALCEU	J. Alloys Compd.	JOUSEH	J. Supercond.
GANKEV	Ganko	JAMTAE	J. Austr. Inst. Met.	JJAPBE	J. Phys. D: Appl. Phys.
GCACAK	Geochim. Cosmochim. Acta	JAPDEJ	J. Alloy Phase Diagrams	JPCAIF	J. Phys. Chem. A
GCINAP	Geochem. Int.	JAPIAU	J. Appl. Phys.	JPCBFK	J. Phys. Chem. B
GCITA9	Gazz. Chim. Ital.	JAPLDR	Jpn. J. Appl. Phys., Part 2	JPCCKK	J. Phys. Chem. C
GEOKAQ	Geokhimiya	JAPNDE	Jpn. J. Appl. Phys., Part 1	JPCFAO	J. Prakt. Chem.
GFFGEE	GFF	JCCCAT	J. Chem. Soc., Chem. Commun.	JPCHAX	J. Phys. Chem.
GHTMDD	Glas. Hem. Tehnol. Maked.	JCCHDD	J. Comput. Chem.	JPCLCD	J. Phys. Chem. Lett.
GKKGA2	Gansekai Kobutsu Kosho Gakkaishi	JCCMBQ	J. Coord. Chem.	JPCSAW	J. Phys. Chem. Solids
GOCAEA	Gongneng Cailiao	JCCCTAC	J. Chin. Chem. Soc. (Taipei)	JPCSDZ	J. Phys. Conf. Ser.
GODEER	Geol. Ore Deposits	JCCYEV	J. Chem. Crystallogr.	JPEDAV	J. Phase Equilib. Diffus.
GPHCEE	Glass Phys. Chem.	JCDTBI	J. Chem. Soc., Dalton Trans.	JPEQE6	J. Phase Equilib.
GPRLAJ	Geophys. Res. Lett.	JCEAAX	J. Chem. Eng. Data	JPFMAT	J. Phys. F: Met. Phys.
GSAPAZ	Spec. Pap. - Geol. Soc. Am.	JCFTAR	J. Chem. Soc., Faraday Trans. 1	JPGCE8	J. Phys. I
GUSCBX	Geol. USP, Ser. Cient.	JCFTBS	J. Chem. Soc., Faraday Trans. 2	JPICEI	J. Phys. IV
GWXUER	Gaoya Wuli Xuebao	JCFTEV	J. Chem. Soc., Faraday Trans.	JPMAFX	J. Porous Mater.
HBGWAO	Heidelb. Geowiss. Abh.	JCISAS	J. Colloid Interface Sci.	JPPCEJ	J. Photochem. Photobiol. A
HCACAV	Helv. Chim. Acta	JCLMB5	J. Cryst. Mol. Struct.	JQCAK	J. Phys., Colloq.
HCHAEU	Han'guk Chaelyo Hakhoechi	JCOMAH	J. Less-Common Met.	JPSCAU	J. Polymer Sci.
HEIDAK	Heidelberg Beitr. Mineral. Petrogr.			JPSLBO	J. Phys., Lett.

JPSOAW	J. Phys. C: Solid State Phys.	MJTOAS	Mineral. J.	PESODO	Proc. - Electrochem. Soc.
JPSODZ	J. Power Sources	MLETJD	Mater. Lett.	PFKMDJ	Poverkhnost
JREAE6	J. Rare Earths	MMTAE6	Metall. Mater. Trans. A	PHBCDQ	Physica B+C (Amsterdam)
JRITEF	J. Res. Natl. Inst. Stand. Technol.	MNLMBB	Mineral. Mag.	PHJRD9	Philips J. Res.
JRMPDM	J. Chem. Res., Miniprint	MNTEEU	Metallofiz. Noveishie Tekhnol.	PHLTAM	Phys. Lett.
JRNBAG	J. Res. Natl. Bur. Stand. (U.S.A.)	MOCMB7	Monatsh. Chem.	PHMAA4	Philos. Mag.
JRNCDM	J. Radioanal. Nucl. Chem.	MOMGA4	Mitt. Oesterr. Mineral. Ges.	PHMMA6	Phys. Met. Metallogr.
JRPSDC	J. Chem. Res., Synop.	MOPHAM	Mol. Phys.	PHRVAO	Phys. Rev.
JRSPAF	J. Raman Spectrosc.	MPLBET	Mod. Phys. Lett. B	PHSSAK	Phys. Status Solidi
JSACEX	J. Soc. Alger. Chim.	MPMTAG	Tschermaks Mineral. Petrogr. Mitt.	PHSTBO	Phys. Scr.
JSCSEN	J. Serb. Chem. Soc.	MRBUAC	Mater. Res. Bull.	PHTHU0	Phys. Chem. Alloys Refract. Compd. Thorium Uranium
JSCTDP	J. Soc. Chim. Tunis.	MRECA7	Mineral. Rec.	PHTRDP	Phase Transitions
JSCTEQ	J. Mater. Sci. Technol. (Shenyang)	MRINJV	Mater. Res. Innovations	PHVEAR	Phys. Verh.
JSGTEC	J. Sol-Gel Sci. Technol.	MRMTAU	Mem. Sci. Rev. Metall.	PHYBE3	Phys. B (Amsterdam)
JSHCAU	J. Sci. Hiroshima Univ., Ser. C	MRSPDH	Mater. Res. Soc. Symp. Proc.	PHYCE6	Phys. C (Amsterdam)
JSHXFU	Jiangsu Shiyou Huagong Xueyuan Xuebao	MSACDV	Mater. Sci. - Pol.	PHYSAG	Physica (Amsterdam)
JSIEN	J. Sci. Islamic Repub. Iran	MSAPAX	Mineral. Soc. Am. Spec. Pap.	PIAADM	Proc. Indian Acad. Sci. Sect. Sci.
JSUFR	J. Soc. Inorg. Mater. Jpn.	MSAPE3	Mater. Sci. Eng., A	PISAA7	Proc. Indian Acad. Sci., Sect. A
JSIRAC	J. Sci. Ind. Res.	MSBTEK	Mater. Sci. Eng., B	PJABDW	Proc. Jpn. Acad., Ser. B
JSNMBN	J. Supercond. Novel Magn.	MSCEAA	Mater. Sci. Eng.	PJCHDQ	Pol. J. Chem.
JSRBA9	J. Sci. Res. Banaras Hindu Univ.	MSCIEQ	Mater. Sci. (N. Y.)	PJPAS0	Bayero J. Pure Appl. Sci.
JSSCBI	J. Solid State Chem.	MSCJDS	Mater. Sci. (Wroclaw)	PKNAAU	Proc. K. Ned. Akad. Wet.
JSSEFS	J. Solid State Electrochem.	MSCOA6	Mettall. Soc. Conf., Proc.	PKOMA3	Phys. Kondens. Mater.
JSTCAM	J. Struct. Chem.	MSCTEP	Mater. Sci. Technol.	PLPUA5	Planseeber. Pulvermetall.
JSYRES	J. Synchrotron Radiat.	MSFOEP	Mater. Sci. Forum	PLRBAQ	Phys. Rev. B: Solid State
JTACF7	J. Therm. Anal. Calorim.	MSTCEP	Meas. Sci. Technol.	PLYHDE	Polyhedron
JTHEA9	J. Therm. Anal.	MTARCE	Mater. Trans.	PMAADG	Philos. Mag. A
JTPHES	J. Exp. Theor. Phys.	MTBSEO	Metall. Mater. Trans. B	PMABDJ	Philos. Mag. B
JTPLA2	JETP Lett.	MTECFQ	Mater. Technol. (Tokyo)	PMACRT	Proc. Int. Symp. Magn. Anisotropy Coercivity Rare Earth Trans. Metal Alloys, 8th
JUPSAU	J. Phys. Soc. Jpn.	MTGTBF	Metall. Trans.	PMANAI	Poroshk. Metall. (Kiev)
JVTAD6	J. Vac. Sci. Technol. A	MTIAC3	Mater., Tekhnol., Instrum.	PMHABF	Philos. Mag.
JWASA3	J. Wash. Acad. Sci.	MTJIEY	Mater. Trans., JIM	PMLEEG	Philos. Mag. Lett.
JWUTE8	J. Wuhan Univ. Technol., Mater. Sci. Ed.	MTLLAF	Metall. (Heidelberg)	PMMCFF	Powder Metall. Met. Ceram.
KAGSEU	Chem. Sens.	MTTABN	Metall. Trans. A	PMTSDT	Phys. Met.
KDGHEI	Kyoto Daigaku Genshiro Jikkensho Gakujutsu Kenkai Hobunshu	MUCBBG	Moscow Univ. Chem. Bull.	PNASA6	Proc. Natl. Acad. Sci. U.S.A.
KDRKDD	Kochi Daigaku Rigakubu Kiyo, Kagaku	MUGBD4	Moscow Univ. Geol. Bull.	PNASEA	Prog. Nat. Sci.
KDVSAK	Mat.-Fys. Medd. - K. Dan. Vidensk. Selsk.	NANPAH	Natl. Nucl. En. Ser., Manhattan Proj. Tech. Sect., Div. 4	PNWSCG	Pr. Nauk. - Wyzsza Szk. Pedagog. Czestochowa, Chem. Ochr. Srodowiska
KEIKA6	Keikinzoku	NATUAS	Nature (London)	PODIE2	Powder Diffr.
KEMAEY	Key Eng. Mater.	NATWAY	Naturwissenschaften	POPYA4	Port. Phys.
KETOD8	Kexue Tongbao Engl. Transl.	NCAHBB	Nat. Chem.	PPCPFY	Phys. Chem. Chem. Phys.
KHFID9	Khim. Fiz.	NCSDDN	Nuovo Cimento Soc. Ital. Fis. D	PPSBAP	Proc. Phys. Soc., London, Sect. B
KHTPAT	Kexue Tongbao Chin. Ed.	NDBSAL	Kenkyu Kiyo - Nihon Daigaku Bunrigakubu Shizen Kagaku Kenkyushu	PPSOAU	Proc. Phys. Soc., London
KHTPBUB	Kexue Tongbao Foreign Lang. Ed.	NDTUK0	Naukovi Pratsi Donetsk. Nats. Tekh. Univ., Ser.: Khim. Khim. Tekhnol.	PRAMCI	Pramana
KIDOEI	Kidorui	NIKGAU	Nippon Kinzoku Gakkaishi (J. Jpn. Inst. Met.)	PRBMDO	Phys. Rev. B
KIURFI	Khim. Interesakh Ustoich. Razvit.	NIMBEU	Nucl. Instrum. Methods Phys. Res., Sect. B	PREBE7	Phosphorus Res. Bull.
KJCRY0	Korean J. Crystallogr.	NJCHD4	Nouv. J. Chim.	PREEDF	Phosphorus Sulfur Relat. Elem.
KKGLIE2	Koatsuryoku no Kagaku to Gijutsu	NJCHE5	New J. Chem.	PRLAAZ	Proc. R. Soc. London, Ser. A
KNSFA2	Forh. K. Nor. Vidensk. Selsk.	NJGAAY	Neues Jahrb. Mineral. Geol. Palaeontol., Abh., Abt. A	PRLTAO	Phys. Rev. Lett.
KOBLAA	Kobalt	NJMIAC	Neues Jahrb. Mineral., Abh.	PRMTFY	Perspekt. Mater.
KOBZAI	Kobutsugaku Zasshi	NJMMAW	Neues Jahrb. Mineral., Monatsh.	PRREA9	Philips Res. Rep.
KOKHDC	Koord. Khim.	NJOPFM	New J. Phys.	PRSSAM	Philips Res. Rep., Suppl.
KRISAJ	Kristallografiya	NKAKB8	Nippon Kagaku Kaishi	PSISDG	Proc. SPIE Int. Soc. Opt. Eng.
KRTEAW	Krist. Tech.	NKEGAF	Nippon Kagaku Kaishi	PSOSED	Phys. Solid State
KSYHA5	Guisuanyan Xuebao	NMAACR	Nat. Mater.	PSSABA	Phys. Status Solidi A
KTHPDM	Gaodeng Xuexiao Huaxue Xuebao	NMAIAF	Nucl. Metall.	PSSBBB	Phys. Status Solidi B
KTREA2	Keem. Teated	NMATEI	Neorg. Mater.	PSSCGL	Phys. Status Solidi C
KURAAV	Annu. Rep. Res. React. Inst. Kyoto Univ.	NNOTER	Nanotechnology	PSSLEC	Phosphorus Sulfur Silicon Relat. Elem.
KUXUEN	Kuangwu Xuebao	NOGTAO	Nor. Geol. Tidsskr.	PSSTAW	Prog. Solid State Chem.
KUYAE2	Kwangwu Yanshi	NPKZAZ	Nippon Kagaku Zasshi	PYLAAG	Phys. Lett. A
LAREEK	Lanthanide Actinide Res.	NPSCA6	Nature (London), Phys. Sci.	PYSIA7	Physica (The Hague)
LCRI30	Abstr. XIV Sci. Conf. "Lviv Chemical Readings - 2013"	NRE187	Nature (London), Phys. Sci.	QDXKF9	Qingdao Daxue Xuebao, Ziran Kexueban
LFRMA7	Liet. Fiz. Rinkiny	NRLAAD	Proc. Int. Workshop Rare-Earth Magnets Their Appl., 9th	RAACAP	Radiochim. Acta
LITHAN	Lithos	NSAPEE	Nanoscale Res. Lett.	RACHAG	Rass. Chim.
LKZUE8	Latv. Kim. Z.	NSKRE2	Nucl. Sci. Appl. (Dhaka)	RAMSCX	Rev. Adv. Mater. Sci.
LTWMA5	Lodz. Tow. Nauk., Pr. Wyzd. 3	NSPUE2	Nippon Seramikkusu Kyokai Gakujutsu Ronbunshi	RARME8	Rare Met. (Beijing)
LZAKAM	Latv. PSR Zinat. Akad. Vestis, Kim. Ser.	NSSICD	NIST Spec. Publ.	RBGCAS	Rev. Bras. Geocienc.
LZFTA6	Latv. PSR Zinat. Akad. Vestis, Fiz. Teh. Zinat. Ser.	NSSTFF	NATO Sci. Ser., II	RCBUEY	Russ. Chem. Bull.
MACHEX	Mater. Charact.	NTNKAX	NATO Sci. Ser., 3	RDIOEO	Radiochemistry (Moscow)
MAMEC4	Maruzalar - Azarb. Mill Elmlar Akad.	NUKKAP	Ned. Tijdschr. Natuurkd.	RELTAN	Rev. Electr. Commun. Lab.
MATTEI	Mater. Technol. (London)	NUKLAS	Nukleonik	REMTDV	Rare Earth Mod. Sci. Technol.
MCHPDR	Mater. Chem. Phys.	NVUUU0	Nukleonika	RFSSDV	Rikogakubu Shuho (Saga Daigaku)
MCLCA5	Mol. Cryst. Liq. Cryst.	NVVUK0	Nauk. Visn. Uzhhorod. Univ., Ser. Khim.	RICHD7	Rev. Inorg. Chem.
MCLCE9	Mol. Cryst. Liq. Cryst. Sci. Technol., Sect. A	NWPYA4	Nauk. Visn. Volyn. Nats. Univ., Khim. Nauky	RIHTAV	Rev. Int. Hautes Temp. Refract.
MCMTEV	Microporous Mater.	OAWCAY	Sae Mulli	RJOFV	Rigaku J.
MCONEN	Micron	OJICBS	Sitzungsber. Oesterr. Akad. Wiss., Math.-Naturwiss. Kl., Abt. 2b	RJACEO	Russ. J. Appl. Chem.
MDKKDY	Meiji Daigaku Kagaku Gijutsu Kenkyusho Kiyo	OKDSBO	Open J. Inorg. Chem.	RJCCEY	Russ. J. Coord. Chem.
MEALET	Metallurgy	OMATET	Osaka Kyoiku Daigaku Kiyo, Dai-3-bumon	RJELE3	Russ. J. Electrochem.
MEFGAZ	Metallforschung	ORGND7	Opt. Mater. (Amsterdam)	RJGCEK	Russ. J. Gen. Chem.
MEIJAP	Metallography	OSAWA8	Organometallics	RJICAQ	Russ. J. Inorg. Chem.
MENCEX	Mendelev Commun.	PBRCAR	Anz. Oesterr. Akad. Wiss., Math.-Naturwiss. Kl.	RJPCAR	Russ. J. Phys. Chem.
MESJA7	Met. Sci. J.	PCCHDB	Proc. Br. Ceram. Soc.	RJPCBS	Russ. J. Phys. Chem. A
METABK	Metalurgija (Zagreb)	PCGCDG	Conf. Coord. Chem.	RJXUEN	Rengong Jingti Xuebao
METSC7	Met. Sci.	PCGMED	Prog. Cryst. Growth Charact.	RLDMYM	Rev. Latinoam. Metal. Mater.
METWAH	Metallwirtsch. Metallwiss. Metalltech.	PCMIDU	Prog. Cryst. Growth Charact. Mater.	RMLYAT	Russ. Metall.
MFIZAC	Metallofizika (Akad. Nauk Ukr. SSR, Inst. Metallofiz.)	PCNHBU	Phys. Chem. Miner.	RMXFAT	Rev. Mex. Fis.
MFOREM	Mater. Forum	PCSLAW	Phys. Chem. News	RMZBAR	Rud.-Metal. Zb.
MGMCE8	Main Group Met. Chem.	PCSOA7	Proc. Chem. Soc. London	ROCHAC	Rocz. Chem.
MHTRAN	Met. Sci. Heat Treat.	PEMIA7	Phys. Chem. Solids	RPCJAP	Rev. Phys. Chem. Jpn.
MIACAQ	Microchim. Acta	PEPIAM	Period. Mineral.	RPHAAN	Rev. Phys. Appl.
MIASA6	Mineral. Mag. J. Mineral. Soc.	PEPYD5	Phys. Earth Planet. Inter.	RRALAZ	Radiochem. Radioanal. Lett.
MIMMFJ	Microporous Mesoporous Mater.	PESCF0	Propellants, Explos., Pyrotech.	RRCHAX	Rev. Roum. Chim.
MINZDR	Mineral. Zh.		Proc. Est. Acad. Sci., Chem.	RRLTDF	Rep. Res. Lab. Eng. Mater., Tokyo Inst. Technol.
MIPPE9	Mineral. Petrol.			RRMTAH	React. Mater.
MITLAC	Metall. Ital.			RRPQAN	Rev. Roum. Phys.
				RSRAAQ	Ric. Sci., Parte 2, Sez. A

RTCPA3	Recl. Trav. Chim. Pays-Bas	SSASEA	Sci. Sin., Ser. A Engl. Ed.	VISPEK	Vib. Spectrosc.
RVCMA8	Rev. Chim. Miner.	SSBSEF	Sci. Sin., Ser. B Engl. Ed.	VKSFAF	Visn. Kiiv. Univ., Ser. Fiz.
RYNOEQ	RIST Yongu Nonmun	SSCOA4	Solid State Commun.	VLDUAB	Visn. Lviv. Derzh. Univ., Ser. Khim.
SAJCDG	S. Afr. J. Chem.	SSCTDM	Stud. Surf. Sci. Catal.	VLUFBI	Vestn. Leningr. Univ., Ser. 4
SAJSAR	S. Afr. J. Sci.	SSINAV	Sci. Sin. Engl. Ed.	VMUFAO	Vestn. Mosk. Univ., Ser. 3
SAKNAH	Soobshch. Akad. Nauk Gruz. SSR	SSIOD3	Solid State Ionics	VMUGAR	Vestn. Mosk. Univ., Ser. 4
SAM190	Abstr. XIX Int. Semin. Phys. Chem. Solids Adv. Mater.	SSPOC3	Solid State Phenomena	VMUKA5	Vestn. Mosk. Univ., Ser. 2
SAMCAS	Spectrochim. Acta, Part A	SSSCFJ	Solid State Sci.	VMUSAT	Vestn. Mosk. Univ., Ser. Fiz.-Mat. Estestv. Nauk
SATEAZ	Sov. At. Energy	SSTEET	Semicond. Sci. Technol.	VSKDAA	Vestn. Slov. Kem. Drus.
SBBPAJ	Stud. Univ. Babes-Bolyai, Phys.	STAMCV	Sci. Technol. Adv. Mater.	VSUKEH	Vestn. S.-Peterb. Univ. Ser. 4
SCAAFF	Sci. China, Ser. A	STCHES	Struct. Chem.	VULPK0	Visn. Nats. Univ. "Lviv. Politekh.", Khim., Tekhnol. Rechovyn. Zas.
SCASEY	Sci. China, Ser. A	STSUEB	Stud. High Temp. Supercond.	WDRKA6	Rikogaku Kenkyusho Hokoku, Waseda Daigaku
SCBCFQ	Sci. China, Ser. B	STUMAR	Sci. Rep. Tohoku Univ., Ser. 3	WGDKEY	Wuhan Gongye Daxue Xuebao
SCBSE5	Sci. China, Ser. B	SUKBAJ	Suom. Kemistil. B	WHUXEO	Wuji Huaxue Xuebao
SCCCCS	Sci. China: Chem.	SUNVAQ	Skr. Nor. Vidensk.-Akad., Kl. 1: Mat.-Naturvidensk. Kl.	WHXUEU	Wuli Huaxue Xuebao
SCDEF8	Sci. China, Ser. D	SUSTEF	Supercond. Sci. Technol.	WJCMAD	World J. Condens. Matter Phys.
SCERAD	Spec. Ceram.	SVCMAJ	Sb. Vys. Sk. Chem.-Technol. Prazhe, G: Mineral.	WLHPAR	Wuli Xuebao
SCIEAS	Science (Washington D.C.)	SVRDAX	Sov. Radiochem.	WUHUE7	Wuji Huaxue
SCMAF7	Ser. Mater.	SYMEDZ	Synth. Met.	XANLDG	Argonne Natl. Lab., Rep. ANL
SCMAT0	Semicond. Mater.	TAAFA3	Sov. J. Contemp. Phys.	XBNSDA	X-sen Bunseki no Shinpo
SCMRBU	Ser. Metall.	TACAAH	Trans. Am. Crystallogr. Assoc.	XIJID9	Xiyou Jinshu
SCRMEX	Ser. Metall. Mater.	TAIMAF	Trans. Am. Inst. Min. Metall. Pet. Eng.	XJCGEA	Xiyou Jinshu Cailiao Yu Gongcheng
SCSGCI	Sci. China, Ser. G	TASEA7	Trans. Am. Soc. Met.	XSAOAF	Anal. Sci.: X-ray Struct. Anal. Online
SCT473	Abstr. 4th Int. Conf. Solid Compd. Transition Elem.	TCHPAX	Dizhi Xuebao	YGKSA4	Yogyo Kyokaishi
SCT679	Abstr. 6th Int. Conf. Solid Compd. Transition Elem.	TCKHAO	Dizhi Kexue	YIHUED	Yingyong Huaxue
SCT782	Abstr. 7th Int. Conf. Solid Compd. Transition Elem.	TDKIE4	Tohoku Daigaku Sozai Kokaku Kenkyusho Iho	YKJIEZ	Yuanzineng Kexue Jishu
SCTE13	Abstr. 13th Int. Conf. Solid Compd. Transition Elem.	TFSOA4	Trans. Faraday Soc.	YPHJAP	Yoop Hakhoeki
SCTHAO	Sichuan Daxue Xuebao, Ziran Kexueban	THACAS	Thermochim. Acta	ZAACAB	Z. Anorg. Allg. Chem.
SFKTE6	Sverkhprovodimost: Fiz. Khim. Tekh.	THHPD3	Cuihua Xuebao	ZACMAH	Z. Anorg. Chem.
SGNEAD	Semento Gijutsu Nenpo	THSFAP	Thin Solid Films	ZAPHAX	Z. Angew. Phys.
SGOXEB	Shanghai Gongye Daxue Xuebao	TIIMA3	Trans. Indian Inst. Met.	ZBRNSI	Zb. Rad. Priir.-Mat. Fak. Univ. Novom Sadu
SIMPAL	Rend. Soc. Ital. Mineral. Petrol.	TIKNAG	Tr. Inst. Khim. Nauk, Akad. Nauk Kaz. SSR	ZEAPAA	Z. Elektrochem. Angew. Phys. Chem.
SINCDO	Stud. Inorg. Chem.	TIKRAS	Tr. Inst. Kristallogr., Akad. Nauk SSSR	ZECEAL	Z. Chem.
SITKA7	Silikattechnik	TITAL0	Titanium Its Alloys Engl. Transl.	ZEELAI	Z. Elektrochem.
SJCDDA	Sov. J. Coord. Chem.	TJIMAA	Trans. Jpn. Inst. Met.	ZEKRDZ	Z. Kristallogr.
SKHDFD	Shizen Kagaku Kenkyusho Kenkyu Hokoku, Okayama Rika Daigaku	TJSCAU	Tex. J. Sci.	ZEMTAE	Z. Metallkd.
SKTIAF	Sven. Kem. Tidskr.	TKHCDJ	Taehan Kumsok Hakhoeki	ZENAAU	Z. Naturforsch. A
SMCSB9	Semin. Chim. Etat Solide	TLNRBV	Kakuriken Kenkyu Hokoku (Tohoku Daigaku)	ZENBAX	Z. Naturforsch. B
SMFRM0	Stabiln. Metastabiln. Fazovye Ravnovesiya Met. Sist.	TLNTA2	Talanta	ZEOLD3	Zeolites
SMICES	Semiconductors	TMCHDN	Transition Met. Chem. (Dordrecht)	ZEPCAC	Z. Phys. Chem. Stoechiom. Verwandtschaftsl.
SMPTA8	Schweiz. Mineral. Petrogr. Mitt.	TMSAAB	Trans. Metall. Soc. AIME	ZEPYAA	Z. Phys.
SNMRDV	Sov. Non-Ferrous Met. Res.	TNMCEW	Trans. Nonferrous Met. Soc. China	ZFKHA9	Zh. Fiz. Khim.
SNS165	Sov. Res. New Semicond. Mater.	TOKHA6	Toyota Kenkyu Hokoku	ZHJIDO	Zhongguo Jiguang
SOMSA4	Sov. Mater. Sci.	TSMBAQ	Titan Ego Splavy	ZKCMJA	Z. Kristallogr. - Cryst. Mater.
SOPJAO	Sov. Phys. J.	TTMMDZ	TMPM, Tschermarks Mineral. Petrogr. Mitt.	ZKKKAJ	Z. Kristallogr.
SPCHBV	Sov. Prog. Chem.	TYPIX0	TYPIX - Stand. Data Cryst. Chem. Charact. Inorg. Struct. Types, Springer-Verlag.	ZKNSFT	Z. Kristallogr. - New Cryst. Struct.
SPHCA6	Sov. Phys. Crystallogr.	UFIZAW	Ukr. Fiz. Zh. Russ. Ed.	ZMGPAS	Zentralbl. Mineral. Geol. Palaeontol.
SPHDA9	Sov. Phys. Dokl.	UFZHAT	Ukr. Fiz. Zh. Ukr. Ed.	ZNASEI	Z. Naturforsch. A
SPHJAR	Sov. Phys. JETP	UJPKAG	Ukr. J. Phys.	ZNBAD2	Z. Naturforsch. B
SPIPAG	Sci. Pap. Inst. Phys. Chem. Res. (Jpn.)	UKAMBN	U.K. At. Energy Auth., Harwell Lab., Memo AERE-M	ZNBSEN	Z. Naturforsch. B
SPMCAV	Sov. Powder Metall. Met. Ceram.	UKCJEN	Ukr. Chem. J.	ZNOKAQ	Zh. Neorg. Khim.
SPPEEL	Springer Proc. Phys.	UKKZA9	Ukr. Khim. Zh. Ukr. Ed.	ZPBBDJ	Z. Phys. B: Condens. Matter Quanta
SPSSA7	Sov. Phys. Solid State	UKPJAK	Ukr. Phys. J.	ZPCBAL	Z. Phys. Chem., Abt. B
SPTPA3	Sov. Phys. Tech. Phys.	UKZHAI	Ukr. Khim. Zh.	ZPCFAX	Z. Phys. Chem. (Munich)
SRIMCN	Synth. React. Inorg. Met.-Org. Chem.	ULTRD6	Ultramicroscopy	ZPCMDN	Z. Phys. B: Condens. Matter
SRIMDO	Synth. React. Inorg. Met.-Org. Nano-Met. Chem.	URKN11	Tezisy Dokl. Ukr. Resp. Konf. Neorg. Khim., 11th	ZRMOBN	Zap. Ross. Mineral. O-va.
SROCCO	Spec. Publ. - R. Soc. Chem.	UTSGAL	Univ. Toronto Stud., Geol. Ser.	ZSTKA1	Zh. Strukt. Khim.
		VBSFA5	Vestsi Akad. Navuk BSSR, Ser. Fiz.-Mat. Navuk	ZTAKDZ	Z. Naturforsch. A
		VCGUEZ	Vestn. Cesk. Geol. Ustavu	ZTEFA3	Zh. Tekh. Fiz.
		VDUPN0	Visn. Donetsk. Nats. Univ., Ser. A: Pryr. Nauky	ZVMOAG	Zap. Vses. Mineral. O-va.
				ZVMOEK	Zap. Vseross. Mineral. O-va.
				ZXXUE5	Zhongguo Xitu Xuebao

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Handbook of Inorganic Substances 2017

Data

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Ac	Ac	Cu, cF4, 225	<i>Fm-3m</i>	0.5311, 0.5311, 0.5311, 90, 90, 90	close-packed structure	gray silver	10.07	X	1408
Ag	Ag	Cu, cF4, 225	<i>Fm-3m</i>	0.40863, 0.40863, 0.40863, 90, 90, 90	close-packed structure	gray silver	10.50	X	33258
Ag	Ag hp	Hg, hR3, 166	<i>R-3m</i>	0.2753, 0.2753, 0.671, 90, 90, 120	close-packed structure	-	12.20	X	51805
Ag	Ag 2H	Mg, hP2, 194	<i>P6₃/mmc</i>	0.293, 0.293, 0.479, 90, 90, 120	close-packed structure	-	10.06	X	12761
Ag	Ag 4H	Nd, hP4, 194	<i>P6₃/mmc</i>	0.293, 0.293, 1.018, 90, 90, 120	close-packed structure	-	9.47	X	12761
Ag	Ag m	*, oP16, *	-	0.4119, 0.841, 0.8535, 90, 90, 90	-	-	9.69	N	50235
Al	Al	Cu, cF4, 225	<i>Fm-3m</i>	0.40496, 0.40496, 0.40496, 90, 90, 90	close-packed structure	gray silver	2.70	X	1558
Am	Am rt	Nd, hP4, 194	<i>P6₃/mmc</i>	0.34681, 0.34681, 1.1241, 90, 90, 120	close-packed structure	white silver	13.79	X	1646
Am	Am ht1/hp1	Cu, cF4, 225	<i>Fm-3m</i>	0.48984, 0.48984, 0.48984, 90, 90, 90	close-packed structure	-	13.73	X	1646
Am	Am hp2	Pu, oF8, 70	<i>Fddd</i>	0.3116, 0.567, 1.0115, 90, 90, 90	-	-	18.06	X	39835
Am	Am hp3	Cs, oP4, 62	<i>Pnma</i>	0.5093, 0.4679, 0.3028, 90, 90, 90	close-packed structure	-	22.37	X	39835
Ar	Ar ccp	Cu, cF4, 225	<i>Fm-3m</i>	0.53112, 0.53112, 0.53112, 90, 90, 90	close-packed structure	-	1.77	X	3551
Ar	Ar hcp	Mg, hP2, 194	<i>P6₃/mmc</i>	0.38, 0.38, 0.62, 90, 90, 120	close-packed structure	-	1.71	X	32986
As	As	As, hR6, 166	<i>R-3m</i>	0.37598, 0.37598, 1.05475, 90, 90, 120	-	gray	5.78	X	4570
As	As ars	P, oS8, 64	<i>Cmce</i>	0.365, 1.1, 0.447, 90, 90, 90	arsenolamprite	black	5.55	X	9103
As	As m-hp	*, tP*, *	-	0.8691, 0.8691, 0.6363, 90, 90, 90	-	-	-	N	6661
As	As hp1	Po, cP1, 221	<i>Pm-3m</i>	0.255, 0.255, 0.255, 90, 90, 90	-	-	7.50	X	23823
As	As hp2	*, mS8, 15	<i>C12/c1</i>	0.74892, 0.67464, 0.32491, 90, 115.365, 90	host-guest structure	-	8.90	P	44677
As	As hp3	W, cI2, 229	<i>Im-3m</i>	0.2806, 0.2806, 0.2806, 90, 90, 90	b.c.c. family	-	11.26	X	30924
Au	Au	Cu, cF4, 225	<i>Fm-3m</i>	0.40788, 0.40788, 0.40788, 90, 90, 90	close-packed structure	golden	19.28	X	2590
B	B rhom1	B, hR423, 166	<i>R-3m</i>	1.09221, 1.09221, 2.38067, 90, 90, 120	β -boron family	gray	2.34	X	53753
B	B rhom2	B, hR36, 166	<i>R-3m</i>	0.49179, 0.49179, 1.25805, 90, 90, 120	-	red	2.45	X	40022
B	B hp	B, oP28, 58	<i>Pnnm</i>	0.50563, 0.56126, 0.6971, 90, 90, 90	-	red dark	2.54	X	52378
B	B m tet	B, tP50, 134	<i>P4₂/nnm</i>	0.8708, 0.8708, 0.5075, 90, 90, 90	-	gray reddish	2.33	X	61050
B	B m rhom	B, hR45, 166	<i>R-3m</i>	0.5594, 0.5594, 1.20756, 90, 90, 120	-	yellow orange	2.47	X	61050
B	B tet2?	B, tP196, 76	<i>P4₁</i>	1.014, 1.014, 1.417, 90, 90, 90	-	black	2.34	X	11283
B	B stab?	B, cP48, 205	<i>Pa-3</i>	0.73195, 0.73195, 0.73195, 90, 90, 90	-	-	2.20	X	61145
Ba	Ba	W, cI2, 229	<i>Im-3m</i>	0.5028, 0.5028, 0.5028, 90, 90, 90	b.c.c. family	gray white	3.59	X	25937
Ba	Ba hp1	Mg, hP2, 194	<i>P6₃/mmc</i>	0.38513, 0.38513, 0.59729, 90, 90, 120	close-packed structure	-	5.94	X	29361
Ba	Ba hp2	*, tI8, 140	<i>I4/mcm</i>	0.84207, 0.84207, 0.43769, 90, 90, 90	host-guest structure	-	7.77	P	36753
Ba	Ba hp3	*, tI8, 140	<i>I4/mcm</i>	0.8346, 0.8346, 0.46966, 90, 90, 90	host-guest structure	-	7.50	P	36753
Ba	Ba hp4	Mg, hP2, 194	<i>P6₃/mmc</i>	0.31035, 0.31035, 0.48778, 90, 90, 120	close-packed structure	-	11.21	X	29361
Be	Be rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.22859, 0.22859, 0.35842, 90, 90, 120	close-packed structure	gray white	1.85	X	307
Be	Be ht	W, cI2, 229	<i>Im-3m</i>	0.2552, 0.2552, 0.2552, 90, 90, 90	b.c.c. family	-	1.80	X	13683
Be	Be hp?	Be, oP4, 18	<i>P2₁2₁2</i>	0.3416, 0.3755, 0.2168, 90, 90, 90	close-packed structure	-	2.15	X	17012
Bi	Bi	As, hR6, 166	<i>R-3m</i>	0.45459, 0.45459, 1.18623, 90, 90, 120	-	gray silver	9.81	A	306
Bi	Bi hp1	Bi, mS4, 12	<i>C12/m1</i>	0.66726, 0.61108, 0.33001, 90, 110.412, 90	-	black	11.01	X	43283
Bi	Bi hp2	*, tI8, 140	<i>I4/mcm</i>	0.85182, 0.85182, 0.41642, 90, 90, 90	host-guest structure	-	12.20	P	43725
Bi	Bi ht-hp1	Cs, oS16, 64	<i>Cmce</i>	1.1191, 0.6622, 0.6608, 90, 90, 90	-	-	11.34	X	59047
Bi	Bi ht-hp2	W, cI2, 229	<i>Im-3m</i>	0.38, 0.38, 0.38, 90, 90, 90	b.c.c. family	-	12.65	X	7218
Bk	Bk rt	Nd, hP4, 194	<i>P6₃/mmc</i>	0.3412, 0.3412, 1.106, 90, 90, 120	close-packed structure	gray silver	14.71	X	23555
Bk	Bk ht/hp1	Cu, cF4, 225	<i>Fm-3m</i>	0.4997, 0.4997, 0.4997, 90, 90, 90	close-packed structure	-	13.15	X	5942
Br	[Br ₂] lt	[I ₂], oS8, 64	<i>Cmce</i>	0.6737, 0.4548, 0.8761, 90, 90, 90	-	-	3.95	A	1013
Br	Br hp	I, oI2, 71	<i>Immm</i>	0.236, 0.263, 0.457, 90, 90, 90	-	-	9.36	X	22610
C	C gra	C, a, hP4, 194	<i>P6₃/mmc</i>	0.2464, 0.2464, 0.6711, 90, 90, 120	graphite	black	2.26	X	9095
C	C gra 3R	C, hR6, 166	<i>R-3m</i>	0.2461, 0.2461, 1.0061, 90, 90, 120	-	-	2.27	X	211
C	C dia	C, cF8, 227	<i>Fd-3m</i>	0.35671, 0.35671, 0.35671, 90, 90, 90	diamond	colorless	3.52	X	29348
C	C dia-n	C, hR6, 160	<i>R3m</i>	0.25321, 0.25321, 0.62023, 90, 90, 120	-	-	3.47	X	48173
C	C lon	C, b, hP4, 194	<i>P6₃/mmc</i>	0.252, 0.252, 0.412, 90, 90, 120	lonsdaleite	-	3.52	X	3511
C	C dia 8H	C, hP16, 194	<i>P6₃/mmc</i>	0.2481, 0.2481, 1.6268, 90, 90, 120	-	black	3.68	X	50907
C	C dense1	Si, cI16, 206	<i>Ia-3</i>	0.4293, 0.4293, 0.4293, 90, 90, 90	-	-	4.03	X	22175
C	C dense2	C, cI16, 229	<i>Im-3m</i>	0.4279, 0.4279, 0.4279, 90, 90, 90	-	-	4.07	X	14433
C	[C ₆₀] rt	[C ₆₀], cF1924, 225	<i>Fm-3m</i>	1.416, 1.416, 1.416, 90, 90, 90	fullerene family	brown dark	1.69	X	27029
C	[C ₆₀] lt	[C ₆₀], cP240, 205	<i>Pa-3</i>	1.40478, 1.40478, 1.40478, 90, 90, 90	fullerene family	-	1.73	X	25082
C	[C ₆₀] 1D orth	Li ₄ [C ₆₀], oP120, 58	<i>Pnnm</i>	0.978, 1.4752, 0.9091, 90, 90, 90	fullerene family	-	1.82	X	51086
C	[C ₆₀] 2D tet	[C ₆₀], tP144, 131	<i>P4₂/mmc</i>	0.9064, 0.9064, 1.5039, 90, 90, 90	fullerene family	-	1.94	X	42053
C	[C ₆₀] 2D orth	[C ₆₀]-a, oI120, 71	<i>Immm</i>	0.9026, 0.9083, 1.5077, 90, 90, 90	fullerene family	-	1.94	X	40460
C	[C ₆₀] 2D rhom	[C ₆₀]-b, hR180, 166	<i>R-3m</i>	0.9175, 0.9175, 2.4568, 90, 90, 120	fullerene family	-	2.00	X	40459
C	[C ₆₀] 3D cub	[C ₆₀], cF240, 202	<i>Fm-3</i>	1.193, 1.193, 1.193, 90, 90, 90	fullerene family	-	2.82	X	51493
C	[C ₆₀] 3D orth	[C ₆₀]-b, oI120, 71	<i>Immm</i>	0.786, 0.859, 1.273, 90, 90, 90	fullerene family	-	2.78	X	48324
C	[C ₆₀] 3D rhom	*, hR*, *	-	0.919, 0.919, 2.199, 90, 90, 120	fullerene family	-	-	N	48324
C	[C ₇₀] hcp rt	Mg, hP2, 194	<i>P6₃/mmc</i>	1.0104, 1.0104, 1.8584, 90, 90, 120	fullerene family	-	1.70	X	28599
C	[C ₇₀] hcp lt	[C ₇₀], oP280, 62	<i>Pnma</i>	1.7349, 1.853, 1.0017, 90, 90, 90	fullerene family	-	1.73	X	28509
C	[C ₇₀] ccp rt	Cu, cF4, 225	<i>Fm-3m</i>	1.497, 1.497, 1.497, 90, 90, 90	fullerene family	-	1.66	X	27924
C	[C ₇₆]	Cu, cF4, 225	<i>Fm-3m</i>	1.5475, 1.5475, 1.5475, 90, 90, 90	fullerene family	-	1.64	X	30931
C	[C ₈₂] mon	[C ₈₂], mP2, 4	<i>P12₁</i>	1.1383, 1.1268, 1.81958, 90, 107.988, 90	fullerene family	-	1.47	X	30836
C	[C ₈₂] cub	*, cP1968, 205	<i>Pa-3</i>	1.576, 1.576, 1.576, 90, 90, 90	fullerene family	-	1.67	N	44646
C	[C ₈₄] cub	Cu, cF4, 225	<i>Fm-3m</i>	1.5817, 1.5817, 1.5817, 90, 90, 90	fullerene family	-	1.69	X	34395
Ca	Ca rt	Cu, cF4, 225	<i>Fm-3m</i>	0.55884, 0.55884, 0.55884, 90, 90, 90	close-packed structure	gray silver	1.53	X	1016
Ca	Ca ht/hp1	W, cI2, 229	<i>Im-3m</i>	0.448, 0.448, 0.448, 90, 90, 90	b.c.c. family	-	1.48	X	1016
Ca	Ca hp2	Po, cP1, 221	<i>Pm-3m</i>	0.2642, 0.2642, 0.2642, 90, 90, 90	-	-	3.61	X	54137
Ca	Ca hp3	Ca, tP8, 92	<i>P4₂2₁2</i>	0.3209, 0.3209, 0.8976, 90, 90, 90	-	-	5.76	X	52249
Ca	Ca hp4	Ca, oS8, 64	<i>Cmce</i>	0.4319, 0.4505, 0.4315, 90, 90, 90	-	-	6.34	X	52249
Ca	Ca hp5	Cs, oP4, 62	<i>Pnma</i>	0.4276, 0.3229, 0.2881, 90, 90, 90	close-packed structure	-	6.69	X	56168
Ca	Ca stab	Mg, hP2, 194	<i>P6₃/mmc</i>	0.394, 0.394, 0.644, 90, 90, 120	close-packed structure	-	1.54	X	720
Ca	Ca hp6	Ca, tP128, 138	<i>P4₂/ncm</i>	1.1022, 1.1022, 0.9181, 90, 90, 90	-	-	7.64	X	62441
Cd	Cd	Mg, hP2, 194	<i>P6₃/mmc</i>	0.29789, 0.29789, 0.56172, 90, 90, 120	close-packed structure	gray bluish	8.65	X	23545
Ce	Ce rt	Nd, hP4, 194	<i>P6₃/mmc</i>	0.3673, 0.3673, 1.1802, 90, 90, 120	close-packed structure	white silver	6.75	X	1679

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Ce	Ce ht1/hp1	Cu,cF4,225	<i>Fm-3m</i>	0.51612,0.51612,0.51612,90,90,90	close-packed structure	-	6.77	X	3995
Ce	Ce ht2	W,cI2,229	<i>Im-3m</i>	0.412,0.412,0.412,90,90,90	b.c.c. family	-	6.65	X	1393
Ce	Ce hp2	Cu,cF4,225	<i>Fm-3m</i>	0.4628,0.4628,0.4628,90,90,90	close-packed structure	-	9.39	X	10567
Ce	Ce hp3	U,oS4,63	<i>Cmcm</i>	0.3049,0.5988,0.5215,90,90,90	close-packed structure	-	9.78	X	10181
Ce	Ce hp4	In,tI2,139	<i>I4/mmm</i>	0.2827,0.2827,0.4777,90,90,90	close-packed structure	-	12.19	X	16797
Ce	Ce m-hp1	Ce,mS2,12	<i>C12/m1</i>	0.5544,0.3102,0.3104,90,122.04,90	close-packed structure	-	10.28	X	10181
Ce	Ce m-hp2	Ce,mS4,12	<i>C12/m1</i>	0.5813,0.3148,0.5622,90,112.85,90	close-packed structure	-	9.82	X	11653
Cf	Cf	Nd,hP4,194	<i>P6₃/mmc</i>	0.338,0.338,1.1025,90,90,120	close-packed structure	gray silver	15.28	X	23555
Cf	Cf hp1	Cu,cF4,225	<i>Fm-3m</i>	0.478,0.478,0.478,90,90,90	close-packed structure	-	15.27	X	19260
Cf	Cf hp2	Cf,aP4,2	<i>P-1</i>	0.2793,0.3307,0.7412,85.70,89.06,85.15	close-packed structure	-	24.51	X	18945
Cl	[Cl ₂] lt	[I ₂],oS8,64	<i>Cmce</i>	0.62929,0.45361,0.81617,90,90,90	-	-	2.02	X	17139
Cm	Cm rt	Nd,hP4,194	<i>P6₃/mmc</i>	0.352,0.352,1.1396,90,90,120	close-packed structure	gray silver	13.42	X	23555
Cm	Cm ht/hp1	Cu,cF4,225	<i>Fm-3m</i>	0.4933,0.4933,0.4933,90,90,90	close-packed structure	-	13.67	X	23555
Cm	Cm hp2	Cm,mS4,15	<i>C12/c1</i>	0.5346,0.2886,0.5328,90,116.2,90	-	-	22.24	X	46460
Cm	Cm hp3	Ps,oF8,70	<i>Fddd</i>	0.2737,0.5315,0.8925,90,90,90	-	-	25.27	X	46460
Cm	Cm hp4	Cs,oP4,62	<i>Pnma</i>	0.4634,0.4394,0.2682,90,90,90	close-packed structure	-	30.04	X	46460
Co	Co rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.25089,0.25089,0.40696,90,90,120	close-packed structure	white silver	8.82	X	33258
Co	Co ht	Cu,cF4,225	<i>Fm-3m</i>	0.35447,0.35447,0.35447,90,90,90	close-packed structure	-	8.79	X	33258
Co	Co m cub	Mn,cP20,213	<i>P4/32</i>	0.6097,0.6097,0.6097,90,90,90	-	black	8.64	X	35629
Co	Co m hex	Co,hP46,186	<i>P6₃mc</i>	0.8288,0.8288,1.0542,90,90,120	-	-	7.18	X	5485
Cr	Cr	W,cI2,229	<i>Im-3m</i>	0.2885,0.2885,0.2885,90,90,90	b.c.c. family	gray steel	7.19	X	643
Cr	Cr m	Cr,cP8,223	<i>Pm-3n</i>	0.46,0.46,0.46,90,90,90	-	-	7.10	X	10568
Cr	Cr (H)	Mg,hP2,194	<i>P6₃/mmc</i>	0.27224,0.27224,0.44342,90,90,120	close-packed structure	-	6.07	X	1455
Cr	Cr cub2?	Cr,cP26,200	<i>Pm-3</i>	0.4588,0.4588,0.4588,90,90,90	-	-	7.15	X	3559
Cs	Cs	W,cI2,229	<i>Im-3m</i>	0.6141,0.6141,0.6141,90,90,90	b.c.c. family	golden pale	1.91	X	5906
Cs	Cs hp1	Cu,cF4,225	<i>Fm-3m</i>	0.6465,0.6465,0.6465,90,90,90	close-packed structure	-	3.27	X	5906
Cs	Cs hp2	Cs,oS84,20	<i>C222₁</i>	0.92718,1.33013,3.42025,90,90,90	close-packed structure	-	4.40	X	39856
Cs	Cs hp3	Cs,tI4,141	<i>I4₁/amd</i>	0.33366,0.33366,1.2408,90,90,90	-	-	6.39	X	36417
Cs	Cs hp4	Cs,oS16,64	<i>Cmce</i>	1.1205,0.6626,0.6595,90,90,90	-	-	7.21	X	35248
Cs	Cs hp5	Mg,hP2,194	<i>P6₃/mmc</i>	0.3011,0.3011,0.4855,90,90,120	close-packed structure	-	11.58	X	25157
Cu	Cu	Cu,cF4,225	<i>Fm-3m</i>	0.36152,0.36152,0.36152,90,90,90	close-packed structure	orange red	8.93	X	24713
D	[D ₂] lt1	Mg,hP2,194	<i>P6₃/mmc</i>	0.3606,0.3606,0.58884,90,90,120	close-packed structure	-	0.20	X	16794
D	[D ₂] lt2	[N ₂],cP8,205	<i>Pa-3</i>	0.5084,0.5084,0.5084,90,90,90	close-packed structure	-	0.20	A	3145
D	[D ₂] tet	In,tI2,139	<i>I4/mmm</i>	0.34,0.34,0.56,90,90,90	close-packed structure	-	0.21	X	1426
Dy	Dy rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.35903,0.35903,0.56475,90,90,120	close-packed structure	white silver	8.56	X	724
Dy	Dy ht	W,cI2,229	<i>Im-3m</i>	0.3982,0.3982,0.3982,90,90,90	b.c.c. family	-	8.55	X	22536
Dy	Dy lt	U,oS4,63	<i>Cmcm</i>	0.36016,0.61917,0.56728,90,90,90	close-packed structure	-	8.53	A	52185
Dy	Dy hp1	Sm,hR9,166	<i>R-3m</i>	0.34014,0.34014,2.456,90,90,120	close-packed structure	-	9.87	A	50263
Dy	Dy hp2	Nd,hP4,194	<i>P6₃/mmc</i>	0.3145,0.3145,1.0117,90,90,120	close-packed structure	-	12.46	X	50263
Dy	Dy hp3	Cu,cF4,225	<i>Fm-3m</i>	0.39778,0.39778,0.39778,90,90,90	close-packed structure	-	17.15	X	50263
Dy	Dy hp4 mon	Ce,mS4,12	<i>C12/m1</i>	0.48597,0.2818,0.48431,90,108.43,90	close-packed structure	-	17.15	X	50263
Dy	Dy hp4 orth1	Dy,oS8,65	<i>Cmmm</i>	0.56307,0.78958,0.2922,90,90,90	-	-	16.62	X	50263
Dy	Dy hp4 orth2	Dy,oS8,67	<i>Cmce</i>	0.56398,0.78723,0.2842,90,90,90	-	-	17.11	X	50263
Dy	Dy hp4 rhom	Pr,hR24,166	<i>R-3m</i>	0.56256,0.56256,1.3767,90,90,120	close-packed structure	-	17.16	X	50263
Er	Er	Mg,hP2,194	<i>P6₃/mmc</i>	0.35588,0.35588,0.55874,90,90,120	close-packed structure	white silver	9.06	X	724
Er	Er hp1	Sm,hR9,166	<i>R-3m</i>	0.328,0.328,2.3236,90,90,120	close-packed structure	-	11.55	X	57518
Er	Er hp2	Nd,hP4,194	<i>P6₃/mmc</i>	0.3043,0.3043,0.9904,90,90,120	close-packed structure	-	13.99	X	57518
Er	Er hp3	Pr,hR24,166	<i>R-3m</i>	0.55412,0.55412,1.35788,90,90,120	close-packed structure	-	18.46	X	57518
Er	Er hp4	Ce,mS4,12	<i>C12/m1</i>	0.45402,0.2667,0.43553,90,105.77,90	close-packed structure	-	21.89	X	57518
Er	Er tf	Cu,cF4,225	<i>Fm-3m</i>	0.509,0.509,0.509,90,90,90	close-packed structure	-	8.42	X	7397
Er	Er stab	W,cI2,229	<i>Im-3m</i>	0.394,0.394,0.394,90,90,90	b.c.c. family	-	9.08	X	2327
Es	Es	Cu,cF4,225	<i>Fm-3m</i>	0.5746,0.5746,0.5746,90,90,90	close-packed structure	-	8.82	X	12339
Eu	Eu	W,cI2,229	<i>Im-3m</i>	0.4606,0.4606,0.4606,90,90,90	b.c.c. family	white silver	5.16	X	724
Eu	Eu hp1	Mg,hP2,194	<i>P6₃/mmc</i>	0.30978,0.30978,0.47744,90,90,120	close-packed structure	-	12.72	X	61043
Eu	Eu hp2	Ga,mS4,15	<i>C12/c1</i>	0.30838,0.53002,0.47239,90,90,39.90	-	-	13.07	X	60168
Eu	Eu hp3	Ga,mS4,15	<i>C12/c1</i>	0.29761,0.52809,0.45613,90,90,372.90	-	-	14.08	X	64574
Eu	Eu hp orth	Cs,oP4,62	<i>Pnma</i>	0.4977,0.4264,0.2944,90,90,90	close-packed structure	-	16.16	X	58027
Eu	Eu hp-stab1	Eu,hR18,167	<i>R-3c</i>	0.9293,0.9293,0.5381,90,90,120	-	-	11.29	X	59708
Eu	Eu hp-stab2	Ga,cI12,220	<i>I-43d</i>	0.6667,0.6667,0.6667,90,90,90	-	-	10.22	X	61043
F	[F ₂] lt1	[F ₂],cP8,223	<i>Pm-3n</i>	0.667,0.667,0.667,90,90,90	-	yellow pale	1.70	X	2058
F	[F ₂] lt2	[F ₂],mS8,15	<i>C12/c1</i>	0.55,0.328,0.728,90,102.17,90	-	-	1.97	X	5311
Fe	Fe rt	W,cI2,229	<i>Im-3m</i>	0.28652,0.28652,0.28652,90,90,90	b.c.c. family	gray	7.89	X	14653
Fe	Fe ht1	Cu,cF4,225	<i>Fm-3m</i>	0.36477,0.36477,0.36477,90,90,90	close-packed structure	-	7.64	X	2748
Fe	Fe ht2	W,cI2,229	<i>Im-3m</i>	0.29378,0.29378,0.29378,90,90,90	b.c.c. family	-	7.32	X	3682
Fe	Fe hp	Mg,hP2,194	<i>P6₃/mmc</i>	0.2416,0.2416,0.387,90,90,120	close-packed structure	-	9.48	X	3482
Fe	Fe ht-hp	Cs,oP4,57	<i>Pbcm</i>	0.236,0.4172,0.4098,90,90,90	-	-	9.19	X	37240
Ga	Ga	Ga,oS8,64	<i>Cmce</i>	0.4523,0.7661,0.4524,90,90,90	-	gray silver	5.91	X	1743
Ga	Ga hp1	Ga,oS104,20	<i>C222₁</i>	0.5976,0.8576,3.5758,90,90,90	-	-	6.57	X	44690
Ga	Ga hp2	Eu,hR18,167	<i>R-3c</i>	0.83272,0.83272,0.47221,90,90,120	-	-	7.35	X	44690
Ga	Ga hp4	Cu,cF4,225	<i>Fm-3m</i>	0.336,0.336,0.336,90,90,90	close-packed structure	-	12.21	X	35241
Ga	Ga hp1-m	In,tI2,139	<i>I4/mmm</i>	0.2813,0.2813,0.4452,90,90,90	close-packed structure	-	6.57	X	11497
Ga	Ga m1	Ga,mS4,15	<i>C12/c1</i>	0.2766,0.8053,0.3332,90,92.03,90	-	-	6.24	X	4339
Ga	Ga m2	Ga,oS40,63	<i>Cmcm</i>	1.0593,1.3523,0.5203,90,90,90	-	-	6.21	X	6272
Ga	Ga m3	Ga,hR66,166	<i>R-3m</i>	0.9087,0.9087,1.702,90,90,120	-	-	6.28	X	7038
Gd	Gd rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.3636,0.3636,0.57826,90,90,120	close-packed structure	white silver	7.89	X	724
Gd	Gd ht	W,cI2,229	<i>Im-3m</i>	0.4063,0.4063,0.4063,90,90,90	b.c.c. family	-	7.79	X	22536
Gd	Gd hp1	Sm,hR9,166	<i>R-3m</i>	0.3436,0.3436,2.483,90,90,120	close-packed structure	-	9.26	A	11480
Gd	Gd hp2	Nd,hP4,194	<i>P6₃/mmc</i>	0.3415,0.3415,1.0864,90,90,120	close-packed structure	-	9.52	X	50258

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Gd	Gd hp3	Cu,cF4,225	<i>Fm-3m</i>	0.439,0.439,0.439,90,90,90	close-packed structure	-	12.35	X	50258
Gd	Gd hp4	Pr,hR24,166	<i>R-3m</i>	0.6138,0.6138,1.5185,90,90,120	close-packed structure	-	12.65	X	50258
Gd	Gd hp5	Ce,mS4,12	<i>C12/m1</i>	0.532,0.2802,0.5,90,112,01,90	close-packed structure	-	15.12	X	50258
Gd	Gd m	Cu,cF4,225	<i>Fm-3m</i>	0.54,0.54,0.54,90,90,90	close-packed structure	-	6.63	X	7397
Ge	Ge	C,cF8,227	<i>Fd-3m</i>	0.56579,0.56579,0.56579,90,90,90	-	white gray	5.32	X	8541
Ge	Ge hp1	Sn,tI4,141	<i>I4₁/amd</i>	0.48894,0.48894,0.26922,90,90,90	-	-	7.49	X	52603
Ge	Ge hp2	Si,oI4,74	<i>Imma</i>	0.4386,0.4572,0.2461,90,90,90	-	-	9.77	X	32386
Ge	Ge hp3	(Hg _{0.1} Sn _{0.9}),hP1,191	<i>P6₃/mmm</i>	0.24631,0.24631,0.22917,90,90,120	-	-	10.01	X	38374
Ge	Ge hp4	Cs,oS16,64	<i>Cmce</i>	0.7885,0.4655,0.4651,90,90,90	-	-	11.30	X	38374
Ge	Ge hp5	Mg,hP2,194	<i>P6₃/mmc</i>	0.2398,0.2398,0.3909,90,90,120	close-packed structure	-	12.38	X	39858
Ge	Ge m-hp1	Si,cI16,206	<i>Ia-3</i>	0.6932,0.6932,0.6932,90,90,90	-	-	5.79	X	27939
Ge	Ge m-hp2	Ge,tP12,92	<i>P4₁2₁2</i>	0.59281,0.59281,0.69803,90,90,90	-	-	5.90	X	52603
Ge	Ge m 4H	Ge,hP8,194	<i>P6₃/mmc</i>	0.39902,0.39902,1.3107,90,90,120	-	-	5.34	X	55690
Ge	Ge m allo	*oP128,26	<i>Pmc2₁</i>	2.3887,0.7787,1.6304,90,90,90	-	-	5.09	N	14874
Ge	Ge clath	Ge,cF136,227	<i>Fd-3m</i>	1.52115,1.52115,1.52115,90,90,90	clathrate	-	4.66	X	48171
H	[H ₂] tet	Pa,tI2,139	<i>I4/mmm</i>	0.45,0.45,0.36,90,90,90	b.c.c. family	-	0.09	X	1426
H	[H ₂] It1	Mg,hP2,194	<i>P6₃/mmc</i>	0.3782,0.3782,0.6167,90,90,120	close-packed structure	-	0.09	X	16417
H	[H ₂] It2	Cu,cF4,225	<i>Fm-3m</i>	0.521,0.521,0.521,90,90,90	close-packed structure	-	0.09	X	3073
He	He hp	Mg,hP2,194	<i>P6₃/mmc</i>	0.365,0.365,0.5945,90,90,120	close-packed structure	-	0.19	X	1688
He	He It-hp	Cu,cF4,225	<i>Fm-3m</i>	0.4242,0.4242,0.4242,90,90,90	close-packed structure	-	0.35	X	1457
He	He hp-bcc?	W,cI2,229	<i>Im-3m</i>	0.411,0.411,0.411,90,90,90	b.c.c. family	-	0.19	X	1688
Hf	Hf rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.31965,0.31965,0.5058,90,90,120	close-packed structure	gray dark	13.24	X	20404
Hf	Hf ht	W,cI2,229	<i>Im-3m</i>	0.3625,0.3625,0.3625,90,90,90	b.c.c. family	-	12.44	X	1867
Hg	Hg It/hp1	Hg,hR3,166	<i>R-3m</i>	0.34644,0.34644,0.66775,90,90,120	close-packed structure	gray silver	14.40	X	819
Hg	Hg hp2	Pa,tI2,139	<i>I4/mmm</i>	0.3995,0.3995,0.2825,90,90,90	b.c.c. family	-	14.78	X	1075
Hg	Hg hp3	Hg,mS6,12	<i>C12/m1</i>	0.5179,0.2797,0.7964,90,107,96,90	-	-	18.21	X	50080
Hg	Hg hp4	Mg,hP2,194	<i>P6₃/mmc</i>	0.2815,0.2815,0.4927,90,90,120	close-packed structure	-	19.70	X	50080
Ho	Ho	Mg,hP2,194	<i>P6₃/mmc</i>	0.35773,0.35773,0.56158,90,90,120	close-packed structure	white silver	8.80	X	724
Ho	Ho hp1	Sm,hR9,166	<i>R-3m</i>	0.334,0.334,2.41,90,90,120	close-packed structure	-	10.59	A	2696
Ho	Ho tf	Cu,cF4,225	<i>Fm-3m</i>	0.515,0.515,0.515,90,90,90	close-packed structure	-	8.02	X	7397
Ho	Ho stab	W,cI2,229	<i>Im-3m</i>	0.396,0.396,0.396,90,90,90	b.c.c. family	-	8.82	X	2327
I	[I ₂]	[I ₂],oS8,64	<i>Cmce</i>	0.71802,0.47102,0.98103,90,90,90	-	gray	5.08	X	26376
I	I hp1	I,mS8,12	<i>C12/m1</i>	0.3951,0.5768,0.89603,90,90,90,90	-	-	8.26	X	52158
I	I hp2	In,oF4,69	<i>Fmmm</i>	0.42039,0.4228,0.54868,90,90,90	-	-	8.64	X	44966
I	I hp3	I,oI2,71	<i>Immm</i>	0.2904,0.3031,0.5252,90,90,90	-	-	9.12	X	15306
I	I hp4	In,tI2,139	<i>I4/mmm</i>	0.29416,0.29416,0.488,90,90,90	close-packed structure	-	9.98	X	44966
I	I hp5	Cu,cF4,225	<i>Fm-3m</i>	0.424,0.424,0.424,90,90,90	close-packed structure	-	11.06	X	20421
In	In	In,tI2,139	<i>I4/mmm</i>	0.32529,0.32529,0.49459,90,90,90	close-packed structure	gray white	7.29	X	23545
In	In hp	In,oF4,69	<i>Fmmm</i>	0.3769,0.3846,0.414,90,90,90	-	-	12.71	X	27908
Ir	Ir	Cu,cF4,225	<i>Fm-3m</i>	0.38393,0.38393,0.38393,90,90,90	close-packed structure	white silver	22.56	X	24713
K	K	W,cI2,229	<i>Im-3m</i>	0.5328,0.5328,0.5328,90,90,90	b.c.c. family	gray silver	0.86	X	19046
K	K hp1	Cu,cF4,225	<i>Fm-3m</i>	0.657,0.657,0.657,90,90,90	close-packed structure	-	0.92	X	29352
K	K hp2	*tI16,140	<i>I4/mcm</i>	0.9715,0.9715,0.4687,90,90,90	host-guest structure	-	3.53	P	48308
K	K hp3	Na,oP8,62	<i>Pnma</i>	0.5602,0.3311,0.638,90,90,90	-	-	4.39	X	54167
K	K hp4	Cs,tI4,141	<i>I4₁/amd</i>	0.2322,0.2322,0.8669,90,90,90	-	-	5.56	X	54167
K	K hp5	Cs,oS16,64	<i>Cmce</i>	0.8032,0.4753,0.4716,90,90,90	-	-	5.77	A	54167
K	K hp hex	K,hP4,194	<i>P6₃/mmc</i>	0.4218,0.4218,0.57369,90,90,120	close-packed structure	-	2.94	X	54202
Kr	Kr It	Cu,cF4,225	<i>Fm-3m</i>	0.56458,0.56458,0.56458,90,90,90	close-packed structure	-	3.09	X	3551
Kr	Kr hp hex	Mg,hP2,194	<i>P6₃/mmc</i>	0.316,0.316,0.518,90,90,120	close-packed structure	-	6.21	X	41367
La	La rt	Nd,hP4,194	<i>P6₃/mmc</i>	0.377,0.377,1.2159,90,90,120	close-packed structure	white silver	6.16	X	724
La	La ht1	Cu,cF4,225	<i>Fm-3m</i>	0.53057,0.53057,0.53057,90,90,90	close-packed structure	-	6.18	X	3498
La	La ht2	W,cI2,229	<i>Im-3m</i>	0.426,0.426,0.426,90,90,90	b.c.c. family	-	5.97	X	1393
Li	Li rt	W,cI2,229	<i>Im-3m</i>	0.35107,0.35107,0.35107,90,90,90	b.c.c. family	white silver	0.53	X	853
Li	Li It	Sm,hR9,166	<i>R-3m</i>	0.3101,0.3101,2.27649,90,90,120	close-packed structure	-	0.55	A	22602
Li	Li hp1	Cu,cF4,225	<i>Fm-3m</i>	0.4357,0.4357,0.4357,90,90,90	close-packed structure	-	0.56	X	9222
Li	Li hp2	Hg,hR3,166	<i>R-3m</i>	0.24023,0.24023,0.55159,90,90,120	close-packed structure	-	1.25	X	38253
Li	Li hp3	Na,cI16,220	<i>I-43d</i>	0.5138,0.5138,0.5138,90,90,90	-	-	1.36	X	38253
Lu	Lu	Mg,hP2,194	<i>P6₃/mmc</i>	0.35031,0.35031,0.55509,90,90,120	close-packed structure	white silver	9.85	X	724
Lu	Lu stab	W,cI2,229	<i>Im-3m</i>	0.39,0.39,0.39,90,90,90	b.c.c. family	-	9.80	X	2327
Mg	Mg	Mg,hP2,194	<i>P6₃/mmc</i>	0.32093,0.32093,0.52103,90,90,120	close-packed structure	gray	1.74	X	306
Mg	Mg hp	W,cI2,229	<i>Im-3m</i>	0.2953,0.2953,0.2953,90,90,90	b.c.c. family	-	3.14	X	18227
Mn	Mn rt	Mn,cI58,217	<i>I-43m</i>	0.8911,0.8911,0.8911,90,90,90	-	gray silver	7.48	X	4869
Mn	Mn ht1	Mn,cP20,213	<i>P4₁32</i>	0.6315,0.6315,0.6315,90,90,90	-	-	7.25	X	11158
Mn	Mn ht2 stab	In,tI2,139	<i>I4/mmm</i>	0.26842,0.26842,0.3592,90,90,90	close-packed structure	-	7.05	X	6005
Mn	Mn ht3	W,cI2,229	<i>Im-3m</i>	0.308,0.308,0.308,90,90,90	b.c.c. family	-	6.24	X	15366
Mn	Mn It	Mn,tI58,121	<i>I-42m</i>	0.8877,0.8877,0.8873,90,90,90	-	-	7.57	X	28868
Mo	Mo	W,cI2,229	<i>Im-3m</i>	0.3147,0.3147,0.3147,90,90,90	b.c.c. family	gray silver	10.22	X	4208
N	[N ₂] It1	[N ₂]-b,hP24,194	<i>P6₃/mmc</i>	0.4087,0.4087,0.665,90,90,120	-	colorless	0.97	A	1009
N	[N ₂] It2	[N ₂],cP8,198	<i>P2₁3</i>	0.565,0.565,0.565,90,90,90	-	-	1.03	X	6357
N	[N ₂] hp-It γ	[N ₂],tP4,136	<i>P4₂/mmn</i>	0.3957,0.3957,0.5109,90,90,90	-	-	1.16	X	5229
N	[N ₂] hp	[O ₂],cP64,223	<i>Pm-3n</i>	0.6164,0.6164,0.6164,90,90,90	-	-	1.59	X	13877
N	[N ₂] hp-It ε	[N ₂],hR48,167	<i>R-3c</i>	0.802,0.802,1.1104,90,90,120	-	-	1.81	X	18996
N	[N ₂] hp-It δ*	[N ₂],tP176,138	<i>P4₂/ncm</i>	0.8063,0.8063,0.5685,90,90,90	-	-	2.01	X	53595
N	[N ₂] ht-hp	[N ₂],cI8,199	<i>I2₁3</i>	0.34542,0.34542,0.34542,90,90,90	-	colorless	4.51	X	44549
Na	Na rt	W,cI2,229	<i>Im-3m</i>	0.4283,0.4283,0.4283,90,90,90	b.c.c. family	white silver	0.97	X	2634
Na	Na It	Sm,hR9,166	<i>R-3m</i>	0.37659,0.37659,2.7653,90,90,120	close-packed structure	-	1.01	A	22602
Na	Na hp1	Cu,cF4,225	<i>Fm-3m</i>	0.36627,0.36627,0.36627,90,90,90	close-packed structure	-	3.11	X	41366
Na	Na hp2	Na,cI16,220	<i>I-43d</i>	0.5461,0.5461,0.5461,90,90,90	-	-	3.75	X	50241

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Na	Na hp3	* _o S120,*	-	0.665,1.312,1.317,90,90,90	-	-	3.99	N	52287
Na	Na hp4	* _a P90,*	-	0.7283,0.7366,1.6138,89.28,89.21,77.96	-	-	4.06	N	52287
Na	Na hp5	Na ₂ O ₈ P ₈ ,62	<i>Pnma</i>	0.4765,0.302,0.5251,90,90,90	-	-	4.04	X	52287
Na	Na hp6	* _t I50,*	-	0.7234,0.7234,0.9193,90,90,90	-	-	3.97	N	52287
Na	Na ht-hp	* _m P512,*	-	1.306,2.88,1.353,90,104,9,90	-	-	3.97	N	52287
Nb	Nb	W ₂ Cl ₂ ,229	<i>Im-3m</i>	0.33004,0.33004,0.33004,90,90,90	b.c.c. family	gray	8.58	X	5185
Nd	Nd rt	Nd ₂ hP ₄ ,194	<i>P6₃/mmc</i>	0.36579,0.36579,1.17992,90,90,120	close-packed structure	white silver	7.01	X	724
Nd	Nd ht	W ₂ Cl ₂ ,229	<i>Im-3m</i>	0.413,0.413,0.413,90,90,90	b.c.c. family	-	6.80	X	1393
Nd	Nd hp1	Cu ₂ cF ₄ ,225	<i>Fm-3m</i>	0.4917,0.4917,0.4917,90,90,90	close-packed structure	-	8.06	X	11480
Nd	Nd hp2?	Tb ₂ hP ₆ ,194	<i>P6₃/mmc</i>	0.3262,0.3262,1.576,90,90,120	close-packed structure	-	9.90	A	18901
Nd	Nd hp3	Sm ₂ hP ₃ ,152	<i>P3₂1</i>	0.2851,0.2851,0.6806,90,90,120	close-packed structure	-	15.00	A	45514
Nd	Nd hp4	Ce ₂ mS ₄ ,12	<i>C12/m1</i>	0.4858,0.2712,0.5051,90,118,6,90	close-packed structure	-	16.40	X	36246
Nd	Nd hp5	U ₂ oS ₄ ,63	<i>Cmcm</i>	0.2421,0.4788,0.434,90,90,90	close-packed structure	-	19.04	X	38349
Ne	Ne lt/hp	Cu ₂ cF ₄ ,225	<i>Fm-3m</i>	0.44636,0.44636,0.44636,90,90,90	close-packed structure	-	1.51	X	2590
Ni	Ni	Cu ₂ cF ₄ ,225	<i>Fm-3m</i>	0.35241,0.35241,0.35241,90,90,90	close-packed structure	gray silver	8.91	X	33258
Ni	Ni stab	Mg ₂ hP ₂ ,194	<i>P6₃/mmc</i>	0.265,0.265,0.432,90,90,120	close-packed structure	-	7.42	X	57087
Ni	Ni m cub1	W ₂ Cl ₂ ,229	<i>Im-3m</i>	0.276,0.276,0.276,90,90,90	b.c.c. family	-	9.27	X	1
Ni	Ni m cub2	Cu ₂ cF ₄ ,225	<i>Fm-3m</i>	0.4241,0.4241,0.4241,90,90,90	close-packed structure	-	5.11	X	56039
Ni	Ni m cub3	* _c F*,225	<i>Fm-3m</i>	0.7406,0.7406,0.7406,90,90,90	-	-	-	N	56039
Ni	Ni m tet1	* _t I*,139	<i>I4/mmm</i>	0.6809,0.6809,0.9713,90,90,90	-	-	-	N	56039
Ni	Ni m tet2	* _t P*,136	<i>P4₃/mnm</i>	0.4566,0.4566,0.2948,90,90,90	-	-	-	N	56039
Ni	Ni m orth	* _o P*,59	<i>Pmmn</i>	0.3561,1.1485,0.4357,90,90,90	-	-	-	N	56039
Np	Np rt	Np ₂ oP ₈ ,62	<i>Pnma</i>	0.6663,0.4723,0.4887,90,90,90	b.c.c. family	gray silver	20.48	X	413
Np	Np ht1	Np ₂ tP ₄ ,129	<i>P4/nmm</i>	0.4897,0.4897,0.3388,90,90,90	b.c.c. family	-	19.38	X	414
Np	Np ht2	W ₂ Cl ₂ ,229	<i>Im-3m</i>	0.352,0.352,0.352,90,90,90	b.c.c. family	-	18.05	X	414
O	[O ₂] lt1	[F ₂]cP ₈ ,223	<i>Pm-3n</i>	0.683,0.683,0.683,90,90,90	-	blue faint	1.33	X	2058
O	[O ₂] lt2/hp1	[O ₂]hR ₆ ,166	<i>R-3m</i>	0.3289,0.3289,1.1281,90,90,120	-	blue faint	1.51	X	17212
O	[O ₂] lt3	[O ₂]mS ₄ ,12	<i>C12/m1</i>	0.5403,0.3433,0.4247,90,117.841,90	-	blue light	1.53	X	17212
O	[O ₂] hp2	[O ₂]oF ₈ ,69	<i>Fmmm</i>	0.29567,0.42151,0.66897,90,90,90	-	orange	2.55	X	15755
O	[O ₂] hp3	[O ₂]mS ₁₆ ,12	<i>C12/m1</i>	0.776,0.551,0.3656,90,116.5,90	-	red dark	3.04	X	48170
O	[O ₂] hp4	* _m S ₁₆ ,12	<i>C12/m1</i>	0.7253,0.4197,0.321,90,112.2,90	-	-	4.70	N	54200
O	[O ₂] ht-hp	[O ₂]hP ₄ ,194	<i>P6₃/mmc</i>	0.2561,0.2561,0.6575,90,90,120	-	-	2.85	X	53594
O	[O ₂] tf	* _m ***,*	-	0.3414,0.6668,0.9225,90,94.95,90	-	-	-	N	14729
O	[O ₃]	[O ₃]oP ₂₄ ,61	<i>Pbca</i>	0.66973,0.68413,0.77888,90,90,90	-	-	1.79	X	39897
Os	Os	Mg ₂ hP ₂ ,194	<i>P6₃/mmc</i>	0.27348,0.27348,0.43193,90,90,120	close-packed structure	gray bluish	22.58	X	59466
P	P black	P ₂ oS ₈ ,64	<i>Cmce</i>	0.33133,1.0473,0.4374,90,90,90	-	black	2.71	X	12309
P	P white lt	P ₂ aP ₂₄ ,2	<i>P-1</i>	0.5503,1.0884,1.1024,94.68,99.83,100.55	-	yellow pale	1.94	X	20419
P	P white m	P ₂ mS ₁₆ ,12	<i>C12/m1</i>	0.91709,0.83385,0.54336,90,90,311,90	-	-	1.98	X	46704
P	P red mon	P ₂ mP ₈₄ ,13	<i>P12/c1</i>	0.921,0.915,2.260,90,106,1,90	-	red	2.36	X	4262
P	P red tric	P ₂ aP ₄₂ ,2	<i>P-1</i>	0.7075,1.16318,1.2198,71.067,73.69,84.17	-	red	2.37	X	45092
P	P hp1	As ₂ hR ₆ ,166	<i>R-3m</i>	0.3377,0.3377,0.8806,90,90,120	-	-	3.55	X	1952
P	P hp2	Po ₂ cP ₁ ,221	<i>Pm-3m</i>	0.2377,0.2377,0.2377,90,90,90	-	-	3.83	X	1952
P	P hp3	Sn ₂ oS ₂ ,65	<i>Cmmm</i>	0.2766,0.3204,0.2064,90,90,90	-	-	5.62	X	52223
P	P hp4	(Hg ₂ ,Sn ₂ o),hP ₁ ,191	<i>P6/mmm</i>	0.21164,0.21164,0.20203,90,90,120	-	-	6.56	X	38336
P	P hp5	Na ₂ cI ₁₆ ,220	<i>I-43d</i>	0.4778,0.4778,0.4778,90,90,90	-	-	7.54	X	60123
Pa	Pa rt	Pa ₂ tI ₂ ,139	<i>I4/mmm</i>	0.3932,0.3932,0.3238,90,90,90	b.c.c. family	-	15.33	X	1028
Pa	Pa ht	Pa ₂ cF ₄ ,225	<i>Fm-3m</i>	0.5031,0.5031,0.5031,90,90,90	close-packed structure	-	12.05	X	5854
Pb	Pb	Cu ₂ cF ₄ ,225	<i>Fm-3m</i>	0.495,0.495,0.495,90,90,90	close-packed structure	gray	11.35	X	306
Pb	Pb hp1	Mg ₂ hP ₂ ,194	<i>P6₃/mmc</i>	0.3007,0.3007,0.4906,90,90,120	close-packed structure	-	17.91	X	23826
Pb	Pb hp2	W ₂ Cl ₂ ,229	<i>Im-3m</i>	0.3124,0.3124,0.3124,90,90,90	b.c.c. family	-	22.57	X	23826
Pd	Pd	Cu ₂ cF ₄ ,225	<i>Fm-3m</i>	0.38911,0.38911,0.38911,90,90,90	close-packed structure	white silver	12.00	X	44481
Pd	Pd hp	* _m *4,*	-	0.3884,0.3884,0.3898,90,90,18,90	-	-	12.02	N	36186
Pd	Pd _{1.7} (O)	Pd _{1.7} hP ₅ ,164	<i>P-3m1</i>	0.2779,0.2779,0.6809,90,90,120	-	-	6.60	X	13196
Pm	Pm	Nd ₂ hP ₄ ,194	<i>P6₃/mmc</i>	0.365,0.365,1.165,90,90,120	close-packed structure	-	7.17	X	5884
Po	Po rt	Po ₂ cP ₁ ,221	<i>Pm-3m</i>	0.3359,0.3359,0.3359,90,90,90	-	black	9.16	X	3081
Po	Po ht	Po ₂ hR ₃ ,166	<i>R-3m</i>	0.5093,0.5093,0.4927,90,90,120	-	black	9.41	X	3081
Pr	Pr rt	Nd ₂ hP ₄ ,194	<i>P6₃/mmc</i>	0.36715,0.36715,1.18354,90,90,120	close-packed structure	white gray	6.77	X	2009
Pr	Pr ht	W ₂ Cl ₂ ,229	<i>Im-3m</i>	0.413,0.413,0.413,90,90,90	b.c.c. family	-	6.64	X	1393
Pr	Pr hp1	Cu ₂ cF ₄ ,225	<i>Fm-3m</i>	0.488,0.488,0.488,90,90,90	close-packed structure	-	8.05	X	2295
Pr	Pr hp2	Pr ₂ hR ₂₄ ,166	<i>R-3m</i>	0.65429,0.65429,1.62403,90,90,120	close-packed structure	-	9.33	X	54182
Pr	Pr hp3	Pr ₂ mS ₁₆ ,12	<i>C12/m1</i>	1.09391,0.62012,0.63817,90,125.623,90	-	-	10.64	X	54182
Pr	Pr hp4	U ₂ oS ₄ ,63	<i>Cmcm</i>	0.27743,0.56165,0.48924,90,90,90	close-packed structure	-	12.28	X	54182
Pr	Pr hp5	Pr ₂ oP ₄ ,19	<i>P2₁2₁2₁</i>	0.2434,0.4433,0.4813,90,90,90	-	-	18.02	X	43724
Pt	Pt	Cu ₂ cF ₄ ,225	<i>Fm-3m</i>	0.39276,0.39276,0.39276,90,90,90	close-packed structure	white gray	21.39	X	53476
Pu	Pu rt	Pu ₂ mP ₁₆ ,11	<i>P12₁/m1</i>	0.6183,0.4822,1.0963,90,101.79,90	-	white silver	20.26	X	1785
Pu	Pu ht1	Pu ₂ mS ₃₄ ,12	<i>C12/m1</i>	1.18302,1.0449,0.7824,90,128.814,90	-	-	18.28	A	1008
Pu	Pu ht2	Pu ₂ oF ₈ ,70	<i>Fddd</i>	0.31587,0.57682,1.0162,90,90,90	-	-	17.51	X	645
Pu	Pu ht3	Cu ₂ cF ₄ ,225	<i>Fm-3m</i>	0.4639,0.4639,0.4639,90,90,90	close-packed structure	-	16.23	X	2629
Pu	Pu ht4	In ₂ tI ₂ ,139	<i>I4/mmm</i>	0.3339,0.3339,0.4446,90,90,90	close-packed structure	-	16.35	X	784
Pu	Pu ht5	W ₂ Cl ₂ ,229	<i>Im-3m</i>	0.3639,0.3639,0.3639,90,90,90	b.c.c. family	-	16.82	X	2215
Pu	Pu hp	Cs ₂ oP ₄ ,62	<i>Pnma</i>	0.47,0.449,0.276,90,90,90	close-packed structure	-	27.83	X	46463
Ra	Ra	W ₂ Cl ₂ ,229	<i>Im-3m</i>	0.5148,0.5148,0.5148,90,90,90	b.c.c. family	white silver	5.50	X	4122
Rb	Rb	W ₂ Cl ₂ ,229	<i>Im-3m</i>	0.5711,0.5711,0.5711,90,90,90	b.c.c. family	white gray	1.52	X	244
Rb	Rb hp1	Cu ₂ cF ₄ ,225	<i>Fm-3m</i>	0.5417,0.5417,0.5417,90,90,90	close-packed structure	-	3.57	X	15421
Rb	Rb hp2	Rb ₂ oS ₅₂ ,20	<i>C222₁</i>	0.7886,1.124,1.8431,90,90,90	-	-	4.52	X	41382
Rb	Rb hp3	* _t I16,140	<i>I4/mcm</i>	1.03503,1.03503,0.51865,90,90,90	host-guest structure	-	4.38	P	39855
Rb	Rb hp4	Cs ₂ tI ₄ ,141	<i>I4₁/amd</i>	0.30277,0.30277,1.1328,90,90,90	-	-	5.47	X	36754
Rb	Rb hp5	Cs ₂ oS ₁₆ ,64	<i>Cmce</i>	0.93718,0.55501,0.55278,90,90,90	-	-	7.90	X	36822

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm, $^{\circ}$)	Family	Color	D_X	C	Ref.
Re	Re	Mg,hP2,194	$P6_3/mmc$	0.27612,0.27612,0.44012,90,90,120	close-packed structure	gray	21.28	X	1739
Re	Re m	Mn,cP20,213	$P4_132$	0.697,0.697,0.697,90,90,90	-	-	18.26	A	24554
Rh	Rh	Cu,cF4,225	$Fm-3m$	0.38033,0.38033,0.38033,90,90,90	close-packed structure	white silver	12.42	X	33258
Ru	Ru	Mg,hP2,194	$P6_3/mmc$	0.27058,0.27058,0.42811,90,90,120	close-packed structure	white silver	12.37	X	1161
Ru	Ru m	Cu,cF4,225	$Fm-3m$	0.381,0.381,0.381,90,90,90	close-packed structure	-	12.14	X	47738
S	S 6-r	S,hR18,148	$R-3$	1.0766,1.0766,0.4225,90,90,120	-	-	2.26	X	11865
S	S 6,10-r	S,mS64,15	$C12/c1$	1.9232,0.9431,0.8831,90,101.21,90	-	orange	2.17	X	16581
S	S 7-r γ	S,mP28,14	$P12_1/c1$	0.9680,0.7641,0.9409,90,102.08,90	-	yellow	2.19	X	13700
S	S 7-r δ	S,mP56,14	$P12_1/c1$	1.5096,0.5998,2.09509,90,133.907,90	-	-	2.18	X	13700
S	S 8-r α rt	S,oF128,70	$Fddd$	1.04633,1.28786,2.44784,90,90,90	-	yellow	2.07	X	10564
S	S 8-r β ht	S,mP64,14	$P12_1/c1$	1.0926,1.0855,1.0790,90,95.92,90	-	-	2.01	X	9680
S	S 8-r β m	S,mP64,4	$P12_1$	1.06883,1.07232,1.08125,90,95.746,90	-	yellow	2.07	X	47054
S	S 8-r β lt	S,mP48,4	$P12_1$	1.0663,1.0684,1.0799,90,95.71,90	-	-	2.09	X	10563
S	S 8-r γ	S,mP32,13	$P12/c1$	0.8230,1.3052,0.9267,90,122.57,90	rosickyite	colorless	2.03	X	26886
S	S 9-r α	S,mP72,14	$P12_1/c1$	0.7902,1.3908,1.6948,90,103.26,90	-	yellow deep	2.11	X	31661
S	S 10-r	S,mS40,15	$C12/c1$	1.2533,1.0275,0.8239,90,107.39,90	-	yellow	2.10	X	16581
S	S 11-r	S,oP88,29	$Pca2_1$	1.4933,0.8321,1.8086,90,90,90	-	yellow	2.08	X	19629
S	S 12-r	S,oP24,58	Pnm	0.4725,0.9104,1.4532,90,90,90	-	yellow pale	2.04	X	14521
S	S 13-r	S,mP104,14	$P12_1/c1$	1.2951,1.236,1.761,90,110.41,90	-	yellow	2.10	X	19629
S	S 14-r	S,aP28,2	$P-1$	0.5469,0.9662,1.4331,95.97,98.96,100.43	-	yellow	2.05	X	34287
S	S 18-r α	S,oP72,19	$P2_12_12_1$	0.7581,1.1441,2.1152,90,90,90	-	yellow lemon	2.09	X	8458
S	S 18-r β	S,mP36,14	$P12_1/c1$	1.075,0.725,1.597,90,130.0,90	-	-	2.01	X	7998
S	S 20-r	S,oP80,60	$Pbcn$	1.8580,1.3181,0.8600,90,90,90	-	yellow pale	2.02	X	8458
S	S chain	S,mP80,3	$P121$	1.38,0.925,1.76082,90,113.07,90	-	-	2.06	X	4623
S	S hp2	Se,tI16,142	$I4_1/acd$	0.7841,0.7841,0.31,90,90,90	-	-	4.47	X	44666
S	S hp3	S,mS2,12	$C12/m1$	0.28288,0.34698,0.22187,90,113.289,90	-	-	5.32	X	46401
S	S hp4	Te,hR3,166	$R-3m$	0.3277,0.3277,0.2584,90,90,120	-	-	6.65	X	27940
S	S ht-hp	S,hP9,152	$P3_121$	0.70897,0.70897,0.43024,90,90,120	-	-	2.56	X	40120
S	S hp?	*m*96,*	-	0.983,1.033,2.065,90,100.66,90	-	-	2.17	N	27930
Sb	Sb	As,hR6,166	$R-3m$	0.43084,0.43084,1.1274,90,90,120	-	gray	6.69	X	1773
Sb	Sb hp1	*mS8,15	$C12/c1$	0.9042,0.81616,0.39504,90,115.361,90	host-guest structure	-	8.16	P	44677
Sb	Sb hp2	*tI8,140	$I4/mcm$	0.80553,0.80553,0.38991,90,90,90	host-guest structure	-	8.48	P	42948
Sb	Sb hp3	W,cI2,229	$Im-3m$	0.3324,0.3324,0.3324,90,90,90	b.c.c. family	-	11.01	X	16427
Sb	Sb m cub1	Po,cP1,221	$Pm-3m$	0.316,0.316,0.316,90,90,90	-	-	6.41	X	12618
Sb	Sb m cub2	Cu,cF4,225	$Fm-3m$	0.461,0.461,0.461,90,90,90	close-packed structure	-	8.25	X	12618
Sb	Sb m tet	In,tI2,139	$I4/mmm$	0.301,0.301,0.496,90,90,90	close-packed structure	-	9.00	X	12618
Sb	Sb m hex	Mg,hP2,194	$P6_3/mmc$	0.333,0.333,0.523,90,90,120	close-packed structure	-	8.05	X	12618
Sc	Sc rt	Mg,hP2,194	$P6_3/mmc$	0.33035,0.33035,0.52247,90,90,120	close-packed structure	white silver	3.02	X	46432
Sc	Sc ht	W,cI2,229	$Im-3m$	0.37559,0.37559,0.37559,90,90,90	b.c.c. family	-	2.82	X	52063
Sc	Sc hp1	*tI8,140	$I4/mcm$	0.75672,0.75672,0.34398,90,90,90	host-guest structure	-	4.00	P	48268
Sc	Sc hp4	Sc,hP6,178	$P6_22$	0.2355,0.2355,1.0446,90,90,120	-	-	8.93	X	46432
Se	Se	Se,hP3,152	$P3_121$	0.43662,0.43662,0.49536,90,90,120	-	gray purple	4.81	X	3439
Se	Se mon α	Se-b,mP32,14	$P12_1/c1$	0.9054,0.9083,1.4615,90,127.47,90	-	red deep	4.40	X	6319
Se	Se mon β	Se-a,mP32,14	$P12_1/c1$	0.931,0.807,1.285,90,93.13,90	-	-	4.35	X	474
Se	Se mon γ	Se,mP64,14	$P12_1/c1$	1.5018,1.4713,0.8789,90,93.61,90	-	red	4.33	X	13144
Se	Se rhom	S,hR18,148	$R-3$	1.1362,1.1362,0.4429,90,90,120	-	-	4.77	X	13218
Se	Se hp1 mon	Se,mS6,12	$C12/m1$	0.657,0.269,0.629,90,105.4,90	-	-	7.34	X	30772
Se	Se hp1 tet	Se,tI16,142	$I4_1/acd$	0.9148,0.9148,0.3626,90,90,90	-	-	6.91	X	44666
Se	Se hp2	Te,aP3,2	$P-1$	0.26481,0.34648,0.62578,102.718,93.093,112.02	-	-	7.66	X	44675
Se	Se hp3	S,mS2,12	$C12/m1$	0.32527,0.40026,0.25735,90,113.341,90	-	-	8.52	X	44656
Se	Se hp4	Te,hR3,166	$R-3m$	0.38704,0.38704,0.29123,90,90,120	-	-	10.41	X	26074
Se	Se hp5	W,cI2,229	$Im-3m$	0.27941,0.27941,0.27941,90,90,90	b.c.c. family	-	12.02	X	26074
Se	Se m	Po,cP1,221	$Pm-3m$	0.2982,0.2982,0.2982,90,90,90	-	-	4.94	X	10868
Se	Se tf	C,cF8,227	$Fd-3m$	0.604,0.604,0.604,90,90,90	-	-	4.76	X	1269
Si	Si	C,cF8,227	$Fd-3m$	0.54309,0.54309,0.54309,90,90,90	-	gray bluish	2.33	X	8905
Si	Si hp1	Sn,tI4,141	$I4_1/amd$	0.469,0.469,0.2578,90,90,90	-	-	3.29	X	19295
Si	Si hp2	Si,oI4,74	$Imma$	0.4502,0.4737,0.255,90,90,90	-	-	3.43	X	27907
Si	Si hp3	(Hg ₉ ,Sn ₉),hP1,191	$P6/mmm$	0.2551,0.2551,0.2387,90,90,120	-	-	3.47	X	19295
Si	Si hp4	(Sn ₉ ,Bi ₉),oS16,64	$Cmce$	0.80242,0.47961,0.4776,90,90,90	-	-	4.06	X	36751
Si	Si hp5	Mg,hP2,194	$P6_3/mmc$	0.24729,0.24729,0.4188,90,90,120	close-packed structure	-	4.21	X	36751
Si	Si hp6	Cu,cF4,225	$Fm-3m$	0.334,0.334,0.334,90,90,90	close-packed structure	-	5.01	X	20420
Si	Si m-hp1	Si,cI16,206	$Ia-3$	0.66265,0.66265,0.66265,90,90,90	-	-	2.56	X	54449
Si	Si m-hp2	Si,hR24,148	$R-3$	0.91932,0.91932,0.5441,90,90,120	-	-	2.81	X	29354
Si	Si stab	C-b,hP4,194	$P6_3/mmc$	0.404,0.404,0.66,90,90,120	-	-	2.00	X	10013
Sm	Sm rt	Sm,hR9,166	$R-3m$	0.3621,0.3621,2.625,90,90,120	close-packed structure	white silver	7.54	X	550
Sm	Sm ht	Mg,hP2,194	$P6_3/mmc$	0.3644,0.3644,0.5876,90,90,120	close-packed structure	-	7.39	X	9221
Sm	Sm hp1	Nd,hP4,194	$P6_3/mmc$	0.3565,0.3565,1.1456,90,90,120	close-packed structure	-	7.92	X	11480
Sm	Sm hp3	Pr,hR24,166	$R-3m$	0.5891,0.5891,1.4748,90,90,120	close-packed structure	-	13.52	X	64129
Sm	Sm hp4	Sm,hP3,152	$P3_121$	0.2806,0.2806,0.6648,90,90,120	close-packed structure	-	16.53	X	29369
Sm	Sm hp5	In,tI2,139	$I4/mmm$	0.2402,0.2402,0.4231,90,90,90	close-packed structure	-	20.46	X	25172
Sn	Sn lt	C,cF8,227	$Fd-3m$	0.64892,0.64892,0.64892,90,90,90	-	gray	5.77	X	619
Sn	Sn rt	Sn,tI4,141	$I4_1/amd$	0.58308,0.58308,0.3181,90,90,90	-	white	7.29	X	14358
Sn	Sn hp1	Pa,tI2,139	$I4/mmm$	0.3448,0.3448,0.3251,90,90,90	b.c.c. family	-	10.20	X	18761
Sn	Sn hp2	Sn,oI2,71	$Immm$	0.3239,0.3449,0.3463,90,90,90	-	-	10.19	X	62421
Sn	Sn hp3	W,cI2,229	$Im-3m$	0.311,0.311,0.311,90,90,90	b.c.c. family	-	13.10	X	22586
Sn	Sn hp4	Mg,hP2,194	$P6_3/mmc$	0.269,0.269,0.4375,90,90,120	close-packed structure	-	14.38	X	58095
Sn	Sn tf	*oP* *	-	0.578,0.598,0.602,90,90,90	-	-	-	N	26828
Sn	Sn (O)	Sn,oS2,65	$Cmmm$	0.3181,0.58308,0.29154,90,90,90	-	-	7.29	X	18900

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Sr	Sr rt	Cu,cF4,225	<i>Fm-3m</i>	0.60849,0.60849,0.60849,90,90,90	close-packed structure	gray white	2.58	X	463
Sr	Sr ht/hp1	W,cI2,229	<i>Im-3m</i>	0.485,0.485,0.485,90,90,90	b.c.c. family	-	2.55	X	463
Sr	Sr hp2	Sn,tI4,141	<i>I4₁/amd</i>	0.5504,0.5504,0.296,90,90,90	-	-	6.49	X	35081
Sr	Sr hp3	Sr,mS12,9	<i>C1c1</i>	0.74784,0.78009,0.5537,90,130.308,90	-	-	7.09	X	48271
Sr	Sr hp4	*,tI8,140	<i>I4/mcm</i>	0.6958,0.6958,0.3959,90,90,90	host-guest structure	-	8.20	P	38335
Sr	Sr stab	Mg,hP2,194	<i>P6₃/mmc</i>	0.432,0.432,0.706,90,90,120	close-packed structure	-	2.55	X	463
Ta	Ta	W,cI2,229	<i>Im-3m</i>	0.33029,0.33029,0.33029,90,90,90	b.c.c. family	gray bluish	16.68	X	375
Ta	Ta m cub	Cu,cF4,225	<i>Fm-3m</i>	0.404,0.404,0.404,90,90,90	close-packed structure	-	18.23	X	47738
Ta	Ta m tet	Ta,tP30,113	<i>P-42₁m</i>	1.0211,1.0211,0.53064,90,90,90	-	gray silver	16.29	X	41976
Ta	Ta lt-m	Ta,tP30,81	<i>P-4</i>	1.01815,1.01815,0.5295,90,90,90	-	gray silver	16.42	X	41976
Ta	Ta tf	Ta,hP24,176	<i>P6₃/m</i>	0.2831,0.2831,0.5337,90,90,120	-	-	16.22	X	7284
Tb	Tb rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.36055,0.36055,0.56966,90,90,120	close-packed structure	white silver	8.23	X	7327
Tb	Tb ht	W,cI2,229	<i>Im-3m</i>	0.402,0.402,0.402,90,90,90	b.c.c. family	-	8.12	X	2327
Tb	Tb hp1	Sm,hR9,166	<i>R-3m</i>	0.35842,0.35842,2.57523,90,90,120	close-packed structure	-	8.29	A	4583
Tb	Tb hp2	Nd,hP4,194	<i>P6₃/mmc</i>	0.326,0.326,1.043,90,90,120	close-packed structure	-	11.00	X	18266
Tb	Tb hp3	Pr,hR24,166	<i>R-3m</i>	0.6006,0.6006,1.43,90,90,120	close-packed structure	-	14.18	X	50327
Tb	Tb hp4	Ce,mS4,12	<i>C12/m1</i>	0.4519,0.2669,0.4296,90,105.4,90	close-packed structure	-	21.13	X	50327
Tb	Tb hp?	Cu,cF4,225	<i>Fm-3m</i>	0.4236,0.4236,0.4236,90,90,90	close-packed structure	-	13.89	X	18266
Tb	Tb tf	Cu,cF4,225	<i>Fm-3m</i>	0.52,0.52,0.52,90,90,90	close-packed structure	-	7.51	X	7397
Tc	Tc	Mg,hP2,194	<i>P6₃/mmc</i>	0.27407,0.27407,0.4398,90,90,120	close-packed structure	gray	11.38	X	6816
Tc	Tc stab	Cu,cF4,225	<i>Fm-3m</i>	0.3956,0.3956,0.3956,90,90,90	close-packed structure	-	10.51	X	11696
Te	Te	Se,hP3,152	<i>P3₁21</i>	0.4456,0.4456,0.5921,90,90,120	-	gray	6.24	X	21954
Te	Te hp1	Te,aP3,2	<i>P-1</i>	0.30977,0.40682,0.73577,74.743,86.42,67.844	-	-	7.68	X	44675
Te	Te hp2	S,mS2,12	<i>C12/m1</i>	0.38912,0.47333,0.30612,90,112.614,90	-	-	8.14	X	42974
Te	Te hp3	W,cI2,229	<i>Im-3m</i>	0.3468,0.3468,0.3468,90,90,90	b.c.c. family	-	10.16	X	21528
Te	Te hp4	*,cF*,*	-	0.40058,0.40058,0.40058,90,90,90	-	-	-	N	64130
Te	Te hp5	Cu,cF4,225	<i>Fm-3m</i>	0.37573,0.37573,0.37573,90,90,90	close-packed structure	-	15.98	X	64130
Te	Te ht-hp?	Te,hR3,166	<i>R-3m</i>	0.46873,0.46873,0.35474,90,90,120	-	-	9.42	X	48313
Te	Te hp?	As,hR6,166	<i>R-3m</i>	0.4208,0.4208,1.2036,90,90,120	-	-	6.89	X	2317
Te	Te tf	C,cF8,227	<i>Fd-3m</i>	0.56408,0.56408,0.56408,90,90,90	-	-	9.44	X	7581
Th	Th rt	Cu,cF4,225	<i>Fm-3m</i>	0.50843,0.50843,0.50843,90,90,90	close-packed structure	gray black	11.73	X	718
Th	Th ht	W,cI2,229	<i>Im-3m</i>	0.4056,0.4056,0.4056,90,90,90	b.c.c. family	-	11.55	X	1105
Th	Th hp	In,tI2,139	<i>I4/mmm</i>	0.2525,0.2525,0.4178,90,90,90	close-packed structure	-	28.93	X	25158
Ti	Ti rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.29486,0.29486,0.467,90,90,120	close-packed structure	white gray	4.52	X	14350
Ti	Ti ht	W,cI2,229	<i>Im-3m</i>	0.33149,0.33149,0.33149,90,90,90	b.c.c. family	-	4.37	X	1097
Ti	Ti hp1	Ti,hP3,191	<i>P6/mmm</i>	0.4625,0.4625,0.2813,90,90,120	-	-	4.58	X	1953
Ti	Ti hp2	(Cu _{0.75} Ti _{0.25}) ₂ oS4,63	<i>Cmcm</i>	0.2382,0.4461,0.3876,90,90,90	close-packed structure	-	7.73	X	40888
Ti	Ti hp3	Ti ₂ oS4,63	<i>Cmcm</i>	0.3861,0.26296,0.36323,90,90,90	-	-	8.63	X	40888
Tl	Tl rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.3463,0.3463,0.5539,90,90,120	close-packed structure	white silver	11.80	X	28675
Tl	Tl ht	W,cI2,229	<i>Im-3m</i>	0.3871,0.3871,0.3871,90,90,90	b.c.c. family	-	11.70	X	1712
Tl	Tl hp	Cu,cF4,225	<i>Fm-3m</i>	0.431,0.431,0.431,90,90,90	close-packed structure	-	16.96	X	28675
Tl	Tl tet?	In,tI2,139	<i>I4/mmm</i>	0.33588,0.33588,0.54,90,90,90	close-packed structure	-	11.14	X	6
Tm	Tm	Mg,hP2,194	<i>P6₃/mmc</i>	0.35426,0.35426,0.55708,90,90,120	close-packed structure	gray silver	9.27	X	4586
Tm	Tm hp1	Sm,hR9,166	<i>R-3m</i>	0.3247,0.3247,2.267,90,90,120	close-packed structure	-	12.20	X	57508
Tm	Tm hp2	Nd,hP4,194	<i>P6₃/mmc</i>	0.3023,0.3023,0.9776,90,90,120	close-packed structure	-	14.50	X	57508
Tm	Tm hp4	Pr,hR24,166	<i>R-3m</i>	0.5349,0.5349,1.3105,90,90,120	close-packed structure	-	20.73	X	57508
Tm	Tm hp5	Ce,mS4,12	<i>C12/m1</i>	0.4325,0.2555,0.4314,90,104.4,90	close-packed structure	-	24.30	X	57508
Tm	Tm tf	Cu,cF4,225	<i>Fm-3m</i>	0.506,0.506,0.506,90,90,90	close-packed structure	-	8.66	X	7397
Tm	Tm stab	W,cI2,229	<i>Im-3m</i>	0.392,0.392,0.392,90,90,90	b.c.c. family	-	9.31	X	2327
U	U rt	U ₂ oS4,63	<i>Cmcm</i>	0.28536,0.58698,0.49555,90,90,90	close-packed structure	gray silver	19.05	A	1558
U	U ht1	U ₂ IP30,136	<i>P4₂/mnm</i>	1.07589,1.07589,0.56531,90,90,90	Frank-Kasper phase	-	18.12	X	20904
U	U ht2	W,cI2,229	<i>Im-3m</i>	0.35321,0.35321,0.35321,90,90,90	b.c.c. family	-	17.94	X	1109
U	U stab	Cu,cF4,225	<i>Fm-3m</i>	0.489,0.489,0.489,90,90,90	close-packed structure	-	13.52	X	7140
V	V	W,cI2,229	<i>Im-3m</i>	0.303,0.303,0.303,90,90,90	b.c.c. family	gray bluish	6.08	X	50239
V	V hp	Te,hR3,166	<i>R-3m</i>	0.39098,0.39098,0.23704,90,90,120	-	-	8.09	X	50332
W	W	W,cI2,229	<i>Im-3m</i>	0.31652,0.31652,0.31652,90,90,90	b.c.c. family	white gray	19.26	X	29328
Xe	Xe lt/hp1	Cu,cF4,225	<i>Fm-3m</i>	0.615,0.615,0.615,90,90,90	close-packed structure	-	3.75	X	6809
Xe	Xe hp hex	Mg,hP2,194	<i>P6₃/mmc</i>	0.335,0.335,0.56,90,90,120	close-packed structure	-	8.01	X	41367
Y	Y rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.36474,0.36474,0.57306,90,90,120	close-packed structure	white silver	4.47	X	724
Y	Y hp4	Ce,mS4,12	<i>C12/m1</i>	0.47063,0.28333,0.42497,90,104.08,90	close-packed structure	-	10.74	X	59522
Y	Y tf	Cu,cF4,225	<i>Fm-3m</i>	0.583,0.583,0.583,90,90,90	close-packed structure	-	2.98	X	9752
Yb	Yb rt	Cu,cF4,225	<i>Fm-3m</i>	0.54847,0.54847,0.54847,90,90,90	close-packed structure	white silver	6.97	X	6084
Yb	Yb ht/hp1	W,cI2,229	<i>Im-3m</i>	0.444,0.444,0.444,90,90,90	b.c.c. family	-	6.57	X	1393
Yb	Yb lt/hp2	Mg,hP2,194	<i>P6₃/mmc</i>	0.38799,0.38799,0.63859,90,90,120	close-packed structure	-	6.90	X	6084
Zn	Zn	Mg,hP2,194	<i>P6₃/mmc</i>	0.26657,0.26657,0.49472,90,90,120	close-packed structure	gray silver	7.13	X	23545
Zr	Zr rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.32333,0.32333,0.51523,90,90,120	close-packed structure	white silver	6.49	X	6067
Zr	Zr ht/hp2	W,cI2,229	<i>Im-3m</i>	0.3614,0.3614,0.3614,90,90,90	b.c.c. family	-	6.42	X	26102
Zr	Zr hp1	Ti,hP3,191	<i>P6/mmm</i>	0.5035,0.5035,0.3141,90,90,120	-	-	6.59	X	14049

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ac-Br	AcBr ₃	UCl ₃ , hP8, 176	$P6_3/m$	0.808, 0.808, 0.469, 90, 90, 120	-	-	5.85	A	276
Ac-Cl	AcCl ₃	UCl ₃ , hP8, 176	$P6_3/m$	0.764, 0.764, 0.456, 90, 90, 120	-	-	4.80	A	4040
Ac-F	AcF ₃	HoH ₃ , hP24, 165	$P-3c1$	0.741, 0.741, 0.755, 90, 90, 120	-	-	7.88	A	298
Ac-H	AcH ₂	CaF ₂ , cF12, 225	$Fm-3m$	0.567, 0.567, 0.567, 90, 90, 90	fluorite family	-	8.35	X	1408
Ac-O	Ac ₂ O ₃	La ₂ O ₃ , hP5, 164	$P-3m1$	0.408, 0.408, 0.63, 90, 90, 120	-	white	9.18	X	298
Ac-S	Ac ₂ S ₄	Th ₃ P ₄ , cI28, 220	$I-43d$	0.899, 0.899, 0.899, 90, 90, 90	-	-	6.71	A	299
Ag-Al	Ag _{0.3} Al _{0.7}	Cu ₂ cF4, 225	$Fm-3m$	0.40524, 0.40524, 0.40524, 90, 90, 90	close-packed structure	-	5.12	X	3910
Ag-Al	Ag _{0.66} Al _{0.34}	Mg ₂ hP2, 194	$P6_3/mmc$	0.2884, 0.2884, 0.46, 90, 90, 120	close-packed structure	-	8.06	X	13356
Ag-Al	Ag _{0.75} Al _{0.25} ht	W ₂ cI2, 229	$Im-3m$	0.324, 0.324, 0.324, 90, 90, 90	b.c.c. family	-	8.56	X	109
Ag-Al	Ag _{0.75} Al _{0.25} rt	Mn ₂ cP20, 213	$P4_132$	0.6942, 0.6942, 0.6942, 90, 90, 90	-	-	8.70	A	6205
Ag-Al	Ag _{0.79} Al _{0.21}	Cu ₂ cF4, 225	$Fm-3m$	0.4065, 0.4065, 0.4065, 90, 90, 90	close-packed structure	-	8.99	X	25933
Ag-As	Ag _{0.875} As _{0.125} ht	Mg ₂ hP2, 194	$P6_3/mmc$	0.29025, 0.29025, 0.47339, 90, 90, 120	close-packed structure	-	9.98	X	1450
Ag-As	Ag _{0.93} As _{0.07}	Cu ₂ cF4, 225	$Fm-3m$	0.40968, 0.40968, 0.40968, 90, 90, 90	close-packed structure	-	10.20	X	1123
Ag-Au	Ag _{0.5} Au _{0.5} rt	Cu ₂ cF4, 225	$Fm-3m$	0.40752, 0.40752, 0.40752, 90, 90, 90	close-packed structure	-	14.96	X	5864
Ag-B	AgB ₂	AlB ₂ , hP3, 191	$P6/mmm$	0.3, 0.3, 0.324, 90, 90, 120	AlB ₂ family	-	8.51	X	1444
Ag-Ba	BaAg	FeB ₂ , oP8, 62	$Pnma$	0.8657, 0.4982, 0.6651, 90, 90, 90	CrB(TlI)-FeB	-	5.68	X	13858
Ag-Ba	BaAg ₂	KHg ₂ , oI12, 74	$Imma$	0.4958, 0.8063, 0.8453, 90, 90, 90	AlB ₂ family	-	6.94	X	2790
Ag-Ba	BaAg ₅	CaCu ₅ , hP6, 191	$P6/mmm$	0.5803, 0.5803, 0.4612, 90, 90, 120	-	-	8.35	X	19996
Ag-Ba	Ba _{0.77} Ag _{0.23}	Cu _{5.44} Tb _{0.78} , hP8, 191	$P6/mmm$	0.56797, 0.56797, 0.47021, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.78	A	59864
Ag-Ba	Ba ₃ Ag ₂	Er ₃ Ni ₂ , hR45, 148	$R-3$	1.0385, 1.0385, 1.9332, 90, 90, 120	-	-	5.20	A	19996
Ag-Be	Be ₁₂ Ag	ThMn ₁₂ , cI26, 139	$I4/mmm$	0.7284, 0.7284, 0.4246, 90, 90, 90	CaCu ₅ -Zr ₄ Al ₃	-	3.18	A	899
Ag-Be	Be ₂ Ag ht	MgCu ₂ , cF24, 227	$Fd-3m$	0.6287, 0.6287, 0.6287, 90, 90, 90	Friauf-Laves phase	-	6.73	X	108
Ag-Bi	Ag _{0.5} Bi _{0.5} m	Mg ₂ hP2, 194	$P6_3/mmc$	0.2998, 0.2998, 0.4849, 90, 90, 120	close-packed structure	-	13.94	X	10128
Ag-Bi	Ag _{0.98} Bi _{0.02}	Cu ₂ cF4, 225	$Fm-3m$	0.4112, 0.4112, 0.4112, 90, 90, 90	close-packed structure	-	10.50	X	25933
Ag-Bi	Ag ₃ Bi ht-hp	Ag ₃ Sb, oP4, 25	$Pmm2$	0.3089, 0.4847, 0.5392, 90, 90, 90	close-packed structure	-	10.95	X	35298
Ag-Br	AgBr hp	K[NH ₂], mP4, 11	$P12_1/m1$	0.3821, 0.398, 0.5513, 90, 95, 90	-	-	7.48	X	36729
Ag-Br	AgBr	NaCl, cF8, 225	$Fm-3m$	0.5775, 0.5775, 0.5775, 90, 90, 90	bromargyrite	yellow	6.48	X	20292
Ag-Ca	CaAg	TlI, oS8, 63	$Cmcm$	0.40522, 1.1447, 0.46443, 90, 90, 90	CrB(TlI)-FeB	gray silver	4.56	X	54537
Ag-Ca	CaAg ₂	KHg ₂ , oI12, 74	$Imma$	0.4689, 0.7301, 0.8139, 90, 90, 90	AlB ₂ family	-	6.10	X	50631
Ag-Ca	Ca ₂ Ag ₇ rt	Ag ₇ Yb ₂ , oS36, 63	$Cmcm$	0.94784, 0.55251, 1.4079, 90, 90, 90	-	-	7.52	X	30242
Ag-Ca	Ca ₃ Ag ₈ (N)	Ca ₃ Ag ₈ , cI44, 229	$Im-3m$	0.981, 0.981, 0.981, 90, 90, 90	-	-	6.92	X	2022
Ag-Ca	Ca ₅ Ag ₃	Cr ₅ B ₃ , cI32, 140	$I4/mcm$	0.8039, 0.8039, 1.5011, 90, 90, 90	-	white silver	3.59	X	1604
Ag-Cd	Ag _{0.05} Cd _{0.95}	Mg ₂ hP2, 194	$P6_3/mmc$	0.299, 0.299, 0.5475, 90, 90, 120	close-packed structure	-	8.79	X	1407
Ag-Cd	Ag _{0.25} Cd _{0.75}	Mg ₂ hP2, 194	$P6_3/mmc$	0.3072, 0.3072, 0.48163, 90, 90, 120	close-packed structure	-	9.39	X	1407
Ag-Cd	Ag _{0.48} Cd _{0.52} ht1	Mg ₂ hP2, 194	$P6_3/mmc$	0.3017, 0.3017, 0.4863, 90, 90, 120	close-packed structure	-	9.55	X	8351
Ag-Cd	Ag _{0.48} Cd _{0.52} ht2	W ₂ cI2, 229	$Im-3m$	0.3392, 0.3392, 0.3392, 90, 90, 90	b.c.c. family	-	9.38	X	8351
Ag-Cd	Ag _{0.875} Cd _{0.125}	Cu ₂ cF4, 225	$Fm-3m$	0.4117, 0.4117, 0.4117, 90, 90, 90	close-packed structure	-	10.32	X	8090
Ag-Cd	Ag _{0.96} Cd _{0.04} rt	CsCl, cP2, 221	$Pm-3m$	0.3347, 0.3347, 0.3347, 90, 90, 90	b.c.c. family	-	9.76	X	8351
Ag-Cd	Ag _{1.02} Cd _{0.98} mart1	*, **, *	-	0.48, 0.48, 0.32, 90, 90, 90	-	-	-	N	7492
Ag-Cd	Ag _{1.02} Cd _{0.98} mart2	*, **, *	-	0.24, 0.3, 0.53, 90, 90, 90	-	-	-	N	7492
Ag-Cd	Ag ₃ Cd ₈	Cu ₂ Zn ₉ , cI52, 217	$I-43m$	1.0035, 1.0035, 1.0035, 90, 90, 90	γ -brass	-	9.46	A	11706
Ag-Ce	AgCe lt	CuTi ₂ , pI2, 123	$P4/mmm$	0.3739, 0.3739, 0.3811, 90, 90, 90	b.c.c. family	-	7.73	X	30767
Ag-Ce	AgCe rt	CsCl, cP2, 221	$Pm-3m$	0.3785, 0.3785, 0.3785, 90, 90, 90	b.c.c. family	-	7.59	X	17113
Ag-Ce	Ag _{0.98} Ce _{0.02}	Cu ₂ cF4, 225	$Fm-3m$	0.40868, 0.40868, 0.40868, 90, 90, 90	close-packed structure	-	10.56	X	15804
Ag-Ce	Ag ₃ Ce rt	KHg ₂ , oI12, 74	$Imma$	0.4702, 0.7331, 0.8193, 90, 90, 90	AlB ₂ family	-	8.37	A	43097
Ag-Ce	Ag ₅₁ Ce ₁₄ rt	Ag ₅₁ Gd ₁₄ , hP68, 175	$P6/m$	1.28524, 1.28524, 0.94683, 90, 90, 120	-	-	9.15	X	65055
Ag-Cl	AgCl hp1	K[NH ₂], mP4, 11	$P12_1/m1$	0.3587, 0.3992, 0.5307, 90, 98, 4, 90	-	-	6.33	X	36729
Ag-Cl	AgCl hp2	TlI, oS8, 63	$Cmcm$	0.3399, 1.0124, 0.4032, 90, 90, 90	CrB(TlI)-FeB	-	6.86	X	36729
Ag-Cl	AgCl	NaCl, cF8, 225	$Fm-3m$	0.5461, 0.5461, 0.5461, 90, 90, 90	rocksalt family	white	5.85	X	36729
Ag-Cu	Ag _{0.01} Cu _{0.99}	Cu ₂ cF4, 225	$Fm-3m$	0.362, 0.362, 0.362, 90, 90, 90	close-packed structure	-	8.96	X	27280
Ag-Cu	Ag _{0.5} Cu _{0.5} m	Cu ₂ cF4, 225	$Fm-3m$	0.38765, 0.38765, 0.38765, 90, 90, 90	close-packed structure	-	9.77	X	3055
Ag-Cu	Ag _{0.97} Cu _{0.03} m	Cu ₂ cF4, 225	$Fm-3m$	0.40877, 0.40877, 0.40877, 90, 90, 90	close-packed structure	-	10.36	X	27280
Ag-Dy	AgDy	CsCl, cP2, 221	$Pm-3m$	0.3623, 0.3623, 0.3623, 90, 90, 90	b.c.c. family	-	9.44	X	23534
Ag-Dy	Ag _{0.945} Dy _{0.055}	Cu ₂ cF4, 225	$Fm-3m$	0.4091, 0.4091, 0.4091, 90, 90, 90	close-packed structure	-	10.76	X	24428
Ag-Dy	Ag ₂ Dy	MoSi ₂ , tI6, 139	$I4/mmm$	0.3697, 0.3697, 0.9213, 90, 90, 90	b.c.c. family	gray silver	9.98	X	4625
Ag-Dy	Ag ₅₁ Dy ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	$P6/m$	1.2655, 1.2655, 0.9275, 90, 90, 120	-	-	10.04	A	27306
Ag-Er	AgEr	CsCl, cP2, 221	$Pm-3m$	0.3578, 0.3578, 0.3578, 90, 90, 90	b.c.c. family	-	9.97	X	24750
Ag-Er	Ag _{0.935} Er _{0.065}	Cu ₂ cF4, 225	$Fm-3m$	0.40994, 0.40994, 0.40994, 90, 90, 90	close-packed structure	-	10.77	X	24428
Ag-Er	Ag ₂ Er	MoSi ₂ , tI6, 139	$I4/mmm$	0.3668, 0.3668, 0.9159, 90, 90, 90	b.c.c. family	-	10.32	X	6622
Ag-Er	Ag ₅₁ Er ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	$P6/m$	1.2596, 1.2596, 0.9236, 90, 90, 120	-	-	10.26	A	4863
Ag-Eu	AgEu	FeB ₂ , oP8, 62	$Pnma$	0.8037, 0.4764, 0.6259, 90, 90, 90	CrB(TlI)-FeB	-	7.20	X	13186
Ag-Eu	Ag _{0.9975} Eu _{0.0025}	Cu ₂ cF4, 225	$Fm-3m$	0.4089, 0.4089, 0.4089, 90, 90, 90	close-packed structure	-	10.49	X	24428
Ag-Eu	Ag ₂ Eu rt	KHg ₂ , oI12, 74	$Imma$	0.4753, 0.7488, 0.8164, 90, 90, 90	AlB ₂ family	-	8.41	X	2790
Ag-Eu	Ag ₂ Eu ₃	U ₇ Si ₂ , pI10, 127	$P4/mbm$	0.8461, 0.8461, 0.4515, 90, 90, 90	-	-	6.90	X	13186
Ag-Eu	Ag ₅ Eu	CaCu ₅ , hP6, 191	$P6/mmm$	0.5629, 0.5629, 0.4638, 90, 90, 120	-	-	9.02	X	12324
Ag-Eu	Ag _{5.25} Eu _{0.88}	Cu _{5.44} Tb _{0.78} , hP8, 191	$P6/mmm$	0.56221, 0.56221, 0.46392, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.13	X	63703
Ag-F	AgF hp1	NiAs, hP4, 194	$P6_3/mmc$	0.32434, 0.32434, 0.62386, 90, 90, 120	AlB ₂ family	-	7.41	X	34840
Ag-F	AgF hp2	CsCl, cP2, 221	$Pm-3m$	0.2945, 0.2945, 0.2945, 90, 90, 90	b.c.c. family	-	8.25	X	6666
Ag-F	AgF	NaCl, cF8, 225	$Fm-3m$	0.4932, 0.4932, 0.4932, 90, 90, 90	rocksalt family	yellow	7.02	X	6666
Ag-F	AgF ₂	AgF ₂ , oP12, 61	$Pbca$	0.5101, 0.5568, 0.5831, 90, 90, 90	-	black blue	5.85	X	24081
Ag-F	AgF ₃	AuF ₃ , hP24, 178	$P6_322$	0.50782, 0.50782, 1.54523, 90, 90, 120	-	red	4.76	X	24606
Ag-F	Ag ₂ F	CdI ₂ , hP3, 164	$P-3m1$	0.29988, 0.29988, 0.5695, 90, 90, 120	CdI ₂ -PbI ₂ polytype	greenish	8.79	X	22306
Ag-F	Ag ₂ F ₅	Ag ₂ F ₅ , aP28, 2	$P-1$	0.4999, 0.7357, 1.1087, 90.05, 90.18, 106.54	-	brown dark	5.28	X	41621
Ag-F	Ag ₃ F ₈	Au ₃ F ₈ , mP22, 14	$P12_1/c1$	0.50466, 1.10542, 0.78756, 90, 136.647, 90	-	-	5.24	X	37509
Ag-Fe	Ag _{0.25} Fe _{0.75} tf	W ₂ cI2, 229	$Im-3m$	0.294, 0.294, 0.294, 90, 90, 90	b.c.c. family	-	8.79	X	21097
Ag-Fe	Ag _{0.5} Fe _{0.5} tf	Cu ₂ cF4, 225	$Fm-3m$	0.403, 0.403, 0.403, 90, 90, 90	close-packed structure	-	8.31	X	21097
Ag-Ga	AgGa	CsCl, cP2, 221	$Pm-3m$	0.3171, 0.3171, 0.3171, 90, 90, 90	b.c.c. family	-	9.25	X	24731
Ag-Ga	Ag _{0.75} Ga _{0.25} ht	Mg ₂ hP2, 194	$P6_3/mmc$	0.28818, 0.28818, 0.46956, 90, 90, 120	close-packed structure	-	9.67	X	45823

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ag-Ga	Ag _{0.92} Ga _{0.08}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.40753,0.40753,0.40753,90,90,90	close-packed structure	-	10.29	X	45823
Ag-Ga	Ag ₂ Ga rt	Mg ₂ In ₂ hP9,189	<i>P-62m</i>	0.7768,0.7768,0.28759,90,90,120	Fe ₂ P family	-	9.46	X	35489
Ag-Ga	Ag ₃ Ga ₂	* _o P*,*	-	0.322,0.3884,0.67276,90,90,90	-	-	-	N	49513
Ag-Gd	AgGd	CsCl,cP2,221	<i>Pm-3m</i>	0.366,0.366,0.366,90,90,90	b.c.c. family	-	8.98	X	15134
Ag-Gd	Ag _{0.945} Gd _{0.055}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.4096,0.4096,0.4096,90,90,90	close-packed structure	-	10.69	X	24428
Ag-Gd	Ag ₂ Gd rt	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3743,0.3743,0.9352,90,90,90	b.c.c. family	-	9.45	X	24813
Ag-Gd	Ag ₅₁ Gd ₁₄	Ag ₅₁ Gd ₁₄ hP68,175	<i>P6/m</i>	1.2643,1.2643,0.93358,90,90,120	-	-	9.90	X	65055
Ag-Ge	Ag _{0.74} Ge _{0.26} hp-ht	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.286,0.286,0.4666,90,90,120	close-packed structure	-	9.92	X	24720
Ag-Ge	Ag _{0.8} Ge _{0.2} m	* _t ***	-	0.8116,0.8116,2.052,90,90,90	-	-	-	N	6669
Ag-Ge	Ag _{0.84} Ge _{0.16}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.409,0.409,0.409,90,90,90	close-packed structure	-	9.92	X	25933
Ag-Hf	AgHf	CuTi ₂ tP4,129	<i>P4/nmm</i>	0.3427,0.3427,0.6362,90,90,90	b.c.c. family	-	12.73	A	56847
Ag-Hf	AgHf ₂	CuZr ₂ tI6,139	<i>I4/mmm</i>	0.3195,0.3195,1.1828,90,90,90	close-packed structure	-	12.79	A	56847
Ag-Hg	AgHg	* _h P24,180	<i>P6₂/22</i>	0.8147,0.8147,0.8855,90,90,120	-	gray silver	-	N	8908
Ag-Hg	Ag _{0.565} Hg _{0.435}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.29853,0.29853,0.48413,90,90,120	schachnerite	-	13.17	X	1450
Ag-Hg	Ag _{0.6} Hg _{0.4}	(Cu _{0.75} Ti _{0.25}) ₂ oS4,63	<i>Cmcm</i>	0.296,0.513,0.483,90,90,90	paraschachnerite	-	13.13	A	6787
Ag-Hg	Ag _{0.733} Hg _{0.267}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.41585,0.41585,0.41585,90,90,90	close-packed structure	-	12.25	X	953
Ag-Hg	Ag ₅ Hg _{7.55}	Ag ₅ Hg _{7.55} cI52,197	<i>I23</i>	1.00506,1.00506,1.00506,90,90,90	moschellandsbergite	-	13.44	X	6336
Ag-Ho	AgHo	CsCl,cP2,221	<i>Pm-3m</i>	0.3601,0.3601,0.3601,90,90,90	b.c.c. family	-	9.70	X	23534
Ag-Ho	Ag ₂ Ho	MoSi ₂ tI6,139	<i>I4/mmm</i>	0.3682,0.3682,0.9181,90,90,90	b.c.c. family	-	10.16	X	4626
Ag-Ho	Ag ₅₁ Ho ₁₄	Ag ₅₁ Gd ₁₄ hP68,175	<i>P6/m</i>	1.2609,1.2609,0.9257,90,90,120	-	-	10.18	A	4863
Ag-Ho	Ag ₇ Ho ₂	* _o P*,*	-	0.7044,0.7855,0.7964,90,90,90	-	-	-	N	3062
Ag-I	AgI 12H	AgI,hP24,186	<i>P6₃/mc</i>	0.4592,0.4592,4.506,90,90,120	-	-	5.69	X	7721
Ag-I	AgI 12T	AgI,hP24,156	<i>P3m1</i>	0.459,0.459,4.508,90,90,120	-	-	5.69	X	10182
Ag-I	AgI 16T	AgI,hP32,156	<i>P3m1</i>	0.4592,0.4592,6.008,90,90,120	-	-	5.69	X	7721
Ag-I	AgI 6H	SiC,hP12,186	<i>P6₃/mc</i>	0.45,0.45,2.24,90,90,120	adamantane structure	-	5.95	X	2727
Ag-I	AgI 8T	AgI,hP16,156	<i>P3m1</i>	0.4592,0.4592,3.004,90,90,120	-	-	5.69	X	7721
Ag-I	AgI hp1	NaCl,cF8,225	<i>Fm-3m</i>	0.60339,0.60339,0.60339,90,90,90	rocksalt family	brown red	7.10	X	36729
Ag-I	AgI hp2	AgI,tP4,115	<i>P-4m2</i>	0.458,0.458,0.6,90,90,90	-	-	6.20	X	4009
Ag-I	AgI hp3	K[NH ₂] ₂ mP4,11	<i>P12₁/m1</i>	0.4056,0.4057,0.5615,90,98.43,90	-	-	8.53	X	36729
Ag-I	AgI ht m	SiC,hP8,186	<i>P6₃/mc</i>	0.45979,0.45979,1.5029,90,90,120	adamantane structure	-	5.67	X	8592
Ag-I	AgI ht	AgI,cI38,229	<i>Im-3m</i>	0.5062,0.5062,0.5062,90,90,90	-	brown dark	6.01	X	11895
Ag-I	AgI m	ZnS,cF8,216	<i>F-43m</i>	0.6496,0.6496,0.6496,90,90,90	adamantane structure	green	5.69	X	44737
Ag-I	AgI rt	ZnO,hP4,186	<i>P6₃/mc</i>	0.45937,0.45937,0.75152,90,90,120	iodargyrite	green	5.68	X	20286
Ag-In	AgIn ₂	CuAl ₂ tI12,140	<i>I4/mcm</i>	0.6881,0.6881,0.562,90,90,90	-	-	8.42	X	6603
Ag-In	Ag _{0.75} In _{0.25} ht1	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.29563,0.29563,0.47857,90,90,120	close-packed structure	-	10.05	X	1450
Ag-In	Ag _{0.75} In _{0.25} ht2	W,cI2,229	<i>Im-3m</i>	0.33682,0.33682,0.33682,90,90,90	b.c.c. family	-	9.53	X	1339
Ag-In	Ag _{0.8} In _{0.2}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.415,0.415,0.415,90,90,90	close-packed structure	-	10.15	X	25933
Ag-In	Ag ₃ In rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4144,0.4144,0.4144,90,90,90	close-packed structure	-	10.23	X	5077
Ag-In	Ag ₉ In ₄ rt	Cu ₉ Al ₄ cP52,215	<i>P-43m</i>	0.9922,0.9922,0.9922,90,90,90	γ-brass	-	9.73	X	10344
Ag-K	KAg ₂ hp	MgZn ₂ hP12,194	<i>P6₃/mmc</i>	0.55891,0.55891,0.94761,90,90,120	Friauf-Laves phase	golden	6.60	X	33558
Ag-K	K ₂ Ag hp	Hg ₂ U,hP3,191	<i>P6/mmm</i>	0.55434,0.55434,0.377,90,90,120	AlB ₂ family	-	3.08	X	31729
Ag-K	K ₃ Ag hp	BiF ₃ cF16,225	<i>Fm-3m</i>	0.7837,0.7837,0.7837,90,90,90	fluorite family	gray silver	3.11	X	31729
Ag-La	AgLa hp1	CuTi ₂ tP2,123	<i>P4/mmm</i>	0.3658,0.3658,0.384,90,90,90	b.c.c. family	-	7.98	X	10987
Ag-La	AgLa hp2	AuCd ₂ oP4,51	<i>Pmma</i>	0.475,0.3,0.54,90,90,90	close-packed structure	-	10.65	A	33225
Ag-La	AgLa rt	CsCl,cP2,221	<i>Pm-3m</i>	0.37924,0.37924,0.37924,90,90,90	b.c.c. family	-	7.51	X	51650
Ag-La	Ag _{0.99} La _{0.01}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.40864,0.40864,0.40864,90,90,90	close-packed structure	-	10.53	X	15804
Ag-La	Ag ₂ La rt	KHg ₂ oI12,74	<i>Imma</i>	0.4825,0.7287,0.8196,90,90,90	AlB ₂ family	-	8.17	A	3993
Ag-La	Ag _{2.5} La _{0.5} rt	MgZn ₂ hP12,194	<i>P6₃/mmc</i>	0.557,0.557,0.9079,90,90,120	Friauf-Laves phase	-	9.23	A	57132
Ag-La	Ag ₅₁ La ₁₄	Ag ₅₁ Gd ₁₄ hP68,175	<i>P6/m</i>	1.2955,1.2955,0.9525,90,90,120	-	-	8.93	A	4863
Ag-Li	LiAg tet	UPb ₃ hI,141	<i>I4₁/amd</i>	0.39658,0.39658,0.82803,90,90,90	close-packed structure	-	5.86	X	56316
Ag-Li	Li _{0.35} Ag _{0.65} rt	Cu ₂ cF4,225	<i>Fm-3m</i>	0.4042,0.4042,0.4042,90,90,90	close-packed structure	-	7.30	X	1866
Ag-Li	Li _{0.98} Ag _{0.02} rt	W,cI2,229	<i>Im-3m</i>	0.34913,0.34913,0.34913,90,90,90	b.c.c. family	-	0.70	X	4379
Ag-Li	Li _{1.18} Ag _{0.82} cub	CsCl,cP2,221	<i>Pm-3m</i>	0.31818,0.31818,0.31818,90,90,90	b.c.c. family	-	4.98	X	52387
Ag-Li	Li _{8.89} Ag ₅ rt	Cu ₅ Zn ₈ cI52,217	<i>I-43m</i>	0.96066,0.96066,0.96066,90,90,90	γ-brass	-	4.50	X	52387
Ag-Lu	Ag _{0.955} Lu _{0.045}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.4108,0.4108,0.4108,90,90,90	close-packed structure	-	10.62	X	5377
Ag-Lu	Ag ₂ Lu	MoSi ₂ tI6,139	<i>I4/mmm</i>	0.3628,0.3628,0.9113,90,90,90	b.c.c. family	-	10.82	A	3255
Ag-Lu	Ag ₄ Lu	MoNi ₄ tI10,87	<i>I4/m</i>	0.66696,0.66696,0.41581,90,90,90	close-packed structure	-	10.89	A	4863
Ag-Mg	MgAg	CsCl,cP2,221	<i>Pm-3m</i>	0.33102,0.33102,0.33102,90,90,90	b.c.c. family	-	6.05	X	3485
Ag-Mg	MgAg ₃ rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.41111,0.41111,0.41111,90,90,90	close-packed structure	-	8.32	X	1078
Ag-Mg	Mg _{0.25} Ag _{0.75} ht	Cu ₂ cF4,225	<i>Fm-3m</i>	0.41526,0.41526,0.41526,90,90,90	close-packed structure	-	8.07	X	4572
Ag-Mg	Mg _{0.98} Ag _{0.02}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.3197,0.3197,0.5184,90,90,120	close-packed structure	-	1.88	X	57139
Ag-Mg	Mg _{1.04} Ag _{2.96} rt	ZrAl ₃ tI16,139	<i>I4/mmm</i>	0.41088,0.41088,1.6444,90,90,90	close-packed structure	-	8.25	A	4572
Ag-Mg	Mg _{25.04} Ag _{7.96} rt	Mg ₁₉ (Mg _{0.9} Ag _{0.1}) ₇ Ag ₇ cF264,202	<i>Fm-3</i>	1.7612,1.7612,1.7612,90,90,90	-	-	3.57	X	40046
Ag-Mg	Mg ₃₇ Ag ₉	Mg ₃₇ Ag ₉ hP116,176	<i>P6₃/m</i>	1.24852,1.24852,1.44117,90,90,120	-	gray silver	3.19	X	46690
Ag-Mg	Mg ₅₄ Ag ₁₇ ht	Hf ₅₄ Os ₁₇ oI142,71	<i>Immm</i>	1.4209,1.424,1.4663,90,90,90	-	-	3.52	X	21676
Ag-Mn	Ag _{0.03} Mn _{0.97} ht3	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3718,0.3718,0.3718,90,90,90	close-packed structure	-	7.31	X	251
Ag-Mn	Ag _{0.84} Mn _{0.16}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.40854,0.40854,0.40854,90,90,90	close-packed structure	-	9.68	X	4505
Ag-N	Ag[N ₃] hp	K[N ₃]tI16,140	<i>I4/mcm</i>	0.552,0.552,0.557,90,90,90	-	white	5.87	X	57478
Ag-N	Ag[N ₃] ht	Ag[N ₃]mP16,14	<i>P12₁/c1</i>	0.60756,0.61663,0.65729,90,114.19,90	-	-	4.43	X	49434
Ag-N	Ag[N ₃] orth	Ag[N ₃]oI16,72	<i>Ibam</i>	0.558,0.593,0.604,90,90,90	-	white	4.98	X	82
Ag-N	Ag[N ₃] tet	* _t IP*,76	<i>P4₁</i>	1.3614,1.3614,0.9452,90,90,90	-	-	-	N	27249
Ag-Na	NaAg ₂ rt	MgCu ₂ cF24,227	<i>Fd-3m</i>	0.7923,0.7923,0.7923,90,90,90	Friauf-Laves phase	white silver	6.38	X	1502
Ag-Nd	AgNd hp	AuCd ₂ oP4,51	<i>Pmma</i>	0.4534,0.2778,0.5268,90,90,90	close-packed structure	-	12.62	A	33225
Ag-Nd	AgNd lt	CuTi ₂ tP2,123	<i>P4/mmm</i>	0.3712,0.3712,0.3698,90,90,90	b.c.c. family	-	8.22	X	8910
Ag-Nd	AgNd rt	CsCl,cP2,221	<i>Pm-3m</i>	0.37181,0.37181,0.37181,90,90,90	b.c.c. family	-	8.14	X	8910
Ag-Nd	Ag _{0.97} Nd _{0.03}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.40873,0.40873,0.40873,90,90,90	close-packed structure	-	10.60	X	15804
Ag-Nd	Ag ₂ Nd ht1	* _h P*,*	-	0.4789,0.4789,0.706,90,90,120	-	-	-	N	11456
Ag-Nd	Ag ₂ Nd rt	KHg ₂ oI12,74	<i>Imma</i>	0.47719,0.7026,0.8153,90,90,90	AlB ₂ family	-	8.75	A	41337

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Ag-Nd	Ag ₅₁ Nd ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.27231,1.27231,0.93852,90,90,120	-	-	9.49	A	41337
Ag-Ni	Ag _{0.5} Ni _{0.5} tf	Cu,cF4,225	<i>Fm-3m</i>	0.383,0.383,0.383,90,90,90	close-packed structure	-	9.85	X	28853
Ag-O	AgO cub	ZnS,cF8,216	<i>F-43m</i>	0.4816,0.4816,0.4816,90,90,90	adamantane structure	-	7.37	X	1063
Ag-O	AgO mon	AgO,mP8,14	<i>P12₁/c1</i>	0.58592,0.34842,0.54995,90,107.506,90	-	gray	7.68	X	21121
Ag-O	AgO tet	AgO,tI32,88	<i>I4₁/a</i>	0.6833,0.6833,0.9122,90,90,90	-	black	7.73	X	19145
Ag-O	Ag ₂ O cub	Cu ₂ O,cP6,224	<i>Pn-3m</i>	0.47306,0.47306,0.47306,90,90,90	-	black	7.27	X	40621
Ag-O	Ag ₂ O hp1	*hP6,*	-	0.471,0.471,0.78,90,90,120	-	-	7.70	N	20551
Ag-O	Ag ₂ O hp2	*hP12,*	-	0.324,0.324,2.182,90,90,120	-	-	7.76	N	15299
Ag-O	Ag ₂ O trig	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.3072,0.3072,0.4941,90,90,120	CdI ₂ -PbI ₂ polytype	-	9.53	X	1838
Ag-O	Ag ₂ O _{2.47} cub	Ag ₂ O _{2.5} ,cP10,224	<i>Pn-3m</i>	0.4904,0.4904,0.4904,90,90,90	-	-	7.19	X	1064
Ag-O	Ag ₂ O ₃ orth	Au ₂ O ₃ ,oF40,43	<i>Fdd2</i>	1.049,1.2869,0.36638,90,90,90	-	black	7.08	X	19506
Ag-O	Ag ₃ O	BiI ₃ ,hP8,162	<i>P-31m</i>	0.5318,0.5318,0.4951,90,90,120	-	-	9.30	X	14064
Ag-O	Ag ₃ O ₄ rt	Ag ₃ O ₄ ,mP14,14	<i>P12₁/c1</i>	0.35787,0.92079,0.56771,90,106.135,90	-	black	7.16	X	20176
Ag-P	AgP ₂	CuP ₂ ,mP12,14	<i>P12₁/c1</i>	0.62167,0.50587,0.78059,90,113.48,90	-	-	5.01	X	15486
Ag-P	Ag ₃ P ₁₁	Ag ₃ P ₁₁ ,mS28,8	<i>C1m1</i>	1.2999,0.7555,0.6612,90,118.84,90	-	black	3.88	X	13999
Ag-Pb	Ag _{0.8} Pb _{0.2} prec	Mg,hP2,194	<i>P6₃/mmc</i>	0.292,0.292,0.476,90,90,120	close-packed structure	-	12.07	X	658
Ag-Pb	Ag _{0.98} Pb _{0.02}	Cu,cF4,225	<i>Fm-3m</i>	0.4108,0.4108,0.4108,90,90,90	close-packed structure	-	10.53	X	25933
Ag-Pd	Ag _{20.21} Pd _{0.79} ht	Cu,cF4,225	<i>Fm-3m</i>	0.39295,0.39295,0.39295,90,90,90	close-packed structure	-	11.68	X	57704
Ag-Pr	AgPr rt	CsCl,cP2,221	<i>Pm-3m</i>	0.3722,0.3722,0.3722,90,90,90	b.c.c. family	-	8.01	X	18027
Ag-Pr	Ag _{0.975} Pr _{0.025}	Cu,cF4,225	<i>Fm-3m</i>	0.4087,0.4087,0.4087,90,90,90	close-packed structure	-	10.58	X	15804
Ag-Pr	Ag ₂ Pr ht	*hP*,*	-	0.4777,0.4777,0.6867,90,90,120	-	-	-	N	11456
Ag-Pr	Ag ₂ Pr rt	KHg ₂ ,oI12,74	<i>Imma</i>	0.4821,0.6917,0.825,90,90,90	AlB ₂ family	-	8.61	A	54900
Ag-Pr	Ag ₅₁ Pr ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.2836,1.2836,0.9434,90,90,120	-	-	9.22	A	54900
Ag-Pt	Ag _{0.06} Pt _{0.94}	Cu,cF4,225	<i>Fm-3m</i>	0.3929,0.3929,0.3929,90,90,90	close-packed structure	-	20.79	X	31833
Ag-Pt	Ag _{0.5} Pt _{0.5} m	Cu,cF4,225	<i>Fm-3m</i>	0.398,0.398,0.398,90,90,90	close-packed structure	-	15.96	X	15981
Ag-Pt	Ag _{0.67} Pt _{0.33}	Cu,cF4,225	<i>Fm-3m</i>	0.4004,0.4004,0.4004,90,90,90	close-packed structure	-	14.14	X	31833
Ag-Pt	Ag _{0.75} Pt _{0.25} ht1	Cu,cF4,225	<i>Fm-3m</i>	0.39,0.39,0.39,90,90,90	close-packed structure	-	14.52	X	230
Ag-Pt	Ag ₁₅ Pt ₁₇ ht	*c*32,*	-	0.8,0.8,0.8,90,90,90	-	-	-	N	31833
Ag-Pt	Ag ₃ Pt rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3887,0.3887,0.3887,90,90,90	close-packed structure	-	14.67	X	230
Ag-Pu	Ag ₅₁ Pu ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.2727,1.2727,0.9392,90,90,120	-	-	11.24	A	6068
Ag-S	Ag ₂ S hp1	Ag ₂ Se,oP12,19	<i>P2₁2₁2₁</i>	0.41479,0.6725,0.72945,90,90,90	-	black	8.09	X	59222
Ag-S	Ag ₂ S hp2	Ag ₂ S-b,mP12,14	<i>P12₁/c1</i>	0.4092,0.57519,0.87134,90,114.123,90	-	black	8.79	X	59222
Ag-S	Ag ₂ S ht1	Ag ₂ S,cI20,229	<i>Im-3m</i>	0.486,0.486,0.486,90,90,90	-	-	7.17	X	13274
Ag-S	Ag ₂ S ht2	UO _{2.12} ,cF92,225	<i>Fm-3m</i>	0.62831,0.62831,0.62831,90,90,90	fluorite family	-	6.64	X	57996
Ag-S	Ag ₂ S lt	Ag ₂ S-a,mP12,14	<i>P12₁/c1</i>	0.41266,0.66989,0.82219,90,109.983,90	acanthite	black	7.71	X	59222
Ag-S	Ag ₂ S tf	*tP*,115	<i>P-4m2</i>	0.69,0.69,0.477,90,90,90	-	-	-	N	7280
Ag-S	Ag ₈ S	Ag ₈ S,oI18,44	<i>Imm2</i>	0.59,0.64,0.87,90,90,90	-	-	9.05	X	29878
Ag-Sb	Ag _{0.85} Sb _{0.15} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.2942,0.2942,0.4802,90,90,120	close-packed structure	-	10.15	X	47461
Ag-Sb	Ag _{0.93} Sb _{0.07}	Cu,cF4,225	<i>Fm-3m</i>	0.413,0.413,0.413,90,90,90	close-packed structure	-	10.26	X	25933
Ag-Sb	Ag ₂ Sb	*oS30,20	<i>C222₁</i>	0.775,1.232,0.842,90,90,90	-	white tin	6.97	N	157
Ag-Sb	Ag _{3.15} Sb _{0.85}	Ag ₃ Sb,oP4,25	<i>Pmm2</i>	0.3008,0.4828,0.5214,90,90,90	dyscrasite	-	9.72	X	9579
Ag-Sc	AgSc	CsCl,cP2,221	<i>Pm-3m</i>	0.3412,0.3412,0.3412,90,90,90	b.c.c. family	-	6.39	X	1716
Ag-Sc	Ag _{0.91} Sc _{0.09}	Cu,cF4,225	<i>Fm-3m</i>	0.41075,0.41075,0.41075,90,90,90	close-packed structure	-	9.80	X	5377
Ag-Sc	Ag ₂ Sc	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3524,0.3524,0.8941,90,90,90	b.c.c. family	-	7.80	A	5879
Ag-Sc	Ag ₄ Sc	MoNi ₄ ,tI10,87	<i>I4/m</i>	0.6574,0.6574,0.40686,90,90,90	close-packed structure	-	9.00	A	4863
Ag-Se	AgSe tf	ZnS,cF8,216	<i>F-43m</i>	0.565,0.565,0.565,90,90,90	adamantane structure	-	6.88	X	6849
Ag-Se	Ag _{13.5} Se ₄ tf	*cF*,*	-	0.696,0.696,0.696,90,90,90	-	-	-	N	1713
Ag-Se	Ag ₂ Se hp1	Ag ₂ Se,oP12,62	<i>Pnma</i>	1.2722,0.4063,0.3918,90,90,90	-	-	9.67	X	64536
Ag-Se	Ag ₂ Se hp2	Li ₂ Ga ₂ oSi12,63	<i>Cmcm</i>	0.3814,1.2545,0.4063,90,90,90	b.c.c. family	-	10.07	X	64536
Ag-Se	Ag ₂ Se ht	Ag ₂ S,cI20,229	<i>Im-3m</i>	0.5006,0.5006,0.5006,90,90,90	-	-	7.80	X	21712
Ag-Se	Ag ₂ Se m	*mS*,12	<i>C12/m1</i>	2.561,0.4022,0.3955,90,93.78,90	-	-	-	N	64536
Ag-Se	Ag ₂ Se rt	Ag ₂ Se,oP12,19	<i>P2₁2₁2₁</i>	0.43359,0.707,0.7774,90,90,90	naumannite	black	8.21	X	56642
Ag-Se	Ag ₂ Se tricl	Ag ₂ Se,aP12,1	<i>P1</i>	0.43,0.7,0.78,92.92.91.5	-	-	8.35	X	15312
Ag-Si	Ag _{0.85} Si _{0.15} m	Mg,hP2,194	<i>P6₃/mmc</i>	0.287,0.287,0.4528,90,90,120	close-packed structure	-	9.86	X	6669
Ag-Si	Ag ₂ Si m	UR ₂ oS24,63	<i>Cmcm</i>	0.556,0.916,0.849,90,90,90	Friauf-Laves phase	-	7.49	A	8128
Ag-Sm	AgSm	CsCl,cP2,221	<i>Pm-3m</i>	0.367,0.367,0.367,90,90,90	b.c.c. family	-	8.68	X	64714
Ag-Sm	Ag _{0.9975} Sm _{0.0025}	Cu,cF4,225	<i>Fm-3m</i>	0.40872,0.40872,0.40872,90,90,90	close-packed structure	-	10.50	X	5377
Ag-Sm	Ag ₅₁ Sm ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.2727,1.2727,0.9359,90,90,120	-	-	9.62	A	54900
Ag-Sn	Ag _{0.04} Sn _{0.96} m	(Hg ₀ ,Sn _{0.9}),hP1,191	<i>P6/mmm</i>	0.3174,0.3174,0.2957,90,90,120	-	-	7.61	X	2908
Ag-Sn	Ag _{0.87} Sn _{0.13}	Cu,cF4,225	<i>Fm-3m</i>	0.4142,0.4142,0.4142,90,90,90	close-packed structure	-	10.21	X	25933
Ag-Sn	Ag _{0.877} Sn _{0.123}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2956,0.2956,0.4752,90,90,120	close-packed structure	-	10.09	X	56847
Ag-Sn	Ag ₃ Sn rt	Cu ₃ Ti,oP8,59	<i>Pmmn</i>	0.47821,0.59957,0.51654,90,90,90	close-packed structure	-	9.92	X	46494
Ag-Sr	SrAg orth1	SrAg,oP16,62	<i>Pnma</i>	1.6558,0.4788,0.6385,90,90,90	CrB(TlI)-FeB	-	5.13	X	13858
Ag-Sr	SrAg orth2	CaCu,oP40,62	<i>Pnma</i>	4.1315,0.47879,0.63881,90,90,90	CrB(TlI)-FeB	gray silver	5.14	X	52477
Ag-Sr	SrAg ₂	KHg ₂ ,oI12,74	<i>Imma</i>	0.4817,0.7716,0.8263,90,90,90	AlB ₂ family	-	6.56	X	2790
Ag-Sr	SrAg ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5644,0.5644,0.4631,90,90,120	-	-	8.15	X	5488
Ag-Sr	Sr ₃ Ag ₂	Er ₃ Ni ₂ ,hR45,148	<i>R-3</i>	0.9962,0.9962,1.861,90,90,120	-	-	4.47	X	17297
Ag-Sr	Sr ₇ Ag ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃/mc</i>	1.138,1.138,0.7277,90,90,120	-	-	3.81	A	17297
Ag-Tb	AgTb lt	CuTi,tP2,123	<i>P4/mmm</i>	0.3613,0.3613,0.3626,90,90,90	b.c.c. family	-	9.36	X	8337
Ag-Tb	AgTb rt	CsCl,cP2,221	<i>Pm-3m</i>	0.3627,0.3627,0.3627,90,90,90	b.c.c. family	-	9.29	X	8337
Ag-Tb	Ag _{0.95} Tb _{0.05}	Cu,cF4,225	<i>Fm-3m</i>	0.40971,0.40971,0.40971,90,90,90	close-packed structure	-	10.66	X	23138
Ag-Tb	Ag ₂ Tb	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3709,0.3709,0.9251,90,90,90	b.c.c. family	-	9.78	X	3993
Ag-Tb	Ag ₅₁ Tb ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.26413,1.26413,0.92754,90,90,120	-	-	10.00	X	65055
Ag-Te	AgTe rt	AgTe,oP32,62	<i>Pnma</i>	2.01,0.8882,0.4614,90,90,90	empressite	bronze pale	7.60	X	43469
Ag-Te	AgTe ₃ hp	AgTe ₃ ,hR12,160	<i>R3m</i>	0.8645,0.8645,0.5272,90,90,120	-	golden	7.16	X	14870
Ag-Te	Ag _{0.26} Te _{0.74} tf	Po,cP1,221	<i>Pm-3m</i>	0.3055,0.3055,0.3055,90,90,90	-	-	7.13	X	1638
Ag-Te	Ag _{10.6} Te ₇ rt	Ag _{10.6} Te ₇ ,hP155,189	<i>P-62m</i>	1.3456,1.3456,1.6917,90,90,120	stützite	gray	7.65	X	32539
Ag-Te	Ag ₂ Te hp1	*tP*,*	-	0.892,0.892,0.609,90,90,90	-	-	-	N	4635

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Ag-Te	Ag ₂ Te hp2	* ₁ P*, *	-	0.868, 0.868, 0.609, 90, 90, 90	-	-	-	N	4635
Ag-Te	Ag ₂ Te ht1	Cu ₂ Se, cF44, 225	<i>Fm-3m</i>	0.6576, 0.6576, 0.6576, 90, 90, 90	fluorite family	purple dark	8.02	X	18126
Ag-Te	Ag ₂ Te ht2	Ag ₂ S, cI20, 229	<i>Im-3m</i>	0.529, 0.529, 0.529, 90, 90, 90	-	-	7.70	X	1360
Ag-Te	Ag ₂ Te rt	Ag ₂ Te, mP12, 14	<i>P12₁/c1</i>	0.8058, 0.4468, 0.8977, 90, 123.04, 90	hessite	gray	8.42	X	26898
Ag-Te	Ag ₇ Te ₄ rt	Ag ₇ Te ₄ , hP55, 191	<i>P6/mmm</i>	1.348, 1.348, 0.849, 90, 90, 120	-	-	7.86	X	3167
Ag-Th	AgTh ₂	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.7591, 0.7591, 0.5844, 90, 90, 90	-	-	11.28	X	6603
Ag-Th	Ag ₂ Th	Hg ₂ U, hP3, 191	<i>P6/mmm</i>	0.4837, 0.4837, 0.3354, 90, 90, 120	AlB ₂ family	-	10.94	X	20061
Ag-Th	Ag ₅₁ Th ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	<i>P6/m</i>	1.2766, 1.2766, 0.9419, 90, 90, 120	-	-	10.93	A	20061
Ag-Ti	AgTi tet1	CdTi, tP4, 129	<i>P4/nmm</i>	0.2903, 0.2903, 0.812, 90, 90, 90	close-packed structure	-	7.56	A	5452
Ag-Ti	AgTi tet2	CuAu, tP2, 123	<i>P4/mmm</i>	0.2902, 0.2902, 0.4077, 90, 90, 90	close-packed structure	-	7.53	X	517
Ag-Ti	AgTi ₂ rt	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.2952, 0.2952, 1.185, 90, 90, 90	close-packed structure	-	6.55	A	5452
Ag-Ti	AgTi ₃	SrPb ₃ , tP4, 123	<i>P4/nmm</i>	0.4187, 0.4187, 0.395, 90, 90, 90	close-packed structure	-	6.03	X	502
Ag-Ti	Ag _{0.07} Ti _{0.93} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.294, 0.294, 0.4703, 90, 90, 120	close-packed structure	-	4.91	X	502
Ag-Tl	Ag _{0.965} Tl _{0.035}	Cu, cF4, 225	<i>Fm-3m</i>	0.40884, 0.40884, 0.40884, 90, 90, 90	close-packed structure	-	10.81	X	180
Ag-Tm	AgTm	CsCl, cP2, 221	<i>Pm-3m</i>	0.3543, 0.3543, 0.3543, 90, 90, 90	b.c.c. family	-	10.34	X	15130
Ag-Tm	Ag _{0.96} Tm _{0.04}	Cu, cF4, 225	<i>Fm-3m</i>	0.4108, 0.4108, 0.4108, 90, 90, 90	close-packed structure	-	10.57	X	5377
Ag-Tm	Ag ₂ Tm rt	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.3653, 0.3653, 0.914, 90, 90, 90	b.c.c. family	-	10.47	X	5232
Ag-Tm	Ag ₃ Tm cub	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.42117, 0.42117, 0.42117, 90, 90, 90	close-packed structure	-	10.95	X	4863
Ag-Tm	Ag ₃ Tm orth	Cu ₃ Ti, oP8, 59	<i>Pmmn</i>	0.4948, 0.6075, 0.5163, 90, 90, 90	close-packed structure	-	10.54	A	4863
Ag-Y	AgY	CsCl, cP2, 221	<i>Pm-3m</i>	0.3618, 0.3618, 0.3618, 90, 90, 90	b.c.c. family	-	6.90	X	29419
Ag-Y	Ag _{0.98} Y _{0.02}	Cu, cF4, 225	<i>Fm-3m</i>	0.40915, 0.40915, 0.40915, 90, 90, 90	close-packed structure	-	10.42	X	24428
Ag-Y	Ag ₂ Y hex	* ₁ hP*, *	-	0.3025, 0.3025, 0.505, 90, 90, 120	-	-	-	N	2078
Ag-Y	Ag ₂ Y tet	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.36882, 0.36882, 0.92436, 90, 90, 90	b.c.c. family	-	8.05	A	41337
Ag-Y	Ag ₅₁ Y ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	<i>P6/m</i>	1.25682, 1.25682, 0.9233, 90, 90, 120	-	-	8.87	X	65055
Ag-Yb	AgYb ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.36787, 0.36787, 0.36787, 90, 90, 90	b.c.c. family	-	9.37	X	2869
Ag-Yb	AgYb rt	FeB-b, oP8, 62	<i>Pnma</i>	0.759, 0.467, 0.6013, 90, 90, 90	CrB(TiI)-FeB	-	8.75	X	5214
Ag-Yb	Ag _{0.99} Yb _{0.01}	Cu, cF4, 225	<i>Fm-3m</i>	0.4088, 0.4088, 0.4088, 90, 90, 90	close-packed structure	-	10.55	X	24428
Ag-Yb	Ag ₂ Yb orth	KHg ₂ , oI12, 74	<i>Imma</i>	0.4663, 0.7211, 0.8184, 90, 90, 90	AlB ₂ family	-	9.38	X	3993
Ag-Yb	Ag ₂ Yb tet	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.3624, 0.3624, 0.888, 90, 90, 90	b.c.c. family	-	11.07	A	2869
Ag-Yb	Ag ₂ Yb ₃	U ₃ Si ₂ , tP10, 127	<i>P4/mbm</i>	0.8219, 0.8219, 0.4218, 90, 90, 90	-	-	8.57	X	5214
Ag-Yb	Ag ₃ Yb ₅	Cr ₃ B ₃ , tI32, 140	<i>I4/mcm</i>	0.7942, 0.7942, 1.4881, 90, 90, 90	-	-	8.41	X	5214
Ag-Yb	Ag ₇ Yb ₂	Ag ₇ Yb ₂ , oS36, 63	<i>Cmcm</i>	0.948, 0.5526, 1.4076, 90, 90, 90	-	gray silver	9.92	X	25441
Ag-Zn	AgZn hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.3088, 0.3088, 0.3088, 90, 90, 90	b.c.c. family	-	9.77	X	18021
Ag-Zn	Ag _{0.045} Zn _{0.955}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.27075, 0.27075, 0.47627, 90, 90, 120	close-packed structure	-	7.39	X	2091
Ag-Zn	Ag _{0.26} Zn _{0.74}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2824, 0.2824, 0.4447, 90, 90, 120	close-packed structure	-	8.26	X	17114
Ag-Zn	Ag _{0.5} Zn _{0.5} ht	W, cI2, 229	<i>Im-3m</i>	0.3155, 0.3155, 0.3155, 90, 90, 90	b.c.c. family	-	9.16	X	18021
Ag-Zn	Ag _{1.07} Zn _{0.93} rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.31588, 0.31588, 0.31588, 90, 90, 90	b.c.c. family	-	9.28	X	13359
Ag-Zn	Ag _{4.5} Zn _{4.5} ht	(Ag _{0.56} Zn _{0.44}) ₂ Zn, hP9, 147	<i>P-3</i>	0.76360, 0.76360, 0.28197, 90, 90, 120	b.c.c. family	-	9.09	X	358
Ag-Zn	Ag ₅ Zn ₈	Cu ₅ Zn ₈ , cI52, 217	<i>I-43m</i>	0.93407, 0.93407, 0.93407, 90, 90, 90	γ-brass	-	8.66	X	543
Ag-Zr	AgZr	CuTi, tP4, 129	<i>P4/nmm</i>	0.3468, 0.3468, 0.6603, 90, 90, 90	b.c.c. family	-	8.33	X	418
Ag-Zr	AgZr ₂	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.32464, 0.32464, 1.20037, 90, 90, 90	close-packed structure	-	7.62	X	1717
Al-As	AlAs hp	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.36, 0.36, 0.574, 90, 90, 120	AlB ₂ family	-	5.25	X	29377
Al-As	AlAs	ZnS, cF8, 216	<i>F-43m</i>	0.56605, 0.56605, 0.56605, 90, 90, 90	adamantane structure	brownish dark	3.73	X	5194
Al-Au	AuAl tf	CsCl, cP2, 221	<i>Pm-3m</i>	0.314, 0.314, 0.314, 90, 90, 90	b.c.c. family	-	12.01	X	6145
Al-Au	AuAl	AuAl, mP8, 11	<i>P12₁/m1</i>	0.63254, 0.33286, 0.63998, 90, 93.14, 90	AlB ₂ family	gray	11.06	X	23393
Al-Au	AuAl _{1.9}	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.59988, 0.59988, 0.59988, 90, 90, 90	fluorite family	blue	7.84	X	23393
Al-Au	AuAl ₂ hp	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.7414, 0.3529, 0.8155, 90, 90, 90	-	-	7.61	X	51691
Al-Au	Au _{0.8} Al _{0.2} ht	W, cI2, 229	<i>Im-3m</i>	0.324, 0.324, 0.324, 90, 90, 90	b.c.c. family	-	15.91	X	2682
Al-Au	Au _{0.8} Al _{0.2} m	Pa, tI2, 139	<i>I4/mmm</i>	0.3108, 0.3108, 0.3418, 90, 90, 90	b.c.c. family	-	16.39	X	18518
Al-Au	Au _{0.862} Al _{0.138}	Cu, cF4, 225	<i>Fm-3m</i>	0.40585, 0.40585, 0.40585, 90, 90, 90	close-packed structure	-	17.24	X	24713
Al-Au	Au ₂ Al ht	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.3349, 0.3349, 0.8893, 90, 90, 90	b.c.c. family	-	14.02	A	8125
Al-Au	Au ₂ Al rt Al+	Au ₂ Al, oP30, 58	<i>Pnnm</i>	0.8801, 1.6772, 0.3219, 90, 90, 90	-	-	14.71	X	8125
Al-Au	Au ₂ Al rt Al-	Au ₂ Al, oP12, 62	<i>Pnma</i>	0.6715, 0.3219, 0.8815, 90, 90, 90	b.c.c. family	-	14.67	X	8125
Al-Au	Au ₄ Al rt	Au ₄ Al, cP20, 198	<i>P2₁3</i>	0.69227, 0.69227, 0.69227, 90, 90, 90	-	-	16.31	X	23418
Al-Au	Au ₈ Al ₃	Yb ₈ In ₃ , hR132, 167	<i>R-3c</i>	0.7724, 0.7724, 4.2083, 90, 90, 120	-	gray silver	15.18	X	22261
Al-B	AlB ₁₂ ht	* ₁ tP52, *	-	0.882, 0.882, 0.509, 90, 90, 90	-	-	2.63	N	8338
Al-B	Al _{0.57} B ₈ ht	Al _{0.57} B ₈ , oP396, 19	<i>P2₁2₁2₁</i>	1.0144, 1.6573, 1.7510, 90, 90, 90	-	-	2.53	X	16104
Al-B	Al _{0.61} B _{6.50} ht	Al _{0.38} (Al _{0.31} B _{0.69}) _{0.73} B ₆ , oS88, 63	<i>Cmcm</i>	0.5690, 0.8881, 0.9100, 90, 90, 90	-	-	2.51	X	3273
Al-B	Al _{0.9} B ₂	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.3005, 0.3005, 0.32537, 90, 90, 120	AlB ₂ family	gray dark	3.00	X	44346
Al-B	Al _{1.67} B ₂₂ rt	Al _{1.67} B ₂₂ , tP216, 92	<i>P4₁2₁2</i>	1.0161, 1.0161, 1.4283, 90, 90, 90	-	-	2.55	X	10656
Al-B	Al _{3.32} B ₁₀₃	Al _{3.32} B _{103.1} , hR411, 166	<i>R-3m</i>	1.0965, 1.0965, 2.3868, 90, 90, 120	β-boron family	black	2.41	X	22462
Al-Ba	BaAl ₂ hp-ht	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.8702, 0.8702, 0.8702, 90, 90, 90	Friauf-Laves phase	gray	3.86	X	17547
Al-Ba	BaAl ₄	BaAl ₄ , tI10, 139	<i>I4/mmm</i>	0.453, 0.453, 1.114, 90, 90, 90	BaAl ₄ family	-	3.56	X	98
Al-Ba	Ba ₂₁ Al ₄₀	Ba ₂₁ Al ₄₀ , hP61, 157	<i>P31m</i>	1.05646, 1.05646, 1.7269, 90, 90, 120	-	gray silver	3.94	X	43811
Al-Ba	Ba ₃ Al ₅	Ba ₃ Al ₅ , hP16, 194	<i>P6₃/mmc</i>	0.60655, 0.60655, 1.4618, 90, 90, 120	-	gray silver	3.90	X	53779
Al-Ba	Ba ₄ Al ₅	Ba ₄ Al ₅ , hP18, 194	<i>P6₃/mmc</i>	0.60921, 0.60921, 1.7758, 90, 90, 120	-	gray silver	3.98	X	53779
Al-Ba	Ba ₇ Al ₁₀	Ba ₇ Al ₁₀ , hR51, 166	<i>R-3m</i>	0.60423, 0.60423, 4.879, 90, 90, 120	-	gray silver	3.98	X	53779
Al-Be	Be _{0.0003} Al _{0.9997}	Cu, cF4, 225	<i>Fm-3m</i>	0.40391, 0.40391, 0.40391, 90, 90, 90	close-packed structure	-	2.72	X	176
Al-Be	Be _{0.997} Al _{0.003} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.22838, 0.22838, 0.3575, 90, 90, 120	close-packed structure	-	1.86	X	134
Al-Br	AlBr ₃	AlBr ₃ , mP16, 14	<i>P12₁/c1</i>	0.7525, 0.7095, 1.0301, 90, 96.45, 90	-	-	3.24	X	32849
Al-C	Al ₄ C ₃	Al ₄ C ₃ , hR21, 166	<i>R-3m</i>	0.3335, 0.3335, 2.4967, 90, 90, 120	-	yellow	2.98	X	31289
Al-Ca	CaAl ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.80414, 0.80414, 0.80414, 90, 90, 90	Friauf-Laves phase	gray silver	2.40	X	51872
Al-Ca	CaAl ₄ ht	BaAl ₄ , tI10, 139	<i>I4/mmm</i>	0.4382, 0.4382, 1.1251, 90, 90, 90	BaAl ₄ family	-	2.28	A	27259
Al-Ca	CaAl ₄ mart	* ₁ m*20, *	-	0.4354, 0.4366, 1.118, 90, 91.1, 90	-	-	-	N	12326
Al-Ca	CaAl ₄ rt	CaGa ₄ , mS10, 12	<i>C12/m1</i>	0.61526, 0.6173, 0.6329, 90, 118.026, 90	BaAl ₄ family	-	2.32	X	27259
Al-Ca	Ca ₁₃ Al ₁₄	Ca ₁₃ Al ₁₄ , mS54, 12	<i>C12/m1</i>	1.5551, 0.9873, 0.9726, 90, 108.09, 90	-	-	2.10	X	34540
Al-Ca	Ca ₈ Al ₃	Ca ₈ In ₃ , hP22, 2	<i>P-1</i>	0.9484, 0.9592, 0.9671, 99.02, 101.13, 119.55	-	-	1.86	X	34540
Al-Ce	CeAl m1	CsCl, cP2, 221	<i>Pm-3m</i>	0.385, 0.385, 0.385, 90, 90, 90	b.c.c. family	-	4.86	X	12569

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,a\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Al-Ce	CeAl m2	*hP**	-	0.365,0.365,2.087,90,90,120	-	-	-	N	12569
Al-Ce	CeAl	CeAl ₆ S16,63	<i>Cmcm</i>	0.927,0.768,0.576,90,90,90	-	-	5.41	X	3305
Al-Ce	CeAl ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.8065,0.8065,0.8065,90,90,90	Friauf-Laves phase	-	4.92	X	34961
Al-Ce	CeAl ₃ rt	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.6541,0.6541,0.461,90,90,120	close-packed structure	-	4.30	X	2524
Al-Ce	CeAl ₃ ht	BaAl ₄ ,tI10,139	<i>I4/mmm</i>	0.4374,0.4374,1.012,90,90,90	BaAl ₄ family	-	4.25	X	1458
Al-Ce	Ce _{0.75} Al _{0.25} hp	Cu,cF4,225	<i>Fm-3m</i>	0.46494,0.46494,0.46494,90,90,90	close-packed structure	-	7.39	X	54100
Al-Ce	Ce ₃ Al ht	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4985,0.4985,0.4985,90,90,90	close-packed structure	-	6.00	X	1458
Al-Ce	Ce ₃ Al lt	Ce ₃ Al,mP16,11	<i>P12₁/m1</i>	0.6824,0.5336,1.2458,90,90,31,90	close-packed structure	-	6.55	X	23777
Al-Ce	Ce ₃ Al rt	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.7043,0.7043,0.5451,90,90,120	close-packed structure	-	6.34	X	8944
Al-Ce	Ce ₃ Al ₁₁ rt	La ₃ Al ₁₁ ,oI28,71	<i>Immm</i>	0.4395,1.0092,1.3025,90,90,90	-	-	4.12	X	30489
Al-Cl	AlCl ₃ m	*h*24,*	-	0.5921,0.5921,1.758,90,90,120	-	-	2.49	N	2088
Al-Cl	AlCl ₃ rt	AlCl ₃ ,mS16,12	<i>C12/m1</i>	0.5914,1.0234,0.6148,90,108.25,90	-	white	2.51	X	26526
Al-Co	CoAl rt	CsCl,cP2,221	<i>Pm-3m</i>	0.2863,0.2863,0.2863,90,90,90	b.c.c. family	-	6.08	X	26140
Al-Co	Co _{0.0001} Al _{0.9999}	Cu,cF4,225	<i>Fm-3m</i>	0.4049,0.4049,0.4049,90,90,90	close-packed structure	-	2.70	X	5183
Al-Co	Co _{0.87} Al _{0.13} ht	Cu,cF4,225	<i>Fm-3m</i>	0.35684,0.35684,0.35684,90,90,90	close-packed structure	-	8.01	X	24713
Al-Co	Co _{12.5} Al _{37.04}	Co _{12.5} Al _{37.04} ,oP240,62	<i>Pnma</i>	2.889,0.8138,1.2346,90,90,90	-	-	3.97	X	55510
Al-Co	Co ₂ Al ₅	Co ₂ Al ₅ ,hP28,194	<i>P6₃/mmc</i>	0.7664,0.7664,0.7605,90,90,120	-	-	4.34	X	36219
Al-Co	Co ₂ Al ₉	Co ₂ Al ₉ ,mP22,14	<i>P12₁/c1</i>	0.62163,0.62883,0.85587,90,94.772,90	-	gray	3.59	X	46674
Al-Co	Co ₃ Al (O)	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.36552,0.36552,0.36552,90,90,90	close-packed structure	-	6.93	X	26048
Al-Co	Co ₄ Al _{12.2} ht	(Co _{0.88} Ni _{0.12}) ₄ Al _{12.1} ,mS36,12	<i>C12/m1</i>	1.7076,0.41059,0.75047,90,116.171,90	-	-	3.97	X	55491
Al-Co	Co ₄ Al ₁₃ rt	Co ₄ Al ₁₃ ,oP102,31	<i>Pmm2₁</i>	0.8158,1.2342,1.4452,90,90,90	-	-	4.02	X	28746
Al-Co	Co ₆ Al ₁₉ rt	Co ₆ Al ₁₉ ,mS100,12	<i>C12/m1</i>	1.5173,0.8109,1.2349,90,107.84,90	-	-	3.98	X	43721
Al-Cr	Cr _{0.05} Al _{0.95}	Cu,cF4,225	<i>Fm-3m</i>	0.4008,0.4008,0.4008,90,90,90	close-packed structure	-	2.91	X	9941
Al-Cr	Cr _{0.87} Al _{0.13}	W,cI2,229	<i>Im-3m</i>	0.2915,0.2915,0.2915,90,90,90	b.c.c. family	-	6.54	X	3659
Al-Cr	Cr ₂ Al rt	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3004,0.3004,0.8646,90,90,90	b.c.c. family	-	5.58	X	4408
Al-Cr	Cr ₂ Al ₁₁ (O)	*mS*,15	<i>C12/c1</i>	1.76,3.05,1.76,90,90,90	-	-	-	N	25079
Al-Cr	Cr ₂₅ Al ₁₂₉	Cr ₁₉ (Cr _{0.5} Al _{0.5}) ₁₂ Al ₁₂₃ ,mS732,15	<i>C12/c1</i>	1.77348,3.04555,1.77344,90,91.052,90	-	-	3.32	X	51584
Al-Cr	Cr _{28.58} Al _{112.28}	Cr _{23.76} (Cr _{0.23} Al _{0.77}) ₂₁ Al _{96.10} ,oS584,63	<i>Cmcm</i>	1.2521,3.4705,2.0223,90,90,90	-	-	3.41	X	34039
Al-Cr	Cr ₄ Al ₁₁ rt	Mn ₄ Al ₁₁ ,aP15,2	<i>P-1</i>	0.5044,0.5089,0.8928,74.678,82.01,79.23	-	-	3.88	A	49611
Al-Cr	Cr ₄ Al ₉ ht	Cu ₅ Zn ₆ ,cI52,217	<i>I-43m</i>	0.9107,0.9107,0.9107,90,90,90	γ -brass	-	3.96	X	61978
Al-Cr	Cr ₄ Al ₉ rt	*hR**	-	1.291,1.291,1.5677,90,90,120	-	-	-	N	33259
Al-Cr	Cr ₅₅ Al _{226.58}	Mn ₅₅ Al _{226.58} ,hP574,194	<i>P6₃/mmc</i>	2.0191,1.20191,2.4854,90,90,120	-	-	3.40	X	51584
Al-Cr	Cr ₇ Al ₄₅	V ₇ Al ₄₅ ,mS104,12	<i>C12/m1</i>	2.0594,0.7574,1.0949,90,107.339,90	-	-	3.22	X	1146
Al-Cr	Cr _{9.5} Al ₁₆ ht	Cr _{4.5} (Cr _{0.56} Al _{0.44}) ₉ Al ₁₂ ,hR78,160	<i>R3m</i>	1.27284,1.27284,0.79416,90,90,120	γ -brass	-	4.14	X	10206
Al-Cu	CuAl rt	CuAl,mS20,12	<i>C12/m1</i>	1.2065,0.4105,0.6913,90,124.95,90	cupalite	-	5.36	X	6610
Al-Cu	CuAl tf	LiRh,hP2,187	<i>P-6m2</i>	0.256,0.256,0.419,90,90,120	close-packed structure	-	6.32	X	49324
Al-Cu	CuAl ₂ m	CuAl ₂ ,mP12,10	<i>P12/m1</i>	0.496,0.848,0.496,90,120,90	-	-	4.32	X	19230
Al-Cu	CuAl ₂ prec	CuAl ₂ ,oF24,69	<i>Fmmm</i>	0.496,0.848,0.859,90,90,90	-	-	4.32	X	20891
Al-Cu	CuAl ₂	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.60637,0.60637,0.48736,90,90,90	khatyrkite	-	4.36	X	47909
Al-Cu	Cu _{0.749} Al _{0.251} mart	*hP**	-	0.257,0.257,0.421,90,90,120	-	-	-	N	1335
Al-Cu	Cu _{0.75} Al _{0.25} ht	W,cI2,229	<i>Im-3m</i>	0.294,0.294,0.294,90,90,90	b.c.c. family	-	7.11	X	492
Al-Cu	Cu _{0.78} Al _{0.22} mart	*o**	-	0.263,0.446,1.91,90,90,90	-	-	-	N	3562
Al-Cu	Cu _{0.848} Al _{0.152} rt	Cu,cF4,225	<i>Fm-3m</i>	0.36536,0.36536,0.36536,90,90,90	close-packed structure	-	7.90	X	24713
Al-Cu	Cu _{0.94} Al _{0.06} ht	Cu _{0.94} Al _{0.06} ,oS32,65	<i>Cmmm</i>	0.4145,1.23004,0.872,90,90,90	-	-	5.09	X	57124
Al-Cu	Cu _{1.7} Al ht	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.4146,0.4146,0.5063,90,90,120	AlB ₂ family	-	5.95	X	6610
Al-Cu	Cu _{11.2} Al _{8.88} ht2	Cu _{11.2} Al _{8.88} ,oF88,42	<i>Fmm2</i>	0.81267,1.41985,0.99928,90,90,90	-	-	5.48	X	43925
Al-Cu	Cu ₂ Al ₃ m	Ni ₂ Al ₃ ,hP5,164	<i>P-3m1</i>	0.4106,0.4106,0.5094,90,90,120	-	-	4.64	X	8169
Al-Cu	Cu ₃ Al	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.5819,0.5819,0.5819,90,90,90	fluorite family	-	7.34	X	14348
Al-Cu	Cu _{32.97} Al _{17.30} rt	Cu _{31.27} (Cu _{0.57} Al _{0.43}) ₃ Al ₁₆ ,hR156,160	<i>R3m</i>	1.2285,1.2285,1.51486,90,90,120	γ -brass	-	6.45	X	24397
Al-Cu	Cu ₄ Al rt	Au ₄ Al,cP20,198	<i>P2₁3</i>	0.626,0.626,0.626,90,90,90	-	-	7.61	A	1883
Al-Cu	Cu _{5.75} Al _{4.5} ht1	Cu _{4.25} (Cu _{0.75} Al _{0.25}) ₂ Al ₄ ,oI24,44	<i>Imm2</i>	0.40972,0.70313,0.99793,90,90,90	-	-	5.62	X	43181
Al-Cu	Cu ₉ Al ₄ ht	Cu ₅ Zn ₆ ,cI52,217	<i>I-43m</i>	0.87158,0.87158,0.87158,90,90,90	γ -brass	-	6.82	A	36040
Al-Cu	Cu ₉ Al ₄ rt	Cu ₉ Al ₄ ,cP52,215	<i>P-43m</i>	0.8707,0.8707,0.8707,90,90,90	γ -brass	golden	6.84	X	10996
Al-Cu	Cu ₄ Al	Cu,cF4,225	<i>Fm-3m</i>	0.4056,0.4056,0.4056,90,90,90	close-packed structure	-	2.69	X	43745
Al-D	AlD ₃ cub	Hf _{0.5} (Ta _{0.5} W _{0.5})O ₃ ,cF64,227	<i>Fd-3m</i>	0.90037,0.90037,0.90037,90,90,90	pyrochlore family	-	1.20	X	49550
Al-D	AlD ₃ hp	*mP4,14	<i>P12₁/c1</i>	0.35503,0.4074,0.52097,90,90.243,90	-	-	2.91	P	58084
Al-D	AlD ₃ orth1	AlF ₃ ,oS48,63	<i>Cmcm</i>	0.647,1.1117,0.6562,90,90,90	-	-	1.39	X	47849
Al-D	AlD ₃ orth2	AlH ₃ ,oP24,58	<i>Pnnm</i>	0.53672,0.7336,0.57562,90,90,90	-	-	1.45	X	49606
Al-D	AlD ₃ rhom	FeF ₃ ,hR24,167	<i>R-3c</i>	0.44364,0.44364,1.17963,90,90,120	-	white	1.64	X	47849
Al-Dy	DyAl ht	CsCl,cP2,221	<i>Pm-3m</i>	0.36826,0.36826,0.36826,90,90,90	b.c.c. family	-	6.30	X	1346
Al-Dy	DyAl rt	DyAl ₃ ,oP16,57	<i>Pbcm</i>	0.580,1.140,0.562,90,90,90	-	-	6.77	X	3305
Al-Dy	DyAl ₂ rt	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7838,0.7838,0.7838,90,90,90	Friauf-Laves phase	-	5.97	X	21152
Al-Dy	DyAl ₃ hp-ht1	HoAl ₃ ,hR60,166	<i>R-3m</i>	0.6074,0.6074,3.587,90,90,120	close-packed structure	-	5.29	A	8937
Al-Dy	DyAl ₃ hp-ht2	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4236,0.4236,0.4236,90,90,90	close-packed structure	-	5.32	X	50420
Al-Dy	DyAl ₃ ht	*1**	-	0.99,0.99,1.266,90,90,90	-	-	-	N	3486
Al-Dy	DyAl ₃ rt	TiNi ₃ ,hP16,194	<i>P6₃/mmc</i>	0.6095,0.6095,0.9531,90,90,120	close-packed structure	-	5.27	A	57415
Al-Dy	Dy ₂ Al	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.6507,0.5084,0.9382,90,90,90	-	-	7.53	A	59900
Al-Dy	Dy ₂ Al ₁₇	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	1.1788,1.1788,1.1322,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	1.91	A	21623
Al-Dy	Dy ₃ Al ₂	Zr ₃ Al ₂ ,tP20,136	<i>P4₂/mnm</i>	0.8168,0.8168,0.7515,90,90,90	-	-	7.17	A	59900
Al-Er	ErAl	DyAl ₃ ,oP16,57	<i>Pbcm</i>	0.5791,1.1277,0.5574,90,90,90	-	-	7.09	A	52878
Al-Er	ErAl ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.77967,0.77967,0.77967,90,90,90	Friauf-Laves phase	-	6.20	X	21152
Al-Er	ErAl ₃ lt	HoAl ₃ ,hR60,166	<i>R-3m</i>	0.6025,0.6025,3.5675,90,90,120	close-packed structure	-	5.51	A	3618
Al-Er	ErAl ₃ rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4215,0.4215,0.4215,90,90,90	close-packed structure	-	5.50	X	57690
Al-Er	Er ₂ Al	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.6523,0.5024,0.9263,90,90,90	-	-	7.91	A	52878
Al-Er	Er ₂ Al ₁₇	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.972,0.972,0.8707,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	3.70	A	26368
Al-Er	Er ₃ Al ₂	Zr ₃ Al ₂ ,tP20,136	<i>P4₂/mnm</i>	0.81323,0.81323,0.75039,90,90,90	-	-	7.44	X	19676
Al-Eu	EuAl	EuAl ₃ ,oP20,59	<i>Pmmn</i>	0.5806,0.9652,1.0088,90,90,90	-	-	5.26	X	18351
Al-Eu	EuAl ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.81305,0.81305,0.81305,90,90,90	Friauf-Laves phase	-	5.09	X	29384

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Al-Eu	EuAl ₄	BaAl ₄ ,tI10,139	<i>I4/mmm</i>	0.4409,0.4409,1.12,90,90,90	BaAl ₄ family	gray silver	3.96	X	62093
Al-F	AlF ₃ ht	ReO ₃ ,cP4,221	<i>Pm-3m</i>	0.357,0.357,0.357,90,90,90	-	-	3.06	X	17148
Al-F	AlF ₃ m	AlF ₃ ,oS48,63	<i>Cmcm</i>	0.6931,1.2002,0.7134,90,90,90	-	-	2.82	X	21400
Al-F	AlF ₃ rt	FeF ₃ ,hR24,167	<i>R-3c</i>	0.49959,0.49959,1.24477,90,90,120	oskarssonite	white grayish	3.11	X	64264
Al-F	AlF ₃ tet1	AlF ₃ ,tP40,127	<i>P4/mbm</i>	1.14033,1.14033,0.35436,90,90,90	-	white	3.03	X	29965
Al-F	AlF ₃ tet2	AlF ₃ ,tP64,129	<i>P4/nmm</i>	1.01843,1.01843,0.71738,90,90,90	-	white	3.00	X	26198
Al-F	AlF ₃ tet3	* ₁ tP8,*	-	0.354,0.354,0.6,90,90,90	-	-	-	N	2996
Al-Fe	FeAl rt	CsCl,cP2,221	<i>Pm-3m</i>	0.291,0.291,0.291,90,90,90	b.c.c. family	-	5.58	X	27412
Al-Fe	FeAl _{2.8}	FeAl _{2.8} ,oS24,63	<i>Cmcm</i>	0.76559,0.64154,0.42184,90,90,90	-	-	4.21	X	28460
Al-Fe	FeAl ₆ m	FeAl ₆ ,oS28,36	<i>Cmc2₁</i>	0.744,0.6464,0.8779,90,90,90	-	-	3.43	X	2389
Al-Fe	Fe _{0.002} Al _{0.998}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.40486,0.40486,0.40486,90,90,90	close-packed structure	-	2.71	X	5183
Al-Fe	Fe _{0.1} Al _{0.9} tf	Cu ₂ cF4,225	<i>Fm-3m</i>	0.404,0.404,0.404,90,90,90	close-packed structure	-	3.01	X	23676
Al-Fe	Fe _{0.4} Al _{0.6} rt	W ₂ cI2,229	<i>Im-3m</i>	0.2957,0.2957,0.2957,90,90,90	b.c.c. family	-	4.95	X	23676
Al-Fe	Fe ₂ Al ht	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.5805,0.5805,0.5805,90,90,90	fluorite family	-	6.61	X	16054
Al-Fe	Fe ₄ Al ₁₃	Fe ₄ Al ₁₃ ,mS102,12	<i>C12/m1</i>	1.5495,0.8089,1.2485,90,107.7,90	-	-	3.84	X	60018
Al-Fe	Fe ₅ Al ₈ ht	Cu ₅ Zn ₈ ,cI52,217	<i>I-43m</i>	0.89718,0.89718,0.89718,90,90,90	γ-brass	-	4.55	X	54779
Al-Fe	Fe _{6.5} Al _{11.5} rt	Fe _{6.5} (Fe _{0.5} Al _{0.5}) ₃ Al ₁₀ ,aP18,1	<i>P1</i>	0.4878,0.6461,0.87476,87.927,74.452,83.11	-	gray silver	4.24	X	7025
Al-Ga	Al _{0.95} Ga _{0.05}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.4055,0.4055,0.4055,90,90,90	close-packed structure	-	2.90	X	4587
Al-Gd	GdAl orth1	CeAl,oS16,63	<i>Cmcm</i>	0.92741,0.76791,0.5584,90,90,90	-	-	6.15	A	2380
Al-Gd	GdAl orth2	DyAl,OP16,57	<i>Pbcm</i>	0.58819,1.1523,0.5653,90,90,90	-	-	6.39	A	57085
Al-Gd	GdAl stab	CsCl,cP2,221	<i>Pm-3m</i>	0.37208,0.37208,0.37208,90,90,90	b.c.c. family	-	5.94	X	1346
Al-Gd	GdAl ₂ rt	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7885,0.7885,0.7885,90,90,90	Friauf-Laves phase	-	5.72	X	57085
Al-Gd	GdAl ₃ hp-ht	BaPb ₃ ,hR36,166	<i>R-3m</i>	0.6231,0.6231,2.1173,90,90,120	close-packed structure	-	5.00	A	8937
Al-Gd	GdAl ₃	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.6332,0.6332,0.46,90,90,120	close-packed structure	-	4.95	X	8944
Al-Gd	GdAl ₄	UAl ₄ ,oI20,74	<i>Imma</i>	0.4442,0.6316,1.3739,90,90,90	-	-	4.57	A	3502
Al-Gd	Gd ₂ Al	Co ₂ Si-b,OP12,62	<i>Pnma</i>	0.6612,0.515,0.9578,90,90,90	-	-	6.95	A	38692
Al-Gd	Gd ₂ Al ₁₇	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.8869,0.8869,0.9711,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	3.88	A	12282
Al-Gd	Gd ₃ Al ₂	Gd ₃ Al ₂ ,tP20,102	<i>P4₂nm</i>	0.8344,0.8344,0.7656,90,90,90	-	-	6.55	X	2050
Al-Ge	AlGe m	* ₁ tP104,*	-	1.059,1.059,1.603,90,90,90	-	-	-	N	5091
Al-Ge	Al _{0.02} Ge _{0.98}	C ₂ cF8,227	<i>Fd-3m</i>	0.56603,0.56603,0.56603,90,90,90	-	-	5.25	X	63388
Al-Ge	Al _{0.30} Ge _{0.70} hp1	(HGe _{0.3} Sn _{0.7}),hP1,191	<i>P6/mmm</i>	0.276,0.276,0.255,90,90,120	-	-	5.81	X	32382
Al-Ge	Al _{0.30} Ge _{0.70} hp2	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2617,0.2617,0.4394,90,90,120	close-packed structure	-	7.51	X	32382
Al-Ge	Al _{0.4} Ge _{0.6} m	* ₁ t**,*	-	1.498,1.498,1.003,90,90,90	-	-	-	N	6669
Al-Ge	Al _{0.6} Ge _{0.4} m	* ₁ cP*,*	-	1.3805,1.3805,1.3805,90,90,90	-	-	-	N	5160
Al-Ge	Al _{0.7} Ge _{0.3} m hex	* ₁ hP*,191	<i>P6/mmm</i>	1.42,1.42,0.74,90,90,120	-	-	-	N	16221
Al-Ge	Al _{0.75} Ge _{0.25} m cub	* ₁ cP*,*	-	1.2868,1.2868,1.2868,90,90,90	-	-	-	N	5160
Al-Ge	Al _{0.75} Ge _{0.25} m tet	* ₁ t**,*	-	1.303,1.303,1.204,90,90,90	-	-	-	N	6669
Al-Ge	Al _{0.8} Ge _{0.2} m tet	* ₁ tP*,*	-	1.295,1.295,1.208,90,90,90	-	-	-	N	5266
Al-Ge	Al _{0.85} Ge _{0.15} m	Cu ₂ cF4,225	<i>Fm-3m</i>	0.4064,0.4064,0.4064,90,90,90	close-packed structure	-	3.35	X	18257
Al-Ge	Al _{0.96} Ge _{0.02}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.40526,0.40526,0.40526,90,90,90	close-packed structure	-	2.78	X	63388
Al-Ge	Al _{2.7} Ge _{0.3} m	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.613,0.613,0.492,90,90,90	-	-	3.40	X	27877
Al-Ge	Al ₆ Ge ₅ m	Zn _{5.38} Sb _{5.38} ,hR66,167	<i>R-3c</i>	1.145,1.145,1.167,90,90,120	-	-	3.95	X	29739
Al-H	AlH ₃ hp1	* ₁ aP24,1	<i>P1</i>	0.383,0.43925,0.6374,74.469,78.016,76.686	-	-	3.01	N	52248
Al-H	AlH ₃ hp2	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.308,0.308,0.308,90,90,90	Frank-Kasper phase	-	3.41	X	52248
Al-H	AlH ₃ orth	AlH ₃ ,oP24,58	<i>Pnnm</i>	0.53806,0.73555,0.57751,90,90,90	-	white	1.31	X	49330
Al-H	AlH ₃ rhom	FeF ₃ ,hR24,167	<i>R-3c</i>	0.44512,0.44512,1.18179,90,90,120	-	white	1.47	X	57951
Al-Hf	HfAl	TiI ₂ ,oS8,63	<i>Cmcm</i>	0.3253,1.0831,0.4282,90,90,90	CrB(TiI)-FeB	-	9.05	X	1353
Al-Hf	HfAl ₂	MgZn ₃ ,hP12,194	<i>P6₃/mmc</i>	0.525,0.525,0.868,90,90,120	Friauf-Laves phase	-	7.45	A	17287
Al-Hf	HfAl ₃ ht	TiAl ₃ ,tI8,139	<i>I4/mmm</i>	0.3893,0.3893,0.8925,90,90,90	close-packed structure	-	6.37	X	1240
Al-Hf	HfAl ₃ rt	ZrAl ₃ ,tI16,139	<i>I4/mmm</i>	0.3989,0.3989,1.7155,90,90,90	close-packed structure	-	6.31	A	16565
Al-Hf	Hf ₂ Al rt	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.6776,0.6776,0.5372,90,90,90	-	-	10.34	A	1430
Al-Hf	Hf ₂ Al ₃	Zr ₂ Al ₃ ,oF40,43	<i>Fdd2</i>	0.9529,1.3763,0.5522,90,90,90	-	-	8.03	X	1176
Al-Hf	Hf ₃ Al ₂ rt	Zr ₃ Al ₂ ,tP20,136	<i>P4₂/nmn</i>	0.7535,0.7535,0.6906,90,90,90	-	-	9.99	X	1168
Al-Hf	Hf ₄ Al ₃ rt	Zr ₄ Al ₃ ,hP7,191	<i>P6/mmm</i>	0.5334,0.5334,0.5429,90,90,120	Frank-Kasper phase	-	9.87	A	13677
Al-Hf	Hf ₅ Al ₃ stab	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8052,0.8052,0.569,90,90,120	-	-	10.12	X	1230
Al-Ho	HoAl	DyAl,OP16,57	<i>Pbcm</i>	0.5742,1.1318,0.5574,90,90,90	-	-	7.04	A	61978
Al-Ho	HoAl ₂ rt	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7834,0.7834,0.7834,90,90,90	Friauf-Laves phase	-	6.05	X	18210
Al-Ho	HoAl ₃ hp	TiNi ₃ ,hP16,194	<i>P6₃/mmc</i>	0.606,0.606,0.953,90,90,120	close-packed structure	-	5.39	A	8937
Al-Ho	HoAl ₃ ht	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4231,0.4231,0.4231,90,90,90	close-packed structure	-	5.39	X	50420
Al-Ho	HoAl ₃ rt	HoAl ₃ ,hR60,166	<i>R-3m</i>	0.6059,0.6059,3.586,90,90,120	close-packed structure	-	5.37	X	8944
Al-Ho	Ho ₂ Al	Co ₂ Si-b,OP12,62	<i>Pnma</i>	0.6528,0.5053,0.9347,90,90,90	-	-	7.69	X	5880
Al-Ho	Ho ₃ Al ₂	Gd ₃ Al ₂ ,tP20,102	<i>P4₂nm</i>	0.8181,0.8181,0.7519,90,90,90	-	-	7.24	A	61978
Al-I	AlI ₃	InI ₃ ,mP16,14	<i>P12₁/c1</i>	0.9591,0.6069,1.1902,90,108.05,90	-	-	4.11	X	44968
Al-Ir	IrAl	CsCl,cP2,221	<i>Pm-3m</i>	0.29771,0.29771,0.29771,90,90,90	b.c.c. family	-	13.80	X	56350
Al-Ir	IrAl _{2.75}	IrAl _{2.75} ,cP60,195	<i>P23</i>	0.7674,0.7674,0.7674,90,90,90	-	-	7.83	X	34023
Al-Ir	IrAl ₃	Na ₃ As,hP8,194	<i>P6₃/mmc</i>	0.4246,0.4246,0.7756,90,90,120	-	-	7.49	X	3311
Al-Ir	Ir _{0.80} Al _{0.20}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3838,0.3838,0.3838,90,90,90	close-packed structure	-	18.70	X	34769
Al-Ir	Ir ₁₃ Al ₄₅	Ir ₁₃ Al ₄₅ ,oP236,62	<i>Pnma</i>	1.676,1.2321,1.7425,90,90,90	-	gray silver	6.85	X	46146
Al-Ir	Ir ₂ Al ₉	Co ₂ Al ₉ ,mP22,14	<i>P12₁/c1</i>	0.63779,0.64318,0.87337,90,94.776,90	-	gray	5.84	X	46674
Al-Ir	Ir ₉ Al ₂₈	Ir ₉ Al ₂₈ ,hP236,159	<i>P31c</i>	1.22864,1.22864,2.7341,90,90,120	-	-	6.93	X	47505
Al-La	LaAl	CeAl,oS16,63	<i>Cmcm</i>	0.9455,0.7753,0.5791,90,90,90	-	gray silver	5.19	X	34748
Al-La	LaAl ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.8148,0.8148,0.8148,90,90,90	Friauf-Laves phase	-	4.74	X	21152
Al-La	LaAl ₃ rt	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.6667,0.6667,0.4616,90,90,120	close-packed structure	-	4.11	X	8944
Al-La	LaAl ₄ ht	BaAl ₄ ,tI10,139	<i>I4/mmm</i>	0.448,0.448,1.042,90,90,90	BaAl ₄ family	-	3.92	A	2700
Al-La	La _{0.88} Al _{1.12} ht	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.4478,0.4478,0.4347,90,90,120	AlB ₂ family	-	3.95	X	2700
Al-La	La ₁₆ Al ₁₃	La ₁₆ Al ₁₃ ,hP29,189	<i>P-62m</i>	0.9166,0.9166,1.1224,90,90,120	-	-	5.23	X	46691
Al-La	La ₃ Al ht	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.7192,0.7192,0.5528,90,90,120	close-packed structure	-	5.95	A	27336
Al-La	La ₃ Al rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.51001,0.51001,0.51001,90,90,90	close-packed structure	-	5.55	X	55544

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Al-La	La ₃ Al ₁₁ rt	La ₃ Al ₁₁ , oI28, 71	<i>Immm</i>	0.4431, 1.0132, 1.3142, 90, 90, 90	-	-	4.02	X	3246
Al-Li	LiAl lt	LiIn, tI8, 141	<i>I4₁/amd</i>	0.44783, 0.44783, 0.63443, 90, 90, 90	-	-	1.77	X	44263
Al-Li	LiAl rt	NaTi, cF16, 227	<i>Fd-3m</i>	0.63597, 0.63597, 0.63597, 90, 90, 90	b.c.c. family	gray bluish	1.75	X	44263
Al-Li	LiAl ₃ rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.401, 0.401, 0.401, 90, 90, 90	close-packed structure	-	2.26	X	4071
Al-Li	Li _{0.045} Al _{0.955}	Cu, cF4, 225	<i>Fm-3m</i>	0.40459, 0.40459, 0.40459, 90, 90, 90	close-packed structure	-	2.62	X	4379
Al-Li	Li _{0.95} Al lt	Li _{0.95} Al, tI40, 82	<i>I-4</i>	1.0051, 1.0051, 0.6357, 90, 90, 90	-	-	1.74	X	16429
Al-Li	Li ₂ Al	Li ₂ Ga, oS12, 63	<i>Cmcm</i>	0.46579, 0.9767, 0.44901, 90, 90, 90	b.c.c. family	-	1.33	X	55907
Al-Li	Li ₃ Al ₂ rt	Li ₃ Al ₂ , hR15, 166	<i>R-3m</i>	0.4508, 0.4508, 1.4259, 90, 90, 120	b.c.c. family	gray	1.48	X	7709
Al-Li	Li ₉ Al ₄ rt	Li ₉ Al ₄ , mS26, 12	<i>C12/m1</i>	1.8916, 0.45041, 0.54249, 90, 105.19, 90	-	-	1.27	X	55907
Al-Lu	LuAl	DyAl, oP16, 57	<i>Pbcm</i>	0.5798, 1.124, 0.552, 90, 90, 90	-	-	7.46	X	22070
Al-Lu	LuAl ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7735, 0.7735, 0.7735, 90, 90, 90	Friauf-Laves phase	-	6.57	X	15126
Al-Lu	LuAl ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.41918, 0.41918, 0.41918, 90, 90, 90	close-packed structure	-	5.77	X	52231
Al-Lu	Lu ₂ Al	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.6456, 0.4969, 0.9184, 90, 90, 90	-	-	8.50	X	26569
Al-Lu	Lu ₃ Al ₂	Zr ₃ Al ₂ , tP20, 136	<i>P4₂/mnm</i>	0.8051, 0.8051, 0.7363, 90, 90, 90	-	-	8.06	X	22070
Al-Mg	MgAl ₂ m	HfGa ₂ , tI24, 141	<i>I4₁/amd</i>	0.4132, 0.4132, 2.6602, 90, 90, 90	close-packed structure	-	2.29	A	11847
Al-Mg	Mg _{0.17} Al _{0.83}	Cu, cF4, 225	<i>Fm-3m</i>	0.41013, 0.41013, 0.41013, 90, 90, 90	close-packed structure	-	2.55	X	55184
Al-Mg	Mg _{0.96} Al _{0.04}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3187, 0.3187, 0.5179, 90, 90, 120	close-packed structure	-	1.78	X	53452
Al-Mg	Mg _{1.2} Al _{1.8} m1	MgNi ₂ , hP24, 194	<i>P6₃/mmc</i>	0.573, 0.573, 1.908, 90, 90, 120	Friauf-Laves phase	-	1.90	A	20719
Al-Mg	Mg _{1.2} Al _{1.8} m2	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.573, 0.573, 0.954, 90, 90, 120	Friauf-Laves phase	-	1.90	A	20719
Al-Mg	Mg _{112.8} Al _{180.2} rt	Mg _{112.8} Al _{180.2} , hR879, 160	<i>R3m</i>	1.9968, 1.9968, 4.89114, 90, 90, 120	-	-	2.24	X	50633
Al-Mg	Mg ₁₇ Al ₁₂	Mg ₁₇ Al ₁₂ , cI58, 217	<i>I-43m</i>	1.05492, 1.05492, 1.05492, 90, 90, 90	-	-	2.08	X	49313
Al-Mg	Mg ₂₃ Al ₃₀ ht	Mg ₂₃ Al ₃₀ , hR159, 148	<i>R-3</i>	1.28254, 1.28254, 2.17478, 90, 90, 120	-	-	2.20	X	3711
Al-Mg	Mg ₂₈ Al ₄₅	Mg ₂₈ Al ₄₅ , cF1832, 227	<i>Fd-3m</i>	2.82435, 2.82435, 2.82435, 90, 90, 90	-	-	2.23	X	50633
Al-Mn	MnAl ₁₂	WAl ₁₂ , cI26, 204	<i>Im-3</i>	0.747, 0.747, 0.747, 90, 90, 90	-	-	3.02	A	9298
Al-Mn	MnAl ₃ m	*, cP*, *	-	0.9323, 0.9323, 0.9323, 90, 90, 90	-	-	-	N	10829
Al-Mn	MnAl ₄ rt	*, oP60, 48	<i>Pnnn</i>	0.6795, 0.9343, 1.3897, 90, 90, 90	-	-	3.68	N	9042
Al-Mn	MnAl ₆	MnAl ₆ , oS28, 63	<i>Cmcm</i>	0.7545, 0.649, 0.8681, 90, 90, 90	-	gray silver	3.39	X	37786
Al-Mn	Mn _{0.06} Al _{0.94}	Cu, cF4, 225	<i>Fm-3m</i>	0.4025, 0.4025, 0.4025, 90, 90, 90	close-packed structure	-	2.92	X	8168
Al-Mn	Mn _{0.5} Al _{0.5} ht1	W, cI2, 229	<i>Im-3m</i>	0.3063, 0.3063, 0.3063, 90, 90, 90	b.c.c. family	-	4.73	X	53384
Al-Mn	Mn _{0.56} Al _{0.44} ht2	Mg, hP2, 194	<i>P6₃/mmc</i>	0.27009, 0.27009, 0.43741, 90, 90, 120	close-packed structure	-	5.12	X	47612
Al-Mn	Mn _{0.7} Al _{0.3} ht1	Mn, cP20, 213	<i>P4₁32</i>	0.6413, 0.6413, 0.6413, 90, 90, 90	-	-	5.86	A	1284
Al-Mn	Mn _{1.39} Al _{0.61} m	CuAu, tP2, 123	<i>P4₂/mmm</i>	0.278, 0.278, 0.3592, 90, 90, 90	close-packed structure	-	5.55	X	21086
Al-Mn	Mn ₃ Al ₁₀	Mn ₃ Al ₁₀ , hP26, 194	<i>P6₃/mmc</i>	0.7546, 0.7546, 0.7895, 90, 90, 120	-	-	3.71	X	36219
Al-Mn	Mn _{3.85} Al ₁₁ rt	Mn ₄ Al ₁₁ , aP15, 2	<i>P-1</i>	0.5051, 0.5095, 0.8879, 74.92, 89.35, 79.53	-	-	3.89	X	12910
Al-Mn	Mn _{53.3} Al _{230.8} rt	Mn ₅₂ (Mn _{0.1} Al _{0.9}) ₁₄ Al ₂₁₈ , hP586, 176	<i>P6₃/m</i>	2.8382, 2.8382, 1.2389, 90, 90, 120	-	-	3.52	X	33394
Al-Mn	Mn ₅₅ Al _{226.58} rt	Mn ₅₅ Al _{226.58} , hP574, 194	<i>P6₃/mmc</i>	1.9981, 1.998, 2.4673, 90, 90, 120	-	black	3.56	X	21997
Al-Mn	Mn ₈ Al ₃₉	Mn ₈ Al ₃₉ , cP564, 198	<i>P2₁3</i>	2.0516, 2.0516, 2.0516, 90, 90, 90	-	-	3.44	X	31325
Al-Mn	Mn _{8.97} Al _{30.03} ht	Mn ₈ (Mn _{0.5} Al _{0.5}) ₈ Al ₂₅ , oP156, 62	<i>Pnma</i>	1.4883, 1.2447, 1.256, 90, 90, 90	-	gray silver	3.72	X	29829
Al-Mn	Mn _{9.82} Al _{15.68} rt	Cr ₄ (Cr _{0.56} Al _{0.44}) ₉ Al ₁₂ , hR78, 160	<i>R3m</i>	1.2667, 1.2667, 0.7942, 90, 90, 120	γ-brass	-	4.35	A	23750
Al-Mo	MoAl ₁₂	WAl ₁₂ , cI26, 204	<i>Im-3</i>	0.75815, 0.75815, 0.75815, 90, 90, 90	-	-	3.20	X	2047
Al-Mo	MoAl ₃ ht	MoAl ₃ , mS32, 12	<i>C12/m1</i>	1.6396, 0.3594, 0.8386, 90, 101.88, 90	close-packed structure	-	4.86	X	25078
Al-Mo	MoAl ₄ ht	WAl ₄ , mS30, 8	<i>C1m1</i>	0.5255, 1.7768, 0.5225, 90, 100.88, 90	-	-	4.24	X	2063
Al-Mo	MoAl ₃ ht1	MoAl ₃ , hP60, 150	<i>P321</i>	0.4933, 0.4933, 4.398, 90, 90, 120	close-packed structure	-	4.14	X	25078
Al-Mo	MoAl ₃ ht2	WAl ₃ , hP12, 182	<i>P6₃22</i>	0.4912, 0.4912, 0.886, 90, 90, 120	close-packed structure	-	4.14	X	25078
Al-Mo	MoAl ₃ rt	MoAl ₃ , hR36, 167	<i>R-3c</i>	0.4951, 0.4951, 2.623, 90, 90, 120	close-packed structure	-	4.13	X	25078
Al-Mo	MoAl ₇	*, m**, *	-	0.512, 1.3, 1.35, 90, 95, 90	-	-	-	N	1209
Al-Mo	Mo _{0.01} Al _{0.99}	Cu, cF4, 225	<i>Fm-3m</i>	0.4043, 0.4043, 0.4043, 90, 90, 90	close-packed structure	-	2.78	X	4717
Al-Mo	Mo _{0.9} Al _{3.1} ht	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.4945, 0.4945, 0.4945, 90, 90, 90	Frank-Kasper phase	-	4.67	X	25078
Al-Mo	Mo ₃ Al	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.4939, 0.4939, 0.4939, 90, 90, 90	Frank-Kasper phase	-	8.68	X	47322
Al-Mo	Mo ₂ Al ₈	Mo ₃ Al ₈ , mS22, 12	<i>C12/m1</i>	0.9164, 0.3639, 1.004, 90, 100.5, 90	close-packed structure	-	5.08	X	1738
Al-Mo	Mo ₄ Al ₁₇	Mo ₄ Al ₁₇ , mS84, 5	<i>C121</i>	0.9158, 0.49323, 2.8935, 90, 96.71, 90	-	-	4.31	X	31243
Al-Mo	Mo ₅ Al ₂₂ ht	Mo ₅ Al ₂₂ , oF216, 43	<i>Fdd2</i>	0.9161, 7.382, 0.4933, 90, 90, 90	-	-	4.27	X	31243
Al-N	AlN 165R	*, hR**, *	-	0.307, 0.307, 41.415, 90, 90, 120	-	-	-	N	14441
Al-N	AlN hp	NaCl, cF8, 225	<i>Fm-3m</i>	0.3956, 0.3956, 0.3956, 90, 90, 90	rocksalt family	black	4.40	X	27431
Al-N	AlN rt	ZnO, hP4, 186	<i>P6₃mc</i>	0.311, 0.311, 0.498, 90, 90, 120	adamantane structure	brown	3.26	X	10874
Al-Nb	NbAl ₃	TiAl ₃ , tI8, 139	<i>I4/mmm</i>	0.38, 0.38, 0.875, 90, 90, 90	close-packed structure	-	4.57	X	48297
Al-Nb	Nb _{0.82} Al _{0.18}	W, cI2, 229	<i>Im-3m</i>	0.3282, 0.3282, 0.3282, 90, 90, 90	b.c.c. family	-	7.61	X	6577
Al-Nb	Nb ₂ Al	Ta ₂ Al, tP30, 136	<i>P4₂/mnm</i>	0.9957, 0.9957, 0.5167, 90, 90, 90	Frank-Kasper phase	-	6.90	X	1416
Al-Nb	Nb _{3.16} Al _{0.84}	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.51907, 0.51907, 0.51907, 90, 90, 90	Frank-Kasper phase	-	7.51	X	37703
Al-Nd	NdAl	DyAl, oP16, 57	<i>Pbcm</i>	0.5943, 1.1744, 0.5731, 90, 90, 90	-	-	5.69	A	57866
Al-Nd	NdAl ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.8, 0.8, 0.8, 90, 90, 90	Friauf-Laves phase	-	5.14	X	14158
Al-Nd	NdAl ₃ rt	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.647, 0.647, 0.4603, 90, 90, 120	close-packed structure	-	4.48	X	3650
Al-Nd	NdAl ₄ ht	BaAl ₄ , tI10, 139	<i>I4/mmm</i>	0.433, 0.433, 1.003, 90, 90, 90	BaAl ₄ family	-	4.45	A	1478
Al-Nd	Nd ₂ Al	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.66825, 0.52342, 0.97321, 90, 90, 90	-	-	6.16	X	57683
Al-Nd	Nd ₃ Al rt	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6968, 0.6968, 0.5407, 90, 90, 120	close-packed structure	-	6.72	A	57866
Al-Nd	Nd ₃ Al ₁₁ rt	La ₃ Al ₁₁ , oI28, 71	<i>Immm</i>	0.4362, 1.001, 1.295, 90, 90, 90	-	-	4.28	A	28261
Al-Ni	NiAl rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.2885, 0.2885, 0.2885, 90, 90, 90	b.c.c. family	blue gray	5.93	X	63753
Al-Ni	NiAl ₃ m	*, oP32, 53	<i>Pmna</i>	0.64, 0.756, 0.956, 90, 90, 90	-	-	-	N	5628
Al-Ni	NiAl ₃	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.65982, 0.73515, 0.48021, 90, 90, 90	-	-	3.98	X	130
Al-Ni	Ni _{0.077} Al _{0.923}	Cu, cF4, 225	<i>Fm-3m</i>	0.4025, 0.4025, 0.4025, 90, 90, 90	close-packed structure	-	3.00	X	5628
Al-Ni	Ni _{0.4} Al _{0.6} ht	W, cI2, 229	<i>Im-3m</i>	0.286, 0.286, 0.286, 90, 90, 90	b.c.c. family	-	5.63	X	24698
Al-Ni	Ni _{0.67} Al _{0.33} m	Cu, cF4, 225	<i>Fm-3m</i>	0.355, 0.355, 0.355, 90, 90, 90	close-packed structure	-	7.16	X	49454
Al-Ni	Ni _{0.88} Al _{0.12}	Cu, cF4, 225	<i>Fm-3m</i>	0.354, 0.354, 0.354, 90, 90, 90	close-packed structure	-	8.22	X	45506
Al-Ni	Ni _{0.9} Al _{1.1} tF	CsCl, cP2, 221	<i>Pm-3m</i>	0.2874, 0.2874, 0.2874, 90, 90, 90	b.c.c. family	-	5.77	X	63753
Al-Ni	Ni _{1.3} Al _{0.7} m	CuAu, tP2, 123	<i>P4₂/mmm</i>	0.26941, 0.26941, 0.3227, 90, 90, 90	close-packed structure	-	6.75	X	55183
Al-Ni	Ni ₂ Al ₃	Ni ₂ Al ₃ , hP5, 164	<i>P-3m1</i>	0.40533, 0.40533, 0.49038, 90, 90, 120	-	-	4.72	X	59073
Al-Ni	Ni ₃ Al rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3567, 0.3567, 0.3567, 90, 90, 90	close-packed structure	-	7.43	X	56119
Al-Ni	Ni ₃ Al ₄	Ni ₃ Ga ₄ , cI112, 230	<i>Ia-3d</i>	1.1408, 1.1408, 1.1408, 90, 90, 90	-	-	5.08	X	22256

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Al-Ni	Ni ₅ Al ₃ rt	Pt ₅ Ga ₃ ,oS16,65	<i>Cmmm</i>	0.6522,0.7554,0.3789,90,90,90	close-packed structure	-	6.66	X	63753
Al-Np	NpAl ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.779,0.779,0.779,90,90,90	Friauf-Laves phase	-	8.18	X	18958
Al-Np	NpAl ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4269,0.4269,0.4269,90,90,90	close-packed structure	-	6.79	X	28969
Al-Np	NpAl ₄	UAl ₄ ,oI20,74	<i>Imma</i>	0.44036,0.6226,1.37219,90,90,90	-	-	6.09	X	53953
Al-O	AlO ht	* ₂ cP*,*	-	0.567,0.567,0.567,90,90,90	-	-	-	N	598
Al-O	Al ₂ O ht	* ₂ cP*,*	-	0.498,0.498,0.498,90,90,90	-	-	-	N	598
Al-O	Al ₂ O _{2.67}	Al ₂ O _{2.67} ,hP6,194	<i>P6₃/mmc</i>	0.3112,0.3112,0.4988,90,90,120	-	-	3.84	X	51186
Al-O	Al ₂ O ₃ hp1	Rh ₂ S ₃ ,oP20,60	<i>Pbcn</i>	0.6393,0.4362,0.4543,90,90,90	-	-	5.35	X	44547
Al-O	Al ₂ O ₃ μ	* ₂ hP*,*	-	0.56,0.56,1.367,90,90,120	-	-	-	N	477
Al-O	Al ₂ O ₃ θ	Ga ₂ O ₃ ,mS20,12	<i>C12/m1</i>	1.1795,0.291,0.5621,90,103.79,90	-	-	3.61	X	31612
Al-O	Al ₂ O ₃ α	Al ₂ O ₃ ,hR30,167	<i>R-3c</i>	0.47617,0.47617,1.2999,90,90,120	corundum	colorless	3.98	X	51741
Al-O	Al ₂ O ₃ β	* ₂ h**,*	-	0.5569,0.5569,2.2751,90,90,120	-	-	-	N	888
Al-O	Al ₂ O ₃ γ'	Al ₂ O ₃ ,tP112,115	<i>P-4m2</i>	0.5611,0.5611,2.445,90,90,90	-	-	3.52	X	43611
Al-O	Al ₂ O ₃ δ ₁	Al ₂ O ₃ ,oP160,19	<i>P2₁2₁2₁</i>	0.7937,1.1679,1.59,90,90,90	-	-	3.68	X	64097
Al-O	Al ₂ O ₃ δ ₂	Al ₂ O ₃ ,mP80,4	<i>P12₁1</i>	0.777,1.1978,0.8005,90,90,1.90	-	-	3.64	X	64097
Al-O	Al ₂ O ₃ v	* ₂ hP*,*	-	0.553,0.553,0.716,90,90,120	-	-	-	N	477
Al-O	Al ₂ O ₃ κ hex	* ₂ hP90,194	<i>P6₃/mmc</i>	0.84,0.84,1.365,90,90,120	-	-	-	N	329
Al-O	Al ₂ O ₃ κ orth	Fe ₂ O ₃ ,oP40,33	<i>Pna2₁</i>	0.48437,0.833,0.89547,90,90,90	-	-	3.75	X	33463
Al-O	Al ₂ O ₃ ξ	* ₂ hP*,*	-	0.498,0.498,1.352,90,90,120	-	-	-	N	477
Al-O	Al ₂ O ₃ ζ'	* ₂ hP*,*	-	0.523,0.523,0.706,90,90,120	-	-	-	N	477
Al-O	Al _{2.667} O ₄ η	Al _{2.67} O ₄ ,cF120,227	<i>Fd-3m</i>	0.7906,0.7906,0.7906,90,90,90	-	-	3.65	X	10076
Al-O	Al _{2.67} O ₄ γ cub	Fe ₂ O ₄ ,cF56,227	<i>Fd-3m</i>	0.7948,0.7948,0.7948,90,90,90	spinel family	colorless	3.60	X	23762
Al-O	Al _{2.67} O ₄ γ tet	Al _{2.67} O ₄ ,tI36,141	<i>I4₁/amd</i>	0.5616,0.5616,0.7836,90,90,90	-	-	3.66	X	43611
Al-O	Al _{2.67} O ₄ δ	Al _{2.67} O ₄ ,tP84,115	<i>P-4m2</i>	0.5599,0.5599,2.3657,90,90,90	-	-	3.66	X	23735
Al-O	Al _{2.67} O ₄ κ'	Al _{2.67} O ₄ ,hP44,186	<i>P6₃mc</i>	0.5544,0.5544,0.9024,90,90,120	-	-	3.76	X	5654
Al-Os	OsAl	CsCl,cP2,221	<i>Pm-3m</i>	0.3005,0.3005,0.3005,90,90,90	b.c.c. family	golden	13.29	X	1238
Al-Os	OsAl ₂	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3162,0.3162,0.8302,90,90,90	b.c.c. family	grayish	9.77	X	2456
Al-Os	Os ₂ Al ₃	Os ₂ Al ₃ ,tI10,139	<i>I4/mmm</i>	0.3106,0.3106,1.4184,90,90,90	b.c.c. family	grayish	11.20	X	2456
Al-Os	Os ₄ Al ₁₃	Os ₄ Al ₁₃ ,mS34,12	<i>C12/m1</i>	1.764,0.4228,0.7773,90,115.15,90	-	gray	7.03	X	2071
Al-P	AlP hp1	NiAs,hP4,194	<i>P6₃/mmc</i>	0.3466,0.3466,0.5571,90,90,120	AlB ₂ family	-	3.32	X	28870
Al-P	AlP	ZnS,cF8,216	<i>F-43m</i>	0.5467,0.5467,0.5467,90,90,90	adamantane structure	green pea	2.36	X	1885
Al-Pd	PdAl ht	CsCl,cP2,221	<i>Pm-3m</i>	0.30532,0.30532,0.30532,90,90,90	b.c.c. family	-	7.78	X	6057
Al-Pd	PdAl rt AlI+	FeSi,cP8,198	<i>P2₁3</i>	0.4859,0.4859,0.4859,90,90,90	-	-	7.72	X	2011
Al-Pd	PdAl rt	PdAl,hR78,148	<i>R-3</i>	1.5659,1.5659,0.5251,90,90,120	-	-	7.75	X	10608
Al-Pd	PdAl ₂ m	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.58,0.58,0.58,90,90,90	fluorite family	-	5.46	X	12277
Al-Pd	PdAl ₄ m	* ₂ o***,*	-	1.184,1.7729,2.2505,90,90,90	-	-	-	N	14326
Al-Pd	PdAl ₄ rt	* ₂ hP*,182	<i>P6₃22</i>	1.3086,1.3086,0.9631,90,90,120	-	-	-	N	39346
Al-Pd	Pd _{0.85} Al _{0.15}	Cu,cF4,225	<i>Fm-3m</i>	0.3871,0.3871,0.3871,90,90,90	close-packed structure	-	10.82	X	11484
Al-Pd	Pd _{0.98} Al _{0.02} ht	* ₂ oP*,33	<i>Pna2₁</i>	2.3402,1.6612,1.23,90,90,90	-	-	-	N	44000
Al-Pd	Pd _{1.1} Al _{2.9} ht	* ₂ oS*,38	<i>Amm2</i>	5.7,1.68,2.35,90,90,90	-	-	-	N	39346
Al-Pd	Pd ₂ Al	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.5407,0.4061,0.7769,90,90,90	-	-	9.34	X	1794
Al-Pd	Pd ₂ Al ₃	Ni ₂ Al ₃ ,hP5,164	<i>P-3m1</i>	0.4219,0.4219,0.5161,90,90,120	-	-	6.13	X	15098
Al-Pd	Pd ₃ Al rt	* ₂ oP24,26	<i>Pmc2₁</i>	0.40281,1.5804,0.54048,90,90,90	-	-	10.02	N	55943
Al-Pd	Pd ₅ Al rt	Pd ₅ Al,oP24,62	<i>Pnma</i>	1.0718,0.39991,0.80839,90,90,90	-	gray	10.72	X	50540
Al-Pd	Pd ₅ Al ₃ ht	Rh ₂ Ge ₃ ,oP16,55	<i>Pbam</i>	0.535,1.041,0.403,90,90,90	-	-	9.07	X	962
Al-Pd	Pd ₈ Al ₂₁ rt	Pt ₈ Al ₂₁ ,tI116,88	<i>I4₁/a</i>	1.2962,1.2962,1.0684,90,90,90	-	-	5.25	X	21113
Al-Pr	PrAl cub	CsCl,cP2,221	<i>Pm-3m</i>	0.382,0.382,0.382,90,90,90	b.c.c. family	-	5.00	X	2004
Al-Pr	PrAl ht	DyAl,oP16,57	<i>Pbcm</i>	0.597,1.177,0.573,90,90,90	-	-	5.54	A	3305
Al-Pr	PrAl rt	CeAl,oS16,63	<i>Cmcm</i>	0.9238,0.7652,0.5681,90,90,90	-	-	5.55	A	51523
Al-Pr	PrAl ₂ lt	YMn ₂ ,tI12,141	<i>I4₁/amd</i>	0.5663,0.5663,0.8013,90,90,90	-	-	5.04	X	62440
Al-Pr	PrAl ₂ rt	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.80323,0.80323,0.80323,90,90,90	Friauf-Laves phase	-	5.00	X	43936
Al-Pr	PrAl ₃ rt	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.6511,0.6511,0.4605,90,90,120	close-packed structure	-	4.36	X	3650
Al-Pr	PrAl ₄ ht	BaAl ₄ ,tI10,139	<i>I4/mmm</i>	0.437,0.437,1.014,90,90,90	BaAl ₄ family	-	4.27	A	2004
Al-Pr	Pr ₂ Al	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.677,0.5259,0.9659,90,90,90	-	-	5.96	A	51523
Al-Pr	Pr ₃ Al ht	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4962,0.4962,0.4962,90,90,90	close-packed structure	-	6.11	X	3208
Al-Pr	Pr ₃ Al rt	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.7039,0.7039,0.5454,90,90,120	close-packed structure	-	6.38	A	51523
Al-Pr	Pr ₃ Al ₁₁ rt	La ₃ Al ₁₁ ,oI28,71	<i>Immm</i>	0.4376,1.0023,1.2966,90,90,90	-	-	4.20	A	51523
Al-Pt	PtAl ht	CsCl,cP2,221	<i>Pm-3m</i>	0.304,0.304,0.304,90,90,90	b.c.c. family	-	13.13	X	18866
Al-Pt	PtAl rt	FeSi,cP8,198	<i>P2₁3</i>	0.4866,0.4866,0.4866,90,90,90	-	gray violet	12.80	X	1751
Al-Pt	PtAl ₂ hp	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.7493,0.3216,0.7999,90,90,90	-	-	8.58	A	59447
Al-Pt	PtAl ₂	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.591,0.591,0.591,90,90,90	fluorite family	brass	8.01	X	15103
Al-Pt	PtAl ₄ m	* ₂ hP*,*	-	1.3067,1.3067,0.9618,90,90,120	-	-	-	N	15103
Al-Pt	PtAl ₄	PtAl ₄ ,hP102,158	<i>P3c1</i>	1.3077,1.3077,0.96342,90,90,120	-	-	6.35	X	51559
Al-Pt	PtAl ₆ m	* ₂ oP*,*	-	0.8318,1.2103,1.5762,90,90,90	-	-	-	N	12469
Al-Pt	Pt _{0.02} Al _{0.98} m	Cu,cF4,225	<i>Fm-3m</i>	0.4044,0.4044,0.4044,90,90,90	close-packed structure	-	3.05	X	8170
Al-Pt	Pt _{0.91} Al _{0.09}	Cu,cF4,225	<i>Fm-3m</i>	0.3906,0.3906,0.3906,90,90,90	close-packed structure	-	20.06	X	11484
Al-Pt	Pt ₂ Al ht	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.54007,0.40547,0.78985,90,90,90	-	-	16.02	X	8942
Al-Pt	Pt ₂ Al rt	Pt ₂ Ga,oP24,51	<i>Pmma</i>	1.6306,0.3919,0.5433,90,90,90	-	-	15.96	A	8942
Al-Pt	Pt ₂ Al ₃	Ni ₂ Al ₃ ,hP5,164	<i>P-3m1</i>	0.4208,0.4208,0.5172,90,90,120	-	brass	9.86	X	1751
Al-Pt	Pt _{2.84} Al _{1.16} ht2	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3868,0.3868,0.3868,90,90,90	close-packed structure	gray silver	16.80	X	33965
Al-Pt	Pt ₂₄ Al ₇₆	* ₂ oS*,63	<i>Cmcm</i>	1.9718,1.4266,1.6228,90,90,90	-	-	-	N	61607
Al-Pt	Pt ₃ Al ht1	Ir ₃ Si,tI16,140	<i>I4/mcm</i>	0.54713,0.54713,0.77747,90,90,90	close-packed structure	-	17.47	A	20720
Al-Pt	Pt ₃ Al rt	Pt ₃ Ga,tP16,127	<i>P4/mbm</i>	0.54524,0.54524,0.782,90,90,90	close-packed structure	-	17.49	X	33965
Al-Pt	Pt ₃ Al tet	SrPb ₃ ,tP4,123	<i>P4/mmm</i>	0.3832,0.3832,0.3894,90,90,90	close-packed structure	-	17.78	X	1513
Al-Pt	Pt ₅ Al ₂₁	Li ₂ Si ₅ ,cF416,216	<i>F-43m</i>	1.923,1.923,1.923,90,90,90	γ-brass	gray silver	5.76	A	2341
Al-Pt	Pt ₅ Al ₃	Rh ₂ Ge ₃ ,oP16,55	<i>Pbam</i>	0.5402,1.0711,0.3949,90,90,90	-	-	15.35	X	31907
Al-Pt	Pt ₈ Al ₂₁	Pt ₈ Al ₂₁ ,tI116,88	<i>I4₁/a</i>	1.2949,1.2949,1.0659,90,90,90	-	-	7.91	X	21113
Al-Pu	PuAl ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7874,0.7874,0.7874,90,90,90	Friauf-Laves phase	-	8.11	X	1648

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Al-Pu	PuAl ₃ ht1	BaPb ₃ ,hR36,166	<i>R-3m</i>	0.615,0.615,2.1102,90,90,120	close-packed structure	-	7.03	X	2414
Al-Pu	PuAl ₃ ht2	PuAl ₃ ,hP24,194	<i>P6₃/mmc</i>	0.610,0.610,1.447,90,90,120	close-packed structure	-	6.94	X	815
Al-Pu	PuAl ₃ ht3	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4262,0.4262,0.4262,90,90,90	close-packed structure	-	6.97	X	3219
Al-Pu	PuAl ₃ rt	BaPb ₃ ,hR36,166	<i>R-3m</i>	0.61502,0.61502,2.11744,90,90,120	close-packed structure	-	7.00	A	3219
Al-Pu	Pu _{0.5} Al _{0.5} ht	Mn,cI58,217	<i>I-43m</i>	1.0769,1.0769,1.0769,90,90,90	-	-	10.45	A	1648
Al-Pu	Pu _{0.75} Al _{0.25} ht	Cu,cF4,225	<i>Fm-3m</i>	0.45,0.45,0.45,90,90,90	close-packed structure	-	13.83	X	1648
Al-Pu	Pu _{0.89} Al _{0.11} ht3	Cu,cF4,225	<i>Fm-3m</i>	0.4559,0.4559,0.4559,90,90,90	close-packed structure	-	15.43	X	1648
Al-Pu	Pu _{0.9} Al _{0.1}	UAl ₄ ,oI20,74	<i>Imma</i>	0.4396,0.6266,1.3708,90,90,90	-	-	5.76	X	3219
Al-Pu	Pu _{0.9515} Al _{0.0485} ht5	W,cI2,229	<i>Im-3m</i>	0.36493,0.36493,0.36493,90,90,90	b.c.c. family	-	15.96	X	2215
Al-Pu	Pu ₃ Al ht	SrPb ₃ ,tP4,123	<i>P4/mmm</i>	0.4499,0.4499,0.4538,90,90,90	close-packed structure	-	13.72	X	1648
Al-Re	ReAl rt	CsCl,cP2,221	<i>Pm-3m</i>	0.288,0.288,0.288,90,90,90	b.c.c. family	-	14.82	X	1238
Al-Re	ReAl ₁₂	WAl ₁₂ ,cI26,204	<i>Im-3</i>	0.7527,0.7527,0.7527,90,90,90	-	-	3.97	X	2047
Al-Re	ReAl ₃	* ₂ mP*,*	-	0.4955,3.9764,0.518,90,99.55,90	-	-	-	N	44610
Al-Re	ReAl ₆	MnAl ₆ ,oS28,63	<i>Cmcm</i>	0.7599,0.6606,0.9029,90,90,90	-	-	5.10	X	28285
Al-Re	Re _{1.8} Al _{2.2}	Re(Re _{0.4} Al _{0.6}) ₂ Al ₁ tP4,123	<i>P4/mmm</i>	0.30785,0.30785,0.59515,90,90,90	b.c.c. family	-	11.62	X	16963
Al-Re	Re ₁₄ Al _{54.75}	Re ₁₄ Al _{54.75} ,aP71,2	<i>P-1</i>	0.5159,0.9106,2.3755,100.94,90.30,93.00	-	-	6.20	X	19738
Al-Re	Re ₂ Al	CuZr ₂ ,tI6,139	<i>I4/mmm</i>	0.29802,0.29802,0.95796,90,90,90	close-packed structure	-	15.59	X	16963
Al-Re	Re ₂₄ Al ₅	Ti ₃ Re ₂₄ ,cI58,217	<i>I-43m</i>	0.958,0.958,0.958,90,90,90	-	-	17.39	A	1705
Al-Re	Re ₄ Al ₁₁	Mn ₄ Al ₁₁ ,aP15,2	<i>P-1</i>	0.5172,0.5154,0.8959,74.83,90.43,80.24	-	-	7.63	X	28285
Al-Re	Re ₈ Al _{32.07} rt	Re ₈ Al _{32.07} ,aP43,2	<i>P-1</i>	0.5153,0.90782,1.3727,96.852,95.521,92.392	-	gray silver	6.17	X	50686
Al-Rh	RhAl	CsCl,cP2,221	<i>Pm-3m</i>	0.29806,0.29806,0.29806,90,90,90	b.c.c. family	-	8.15	X	16268
Al-Rh	RhAl _{2.63} ht	RhAl _{2.63} ,cP54,195	<i>P23</i>	0.76692,0.76692,0.76692,90,90,90	-	-	5.12	X	34023
Al-Rh	RhAl ₃ orth1	* ₂ O*,*	-	1.64,2.38,3.28,90,90,90	-	-	-	N	37688
Al-Rh	RhAl ₃ orth2	* ₂ O*,* 62	<i>Pnma</i>	2.35,1.68,1.23,90,90,90	-	-	-	N	54793
Al-Rh	Rh _{0.925} Al _{0.075}	Cu,cF4,225	<i>Fm-3m</i>	0.38017,0.38017,0.38017,90,90,90	close-packed structure	-	11.75	X	24713
Al-Rh	Rh ₂ Al ₅ rt	Co ₂ Al ₅ ,hP28,194	<i>P6₃/mmc</i>	0.7893,0.7893,0.7854,90,90,120	-	-	5.34	X	3333
Al-Rh	Rh ₂ Al ₉	Co ₂ Al ₉ ,mP22,14	<i>P12₁/c1</i>	0.63501,0.64266,0.87181,90,94.809,90	-	gray	4.20	X	46674
Al-Rh	Rh ₃ Al ₇ ht	* ₂ mP*,*	-	0.6595,0.3808,1.0309,90,102.42,90	-	-	-	N	37026
Al-Rh	Rh ₄ Al ₁₃	Fe ₄ Al ₁₃ ,mS102,12	<i>C12/m1</i>	1.636,0.805,1.279,90,107.77,90	-	-	4.74	A	15977
Al-Rh	Rh ₉₉ Al ₃₄₃	Rh ₉₉ Al ₃₄₃ ,oS884,38	<i>Amm2</i>	1.68,3.24,2.35,90,90,90	-	-	5.05	X	54793
Al-Ru	RuAl	CsCl,cP2,221	<i>Pm-3m</i>	0.29916,0.29916,0.29916,90,90,90	b.c.c. family	-	7.94	X	26962
Al-Ru	RuAl ₁₂	* ₂ cP*,*	-	0.812,0.812,0.812,90,90,90	-	-	-	N	1927
Al-Ru	RuAl ₂ rt orth	TiSi ₂ ,oF24,70	<i>Fddd</i>	0.4717,0.8012,0.8785,90,90,90	-	-	6.20	X	2901
Al-Ru	RuAl ₂ rt tet	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.311,0.311,0.638,90,90,90	b.c.c. family	-	8.34	A	1927
Al-Ru	RuAl _{2.5} ht	FeAl _{2.5} ,oS24,63	<i>Cmcm</i>	0.78,0.66,0.42,90,90,90	-	-	5.18	A	42210
Al-Ru	RuAl ₃	TiNi ₃ ,hP16,194	<i>P6₃/mmc</i>	0.481,0.481,0.784,90,90,120	close-packed structure	-	7.70	A	1927
Al-Ru	RuAl ₆	MnAl ₆ ,oS28,63	<i>Cmcm</i>	0.74882,0.65559,0.89605,90,90,90	-	-	3.97	X	3781
Al-Ru	Ru _{0.1} Al _{0.9}	Cu,cF4,225	<i>Fm-3m</i>	0.402,0.402,0.402,90,90,90	close-packed structure	-	3.52	X	7599
Al-Ru	Ru ₂ Al ₃ ht tet	Os ₂ Al ₃ ,tI10,139	<i>I4/mmm</i>	0.3079,0.3079,1.433,90,90,90	b.c.c. family	-	6.92	A	2901
Al-Ru	Ru ₂ Al ₃ ht trig	Ni ₂ Al ₃ ,hP5,164	<i>P-3m1</i>	0.405,0.405,0.494,90,90,120	-	-	6.70	A	1927
Al-Ru	Ru ₄ Al ₁₃	Fe ₄ Al ₁₃ ,mS102,12	<i>C12/m1</i>	1.586,0.8192,1.2742,90,107.77,90	-	-	4.77	X	57949
Al-S	Al _{0.67} S ht	ZnO,hP4,186	<i>P6₃mc</i>	0.3579,0.3579,0.5829,90,90,120	adamantane structure	-	2.58	A	365
Al-S	Al ₂ S ₃ hex	In ₂ Se ₃ ,hP30,169	<i>P6₁</i>	0.6491,0.6491,1.7169,90,90,120	-	-	2.39	X	28155
Al-S	Al ₂ S ₃ hp-ht	In ₂ S ₃ ,tI80,141	<i>I4₁/amd</i>	0.7026,0.7026,2.9811,90,90,90	-	orange yellow	2.71	X	5330
Al-S	Al ₂ S ₃ ht	Al ₂ O ₃ ,hR30,167	<i>R-3c</i>	0.647,0.647,1.727,90,90,120	-	-	2.39	A	419
Al-S	Al ₂ S ₃ rt	Al ₂ S ₃ ,hP30,169	<i>P6₁</i>	0.6438,0.6438,1.7898,90,90,120	-	colorless	2.33	X	28155
Al-S	Al _{2.674} S ₄ hp2-ht	Fe ₃ O ₄ ,cF56,227	<i>Fd-3m</i>	0.994,0.994,0.994,90,90,90	spinel family	yellow dark	2.71	X	7705
Al-Sb	AlSb hp	ZnTe,oS8,63	<i>Cmcm</i>	0.537,0.5913,0.5093,90,90,90	-	-	6.11	X	39528
Al-Sb	AlSb	ZnS,cF8,216	<i>F-43m</i>	0.6135,0.6135,0.6135,90,90,90	adamantane structure	brown	4.28	X	13460
Al-Sc	ScAl rt	* ₂ O*,*	-	0.31263,0.50299,0.98945,90,90,90	-	-	-	N	17921
Al-Sc	ScAl stab	CsCl,cP2,221	<i>Pm-3m</i>	0.3388,0.3388,0.3388,90,90,90	b.c.c. family	-	3.07	X	17921
Al-Sc	ScAl ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.76,0.76,0.76,90,90,90	Friauf-Laves phase	yellowish	2.99	X	16996
Al-Sc	ScAl ₃ rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4108,0.4108,0.4108,90,90,90	close-packed structure	gray	3.02	X	61112
Al-Sc	Sc _{0.03} Al _{0.97}	Cu,cF4,225	<i>Fm-3m</i>	0.40653,0.40653,0.40653,90,90,90	close-packed structure	-	2.72	X	10059
Al-Sc	Sc ₂ Al	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.4888,0.4888,0.6166,90,90,120	AlB ₂ family	-	3.04	X	4617
Al-Se	Al _{0.67} Se rt	ZnO,hP4,186	<i>P6₃mc</i>	0.389,0.389,0.63,90,90,120	adamantane structure	white	3.90	X	633
Al-Se	Al ₂ Se ₃	Ga ₂ S ₃ ,mS20,9	<i>C1c1</i>	1.168,0.6733,0.7329,90,121.12,90	-	-	3.92	A	2833
Al-Se	Al _{2.67} Se ₄ hp-ht	Fe ₃ O ₄ ,cF56,227	<i>Fd-3m</i>	1.045,1.045,1.045,90,90,90	spinel family	-	4.52	X	7705
Al-Si	Al _{0.82} Si _{0.18}	Cu,cF4,225	<i>Fm-3m</i>	0.4009,0.4009,0.4009,90,90,90	close-packed structure	-	2.80	X	18257
Al-Sm	SmAl cub	CsCl,cP2,221	<i>Pm-3m</i>	0.3739,0.3739,0.3739,90,90,90	b.c.c. family	-	5.64	X	2599
Al-Sm	SmAl orth	DyAl ₁₀ ,oP16,57	<i>Pbcm</i>	0.5891,1.1596,0.5684,90,90,90	-	-	6.07	A	50446
Al-Sm	SmAl ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.79441,0.79441,0.79441,90,90,90	Friauf-Laves phase	-	5.42	X	29384
Al-Sm	SmAl ₃ rt	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.6388,0.6388,0.4607,90,90,120	close-packed structure	-	4.72	A	49845
Al-Sm	SmAl _{3.67} ht	BaAl ₄ ,tI10,139	<i>I4/mmm</i>	0.4281,0.4281,0.9906,90,90,90	BaAl ₄ family	-	4.56	A	49845
Al-Sm	SmAl ₄ m	UAl ₄ ,oI20,74	<i>Imma</i>	0.444,0.638,1.362,90,90,90	-	-	4.45	A	3545
Al-Sm	Sm ₂ Al	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.6662,0.519,0.9625,90,90,90	-	-	6.54	A	34498
Al-Sm	Sm ₃ Al	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.48571,0.48571,0.48571,90,90,90	close-packed structure	-	6.93	X	50446
Al-Sm	Sm ₃ Al ₁₁ rt	La ₃ Al ₁₁ ,oI28,71	<i>Immm</i>	0.4333,0.997,1.281,90,90,90	-	-	4.49	A	3618
Al-Sn	Al _{0.5} Sn _{0.5} m	(Hg _{0.5} Sn _{0.5}),hP1,191	<i>P6/mmm</i>	0.3181,0.3181,0.298,90,90,120	-	-	4.63	X	2908
Al-Sn	Al _{0.977} Sn _{0.023}	Cu,cF4,225	<i>Fm-3m</i>	0.4041,0.4041,0.4041,90,90,90	close-packed structure	-	2.93	X	14357
Al-Sr	SrAl ₂ hp-ht	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.8325,0.8325,0.8325,90,90,90	Friauf-Laves phase	-	3.26	X	15574
Al-Sr	SrAl ₂	KHg ₂ ,oI12,74	<i>Imma</i>	0.4801,0.7905,0.7974,90,90,90	AlB ₂ family	white silver	3.11	X	15574
Al-Sr	SrAl ₄	BaAl ₄ ,tI10,139	<i>I4/mmm</i>	0.4461,0.4461,1.1209,90,90,90	BaAl ₄ family	-	2.91	X	32635
Al-Sr	Sr ₃ Al ₉	Sr ₃ Al ₉ ,hR42,166	<i>R-3m</i>	0.5881,0.5881,3.571,90,90,120	-	-	3.17	X	20528
Al-Sr	Sr ₈ Al ₇	Ba ₈ Ga ₇ ,cP60,198	<i>P2₁3</i>	1.2753,1.2753,1.2753,90,90,90	-	-	2.85	X	15719
Al-Ta	TaAl _{1.4} rt	* ₂ hP*,*	-	3.214,3.214,1.341,90,90,120	-	-	-	N	30182
Al-Ta	TaAl _{1.5} rt	* ₂ aP69,*	-	1.0433,1.0748,1.1078,63.19,89.55,82.4	-	-	-	N	30182
Al-Ta	TaAl ₃	TiAl ₃ ,tI8,139	<i>I4/mmm</i>	0.38437,0.38437,0.8546,90,90,90	close-packed structure	gray silver	6.89	X	42297

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Al-Ta	Ta _{0.74} Al _{0.26}	(Cr _{0.49} Fe _{0.51}), tP30, 136	$P4_2/mnm$	0.9957, 0.9957, 0.5199, 90, 90, 90	Frank-Kasper phase	-	13.62	X	47999
Al-Ta	Ta ₁₇ Al ₁₂ ht	Mg ₁₇ Al ₁₂ , cI58, 217	$I-43m$	0.988, 0.988, 0.988, 90, 90, 90	-	-	11.71	A	2458
Al-Ta	Ta _{22.4} Al _{20.6}	Ta ₂₂ Al ₂₁ , mP86, 14	$P12_1/c1$	0.98786, 0.99012, 1.63873, 90, 116.465, 90	-	-	10.67	X	50236
Al-Ta	Ta ₃₉ Al ₆₉ ht	Ta ₃₉ Al ₆₉ , cF444, 216	$F-43m$	1.9153, 1.9153, 1.9153, 90, 90, 90	-	-	8.43	X	28695
Al-Ta	Ta ₅ Al ₃ stab	Mn ₅ Si ₃ , hP16, 193	$P6_3/mcm$	0.77337, 0.77337, 0.52446, 90, 90, 120	-	-	12.05	A	13677
Al-Tb	TbAl	DyAl, oP16, 57	$Pbcm$	0.583, 1.137, 0.562, 90, 90, 90	-	-	6.63	X	4168
Al-Tb	TbAl ₂	MgCu ₂ , cF24, 227	$Fd-3m$	0.7889, 0.7889, 0.7889, 90, 90, 90	Friauf-Laves phase	-	5.76	X	6879
Al-Tb	TbAl ₃ ht	HoAl ₃ , hR60, 166	$R-3m$	0.6095, 0.6095, 3.596, 90, 90, 120	close-packed structure	-	5.16	A	50420
Al-Tb	TbAl ₃ rt	BaPb ₃ , hR36, 166	$R-3m$	0.6176, 0.6176, 2.1165, 90, 90, 120	close-packed structure	-	5.13	X	3502
Al-Tb	TbAl ₄	UAl ₄ , oI20, 74	$Imma$	0.443, 0.6261, 1.3706, 90, 90, 90	-	-	4.66	A	3502
Al-Tb	Tb ₂ Al	Co ₅ Si ₂ , oP12, 62	$Pnma$	0.6592, 0.5113, 0.944, 90, 90, 90	-	-	7.20	A	5880
Al-Tb	Tb ₃ Al stab	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4794, 0.4794, 0.4794, 90, 90, 90	close-packed structure	-	7.59	X	3575
Al-Tb	Tb ₃ Al ₂	Gd ₃ Al ₂ , tP20, 102	$P4_2nm$	0.8255, 0.8255, 0.7568, 90, 90, 90	-	-	6.84	A	2596
Al-Tc	TcAl ₁₂	WAl ₁₂ , cI26, 204	$Im-3$	0.75255, 0.75255, 0.75255, 90, 90, 90	-	-	3.29	X	2047
Al-Tc	TcAl ₄	WAl ₄ , mS30, 8	$C1m1$	0.51, 1.7, 0.51, 90, 100, 02, 90	-	-	4.71	A	1936
Al-Tc	TcAl ₆	MnAl ₆ , oS28, 63	$Cmcm$	0.7629, 0.65944, 0.90011, 90, 90, 90	-	-	3.81	X	3269
Al-Tc	Tc ₂ Al	CuZr ₂ , tI6, 139	$I4/mmm$	0.2977, 0.2977, 0.9476, 90, 90, 90	close-packed structure	-	8.82	A	2595
Al-Tc	Tc ₂ Al ₃	Ni ₂ Al ₃ , hP5, 164	$P-3m1$	0.416, 0.416, 0.513, 90, 90, 120	-	-	5.98	A	1936
Al-Te	Al _{0.67} Te m1	ZnS, cF8, 216	$F-43m$	0.5949, 0.5949, 0.5949, 90, 90, 90	adamantane structure	brown red	4.60	X	21860
Al-Te	Al ₂ Te ₃ ht	Al ₂ Te ₃ , mP40, 14	$P12_1/c1$	0.7181, 1.2848, 1.4167, 90, 90, 04, 90	-	yellow	4.44	X	33891
Al-Te	Al ₂ Te ₃ ht	Al ₂ Te ₅ , mS14, 12	$C12/m1$	1.35929, 0.41527, 0.98392, 90, 126.97, 90	-	black	5.18	X	32624
Al-Te	Al _{2.67} Te ₄ rt	*, mP8, 4	$P12_1$	0.4246, 0.7189, 1.3855, 90, 90, 21, 90	-	orange red	4.57	P	21860
Al-Te	Al ₃ Te ₄ rt	*, cP*, *	-	0.6147, 0.6147, 0.6147, 90, 90, 90	-	-	-	N	21205
Al-Te	Al ₇ Te ₁₀ m	Al ₇ Te ₁₀ , hR102, 155	$R32$	1.4395, 1.4395, 1.7932, 90, 90, 120	-	red ruby	4.54	X	20748
Al-Th	ThAl	TlI, oS8, 63	$Cmcm$	0.442, 1.145, 0.419, 90, 90, 90	CrB(III)-FeB	-	8.11	X	1458
Al-Th	ThAl ₂ hp	MgCu ₂ , cF24, 227	$Fd-3m$	0.797, 0.797, 0.797, 90, 90, 90	Friauf-Laves phase	-	7.50	X	19051
Al-Th	ThAl ₂	AlB ₂ , hP3, 191	$P6/mmm$	0.4412, 0.4412, 0.4173, 90, 90, 120	AlB ₂ family	-	6.75	X	19051
Al-Th	ThAl ₃	Mg ₃ Cd, hP8, 194	$P6_3/mmc$	0.6499, 0.6499, 0.4626, 90, 90, 120	close-packed structure	-	6.14	X	8944
Al-Th	Th _{0.0023} Al _{0.9977}	Cu, cF4, 225	$Fm-3m$	0.40493, 0.40493, 0.40493, 90, 90, 90	close-packed structure	-	9.75	X	218
Al-Th	Th ₂ Al	CuAl ₃ , tI12, 140	$I4/mcm$	0.7618, 0.7618, 0.5862, 90, 90, 90	-	-	2.59	X	6603
Al-Th	Th ₂ Al ₃ ht	*, tP20, *	-	0.986, 0.986, 0.781, 90, 90, 90	-	-	-	N	1458
Al-Th	Th ₂ Al ₇	Th ₂ Al ₇ , oP18, 55	$Pbam$	0.5874, 1.1479, 0.553, 90, 90, 90	-	-	5.82	X	4226
Al-Th	Th ₃ Al ₂ ht	U ₃ Si ₂ , tP10, 127	$P4/mbm$	0.8125, 0.8125, 0.4217, 90, 90, 90	-	-	8.95	X	675
Al-Ti	TiAl prec	TiAl, tP8, 129	$P4/nmm$	0.4, 0.4, 0.76, 90, 90, 90	-	-	4.09	X	15774
Al-Ti	TiAl rt	CuAu, tP2, 123	$P4/mmm$	0.28373, 0.28373, 0.40591, 90, 90, 90	close-packed structure	-	3.81	X	44528
Al-Ti	TiAl ₂ ht	ZrGa ₂ , oS12, 65	$Cmcm$	0.39591, 1.20944, 0.40315, 90, 90, 90	close-packed structure	-	3.51	X	24164
Al-Ti	TiAl ₂ rt	HfGa ₂ , tI24, 141	$I4_1/amd$	0.3971, 0.3971, 2.4313, 90, 90, 90	close-packed structure	-	3.53	X	37732
Al-Ti	TiAl ₃ ht	TiAl ₃ , tI8, 139	$I4/mmm$	0.38537, 0.38537, 0.85839, 90, 90, 90	close-packed structure	-	3.36	X	18574
Al-Ti	TiAl ₃ m	Cu ₃ Au, cP4, 221	$Pm-3m$	0.401, 0.401, 0.401, 90, 90, 90	close-packed structure	-	3.32	X	49315
Al-Ti	TiAl ₃ rt	TiAl ₃ , tI32, 139	$I4/mmm$	0.3875, 0.3875, 3.384, 90, 90, 90	-	-	3.37	X	42207
Al-Ti	Ti _{0.12} Al _{0.88}	Cu, cF4, 225	$Fm-3m$	0.40397, 0.40397, 0.40397, 90, 90, 90	close-packed structure	-	2.97	X	50774
Al-Ti	Ti _{0.4} Al _{0.6} m	Cu, cF4, 225	$Fm-3m$	0.4022, 0.4022, 0.4022, 90, 90, 90	close-packed structure	-	3.61	X	28416
Al-Ti	Ti _{0.5} Al _{0.5} ht	Mg, hP2, 194	$P6_3/mmc$	0.29064, 0.29064, 0.46667, 90, 90, 120	close-packed structure	-	3.64	X	44528
Al-Ti	Ti _{0.72} Al _{1.28} ht	CuAu, tP2, 123	$P4/mmm$	0.28496, 0.28496, 0.3955, 90, 90, 90	close-packed structure	-	3.57	X	39733
Al-Ti	Ti _{0.9} Al _{1.1} prec	*, oP16, *	-	0.4, 0.57, 1.13, 90, 90, 90	-	-	-	N	15774
Al-Ti	Ti _{1.14} Al _{1.86} ht	Ti(Ti _{0.14} Al _{0.86})Al ₂ , tP28, 123	$P4/mmm$	0.39053, 0.39053, 2.91963, 90, 90, 90	-	-	3.44	X	24164
Al-Ti	Ti _{1.25} Al _{2.75} ht	Ti(Ti _{0.25} Al _{0.75})Al ₂ , tI16, 139	$I4/mmm$	0.3923, 0.3923, 1.65349, 90, 90, 90	-	-	3.50	X	24164
Al-Ti	Ti _{1.5} Al _{2.5} ht	Ti(Ti _{0.5} Al _{0.5})Al ₂ , oP4, 47	$Pnmm$	0.39617, 0.40262, 0.40262, 90, 90, 90	close-packed structure	-	3.60	X	24164
Al-Ti	Ti ₂ Al prec	*, h***, *	-	0.298, 0.298, 1.895, 90, 90, 120	-	-	-	N	15774
Al-Ti	Ti ₃ Al ₅ rt	*, tP32, 127	$P4/mbm$	1.1293, 1.1293, 0.4038, 90, 90, 90	-	-	3.59	N	39733
Al-Ti	Ti _{3.25} Al _{0.75} rt	Mg ₃ Cd, hP8, 194	$P6_3/mmc$	0.58193, 0.58193, 0.46639, 90, 90, 120	close-packed structure	-	4.27	X	45767
Al-Ti	Ti _{8.5} Al _{16.5} ht	*, hP*, *	-	1.152, 1.152, 0.465, 90, 90, 120	-	-	-	N	1488
Al-Ti	Ti ₉ Al ₂₃ rt (Si)	*, tI32, *	-	0.3843, 0.3843, 3.3465, 90, 90, 90	-	-	3.53	N	2786
Al-Tm	TmAl	DyAl, oP16, 57	$Pbcm$	0.577, 1.124, 0.556, 90, 90, 90	-	-	7.22	X	4236
Al-Tm	TmAl ₂	MgCu ₂ , cF24, 227	$Fd-3m$	0.77757, 0.77757, 0.77757, 90, 90, 90	Friauf-Laves phase	-	6.30	X	2603
Al-Tm	TmAl ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.42, 0.42, 0.42, 90, 90, 90	close-packed structure	-	5.60	X	50420
Al-Tm	Tm ₃ Al ₂	Zr ₃ Al ₂ , tP20, 136	$P4_2/nmm$	0.8094, 0.8094, 0.7452, 90, 90, 90	-	-	7.63	A	22070
Al-U	UAl ₂ hp	MgNi ₂ , hP24, 194	$P6_3/mmc$	0.5165, 0.5165, 1.6083, 90, 90, 120	Friauf-Laves phase	-	10.44	A	30240
Al-U	UAl ₂ rt	MgCu ₂ , cF24, 227	$Fd-3m$	0.778, 0.778, 0.778, 90, 90, 90	Friauf-Laves phase	-	8.24	X	14051
Al-U	UAl ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4266, 0.4266, 0.4266, 90, 90, 90	close-packed structure	-	6.82	X	43745
Al-U	UAl ₄ rt	UAl ₄ , oI20, 74	$Imma$	0.44014, 0.62552, 1.37279, 90, 90, 90	-	black	6.08	X	43745
Al-V	VAl ₁₀	VAl ₁₀ , cF176, 227	$Fd-3m$	1.45125, 1.45125, 1.45125, 90, 90, 90	-	-	2.79	X	64512
Al-V	VAl ₃	TiAl ₃ , tI8, 139	$I4/mmm$	0.378, 0.378, 0.8322, 90, 90, 90	close-packed structure	-	3.68	X	16565
Al-V	V _{0.765} Al _{0.235}	W, cI2, 229	$Im-3m$	0.3027, 0.3027, 0.3027, 90, 90, 90	b.c.c. family	-	5.43	X	61162
Al-V	V ₃ Al hp1-ht	*, t***, *	-	0.6167, 0.6167, 0.9481, 90, 90, 90	-	-	-	N	7333
Al-V	V ₃ Al hp2-ht	*, hP*, *	-	0.707, 0.707, 0.9565, 90, 90, 120	-	-	-	N	7333
Al-V	V ₃ Al rt	Cr ₃ Si, cP8, 223	$Pm-3n$	0.481, 0.481, 0.481, 90, 90, 90	Frank-Kasper phase	-	5.37	X	5459
Al-V	V ₄ Al ₂₃	V ₄ Al ₂₃ , hP54, 194	$P6_3/mmc$	0.7692, 0.7692, 1.704, 90, 90, 120	-	blue dark	3.14	X	1163
Al-V	V ₅ Al ₈	Cu ₅ Zn ₈ , cI52, 217	$I-43m$	0.9234, 0.9234, 0.9234, 90, 90, 90	γ -brass	-	3.97	X	10206
Al-V	V ₇ Al ₄₅	V ₇ Al ₄₅ , mS104, 12	$C12/m1$	2.0827, 0.76213, 1.1081, 90, 106.97, 90	-	-	3.10	X	1042
Al-W	WAl ₁₂	WAl ₁₂ , cI26, 204	$Im-3$	0.75803, 0.75803, 0.75803, 90, 90, 90	-	-	3.87	X	566
Al-W	WAl ₂ hp	CrSi ₂ , hP9, 180	$P6_22$	0.47422, 0.47422, 0.66057, 90, 90, 120	-	black	9.21	X	51916
Al-W	WAl ₄	WAl ₄ , mS30, 8	$C1m1$	0.52614, 1.77457, 0.52241, 90, 100.225, 90	-	-	6.06	X	56291
Al-W	WAl ₅	WAl ₅ , hP12, 182	$P6_22$	0.49020, 0.49020, 0.88570, 90, 90, 120	close-packed structure	-	5.74	X	641
Al-W	W _{0.5} Al _{0.5} m	W, cI2, 229	$Im-3m$	0.3165, 0.3165, 0.3165, 90, 90, 90	b.c.c. family	-	11.04	X	46276
Al-W	W ₂ Al	Cu, cF4, 225	$Fm-3m$	0.40504, 0.40504, 0.40504, 90, 90, 90	close-packed structure	-	2.70	X	56291
Al-Y	YAl ht	CsCl, cP2, 221	$Pm-3m$	0.3754, 0.3754, 0.3754, 90, 90, 90	b.c.c. family	-	3.64	X	3350
Al-Y	YAl rt	TlI, oS8, 63	$Cmcm$	0.3884, 1.1522, 0.4385, 90, 90, 90	CrB(III)-FeB	-	3.92	X	3350

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Al-Y	YAl ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.78611, 0.78611, 0.78611, 90, 90, 90	Friauf-Laves phase	-	3.91	X	20058
Al-Y	YAl ₃ ht1	BaPb ₃ , hR36, 166	<i>R-3m</i>	0.6204, 0.6204, 2.1184, 90, 90, 120	close-packed structure	-	3.59	X	3298
Al-Y	YAl ₃ ht2	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4323, 0.4323, 0.4323, 90, 90, 90	close-packed structure	-	3.49	X	3350
Al-Y	YAl ₃ rt	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6276, 0.6276, 0.4582, 90, 90, 120	close-packed structure	-	3.61	X	3298
Al-Y	YAl _x rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.363, 0.363, 0.5732, 90, 90, 120	close-packed structure	-	4.51	X	2744
Al-Y	Y ₂ Al	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.6642, 0.5084, 0.9469, 90, 90, 90	-	-	4.25	X	3350
Al-Y	Y ₃ Al stab	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.47845, 0.47845, 0.47845, 90, 90, 90	close-packed structure	-	4.45	X	42361
Al-Y	Y ₃ Al ₂	Zr ₃ Al ₂ , tP20, 136	<i>P4₂/mmn</i>	0.8239, 0.8239, 0.7648, 90, 90, 90	-	-	4.10	X	3350
Al-Y	Y ₅ Al ₃ m	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8787, 0.8787, 0.6435, 90, 90, 120	-	-	4.06	X	20129
Al-Yb	YbAl ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.785, 0.785, 0.785, 90, 90, 90	Friauf-Laves phase	-	6.23	X	13461
Al-Yb	YbAl ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4202, 0.4202, 0.4202, 90, 90, 90	close-packed structure	-	5.68	X	37795
Al-Zn	ZnAl ₂ prec	ZnAl ₂ , hP3, 164	<i>P-3m1</i>	0.286, 0.286, 0.699, 90, 90, 120	close-packed structure	-	4.00	X	26367
Al-Zn	ZnAl _x	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2665, 0.2665, 0.4947, 90, 90, 120	close-packed structure	-	7.14	X	38231
Al-Zn	Zn _{0.29} Al _{0.71} m	(Zn _{0.29} Al _{0.71}), hR3, 166	<i>R-3m</i>	0.2852, 0.2852, 0.6785, 90, 90, 120	close-packed structure	-	3.97	X	3130
Al-Zn	Zn _{0.4} Al _{0.6}	Cu, cF4, 225	<i>Fm-3m</i>	0.4012, 0.4012, 0.4012, 90, 90, 90	close-packed structure	-	4.36	X	26507
Al-Zr	ZrAl rt	TiI, oS8, 63	<i>Cmcm</i>	0.3353, 1.0866, 0.4266, 90, 90, 90	CrB(TiI)-FeB	-	5.05	X	1676
Al-Zr	ZrAl ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5281, 0.5281, 0.8742, 90, 90, 120	Friauf-Laves phase	-	4.57	X	33284
Al-Zr	ZrAl ₃ m	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4093, 0.4093, 0.4093, 90, 90, 90	close-packed structure	-	4.17	X	24697
Al-Zr	ZrAl ₃ rt	ZrAl ₃ , tI16, 139	<i>I4/mnm</i>	0.39993, 0.39993, 1.7283, 90, 90, 90	close-packed structure	-	4.14	X	25717
Al-Zr	Zr _{0.022} Al _{0.978}	Cu, cF4, 225	<i>Fm-3m</i>	0.40508, 0.40508, 0.40508, 90, 90, 90	close-packed structure	-	2.84	X	4716
Al-Zr	Zr _{0.94} Al _{0.06} rt m	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3207, 0.3207, 0.5123, 90, 90, 120	close-packed structure	-	6.36	X	5269
Al-Zr	Zr ₂ Al rt hex	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.4913, 0.4913, 0.5914, 90, 90, 120	AlB ₂ family	-	5.63	X	55550
Al-Zr	Zr ₂ Al rt tet	Ti ₂ Ga ₂ , tI12, 140	<i>I4/mcm</i>	0.684, 0.684, 0.55, 90, 90, 90	-	-	5.41	A	27219
Al-Zr	Zr ₂ Al ₃	Zr ₂ Al ₃ , oF40, 43	<i>Fdd2</i>	0.9601, 1.3906, 0.5574, 90, 90, 90	-	-	4.70	X	1325
Al-Zr	Zr ₃ Al rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.43917, 0.43917, 0.43917, 90, 90, 90	close-packed structure	-	5.89	X	23312
Al-Zr	Zr ₃ Al ₂	Zr ₃ Al ₂ , tP20, 136	<i>P4₂/mmn</i>	0.763, 0.763, 0.6998, 90, 90, 90	-	-	5.34	X	1148
Al-Zr	Zr ₄ Al ₃ rt	Zr ₄ Al ₃ , hP7, 191	<i>P6/mmm</i>	0.5433, 0.5433, 0.539, 90, 90, 120	Frank-Kasper phase	-	5.37	X	1153
Al-Zr	Zr ₅ Al ₃ ht	W ₅ Si ₃ , tI32, 140	<i>I4/mcm</i>	1.1049, 1.1049, 0.5396, 90, 90, 90	-	-	5.42	X	1175
Al-Zr	Zr ₅ Al ₃ stab	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8184, 0.8184, 0.5702, 90, 90, 120	-	-	5.39	X	15315
Al-Zr	Zr ₅ Al ₄ ht	Ti ₅ Ga ₄ , hP18, 193	<i>P6₃/mcm</i>	0.8447, 0.8447, 0.581, 90, 90, 120	AlB ₂ family	-	5.22	X	15315
Am-As	AmAs	NaCl, cF8, 225	<i>Fm-3m</i>	0.5876, 0.5876, 0.5876, 90, 90, 90	rocksalt family	-	10.41	X	9150
Am-B	AmB ₄	UB ₄ , tP20, 127	<i>P4/mbm</i>	0.71085, 0.71085, 0.40101, 90, 90, 90	-	-	9.38	A	4647
Am-B	AmB ₆	CaB ₆ , cP7, 221	<i>Pm-3m</i>	0.41154, 0.41154, 0.41154, 90, 90, 90	-	-	7.33	A	4647
Am-Be	Be ₁₃ Am	NaZn ₁₃ , cF112, 226	<i>Fm-3c</i>	1.0291, 1.0291, 1.0291, 90, 90, 90	-	-	4.39	A	8949
Am-Bi	AmBi rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.6334, 0.6334, 0.6334, 90, 90, 90	rocksalt family	-	11.81	X	20027
Am-Br	AmBr ₂	SrBr ₂ , tP30, 85	<i>P4/n</i>	1.1592, 1.1592, 0.7121, 90, 90, 90	-	black	6.99	A	7376
Am-Br	AmBr ₃	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.4064, 1.2661, 0.9144, 90, 90, 90	-	-	6.81	A	2551
Am-C	Am ₂ C ₃	Pu ₂ C ₃ , cI40, 220	<i>I-43d</i>	0.82757, 0.82757, 0.82757, 90, 90, 90	-	-	12.24	A	5273
Am-Cl	AmCl ₂	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.7573, 0.4532, 0.8963, 90, 90, 90	-	black	6.78	A	7376
Am-Cl	AmCl ₃	UCl ₃ , hP8, 176	<i>P6₃/m</i>	0.7382, 0.7382, 0.4214, 90, 90, 120	-	pink yellow	5.83	X	4885
Am-Cu	Cu ₅ Am	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.4958, 0.4958, 0.4175, 90, 90, 120	-	-	10.48	X	48353
Am-F	AmF ₃	HoH ₃ , hP24, 165	<i>P-3c1</i>	0.7038, 0.7038, 0.722, 90, 90, 120	-	pink	9.65	A	16265
Am-F	AmF ₄	ZrF ₄ , mS60, 15	<i>C12/c1</i>	1.25, 1.047, 0.82, 90, 126, 90	-	brown tan	7.32	A	597
Am-Fe	AmFe ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7298, 0.7298, 0.7298, 90, 90, 90	Friauf-Laves phase	-	12.12	X	12323
Am-H	AmH ₂	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5348, 0.5348, 0.5348, 90, 90, 90	fluorite family	-	10.64	X	3088
Am-H	AmH _{2.67} rt	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.5338, 0.5338, 0.5338, 90, 90, 90	fluorite family	-	10.73	X	3088
Am-H	AmH ₃	Na ₃ Al, hP8, 194	<i>P6₃/mmc</i>	0.377, 0.377, 0.675, 90, 90, 120	-	-	9.83	A	3088
Am-I	AmI ₂	EuI ₂ , mP12, 14	<i>P12₁/c1</i>	0.7677, 0.8311, 0.7925, 90, 98, 46, 90	-	black	6.60	A	6643
Am-I	AmI ₃ ht	BiI ₃ , hR24, 148	<i>R-3</i>	0.7637, 0.7637, 2.091, 90, 90, 120	-	-	5.88	A	15999
Am-I	AmI ₃ rt	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.428, 1.394, 0.9974, 90, 90, 90	-	yellow	6.96	A	15999
Am-Ir	AmIr ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.75655, 0.75655, 0.75655, 90, 90, 90	Friauf-Laves phase	-	19.25	X	26650
Am-Ir	Am ₃ Ir	Cu, cF4, 225	<i>Fm-3m</i>	0.38394, 0.38394, 0.38394, 90, 90, 90	close-packed structure	-	22.56	X	26650
Am-La	La _{0.97} Am _{0.03} ht1	Cu, cF4, 225	<i>Fm-3m</i>	0.52932, 0.52932, 0.52932, 90, 90, 90	close-packed structure	-	6.36	X	5878
Am-N	AmN	NaCl, cF8, 225	<i>Fm-3m</i>	0.50225, 0.50225, 0.50225, 90, 90, 90	rocksalt family	-	13.47	X	51792
Am-Ni	AmNi ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.699, 0.699, 0.699, 90, 90, 90	Friauf-Laves phase	-	14.02	X	6654
Am-O	AmO	NaCl, cF8, 225	<i>Fm-3m</i>	0.5045, 0.5045, 0.5045, 90, 90, 90	rocksalt family	-	13.40	X	3534
Am-O	AmO ₂ rt	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.53736, 0.53736, 0.53736, 90, 90, 90	fluorite family	black	11.77	X	13439
Am-O	Am ₂ O ₃ ht mon	Sm ₂ O ₃ , mS30, 12	<i>C12/m1</i>	1.438, 0.352, 0.892, 90, 100, 4, 90	-	-	11.98	A	4029
Am-O	Am ₂ O ₃ ht trig	La ₂ O ₃ , hP5, 164	<i>P-3m1</i>	0.3818, 0.3818, 0.5975, 90, 90, 120	-	-	11.76	A	19012
Am-O	Am ₂ O ₃ rt	(Mn _{0.3} Fe _{0.3}) ₂ O ₃ , cI80, 206	<i>Ia-3</i>	1.103, 1.103, 1.103, 90, 90, 90	-	-	10.57	X	496
Am-O	Am ₂ O _{3.3} ht	* _c *,*,*	-	1.09, 1.09, 1.09, 90, 90, 90	-	-	-	N	4029
Am-Os	AmOs ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.532, 0.532, 0.8849, 90, 90, 120	Friauf-Laves phase	-	19.09	A	6654
Am-P	AmP	NaCl, cF8, 225	<i>Fm-3m</i>	0.57114, 0.57114, 0.57114, 90, 90, 90	rocksalt family	-	9.77	X	9150
Am-Pd	Am _{0.05} Pd _{0.95}	Cu, cF4, 225	<i>Fm-3m</i>	0.393, 0.393, 0.393, 90, 90, 90	close-packed structure	-	12.39	X	22802
Am-Pd	Am _{0.92} Pd _{0.08}	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4119, 0.4119, 0.4119, 90, 90, 90	close-packed structure	-	13.10	X	22802
Am-Pt	AmPt ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.766, 0.766, 0.766, 90, 90, 90	Friauf-Laves phase	-	18.72	X	6654
Am-Pt	AmPt ₅ hex	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5307, 0.5307, 0.4407, 90, 90, 120	-	-	18.82	X	17374
Am-Pt	AmPt ₅ orth	* _c oP72,*	-	0.5319, 0.909, 2.642, 90, 90, 90	-	-	19.01	N	9807
Am-Pu	Pu _{0.92} Am _{0.08} ht2	Pu, oF8, 70	<i>Fddd</i>	0.31701, 0.57225, 1.0065, 90, 90, 90	-	-	17.75	X	51686
Am-Pu	Pu _{0.92} Am _{0.08} rt	Pu, mP16, 11	<i>P12₁/m1</i>	0.613, 0.4783, 1.0891, 90, 101, 87, 90	-	-	20.74	A	51686
Am-Pu	Pu _{0.92} Am _{0.08}	Cu, cF4, 225	<i>Fm-3m</i>	0.46547, 0.46547, 0.46547, 90, 90, 90	close-packed structure	-	16.07	X	51686
Am-Rh	AmRh ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7548, 0.7548, 0.7548, 90, 90, 90	Friauf-Laves phase	-	13.87	X	9807
Am-Rh	AmRh ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4098, 0.4098, 0.4098, 90, 90, 90	close-packed structure	-	13.31	X	9807
Am-S	AmS	NaCl, cF8, 225	<i>Fm-3m</i>	0.5592, 0.5592, 0.5592, 90, 90, 90	rocksalt family	-	10.45	X	5851
Am-S	AmS ₂	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.3938, 0.3938, 0.7982, 90, 90, 90	-	-	8.24	A	5853
Am-S	Am ₂ S ₃	Cr ₂ C ₂ -b, oP20, 62	<i>Pnma</i>	0.739, 0.398, 1.536, 90, 90, 90	-	black	8.56	A	5851
Am-S	Am _{2.67} S ₄	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.84344, 0.84344, 0.84344, 90, 90, 90	-	-	8.60	A	5851
Am-Sb	AmSb	NaCl, cF8, 225	<i>Fm-3m</i>	0.6241, 0.6241, 0.6241, 90, 90, 90	rocksalt family	-	9.97	X	8162

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Am-Sb	AmSb ₂	SmSb ₂ , oS24,64	<i>Cmce</i>	0.618,0.605,1.759,90,90,90	-	-	9.83	A	10811
Am-Sb	Am ₄ Sb ₃	Th ₃ P ₄ , cI28,220	<i>I-43d</i>	0.92392,0.92392,0.92392,90,90,90	-	-	11.26	A	9150
Am-Se	AmSe ₂	UAs ₂ , tP6,129	<i>P4/nmm</i>	0.4063,0.4063,0.8331,90,90,90	-	-	9.68	A	8162
Am-Se	Am ₃ Se ₄	Th ₃ P ₄ , cI28,220	<i>I-43d</i>	0.8783,0.8783,0.8783,90,90,90	-	-	10.24	A	8162
Am-Si	AmSi	FeB-b, oP8,62	<i>Pnma</i>	0.84,0.4064,0.6036,90,90,90	CrB(TII)-FeB	black	8.74	X	16931
Am-Si	AmSi _{1.67}	AlB ₂ , hP3,191	<i>P6/mmm</i>	0.3871,0.3871,0.412,90,90,120	AlB ₂ family	-	9.00	X	16931
Am-Si	AmSi ₂	ThSi ₂ , tI12,141	<i>I4₁/amd</i>	0.4015,0.4015,1.3733,90,90,90	-	gray silver	8.98	X	16931
Am-Si	Am ₂ Si ₃	W ₂ Si ₃ , tI32,140	<i>I4/mcm</i>	1.1419,1.1419,0.5538,90,90,90	-	-	11.95	A	16931
Am-Te	AmTe hp	CsCl, cP2,221	<i>Pm-3m</i>	0.343,0.343,0.343,90,90,90	b.c.c. family	-	15.25	X	61697
Am-Te	AmTe	NaCl, cF8,225	<i>Fm-3m</i>	0.61818,0.61818,0.61818,90,90,90	rocksalt family	-	10.42	X	61697
Am-Te	AmTe _{1.73}	UAs ₂ , tP6,129	<i>P4/nmm</i>	0.4358,0.4358,0.9027,90,90,90	-	black	8.98	X	11934
Am-Te	AmTe ₃	NdTe ₃ , oS16,63	<i>Cmcm</i>	0.4339,2.557,0.4339,90,90,90	-	-	8.63	A	6566
Am-Te	Am ₃ Te ₄	Th ₃ P ₄ , cI28,220	<i>I-43d</i>	0.9392,0.9392,0.9392,90,90,90	-	-	9.94	A	5276
Ar-C	Ar[C ₆₀] lt	*cP*,205	<i>Pa-3</i>	1.404,1.404,1.404,90,90,90	fullerene family	-	-	N	33502
Ar-C	Ar[C ₆₀] rt	NaCl, cF8,225	<i>Fm-3m</i>	1.4192,1.4192,1.4192,90,90,90	fullerene family	-	1.77	X	33502
Ar-C	Ar _{0.94} [C ₇₀]	NaCl, cF8,225	<i>Fm-3m</i>	1.5001,1.5001,1.5001,90,90,90	fullerene family	-	1.73	X	34918
Ar-H	Ar[H ₂] ₂ hp calc	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.5211,0.5211,0.8482,90,90,120	Friauf-Laves phase	-	1.46	A	29376
Ar-Kr	Kr _{0.5} Ar _{0.5} lt	Cu ₂ , cF4,225	<i>Fm-3m</i>	0.5579,0.5579,0.5579,90,90,90	close-packed structure	-	2.37	X	6809
Ar-O	Ar[O ₂] hp2	Ar[O ₂], cP72,223	<i>Pm-3n</i>	0.57828,0.57828,0.57828,90,90,90	-	-	2.47	X	56189
Ar-O	Ar[O ₂] hp3	*tI*,122	<i>I-42d</i>	1.16606,1.16606,1.1197,90,90,90	-	-	-	N	56189
Ar-Xe	Xe _{0.1} Ar _{0.9} tf	Cu ₂ , cF4,225	<i>Fm-3m</i>	0.536,0.536,0.536,90,90,90	close-packed structure	-	2.12	X	6809
Ar-Xe	Xe _{0.78} Ar _{0.22} tf	Cu ₂ , cF4,225	<i>Fm-3m</i>	0.608,0.608,0.608,90,90,90	close-packed structure	-	3.29	X	6809
As-B	BA ₂ rt	ZnS, cF8,216	<i>F-43m</i>	0.4777,0.4777,0.4777,90,90,90	adamantane structure	-	5.22	X	2288
As-B	B ₆ As	B ₆ P, hR42,166	<i>R-3m</i>	0.6149,0.6149,1.1914,90,90,120	-	colorless	3.57	X	20377
As-Ba	BaAs ₂	BaAs ₂ , mP18,7	<i>P1c1</i>	0.655,1.2532,0.8038,90,127.75,90	-	black	5.48	X	44903
As-Ba	BaAs ₃	SrAs ₃ , mS16,12	<i>C12/m1</i>	1.0162,0.776,0.6015,90,113.55,90	-	black	5.53	X	14180
As-Ba	Ba ₂ As	La ₂ Sb, tI12,139	<i>I4/mmm</i>	0.513,0.513,1.736,90,90,90	-	black	5.08	X	10123
As-Ba	Ba ₃ As ₁₄	Sr ₃ P ₁₄ , mP34,14	<i>P12₁/c1</i>	0.6854,1.3639,1.21655,90,124.441,90	-	black	5.17	X	10396
As-Ba	Ba ₄ As _{2.60}	Th ₃ P ₄ , cI28,220	<i>I-43d</i>	0.9973,0.9973,0.9973,90,90,90	-	-	4.98	X	42278
As-Ba	Ba ₅ As ₃	Mn ₂ Si ₃ , hP16,193	<i>P6₃/mcm</i>	0.949,0.949,0.79,90,90,120	-	black	4.91	X	10123
As-Be	BeAs ₂ ht	*tP48,92	<i>P4₂,2</i>	0.7531,0.7531,1.5812,90,90,90	-	-	-	N	10414
As-Be	BeAs ₂ rt	*tP96,*	-	0.753,0.753,3.165,90,90,90	-	black	-	N	9832
As-Bk	BkAs	NaCl, cF8,225	<i>Fm-3m</i>	0.5826,0.5826,0.5826,90,90,90	rocksalt family	-	10.81	X	13217
As-Br	AsBr ₃	AsBr ₃ , oP16,19	<i>P2₁,2₁</i>	0.4331,1.024,1.22,90,90,90	-	colorless	3.86	X	2806
As-Ca	CaAs ₃	CaP ₃ , aP8,2	<i>P-1</i>	0.5866,0.5838,0.5921,70.04,80.16,75.85	-	black	4.78	X	14180
As-Ca	Ca ₁₆ As ₁₁	Ca ₁₆ Sb ₁₁ , tP56,113	<i>P-42₁m</i>	1.1686,1.1686,1.0511,90,90,90	-	-	3.39	A	33193
As-Ca	Ca ₂ As	La ₂ Sb, tI12,139	<i>I4/mmm</i>	0.463,0.463,1.556,90,90,90	-	black	3.09	X	8496
As-Ca	Ca ₂ As ₂	Na ₂ [O ₂], hP12,189	<i>P-62m</i>	0.7844,0.7844,0.5917,90,90,120	-	black	3.63	X	9997
As-Ca	Ca ₂ As ₃	Ca ₂ As ₃ , mP40,13	<i>P12/c1</i>	1.1985,0.5806,1.8075,90,130.77,90	-	gray	4.25	X	10148
As-Ca	Ca ₅ As ₃	Mn ₂ Si ₃ , hP16,193	<i>P6₃/mcm</i>	0.843,0.843,0.675,90,90,120	-	-	3.40	X	9291
As-Cd	CdAs hp-ht	CdSb, oP16,61	<i>Pbca</i>	0.5993,0.7819,0.8011,90,90,90	-	-	6.63	X	10165
As-Cd	CdAs ₂ m	ZnAs ₂ , mP24,14	<i>P12₁/c1</i>	0.9496,0.7769,0.8141,90,102.38,90	-	-	5.94	A	17815
As-Cd	CdAs ₂ rt	CdAs ₂ , tI12,98	<i>I4₁22</i>	0.7956,0.7956,0.4674,90,90,90	-	-	5.89	X	4905
As-Cd	Cd _{1.5} As ht3	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.64033,0.64033,0.64033,90,90,90	fluorite family	-	6.16	X	7583
As-Cd	Cd ₃ As ₂ hp1	*hP30,*	-	0.794,0.794,1.282,90,90,120	-	-	-	N	4502
As-Cd	Cd ₃ As ₂ ht1	Zn ₃ As ₂ , tP160,133	<i>P4₂/nbc</i>	1.2707,1.2707,2.5634,90,90,90	-	-	6.25	A	3808
As-Cd	Cd ₃ As ₂ ht2	Zn ₃ P ₂ , tP40,137	<i>P4₂/nmc</i>	0.8963,0.8963,1.268,90,90,90	fluorite family	-	6.35	X	4337
As-Cd	Cd ₃ As ₂ rt	Cd ₃ As ₂ , tI160,142	<i>I4₁/acd</i>	1.2633,1.2633,2.5427,90,90,90	-	gray silver	6.38	X	63500
As-Ce	CeAs rt	NaCl, cF8,225	<i>Fm-3m</i>	0.6054,0.6054,0.6054,90,90,90	rocksalt family	-	6.44	X	59613
As-Ce	CeAs ₂	NdAs ₂ , mP12,14	<i>P12₁/c1</i>	0.4165,0.6871,1.0561,90,106.72,90	-	-	6.65	A	5225
As-Ce	Ce ₄ As ₃	Th ₃ P ₄ , cI28,220	<i>I-43d</i>	0.9053,0.9053,0.9053,90,90,90	-	-	7.03	X	5225
As-Cf	CfAs	NaCl, cF8,225	<i>Fm-3m</i>	0.5809,0.5809,0.5809,90,90,90	rocksalt family	-	11.04	X	13108
As-Cl	AsCl ₃	AsBr ₃ , oP16,19	<i>P2₁,2₁</i>	0.4289,0.9466,1.1335,90,90,90	-	-	2.62	X	15190
As-Cl	AsCl ₅	AsCl ₅ , oP12,59	<i>Pmmn</i>	0.7062,0.7603,0.6233,90,90,90	-	yellow	2.50	X	41665
As-Cm	CmAs	NaCl, cF8,225	<i>Fm-3m</i>	0.5901,0.5901,0.5901,90,90,90	rocksalt family	-	10.41	X	9150
As-Co	CoAs ht	NiAs, hP4,194	<i>P6₃/mmc</i>	0.3562,0.3562,0.523,90,90,120	AlB ₂ family	-	7.74	X	7076
As-Co	CoAs rt	FeAs, oP8,62	<i>Pnma</i>	0.52675,0.34623,0.5815,90,90,90	langisite	gray silver	8.38	X	16723
As-Co	CoAs ₂ rt	CoSb ₂ , mP12,14	<i>P12₁/c1</i>	0.59106,0.5868,0.59587,90,116.432,90	pyrite-marcasite family	-	7.49	X	5624
As-Co	CoAs ₃	CoAs ₃ , cI32,204	<i>Im-3</i>	0.8195,0.8195,0.8195,90,90,90	skutterudite	-	6.85	X	5562
As-Co	Co ₂ As ht	Fe ₂ P, hP9,189	<i>P-62m</i>	0.603,0.603,0.35325,90,90,120	Fe ₂ P family	-	8.63	X	24444
As-Co	Co ₂ As rt	Co ₂ As, hP36,189	<i>P-62m</i>	1.19867,1.19867,0.35875,90,90,120	-	-	8.61	X	24444
As-Co	Co ₂ As ₃ ht	*hP*,*	-	0.616,0.616,1.54,90,90,120	-	-	-	N	868
As-Co	Co ₃ As ht	*hP*,*	-	0.531,0.531,0.566,90,90,120	-	-	-	N	868
As-Co	Co ₅ As ₂ ht	Pd ₅ Sb ₂ , hP42,185	<i>P6₃cm</i>	0.6797,0.6797,1.2423,90,90,120	-	-	8.91	A	18917
As-Cr	CrAs ht	NiAs, hP4,194	<i>P6₃/mmc</i>	0.3625,0.3625,0.5795,90,90,120	AlB ₂ family	-	6.39	X	7076
As-Cr	CrAs rt	FeAs, oP8,62	<i>Pnma</i>	0.5649,0.3463,0.6212,90,90,90	AlB ₂ family	-	6.94	X	5606
As-Cr	CrAs ₂ hp	OsGe ₂ , mS12,12	<i>C12/m1</i>	0.8893,0.3273,0.7389,90,119.88,90	-	-	7.19	A	7049
As-Cr	Cr ₂ As rt	Cu ₂ Sb, tP6,129	<i>P4/nmm</i>	0.3603,0.3603,0.6338,90,90,90	-	-	7.22	X	2660
As-Cr	Cr ₂ As _{0.93} ht	Fe ₂ P, hP9,189	<i>P-62m</i>	0.6307,0.6307,0.3446,90,90,120	Fe ₂ P family	-	7.29	X	6034
As-Cr	Cr ₃ As ₂	*tP*,*	-	0.765,0.765,0.905,90,90,90	-	-	-	N	1225
As-Cr	Cr _{3.2} As _{0.8}	Cr ₃ Si, cP8,223	<i>Pm-3n</i>	0.4617,0.4617,0.4617,90,90,90	Frank-Kasper phase	-	7.64	X	3572
As-Cr	Cr ₄ As ₃ rt	Cr ₄ As ₃ , mS28,8	<i>C1m1</i>	1.3168,0.3542,0.9302,90,102.19,90	-	-	6.78	X	5352
As-Cr	Cr ₅ As ₃ ht	Yb ₅ Sb ₃ , oP32,62	<i>Pnma</i>	0.9263,0.7446,0.6393,90,90,90	-	-	7.30	A	8559
As-Cs	CsAs	CsAs, hP36,189	<i>P-62m</i>	1.2197,1.2197,1.0463,90,90,120	-	black	4.61	X	41805
As-Cs	Cs ₂ As ₃	Rb ₂ P ₃ , oF40,69	<i>Fmmm</i>	0.9764,1.0373,1.5577,90,90,90	-	blue steel	4.13	X	37057
As-Cs	Cs ₃ As	Cu ₃ P, hP24,185	<i>P6₃cm</i>	1.0783,1.0783,1.1147,90,90,120	-	gray dark	4.20	X	43286
As-Cs	Cs ₃ As ₁₁	Cs ₃ As ₁₁ , mS112,15	<i>C12/c1</i>	1.3245,1.5245,1.9372,90,95.29,90	-	red carmine	4.17	X	43182
As-Cs	Cs ₃ As ₇ ht	Rb ₃ P ₇ , cF284,225	<i>Fm-3m</i>	1.1692,1.1692,1.1692,90,90,90	-	brown red	3.84	A	22945

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
As-Cs	Cs ₃ As ₇ rt	Cs ₃ As ₇ , oP80,61	<i>Pbca</i>	1.0228, 1.3176, 2.1952, 90, 90, 90	-	black	4.15	X	41805
As-Cu	Cu _{0.9} As _{0.1} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.259, 0.259, 0.424, 90, 90, 120	algodonite	-	8.72	X	865
As-Cu	Cu _{0.935} As _{0.065}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3652, 0.3652, 0.3652, 90, 90, 90	close-packed structure	-	8.77	X	12475
As-Cu	Cu ₂ As rt	Cu ₂ Sb, tP6, 129	<i>P4/nmm</i>	0.3788, 0.3788, 0.5942, 90, 90, 90	-	-	7.87	X	6769
As-Cu	Cu ₂ As ₃	*, o*50, *	-	0.7654, 1.15, 1.284, 90, 90, 90	paxite	-	-	N	1364
As-Cu	Cu _{2.5} As ht	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.582, 0.582, 0.582, 90, 90, 90	fluorite family	-	7.88	X	5869
As-Cu	Cu ₃ As dom cub	Cu ₃ As, cI64, 220	<i>I-43d</i>	0.9619, 0.9619, 0.9619, 90, 90, 90	domeykite	black	7.93	X	10939
As-Cu	Cu ₃ As dom trig	HoH ₃ , hP24, 165	<i>P-3c1</i>	0.7143, 0.7143, 0.7324, 90, 90, 120	domeykite-beta	gray silver	8.18	X	2808
As-Cu	Cu ₃ As ₄	*, oI28, 71	<i>Immm</i>	0.354, 1.345, 1.377, 90, 90, 90	-	gray	-	N	15528
As-Cu	Cu ₅ As ₂ rt	Mg ₅ Ga ₂ , oI28, 72	<i>Ibam</i>	0.5977, 1.1577, 0.5491, 90, 90, 90	koutekite	-	8.17	X	5869
As-Dy	DyAs lt	CoO, tI4, 139	<i>I4/mmm</i>	0.4098, 0.4098, 0.5776, 90, 90, 90	rocksalt family	-	8.13	X	4718
As-Dy	DyAs rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.58165, 0.58165, 0.58165, 90, 90, 90	rocksalt family	gray	8.01	X	39370
As-Er	ErAs rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.57427, 0.57427, 0.57427, 90, 90, 90	rocksalt family	gray	8.49	X	27407
As-Eu	EuAs ₂	*, oP12, 62	<i>Pnma</i>	0.71433, 0.69195, 0.60486, 90, 90, 90	-	gray	-	N	5896
As-Eu	EuAs ₃	SrAs ₃ , mS16, 12	<i>C12/m1</i>	0.9471, 0.7598, 0.5778, 90, 112.53, 90	-	black	6.52	X	14180
As-Eu	Eu ₁₁ As ₁₀	*, oI*, *	-	1.1255, 1.1715, 1.7394, 90, 90, 90	-	-	-	N	11454
As-Eu	Eu ₁₆ As ₁₁	Ca ₁₆ Sb ₁₁ , tP56, 113	<i>P-42₁m</i>	1.20885, 1.20885, 1.104, 90, 90, 90	-	-	6.70	A	33193
As-Eu	Eu ₂ As ₂ rt	Na ₂ (O ₂) ₂ , hP12, 189	<i>P-62m</i>	0.8154, 0.8154, 0.6137, 90, 90, 120	-	black	6.40	X	10215
As-Eu	Eu ₂ As ₃ rt	Ca ₂ As ₃ , mP40, 13	<i>P12/c1</i>	1.2325, 0.59559, 1.86109, 90, 130.723, 90	-	gray	6.78	A	5896
As-Eu	Eu ₃ As ₂ Eu+	*, II*, 142	<i>I4₁/acd</i>	1.6464, 1.6464, 2.2246, 90, 90, 90	-	-	-	N	11454
As-Eu	Eu ₃ As ₄	Sr ₃ As ₄ , oF56, 43	<i>Fdd2</i>	1.46419, 1.76357, 0.58866, 90, 90, 90	-	gray	6.60	X	11989
As-Eu	Eu ₄ As ₃ lt	*, hR84, 146	<i>R3</i>	1.30733, 1.30733, 1.56544, 90, 90, 120	-	-	-	N	12453
As-Eu	Eu ₄ As ₃ rt	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.9214, 0.9214, 0.9214, 90, 90, 90	-	-	7.07	X	12848
As-Eu	Eu ₅ As ₃ ht	Eu ₅ As ₃ , hP72, 186	<i>P6₃/mcm</i>	1.5243, 1.5243, 0.72517, 90, 90, 120	-	-	6.72	X	11080
As-Eu	Eu ₅ As ₃ rt	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.88646, 0.88646, 0.70811, 90, 90, 120	-	-	6.79	X	11080
As-Eu	Eu ₅ As ₄	Eu ₅ As ₄ , oS36, 64	<i>Cmce</i>	1.5802, 0.8021, 0.8058, 90, 90, 90	-	-	6.89	X	11068
As-F	AsF ₃	AsF ₃ , oP16, 33	<i>Pna2₁</i>	0.7018, 0.5205, 0.7315, 90, 90, 90	-	-	3.28	X	15190
As-F	AsF ₅	SbCl ₃ , hP12, 194	<i>P6₃/mmc</i>	0.5771, 0.5771, 0.6414, 90, 90, 120	-	-	3.05	X	22870
As-Fe	FeAs rt	FeAs, oP8, 62	<i>Pnma</i>	0.54401, 0.33712, 0.60259, 90, 90, 90	westerveldite	-	7.86	X	16723
As-Fe	FeAs ₂	FeAs ₂ , oP6, 58	<i>Pnnm</i>	0.53001, 0.59838, 0.28821, 90, 90, 90	lollingite	-	7.47	X	20681
As-Fe	Fe _{0.92} As _{0.08} rt	W, cI2, 229	<i>Im-3m</i>	0.2883, 0.2883, 0.2883, 90, 90, 90	b.c.c. family	-	7.95	X	967
As-Fe	Fe ₁₂ As ₅ hp	Fe ₂ (Fe _{0.82} Ru _{0.18}) ₇ As ₅ , hR51, 146	<i>R3</i>	0.67855, 0.67855, 1.6301, 90, 90, 120	-	-	8.01	A	16209
As-Fe	Fe ₂ As	Cu ₂ Sb, tP6, 129	<i>P4/nmm</i>	0.36379, 0.36379, 0.5983, 90, 90, 90	-	-	7.83	X	48658
As-Ga	GaAs hp1	InSb, oP2, 25	<i>Pmm2</i>	0.2482, 0.483, 0.2618, 90, 90, 90	-	-	7.65	A	22589
As-Ga	GaAs hp2	GaAs, oI4, 44	<i>Imm2</i>	0.479, 0.492, 0.2635, 90, 90, 90	-	-	7.74	X	22589
As-Ga	GaAs hp3	*, oS*, 63	<i>Cmcm</i>	0.5017, 0.5325, 0.4862, 90, 90, 90	-	-	-	N	35247
As-Ga	GaAs ht-hp	CuCl, cP16, 205	<i>Pa-3</i>	0.6594, 0.6594, 0.6594, 90, 90, 90	-	-	6.70	X	35247
As-Ga	GaAs rt	ZnS, cF8, 216	<i>F-43m</i>	0.5653, 0.5653, 0.5653, 90, 90, 90	adamantane structure	gray dark	5.32	X	18715
As-Ga	GaAs trig	CdTe, hP6, 152	<i>P3₂1</i>	0.3883, 0.3883, 0.8657, 90, 90, 120	rocksalt family	-	6.37	X	33809
As-Gd	GdAs rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.58789, 0.58789, 0.58789, 90, 90, 90	rocksalt family	gray	7.59	X	39370
As-Ge	GeAs hp	GeP, tI4, 107	<i>I4mm</i>	0.3712, 0.3712, 0.5832, 90, 90, 90	-	black	6.10	A	5285
As-Ge	GeAs rt	SiAs, mS24, 12	<i>C12/m1</i>	1.5517, 0.3775, 0.9455, 90, 101.03, 90	-	-	5.41	X	13937
As-Ge	GeAs ₂	GeAs ₂ , oP24, 55	<i>Pbam</i>	1.016, 1.476, 0.3728, 90, 90, 90	-	gray	5.29	X	1537
As-Ge	Ge _{0.11} As _{0.89}	As, hR6, 166	<i>R-3m</i>	0.3608, 0.3608, 1.109, 90, 90, 120	-	-	5.95	A	18288
As-Hf	HfAs	TiP, hP8, 194	<i>P6₃/mmc</i>	0.3765, 0.3765, 1.2681, 90, 90, 120	-	-	10.81	X	1670
As-Hf	HfAs ₂	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.6771, 0.3673, 0.8941, 90, 90, 90	-	-	9.81	X	1670
As-Hf	Hf ₂ As	Ta ₂ P, oP36, 58	<i>Pnnm</i>	1.24892, 1.53606, 0.36498, 90, 90, 90	-	-	12.29	A	3782
As-Hf	Hf ₃ As	Ta ₃ As, mS64, 15	<i>C12/c1</i>	1.53898, 0.53795, 1.5333, 90, 90, 291, 90	-	-	12.78	X	13264
As-Hf	Hf ₃ As ₂	Th ₂ S ₃ , oP20, 62	<i>Pnma</i>	1.04362, 0.36521, 1.01465, 90, 90, 90	-	-	11.77	A	3782
As-Hf	Hf ₅ As ₃	Nb ₇ P ₃ , oP64, 62	<i>Pnma</i>	2.73884, 0.36114, 1.23049, 90, 90, 90	-	-	12.19	A	3782
As-Hf	Hf ₇ As ₄	Nb ₇ P ₄ , mS44, 12	<i>C12/m1</i>	1.6115, 0.35912, 1.49283, 90, 104.24, 90	-	-	12.29	A	16630
As-Hg	Hg _{0.5} As _{0.5}	As, hR6, 166	<i>R-3m</i>	0.3771, 0.3771, 1.061, 90, 90, 120	-	-	10.50	X	8133
As-Hg	Hg _{0.99} As _{0.01}	Ti, hP3, 191	<i>P6/mmm</i>	0.454, 0.454, 0.387, 90, 90, 120	-	-	14.38	X	8133
As-Ho	HoAs lt	CoO, tI4, 139	<i>I4/mmm</i>	0.4072, 0.4072, 0.5759, 90, 90, 90	rocksalt family	-	8.34	X	4718
As-Ho	HoAs rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.58093, 0.58093, 0.58093, 90, 90, 90	rocksalt family	gray	8.13	X	39370
As-I	AsI ₃ ht	*, hP24, 151	<i>P3₁12</i>	0.72, 0.72, 2.147, 90, 90, 120	-	yellow	4.71	N	15190
As-I	AsI ₃ rt	BiI ₃ , hR24, 148	<i>R-3</i>	0.7193, 0.7193, 2.1372, 90, 90, 120	-	orange red	4.74	X	12935
As-In	InAs hp1	NaCl, cF8, 225	<i>Fm-3m</i>	0.54785, 0.54785, 0.54785, 90, 90, 90	rocksalt family	-	7.66	X	53593
As-In	InAs hp2	ZnTe, oS8, 63	<i>Cmcm</i>	0.53468, 0.54088, 0.53424, 90, 90, 90	-	-	8.16	X	53593
As-In	InAs rt	ZnS, cF8, 216	<i>F-43m</i>	0.59821, 0.59821, 0.59821, 90, 90, 90	adamantane structure	-	5.89	X	53593
As-In	In _{0.5} As _{0.5} hp2	Sn, tI4, 141	<i>I4₁/amd</i>	0.5226, 0.5226, 0.273, 90, 90, 90	-	-	8.45	X	18236
As-Ir	IrAs ₂	CoSb ₂ , mP12, 14	<i>P12₁/c1</i>	0.60549, 0.60717, 0.61587, 90, 113.197, 90	iridarsenite	-	10.92	X	5624
As-Ir	IrAs ₃	CoAs ₃ , cI32, 204	<i>Im-3</i>	0.84673, 0.84673, 0.84673, 90, 90, 90	-	-	9.13	X	7740
As-K	KAs	NaP, oP16, 19	<i>P2₁2₁2₁</i>	0.6425, 0.6681, 1.1602, 90, 90, 90	-	black	3.04	X	41764
As-K	K ₃ As	Na ₃ As, hP8, 194	<i>P6₃/mmc</i>	0.5782, 0.5782, 1.0222, 90, 90, 120	-	-	2.16	X	139
As-K	K ₃ As ₁₁ rt	Na ₃ P ₁₁ , oP56, 60	<i>Pbcn</i>	1.0914, 1.4525, 1.0596, 90, 90, 90	-	black red	3.72	X	25408
As-K	K ₃ As ₇ rt	K ₃ As ₇ , oP160, 61	<i>Pbca</i>	1.2919, 2.5441, 1.5377, 90, 90, 90	-	black	3.37	X	41805
As-K	K ₅ As ₄	Rb ₅ As ₄ , mS20, 12	<i>C12/m1</i>	1.1592, 0.52114, 1.0383, 90, 113.42, 90	-	-	2.86	X	39119
As-La	LaAs hp	CuTi, tP2, 123	<i>P4/mmm</i>	0.3625, 0.3625, 0.306, 90, 90, 90	b.c.c. family	-	8.83	X	43013
As-La	LaAs	NaCl, cF8, 225	<i>Fm-3m</i>	0.6137, 0.6137, 0.6137, 90, 90, 90	rocksalt family	-	6.14	X	43013
As-La	LaAs ₂ ht	LaP ₂ , mS48, 9	<i>C1c1</i>	1.28835, 1.4422, 0.9083, 90, 134.917, 90	-	black	6.42	X	37159
As-La	LaAs ₂ rt	NdAs ₂ , mP12, 14	<i>P12₁/c1</i>	0.4212, 0.6935, 1.0647, 90, 106.6, 90	-	-	6.44	A	5225
As-La	La ₄ As ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.9203, 0.9203, 0.9203, 90, 90, 90	-	-	6.65	A	10603
As-Li	LiAs	LiAs, mP16, 14	<i>P12₁/c1</i>	0.579, 0.524, 1.070, 90, 117.4, 90	-	-	3.77	X	1014
As-Li	Li ₃ As rt	Na ₃ As, hP8, 194	<i>P6₃/mmc</i>	0.4387, 0.4387, 0.781, 90, 90, 120	-	brown red	2.44	X	139
As-Li	Li ₃ As ₇ rt	Li ₃ As ₇ , oP160, 61	<i>Pbca</i>	1.2466, 2.2489, 1.2592, 90, 90, 90	-	gray light	4.10	X	41765
As-Lu	LuAs	NaCl, cF8, 225	<i>Fm-3m</i>	0.56802, 0.56802, 0.56802, 90, 90, 90	rocksalt family	-	9.06	X	7640
As-Mg	MgAs ₄	MgAs ₄ , tP20, 92	<i>P4₂12</i>	0.5385, 0.5385, 1.5798, 90, 90, 90	-	black	4.70	X	10254

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
As-Mg	Mg ₃ As ₂ ht	La ₂ O ₃ ,hP5,164	<i>P-3m1</i>	0.4264,0.4264,0.6738,90,90,120	-	black gray	3.49	X	2346
As-Mg	Mg ₃ As ₂ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>la-3</i>	1.233,1.233,1.233,90,90,90	-	brown red	3.16	X	62
As-Mn	MnAs ht1	FeAs ₂ ,oP8,62	<i>Pnma</i>	0.5495,0.3414,0.6103,90,90,90	AlB ₂ family	-	7.53	X	42128
As-Mn	MnAs ht2	NiAs,hP4,194	<i>P6₃/mmc</i>	0.37214,0.37214,0.57066,90,90,120	AlB ₂ family	-	6.30	X	60271
As-Mn	MnAs rt	NiAs,hP4,194	<i>P6₃/mmc</i>	0.3721,0.3721,0.5703,90,90,120	AlB ₂ family	-	6.31	X	16992
As-Mn	Mn ₂ As hp-ht	Fe ₂ P,hP9,189	<i>P-62m</i>	0.63627,0.63627,0.36784,90,90,120	Fe ₂ P family	-	7.14	X	6271
As-Mn	Mn ₂ As	Cu ₂ Sb,tP6,129	<i>P4/nmm</i>	0.37831,0.37831,0.6266,90,90,90	-	-	6.84	X	48658
As-Mn	Mn _{2.90} As ₂ ht2	Mn _{2.9} As ₂ ,mS40,12	<i>C12/m1</i>	1.3856,0.3777,1.3622,90,107.79,90	-	gray	6.05	X	24115
As-Mn	Mn ₃ As	Mn ₃ As,oS16,63	<i>Cmcm</i>	0.3788,1.629,0.3788,90,90,90	-	-	6.81	X	380
As-Mn	Mn ₃ As ₂ ht	Mn ₃ As ₂ ,oS40,36	<i>Cmc2₁</i>	0.3761,1.3760,1.3190,90,90,90	-	black	6.12	X	28192
As-Mn	Mn ₃ As ₂ rt	Mn ₃ As ₂ ,mS20,12	<i>C12/m1</i>	1.3247,0.3695,0.9046,90,132.23,90	-	gray	6.37	X	29162
As-Mn	Mn ₄ As ₃ rt	V ₄ As ₃ ,mS28,12	<i>C12/m1</i>	1.3411,0.36934,0.9628,90,101.97,90	-	-	6.33	X	30722
As-Mn	Mn ₅ As ₄	Mn ₅ As ₄ ,oS36,36	<i>Cmc2₁</i>	0.3761,1.3760,1.2123,90,90,90	-	black	6.08	X	28192
As-Mo	MoAs	FeAs ₂ ,oP8,62	<i>Pnma</i>	0.5978,0.336,0.6415,90,90,90	AlB ₂ family	-	8.81	X	3213
As-Mo	MoAs ₂	OsGe ₂ ,mS12,12	<i>C12/m1</i>	0.9071,0.32994,0.7719,90,119.37,90	-	-	8.11	A	2900
As-Mo	Mo _{0.4} As ₂	FeAs ₂ ,oP6,58	<i>Pnmm</i>	0.5299,0.5983,0.2885,90,90,90	pyrite-marcasite family	-	6.83	X	2685
As-Mo	Mo ₂ As ₃	Mo ₂ As ₃ ,mS20,12	<i>C12/m1</i>	1.3361,0.32337,0.96385,90,124.57,90	-	-	8.07	X	19109
As-Mo	Mo ₂ As ₄	Ti ₃ Te ₄ ,tI18,87	<i>I4/m</i>	0.96005,0.96005,0.32781,90,90,90	Chevre phase	-	8.57	X	2886
As-N	As[N ₃] ₃	As[N ₃] ₃ ,mP40,14	<i>P12₁/c1</i>	0.73263,1.1716,0.69865,90,107.219,90	-	-	2.33	X	43576
As-Na	NaAs mon	LiAs,mP16,14	<i>P12₁/c1</i>	0.6242,0.5849,1.155,90,117.1,90	-	black	3.47	X	56392
As-Na	NaAs orth	NaP,oP16,19	<i>P2₁2₁2₁</i>	0.591,0.624,1.051,90,90,90	-	-	3.36	A	11005
As-Na	Na ₃ As hp	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.6835,0.6835,0.6835,90,90,90	fluorite family	gray	2.99	X	24183
As-Na	Na ₃ As	Cu ₃ P,hP24,185	<i>P6₃cm</i>	0.87727,0.87727,0.89876,90,90,120	-	violet dark	2.39	X	31844
As-Na	Na ₃ As ₇ rt	Na ₃ As ₇ ,mP80,14	<i>P12₁/c1</i>	1.5554,1.0898,1.428,90,115.83,90	-	brown red	3.62	X	41766
As-Nb	NbAs	NbAs,tI8,109	<i>I4₁md</i>	0.3452,0.3452,1.1679,90,90,90	-	-	8.01	X	1757
As-Nb	NbAs ₂	OsGe ₂ ,mS12,12	<i>C12/m1</i>	0.9368,0.3396,0.7799,90,119.42,90	-	black	7.46	X	29795
As-Nb	Nb ₂ As	Nb ₂ P,oP54,51	<i>Pnma</i>	1.8493,0.35066,1.41649,90,90,90	-	-	8.48	X	59983
As-Nb	Nb ₃ As	Ti ₃ P,tP32,86	<i>P4₂/n</i>	1.0294,1.0294,0.5199,90,90,90	-	-	8.53	X	8673
As-Nb	Nb ₄ As ₃	Nb ₄ As ₃ ,oS56,63	<i>Cmcm</i>	0.35161,1.46605,1.88303,90,90,90	-	-	8.16	X	5609
As-Nb	Nb ₅ As ₃	Nb ₅ P,oP64,62	<i>Pnma</i>	2.60701,0.35198,1.17869,90,90,90	-	-	8.47	X	13843
As-Nb	Nb ₇ As ₄	Nb ₇ P ₄ ,mS44,12	<i>C12/m1</i>	1.53172,0.35242,1.4192,90,104.742,90	-	-	8.52	A	4349
As-Nd	NdAs hp	CuTi,tP2,123	<i>P4/mmm</i>	0.3536,0.3536,0.289,90,90,90	b.c.c. family	-	10.07	X	39370
As-Nd	NdAs rt	NaCl,cF8,225	<i>Fm-3m</i>	0.5962,0.5962,0.5962,90,90,90	rocksalt family	-	6.87	X	7400
As-Nd	NdAs ₂	NdAs ₂ ,mP12,14	<i>P12₁/c1</i>	0.41081,0.68201,1.04431,90,106.718,90	-	-	6.97	X	11067
As-Ni	NiAs lt	NiAs ₂ ,oS24,36	<i>Cmc2₁</i>	1.08568,0.62682,0.5034,90,90,90	AlB ₂ family	-	7.77	X	21263
As-Ni	NiAs rt	NiAs,hP4,194	<i>P6₃/mmc</i>	0.36184,0.36184,0.50326,90,90,120	nickeline	brownish	7.78	X	60271
As-Ni	NiAs ₂ hp-ht	FeS ₂ ,cP12,205	<i>Pa-3</i>	0.57634,0.57634,0.57634,90,90,90	krutovite	black	7.24	A	3942
As-Ni	NiAs ₂ ht	FeAs ₂ ,oP6,58	<i>Pnmm</i>	0.47583,0.57954,0.35449,90,90,90	rammelsbergite	white tin	7.09	X	3786
As-Ni	NiAs ₂ rt	NiAs ₂ ,oP24,61	<i>Pbca</i>	0.57718,0.58342,1.14214,90,90,90	pararammelsbergite	white tin	7.20	X	11900
As-Ni	Ni ₁₁ As ₈ mon	Ni ₁₁ As ₈ ,mS76,15	<i>C12/c1</i>	0.9718,0.9718,1.1177,90,102.55,90	maucherite MDO2	-	8.03	X	53104
As-Ni	Ni ₁₁ As ₈ tet	Ni ₁₁ As ₈ ,tP76,92	<i>P4₁2₁2</i>	0.68724,0.68724,2.1821,90,90,90	maucherite MDO1	-	8.02	X	7089
As-Ni	Ni ₅ As ₂ rt Ni+	* ₂ ,hR* *	-	0.6824,0.6824,7.566,90,90,120	-	-	-	N	5224
As-Ni	Ni ₅ As ₂	Pd ₂ Sb ₂ ,hP42,185	<i>P6₃cm</i>	0.6825,0.6825,1.2513,90,90,120	orcelite	-	8.75	X	5224
As-Np	NpAs hp	CsCl,cP2,221	<i>Pm-3m</i>	0.331,0.331,0.331,90,90,90	b.c.c. family	-	14.29	X	19262
As-Np	NpAs lt	CoO,tI4,139	<i>I4/mmm</i>	0.41237,0.41237,0.58278,90,90,90	rocksalt family	-	10.46	X	8330
As-Np	NpAs rt	NaCl,cF8,225	<i>Fm-3m</i>	0.58366,0.58366,0.58366,90,90,90	rocksalt family	-	10.42	X	22360
As-Np	NpAs ₂	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.393,0.393,0.8137,90,90,90	-	golden	10.22	X	15133
As-Np	Np ₃ As ₄	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.85,0.85,0.85,90,90,90	-	black	10.93	A	30202
As-O	AsO ₂	AsO ₂ ,oP24,62	<i>Pnma</i>	0.8597,0.5235,0.7269,90,90,90	-	colorless	4.34	X	12911
As-O	As ₂ O ₃ ars	As ₂ O ₃ ,cF80,227	<i>Fd-3m</i>	1.10772,1.10772,1.10772,90,90,90	arsenolite	white	3.87	X	47036
As-O	As ₂ O ₃ cla I	As ₂ O ₃ -a,mP20,14	<i>P12₁/c1</i>	0.453,1.299,0.670,90,128.56,90	claudetite I	-	4.26	X	11614
As-O	As ₂ O ₃ cla II	As ₂ O ₃ -b,mP20,14	<i>P12₁/c1</i>	0.80131,0.45717,1.08328,90,124.554,90	claudetite II	colorless	4.02	X	58788
As-O	As ₂ O ₃ ht	As ₂ O ₃ ,tP28,92	<i>P4₁2₁2</i>	0.8572,0.8572,0.4636,90,90,90	-	-	4.48	X	12691
As-O	As ₂ O ₃ rt	As ₂ O ₃ ,oP28,19	<i>P2₁2₁2₁</i>	0.4626,0.8449,0.8646,90,90,90	-	colorless	4.52	X	11806
As-Os	OsAs ₂	FeAs ₂ ,oP6,58	<i>Pnmm</i>	0.54059,0.61746,0.29941,90,90,90	omeiite	black	11.30	X	63609
As-P	As _{0.06} P _{0.94} bla	P ₂ ,oS8,64	<i>Cmce</i>	0.33279,1.0527,0.43867,90,90,90	-	black	2.91	X	58466
As-P	As _{0.3} P _{0.5} hp1	As,hR6,166	<i>R-3m</i>	0.35,0.35,0.911,90,90,120	-	-	5.46	A	27835
As-Pa	PaAs	NaCl,cF8,225	<i>Fm-3m</i>	0.5756,0.5756,0.5756,90,90,90	rocksalt family	-	10.66	X	12305
As-Pa	PaAs ₂	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.39748,0.39748,0.8159,90,90,90	-	-	9.81	A	12305
As-Pa	Pa ₃ As ₄	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.85224,0.85224,0.85224,90,90,90	-	-	10.65	A	12305
As-Pd	PdAs ₂	FeS ₂ ,cP12,205	<i>Pa-3</i>	0.5979,0.5979,0.5979,90,90,90	pyrite-marcasite family	-	7.96	X	29570
As-Pd	Pd _{0.83} As _{0.17} m	W,cI2,229	<i>Im-3m</i>	0.3093,0.3093,0.3093,90,90,90	b.c.c. family	-	11.34	X	16544
As-Pd	Pd _{1.667} As _{0.333} m	CsCl,cP2,221	<i>Pm-3m</i>	0.3093,0.3093,0.3093,90,90,90	b.c.c. family	-	11.35	X	14949
As-Pd	Pd ₂ As ht	Fe ₂ P,hP9,189	<i>P-62m</i>	0.6645,0.6645,0.358,90,90,120	Fe ₂ P family	-	10.47	A	38233
As-Pd	Pd ₂ As rt	Pd ₂ As ₂ ,oS24,36	<i>Cmc2₁</i>	0.3245,1.6844,0.6576,90,90,90	-	-	10.63	X	4613
As-Pd	Pd ₃ As orth	* ₂ ,oP* *	-	0.333,0.607,1.083,90,90,90	isomertieite	-	-	N	8432
As-Pd	Pd ₃ As tet	Ni ₃ P,tI32,82	<i>I-4</i>	0.9974,0.9974,0.4822,90,90,90	-	-	10.91	A	2100
As-Pd	Pd ₅ As	Pd ₅ As,mS24,5	<i>C121</i>	0.5520,0.7739,0.8426,90,98.99,90	-	-	11.34	X	11466
As-Pd	Pd ₅ As ₂ hex	Pd ₅ Sb ₂ ,hP42,185	<i>P6₃cm</i>	0.732,0.732,1.37,90,90,120	-	-	10.69	A	2099
As-Pd	Pd ₅ As ₂ trig1	* ₂ ,hP84,164	<i>P-3m1</i>	0.732,0.732,2.7523,90,90,120	-	-	-	N	2099
As-Pd	Pd ₅ As ₂ trig2	* ₂ ,hP* ₂ ,164	<i>P-3m1</i>	0.732,0.732,1.034,90,90,120	-	-	-	N	2099
As-Pd	Pd ₆ As ₃ rt	* ₂ ,hP33,147	<i>P-3</i>	0.7399,0.7399,1.0311,90,90,120	stillwaterite	gray creamy	-	N	8768
As-Pr	PrAs hp	CuTi,tP2,123	<i>P4/mmm</i>	0.3524,0.3524,0.2961,90,90,90	b.c.c. family	-	9.75	X	39370
As-Pr	PrAs	NaCl,cF8,225	<i>Fm-3m</i>	0.6036,0.6036,0.6036,90,90,90	rocksalt family	-	6.52	X	11431
As-Pr	PrAs ₂	NdAs ₂ ,mP12,14	<i>P12₁/c1</i>	0.4139,0.6844,1.0509,90,106.69,90	-	-	6.77	A	5225
As-Pr	Pr ₄ As ₃	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.8994,0.8994,0.8994,90,90,90	-	-	7.20	X	5225
As-Pt	PtAs ₂	FeS ₂ ,cP12,205	<i>Pa-3</i>	0.59681,0.59681,0.59681,90,90,90	sperrylite	-	10.78	X	12105
As-Pu	PuAs hp	CsCl,cP2,221	<i>Pm-3m</i>	0.322,0.322,0.322,90,90,90	b.c.c. family	-	15.86	X	22240

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a\beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
As-Pu	PuAs	NaCl, cF8, 225	<i>Fm-3m</i>	0.58565, 0.58565, 0.58565, 90, 90, 90	rocksalt family	-	10.55	X	22240
As-Rb	RbAs	NaP, oP16, 19	<i>P2_12_1</i>	0.6581, 0.6916, 1.2047, 90, 90, 90	-	black	3.89	X	41805
As-Rb	Rb ₂ As ₃	Rb ₂ P ₃ , oF40, 69	<i>Fmmm</i>	0.917, 1.0078, 1.5186, 90, 90, 90	-	blue steel	3.75	X	37057
As-Rb	Rb ₃ As	Na ₃ As, hP8, 194	<i>P6₃/mmc</i>	0.6052, 0.6052, 1.073, 90, 90, 120	-	violet	3.23	X	1499
As-Rb	Rb ₃ As ₁₁ rt	Na ₃ P ₁₁ , oP56, 60	<i>Pbcn</i>	1.1082, 1.5335, 1.0601, 90, 90, 90	-	red carmine	3.98	X	43182
As-Rb	Rb ₃ As ₇ ht	Rb ₃ As ₇ , mP80, 14	<i>P12₁/c1</i>	0.7573, 1.3102, 2.6927, 90, 91, 972, 90	-	black	3.88	X	41805
As-Rb	Rb ₃ As ₇ rt	K ₃ As ₇ , oP160, 61	<i>Pbca</i>	1.3194, 2.5878, 1.5881, 90, 90, 90	-	red	3.83	X	41767
As-Rb	Rb ₅ As ₄	Rb ₅ As ₄ , mS20, 12	<i>C12/m1</i>	1.192, 0.5533, 1.0755, 90, 117, 228, 90	-	-	3.83	X	22888
As-Re	Re ₃ As ₇	Ru ₃ Sn ₇ , cI40, 229	<i>Im-3m</i>	0.87162, 0.87162, 0.87162, 90, 90, 90	-	-	10.86	X	4588
As-Rh	RhAs	FeAs, oP8, 62	<i>Pnma</i>	0.5603, 0.35861, 0.60708, 90, 90, 90	cherepanovite	-	9.68	A	24850
As-Rh	RhAs ₂	CoSb ₂ , mP12, 14	<i>P12₁/c1</i>	0.60629, 0.60816, 0.61498, 90, 114, 707, 90	pyrite-marcasite family	-	8.15	X	5624
As-Rh	RhAs ₃	CoAs ₃ , cI32, 204	<i>Im-3</i>	0.84507, 0.84507, 0.84507, 90, 90, 90	-	-	7.21	X	7740
As-Rh	Rh _{10.5} As ₇	V ₁₂ P ₇ , hP26, 176	<i>P6₃/m</i>	0.9219, 0.9219, 0.3532, 90, 90, 120	-	-	10.25	X	21194
As-Rh	Rh ₁₂ As ₇	Rh ₁₂ As ₇ -a, hP22, 176	<i>P6₃/m</i>	0.9297, 0.9297, 0.3657, 90, 90, 120	polkanovite	-	10.67	X	17894
As-Rh	Rh ₂ As ht	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.5904, 0.3918, 0.7352, 90, 90, 90	rhodarsenide	-	10.96	A	19001
As-Rh	Rh ₂ As rt	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.56753, 0.56753, 0.56753, 90, 90, 90	fluorite family	-	10.20	X	19001
As-Ru	RuAs	FeAs, oP8, 62	<i>Pnma</i>	0.57168, 0.33379, 0.63129, 90, 90, 90	ruthenarsenite	-	9.70	A	60271
As-Ru	RuAs ₂	FeAs ₂ , oP6, 58	<i>Pnmm</i>	0.54302, 0.61834, 0.29714, 90, 90, 90	anduoite	-	8.35	X	3786
As-S	AsS bon	AsS, mS32, 15	<i>C12/c1</i>	0.9956, 0.9308, 0.8869, 90, 102, 55, 90	bonazziite	orange	3.54	X	65170
As-S	AsS hp	AsS, oP68, 29	<i>Pca2₁</i>	1.027, 0.74537, 1.8258, 90, 90, 90	-	-	4.07	X	56936
As-S	AsS ht1	AsS, mS32, 15	<i>C12/c1</i>	0.99723, 0.93213, 0.88801, 90, 102, 514, 90	-	orange	3.53	X	59981
As-S	AsS ht2	AsS-b, mP32, 14	<i>P12₁/c1</i>	0.7153, 0.9994, 1.2986, 90, 120, 6, 90	-	orange yellow	3.56	X	10078
As-S	AsS par	AsS-c, mP32, 14	<i>P12₁/c1</i>	0.9909, 0.9655, 0.8502, 90, 97, 29, 90	pararealgar	yellow	3.52	X	29848
As-S	AsS rea	AsS-a, mP32, 14	<i>P12₁/c1</i>	0.659, 1.3563, 0.9777, 90, 113, 81, 90	realgar	orange yellow	3.56	X	45252
As-S	AsS _{1.04} m	AsS _{1.04} , mS56, 15	<i>C12/c1</i>	0.9881, 0.9397, 0.893, 90, 101, 64, 90	-	-	3.54	X	47000
As-S	AsS ₂ hp	AsS ₂ , mP24, 4	<i>P12₁</i>	0.7118, 0.9937, 0.7916, 90, 106, 41, 90	-	red carmine	3.44	X	60891
As-S	AsS ₂ S ₃ mon	AsS ₂ S ₃ , mP20, 14	<i>P12₁/c1</i>	0.4256, 0.9577, 1.2191, 90, 109, 75, 90	orpiment	yellow	3.49	X	6950
As-S	AsS ₂ S ₃ orth	Sb ₂ S ₃ , oP20, 62	<i>Pnma</i>	1.148, 0.426, 0.96, 90, 90, 90	-	-	3.48	A	32416
As-S	AsS ₂ S ₃ tricl	AsS ₂ S ₃ , aP20, 2	<i>P-1</i>	0.57577, 0.87169, 1.02682, 78.152, 75.817, 89.861	anorpiment	yellow	3.35	X	57916
As-S	AsS ₂ S ₅	* _o *, *	-	0.866, 0.99, 1.037, 90, 90, 90	-	-	-	N	5094
As-S	As ₄ S	* _o P10, *	-	0.3576, 0.6759, 1.0074, 90, 90, 90	duranusite	-	-	N	7124
As-S	As ₄ S ₃ ht1	As ₄ S ₃ -a, oP28, 62	<i>Pnma</i>	0.91577, 0.80332, 1.02005, 90, 90, 90	dimorphite high	orange yellow	3.50	X	62297
As-S	As ₄ S ₃ ht2	* _t P*, *	-	1.691, 1.691, 2.175, 90, 90, 90	-	-	-	N	13611
As-S	As ₄ S ₃ rt	As ₄ S ₃ -b, oP28, 62	<i>Pnma</i>	1.12175, 0.99224, 0.66075, 90, 90, 90	dimorphite low	yellow	3.58	X	62297
As-S	As ₄ S ₅ mon	As ₄ S ₅ , mP18, 11	<i>P12₁/m1</i>	0.7148, 0.8096, 0.7973, 90, 101, 01, 90	uzonite	-	3.37	X	42009
As-S	As ₄ S ₅ orth	As ₄ S ₅ , oP72, 56	<i>Pccn</i>	1.0166, 1.9352, 0.8697, 90, 90, 90	-	-	3.57	X	48993
As-S	As ₈ S ₉	As ₈ S ₉ , mP34, 13	<i>P12/c1</i>	0.9942, 0.9601, 0.9178, 90, 101, 94, 90	alacranite	-	3.44	X	41958
As-Sb	SbAs rt	GeTe, hR6, 160	<i>R3m</i>	0.40655, 0.40655, 1.0889, 90, 90, 120	rocksalt family	-	6.29	X	62382
As-Sb	Sb _{0.99} As _{0.01}	As, hR6, 166	<i>R-3m</i>	0.4305, 0.4305, 1.1263, 90, 90, 120	stibarsen	white	6.68	A	16834
As-Sb	Sb _{2.93} As _{1.07} lt	* _m S4, 5	<i>C121</i>	0.7252, 0.4172, 0.4431, 90, 123, 05, 90	paradocrasite	yellowish	-	N	5629
As-Sc	ScAs	NaCl, cF8, 225	<i>Fm-3m</i>	0.5464, 0.5464, 0.5464, 90, 90, 90	rocksalt family	gray	4.88	X	60271
As-Sc	Sc ₃ As ₂ orth1	Th ₂ S ₃ , oP20, 62	<i>Pnma</i>	1.03754, 0.38063, 1.03754, 90, 90, 90	-	-	4.62	X	12773
As-Sc	Sc ₃ As ₂ orth2	Cr ₃ C ₂ -b, oP20, 62	<i>Pnma</i>	0.71423, 0.38698, 1.47073, 90, 90, 90	-	-	4.65	A	12771
As-Sc	Sc ₅ As ₃	Yb ₅ Sb ₃ , oP32, 62	<i>Pnma</i>	1.07038, 0.81418, 0.72272, 90, 90, 90	-	-	4.74	A	12771
As-Sc	Sc ₇ As ₃	Sc ₇ As ₃ , tI84, 140	<i>I4/mcm</i>	1.43751, 1.43751, 0.80281, 90, 90, 90	-	-	4.32	X	13775
As-Se	AsSe	AsS-a, mP32, 14	<i>P12₁/c1</i>	0.67368, 1.38187, 1.00076, 90, 113, 603, 90	-	black	4.79	X	52784
As-Se	As ₂ Se ₃ hp	As ₂ Te ₃ , mS20, 12	<i>C12/m1</i>	1.337, 0.373, 0.934, 90, 95, 90	-	-	5.54	A	23887
As-Se	As ₂ Se ₃	As ₂ S ₃ , mP20, 14	<i>P12₁/c1</i>	0.42835, 0.99037, 1.27822, 90, 109, 121, 90	-	red cherry	5.01	X	18508
As-Se	As ₄ Se ₃ mon	* _m S11, 12, 15	<i>C12/c1</i>	2.562, 0.652, 2.301, 90, 123, 6, 90	-	-	-	N	10580
As-Se	As ₄ Se ₃ rt	As ₄ S ₃ -a, oP28, 62	<i>Pnma</i>	0.946, 0.791, 1.041, 90, 90, 90	-	red	4.58	A	10580
As-Si	SiAs prec	* _o P24, *	-	0.695, 0.77, 0.925, 90, 90, 90	-	-	4.15	N	3054
As-Si	SiAs rt	SiAs, mS24, 12	<i>C12/m1</i>	1.5979, 0.3668, 0.9529, 90, 106, 00, 90	-	gray	3.82	X	2442
As-Si	SiAs ₂ hp	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.60232, 0.60232, 0.60232, 90, 90, 90	pyrite-marcasite family	-	5.41	X	4051
As-Si	SiAs ₂	GeAs ₂ , oP24, 55	<i>Pbam</i>	1.0393, 1.4545, 0.3636, 90, 90, 90	-	-	4.30	A	13158
As-Sm	SmAs hp	CuTi, tP2, 123	<i>P4/mmm</i>	0.3445, 0.3445, 0.2847, 90, 90, 90	b.c.c. family	-	11.07	X	39370
As-Sm	SmAs	NaCl, cF8, 225	<i>Fm-3m</i>	0.592, 0.592, 0.592, 90, 90, 90	rocksalt family	gray silver	7.21	X	14055
As-Sm	Sm ₄ As ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.88361, 0.88361, 0.88361, 90, 90, 90	-	-	7.96	A	47173
As-Sn	SnAs	NaCl, cF8, 225	<i>Fm-3m</i>	0.5716, 0.5716, 0.5716, 90, 90, 90	rocksalt family	-	6.89	X	8354
As-Sn	Sn ₄ As ₃	Sn ₄ As ₃ , hR21, 160	<i>R3m</i>	0.4089, 0.4089, 3.6059, 90, 90, 120	-	gray silver	6.67	X	53913
As-Sr	SrAs ₃	SrAs ₃ , mS16, 12	<i>C12/m1</i>	0.961, 0.763, 0.588, 90, 112, 9, 90	-	gray	5.22	X	10164
As-Sr	Sr ₁₆ As ₁₁	Ca ₁₆ Sb ₁₁ , tP56, 113	<i>P-42₁m</i>	1.22954, 1.22954, 1.11598, 90, 90, 90	-	-	4.38	A	33193
As-Sr	Sr ₂ As	La ₂ Sb, tI12, 139	<i>I4/mmm</i>	0.483, 0.483, 1.613, 90, 90, 90	-	orange red	4.42	X	10123
As-Sr	Sr ₂ As ₂	Na ₂ [O ₂], hP12, 189	<i>P-62m</i>	0.8271, 0.8271, 0.6203, 90, 90, 120	-	black	4.41	X	32721
As-Sr	Sr ₃ As ₄	Sr ₃ As ₄ , oF56, 43	<i>Fdd2</i>	1.484, 1.789, 0.597, 90, 90, 90	-	gray dark	4.72	X	10967
As-Sr	Sr ₄ As ₃	Ba ₄ P ₃ , oP56, 55	<i>Pbam</i>	1.2185, 1.2775, 1.0958, 90, 90, 90	-	gray dark	4.48	X	31230
As-Sr	Sr ₅ As ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.893, 0.893, 0.732, 90, 90, 120	-	-	4.35	X	10123
As-Ta	TaAs	NbAs, tI8, 109	<i>I4/m</i>	0.34348, 0.34348, 1.1641, 90, 90, 90	-	-	12.38	X	2457
As-Ta	TaAs ₂	OsGe ₂ , mS12, 12	<i>C12/m1</i>	0.9331, 0.3383, 0.7752, 90, 119, 71, 90	-	-	10.34	X	13934
As-Ta	Ta ₂ As	Ta ₂ P, oP36, 58	<i>Pnmm</i>	1.18373, 1.4768, 0.34696, 90, 90, 90	-	-	14.35	A	4349
As-Ta	Ta ₃ As	Ta ₃ As, mS64, 15	<i>C12/c1</i>	1.46773, 0.50954, 1.45505, 90, 90, 572, 90	-	-	15.08	X	11942
As-Ta	Ta ₅ As ₄	Ti ₅ Te ₄ , tI18, 87	<i>I4/m</i>	0.97975, 0.97975, 0.34296, 90, 90, 90	Chevre phase	-	12.15	X	26765
As-Tb	TbAs lt	NiO, hR6, 166	<i>R-3m</i>	0.41486, 0.41486, 0.94981, 90, 90, 120	rocksalt family	-	8.23	X	4718
As-Tb	TbAs rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.5824, 0.5824, 0.5824, 90, 90, 90	rocksalt family	gray	7.86	X	4718
As-Tc	Tc ₂ As ₃	Tc ₂ As ₃ , aP20, 2	<i>P-1</i>	0.6574, 0.6632, 0.8023, 95, 69, 102, 03, 104, 31	-	-	8.54	X	18065
As-Te	AsTe	NaCl, cF8, 225	<i>Fm-3m</i>	0.5778, 0.5778, 0.5778, 90, 90, 90	rocksalt family	-	6.97	X	15753
As-Te	As ₂ Te ₃ m	Bi ₂ Te ₃ , hR15, 166	<i>R-3m</i>	0.406, 0.406, 2.959, 90, 90, 120	-	-	6.28	X	19208
As-Te	As ₂ Te ₃	As ₂ Te ₃ , mS20, 12	<i>C12/m1</i>	1.43573, 0.40199, 0.98990, 90, 95, 107, 90	-	gray	6.22	X	18496
As-Th	ThAs hp	CSiCl, cP2, 221	<i>Pm-3m</i>	0.345, 0.345, 0.345, 90, 90, 90	b.c.c. family	-	12.41	X	20980

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
As-Th	ThAs ₂ rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.5978, 0.5978, 0.5978, 90, 90, 90	rocksalt family	black gray	9.54	X	20980
As-Th	ThAs ₂ ht	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.4086, 0.4086, 0.8575, 90, 90, 90	-	-	8.86	X	642
As-Th	ThAs ₂ rt	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.7287, 0.4002, 0.9784, 90, 90, 90	-	-	8.89	A	3132
As-Th	Th ₃ As ₄	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8843, 0.8843, 0.8843, 90, 90, 90	-	-	9.57	X	642
As-Ti	TiAs ₂ ht	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.3645, 0.3645, 0.6109, 90, 90, 120	AlB ₂ family	-	5.80	X	2677
As-Ti	TiAs ₂ rt	TiP, hP8, 194	<i>P6₃/mmc</i>	0.3642, 0.3642, 1.2064, 90, 90, 120	-	-	5.89	X	591
As-Ti	TiAs ₂	TiAs ₂ , oP24, 58	<i>Pnnm</i>	0.896, 1.327, 0.350, 90, 90, 90	-	-	6.31	X	2226
As-Ti	Ti ₃ As	Ti ₃ P, tP32, 86	<i>P4₂/n</i>	1.01618, 1.01618, 0.51098, 90, 90, 90	-	-	5.50	A	10197
As-Ti	Ti ₄ As ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.76795, 0.76795, 0.76795, 90, 90, 90	-	-	6.11	A	10197
As-Ti	Ti ₅ As ₃ hex	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.74, 0.74, 0.5215, 90, 90, 120	-	-	6.23	X	2673
As-Ti	Ti ₅ As ₃ orth	Yb ₅ Sb ₃ , oP32, 62	<i>Pnma</i>	0.9866, 0.7769, 0.674, 90, 90, 90	-	-	5.97	A	40785
As-Tm	TmAs	NaCl, cF8, 225	<i>Fm-3m</i>	0.5772, 0.5772, 0.5772, 90, 90, 90	rocksalt family	gray	8.42	X	9355
As-U	UAs hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.331, 0.331, 0.331, 90, 90, 90	b.c.c. family	-	14.33	X	19262
As-U	UAs rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.57767, 0.57767, 0.57767, 90, 90, 90	rocksalt family	-	10.78	X	19261
As-U	UAs _{0.1} stab fil	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.489, 0.489, 0.489, 90, 90, 90	close-packed structure	-	13.95	F	7140
As-U	UAs ₂ hp	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.64, 0.356, 0.853, 90, 90, 90	-	-	13.26	A	23209
As-U	UAs ₂ rt	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.3954, 0.3954, 0.8116, 90, 90, 90	-	-	10.15	X	2631
As-U	U ₃ As ₄ lt	*, hR84, *	-	1.20109, 1.20109, 1.47373, 90, 90, 120	-	-	-	N	9816
As-U	U ₃ As ₄ rt	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8497, 0.8497, 0.8497, 90, 90, 90	-	-	10.98	X	8349
As-V	VAs	FeAs, oP8, 33	<i>Pna2₁</i>	0.585, 0.62923, 0.33618, 90, 90, 90	-	-	6.76	X	6374
As-V	VAs ₂	OsGe ₂ , mS12, 12	<i>C12/m1</i>	0.905, 0.327, 0.746, 90, 120, 90	-	-	6.98	A	2789
As-V	V ₂ As	*, hP12, *	-	0.76519, 0.76519, 0.33584, 90, 90, 120	-	-	-	N	8559
As-V	V ₃ As	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.47425, 0.47425, 0.47425, 90, 90, 90	Frank-Kasper phase	-	7.09	X	5500
As-V	V ₃ As ₂	V ₃ As ₂ , tP20, 83	<i>P4/m</i>	0.94128, 0.94128, 0.33361, 90, 90, 90	-	-	6.80	X	10192
As-V	V ₄ As ₃ ht	V ₄ As ₃ , mS28, 12	<i>C12/m1</i>	1.37251, 0.33928, 0.92297, 90, 100.521, 90	-	-	6.74	X	7738
As-V	V ₄ As ₃ rt	Nb ₄ As ₃ , oS56, 63	<i>Cmcm</i>	0.342, 1.373, 1.812, 90, 90, 90	-	-	6.69	X	6743
As-V	V ₅ As _{2.74} rt	W ₅ Si ₃ , tI32, 140	<i>I4/mcm</i>	0.95031, 0.95031, 0.48255, 90, 90, 90	-	-	7.01	X	10189
As-V	V ₅ As ₃ ht1	Yb ₅ Sb ₃ , oP32, 62	<i>Pnma</i>	0.9463, 0.7519, 0.6471, 90, 90, 90	-	-	6.92	A	8559
As-V	V ₅ As ₃ ht2	Y ₅ Bi ₃ , oP32, 62	<i>Pnma</i>	0.64402, 0.76767, 0.92846, 90, 90, 90	-	-	6.94	X	9363
As-W	WAs ₂	OsGe ₂ , mS12, 12	<i>C12/m1</i>	0.9078, 0.33177, 0.7686, 90, 119.42, 90	-	-	10.99	A	2900
As-W	W ₂ As ₃	Mo ₂ As ₃ , mS20, 12	<i>C12/m1</i>	1.33308, 0.32791, 0.9599, 90, 124.697, 90	-	-	11.41	X	2882
As-Y	YAs	NaCl, cF8, 225	<i>Fm-3m</i>	0.57819, 0.57819, 0.57819, 90, 90, 90	rocksalt family	gray	5.63	X	60283
As-Yb	YbAs rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.5694, 0.5694, 0.5694, 90, 90, 90	rocksalt family	gray	8.92	X	30447
As-Yb	Yb ₄ As ₃ ht	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.87914, 0.87914, 0.87914, 90, 90, 90	-	-	8.96	X	46387
As-Yb	Yb ₄ As ₃ lt	Yb ₄ As ₃ , hR42, 161	<i>R3c</i>	1.25112, 1.25112, 0.7502, 90, 90, 120	-	-	8.98	X	46387
As-Yb	Yb ₅ As ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.848, 0.848, 0.6671, 90, 90, 120	-	-	8.71	X	5225
As-Zn	ZnAs hp-ht	CdSb, oP16, 61	<i>Pbca</i>	0.5673, 0.72754, 0.75572, 90, 90, 90	-	gray	5.98	X	63585
As-Zn	ZnAs ₂ rt	ZnAs ₂ , mP24, 14	<i>P12₁/c1</i>	0.9287, 0.7691, 0.8010, 90, 102.47, 90	-	-	5.12	X	7752
As-Zn	Zn _{1.5} As ₂ ht2	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.59481, 0.59481, 0.59481, 90, 90, 90	fluorite family	gray	5.46	X	7583
As-Zn	Zn ₃ As ₂ hp1	*, cF*, *	-	1.182, 1.182, 1.182, 90, 90, 90	-	-	-	N	4502
As-Zn	Zn ₃ As ₂ hp2	*, hP30, *	-	0.727, 0.727, 1.208, 90, 90, 120	-	-	-	N	4502
As-Zn	Zn ₃ As ₂ ht-hp	Zn ₃ P ₂ , tP40, 137	<i>P4₂/nmc</i>	0.8316, 0.8316, 1.176, 90, 90, 90	fluorite family	gray silver	5.65	X	102
As-Zn	Zn ₃ As ₂ ht1	Zn ₃ As ₂ , tP160, 133	<i>P4₂/nbc</i>	1.1789, 1.1789, 2.3635, 90, 90, 90	-	-	5.60	X	9558
As-Zn	Zn ₃ As ₂ rt	Cd ₃ As ₂ , tI160, 110	<i>I4₁cd</i>	1.17823, 1.17823, 2.36385, 90, 90, 90	-	-	5.60	X	22555
As-Zr	ZrAs ht	NaCl, cF8, 225	<i>Fm-3m</i>	0.54335, 0.54335, 0.54335, 90, 90, 90	rocksalt family	-	6.88	X	16630
As-Zr	ZrAs rt	TiP, hP8, 194	<i>P6₃/mmc</i>	0.3804, 0.3804, 1.287, 90, 90, 120	-	-	6.84	X	971
As-Zr	ZrAs ₂	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.68006, 0.36883, 0.90328, 90, 90, 90	-	-	7.07	X	55530
As-Zr	Zr ₁₄ As ₉	Zr ₁₄ P ₉ , oP92, 58	<i>Pnnm</i>	1.70987, 2.82588, 0.37661, 90, 90, 90	-	-	7.12	A	16630
As-Zr	Zr ₂ As	*, oP*, *	-	0.36613, 1.50782, 1.95317, 90, 90, 90	-	-	-	N	16630
As-Zr	Zr ₃ As	Ti ₃ P, tP32, 86	<i>P4₂/n</i>	1.09734, 1.09734, 0.54499, 90, 90, 90	-	-	7.06	A	2889
As-Zr	Zr ₃ As ₂	Th ₃ S ₃ , oP20, 62	<i>Pnma</i>	1.05278, 0.37276, 1.02142, 90, 90, 90	-	-	7.02	A	16630
As-Zr	Zr ₇ As ₄	Nb ₇ P ₄ , mS44, 12	<i>C12/m1</i>	1.6202, 0.36778, 1.50394, 90, 104.656, 90	-	-	7.19	A	16630
As-Zr	Zr ₈ As ₅	Nb ₈ P ₅ , oP54, 55	<i>Pbam</i>	1.02052, 2.83335, 0.37743, 90, 90, 90	-	-	6.72	X	9364
Au-B	AuB ₂	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.314, 0.314, 0.352, 90, 90, 120	AlB ₂ family	-	12.08	X	1444
Au-B	Au _{0.01} B rhom I	B, hR423, 166	<i>R-3m</i>	1.09324, 1.09324, 2.38238, 90, 90, 120	β-boron family	-	2.76	F	14076
Au-Ba	BaAu	FeB, b, oP8, 62	<i>Pnma</i>	0.8331, 0.49309, 0.63928, 90, 90, 90	CrB(III)-FeB	-	8.46	X	54448
Au-Ba	BaAu ₂	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.4804, 0.4804, 0.4119, 90, 90, 120	AlB ₂ family	-	10.72	X	4837
Au-Ba	BaAu ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.569, 0.569, 0.4542, 90, 90, 120	-	-	14.63	X	3223
Au-Ba	Ba ₃ Au ₂	Er ₃ Ni ₂ , hR45, 148	<i>R-3</i>	1.0001, 1.0001, 1.9143, 90, 90, 120	-	-	7.26	A	18336
Au-Be	BeAu rt	FeSi, cP8, 198	<i>P2₁3</i>	0.4668, 0.4668, 0.4668, 90, 90, 90	-	-	13.45	X	266
Au-Be	Be ₁₂ Au	ThMn ₁₂ , tI26, 139	<i>I4/mmm</i>	0.7243, 0.7243, 0.4252, 90, 90, 90	CaCu ₅ -Zr ₄ Al ₃	-	4.54	A	899
Au-Be	Be ₅ Au	Be ₅ Au, cF24, 216	<i>F-43m</i>	0.6097, 0.6097, 0.6097, 90, 90, 90	Friauf-Laves phase	-	7.09	X	91
Au-Bi	Au _{0.3} Bi _{0.7} m	Po, cP1, 221	<i>Pm-3m</i>	0.3115, 0.3115, 0.3115, 90, 90, 90	-	-	11.28	X	4176
Au-Bi	Au _{0.4} Bi _{0.6} m	Po, hR3, 166	<i>R-3m</i>	0.42527, 0.42527, 0.53317, 90, 90, 120	-	-	12.18	X	4176
Au-Bi	Au ₂ Bi ht	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.796, 0.796, 0.796, 90, 90, 90	maldonite	-	15.88	X	55409
Au-Br	AuBr ht1	AuI, tP8, 138	<i>P4₂/ncm</i>	0.4296, 0.4296, 1.2146, 90, 90, 90	-	-	8.20	X	11457
Au-Br	AuBr ht2	AuCl, tI16, 141	<i>I4₁/amd</i>	0.694, 0.694, 0.9252, 90, 90, 90	-	-	8.25	X	11457
Au-Br	AuBr ht3	Hg ₄ Pt, cI10, 229	<i>Im-3m</i>	0.488, 0.488, 0.488, 90, 90, 90	-	-	7.91	X	11458
Au-Br	AuBr ₃	AuBr ₃ , mP32, 14	<i>P12₁/c1</i>	0.6831, 2.041, 0.8105, 90, 119.74, 90	-	red dark	5.91	X	9338
Au-Ca	CaAu rt	TlI, oS8, 63	<i>Cmcm</i>	0.3961, 1.1075, 0.4576, 90, 90, 90	CrB(III)-FeB	-	7.84	X	15091
Au-Ca	CaAu ₂ rt	KHg ₂ , oI12, 74	<i>Imma</i>	0.4611, 0.7067, 0.8079, 90, 90, 90	AlB ₂ family	gray green	10.95	X	31787
Au-Ca	CaAu ₅	Be ₅ Au, cF24, 216	<i>F-43m</i>	0.7747, 0.7747, 0.7747, 90, 90, 90	Friauf-Laves phase	-	14.64	X	2175
Au-Ca	Ca ₃ Au	Fe ₃ C, b, oP16, 62	<i>Pnma</i>	0.7795, 1., 0.678, 90, 90, 90	-	-	3.99	X	18336
Au-Ca	Ca ₃ Au ₄ hp	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.37351, 1.37351, 0.59084, 90, 90, 120	b.c.c. family	-	9.37	X	36190
Au-Ca	Ca ₅ Au ₂	Mn ₅ C ₂ , mS28, 15	<i>C12/c1</i>	1.6857, 0.6809, 0.7746, 90, 97.26, 90	-	-	4.48	X	18336
Au-Ca	Ca ₅ Au ₃	Cr ₅ B ₃ , tI32, 140	<i>I4/mcm</i>	0.7867, 0.7867, 1.439, 90, 90, 90	-	-	5.90	X	17297
Au-Ca	Ca ₅ Au ₄	Ca ₅ Au ₄ , mP18, 14	<i>P12₁/c1</i>	0.8028, 0.8019, 0.7727, 90, 109.16, 90	-	-	6.99	X	18088
Au-Ca	Ca ₇ Au ₃	Ca ₇ Au ₃ , oP80, 61	<i>Pbca</i>	0.6665, 2.0742, 1.8036, 90, 90, 90	-	-	4.64	X	18088

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Au-Cd	AuCd ₃ rt	Cu ₃ P, hP24, 185	$P6_3cm$	0.8147, 0.8147, 0.8511, 90, 90, 120	-	-	10.88	X	10583
Au-Cd	Au _{0.5} Cd _{1.5} ht	CuTi ₂ tP2, 123	$P4/mmm$	0.33478, 0.33478, 0.28729, 90, 90, 90	b.c.c. family	-	13.78	X	15242
Au-Cd	Au _{0.5} Cd _{1.5} rt	CuTi ₂ tP2, 123	$P4/mmm$	0.33645, 0.33645, 0.2735, 90, 90, 90	b.c.c. family	-	14.33	X	15242
Au-Cd	Au _{1.01} Cd _{0.99} ht	CsCl, cP2, 221	$Pm-3m$	0.3342, 0.3342, 0.3342, 90, 90, 90	b.c.c. family	-	13.80	X	48784
Au-Cd	Au _{1.01} Cd _{0.99} rt	Au _{1.01} Cd _{0.99} , hP18, 143	$P3$	0.8095, 0.8095, 0.5794, 90, 90, 120	b.c.c. family	-	14.10	X	26413
Au-Cd	Au _{1.05} Cd _{0.95} mart	AuCd, oP4, 51	$Pmma$	0.4766, 0.3151, 0.4859, 90, 90, 90	close-packed structure	-	14.27	X	23749
Au-Cd	Au _{1.1} Cd _{0.9} rt	LiSn, mP6, 10	$P12/m1$	0.491, 0.3089, 0.7431, 90, 105, 38, 90	close-packed structure	-	14.57	X	11842
Au-Cd	Au ₁₃ Cd ₂₃ ht1	Au ₇ (Au _{0.46} Cd _{0.54}) ₁₃ Cd ₁₆ , mS72, 12	$C12/m1$	1.4735, 0.82485, 1.2714, 90, 115, 11, 90	-	gray silver	12.21	X	61227
Au-Cd	Au ₃ Cd rt	ZrAl ₃ , tI16, 139	$I4/mmm$	0.4109, 0.4109, 1.6552, 90, 90, 90	close-packed structure	-	16.72	X	2664
Au-Cd	Au ₃ Cd ₅ rt	W ₅ Si ₃ , tI32, 140	$I4/mcm$	1.0728, 1.0728, 0.5352, 90, 90, 90	-	-	12.43	X	12290
Au-Cd	Au _{32.7} Cd _{16.3} ht	Au ₁₂ (Au _{0.58} Cd _{0.42}) ₃₆ Cd, hP98, 194	$P6_3/mmc$	2.0433, 2.0433, 0.4818, 90, 90, 120	-	-	15.77	X	15018
Au-Cd	Au ₅ Cd ₈ ht2	Cu ₂ Zn ₈ , cI52, 217	$I-43m$	0.9998, 0.9998, 0.9998, 90, 90, 90	γ -brass	-	12.52	A	12290
Au-Cd	Au ₅ Cd ₈ ht3	Cu ₂ Zn ₈ , cI52, 217	$I-43m$	1.003, 1.003, 1.003, 90, 90, 90	γ -brass	-	12.40	A	12290
Au-Cd	Au _{5.92} Cd _{36.63}	Au _{5.92} Cd _{36.63} , hP288, 176	$P6_3/m$	2.13259, 2.13259, 1.41254, 90, 90, 120	-	gray silver	9.46	X	65029
Au-Cd	Au _{7.8} Cd _{36.79}	Au _{5.92} Cd _{36.63} , hP288, 176	$P6_3/m$	2.134, 2.134, 1.41212, 90, 90, 120	-	gray silver	10.49	X	65029
Au-Ce	AuCe ht	TlI, oS8, 63	$Cmcm$	0.39, 1.114, 0.475, 90, 90, 90	CrB(TlI)-FeB	-	10.85	X	5891
Au-Ce	AuCe rt	FeB-b, oP8, 62	$Pnma$	0.743, 0.466, 0.593, 90, 90, 90	CrB(TlI)-FeB	-	10.91	X	5891
Au-Ce	AuCe ₂	Co ₂ Si-b, oP12, 62	$Pnma$	0.7271, 0.5073, 0.932, 90, 90, 90	-	-	9.22	X	5891
Au-Ce	Au-Ce	KHg ₂ , oI12, 74	$Imma$	0.4528, 0.7203, 0.8068, 90, 90, 90	AlB ₂ family	-	13.48	A	3993
Au-Ce	Au ₅₁ Ce ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	$P6/m$	1.2808, 1.2808, 0.9327, 90, 90, 120	-	-	15.05	X	5891
Au-Ce	Au ₆ Ce	Au ₆ Pr, mS28, 15	$C12/c1$	0.7822, 0.7779, 0.9079, 90, 100, 8, 90	-	-	16.18	A	53450
Au-Cl	AuCl ht	AuCl, tI16, 141	$I4_1/amd$	0.6734, 0.6734, 0.8674, 90, 90, 90	-	-	7.85	X	8144
Au-Cl	AuCl rt	NaCl, cF8, 225	$Fm-3m$	0.632, 0.632, 0.632, 90, 90, 90	rocksalt family	-	6.12	X	53733
Au-Cl	AuCl ₂	AuCl ₂ , aP12, 2	$P-1$	0.6684, 0.6830, 0.7015, 88, 4, 72, 5, 85, 6	-	black	5.84	X	15049
Au-Cl	AuCl ₃	AuCl ₃ , mP16, 14	$P12_1/c1$	0.657, 1.104, 0.644, 90, 113, 3, 90	-	orange	4.70	X	906
Au-Co	Au _{0.025} Co _{0.975} ht	Cu, cF4, 225	$Fm-3m$	0.3559, 0.3559, 0.3559, 90, 90, 90	close-packed structure	-	9.19	X	343
Au-Co	Au _{0.5} Co _{0.5}	Cu, cF4, 225	$Fm-3m$	0.378, 0.378, 0.378, 90, 90, 90	close-packed structure	-	15.74	X	40973
Au-Co	Au ₃ Co	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4, 0.4, 0.4, 90, 90, 90	close-packed structure	-	16.86	X	51470
Au-Cr	Au _{0.5} Cr _{0.5}	Cu, cF4, 225	$Fm-3m$	0.3991, 0.3991, 0.3991, 90, 90, 90	close-packed structure	-	13.01	X	7291
Au-Cr	Au _{3.96} Cr _{1.04} rt	MoNi ₄ , tI10, 87	$I4/m$	0.6398, 0.6398, 0.4046, 90, 90, 90	close-packed structure	-	16.73	X	16734
Au-Cs	CsAu rt	CsCl, cP2, 221	$Pm-3m$	0.4258, 0.4258, 0.4258, 90, 90, 90	b.c.c. family	black	7.10	X	28052
Au-Cu	CuAu ht1	CuAu, oI40, 74	$Imma$	0.3676, 0.3956, 3.972, 90, 90, 90	close-packed structure	-	14.98	X	4063
Au-Cu	CuAu rt	CuAu, tP2, 123	$P4/mmm$	0.28086, 0.28086, 0.3665, 90, 90, 90	tetra-aurocupride	-	14.96	X	24618
Au-Cu	Cu _{0.5} Au _{0.5} ht2	Cu, cF4, 225	$Fm-3m$	0.38716, 0.38716, 0.38716, 90, 90, 90	close-packed structure	-	14.91	X	28744
Au-Cu	Cu _{1.28} Au _{0.72} rt	Cu ₃ Au, cP4, 221	$Pm-3m$	0.39528, 0.39528, 0.39528, 90, 90, 90	close-packed structure	-	16.59	X	2972
Au-Cu	Cu _{2.74} Au _{1.26} rt	Cu ₃ Au, cP4, 221	$Pm-3m$	0.3782, 0.3782, 0.3782, 90, 90, 90	aurocupride	-	12.96	X	24618
Au-Dy	AuDy ht	CsCl, cP2, 221	$Pm-3m$	0.3555, 0.3555, 0.3555, 90, 90, 90	b.c.c. family	-	13.29	X	1865
Au-Dy	AuDy rt	TlI, oS8, 63	$Cmcm$	0.371, 1.087, 0.461, 90, 90, 90	CrB(TlI)-FeB	-	12.84	X	5891
Au-Dy	AuDy ₂	Co ₂ Si-b, oP12, 62	$Pnma$	0.70473, 0.49081, 0.88977, 90, 90, 90	-	-	11.27	X	5891
Au-Dy	Au _{0.98} Dy _{0.02}	Cu, cF4, 225	$Fm-3m$	0.40921, 0.40921, 0.40921, 90, 90, 90	close-packed structure	-	19.03	X	2747
Au-Dy	Au ₂ Dy	MoSi ₂ , tI6, 139	$I4/mmm$	0.3694, 0.3694, 0.8961, 90, 90, 90	b.c.c. family	-	15.11	X	4625
Au-Dy	Au ₃ Dy	Cu ₃ Ti, oP8, 59	$Pnmm$	0.49784, 0.60887, 0.50903, 90, 90, 90	close-packed structure	-	16.22	X	5891
Au-Dy	Au ₅₁ Dy ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	$P6/m$	1.2558, 1.2558, 0.9152, 90, 90, 120	-	-	16.37	X	5891
Au-Dy	Au ₆ Dy	Au ₆ Sm, tP56, 138	$P4_2/ncm$	1.03, 1.03, 0.967, 90, 90, 90	-	-	17.41	A	5891
Au-Er	AuEr ht	CsCl, cP2, 221	$Pm-3m$	0.3534, 0.3534, 0.3534, 90, 90, 90	b.c.c. family	-	13.70	X	24750
Au-Er	AuEr rt	TlI, oS8, 63	$Cmcm$	0.365, 1.081, 0.458, 90, 90, 90	CrB(TlI)-FeB	-	13.39	X	5891
Au-Er	AuEr ₂	Co ₂ Si-b, oP12, 62	$Pnma$	0.6996, 0.48694, 0.8802, 90, 90, 90	-	-	11.77	X	5891
Au-Er	Au _{0.95} Er _{0.05}	Cu, cF4, 225	$Fm-3m$	0.4107, 0.4107, 0.4107, 90, 90, 90	close-packed structure	-	18.74	X	2747
Au-Er	Au ₁₀ Er ₇	Au ₁₀ Gd ₇ , tI136, 142	$I4_1/acd$	1.017, 1.017, 2.763, 90, 90, 90	-	-	14.60	A	40601
Au-Er	Au ₂ Er	MoSi ₂ , tI6, 139	$I4/mmm$	0.3663, 0.3663, 0.892, 90, 90, 90	b.c.c. family	-	15.57	X	6620
Au-Er	Au ₃ Er	Cu ₃ Ti, oP8, 59	$Pnmm$	0.4955, 0.6031, 0.5084, 90, 90, 90	close-packed structure	-	16.57	X	5891
Au-Er	Au ₄ Er	MoNi ₄ , tI10, 87	$I4/m$	0.6639, 0.6639, 0.41575, 90, 90, 90	close-packed structure	-	17.31	X	5891
Au-Eu	AuEu rt	FeB-b, oP8, 62	$Pnma$	0.7784, 0.4699, 0.6054, 90, 90, 90	CrB(TlI)-FeB	-	10.47	A	16920
Au-Eu	AuEu ₃	Fe ₃ C-b, oP16, 62	$Pnma$	0.8049, 1.03, 0.7014, 90, 90, 90	-	-	7.46	A	16920
Au-Eu	Au ₂ Eu	KHg ₂ , oI12, 74	$Imma$	0.4715, 0.7331, 0.8171, 90, 90, 90	AlB ₂ family	-	12.84	A	16920
Au-Eu	Au ₂ Eu ₃	Er ₃ Ni ₂ , hR45, 148	$R-3$	0.9402, 0.9402, 1.809, 90, 90, 120	-	-	9.17	A	16920
Au-Eu	Au ₃ Eu ₇	Th ₃ Fe ₃ , hP20, 186	$P6_3/mc$	1.0834, 1.0834, 0.6909, 90, 90, 120	-	-	7.82	A	16920
Au-Eu	Au ₅ Eu	CaCu ₅ , hP6, 191	$P6/mmm$	0.5576, 0.5576, 0.4575, 90, 90, 120	-	-	15.32	X	16920
Au-F	AuF ₃	AuF ₃ , hP24, 178	$P6_3$	0.51508, 0.51508, 1.62637, 90, 90, 120	-	orange yellow	6.77	X	24606
Au-F	AuF ₃ hex	*, hP6, 178	$P6_3$	0.5664, 0.5664, 1.9221, 90, 90, 120	-	-	5.45	P	23891
Au-F	AuF ₃ orth	AuF ₃ , oP48, 62	$Pnma$	0.9366, 1.5052, 0.484, 90, 90, 90	-	brown red	5.68	X	38764
Au-F	Au ₃ F ₈	Au ₃ F ₈ , mP22, 14	$P12_1/c1$	0.52721, 1.07076, 0.77469, 90, 132, 25, 90	-	brown	7.62	X	36992
Au-Fe	AuFe m	CuAu, tP2, 123	$P4/mmm$	0.26516, 0.26516, 0.361, 90, 90, 90	close-packed structure	-	16.54	X	58677
Au-Fe	Au _{0.04} Fe _{0.96} rt	W, cI2, 229	$Im-3m$	0.28885, 0.28885, 0.28885, 90, 90, 90	b.c.c. family	-	8.47	X	2464
Au-Fe	Au _{0.08} Fe _{0.92} ht	Cu, cF4, 225	$Fm-3m$	0.368, 0.368, 0.368, 90, 90, 90	close-packed structure	-	8.95	X	343
Au-Fe	Au _{0.93} Fe _{0.07} ht	Cu, cF4, 225	$Fm-3m$	0.405, 0.405, 0.405, 90, 90, 90	close-packed structure	-	18.71	X	55786
Au-Fe	Au ₃ Fe m	Cu ₃ Au, cP4, 221	$Pm-3m$	0.399, 0.399, 0.399, 90, 90, 90	close-packed structure	-	16.91	X	51470
Au-Ga	AuGa	FeAs, oP8, 62	$Pnma$	0.6267, 0.3421, 0.6397, 90, 90, 90	AlB ₂ family	-	12.92	X	337
Au-Ga	AuGa ₂ hp	*, o*, *, *	-	0.4211, 0.43105, 1.12, 90, 90, 90	-	-	-	N	47727
Au-Ga	AuGa ₂	CaF ₂ , cF12, 225	$Fm-3m$	0.60754, 0.60754, 0.60754, 90, 90, 90	fluorite family	blue	9.96	X	8542
Au-Ga	Au _{0.875} Ga _{0.125} ht	Nd, hP4, 194	$P6_3/mmc$	0.28712, 0.28712, 0.93914, 90, 90, 120	close-packed structure	-	17.94	X	22704
Au-Ga	Au _{0.88} Ga _{0.12}	Cu, cF4, 225	$Fm-3m$	0.40726, 0.40726, 0.40726, 90, 90, 90	close-packed structure	-	17.87	X	3058
Au-Ga	Au ₂ Ga rt	Pd ₂ As, oS24, 36	$Cmc2_1$	0.3199, 1.8023, 0.6999, 90, 90, 90	-	white silver	15.26	X	8146
Au-Ga	Au ₇ Ga ₂ ht	Au ₇ Ga ₂ , hP27, 189	$P-62m$	0.7724, 0.7724, 0.8751, 90, 90, 120	Fe ₂ P family	-	16.73	X	5877
Au-Ga	Au ₇ Ga ₂ rt	*, o*, *, *	-	0.7643, 0.8765, 0.9009, 90, 90, 90	-	-	-	N	5877
Au-Gd	AuGd ht	CsCl, cP2, 221	$Pm-3m$	0.36009, 0.36009, 0.36009, 90, 90, 90	b.c.c. family	-	12.60	X	2380
Au-Gd	AuGd rt	TlI, oS8, 63	$Cmcm$	0.376, 1.094, 0.464, 90, 90, 90	CrB(TlI)-FeB	-	12.33	X	5891
Au-Gd	AuGd ₂	Co ₂ Si-b, oP12, 62	$Pnma$	0.7116, 0.49619, 0.8998, 90, 90, 90	-	-	10.69	X	5891

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Au-Gd	Au _{0.994} Gd _{0.006}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.4082,0.4082,0.4082,90,90,90	close-packed structure	-	19.21	X	2747
Au-Gd	Au ₁₀ Gd ₇	Au ₁₀ Gd ₇ ,tI136,142	<i>I4₁/acd</i>	1.0324,1.0324,2.8066,90,90,90	-	-	13.64	X	31651
Au-Gd	Au ₂ Gd ht	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.37282,0.37282,0.90238,90,90,90	b.c.c. family	-	14.59	X	5891
Au-Gd	Au ₃ Gd	Cu ₃ Ti,oP8,59	<i>Pmmn</i>	0.5005,0.615,0.5105,90,90,90	close-packed structure	-	15.81	X	5891
Au-Gd	Au ₄ Gd ₃	Pu ₃ Pd ₄ ,hR42,148	<i>R-3</i>	1.35,1.35,0.5995,90,90,120	b.c.c. family	-	13.26	X	31651
Au-Gd	Au ₅₁ Gd ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.26174,1.26174,0.91902,90,90,120	-	-	16.05	X	5891
Au-Gd	Au ₆ Gd	Au ₅ Sm,tP56,138	<i>P4₂/ncm</i>	1.0419,1.0419,0.9681,90,90,90	-	-	16.93	A	31651
Au-Ge	AuGe ₃ m	* ₂ h**,*	-	0.328,0.328,0.527,90,90,120	-	-	-	N	15309
Au-Ge	Au _{0.5} Ge _{0.5} m	* ₂ t***,*	-	1.6444,1.6444,4.4982,90,90,90	-	-	-	N	6669
Au-Ge	Au _{0.73} Ge _{0.27} m1	* ₂ t***,*	-	1.297,1.297,1.247,90,90,90	-	-	-	N	6669
Au-Ge	Au _{0.73} Ge _{0.27} m2	* ₂ t***,*	-	1.239,1.239,2.017,90,90,90	-	-	-	N	6669
Au-Ge	Au _{0.73} Ge _{0.27} m3	* ₂ t***,*	-	0.4127,0.4127,3.854,90,90,90	-	-	-	N	6669
Au-Ge	Au _{0.8} Ge _{0.2} m	Mg,hP2,194	<i>P6₃/mmc</i>	0.2853,0.2853,0.4687,90,90,120	close-packed structure	-	17.30	X	24720
Au-Ge	Au _{0.975} Ge _{0.025}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.4075,0.4075,0.4075,90,90,90	close-packed structure	-	19.03	X	57689
Au-Ge	Au ₃ Ge m1	* ₂ t***,*	-	0.8993,0.8993,1.2469,90,90,90	-	-	-	N	4771
Au-Ge	Au ₃ Ge m2	* ₂ t***,*	-	0.4127,0.4127,1.927,90,90,90	-	-	-	N	4771
Au-Ge	Au ₃ Ge ₂ m	* ₂ t***,*	<i>P4₂/nbc</i>	1.163,1.163,2.249,90,90,90	-	-	-	N	15309
Au-Hf	AuHf rt	CuTi,tP4,129	<i>P4/nmm</i>	0.3467,0.3467,0.6323,90,90,90	b.c.c. family	-	16.41	A	1676
Au-Hf	AuHf ₂	CuZr ₂ ,tI6,139	<i>I4/mmm</i>	0.32309,0.32309,1.16057,90,90,90	close-packed structure	-	15.19	X	1717
Au-Hf	Au _{0.02} Hf _{0.98} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.31995,0.31995,0.5054,90,90,120	close-packed structure	-	13.26	X	37596
Au-Hf	Au ₁₀ Hf ₇ rt	Zr ₇ Ni ₁₀ ,oS68,64	<i>Cmce</i>	1.322,0.9772,0.9773,90,90,90	-	-	16.94	A	37596
Au-Hf	Au ₂ Hf	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3524,0.3524,0.867,90,90,90	b.c.c. family	-	17.66	A	37596
Au-Hf	Au ₃ Hf	Cu ₃ Ti,oP8,59	<i>Pmmn</i>	0.4785,0.6038,0.4877,90,90,90	close-packed structure	-	18.13	A	37596
Au-Hf	Au ₄ Hf	Au ₄ Zr,oP20,62	<i>Pnma</i>	0.5006,0.4844,1.427,90,90,90	close-packed structure	-	18.55	A	37596
Au-Hf	Au _{4.2} Hf _{0.8}	MoNi ₄ ,tI10,87	<i>I4/m</i>	0.6529,0.6529,0.4028,90,90,90	close-packed structure	-	18.76	A	1735
Au-Hg	Au _{0.75} Hg _{0.25}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2918,0.2918,0.48112,90,90,120	close-packed structure	golden	18.52	X	3495
Au-Hg	Au _{0.80} Hg _{0.20}	* ₂ hP36,*	-	0.8736,0.8736,0.9577,90,90,120	-	-	-	N	3495
Au-Hg	Au _{0.828} Hg _{0.172}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.41214,0.41214,0.41214,90,90,90	close-packed structure	-	18.75	X	953
Au-Hg	Au ₂ Hg	* ₂ hP*,*	-	1.398,1.398,1.72,90,90,120	-	gray silver	-	N	3495
Au-Hg	Au ₆ Hg ₅ rt	Au ₆ Hg ₅ ,hP22,193	<i>P6₃/mcm</i>	0.69937,0.69937,1.0148,90,90,120	-	gray	16.88	X	4953
Au-Ho	AuHo ht	CsCl,cP2,221	<i>Pm-3m</i>	0.3541,0.3541,0.3541,90,90,90	b.c.c. family	-	13.54	X	1865
Au-Ho	AuHo rt	TlI ₂ oS8,63	<i>Cmcm</i>	0.3685,1.0835,0.4595,90,90,90	CrB(III)-FeB	-	13.10	X	5891
Au-Ho	AuHo ₂	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.7025,0.48922,0.88482,90,90,90	-	-	11.51	X	5891
Au-Ho	Au ₁₀ Ho ₇	Au ₁₀ Gd ₇ ,tI136,142	<i>I4₁/acd</i>	1.021,1.021,2.772,90,90,90	-	-	14.36	A	40601
Au-Ho	Au ₂ Ho	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3678,0.3678,0.894,90,90,90	b.c.c. family	-	15.35	X	6619
Au-Ho	Au ₃ Ho	Cu ₃ Ti,oP8,59	<i>Pmmn</i>	0.4966,0.60598,0.50864,90,90,90	close-packed structure	-	16.40	X	5891
Au-Ho	Au ₄ Ho ht	MoNi ₄ ,tI10,87	<i>I4/m</i>	0.66534,0.66534,0.4174,90,90,90	close-packed structure	-	17.13	X	5891
Au-Ho	Au ₅₁ Ho ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.2545,1.2545,0.9135,90,90,120	-	-	16.48	X	5891
Au-Ho	Au ₆ Ho	Au ₅ Sm,tP56,138	<i>P4₂/ncm</i>	1.029,1.029,0.966,90,90,90	-	-	17.49	A	5891
Au-I	AuI	AuI,tP8,138	<i>P4₂/ncm</i>	0.435,0.435,1.373,90,90,90	-	yellowish	8.28	X	1132
Au-In	AuIn	* ₂ aP*,*	-	0.356,0.43,1.059,90,17.90,54.90	-	-	-	N	18905
Au-In	AuIn ₂ hp	PbCl ₂ ,mP24,14	<i>P12₁/c1</i>	0.8114,0.451,1.2145,90,96.90	-	-	12.82	A	56198
Au-In	AuIn ₂	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.65075,0.65075,0.65075,90,90,90	fluorite family	blue	10.28	X	7574
Au-In	Au _{0.8} In _{0.2} o-d	Mg,hP2,194	<i>P6₃/mmc</i>	0.29,0.29,0.49,90,90,120	close-packed structure	-	16.80	X	18905
Au-In	Au _{0.87} In _{0.13}	Nd,hP4,194	<i>P6₃/mmc</i>	0.2909,0.2909,0.95,90,90,120	close-packed structure	-	17.77	X	2271
Au-In	Au _{0.92} In _{0.08}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.40997,0.40997,0.40997,90,90,90	close-packed structure	-	18.35	X	11493
Au-In	Au ₁₀ In ₃ rt	Cu ₁₀ Sb ₃ ,hP26,176	<i>P6₃/m</i>	1.0536,1.0536,0.4788,90,90,120	close-packed structure	-	16.70	A	2271
Au-In	Au ₃ In rt	Cu ₃ Ti,oP8,59	<i>Pmmn</i>	0.474,0.586,0.516,90,90,90	close-packed structure	-	16.35	A	18905
Au-In	Au ₃ In tf	* ₂ hP*,*	-	0.5828,0.5828,0.4732,90,90,120	-	-	-	N	14059
Au-In	Au _{3.1} In _{1.9} ht	Ni ₂ Al ₃ ,hP5,164	<i>P-3m1</i>	0.4538,0.4538,0.5645,90,90,120	-	-	13.67	A	2271
Au-In	Au ₇ In ₃ rt	Au ₇ In ₃ ,hP60,147	<i>P-3</i>	1.2215,1.2215,0.8509,90,90,120	-	-	15.62	X	8946
Au-In	Au ₉ In ₄ ht	Au ₆ (Au _{0.5} In _{0.5}) ₄ In,cP76,215	<i>P-43m</i>	0.9829,0.9829,0.9829,90,90,90	γ-brass	-	15.61	X	10344
Au-K	KAu ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5623,0.5623,0.9791,90,90,120	Friauf-Laves phase	-	10.73	X	20781
Au-K	KAu ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5663,0.5663,0.4483,90,90,120	-	green	13.66	X	27316
Au-K	K ₂ Au ₃	K ₂ Au ₃ ,oI10,71	<i>Immm</i>	0.4875,0.5454,1.0004,90,90,90	-	golden	8.35	X	22942
Au-La	AuLa ht	TlI ₂ oS8,63	<i>Cmcm</i>	0.395,1.12,0.478,90,90,90	CrB(III)-FeB	-	10.55	X	5891
Au-La	AuLa rt	FeB-b,oP8,62	<i>Pnma</i>	0.752,0.469,0.596,90,90,90	CrB(III)-FeB	-	10.61	X	5891
Au-La	AuLa ₂	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.7397,0.5107,0.941,90,90,90	-	-	8.87	X	5891
Au-La	AuLa ₄ m	* ₂ oI*,*	-	0.654,0.771,1.132,90,90,90	-	-	-	N	16758
Au-La	Au ₂ La	KHg ₂ ,oI12,74	<i>Imma</i>	0.4811,0.7218,0.8324,90,90,90	AlB ₂ family	-	12.24	A	22309
Au-La	Au ₅₁ La ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.2871,1.2871,0.9388,90,90,120	-	-	14.78	X	5891
Au-Li	LiAu ₃ rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3973,0.3973,0.3973,90,90,90	close-packed structure	-	15.83	X	1502
Au-Li	Li _{0.4} Au _{0.6}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3968,0.3968,0.3968,90,90,90	close-packed structure	-	12.86	X	1502
Au-Li	Li _{0.52} Au _{0.48}	* ₂ o*2,*	-	0.28,0.321,0.33,90,90,90	-	-	-	N	1502
Au-Li	Li _{0.54} Au _{0.46}	* ₂ t*2,*	-	0.323,0.323,0.283,90,90,90	-	-	-	N	1502
Au-Li	Li _{1.1} Au _{0.9} m	CsCl,cP2,221	<i>Pm-3m</i>	0.3098,0.3098,0.3098,90,90,90	b.c.c. family	-	10.33	X	1502
Au-Li	Li _{1.5} Au ₄	Cu ₁₅ Si ₄ ,cI76,220	<i>I-43d</i>	1.0833,1.0833,1.0833,90,90,90	-	-	4.66	X	1502
Au-Li	Li ₂ Au ht	* ₂ h**,*	-	0.723,0.723,0.277,90,90,120	-	-	-	N	1502
Au-Li	Li ₃ Au	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.6302,0.6302,0.6302,90,90,90	fluorite family	-	5.78	X	1502
Au-Li	Li ₄ Au ₅ ht	* ₂ h**,*	-	0.81,0.81,0.79,90,90,120	-	-	-	N	1502
Au-Lu	AuLu	CsCl,cP2,221	<i>Pm-3m</i>	0.34955,0.34955,0.34955,90,90,90	b.c.c. family	-	14.46	X	5891
Au-Lu	AuLu ₂	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.69062,0.48155,0.87024,90,90,90	-	-	12.55	X	5891
Au-Lu	Au _{0.93} Lu _{0.07}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.4115,0.4115,0.4115,90,90,90	close-packed structure	-	18.63	X	2747
Au-Lu	Au ₂ Lu	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.36228,0.36228,0.8873,90,90,90	b.c.c. family	-	16.22	X	5891
Au-Lu	Au ₃ Lu ht	Cu ₃ Ti,oP8,59	<i>Pmmn</i>	0.4921,0.5962,0.5072,90,90,90	close-packed structure	-	17.09	X	5891
Au-Lu	Au ₄ Lu	MoNi ₄ ,tI10,87	<i>I4/m</i>	0.66239,0.66239,0.41165,90,90,90	close-packed structure	-	17.70	X	5891
Au-Mg	MgAu	CsCl,cP2,221	<i>Pm-3m</i>	0.327,0.327,0.327,90,90,90	b.c.c. family	white	10.51	X	17205
Au-Mg	MgAu ₃ Au ⁺	MgAu ₃ ,oS64,63	<i>Cmcm</i>	0.5747,1.995,0.9437,90,90,90	close-packed structure	-	15.11	X	2793

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Au-Mg	MgAu ₃ Mg ⁺	MgAu ₃ , oS160,63	<i>Cmcm</i>	0.574, 1.983, 2.359, 90, 90, 90	close-packed structure	-	15.22	X	2793
Au-Mg	Mg _{0.142} Au _{0.858}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.4073, 0.4073, 0.4073, 90, 90, 90	close-packed structure	-	16.95	X	54049
Au-Mg	Mg _{0.8} Au _{3.2} ht	ZrAl ₃ , tI16, 139	<i>I4/mmm</i>	0.4073, 0.4073, 1.63, 90, 90, 90	close-packed structure	-	15.96	A	2793
Au-Mg	Mg _{0.999} Au _{0.001}	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.32022, 0.32022, 0.51992, 90, 90, 120	close-packed structure	-	1.76	X	192
Au-Mg	Mg _{1.3} Au _{4.1} rt	Mg _{1.3} Au _{4.1} , hP108, 193	<i>P6₃/mcm</i>	1.4927, 1.4927, 0.9441, 90, 90, 120	close-packed structure	-	15.30	X	3727
Au-Mg	Mg ₂ Au	Mg ₂ Au, oP108, 62	<i>Pnma</i>	1.8328, 1.3561, 0.8253, 90, 90, 90	-	-	7.16	X	17205
Au-Mg	Mg ₃ Au	Cu ₃ P, hP24, 185	<i>P6₃cm</i>	0.80594, 0.80594, 0.84801, 90, 90, 120	-	-	5.64	X	27290
Au-Mn	AuMn rt Mn ⁺	AuMn, oP2, 47	<i>Pmmm</i>	0.3140, 0.3176, 0.3284, 90, 90, 90	-	-	12.77	X	1091
Au-Mn	AuMn ₂ rt	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.3328, 0.3328, 0.8539, 90, 90, 90	b.c.c. family	-	10.78	X	4841
Au-Mn	AuMn ₃ rt	AuMn ₃ , tP12, 123	<i>P4/mmm</i>	0.4706, 0.4706, 0.8539, 90, 90, 90	b.c.c. family	-	9.53	X	2426
Au-Mn	Au _{0.52} Mn _{0.48} rt	* ₁ ** ₂ *	-	0.3262, 0.3262, 0.3099, 90, 90, 90	-	-	-	N	528
Au-Mn	Au _{0.75} Mn _{0.25} ht	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.40591, 0.40591, 0.40591, 90, 90, 90	close-packed structure	-	16.04	X	8095
Au-Mn	Au _{0.76} Mn _{0.24} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.28578, 0.28578, 0.47297, 90, 90, 120	close-packed structure	-	16.17	X	1523
Au-Mn	Au _{0.8} Mn _{1.2} ht	CsCl ₂ CP2, 221	<i>Pm-3m</i>	0.3194, 0.3194, 0.3194, 90, 90, 90	b.c.c. family	-	11.39	X	528
Au-Mn	Au _{1.1} Mn ₃	Au _{1.1} Mn ₃ , mP28, 14	<i>P12₁/c1</i>	1.26, 0.4, 0.89, 90, 98, 2, 90	-	-	17.44	X	14650
Au-Mn	Au _{1.1} Mn ₄ rt	* ₁ mS810, 8	<i>C1m1</i>	1.4767, 1.4359, 6.368, 90, 90, 41, 90	-	-	-	N	7829
Au-Mn	Au ₂ Mn rt	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.3363, 0.3363, 0.8592, 90, 90, 90	b.c.c. family	-	15.34	X	1021
Au-Mn	Au ₃ Mn rt	SrPb ₃ , tP4, 123	<i>P4/mmm</i>	0.40418, 0.40418, 0.40645, 90, 90, 90	close-packed structure	-	16.15	X	2359
Au-Mn	Au ₄ Mn rt	MoNi ₄ , tI10, 87	<i>I4/m</i>	0.645, 0.645, 0.403, 90, 90, 90	close-packed structure	-	16.70	X	1223
Au-Mn	Au ₅ Mn ₂ rt	Au ₅ Mn ₂ , mS14, 12	<i>C12/m1</i>	0.9188, 0.3954, 0.6479, 90, 97.56, 90	close-packed structure	-	15.58	X	2029
Au-Mo	Au _{0.11} Mo _{0.89}	W ₂ c12, 229	<i>Im-3m</i>	0.31467, 0.31467, 0.31467, 90, 90, 90	b.c.c. family	-	11.41	X	504
Au-Mo	Au _{0.99} Mo _{0.01}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.41003, 0.41003, 0.41003, 90, 90, 90	close-packed structure	-	18.88	X	504
Au-Na	NaAu ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7815, 0.7815, 0.7815, 90, 90, 90	Friauf-Laves phase	golden	11.60	X	27315
Au-Na	Na ₂ Au	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.72817, 0.72817, 0.54784, 90, 90, 90	-	-	5.56	X	58058
Au-Na	Na ₃ Au hp1	Cu ₃ P, hP24, 185	<i>P6₃cm</i>	0.87488, 0.87488, 0.9077, 90, 90, 120	-	-	4.40	X	58058
Au-Na	Na ₃ Au hp2	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.69948, 0.69948, 0.69948, 90, 90, 90	fluorite family	-	5.16	X	58058
Au-Nb	Au _{0.3} Nb _{0.7} ht	W ₂ c12, 229	<i>Im-3m</i>	0.3275, 0.3275, 0.3275, 90, 90, 90	b.c.c. family	-	11.74	X	14178
Au-Nb	Au _{0.8} Nb _{0.2}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.4077, 0.4077, 0.4077, 90, 90, 90	close-packed structure	-	17.27	X	7680
Au-Nb	Au _{1.02} Nb _{2.98} rt	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.5192, 0.5192, 0.5192, 90, 90, 90	Frank-Kasper phase	-	11.34	X	34572
Au-Nb	Au ₂ Nb rt	Hg ₂ U, hP3, 191	<i>P6/mmm</i>	0.463, 0.463, 0.273, 90, 90, 120	AlB ₂ family	-	15.95	X	1441
Au-Nb	Au ₂ Nb ₃ rt	Au ₂ Nb ₃ , tI10, 139	<i>I4/mmm</i>	0.3391, 0.3391, 1.518, 90, 90, 90	b.c.c. family	-	12.80	X	34572
Au-Nb	Au _{2.25} Nb _{2.75} (N)	Mg ₃ Ru ₂ , cP20, 213	<i>P4₃32</i>	0.7092, 0.7092, 0.7092, 90, 90, 90	-	-	13.01	X	34572
Au-Nd	AuNd ht1	TiI ₂ , oS8, 63	<i>Cmcm</i>	0.384, 1.107, 0.47, 90, 90, 90	CrB(TiI)-FeB	-	11.34	X	5891
Au-Nd	AuNd ht2	CsCl ₂ CP2, 221	<i>Pm-3m</i>	0.3659, 0.3659, 0.3659, 90, 90, 90	b.c.c. family	-	11.57	X	1865
Au-Nd	AuNd rt	FeB-b, oP8, 62	<i>Pnma</i>	0.732, 0.461, 0.589, 90, 90, 90	CrB(TiI)-FeB	-	11.40	X	5891
Au-Nd	AuNd ₃	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.7213, 0.5025, 0.9235, 90, 90, 90	-	-	9.63	X	5891
Au-Nd	Au ₃₆ Nd ₁₇ ht	Au ₃₆ Nd ₁₇ , tP106, 129	<i>P4/nmm</i>	1.5835, 1.5835, 0.9278, 90, 90, 90	-	-	13.62	X	29647
Au-Nd	Au ₅₁ Nd ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	<i>P6/m</i>	1.27362, 1.27362, 0.92741, 90, 90, 120	-	-	15.38	X	5891
Au-Nd	Au ₆ Nd	Au ₆ Pr, mS28, 15	<i>C12/c1</i>	0.774, 0.772, 0.907, 90, 100, 1.90	-	-	16.51	A	7774
Au-Ni	Au _{0.08} Ni _{0.92}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.3584, 0.3584, 0.3584, 90, 90, 90	close-packed structure	-	10.07	X	16054
Au-Ni	Au ₃ Ni	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4, 0.4, 0.4, 90, 90, 90	close-packed structure	-	16.86	X	51470
Au-O	Au ₂ O ₃	Au ₂ O ₃ , oF40, 43	<i>Fdd2</i>	1.0520, 1.2827, 0.3838, 90, 90, 90	-	brown	11.34	X	11936
Au-O	Au ₂ O ₂ tf	Au ₂ O ₂ , oS20, 63	<i>Cmcm</i>	0.528, 0.9145, 0.675, 90, 90, 90	-	-	12.69	X	880
Au-P	Au ₂ P ₃ m	Au ₂ P ₃ , mS20, 12	<i>C12/m1</i>	0.5863, 1.4439, 0.4674, 90, 108.39, 90	-	black	8.61	X	12058
Au-P	Au ₂ P ₃ prec	* ₁ hP20, *	-	0.613, 0.613, 1.108, 90, 90, 120	-	gray	-	N	6746
Au-Pb	AuPb ₂	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.7338, 0.7338, 0.5658, 90, 90, 90	-	gray silver	13.33	X	6603
Au-Pb	AuPb ₃ ht	V ₃ Si, tI32, 121	<i>I-42m</i>	1.1959, 1.1959, 0.5877, 90, 90, 90	-	-	12.94	X	6058
Au-Pb	Au _{0.0009} Pb _{0.9991}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.49503, 0.49503, 0.49503, 90, 90, 90	close-packed structure	-	11.34	X	12495
Au-Pb	Au ₂ Pb	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7911, 0.7911, 0.7911, 90, 90, 90	hunchunite	-	16.13	X	69
Au-Pd	Au _{0.67} Pd _{0.33} ht	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.4002, 0.4002, 0.4002, 90, 90, 90	close-packed structure	-	17.31	X	50390
Au-Pr	AuPr ht1	TiI ₂ , oS8, 63	<i>Cmcm</i>	0.387, 1.11, 0.472, 90, 90, 90	CrB(TiI)-FeB	-	11.07	X	5891
Au-Pr	AuPr ht2	CsCl ₂ CP2, 221	<i>Pm-3m</i>	0.368, 0.368, 0.368, 90, 90, 90	b.c.c. family	-	11.26	X	1865
Au-Pr	AuPr rt	FeB-b, oP8, 62	<i>Pnma</i>	0.738, 0.463, 0.59, 90, 90, 90	CrB(TiI)-FeB	-	11.13	X	5891
Au-Pr	AuPr ₂	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.721, 0.504, 0.925, 90, 90, 90	-	-	9.46	X	6060
Au-Pr	Au ₂ Pr rt	KHg ₂ , oI12, 74	<i>Imma</i>	0.4672, 0.704, 0.8178, 90, 90, 90	AlB ₂ family	-	13.21	X	5891
Au-Pr	Au ₃₆ Pr ₁₇ ht	Au ₃₆ Nd ₁₇ , tP106, 129	<i>P4/nmm</i>	1.5955, 1.5955, 0.9348, 90, 90, 90	-	-	13.24	A	52879
Au-Pr	Au ₄ Pr ₃	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.381, 1.381, 0.6131, 90, 90, 120	b.c.c. family	-	11.91	A	52879
Au-Pr	Au ₅₁ Pr ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	<i>P6/m</i>	1.2769, 1.2769, 0.9305, 90, 90, 120	-	-	15.19	X	5891
Au-Pr	Au ₆ Pr	Au ₆ Pr, mS28, 15	<i>C12/c1</i>	0.7765, 0.7745, 0.9076, 90, 100.3, 90	-	-	16.36	X	7774
Au-Pt	Au _{0.6} Pt _{0.4}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.401, 0.401, 0.401, 90, 90, 90	close-packed structure	-	20.21	X	51730
Au-Pu	Au ₅₁ Pu ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	<i>P6/m</i>	1.271, 1.271, 0.921, 90, 90, 120	-	-	17.35	A	3637
Au-Rb	RbAu	CsCl ₂ CP2, 221	<i>Pm-3m</i>	0.4098, 0.4098, 0.4098, 90, 90, 90	b.c.c. family	black	6.81	X	28052
Au-Rb	RbAu ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5762, 0.5762, 0.4442, 90, 90, 120	-	green	13.92	X	27316
Au-Rb	Rb ₂ Au ₃	K ₂ Au ₃ , oI10, 71	<i>Immm</i>	0.4942, 0.5442, 1.0601, 90, 90, 90	-	gray silver	8.87	X	28751
Au-Rb	Rb ₃ Au ₇	Rb ₃ Au ₇ , oS20, 65	<i>Cmmm</i>	0.5585, 1.3252, 0.7258, 90, 90, 90	-	gray silver	10.11	X	27350
Au-Rh	Au _{0.05} Rh _{0.95}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.3821, 0.3821, 0.3821, 90, 90, 90	close-packed structure	-	12.81	X	52277
Au-Rh	Au _{0.35} Rh _{0.65} m	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.3911, 0.3911, 0.3911, 90, 90, 90	close-packed structure	-	15.08	X	59689
Au-S	Au ₂ S	Cu ₂ O, cP6, 224	<i>Pn-3m</i>	0.50206, 0.50206, 0.50206, 90, 90, 90	-	brown	11.18	X	31041
Au-Sb	AuSb ₂	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.66583, 0.66583, 0.66583, 90, 90, 90	aurostibite	white galena	9.91	X	2454
Au-Sb	AuSb ₃ m	AuSb ₃ , cI8, 229	<i>Im-3m</i>	0.608, 0.608, 0.608, 90, 90, 90	-	-	8.31	X	1451
Au-Sb	Au _{0.2} Sb _{0.8} m	Po, cP1, 221	<i>Pm-3m</i>	0.2693, 0.2693, 0.2693, 90, 90, 90	-	-	11.63	X	4176
Au-Sb	Au _{0.99} Sb _{0.01}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.4083, 0.4083, 0.4083, 90, 90, 90	close-packed structure	-	19.15	X	243
Au-Sc	AuSc	CsCl ₂ CP2, 221	<i>Pm-3m</i>	0.3369, 0.3369, 0.3369, 90, 90, 90	b.c.c. family	-	10.51	X	33344
Au-Sc	AuSc ₂	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.647, 0.4667, 0.8358, 90, 90, 90	-	-	7.55	A	33344
Au-Sc	Au _{0.95} Sc _{0.05}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.4091, 0.4091, 0.4091, 90, 90, 90	close-packed structure	-	17.93	X	2747
Au-Sc	Au _{15.7} Sc _{55.3}	Au _{15.7} Sc _{55.3} , oI146, 71	<i>Immm</i>	1.436, 1.4476, 1.4833, 90, 90, 90	-	-	6.01	X	33344
Au-Sc	Au ₂ Sc	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.351, 0.351, 0.8728, 90, 90, 90	b.c.c. family	-	13.56	A	33344
Au-Sc	Au ₃ Sc	Cu ₃ Ti, oP8, 59	<i>Pmmn</i>	0.4823, 0.58, 0.5003, 90, 90, 90	close-packed structure	-	15.09	A	33344

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Au-Sc	Au ₄ Sc	MoNi ₄ ,tI10,87	<i>I4/m</i>	0.6546,0.6546,0.4037,90,90,90	close-packed structure	-	15.99	A	33344
Au-Se	AuSe m	AuSe,mS8,12	<i>C12/m1</i>	0.8355,0.3663,0.6262,90,106.03,90	-	black	9.95	X	9772
Au-Se	AuSe tf	NiAs,hP4,194	<i>P6₃/mmc</i>	0.412,0.412,0.539,90,90,120	AlB ₂ family	-	11.57	X	6924
Au-Se	AuSe	AuSe,mS16,12	<i>C12/m1</i>	1.2202,0.3690,0.8433,90,103.15,90	-	black	9.91	X	9772
Au-Si	AuSi ₃ m	* _h ***	-	0.323,0.323,0.511,90,90,120	-	-	-	N	15309
Au-Si	Au ₆₀ Si ₄₀ m	* _c F**	-	1.9503,1.9503,1.9503,90,90,90	-	-	-	N	6669
Au-Si	Au ₆₀ Si ₄₀ m2	* _c P**	-	0.402,0.402,0.402,90,90,90	-	-	-	N	15309
Au-Si	Au ₈₀ Si ₂₀ m1	* _c ***	-	0.675,0.675,0.675,90,90,90	-	-	-	N	6669
Au-Si	Au ₈₀ Si ₂₀ m2	* _c I10,*	-	0.5558,0.5558,0.5558,90,90,90	-	-	-	N	13679
Au-Si	Au ₈₀ Si ₂₀ m3	* _o S*,*	-	0.5543,0.7872,2.3633,90,90,90	-	-	-	N	21836
Au-Si	Au ₈₅ Si ₁₅ m	* _c F**	-	0.7844,0.7844,0.7844,90,90,90	-	-	-	N	6669
Au-Si	Au ₇ Si ₃ m	* _h ***	-	0.761,0.761,0.922,90,90,120	-	-	-	N	15309
Au-Si	Au ₉₇ Si _{3.03} m	Cu ₂ Zn ₈ ,cI52,217	<i>I-43m</i>	0.96,0.96,0.96,90,90,90	γ-brass	-	15.38	A	22162
Au-Sm	AuSm ht1	TlI ₂ O ₈ ,63	<i>Cmcm</i>	0.38,1.1,0.466,90,90,90	CrB(III)-FeB	-	11.85	X	5891
Au-Sm	AuSm ht2	CsCl,cP2,221	<i>Pm-3m</i>	0.3621,0.3621,0.3621,90,90,90	b.c.c. family	-	12.15	X	1865
Au-Sm	AuSm rt	FeB-b,oP8,62	<i>Pnma</i>	0.725,0.457,0.583,90,90,90	CrB(III)-FeB	-	11.95	X	5891
Au-Sm	AuSm ₂	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.7139,0.4982,0.9157,90,90,90	-	-	10.15	X	5891
Au-Sm	Au ₁₀ Sm ₇	* _t I136,142	<i>I4₁/acd</i>	1.04,1.04,2.8254,90,90,90	-	-	-	N	7322
Au-Sm	Au ₂ Sm ht	* _t ***	-	1.045,1.045,2.83,90,90,90	-	-	-	N	5514
Au-Sm	Au ₃ Sm rt	Cu ₃ Ti,oP8,59	<i>Pmmn</i>	0.4966,0.6397,0.5068,90,90,90	close-packed structure	-	15.29	A	7322
Au-Sm	Au ₃₆ Sm ₁₇	Au ₃₆ Nd ₁₇ ,tP106,129	<i>P4/nmm</i>	1.57,1.57,0.928,90,90,90	-	-	14.01	A	5891
Au-Sm	Au ₅₁ Sm ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.2673,1.2673,0.9232,90,90,120	-	-	15.71	X	5891
Au-Sm	Au ₆ Sm	Au ₆ Sm,tP56,138	<i>P4₂/ncm</i>	1.0395,1.0395,0.9706,90,90,90	-	-	16.87	X	7860
Au-Sm	Au ₇ Sm ₆	* _h R39,166	<i>R-3m</i>	1.3607,1.3607,0.6039,90,90,120	-	-	-	N	7322
Au-Sn	AuSn	NiAs,hP4,194	<i>P6₃/mmc</i>	0.43218,0.43218,0.5523,90,90,120	yuanjiangite	-	11.73	X	1820
Au-Sn	AuSn ₂	AuSn ₂ ,oP24,61	<i>Pbca</i>	0.6898,0.7011,1.1773,90,90,90	-	gray	10.13	X	48715
Au-Sn	AuSn ₄ ht	PtSn ₄ ,oS20,68	<i>Ccce</i>	0.652,1.173,0.652,90,90,90	-	-	8.95	A	40734
Au-Sn	AuSn ₄ rt	PtPb ₄ ,tP10,125	<i>P4/nbm</i>	0.663,0.663,0.592,90,90,90	-	-	8.57	X	32170
Au-Sn	Au ₀₈ Sn _{0.92} m	(Hg ₀ ,Sn _{0.9}),hP1,191	<i>P6/mmm</i>	0.3177,0.3177,0.2957,90,90,120	-	-	8.03	X	2908
Au-Sn	Au ₈₈ Sn _{0.12} ht	Mg,hP2,194	<i>P6₃/mmc</i>	0.29115,0.29115,0.4785,90,90,120	close-packed structure	-	17.73	X	33258
Au-Sn	Au ₉₁ Sn _{0.09} ht	Nd,hP4,194	<i>P6₃/mmc</i>	0.2901,0.2901,0.9524,90,90,120	close-packed structure	-	18.17	X	25597
Au-Sn	Au ₉₇₀ Sn _{0.030}	Cu,cF4,225	<i>Fm-3m</i>	0.40897,0.40897,0.40897,90,90,90	close-packed structure	-	18.90	X	33258
Au-Sn	Au ₃ Sn _{0.4} ht	TiNi ₃ ,hP16,194	<i>P6₃/mmc</i>	0.5808,0.5808,0.9536,90,90,120	close-packed structure	-	18.04	A	1124
Au-Sn	Au ₅ Sn rt	Au ₅ Sn,hR18,155	<i>R32</i>	0.5092,0.5092,1.4333,90,90,120	close-packed structure	-	17.08	X	8434
Au-Sn	Au ₉ Sn ₄ m	Cu ₂ Zn ₈ ,cI52,217	<i>I-43m</i>	0.98,0.98,0.98,90,90,90	γ-brass	-	15.86	A	4212
Au-Sr	SrAu	SrAu,mP40,11	<i>P12₁/m1</i>	0.6192,0.4697,4.013,90,94,21.90	CrB(III)-FeB	-	8.12	X	18087
Au-Sr	SrAu ₂	KHg ₂ ,oI12,74	<i>Imma</i>	0.4732,0.7484,0.8165,90,90,90	AlB ₂ family	gray green	11.06	X	31787
Au-Sr	SrAu ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5627,0.5627,0.4616,90,90,120	-	-	14.07	X	1287
Au-Sr	Sr ₃ Au ₂ rt	Er ₃ Ni ₂ ,hR45,148	<i>R-3</i>	0.9604,0.9604,1.836,90,90,120	-	-	6.69	X	18336
Au-Sr	Sr ₇ Au ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃/mc</i>	1.107,1.107,0.7161,90,90,120	-	-	5.26	X	17297
Au-Ta	Au _{0.33} Ta _{0.67}	(Cr _{0.40} Fe _{0.51}),tP30,136	<i>P4₂/mnm</i>	1.006,1.006,0.523,90,90,90	Frank-Kasper phase	-	17.53	A	1512
Au-Ta	Au _{0.5} Ta _{0.5}	Pa,tI2,139	<i>I4/mmm</i>	0.338,0.338,0.305,90,90,90	b.c.c. family	-	18.01	X	1512
Au-Ta	Au _{0.75} Ta _{0.25}	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.5224,0.5224,0.5224,90,90,90	Frank-Kasper phase	-	17.14	X	5500
Au-Ta	Au _{0.9} Ta _{0.1}	Cu,cF4,225	<i>Fm-3m</i>	0.4085,0.4085,0.4085,90,90,90	close-packed structure	-	19.04	X	1512
Au-Tb	AuTb ht	CsCl,cP2,221	<i>Pm-3m</i>	0.359,0.359,0.359,90,90,90	b.c.c. family	-	12.77	X	37475
Au-Tb	AuTb rt	TlI ₂ O ₈ ,63	<i>Cmcm</i>	0.373,1.09,0.462,90,90,90	CrB(III)-FeB	-	12.59	X	5891
Au-Tb	AuTb ₂	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.7078,0.4929,0.8938,90,90,90	-	-	10.97	X	5891
Au-Tb	Au _{0.987} Tb _{0.013}	Cu,cF4,225	<i>Fm-3m</i>	0.4088,0.4088,0.4088,90,90,90	close-packed structure	-	19.10	X	2747
Au-Tb	Au ₁₀ Tb ₇	Au ₁₀ Gd ₇ ,tI136,142	<i>I4₁/acd</i>	1.028,1.028,2.793,90,90,90	-	-	13.87	A	37475
Au-Tb	Au ₂ Tb	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3707,0.3707,0.8987,90,90,90	b.c.c. family	-	14.87	X	4012
Au-Tb	Au ₃ Tb ht	Cu ₃ Ti,oP8,59	<i>Pmmn</i>	0.4992,0.6115,0.5096,90,90,90	close-packed structure	-	16.01	X	5891
Au-Tb	Au ₄ Tb ₃	Pu ₃ Pd ₄ ,hR42,148	<i>R-3</i>	1.344,1.344,0.5973,90,90,120	b.c.c. family	-	13.49	A	37475
Au-Tb	Au ₅₁ Tb ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.2579,1.2579,0.9166,90,90,120	-	-	16.22	X	5891
Au-Tb	Au ₆ Tb	Au ₆ Sm,tP56,138	<i>P4₂/ncm</i>	1.032,1.032,0.969,90,90,90	-	-	17.26	A	5891
Au-Te	AuTe ₂ hp	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.4116,0.4116,0.5026,90,90,120	CdI ₂ -PbI ₂ polytype	-	10.18	X	27019
Au-Te	AuTe ₂ rt	AuTe ₂ ,mS6,12	<i>C12/m1</i>	0.7189,0.4407,0.5069,90,90,04.90	calaverite	yellow	9.35	X	27019
Au-Te	Au _{0.38} Te _{0.62} m	Po,cP1,221	<i>Pm-3m</i>	0.296,0.296,0.296,90,90,90	-	-	9.86	X	1638
Au-Te	Au ₂ Te ₄ (Ag) kre	(Ag _{0.33} Au _{0.67})AuTe ₄ ,oP24,28	<i>Pma2</i>	1.651,0.88,0.445,90,90,90	krennerite	-	9.29	X	107
Au-Te	Au _{22.7} Te _{36.4}	Au _{22.7} Te _{36.4} ,aP61,1	<i>P1</i>	1.0783,1.2123,1.342,108.03,104.36,97.45	montbrayite	white yellow	9.61	X	25544
Au-Th	AuTh	TlI ₂ O ₈ ,63	<i>Cmcm</i>	0.381,1.1362,0.4587,90,90,90	CrB(III)-FeB	-	14.35	A	18980
Au-Th	AuTh ₂	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.7462,0.7462,0.5989,90,90,90	-	-	13.17	X	6603
Au-Th	Au ₂ Th	Hg ₂ U,hP3,191	<i>P6/mmm</i>	0.4747,0.4747,0.3421,90,90,120	AlB ₂ family	-	15.57	X	18980
Au-Th	Au ₂ Th ₃	* _c ***	-	1.12,1.12,1.12,90,90,90	-	-	-	N	18980
Au-Th	Au ₄ Th ₃	Pu ₃ Pd ₄ ,hR42,148	<i>R-3</i>	1.3732,1.3732,0.6129,90,90,120	b.c.c. family	-	14.77	A	18980
Au-Th	Au ₅₁ Th ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.2808,1.2808,0.926,90,90,120	-	-	16.78	A	26435
Au-Ti	AuTi ht1	AuCd,oP4,51	<i>Pmma</i>	0.463,0.2944,0.488,90,90,90	close-packed structure	-	12.23	A	1676
Au-Ti	AuTi ht2	CsCl,cP2,221	<i>Pm-3m</i>	0.3254,0.3254,0.3254,90,90,90	b.c.c. family	-	11.80	X	5209
Au-Ti	AuTi rt	CuTi,tP4,129	<i>P4/nmm</i>	0.3335,0.3335,0.6028,90,90,90	b.c.c. family	-	12.13	A	1676
Au-Ti	AuTi ₃ rt	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.50974,0.50974,0.50974,90,90,90	Frank-Kasper phase	-	8.54	X	3734
Au-Ti	AuTi ₃ stab	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4096,0.4096,0.4096,90,90,90	close-packed structure	-	8.23	X	2034
Au-Ti	Au _{0.35} Ti _{0.65} m	* _h P**	-	0.327,0.327,0.526,90,90,120	-	-	-	N	16271
Au-Ti	Au _{0.88} Ti _{0.12}	Cu,cF4,225	<i>Fm-3m</i>	0.4065,0.4065,0.4065,90,90,90	close-packed structure	-	17.71	X	1406
Au-Ti	Au ₂ Ti	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.343,0.343,0.8538,90,90,90	b.c.c. family	-	14.61	X	1091
Au-Ti	Au ₄ Ti	MoNi ₄ ,tI10,87	<i>I4/m</i>	0.646,0.646,0.3975,90,90,90	close-packed structure	-	16.73	A	1406
Au-Tl	AuTl ₂	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.726,0.726,0.56,90,90,90	-	-	13.63	A	6603
Au-Tl	Au _{0.99} Tl _{0.01}	Cu,cF4,225	<i>Fm-3m</i>	0.4075,0.4075,0.4075,90,90,90	close-packed structure	-	19.34	X	252
Au-Tm	AuTm ht	CsCl,cP2,221	<i>Pm-3m</i>	0.3516,0.3516,0.3516,90,90,90	b.c.c. family	-	13.98	X	1865
Au-Tm	AuTm rt	TlI ₂ O ₈ ,63	<i>Cmcm</i>	0.362,1.078,0.457,90,90,90	CrB(III)-FeB	-	13.63	X	5891

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a\beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Au-Tm	AuTm ₂	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.6958, 0.4834, 0.8767, 90, 90, 90	-	-	12.05	X	5891
Au-Tm	Au _{0.94} Tm _{0.06}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.4112, 0.4112, 0.4112, 90, 90, 90	close-packed structure	-	18.66	X	2747
Au-Tm	Au ₁₀ Tm ₇	Au ₁₀ Gd ₇ , tI136, 142	<i>I4₁/acd</i>	1.008, 1.008, 2.748, 90, 90, 90	-	-	15.00	A	40601
Au-Tm	Au ₂ Tm	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.3644, 0.3644, 0.8896, 90, 90, 90	b.c.c. family	-	15.83	X	5232
Au-Tm	Au ₃ Tm	Cu ₃ Ti, oP8, 59	<i>Pmmn</i>	0.4943, 0.6016, 0.5071, 90, 90, 90	close-packed structure	-	16.73	X	5891
Au-Tm	Au ₄ Tm	MoNi ₄ , tI10, 87	<i>I4/m</i>	0.6634, 0.6634, 0.41413, 90, 90, 90	close-packed structure	-	17.44	X	5891
Au-U	Au ₂ U	Hg ₂ U, hP3, 191	<i>P6/mmm</i>	0.4756, 0.4756, 0.311, 90, 90, 120	AlB ₂ family	gray faint	17.23	X	31999
Au-U	Au ₅₁ U ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	<i>P6/m</i>	1.26521, 1.26521, 0.91381, 90, 90, 120	-	white	17.54	X	23394
Au-V	AuV ₃ rt	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.48813, 0.48813, 0.48813, 90, 90, 90	Frank-Kasper phase	-	9.99	X	3734
Au-V	AuV ₃ stab	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3964, 0.3964, 0.3964, 90, 90, 90	close-packed structure	-	9.33	X	2034
Au-V	Au _{0.25} V _{0.75} ht	W, cI2, 229	<i>Im-3m</i>	0.3063, 0.3063, 0.3063, 90, 90, 90	b.c.c. family	-	10.11	X	9224
Au-V	Au _{0.8} V _{0.2} ht	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.4047, 0.4047, 0.4047, 90, 90, 90	close-packed structure	-	16.81	X	13357
Au-V	Au ₂ V rt	Au ₂ V, oS12, 63	<i>Cmcm</i>	0.8482, 0.4810, 0.4684, 90, 90, 90	close-packed structure	-	15.46	X	1735
Au-V	Au ₄ V rt	MoNi ₄ , tI10, 87	<i>I4/m</i>	0.6361, 0.6361, 0.4009, 90, 90, 90	close-packed structure	-	17.17	X	47705
Au-Y	AuY	CsCl, cP2, 221	<i>Pm-3m</i>	0.3559, 0.3559, 0.3559, 90, 90, 90	b.c.c. family	-	10.53	X	1865
Au-Y	AuY ₂	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.7115, 0.4933, 0.8908, 90, 90, 90	-	gray silver	7.96	X	56601
Au-Y	Au ₂ Y	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.3688, 0.3688, 0.8949, 90, 90, 90	b.c.c. family	-	13.17	A	3983
Au-Y	Au ₂ Y ₃	U ₃ Si ₂ , tP10, 127	<i>P4/mbm</i>	0.8059, 0.8059, 0.3907, 90, 90, 90	-	gray silver	8.65	X	56601
Au-Y	Au ₃ Y	Cu ₃ Ti, oP8, 59	<i>Pmmn</i>	0.5084, 0.6096, 0.4968, 90, 90, 90	close-packed structure	-	14.66	A	3983
Au-Yb	AuYb ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.3584, 0.3584, 0.3584, 90, 90, 90	b.c.c. family	-	13.35	X	4595
Au-Yb	AuYb rt	FeB-b, oP8, 62	<i>Pnma</i>	0.743, 0.459, 0.5849, 90, 90, 90	CrB(TiI)-FeB	-	12.32	X	5891
Au-Yb	AuYb ₂	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.7808, 0.457, 0.9409, 90, 90, 90	-	-	10.74	X	4595
Au-Yb	Au _{0.94} Yb _{0.06}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.41082, 0.41082, 0.41082, 90, 90, 90	close-packed structure	-	18.73	X	2747
Au-Yb	Au ₂ Yb	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.3622, 0.3622, 0.88584, 90, 90, 90	b.c.c. family	-	16.20	X	5232
Au-Yb	Au ₂ Yb	Cu ₃ Ti, oP8, 59	<i>Pmmn</i>	0.4928, 0.598, 0.5077, 90, 90, 90	close-packed structure	-	16.96	X	4595
Au-Yb	Au ₃ Yb ₅	Cr ₃ B ₂ , tI32, 140	<i>I4/mcm</i>	0.7793, 0.7793, 1.426, 90, 90, 90	-	-	11.17	X	4595
Au-Yb	Au ₃ Yb ₇	Th ₇ Fe ₃ , hP20, 186	<i>P6₃/mc</i>	1.0372, 1.0372, 0.6514, 90, 90, 120	-	-	9.86	X	4595
Au-Yb	Au ₄ Yb	MoNi ₄ , tI10, 87	<i>I4/m</i>	0.6628, 0.6628, 0.4128, 90, 90, 90	close-packed structure	-	17.60	X	4595
Au-Yb	Au ₄ Yb ₅	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.7752, 1.5029, 0.788, 90, 90, 90	-	-	11.96	X	4595
Au-Zn	AuZn ₃ rt	UH ₃ , cP32, 223	<i>Pm-3n</i>	0.7903, 0.7903, 0.7903, 90, 90, 90	-	-	10.58	X	997
Au-Zn	Au _{0.05} Zn _{0.95}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.27078, 0.27078, 0.47534, 90, 90, 120	close-packed structure	-	7.92	X	2091
Au-Zn	Au _{0.78} Zn _{0.22}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.4034, 0.4034, 0.4034, 90, 90, 90	close-packed structure	-	17.00	X	243
Au-Zn	Au _{0.81} Zn _{0.19}	* ₀ * ₄ *, *	-	0.4026, 0.4034, 0.4062, 90, 90, 90	-	-	17.31	N	895
Au-Zn	Au _{1.04} Zn _{0.96} rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.31426, 0.31426, 0.31426, 90, 90, 90	b.c.c. family	-	14.32	X	55797
Au-Zn	Au _{2.5} Zn _{1.5} m	Au(Au _{0.5} Zn _{0.5}) ₃ , oP16, 26	<i>Pmc2₁</i>	0.6345, 0.8971, 0.4486, 90, 90, 90	b.c.c. family	-	15.36	X	2659
Au-Zn	Au ₃ Zn rt Au ⁺	Au ₃ Zn, tI64, 142	<i>I4₁/acd</i>	0.5586, 0.5586, 3.34, 90, 90, 90	close-packed structure	-	16.73	X	1658
Au-Zn	Au ₃ Zn rt Zn ⁺	Au ₃ Zn, oS32, 64	<i>Cmce</i>	1.66035, 0.55813, 0.55813, 90, 90, 90	close-packed structure	-	16.86	X	1658
Au-Zn	Au _{36.30} Zn _{75.06}	Au _{36.30} Zn _{75.06} , hP228, 157	<i>P31m</i>	2.2641, 2.2641, 0.7972, 90, 90, 120	-	gray silver	11.32	X	61232
Au-Zn	Au ₅ Zn ₃ rt	Au ₅ Zn ₃ , oI128, 72	<i>Ibam</i>	0.551, 1.102, 3.362, 90, 90, 90	close-packed structure	-	15.37	X	998
Au-Zn	Au _{9.16} Zn _{16.24} ht	Cr ₄ (C ₇₀ Se ₄₆ Al _{0.44}) ₉ Al ₁₂ , hR78, 160	<i>R3m</i>	1.31345, 1.31345, 0.81103, 90, 90, 120	γ-brass	gray silver	11.78	X	61232
Au-Zr	AuZr ht	AuZr, mP32, 10	<i>P12/m1</i>	1.1695, 0.4828, 1.1719, 90, 107, 09, 90	-	-	12.11	X	43978
Au-Zr	AuZr rt	AuZr, aP32, 2	<i>P-1</i>	0.4841, 1.1507, 1.1537, 75, 18, 87, 59, 87, 42	-	-	12.34	X	43978
Au-Zr	AuZr ₂ rt	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.328, 0.328, 1.16, 90, 90, 90	close-packed structure	-	10.10	X	1717
Au-Zr	AuZr ₃	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.5488, 0.5488, 0.5488, 90, 90, 90	Frank-Kasper phase	-	9.46	X	33343
Au-Zr	Au _{0.925} Zr _{0.075}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.4085, 0.4085, 0.4085, 90, 90, 90	close-packed structure	-	18.42	X	293
Au-Zr	Au ₁₀ Zr ₇ rt	* ₁ tI34, *	-	0.6949, 0.6949, 1.3272, 90, 90, 90	-	-	-	N	33343
Au-Zr	Au ₂ Zr	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.3555, 0.3555, 0.876, 90, 90, 90	b.c.c. family	-	14.55	A	33343
Au-Zr	Au ₂ Zr ₂ ht2	U ₃ (U _{0.5} Mo _{0.5}) ₃ , tP4, 123	<i>P4/mmm</i>	0.4835, 0.4835, 0.3416, 90, 90, 90	close-packed structure	-	11.99	X	43978
Au-Zr	Au ₃ Zr	Cu ₃ Ti, oP8, 59	<i>Pmmn</i>	0.479, 0.608, 0.489, 90, 90, 90	close-packed structure	-	15.91	A	33343
Au-Zr	Au ₄ Zr	Au ₄ Zr, oP20, 62	<i>Pnma</i>	0.5006, 0.4845, 1.4294, 90, 90, 90	close-packed structure	yellow	16.84	X	1735
B-Ba	BaB ₆	CaB ₆ , cP7, 221	<i>Pm-3m</i>	0.42615, 0.42615, 0.42615, 90, 90, 90	-	black	4.34	X	39902
B-Be	Be _{0.167} B	B ₂ IP96, 76	<i>P4₁</i>	1.016, 1.016, 1.428, 90, 90, 90	-	red brick	2.64	F	1390
B-Be	Be _{1.6} B _{2.5}	Be _{1.6} B _{2.5} , tP58, 134	<i>P4₂/nnm</i>	0.88557, 0.88557, 0.51157, 90, 90, 90	-	-	2.36	X	44309
B-Be	Be ₂ B ht	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.4663, 0.4663, 0.4663, 90, 90, 90	fluorite family	-	1.89	X	1317
B-Be	Be ₂ B	Be ₂ B, tP10, 129	<i>P4/nnm</i>	0.338, 0.338, 0.706, 90, 90, 90	-	brownish	1.93	X	1729
B-Be	Be _{4.9} B _{13.5}	Be ₃ (Be _{0.5} B _{0.5}) _{12.5} , hP120, 191	<i>P6/mmm</i>	0.97738, 0.97738, 0.95467, 90, 90, 120	-	-	2.40	X	41084
B-Br	BBr	BCl, hR162, 166	<i>R-3m</i>	1.3175, 1.3175, 1.7776, 90, 90, 120	-	red ruby	3.04	X	33640
B-Br	BBr ₃	BCl ₃ , hP8, 176	<i>P6₃/m</i>	0.6406, 0.6406, 0.6864, 90, 90, 120	-	-	3.41	A	257
B-C	BC _{1.6} ht-hp	* ₀ * ₃ *, *	-	0.47943, 0.59181, 0.60517, 90, 90, 90	-	-	6.97	N	47643
B-C	B _{0.026} C _{0.974} gra	C, cF8, 227	<i>Fd-3m</i>	0.35725, 0.35725, 0.35725, 90, 90, 90	-	black	3.49	X	48725
B-C	B _{0.38} C _{0.62} ht-hp	C, cF8, 227	<i>Fd-3m</i>	0.35778, 0.35778, 0.35778, 90, 90, 90	-	-	3.35	X	47643
B-C	B ₁₃ C ₂	B ₁₃ C ₂ , hR45, 166	<i>R-3m</i>	0.55985, 0.55985, 1.20664, 90, 90, 120	-	black	2.50	X	32069
B-C	B ₂₅ C	B ₂₅ C, tP68, 134	<i>P4₂/nnm</i>	0.8753, 0.8753, 0.5093, 90, 90, 90	-	-	2.40	X	9318
B-C	B ₃₀ C ₁₂	* ₀ * ₁₀₂ , *	-	0.508, 0.88, 1.793, 90, 90, 90	-	-	-	N	3987
B-Ca	CaB ₄ (C)	UB ₄ , tP20, 127	<i>P4/mbm</i>	0.70989, 0.70989, 0.41353, 90, 90, 90	-	-	2.66	X	47362
B-Ca	CaB ₆	CaB ₆ , cP7, 221	<i>Pm-3m</i>	0.41525, 0.41525, 0.41525, 90, 90, 90	-	black	2.43	X	28923
B-Ce	CeB ₄	UB ₄ , tP20, 127	<i>P4/mbm</i>	0.72034, 0.72034, 0.41006, 90, 90, 90	-	black	5.72	X	50735
B-Ce	CeB ₆ rt	CaB ₆ , cP7, 221	<i>Pm-3m</i>	0.41429, 0.41429, 0.41429, 90, 90, 90	-	purple dark	4.79	X	50980
B-Cl	BCl cub	BCl, cP96, 205	<i>Pa-3</i>	1.24498, 1.24498, 1.24498, 90, 90, 90	-	blue dark	1.91	X	56568
B-Cl	BCl orth	BCl, oP64, 19	<i>P2₁2₁2₁</i>	0.785, 1.291, 1.364, 90, 90, 90	-	purple	1.78	X	2834
B-Cl	BCl rhom	BCl, hR162, 166	<i>R-3m</i>	1.2596, 1.2596, 1.7001, 90, 90, 120	-	orange yellow	1.78	X	33640
B-Cl	BCl tet	BCl, tP16, 137	<i>P4₂/nmc</i>	0.809, 0.809, 0.5451, 90, 90, 90	-	-	1.72	X	470
B-Cl	BCl ₂	BCl ₂ , oP24, 61	<i>Pbca</i>	0.6281, 0.769, 1.19, 90, 90, 90	-	-	1.89	X	855
B-Cl	BCl ₃ lt	BCl ₃ , hP8, 176	<i>P6₃/m</i>	0.608, 0.608, 0.655, 90, 90, 120	-	-	1.86	X	854
B-Co	CoB	FeB-b, oP8, 62	<i>Pnma</i>	0.52449, 0.30443, 0.39537, 90, 90, 90	CrB(TiI)-FeB	-	7.34	X	64142
B-Co	CoB _{0.02}	NaCl, cF8, 225	<i>Fm-3m</i>	0.35452, 0.35452, 0.35452, 90, 90, 90	rocksalt family	-	8.82	X	38772
B-Co	Co _{0.01} B rhom1	B, hR423, 166	<i>R-3m</i>	1.0944, 1.0944, 2.3834, 90, 90, 120	β-boron family	-	2.46	F	33414
B-Co	Co ₂ B	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.5016, 0.5016, 0.422, 90, 90, 90	-	-	8.05	X	3706

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
B-Co	Co ₂₃ B ₆	Cr ₂₃ C ₆ ,cF116,225	<i>Fm-3m</i>	1.04618,1.04618,1.04618,90,90,90	-	-	8.24	X	53908
B-Co	Co ₃ B	Fe ₃ C-b,pP16,62	<i>Pnma</i>	0.5229,0.6631,0.4432,90,90,90	-	-	8.11	A	16054
B-Co	Co ₅ B ₁₆ hp	Co ₅ B ₁₆ ,oP42,51	<i>Pmma</i>	1.91736,0.29329,0.54886,90,90,90	-	black	5.03	X	63785
B-Cr	CrB B+	MoB,tI16,141	<i>I4₁/amd</i>	0.294,0.294,1.572,90,90,90	-	-	6.14	A	7522
B-Cr	CrB rt	TiI ₁₀ S8,63	<i>Cmcm</i>	0.29782,0.787,0.29346,90,90,90	CrB(TII)-FeB	-	6.07	X	20205
B-Cr	CrB _{0.026} stabl	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.27606,0.27606,0.44154,90,90,120	close-packed structure	-	5.96	F	6019
B-Cr	CrB ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.2975,0.2975,0.307,90,90,120	AlB ₂ family	-	5.20	X	20285
B-Cr	CrB ₄ rt	CrB ₄ ,oI10,71	<i>Immm</i>	0.28717,0.47482,0.54856,90,90,90	-	gray silver	4.23	X	57170
B-Cr	Cr ₂ B	Mg ₂ Cu,oF48,70	<i>Fddd</i>	0.4275,0.7452,1.4795,90,90,90	-	black	6.47	X	52358
B-Cr	Cr ₂ B ₃ (Al)	V ₂ B ₃ ,oS20,63	<i>Cmcm</i>	0.30264,1.8115,0.29542,90,90,90	-	-	5.60	X	20205
B-Cr	Cr _{2.5} B ₁₀₃ rhom1	Cr _{2.5} B _{103.3} ,hR339,166	<i>R-3m</i>	1.09637,1.09637,2.38477,90,90,120	β-boron family	-	2.50	X	5331
B-Cr	Cr ₃ B ₄	Ta ₃ B ₄ ,oI14,71	<i>Immm</i>	0.29516,0.30004,1.3018,90,90,90	-	-	5.74	X	20205
B-Cr	Cr ₃ B ₃	Cr ₃ B ₃ ,tI32,140	<i>I4/mcm</i>	0.546,0.546,1.064,90,90,90	-	-	6.12	X	490
B-Cu	Cu _{3.7} B _{103.9} rhom1	Cu _{4.5} B _{103.9} ,hR399,166	<i>R-3m</i>	1.09703,1.09703,2.38898,90,90,120	β-boron family	-	2.72	X	8198
B-D	B ₅ D ₇	B ₅ H ₇ ,mP96,13	<i>P12/c1</i>	1.23688,0.562,1.423,90,125.016,90	-	colorless	1.12	X	4535
B-Dy	DyB ₁₂ rt	UB ₁₂ ,cF52,225	<i>Fm-3m</i>	0.7493,0.7493,0.7493,90,90,90	-	-	4.61	A	47581
B-Dy	DyB ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.32924,0.32924,0.38517,90,90,120	AlB ₂ family	-	8.46	X	56230
B-Dy	DyB ₄ rt	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.7021,0.7021,0.3972,90,90,90	-	-	6.98	X	10135
B-Dy	DyB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.40998,0.40998,0.40998,90,90,90	-	-	5.48	A	47581
B-Dy	DyB ₆₆	YB ₆₆ ,cF1936,226	<i>Fm-3c</i>	2.3381,2.3381,2.3381,90,90,90	-	-	2.73	A	47581
B-Dy	Dy _{0.56} B ₁₄	Tb _{0.56} B ₁₄ ,mS60,12	<i>C12/m1</i>	1.01023,1.0325,0.5856,90,124.986,90	-	-	3.22	A	39402
B-Er	ErB ₁₂ rt	UB ₁₂ ,cF52,225	<i>Fm-3m</i>	0.74815,0.74815,0.74815,90,90,90	-	-	4.71	A	47581
B-Er	ErB ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.3273,0.3273,0.37835,90,90,120	AlB ₂ family	golden	8.94	X	56230
B-Er	ErB ₄ lt	* ₀ P20,*	-	0.39932,0.70787,0.70789,90,90,90	-	-	-	N	19047
B-Er	ErB ₄ rt	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.7071,0.7071,0.4.90,90,90	-	-	6.99	X	14127
B-Er	ErB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.41165,0.41165,0.41165,90,90,90	-	blue	5.53	A	28786
B-Er	ErB ₆₆	YB ₆₆ ,cF1936,226	<i>Fm-3c</i>	2.3436,2.3436,2.3436,90,90,90	-	-	2.73	A	47581
B-Er	Er _{0.56} B ₁₄	Tb _{0.56} B ₁₄ ,mS60,12	<i>C12/m1</i>	1.00884,1.0309,0.5856,90,125.022,90	-	-	3.26	A	39402
B-Eu	EuB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.41849,0.41849,0.41849,90,90,90	-	gray dark	4.91	X	30160
B-F	BF ₂	BF ₂ ,mP12,14	<i>P12₁/c1</i>	0.4826,0.6530,0.6475,90,124.2.90	-	-	1.92	X	947
B-F	BF ₃ m	BF ₃ ,mP32,14	<i>P12₁/c1</i>	0.4779,1.400,0.7430,90,107.60,90	-	-	1.90	X	14559
B-F	BF ₃	BF ₃ ,aP32,2	<i>P-1</i>	0.4730,0.7374,1.3987,87.21,89.22,72.70	-	white	1.94	X	16778
B-F	B ₁₇ F ₂₇	B ₁₇ F ₂₇ ,aP88,2	<i>P-1</i>	0.7321,1.3176,1.3529,69.364,79.511,81.299	-	colorless	1.94	X	41835
B-F	B ₂ F ₃	B ₂ F ₃ ,mP320,13	<i>P12/c1</i>	2.4577,0.7334,2.5493,90,106.708,90	-	yellow	1.90	X	41835
B-F	B ₃ F ₆	B ₃ F ₆ ,tI88,88	<i>I4₁/a</i>	0.64118,0.64118,2.7551,90,90,90	-	colorless	1.97	X	41835
B-Fe	FeB m	TiI ₁₀ S8,63	<i>Cmcm</i>	0.2951,0.7564,0.2953,90,90,90	CrB(TII)-FeB	-	6.72	A	25160
B-Fe	FeB rt	FeB-b,oP8,62	<i>Pnma</i>	0.54954,0.29408,0.40477,90,90,90	CrB(TII)-FeB	-	6.77	X	48650
B-Fe	FeB ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.3045,0.3045,0.3035,90,90,120	AlB ₂ family	-	5.28	X	5350
B-Fe	FeB ₄ ht-hp	CrB ₄ ,oP10,58	<i>Pnnm</i>	0.45786,0.52981,0.29991,90,90,90	-	-	4.52	X	62444
B-Fe	Fe _{0.91} B _{10.09} rt	W ₁₂ ,cI2,229	<i>Im-3m</i>	0.28603,0.28603,0.28603,90,90,90	b.c.c. family	-	7.35	X	19296
B-Fe	Fe ₂ B	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.51059,0.51059,0.4251,90,90,90	-	-	7.34	X	48650
B-Fe	Fe ₂ B _{103.3} rhom1	Cr _{2.5} B _{103.3} ,hR339,166	<i>R-3m</i>	1.09514,1.09514,2.38609,90,90,120	β-boron family	-	2.48	X	9830
B-Fe	Fe _{22.29} B _{6.71}	* ₀ cF*,225	<i>Fm-3m</i>	1.0642,1.0642,1.0642,90,90,90	-	-	7.26	N	45505
B-Fe	Fe ₂ B ht	Ni ₃ P,tI32,82	<i>I-4</i>	0.8655,0.8655,0.4297,90,90,90	-	-	7.36	A	15559
B-Fe	Fe _{3.11} B _{0.89} m	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.53612,0.66761,0.44673,90,90,90	-	-	7.61	A	45505
B-Fe	Fe ₇ B m	* ₀ hP*,*	-	0.5501,0.5501,0.7213,90,90,120	-	-	-	N	20599
B-Ga	GaB ₁₂	* ₀ t*130,*	-	1.293,1.293,0.484,90,90,90	-	-	-	N	1372
B-Gd	GdB ₁₂ hp-ht	UB ₁₂ ,cF52,225	<i>Fm-3m</i>	0.7524,0.7524,0.7524,90,90,90	-	-	4.48	A	10613
B-Gd	GdB ₂ ht	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.3319,0.3319,0.3944,90,90,120	AlB ₂ family	-	7.89	X	44360
B-Gd	GdB ₄	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.71316,0.71316,0.40505,90,90,90	-	blue	6.46	X	43083
B-Gd	GdB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.41123,0.41123,0.41123,90,90,90	-	black	5.30	X	565
B-Gd	GdB ₆₆	YB ₆₆ ,cF1936,226	<i>Fm-3c</i>	2.34487,2.34487,2.34487,90,90,90	-	-	2.69	A	13003
B-Gd	Gd _{0.56} B ₁₄	Tb _{0.56} B ₁₄ ,mS60,12	<i>C12/m1</i>	1.01316,1.0339,0.5853,90,124.867,90	-	-	3.16	A	39402
B-Gd	Gd ₂ B ₃	Gd ₂ B ₃ ,mP28,14	<i>P12₁/c1</i>	0.7136,0.7159,0.7183,90,102.68,90	-	gray silver	6.84	X	20752
B-Ge	Ge _{1.14} B _{103.2} rhom1	Ge _{1.14} B _{102.9} ,hR465,166	<i>R-3m</i>	1.09588,1.09588,2.38622,90,90,120	β-boron family	-	2.40	X	14126
B-H	BH ₃	BH ₃ ,mP16,14	<i>P12₁/c1</i>	0.44,0.6487,0.62355,90,117.53,90	-	colorless	0.58	X	44834
B-H	B ₁₀ H ₁₃ 1,1'	B ₁₀ H ₁₃ ,oP184,61	<i>Pbca</i>	1.05515,1.45604,1.06601,90,90,90	-	colorless	0.98	X	38807
B-H	B ₁₀ H ₁₃ 1,5'	B ₁₀ H ₁₃ ,mP184,14	<i>P12₁/c1</i>	0.7235,1.5453,1.63971,90,114.754,90	-	colorless	0.97	X	12174
B-H	B ₁₀ H ₁₃ 1,6'	B ₁₀ H ₁₃ -b,oP368,61	<i>Pbca</i>	1.13252,1.4045,2.08013,90,90,90	-	colorless	0.97	X	47239
B-H	B ₁₀ H ₁₃ 2,2'	B ₁₀ H ₁₃ ,tI368,110	<i>I4₁cd</i>	1.1901,1.1901,2.3135,90,90,90	-	colorless	0.98	X	13146
B-H	B ₁₀ H ₁₃ 2,6'	B ₁₀ H ₁₃ -a,oP368,61	<i>Pbca</i>	1.158,1.4673,1.9765,90,90,90	-	colorless	0.96	X	13146
B-H	B ₁₃ H ₁₉	B ₁₃ H ₁₉ ,mP128,14	<i>P12₁/c1</i>	0.9217,0.6498,1.9719,90,97.69,90	-	yellow	0.91	X	9681
B-H	B ₂ H ₃	B ₂ H ₃ ,oP160,61	<i>Pbca</i>	1.0410,1.3613,1.0410,90,90,90	-	-	0.89	X	2136
B-H	B ₂ H ₅	B ₂ H ₅ ,mP56,14	<i>P12₁/c1</i>	0.558,1.014,0.8941,90,110.985,90	-	-	0.75	X	2834
B-H	B ₃ H ₄	B ₃ H ₄ ,oP112,33	<i>Pna2₁</i>	1.0686,0.8686,1.1351,90,90,90	-	colorless	0.92	X	16885
B-H	B ₃ H ₅ mon	B ₃ H ₅ ,mP96,14	<i>P12₁/c1</i>	1.125,0.694,1.337,90,123.50,90	-	-	0.86	X	856
B-H	B ₃ H ₅ orth	B ₃ H ₅ ,oS64,36	<i>Cmc2₁</i>	0.75,0.923,0.85,90,90,90	-	-	0.85	X	948
B-H	B ₄ H ₅	B ₄ H ₅ ,mP144,14	<i>P12₁/c1</i>	0.5849,1.367,1.675,90,100.83,90	-	-	0.98	X	5121
B-H	B ₅ H ₁₁	B ₅ H ₁₁ ,mP64,14	<i>P12₁/c1</i>	0.676,0.851,1.17575,90,120.683,90	-	-	0.74	X	609
B-H	B ₅ H ₄	B ₅ H ₄ ,tI288,142	<i>I4₁/acd</i>	0.965,0.965,2.964,90,90,90	-	-	1.12	X	2188
B-H	B ₅ H ₇ mon	B ₅ H ₇ ,mP96,13	<i>P12₁/c1</i>	1.244,0.562,1.432,90,125.08,90	-	-	0.99	X	5552
B-H	B ₅ H ₇ orth	B ₅ H ₇ ,oP80,58	<i>Pnnm</i>	0.7255,1.044,0.568,90,90,90	-	-	0.94	X	323
B-H	B ₅ H ₈	B ₅ H ₈ ,oP104,33	<i>Pna2₁</i>	1.102,0.587,1.4988,90,90,90	-	-	0.85	X	18789
B-H	B ₅ H ₉ lt	B ₅ H ₉ ,tI12,76	<i>P4₁</i>	1.0201,1.0201,0.9996,90,90,90	-	-	0.81	X	36321
B-H	B ₅ H ₉ rt	B ₅ H ₉ ,tI28,107	<i>I4mm</i>	0.716,0.716,0.538,90,90,90	-	-	0.76	X	401
B-H	B ₇ H ₁₀	B ₇ H ₁₀ ,oP136,19	<i>P2₁2₁2₁</i>	0.8963,0.9976,1.3119,90,90,90	-	yellow	0.97	X	13998
B-H	B ₉ H ₁₁ mon	B ₉ H ₁₁ ,mP160,14	<i>P12₁/c1</i>	0.9199,1.3180,1.2515,90,109.58,90	-	-	1.01	X	1875
B-H	B ₉ H ₁₁ orth	B ₉ H ₁₁ ,oP160,56	<i>Pccn</i>	1.0844,1.2107,1.0803,90,90,90	-	-	1.02	X	1876

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
B-Hf	HfB	NaCl,cF8,225	<i>Fm-3m</i>	0.462,0.462,0.462,90,90,90	rocksalt family	-	12.75	X	3452
B-Hf	HfB ₁₂ hp-ht	UB ₁₂ ,cF52,225	<i>Fm-3m</i>	0.7377,0.7377,0.7377,90,90,90	-	-	5.10	A	15992
B-Hf	HfB ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.31425,0.31425,0.3476,90,90,120	AlB ₂ family	gray dark	11.18	X	20402
B-Hf	Hf _{0.44} B _{10.8} rhom1	Ti _{2.0} B _{10.3} ,hR357,166	<i>R-3m</i>	1.0948,1.0948,2.3909,90,90,120	β -boron family	-	2.43	X	21374
B-Ho	HoB ₁₂ rt	UB ₁₂ ,cF52,225	<i>Fm-3m</i>	0.75032,0.75032,0.75032,90,90,90	-	-	4.63	A	47581
B-Ho	HoB ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.32628,0.32628,0.37586,90,90,120	AlB ₂ family	-	8.94	X	56230
B-Ho	HoB ₄ lt	*,oP20,*	-	0.4002,0.7077,0.7088,90,90,90	-	-	6.89	N	56585
B-Ho	HoB ₄ rt	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.70842,0.70842,0.4006,90,90,90	-	black	6.88	X	56585
B-Ho	HoB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.4116,0.4116,0.4116,90,90,90	-	-	5.47	A	47581
B-Ho	HoB ₆₆	YB ₆₆ ,cF1936,226	<i>Fm-3c</i>	2.3365,2.3365,2.3365,90,90,90	-	-	2.74	A	47581
B-Ho	Ho _{0.56} B ₁₄	Tb _{0.56} B ₁₄ ,mS60,12	<i>C12/m1</i>	1.00969,1.0319,0.5858,90,125.002,90	-	-	3.24	A	39402
B-I	BI ₃	BCl ₃ ,hP8,176	<i>P6₃/m</i>	0.69909,0.69909,0.73642,90,90,120	-	colorless	4.17	X	40095
B-Ir	IrB _{0.02}	NaCl,cF8,225	<i>Fm-3m</i>	0.38402,0.38402,0.38402,90,90,90	rocksalt family	-	22.57	X	38772
B-Ir	IrB _{0.9} ht	WC,hP2,187	<i>P-6m2</i>	0.2815,0.2815,0.2823,90,90,120	AlB ₂ family	-	17.31	X	6036
B-Ir	IrB _{0.9} rt	IrB _{0.9} ,oS16,36	<i>Cmc2₁</i>	0.2771,0.7578,0.7314,90,90,90	-	-	17.47	X	6036
B-Ir	IrB _{1.1}	ThSi ₂ ,tI12,141	<i>I4₁/amd</i>	0.281,0.281,1.0263,90,90,90	-	-	16.73	X	1178
B-Ir	Ir _{0.02} B rhom1	B,hR423,166	<i>R-3m</i>	1.09287,1.09287,2.38274,90,90,120	β -boron family	-	3.17	F	14076
B-Ir	Ir ₂ B _{2.5}	Ir ₂ B _{2.5} ,mS28,12	<i>C12/m1</i>	1.05300,0.29038,0.61013,90,91,119,90	-	-	14.65	X	7081
B-K	KB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.42246,0.42246,0.42246,90,90,90	-	red bordeaux	2.29	X	43813
B-La	LaB ₄	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.7324,0.7324,0.4181,90,90,90	-	black	5.39	X	7836
B-La	LaB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.41566,0.41566,0.41566,90,90,90	-	blue	4.71	X	17501
B-Li	LiB hex	LiB,hP4,194	<i>P6₃/mmc</i>	0.4022,0.4022,0.2796,90,90,120	-	gray	1.51	X	37750
B-Li	LiB ₃	LiB ₃ ,tP20,127	<i>P4/mbm</i>	0.5975,0.5975,0.4189,90,90,90	-	red	1.75	X	36890
B-Li	Li _{0.092} B tet	B,tP196,76	<i>P4₁</i>	1.016,1.016,1.428,90,90,90	-	brown	2.45	F	3476
B-Li	Li ₁₀ B ₁₀₃ rhom1	Li ₁₀ B ₁₀₃ ,hR378,166	<i>R-3m</i>	1.101,1.101,2.4185,90,90,120	β -boron family	black	2.32	X	54444
B-Li	Li _{2.2} B ₂ m	(Li _{0.62} B _{0.38}),aB _{0.5} ,cI16,217	<i>I-43m</i>	0.493,0.493,0.493,90,90,90	-	-	1.08	X	11489
B-Li	Li _{2.9} B ₁₄	Li ₃ B ₁₄ ,tI60,122	<i>I-42d</i>	1.0764,1.0764,0.8947,90,90,90	-	red	2.20	X	21351
B-Li	Li ₈ B _{103.4} m	Zr _{2.0} B _{102.1} ,hR357,166	<i>R-3m</i>	1.09654,1.09654,2.40495,90,90,120	β -boron family	black	2.33	X	30214
B-Lu	LuB ₁₂	UB ₁₂ ,cF52,225	<i>Fm-3m</i>	0.74635,0.74635,0.74635,90,90,90	-	-	4.87	A	17979
B-Lu	LuB ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.32441,0.32441,0.37036,90,90,120	AlB ₂ family	-	9.67	X	56230
B-Lu	LuB ₄	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.7041,0.7041,0.39755,90,90,90	-	black	7.35	A	41342
B-Lu	LuB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.41,0.41,0.41,90,90,90	-	-	5.78	A	4128
B-Lu	LuB ₆₆	YB ₆₆ ,cF1936,226	<i>Fm-3c</i>	2.3412,2.3412,2.3412,90,90,90	-	-	2.76	A	6600
B-Mg	MgB ₁₂	MgB ₁₂ ,oP424,62	<i>Pnma</i>	1.6632,1.7802,1.0396,90,90,90	-	black bluish	2.49	X	47973
B-Mg	MgB ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.30849,0.30849,0.35187,90,90,120	AlB ₂ family	brown grayish	2.63	X	46382
B-Mg	MgB ₄	MgB ₄ ,oP20,62	<i>Pnma</i>	0.5464,0.4428,0.7472,90,90,90	-	black	2.48	X	6481
B-Mg	MgB ₇	MgB ₇ ,oI64,74	<i>Imma</i>	0.59769,1.04782,0.81245,90,90,90	-	red dark	2.61	X	55232
B-Mg	Mg _{2.5} B ₂₂	Al _{1.6} B ₂₂ ,tP216,92	<i>P4₂/2</i>	1.03795,1.03795,1.4391,90,90,90	-	black	2.56	X	55232
B-Mg	Mg _{5.22} B ₁₀₃ rhom1	Se _{3.7} B _{101.8} ,hR357,166	<i>R-3m</i>	1.0983,1.0983,2.41561,90,90,120	β -boron family	black	2.45	X	40600
B-Mn	MnB rt	FeB,oP8,62	<i>Pnma</i>	0.556,0.2977,0.4145,90,90,90	CrB(TiI)-FeB	gray medium	6.37	X	324
B-Mn	MnB ₂ ht	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.30085,0.30085,0.30369,90,90,120	AlB ₂ family	-	5.34	X	60626
B-Mn	MnB ₄ rt	MnB ₄ ,mP20,14	<i>P12₁/c1</i>	0.54867,0.53732,0.55112,90,115.136,90	-	black	4.43	X	62721
B-Mn	Mn _{0.81} B _{0.19} rt	Mn,cI58,63	<i>I-43m</i>	0.89204,0.89204,0.89204,90,90,90	-	-	6.32	A	11488
B-Mn	Mn ₂ B rt Mn+	Mg ₂ Cu,oF48,70	<i>Fddd</i>	0.42082,0.72914,1.45395,90,90,90	-	-	7.19	X	14125
B-Mn	Mn ₂ B tet	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.5148,0.5148,0.4208,90,90,90	-	-	7.19	X	3706
B-Mn	Mn ₃ B ₄	Ta ₃ B ₄ ,oI14,71	<i>Immm</i>	0.296,0.3032,1.286,90,90,90	-	-	5.99	X	324
B-Mn	Mn _{4.48} B ₁₀₃ rhom1	Mn _{4.48} B _{102.9} ,hR345,166	<i>R-3m</i>	1.09875,1.09875,2.39937,90,90,120	β -boron family	-	2.70	X	8198
B-Mo	MoB ht	TiI,oS8,63	<i>Cmcm</i>	0.31418,0.84961,0.30721,90,90,90	CrB(TiI)-FeB	black	8.65	X	65026
B-Mo	MoB rt	MoB,tI16,141	<i>I4₁/amd</i>	0.3105,0.3105,1.697,90,90,90	-	-	8.67	X	254
B-Mo	MoB ₂ ht	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.30049,0.30049,0.31726,90,90,120	AlB ₂ family	-	7.87	X	31858
B-Mo	MoB ₂ rt	MoB ₂ ,hR18,166	<i>R-3m</i>	0.30152,0.30152,2.0971,90,90,120	-	black olive	7.09	X	18966
B-Mo	Mo _{0.07} B rhom1	B,hR423,166	<i>R-3m</i>	1.09303,1.09303,2.38217,90,90,120	β -boron family	-	2.55	F	14076
B-Mo	Mo _{0.9} B ₃ rt	Mo _{0.9} B ₃ ,hP16,194	<i>P6₃/mmc</i>	0.52646,0.52646,0.6121,90,90,120	-	-	5.37	X	31858
B-Mo	Mo ₂ B	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.5547,0.5547,0.4739,90,90,90	-	-	9.23	X	6603
B-Mo	Mo ₂ B ₂ ht	U ₃ Si ₂ ,tP10,127	<i>P4/mbm</i>	0.6,0.6,0.315,90,90,90	-	-	9.06	A	1188
B-N	BN cub	ZnS,cF8,216	<i>F-43m</i>	0.36159,0.36159,0.36159,90,90,90	qingsongite	colorless	3.49	X	24398
B-N	BN hex	BN-b,hP4,194	<i>P6₃/mmc</i>	0.24982,0.24982,0.66357,90,90,120	-	white	2.30	X	48819
B-N	BN hp-ht	BN,oF8,42	<i>Fmm2</i>	0.25,0.335,0.434,90,90,90	-	-	4.54	X	17338
B-N	BN hp2	ZnO,hP4,186	<i>P6₃mc</i>	0.25494,0.25494,0.42229,90,90,120	adamantane structure	-	3.47	A	60633
B-N	BN part	*,cF*,*	-	0.8405,0.8405,0.8405,90,90,90	-	-	-	N	19038
B-N	BN rhom	BN,hR6,160	<i>R3m</i>	0.2504,0.2504,1.0000,90,90,120	-	-	2.28	X	29459
B-N	B _{0.5} N _{0.5} hp2	C,cF8,227	<i>Fd-3m</i>	0.3615,0.3615,0.3615,90,90,90	-	-	3.49	X	4162
B-N	B ₁₃ N ₂ ht-hp	B ₁₃ C ₂ ,hR45,166	<i>R-3m</i>	0.54455,0.54455,1.22649,90,90,120	-	-	2.67	X	48819
B-N	B _{25.03} N _{0.94}	B ₂₅ N ₁ ,tP62,111	<i>P-42m</i>	0.8634,0.8634,0.5128,90,90,90	-	-	2.47	X	9765
B-Na	Na ₂ B ₂₉	Na ₂ B ₂₉ ,mS62,8	<i>C1m1</i>	1.02022,1.0403,0.5874,90,124.982,90	-	black	2.34	X	37335
B-Na	Na ₃ B ₂₀	Na ₃ B ₂₀ ,oS46,65	<i>Cmmm</i>	0.57009,1.86945,0.41506,90,90,90	-	black	2.14	X	34167
B-Nb	NbB	TiI,oS8,63	<i>Cmcm</i>	0.32961,0.87224,0.31653,90,90,90	CrB(TiI)-FeB	-	7.57	A	24373
B-Nb	NbB _{1.88}	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.31111,0.31111,0.32627,90,90,120	AlB ₂ family	black	6.88	X	45100
B-Nb	Nb _{0.53} B _{105.5} rhom1	Fe _{1.2} B _{105.4} ,hR411,166	<i>R-3m</i>	1.0938,1.0938,2.3858,90,90,120	β -boron family	-	2.40	X	21374
B-Nb	Nb ₂ B ₃	V ₂ B ₃ ,oS20,63	<i>Cmcm</i>	0.33058,1.948,0.31293,90,90,90	-	-	7.19	A	24373
B-Nb	Nb ₃ B ₂	U ₃ Si ₂ ,tP10,127	<i>P4/mbm</i>	0.6185,0.6185,0.3281,90,90,90	-	-	7.95	X	960
B-Nb	Nb ₃ B ₄	Ta ₃ B ₄ ,oI14,71	<i>Immm</i>	0.31428,0.33033,1.4076,90,90,90	-	-	7.32	A	24373
B-Nb	Nb ₅ B ₆	V ₂ B ₆ ,oS22,65	<i>Cmmm</i>	0.31567,2.2767,0.33034,90,90,90	-	-	7.41	A	24373
B-Nd	NdB ₄	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.72197,0.72197,0.41016,90,90,90	-	golden	5.82	X	47562
B-Nd	NdB ₆ rt	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.41269,0.41269,0.41269,90,90,90	-	blue	4.94	X	30160
B-Nd	NdB ₆₆	YB ₆₆ ,cF1936,226	<i>Fm-3c</i>	2.3476,2.3476,2.3476,90,90,90	-	-	2.64	A	47562
B-Nd	Nd ₂ B ₅	Pr ₂ B ₅ ,mS56,15	<i>C12/c1</i>	1.50808,0.72522,0.72841,90,109.104,90	-	-	6.04	X	47562
B-Ni	NiB	TiI,oS8,63	<i>Cmcm</i>	0.2936,0.7396,0.2967,90,90,90	CrB(TiI)-FeB	-	7.17	A	61966

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
B-Ni	NiB ₁₂	*c***	-	0.7385,0.7385,0.7385,90,90,90	-	-	-	N	3655
B-Ni	NiB ₃	NiB ₃ ,mP16,14	P12 ₁ /c1	0.3038,0.822,0.5212,90,92.43,90	-	-	4.65	X	55343
B-Ni	NiB _x	Cu ₂ cF4,225	Fm-3m	0.35246,0.35246,0.35246,90,90,90	close-packed structure	-	8.91	X	31772
B-Ni	Ni ₂ B	CuAl ₂ ,tI12,140	I4/mcm	0.4995,0.4995,0.4238,90,90,90	-	-	8.05	X	51464
B-Ni	Ni ₁₂ B ₁₀₃ rhom1	Ni ₁₂ B ₁₀₄ ,hR429,166	R-3m	1.09615,1.09615,2.38544,90,90,120	β-boron family	-	2.48	X	17490
B-Ni	Ni ₃ B	Fe ₃ C-b,pP16,62	Pnma	0.52219,0.66171,0.43918,90,90,90	-	gray silver	8.18	X	48705
B-Ni	Ni ₄ B _{2.81} orth	Ni ₄ B ₃ ,oP28,62	Pnma	1.19665,0.29852,0.6575,90,90,90	-	-	7.50	X	61966
B-Ni	Ni ₄ B ₃ mon	Ni ₄ B ₃ ,mS28,15	C12/c1	0.64356,0.48867,0.78267,90,103.288,90	-	-	7.41	X	61966
B-Np	NpB ₁₂	UB ₁₂ ,cF52,225	Fm-3m	0.7478,0.7478,0.7478,90,90,90	-	-	5.83	A	4647
B-Np	NpB ₂	AlB ₂ ,hP3,191	P6/mmm	0.31623,0.31623,0.39719,90,90,120	AlB ₂ family	-	12.49	X	22239
B-Np	NpB ₄	UB ₄ ,tP20,127	P4/mbm	0.7088,0.7088,0.3995,90,90,90	-	-	9.28	A	18960
B-Np	NpB ₆	CaB ₆ ,cP7,221	Pm-3m	0.41129,0.41129,0.41129,90,90,90	-	-	7.21	A	4647
B-O	B ₂ O hp hex	*h***	-	0.798,0.798,0.909,90,90,120	-	brown reddish	-	N	2529
B-O	B ₂ O hp trig	B ₂ O ₃ ,hP6,164	P-3m1	0.2879,0.2879,0.7052,90,90,120	-	-	2.47	X	20126
B-O	B ₂ O ₃ cub	*c***	-	1.004,1.004,1.004,90,90,90	-	-	-	N	391
B-O	B ₂ O ₃ hp	B ₂ O ₃ ,oS20,36	Cmc2 ₁	0.7803,0.4613,0.4129,90,90,90	-	-	3.11	X	3767
B-O	B ₂ O ₃ mon	*m*10,*	-	0.453,0.415,0.45466,90,118.806,90	-	-	-	N	1391
B-O	B ₂ O ₃ rt	B ₂ O ₃ -b,hP15,144	P3 ₁	0.43358,0.43358,0.83397,90,90,120	-	-	2.55	X	4923
B-O	B ₆ O ₈₄	B ₆ P,hR42,166	R-3m	0.53774,0.53774,1.2322,90,90,120	-	brown	2.53	X	33354
B-Os	OsB cub	*c***	-	0.704,0.704,0.704,90,90,90	-	-	-	N	1178
B-Os	OsB hex	WC,hP2,187	P-6m2	0.28767,0.28767,0.28718,90,90,120	AlB ₂ family	-	16.22	X	55447
B-Os	OsB ₂	RuB ₂ ,oP6,59	Pmmn	0.28702,0.46729,0.40792,90,90,90	-	-	12.86	X	56218
B-Os	Os _{0.01} B rhom1	B,hR423,166	R-3m	1.09319,1.09319,2.38263,90,90,120	β-boron family	-	2.75	F	14076
B-Os	Os ₂ B ₃	Ru ₂ B ₃ ,hP10,194	P6 ₃ /mmc	0.29145,0.29145,1.29213,90,90,120	-	-	14.42	X	60333
B-P	BP ht	ZnO,hP4,186	P6 ₃ mc	0.3562,0.3562,0.59,90,90,120	adamantane structure	-	2.14	A	1841
B-P	BP rt	ZnS,cF8,216	F-43m	0.4543,0.4543,0.4543,90,90,90	adamantane structure	-	2.96	X	27433
B-P	B ₆ P	B ₆ P,hR42,166	R-3m	0.6000,0.6000,1.1857,90,90,120	-	black blue	2.58	X	18703
B-Pd	PdB _{0.163}	NaCl,cF8,225	Fm-3m	0.4001,0.4001,0.4001,90,90,90	close-packed structure	-	11.22	X	48649
B-Pd	PdB _{0.19} rt	CoO,tI4,139	I4/mmm	0.2849,0.2849,0.40038,90,90,90	rocksalt family	-	11.08	X	40128
B-Pd	PdB _{0.214} ht	NaCl,cF8,225	Fm-3m	0.40272,0.40272,0.40272,90,90,90	rocksalt family	-	11.06	X	38772
B-Pd	Pd _{0.01} B rhom1	B,hR423,166	R-3m	1.09311,1.09311,2.38212,90,90,120	β-boron family	-	2.57	F	14076
B-Pd	Pd ₂ B	CaCl ₂ ,oP6,58	Pnm	0.46918,0.51271,0.31096,90,90,90	-	-	9.93	X	13270
B-Pd	Pd ₃ B rt	Fe ₃ C-b,pP16,62	Pnma	0.54644,0.75632,0.48506,90,90,90	-	-	10.93	X	48705
B-Pd	Pd ₃ B ₂ (Si)	*hP*,*	-	0.648,0.648,0.342,90,90,120	-	-	-	N	382
B-Pd	Pd ₅ B ₂	Mn ₅ C ₂ ,mS28,15	C12/c1	1.2786,0.4955,0.5472,90,97.03,90	-	-	10.69	X	1355
B-Pd	Pd ₄ B rt	Pd ₄ B,mS28,15	C12/c1	0.48902,0.8467,0.93639,90,100.03,90	-	-	11.29	X	48649
B-Pr	PrB ₄	UB ₄ ,tP20,127	P4/mbm	0.72409,0.72409,0.41225,90,90,90	-	black	5.66	A	46363
B-Pr	PrB ₆ lt	CaB ₆ ,cP7,221	Pm-3m	0.412,0.412,0.412,90,90,90	-	black	4.89	X	13580
B-Pr	Pr ₂ B ₅	Pr ₂ B ₃ ,mS56,15	C12/c1	1.51603,0.72771,0.73137,90,109.607,90	-	-	5.87	X	42796
B-Pt	PtB hp-ht	NiAs,hP4,194	P6 ₃ /mmc	0.3358,0.3358,0.4058,90,90,120	AlB ₂ family	-	17.26	X	1178
B-Pt	PtB _{0.027}	NaCl,cF8,225	Fm-3m	0.39258,0.39258,0.39258,90,90,90	close-packed structure	-	21.45	X	38772
B-Pt	PtB _{0.67} ht	PtB _{0.67} ,oS8,63	Cmcm	0.3371,0.5817,0.4045,90,90,90	AlB ₂ family	-	16.94	X	28263
B-Pt	Pt _{0.01} B rhom1	B,hR423,166	R-3m	1.09278,1.09278,2.3819,90,90,120	β-boron family	-	2.76	F	14076
B-Pt	Pt ₂ B	MoS ₂ ,hP6,194	P6 ₃ /mmc	0.27936,0.27936,1.0486,90,90,120	-	-	18.79	A	12302
B-Pt	Pt ₄ B	*c***	-	0.75669,0.75669,0.75669,90,90,90	-	-	-	N	12302
B-Pu	PuB	NaCl,cF8,225	Fm-3m	0.4905,0.4905,0.4905,90,90,90	rocksalt family	-	14.34	X	18960
B-Pu	PuB ₁₂	UB ₁₂ ,cF52,225	Fm-3m	0.74843,0.74843,0.74843,90,90,90	-	-	5.92	A	2530
B-Pu	PuB ₂	AlB ₂ ,hP3,191	P6/mmm	0.31862,0.31862,0.39491,90,90,120	AlB ₂ family	-	12.70	X	22239
B-Pu	PuB ₄	UB ₄ ,tP20,127	P4/mbm	0.71,0.71,0.4014,90,90,90	-	-	9.43	X	1149
B-Pu	PuB ₆	CaB ₆ ,cP7,221	Pm-3m	0.4115,0.4115,0.4115,90,90,90	-	-	7.36	X	1149
B-Pu	Pu _{0.66} B ₆₆	YB ₆₆ ,cF1936,226	Fm-3c	2.343,2.343,2.343,90,90,90	-	-	2.71	A	2530
B-Re	ReB ₂	ReB ₂ ,hP6,194	P6 ₃ /mmc	0.28982,0.28982,0.74723,90,90,120	-	-	12.70	X	53542
B-Re	Re _{0.01} B rhom1	B,hR423,166	R-3m	1.09281,1.09281,2.38278,90,90,120	β-boron family	-	2.74	F	14076
B-Re	Re ₃ B mon	*mS16,12	C12/m1	0.93283,0.28869,0.72927,90,91.244,90	-	-	19.26	N	64305
B-Re	Re ₂ B orth	Re ₂ B ₃ ,oS16,63	Cmcm	0.2890,0.9313,0.7258,90,90,90	-	-	19.36	X	1166
B-Re	Re ₇ B ₃	Th ₇ Fe ₃ ,hP20,186	P6 ₃ mc	0.75029,0.75029,0.48816,90,90,120	-	-	18.64	X	16606
B-Rh	RhB	NiAs,hP4,194	P6 ₃ /mmc	0.3309,0.3309,0.4224,90,90,120	AlB ₂ family	-	9.43	X	1178
B-Rh	RhB _{0.02}	NaCl,cF8,225	Fm-3m	0.38043,0.38043,0.38043,90,90,90	rocksalt family	-	12.44	X	38772
B-Rh	Rh _{0.01} B rhom1	B,hR423,166	R-3m	1.09287,1.09287,2.38156,90,90,120	β-boron family	-	2.56	F	14076
B-Rh	Rh ₂ B	Co ₂ Si-b,oP12,62	Pnma	0.542,0.398,0.744,90,90,90	-	-	8.97	X	547
B-Rh	Rh ₅ B ₄	Rh ₅ B ₄ ,hP18,194	P6 ₃ /mmc	0.33058,0.33058,2.0394,90,90,120	-	-	9.60	X	14123
B-Rh	Rh ₇ B ₃	Th ₇ Fe ₃ ,hP20,186	P6 ₃ mc	0.74696,0.74696,0.47777,90,90,120	-	-	10.83	X	16606
B-Rh	Rh ₉ B _{5.5}	Rh ₉ B _{5.5} ,aP30,2	P-1	0.5483,0.6818,0.9072,110.78,94.73,90.46	-	-	10.37	X	44366
B-Ru	RuB	*c1*,*	-	0.702,0.702,0.702,90,90,90	-	-	-	N	1927
B-Ru	RuB ₂	RuB ₂ ,oP6,59	Pmmn	0.28657,0.46457,0.40462,90,90,90	-	-	7.56	X	50330
B-Ru	Ru _{0.01} B rhom1	B,hR423,166	R-3m	1.09281,1.09281,2.36236,90,90,120	β-boron family	-	2.58	F	14076
B-Ru	Ru ₁₁ B ₈	Ru ₁₁ B ₈ ,oP38,55	Pbam	1.1342,1.1609,0.2836,90,90,90	-	-	10.66	X	1174
B-Ru	Ru ₂ B ₃	Ru ₂ B ₃ ,hP10,194	P6 ₃ /mmc	0.29049,0.29049,1.28164,90,90,120	-	-	8.32	X	60333
B-Ru	Ru ₇ B ₃	Th ₇ Fe ₃ ,hP20,186	P6 ₃ mc	0.74669,0.74669,0.47142,90,90,120	-	-	10.80	X	16606
B-S	BS ₂ mon1	BS ₂ ,mP48,14	P12 ₁ /c1	1.2091,0.4063,2.187,90,107.64,90	-	colorless	1.94	X	12955
B-S	BS ₂ mon2	BS ₂ ,mP24,14	P12 ₁ /c1	0.68,1.0545,0.7828,90,117.27,90	-	-	2.00	X	13748
B-S	B ₂ S ₃ hp	B ₂ S ₃ ,tI500,88	I4 ₁ /a	1.6086,1.6086,3.0488,90,90,90	-	yellow pale	2.48	X	41142
B-S	B ₂ S ₃	B ₂ S ₃ ,mP40,14	P12 ₁ /c1	0.4039,1.0722,1.862,90,96.23,90	-	colorless	1.95	X	10394
B-S	B ₆ S _{0.62}	B ₆ P,hR42,166	R-3m	0.58219,0.58219,1.2002,90,90,120	-	brown	2.40	X	62480
B-Sc	ScB ₁₂ cub	UB ₁₂ ,cF52,225	Fm-3m	0.7402,0.7402,0.7402,90,90,90	-	-	2.86	X	21034
B-Sc	ScB ₁₂ tet	ScB ₁₂ ,tI26,139	I4/mmm	0.522,0.522,0.735,90,90,90	-	-	2.90	X	2412
B-Sc	ScB ₁₅	ScB ₁₅ ,tP192,76	P4 ₁	1.02995,1.02995,1.4223,90,90,90	-	-	2.74	X	58242
B-Sc	ScB ₂	AlB ₂ ,hP3,191	P6/mmm	0.31482,0.31482,0.35148,90,90,120	AlB ₂ family	-	3.66	X	47974

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
B-Sc	Sc _{3.68} B _{101.78} rhomI	Sc ₃ B _{101.8} ,hR357,166	<i>R-3m</i>	1.09658,1.09658,2.40875,90,90,120	β-boron family	-	2.51	X	11551
B-Se	BSe ₂	BS ₂ ,mP24,14	<i>P12₁/c1</i>	0.7205,1.1202,0.8123,90,117.62,90	-	-	3.86	A	13748
B-Se	B ₂ Se ₃	*,mP40,*	-	0.406,3.86,1.043,90,90,90	-	-	-	N	6424
B-Se	B _{6.53} Se _{0.47}	B ₆ (B _{0.53} Se _{0.47}),hR48,166	<i>R-3m</i>	0.59041,0.59041,1.1947,90,90,120	-	brown dark	2.98	X	27406
B-Si	SiB ₃	SiB ₃ ,oI64,74	<i>Imma</i>	0.83915,1.2568,0.62134,90,90,90	-	orange yellow	2.45	X	41818
B-Si	SiB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.415,0.415,0.415,90,90,90	-	black	2.16	X	781
B-Si	Si _{0.99} B _{0.01}	C,cF8,227	<i>Fd-3m</i>	0.5424,0.5424,0.5424,90,90,90	-	-	2.32	X	44360
B-Si	Si _{1.8} B _{5.2} rt	Si(Si _{0.28} B _{0.72}) ₃ B ₃ ,hR42,166	<i>R-3m</i>	0.6319,0.6319,1.2713,90,90,120	-	-	2.42	X	1587
B-Si	Si _{10.7} B _{59.6}	Si _{5.78} (Si _{0.41} B _{0.59}) ₁₂ B _{52.5} ,oP340,58	<i>Pnnm</i>	1.4397,1.8318,0.9911,90,90,90	-	black	2.40	X	19104
B-Si	Si ₁₅ B ₂₉₀	*,hR*,166	<i>R-3m</i>	1.10152,1.10152,2.38625,90,90,120	-	-	-	N	44360
B-Si	Si _{2.8} B _{101.8} rhomI	Si _{1.2} (Si _{0.13} B _{0.87}) ₁₂ B _{91.4} ,hR339,166	<i>R-3m</i>	1.101,1.101,2.39,90,90,120	β-boron family	-	2.34	X	14211
B-Sm	SmB ₂ hp-ht	AlB ₂ ,hP3,191	<i>P6₃/mmm</i>	0.331,0.331,0.4019,90,90,120	AlB ₂ family	-	7.49	X	10613
B-Sm	SmB ₄	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.7174,0.7174,0.40641,90,90,90	-	blue	6.15	X	21015
B-Sm	SmB ₆ hp	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.41327,0.41327,0.41327,90,90,90	-	blue dark	5.06	X	54795
B-Sm	SmB ₆ rt	YB ₆₆ ,cF1936,226	<i>Fm-3c</i>	2.34683,2.34683,2.34683,90,90,90	-	-	2.66	A	15615
B-Sm	Sm ₂ B ₅	Gd ₂ B ₅ ,mP28,14	<i>P12₁/c1</i>	0.7179,0.718,0.7205,90,102.02,90	-	gray	6.49	X	23978
B-Sr	SrB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.41982,0.41982,0.41982,90,90,90	-	black	3.42	X	34157
B-Ta	TaB	TiI ₀ ,oS8,63	<i>Cmcm</i>	0.3276,0.8669,0.3157,90,90,90	CrB(TiI)-FeB	-	14.21	X	301
B-Ta	TaB ₂	AlB ₂ ,hP3,191	<i>P6₃/mmm</i>	0.3076,0.3076,0.3275,90,90,120	AlB ₂ family	gray dark	12.53	X	27471
B-Ta	Ta _{1.08} B _{104.2} rhomI	Ta _{1.1} B _{104.2} ,hR393,166	<i>R-3m</i>	1.0942,1.0942,2.3898,90,90,120	β-boron family	-	2.66	X	21374
B-Ta	Ta ₂ B ht	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.5783,0.5783,0.4866,90,90,90	-	-	15.21	X	6603
B-Ta	Ta ₃ B ₂ rt	U ₃ Si ₂ ,tP10,127	<i>P4/mbm</i>	0.6184,0.6184,0.3287,90,90,90	-	-	14.91	X	960
B-Ta	Ta ₃ B ₄	Ta ₃ B ₄ ,oI14,71	<i>Immm</i>	0.313,0.329,1.40,90,90,90	-	-	13.50	X	301
B-Ta	Ta ₄ B ₆	V ₃ B ₆ ,oS22,65	<i>Cmmm</i>	0.31385,2.2602,0.32895,90,90,90	-	-	13.80	X	23417
B-Tb	TbB ₁₂ rt	UB ₁₂ ,cF52,225	<i>Fm-3m</i>	0.7504,0.7504,0.7504,90,90,90	-	-	4.54	A	5779
B-Tb	TbB ₂	AlB ₂ ,hP3,191	<i>P6₃/mmm</i>	0.32938,0.32938,0.3886,90,90,120	AlB ₂ family	-	8.21	X	11412
B-Tb	TbB ₄ lt	*,oP20,*	-	0.40241,0.71087,0.71296,90,90,90	-	-	-	N	18702
B-Tb	TbB ₄ rt	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.712,0.712,0.4042,90,90,90	-	brown gray	6.55	X	14127
B-Tb	TbB ₅₀	*,oP*,*	-	0.948,1.661,1.764,90,90,90	-	-	-	N	36134
B-Tb	TbB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.411,0.411,0.411,90,90,90	-	blue	5.35	X	1258
B-Tb	TbB ₆₆	YB ₆₆ ,cF1936,226	<i>Fm-3c</i>	2.3457,2.3457,2.3457,90,90,90	-	-	2.69	A	6600
B-Tb	Tb _{0.56} B ₁₄	Tb _{0.56} B ₁₄ ,mS60,12	<i>C12/m1</i>	1.01008,1.03354,0.5855,90,124.937,90	-	-	3.19	X	39402
B-Tc	TcB _{0.04}	Mg,hP2,194	<i>P6₃/mmc</i>	0.274,0.274,0.4398,90,90,120	close-packed structure	-	11.43	F	2168
B-Tc	TcB ₂	ReB ₂ ,hP6,194	<i>P6₃/mmc</i>	0.2892,0.2892,0.7453,90,90,120	-	-	7.36	A	2168
B-Tc	Tc ₃ B	Re ₃ B,oS16,63	<i>Cmcm</i>	0.2891,0.9161,0.7246,90,90,90	-	-	10.55	A	2168
B-Tc	Tc ₄ B ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃/mc</i>	0.7417,0.7417,0.4777,90,90,120	-	-	10.48	A	2168
B-Th	ThB ₁₂ hp-ht	UB ₁₂ ,cF52,225	<i>Fm-3m</i>	0.7612,0.7612,0.7612,90,90,90	-	gray silver	5.45	A	15992
B-Th	ThB ₄	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.7256,0.7256,0.41118,90,90,90	-	gray dark	8.45	X	31785
B-Th	ThB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.40931,0.40931,0.40931,90,90,90	-	red dark	7.19	X	31785
B-Th	ThB ₆₆ (O)	YB ₆₆ ,cF1936,226	<i>Fm-3c</i>	2.3518,2.3518,2.3518,90,90,90	-	-	2.90	A	6600
B-Ti	TiB cub	NaCl,cF8,225	<i>Fm-3m</i>	0.4261,0.4261,0.4261,90,90,90	rocksalt family	-	5.04	X	23915
B-Ti	TiB orth	FeB-b,oP8,62	<i>Pnma</i>	0.612,0.306,0.456,90,90,90	CrB(TiI)-FeB	-	4.57	X	559
B-Ti	TiB _{0.5}	*,hP*,*	-	0.5934,0.5934,0.4779,90,90,120	-	-	-	N	313
B-Ti	TiB ₂ rt	AlB ₂ ,hP3,191	<i>P6₃/mmm</i>	0.30309,0.30309,0.32298,90,90,120	AlB ₂ family	black	4.49	X	62585
B-Ti	Ti _{0.84} B ₂₅	Ti _{0.94} B ₂₅ ,tP52,134	<i>P4₂/nnm</i>	0.8830,0.8830,0.5072,90,90,90	-	-	2.61	X	8712
B-Ti	Ti _{0.925} B _{0.075} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.2952,0.2952,0.4685,90,90,120	close-packed structure	-	4.24	X	45836
B-Ti	Ti ₂ B ht	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.611,0.611,0.456,90,90,90	-	-	4.16	A	3453
B-Ti	Ti _{2.00} B _{103.3} rhomI	Ti _{2.00} B _{103.3} ,hR357,166	<i>R-3m</i>	1.0925,1.0925,2.3913,90,90,120	β-boron family	-	2.44	X	21374
B-Ti	Ti ₃ B ₄	Ta ₃ B ₄ ,oI14,71	<i>Immm</i>	0.3051,0.3259,1.3747,90,90,90	-	-	4.54	A	50237
B-Tm	TmB ₁₂	UB ₁₂ ,cF52,225	<i>Fm-3m</i>	0.7474,0.7474,0.7474,90,90,90	-	-	4.75	A	39826
B-Tm	TmB ₂	AlB ₂ ,hP3,191	<i>P6₃/mmm</i>	0.32602,0.32602,0.37535,90,90,120	AlB ₂ family	gray	9.16	X	54129
B-Tm	TmB ₄	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.7047,0.7047,0.3985,90,90,90	-	-	7.12	A	39826
B-Tm	TmB ₆	CaB ₆ ,cP7,221	<i>Pm-3m</i>	0.411,0.411,0.411,90,90,90	-	-	5.59	A	1418
B-Tm	TmB ₆₆	YB ₆₆ ,cF1936,226	<i>Fm-3c</i>	2.3433,2.3433,2.3433,90,90,90	-	-	2.73	A	6600
B-U	UB ₁₂ rt	UB ₁₂ ,cF52,225	<i>Fm-3m</i>	0.74734,0.74734,0.74734,90,90,90	-	-	5.85	X	55619
B-U	UB ₂ rt	AlB ₂ ,hP3,191	<i>P6₃/mmm</i>	0.3131,0.3131,0.3985,90,90,120	AlB ₂ family	-	12.74	X	55619
B-U	UB ₄ rt	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.7075,0.7075,0.3979,90,90,90	-	black	9.38	X	334
B-V	VB	TiI ₀ ,oS8,63	<i>Cmcm</i>	0.30655,0.80501,0.29809,90,90,90	CrB(TiI)-FeB	-	5.58	A	53755
B-V	VB ₂	AlB ₂ ,hP3,191	<i>P6₃/mmm</i>	0.2997,0.2997,0.3056,90,90,120	AlB ₂ family	gray dark	5.07	X	20285
B-V	V _{0.77} B ₂₅	Ti _{0.94} B ₂₅ ,tP52,134	<i>P4₂/nnm</i>	0.8824,0.8824,0.5072,90,90,90	-	-	2.60	X	9532
B-V	V _{1.5} B ₁₀₅ rhomI	Cr _{2.5} B _{103.3} ,hR339,166	<i>R-3m</i>	1.0972,1.0972,2.3908,90,90,120	β-boron family	-	2.42	X	19111
B-V	V ₂ B ₃	V ₂ B ₃ ,oS20,63	<i>Cmcm</i>	0.30599,1.8429,0.29839,90,90,90	-	gray	5.30	X	30225
B-V	V ₃ B ₂	U ₃ Si ₂ ,tP10,127	<i>P4/mbm</i>	0.5755,0.5755,0.3038,90,90,90	-	-	5.76	X	36206
B-V	V ₃ B ₄	Ta ₃ B ₄ ,oI14,71	<i>Immm</i>	0.298,0.304,1.32,90,90,90	-	-	5.45	A	4756
B-V	V ₄ B ₆ rt	V ₃ B ₆ ,oS22,65	<i>Cmmm</i>	0.29773,2.1242,0.30613,90,90,90	-	-	5.48	A	23417
B-W	WB ht	TiI ₀ ,oS8,63	<i>Cmcm</i>	0.31354,0.84544,0.30659,90,90,90	CrB(TiI)-FeB	-	15.91	A	60254
B-W	WB rt	MoB,tI16,141	<i>I4₁/amd</i>	0.3106,0.3106,1.69513,90,90,90	-	-	15.81	X	60254
B-W	WB ₂ ht	WB ₂ ,hP12,194	<i>P6₃/mmc</i>	0.29831,0.29831,1.38790,90,90,120	-	-	12.76	X	4373
B-W	WB ₂ rt	AlB ₂ ,hP3,191	<i>P6₃/mmm</i>	0.302,0.302,0.305,90,90,120	AlB ₂ family	-	14.16	X	3153
B-W	WB ₃ hp	Mo _{0.8} B ₃ ,hP16,194	<i>P6₃/mmc</i>	0.52012,0.52012,0.63465,90,90,120	-	-	9.66	X	63127
B-W	WB ₄ tet	*,tP20,*	-	0.634,0.634,0.45,90,90,90	-	-	-	N	1375
B-W	W _{0.01} B rhomI	B,hR423,166	<i>R-3m</i>	1.09382,1.09382,2.38356,90,90,120	β-boron family	-	2.73	F	14076
B-W	W _{0.86} B ₃	Mo _{0.8} B ₃ ,hP16,194	<i>P6₃/mmc</i>	0.52012,0.52012,0.63315,90,90,120	-	-	8.53	X	64139
B-W	W ₂ B	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.5568,0.5568,0.4744,90,90,90	-	-	17.09	X	6603
B-W	W ₂ B ₃ rt	W ₂ B ₃ ,hP14,194	<i>P6₃/mmc</i>	0.29856,0.29856,1.38723,90,90,120	-	black	13.08	A	21516
B-Y	YB ₁₂	UB ₁₂ ,cF52,225	<i>Fm-3m</i>	0.75,0.75,0.75,90,90,90	-	-	3.44	X	2412
B-Y	YB ₂	AlB ₂ ,hP3,191	<i>P6₃/mmm</i>	0.32875,0.32875,0.3836,90,90,120	AlB ₂ family	-	5.11	X	47581
B-Y	YB ₄	UB ₄ ,tP20,127	<i>P4/mbm</i>	0.7111,0.7111,0.4017,90,90,90	-	-	4.32	X	12981

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
B-Y	YB ₅₀ rt	* _o P*, 18	$P2_12_12$	1.66251, 1.76198, 0.94797, 90, 90, 90	-	-	-	N	28728
B-Y	YB ₆	CaB ₆ , cP7, 221	$Pm\bar{3}m$	0.41, 0.41, 0.41, 90, 90, 90	-	blue	3.70	X	43924
B-Y	Y _{0.55} B ₁₄	Y _{0.55} B ₁₄ , mS64, 12	$C12/m1$	1.00868, 1.0331, 0.58572, 90, 124.997, 90	-	-	2.66	X	63836
B-Y	Y _{1.06} B ₆₆	YB ₆₆ , cF1936, 226	$Fm\bar{3}c$	2.34364, 2.34364, 2.34364, 90, 90, 90	-	black	2.50	X	33627
B-Yb	YbB ₁₂	UB ₁₂ , cF52, 225	$Fm\bar{3}m$	0.7468, 0.7468, 0.7468, 90, 90, 90	-	-	4.83	A	27832
B-Yb	YbB ₂	AlB ₂ , hP3, 191	$P6/mmm$	0.32522, 0.32522, 0.37297, 90, 90, 120	AlB ₂ family	-	9.46	X	59519
B-Yb	YbB ₄	UB ₄ , tP20, 127	$P4/mbm$	0.7074, 0.7074, 0.399, 90, 90, 90	-	black	7.20	A	45676
B-Yb	YbB ₆	CaB ₆ , cP7, 221	$Pm\bar{3}m$	0.41479, 0.41479, 0.41479, 90, 90, 90	-	blue	5.54	X	30160
B-Yb	YbB ₆₆	YB ₆₆ , cF1936, 226	$Fm\bar{3}c$	2.3422, 2.3422, 2.3422, 90, 90, 90	-	-	2.75	A	6600
B-Zn	Zn _{0.01} B rhom2	B ₁ hR36, 166	$R\bar{3}m$	0.491, 0.491, 1.2582, 90, 90, 120	-	-	2.61	F	10861
B-Zn	Zn _{4.12} B ₁₀₃ rhom1	Zn _{4.1} B _{102.6} , hR363, 166	$R\bar{3}m$	1.0986, 1.0986, 2.4016, 90, 90, 120	β-boron family	-	2.74	X	19925
B-Zr	ZrB ht	NaCl, cF8, 225	$Fm\bar{3}m$	0.465, 0.465, 0.465, 90, 90, 90	rocksalt family	-	6.74	X	3452
B-Zr	ZrB ₁₂	UB ₁₂ , cF52, 225	$Fm\bar{3}m$	0.74075, 0.74075, 0.74075, 90, 90, 90	-	gray	3.61	X	41743
B-Zr	ZrB ₂	AlB ₂ , hP3, 191	$P6/mmm$	0.3162, 0.3162, 0.353, 90, 90, 120	AlB ₂ family	gray	6.13	X	62391
B-Zr	Zr _{0.72} B ₁₀₅ rhom1	Sc _{1.6} B _{104.0} , hR363, 166	$R\bar{3}m$	1.0932, 1.0932, 2.3849, 90, 90, 120	β-boron family	-	2.42	X	21374
Ba-Be	BaBe ₁₃	NaZn ₁₃ , cF112, 226	$Fm\bar{3}c$	1.0485, 1.0485, 1.0485, 90, 90, 90	-	-	2.93	X	3417
Ba-Bi	BaBi ₃	SrPb ₃ , tP4, 123	$P4/mmm$	0.5188, 0.5188, 0.5157, 90, 90, 90	close-packed structure	-	9.14	X	1479
Ba-Bi	Ba ₁₁ Bi ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	$I4/mmm$	1.323, 1.323, 1.9365, 90, 90, 90	-	-	7.06	X	41102
Ba-Bi	Ba ₁₆ Bi ₁₁	Ca ₁₆ Sb ₁₁ , tP56, 113	$P\bar{4}2_1m$	1.3744, 1.3744, 1.2568, 90, 90, 90	-	-	6.29	A	33193
Ba-Bi	Ba ₂ Bi	La ₂ Sb ₂ , tI12, 139	$I4/mmm$	0.5263, 0.5263, 1.87, 90, 90, 90	-	-	6.20	X	7787
Ba-Bi	Ba ₂ Bi ₃	K ₂ Au ₃ , oI10, 71	$Immm$	0.4819, 0.7989, 0.9982, 90, 90, 90	-	gray silver	7.79	X	43822
Ba-Bi	Ba ₄ Bi ₃	Th ₄ P ₄ , cI28, 220	$I\bar{4}3d$	1.055, 1.055, 1.055, 90, 90, 90	-	-	6.65	X	42278
Ba-Bi	Ba ₅ Bi ₃	Mn ₅ Sb ₃ , hP16, 193	$P6_3/mcm$	1.013, 1.013, 0.779, 90, 90, 120	-	-	6.30	X	9337
Ba-Br	BaBr ₂ hp	PbCl ₂ , mP24, 14	$P12_1/c1$	0.9302, 0.4896, 1.2773, 90, 92, 90	-	-	6.79	X	30142
Ba-Br	BaBr ₂ m	Fe ₂ P, hP9, 189	$P\bar{6}2m$	0.84826, 0.84826, 0.4824, 90, 90, 120	Fe ₂ P family	-	4.92	A	22221
Ba-Br	BaBr ₂	PbCl ₂ , oP12, 62	$Pnma$	0.82746, 0.49599, 0.99264, 90, 90, 90	-	-	4.84	X	57798
Ba-C	BaC ₂ hp	BaC ₂ , hR9, 166	$R\bar{3}m$	0.50166, 0.50166, 0.72524, 90, 90, 120	-	-	5.09	X	60087
Ba-C	BaC ₂ ht	NaCl, cF8, 225	$Fm\bar{3}m$	0.6563, 0.6563, 0.6563, 90, 90, 90	rocksalt family	white grayish	3.79	X	36064
Ba-C	BaC ₂ lt	ThC ₂ , mS12, 15	$C12/c1$	0.75217, 0.47441, 0.80861, 90, 107.743, 90	-	white grayish	3.90	X	36064
Ba-C	BaC ₂ rt	CaC ₂ , tI6, 139	$I4/mmm$	0.43943, 0.43943, 0.7125, 90, 90, 90	-	colorless	3.89	X	36064
Ba-C	BaC ₆	BaC ₆ , hP14, 194	$P6_3/mmc$	0.4302, 0.4302, 1.051, 90, 90, 120	GIC	golden	4.13	X	7977
Ba-C	Ba ₃ [C ₆₀]	Ba ₃ [C ₆₀], cP126, 223	$Pm\bar{3}n$	1.1343, 1.1343, 1.1343, 90, 90, 90	fullerene family	-	2.58	X	27896
Ba-C	Ba ₃ [C ₇₀]	* _m ***, *	-	2.355, 2.34, 2.451, 90, 94, 03, 90	fullerene family	-	-	N	37588
Ba-C	Ba ₆ [C ₆₀]	Cs ₆ [C ₆₀], cI132, 204	$Im\bar{3}$	1.1171, 1.1171, 1.1171, 90, 90, 90	fullerene family	-	3.68	X	26422
Ba-Ca	Ba _{0.3} Ca _{0.7} rt	Cu ₂ , cF4, 225	$Fm\bar{3}m$	0.583, 0.583, 0.583, 90, 90, 90	close-packed structure	-	2.32	X	197
Ba-Ca	Ba _{0.4} Ca _{0.6}	W, cI2, 229	$Im\bar{3}m$	0.467, 0.467, 0.467, 90, 90, 90	b.c.c. family	-	2.58	X	197
Ba-Cd	BaCd	CsCl, cP2, 221	$Pm\bar{3}m$	0.4213, 0.4213, 0.4213, 90, 90, 90	b.c.c. family	-	5.55	X	6507
Ba-Cd	BaCd ₁₁	BaCd ₁₁ , tI48, 141	$I4_1/amd$	1.202, 1.202, 0.774, 90, 90, 90	-	-	8.16	X	471
Ba-Cd	BaCd ₂	KHg ₂ , oI12, 74	$Imma$	0.517, 0.8383, 0.8658, 90, 90, 90	AlB ₂ family	-	6.41	X	4837
Ba-Cd	Ba ₂ Cd	CuZr ₂ , tI6, 139	$I4/mmm$	0.4272, 0.4272, 1.52, 90, 90, 90	close-packed structure	-	4.63	X	9779
Ba-Cd	Ba ₇ Cd ₃₁	Ba ₇ Cd ₃₁ , hP41, 191	$P6/mmm$	1.0740, 1.0740, 1.0200, 90, 90, 120	-	-	7.25	X	7838
Ba-Cl	BaCl ₂ hp1	PbCl ₂ , mP24, 14	$P12_1/c1$	0.8613, 0.4604, 1.1901, 90, 92, 5, 90	-	-	5.87	X	30142
Ba-Cl	BaCl ₂ hp2	Fe ₂ P, hP9, 189	$P\bar{6}2m$	0.7083, 0.7083, 0.4058, 90, 90, 120	Fe ₂ P family	-	5.88	A	26097
Ba-Cl	BaCl ₂ ht	CaF ₂ , cF12, 225	$Fm\bar{3}m$	0.7324, 0.7324, 0.7324, 90, 90, 90	fluorite family	-	3.52	X	1894
Ba-Cl	BaCl ₂ lt	PbCl ₂ , oP12, 62	$Pnma$	0.78813, 0.47369, 0.9436, 90, 90, 90	-	-	3.93	X	57798
Ba-Cl	BaCl ₂ rt	Fe ₂ P, hP9, 189	$P\bar{6}2m$	0.8103, 0.8103, 0.4651, 90, 90, 120	Fe ₂ P family	-	3.92	A	11804
Ba-Cu	BaCu	BaCu, hP8, 194	$P6_3/mmc$	0.4499, 0.4499, 1.625, 90, 90, 120	-	-	4.68	X	12787
Ba-Cu	BaCu ₁₃	NaZn ₁₃ , cF112, 226	$Fm\bar{3}c$	1.1697, 1.1697, 1.1697, 90, 90, 90	-	brass	8.00	X	47602
Ba-D	BaD ₂ rt	PbCl ₂ , oP12, 62	$Pnma$	0.6789, 0.4171, 0.7852, 90, 90, 90	-	white	4.22	X	20610
Ba-F	BaF ₂ hp1	PbCl ₂ , oP12, 62	$Pnma$	0.65287, 0.39625, 0.77687, 90, 90, 90	-	-	5.79	X	54136
Ba-F	BaF ₂ hp2	Co _{1.75} Ge, hP6, 194	$P6_3/mmc$	0.4253, 0.4253, 0.5516, 90, 90, 120	AlB ₂ family	-	6.74	X	30941
Ba-F	BaF ₂ rt	CaF ₂ , cF12, 225	$Fm\bar{3}m$	0.61827, 0.61827, 0.61827, 90, 90, 90	frankdicksonite	colorless	4.93	X	54136
Ba-Ga	BaGa ₂	AlB ₂ , hP3, 191	$P6/mmm$	0.44322, 0.44322, 0.50824, 90, 90, 120	AlB ₂ family	gray silver	5.32	X	52890
Ba-Ga	BaGa ₄	BaAl ₄ , tI10, 139	$I4/mmm$	0.45661, 0.45661, 1.0778, 90, 90, 90	BaAl ₄ family	-	6.15	X	24498
Ba-Ga	Ba ₁₀ Ga	VAI ₁₀ , cF176, 227	$Fd\bar{3}m$	2.052, 2.052, 2.052, 90, 90, 90	-	-	4.44	X	12545
Ba-Ga	Ba ₅ Ga ₆	Ba ₅ Ga ₆ , hP24, 188	$P\bar{6}c2$	0.7771, 0.7771, 1.4376, 90, 90, 120	-	-	4.88	X	28721
Ba-Ga	Ba ₈ Ga ₇	Ba ₈ Ga ₇ , cP60, 198	$P2_13$	1.2990, 1.2990, 1.2990, 90, 90, 90	-	-	4.81	X	15719
Ba-Ge	BaGe	TlI ₂ O ₈ , 63	$Cmcm$	0.5057, 1.1942, 0.4299, 90, 90, 90	CrB(TII)-FeB	-	5.37	X	3267
Ba-Ge	BaGe _{1.51}	AlB ₂ , hP3, 191	$P6/mmm$	0.4458, 0.4458, 0.4867, 90, 90, 120	AlB ₂ family	gray dark	4.90	X	62678
Ba-Ge	BaGe ₂ hp	ThSi ₂ , tI12, 141	$I4_1/amd$	0.4769, 0.4769, 1.4737, 90, 90, 90	-	pink	5.60	X	13716
Ba-Ge	BaGe ₂ rt	BaSi ₂ , oP24, 62	$Pnma$	0.9075, 0.6808, 1.1644, 90, 90, 90	-	gray silver	5.22	X	33635
Ba-Ge	BaGe ₃ hp	Mg ₃ Cd, hP8, 194	$P6_3/mmc$	0.6814, 0.6814, 0.5027, 90, 90, 120	close-packed structure	-	5.83	X	57268
Ba-Ge	BaGe ₅ hp	BaGe ₅ , oI24, 74	$Imma$	0.48728, 0.83421, 1.37202, 90, 90, 90	-	-	5.96	X	64950
Ba-Ge	BaGe ₃ rt	BaGe ₃ , oP66, 53	$Pnma$	1.0727, 0.92844, 1.4794, 90, 90, 90	-	gray	5.64	X	55380
Ba-Ge	BaGe ₆	Eu(Ga _{0.33} Ge _{0.67}) ₆ , oS28, 63	$Cmcm$	0.4769, 1.0777, 1.2385, 90, 90, 90	clathrate	-	5.98	X	63461
Ba-Ge	Ba ₂ Ge	Co ₂ Si-b, oP12, 62	$Pnma$	0.838, 0.548, 1.004, 90, 90, 90	-	-	5.00	X	7702
Ba-Ge	Ba ₂ Ge ₄ ht	Ba ₂ Si ₄ , tP28, 136	$P4_2/mmm$	0.8621, 0.8621, 1.2031, 90, 90, 90	-	black	5.22	X	34288
Ba-Ge	Ba ₃ Ge ₄ rt	Ba ₃ Ge ₄ , oS56, 65	$Cmmm$	1.1799, 1.221, 1.2097, 90, 90, 90	-	gray	5.35	X	34288
Ba-Ge	Ba ₄ Ge _{21.5}	Na ₂ Si ₂₃ , cP54, 223	$Pm\bar{3}n$	1.066, 1.066, 1.066, 90, 90, 90	clathrate	gray silver	5.79	X	42729
Ba-Ge	Ba ₅ Ge ₃	Ba ₅ Si ₃ , tP32, 130	$P4/ncc$	0.8519, 0.8519, 1.6554, 90, 90, 90	-	black gray	5.00	X	37060
Ba-Ge	Ba ₆ Ge ₂₄	K ₆ Sn ₂₅ , cP124, 213	$P4_132$	1.45483, 1.45483, 1.45483, 90, 90, 90	clathrate	black	5.54	X	38017
Ba-Ge	Ba ₇ Ge ₃₉	Ba ₇ Ge ₃₉ , oS184, 36	$Cmc2_1$	2.95729, 1.12228, 1.27992, 90, 90, 90	-	gray	5.93	X	63461
Ba-Ge	Ba ₇ Ge ₆	Ca ₇ Sn ₆ , oP52, 62	$Pnma$	0.80853, 2.4545, 0.89782, 90, 90, 90	-	-	5.21	X	59809
Ba-Ge	Ba ₈ Ge ₄₃ ht1	Ba ₈ Ge ₄₃ , cI408, 230	$Ia\bar{3}d$	2.13123, 2.13123, 2.13123, 90, 90, 90	clathrate	gray	5.79	X	44883
Ba-H	BaH ₂ hp1	Co _{1.75} Ge, hP6, 194	$P6_3/mmc$	0.44, 0.44, 0.56, 90, 90, 120	AlB ₂ family	-	4.93	X	54260
Ba-H	BaH ₂ hp2	* _h P3, 191	$P6/mmm$	0.32741, 0.32741, 0.29518, 90, 90, 120	-	-	8.44	N	54260
Ba-H	BaH ₂ ht	* _c I*, *	-	0.9465, 0.9465, 0.9465, 90, 90, 90	-	-	-	N	1202
Ba-H	BaH ₂ rt	PbCl ₂ , oP12, 62	$Pnma$	0.6792, 0.4168, 0.7858, 90, 90, 90	-	white	4.16	X	29634

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Ba-Hg	BaHg	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.4131,0.4131,0.4131,90,90,90	b.c.c. family	-	7.96	X	8927
Ba-Hg	BaHg ₁₁	BaHg ₁₁ cP36,221	<i>Pm-3m</i>	0.95875,0.95875,0.95875,90,90,90	-	gray silver	13.25	X	36879
Ba-Hg	BaHg ₂	KHg ₂ oI12,74	<i>Imma</i>	0.5102,0.8063,0.87,90,90,90	AlB ₂ family	-	9.99	X	4837
Ba-Hg	BaHg ₆	BaHg ₆ oP28,62	<i>Pnma</i>	1.3389,0.51939,1.0426,90,90,90	-	-	12.28	X	61510
Ba-Hg	Ba ₂ Hg	CuZr ₂ tI6,139	<i>I4/mmm</i>	0.42,0.42,1.519,90,90,90	close-packed structure	-	5.89	X	9779
Ba-Hg	Ba ₂₀ Hg ₁₀₃	Ba ₂₀ Hg ₁₀₃ cF492,216	<i>F-43m</i>	2.3333,2.3333,2.3333,90,90,90	-	gray silver	12.24	X	60448
Ba-Hg	Ba ₇ Hg ₃₁	Ba ₇ Cd ₃₁ hP41,191	<i>P6/mmm</i>	1.0778,1.0778,1.0189,90,90,120	-	-	11.63	A	8927
Ba-I	BaI ₂ hp	PbCl ₂ mP24,14	<i>P12₁/c1</i>	0.9572,0.5022,1.3501,90,90,99,90	-	-	8.01	X	30142
Ba-I	BaI ₂ hp-ht	Fe ₂ P,hP9,189	<i>P-62m</i>	0.9142,0.9142,0.5173,90,90,120	Fe ₂ P family	white	5.20	X	16103
Ba-I	BaI ₂ rt	PbCl ₂ oP12,62	<i>Pnma</i>	0.8922,0.5304,1.0695,90,90,90	-	-	5.13	X	1894
Ba-In	BaIn	NaHg ₂ oS16,63	<i>Cmcm</i>	0.8158,1.2481,0.5578,90,90,90	b.c.c. family	gray silver	5.90	X	46660
Ba-In	BaIn ₂	KHg ₂ oI12,74	<i>Imma</i>	0.522,0.8504,0.852,90,90,90	AlB ₂ family	gray silver	6.44	X	46660
Ba-In	BaIn ₄	BaAl ₄ tI10,139	<i>I4/mmm</i>	0.497,0.497,1.1983,90,90,90	BaAl ₄ family	gray silver	6.69	X	46660
Ba-In	Ba ₂ In	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.80973,0.59134,1.0939,90,90,90	-	-	4.94	X	58378
Ba-In	Ba ₉ In ₄	Sm ₉ Ga ₄ tI26,87	<i>I4/m</i>	1.3948,1.3948,0.5888,90,90,90	-	-	4.92	X	56543
Ba-Li	Li ₄ Ba	Li ₄ Ba ₃ oP30,194	<i>P6₃/mmc</i>	1.0936,1.0936,0.8943,90,90,120	-	gray	1.78	X	48709
Ba-Li	Li ₄₄ Ba ₁₉	Li ₄₄ Ba ₁₉ tI252,122	<i>I-42d</i>	1.63911,1.63911,3.2712,90,90,90	-	-	2.20	X	49390
Ba-Mg	BaMg ₂	MgZn ₂ hP12,194	<i>P6₃/mmc</i>	0.66699,0.66699,1.0602,90,90,120	Friauf-Laves phase	gray silver	3.03	X	43811
Ba-Mg	Ba ₁₉ Mg ₁₇₂	*hP*,194	<i>P6₃/mmc</i>	1.0581,1.0581,1.053,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	2.21	N	4779
Ba-Mg	Ba ₂ Mg ₁₇	Zn ₁₇ Th ₂ hR57,166	<i>R-3m</i>	1.065,1.065,1.5587,90,90,120	CaCu ₅ -Zr ₄ Al ₃	white silver	2.24	X	7343
Ba-Mg	Ba ₆ Mg ₂₃	Th ₆ Mn ₂₃ cF116,225	<i>Fm-3m</i>	1.5263,1.5263,1.5263,90,90,90	-	-	2.59	A	2388
Ba-Mn	Ba _{0.03} Mn _{0.97} rt	Mn ₂ cI58,217	<i>I-43m</i>	0.895,0.895,0.895,90,90,90	-	-	7.71	X	7598
Ba-N	Ba[N ₂]	ThC ₂ mS12,15	<i>C12/c1</i>	0.71608,0.43776,0.72188,90,104.968,90	-	-	5.02	X	59171
Ba-N	Ba[N ₃] ₂	Ba[N ₃] ₂ mP14,11	<i>P12₁/m1</i>	0.5448,0.4399,0.9613,90,99.64,90	-	colorless	3.24	X	43291
Ba-N	Ba ₂ N hp1	CdI ₂ hP3,164	<i>P-3m1</i>	0.38211,0.38211,0.6902,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.49	X	45433
Ba-N	Ba ₂ N	CdCl ₂ hR9,166	<i>R-3m</i>	0.4029,0.4029,2.2425,90,90,120	-	brown dark	4.56	X	46760
Ba-N	Ba ₃ N	TiCl ₃ hP8,193	<i>P6₃/mcm</i>	0.76418,0.76418,0.70501,90,90,120	-	-	3.97	X	35415
Ba-N	Ba ₃ N ₄	*hP*,*	-	0.522,0.522,0.55,90,90,120	-	black	-	N	2984
Ba-N	Ba ₄ N ₂ hp2	Th ₃ P ₄ cI28,220	<i>I-43d</i>	0.83741,0.83741,0.83741,90,90,90	-	-	6.53	X	45433
Ba-Na	NaBa	CdNa ₂ cF96,227	<i>Fd-3m</i>	1.7027,1.7027,1.7027,90,90,90	-	-	2.59	X	28882
Ba-Na	Na ₂ Ba rt	MgZn ₂ hP12,194	<i>P6₃/mmc</i>	0.7393,0.7393,1.1999,90,90,120	Friauf-Laves phase	-	2.14	X	29708
Ba-Ni	Ba ₂ Ni ₃ ht	Sr ₂ Ni ₃ hP5,164	<i>P-3m1</i>	0.4201,0.4201,0.91371,90,90,120	-	-	5.36	X	58332
Ba-O	BaO hp1	NiAs ₂ hP4,194	<i>P6₃/mmc</i>	0.3617,0.3617,0.6349,90,90,120	AlB ₂ family	-	7.08	X	19285
Ba-O	BaO hp2	BaO ₂ tP4,129	<i>P4/nmm</i>	0.4375,0.4375,0.3248,90,90,90	b.c.c. family	-	8.19	X	19285
Ba-O	BaO rt	NaCl ₂ cF8,225	<i>Fm-3m</i>	0.5539,0.5539,0.5539,90,90,90	rocksalt family	-	5.99	X	10999
Ba-O	BaO _{1.97}	CaC ₂ tI6,139	<i>I4/mmm</i>	0.38059,0.38059,0.6837,90,90,90	-	white	5.66	X	36535
Ba-O	Ba[O ₂] hp	Ba[O ₂]oS6,65	<i>Cmmm</i>	0.38922,0.57551,0.30424,90,90,90	-	-	8.25	X	56212
Ba-P	BaP ₁₀ rt	BaP ₁₀ oS44,36	<i>Cmc2₁</i>	0.6452,1.2589,1.1927,90,90,90	-	black	3.07	X	15491
Ba-P	BaP ₃ mon1	BaP ₃ mS16,12	<i>C12/m1</i>	1.1627,0.76529,0.47469,90,112.73,90	-	red dark	3.93	X	62955
Ba-P	BaP ₃ mon2	BaP ₃ mP16,14	<i>P12₁/c1</i>	0.64859,0.77105,0.81719,90,104.72,90	-	red dark	3.87	X	62955
Ba-P	BaP ₈	BaP ₈ aP18,2	<i>P-1</i>	0.6762,0.7233,0.8567,86.32,84.31,70.4	-	black	3.26	X	42686
Ba-P	Ba ₃ P ₁₄	Sr ₃ P ₁₄ mP34,14	<i>P12₁/c1</i>	0.6516,1.299,1.19969,90,123.4,90	-	red	3.31	X	7566
Ba-P	Ba ₃ P ₄	Sr ₃ As ₄ oF56,43	<i>Fdd2</i>	1.4851,1.8236,0.615,90,90,90	-	black	4.27	X	17412
Ba-P	Ba ₄ P _{2.67}	Th ₃ P ₄ cI28,220	<i>I-43d</i>	0.9779,0.9779,0.9779,90,90,90	-	black gray	4.49	X	10918
Ba-P	Ba ₄ P ₃ rt	Ba ₄ P ₃ oP56,55	<i>Pbam</i>	1.2562,1.3254,1.1273,90,90,90	-	black gray	4.55	X	28148
Ba-P	Ba ₃ P ₄ ht	Sm ₅ Ge ₄ oP36,62	<i>Pnma</i>	0.833,1.6503,0.8405,90,90,90	-	-	4.66	X	43128
Ba-P	Ba ₃ P ₉ rt	Ba ₃ P ₉ oF112,43	<i>Fdd2</i>	1.5626,1.8968,1.0272,90,90,90	-	gray dark	4.21	X	43180
Ba-Pb	BaPb rt	TlI ₂ oS8,63	<i>Cmcm</i>	0.529,1.26,0.478,90,90,90	CrB(TlI)-FeB	black	7.18	X	2066
Ba-Pb	BaPb ₃	BaPb ₃ hR36,166	<i>R-3m</i>	0.72906,0.72906,2.56443,90,90,120	close-packed structure	gray silver	9.61	X	52586
Ba-Pb	Ba ₂ Pb	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.86512,0.5691,1.0618,90,90,90	-	-	6.12	X	48753
Ba-Pb	Ba ₃ Pb ₅ rt	Pu ₃ Pd ₅ oS32,63	<i>Cmcm</i>	1.1154,0.9049,1.137,90,90,90	-	black gray	8.38	X	39141
Ba-Pb	Ba _{4.82} Pb ₃	W ₅ Si ₃ tI32,140	<i>I4/mcm</i>	1.4148,1.4148,0.64288,90,90,90	-	-	6.63	X	46121
Ba-Pb	Ba ₄ Pb ₃	Cr ₃ B ₃ tI32,140	<i>I4/mcm</i>	0.9038,0.9038,1.6843,90,90,90	-	gray silver	6.32	X	2066
Ba-Pd	BaPd	TlI ₂ oS8,63	<i>Cmcm</i>	0.435,1.179,0.468,90,90,90	CrB(TlI)-FeB	-	6.75	A	8138
Ba-Pd	BaPd ₂	MgCu ₂ cF24,227	<i>Fd-3m</i>	0.7967,0.7967,0.7967,90,90,90	Friauf-Laves phase	-	9.20	X	5416
Ba-Pd	BaPd ₅	CaCu ₅ hP6,191	<i>P6/mmm</i>	0.554,0.554,0.433,90,90,120	-	-	9.66	X	5441
Ba-Po	BaPo	NaCl ₂ cF8,225	<i>Fm-3m</i>	0.7119,0.7119,0.7119,90,90,90	rocksalt family	gray	6.38	X	1219
Ba-Pt	BaPt	NiAs ₂ hP4,194	<i>P6₃/mmc</i>	0.5057,0.5057,0.542,90,90,120	AlB ₂ family	black shiny	9.20	X	43868
Ba-Pt	BaPt ₂	MgCu ₂ cF24,227	<i>Fd-3m</i>	0.794,0.794,0.794,90,90,90	Friauf-Laves phase	-	14.00	X	6098
Ba-Pt	BaPt ₃	CaCu ₅ hP6,191	<i>P6/mmm</i>	0.5505,0.5505,0.4337,90,90,120	-	-	16.23	X	5441
Ba-Pt	Ba ₂ Pt	CdCl ₂ hR9,166	<i>R-3m</i>	0.45642,0.45642,2.20912,90,90,120	-	black	5.87	X	45094
Ba-Pt	Ba ₃ Pt ₂	Er ₃ Ni ₂ hR45,148	<i>R-3</i>	0.9624,0.9624,1.8606,90,90,120	-	black	8.03	X	45012
Ba-Rh	BaRh ₂	MgCu ₂ cF24,227	<i>Fd-3m</i>	0.7852,0.7852,0.7852,90,90,90	Friauf-Laves phase	-	9.42	X	909
Ba-S	BaS hp	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3648,0.3648,0.3648,90,90,90	b.c.c. family	orange yellow	5.79	X	13573
Ba-S	BaS rt	NaCl ₂ cF8,225	<i>Fm-3m</i>	0.6387,0.6387,0.6387,90,90,90	rocksalt family	colorless	4.32	X	13573
Ba-S	Ba ₂ S rt	Ba ₂ S ₂ mS12,15	<i>C12/c1</i>	0.9299,0.4736,0.8993,90,118.37,90	-	yellow	3.84	X	8681
Ba-S	Ba ₂ S ₃	Ba ₂ S ₃ tP8,113	<i>P-42,m</i>	0.6871,0.6871,0.41681,90,90,90	-	yellow lemon	3.94	X	8846
Ba-S	Ba ₂ S ₃	Ba ₂ S ₃ tI20,109	<i>I4,md</i>	0.6112,0.6112,1.5950,90,90,90	-	yellow lemon	4.13	X	8846
Ba-Sb	BaSb ₂	BaSb ₂ mP18,11	<i>P12₁/m1</i>	1.1679,0.4381,1.2571,90,100.53,90	-	gray silver	6.00	X	45030
Ba-Sb	BaSb ₃	SrAs ₃ mS16,12	<i>C12/m1</i>	1.0807,0.8519,0.6471,90,112.66,90	-	gray silver	6.07	X	11878
Ba-Sb	Ba ₁₁ Sb ₁₀	Ba ₁₁ Sb ₁₀ oI84,71	<i>Immm</i>	1.2653,1.3161,1.9472,90,90,90	-	gray dark	5.59	X	45030
Ba-Sb	Ba ₁₆ Sb ₁₁	Ca ₁₆ Sb ₁₁ tP56,113	<i>P-42,m</i>	1.3582,1.3582,1.2393,90,90,90	-	-	5.14	A	33193
Ba-Sb	Ba ₂ Sb	La ₂ Sb ₂ tI12,139	<i>I4/mmm</i>	0.522,0.522,1.846,90,90,90	-	-	5.23	X	9337
Ba-Sb	Ba ₂ Sb ₃	Sr ₂ Sb ₃ mP40,14	<i>P12₁/c1</i>	0.6934,1.3453,1.5817,90,90,25,90	-	gray	5.76	X	18538
Ba-Sb	Ba ₃ Sb ₃	Mn ₅ Si ₃ hP16,193	<i>P6₃/mcm</i>	0.997,0.997,0.773,90,90,120	-	-	5.25	X	9337
Ba-Sb	Ba ₂ Sb ₄ ht	Eu ₅ As ₄ oS36,64	<i>Cmce</i>	1.7749,0.9021,0.9059,90,90,90	-	gray dark	5.37	X	35648
Ba-Sb	Ba ₂ Sb ₄ rt	Sm ₅ Ge ₄ oP36,62	<i>Pnma</i>	0.9012,1.7823,0.9041,90,90,90	-	black	5.37	X	14615
Ba-Se	BaSe hp	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3795,0.3795,0.3795,90,90,90	b.c.c. family	red	6.57	X	17183

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ba-Se	BaSe rt	NaCl,cF8,225	<i>Fm-3m</i>	0.6593,0.6593,0.6593,90,90,90	rocksalt family	red	5.01	X	17183
Ba-Se	BaSe ₂	BaS ₂ ,mS12,15	<i>C12/c1</i>	0.982,0.4929,0.9335,90,118.48,90	-	red	4.94	X	14616
Ba-Se	BaSe ₃	BaS ₃ ,tP8,113	<i>P-42₁m</i>	0.72802,0.72802,0.42495,90,90,90	-	brown red	5.52	X	14616
Ba-Si	BaSi	TlI,oS8,63	<i>Cmcm</i>	0.5043,1.1933,0.41395,90,90,90	CrB(TII)-FeB	gray silver	4.41	X	32618
Ba-Si	BaSi ₂ hp1	EuGe ₂ ,hP3,164	<i>P-3m1</i>	0.4047,0.4047,0.533,90,90,120	AlB ₂ family	-	4.25	A	13290
Ba-Si	BaSi ₂ hp2	SrSi ₂ ,cP12,213	<i>P4₁32</i>	0.6715,0.6715,0.6715,90,90,90	-	golden light	4.24	X	11232
Ba-Si	BaSi ₂	BaSi ₂ ,oP24,62	<i>Pnma</i>	0.89326,0.67262,1.15335,90,90,90	-	black	3.71	X	54532
Ba-Si	BaSi ₆ ht-hp	Eu(Ga _{0.33} Ge _{0.67}) ₆ ,oS28,63	<i>Cmcm</i>	0.44789,1.03679,1.19634,90,90,90	clathrate	-	3.66	X	54516
Ba-Si	Ba _{0.001} Si _{0.999}	C ₆ F8,227	<i>Fd-3m</i>	0.54316,0.54316,0.54316,90,90,90	-	-	2.34	X	55652
Ba-Si	Ba ₂ Si	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.843,0.54,0.988,90,90,90	-	-	4.47	X	10159
Ba-Si	Ba ₃ Si ₄	Ba ₃ Si ₄ ,tP28,136	<i>P4₂/mmm</i>	0.85233,0.85233,1.18322,90,90,90	-	gray	4.05	X	52447
Ba-Si	Ba ₃ Si ₂₃ hp	Na ₃ Si ₂₃ ,cP54,223	<i>Pm-3n</i>	1.0331,1.0331,1.0331,90,90,90	clathrate	gray dark	3.52	X	42729
Ba-Si	Ba ₅ Si ₃	Ba ₅ Si ₃ ,tP32,130	<i>P4/ncc</i>	0.8465,0.8465,1.645,90,90,90	-	black gray	4.34	X	37058
Ba-Si	Ba ₆ Si ₅	K ₆ Sn ₂₅ ,cP124,213	<i>P4₁32</i>	1.4061,1.4061,1.4061,90,90,90	clathrate	-	3.65	X	58031
Ba-Sn	BaSn	TlI,oS8,63	<i>Cmcm</i>	0.531,1.2485,0.465,90,90,90	CrB(TII)-FeB	-	5.52	X	3267
Ba-Sn	BaSn ₂	EuGe ₂ ,hP3,164	<i>P-3m1</i>	0.4652,0.4652,0.5546,90,90,120	AlB ₂ family	-	5.99	X	52566
Ba-Sn	BaSn ₃	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.7254,0.7254,0.55,90,90,120	close-packed structure	gray silver	6.54	X	50753
Ba-Sn	BaSn ₅	BaSn ₅ ,hP6,191	<i>P6/mmm</i>	0.53734,0.53734,0.7097,90,90,120	-	gray silver	6.84	X	40048
Ba-Sn	Ba ₂ Sn	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.86152,0.56985,1.0569,90,90,90	-	-	5.04	X	48753
Ba-Sn	Ba ₃ Sn ₂	Ba ₃ Sn ₂ ,tP20,92	<i>P4₁2₁2</i>	0.66854,0.66854,1.7842,90,90,90	-	-	5.41	X	59809
Ba-Sn	Ba ₃ Sn ₅	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	1.0995,0.8987,1.1176,90,90,90	-	black gray	6.05	X	40035
Ba-Sn	Ba ₅ Sn ₃	Cr ₃ B ₃ ,tI32,140	<i>I4/mcm</i>	0.902,0.902,1.678,90,90,90	-	-	5.07	X	10954
Ba-Sr	Ba _{0.22} Sr _{0.78} rt	Cu ₂ cF4,225	<i>Fm-3m</i>	0.6136,0.6136,0.6136,90,90,90	close-packed structure	-	2.83	X	760
Ba-Sr	Ba _{0.5} Sr _{0.5}	W,cI2,229	<i>Im-3m</i>	0.492,0.492,0.492,90,90,90	b.c.c. family	-	3.14	X	760
Ba-T	BaT ₂	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.679,0.4161,0.782,90,90,90	-	-	4.31	A	22012
Ba-Te	BaTe hp	CsCl,cP2,221	<i>Pm-3m</i>	0.3914,0.3914,0.3914,90,90,90	b.c.c. family	-	7.34	X	17183
Ba-Te	BaTe rt	NaCl,cF8,225	<i>Fm-3m</i>	0.7005,0.7005,0.7005,90,90,90	rocksalt family	black	5.12	X	17183
Ba-Te	BaTe ₂	SrS ₂ ,tI12,140	<i>I4/mcm</i>	0.7181,0.7181,0.8898,90,90,90	-	black	5.68	X	30656
Ba-Te	BaTe ₃	BaS ₃ ,tP8,113	<i>P-42₁m</i>	0.7915,0.7915,0.443,90,90,90	-	black	6.22	X	17558
Ba-Tl	BaTl ₂	CaIn ₂ ,hP6,194	<i>P6₃/mmc</i>	0.522,0.522,0.8437,90,90,120	AlB ₂ family	-	9.11	X	2343
Ba-Tl	BaTl ₃ rt	Cd ₃ Er,oS16,63	<i>Cmcm</i>	0.7024,1.3899,0.5201,90,90,90	close-packed structure	gray	9.82	X	40692
Ba-Tl	BaTl ₄	EuIn ₄ ,mS20,12	<i>C12/m1</i>	1.2408,0.5351,1.0383,90,116,90	-	gray silver	10.24	X	57216
Ba-Zn	BaZn	CsCl,cP2,221	<i>Pm-3m</i>	0.4093,0.4093,0.4093,90,90,90	b.c.c. family	-	4.91	X	17967
Ba-Zn	BaZn ₁₃	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.2358,1.2358,1.2358,90,90,90	-	-	6.95	X	47602
Ba-Zn	BaZn ₂	KHg ₂ ,oI12,74	<i>Imma</i>	0.5009,0.8104,0.78,90,90,90	AlB ₂ family	-	5.62	X	17967
Ba-Zn	BaZn ₃	BaZn ₃ ,oS24,63	<i>Cmcm</i>	1.0783,0.8398,0.532,90,90,90	-	gray silver	6.40	X	50712
Ba-Zn	Ba ₂ Zn	CuZr ₂ ,tI6,139	<i>I4/mmm</i>	0.4175,0.4175,1.496,90,90,90	close-packed structure	-	4.33	A	17967
Be-Br	BeBr ₂ rt	SiS ₂ ,oI12,72	<i>Ibam</i>	0.5569,1.0405,0.5543,90,90,90	-	-	3.49	X	38395
Be-C	Be ₂ C	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.434,0.434,0.434,90,90,90	fluorite family	colorless	2.44	X	3170
Be-Ca	CaBe ₁₃	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0312,1.0312,1.0312,90,90,90	-	-	1.90	X	1538
Be-Ce	Be ₁₃ Ce	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0376,1.0376,1.0376,90,90,90	-	-	3.06	X	43867
Be-Cl	BeCl ₂ ht	SiS ₂ ,oI12,72	<i>Ibam</i>	0.5285,0.9807,0.5227,90,90,90	-	-	1.96	X	38395
Be-Cl	BeCl ₂ rt	ZnI ₂ ,tI96,142	<i>I4₁/acd</i>	1.0595,1.0595,1.8036,90,90,90	-	white	2.10	X	38395
Be-Cm	Be ₁₃ Cm	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0272,1.0272,1.0272,90,90,90	-	-	4.46	A	8949
Be-Co	BeCo	CsCl,cP2,221	<i>Pm-3m</i>	0.2625,0.2625,0.2625,90,90,90	b.c.c. family	-	6.24	X	10932
Be-Co	Be _{0.3} Co _{0.7} ht	* ₁ tP*,*	-	0.2658,0.2658,0.2726,90,90,90	-	-	-	N	10830
Be-Co	Be _{0.67} Co _{0.33} ht	W,cI2,229	<i>Im-3m</i>	0.2582,0.2582,0.2582,90,90,90	b.c.c. family	-	4.92	X	10463
Be-Co	Be ₁₂ Co	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.7237,0.7237,0.4249,90,90,90	CaCu ₂ -Zr ₄ Al ₃	-	2.49	A	823
Be-Co	Be ₁₇ Co ₂ rt	Be _{15.34} Rh _{2.36} ,hP19,187	<i>P-6m2</i>	0.42,0.42,1.047,90,90,120	-	-	2.81	A	10463
Be-Co	Be ₂ Co rt	* ₁ hP*,*	-	0.83783,0.83783,1.37652,90,90,120	-	-	-	N	10932
Be-Co	Be ₃ Co m	Be ₃ Au,cF24,216	<i>F-43m</i>	0.5852,0.5852,0.5852,90,90,90	Friauf-Laves phase	-	3.45	A	3192
Be-Co	Be ₆ Co	* ₁ cF*,*	-	1.52466,1.52466,1.52466,90,90,90	-	-	-	N	10932
Be-Co	Be ₉ Co ht	* ₁ cI*,*	-	0.76136,0.76136,0.76136,90,90,90	-	-	-	N	10932
Be-Cr	Be _{0.09} Cr _{0.91}	W,cI2,229	<i>Im-3m</i>	0.28623,0.28623,0.28623,90,90,90	b.c.c. family	-	6.82	X	672
Be-Cr	Be ₁₂ Cr	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.7238,0.7238,0.4174,90,90,90	CaCu ₂ -Zr ₄ Al ₃	-	2.43	X	13968
Be-Cr	Be ₂ Cr	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.4239,0.4239,0.6919,90,90,120	Friauf-Laves phase	-	4.32	X	108
Be-Cu	BeCu	CsCl,cP2,221	<i>Pm-3m</i>	0.2702,0.2702,0.2702,90,90,90	b.c.c. family	-	6.11	X	4737
Be-Cu	Be _{0.35} Cu _{0.65} ht	W,cI2,229	<i>Im-3m</i>	0.279,0.279,0.279,90,90,90	b.c.c. family	-	6.80	X	90
Be-Cu	Be ₂ Cu	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.5977,0.5977,0.5977,90,90,90	Friauf-Laves phase	-	5.08	X	15558
Be-Cu	Be _{2.25} Cu _{0.75}	Cu _{0.7} Zn ₂ ,hP3,187	<i>P-6m2</i>	0.4179,0.4179,0.2557,90,90,120	AlB ₂ family	-	2.92	X	4737
Be-Dy	Be ₁₃ Dy	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.021,1.021,1.021,90,90,90	-	-	3.49	X	18025
Be-Er	Be ₁₃ Er	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.021,1.021,1.021,90,90,90	-	-	3.55	X	2301
Be-Eu	Be ₁₃ Eu	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.03,1.03,1.03,90,90,90	-	-	3.27	X	2301
Be-F	BeF ₂ ht1	SiO ₂ ,hP18,180	<i>P6₂22</i>	0.4806,0.4806,0.52404,90,90,120	-	-	2.23	X	21289
Be-F	BeF ₂ rt	SiO ₂ ,hP9,152	<i>P3₁21</i>	0.4739,0.4739,0.51875,90,90,120	-	colorless	2.32	X	57297
Be-F	BeF ₂ tet	SiO ₂ ,tP12,92	<i>P4₁2₁2</i>	0.4749,0.4749,0.655,90,90,90	-	-	2.11	A	19342
Be-Fe	Be _{0.25} Fe _{0.75} rt	W,cI2,229	<i>Im-3m</i>	0.279,0.279,0.279,90,90,90	b.c.c. family	-	6.75	X	12471
Be-Fe	Be _{0.56} Fe _{1.44} m	CsCl,cP2,221	<i>Pm-3m</i>	0.273,0.273,0.273,90,90,90	b.c.c. family	-	6.98	X	11652
Be-Fe	Be ₁₂ Fe	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.7253,0.7253,0.4232,90,90,90	CaCu ₂ -Zr ₄ Al ₃	-	2.45	A	823
Be-Fe	Be _{15.2} Fe _{2.2} rt	Be _{15.34} Rh _{2.36} ,hP19,187	<i>P-6m2</i>	0.4137,0.4137,1.072,90,90,120	-	-	2.72	A	4850
Be-Fe	Be ₂ Fe	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.4225,0.4225,0.6872,90,90,120	Friauf-Laves phase	-	4.62	A	37671
Be-Fe	Be ₃ Fe	Be ₃ Au,cF24,216	<i>F-43m</i>	0.5875,0.5875,0.5875,90,90,90	Friauf-Laves phase	-	3.31	A	15558
Be-Gd	Be ₁₃ Gd rt	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.028,1.028,1.028,90,90,90	-	-	3.36	A	7580
Be-H	BeH ₂	BeH ₂ ,oI36,72	<i>Ibam</i>	0.4160,0.9082,0.7707,90,90,90	-	-	0.75	X	21697
Be-Hf	BeHf	TlI,oS8,63	<i>Cmcm</i>	0.334,1,0.372,90,90,90	CrB(TII)-FeB	-	10.02	A	12939
Be-Hf	Be ₁₃ Hf ht	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0005,1.0005,1.0005,90,90,90	-	-	3.92	X	1420
Be-Hf	Be ₁₇ Hf ₂ hex1	Th ₃ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.744,0.744,0.738,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	4.79	A	1332
Be-Hf	Be ₁₇ Hf ₂ hex2	Zn ₁₇ U ₂ ,hP114,194	<i>P6₃/mmc</i>	0.7499,0.7499,2.1905,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	4.77	A	1477

System	Substance	Prototype	H-M	Unit Cell Parameters <i>a,b,c,a,β,γ</i> (nm,°)	Family	Color	<i>D_x</i>	C	Ref.
Be-Hf	Be ₁₇ Hf ₂ rhom	Zn ₁₇ Th ₂ ,hR57,166	<i>R-3m</i>	0.7494,0.7494,1.093,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	4.78	A	1332
Be-Hf	Be ₂ Hf	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.3775,0.3775,0.3157,90,90,120	AlB ₂ family	-	8.38	X	1420
Be-Hf	Be ₅ Hf	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.4525,0.4525,0.3464,90,90,120	-	-	6.04	X	1420
Be-Ho	Be ₁₃ Ho	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0205,1.0205,1.0205,90,90,90	-	-	3.53	X	38340
Be-I	BeI ₂ orth	SiS ₂ ,oI12,72	<i>Ibam</i>	0.6025,1.1316,0.6035,90,90,90	-	-	4.24	X	38395
Be-I	BeI ₂ tet	ZnI ₂ ,tI96,142	<i>I4₁/acd</i>	1.219,1.219,2.1325,90,90,90	-	-	4.41	X	38395
Be-Ir	Be ₁₇ Ir ₂	Be _{15,34} Rh _{2,36} ,hP19,187	<i>P-6m2</i>	0.4193,0.4193,1.089,90,90,120	-	-	5.38	A	6100
Be-La	Be ₁₃ La	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.046,1.046,1.046,90,90,90	-	-	2.97	X	2301
Be-Lu	Be ₁₃ Lu	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0173,1.0173,1.0173,90,90,90	-	-	3.69	X	2301
Be-Mg	MgBe ₁₃	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0166,1.0166,1.0166,90,90,90	-	-	1.79	X	1538
Be-Mn	Be ₁₂ Mn	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.7276,0.7276,0.4256,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	2.40	A	823
Be-Mn	Be ₂ Mn	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.4231,0.4231,0.6909,90,90,120	Friauf-Laves phase	-	4.52	X	108
Be-Mn	Be ₂ Mn _{0.17}	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.589,0.589,0.589,90,90,90	Friauf-Laves phase	-	1.78	X	4119
Be-Mo	BeMo ₃ rt	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.489,0.489,0.489,90,90,90	Frank-Kasper phase	-	8.43	X	1157
Be-Mo	Be ₁₂ Mo	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.7251,0.7251,0.4234,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	3.04	X	16700
Be-Mo	Be ₁₃ Mo	*tP56,89	P422	1.027,1.027,0.429,90,90,90	-	-	3.13	N	384
Be-Mo	Be ₂ Mo	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.4434,0.4434,0.7275,90,90,120	Friauf-Laves phase	-	6.11	X	108
Be-Mo	Be ₂₂ Mo	Zn ₂₂ Zr,cF184,227	<i>Fd-3m</i>	1.1634,1.1634,1.1634,90,90,90	-	-	2.48	X	1968
Be-N	Be ₃ N ₂ ht	Be ₃ N ₂ ,hP12,194	<i>P6₃/mmc</i>	0.28413,0.28413,0.9693,90,90,120	-	-	2.70	X	4794
Be-N	Be ₃ N ₂ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	0.81452,0.81452,0.81452,90,90,90	-	colorless	2.71	X	43295
Be-Nb	Be _{0.15} Nb _{0.85}	W,cI2,229	<i>Im-3m</i>	0.3289,0.3289,0.3289,90,90,90	b.c.c. family	-	7.50	X	4138
Be-Nb	Be ₁₂ Nb	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.7357,0.7357,0.4247,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	2.90	X	666
Be-Nb	Be ₁₇ Nb ₂ ht	Zn ₁₇ Th ₂ ,hR57,166	<i>R-3m</i>	0.7409,0.7409,1.084,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	3.28	X	1031
Be-Nb	Be ₂ Nb	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.6535,0.6535,0.6535,90,90,90	Friauf-Laves phase	-	5.28	X	1018
Be-Nb	Be ₂ Nb ₃	U ₃ Si ₂ ,tP10,127	<i>P4/mbm</i>	0.649,0.649,0.335,90,90,90	-	-	6.98	X	1142
Be-Nb	Be ₃ Nb	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.4561,0.4561,2.105,90,90,120	Laves-CaCu ₅	-	4.73	X	1018
Be-Nd	Be ₁₃ Nd	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0352,1.0352,1.0352,90,90,90	-	-	3.13	X	2301
Be-Ni	BeNi	CsCl,cP2,221	<i>Pm-3m</i>	0.2604,0.2604,0.2604,90,90,90	b.c.c. family	-	6.37	X	13683
Be-Ni	Be _{0.35} Ni _{0.65} m	*oP*,*	-	0.2578,0.3647,0.3914,90,90,90	-	-	-	N	10830
Be-Ni	Be _{0.989} Ni _{0.011}	Mg,hP2,194	<i>P6₃/mmc</i>	0.22878,0.22878,0.3598,90,90,120	close-packed structure	-	1.95	X	13453
Be-Ni	Be ₂₁ Ni ₄	*cF*,*	-	0.7619,0.7619,0.7619,90,90,90	-	-	-	N	2267
Be-Ni	Be ₇ Ni ht	*cI*,*	-	0.7624,0.7624,0.7624,90,90,90	-	-	-	N	13683
Be-Np	Be ₁₃ Np	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0256,1.0256,1.0256,90,90,90	-	-	4.36	A	538
Be-O	BeO cub	NaCl,cF8,225	<i>Fm-3m</i>	0.3796,0.3796,0.3796,90,90,90	rocksalt family	white	3.04	X	4
Be-O	BeO ht	BeO,tP8,136	<i>P4₂/mm</i>	0.475,0.475,0.274,90,90,90	-	-	2.69	X	2394
Be-O	BeO rt	ZnO,hP4,186	<i>P6₃/mc</i>	0.2696,0.2696,0.43792,90,90,120	bromellite	colorless	3.01	X	18863
Be-Os	Be ₁₂ Os	*mP*,11	<i>P12₁/m1</i>	1.0628,0.84803,1.1305,90,96.546,90	-	-	-	N	15367
Be-Os	Be ₁₇ Os ₂	Be _{15,34} Rh _{2,36} ,hP19,187	<i>P-6m2</i>	0.4221,0.4221,1.094,90,90,120	-	-	5.25	A	6100
Be-Os	Be ₁₇ Os ₃	Be ₁₇ Ru ₃ ,cI160,204	<i>Im-3</i>	1.13421,1.13421,1.13421,90,90,90	-	-	6.59	A	15367
Be-P	BeP ₂	BeP ₂ ,tI12,141	<i>I4₁/amd</i>	0.3546,0.3546,1.501,90,90,90	-	brown red	2.50	X	9882
Be-P	Be ₃ P ₂	Be ₃ P ₂ ,tI160,142	<i>I4₁/acd</i>	1.022,1.022,2.039,90,90,90	fluorite family	ochre	2.22	X	9025
Be-Pa	Be ₁₃ Pa	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.02607,1.02607,1.02607,90,90,90	-	-	4.28	A	8949
Be-Pd	BePd	CsCl,cP2,221	<i>Pm-3m</i>	0.2813,0.2813,0.2813,90,90,90	b.c.c. family	-	8.61	X	108
Be-Pd	BePd ₂	CuZr ₂ ,tI6,139	<i>I4/mmm</i>	0.27498,0.27498,0.97148,90,90,90	b.c.c. family	gray	10.03	X	41566
Be-Pd	BePd ₃	Re ₃ B ₂ ,oS16,63	<i>Cmcm</i>	0.28498,0.95672,0.7567,90,90,90	-	gray	10.57	X	41566
Be-Pd	Be ₁₂ Pd	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.7271,0.7271,0.4251,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	3.17	A	899
Be-Pd	Be ₅ Pd	Be ₅ Au,cF24,216	<i>F-43m</i>	0.5982,0.5982,0.5982,90,90,90	Friauf-Laves phase	yellowish	4.70	X	91
Be-Po	BePo	ZnS,cF8,216	<i>F-43m</i>	0.5838,0.5838,0.5838,90,90,90	adamantane structure	black	7.28	X	1219
Be-Pr	Be ₁₃ Pr	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.037,1.037,1.037,90,90,90	-	-	3.07	X	2301
Be-Pt	Be ₁₂ Pt ht	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.7237,0.7237,0.4252,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	4.52	A	899
Be-Pt	Be ₂ Pt	Be ₃ Au,cF24,216	<i>F-43m</i>	0.5978,0.5978,0.5978,90,90,90	Friauf-Laves phase	-	7.47	X	899
Be-Pu	Be ₁₃ Pu	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0278,1.0278,1.0278,90,90,90	-	-	4.42	X	743
Be-Re	Be ₂ Re	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.4345,0.4345,0.7087,90,90,120	Friauf-Laves phase	-	11.71	X	108
Be-Re	Be ₂₂ Re	Zn ₂₂ Zr,cF184,227	<i>Fd-3m</i>	1.1561,1.1561,1.1561,90,90,90	-	-	3.31	X	1569
Be-Re	Be ₄ Re _{0.23}	Be ₃ Au,cF24,216	<i>F-43m</i>	0.5875,0.5875,0.5875,90,90,90	Friauf-Laves phase	-	2.58	X	16699
Be-Rh	BeRh	CsCl,cP2,221	<i>Pm-3m</i>	0.2739,0.2739,0.2739,90,90,90	b.c.c. family	-	9.04	X	4774
Be-Rh	Be _{15,34} Rh _{2,36}	Be _{15,34} Rh _{2,36} ,hP19,187	<i>P-6m2</i>	0.4191,0.4191,1.0886,90,90,120	-	-	3.82	X	4850
Be-Ru	Be ₁₇ Ru ₂	Be _{15,34} Rh _{2,36} ,hP19,187	<i>P-6m2</i>	0.4203,0.4203,1.09,90,90,120	-	-	3.54	A	6100
Be-Ru	Be ₁₇ Ru ₃	Be ₁₇ Ru ₃ ,cI160,204	<i>Im-3</i>	1.1337,1.1337,1.1337,90,90,90	-	-	4.16	X	1529
Be-Ru	Be ₂ Ru	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.596,0.596,0.918,90,90,120	Friauf-Laves phase	-	2.80	A	1927
Be-Ru	Be ₃ Ru ₂	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	1.142,1.142,1.142,90,90,90	-	-	4.09	A	1927
Be-S	BeS rt	ZnS,cF8,216	<i>F-43m</i>	0.4863,0.4863,0.4863,90,90,90	adamantane structure	colorless	2.37	X	6664
Be-Sb	Be ₁₃ Sb	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0046,1.0046,1.0046,90,90,90	-	-	3.13	X	10346
Be-Sc	Be ₁₃ Sc	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.009,1.009,1.009,90,90,90	-	-	2.10	A	42811
Be-Sc	Be ₁₇ Sc ₂	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.761,0.761,0.75,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	2.15	A	2005
Be-Sc	Be ₅ Sc	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.455,0.455,0.35,90,90,120	-	-	2.38	X	2308
Be-Se	BeSe hp	NiAs,hP4,194	<i>P6₃/mmc</i>	0.3123,0.3123,0.4955,90,90,120	AlB ₂ family	-	6.98	X	30955
Be-Se	BeSe rt	ZnS,cF8,216	<i>F-43m</i>	0.4647,0.4647,0.4647,90,90,90	adamantane structure	black gray	5.82	X	30955
Be-Sm	Be ₁₃ Sm	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0325,1.0325,1.0325,90,90,90	-	-	3.23	X	2301
Be-Sr	SrBe ₁₃	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.046,1.046,1.046,90,90,90	-	-	2.38	X	3417
Be-Ta	BeTa ₂	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.601,0.601,0.489,90,90,90	-	-	13.95	X	6603
Be-Ta	Be ₁₂ Ta	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.7349,0.7349,0.4243,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	4.19	A	10546
Be-Ta	Be ₁₇ Ta ₂	Zn ₁₇ Th ₂ ,hR57,166	<i>R-3m</i>	0.7388,0.7388,1.074,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	5.05	A	1332
Be-Ta	Be ₅ Ta	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.6507,0.6507,0.6507,90,90,90	Friauf-Laves phase	-	9.59	X	9288
Be-Ta	Be ₂ Ta ₃	U ₃ Si ₂ ,tP10,127	<i>P4/mbm</i>	0.65,0.65,0.332,90,90,90	-	-	13.28	A	1332
Be-Ta	Be ₃ Ta	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.453,0.453,2.095,90,90,120	Laves-CaCu ₅	-	8.35	A	1332
Be-Tb	Be ₁₃ Tb	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.0254,1.0254,1.0254,90,90,90	-	-	3.40	X	11663
Be-Tc	Be ₂₂ Tc	Zn ₂₂ Zr,cF184,227	<i>Fd-3m</i>	1.1566,1.1566,1.1566,90,90,90	-	-	2.54	A	14648

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Be-Te	BeTe hp	NiAs, hP4, 194	$P6_3/mmc$	0.3423, 0.3423, 0.5528, 90, 90, 120	AlB ₂ family	-	8.09	X	30955
Be-Te	BeTe rt	ZnS, cF8, 216	$F-43m$	0.56269, 0.56269, 0.56269, 90, 90, 90	adamantane structure	-	5.09	X	6664
Be-Th	Be ₁₃ Th	NaZn ₁₃ , cF112, 226	$Fm-3c$	1.04101, 1.04101, 1.04101, 90, 90, 90	-	-	4.11	X	18246
Be-Ti	BeTi m	CsCl, cP2, 221	$Pm-3m$	0.294, 0.294, 0.294, 90, 90, 90	b.c.c. family	-	3.72	X	11636
Be-Ti	Be _{0.1} Ti rt	Mg, hP2, 194	$P6_3/mmc$	0.2956, 0.2956, 0.4745, 90, 90, 120	close-packed structure	-	4.51	F	313
Be-Ti	Be ₁₂ Ti	ThMn ₁₂ , tI26, 139	$I4/mmm$	0.739, 0.739, 0.419, 90, 90, 90	CaCu ₅ -Zr ₄ Al ₃	-	2.26	A	1332
Be-Ti	Be ₁₇ Ti ₂ hex	Th ₂ Ni ₁₇ , hP38, 194	$P6_3/mmc$	0.736, 0.736, 0.73, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	2.41	A	1332
Be-Ti	Be ₁₇ Ti ₂ rhom	Zn ₁₇ Th ₂ , hR57, 166	$R-3m$	0.7392, 0.7392, 1.079, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	2.43	A	1332
Be-Ti	Be ₂ Ti	MgCu ₂ , cF24, 227	$Fd-3m$	0.645, 0.645, 0.645, 90, 90, 90	Friauf-Laves phase	-	3.26	X	9288
Be-Ti	Be ₃ Ti	PuNi ₃ , hR36, 166	$R-3m$	0.449, 0.449, 2.132, 90, 90, 120	Laves-CaCu ₅	-	3.01	A	1332
Be-Tm	Be ₁₃ Tm	NaZn ₁₃ , cF112, 226	$Fm-3c$	1.0199, 1.0199, 1.0199, 90, 90, 90	-	-	3.58	X	2301
Be-U	Be ₁₃ U	NaZn ₁₃ , cF112, 226	$Fm-3c$	1.0268, 1.0268, 1.0268, 90, 90, 90	-	-	4.36	X	23001
Be-V	Be ₁₂ V	ThMn ₁₂ , tI26, 139	$I4/mmm$	0.7266, 0.7266, 0.4194, 90, 90, 90	CaCu ₅ -Zr ₄ Al ₃	-	2.39	X	666
Be-V	Be ₂ V	MgZn ₂ , hP12, 194	$P6_3/mmc$	0.4385, 0.4385, 0.713, 90, 90, 120	Friauf-Laves phase	-	3.86	X	108
Be-W	Be _{0.05} W _{0.95}	W, cI2, 229	$Im-3m$	0.31624, 0.31624, 0.31624, 90, 90, 90	b.c.c. family	-	18.39	X	3060
Be-W	Be ₁₂ W	ThMn ₁₂ , tI26, 139	$I4/mmm$	0.7235, 0.7235, 0.4233, 90, 90, 90	CaCu ₅ -Zr ₄ Al ₃	-	4.38	A	881
Be-W	Be ₂ W	MgZn ₂ , hP12, 194	$P6_3/mmc$	0.4437, 0.4437, 0.7274, 90, 90, 120	Friauf-Laves phase	-	10.81	X	108
Be-W	Be ₂₂ W	Zn ₂₂ Zr, cF184, 227	$Fd-3m$	1.1631, 1.1631, 1.1631, 90, 90, 90	-	-	3.23	X	1968
Be-Y	Be ₁₃ Y	NaZn ₁₃ , cF112, 226	$Fm-3c$	1.024, 1.024, 1.024, 90, 90, 90	-	-	2.55	A	13231
Be-Yb	Be ₁₃ Yb	NaZn ₁₃ , cF112, 226	$Fm-3c$	1.0182, 1.0182, 1.0182, 90, 90, 90	-	-	3.65	X	2301
Be-Zr	Be ₁₃ Zr	NaZn ₁₃ , cF112, 226	$Fm-3c$	1.0047, 1.0047, 1.0047, 90, 90, 90	-	-	2.73	X	294
Be-Zr	Be ₁₇ Zr ₂	Zn ₁₇ Th ₂ , hR57, 166	$R-3m$	0.7538, 0.7538, 1.1015, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	3.08	X	16644
Be-Zr	Be ₂ Zr	AlB ₂ , hP3, 191	$P6/mmm$	0.3819, 0.3819, 0.3234, 90, 90, 120	AlB ₂ family	-	4.44	X	30261
Be-Zr	Be ₃ Zr	CaCu ₅ , hP6, 191	$P6/mmm$	0.4564, 0.4564, 0.3485, 90, 90, 120	-	-	3.60	X	1029
Bi-Br	BiBr	BiBr, mS32, 12	$C12/m1$	1.3064, 0.4338, 2.0061, 90, 107.42, 90	-	-	7.08	X	11792
Bi-Br	BiBr ₃ ht	AlCl ₃ , mS16, 12	$C12/m1$	0.7249, 1.2528, 0.6849, 90, 110.68, 90	-	-	5.12	X	13653
Bi-Br	BiBr ₃ rt	BiBr ₃ , mP16, 14	$P12_1/c1$	0.6756, 0.9848, 0.8429, 90, 109.65, 90	-	yellow light	5.64	X	13653
Bi-Br	Bi ₆ Br ₇	Bi ₆ Cl ₇ , oP104, 58	$Pnnm$	1.5504, 2.3665, 0.9054, 90, 90, 90	-	black	7.25	X	62681
Bi-Ca	Ca ₁₁ Bi _{9.88}	Ho ₁₁ Ge ₁₀ , tI84, 139	$I4/mmm$	1.22842, 1.22842, 1.7866, 90, 90, 90	-	gray silver	6.17	X	64518
Bi-Ca	Ca ₁₆ Bi ₁₁	Ca ₁₆ Sb ₁₁ , tP56, 113	$P-42_1m$	1.24949, 1.24949, 1.143, 90, 90, 90	-	-	5.47	A	33193
Bi-Ca	Ca ₂ Bi	La ₂ Sb, tI12, 139	$I4/mmm$	0.472, 0.472, 1.654, 90, 90, 90	-	gray	5.21	X	8512
Bi-Ca	Ca ₅ Bi ₃ (H)	Yb ₅ Sb ₃ , oP32, 62	$Pnma$	1.2722, 0.9666, 0.8432, 90, 90, 90	-	black	5.30	X	7788
Bi-Ca	Ca ₅ Bi ₃ rt	Mn ₅ Sb ₃ , hP16, 193	$P6_3/mcm$	0.91757, 0.91757, 0.71444, 90, 90, 120	-	-	5.27	A	47173
Bi-Ce	CeBi hp2	CsCl, cP2, 221	$Pm-3m$	0.3739, 0.3739, 0.3739, 90, 90, 90	b.c.c. family	-	11.09	X	18013
Bi-Ce	CeBi lt	CuTi, tP2, 123	$P4/mmm$	0.3993, 0.3993, 0.335, 90, 90, 90	b.c.c. family	-	10.85	X	18013
Bi-Ce	CeBi rt	NaCl, cF8, 225	$Fm-3m$	0.655, 0.655, 0.655, 90, 90, 90	rocksalt family	-	8.25	X	27837
Bi-Ce	CeBi ₂	* ₁ aP* ₂ *	-	0.6528, 1.18516, 1.30564, 91.515, 92.199, 103.02	-	-	-	N	8945
Bi-Ce	Ce ₂ Bi	La ₂ Sb, tI12, 139	$I4/mmm$	0.45911, 0.45911, 1.81539, 90, 90, 90	-	-	8.49	A	8945
Bi-Ce	Ce ₄ Bi ₃	Th ₃ P ₄ , cI28, 220	$I-43d$	0.9672, 0.9672, 0.9672, 90, 90, 90	-	-	8.72	X	26129
Bi-Ce	Ce ₅ Bi ₃	Mn ₅ Sb ₃ , hP16, 193	$P6_3/mcm$	0.95313, 0.95313, 0.65871, 90, 90, 120	-	-	8.51	A	8945
Bi-Cl	BiCl ₃	BiCl ₃ , oP16, 33	$Pna2_1$	0.7641, 0.6291, 0.9172, 90, 90, 90	-	-	4.75	X	5564
Bi-Cl	Bi ₆ Cl ₇	Bi ₆ Cl ₇ , oP104, 58	$Pnnm$	1.4955, 2.2892, 0.8719, 90, 90, 90	-	black	6.69	X	62681
Bi-Cl	Bi ₇ Cl ₁₀ rt	Bi ₇ Cl ₁₀ , tI1216, 142	$I4_1/acd$	2.8235, 2.8235, 3.995, 90, 90, 90	-	black	6.06	X	46646
Bi-Cm	CmBi rt	NaCl, cF8, 225	$Fm-3m$	0.6335, 0.6335, 0.6335, 90, 90, 90	rocksalt family	-	11.91	X	20027
Bi-Co	CoBi ₃	NiBi ₃ , oP16, 62	$Pnma$	0.88464, 0.40697, 1.15604, 90, 90, 90	-	-	10.95	X	63907
Bi-Cs	CsBi	CsSb, mP32, 14	$P12_1/c1$	1.5237, 0.7737, 1.4399, 90, 112.722, 90	-	black	5.80	X	44853
Bi-Cs	CsBi ₂	MgCu ₂ , cF24, 227	$Fd-3m$	0.972, 0.972, 0.972, 90, 90, 90	Friauf-Laves phase	gray silver	7.97	X	44853
Bi-Cs	Cs ₃ Bi	BiF ₃ , cF16, 225	$Fm-3m$	0.9292, 0.9292, 0.9292, 90, 90, 90	fluorite family	black	5.03	X	1362
Bi-Cs	Cs ₂ Bi ₂	Eu ₂ Ga ₂ , mS20, 15	$C12/c1$	1.0077, 1.03207, 1.0145, 90, 105.21, 90	-	gray dark	5.33	X	37582
Bi-Cs	Cs ₂ Bi ₄	Rb ₅ As ₄ , mS20, 12	$C12/m1$	1.2887, 0.6323, 1.26361, 90, 122.94, 90	-	-	5.77	X	39119
Bi-Dy	DyBi lt	* ₁ t* ₈ * ₈	-	0.6247, 0.6247, 0.6212, 90, 90, 90	-	-	-	N	13224
Bi-Dy	DyBi rt	NaCl, cF8, 225	$Fm-3m$	0.6234, 0.6234, 0.6234, 90, 90, 90	rocksalt family	gray	10.18	X	13224
Bi-Dy	Dy ₃ Bi ₃	Y ₃ Bi ₃ , oP32, 62	$Pnma$	0.8155, 0.9432, 1.1934, 90, 90, 90	-	-	10.42	X	39288
Bi-Er	ErBi rt	NaCl, cF8, 225	$Fm-3m$	0.6186, 0.6186, 0.6186, 90, 90, 90	rocksalt family	-	10.56	X	25868
Bi-Er	Er ₃ Bi ₃	Y ₃ Bi ₃ , oP32, 62	$Pnma$	0.809, 0.9349, 1.1806, 90, 90, 90	-	-	10.88	X	39288
Bi-Eu	EuBi ₂	HfGa ₂ , tI24, 141	$I4_1/amd$	0.4726, 0.4726, 3.4221, 90, 90, 90	close-packed structure	black	9.91	X	44342
Bi-Eu	EuBi ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4997, 0.4997, 0.4997, 90, 90, 90	close-packed structure	-	10.37	X	62177
Bi-Eu	Eu ₁₁ Bi ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	$I4/mmm$	1.26103, 1.26103, 1.82598, 90, 90, 90	-	-	8.60	A	12230
Bi-Eu	Eu ₁₆ Bi ₁₁	Ca ₁₆ Sb ₁₁ , tP56, 113	$P-42_1m$	1.2885, 1.2885, 1.1883, 90, 90, 90	-	-	7.96	X	38066
Bi-Eu	Eu ₄ Bi ₃	Th ₃ P ₄ , cI28, 220	$I-43d$	0.992, 0.992, 0.992, 90, 90, 90	-	gray	8.40	X	32580
Bi-Eu	Eu ₅ Bi ₃ hex	Mn ₅ Si ₃ , hP16, 193	$P6_3/mcm$	0.95551, 0.95551, 0.73256, 90, 90, 120	-	-	7.95	X	47173
Bi-Eu	Eu ₅ Bi ₃ orth	Yb ₅ Sb ₃ , oP32, 62	$Pnma$	1.31522, 1.01219, 0.87544, 90, 90, 90	-	-	7.90	X	12230
Bi-F	BiF ₃ cub	BiF ₃ , cF16, 225	$Fm-3m$	0.58344, 0.58344, 0.58344, 90, 90, 90	gananite	white	8.90	X	63149
Bi-F	BiF ₃ hp	HoH ₃ , hP24, 165	$P-3c1$	0.7076, 0.7076, 0.735, 90, 90, 120	-	-	8.32	A	14399
Bi-F	BiF ₃ orth	Fe ₂ C-b, oP16, 62	$Pnma$	0.65614, 0.70153, 0.48414, 90, 90, 90	-	-	7.93	X	10917
Bi-F	BiF ₅	UF ₅ , tI12, 87	$I4/m$	0.6581, 0.6581, 0.4229, 90, 90, 90	-	colorless	5.51	X	6191
Bi-Gd	GdBi rt	NaCl, cF8, 225	$Fm-3m$	0.63108, 0.63108, 0.63108, 90, 90, 90	rocksalt family	-	9.68	X	8945
Bi-Gd	Gd ₄ Bi ₃	Th ₃ P ₄ , cI28, 220	$I-43d$	0.93876, 0.93876, 0.93876, 90, 90, 90	-	gray	10.08	X	59107
Bi-Gd	Gd ₅ Bi ₃ Bi+	Mn ₅ Si ₃ , hP16, 193	$P6_3/mcm$	0.9182, 0.9182, 0.6426, 90, 90, 120	-	-	10.00	X	4584
Bi-Gd	Gd ₅ Bi ₃ rt	Y ₃ Bi ₃ , oP32, 62	$Pnma$	0.8226, 0.954, 1.2085, 90, 90, 90	-	-	9.90	X	39288
Bi-Hf	HfBi	ZrSb, oS24, 63	$Cmcm$	0.38059, 1.0735, 1.4208, 90, 90, 90	-	-	13.30	A	40010
Bi-Hf	HfBi ₂	TiAs ₂ , oP24, 58	$Pnnm$	1.014, 1.5574, 0.3969, 90, 90, 90	-	-	12.64	X	40010
Bi-Hf	Hf ₈ Bi ₉	V ₇ Sb ₉ , tP34, 129	$P4/nmm$	1.0718, 1.0718, 0.752, 90, 90, 90	-	-	12.72	A	33655
Bi-Ho	HoBi lt	* ₁ t* ₈ * ₈	-	0.621, 0.621, 0.6217, 90, 90, 90	-	-	-	N	16946
Bi-Ho	HoBi rt	NaCl, cF8, 225	$Fm-3m$	0.6223, 0.6223, 0.6223, 90, 90, 90	rocksalt family	-	10.31	X	18213
Bi-Ho	Ho ₅ Bi ₃ orth1	Y ₃ Bi ₃ , oP32, 62	$Pnma$	0.8128, 0.9385, 1.1874, 90, 90, 90	-	-	10.65	X	39288
Bi-Ho	Ho ₅ Bi ₃ orth2	Yb ₅ Sb ₃ , oP32, 62	$Pnma$	1.181, 0.9359, 0.8095, 90, 90, 90	-	-	10.78	A	45777
Bi-I	BiI ht1	BiI-a, mS16, 12	$C12/m1$	1.4386, 0.4430, 1.0493, 90, 107.87, 90	-	black	7.01	X	11791

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Bi-I	BiI ht2	BiI-b,mS16,12	$C12/m1$	1.4444,0.4456,1.0538,90,107.64,90	-	black	6.90	X	11791
Bi-I	BiI rt	BiI,mS32,12	$C12/m1$	1.4245,0.4428,1.9968,90,92.96,90	-	black	7.09	X	11791
Bi-I	BiI ₃ mon	BiBr ₃ ,mP16,14	$P12_1/c1$	0.6728,0.9565,0.8106,90,107.56,90	-	-	7.88	A	35239
Bi-I	BiI ₃ rhom	BiI ₃ ,hR24,148	$R-3$	0.75249,0.75249,2.0733,90,90,120	-	red	5.78	X	31206
Bi-I	BiI ₃ trig	BiI ₃ ,hP8,162	$P-31m$	0.75,0.75,0.69,90,90,120	-	-	5.83	X	441
Bi-I	BiI ₄	BiI ₄ ,mS40,12	$C12/m1$	2.5948,0.4354,1.3259,90,104.48,90	-	black	8.82	X	51248
Bi-I	BiI ₂	BiI ₂ ,mP18,11	$P12_1/m1$	1.1447,0.4342,1.3309,90,92.08,90	-	-	8.62	X	26700
Bi-I	BiI ₂	BiI ₂ ,mP22,11	$P12_1/m1$	1.3353,0.4383,1.5184,90,115.06,90	-	-	8.81	X	23158
Bi-In	InBi	InBi ₄ ,pP4,129	$P4/nmm$	0.502,0.502,0.479,90,90,90	-	-	8.91	X	10899
Bi-In	InBi ₃ m	* _o I4,74	$Imma$	0.605,0.624,0.335,90,90,90	-	-	-	N	9223
Bi-In	In _{0.2} Bi _{0.8} m	Sn ₄ I4,141	$I4_1/amd$	0.615,0.615,0.3305,90,90,90	-	-	10.10	X	9223
Bi-In	In _{0.3} Bi _{0.7} hp	(Sn _{0.6} Bi _{0.4}),oS16,64	$Cmce$	1.1236,0.6555,0.6531,90,90,90	-	-	9.98	X	38370
Bi-In	In _{0.45} Bi _{0.55} m	(Hg _{0.1} Sn _{0.9}),hP1,191	$P6/mmm$	0.3314,0.3314,0.3115,90,90,120	-	-	9.34	X	3664
Bi-In	In _{0.56} Bi _{0.44} hp	Pa ₄ I2,139	$I4/mmm$	0.3715,0.3715,0.3426,90,90,90	b.c.c. family	-	10.98	X	40904
Bi-In	In _{0.62} Bi _{0.38} m	W ₄ I2,229	$Im-3m$	0.3832,0.3832,0.3832,90,90,90	b.c.c. family	-	8.89	X	3664
Bi-In	In _{0.66} Bi _{0.34} hp	In ₄ I2,139	$I4/mmm$	0.3447,0.3447,0.3883,90,90,90	close-packed structure	-	10.57	X	40904
Bi-In	In _{0.78} Bi _{0.22} m	In ₄ I2,139	$I4/mmm$	0.3545,0.3545,0.4304,90,90,90	close-packed structure	-	8.32	X	3664
Bi-In	In _{0.9} Bi _{0.1} ht	In ₄ I2,139	$I4/mmm$	0.3472,0.3472,0.4495,90,90,90	close-packed structure	-	7.61	X	11492
Bi-In	In _{0.94} Bi _{0.06}	In ₄ I2,139	$I4/mmm$	0.3265,0.3265,0.5023,90,90,90	close-packed structure	-	7.47	X	11492
Bi-In	In ₂ Bi	Co _{1.75} Ge,hP6,194	$P6_3/mmc$	0.5495,0.5495,0.6579,90,90,120	AlB ₂ family	-	8.47	X	10899
Bi-In	In ₃ Bi ₂ m	* _h P*,*	-	1.17,1.17,0.853,90,90,120	-	-	-	N	1451
Bi-In	In ₅ Bi ₃	In ₃ Bi ₃ ,tI32,140	$I4/mcm$	0.8544,0.8544,1.268,90,90,90	-	-	8.62	X	10899
Bi-Ir	IrBi ₂	CoSb ₂ ,mP12,14	$P12_1/c1$	0.6901,0.67885,0.69617,90,116.454,90	pyrite-marcasite family	-	13.88	X	60330
Bi-Ir	IrBi ₃	NiBi ₃ ,oP16,62	$Pnma$	0.897,0.419,1.1511,90,90,90	-	-	12.58	X	62731
Bi-Ir	IrBi ₄	IrBi ₄ ,hR135,166	$R-3m$	2.6567,2.6567,0.7016,90,90,120	-	-	10.75	X	65041
Bi-K	KBi	CsSb,mP32,14	$P12_1/c1$	1.4223,0.7248,1.342,90,113.03,90	-	black	5.18	X	44853
Bi-K	KBi ₂	MgCu ₂ ,cF24,227	$Fd-3m$	0.9521,0.9521,0.9521,90,90,90	Friauf-Laves phase	gray silver	7.04	X	44853
Bi-K	K ₃ Bi ht	BiF ₃ ,cF16,225	$Fm-3m$	0.8805,0.8805,0.8805,90,90,90	fluorite family	-	3.17	X	1766
Bi-K	K ₃ Bi rt	Cu ₃ P,hP24,185	$P6_3cm$	1.0649,1.0649,1.094,90,90,120	-	black purple	3.03	X	35549
Bi-K	K ₃ Bi ₂	Eu ₃ Ga ₂ ,mS20,15	$C12/c1$	0.9381,0.9794,0.9284,90,104.99,90	-	gray dark	4.31	A	37582
Bi-K	K ₄ Bi ₄	K ₄ Bi ₄ ,mS18,12	$C12/m1$	1.2517,0.5541,1.1625,90,111.46,90	-	-	4.57	X	39119
Bi-La	LaBi	NaCl,cF8,225	$Fm-3m$	0.661,0.661,0.661,90,90,90	rocksalt family	-	8.00	X	21609
Bi-La	LaBi ₂	* _o P12,*	-	0.4564,0.4737,1.751,90,90,90	-	-	-	N	10592
Bi-La	La _{0.95} Bi _{0.05} ht	Pa ₄ I2,139	$I4/mmm$	0.4126,0.4126,0.431,90,90,90	b.c.c. family	-	6.45	X	10592
Bi-La	La ₂ Bi	La ₂ Sb,tI12,139	$I4/mmm$	0.46737,0.46737,1.83952,90,90,90	-	-	8.05	A	8945
Bi-La	La ₄ Bi ₃	Th ₃ P ₄ ,cI28,220	$I-43d$	0.979,0.979,0.979,90,90,90	-	gray	8.37	A	18003
Bi-La	La ₅ Bi ₃	Mn ₅ Si ₃ ,hP16,193	$P6_3/mcm$	0.96585,0.96585,0.6697,90,90,120	-	-	8.11	A	8945
Bi-Li	LiBi rt	CuAu,pP2,123	$P4/mmm$	0.3361,0.3361,0.4247,90,90,90	close-packed structure	-	7.47	X	95
Bi-Li	Li ₃ Bi ht	Na ₃ As,hP8,194	$P6_3/mmc$	0.47812,0.47812,0.84853,90,90,120	-	-	4.54	A	62182
Bi-Li	Li ₃ Bi rt	BiF ₃ ,cF16,225	$Fm-3m$	0.67227,0.67227,0.67227,90,90,90	fluorite family	-	5.02	X	62182
Bi-Lu	LuBi	NaCl,cF8,225	$Fm-3m$	0.6156,0.6156,0.6156,90,90,90	rocksalt family	-	10.93	X	2012
Bi-Lu	Lu ₂ Bi ₃	Y ₃ Bi ₃ ,oP32,62	$Pnma$	0.8046,0.9768,1.1718,90,90,90	-	-	10.83	A	31015
Bi-Mg	Mg _{0.993} Bi _{0.005}	Mg ₂ hP2,194	$P6_3/mmc$	0.32106,0.32106,0.52146,90,90,120	close-packed structure	-	1.80	X	1094
Bi-Mg	Mg _{1.5} Bi ht	Ag ₂ S,cI20,229	$Im-3m$	0.5297,0.5297,0.5297,90,90,90	-	-	5.49	A	28913
Bi-Mg	Mg ₃ Bi ₂ rt	La ₂ O ₃ ,hP5,164	$P-3m1$	0.4671,0.4671,0.7403,90,90,120	-	-	5.83	X	62
Bi-Mn	MnBi lt	Fe _{0.91} S,oS8,63	$Cmcm$	0.42674,0.7403,0.6066,90,90,90	-	-	9.15	X	64571
Bi-Mn	MnBi rt	NiAs,hP4,194	$P6_3/mmc$	0.429,0.429,0.6126,90,90,120	AlB ₂ family	-	8.98	X	3320
Bi-Mn	MnBi tf	* _c F*,*	-	1.205,1.205,1.205,90,90,90	-	-	-	N	26170
Bi-Mn	Mn _{1.08} Bi ht	Co _{1.75} Ge,hP6,194	$P6_3/mmc$	0.4365,0.4365,0.592,90,90,120	AlB ₂ family	-	9.12	X	54052
Bi-Mn	Mn _{2.23} Bi _{1.88} ht	Mn ₂ Bi ₂ ,hP10,51	$Pnma$	0.5959,0.4334,0.7505,90,90,90	-	-	8.83	X	6363
Bi-Mn	Mn ₃ Bi m	Mn ₃ Bi,hR48,166	$R-3m$	1.997,1.997,0.449,90,90,120	-	-	4.80	X	18669
Bi-N	Bi[N ₃] ₃	Sb[N ₃] ₃ ,aP20,2	$P-1$	0.65412,0.68343,0.69807,81.645,67.457,83.024	-	yellow	3.91	X	61349
Bi-Na	NaBi	CuAu,pP2,123	$P4/mmm$	0.346,0.346,0.48,90,90,90	close-packed structure	-	6.70	X	50
Bi-Na	Na ₃ Bi rt	Na ₃ As,hP8,194	$P6_3/mmc$	0.5448,0.5448,0.9655,90,90,120	-	-	3.72	X	139
Bi-Nb	Nb _{0.75} Bi _{0.25}	W ₄ I2,229	$Im-3m$	0.3327,0.3327,0.3327,90,90,90	b.c.c. family	-	11.00	X	2212
Bi-Nb	Nb ₃ Bi ht-hp	Cr ₃ Si,cP8,223	$Pm-3n$	0.532,0.532,0.532,90,90,90	Frank-Kasper phase	-	10.76	X	2212
Bi-Nd	NdBi	NaCl,cF8,225	$Fm-3m$	0.641,0.641,0.641,90,90,90	rocksalt family	black gray	8.91	X	21609
Bi-Nd	NdBi ₂	* _a P*,*	-	0.64682,1.18576,1.29796,91.723,92.361,104.013	-	-	-	N	8945
Bi-Nd	Nd ₂ Bi	La ₂ Sb,tI12,139	$I4/mmm$	0.45603,0.45603,1.7865,90,90,90	-	-	8.89	X	58334
Bi-Nd	Nd ₄ Bi ₃	Th ₃ P ₄ ,cI28,220	$I-43d$	0.9552,0.9552,0.9552,90,90,90	-	gray	9.18	A	40246
Bi-Nd	Nd ₅ Bi ₃	Mn ₅ Si ₃ ,hP16,193	$P6_3/mcm$	0.937,0.937,0.6528,90,90,120	-	-	9.02	A	40246
Bi-Ni	NiBi	NiBi,mS66,12	$C12/m1$	1.41239,0.81621,1.28325,90,123.389,90	-	black	11.52	X	36945
Bi-Ni	NiBi ₃	NiBi ₃ ,oP16,62	$Pnma$	0.88796,0.40997,1.1478,90,90,90	-	-	10.90	X	48748
Bi-Ni	Ni _{0.92} Bi IC	Ni _{0.92} Bi,oP20,51	$Pnma$	0.53243,0.81527,1.41209,90,90,90	-	gray silver	4.27	X	38483
Bi-Ni	Ni ₄ Bi _{5.6}	Ni ₄ Bi _{5.6} ,oI52,74	$Imma$	0.4219,1.924,1.1656,90,90,90	-	-	10.28	X	56571
Bi-Np	NpBi	NaCl,cF8,225	$Fm-3m$	0.637,0.637,0.637,90,90,90	rocksalt family	-	11.46	X	30202
Bi-O	BiO tf	BiO,hR6,160	$R3m$	0.388,0.388,0.971,90,90,120	-	yellowish	8.85	X	3156
Bi-O	BiO _{1.5} ht2	CaF ₂ ,cF12,225	$Fm-3m$	0.56542,0.56542,0.56542,90,90,90	fluorite family	brown reddish	8.56	X	45707
Bi-O	BiO _{1.5} m tet	BiO _{1.5} ,hI6,139	$I4/mmm$	0.4022,0.4022,0.5558,90,90,90	-	-	8.61	X	52911
Bi-O	BiO ₂	SbO ₂ ,mS24,15	$C12/c1$	1.23668,0.5118,0.5567,90,107.838,90	-	brown dark	9.54	X	30632
Bi-O	Bi _{12.8} O _{19.2} m	Bi _{12.8} O _{19.2} ,cI66,197	$I23$	1.02501,1.02501,1.02501,90,90,90	-	yellow	9.20	X	25726
Bi-O	Bi ₂ O _{2.5} tf	Bi ₂ O ₃ ,tP20,114	$P-42_1c$	0.773,0.773,0.563,90,90,90	-	-	9.04	X	6140
Bi-O	Bi ₂ O _{2.7} tf	Bi ₂ O _{2.7} ,tI14,139	$I4/mmm$	0.385,0.385,1.225,90,90,90	-	yellowish	8.44	X	2735
Bi-O	Bi ₂ O ₃ hp1	Bi ₂ O ₃ ,hP20,159	$P31c$	0.7749,0.7749,0.6302,90,90,120	-	yellow	9.44	X	56191
Bi-O	Bi ₂ O ₃ hp2	Bi ₂ O ₃ ,hP20,186	$P6_3mc$	0.7605,0.7605,0.5937,90,90,120	-	-	10.41	X	58053
Bi-O	Bi ₂ O ₃ ht1	Bi ₂ O ₃ ,tP20,114	$P-42_1c$	0.774,0.774,0.56446,90,90,90	sphaerobismoite	yellow dark	9.15	X	51843
Bi-O	Bi ₂ O ₃ m cub	Ag ₂ O ₃ ,cP10,224	$Pn-3m$	0.5529,0.5529,0.5529,90,90,90	-	-	9.16	X	50159
Bi-O	Bi ₂ O ₃ m mon	Bi ₂ O ₃ ,mP40,14	$P12_1/c1$	0.9107,0.7344,1.009,90,102.111,90	-	-	9.38	X	56191

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Bi-O	Bi ₂ O ₃ m orth	Sb ₂ O ₃ , oP20,56	<i>Pccn</i>	0.49555, 1.27299, 0.55854, 90, 90, 90	-	-	8.78	X	47390
Bi-O	Bi ₂ O ₃ rt	Bi ₂ O ₃ , mP20,14	<i>P12₁/c1</i>	0.58444, 0.81574, 0.75032, 90, 112.97, 90	bismite	yellow light	9.40	X	39830
Bi-O	Bi ₄ O ₇	Bi ₄ O ₇ , aP22,2	<i>P-1</i>	0.67253, 0.6995, 0.77961, 72.566, 88.842, 76.925	-	brown dark	9.25	X	41080
Bi-O	Bi ₆ O ₇ tf	Bi ₄ O ₇ , tI38,139	<i>I4/mmm</i>	0.385, 0.385, 3.51, 90, 90, 90	-	-	8.72	X	64108
Bi-Pb	Pb _{0.0039} Bi _{0.9961}	As, hR6,166	<i>R-3m</i>	0.4534, 0.4534, 1.1814, 90, 90, 120	-	-	9.90	X	1571
Bi-Pb	Pb _{0.2} Bi _{0.8} hp	(Sn _{0.6} Bi _{0.4}), oS16,64	<i>Cmce</i>	1.1209, 0.6672, 0.6658, 90, 90, 90	-	-	11.13	X	38370
Bi-Pb	Pb _{0.375} Bi _{0.625} hp	Nd, hP4,194	<i>P6₃/mmc</i>	0.345, 0.345, 1.13, 90, 90, 120	close-packed structure	-	11.88	X	4762
Bi-Pb	Pb _{0.7} Bi _{0.3} rt	Mg, hP2,194	<i>P6₃/mmc</i>	0.35059, 0.35059, 0.5686, 90, 90, 120	close-packed structure	-	11.40	X	15944
Bi-Pb	Pb _{0.75} Bi _{0.25}	Cu, cF4,225	<i>Fm-3m</i>	0.49714, 0.49714, 0.49714, 90, 90, 90	close-packed structure	-	11.23	X	9918
Bi-Pb	Pb _{0.96} Bi _{0.04} m	*, tP48, *	-	0.9931, 0.9931, 1.499, 90, 90, 90	-	-	-	N	7638
Bi-Pd	PdBi ht	PdBi, oS32,36	<i>Cmc2₁</i>	0.8707, 0.7203, 1.0662, 90, 90, 90	CrB(TII)-FeB	-	12.53	X	882
Bi-Pd	PdBi rt	PdBi, mP16,4	<i>P12₁</i>	0.5635, 1.0651, 0.5661, 90, 100.85, 90	CrB(TII)-FeB	-	12.56	X	22737
Bi-Pd	PdBi _{0.6} ht	*, hP16, *	-	0.777, 0.777, 0.5817, 90, 90, 120	-	-	-	N	973
Bi-Pd	PdBi ₂ ht	CuZr ₂ , tI6,139	<i>I4/mmm</i>	0.3362, 0.3362, 1.2983, 90, 90, 90	close-packed structure	-	11.87	X	882
Bi-Pd	PdBi ₂ rt	PdBi ₂ , mS12,12	<i>C12/m1</i>	1.274, 0.425, 0.5665, 90, 102.58, 90	froodite	-	11.63	X	882
Bi-Pd	Pd _{0.91} Bi _{0.09}	Cu, cF4,225	<i>Fm-3m</i>	0.39498, 0.39498, 0.39498, 90, 90, 90	close-packed structure	-	12.46	X	49561
Bi-Pd	Pd ₃ Bi rt	Pd ₃ Bi, oP16,51	<i>Pmma</i>	0.9393, 0.5752, 0.4954, 90, 90, 90	close-packed structure	-	13.11	X	4590
Bi-Pd	Pd ₃ Bi ₂ rt	Pd ₃ Bi ₂ , mS28,12	<i>C12/m1</i>	1.4192, 0.5780, 0.6752, 90, 117.256, 90	-	-	12.82	X	12275
Bi-Pd	Pd ₈ Bi ₃ ht	Pd ₈ Bi ₃ , hR132,161	<i>R3c</i>	0.7809, 0.7809, 4.2597, 90, 90, 120	-	-	13.09	A	12275
Bi-Pr	PrBi	NaCl, cF8,225	<i>Fm-3m</i>	0.647, 0.647, 0.647, 90, 90, 90	rocksalt family	-	8.58	X	21609
Bi-Pr	PrBi ₂	*, o***, *	-	0.6512, 1.1821, 1.3022, 90, 90, 90	-	-	-	N	33199
Bi-Pr	Pr ₂ Bi	La ₂ Sb, tI12,139	<i>I4/mmm</i>	0.4602, 0.4602, 1.7988, 90, 90, 90	-	-	8.56	A	33199
Bi-Pr	Pr ₄ Bi ₃	Th ₃ P ₄ , cI28,220	<i>I-43d</i>	0.9622, 0.9622, 0.9622, 90, 90, 90	-	gray	8.88	A	33199
Bi-Pr	Pr ₃ Bi ₃	Mn ₃ Si ₃ , hP16,193	<i>P6₃/mcm</i>	0.9452, 0.9452, 0.6542, 90, 90, 120	-	-	8.74	A	33199
Bi-Pt	PtBi	NiAs, hP4,194	<i>P6₃/mmc</i>	0.4315, 0.4315, 0.549, 90, 90, 120	AlB ₂ family	-	15.16	X	1706
Bi-Pt	PtBi ₂ ht1	FeSe ₂ , aP12,205	<i>Pa-3</i>	0.67014, 0.67014, 0.67014, 90, 90, 90	insizwaite	-	13.53	X	29570
Bi-Pt	PtBi ₂ ht2	PtBi ₂ , hP9,157	<i>P31m</i>	0.6573, 0.6573, 0.61665, 90, 90, 120	-	-	13.24	X	64775
Bi-Pt	PtBi ₂ rt	AuSn ₂ , oP24,61	<i>Pbca</i>	0.6732, 0.6794, 1.3346, 90, 90, 90	-	-	13.34	X	13682
Bi-Pt	Pt _{0.67} Bi ht	NiAs, hP4,194	<i>P6₃/mmc</i>	0.413, 0.413, 0.558, 90, 90, 120	AlB ₂ family	-	13.69	X	4111
Bi-Pu	PuBi hp2	CsCl, cP2,221	<i>Pm-3m</i>	0.344, 0.344, 0.344, 90, 90, 90	b.c.c. family	-	18.48	X	36080
Bi-Pu	PuBi	NaCl, cF8,225	<i>Fm-3m</i>	0.63588, 0.63588, 0.63588, 90, 90, 90	rocksalt family	-	11.70	X	36080
Bi-Pu	Pu ₄ Bi ₃	Th ₃ P ₄ , cI28,220	<i>I-43d</i>	0.94, 0.94, 0.94, 90, 90, 90	-	-	12.82	A	30202
Bi-Rb	RbBi	CsSb, mP32,14	<i>P12₁/c1</i>	1.4742, 0.7502, 1.3921, 90, 113.033, 90	-	black	5.52	X	44853
Bi-Rb	RbBi ₂	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.9625, 0.9625, 0.9625, 90, 90, 90	Friauf-Laves phase	gray silver	7.50	X	44853
Bi-Rb	Rb ₃ Bi rt cub	BiF ₃ , cF16,225	<i>Fm-3m</i>	0.8494, 0.8494, 0.8494, 90, 90, 90	fluorite family	-	5.04	X	10844
Bi-Rb	Rb ₃ Bi rt hex	Na ₃ As, hP8,194	<i>P6₃/mmc</i>	0.642, 0.642, 1.146, 90, 90, 120	-	gray dark	3.78	X	1263
Bi-Rb	Rb ₃ Bi ₂	Eu ₃ Ga ₂ , mS20,15	<i>C12/c1</i>	0.9735, 1.0075, 0.9715, 90, 105.34, 90	-	gray dark	4.87	A	37582
Bi-Rb	Rb ₂ Bi ₄	Rb ₂ As ₄ , mS20,12	<i>C12/m1</i>	1.2945, 0.57851, 1.2018, 90, 112.78, 90	-	-	5.06	X	39119
Bi-Rh	RhBi	NiAs, hP4,194	<i>P6₃/mmc</i>	0.40894, 0.40894, 0.56642, 90, 90, 120	AlB ₂ family	-	12.63	X	1635
Bi-Rh	RhBi ₂ ht1	RhBi ₂ , aP12,2	<i>P-1</i>	0.6743, 0.7030, 0.7067, 104.76, 100.73, 105.79	-	gray light	11.54	X	31476
Bi-Rh	RhBi ₂ rt	CoSb ₂ , mP12,14	<i>P12₁/c1</i>	0.696, 0.683, 0.701, 90, 118.2, 90	pyrite-marcasite family	-	11.78	X	1701
Bi-Rh	RhBi ₃	NiBi ₃ , oP16,62	<i>Pnma</i>	0.9027, 0.424, 1.1522, 90, 90, 90	-	-	10.99	X	1468
Bi-Rh	RhBi ₄ rt	RhBi ₄ , cI120,230	<i>Ia-3d</i>	1.4928, 1.4928, 1.4928, 90, 90, 90	-	-	11.25	X	783
Bi-Rh	Rh ₃ Bi ₁₄	Rh ₃ Bi ₁₄ , oF136,70	<i>Fddd</i>	0.69002, 1.73616, 3.1694, 90, 90, 90	-	-	11.32	X	62726
Bi-S	BiS ₂	BiSe ₂ , mS24,12	<i>C12/m1</i>	1.57879, 0.40261, 1.1333, 90, 127.562, 90	-	-	6.35	X	65003
Bi-S	Bi ₂ S ₃	Sb ₂ S ₃ , oP20,62	<i>Pnma</i>	1.1345, 0.3994, 1.1193, 90, 90, 90	bismuthinite	black	6.73	X	43499
Bi-Sb	Bi _{0.969} Sb _{0.031}	As, hR6,166	<i>R-3m</i>	0.454, 0.454, 1.185, 90, 90, 120	-	-	9.72	X	1571
Bi-Sc	ScBi	NaCl, cF8,225	<i>Fm-3m</i>	0.5954, 0.5954, 0.5954, 90, 90, 90	rocksalt family	-	7.99	X	1707
Bi-Sc	Sc ₂ Bi ₃	YbSb ₃ , oP32,62	<i>Pnma</i>	1.1236, 0.8873, 0.7761, 90, 90, 90	-	gray dark	7.31	X	40010
Bi-Se	BiSe m	NaCl, cF8,225	<i>Fm-3m</i>	0.599, 0.599, 0.599, 90, 90, 90	rocksalt family	-	8.90	X	626
Bi-Se	BiSe	BiSe, hP12,164	<i>P-3m1</i>	0.4212, 0.4212, 2.2942, 90, 90, 120	-	-	8.14	X	30824
Bi-Se	BiSe ₂	BiSe ₂ , mS24,12	<i>C12/m1</i>	1.674, 0.4141, 1.2027, 90, 127.658, 90	-	-	7.38	X	65003
Bi-Se	Bi _{0.7} Se _{0.3} m	As, hR6,166	<i>R-3m</i>	0.454, 0.454, 1.183, 90, 90, 120	-	-	8.02	A	16833
Bi-Se	Bi ₂ Se ₃ hp1	Bi ₂ Te ₃ , mS20,12	<i>C12/m1</i>	1.3938, 0.38506, 0.85086, 90, 91.829, 90	-	-	9.53	X	61683
Bi-Se	Bi ₂ Se ₃ hp2	Os ₂ Al ₃ , tI10,139	<i>I4/mmm</i>	0.3395, 0.3395, 1.6882, 90, 90, 90	b.c.c. family	-	11.18	X	61683
Bi-Se	Bi ₂ Se ₃ hp3 cub	*, cP80, *	-	1.298, 1.298, 1.298, 90, 90, 90	-	-	-	N	8423
Bi-Se	Bi ₂ Se ₃ hp3 orth	Sb ₂ S ₃ , oP20,62	<i>Pnma</i>	1.1706, 0.41417, 1.16082, 90, 90, 90	-	-	7.73	X	61683
Bi-Se	Bi ₂ Se ₃ hp3 tet	Zn ₃ P ₂ , tP40,137	<i>P4₂/nmc</i>	0.923, 0.923, 1.27, 90, 90, 90	fluorite family	-	8.04	A	8423
Bi-Se	Bi ₂ Se ₃	Bi ₂ Te ₃ , hR15,166	<i>R-3m</i>	0.40483, 0.40483, 2.7624, 90, 90, 120	paraguanaquatite	black	8.32	X	61683
Bi-Se	Bi ₃ Se ₂	*, hP*, *	-	0.4256, 0.4256, 5.872, 90, 90, 120	-	-	-	N	19348
Bi-Se	Bi ₃ Se ₄	In ₃ Te ₄ , hR21,166	<i>R-3m</i>	0.423, 0.423, 4.05, 90, 90, 120	-	-	7.48	X	626
Bi-Se	Bi ₄ Se ₃	Bi ₄ Se ₃ , hR21,166	<i>R-3m</i>	0.427, 0.427, 4.00, 90, 90, 120	-	-	8.46	X	3957
Bi-Se	Bi ₆ Se ₅	*, hP*, *	-	0.4246, 0.4246, 6.32, 90, 90, 120	-	-	-	N	19348
Bi-Se	Bi ₆ Se ₇	*, hP*, *	-	0.4189, 0.4189, 7.43, 90, 90, 120	-	-	-	N	19348
Bi-Se	Bi ₈ Se ₇	Bi ₈ Se ₇ , hP45,164	<i>P-3m1</i>	0.422, 0.422, 8.565, 90, 90, 120	-	-	8.39	X	6126
Bi-Se	Bi ₈ Se ₉	Bi ₈ Se ₉ , hR51,166	<i>R-3m</i>	0.416, 0.416, 9.71, 90, 90, 120	-	-	8.16	X	6126
Bi-Sm	SmBi hp	CuTi ₂ , tP2,123	<i>P4/mmm</i>	0.3775, 0.3775, 0.325, 90, 90, 90	b.c.c. family	-	12.89	X	55788
Bi-Sm	SmBi rt	NaCl, cF8,225	<i>Fm-3m</i>	0.6364, 0.6364, 0.6364, 90, 90, 90	rocksalt family	black gray	9.26	X	55788
Bi-Sm	SmBi ₂ rt	*, o***, *	-	0.642, 1.164, 1.28, 90, 90, 90	-	-	-	N	17960
Bi-Sm	Sm ₂ Bi	La ₂ Sb, tI12,139	<i>I4/mmm</i>	0.452, 0.452, 1.76, 90, 90, 90	-	-	9.42	A	17960
Bi-Sm	Sm ₄ Bi ₃	Th ₃ P ₄ , cI28,220	<i>I-43d</i>	0.94, 0.94, 0.94, 90, 90, 90	-	gray silver	9.82	A	17978
Bi-Sm	Sm ₃ Bi ₃	Mn ₃ Si ₃ , hP16,193	<i>P6₃/mcm</i>	0.9268, 0.9268, 0.6456, 90, 90, 120	-	-	9.54	A	47173
Bi-Sn	Sn _{0.00125} Bi _{0.99875}	As, hR6,166	<i>R-3m</i>	0.4534, 0.4534, 1.1814, 90, 90, 120	-	-	9.89	X	1571
Bi-Sn	Sn _{0.3} Bi _{0.7} hp-ht	As, hR6,166	<i>R-3m</i>	0.4456, 0.4456, 1.175, 90, 90, 120	-	-	8.97	A	12604
Bi-Sn	Sn _{0.5} Bi _{0.5} hp-ht	Sn, tI4,141	<i>I4₁/amd</i>	0.6052, 0.6052, 0.3251, 90, 90, 90	-	-	9.14	X	12604
Bi-Sn	Sn _{0.60} Bi _{0.40} hp1	(Sn _{0.6} Bi _{0.4}), oS16,64	<i>Cmce</i>	1.07345, 0.6327, 0.63115, 90, 90, 90	-	-	9.60	X	42947
Bi-Sn	Sn _{0.60} Bi _{0.40} hp2	W, cI2,229	<i>Im-3m</i>	0.36336, 0.36336, 0.36336, 90, 90, 90	b.c.c. family	-	10.72	X	42947
Bi-Sn	Sn _{0.95} Bi _{0.05} rt	Sn, tI4,141	<i>I4₁/amd</i>	0.5858, 0.5858, 0.3191, 90, 90, 90	-	-	7.47	X	621

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Bi-Sr	SrBi ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.5042, 0.5042, 0.5042, 90, 90, 90	close-packed structure	-	9.26	X	1479
Bi-Sr	Sr ₁₁ Bi ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	<i>I4/mmm</i>	1.2765, 1.2765, 1.8407, 90, 90, 90	-	-	6.76	X	41102
Bi-Sr	Sr ₁₆ Bi ₁₁	Ca ₁₆ Sb ₁₁ , tP56, 113	<i>P-42₁m</i>	1.3152, 1.3152, 1.1934, 90, 90, 90	-	-	5.95	A	33193
Bi-Sr	Sr ₂ Bi	La ₂ Sb, tI12, 139	<i>I4/mmm</i>	0.501, 0.501, 1.768, 90, 90, 90	-	-	5.75	X	9337
Bi-Sr	Sr ₂ Bi ₃	Sr ₂ Bi ₃ , oP20, 52	<i>Pnma</i>	1.5631, 0.6793, 0.6599, 90, 90, 90	-	-	7.60	X	29235
Bi-Sr	Sr ₄ Bi ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	1.0101, 1.0101, 1.0101, 90, 90, 90	-	-	6.30	X	42278
Bi-Sr	Sr ₅ Bi ₃ (H)	Yb ₅ Sb ₃ , oP32, 62	<i>Pnma</i>	1.337, 1.0233, 0.889, 90, 90, 90	-	-	5.82	A	11481
Bi-Sr	Sr ₅ Bi ₃ rt	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.963, 0.963, 0.763, 90, 90, 120	-	-	5.77	X	9337
Bi-Tb	TbBi It	NiO, hR6, 166	<i>R-3m</i>	0.44217, 0.44217, 1.08694, 90, 90, 120	-	-	9.96	X	11891
Bi-Tb	TbBi rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.62755, 0.62755, 0.62755, 90, 90, 90	rocksalt family	-	9.89	X	11891
Bi-Tb	Tb ₃ Bi ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.93215, 0.93215, 0.93215, 90, 90, 90	-	-	10.35	A	8945
Bi-Tb	Tb ₃ Bi ₃ Tb+	Y ₃ Bi ₃ , oP32, 62	<i>Pnma</i>	0.817, 0.9487, 1.1968, 90, 90, 90	-	-	10.18	X	39288
Bi-Tb	Tb ₅ Bi ₃ Tb-	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.91006, 0.91006, 0.63651, 90, 90, 120	-	-	10.34	A	8945
Bi-Te	BiTe m cub	NaCl, cF8, 225	<i>Fm-3m</i>	0.647, 0.647, 0.647, 90, 90, 90	rocksalt family	-	8.25	X	626
Bi-Te	BiTe	BiSe, hP12, 164	<i>P-3m1</i>	0.4422, 0.4422, 2.405, 90, 90, 120	tsunite	white silver	8.23	X	11208
Bi-Te	Bi ₁₀ Te ₉	Se, hP3, 152	<i>P3₁21</i>	0.4453, 0.4453, 0.5905, 90, 90, 120	-	-	6.67	A	18825
Bi-Te	Bi ₁₀ Te ₆ hp3	W, cI2, 229	<i>Im-3m</i>	0.3571, 0.3571, 0.3571, 90, 90, 90	b.c.c. family	-	11.68	X	58116
Bi-Te	Bi ₁₀ Te ₅ m rhom	As, hR6, 166	<i>R-3m</i>	0.443, 0.443, 1.175, 90, 90, 120	-	-	8.40	A	18825
Bi-Te	Bi ₁₀ 985Te ₁₀₀₁₅	As, hR6, 166	<i>R-3m</i>	0.4534, 0.4534, 1.1814, 90, 90, 120	-	-	9.89	X	1571
Bi-Te	Bi ₂ Te	Sb ₂ Te, hP9, 164	<i>P-3m1</i>	0.44688, 0.44688, 1.79216, 90, 90, 120	-	-	8.77	X	59833
Bi-Te	Bi ₂ Te ₃ hp1	Bi ₂ Te ₃ , mS20, 12	<i>C12/m1</i>	1.4645, 0.4096, 0.90195, 90, 90, 384, 90	-	-	9.83	X	58116
Bi-Te	Bi ₂ Te ₃ hp2	Bi ₂ Te ₃ , mS20, 15	<i>C12/c1</i>	1.0233, 0.6955, 0.77719, 90, 110, 154, 90	-	-	10.24	X	58116
Bi-Te	Bi ₂ Te ₃ rt	Bi ₂ Te ₃ , hR15, 166	<i>R-3m</i>	0.43896, 0.43896, 3.05019, 90, 90, 120	tellurobismuthite	-	7.84	X	60211
Bi-Te	Bi ₃ Te ₄	In ₃ Te ₄ , hR21, 166	<i>R-3m</i>	0.4389, 0.4389, 4.2, 90, 90, 120	rucklidgeite	-	8.09	A	24348
Bi-Te	Bi ₄ Te ₃	Bi ₄ Se ₃ , hR21, 166	<i>R-3m</i>	0.4451, 0.4451, 4.1888, 90, 90, 120	pilsenite	-	8.45	X	11945
Bi-Te	Bi ₄ Te ₅	* _h ***	-	0.44106, 0.44106, 5.433, 90, 90, 120	-	-	-	N	3971
Bi-Te	Bi ₆ Te ₇	* _h ***	-	0.44214, 0.44214, 7.8195, 90, 90, 120	-	-	-	N	3971
Bi-Te	Bi ₈ Te ₉	Bi ₈ Se ₉ , hR51, 166	<i>R-3m</i>	0.441, 0.441, 10.3, 90, 90, 120	-	-	8.10	X	27794
Bi-Th	ThBi m	CsCl, cP2, 221	<i>Pm-3m</i>	0.39635, 0.39635, 0.39635, 90, 90, 90	b.c.c. family	-	11.76	X	62758
Bi-Th	ThBi ₂	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.4492, 0.4492, 0.9298, 90, 90, 90	-	-	11.51	X	817
Bi-Th	Th ₃ Bi ₄	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.9559, 0.9559, 0.9559, 90, 90, 90	-	-	11.65	X	817
Bi-Th	Th ₅ Bi ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.959, 0.959, 0.6632, 90, 90, 120	-	-	11.24	A	15074
Bi-Ti	Ti ₁₀ 9965Bi ₁₀₀₀₃₅ rt	Mg, hP2, 194	<i>P6₃/mcm</i>	0.2933, 0.2933, 0.4669, 90, 90, 120	close-packed structure	-	4.63	X	1272
Bi-Ti	Ti ₂ Bi (O)	Ti ₂ Bi, tI12, 139	<i>I4/mmm</i>	0.408, 0.408, 1.457, 90, 90, 90	-	-	8.35	X	959
Bi-Ti	Ti ₈ Bi ₉	V ₇ Sb ₉ , tP34, 129	<i>P4/nmm</i>	1.0277, 1.0277, 0.7375, 90, 90, 90	-	-	9.65	X	33655
Bi-Tl	TlBi cub	CsCl, cP2, 221	<i>Pm-3m</i>	0.398, 0.398, 0.398, 90, 90, 90	b.c.c. family	-	10.89	X	11
Bi-Tl	Tl _{0.44} Bi _{0.56}	Ti, hP3, 191	<i>P6/mmm</i>	0.5653, 0.5653, 0.3379, 90, 90, 120	-	-	11.02	X	332
Bi-Tl	Tl _{0.75} Bi _{0.25} rt	Mg, hP2, 194	<i>P6₃/mcm</i>	0.352, 0.352, 0.516, 90, 90, 120	close-packed structure	-	12.33	X	25706
Bi-Tl	Tl _{0.8} Bi _{0.2}	Cu, cF4, 225	<i>Fm-3m</i>	0.4921, 0.4921, 0.4921, 90, 90, 90	close-packed structure	-	11.44	X	7871
Bi-Tm	TmBi	NaCl, cF8, 225	<i>Fm-3m</i>	0.6188, 0.6188, 0.6188, 90, 90, 90	rocksalt family	-	10.59	X	42885
Bi-Tm	Tm ₅ Bi ₃	Y ₅ Bi ₃ , oP32, 62	<i>Pnma</i>	0.8061, 0.9286, 1.1724, 90, 90, 90	-	-	11.14	A	42885
Bi-U	UBi rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.63627, 0.63627, 0.63627, 90, 90, 90	rocksalt family	-	11.53	X	27836
Bi-U	UBi ₂	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.4445, 0.4445, 0.8908, 90, 90, 90	-	-	12.38	X	3615
Bi-U	UBi _x stab	Cu, cF4, 225	<i>Fm-3m</i>	0.489, 0.489, 0.489, 90, 90, 90	close-packed structure	-	13.52	X	7140
Bi-U	U ₃ Bi ₄	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.935, 0.935, 0.935, 90, 90, 90	-	-	12.60	X	394
Bi-Y	YBi	NaCl, cF8, 225	<i>Fm-3m</i>	0.62597, 0.62597, 0.62597, 90, 90, 90	rocksalt family	-	8.07	X	4594
Bi-Y	Y ₃ Bi ₃	Y ₃ Bi ₃ , oP32, 62	<i>Pnma</i>	0.8179, 0.9401, 1.1957, 90, 90, 90	-	-	7.74	X	9394
Bi-Yb	YbBi ₂	ZrSi ₂ , oS12, 63	<i>Cmcm</i>	0.456, 1.668, 0.428, 90, 90, 90	close-packed structure	-	12.06	A	17925
Bi-Yb	Yb ₁₁ Bi ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	<i>I4/mmm</i>	1.22043, 1.22043, 1.77227, 90, 90, 90	-	-	10.05	X	62524
Bi-Yb	Yb ₁₆ Bi ₁₁	Ca ₁₆ Sb ₁₁ , tP56, 113	<i>P-42₁m</i>	1.23694, 1.23694, 1.1548, 90, 90, 90	-	-	9.53	A	33193
Bi-Yb	Yb ₄ Bi ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.9573, 0.9573, 0.9573, 90, 90, 90	-	gray	9.99	A	22490
Bi-Yb	Yb ₂ Bi ₂	* _o P* ₃₃	<i>Pna2₁</i>	1.236, 0.828, 0.966, 90, 90, 90	-	-	-	N	17925
Bi-Yb	Yb ₅ Bi ₃ hex	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.91852, 0.91852, 0.70391, 90, 90, 120	-	-	9.64	A	47173
Bi-Yb	Yb ₅ Bi ₃ orth	Yb ₅ Sb ₃ , oP32, 62	<i>Pnma</i>	1.26375, 0.97243, 0.84117, 90, 90, 90	-	-	9.59	X	50739
Bi-Yb	Yb ₅ Bi ₄ ht	* _{tl} * ₁₃₉	<i>I4/mmm</i>	1.193, 1.193, 1.713, 90, 90, 90	-	-	-	N	17925
Bi-Zr	ZrBi	ZrSb, oS24, 63	<i>Cmcm</i>	0.3858, 1.077, 1.4325, 90, 90, 90	-	-	10.05	X	44980
Bi-Zr	ZrBi ₂	TiAs ₂ , oP24, 58	<i>Pnmm</i>	1.018, 1.549, 0.397, 90, 90, 90	-	-	10.81	X	4205
Bi-Zr	Zr ₃ Bi	Ni ₃ P, tI32, 82	<i>I-4</i>	1.152, 1.152, 0.572, 90, 90, 90	-	-	8.45	A	4205
Bi-Zr	Zr ₃ Bi ₅	Ir ₃ Ga ₅ , tP32, 118	<i>P-4n2</i>	0.6958, 0.6958, 1.73, 90, 90, 90	chimney-ladder structure	-	10.46	X	48437
Bi-Zr	Zr ₅ Bi ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.87351, 0.87351, 0.59908, 90, 90, 120	-	-	9.09	X	40010
Bi-Zr	Zr ₈ Bi ₁₃	Zr ₈ Bi ₁₃ , tP84, 116	<i>P-4c2</i>	0.6958, 0.6958, 4.498, 90, 90, 90	-	-	10.51	X	48437
Bk-Br	BkBr ₃ ht1	Bi ₁₁ , hR24, 148	<i>R-3</i>	0.7263, 0.7263, 1.92308, 90, 90, 120	-	-	5.52	A	8969
Bk-Br	BkBr ₃ ht2	AlCl ₃ , mS16, 12	<i>C12/m1</i>	0.683, 1.253, 0.723, 90, 110, 6, 90	-	-	5.58	A	8969
Bk-Br	BkBr ₃ rt	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.403, 1.271, 0.912, 90, 90, 90	-	-	6.92	A	8969
Bk-Cl	BkCl ₃	UCl ₃ , hP8, 176	<i>P6₃/m</i>	0.7382, 0.7382, 0.4127, 90, 90, 120	-	green lime	6.03	A	4040
Bk-F	BkF ₄	ZrF ₄ , mS60, 15	<i>C12/c1</i>	1.247, 1.046, 0.813, 90, 126, 1, 90	-	-	7.51	A	16265
Bk-H	BkH ₂	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5248, 0.5248, 0.5248, 90, 90, 90	fluorite family	-	11.44	X	17916
Bk-H	BkH ₃	Na ₃ As, hP8, 194	<i>P6₃/mcm</i>	0.3729, 0.3729, 0.6665, 90, 90, 120	-	-	10.35	A	17916
Bk-Ir	BkIr ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.75204, 0.75204, 0.75204, 90, 90, 90	Friauf-Laves phase	-	19.72	X	23556
Bk-N	BkN	NaCl, cF8, 225	<i>Fm-3m</i>	0.4951, 0.4951, 0.4951, 90, 90, 90	rocksalt family	-	14.29	X	13217
Bk-O	BkO	NaCl, cF8, 225	<i>Fm-3m</i>	0.5002, 0.5002, 0.5002, 90, 90, 90	rocksalt family	-	13.96	X	23555
Bk-O	BkO ₂	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5336, 0.5336, 0.5336, 90, 90, 90	fluorite family	tan	12.20	X	13212
Bk-O	Bk ₂ O ₃ ht1	Sm ₂ O ₃ , mS30, 12	<i>C12/m1</i>	1.4197, 0.3606, 0.8846, 90, 100, 23, 90	-	-	12.12	A	7375
Bk-O	Bk ₂ O ₃ ht2	La ₂ O ₃ , hP5, 164	<i>P-3m1</i>	0.3754, 0.3754, 0.5958, 90, 90, 120	-	-	12.38	A	7375
Bk-O	Bk ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	<i>Ia-3</i>	1.089, 1.089, 1.089, 90, 90, 90	-	tan	11.15	A	23555
Bk-P	BkP	NaCl, cF8, 225	<i>Fm-3m</i>	0.5669, 0.5669, 0.5669, 90, 90, 90	rocksalt family	-	10.13	X	13217
Bk-Pt	BkPt ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.527, 0.527, 0.4423, 90, 90, 120	-	-	19.08	X	23556
Bk-Rh	BkRh ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4013, 0.4013, 0.4013, 90, 90, 90	close-packed structure	-	14.28	X	23556

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Bk-Sb	BkSb	NaCl, cF8, 225	<i>Fm-3m</i>	0.6188, 0.6188, 0.6188, 90, 90, 90	rocksalt family	-	10.34	X	13217
Br-C	CBr ₄ ht	CBr ₄ , cF516, 225	<i>Fm-3m</i>	0.882, 0.882, 0.882, 90, 90, 90	-	-	3.21	X	17512
Br-C	CBr ₄ rt	CBr ₄ , mS160, 15	<i>C12/c1</i>	2.143, 1.212, 2.102, 90, 110.88, 90	-	-	3.45	X	10327
Br-C	C ₆ Br ₆	C ₆ Cl ₆ , mP24, 14	<i>P12₁/c1</i>	0.839, 0.401, 1.71385, 90, 116.266, 90	-	-	3.54	A	1159
Br-C	[C ₆₀]Br ₂₄ [Br ₂]	[C ₆₀]Br ₂₄ [Br ₂], hR294, 148	<i>R-3</i>	1.2874, 1.2874, 3.2659, 90, 90, 120	fullerene family	orange	2.97	X	26578
Br-C	[C ₆₀]Br ₂₄ [Br ₂] ₂ rt	[C ₆₀]Br ₂₄ [Br ₂] ₂ , aP88, 2	<i>P-1</i>	1.2471, 1.27687, 1.2867, 60.395, 62.754, 84.716	fullerene family	orange	3.15	X	30141
Br-C	[C ₇₀]Br ₁₀	[C ₇₀]Br ₁₀ , mP320, 14	<i>P12₁/c1</i>	1.8579, 1.2313, 1.968, 90, 98.64, 90	fullerene family	orange	2.45	X	41821
Br-C	[C ₇₀]Br ₁₀ [Br ₂] ₃	[C ₇₀]Br ₁₀ [Br ₂] ₃ , aP172, 2	<i>P-1</i>	1.14, 1.3973, 1.8165, 111.78, 93.19, 96.42	fullerene family	orange	2.65	X	41821
Br-C	[C ₇₀]Br ₁₄	*, mP*, *	-	1.8135, 1.0731, 3.07092, 90, 102.558, 90	fullerene family	orange yellow	-	N	33988
Br-Ca	CaBr ₂ ht	TiO ₂ , tP6, 136	<i>P4₂/mmn</i>	0.68109, 0.68109, 0.44177, 90, 90, 90	-	-	3.24	X	44668
Br-Ca	CaBr ₂ rt	CaCl ₂ , oP6, 58	<i>Pnnm</i>	0.66531, 0.68875, 0.43773, 90, 90, 90	-	yellow	3.31	X	44668
Br-Cd	CdBr ₂ 12R	PbI ₂ , hR18, 166	<i>R-3m</i>	0.3985, 0.3985, 3.7682, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	5.23	X	12880
Br-Cd	CdBr ₂ 4H	CdI ₂ , hP6, 186	<i>P6₃mc</i>	0.3985, 0.3985, 1.2561, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	5.23	X	1744
Br-Cd	CdBr ₂ 6R	CdCl ₂ , hR9, 166	<i>R-3m</i>	0.3985, 0.3985, 1.8841, 90, 90, 120	-	-	5.23	X	1744
Br-Ce	CeBr ₃	UCl ₃ , hP8, 176	<i>P6₃/m</i>	0.7952, 0.7952, 0.4444, 90, 90, 120	-	-	5.18	A	276
Br-Ce	Ce ₂ Br ₅	Pr ₂ I ₅ , mP14, 11	<i>P12₁/m1</i>	0.78889, 0.41916, 1.3362, 90, 88.738, 90	-	black	5.11	X	24489
Br-Cf	CfBr ₃ rt	AlCl ₃ , mS16, 12	<i>C12/m1</i>	0.7214, 1.2423, 0.6825, 90, 110.7, 90	-	green	5.70	X	8969
Br-Cl	BrCl	IBr, oS8, 36	<i>Cmc2₁</i>	0.6449, 0.4547, 0.835, 90, 90, 90	-	yellow	3.13	X	60338
Br-Cm	CmBr ₃	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.404, 1.27, 0.9135, 90, 90, 90	-	green yellow	6.90	X	8969
Br-Co	CoBr ₂	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.3685, 0.3685, 0.612, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	5.05	X	21
Br-Cr	CrBr ₂ hp1	CrBr ₂ , mS6, 12	<i>C12/m1</i>	0.7114, 0.3649, 0.6217, 90, 93.88, 90	-	-	4.37	X	1563
Br-Cr	CrBr ₃ rt	BiI ₃ , hR24, 148	<i>R-3</i>	0.626, 0.626, 1.82, 90, 90, 120	-	black	4.71	X	43
Br-Cs	CsBr lt	NaCl, cF8, 225	<i>Fm-3m</i>	0.7253, 0.7253, 0.7253, 90, 90, 90	rocksalt family	-	3.70	X	32850
Br-Cs	CsBr rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.4297, 0.4297, 0.4297, 90, 90, 90	b.c.c. family	-	4.45	X	60679
Br-Cs	Cs[Br ₃]	Cs[I ₃], oP16, 62	<i>Pnma</i>	1.0037, 0.6522, 0.9539, 90, 90, 90	-	-	3.96	X	4253
Br-Cu	CuBr hp1	PbO, pP4, 129	<i>P4/nmm</i>	0.39411, 0.39411, 0.50054, 90, 90, 90	-	-	6.13	X	29366
Br-Cu	CuBr hp2	CuCl, cP16, 205	<i>Pa-3</i>	0.66674, 0.66674, 0.66674, 90, 90, 90	-	-	6.43	X	29366
Br-Cu	CuBr hp3	NaCl, cF8, 225	<i>Fm-3m</i>	0.51701, 0.51701, 0.51701, 90, 90, 90	rocksalt family	colorless	6.89	X	29366
Br-Cu	CuBr ht1	ZnO, hP4, 186	<i>P6₃mc</i>	0.4096, 0.4096, 0.6713, 90, 90, 120	adamantane structure	-	4.88	X	10473
Br-Cu	CuBr ht2	VH _{0.5} , cI14, 229	<i>Im-3m</i>	0.4601, 0.4601, 0.4601, 90, 90, 90	-	-	4.89	X	10473
Br-Cu	CuBr rt	ZnS, cF8, 216	<i>F-43m</i>	0.5498, 0.5498, 0.5498, 90, 90, 90	adamantane structure	-	5.73	X	29366
Br-Cu	CuBr tf	*, tP2, 136	<i>P4₂/mmn</i>	0.302, 0.302, 0.424, 90, 90, 90	-	-	-	N	3162
Br-Cu	CuBr ₂	CuBr ₂ , mS6, 12	<i>C12/m1</i>	0.72096, 0.34742, 0.70475, 90, 119.61, 90	-	brown dark	4.83	X	38697
Br-D	DBr lt1	HCl, cF52, 225	<i>Fm-3m</i>	0.57958, 0.57958, 0.57958, 90, 90, 90	close-packed structure	-	2.79	X	27775
Br-D	DBr lt2	HBr, oS12, 64	<i>Cmce</i>	0.60924, 0.55441, 0.56322, 90, 90, 90	-	-	2.86	X	27775
Br-D	DBr lt3	HCl, oS8, 36	<i>Cmc2₁</i>	0.61178, 0.54289, 0.5628, 90, 90, 90	-	-	2.91	X	27775
Br-Dy	DyBr ₂	SrI ₂ , oP24, 61	<i>Pbca</i>	0.71791, 1.39864, 0.74768, 90, 90, 90	-	-	5.70	A	28070
Br-Dy	DyBr ₃ hp	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.3923, 1.277, 0.9118, 90, 90, 90	-	-	5.85	A	12650
Br-Dy	DyBr ₃	BiI ₃ , hR24, 148	<i>R-3</i>	0.7107, 0.7107, 1.9161, 90, 90, 120	-	-	4.78	A	4017
Br-Er	ErBr	ZrCl ₄ , hR12, 166	<i>R-3m</i>	0.377, 0.377, 2.8826, 90, 90, 120	-	-	6.94	A	13617
Br-Er	ErBr ₃	BiI ₃ , hR24, 148	<i>R-3</i>	0.7045, 0.7045, 1.9148, 90, 90, 120	-	-	4.93	A	4017
Br-Eu	EuBr ₂	SrBr ₂ , tP30, 85	<i>P4/n</i>	1.1567, 1.1567, 0.7094, 90, 90, 90	-	gray	5.45	X	5647
Br-Eu	EuBr ₂ 99	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.4045, 1.286, 0.917, 90, 90, 90	-	-	5.44	A	17872
Br-F	BrF ₃ rt	BrF ₃ , oS16, 36	<i>Cmc2₁</i>	0.5315, 0.7305, 0.6624, 90, 90, 90	-	-	3.54	X	25232
Br-F	BrF ₅	BrF ₅ , oS24, 36	<i>Cmc2₁</i>	0.6422, 0.7245, 0.7846, 90, 90, 90	-	-	3.18	X	857
Br-Fe	FeBr ₂	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.3776, 0.3776, 0.6227, 90, 90, 120	CdI ₂ -PbI ₂ polytype	yellow	4.66	X	40193
Br-Fe	FeBr ₃	BiI ₃ , hR24, 148	<i>R-3</i>	0.6397, 0.6397, 1.8375, 90, 90, 120	-	black	4.52	X	38574
Br-Ga	GaBr ₂ ht	Gal ₃ , hR108, 161	<i>R3c</i>	2.1634, 2.1634, 0.8692, 90, 90, 120	-	-	3.89	X	20746
Br-Ga	GaBr ₂ rt	GaCl ₂ , oP24, 52	<i>Pnna</i>	0.7528, 0.9972, 1.001, 90, 90, 90	-	-	4.06	X	20747
Br-Ga	GaBr ₃	InI ₃ , mP16, 14	<i>P12₁/c1</i>	0.8874, 0.5637, 1.1006, 90, 107.81, 90	-	-	3.92	X	44968
Br-Ga	Ga ₂ Br ₃	Ga ₂ Br ₃ , oP84, 62	<i>Pnma</i>	1.2537, 1.5474, 1.2534, 90, 90, 90	-	colorless	4.14	X	19057
Br-Gd	GdBr rt	ZrCl ₄ , hR12, 166	<i>R-3m</i>	0.38692, 0.38692, 2.9164, 90, 90, 120	-	-	6.25	A	13617
Br-Gd	GdBr ₃ hp	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.3987, 1.2746, 0.9109, 90, 90, 90	-	-	5.70	A	16501
Br-Gd	GdBr ₃	AlCl ₃ , mS16, 12	<i>C12/m1</i>	0.7224, 1.2512, 0.684, 90, 110.6, 90	-	-	4.56	X	6984
Br-Gd	Gd ₂ Br ₃	Gd ₂ Cl ₃ , mS20, 12	<i>C12/m1</i>	1.6418, 0.3983, 1.0753, 90, 119.27, 90	-	bronze	6.00	X	12661
Br-Gd	Gd ₅ Br ₈	Tb ₃ Br ₈ , mS26, 12	<i>C12/m1</i>	1.99097, 0.3884, 1.3553, 90, 129.756, 90	-	-	5.88	A	13523
Br-Ge	GeBr ₂	GeBr ₂ , mP24, 14	<i>P12₁/c1</i>	1.168, 0.912, 0.702, 90, 101.9, 90	-	-	4.22	X	10936
Br-Ge	GeBr ₄ lt	SnBr ₄ , mP20, 14	<i>P12₁/c1</i>	1.0183, 0.6779, 1.0292, 90, 102.53, 90	-	colorless	3.76	X	46763
Br-Ge	GeBr ₄ rt	SnI ₄ , cP40, 205	<i>Pa-3</i>	1.1172, 1.1172, 1.1172, 90, 90, 90	-	colorless	3.74	X	46762
Br-H	HBr lt1	Cu, cF4, 225	<i>Fm-3m</i>	0.5809, 0.5809, 0.5809, 90, 90, 90	close-packed structure	-	2.74	X	21833
Br-H	HBr lt2	HBr, cP4, 205	<i>Pa-3</i>	0.57907, 0.57907, 0.57907, 90, 90, 90	-	colorless	2.77	X	21833
Br-H	HBr lt3	HBr, oS12, 64	<i>Cmce</i>	0.6086, 0.5555, 0.5648, 90, 90, 90	-	-	2.81	A	5494
Br-H	HBr lt4	HCl, oS8, 36	<i>Cmc2₁</i>	0.6111, 0.5462, 0.5643, 90, 90, 90	-	-	2.85	A	5494
Br-Hf	HfBr	ZrBr ₄ , hR12, 166	<i>R-3m</i>	0.34732, 0.34732, 2.8226, 90, 90, 120	-	-	8.73	A	12524
Br-Hf	HfBr ₂	*, tP48, *	-	0.7556, 0.7556, 1.82, 90, 90, 90	-	black	8.65	N	12510
Br-Hf	HfBr ₄	SnI ₄ , cP40, 205	<i>Pa-3</i>	1.091, 1.091, 1.091, 90, 90, 90	-	-	5.10	A	1948
Br-Hg	HgBr rt	HgCl ₂ , dI8, 139	<i>I4/mmm</i>	0.4663, 0.4663, 1.1133, 90, 90, 90	kuzminite	-	7.70	X	5005
Br-Hg	HgBr ₂ hp3	HgBr ₂ , hP9, 143	<i>P3</i>	0.67569, 0.67569, 0.56589, 90, 90, 120	-	-	8.02	X	44718
Br-Hg	HgBr ₂ hp4	*, h***, *	-	0.6787, 0.6787, 1.113, 90, 90, 120	-	-	-	N	44718
Br-Hg	HgBr ₂	HgBr ₂ , oS12, 36	<i>Cmc2₁</i>	0.4628, 0.6802, 1.2476, 90, 90, 90	-	colorless	6.10	X	23868
Br-Ho	HoBr rt	ZrCl ₄ , hR12, 166	<i>R-3m</i>	0.3774, 0.3774, 2.8834, 90, 90, 120	-	-	6.86	A	13617
Br-Ho	HoBr ₃ hp1	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.3898, 1.2773, 0.9125, 90, 90, 90	-	-	5.92	A	12650
Br-Ho	HoBr ₃	BiI ₃ , hR24, 148	<i>R-3</i>	0.7072, 0.7072, 1.915, 90, 90, 120	-	-	4.86	A	4017
Br-I	IBr hp	IBr, mS4, 12	<i>C12/m1</i>	0.391, 0.486, 0.391, 90, 92.3, 90	-	-	9.25	X	17845
Br-I	IBr	IBr, oS8, 36	<i>Cmc2₁</i>	0.6993, 0.4903, 0.8931, 90, 90, 90	-	-	4.49	X	3751
Br-I	[I ₂] _{0.35} [Br ₂] _{0.65}	[I ₂], oS8, 64	<i>Cmce</i>	0.6876, 0.4619, 0.9016, 90, 90, 90	-	-	4.47	A	1005
Br-I	[I ₂] _{0.75} [Br ₂] _{0.25} lt	[I ₂], oS8, 64	<i>Cmce</i>	0.7073, 0.4697, 0.9457, 90, 90, 90	-	-	4.87	A	1005
Br-In	InBr	TlI, oS8, 63	<i>Cmcm</i>	0.4466, 1.2368, 0.4739, 90, 90, 90	CrB(III)-FeB	orange red	4.94	X	20652

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Br-In	InBr ₂	GaCl ₂ , oP24, 52	<i>Pnna</i>	0.7986, 1.0385, 1.0425, 90, 90, 90	-	colorless	4.22	X	20652
Br-In	InBr ₃	AlCl ₃ , mS16, 12	<i>C12/m1</i>	0.6696, 1.1641, 0.6633, 90, 108, 99, 90	-	colorless	4.82	X	21785
Br-In	In ₂ Br ₃	In ₂ Br ₃ , oP84, 19	<i>P2₁2₁2₁</i>	1.2855, 1.2938, 1.6399, 90, 90, 90	-	yellow	4.57	X	22889
Br-In	In ₄ Br ₇ lt	In ₄ Br ₇ , mS88, 15	<i>C12/c1</i>	1.3066, 0.752, 3.1105, 90, 98, 2, 90	-	-	4.47	X	42709
Br-In	In ₄ Br ₇ rt	In ₄ Br ₇ , hR66, 166	<i>R-3m</i>	0.7583, 0.7583, 4.6607, 90, 90, 120	-	colorless	4.37	X	42709
Br-In	In ₅ Br ₇ mon	In ₅ Br ₇ , mS192, 15	<i>C12/c1</i>	1.8673, 1.867, 1.918, 90, 103, 96, 90	-	yellow	4.64	X	36990
Br-In	In ₅ Br ₇ tet	In ₅ Br ₇ , tP192, 92	<i>P4₁2₁2</i>	1.3189, 1.3189, 3.7238, 90, 90, 90	-	yellow lemon	4.65	X	36990
Br-In	In ₇ Br ₉	In ₇ Cl ₉ , cP64, 205	<i>Pa-3</i>	1.2681, 1.2681, 1.2681, 90, 90, 90	-	orange	4.96	X	31237
Br-Ir	IrBr ₃	AlCl ₃ , mS16, 12	<i>C12/m1</i>	0.63, 1.098, 0.634, 90, 108, 7, 90	-	green	6.91	X	3996
Br-K	KBr hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.374, 0.374, 0.374, 90, 90, 90	b.c.c. family	-	3.78	X	2207
Br-K	KBr	NaCl, cF8, 225	<i>Fm-3m</i>	0.6578, 0.6578, 0.6578, 90, 90, 90	rocksalt family	colorless	2.78	X	11001
Br-La	LaBr rt	ZrCl ₃ , hR12, 166	<i>R-3m</i>	0.41333, 0.41333, 2.9715, 90, 90, 120	-	-	4.96	X	13617
Br-La	LaBr ₂	NbS ₂ , hP6, 194	<i>P6₃/mmc</i>	0.40988, 0.40988, 1.39, 90, 90, 120	-	black	4.91	X	22871
Br-La	LaBr ₃	UCl ₃ , hP8, 176	<i>P6₃/m</i>	0.79648, 0.79648, 0.45119, 90, 90, 120	-	colorless	5.07	X	22871
Br-La	La ₂ Br ₅	Pr ₂ I ₃ , mP14, 11	<i>P12₁/m1</i>	0.78909, 0.42489, 1.3423, 90, 88, 4, 90	-	black	5.00	X	22871
Br-Li	LiBr hex	ZnO, hP4, 186	<i>P6₃mc</i>	0.41509, 0.41509, 0.66502, 90, 90, 120	adamantane structure	-	2.91	X	50754
Br-Li	LiBr rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.549, 0.549, 0.549, 90, 90, 90	rocksalt family	-	3.49	X	19125
Br-Lu	LuBr ₃	BiI ₃ , hR24, 148	<i>R-3</i>	0.695, 0.695, 1.9109, 90, 90, 120	-	-	5.17	A	4017
Br-Mg	MgBr ₂ ht	MgBr ₂ , hP166	<i>R-3m</i>	0.39152, 0.39152, 1.942, 90, 90, 120	-	-	3.56	A	25730
Br-Mg	MgBr ₂ rt	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.3815, 0.3815, 0.6256, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	3.88	X	21
Br-Mn	MnBr ₂ ht	CdCl ₂ , hR9, 166	<i>R-3m</i>	0.39224, 0.39224, 1.9167, 90, 90, 120	-	-	4.19	X	25730
Br-Mn	MnBr ₂ rt	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.3868, 0.3868, 0.6272, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	4.39	X	969
Br-Mo	MoBr ₂	MoCl ₂ , oS72, 64	<i>Cmce</i>	1.4767, 1.1771, 1.1787, 90, 90, 90	Chevre phase	red	4.97	X	35546
Br-Mo	MoBr _{2.2} m	*, tP*, *	-	0.56, 0.56, 1.545, 90, 90, 90	-	brown	-	N	22677
Br-Mo	MoBr ₃ hex	TiCl ₃ , hP8, 193	<i>P6₃/mcm</i>	0.6595, 0.6595, 0.606, 90, 90, 120	-	black brown	4.88	X	2266
Br-Mo	MoBr ₃ rt	RuBr ₃ , oP16, 59	<i>Pmmn</i>	0.6077, 1.1442, 0.6605, 90, 90, 90	-	-	4.85	X	43621
Br-Mo	Mo ₂ Br ₅ rt	*, hP7, *	-	0.66, 0.66, 0.606, 90, 90, 120	-	-	4.30	N	21582
Br-N	Br[N ₃]	Br[N ₃], tI64, 110	<i>I4₁cd</i>	1.31873, 1.31873, 0.7266, 90, 90, 90	-	yellow	2.56	X	58462
Br-Na	NaBr	NaCl, cF8, 225	<i>Fm-3m</i>	0.59735, 0.59735, 0.59735, 90, 90, 90	rocksalt family	colorless	3.21	X	19280
Br-Nb	NbBr ₄	*, oS40, *	-	1.285, 1.222, 0.7179, 90, 90, 90	-	blue reddish	-	N	2280
Br-Nb	NbBr ₅ ht	NbBr ₅ , oP48, 62	<i>Pnma</i>	1.2888, 1.8690, 0.6149, 90, 90, 90	-	black	4.42	X	24205
Br-Nb	NbBr ₅ mon	NbCl ₅ , mS72, 12	<i>C12/m1</i>	1.92, 1.855, 0.61, 90, 90, 1, 90	-	-	4.52	A	3356
Br-Nb	NbBr ₅ rt	NbBr ₅ , oP24, 55	<i>Pbam</i>	0.615, 1.288, 0.933, 90, 90, 90	-	black	4.43	X	16593
Br-Nb	NbBr ₅ tricl	UCl ₃ , aP12, 2	<i>P-1</i>	0.6461, 0.7031, 0.9584, 108.84, 90.89, 116.16	-	black	4.50	X	50674
Br-Nb	Nb ₃ Br ₈ ht	Nb ₃ Br ₈ , hR66, 166	<i>R-3m</i>	0.70787, 0.70787, 3.8957, 90, 90, 120	-	black	5.41	X	56544
Br-Nb	Nb ₃ Br ₈ rt	Nb ₃ Cl ₈ , hP22, 164	<i>P-3m1</i>	0.7227, 0.7227, 1.293, 90, 90, 120	-	gray dark	5.21	A	2704
Br-Nd	NdBr ₂	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.80238, 0.47849, 0.95833, 90, 90, 90	-	-	5.49	A	28071
Br-Nd	NdBr ₃ rt	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.411, 1.265, 0.917, 90, 90, 90	-	-	5.35	A	27297
Br-Ni	NiBr ₂ lt	CdCl ₂ , hR9, 166	<i>R-3m</i>	0.365, 0.365, 1.83, 90, 90, 120	-	ochre	5.16	X	18082
Br-Np	NpBr ₃ hex	UCl ₃ , hP8, 176	<i>P6₃/m</i>	0.7917, 0.7917, 0.4382, 90, 90, 120	-	-	6.66	X	311
Br-Np	NpBr ₃ orth	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.412, 1.268, 0.917, 90, 90, 90	-	-	6.61	A	276
Br-O	Br ₂ O	Br ₂ O, oP12, 33	<i>Pna2₁</i>	1.0622, 0.3904, 0.6822, 90, 90, 90	-	brown yellow	4.13	X	33966
Br-O	Br ₂ O ₃ lt	*, mP40, 14	<i>P12₁/c1</i>	1.1866, 0.7629, 0.8693, 90, 106, 4, 90	-	orange	-	N	26988
Br-Os	OsBr ₄	TcCl ₄ , oP40, 61	<i>Pbca</i>	0.63399, 1.21092, 1.4615, 90, 90, 90	-	black	6.04	X	18473
Br-P	PBr ₃ lt	SbCl ₃ , oP16, 62	<i>Pnma</i>	0.8014, 1.0026, 0.6444, 90, 90, 90	-	-	3.47	X	12053
Br-P	PBr ₅	PBr ₅ , oP24, 57	<i>Pbcm</i>	0.5663, 1.7031, 0.8247, 90, 90, 90	-	-	3.60	X	4904
Br-P	PBr ₇	PBr ₇ , oP32, 62	<i>Pnma</i>	0.935, 0.794, 1.469, 90, 90, 90	-	red	3.60	X	3286
Br-Pa	PaBr ₄	ThCl ₄ , tI20, 141	<i>I4₁/amd</i>	0.8824, 0.8824, 0.7957, 90, 90, 90	-	-	5.90	X	5929
Br-Pa	PaBr ₅ ht	UCl ₃ , mP24, 14	<i>P12₁/c1</i>	0.8385, 1.1205, 1.21462, 90, 132.547, 90	-	-	4.98	X	4279
Br-Pa	PaBr ₅ rt	*, mP48, 14	<i>P12₁/c1</i>	1.269, 1.282, 0.992, 90, 108, 90	-	-	-	N	4279
Br-Pb	PbBr ₂	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.8059, 0.47319, 0.954, 90, 90, 90	-	-	6.70	X	19457
Br-Pd	PdBr ₂	PdBr ₂ , mS12, 15	<i>C12/c1</i>	1.289, 0.396, 0.659, 90, 102, 2, 90	-	black brown	5.38	X	3204
Br-Pm	PmBr ₃	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.41, 1.269, 0.915, 90, 90, 90	-	red coral	5.37	A	21161
Br-Po	Po _{0.25} Br	NaCl, cF8, 225	<i>Fm-3m</i>	0.561, 0.561, 0.561, 90, 90, 90	rocksalt family	red	4.97	X	671
Br-Pr	PrBr rt	ZrCl ₃ , hR12, 166	<i>R-3m</i>	0.40302, 0.40302, 2.9453, 90, 90, 120	-	-	5.31	A	13617
Br-Pr	PrBr ₃ ht	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.397, 1.258, 0.957, 90, 90, 90	-	-	5.29	A	22216
Br-Pr	PrBr ₃ rt	UCl ₃ , hP8, 176	<i>P6₃/m</i>	0.79248, 0.79248, 0.43886, 90, 90, 120	-	green	5.30	X	54471
Br-Pr	Pr ₂ Br ₅	Pr ₂ I ₃ , mP14, 11	<i>P12₁/m1</i>	0.7787, 0.4169, 1.3338, 90, 88.96, 90	-	bronze	5.23	X	24974
Br-Pt	PtBr ₂	PtCl ₂ , hR54, 166	<i>R-3m</i>	1.385, 1.385, 0.923, 90, 90, 120	-	-	6.92	A	2762
Br-Pt	PtBr ₃	PtBr ₃ , hR144, 148	<i>R-3</i>	2.2318, 2.2318, 0.9034, 90, 90, 120	-	green dark	6.67	X	44829
Br-Pu	PuBr ₃	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.410, 1.265, 0.915, 90, 90, 90	-	-	6.77	X	276
Br-Rb	RbBr hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.409, 0.409, 0.409, 90, 90, 90	b.c.c. family	-	4.01	X	2207
Br-Rb	RbBr rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.68924, 0.68924, 0.68924, 90, 90, 90	rocksalt family	-	3.35	X	63628
Br-Re	ReBr ₃ m	ReCl ₃ , hR72, 166	<i>R-3m</i>	1.06511, 1.06511, 2.1302, 90, 90, 120	-	-	6.08	A	25421
Br-Rh	RhBr ₃	AlCl ₃ , mS16, 12	<i>C12/m1</i>	0.627, 1.085, 0.635, 90, 109, 90	-	brown red	5.57	X	3982
Br-Ru	RuBr ₃ ht	TiCl ₃ , hP8, 193	<i>P6₃/mcm</i>	0.6488, 0.6488, 0.5859, 90, 90, 120	-	-	5.30	X	43621
Br-Ru	RuBr ₃ rt	RuBr ₃ , oP16, 59	<i>Pmmn</i>	0.5859, 1.1235, 0.6488, 90, 90, 90	-	-	5.30	X	43621
Br-S	SBr lt	SBr, oS16, 41	<i>Aea2</i>	1.349, 0.6788, 0.5245, 90, 90, 90	-	red ruby	3.10	X	16573
Br-Sb	SbBr ₃ orth1	AsBr ₃ , oP16, 19	<i>P2₁2₁2₁</i>	0.442, 1.012, 1.23, 90, 90, 90	-	-	4.36	X	2195
Br-Sb	SbBr ₃ orth2	SbCl ₃ , oP16, 62	<i>Pnma</i>	0.825, 0.996, 0.668, 90, 90, 90	-	-	4.37	X	1641
Br-Sc	ScBr ₃ rt	BiI ₃ , hR24, 148	<i>R-3</i>	0.6656, 0.6656, 1.8803, 90, 90, 120	-	colorless	3.93	A	2291
Br-Se	SeBr lt1	SBr, oS16, 41	<i>Aea2</i>	1.4069, 0.6744, 0.5309, 90, 90, 90	-	black brownish	4.19	X	16573
Br-Se	SeBr lt2	SeBr, mP16, 14	<i>P12₁/c1</i>	0.7345, 1.4282, 0.4974, 90, 97.11, 90	-	black brown	4.08	X	16573
Br-Se	SeBr ₂ m	TcCl ₄ , mS80, 15	<i>C12/c1</i>	1.702, 1.039, 1.549, 90, 117, 90	-	red	4.34	A	12643
Br-Se	SeBr ₄ rt	SeBr ₄ , hP80, 159	<i>P31c</i>	1.02, 1.02, 3.0351, 90, 90, 120	-	black	3.87	X	12643
Br-Si	SiBr ₂	SiI ₂ , mP60, 14	<i>P12₁/c1</i>	1.0279, 1.4699, 1.47972, 90, 119.78, 90	-	-	3.22	X	17655
Br-Si	SiBr ₃	SiBr ₃ , mS16, 12	<i>C12/m1</i>	0.66327, 1.14385, 0.75069, 90, 108.488, 90	-	white	3.29	X	62775
Br-Si	SiBr ₄ lt1	SnI ₄ , cP40, 205	<i>Pa-3</i>	1.1152, 1.1152, 1.1152, 90, 90, 90	-	colorless	3.33	X	58395

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Br-Si	SiBr ₄ lt2	SnBr ₄ ,mP20,14	$P12_1/c1$	1.0285,0.6763,1.0377,90,103.15,90	-	colorless	3.29	X	58403
Br-Sm	SmBr ₂ orth	PbCl ₂ ,oP12,62	$Pnma$	0.7977,0.4754,0.9506,90,90,90	-	-	5.72	A	7606
Br-Sm	SmBr ₂ tet	SrBr ₂ ,tP30,85	$P4/n$	1.1593,1.1593,0.71,90,90,90	-	-	5.40	A	7606
Br-Sm	SmBr ₃	PuBr ₃ ,oS16,63	$Cmcm$	0.404,1.265,0.908,90,90,90	-	-	5.58	A	276
Br-Sm	Sm ₁₁ Br ₂₄	Sm ₁₁ Br ₂₄ ,mP140,14	$P12_1/c1$	0.7130,8.162,1.0442,90,132.88,90	-	-	5.33	X	11356
Br-Sm	Sm ₃ Br ₁₁	Dy ₃ Cl ₁₁ ,mP64,11	$P12_1/m1$	0.7121,3.721,0.7652,90,90,26,90	-	-	5.34	X	11356
Br-Sm	Sm ₆ Br ₁₃	Sm ₆ Br ₁₃ ,mS76,15	$C12/c1$	4.492,0.7139,0.7649,90,98.50,90	-	-	5.31	X	11356
Br-Sn	SnBr ₂ ht	SnBr ₂ ,hP18,176	$P6_3/m$	1.22824,1.22824,0.43568,90,90,120	-	colorless	4.87	X	65191
Br-Sn	SnBr ₂ rt	SnBr ₂ ,oP12,62	$Pnma$	0.83908,0.42354,1.05203,90,90,90	-	colorless	4.95	X	65191
Br-Sn	SnBr ₄ hp	SnBr ₄ ,mP20,14	$P12_1/c1$	1.0371,0.7006,1.047,90,102.56,90	-	colorless	3.92	X	40116
Br-Sr	SrBr ₂ ht	(Th _{0.025} Pb _{0.975})F _{2.05} ,cF60,225	$Fm-3m$	0.75408,0.75408,0.75408,90,90,90	fluorite family	-	3.83	X	57798
Br-Sr	SrBr ₂ rt	SrBr ₂ ,tP30,85	$P4/n$	1.16042,1.16042,0.71306,90,90,90	-	-	4.28	X	57798
Br-Ta	TaBr ₄	* ₀ S40,*	-	0.7143,1.238,1.288,90,90,90	-	-	-	N	2280
Br-Ta	TaBr ₅	NbCl ₅ ,mS72,12	$C12/m1$	1.9433,1.8775,0.62034,90,90,716,90	-	orange	5.11	X	54679
Br-Ta	Ta ₂ Br ₅	Ta ₂ Cl ₅ ,tI336,230	$Ia-3d$	2.1309,2.1309,2.1309,90,90,90	-	black brownish	6.27	X	37054
Br-Ta	Ta ₃ Br ₇	Nb ₃ Cl ₇ ,oS80,64	$Cmce$	1.4063,1.3177,1.157,90,90,90	Chevre phase	black	6.83	X	31198
Br-Ta	Ta _{6,86} Br _{20,16}	Ta _{6,86} Br _{20,16} ,hR168,167	$R-3c$	1.2986,1.2986,3.3285,90,90,120	-	-	5.85	X	55088
Br-Tb	TbBr rt	ZrCl ₄ ,hR12,166	$R-3m$	0.3842,0.3842,2.9028,90,90,120	-	-	6.41	X	13617
Br-Tb	TbBr ₃ hp	PuBr ₃ ,oS16,63	$Cmcm$	0.3954,1.2794,0.9081,90,90,90	-	-	5.76	A	12650
Br-Tb	TbBr ₃ mon	AlCl ₃ ,mS16,12	$C12/m1$	0.7167,1.241,0.6829,90,110.47,90	-	-	4.65	A	21286
Br-Tb	TbBr ₃ rhom	BiI ₃ ,hR24,148	$R-3$	0.7159,0.7159,1.9163,90,90,120	-	-	4.67	A	4017
Br-Tb	Tb ₂ Br ₈	Tb ₂ Br ₈ ,mS26,12	$C12/m1$	1.96826,0.3859,1.3367,90,129.784,90	-	-	6.10	X	13523
Br-Tb	Tb ₆ Br ₇	Er ₆ Cl ₇ ,mS26,12	$C12/m1$	2.0571,0.3793,1.18,90,124.59,90	-	gray	6.63	X	13721
Br-Tc	TcBr ₃	RuBr ₃ ,oP16,59	$Pmmn$	0.59755,1.10618,0.63873,90,90,90	-	black	5.31	X	53360
Br-Tc	TcBr ₄	TcCl ₄ ,oP40,61	$Pbca$	0.63237,1.21777,1.47397,90,90,90	-	black	4.89	X	53360
Br-Te	TeBr ₄	TeCl ₄ ,mS80,15	$C12/c1$	1.79,1.09,1.59,90,116.5,90	-	-	4.28	A	2112
Br-Te	Te ₂ Br	Te ₂ Br ₂ ,oP24,62	$Pnma$	1.4978,0.4012,1.2945,90,90,90	-	gray dark	5.72	X	62681
Br-Th	ThBr ₄ ht	ThCl ₄ ,tI20,141	$I4_1/amd$	0.8921,0.8921,0.7912,90,90,90	-	-	5.82	X	27007
Br-Th	ThBr ₄ rt	ThCl ₄ ,tI20,88	$I4_1/a$	0.6737,0.6737,1.3601,90,90,90	-	-	5.94	X	8127
Br-Ti	TiBr ₂	CdI ₂ ,hP3,164	$P-3m1$	0.3629,0.3629,0.6492,90,90,120	CdI ₂ -PbI ₂ polytype	black violet	4.66	X	1507
Br-Ti	TiBr ₃ ht	BiI ₃ ,hR24,148	$R-3$	0.6478,0.6478,1.8632,90,90,120	-	black blue	4.23	X	23904
Br-Ti	TiBr ₃ lt	TiBr ₃ ,aP8,2	$P-1$	0.6424,0.6438,0.7236,63.73,63.81,60.12	-	-	4.28	X	29431
Br-Ti	TiBr ₃ rt hex	TiCl ₃ ,hP8,193	$P6_3/mcm$	0.6595,0.6595,0.6095,90,90,120	-	black green	4.16	A	5222
Br-Ti	TiBr ₄ lt	SnBr ₄ ,mP20,14	$P12_1/c1$	1.017,0.709,1.041,90,101.96,90	-	brown red	3.32	A	3206
Br-Ti	TiBr ₄ rt	SnI ₄ ,cP40,205	$Pa-3$	1.1258,1.1258,1.1258,90,90,90	-	amber	3.42	X	23904
Br-Ti	Ti ₇ Br ₁₆	Ti ₇ Cl ₁₆ ,oP46,58	$Pnnm$	1.0577,1.5228,0.7276,90,90,90	-	black	4.57	X	14510
Br-Tl	TlBr m	NaCl,cF8,225	$Fm-3m$	0.6594,0.6594,0.6594,90,90,90	rocksalt family	-	6.59	X	3146
Br-Tl	TlBr rt	CsCl,cP2,221	$Pm-3m$	0.397,0.397,0.397,90,90,90	b.c.c. family	-	7.54	X	330
Br-Tl	TlBr tf	Tl ₂ OS8,63	$Cmcm$	0.496,1.25,0.439,90,90,90	CrB(TII)-FeB	-	6.94	A	3146
Br-Tl	TlBr ₂	GaCl ₃ ,oP24,52	$Pnna$	0.802,1.035,1.045,90,90,90	-	-	5.58	X	1879
Br-Tl	Tl ₂ Br ₃ mon1	Tl ₂ Br ₃ ,mS320,15	$C12/c1$	2.6763,1.5311,2.7375,90,108.63,90	-	red dark	6.48	X	41629
Br-Tl	Tl ₂ Br ₃ mon2	* ₀ mP*,11	$P12_1/m1$	1.3124,2.555,1.313,90,119.91,90	-	red	-	N	41629
Br-Tm	TmBr ₂	SrI ₂ ,oP24,61	$Pbca$	0.71023,1.38139,0.73809,90,90,90	-	-	6.03	A	26762
Br-Tm	TmBr ₃	BiI ₃ ,hR24,148	$R-3$	0.7002,0.7002,1.9111,90,90,120	-	-	5.02	A	4017
Br-U	UBr ₃ rt	UCl ₃ ,hP8,176	$P6_3/m$	0.7935,0.7935,0.444,90,90,120	-	-	6.55	X	18947
Br-U	UBr ₄	UBr ₄ ,mS20,12	$C12/m1$	1.104,0.876,0.704,90,94.05,90	-	brown	5.45	X	7822
Br-U	UBr ₅	UCl ₅ ,aP12,2	$P-1$	0.6686,0.73555,1.0127,108.399,90.75,116.131	-	-	5.07	X	11504
Br-V	VBr ₂	CdI ₂ ,hP3,164	$P-3m1$	0.3751,0.3751,0.6206,90,90,120	CdI ₂ -PbI ₂ polytype	-	4.63	X	16162
Br-V	VBr ₃	BiI ₃ ,hR24,148	$R-3$	0.64,0.64,1.853,90,90,120	-	-	4.41	A	2142
Br-W	WBr ₂	MoCl ₂ ,oS72,64	$Cmce$	1.479,1.1799,1.1813,90,90,90	Chevre phase	yellow	6.64	X	34026
Br-W	WBr ₃	WCl ₃ ,hR72,148	$R-3$	1.572,1.572,0.882,90,90,120	-	black	6.71	A	5216
Br-W	WBr ₄	NbCl ₅ ,mS20,12	$C12/m1$	1.24341,0.6839,0.8519,90,131.048,90	-	-	6.12	X	60185
Br-W	WBr ₅ mon	NbCl ₅ ,mS72,12	$C12/m1$	1.9109,1.8594,0.6088,90,90,43,90	-	brown dark	5.37	X	35547
Br-W	WBr ₅ tricl	UCl ₅ ,aP12,2	$P-1$	0.6446,0.6978,0.954,108.67,90.69,116.29	-	-	5.41	X	60185
Br-W	WBr ₆	WCl ₆ ,hR21,148	$R-3$	0.6394,0.6394,1.753,90,90,120	-	-	5.32	X	19659
Br-W	W ₂ Br ₅	W ₂ Br ₅ ,mP56,14	$P12_1/c1$	0.9197,1.0852,1.8012,90,103.81,90	Chevre phase	black	5.84	X	60388
Br-W	W ₃ Br ₇	W ₃ Br ₇ ,cP80,201	$Pn-3$	1.3458,1.3458,1.3458,90,90,90	-	black brown	6.05	X	29508
Br-W	W ₃ Br ₈	W ₃ Br ₈ ,oS88,64	$Cmce$	1.2071,1.4606,1.4262,90,90,90	Chevre phase	black	6.29	X	4184
Br-Y	YBr	ZrCl ₄ ,hR12,166	$R-3m$	0.3806,0.3806,2.9158,90,90,120	-	-	4.60	A	13068
Br-Y	YBr ₃	BiI ₃ ,hR24,148	$R-3$	0.7072,0.7072,1.915,90,90,120	-	-	3.95	A	4017
Br-Y	Y ₂ Br ₃	Gd ₂ Cl ₃ ,mS20,12	$C12/m1$	1.6463,0.3898,1.0695,90,120.08,90	-	-	4.67	A	13068
Br-Yb	YbBr ₂ ht orth1	CaCl ₂ ,oP6,58	$Pnnm$	0.663,0.693,0.437,90,90,90	-	-	5.51	X	6197
Br-Yb	YbBr ₂ ht orth2	Fe ₂ N _{0.94} ,oP12,60	$Pbcn$	0.66578,0.81383,0.73178,90,90,90	-	-	5.58	A	26762
Br-Yb	YbBr ₂ ht1	CaCl ₂ ,oP6,58	$Pnnm$	0.6763,0.68707,0.44223,90,90,90	-	rose	5.38	X	64802
Br-Yb	YbBr ₂ ht2	TiO ₂ ,tP6,136	$P4_2/mnm$	0.68257,0.68257,0.44379,90,90,90	-	rose	5.35	X	64802
Br-Yb	YbBr ₂ lt	SrI ₂ ,oP24,61	$Pbca$	0.70352,1.3669,0.73085,90,90,90	-	rose	6.29	X	64802
Br-Yb	YbBr ₂ rt	Fe ₂ N _{0.94} ,oP12,60	$Pbcn$	0.66934,0.81392,0.73274,90,90,90	-	rose	5.54	X	64802
Br-Yb	YbBr ₃	BiI ₃ ,hR24,148	$R-3$	0.6973,0.6973,1.9138,90,90,120	-	-	5.10	A	21286
Br-Zn	ZnBr ₂ ?	CdCl ₂ ,hR9,166	$R-3m$	0.39192,0.39192,1.87276,90,90,120	-	-	4.50	A	214
Br-Zn	ZnBr ₂	ZnI ₂ ,tP6,142	$I4_1/acd$	1.1389,1.1389,2.1773,90,90,90	-	-	4.24	X	17476
Br-Zr	ZrBr	ZrBr ₄ ,hR12,166	$R-3m$	0.35031,0.35031,2.8071,90,90,120	-	black	5.72	X	10490
Br-Zr	ZrBr ₂ hex	* ₀ hP6,194	$P6_3/mmc$	0.35257,0.35257,1.3726,90,90,120	-	-	-	N	12191
Br-Zr	ZrBr ₂ rhom	ZrCl ₂ ,hR54,148	$R-3$	1.3577,1.3577,0.9287,90,90,120	-	-	5.06	X	13978
Br-Zr	ZrBr ₃	TiCl ₃ ,hP8,193	$P6_3/mcm$	0.6728,0.6728,0.6299,90,90,120	-	green yellow	4.45	X	14971
Br-Zr	ZrBr ₄	SnI ₄ ,cP40,205	$Pa-3$	1.095,1.095,1.095,90,90,90	-	-	4.16	A	1692
C-Ca	CaC ₂ ht	CaC ₂ ,cF36,225	$Fm-3m$	0.5886,0.5886,0.5886,90,90,90	-	-	2.09	X	5908
C-Ca	CaC ₂ m1	ThC ₂ ,mS12,15	$C12/c1$	0.66435,0.41994,0.73307,90,107.257,90	-	colorless	2.18	X	38932
C-Ca	CaC ₂ m2	CaC ₂ ,mS12,12	$C12/m1$	0.72286,0.38524,0.73764,90,107.338,90	-	gray	2.17	X	38932

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a\beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
C-Ca	CaC ₂ rt	CaC ₂ , tI6, 139	<i>I4/mmm</i>	0.38863, 0.38863, 0.63862, 90, 90, 90	-	gray	2.21	X	36921
C-Ca	CaC ₆ rhom	CaC ₆ , hR21, 166	<i>R-3m</i>	0.4333, 0.4333, 1.3572, 90, 90, 120	-	-	2.53	X	46120
C-Ca	Ca _{3.01} [C ₆₀]	Ca _{3.01} [C ₆₀], cP152, 205	<i>Pa-3</i>	2.7907, 2.7907, 2.7907, 90, 90, 90	fullerene family	-	2.06	X	42071
C-Ca	Ca ₅ [C ₆₀]	*cP*, *	-	1.401, 1.401, 1.401, 90, 90, 90	fullerene family	-	-	N	26417
C-Ce	CeC	NaCl, cF8, 225	<i>Fm-3m</i>	0.5135, 0.5135, 0.5135, 90, 90, 90	rocksalt family	-	7.46	X	2269
C-Ce	CeC ₂ ht	CaC ₂ , cF36, 225	<i>Fm-3m</i>	0.5938, 0.5938, 0.5938, 90, 90, 90	-	-	5.21	A	21180
C-Ce	CeC ₂ rt	CaC ₂ , tI6, 139	<i>I4/mmm</i>	0.3881, 0.3881, 0.6487, 90, 90, 90	-	brass	5.58	X	19075
C-Ce	Ce[C ₈₂] lt	Ce[C ₈₂], cP1976, 205	<i>Pa-3</i>	1.574, 1.574, 1.574, 90, 90, 90	fullerene family	-	1.92	X	44183
C-Ce	Ce ₂ C ₃	Pu ₂ C ₃ , cI40, 220	<i>I-43d</i>	0.84476, 0.84476, 0.84476, 90, 90, 90	-	-	6.97	X	1401
C-Cl	C ₁₀ Cl ₈	C ₁₀ Cl ₈ , mP72, 14	<i>P12₁/c1</i>	0.976, 0.730, 1.948, 90, 111.55, 90	-	-	2.08	X	1932
C-Cl	C ₁₃ Cl ₁₂	C ₁₃ Cl ₁₂ , aP50, 2	<i>P-1</i>	0.8415, 0.8598, 1.541, 90, 38.97, 113.18, 58	-	colorless	1.99	X	11060
C-Cl	C ₁₄ Cl ₁₀	C ₁₄ Cl ₁₀ , oP96, 60	<i>Pbcn</i>	0.5065, 1.7946, 1.8554, 90, 90, 90	-	yellow	2.06	X	9439
C-Cl	C ₁₆ Cl ₁₀	C ₁₆ Cl ₁₀ , mP104, 14	<i>P12₁/c1</i>	1.0803, 0.7494, 2.35514, 90, 114.468, 90	-	yellow	2.09	X	9518
C-Cl	C ₂ Cl ₆ ht	C ₂ Cl ₆ , cI28, 229	<i>Im-3m</i>	0.749, 0.749, 0.749, 90, 90, 90	-	-	1.87	X	13743
C-Cl	C ₂ Cl ₆ rt	C ₂ Cl ₆ , oP32, 62	<i>Pnma</i>	1.1568, 1.0198, 0.6409, 90, 90, 90	-	-	2.08	X	12032
C-Cl	C ₂₈ Cl ₁₈ [CCl ₄] _{0.5}	C ₂₈ Cl ₁₈ [CCl ₄] _{0.5} , mS204, 15	<i>C12/c1</i>	2.5794, 0.8676, 1.7258, 90, 94.47, 90	-	red deep	1.81	X	12019
C-Cl	C ₃ Cl ₆	C ₃ Cl ₆ , mP36, 14	<i>P12₁/c1</i>	1.0899, 0.619, 1.2682, 90, 112.13, 90	-	colorless	2.08	X	19652
C-Cl	C ₆ Cl ₁₀	C ₆ Cl ₁₀ , mP64, 14	<i>P12₁/c1</i>	1.28936, 0.67051, 1.53753, 90, 93.858, 90	-	colorless	2.14	X	58600
C-Cl	C ₈ Cl ₆	C ₈ Cl ₆ , mP24, 14	<i>P12₁/c1</i>	0.808, 0.387, 1.665, 90, 117, 90	-	-	2.04	X	1419
C-Cl	C ₇ Cl ₈	C ₇ Cl ₈ , mP60, 14	<i>P12₁/c1</i>	1.0312, 1.0832, 1.1449, 90, 112.96, 90	-	colorless	2.07	X	24312
C-Cl	C ₈ Cl ₁₀	C ₈ Cl ₁₀ , oP144, 61	<i>Pbca</i>	0.9792, 1.6436, 1.86, 90, 90, 90	-	yellow	2.00	X	11170
C-Cl	C ₈ Cl ₈	C ₈ Cl ₈ , aP64, 2	<i>P-1</i>	0.8742, 1.0254, 1.4912, 99, 24.99, 4.96, 39	-	yellow faint	1.96	X	9492
C-Cl	[CCl ₄] hp	SnBr ₄ , mP20, 14	<i>P12₁/c1</i>	0.9079, 0.5764, 0.9201, 90, 104.29, 90	-	-	2.19	X	7354
C-Cl	[CCl ₄] lt1	*, hR*, *	-	1.98093, 1.98093, 2.46115, 90, 90, 120	-	-	-	N	44179
C-Cl	[CCl ₄] lt2	CBr ₄ , mS160, 15	<i>C12/c1</i>	2.0181, 1.135, 1.9761, 90, 111.46, 90	-	-	1.94	X	11962
C-Cl	[CCl ₄] rt	CBr ₄ , cF516, 225	<i>Fm-3m</i>	0.838, 0.838, 0.838, 90, 90, 90	-	-	1.74	A	44179
C-Cl	[C ₁₀₂]Cl _{18.74}	[C ₁₀₂]Cl _{18.74} , aP248, 2	<i>P-1</i>	1.3832, 1.5774, 1.5981, 83.342, 84.758, 84.313	fullerene family	red	1.83	X	62975
C-Cl	[C ₁₀₂]Cl ₂₀	[C ₁₀₂]Cl ₂₀ , mP488, 14	<i>P12₁/c1</i>	1.0465, 2.9395, 2.1868, 90, 100.23, 90	fullerene family	orange	1.94	X	60730
C-Cl	[C ₁₀₄]Cl ₁₆	[C ₁₀₄]Cl ₁₆ , mP480, 14	<i>P12₁/c1</i>	2.3734, 1.06861, 2.8109, 90, 118.084, 90	fullerene family	orange	1.92	X	62932
C-Cl	[C ₁₀₄]Cl _{17.26}	[C ₁₀₄]Cl _{17.26} , mP252, 11	<i>P12₁/m1</i>	1.1605, 1.9513, 1.5514, 90, 109.977, 90	fullerene family	red	1.87	X	62975
C-Cl	[C ₁₀₄]Cl ₂₂ [Cl ₂] _{0.67}	[C ₁₀₄]Cl ₂₂ [Cl ₂] _{0.67} , hR2421, 148	<i>R-3</i>	4.9461, 4.9461, 1.6561, 90, 90, 120	fullerene family	red	1.77	X	62975
C-Cl	[C ₁₀₄]Cl ₂₄	[C ₁₀₄]Cl ₂₄ , mP528, 13	<i>P12/c1</i>	2.5658, 1.4277, 2.0611, 90, 98.16, 90	fullerene family	orange	1.87	X	62932
C-Cl	[C ₅₀]Cl ₁₀	[C ₅₀]Cl ₁₀ , mS480, 15	<i>C12/c1</i>	1.3665, 1.7852, 1.2977, 90, 93.616, 90	fullerene family	red	2.01	X	50756
C-Cl	[C ₅₆]Cl ₁₀	[C ₅₆]Cl ₁₀ , oS264, 63	<i>Cmcm</i>	1.87599, 1.34186, 1.38694, 90, 90, 90	fullerene family	red dark	1.95	X	51481
C-Cl	[C ₆₄]Cl ₃₅ C	[C ₆₄]Cl ₃₅ C, mS136, 15	<i>C12/c1</i>	1.3718, 1.1542, 1.7946, 90, 108.134, 90	-	red	1.87	X	60498
C-Cl	[C ₆₀]Cl ₁₀	[C ₆₀]Cl ₁₀ , oS560, 20	<i>C221</i>	0.9997, 2.0717, 3.9968, 90, 90, 90	fullerene family	orange red	1.73	X	55412
C-Cl	[C ₆₀]Cl ₃₀ [Cl ₂] _{0.09}	[C ₆₀]Cl ₃₀ [Cl ₂] _{0.09} , mP184, 14	<i>P12₁/c1</i>	1.2539, 1.3507, 1.93777, 90, 119.61, 90	fullerene family	orange	2.08	X	45079
C-Cl	[C ₆₀]Cl ₅	[C ₆₀]Cl ₅ , oP524, 29	<i>Pca2₁</i>	1.9579, 1.1268, 2.9077, 90, 90, 90	fullerene family	red	1.86	X	49107
C-Cl	[C ₆₀]Cl ₆	[C ₆₀]Cl ₆ , oP1080, 61	<i>Pbca</i>	1.71965, 3.9918, 1.95617, 90, 90, 90	fullerene family	orange red	1.85	X	53009
C-Cl	[C ₆₄]Cl ₄	[C ₆₄]Cl ₄ , oP272, 62	<i>Pnma</i>	1.66815, 1.45131, 1.3199, 90, 90, 90	fullerene family	black	1.89	X	50756
C-Cl	[C ₇₆]Cl ₂₄ mon1	[C ₇₆]Cl ₂₄ , mP460, 14	<i>P12₁/c1</i>	2.2921, 1.1476, 2.3315, 90, 103.58, 90	fullerene family	yellow	1.97	X	56987
C-Cl	[C ₇₆]Cl ₂₄ mon2	[C ₇₆]Cl ₂₄ , mS400, 15	<i>C12/c1</i>	1.53037, 2.73861, 1.39225, 90, 108.604, 90	fullerene family	orange	2.12	X	52629
C-Cl	[C ₇₆]Cl ₂₆ mon	[C ₇₆]Cl ₂₆ , mP460, 14	<i>P12₁/c1</i>	1.1546, 3.7895, 1.55448, 90, 114.939, 90	fullerene family	yellow	1.98	X	56987
C-Cl	[C ₇₆]Cl ₂₆ tricl	[C ₇₆]Cl ₂₆ , aP212, 2	<i>P-1</i>	1.1535, 1.2584, 2.2517, 101.465, 94.609, 105.838	fullerene family	yellow	2.00	X	56987
C-Cl	[C ₇₆]Cl ₂₈ [Cl ₂] _{0.27}	[C ₇₆]Cl ₂₈ [Cl ₂] _{0.27} , oP880, 61	<i>Pbca</i>	1.4573, 2.0984, 1.119, 90, 90, 90	fullerene family	yellow	2.03	X	56987
C-Cl	[C ₇₆]Cl ₂₈ [Cl ₂] _{0.37}	[C ₇₆]Cl ₂₈ [Cl ₂] _{0.37} , mP440, 14	<i>P12₁/c1</i>	1.16025, 4.1703, 1.54879, 90, 115.911, 90	fullerene family	yellow	1.90	X	56987
C-Cl	[C ₇₆]Cl ₂₈ [Cl ₂] _{0.5}	[C ₇₆]Cl ₂₈ [Cl ₂] _{0.5} , mP416, 14	<i>P12₁/c1</i>	1.1575, 2.7495, 2.2182, 90, 100.169, 90	fullerene family	yellow	1.86	X	56987
C-Cl	[C ₇₆]Cl ₂₈ [Cl ₂] _{0.65}	[C ₇₆]Cl ₂₈ [Cl ₂] _{0.65} , mS448, 15	<i>C12/c1</i>	2.3108, 2.7592, 1.1554, 90, 109.41, 90	fullerene family	yellow	1.87	X	56987
C-Cl	[C ₇₆]Cl ₃₃ [Cl ₂] _{0.44}	[C ₇₆]Cl ₃₃ [Cl ₂] _{0.44} , mP472, 14	<i>P12₁/c1</i>	1.3777, 1.95282, 2.8193, 90, 118.182, 90	fullerene family	yellow	2.10	X	56987
C-Cl	[C ₇₆]Cl ₃₄	[C ₇₆]Cl ₃₄ , mP440, 14	<i>P12/c1</i>	1.3821, 1.9569, 2.82408, 90, 117.405, 90	fullerene family	-	2.07	X	55272
C-Cl	[C ₇₈]Cl ₁₈	[C ₇₈]Cl ₁₈ , hP192, 176	<i>P6₃/m</i>	1.3055, 1.3055, 1.8762, 90, 90, 120	fullerene family	yellow	1.89	X	50759
C-Cl	[C ₇₈]Cl ₃₀ [Cl ₂]	[C ₇₈]Cl ₃₀ [Cl ₂], tI900, 82	<i>I-4</i>	2.07619, 2.07619, 3.1444, 90, 90, 90	fullerene family	orange	2.03	X	54389
C-Cl	[C ₈₀]Cl ₁₂	[C ₈₀]Cl ₁₂ , mS368, 15	<i>C12/c1</i>	2.1043, 1.11665, 2.151, 90, 106.235, 90	fullerene family	orange	1.90	X	52891
C-Cl	[C ₈₀]Cl _{28.12} [Cl ₂] _{0.017}	[C ₈₀]Cl _{28.12} [Cl ₂] _{0.017} , mP876, 14	<i>P12₁/c1</i>	1.4511, 4.3534, 2.35326, 90, 118.962, 90	fullerene family	yellow	2.00	X	61318
C-Cl	[C ₈₂]Cl ₂₈ [Cl ₂] _{0.28}	[C ₈₂]Cl ₂₈ [Cl ₂] _{0.28} , aP240, 2	<i>P-1</i>	1.3403, 1.4005, 2.0016, 93.24, 103.04, 113.74	fullerene family	orange yellow	2.01	X	59127
C-Cl	[C ₈₄]Cl ₂₀	[C ₈₄]Cl ₂₀ , mP212, 13	<i>P12/c1</i>	1.3825, 1.4364, 1.99271, 90, 133.446, 90	fullerene family	-	1.99	X	58767
C-Cl	[C ₈₄]Cl ₂₂ [Cl ₂] _{0.16}	[C ₈₄]Cl ₂₂ [Cl ₂] _{0.16} , mP236, 11	<i>P12₁/m1</i>	1.2831, 1.8301, 1.3385, 90, 95.182, 90	fullerene family	orange	1.91	X	59177
C-Cl	[C ₈₄]Cl ₃₂ [Cl ₂] _{1.73}	[C ₈₄]Cl ₃₂ [Cl ₂] _{1.73} , aP257, 2	<i>P-1</i>	1.478, 1.5175, 1.8347, 68.029, 78.323, 79.463	fullerene family	yellow	2.03	X	54584
C-Cl	[C ₈₄]Cl _{32.38}	[C ₈₄]Cl _{32.38} , mP472, 14	<i>P12₁/c1</i>	1.04728, 4.6955, 1.53827, 90, 111.996, 90	fullerene family	-	2.04	X	58767
C-Cl	[C ₈₆]Cl _{19.61}	[C ₈₆]Cl _{19.61} , oP856, 61	<i>Pbca</i>	2.0292, 2.6814, 2.2047, 90, 90, 90	fullerene family	orange	1.91	X	62959
C-Cl	[C ₈₆]Cl ₂₈	[C ₈₆]Cl ₂₈ , mP456, 14	<i>P12₁/c1</i>	2.0941, 1.2853, 2.9303, 90, 110.237, 90	fullerene family	yellow	1.82	X	54584
C-Cl	[C ₈₆] ₃ Cl _{55.25}	[C ₈₆] ₃ Cl _{55.25} , mP1264, 14	<i>P12₁/c1</i>	3.3397, 2.0518, 2.6954, 90, 107.515, 90	fullerene family	orange	1.91	X	62959
C-Cl	[C ₈₈]Cl ₂₂ mon1	[C ₈₈]Cl ₂₂ , mP456, 14	<i>P12₁/c1</i>	1.2777, 2.30058, 2.1095, 90, 98.35, 90	fullerene family	orange	1.99	X	61250
C-Cl	[C ₈₈]Cl ₂₂ mon2	[C ₈₈]Cl ₂₂ , mS1008, 15	<i>C12/c1</i>	2.4327, 1.44721, 3.6516, 90, 101.652, 90	fullerene family	orange	1.94	X	61250
C-Cl	[C ₈₈]Cl ₂₂ tricl	[C ₈₈]Cl ₂₂ , aP232, 2	<i>P-1</i>	1.25461, 1.4583, 1.9408, 106.232, 93.548, 112.024	fullerene family	orange	1.97	X	61250
C-Cl	[C ₈₈]Cl ₂₄	[C ₈₈]Cl ₂₄ , mP948, 14	<i>P12₁/c1</i>	3.6778, 1.44281, 2.4192, 90, 98.894, 90	fullerene family	orange	2.00	X	61250
C-Cl	[C ₉₀]Cl ₂₃	[C ₉₀]Cl ₂₃ , aP472, 2	<i>P-1</i>	1.4387, 1.8416, 2.7629, 96.19, 96.84, 96.1	fullerene family	orange	1.76	X	56803
C-Cl	[C ₉₀]Cl ₂₄ mon	[C ₉₀]Cl ₂₄ , mS540, 15	<i>C12/c1</i>	1.43862, 4.817, 1.8462, 90, 102.51, 90	fullerene family	orange	1.99	X	56803
C-Cl	[C ₉₀]Cl ₂₄ tricl	[C ₉₀]Cl ₂₄ , aP236, 2	<i>P-1</i>	1.2698, 1.4064, 2.0254, 85.03, 87.8, 66.89	fullerene family	orange	1.94	X	56803
C-Cl	[C ₉₀]Cl ₂₄ [Cl ₂] _{0.04}	[C ₉₀]Cl ₂₄ [Cl ₂] _{0.04} , aP232, 2	<i>P-1</i>	1.2686, 1.4171, 2.0363, 84.77, 87.91, 66.95	fullerene family	orange	1.92	X	56803
C-Cl	[C ₉₀]Cl ₂₈ [Cl ₂] _{0.25}	[C ₉₀]Cl ₂₈ [Cl ₂] _{0.25} , aP276, 2	<i>P-1</i>	1.2956, 1.3027, 2.2696, 81.8, 83.3, 67.29	fullerene family	orange	1.99	X	56803
C-Cl	[C ₉₀]Cl ₃₂ mon1	[C ₉₀]Cl ₃₂ , mS992, 15	<i>C12/c1</i>	4.75533, 1.49608, 2.32785, 90, 118.218, 90	fullerene family	-	2.02	X	52625
C-Cl	[C ₉₀]Cl ₃₂ mon2	[C ₉₀]Cl ₃₂ , mS1048, 15	<i>C12/c1</i>	4.7487, 1.4961, 2.3307, 90, 118.163, 90	fullerene family	yellow	2.02	X	56803
C-Cl	[C ₉₀]Cl ₃₂ tricl	[C ₉₀]Cl ₃₂							

System	Substance	Prototype	H-M	Unit Cell Parameters <i>a,b,c,a,β,γ</i> (nm,°)	Family	Color	<i>D_x</i>	C	Ref.
C-Cl	[C ₉₄]Cl ₂₈	[C ₉₄]Cl ₂₈ ,aP258,2	<i>P</i> -1	1.3137,1.43031,2.1303,70.457,85.08,70.249	fullerene family	orange	1.99	X	62928
C-Cl	[C ₉₆]Cl ₃₀	[C ₉₆]Cl ₃₀ ,aP232,2	<i>P</i> -1	1.3083,1.4018,2.0455,80.165,87.39,62.703	fullerene family	orange	1.88	X	62928
C-Cl	[C ₉₆]Cl _{20.5}	[C ₉₆]Cl _{20.5} ,mP952,14	<i>P</i> 12 ₁ /c1	2.1585,2.2155,3.14147,90,119.047,90	fullerene family	orange	1.90	X	62928
C-Cl	[C ₉₆]Cl ₂₂ mon	[C ₉₆]Cl ₂₂ ,mP488,14	<i>P</i> 12 ₁ /c1	2.0292,1.4556,2.2914,90,99.041,90	fullerene family	orange	1.92	X	62928
C-Cl	[C ₉₆]Cl ₂₂ triel	[C ₉₆]Cl ₂₂ ,aP494,2	<i>P</i> -1	1.4603,2.1495,2.2902,68.233,89.815,86.641	fullerene family	orange	1.93	X	58480
C-Cl	[C ₉₆]Cl ₂₂ [Cl ₂] _{0.04}	[C ₉₆]Cl ₂₂ [Cl ₂] _{0.04} ,oP504,60	<i>Pbcn</i>	1.28541,2.2104,2.4268,90,90,90	fullerene family	yellow	1.86	X	58480
C-Cl	[C ₉₆]Cl ₂₂ [Cl ₂] _{0.06}	[C ₉₆]Cl ₂₂ [Cl ₂] _{0.06} ,mS488,15	<i>C</i> 12/c1	1.56571,2.4039,1.8351,90,95.605,90	fullerene family	yellow	1.87	X	58480
C-Cl	[C ₉₆]Cl ₂₂ [Cl ₂] _{0.07}	[C ₉₆]Cl ₂₂ [Cl ₂] _{0.07} ,mP956,14	<i>P</i> 12 ₁ /c1	2.2912,1.4155,4.39378,90,107.995,90	fullerene family	red	1.90	X	58480
C-Cl	[C ₉₆]Cl ₂₂ [Cl ₂] _{0.6}	[C ₉₆]Cl ₂₂ [Cl ₂] _{0.6} ,oP976,61	<i>Pbca</i>	1.4618,2.3107,3.991,90,90,90	fullerene family	yellow	1.95	X	58480
C-Cm	CmC _{0.33}	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	0.5211,0.5211,0.5211,90,90,90	rocksalt family	-	11.78	X	44703
C-Cm	Cm ₂ C ₃	Pu ₂ C ₃ ,cI40,220	<i>I</i> -43 <i>d</i>	0.84177,0.84177,0.84177,90,90,90	-	-	11.81	A	44703
C-Co	CoC _{0.015} ht	Cu,cF4,225	<i>Fm</i> -3 <i>m</i>	0.3552,0.3552,0.3552,90,90,90	close-packed structure	-	8.76	F	6838
C-Co	CoC _{0.33} m	Mg,hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.2685,0.2685,0.4335,90,90,120	close-packed structure	-	7.72	F	24652
C-Co	Co ₂ C	CaCl ₂ ,oP6,58	<i>Pnnm</i>	0.43707,0.44465,0.28969,90,90,90	-	-	7.66	X	364
C-Co	Co ₃ C	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.5036,0.6735,0.4489,90,90,90	-	-	8.24	A	23755
C-Cr	CrC m	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	0.402,0.402,0.402,90,90,90	rocksalt family	-	6.54	X	27878
C-Cr	Cr ₂₃ C ₆	Cr ₂₃ C ₆ ,cF116,225	<i>Fm</i> -3 <i>m</i>	1.06595,1.06595,1.06595,90,90,90	-	-	6.95	X	19791
C-Cr	Cr ₃ C m	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.512,0.68,0.458,90,90,90	-	-	7.00	A	17026
C-Cr	Cr ₃ C ₂ m	(V _{0.3} Cr _{0.7}) ₃ Cl _{1.44} ,oS20,63	<i>Cmcm</i>	0.2854,0.9259,0.6965,90,90,90	-	-	6.50	X	27878
C-Cr	Cr ₃ C ₂	Cr ₃ C ₂ -b,oP20,62	<i>Pnma</i>	0.55399,0.28327,1.1494,90,90,90	tongbaite	-	6.63	X	43315
C-Cr	Cr ₇ C ₃ tf	Cr ₇ C ₃ ,hP80,186	<i>P</i> 6 ₃ / <i>mc</i>	1.398,1.398,0.4523,90,90,120	-	-	6.94	X	89
C-Cr	Cr ₇ C ₃	Mn ₇ C ₃ ,oP40,62	<i>Pnma</i>	0.4526,0.701,1.2142,90,90,90	-	gray olive	6.90	X	4970
C-Cs	CsC orth	RbC,oP16,62	<i>Pnma</i>	0.9254,0.5136,1.0597,90,90,90	-	-	3.82	X	40079
C-Cs	CsC ₈ hp1	* ₀ S* ₂ 1	<i>C</i> 222	0.524,0.602,5.675,90,90,90	-	-	-	N	52194
C-Cs	CsC ₈ hp2	* ₀ F* ₇ 0	<i>F</i> ddd	0.439,0.92,2.287,90,90,90	-	-	-	N	52194
C-Cs	CsC ₈	CsC ₈ ,hP27,180	<i>P</i> 6 ₂ 22	0.49601,0.49601,1.7847,90,90,120	GIC	yellow	3.00	X	52194
C-Cs	Cs[C ₆₀] ht	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	1.413,1.413,1.413,90,90,90	fullerene family	-	2.01	X	27897
C-Cs	Cs[C ₆₀] rt	Rb[C ₆₀],oP122,58	<i>Pnnm</i>	1.02,1.418,0.909,90,90,90	fullerene family	-	2.16	A	35309
C-Cs	Cs ₂ C ₆ hex	Na ₂ [O ₂] ₂ ,hP12,189	<i>P</i> -62 <i>m</i>	0.8637,0.8637,0.5674,90,90,120	-	-	3.94	X	40079
C-Cs	Cs ₃ [C ₆₀] cub1	Ba ₃ [C ₆₀],cP126,223	<i>Pm</i> -3 <i>n</i>	1.1757,1.1757,1.1757,90,90,90	fullerene family	-	2.29	X	41369
C-Cs	Cs ₃ [C ₆₀] cub2	K ₃ [C ₆₀],cF492,225	<i>Fm</i> -3 <i>m</i>	1.47615,1.47615,1.47615,90,90,90	fullerene family	-	2.31	X	56096
C-Cs	Cs ₃ [C ₆₀] lt	* ₀ I252,71	<i>I</i> mmm	1.132,1.14,1.18,90,90,90	fullerene family	-	4.88	N	38361
C-Cs	Cs ₃ [C ₆₀] tet	K ₄ [C ₆₀],tI10,139	<i>I</i> 4/ <i>mmm</i>	1.2057,1.2057,1.1432,90,90,90	fullerene family	-	2.24	A	31024
C-Cs	Cs ₄ [C ₆₀] ht	K ₄ [C ₆₀],tI10,139	<i>I</i> 4/ <i>mmm</i>	1.2237,1.2237,1.1358,90,90,90	fullerene family	-	2.45	X	40467
C-Cs	Cs ₄ [C ₆₀] rt	Cs ₄ [C ₆₀],oI128,71	<i>I</i> mmm	1.14298,1.19255,1.21519,90,90,90	fullerene family	-	2.51	X	40467
C-Cs	Cs ₆ [C ₆₀]	Cs ₆ [C ₆₀],cI132,204	<i>Im</i> -3	1.179,1.179,1.179,90,90,90	fullerene family	-	3.08	X	25081
C-Dy	DyC _{0.33}	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	0.50722,0.50722,0.50722,90,90,90	rocksalt family	-	8.47	X	62561
C-Dy	DyC ₂ rt	CaC ₂ ,tI6,139	<i>I</i> 4/ <i>mmm</i>	0.3668,0.3668,0.6176,90,90,90	-	brass	7.46	X	4011
C-Dy	Dy[C ₈₂]	Ce[C ₈₂],cP1976,205	<i>Pa</i> -3	1.578,1.578,1.578,90,90,90	fullerene family	-	1.94	A	42940
C-Dy	Dy ₂ C	CdCl ₂ ,hR9,166	<i>R</i> -3 <i>m</i>	0.3584,0.3584,1.789,90,90,120	-	-	8.44	X	14131
C-Dy	Dy ₂ C ₃	Pu ₂ C ₃ ,cI40,220	<i>I</i> -43 <i>d</i>	0.8189,0.8189,0.8189,90,90,90	-	-	8.73	X	11595
C-Dy	Dy ₃ C ₄	Sc ₃ C ₄ ,tP70,128	<i>P</i> 4/ <i>mnc</i>	0.8084,0.8084,1.5881,90,90,90	-	-	8.57	A	34734
C-Dy	Dy ₄ C ₃	Y ₄ C ₃ ,oP18,55	<i>P</i> bam	0.6574,1.1905,0.36654,90,90,90	-	-	8.22	A	33609
C-Dy	Dy ₄ C ₇	Ho ₄ C ₇ ,mP44,14	<i>P</i> 12 ₁ /c1	0.3688,1.254,1.37209,90,98.834,90	-	-	7.78	A	62561
C-Er	ErC _{0.6}	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	0.50214,0.50214,0.50214,90,90,90	rocksalt family	-	9.15	X	14129
C-Er	ErC ₂ rt	CaC ₂ ,tI6,139	<i>I</i> 4/ <i>mmm</i>	0.3622,0.3622,0.6106,90,90,90	-	golden	7.93	X	24912
C-Er	Er ₂ C ₃ hp-ht	Pu ₂ C ₃ ,cI40,220	<i>I</i> -43 <i>d</i>	0.81324,0.81324,0.81324,90,90,90	-	-	9.15	X	13488
C-Er	Er ₃ C ₄	Sc ₃ C ₄ ,tP70,128	<i>P</i> 4/ <i>mnc</i>	0.7988,0.7988,1.5785,90,90,90	-	-	9.07	A	24521
C-Er	Er ₄ C ₇	Lu ₄ C ₇ ,mP22,14	<i>P</i> 12 ₁ /c1	0.3682,1.3588,0.6449,90,103.27,90	-	gray dark	7.96	A	32807
C-Eu	EuC ₂ ht1	CaC ₂ ,tI6,139	<i>I</i> 4/ <i>mmm</i>	0.415,0.415,0.66273,90,90,90	-	-	5.12	X	55274
C-Eu	EuC ₂ ht2	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	0.61379,0.61379,0.61379,90,90,90	rocksalt family	-	5.06	X	55274
C-Eu	EuC ₂ rt	ThC ₂ ,mS12,15	<i>C</i> 12/c1	0.70075,0.44098,0.7591,90,106.918,90	-	-	5.21	X	55274
C-Eu	EuC ₆ sta1	BaC ₆ ,hP14,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.4314,0.4314,0.9745,90,90,120	GIC	-	4.74	A	12993
C-Eu	Eu _{2.82} [C ₆₀]	Eu _{2.82} [C ₆₀],cP344,205	<i>Pa</i> -3	2.821,2.821,2.821,90,90,90	fullerene family	-	2.72	X	35300
C-Eu	Eu ₃ [C ₇₀] hp	Eu ₃ [C ₇₀],aP10,1	<i>P</i> 1	1.013,1.095,1.4926,96.111,90,90	fullerene family	-	2.62	X	42319
C-Eu	Eu ₃ [C ₇₀] mon	* ₀ mP* ₂ *	-	1.095,1.013,1.4926,90,96.111,90	fullerene family	-	-	N	42936
C-Eu	Eu ₆ [C ₆₀]	Cs ₆ [C ₆₀],cI132,204	<i>Im</i> -3	1.09292,1.09292,1.09292,90,90,90	fullerene family	-	4.15	X	40679
C-Eu	Eu ₉ [C ₇₀]	Eu ₉ [C ₇₀],cF64,225	<i>Fm</i> -3 <i>m</i>	1.50572,1.50572,1.50572,90,90,90	fullerene family	-	4.30	X	42319
C-F	CF rt	CF,hR12,166	<i>R</i> -3 <i>m</i>	0.25406,0.25406,1.4243,90,90,120	-	-	3.88	X	37940
C-F	CF ₄ hp1	CF ₄ ,mS20,15	<i>C</i> 12/c1	0.84098,0.43022,0.83506,90,119.588,90	-	-	2.22	X	28175
C-F	CF ₄ hp2	* ₀ mP* ₂ *	<i>P</i> 12 ₁ /c1	0.6776,0.4423,0.6818,90,102.97,90	-	-	-	N	40891
C-F	C ₁₀ F ₈ hp-lt	* ₀ mP72,14	<i>P</i> 12 ₁ /c1	1.659,0.4573,1.1057,90,107.843,90	-	-	-	N	11065
C-F	C ₁₀ F ₈ lt	* ₀ mP36,14	<i>P</i> 12 ₁ /c1	0.755,0.496,1.1865,90,96.67,90	-	-	2.05	N	11065
C-F	C ₁₁ F ₇	C ₁₁ F ₇ ,mS72,12	<i>C</i> 12/ <i>m</i> 1	0.89294,0.76605,1.32005,90,99.437,90	-	colorless	1.98	X	43502
C-F	C ₁₂ F ₁₀	C ₁₂ F ₁₀ ,oF176,43	<i>F</i> dd2	1.349,2.6542,0.631,90,90,90	-	-	1.96	X	9633
C-F	C ₁₂ F ₁₂	C ₁₂ F ₁₂ ,hP48,176	<i>P</i> 6 ₃ / <i>m</i>	0.8966,0.8966,0.8671,90,90,120	-	-	2.05	X	10561
C-F	C ₁₄ F ₁₀	C ₁₄ F ₁₀ ,oP192,61	<i>P</i> bca	0.959,2.734,0.959,90,90,90	-	-	1.89	X	12060
C-F	C ₁₅ F ₁₈	C ₁₅ F ₁₈ ,oP280,60	<i>P</i> bcn	1.7845,1.7998,1.0143,90,90,90	-	-	2.13	X	14797
C-F	C ₁₈ F ₁₂	C ₁₈ F ₁₂ ,oF240,43	<i>F</i> dd2	1.35,2.0228,1.0927,90,90,90	-	white	1.98	X	10617
C-F	C ₂ F	C ₂ F,aP12,1	<i>P</i> 1	0.492,0.49205,0.88,90,90,118.79	-	-	1.53	X	12073
C-F	C ₂ F ₃	C ₂ F ₃ ,aP36,2	<i>P</i> -1	0.602,0.629,0.727,103.6,107.9,106.4	-	-	2.29	X	2391
C-F	C ₂ F ₄	C ₂ F ₄ ,mP12,14	<i>P</i> 12 ₁ /c1	0.4551,0.621,0.64058,90,119.144,90	-	-	2.10	X	43575
C-F	C ₂ F ₆	* ₀ c* ₂ * ₂ *	-	0.554,0.554,0.554,90,90,90	-	-	-	N	28234
C-F	C ₂₀ F ₄₂ lt2	* ₀ mP124,7	<i>P</i> 1c1	2.83,0.57,0.965,90,97,90	-	-	2.23	N	24788
C-F	C ₂₀ F ₄₂ rt	* ₀ hR186,166	<i>R</i> -3 <i>m</i>	0.57,0.57,8.5,90,90,120	-	-	2.16	N	24788
C-F	C ₃ F ₆	C ₃ F ₆ ,aP18,2	<i>P</i> -1	0.6072,0.6233,0.6569,92.33,108.75,94.31	-	-	2.13	X	38686
C-F	C ₄ F ₈ lt1	* ₀ cI24,*	-	0.706,0.706,0.706,90,90,90	-	-	1.89	N	21510
C-F	C ₅ F ₆	C ₅ F ₆ ,mS176,15	<i>C</i> 12/c1	1.5368,1.5326,1.0066,90,105.75,90	-	-	2.03	X	10260

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
C-F	C ₆ F ₁₀ hex	*, hP32, *	-	0.695, 0.695, 1.12, 90, 90, 120	-	colorless	1.86	N	602
C-F	C ₆ F ₁₀ mon	C ₆ F ₁₀ , mP64, 14	$P12_1/c1$	0.9663, 0.7247, 1.20046, 90, 114.312, 90	-	-	2.27	X	60481
C-F	C ₆ F ₆	C ₆ F ₆ , mP72, 14	$P12_1/c1$	0.59042, 0.91174, 1.73893, 90, 105.782, 90	-	-	2.06	X	58777
C-F	C ₈ F ₈	C ₈ F ₈ , mP64, 14	$P12_1/c1$	0.996, 0.704, 1.266, 90, 111.6, 90	-	-	2.00	X	14822
C-F	[CF ₃] ₁₀ [C ₇₈]	[CF ₃] ₁₀ [C ₇₈], mS472, 15	$C12/c1$	2.38603, 1.11601, 2.29338, 90, 105.447, 90	fullerene family	red	1.84	X	51473
C-F	[CF ₃] ₁₂ [C ₆₀] orth	[CF ₃] ₁₂ [C ₆₀], oP480, 61	<i>Pbca</i>	1.65102, 1.7688, 1.72319, 90, 90, 90	fullerene family	yellow	2.04	X	49112
C-F	[CF ₃] ₁₂ [C ₆₀] rhom	[CF ₃] ₁₂ [C ₆₀], hR324, 148	$R-3$	2.072, 2.072, 0.9729, 90, 90, 120	fullerene family	orange	2.13	X	49108
C-F	[CF ₃] ₁₂ [C ₇₀] mon1	[CF ₃] ₁₂ [C ₇₀], mP508, 14	$P12_1/c1$	1.4532, 2.1131, 2.14664, 90, 123.463, 90	fullerene family	orange	2.02	X	47116
C-F	[CF ₃] ₁₂ [C ₇₀] mon2	[CF ₃] ₁₂ [C ₇₀], mS968, 15	$C12/c1$	1.66925, 1.85411, 3.5626, 90, 99.644, 90	fullerene family	orange	2.04	X	47116
C-F	[CF ₃] ₁₂ [C ₇₈]	[CF ₃] ₁₂ [C ₇₈], aP252, 2	$P-1$	1.4305, 1.5264, 2.0733, 97.226, 98.956, 94.322	fullerene family	-	1.33	X	48766
C-F	[CF ₃] ₁₂ [C ₈₀]	[CF ₃] ₁₂ [C ₈₀], oS1024, 20	$C222_1$	1.5345, 2.6997, 3.7335, 90, 90, 90	fullerene family	orange	1.54	X	61318
C-F	[CF ₃] ₁₂ [C ₈₄] tet1	[CF ₃] ₁₂ [C ₈₄], tP1080, 106	$P4_3bc$	1.6028, 1.6028, 4.5983, 90, 90, 90	fullerene family	orange	2.07	X	60694
C-F	[CF ₃] ₁₂ [C ₈₄] tet2	[CF ₃] ₁₂ [C ₈₄], tI1056, 88	$I4_1/a$	1.6611, 1.6611, 4.355, 90, 90, 90	fullerene family	yellow	2.03	X	60694
C-F	[CF ₃] ₁₄ [C ₆₀] mon	[CF ₃] ₁₄ [C ₆₀], mP492, 14	$P12_1/c1$	1.1219, 1.3882, 3.5541, 90, 90, 544, 90	fullerene family	yellow	2.02	X	49112
C-F	[CF ₃] ₁₄ [C ₆₀] tricl	[CF ₃] ₁₄ [C ₆₀], aP116, 1	$P1$	1.1118, 1.11525, 1.22892, 69.872, 70.133, 76.892	fullerene family	yellow	2.10	X	49112
C-F	[CF ₃] ₁₆ [C ₇₀]	[CF ₃] ₁₆ [C ₇₀], mP548, 14	$P12_1/c1$	1.29804, 2.087, 2.57438, 90, 117.094, 90	fullerene family	yellow	2.08	X	47118
C-F	[CF ₃] ₁₆ [C ₈₄]	[CF ₃] ₁₆ [C ₈₄], aP330, 2	$P-1$	1.4015, 1.4363, 1.8724, 80.533, 75.891, 67.83	fullerene family	-	2.08	X	60676
C-F	[CF ₃] ₁₆ [C ₈₆] mon1	[CF ₃] ₁₆ [C ₈₆], mP600, 14	$P12_1/c1$	1.5583, 3.1104, 1.96866, 90, 128.283, 90	fullerene family	yellow	1.90	X	53022
C-F	[CF ₃] ₁₆ [C ₈₆] mon2	[CF ₃] ₁₆ [C ₈₆], mS648, 15	$C12/c1$	1.5931, 2.6851, 1.7802, 90, 94.79, 90	fullerene family	yellow	1.87	X	53022
C-F	[CF ₃] ₁₈ [C ₇₀]	[CF ₃] ₁₈ [C ₇₀], aP296, 2	$P-1$	1.33244, 1.43768, 2.0323, 103.674, 98.521, 114.658	fullerene family	brown	2.10	X	47118
C-F	[CF ₃] ₁₈ [C ₈₄]	[CF ₃] ₁₈ [C ₈₄], oP672, 62	<i>Pnma</i>	2.21091, 2.3118, 1.40709, 90, 90, 90	fullerene family	-	2.08	X	60676
C-F	[CF ₃] ₂ [C ₃ F ₇] ₂ [C ₆₀]	[CF ₃] ₂ [C ₃ F ₇] ₂ [C ₆₀], mP176, 11	$P12_1/m1$	0.99093, 1.989, 1.0366, 90, 109.19, 90	fullerene family	orange	2.06	X	53630
C-F	[CF ₃] ₂₀ [C ₈₄]	[CF ₃] ₂₀ [C ₈₄], mS824, 15	$C12/c1$	2.3073, 1.4586, 2.427, 90, 108.24, 90	fullerene family	yellow	2.05	X	60694
C-F	[CF ₃] ₈ [C ₈₄]	[CF ₃] ₈ [C ₈₄], mS976, 15	$C12/c1$	4.4753, 1.13429, 2.4116, 90, 119.748, 90	fullerene family	-	1.95	X	60676
C-F	[C ₂ F ₅] ₁₀ [C ₆₀]	[C ₂ F ₅] ₁₀ [C ₆₀], mP536, 14	$P12_1/c1$	1.79226, 1.67522, 2.49009, 90, 126.322, 90	fullerene family	brown	2.11	X	55671
C-F	[C ₂ F ₅] ₁₀ [C ₇₀] mon1	[C ₂ F ₅] ₁₀ [C ₇₀], mP1136, 14	$P12_1/c1$	2.06075, 2.52241, 2.83419, 90, 117.384, 90	fullerene family	brown	2.06	X	53046
C-F	[C ₂ F ₅] ₁₀ [C ₇₀] mon2	[C ₂ F ₅] ₁₀ [C ₇₀], mP620, 14	$P12_1/c1$	1.95072, 1.63789, 2.63719, 90, 128.685, 90	fullerene family	brown	2.05	X	55671
C-F	[C ₂ F ₅] ₁₀ [C ₇₀] tricl	[C ₂ F ₅] ₁₀ [C ₇₀], aP290, 2	$P-1$	1.3028, 1.3172, 2.1183, 82.979, 73.435, 70.517	fullerene family	-	2.05	X	56515
C-F	[C ₂ F ₅] ₁₂ [C ₇₀]	[C ₂ F ₅] ₁₂ [C ₇₀], mP616, 14	$P12_1/c1$	1.43871, 2.22798, 2.43473, 90, 111.114, 90	fullerene family	red	2.07	X	55671
C-F	[C ₂ F ₅] ₁₂ [C ₈₄] mon	[C ₂ F ₅] ₁₂ [C ₈₄], mP336, 4	$P12_1$	1.3388, 2.3356, 1.3546, 90, 110.329, 90	fullerene family	orange	2.04	X	59177
C-F	[C ₂ F ₅] ₁₂ [C ₈₄] tet	[C ₂ F ₅] ₁₂ [C ₈₄], tI1632, 142	$I4_1/acd$	1.8775, 1.8775, 4.3194, 90, 90, 90	fullerene family	orange	2.13	X	52887
C-F	[C ₂ F ₅] ₁₂ [C ₈₄] tricl1	[C ₂ F ₅] ₁₂ [C ₈₄], aP344, 2	$P-1$	1.53518, 1.58495, 1.73527, 75.487, 82.931, 84.561	fullerene family	orange	2.00	X	52887
C-F	[C ₂ F ₅] ₁₂ [C ₈₄] tricl2	[C ₂ F ₅] ₁₂ [C ₈₄], aP358, 2	$P-1$	1.47891, 1.59393, 1.95724, 88.614, 69.884, 69.707	fullerene family	red	2.00	X	52887
C-F	[C ₂ F ₅] ₈ [C ₇₀] mon1	[C ₂ F ₅] ₈ [C ₇₀], mS1104, 15	$C12/c1$	4.71042, 1.41042, 1.81336, 90, 104.438, 90	fullerene family	red	2.04	X	53046
C-F	[C ₂ F ₅] ₈ [C ₇₀] mon2	[C ₂ F ₅] ₈ [C ₇₀], mP520, 14	$P12_1/c1$	1.88048, 1.22411, 2.58852, 90, 100.986, 90	fullerene family	brown	2.04	X	53046
C-F	[C ₂ F ₅] ₈ [C ₇₀] orth	[C ₂ F ₅] ₈ [C ₇₀], oP592, 62	<i>Pnma</i>	1.84739, 2.55003, 1.23008, 90, 90, 90	fullerene family	red	2.06	X	53046
C-F	[C ₂ F ₅] ₈ [C ₇₀] tricl	[C ₂ F ₅] ₈ [C ₇₀], aP252, 2	$P-1$	0.99629, 1.48044, 2.17315, 109.818, 93.576, 103.488	fullerene family	red	2.06	X	53046
C-F	[C ₃ F ₇] ₄ [C ₇₀]	[C ₃ F ₇] ₄ [C ₇₀], mS440, 15	$C12/c1$	1.81127, 1.01948, 2.81018, 90, 107.112, 90	fullerene family	brown	2.03	X	55675
C-F	[C ₃ F ₇] ₆ [C ₆₀] mon	[C ₃ F ₇] ₆ [C ₆₀], mP500, 14	$P12_1/c1$	1.64566, 1.43939, 2.74516, 90, 122.49, 90	fullerene family	brown	2.10	X	53630
C-F	[C ₃ F ₇] ₆ [C ₆₀] tricl	[C ₃ F ₇] ₆ [C ₆₀], aP240, 2	$P-1$	1.05013, 1.27563, 2.1161, 88.356, 82.921, 77.32	fullerene family	red	2.10	X	53630
C-F	[C ₃ F ₇] ₈ [C ₇₀] mon	[C ₃ F ₇] ₈ [C ₇₀], mS1240, 15	$C12/c1$	3.3918, 1.6264, 2.8027, 90, 98.023, 90	fullerene family	yellow	1.90	X	55675
C-F	[C ₃ F ₇] ₈ [C ₇₀] tricl	[C ₃ F ₇] ₈ [C ₇₀], aP304, 2	$P-1$	1.4968, 1.5743, 1.6905, 70.708, 86.055, 70.317	fullerene family	orange	2.06	X	55675
C-F	[C ₄ F ₈] ₄ [C ₇₀]	[C ₄ F ₈] ₄ [C ₇₀], mP336, 7	$P1c1$	1.7139, 1.1117, 2.0154, 90, 107.078, 90	fullerene family	black	1.88	X	56097
C-F	[C ₄ F ₈] ₄ [C ₇₀]	[C ₄ F ₈] ₄ [C ₇₀], oP472, 62	<i>Pnma</i>	2.2599, 1.653, 1.1926, 90, 90, 90	fullerene family	orange	2.45	X	56097
C-F	[C ₄ F ₈] ₄ [C ₇₀]	[C ₄ F ₈] ₄ [C ₇₀], mP524, 14	$P12_1/c1$	2.3734, 1.1947, 2.0846, 90, 103.37, 90	fullerene family	orange	2.13	X	56097
C-F	[C ₄ F ₈] ₆ [C ₇₀] It1	[C ₄ F ₈] ₆ [C ₇₀], aP306, 2	$P-1$	1.2065, 1.6414, 1.644, 92.965, 95.77, 101.288	fullerene family	yellow	2.14	X	56097
C-F	[C ₄ F ₈] ₆ [C ₇₀] orth	[C ₄ F ₈] ₆ [C ₇₀], oP1160, 61	<i>Pbca</i>	1.973, 3.049, 2.14, 90, 90, 90	fullerene family	yellow	2.11	X	56097
C-F	[C ₆₀]F ₁₈	[C ₆₀]F ₁₈ , mS312, 9	$C1c1$	1.9669, 1.1041, 1.93432, 90, 121.178, 90	fullerene family	brown	1.96	X	49081
C-F	[C ₆₀]F ₃₆	*, cI*, *	-	1.2988, 1.2988, 1.2988, 90, 90, 90	fullerene family	-	-	N	41460
C-F	[C ₆₀]F ₄₁	*, cF*, *	-	1.738, 1.738, 1.738, 90, 90, 90	fullerene family	white	-	N	41460
C-F	[C ₆₀]F ₄₈ rt	*, tI*, *	-	1.2017, 1.2017, 1.7871, 90, 90, 90	fullerene family	-	-	N	41460
C-F	[C ₇₀]F ₃₀	[C ₇₀]F ₃₀ , aP200, 2	$P-1$	1.10257, 1.14172, 2.04527, 82.369, 77.01, 65.543	fullerene family	red	2.05	X	48955
C-Fe	FeC m	NaCl, cF8, 225	<i>Fm-3m</i>	0.458, 0.458, 0.458, 90, 90, 90	rocksalt family	-	4.69	X	53979
C-Fe	FeC _{0.016} mart	FeC _{0.05} , tI4, 139	$I4/mmm$	0.28232, 0.28232, 0.28678, 90, 90, 90	-	-	8.14	X	47321
C-Fe	FeC _{0.063} ht	Cu, cF4, 225	<i>Fm-3m</i>	0.362, 0.362, 0.362, 90, 90, 90	close-packed structure	-	7.93	F	5349
C-Fe	FeC _{0.09} m	FeC _{0.09} , oP96, 74	<i>Imma</i>	0.402, 0.402, 3.699, 90, 90, 90	-	-	7.59	X	12619
C-Fe	FeC _{0.09} rt	W, cI2, 229	<i>Im-3m</i>	0.29, 0.29, 0.29, 90, 90, 90	b.c.c. family	-	7.75	F	3
C-Fe	Fe ₂ C m	CaCl ₂ , oP6, 58	<i>Pnnm</i>	0.4318, 0.4704, 0.283, 90, 90, 90	-	-	7.15	X	6384
C-Fe	Fe ₃ C m	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.50824, 0.67329, 0.4512, 90, 90, 90	-	gray	7.72	X	43859
C-Fe	Fe ₃ C tf	Fe ₃ N, hP8, 182	$P6_322$	0.4767, 0.4767, 0.4354, 90, 90, 120	-	-	6.96	X	1083
C-Fe	Fe ₄ C m	Fe ₄ C, cP5, 215	$P-43m$	0.3878, 0.3878, 0.3878, 90, 90, 90	-	-	6.70	X	777
C-Fe	Fe ₅ C ₂ m-mon	Mn ₅ C ₂ , mS28, 15	$C12/c1$	1.15695, 0.45725, 0.5061, 90, 97.731, 90	-	-	7.59	X	60393
C-Fe	Fe ₅ C ₂ m-tricl	Fe ₅ C ₂ , aP28, 2	$P-1$	0.45713, 0.50588, 1.15695, 97.765, 90.036, 90.116	-	-	7.60	X	50630
C-Fe	Fe ₃ C ₃ hp	Ca ₇ Au ₃ , oP80, 61	<i>Pbca</i>	0.4165, 1.298, 1.1301, 90, 90, 90	-	-	9.28	X	59048
C-Fe	Fe ₂ C ₃ m hex	Th ₇ Fe ₃ , hP20, 186	$P6_3/mc$	0.6882, 0.6882, 0.454, 90, 90, 120	-	-	7.61	X	2151
C-Fe	Fe ₂ C ₃ m orth	Mn ₇ C ₃ , oP40, 62	<i>Pnma</i>	0.4534, 0.6909, 1.1857, 90, 90, 90	-	-	7.64	A	47321
C-Gd	GdC _{0.03}	Mg, hP2, 194	$P6_3/mmc$	0.365, 0.365, 0.587, 90, 90, 120	close-packed structure	-	7.73	F	33373
C-Gd	GdC _{0.33}	NaCl, cF8, 225	<i>Fm-3m</i>	0.5126, 0.5126, 0.5126, 90, 90, 90	rocksalt family	-	7.95	X	943
C-Gd	GdC ₂ rt	CaC ₂ , tI6, 139	$I4/mmm$	0.3712, 0.3712, 0.6275, 90, 90, 90	-	-	6.96	A	27373
C-Gd	Gd ₂ C ₃ 0.985	CdCl ₂ , hR9, 166	$R-3m$	0.3648, 0.3648, 1.779, 90, 90, 120	-	-	7.93	A	33373
C-Gd	Gd ₂ C ₃ rt	Pu ₂ C ₃ , cI40, 220	$I-43d$	0.8332, 0.8332, 0.8332, 90, 90, 90	-	-	8.05	A	27373
C-Gd	Gd ₄ C ₅	Y ₄ C ₅ , oP18, 55	<i>Pbam</i>	0.6667, 1.2084, 0.37259, 90, 90, 90	-	-	7.62	A	33609
C-Hf	HfC	NaCl, cF8, 225							

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
C-Ho	Ho ₂ C ₃	Pu ₂ C ₃ ,cI40,220	<i>I</i> -43 <i>d</i>	0.8163,0.8163,0.8163,90,90,90	-	-	8.94	X	5907
C-Ho	Ho ₃ C ₄	Se ₂ C ₄ ,tP70,128	<i>P4/mnc</i>	0.8043,0.8043,1.586,90,90,90	-	-	8.79	A	34759
C-Ho	Ho ₄ C ₅	Y ₄ C ₅ ,oP18,55	<i>Pbam</i>	0.653,1.1846,0.3638,90,90,90	-	-	8.49	X	33609
C-Ho	Ho ₄ C ₇ ht	Lu ₄ C ₇ ,mP22,14	<i>P12₁/c1</i>	0.3711,1.3636,0.651,90,102.76,90	-	gray dark	7.69	X	32807
C-Ho	Ho ₄ C ₇ rt	Ho ₄ C ₇ ,mP44,14	<i>P12₁/c1</i>	0.36806,1.2518,1.3716,90,98.84,90	-	black	7.91	X	29703
C-I	Cl ₄	Cl ₄ ,tI10,121	<i>I</i> -42 <i>m</i>	0.6409,0.6409,0.9558,90,90,90	-	red ruby	4.40	X	15530
C-I	C ₂ I ₂	C ₂ I ₂ ,tP32,86	<i>P4₂/n</i>	1.568,1.568,0.43,90,90,90	-	-	3.49	X	6273
C-I	C ₂ I ₄	C ₂ I ₄ ,mP24,14	<i>P12₁/c1</i>	1.4932,0.4271,1.2684,90,108.34,90	-	-	4.60	X	10242
C-I	C ₄ I ₄	C ₄ I ₄ ,mP32,14	<i>P12₁/c1</i>	0.44362,1.71459,1.27859,90,103.44,90	-	yellow	3.90	X	40258
C-I	[C ₆₀][I ₂] ₂	[C ₆₀][I ₂] ₂ ,hP78,147	<i>P</i> -3	0.9962,0.9962,0.9984,90,90,120	fullerene family	black	2.38	X	26418
C-I	[C ₇₀][I ₂]	[C ₇₀][I ₂] ₂ ,mP288,14	<i>P12₁/c1</i>	1.10613,2.19269,1.79038,90,128.092,90	fullerene family	black	2.13	X	62997
C-K	KC rt	NaC,tI32,142	<i>I4₁/acd</i>	0.7594,0.7594,1.4662,90,90,90	-	white	1.61	X	36906
C-K	KC ₂₄ rt sta2	* _h ***	-	0.491,0.491,1.754,90,90,120	-	blue dark	-	N	631
C-K	KC ₃₆ rt sta3	* _h ***	-	0.491,0.491,1.212,90,90,120	-	blue dark	-	N	631
C-K	KC ₄₈ rt sta4	* _h ***	-	0.491,0.491,3.098,90,90,120	-	black	-	N	631
C-K	KC ₆₀ rt sta5	* _h ***	-	0.491,0.491,1.884,90,90,120	fullerene family	black	-	N	631
C-K	KC ₈ rt sta5	* _h ***	-	0.491,0.491,2.164,90,90,120	fullerene family	tan	-	N	631
C-K	K[C ₆₀] ht	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	1.406,1.406,1.406,90,90,90	fullerene family	-	1.82	X	30950
C-K	K[C ₆₀] lt mon	K[C ₆₀],mS8,12	<i>C12/m1</i>	1.7092,0.9771,1.71279,90,111.703,90	fullerene family	-	1.90	X	30920
C-K	K[C ₆₀] rt	Rb[C ₆₀],oP122,58	<i>Pnnm</i>	0.9953,1.4321,0.9109,90,90,90	fullerene family	-	1.94	X	34386
C-K	K ₂ C ₂ ht	CaF ₂ ,cF12,225	<i>Fm</i> -3 <i>m</i>	0.7553,0.7553,0.7553,90,90,90	fluorite family	black gray	1.58	X	36906
C-K	K ₂ [C ₆₀]	K ₃ [C ₆₀],cF492,225	<i>Fm</i> -3 <i>m</i>	1.4242,1.4242,1.4242,90,90,90	fullerene family	-	1.87	X	28471
C-K	K ₃ [C ₆₀] rt	K ₃ [C ₆₀],cF492,225	<i>Fm</i> -3 <i>m</i>	1.41582,1.41582,1.41582,90,90,90	fullerene family	-	1.96	X	29966
C-K	K ₃ [C ₇₀]	* _c F584,225	<i>Fm</i> -3 <i>m</i>	1.486,1.486,1.486,90,90,90	fullerene family	-	-	N	27924
C-K	K ₄ [C ₆₀] tet	K ₄ [C ₆₀],tI248,139	<i>I4/mmm</i>	1.184,1.184,1.075,90,90,90	fullerene family	-	1.93	X	26194
C-K	K ₄ [C ₇₀]	K ₄ [C ₆₀],tI10,139	<i>I4/mmm</i>	1.265,1.265,1.098,90,90,90	fullerene family	-	1.88	A	27924
C-K	K ₆ [C ₆₀]	Cs ₆ [C ₆₀],cI132,204	<i>Im</i> -3	1.13365,1.13365,1.13365,90,90,90	fullerene family	-	2.18	X	29966
C-K	K ₉ [C ₇₀] cub	K ₉ [C ₇₀],cF40,216	<i>F</i> -43 <i>m</i>	1.569,1.569,1.569,90,90,90	fullerene family	-	2.05	X	27924
C-K	K ₉ [C ₇₀] rhom	* _h hR*,*	-	1.00771,1.00771,2.71186,90,90,120	fullerene family	-	-	N	27924
C-Kr	Kr _{0.80} [C ₆₀] rt	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	1.42073,1.42073,1.42073,90,90,90	fullerene family	-	1.82	X	33502
C-Kr	Kr _{0.84} [C ₆₀] lt	* _c P*,205	<i>Pa</i> -3	1.4069,1.4069,1.4069,90,90,90	fullerene family	-	1.89	N	33502
C-Kr	Kr _{0.94} [C ₇₀]	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	1.5003,1.5003,1.5003,90,90,90	fullerene family	-	1.81	X	34918
C-La	LaC ₂ ht	CaC ₂ ,cF36,225	<i>Fm</i> -3 <i>m</i>	0.6022,0.6022,0.6022,90,90,90	-	-	4.96	X	3754
C-La	LaC ₂ rt	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.39351,0.39351,0.65746,90,90,90	-	-	5.32	X	63887
C-La	La ₂ C _{2.67}	Pu ₂ C ₃ ,cI40,220	<i>I</i> -43 <i>d</i>	0.8802,0.8802,0.8802,90,90,90	-	-	6.04	X	44876
C-Li	LiC ₁₂ rt	LiC ₁₂ ,hP13,191	<i>P6/mmm</i>	0.42686,0.42686,0.70229,90,90,120	GIC	red copper	2.26	X	63948
C-Li	LiC ₁₈	* _h P*,*	-	0.428,0.428,1.044,90,90,120	-	blue steel	-	N	2690
C-Li	LiC ₃	LiC ₃ ,hP16,194	<i>P6₃/mmc</i>	0.43,0.43,0.74,90,90,120	GIC	yellow bright	2.41	X	44186
C-Li	LiC ₆ rt	LiC ₆ ,hP7,191	<i>P6/mmm</i>	0.429,0.429,0.3737,90,90,120	GIC	brass	2.20	X	2690
C-Li	Li ₁₂ [C ₆₀] ht	Li ₁₂ [C ₆₀],cF64,225	<i>Fm</i> -3 <i>m</i>	1.4088,1.4088,1.4088,90,90,90	fullerene family	-	1.91	X	36730
C-Li	Li ₁₂ [C ₆₀] mon	Li ₁₂ [C ₆₀],mP140,14	<i>P12₁/c1</i>	0.9888,0.9901,1.73078,90,124.35,90	fullerene family	black	1.91	X	63044
C-Li	Li ₁₂ [C ₆₀] rt	* _h tl*,*	-	0.9894,0.9894,1.4209,90,90,90	fullerene family	-	1.92	N	36730
C-Li	Li ₂ C ₂ ht	CaF ₂ ,cF12,225	<i>Fm</i> -3 <i>m</i>	0.5965,0.5965,0.5965,90,90,90	fluorite family	-	1.19	X	36917
C-Li	Li ₂ C ₂ rt	Rb ₂ [O ₂],oI8,71	<i>Immm</i>	0.3652,0.48312,0.54344,90,90,90	-	-	1.31	X	36917
C-Li	Li ₄ [C ₆₀]	Li ₄ [C ₆₀],mS128,12	<i>C12/m1</i>	1.75567,0.90478,0.93264,90,121.115,90	fullerene family	-	1.96	X	43869
C-Li	Li ₄ [C ₆₀]	Li ₄ [C ₆₀],oP120,58	<i>Pnnm</i>	0.9843,1.4745,0.9092,90,90,90	fullerene family	-	1.81	X	39699
C-Lu	LuC _{0.33}	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	0.4965,0.4965,0.4965,90,90,90	rocksalt family	-	9.71	X	943
C-Lu	LuC ₂ ht	CaC ₂ ,cF36,225	<i>Fm</i> -3 <i>m</i>	0.5505,0.5505,0.5505,90,90,90	-	-	7.92	A	3416
C-Lu	LuC ₂ rt	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.3563,0.3563,0.5964,90,90,90	-	-	8.73	X	1400
C-Lu	Lu ₂ C ₃ hp-ht	Pu ₂ C ₃ ,cI40,220	<i>I</i> -43 <i>d</i>	0.80354,0.80354,0.80354,90,90,90	-	-	9.88	X	13488
C-Lu	Lu ₃ C ₄	Se ₂ C ₄ ,tP70,128	<i>P4/mnc</i>	0.78496,0.78496,1.5633,90,90,90	-	-	9.88	A	24521
C-Lu	Lu ₄ C ₇	Lu ₄ C ₇ ,mP22,14	<i>P12₁/c1</i>	0.3604,1.3514,0.629,90,104.97,90	-	gray dark	8.80	X	32807
C-Mg	MgC ₂ rt	MgC ₂ ,tP6,136	<i>P4₂/mmn</i>	0.39342,0.39342,0.5021,90,90,90	-	-	2.07	X	36043
C-Mg	Mg ₂ C	CaF ₂ ,cF12,225	<i>Fm</i> -3 <i>m</i>	0.5448,0.5448,0.5448,90,90,90	fluorite family	-	2.49	X	60465
C-Mg	Mg ₂ C ₃ mon	Mg ₂ C ₃ ,mS10,12	<i>C12/m1</i>	0.4831,0.47,0.49866,90,104.245,90	-	-	2.56	X	63556
C-Mg	Mg ₂ C ₃ orth	Mg ₂ C ₃ ,oP10,58	<i>Pnnm</i>	0.52786,0.64108,0.37283,90,90,90	-	-	2.23	X	25845
C-Mg	Mg ₃ [C ₇₀]	* _c F292,*	-	1.452,1.452,1.452,90,90,90	fullerene family	-	1.98	N	52308
C-Mg	Mg ₄ [C ₆₀]	Mg ₄ [C ₆₀],hR15,166	<i>R</i> -3 <i>m</i>	0.922,0.922,2.525,90,90,120	fullerene family	gray dark	2.19	X	43009
C-Mg	Mg ₅ [C ₇₀]	* _o P*,*	-	1.384,1.462,1.684,90,90,90	fullerene family	-	-	N	52308
C-Mn	MnC _{0.07} rt	Mn,cI58,217	<i>I</i> -43 <i>m</i>	0.8969,0.8969,0.8969,90,90,90	-	-	7.45	F	7555
C-Mn	MnC _{0.21} ht	NiAs,hP4,194	<i>P6₃/mmc</i>	0.2709,0.2709,0.44229,90,90,120	AlB ₂ family	-	6.79	X	7555
C-Mn	Mn ₂ C ₆ rt	Cr ₂ C ₆ ,cF116,225	<i>Fm</i> -3 <i>m</i>	1.0595,1.0595,1.0595,90,90,90	-	-	7.46	X	24212
C-Mn	Mn ₃ C ht	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.51052,0.67851,0.45443,90,90,90	-	-	7.46	X	64799
C-Mn	Mn ₃ C ₂ ht	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.16724,0.45864,0.50969,90,97.719,90	-	-	7.34	X	24212
C-Mn	Mn ₃ C ₃	Mn ₃ C ₃ ,oP40,62	<i>Pnma</i>	0.4543,0.69544,1.1973,90,90,90	-	-	7.39	X	24212
C-Mo	MoC hex	TiP,hP8,194	<i>P6₃/mmc</i>	0.2932,0.2932,1.097,90,90,120	-	-	8.78	X	436
C-Mo	MoC ht-hp	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	0.427,0.427,0.427,90,90,90	rocksalt family	-	9.21	X	48724
C-Mo	MoC rt	WC,hP2,187	<i>P</i> -6 <i>m2</i>	0.29,0.29,0.282,90,90,120	AlB ₂ family	-	8.73	X	48724
C-Mo	MoC _{0.005}	W,cI2,229	<i>Im</i> -3 <i>m</i>	0.31486,0.31486,0.31486,90,90,90	b.c.c. family	-	10.21	F	55486
C-Mo	MoC _{0.49} tf	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	0.4254,0.4254,0.4254,90,90,90	rocksalt family	-	8.79	X	6230
C-Mo	MoC _{0.5} ht2	NiAs,hP4,194	<i>P6₃/mmc</i>	0.30128,0.30128,0.47357,90,90,120	AlB ₂ family	-	9.10	X	39372
C-Mo	MoC _{0.51} ht1	MoC _{0.5} ,oP16,60	<i>Pbcn</i>	0.4732,0.6037,0.5204,90,90,90	-	-	9.12	X	10196
C-Mo	MoC _{0.594} ht	MoC _{0.67} ,hP12,194	<i>P6₃/mmc</i>	0.30105,0.30105,1.46112,90,90,120	-	-	8.96	X	48318
C-Mo	MoC _{0.681} ht	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	0.42665,0.42665,0.42665,90,90,90	rocksalt family	-	8.91	X	59884
C-Mo	Mo ₂ C rt	* _o *768,*	-	0.9466,2.4152,4.1675,90,90,90	-	-	-	N	21680
C-N	CN ₇	CN ₇ ,oP128,60	<i>Pbcn</i>	1.81289,0.82128,1.14021,90,90,90	-	colorless	1.72	X	56566
C-N	C[CN] ₄	C[CN] ₄ ,hR54,161	<i>R3c</i>	0.9062,0.9062,1.1635,90,90,120	-	-	1.40	X	7780
C-N	C ₂ N[CN] ₂	C ₂ N[CN] ₂ ,oP112,61	<i>Pbca</i>	1.009,1.2141,1.385,90,90,90	-	colorless	1.41	X	54055

System	Substance	Prototype	H-M	Unit Cell Parameters <i>a,b,c,aβ,γ</i> (nm, $^{\circ}$)	Family	Color	<i>D_x</i>	C	Ref.
C-N	C ₂ N ₂	C ₂ N ₂ ,oP16,61	<i>Pbca</i>	0.619,0.708,0.631,90,90,90	-	-	1.25	X	1783
C-N	C ₂ N ₂ [N ₃]	C ₂ N ₂ [N ₃],hP44,176	<i>P6₃/m</i>	1.02163,1.02163,0.59707,90,90,120	-	yellow pale	1.74	X	43877
C-N	C ₂ [CN] ₄ ht	C ₂ [CN] ₄ ,mP20,14	<i>P12₁/c1</i>	0.69858,0.61997,0.95718,90,129.135,90	-	-	1.32	X	40913
C-N	C ₂ [CN] ₄ rt	C ₂ [CN] ₄ ,cI60,204	<i>Im-3</i>	0.9736,0.9736,0.9736,90,90,90	-	-	1.38	X	5537
C-N	C ₃ N ₃ [CN] ₃	C ₃ N ₃ [CN] ₃ ,mP50,4	<i>P12₁1</i>	0.846,0.904,0.9741,90,90.75,90	-	colorless	1.39	X	37047
C-N	C ₃ N ₃ [N ₃] ₃	C ₃ N ₃ [N ₃] ₃ ,hP30,147	<i>P-3</i>	0.87456,0.87456,0.58945,90,90,120	-	colorless	1.74	X	34447
C-N	C ₃ N ₄ m1	<i>*_h**,*</i>	-	0.487,0.487,0.641,90,90,120	-	brown	-	N	52611
C-N	C ₃ N ₄ tf	C ₃ N ₄ ,hP14,187	<i>P-6m2</i>	0.50415,0.50415,0.65764,90,90,120	-	-	2.11	X	62732
C-N	C ₆ [CN] ₆	C ₆ [CN] ₆ ,cP72,205	<i>Pa-3</i>	1.0781,1.0781,1.0781,90,90,90	-	yellow	1.21	X	15691
C-N	C ₆ [N ₃] ₃ [CN] ₃	C ₆ [N ₃] ₃ [CN] ₃ ,oP84,19	<i>P2₁2₁2₁</i>	0.597,1.1318,1.6878,90,90,90	-	brown	1.61	X	60445
C-Na	NaC rt	NaCl,tI32,142	<i>I4₁/acd</i>	0.67572,0.67572,1.27015,90,90,90	-	white	1.60	X	41633
C-Na	Na ₂ C ₂ ht	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.6756,0.6756,0.6756,90,90,90	fluorite family	colorless	1.51	X	36906
C-Na	Na ₂ C ₂ orth	Rb ₂ O ₂ ,oI8,71	<i>Immm</i>	0.41893,0.53862,0.64007,90,90,90	-	-	1.61	X	41633
C-Na	Na ₂ [C ₆₀] rt	CaF ₂ ,cF12,225	<i>Fm-3m</i>	1.4189,1.4189,1.4189,90,90,90	fullerene family	-	1.78	X	26419
C-Na	Na ₃ [C ₆₀] ht	K ₃ [C ₆₀],cF492,225	<i>Fm-3m</i>	1.4183,1.4183,1.4183,90,90,90	fullerene family	-	1.84	A	26193
C-Na	Na ₄ [C ₆₀] rt	Na ₄ [C ₆₀],mS248,12	<i>C12/m1</i>	1.43873,1.171,1.025,90,129.027,90	fullerene family	-	2.01	X	39833
C-Na	Na ₆ [C ₆₀] ht	CeH ₃ ,cF44,225	<i>Fm-3m</i>	1.4248,1.4248,1.4248,90,90,90	fullerene family	-	1.97	X	26419
C-Na	Na ₇ [C ₇₀] trig	<i>*_hP*</i> ,164	<i>P-3m1</i>	1.0617,1.0617,2.5998,90,90,120	fullerene family	-	-	N	40695
C-Na	Na ₉ [C ₆₀]	Na ₉ [C ₆₀],cF48,202	<i>Fm-3</i>	1.459,1.459,1.459,90,90,90	fullerene family	-	2.02	X	26423
C-Nb	NbC	NaCl,cF8,225	<i>Fm-3m</i>	0.44721,0.44721,0.44721,90,90,90	niobocarbide	yellow	7.79	X	61410
C-Nb	NbC _{0.05}	W,cI2,229	<i>Im-3m</i>	0.3304,0.3304,0.3304,90,90,90	b.c.c. family	-	8.61	F	632
C-Nb	NbC _{0.5} ht2	NiAs,hP4,194	<i>P6₃/mmc</i>	0.3123,0.3123,0.5022,90,90,120	AlB ₂ family	-	7.74	X	53446
C-Nb	NbC _{0.75} rt	Sc _{0.67} Te,hR24,166	<i>R-3m</i>	0.314,0.314,3.01,90,90,120	-	-	7.90	A	4868
C-Nb	NbC _{0.76}	Mo _{0.75} N _{0.50} ,cP8,221	<i>Pm-3m</i>	0.44412,0.44412,0.44412,90,90,90	-	-	7.74	X	53446
C-Nb	Nb _{1.91} C rt	Nb _{1.91} C,mP12,6	<i>P1m1</i>	0.49819,0.30989,1.09391,90,90,90	-	-	7.45	X	27102
C-Nb	Nb ₂ C ht1	Fe ₂ N,hP9,162	<i>P-31m</i>	0.524,0.524,0.492,90,90,120	-	-	8.42	X	23546
C-Nb	Nb ₆ C ₅ rt	Nb ₆ C ₅ ,mS22,12	<i>C12/m1</i>	0.546,0.9457,0.546,90,109.47,90	-	-	7.72	X	18374
C-Nd	NdC ₂ rt	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.3827,0.3827,0.6407,90,90,90	-	brass	5.96	X	19075
C-Nd	Nd ₂ C ₃	Pu ₂ C ₃ ,cI40,220	<i>I-43d</i>	0.8517,0.8517,0.8517,90,90,90	-	-	6.98	X	11595
C-Ni	NiC _{0.22}	NaCl,cF8,225	<i>Fm-3m</i>	0.354,0.354,0.354,90,90,90	close-packed structure	-	9.18	X	53039
C-Ni	NiC _{0.33} tf	NiAs,hP4,194	<i>P6₃/mmc</i>	0.2697,0.2697,0.4334,90,90,120	AlB ₂ family	-	7.62	X	47288
C-Ni	Ni ₃ C rt	FeF ₃ ,hR24,167	<i>R-3c</i>	0.45889,0.45889,1.29895,90,90,120	-	-	7.91	X	60019
C-Np	NpC _{0.93}	NaCl,cF8,225	<i>Fm-3m</i>	0.4992,0.4992,0.4992,90,90,90	rocksalt family	-	13.25	X	4662
C-Np	Np ₂ C ₃	Pu ₂ C ₃ ,cI40,220	<i>I-43d</i>	0.8103,0.8103,0.8103,90,90,90	-	-	12.74	A	5273
C-O	CO ₂ hp6	SiO ₂ ,tI12,122	<i>I-42d</i>	0.3552,0.3552,0.5919,90,90,90	-	-	3.91	X	64831
C-O	C ₃ O ₂ lt	C ₃ O ₂ ,oP40,62	<i>Pnma</i>	0.9869,1.206,0.516,90,90,90	-	-	1.47	X	40088
C-O	C ₅₉ O ₆ [CO]	C ₅₉ O ₆ [CO],oP536,61	<i>Pbca</i>	1.79794,1.98623,1.79848,90,90,90	-	-	1.72	X	60684
C-O	[CO] hp1-lt	[O ₂],cP64,223	<i>Pm-3n</i>	0.6136,0.6136,0.6136,90,90,90	-	-	1.61	A	18996
C-O	[CO] hp2-lt	[N ₂],hR48,167	<i>R-3c</i>	0.8244,0.8244,1.125,90,90,120	-	-	1.69	A	18996
C-O	[CO] lt1	[N ₂]-b,hP24,194	<i>P6₃/mmc</i>	0.3615,0.3615,0.588,90,90,90	-	-	1.40	X	15622
C-O	[CO] lt3	[CO],cP8,198	<i>P2₁3</i>	0.563,0.563,0.563,90,90,90	-	-	1.04	X	27
C-O	[C ₆₀][OCO] _{0.80} cub	[C ₆₀][OCO] _{0.80} ,cF40,225	<i>Fm-3m</i>	1.4224,1.4224,1.4224,90,90,90	fullerene family	-	1.74	X	35238
C-O	[C ₆₀][OCO] _{0.80} mon	[C ₆₀][OCO] _{0.80} ,mP126,14	<i>P12₁/c1</i>	0.97438,0.97473,1.75076,90,123.426,90	fullerene family	-	1.81	X	35238
C-O	[C ₆₀][O ₂] lt	<i>*_cP4</i> ,205	<i>Pa-3</i>	1.405,1.405,1.405,90,90,90	fullerene family	-	1.80	P	38331
C-O	[C ₆₀][O ₂] rt	[C ₆₀][O ₂],cF272,202	<i>Fm-3</i>	1.4152,1.4152,1.4152,90,90,90	fullerene family	-	1.76	X	28895
C-O	[OCO] hp1	[CS ₂],oS12,64	<i>Cmce</i>	0.4027,0.414,0.5831,90,90,90	-	-	3.01	X	62400
C-O	[OCO] hp2	[OCO],hR72,167	<i>R-3c</i>	0.8628,0.8628,1.0604,90,90,120	-	-	2.57	X	64831
C-O	[OCO] hp3	KrF ₂ ,tP6,136	<i>P4₂/mnm</i>	0.3516,0.3516,0.4104,90,90,90	-	-	2.88	X	64528
C-O	[OCO] hp4	[OCO],tP8,136	<i>P4₂/mnm</i>	0.34284,0.34284,0.40259,90,90,90	-	-	3.09	X	50186
C-O	[OCO] hp5	[OCO],oP12,60	<i>Pbcn</i>	0.4344,0.6111,0.4285,90,90,90	-	-	2.57	X	42951
C-O	[OCO] lt	[OCO],cP12,205	<i>Pa-3</i>	0.54942,0.54942,0.54942,90,90,90	-	colorless	1.76	X	34247
C-Os	OsC	WC,hP2,187	<i>P-6m2</i>	0.29077,0.29077,0.28218,90,90,120	AlB ₂ family	-	16.25	X	1208
C-P	P ₈ [C ₆₀]	P ₈ [C ₆₀],hP25,191	<i>P6₃/mmm</i>	1.00838,1.00838,1.01048,90,90,120	fullerene family	black	1.81	X	28511
C-Pa	PaC	NaCl,cF8,225	<i>Fm-3m</i>	0.50608,0.50608,0.50608,90,90,90	rocksalt family	-	12.46	X	4639
C-Pa	PaC ₂	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.361,0.361,0.611,90,90,90	-	-	10.64	A	4639
C-Pd	PdC _{0.03}	Cu,cF4,225	<i>Fm-3m</i>	0.3908,0.3908,0.3908,90,90,90	close-packed structure	-	11.88	F	9951
C-Pr	PrC ₂ rt	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.3852,0.3852,0.6425,90,90,90	-	brass	5.75	X	3510
C-Pr	Pr ₂ C ₃	Pu ₂ C ₃ ,cI40,220	<i>I-43d</i>	0.8572,0.8572,0.8572,90,90,90	-	-	6.70	X	11595
C-Pt	PtC hp	NaCl,cF8,225	<i>Fm-3m</i>	0.4814,0.4814,0.4814,90,90,90	rocksalt family	-	12.33	X	46466
C-Pu	PuC	NaCl,cF8,225	<i>Fm-3m</i>	0.49619,0.49619,0.49619,90,90,90	rocksalt family	-	13.92	X	11476
C-Pu	PuC ₂ ht	CaC ₂ ,cF36,225	<i>Fm-3m</i>	0.569,0.569,0.569,90,90,90	-	-	9.66	A	5196
C-Pu	PuC ₂ rt	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.363,0.363,0.6094,90,90,90	-	-	11.09	A	2401
C-Pu	Pu ₂ C ₃	Pu ₂ C ₃ ,cI40,220	<i>I-43d</i>	0.8132,0.8132,0.8132,90,90,90	-	-	12.95	X	5268
C-Rb	RbC hex	RbC,hP11,189	<i>P-62m</i>	0.8526,0.8526,0.517,90,90,120	-	-	2.98	X	40079
C-Rb	RbC orth	RbC,oP16,62	<i>Pnma</i>	0.90484,0.48365,0.99322,90,90,90	-	-	2.98	X	40079
C-Rb	RbC ₂₄ GIC-2	<i>*_h**,*</i>	-	0.491,0.491,1.808,90,90,120	-	blue dark	-	N	631
C-Rb	RbC ₃₆ GIC-3	<i>*_h**,*</i>	-	0.491,0.491,1.236,90,90,120	-	blue dark	-	N	631
C-Rb	RbC ₄₈ GIC-4	<i>*_h**,*</i>	-	0.491,0.491,3.156,90,90,120	-	black	-	N	631
C-Rb	RbC ₆₀ GIC-5	<i>*_h**,*</i>	-	0.491,0.491,1.912,90,90,120	-	black	-	N	631
C-Rb	RbC ₈ rt	<i>*_h**,*</i>	-	0.491,0.491,2.265,90,90,120	-	tan	-	N	631
C-Rb	Rb[C ₆₀] lt cub	NaCl,cF8,225	<i>Fm-3m</i>	1.4072,1.4072,1.4072,90,90,90	fullerene family	-	1.92	X	29378
C-Rb	Rb _{0.91} [C ₆₀] rt	Rb[C ₆₀],oP122,58	<i>Pnnm</i>	1.0107,1.4233,0.9138,90,90,90	fullerene family	-	2.02	X	29268
C-Rb	Rb ₃ [C ₆₀] lt	K ₃ [C ₆₀],cF492,225	<i>Fm-3m</i>	1.442,1.442,1.442,90,90,90	fullerene family	-	2.16	X	26194
C-Rb	Rb ₄ [C ₆₀] hp	Rb ₄ [C ₆₀],oI10,71	<i>Immm</i>	1.1109,1.1549,1.181,90,90,90	fullerene family	-	2.33	X	48296
C-Rb	Rb ₄ [C ₆₀] rt	K ₄ [C ₆₀],tI248,139	<i>I4/mmm</i>	1.19783,1.19783,1.1035,90,90,90	fullerene family	black	2.23	X	55263
C-Rb	Rb ₆ [C ₆₀]	Cs ₆ [C ₆₀],cI132,204	<i>Im-3</i>	1.154,1.154,1.154,90,90,90	fullerene family	-	2.67	X	26194
C-Rb	Rb _{8.8} [C ₈₄]	Rb _{8.8} [C ₈₄],cP48,205	<i>Pa-3</i>	1.687,1.687,1.687,90,90,90	fullerene family	-	2.44	X	46406
C-Re	ReC hp cub	NaCl,cF8,225	<i>Fm-3m</i>	0.4005,0.4005,0.4005,90,90,90	rocksalt family	-	20.50	X	8547

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
C-Re	ReC hp hex	TiP,hP8,194	$P6_3/mmc$	0.284,0.284,0.985,90,90,120	-	-	19.14	A	5782
C-Re	ReC _{0.5} tf	NiAs,hP4,194	$P6_3/mmc$	0.302,0.302,0.476,90,90,120	AlB ₂ family	-	16.98	X	4566
C-Re	Re ₂ C rt	NbS ₂ ,hP6,194	$P6_3/mmc$	0.28425,0.28425,0.98599,90,90,120	-	-	18.51	X	52547
C-Ru	RuC	WC,hP2,187	$P-6m2$	0.29079,0.29079,0.28219,90,90,120	AlB ₂ family	-	9.09	X	1208
C-Ru	Ru ₂ C	CdI ₂ ,hP3,164	$P-3m1$	0.2534,0.2534,0.4147,90,90,120	CdI ₂ -PbI ₂ polytype	-	15.42	X	59523
C-S	C ₂ S	C ₂ S,mP48,4	$P12_1$	0.39074,1.65628,1.1154,90,94.18,90	-	red dark	2.07	X	46844
C-S	C ₂ S ₃ m	C ₂ S ₃ ,mP20,14	$P12_2/c1$	0.5805,0.6638,1.07791,90,109.164,90	-	yellow	2.04	X	47235
C-S	C ₂ S ₃	C ₂ S ₃ ,mP40,14	$P12_2/c1$	0.7644,1.0459,0.9901,90,105.92,90	-	brown dark	2.10	X	47235
C-S	C ₃ S ₄	C ₃ S ₄ ,mP56,14	$P12_2/c1$	0.8046,0.9797,1.3818,90,105.76,90	-	orange yellow	2.08	X	27217
C-S	C ₃ S ₈	C ₃ S ₈ ,aP22,2	$P-1$	0.44204,0.9136,1.1762,101.61,96.2,92.28	-	yellow	2.10	X	26914
C-S	S ₁₂ [CS ₂]	S ₁₂ [CS ₂],hR45,166	$R-3m$	1.0668,1.0668,1.1551,90,90,120	-	colorless	2.02	X	14521
C-S	[CS ₂]	[CS ₂],oS12,64	$Cmce$	0.60864,0.52866,0.94623,90,90,90	-	-	1.66	X	14781
C-S	[C ₆₀][S ₈][CS ₂] rt	[C ₆₀][S ₈][CS ₂],oP48,62	$Pnma$	0.9973,1.3356,2.8654,90,90,90	fullerene family	red brown	1.83	X	27762
C-S	[C ₆₀][S ₈] ₂	[C ₆₀][S ₈] ₂ ,mS304,15	$C12/c1$	2.0867,2.1062,1.0508,90,111.25,90	fullerene family	-	1.90	X	26998
C-S	[C ₇₀] ₄₈	[C ₇₀] ₄₈ ,oS568,38	$Amm2$	3.7953,2.0241,1.0226,90,90,90	fullerene family	black	2.01	X	27171
C-S	[C ₇₆] ₄₈	[C ₇₆] ₄₈ ,mS704,8	$C1m1$	1.0410,2.0500,1.9480,90,98.8,90	fullerene family	black	1.98	X	28444
C-Sc	ScC rt	NaCl,cF8,225	$Fm-3m$	0.45615,0.45615,0.45615,90,90,90	rocksalt family	-	3.99	X	57377
C-Sc	ScC _{0.5}	NaCl,cF8,225	$Fm-3m$	0.4747,0.4747,0.4747,90,90,90	rocksalt family	-	3.16	X	57377
C-Sc	ScC _x orth	* _o P*,47	$Pmmm$	0.38846,0.93885,1.56487,90,90,90	-	-	-	N	57377
C-Sc	ScC _x rt	Mg,hP2,194	$P6_3/mmc$	0.31802,0.31802,0.49911,90,90,120	close-packed structure	-	3.42	X	55986
C-Sc	Sc ₁₃ C ₁₀ ht2 (Ge)	* _c I*,*	-	0.8514,0.8514,0.8514,90,90,90	-	-	-	N	4610
C-Sc	Sc ₁₅ C ₁₉	Sc ₁₅ C ₁₉ ,tP68,114	$P-42_1c$	0.7483,0.7483,1.496,90,90,90	-	-	3.58	A	16755
C-Sc	Sc ₂ C rt	Ti ₂ C,cF48,227	$Fd-3m$	0.944,0.944,0.944,90,90,90	-	-	3.22	X	3578
C-Sc	Sc ₂ C ₃	Pu ₂ C ₃ ,cI40,220	$I-43d$	0.7205,0.7205,0.7205,90,90,90	-	-	4.47	X	3578
C-Sc	Sc ₂ [C ₈₄]	* _h P*,194	$P6_3/mmc$	1.12,1.12,1.83,90,90,120	fullerene family	-	-	N	29267
C-Sc	Sc ₂ C ₄	Sc ₂ C ₄ ,tP70,128	$P4/mnc$	0.74873,0.74873,1.5026,90,90,90	-	gray light	3.61	X	24521
C-Sc	Sc ₄ C ₃ ht1	Th ₃ P ₄ ,cI28,220	$I-43d$	0.7207,0.7207,0.7207,90,90,90	-	-	3.83	X	4501
C-Se	Se ₂ C	[CS ₂],oS12,64	$Cmce$	0.67666,0.59513,0.88451,90,90,90	-	golden	3.17	X	15724
C-Si	SiC 105R	SiC,hR210,160	$R3m$	0.3078,0.3078,26.439,90,90,120	adamantane structure	-	3.22	X	2046
C-Si	SiC 10H	SiC,hP20,156	$P3m1$	0.3079,0.3079,2.5184,90,90,120	adamantane structure	-	3.22	X	352
C-Si	SiC 111R	SiC,hR222,160	$R3m$	0.3078,0.3078,27.95,90,90,120	adamantane structure	green light	3.22	X	1740
C-Si	SiC 120R	SiC,hR240,160	$R3m$	0.308,0.308,30.24,90,90,120	adamantane structure	-	3.22	X	3728
C-Si	SiC 126R	SiC,hR252,160	$R3m$	0.3078,0.3078,31.68,90,90,120	adamantane structure	-	3.23	X	10989
C-Si	SiC 141R	SiC,hR282,160	$R3m$	0.3079,0.3079,35.5049,90,90,120	adamantane structure	blue gray	3.22	X	607
C-Si	SiC 147R	SiC,hR294,160	$R3m$	0.3079,0.3079,37.03,90,90,120	adamantane structure	-	3.22	X	7689
C-Si	SiC 14H	SiC,hP28,156	$P3m1$	0.3079,0.3079,3.5252,90,90,120	adamantane structure	-	3.22	X	3100
C-Si	SiC 150R ₁	SiC-a,hR300,160	$R3m$	0.3079,0.3079,37.77,90,90,120	adamantane structure	-	3.22	X	12765
C-Si	SiC 150R ₂	SiC-b,hR300,160	$R3m$	0.3079,0.3079,37.77,90,90,120	adamantane structure	-	3.22	X	12765
C-Si	SiC 15R	SiC,hR30,160	$R3m$	0.308,0.308,3.7817,90,90,120	adamantane structure	green yellow	3.21	X	278
C-Si	SiC 174R	SiC,hR348,160	$R3m$	0.3078,0.3078,43.67,90,90,120	adamantane structure	black	3.23	X	1227
C-Si	SiC 189R	SiC,hR378,160	$R3m$	0.308,0.308,47.628,90,90,120	adamantane structure	black bluish	3.22	X	6975
C-Si	SiC 19H	SiC,hP38,156	$P3m1$	0.30792,0.30792,4.78495,90,90,120	adamantane structure	blue dark	3.22	X	483
C-Si	SiC 21H	SiC,hP42,156	$P3m1$	0.307,0.307,5.287,90,90,120	adamantane structure	green	3.24	X	16767
C-Si	SiC 21R	SiC,hR42,160	$R3m$	0.3079,0.3079,5.289,90,90,120	adamantane structure	-	3.22	X	232
C-Si	SiC 24R	SiC,hR48,160	$R3m$	0.3082,0.3082,6.049,90,90,120	adamantane structure	-	3.21	X	2383
C-Si	SiC 261R	SiC,hR522,160	$R3m$	0.308,0.308,65.76,90,90,120	adamantane structure	-	3.22	X	15019
C-Si	SiC 27H	SiC,hP54,156	$P3m1$	0.3079,0.3079,6.7996,90,90,120	adamantane structure	black bluish	3.22	X	1000
C-Si	SiC 27R	SiC,hR54,160	$R3m$	0.3079,0.3079,6.7996,90,90,120	adamantane structure	-	3.22	X	398
C-Si	SiC 2H	ZnO,hP4,186	$P6_3/mc$	0.3079,0.3079,0.5053,90,90,120	adamantane structure	black	3.21	X	12613
C-Si	SiC 33R	SiC,hR66,160	$R3m$	0.3076,0.3076,8.312,90,90,120	adamantane structure	blue greenish	3.23	X	48640
C-Si	SiC 36H	SiC,hP72,156	$P3m1$	0.3078,0.3078,9.065,90,90,120	adamantane structure	-	3.22	X	1848
C-Si	SiC 393R	SiC,hR786,160	$R3m$	0.308,0.308,99.90,90,120	adamantane structure	-	3.22	X	16722
C-Si	SiC 3C	ZnS,cF8,216	$F-43m$	0.43588,0.43588,0.43588,90,90,90	adamantane structure	black	3.22	X	11631
C-Si	SiC 411R	SiC,hR822,160	$R3m$	0.308,0.308,103.5,90,90,120	adamantane structure	-	3.22	X	16722
C-Si	SiC 45R ₁	SiC-a,hR90,160	$R3m$	0.3079,0.3079,11.331,90,90,120	adamantane structure	-	3.22	X	6736
C-Si	SiC 45R ₆	SiC-b,hR90,160	$R3m$	0.308,0.308,11.34,90,90,120	adamantane structure	-	3.22	X	14652
C-Si	SiC 4H	SiC,hP8,186	$P6_3/mc$	0.30799,0.30799,1.00822,90,90,120	adamantane structure	black	3.22	X	54107
C-Si	SiC 519R	SiC,hR1038,160	$R3m$	0.308,0.308,130.5,90,90,120	adamantane structure	-	3.22	X	16722
C-Si	SiC 51R ₁	SiC-a,hR102,160	$R3m$	0.3079,0.3079,12.8437,90,90,120	adamantane structure	-	3.22	X	256
C-Si	SiC 51R ₂	SiC-b,hR102,160	$R3m$	0.3079,0.3079,12.8437,90,90,120	adamantane structure	black	3.22	X	398
C-Si	SiC 51R ₃	SiC-c,hR102,160	$R3m$	0.308,0.308,12.844,90,90,120	adamantane structure	-	3.22	X	25321
C-Si	SiC 57R	SiC,hR114,160	$R3m$	0.3078,0.3078,14.3526,90,90,120	adamantane structure	green light	3.22	X	1548
C-Si	SiC 69R ₁	SiC-a,hR138,160	$R3m$	0.30806,0.30806,17.385,90,90,120	adamantane structure	-	3.22	X	2320
C-Si	SiC 69R ₂	SiC-b,hR138,160	$R3m$	0.3077,0.3077,17.375,90,90,120	adamantane structure	-	3.22	X	4888
C-Si	SiC 6H	SiC,hP12,186	$P6_3/mc$	0.3081,0.3081,1.51248,90,90,120	moissanite	colorless	3.21	X	48987
C-Si	SiC 75R	SiC,hR150,160	$R3m$	0.3079,0.3079,18.8878,90,90,120	adamantane structure	-	3.22	X	398
C-Si	SiC 84R	SiC,hR168,160	$R3m$	0.3079,0.3079,21.1543,90,90,120	adamantane structure	-	3.22	X	398
C-Si	SiC 87R	SiC,hR174,160	$R3m$	0.3079,0.3079,21.9099,90,90,120	adamantane structure	blue dark	3.22	X	256
C-Si	SiC 8H	SiC,hP16,186	$P6_3/mc$	0.3079,0.3079,2.0147,90,90,120	adamantane structure	yellow	3.22	X	398
C-Si	SiC 90R	SiC,hR180,160	$R3m$	0.3078,0.3078,22.66,90,90,120	adamantane structure	-	3.22	X	1940
C-Si	SiC 93R ₁	SiC-a,hR186,160	$R3m$	0.308,0.308,23.43,90,90,120	adamantane structure	-	3.22	X	15019
C-Si	SiC 93R ₂	SiC-b,hR186,160	$R3m$	0.307,0.307,23.417,90,90,120	adamantane structure	green	3.24	X	16767
C-Si	SiC 96R	SiC,hR192,160	$R3m$	0.3079,0.3079,24.183,90,90,120	adamantane structure	-	3.22	X	3108
C-Si	SiC 9H	SiC,hP18,156	$P3m1$	0.3079,0.3079,2.2662,90,90,120	adamantane structure	-	3.22	X	5911
C-Si	SiC hp	NaCl,cF8,225	$Fm-3m$	0.3684,0.3684,0.3684,90,90,90	rocksalt family	-	5.33	X	27914
C-Si	Si _{1.25} C _{0.75}	FeSi,cP8,198	$P2_13$	0.4523,0.4523,0.4523,90,90,90	-	-	3.17	X	30125
C-Sm	SmC _{0.33} ht	NaCl,cF8,225	$Fm-3m$	0.5172,0.5172,0.5172,90,90,90	rocksalt family	-	7.41	X	943
C-Sm	SmC ₂ rt	CaC ₂ ,tI6,139	$I4/mmm$	0.3761,0.3761,0.6317,90,90,90	-	-	6.48	A	27373

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
C-Sm	SmC ₆	LiC ₆ ,hP7,191	<i>P6/mmm</i>	0.431,0.431,0.494,90,90,120	GIC	-	4.65	A	8787
C-Sm	Sm ₂ C ₃	Pu ₂ C ₃ ,cI40,220	<i>I-43d</i>	0.8425,0.8425,0.8425,90,90,90	-	-	7.48	A	27373
C-Sm	Sm _{2.75} [C ₆₀] cub	Eu _{2.82} [C ₆₀],cP344,205	<i>Pa-3</i>	2.82,2.82,2.82,90,90,90	fullerene family	-	2.69	X	38433
C-Sm	Sm _{2.75} [C ₆₀] orth	Yb _{2.75} [C ₆₀],oP144,61	<i>Pbca</i>	2.81609,2.8235,2.8197,90,90,90	fullerene family	-	2.69	X	37799
C-Sm	Sm ₃ [C ₆₀] cub	Sm ₃ [C ₆₀],cP8,200	<i>Pm-3</i>	1.112,1.112,1.112,90,90,90	fullerene family	-	2.83	X	38433
C-Sm	Sm ₃ [C ₆₀] orth	Yb _{2.75} [C ₆₀],oP144,61	<i>Pbca</i>	2.807,2.817,2.827,90,90,90	fullerene family	-	2.79	A	30945
C-Sm	Sm ₃ [C ₇₀] hp	Eu ₃ [C ₇₀],aP10,1	<i>P1</i>	0.9723,1.0592,1.4408,96.205,90,90	fullerene family	-	2.91	X	42936
C-Sm	Sm ₃ [C ₇₀]	Sm ₃ [C ₇₀],mP10,3	<i>P121</i>	1.093,1.009,1.488,90,96,16,90	fullerene family	-	2.63	X	37588
C-Sm	Sm ₆ [C ₆₀]	Cs ₆ [C ₆₀],cI132,204	<i>Im-3</i>	1.089,1.089,1.089,90,90,90	fullerene family	-	4.17	X	36745
C-Sn	SnC ₆₀	*,cF*,*	-	1.4242,1.4242,1.4242,90,90,90	-	-	-	N	26629
C-Sn	Sn ₄ [C ₆₀]	*,tI*,141	<i>I4₁/amd</i>	0.5778,0.5778,0.3194,90,90,90	fullerene family	-	-	N	47222
C-Sr	SrC ₂ ht	NaCl,cF8,225	<i>Fm-3m</i>	0.62134,0.62134,0.62134,90,90,90	rocksalt family	gray faint	3.09	X	37959
C-Sr	SrC ₂ lt	ThC ₂ ,mS12,15	<i>C12/c1</i>	0.70455,0.44681,0.76836,90,107.22,90	-	gray faint	3.21	X	37959
C-Sr	SrC ₂ rt	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.41157,0.41157,0.6741,90,90,90	-	colorless	3.25	X	36921
C-Sr	SrC ₆	BaC ₆ ,hP14,194	<i>P6₃/mmc</i>	0.4316,0.4316,0.988,90,90,120	GIC	yellow	3.33	A	8787
C-Sr	Sr _{2.08} [C ₆₀]	Sr _{2.08} [C ₆₀],cF280,202	<i>Fm-3</i>	1.4144,1.4144,1.4144,90,90,90	fullerene family	-	2.12	X	28510
C-Sr	Sr ₃ [C ₆₀]	Sr ₃ [C ₆₀],cP126,200	<i>Pm-3</i>	1.1140,1.1140,1.1140,90,90,90	fullerene family	-	2.36	X	28510
C-Sr	Sr ₆ [C ₆₀]	Cs ₆ [C ₆₀],cI132,204	<i>Im-3</i>	1.0975,1.0975,1.0975,90,90,90	fullerene family	-	3.13	X	28510
C-Ta	TaC	NaCl,cF8,225	<i>Fm-3m</i>	0.4453,0.4453,0.4453,90,90,90	tantalcarbide	black	14.52	X	52107
C-Ta	TaC _{0.5} ht	NiAs,hP4,194	<i>P6₃/mmc</i>	0.3116,0.3116,0.4886,90,90,120	AlB ₂ family	-	15.11	X	50010
C-Ta	Ta ₂ C rt	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.31059,0.31059,0.49464,90,90,120	CdI ₂ -PbI ₂ polytype	-	15.03	X	40163
C-Ta	Ta ₄ C _{2.67} rt	Ir ₃ Te ₄ ,hR21,166	<i>R-3m</i>	0.31216,0.31216,3.0058,90,90,120	-	-	14.85	X	50010
C-Tb	TbC _{0.33}	NaCl,cF8,225	<i>Fm-3m</i>	0.5107,0.5107,0.5107,90,90,90	rocksalt family	-	8.12	X	943
C-Tb	TbC ₂ ht	CaC ₂ ,cF36,225	<i>Fm-3m</i>	0.5691,0.5691,0.5691,90,90,90	-	-	6.59	A	3416
C-Tb	TbC ₂ rt	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.3678,0.3678,0.6206,90,90,90	-	brass	7.24	X	3510
C-Tb	Tb ₂ C	CdCl ₂ ,hR9,166	<i>R-3m</i>	0.3584,0.3584,1.804,90,90,120	-	gray	8.19	X	14131
C-Tb	Tb ₂ C ₃	Pu ₂ C ₃ ,cI40,220	<i>I-43d</i>	0.82526,0.82526,0.82526,90,90,90	-	-	8.36	X	1401
C-Tb	Tb ₄ C ₅	Y ₄ C ₅ ,oP18,55	<i>Pbam</i>	0.6608,1.1973,0.36871,90,90,90	-	-	7.92	X	33609
C-Te	TeC _{0.11}	Mg,hP2,194	-	0.29848,0.29848,0.4447,90,90,120	-	-	9.61	F	12763
C-Te	TeC _{0.21} cub2	Cu,cF4,225	-	0.39844,0.39844,0.39844,90,90,90	close-packed structure	-	-	F	12763
C-Th	ThC	NaCl,cF8,225	<i>Fm-3m</i>	0.53221,0.53221,0.53221,90,90,90	rocksalt family	-	10.75	X	19255
C-Th	ThC _{0.18} rt	Cu,cF4,225	<i>Fm-3m</i>	0.516,0.516,0.516,90,90,90	close-packed structure	-	11.32	F	976
C-Th	ThC _{0.91} ht2	NaCl,cF8,225	<i>Fm-3m</i>	0.5335,0.5335,0.5335,90,90,90	rocksalt family	-	10.63	X	3483
C-Th	ThC ₂ ht1	CoO,tI4,139	<i>I4/mmm</i>	0.4221,0.4221,0.5394,90,90,90	rocksalt family	-	8.85	X	3716
C-Th	ThC ₂ rt	ThC ₂ ,mS12,15	<i>C12/c1</i>	0.6684,0.4220,0.6735,90,103.91,90	-	-	9.22	X	20196
C-Th	Th ₂ C ₃ hp	Pu ₂ C ₃ ,cI40,220	<i>I-43d</i>	0.85527,0.85527,0.85527,90,90,90	-	-	10.62	A	5200
C-Ti	TiC hp	NiO,hR6,166	<i>R-3m</i>	0.29442,0.29442,0.73353,90,90,120	rocksalt family	-	5.42	X	36145
C-Ti	TiC rt	NaCl,cF8,225	<i>Fm-3m</i>	0.4328,0.4328,0.4328,90,90,90	khamrabaevite	black	4.91	X	11029
C-Ti	TiC _{0.016} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.2955,0.2955,0.4703,90,90,120	close-packed structure	-	4.49	F	516
C-Ti	TiC _{0.60} ht1	Zr _{0.65} S ₂ ,cF64,227	<i>Fd-3m</i>	0.8649,0.8649,0.8649,90,90,90	rocksalt family	-	4.53	A	60885
C-Ti	TiC ₂	TiC ₂ ,cP7,221	<i>Pm-3m</i>	0.313,0.313,0.313,90,90,90	-	-	3.89	X	1614
C-Ti	Ti _{0.96} C _{0.62} rt	Ti _{0.96} C _{0.62} ,hR12,160	<i>R3m</i>	0.306,0.306,1.491,90,90,120	rocksalt family	-	4.40	X	29991
C-Tm	TmC _{0.33}	NaCl,cF8,225	<i>Fm-3m</i>	0.5016,0.5016,0.5016,90,90,90	rocksalt family	-	9.10	X	943
C-Tm	TmC ₂ rt	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.3601,0.3601,0.6062,90,90,90	-	brass	8.15	X	5231
C-Tm	Tm ₂ C ₃ hp-ht	Pu ₂ C ₃ ,cI40,220	<i>I-43d</i>	0.80917,0.80917,0.80917,90,90,90	-	-	9.38	X	13488
C-Tm	Tm ₃ C ₄	Sc ₃ C ₄ ,iP70,128	<i>P4/mnc</i>	0.793,0.793,1.573,90,90,90	-	-	9.31	A	24521
C-Tm	Tm ₄ C ₇	Lu ₄ C ₇ ,mP22,14	<i>P12₁/c1</i>	0.365,1.3564,0.6361,90,104.36,90	-	-	8.27	A	32807
C-U	UC hp	*,oP*,*	-	0.3043,0.3518,0.473,90,90,90	-	-	-	N	18956
C-U	UC rt	NaCl,cF8,225	<i>Fm-3m</i>	0.49606,0.49606,0.49606,90,90,90	rocksalt family	gray dark	13.61	X	19261
C-U	UC _{0.1} m	Cu,cF4,225	<i>Fm-3m</i>	0.489,0.489,0.489,90,90,90	close-packed structure	-	13.59	F	7140
C-U	UC ₂ hp	*,hP12,*	-	0.5674,0.5674,0.4767,90,90,120	-	-	13.10	N	27286
C-U	UC ₂ ht1	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.3522,0.3522,0.5988,90,90,90	-	-	11.72	X	20196
C-U	UC ₂ ht2	NaCl,cF8,225	<i>Fm-3m</i>	0.5488,0.5488,0.5488,90,90,90	rocksalt family	-	10.53	X	2858
C-U	U ₂ C ₃ ht	Pu ₂ C ₃ ,cI40,220	<i>I-43d</i>	0.8089,0.8089,0.8089,90,90,90	-	-	12.85	X	5268
C-V	VC rt	NaCl,cF8,225	<i>Fm-3m</i>	0.41629,0.41629,0.41629,90,90,90	rocksalt family	black	5.80	X	52107
C-V	VC _{0.042}	W,cI2,229	<i>Im-3m</i>	0.3028,0.3028,0.3028,90,90,90	b.c.c. family	-	6.15	F	3021
C-V	VC _{0.5} ht	NiAs,hP4,194	<i>P6₃/mmc</i>	0.29043,0.29043,0.45793,90,90,120	AlB ₂ family	-	5.65	X	2431
C-V	VC _{0.67} rt	Sc _{0.67} Te,hR24,166	<i>R-3m</i>	0.2917,0.2917,2.783,90,90,120	-	-	5.73	X	4868
C-V	V ₂ C rt	Fe ₂ N _{0.94} ,oP12,60	<i>Pbcn</i>	0.4577,0.5742,0.5037,90,90,90	-	-	5.71	X	3122
C-V	V ₆ C ₅ rt	V ₆ C ₅ ,hP33,151	<i>P3₁12</i>	0.509,0.509,1.440,90,90,120	rocksalt family	-	5.64	X	4117
C-V	V ₈ C ₇ rt	V ₈ C ₇ ,cP60,213	<i>P4₃32</i>	0.83403,0.83403,0.83403,90,90,90	rocksalt family	-	5.63	X	34673
C-W	WC rt	WC,hP2,187	<i>P-6m2</i>	0.29017,0.29017,0.28486,90,90,120	qusongite	gray steel	15.66	X	52345
C-W	WC _{0.46} ht2	NiAs,hP4,194	<i>P6₃/mmc</i>	0.29947,0.29947,0.4728,90,90,120	AlB ₂ family	-	17.13	X	50076
C-W	WC _{0.82} ht	NaCl,cF8,225	<i>Fm-3m</i>	0.4215,0.4215,0.4215,90,90,90	rocksalt family	-	17.18	X	2584
C-W	WC _x	W,cI2,229	<i>Im-3m</i>	0.31649,0.31649,0.31649,90,90,90	b.c.c. family	-	19.26	X	7711
C-W	W ₂ C ht1	W ₂ C,hP11,162	<i>P-31m</i>	0.5188,0.5188,0.47273,90,90,120	-	-	17.17	X	50318
C-W	W ₂ C orth	Fe ₂ N _{0.94} ,oP12,60	<i>Pbcn</i>	0.4721,0.603,0.518,90,90,90	-	-	17.10	X	4150
C-W	W ₂ C trig	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.298,0.298,0.471,90,90,120	CdI ₂ -PbI ₂ polytype	-	17.41	X	1271
C-W	W ₃ C _{0.375} tf	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.5041,0.5041,0.5041,90,90,90	Frank-Kasper phase	-	14.42	X	17787
C-Xe	Xe _{0.55} [C ₆₀] rt	NaCl,cF8,225	<i>Fm-3m</i>	1.42398,1.42398,1.42398,90,90,90	fullerene family	-	1.82	X	33502
C-Xe	Xe _{0.66} [C ₆₀] lt	*,cP*,205	<i>Pa-3</i>	1.4164,1.4164,1.4164,90,90,90	fullerene family	-	1.89	N	33502
C-Xe	Xe _{0.90} [C ₇₀]	NaCl,cF8,225	<i>Fm-3m</i>	1.4999,1.4999,1.4999,90,90,90	fullerene family	-	1.89	X	34918
C-Y	YC _{0.44} ht	NaCl,cF8,225	<i>Fm-3m</i>	0.5115,0.5115,0.5115,90,90,90	rocksalt family	brass	4.68	X	4624
C-Y	YC ₂ rt	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.3663,0.3663,0.6171,90,90,90	-	golden	4.53	X	17076
C-Y	YC _x rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.3662,0.3662,0.5723,90,90,120	close-packed structure	-	4.44	X	2744
C-Y	Y[C ₈₂]	Y[C ₈₂],mP4,4	<i>P12₁1</i>	1.1265,1.1281,1.8355,90,107.624,90	fullerene family	-	1.60	X	30836
C-Y	Y ₂ C rt	CdCl ₂ ,hR9,166	<i>R-3m</i>	0.36248,0.36248,1.7964,90,90,120	-	brass	4.63	X	42360
C-Y	Y ₂ C ₃ hp-ht	Pu ₂ C ₃ ,cI40,220	<i>I-43d</i>	0.82372,0.82372,0.82372,90,90,90	-	-	5.08	X	46355

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
C-Y	Y ₃ C ₄ rt	Sc ₃ C ₄ ,tP70,128	<i>P4/mnc</i>	0.8049,0.8049,1.6037,90,90,90	-	-	5.03	A	24521
C-Y	Y ₄ C ₃ rt	Y ₄ C ₃ ,oP18,55	<i>Pbam</i>	0.65735,1.1918,0.36692,90,90,90	-	-	4.80	X	33609
C-Y	Y ₄ C ₇ ht	Lu ₄ C ₇ ,mP22,14	<i>P12₁/c1</i>	0.3726,1.3692,0.6527,90,103.04,90	-	-	4.50	X	34734
C-Y	Y ₄ C ₇ rt	Ho ₄ C ₇ ,mP44,14	<i>P12₁/c1</i>	0.37008,1.2589,1.3791,90,98.85,90	-	-	4.60	A	29703
C-Yb	YbC _{0.5} ht	NaCl,cF8,225	<i>Fm-3m</i>	0.5001,0.5001,0.5001,90,90,90	rocksalt family	-	9.51	X	5187
C-Yb	YbC _{0.5} rt	Sc _{0.685} S ₂ ,hR12,166	<i>R-3m</i>	0.35371,0.35371,1.74572,90,90,120	-	-	9.43	A	5187
C-Yb	YbC ₂ rt	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.363,0.363,0.6101,90,90,90	-	golden	8.14	X	5230
C-Yb	YbC ₆	BaC ₆ ,hP14,194	<i>P6₃/mmc</i>	0.432,0.432,0.9147,90,90,120	GIC	-	5.51	A	12993
C-Yb	Yb ₂ C ₃ hp-ht	Pu ₂ C ₃ ,cI40,220	<i>I-43d</i>	0.80723,0.80723,0.80723,90,90,90	-	-	9.65	X	13488
C-Yb	Yb _{2.75} [C ₆₀]	Yb _{2.75} [C ₆₀],oP144,61	<i>Pbca</i>	2.78733,2.79804,2.78743,90,90,90	fullerene family	-	2.92	X	30833
C-Yb	Yb ₃ C ₄	Sc ₃ C ₄ ,tP70,128	<i>P4/mnc</i>	0.79096,0.79096,1.5521,90,90,90	-	gray silver	9.70	A	24521
C-Yb	Yb ₃ [C ₇₀]	*,mP*,*	-	1.0897,0.9991,1.4774,90,96.072,90	fullerene family	-	-	N	42936
C-Zr	ZrC _{0.02}	NiAs,hP4,194	<i>P6₃/mmc</i>	0.32358,0.32358,0.5161,90,90,120	AlB ₂ family	-	6.49	X	7601
C-Zr	ZrC _{0.92}	NaCl,cF8,225	<i>Fm-3m</i>	0.4698,0.4698,0.4698,90,90,90	rocksalt family	-	6.55	X	22971
C-Zr	Zr ₂ C	Ti ₂ C,cF48,227	<i>Fd-3m</i>	0.93236,0.93236,0.93236,90,90,90	-	-	6.37	X	59221
Ca-Cd	CaCd	CsCl,cP2,221	<i>Pm-3m</i>	0.3839,0.3839,0.3839,90,90,90	b.c.c. family	-	4.48	X	6507
Ca-Cd	CaCd ₂ ht	KHg ₂ ,oI12,74	<i>Imma</i>	0.48863,0.7541,0.8513,90,90,90	AlB ₂ family	gray silver	5.61	X	54554
Ca-Cd	CaCd ₂ rt	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.59971,0.59971,0.9627,90,90,120	Friauf-Laves phase	gray silver	5.87	X	54554
Ca-Cd	CaCd ₆	Cd ₆ Yb,cI208,204	<i>Im-3</i>	1.5702,1.5702,1.5702,90,90,90	-	-	7.36	X	42954
Ca-Cd	Ca ₁₃ Cd ₇₆	Ca ₁₃ Cd ₇₆ ,cP792,205	<i>Pa-3</i>	2.53395,2.53395,2.53395,90,90,90	-	-	7.40	X	38766
Ca-Cd	Ca ₁₄ Cd ₅₁	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.3465,1.3465,0.9787,90,90,120	-	-	6.80	A	6507
Ca-Cd	Ca ₃ Cd ₂	Gd ₃ Al ₂ ,tP20,102	<i>P4₂/nm</i>	0.8864,0.8864,0.802,90,90,90	-	-	3.64	A	9779
Ca-Cl	CaCl ₂ hp1	Fe ₂ NO ₉₄ ,oP12,60	<i>Pbcn</i>	0.611,0.762,0.702,90,90,90	-	-	2.26	A	34909
Ca-Cl	CaCl ₂ hp2	SrI ₂ ,oP24,61	<i>Pbca</i>	0.6481,1.2661,0.6762,90,90,90	-	-	2.66	A	34909
Ca-Cl	CaCl ₂ hp3	EuI ₂ ,mP12,14	<i>P12₁/c1</i>	0.6411,0.6677,0.689,90,100.1,90	-	-	2.54	A	34909
Ca-Cl	CaCl ₂ hp4	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.7029,0.4172,0.8366,90,90,90	-	-	3.00	X	34909
Ca-Cl	CaCl ₂ ht	TiO ₂ ,tP6,136	<i>P4₂/nm</i>	0.63831,0.63831,0.42041,90,90,90	-	-	2.15	X	46430
Ca-Cl	CaCl ₂ rt	CaCl ₂ ,oP6,58	<i>Pnnm</i>	0.62877,0.64376,0.41782,90,90,90	-	-	2.18	X	46430
Ca-Cu	CaCu ht	CaCu,oP40,62	<i>Pnma</i>	3.880,0.4271,0.5894,90,90,90	CrB(TII)-FeB	-	3.52	X	13858
Ca-Cu	CaCu rt	CaCu,mP20,11	<i>P12₁/m1</i>	0.5880,0.4271,1.947,90,94.3,90	CrB(TII)-FeB	-	3.53	X	13858
Ca-Cu	CaCu ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5108,0.5108,0.4057,90,90,120	-	-	6.48	X	26577
Ca-Cu	Ca ₂ Cu	Ca ₂ Cu,oP12,62	<i>Pnma</i>	0.6126,0.4161,1.453,90,90,90	-	-	2.58	X	14741
Ca-D	CaD ₂ rt	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.59475,0.35933,0.68018,90,90,90	-	gray white	2.02	X	49560
Ca-F	CaF ₂ hp	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.6018,0.3614,0.7023,90,90,90	-	-	3.40	X	39515
Ca-F	CaF ₂ rt	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.54712,0.54712,0.54712,90,90,90	fluorite	colorless	3.17	X	31572
Ca-Ga	CaGa	TlI,oS8,63	<i>Cmcm</i>	0.4193,1.1447,0.43847,90,90,90	CrB(TII)-FeB	-	3.47	X	53390
Ca-Ga	CaGa ₂ ht	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.44296,0.44296,0.4074,90,90,120	AlB ₂ family	-	4.31	X	52890
Ca-Ga	CaGa ₂ rt	CaI ₂ ,hP6,194	<i>P6₃/mmc</i>	0.44627,0.44627,0.7364,90,90,120	AlB ₂ family	gray silver	4.69	X	50719
Ca-Ga	CaGa ₄	CaGa ₄ ,mS10,12	<i>C12/m1</i>	0.6181,0.6130,0.6117,90,118.94,90	BaAl ₄ family	-	5.22	X	22272
Ca-Ga	Ca _{0.96} Ga _{2.26}	Ca _{0.96} Ga _{2.26} ,hP9,191	<i>P6/mmm</i>	0.4319,0.4319,0.4329,90,90,120	-	-	4.66	X	22272
Ca-Ga	Ca ₁₁ Ga ₇	Ca ₁₁ Ga ₇ ,cF144,225	<i>Fm-3m</i>	1.6109,1.6109,1.6109,90,90,90	-	-	2.95	X	22893
Ca-Ga	Ca ₂₈ Ga ₁₁	Ca ₂₈ Ga ₁₁ ,oI78,44	<i>Imn2</i>	0.5324,6.1445,0.7488,90,90,90	-	-	2.56	X	18638
Ca-Ga	Ca ₃ Ga ₅	Ca ₃ Ga ₅ ,oS32,63	<i>Cmcm</i>	0.4463,1.0799,1.5025,90,90,90	-	-	4.30	X	19532
Ca-Ga	Ca ₃ Ga ₈	Eu ₃ Ga ₈ ,oI22,71	<i>Immm</i>	0.4323,0.4323,2.5843,90,90,90	-	-	4.66	A	21837
Ca-Ga	Ca ₃ Ga ₃	Cr ₃ B ₃ ,tI32,140	<i>I4/mcm</i>	0.7954,0.7954,1.5084,90,90,90	-	-	2.85	A	11481
Ca-Ge	CaGe	TlI,oS8,63	<i>Cmcm</i>	0.4575,1.0845,0.4001,90,90,90	CrB(TII)-FeB	gray silver	3.77	X	695
Ca-Ge	CaGe ₂ hex	(Li _{0.1} Ca _{0.9})(Li _{0.03} Ge _{0.97}) ₂ ,hP6,186	<i>P6₃/mc</i>	0.39966,0.39966,1.0211,90,90,120	-	-	4.36	X	49893
Ca-Ge	CaGe ₂ rhom	CaSi ₃ ,hR18,166	<i>R-3m</i>	0.39872,0.39872,3.0583,90,90,120	-	-	4.38	X	49893
Ca-Ge	CaGe ₃	YbSi ₃ ,tI32,139	<i>I4/mmm</i>	0.7692,0.7692,1.13314,90,90,90	-	-	5.11	X	59228
Ca-Ge	Ca ₂ Ge	Co ₂ Si ₂ ,oP12,62	<i>Pnma</i>	0.7734,0.4834,0.9069,90,90,90	-	-	2.99	X	693
Ca-Ge	Ca _{2.91} Ge _{0.09}	Ti ₂ C,cF48,227	<i>Fd-3m</i>	1.019,1.019,1.019,90,90,90	-	-	3.09	X	1984
Ca-Ge	Ca ₃ Ge ₃	Cr ₃ B ₃ ,tI32,140	<i>I4/mcm</i>	0.77156,0.77156,1.4885,90,90,90	-	-	3.13	X	39601
Ca-Ge	Ca ₇ Ge	CuPt ₇ ,cF32,225	<i>Fm-3m</i>	0.945,0.945,0.945,90,90,90	close-packed structure	-	2.78	X	1984
Ca-Ge	Ca ₇ Ge ₆ rt	Ca ₇ Sn ₆ ,oP52,62	<i>Pnma</i>	0.7375,2.2362,0.812,90,90,90	-	-	3.55	X	40834
Ca-H	CaH ₂ hp	Co _{1.75} Ge ₂ ,hP6,194	<i>P6₃/mmc</i>	0.3571,0.3571,0.4667,90,90,120	AlB ₂ family	-	2.71	X	50272
Ca-H	CaH ₂	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.59696,0.36022,0.68336,90,90,90	-	white light	1.90	X	55397
Ca-Hg	CaHg	CsCl,cP2,221	<i>Pm-3m</i>	0.3759,0.3759,0.3759,90,90,90	b.c.c. family	-	7.52	X	7336
Ca-Hg	CaHg ₁₁	BaHg ₁₁ ,cP36,221	<i>Pm-3m</i>	0.96,0.96,0.96,90,90,90	-	-	12.65	X	11273
Ca-Hg	CaHg ₂	Cd ₂ Ce,hP3,164	<i>P-3m1</i>	0.49,0.49,0.357,90,90,120	AlB ₂ family	-	9.87	A	27314
Ca-Hg	CaHg ₃	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.6635,0.6635,0.502,90,90,120	close-packed structure	-	11.14	X	7336
Ca-Hg	Ca _{10.9} Hg _{54.1}	Ca ₉ (Ca _{0.95} Hg _{0.05}) ₂ Hg ₅₄ ,hP65,174	<i>P-6</i>	1.3389,1.3389,0.9615,90,90,120	-	-	12.56	X	51361
Ca-Hg	Ca ₂ Hg	Co ₂ Si ₂ ,oP12,62	<i>Pnma</i>	0.786,0.489,0.987,90,90,90	-	-	4.92	A	7336
Ca-Hg	Ca ₃ Hg cub	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.492,0.492,0.492,90,90,90	close-packed structure	gray silver	4.47	X	24382
Ca-Hg	Ca ₃ Hg orth	Fe ₃ C ₃ ,bOP16,62	<i>Pnma</i>	0.8161,1.015,0.6828,90,90,90	-	-	3.77	A	7336
Ca-Hg	Ca ₃ Hg ₂	U ₃ Si ₂ ,tP10,127	<i>P4/mbm</i>	0.8476,0.8476,0.4197,90,90,90	-	-	5.74	A	7336
Ca-Hg	Ca ₄ Hg ₉	Cu ₉ Al ₄ ,cP52,215	<i>P-43m</i>	1.113,1.113,1.113,90,90,90	γ-brass	-	9.47	A	13706
Ca-Hg	Ca ₃ Hg ₃	Cr ₃ B ₃ ,tI32,140	<i>I4/mcm</i>	0.8189,0.8189,1.4701,90,90,90	-	gray silver	5.40	X	29537
Ca-I	CaI ₂	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.448,0.448,0.696,90,90,120	CdI ₂ -PbI ₂ polytype	white	4.03	X	63
Ca-In	CaIn	PuGa,tI16,139	<i>I4/mmm</i>	0.737,0.737,0.8401,90,90,90	b.c.c. family	gray silver	4.51	X	46660
Ca-In	CaIn ₂	CaIn ₂ ,hP6,194	<i>P6₃/mmc</i>	0.4892,0.4892,0.7739,90,90,120	AlB ₂ family	gray silver	5.58	X	46660
Ca-In	Ca ₂ In	Co ₂ Si ₂ ,oP12,62	<i>Pnma</i>	0.7275,0.5371,0.999,90,90,90	-	gray silver	3.32	X	45029
Ca-In	Ca ₈ In ₃	Ca ₈ In ₃ ,aP22,2	<i>P-1</i>	0.9606,0.9712,0.9782,99.01,101.15,119.60	-	-	2.97	X	20817
Ca-Ir	CaIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7545,0.7545,0.7545,90,90,90	Friauf-Laves phase	-	13.13	X	909
Ca-Ir	Ca ₃ Ir	Ca ₃ Ir,oP24,62	<i>Pnma</i>	0.7656,1.5917,0.6793,90,90,90	-	-	3.15	X	49562
Ca-Li	Li ₂ Ca cub	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.8856,0.8856,0.8856,90,90,90	Friauf-Laves phase	-	1.03	X	43139
Ca-Li	Li ₂ Ca hex	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.6268,0.6268,1.0219,90,90,120	Friauf-Laves phase	gray silver	1.03	X	27326
Ca-Mg	CaMg ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.62613,0.62613,1.0157,90,90,120	Friauf-Laves phase	gray silver	1.71	X	42218
Ca-Mn	Ca _{0.03} Mn _{0.97} rt	Mn,cI58,217	<i>I-43m</i>	0.895,0.895,0.895,90,90,90	-	-	7.32	X	7598

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Ca-N	Ca[N ₂]	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.35747,0.35747,0.59844,90,90,90	-	-	2.96	X	59171
Ca-N	Ca[N ₃] ₂	Sr[N ₃] ₂ ,oF56,70	<i>Fddd</i>	0.5954,1.1036,1.1331,90,90,90	-	colorless	2.21	X	43291
Ca-N	Ca ₁₁ N ₈	Ca ₁₁ N ₈ ,tP38,136	<i>P4₂/mnm</i>	1.445,1.445,0.360,90,90,90	-	red brown	2.44	X	4287
Ca-N	Ca ₂ N	CdCl ₂ ,hR9,166	<i>R-3m</i>	0.36271,0.36271,1.8972,90,90,120	-	red dark	2.17	X	38843
Ca-N	Ca ₃ N ₂ hp1	Sm ₂ O ₃ ,mS30,12	<i>C12/m1</i>	1.4095,0.3651,0.891,90,98.252,90	-	-	3.26	X	55764
Ca-N	Ca ₃ N ₂ hp2	Ni ₂ Al ₃ ,hP5,164	<i>P-3m1</i>	0.3938,0.3938,0.4921,90,90,120	-	-	3.73	X	55764
Ca-N	Ca ₃ N ₂ ht	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	1.14786,1.14786,1.14786,90,90,90	-	brown	2.60	X	40068
Ca-N	Ca ₃ N ₂ m orth	*,oP40,*	-	0.358,1.156,1.782,90,90,90	-	yellow	-	N	4142
Ca-N	Ca ₃ N ₂ m rhom	Al ₂ O ₃ ,hR30,167	<i>R-3c</i>	0.61988,0.61988,1.66296,90,90,120	-	-	2.67	X	52892
Ca-N	Ca ₄ N ₃	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.77212,0.77212,0.77212,90,90,90	-	red dark	2.92	X	57355
Ca-Ni	CaNi ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7251,0.7251,0.7251,90,90,90	Friauf-Laves phase	-	5.49	X	13404
Ca-Ni	CaNi ₃	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.50522,0.50522,2.4451,90,90,120	Laves-CaCu ₅	-	5.98	A	37673
Ca-Ni	CaNi ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.49735,0.49735,0.3958,90,90,120	-	-	6.53	X	34766
Ca-Ni	Ca ₂ Ni ₇	Gd ₂ Co ₇ ,hR54,166	<i>R-3m</i>	0.5009,0.5009,3.606,90,90,120	Laves-CaCu ₅	-	6.24	A	8147
Ca-O	CaO rt	NaCl,cF8,225	<i>Fm-3m</i>	0.48171,0.48171,0.48171,90,90,90	lime	colorless	3.33	X	57759
Ca-O	Ca[O ₂]	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.35426,0.35426,0.592,90,90,90	-	-	3.22	X	200
Ca-P	CaP ₃	CaP ₃ ,aP8,2	<i>P-1</i>	0.5590,0.5618,0.5665,69.96,79.49,74.78	-	black	2.75	X	7570
Ca-P	Ca ₂ P ₂	Na ₂ [O ₂] ₂ ,hP12,189	<i>P-62m</i>	0.7633,0.7633,0.5733,90,90,120	-	black	2.45	X	32721
Ca-P	Ca ₅ P ₄	Ca ₃ P ₈ ,mS26,12	<i>C12/m1</i>	0.6899,1.1883,0.7484,90,108.25,90	-	brown red	2.55	X	29506
Ca-Pb	CaPb	CuAu,tP2,123	<i>P4/mmm</i>	0.362,0.362,0.4491,90,90,90	close-packed structure	-	6.98	X	9766
Ca-Pb	CaPb ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.49,0.49,0.49,90,90,90	close-packed structure	-	9.34	X	7395
Ca-Pb	Ca ₂ Pb	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.8072,0.51,0.9647,90,90,90	-	-	4.81	X	1493
Ca-Pb	Ca ₃ Pb	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4853,0.4853,0.4853,90,90,90	close-packed structure	-	4.76	X	1984
Ca-Pb	Ca ₅ Pb ₃	Ca ₃ Pb ₃ ,hP48,186	<i>P6₃/mc</i>	1.623,1.623,0.704,90,90,120	-	-	5.10	X	1984
Ca-Pd	CaPd	CsCl,cP2,221	<i>Pm-3m</i>	0.3516,0.3516,0.3516,90,90,90	b.c.c. family	-	5.60	X	59904
Ca-Pd	CaPd ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7652,0.7652,0.7652,90,90,90	Friauf-Laves phase	-	7.50	X	15085
Ca-Pd	CaPd ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5147,0.5147,0.4224,90,90,120	-	-	9.80	X	23925
Ca-Pd	Ca ₃ Pd	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.7699,0.9937,0.6691,90,90,90	-	-	2.94	A	15085
Ca-Pd	Ca ₃ Pd ₂	Er ₃ Ni ₂ ,hR45,148	<i>R-3</i>	0.8939,0.8939,1.69,90,90,120	-	-	4.26	A	15085
Ca-Pd	Ca ₅ Pd ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.6694,0.6708,0.7704,90,97.3,90	-	-	3.21	A	15085
Ca-Po	CaPo	NaCl,cF8,225	<i>Fm-3m</i>	0.6514,0.6514,0.6514,90,90,90	rocksalt family	gray	5.99	X	1219
Ca-Pt	CaPt ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7629,0.7629,0.7629,90,90,90	Friauf-Laves phase	-	12.87	X	909
Ca-Pt	CaPt ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5322,0.5322,0.4368,90,90,120	-	-	15.74	X	1732
Ca-Pt	Ca ₃ Pt ₂	Er ₃ Ni ₂ ,hR45,148	<i>R-3</i>	0.8786,0.8786,1.6786,90,90,120	-	-	6.80	A	14095
Ca-Pt	Ca ₅ Pt ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.6154,0.6627,0.7662,90,97.47,90	-	-	4.82	A	14095
Ca-Pt	Ca ₄ Pt ₃	W ₅ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.1563,1.1563,0.5753,90,90,90	-	-	6.78	A	14095
Ca-Rh	CaRh ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7525,0.7525,0.7525,90,90,90	Friauf-Laves phase	-	7.67	X	909
Ca-Rh	Ca ₂ Rh	Ca ₃ Ir,oP24,62	<i>Pnma</i>	0.7569,1.6067,0.6725,90,90,90	-	-	2.46	A	49562
Ca-S	CaS	NaCl,cF8,225	<i>Fm-3m</i>	0.5647,0.5647,0.5647,90,90,90	oldhamite	gray	2.66	X	64010
Ca-Sb	CaSb ₂	CaSb ₂ ,mP6,11	<i>P12₁/m1</i>	0.4746,0.4177,0.89913,90,104.14,90	-	gray	5.45	X	10107
Ca-Sb	Ca ₁₁ Sb ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	<i>I4/mmm</i>	1.194,1.194,1.74,90,90,90	-	gray	4.44	X	10169
Ca-Sb	Ca ₁₆ Sb ₁₁	Ca ₁₆ Sb ₁₁ ,tP56,113	<i>P-42₁/m</i>	1.2253,1.2253,1.1313,90,90,90	-	-	3.87	X	33193
Ca-Sb	Ca ₂ Sb (O)	La ₂ Sb,tI12,139	<i>I4/mmm</i>	0.467,0.467,1.628,90,90,90	-	red	3.78	X	8512
Ca-Sb	Ca ₅ Sb ₃ (H)	Yb ₅ Sb ₃ ,oP32,62	<i>Pnma</i>	1.2502,0.9512,0.8287,90,90,90	-	black	3.81	X	7741
Ca-Sb	Ca ₂ Sb ₃ rt	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.90312,0.90312,0.70254,90,90,120	-	-	3.79	X	47173
Ca-Se	CaSe rt	NaCl,cF8,225	<i>Fm-3m</i>	0.5916,0.5916,0.5916,90,90,90	rocksalt family	gray	3.82	X	29360
Ca-Si	CaSi	TiI,oS8,63	<i>Cmcm</i>	0.45516,1.07002,0.38869,90,90,90	CrB(TiI)-FeB	gray silver	2.39	X	62724
Ca-Si	CaSi ₂ 3-lay	CaSi ₂ ,hR9,166	<i>R-3m</i>	0.38295,0.38295,1.5904,90,90,120	-	gray	2.37	X	35516
Ca-Si	CaSi ₂ 6-lay	CaSi ₂ ,hR18,166	<i>R-3m</i>	0.38494,0.38494,3.0544,90,90,120	-	gray	2.45	X	38350
Ca-Si	CaSi ₂ hp-ht	ThSi ₂ ,tI12,141	<i>I4₁/amd</i>	0.4283,0.4283,1.353,90,90,90	-	brown red	2.58	X	15575
Ca-Si	CaSi ₂ hp1	EuGe ₂ ,hP3,164	<i>P-3m1</i>	0.37808,0.37808,0.45904,90,90,120	AlB ₂ family	-	2.81	X	38350
Ca-Si	CaSi ₂ hp2	EuGe ₂ ,hP3,164	<i>P-3m1</i>	0.37112,0.37112,0.40391,90,90,120	-	-	3.32	X	38350
Ca-Si	CaSi ₃	YbSi ₃ ,tI32,139	<i>I4/mmm</i>	0.72676,0.72676,1.13501,90,90,90	-	-	2.76	X	59325
Ca-Si	Ca ₁₄ Si ₁₉ ht	Ca ₁₄ Si ₁₉ ,hR198,167	<i>R-3c</i>	0.86785,0.86785,6.8528,90,90,120	-	gray	2.44	X	32586
Ca-Si	Ca ₂ Si	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.7691,0.48174,0.90477,90,90,90	-	gray silver	2.14	X	49148
Ca-Si	Ca ₃ Si ₄ rt	Ca ₃ Si ₄ ,hP42,176	<i>P6₃/m</i>	0.8541,0.8541,1.4906,90,90,120	-	-	2.46	X	37474
Ca-Si	Ca ₂ Si ₃	Cr ₂ B ₃ ,tI32,140	<i>I4/mcm</i>	0.76495,0.76495,1.4835,90,90,90	-	-	2.18	X	39601
Ca-Sn	CaSn	TiI,oS8,63	<i>Cmcm</i>	0.4821,1.152,0.4349,90,90,90	CrB(TiI)-FeB	gray white	4.37	X	695
Ca-Sn	CaSn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4741,0.4741,0.4741,90,90,90	close-packed structure	-	6.17	X	37755
Ca-Sn	Ca _{0.15} Sn _{0.85} m	(Hg _{0.15} Sn _{0.85}),hP1,191	<i>P6/mmm</i>	0.3151,0.3151,0.2994,90,90,120	-	-	6.90	X	2908
Ca-Sn	Ca ₂ Sn	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.7992,0.5037,0.9554,90,90,90	-	-	3.43	A	37755
Ca-Sn	Ca ₃₁ Sn ₂₀	Pu ₃₁ Pt ₂₀ ,tI204,140	<i>I4/mcm</i>	1.25267,1.25267,3.9912,90,90,90	-	black	3.84	X	27201
Ca-Sn	Ca ₃₆ Sn ₂₃	Yb ₃₆ Sn ₂₃ ,tP118,127	<i>P4/mbm</i>	1.2499,1.2499,2.2883,90,90,90	-	-	3.88	X	37755
Ca-Sn	Ca ₂ Sn ₃	Cr ₂ B ₃ ,tI32,140	<i>I4/mcm</i>	0.8117,0.8117,1.5429,90,90,90	-	-	3.64	A	37755
Ca-Sn	Ca ₇ Sn ₆	Ca ₇ Sn ₆ ,oP52,62	<i>Pnma</i>	0.7867,2.3818,0.8465,90,90,90	-	-	4.16	X	37755
Ca-Sr	Sr _{0.5} Ca _{0.5} ht	W,cI2,229	<i>Im-3m</i>	0.475,0.475,0.475,90,90,90	b.c.c. family	-	1.98	X	956
Ca-Sr	Sr _{0.5} Ca _{0.5} rt	Cu,cF4,225	<i>Fm-3m</i>	0.586,0.586,0.586,90,90,90	close-packed structure	-	2.11	X	956
Ca-Sr	Sr _{0.5} Ca _{0.5} stab	Mg,hP2,194	<i>P6₃/mmc</i>	0.416,0.416,0.679,90,90,120	close-packed structure	-	2.08	X	956
Ca-Te	CaTe hp	CsCl,cP2,221	<i>Pm-3m</i>	0.3388,0.3388,0.3388,90,90,90	b.c.c. family	-	7.16	X	18242
Ca-Te	CaTe	NaCl,cF8,225	<i>Fm-3m</i>	0.6348,0.6348,0.6348,90,90,90	rocksalt family	black	4.35	X	29360
Ca-Tl	CaTl	CsCl,cP2,221	<i>Pm-3m</i>	0.3855,0.3855,0.3855,90,90,90	b.c.c. family	-	7.09	X	2919
Ca-Tl	CaTl ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4803,0.4803,0.4803,90,90,90	close-packed structure	-	9.79	X	2919
Ca-Tl	Ca ₃ Tl	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.785,0.785,0.785,90,90,90	fluorite family	-	4.46	X	2919
Ca-Tl	Ca ₃ Tl ₅	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	1.0231,0.8362,1.0623,90,90,90	-	-	8.35	X	54397
Ca-Zn	CaZn	TiI,oS8,63	<i>Cmcm</i>	0.4202,1.161,0.4442,90,90,90	CrB(TiI)-FeB	-	3.23	X	14096
Ca-Zn	CaZn ₁₁	BaCd ₁₁ ,tI48,141	<i>I4₁/amd</i>	1.06811,1.06811,0.68281,90,90,90	-	gray silver	6.47	X	50712
Ca-Zn	CaZn ₁₃	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.21543,1.21543,1.21543,90,90,90	-	-	6.59	X	47602
Ca-Zn	CaZn ₂ hp	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.56363,0.56363,0.8994,90,90,120	Friauf-Laves phase	-	4.59	X	51938

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ca-Zn	CaZn ₂ rt	KHg ₂ ,oI12,74	<i>Imma</i>	0.4585,0.73662,0.76653,90,90,90	AlB ₂ family	gray silver	4.38	X	51872
Ca-Zn	CaZn ₃	CaCu ₃ ,hP6,191	<i>P6/mmm</i>	0.53899,0.53899,0.42456,90,90,120	-	gray silver	5.71	X	50712
Ca-Zn	Ca ₃ Zn	Re ₃ B ₂ ,oS16,63	<i>Cmcm</i>	0.415,1.3258,1.0186,90,90,90	-	-	2.20	X	14096
Ca-Zn	Ca _{3.33} Zn _{10.11}	Ca _{3.33} Zn _{10.11} ,hP32,194	<i>P6₃/mmc</i>	0.9168,0.9168,0.7327,90,90,120	-	-	4.95	X	12820
Ca-Zn	Ca ₅ Zn ₃	Cr ₃ B ₂ ,tI32,140	<i>I4/mcm</i>	0.7962,0.7962,1.54,90,90,90	-	gray silver	2.70	X	27387
Cd-Ce	CdCe lt1	CuTi ₂ P2,123	<i>P4/mmm</i>	0.382,0.382,0.389,90,90,90	b.c.c. family	-	7.39	X	21411
Cd-Ce	CdCe rt	CsCl ₂ P2,221	<i>Pm-3m</i>	0.3855,0.3855,0.3855,90,90,90	b.c.c. family	-	7.32	X	21411
Cd-Ce	Cd ₁₁ Ce	BaHg ₁₁ ,cP36,221	<i>Pm-3m</i>	0.93228,0.93228,0.93228,90,90,90	-	-	8.46	X	56006
Cd-Ce	Cd ₁₇ Ce ₂ ht	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	1.0012,1.0012,0.9815,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	8.54	A	18135
Cd-Ce	Cd ₂ Ce	Cd ₂ Ce,hP3,164	<i>P-3m1</i>	0.5073,0.5073,0.3450,90,90,120	AlB ₂ family	-	7.88	X	595
Cd-Ce	Cd ₃ Ce	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.7223,0.7223,0.7223,90,90,90	fluorite family	-	8.41	X	22219
Cd-Ce	Cd ₃₇ Ce ₆	Cd ₃₇ Ce ₆ ,cP188,201	<i>Pn-3</i>	1.5808,1.5808,1.5808,90,90,90	-	gray silver	8.41	X	37715
Cd-Ce	Cd ₅₈ Ce ₁₃	Zn ₅₈ Gd ₁₃ ,hP142,194	<i>P6₃/mmc</i>	1.577,1.577,1.557,90,90,120	-	-	8.26	X	7323
Cd-Ce	Cd _{58.68} Ce _{12.60}	Cd _{58.68} Ce _{12.60} ,oS368,63	<i>Cmcm</i>	1.57592,2.72789,1.55816,90,90,90	-	-	8.29	X	51349
Cd-Cl	CdCl ₂	CdCl ₂ ,hR9,166	<i>R-3m</i>	0.38459,0.38459,1.74931,90,90,120	-	colorless	4.08	X	24980
Cd-Cs	CsCd ₁₃	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.392,1.392,1.392,90,90,90	-	-	7.85	X	47602
Cd-Cu	Cu _{0.975} Cd _{0.025}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3632,0.3632,0.3632,90,90,90	close-packed structure	-	8.98	X	16346
Cd-Cu	Cu _{1.5} Cd ₅	Co ₂ Al ₅ ,hP28,194	<i>P6₃/mmc</i>	0.8118,0.8118,0.8751,90,90,120	-	-	8.74	X	15551
Cd-Cu	Cu ₁₆₀ Cd ₁₂₁	Cu ₁₃₆ (Cu _{0.5} Cd _{0.5}) ₄₈ Cd ₉₇ ,cF1124,216	<i>F-43m</i>	2.5871,2.5871,2.5871,90,90,90	-	-	9.12	X	3292
Cd-Cu	Cu ₂ Cd	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.496,0.496,0.799,90,90,120	Friauf-Laves phase	-	9.35	X	423
Cd-Cu	Cu ₅ Cd ₈	Cu ₂ Zn ₈ ,cI52,217	<i>I-43m</i>	0.9615,0.9615,0.9615,90,90,90	γ-brass	-	9.09	X	7757
Cd-Dy	CdDy rt	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3714,0.3714,0.3714,90,90,90	b.c.c. family	gray silver	8.91	X	18393
Cd-Dy	Cd ₂ Dy	Cd ₂ Ce,hP3,164	<i>P-3m1</i>	0.491,0.491,0.3442,90,90,120	AlB ₂ family	-	8.95	X	3993
Cd-Dy	Cd ₃ Dy	Cd ₃ Er,oS16,63	<i>Cmcm</i>	0.7052,1.0828,0.4833,90,90,90	close-packed structure	-	8.99	X	7323
Cd-Dy	Cd ₄₅ Dy ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	<i>F-43m</i>	2.1512,2.1512,2.1512,90,90,90	Nasicon family	-	9.14	A	7323
Cd-Dy	Cd ₆ Dy	Cd ₆ Y,cI184,204	<i>Im-3</i>	1.5491,1.5491,1.5491,90,90,90	-	-	8.97	X	59903
Cd-Er	CdEr	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3681,0.3681,0.3681,90,90,90	b.c.c. family	gray silver	9.31	X	8151
Cd-Er	Cd ₂ Er	Cd ₂ Ce,hP3,164	<i>P-3m1</i>	0.4856,0.4856,0.3425,90,90,120	AlB ₂ family	-	9.31	X	2977
Cd-Er	Cd ₃ Er	Cd ₃ Er,oS16,63	<i>Cmcm</i>	0.7094,1.0678,0.4804,90,90,90	close-packed structure	-	9.21	X	6316
Cd-Er	Cd ₄₅ Er ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	<i>F-43m</i>	2.145,2.145,2.145,90,90,90	Nasicon family	-	9.29	A	7323
Cd-Er	Cd ₆ Er	Cd ₆ Y,cI184,204	<i>Im-3</i>	1.5399,1.5399,1.5399,90,90,90	-	-	9.19	X	48737
Cd-Eu	Cd _{0.9} Eu _{1.1}	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3955,0.3955,0.3955,90,90,90	b.c.c. family	gray silver	7.20	X	10741
Cd-Eu	Cd ₁₁ Eu	BaCd ₁₁ ,tI48,141	<i>I4₁/amd</i>	1.191,1.191,0.765,90,90,90	-	-	8.50	X	2790
Cd-Eu	Cd ₂ Eu	KHg ₂ ,oI12,74	<i>Imma</i>	0.5053,0.792,0.8447,90,90,90	AlB ₂ family	-	7.40	X	2790
Cd-Eu	Cd ₂₅ Eu ₄	Cd ₂₅ Eu ₄ ,cF1456,203	<i>Fd-3</i>	3.18718,3.18718,3.18718,90,90,90	-	-	8.42	X	43569
Cd-Eu	Cd ₅₁ Eu ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.361,1.361,0.983,90,90,120	-	-	8.28	A	5900
Cd-Eu	Cd ₅₈ Eu ₁₃	Zn ₅₈ Gd ₁₃ ,hP142,194	<i>P6₃/mmc</i>	1.597,1.597,1.585,90,90,120	-	-	8.06	X	7323
Cd-F	CdF ₂ hp1	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.553,0.3444,0.6722,90,90,90	-	-	7.80	X	58181
Cd-F	CdF ₂	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.5393,0.5393,0.5393,90,90,90	fluorite family	-	6.37	X	44456
Cd-Gd	CdGd rt	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.375,0.375,0.375,90,90,90	b.c.c. family	-	8.49	X	20119
Cd-Gd	CdGd ₃	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.29792,0.29792,0.5613,90,90,120	close-packed structure	-	8.65	X	63827
Cd-Gd	Cd _{0.03} Gd _{0.97} rt	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.3642,0.3642,0.57602,90,90,120	close-packed structure	-	7.83	X	63827
Cd-Gd	Cd _{0.15} Gd _{0.85} ht	W ₂ cI2,229	<i>Im-3m</i>	0.3965,0.3965,0.3965,90,90,90	b.c.c. family	-	8.02	X	5897
Cd-Gd	Cd ₂ Gd rt	Cd ₂ Ce,hP3,164	<i>P-3m1</i>	0.4942,0.4942,0.3469,90,90,120	AlB ₂ family	-	8.65	X	3993
Cd-Gd	Cd ₃ Gd	Mg ₂ Cd,hP8,194	<i>P6₃/mmc</i>	0.6621,0.6621,0.4933,90,90,120	close-packed structure	-	8.77	X	5897
Cd-Gd	Cd ₄₅ Gd ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	<i>F-43m</i>	2.15964,2.15964,2.15964,90,90,90	Nasicon family	-	8.95	A	63827
Cd-Gd	Cd ₅₈ Gd ₁₃	Zn ₅₈ Gd ₁₃ ,hP142,194	<i>P6₃/mmc</i>	1.54,1.54,1.528,90,90,120	-	-	9.06	X	5897
Cd-Gd	Cd ₆ Gd	Cd ₆ Y,cI184,204	<i>Im-3</i>	1.5441,1.5441,1.5441,90,90,90	-	-	9.00	X	42954
Cd-Hf	CdHf	CdTi ₂ tP4,129	<i>P4/nmm</i>	0.312,0.312,0.867,90,90,90	close-packed structure	-	11.45	A	2791
Cd-Hf	CdHf ₂	CuZr ₂ tI6,139	<i>I4/nmm</i>	0.328,0.328,1.199,90,90,90	close-packed structure	-	12.09	A	2791
Cd-Hg	CdHg ₂ lt	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3965,0.3965,0.8607,90,90,90	b.c.c. family	-	12.61	X	2907
Cd-Hg	Cd _{0.55} Hg _{0.45} rt	Pa,tI2,139	<i>I4/mmm</i>	0.3928,0.3928,0.2884,90,90,90	b.c.c. family	-	11.35	X	12306
Cd-Hg	Cd _{0.863} Hg _{0.137}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.29732,0.29732,0.56635,90,90,120	close-packed structure	-	9.54	X	6811
Cd-Hg	Cd ₂ Hg lt	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3915,0.3915,0.86355,90,90,90	b.c.c. family	-	10.67	X	12306
Cd-Ho	CdHo	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3701,0.3701,0.3701,90,90,90	b.c.c. family	gray silver	9.08	X	8151
Cd-Ho	Cd ₂ Ho	Cd ₂ Ce,hP3,164	<i>P-3m1</i>	0.4895,0.4895,0.3433,90,90,120	AlB ₂ family	-	9.09	A	2977
Cd-Ho	Cd ₃ Ho	Cd ₃ Er,oS16,63	<i>Cmcm</i>	0.7077,1.0765,0.4818,90,90,90	close-packed structure	-	9.09	X	7323
Cd-Ho	Cd ₄₅ Ho ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	<i>F-43m</i>	2.1478,2.1478,2.1478,90,90,90	Nasicon family	-	9.22	A	7323
Cd-Ho	Cd ₆ Ho	Cd ₆ Y,cI184,204	<i>Im-3</i>	1.5332,1.5332,1.5332,90,90,90	-	-	9.28	X	48737
Cd-I	CdI ₂ 102R ₁	CdI ₂ -a,hR153,160	<i>R3m</i>	0.424,0.424,34.8585,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 102R ₂	CdI ₂ -b,hR153,160	<i>R3m</i>	0.424,0.424,34.8585,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 108R ₁	CdI ₂ -a,hR162,160	<i>R3m</i>	0.424,0.424,36.909,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 108R ₂	CdI ₂ -b,hR162,160	<i>R3m</i>	0.424,0.424,36.909,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 10H ₁	CdI ₂ -a,hP15,156	<i>P3m1</i>	0.424,0.424,3.4175,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	806
Cd-I	CdI ₂ 10H ₂	CdI ₂ -b,hP15,164	<i>P-3m1</i>	0.424,0.424,3.418,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9310
Cd-I	CdI ₂ 10H ₃	CdI ₂ -d,hP15,156	<i>P3m1</i>	0.424,0.424,3.4175,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 10H ₄	PbI ₂ -a,hP15,156	<i>P3m1</i>	0.424,0.424,3.4175,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 10H ₅	CdI ₂ -e,hP15,164	<i>P-3m1</i>	0.424,0.424,3.4175,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 10H ₆	CdI ₂ -f,hP15,156	<i>P3m1</i>	0.424,0.424,3.4175,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 120R ₁	CdI ₂ -a,hR180,160	<i>R3m</i>	0.424,0.424,41.01,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 120R ₂	CdI ₂ -b,hR180,160	<i>R3m</i>	0.424,0.424,41.01,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 12H ₁	CdI ₂ -a,hP18,156	<i>P3m1</i>	0.424,0.424,4.101,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	806
Cd-I	CdI ₂ 12H ₁₀	CdI ₂ -j,hP18,156	<i>P3m1</i>	0.424,0.424,4.101,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 12H ₂	CdI ₂ -b,hP18,156	<i>P3m1</i>	0.424,0.424,4.101,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	806
Cd-I	CdI ₂ 12H ₃	CdI ₂ -c,hP18,156	<i>P3m1</i>	0.424,0.424,4.101,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	806
Cd-I	CdI ₂ 12H ₄	CdI ₂ -d,hP18,156	<i>P3m1</i>	0.424,0.424,4.101,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	6220
Cd-I	CdI ₂ 12H ₅	CdI ₂ -a,hP18,164	<i>P-3m1</i>	0.424,0.424,4.101,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	6220
Cd-I	CdI ₂ 12H ₆	CdI ₂ -b,hP18,164	<i>P-3m1</i>	0.424,0.424,4.101,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	8498

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Cd-I	CdI ₂ 12H ₇	CdI ₂ -g,hP18,156	<i>P3m1</i>	0.424,0.424,4.101,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 12H ₈	CdI ₂ -h,hP18,156	<i>P3m1</i>	0.424,0.424,4.101,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 12H ₉	CdI ₂ -c,hP18,164	<i>P-3m1</i>	0.424,0.424,4.1004,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 12R	PbI ₂ ,hR18,166	<i>R-3m</i>	0.424,0.424,4.101,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	3772
Cd-I	CdI ₂ 14H ₁	CdI ₂ -a,hP21,156	<i>P3m1</i>	0.424,0.424,4.7845,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	806
Cd-I	CdI ₂ 14H ₂	CdI ₂ -b,hP21,156	<i>P3m1</i>	0.424,0.424,4.7845,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	5563
Cd-I	CdI ₂ 14H ₃	CdI ₂ -c,hP21,156	<i>P3m1</i>	0.424,0.424,4.786,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	8498
Cd-I	CdI ₂ 14H ₄	CdI ₂ -d,hP21,156	<i>P3m1</i>	0.424,0.424,4.785,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9310
Cd-I	CdI ₂ 14H ₅	CdI ₂ -e,hP21,156	<i>P3m1</i>	0.424,0.424,4.785,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11103
Cd-I	CdI ₂ 14H ₆	PbI ₂ ,hP21,156	<i>P3m1</i>	0.424,0.424,4.785,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	14792
Cd-I	CdI ₂ 14H ₇	CdI ₂ -g,hP21,156	<i>P3m1</i>	0.424,0.424,4.7845,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 14H ₈	CdI ₂ -h,hP21,156	<i>P3m1</i>	0.424,0.424,4.7845,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 14H ₉	CdI ₂ -i,hP21,156	<i>P3m1</i>	0.424,0.424,4.784,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	17482
Cd-I	CdI ₂ 16H ₁	CdI ₂ -a,hP24,156	<i>P3m1</i>	0.424,0.424,5.468,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	5563
Cd-I	CdI ₂ 16H ₁₀	CdI ₂ -j,hP24,156	<i>P3m1</i>	0.424,0.424,5.568,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.61	X	15698
Cd-I	CdI ₂ 16H ₁₁	CdI ₂ -k,hP24,156	<i>P3m1</i>	0.424,0.424,5.468,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 16H ₁₂	CdI ₂ -l,hP24,156	<i>P3m1</i>	0.424,0.424,5.468,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16697
Cd-I	CdI ₂ 16H ₂	CdI ₂ -b,hP24,156	<i>P3m1</i>	0.424,0.424,5.468,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	5563
Cd-I	CdI ₂ 16H ₃	CdI ₂ -c,hP24,156	<i>P3m1</i>	0.424,0.424,5.468,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	5563
Cd-I	CdI ₂ 16H ₄	CdI ₂ -d,hP24,156	<i>P3m1</i>	0.424,0.424,5.468,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	6987
Cd-I	CdI ₂ 16H ₅	CdI ₂ ,hP24,164	<i>P-3m1</i>	0.424,0.424,5.468,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	8498
Cd-I	CdI ₂ 16H ₆	CdI ₂ -f,hP24,156	<i>P3m1</i>	0.424,0.424,5.46,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	9309
Cd-I	CdI ₂ 16H ₇	CdI ₂ -g,hP24,156	<i>P3m1</i>	0.424,0.424,5.468,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9312
Cd-I	CdI ₂ 16H ₈	CdI ₂ ,hP24,186	<i>P6₃mc</i>	0.424,0.424,5.468,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11103
Cd-I	CdI ₂ 16H _{9b}	CdI ₂ -h,hP24,156	<i>P3m1</i>	0.424,0.424,5.468,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 16H ₉	CdI ₂ -i,hP24,156	<i>P3m1</i>	0.424,0.424,5.468,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	14793
Cd-I	CdI ₂ 18H ₁	CdI ₂ -a,hP27,156	<i>P3m1</i>	0.424,0.424,6.1515,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	4225
Cd-I	CdI ₂ 18H ₁₀	CdI ₂ -j,hP27,156	<i>P3m1</i>	0.424,0.424,6.1515,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 18H ₁₁	CdI ₂ -k,hP27,156	<i>P3m1</i>	0.424,0.424,6.1515,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 18H ₁₂	CdI ₂ -l,hP27,156	<i>P3m1</i>	0.424,0.424,6.1515,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 18H ₁₃	CdI ₂ -m,hP27,156	<i>P3m1</i>	0.424,0.424,6.1515,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 18H ₂	CdI ₂ -c,hP27,156	<i>P3m1</i>	0.424,0.424,6.1515,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	4881
Cd-I	CdI ₂ 18H ₃	CdI ₂ ,hP27,164	<i>P-3m1</i>	0.424,0.424,6.1515,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	6225
Cd-I	CdI ₂ 18H ₄	CdI ₂ -d,hP27,156	<i>P3m1</i>	0.424,0.424,6.152,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	6987
Cd-I	CdI ₂ 18H ₅	CdI ₂ -e,hP27,156	<i>P3m1</i>	0.424,0.424,6.152,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9310
Cd-I	CdI ₂ 18H ₆	CdI ₂ -f,hP27,156	<i>P3m1</i>	0.424,0.424,6.1515,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	10184
Cd-I	CdI ₂ 18H _{6b}	CdI ₂ -x,hP27,156	<i>P3m1</i>	0.424,0.424,6.152,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11104
Cd-I	CdI ₂ 18H ₇	CdI ₂ -g,hP27,156	<i>P3m1</i>	0.424,0.424,6.152,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15698
Cd-I	CdI ₂ 18H ₈	CdI ₂ -h,hP27,156	<i>P3m1</i>	0.424,0.424,6.1515,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 18H ₉	CdI ₂ -i,hP27,156	<i>P3m1</i>	0.424,0.424,6.1515,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 18R ₁	CdI ₂ ,hR27,166	<i>R-3m</i>	0.424,0.424,6.152,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11103
Cd-I	CdI ₂ 20H ₁	CdI ₂ -a,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	4889
Cd-I	CdI ₂ 20H ₁₀	CdI ₂ -j,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11103
Cd-I	CdI ₂ 20H ₁₁	CdI ₂ -k,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11103
Cd-I	CdI ₂ 20H ₁₂	CdI ₂ -l,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 20H ₁₃	CdI ₂ -m,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 20H ₁₄	CdI ₂ -n,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 20H ₁₅	CdI ₂ -o,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 20H ₂	CdI ₂ -b,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	4889
Cd-I	CdI ₂ 20H ₃	CdI ₂ -c,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	5563
Cd-I	CdI ₂ 20H ₄	PbI ₂ ,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9311
Cd-I	CdI ₂ 20H ₅	CdI ₂ -e,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9311
Cd-I	CdI ₂ 20H ₆	CdI ₂ -f,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9311
Cd-I	CdI ₂ 20H ₇	CdI ₂ -g,hP30,156	<i>P3m1</i>	0.424,0.424,6.84,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9906
Cd-I	CdI ₂ 20H _{7b}	CdI ₂ -x,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9790
Cd-I	CdI ₂ 20H ₈	CdI ₂ -h,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9790
Cd-I	CdI ₂ 20H ₉	CdI ₂ ,hP30,156	<i>P3m1</i>	0.424,0.424,6.835,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	10184
Cd-I	CdI ₂ 22H ₁	CdI ₂ -a,hP33,156	<i>P3m1</i>	0.424,0.424,7.518,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	1748
Cd-I	CdI ₂ 22H ₁₀	CdI ₂ -j,hP33,156	<i>P3m1</i>	0.424,0.424,7.519,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16697
Cd-I	CdI ₂ 22H ₁₁	CdI ₂ -k,hP33,156	<i>P3m1</i>	0.424,0.424,7.519,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16697
Cd-I	CdI ₂ 22H ₁₂	CdI ₂ -l,hP33,156	<i>P3m1</i>	0.424,0.424,7.519,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	20691
Cd-I	CdI ₂ 22H ₁₃	CdI ₂ -m,hP33,156	<i>P3m1</i>	0.424,0.424,7.519,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	20691
Cd-I	CdI ₂ 22H ₂	CdI ₂ -b,hP33,156	<i>P3m1</i>	0.424,0.424,7.52,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11104
Cd-I	CdI ₂ 22H ₃	CdI ₂ -c,hP33,156	<i>P3m1</i>	0.424,0.424,7.52,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11104
Cd-I	CdI ₂ 22H ₄	CdI ₂ -d,hP33,156	<i>P3m1</i>	0.424,0.424,7.5174,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 22H ₅	PbI ₂ ,hP33,156	<i>P3m1</i>	0.424,0.424,7.5174,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 22H ₆	CdI ₂ -f,hP33,156	<i>P3m1</i>	0.424,0.424,7.5185,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 22H ₇	CdI ₂ -g,hP33,156	<i>P3m1</i>	0.424,0.424,7.5185,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 22H ₈	CdI ₂ -h,hP33,156	<i>P3m1</i>	0.424,0.424,7.5185,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 22H ₉	CdI ₂ -i,hP33,156	<i>P3m1</i>	0.424,0.424,7.5185,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 24H ₁	CdI ₂ ,hP36,186	<i>P6₃mc</i>	0.424,0.424,8.202,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	3297
Cd-I	CdI ₂ 24H ₁₀	CdI ₂ -x,hP36,156	<i>P3m1</i>	0.424,0.424,8.2008,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 24H ₁₁	CdI ₂ -j,hP36,156	<i>P3m1</i>	0.424,0.424,8.202,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	14793
Cd-I	CdI ₂ 24H ₁₂	CdI ₂ -k,hP36,156	<i>P3m1</i>	0.424,0.424,8.202,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15698
Cd-I	CdI ₂ 24H ₁₃	CdI ₂ -l,hP36,156	<i>P3m1</i>	0.424,0.424,8.202,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 24H ₂	CdI ₂ -b,hP36,156	<i>P3m1</i>	0.424,0.424,8.202,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9312
Cd-I	CdI ₂ 24H ₃	CdI ₂ -c,hP36,156	<i>P3m1</i>	0.424,0.424,8.202,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11103
Cd-I	CdI ₂ 24H ₄	CdI ₂							

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cd-I	CdI ₂ 24H ₅	CdI ₂ -e,hP36,156	<i>P3m1</i>	0.424,0.424,8.202,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11103
Cd-I	CdI ₂ 24H ₆	CdI ₂ -f,hP36,156	<i>P3m1</i>	0.424,0.424,8.202,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11103
Cd-I	CdI ₂ 24H ₇	CdI ₂ -g,hP36,156	<i>P3m1</i>	0.424,0.424,8.202,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11104
Cd-I	CdI ₂ 24H ₈	CdI ₂ -h,hP36,156	<i>P3m1</i>	0.424,0.424,8.2008,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 24H ₉	CdI ₂ -i,hP36,156	<i>P3m1</i>	0.424,0.424,8.2008,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 24R ₁	CdI ₂ -hR36,160	<i>R3m</i>	0.424,0.424,8.202,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	4881
Cd-I	CdI ₂ 24R ₂	CdI ₂ -hR36,166	<i>R-3m</i>	0.424,0.424,8.2,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	11103
Cd-I	CdI ₂ 24R ₃	CdI ₂ -c,hR36,166	<i>R-3m</i>	0.424,0.424,8.202,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 26H ₁	CdI ₂ -a,hP39,156	<i>P3m1</i>	0.424,0.424,8.88,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	2526
Cd-I	CdI ₂ 26H ₂	CdI ₂ -b,hP39,156	<i>P3m1</i>	0.424,0.424,8.88,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	2526
Cd-I	CdI ₂ 26H ₃	CdI ₂ -c,hP39,156	<i>P3m1</i>	0.424,0.424,8.879,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	9309
Cd-I	CdI ₂ 26H ₄	CdI ₂ -d,hP39,156	<i>P3m1</i>	0.424,0.424,8.8842,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 26H ₅	CdI ₂ -e,hP39,156	<i>P3m1</i>	0.424,0.424,8.8855,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 26H ₆	CdI ₂ -f,hP39,156	<i>P3m1</i>	0.424,0.424,8.8855,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 28H ₁	CdI ₂ -a,hP42,156	<i>P3m1</i>	0.424,0.424,9.569,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	2036
Cd-I	CdI ₂ 28H ₂	CdI ₂ -b,hP42,156	<i>P3m1</i>	0.424,0.424,9.569,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	6987
Cd-I	CdI ₂ 28H ₃	CdI ₂ -c,hP42,156	<i>P3m1</i>	0.424,0.424,9.569,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	6987
Cd-I	CdI ₂ 28H ₄	CdI ₂ -d,hP42,156	<i>P3m1</i>	0.424,0.424,9.569,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	9312
Cd-I	CdI ₂ 28H ₅	CdI ₂ -e,hP42,156	<i>P3m1</i>	0.424,0.424,9.569,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11104
Cd-I	CdI ₂ 28H ₆	CdI ₂ -f,hP42,156	<i>P3m1</i>	0.424,0.424,9.569,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 28H ₇	CdI ₂ -g,hP42,156	<i>P3m1</i>	0.424,0.424,9.569,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 28H ₈	CdI ₂ -h,hP42,156	<i>P3m1</i>	0.424,0.424,9.569,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 2H	CdI ₂ -hP3,164	<i>P-3m1</i>	0.424,0.424,0.684,90,90,120	CdI ₂ -PbI ₂ polytype	yellow light	5.71	X	2
Cd-I	CdI ₂ 30H ₁	CdI ₂ -a,hP45,156	<i>P3m1</i>	0.424,0.424,10.252,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	4881
Cd-I	CdI ₂ 30H ₂	CdI ₂ -b,hP45,156	<i>P3m1</i>	0.424,0.424,10.252,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	9311
Cd-I	CdI ₂ 30H ₃	CdI ₂ -c,hP45,156	<i>P3m1</i>	0.424,0.424,10.252,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	9311
Cd-I	CdI ₂ 30H ₄	CdI ₂ -d,hP45,156	<i>P3m1</i>	0.424,0.424,10.252,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	9311
Cd-I	CdI ₂ 30H ₅	CdI ₂ -e,hP45,156	<i>P3m1</i>	0.424,0.424,10.252,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	11104
Cd-I	CdI ₂ 30H ₆	CdI ₂ -g,hP45,156	<i>P3m1</i>	0.424,0.424,10.254,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15698
Cd-I	CdI ₂ 30R ₁	CdI ₂ -a,hR45,160	<i>R3m</i>	0.424,0.424,10.2525,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	3249
Cd-I	CdI ₂ 30R ₂	CdI ₂ -b,hR45,166	<i>R-3m</i>	0.424,0.424,10.253,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11103
Cd-I	CdI ₂ 30R ₃	CdI ₂ -c,hR45,160	<i>R3m</i>	0.424,0.424,10.2525,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 30R ₄	CdI ₂ -d,hR45,166	<i>R-3m</i>	0.424,0.424,10.2525,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 30R ₅	PbI ₂ -hR45,166	<i>R-3m</i>	0.424,0.424,10.2525,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 32H ₁	CdI ₂ -a,hP48,156	<i>P3m1</i>	0.424,0.424,10.797,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.79	X	5507
Cd-I	CdI ₂ 32H ₂	CdI ₂ -b,hP48,156	<i>P3m1</i>	0.424,0.424,10.9344,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 32H ₃	CdI ₂ -c,hP48,156	<i>P3m1</i>	0.424,0.424,10.938,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15698
Cd-I	CdI ₂ 34H ₁	CdI ₂ -a,hP51,156	<i>P3m1</i>	0.424,0.424,11.619,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	9309
Cd-I	CdI ₂ 34H ₂	CdI ₂ -d,hP51,156	<i>P3m1</i>	0.424,0.424,11.6178,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 34H ₃	CdI ₂ -e,hP51,156	<i>P3m1</i>	0.424,0.424,11.6195,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 34H ₆	CdI ₂ -f,hP51,156	<i>P3m1</i>	0.424,0.424,11.6195,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 36H ₁	CdI ₂ -a,hP54,156	<i>P3m1</i>	0.424,0.424,12.303,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	6987
Cd-I	CdI ₂ 36H ₂	CdI ₂ -b,hP54,156	<i>P3m1</i>	0.424,0.424,12.303,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 36H ₃	CdI ₂ -c,hP54,156	<i>P3m1</i>	0.424,0.424,12.303,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 36R ₁	CdI ₂ -a,hR54,160	<i>R3m</i>	0.424,0.424,12.303,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	4881
Cd-I	CdI ₂ 36R ₂	CdI ₂ -b,hR54,160	<i>R3m</i>	0.424,0.424,12.303,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	7687
Cd-I	CdI ₂ 36R ₃	CdI ₂ -c,hR54,160	<i>R3m</i>	0.424,0.424,12.303,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	11104
Cd-I	CdI ₂ 36R ₅	CdI ₂ -e,hR54,160	<i>R3m</i>	0.424,0.424,12.303,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 36R ₆	CdI ₂ -f,hR54,160	<i>R3m</i>	0.424,0.424,12.303,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 36R ₇	CdI ₂ -g,hR54,160	<i>R3m</i>	0.424,0.424,12.303,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 36R ₈	CdI ₂ -h,hR54,160	<i>R3m</i>	0.424,0.424,12.303,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 36R ₉	CdI ₂ -i,hR54,166	<i>R-3m</i>	0.424,0.424,12.303,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 38H ₁	CdI ₂ -a,hP57,156	<i>P3m1</i>	0.424,0.424,12.9846,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 38H ₂	CdI ₂ -b,hP57,156	<i>P3m1</i>	0.424,0.424,12.9865,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 40H ₁	CdI ₂ -a,hP60,156	<i>P3m1</i>	0.424,0.424,13.67,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	6987
Cd-I	CdI ₂ 40H ₂	CdI ₂ -b,hP60,156	<i>P3m1</i>	0.424,0.424,13.67,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 40H ₃	CdI ₂ -c,hP60,156	<i>P3m1</i>	0.424,0.424,13.67,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 42H ₁	CdI ₂ -a,hP63,156	<i>P3m1</i>	0.424,0.424,14.3514,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 42H ₂	CdI ₂ -b,hP63,156	<i>P3m1</i>	0.424,0.424,14.3535,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 42R ₁	CdI ₂ -a,hR63,160	<i>R3m</i>	0.424,0.424,14.3535,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	3249
Cd-I	CdI ₂ 42R ₂	CdI ₂ -b,hR63,160	<i>R3m</i>	0.424,0.424,14.3535,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 42R ₃	CdI ₂ -c,hR63,160	<i>R3m</i>	0.424,0.424,14.3535,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16696
Cd-I	CdI ₂ 42R ₄	CdI ₂ -d,hR63,160	<i>R3m</i>	0.424,0.424,14.3535,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 42R ₅	CdI ₂ -e,hR63,160	<i>R3m</i>	0.424,0.424,14.3535,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 42R ₆	CdI ₂ -f,hR63,160	<i>R3m</i>	0.424,0.424,14.3535,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 44H ₁	CdI ₂ -hP66,156	<i>P3m1</i>	0.424,0.424,15.037,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	14793
Cd-I	CdI ₂ 48R ₁	CdI ₂ -a,hR72,160	<i>R3m</i>	0.424,0.424,16.4016,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 48R ₂	CdI ₂ -b,hR72,160	<i>R3m</i>	0.424,0.424,16.404,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 48R ₃	CdI ₂ -c,hR72,160	<i>R3m</i>	0.424,0.424,16.404,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 50H ₁	CdI ₂ -hP75,156	<i>P3m1</i>	0.424,0.424,17.085,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 50H ₃	*,hP75,156	<i>P3m1</i>	0.424,0.424,17.1,90,90,120	-	-	-	N	2429
Cd-I	CdI ₂ 54R ₁	CdI ₂ -a,hR81,160	<i>R3m</i>	0.424,0.424,18.4518,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 54R ₂	CdI ₂ -b,hR81,160	<i>R3m</i>	0.424,0.424,18.4518,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 54R ₃	CdI ₂ -c,hR81,160	<i>R3m</i>	0.424,0.424,18.4545,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 58H ₁	CdI ₂ -hP87,156	<i>P3m1</i>	0.424,0.424,19.8186,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 60R	CdI ₂ -a,hR90,160	<i>R3m</i>	0.424,0.424,20.505,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	5520
Cd-I	CdI ₂ 60R ₂	CdI ₂ -b,hR90,166	<i>R-3m</i>	0.424,0.424,20.502,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 66R ₁	CdI ₂ -a,hR99,160	<i>R3m</i>	0.424,0.424,2					

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cd-I	CdI ₂ 66R ₂	CdI ₂ -b,hR99,160	<i>R3m</i>	0.424,0.424,22.5555,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 66R ₃	CdI ₂ -c,hR99,160	<i>R3m</i>	0.424,0.424,22.5555,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 66R ₄	CdI ₂ -d,hR99,160	<i>R3m</i>	0.424,0.424,22.5555,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 66R ₅	CdI ₂ -e,hR99,160	<i>R3m</i>	0.424,0.424,22.5555,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 66R ₆	CdI ₂ -f,hR99,160	<i>R3m</i>	0.424,0.424,22.5555,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 66R ₇	CdI ₂ -g,hR99,160	<i>R3m</i>	0.424,0.424,22.5555,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 6H ₁	CdI ₂ hP9,156	<i>P3m1</i>	0.424,0.424,2.0505,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	806
Cd-I	CdI ₂ 6H ₂	CdI ₂ hP9,164	<i>P-3m1</i>	0.424,0.424,2.05,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	201
Cd-I	CdI ₂ 72R ₁	CdI ₂ -a,hR108,160	<i>R3m</i>	0.424,0.424,24.606,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	5520
Cd-I	CdI ₂ 72R ₂	CdI ₂ -b,hR108,160	<i>R3m</i>	0.424,0.424,24.6024,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.72	X	14792
Cd-I	CdI ₂ 72R ₃	CdI ₂ -c,hR108,160	<i>R3m</i>	0.424,0.424,24.606,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 78R ₁	CdI ₂ -a,hR117,160	<i>R3m</i>	0.424,0.424,26.6565,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 78R ₂	CdI ₂ -b,hR117,160	<i>R3m</i>	0.424,0.424,26.6565,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	17483
Cd-I	CdI ₂ 84R ₁	CdI ₂ -a,hR126,160	<i>R3m</i>	0.424,0.424,28.707,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	8152
Cd-I	CdI ₂ 84R ₂	CdI ₂ -b,hR126,160	<i>R3m</i>	0.424,0.424,28.707,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	8152
Cd-I	CdI ₂ 84R ₃	CdI ₂ -c,hR126,160	<i>R3m</i>	0.424,0.424,28.707,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 84R ₄	CdI ₂ -d,hR126,160	<i>R3m</i>	0.424,0.424,28.707,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 84R ₅	CdI ₂ -e,hR126,160	<i>R3m</i>	0.424,0.424,28.707,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 84R ₆	CdI ₂ -f,hR126,160	<i>R3m</i>	0.424,0.424,28.707,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	16634
Cd-I	CdI ₂ 8H	CdI ₂ hP12,156	<i>P3m1</i>	0.424,0.424,2.734,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	806
Cd-I	CdI ₂ 8H ₂	CdI ₂ hP12,186	<i>P6₃mc</i>	0.424,0.424,2.734,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	3297
Cd-I	CdI ₂ 8H ₃	CdI ₂ hP12,164	<i>P-3m1</i>	0.424,0.424,2.734,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	5563
Cd-I	CdI ₂ 90R	CdI ₂ hR135,160	<i>R3m</i>	0.424,0.424,30.7575,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ 96R ₁	CdI ₂ -a,hR144,160	<i>R3m</i>	0.424,0.424,32.808,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15687
Cd-I	CdI ₂ 96R ₂	CdI ₂ -b,hR144,160	<i>R3m</i>	0.424,0.424,32.808,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.71	X	15625
Cd-I	CdI ₂ ht	CdI ₂ hP6,186	<i>P6₃mc</i>	0.424,0.424,1.37,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.70	X	238
Cd-In	Cd _{0.035} In _{0.965}	In ₂ It2,139	<i>I4/mmm</i>	0.3268,0.3268,0.4872,90,90,90	close-packed structure	-	7.32	X	3621
Cd-In	Cd _{0.1} In _{0.9}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.46937,0.46937,0.46937,90,90,90	close-packed structure	-	7.36	X	6204
Cd-Ir	Cd ₄₁ Ir ₈	V ₃ Ga ₄₁ ,hR147,148	<i>R-3</i>	1.48489,1.48489,1.598,90,90,120	-	gray	10.04	X	62677
Cd-K	KCd ₁₃	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.3792,1.3792,1.3792,90,90,90	-	-	7.60	X	47602
Cd-K	K _{0.4} Cd ₂	K _{0.4} Cd ₂ ,tI12,140	<i>I4/mcm</i>	0.9169,0.9169,0.28779,90,90,90	-	-	6.60	X	34552
Cd-K	K ₃ Cd ₁₆	K ₃ Cd ₁₆ ,tP38,126	<i>P4/nnc</i>	0.9152,0.9152,1.159,90,90,90	-	-	6.55	X	56396
Cd-La	CdLa lt	CuTi ₂ tP2,123	<i>P4/mmm</i>	0.385,0.385,0.3977,90,90,90	b.c.c. family	-	7.08	X	21411
Cd-La	CdLa rt	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3907,0.3907,0.3907,90,90,90	b.c.c. family	-	7.00	X	21411
Cd-La	Cd _{0.15} La _{0.85} ht2	W ₂ cI2,229	<i>Im-3m</i>	0.414,0.414,0.414,90,90,90	b.c.c. family	-	6.32	X	7321
Cd-La	Cd ₁₇ La ₂	BaHg ₁₁ ,cP36,221	<i>Pm-3m</i>	0.93272,0.93272,0.93272,90,90,90	-	-	8.44	X	56006
Cd-La	Cd ₁₇ La ₂	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	1.0042,1.0042,0.9825,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	8.47	X	7323
Cd-La	Cd ₂ La	Cd ₂ Ce,hP3,164	<i>P-3m1</i>	0.5075,0.5075,0.3458,90,90,120	AlB ₂ family	-	7.83	X	595
Cd-La	Cd ₅₈ La ₁₃	Zn ₅₈ Gd ₁₃ ,hP142,194	<i>P6₃/mmc</i>	1.585,1.585,1.563,90,90,120	-	-	8.13	X	7323
Cd-Li	LiCd hp	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.312,0.312,0.312,90,90,90	b.c.c. family	-	6.53	X	34956
Cd-Li	LiCd rt	NaTi ₂ cF16,227	<i>Fd-3m</i>	0.654,0.654,0.654,90,90,90	b.c.c. family	-	5.67	X	34956
Cd-Li	Li _{0.222} Cd _{0.778} rt	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.29802,0.29802,0.56187,90,90,120	close-packed structure	-	6.84	X	4073
Cd-Li	Li _{0.75} Cd _{0.25} rt	Cu ₂ cF4,225	<i>Fm-3m</i>	0.425,0.425,0.425,90,90,90	close-packed structure	-	2.88	X	94
Cd-Li	Li _{0.975} Cd _{0.025} rt	W ₂ cI2,229	<i>Im-3m</i>	0.34921,0.34921,0.34921,90,90,90	b.c.c. family	-	0.75	X	4379
Cd-Lu	CdLu	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.364,0.364,0.364,90,90,90	b.c.c. family	gray silver	9.89	X	2600
Cd-Lu	Cd ₂ Lu	Cd ₂ Ce,hP3,164	<i>P-3m1</i>	0.4865,0.4865,0.3382,90,90,120	AlB ₂ family	-	9.58	A	3993
Cd-Lu	Cd ₃ Lu	Cd ₃ Er,oS16,63	<i>Cmcm</i>	0.714,1.0517,0.4771,90,90,90	close-packed structure	-	9.50	X	7323
Cd-Lu	Cd ₄₃ Lu ₁₁	Cd ₄₃ Sm ₁₁ ,cF448,216	<i>F-43m</i>	2.1402,2.1402,2.1402,90,90,90	Nasicon family	-	9.46	A	7323
Cd-Lu	Cd ₆ Lu	Cd ₆ Y,cI184,204	<i>Im-3</i>	1.533,1.533,1.533,90,90,90	-	-	9.40	X	48737
Cd-Mg	MgCd rt	AuCd ₂ oP4,51	<i>Pnma</i>	0.50051,0.32217,0.527,90,90,90	close-packed structure	-	5.34	X	400
Cd-Mg	MgCd ₃ rt	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.62335,0.62335,0.5045,90,90,120	close-packed structure	-	7.07	A	427
Cd-Mg	Mg _{0.33} Cd _{0.67} ht	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.314,0.314,0.562,90,90,120	close-packed structure	-	5.77	X	11706
Cd-Mg	Mg ₃ Cd rt	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.6313,0.6313,0.5074,90,90,120	close-packed structure	-	3.51	X	427
Cd-Mn	Cd _{0.995} Mn _{0.005}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.29803,0.29803,0.56204,90,90,120	close-packed structure	-	8.61	X	5348
Cd-N	Cd[N ₃] ₂	Cd[N ₃] ₂ ,oP56,61	<i>Pbca</i>	0.644,1.6073,0.782,90,90,90	-	colorless	3.22	X	46633
Cd-N	Cd ₃ N ₂	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	1.0829,1.0829,1.0829,90,90,90	-	black	7.64	X	50570
Cd-N	Cd ₄ N ₃	*oP21,54	<i>Pcca</i>	0.646,1.604,0.782,90,90,90	-	white	-	N	122
Cd-Na	Na ₂ Cd ₁₁	Mg ₂ Zn ₁₁ ,cP39,200	<i>Pm-3</i>	0.95875,0.95875,0.95875,90,90,90	-	-	7.25	X	56396
Cd-Na	Na ₂₆ Cd ₄₁	Na ₂₆ Cd ₄₁ ,hP167,191	<i>P6/mmm</i>	2.1306,2.1306,0.9625,90,90,120	-	-	7.22	X	34552
Cd-Na	Na ₅₄ Cd ₉₂	Na ₂₂ (Na _{0.57} Cd _{0.43}) ₅₇ Cd ₆₈ ,cF1192,227	<i>Fd-3m</i>	3.056,3.056,3.056,90,90,90	-	-	5.42	X	19788
Cd-Nb	Cd ₃ Nb	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4215,0.4215,0.4215,90,90,90	close-packed structure	-	9.54	X	2853
Cd-Nd	CdNd rt	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3818,0.3818,0.3818,90,90,90	b.c.c. family	-	7.66	X	18393
Cd-Nd	Cd ₁₁ Nd	BaHg ₁₁ ,cP36,221	<i>Pm-3m</i>	0.9294,0.9294,0.9294,90,90,90	-	-	8.57	A	5384
Cd-Nd	Cd ₂ Nd	Cd ₂ Ce,hP3,164	<i>P-3m1</i>	0.5023,0.5023,0.3451,90,90,120	AlB ₂ family	-	8.13	A	3993
Cd-Nd	Cd ₄₅ Nd ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	<i>F-43m</i>	2.1783,2.1783,2.1783,90,90,90	Nasicon family	-	8.54	A	7323
Cd-Nd	Cd ₅₈ Nd ₁₃	Zn ₅₈ Gd ₁₃ ,hP142,194	<i>P6₃/mmc</i>	1.561,1.561,1.544,90,90,120	-	-	8.56	X	7323
Cd-Nd	Cd ₆ Nd	Cd ₆ Nd,cI232,204	<i>Im-3</i>	1.5605,1.5605,1.5605,90,90,90	-	-	8.59	X	42954
Cd-Ni	CdNi	CdNi,cF96,227	<i>Fd-3m</i>	1.13946,1.13946,1.13946,90,90,90	-	gray silver	9.22	X	60870
Cd-Ni	Cd _{82.25} Ni _{14.49}	Cd _{82.25} Ni _{14.49} ,cF508,216	<i>F-43m</i>	1.9722,1.9722,1.9722,90,90,90	γ -brass	gray silver	8.74	X	60870
Cd-Np	Cd ₁₁ Np	BaHg ₁₁ ,cP36,221	<i>Pm-3m</i>	0.9288,0.9288,0.9288,90,90,90	-	-	9.16	A	4600
Cd-Np	Cd ₆ Np	Cd ₆ Y,cI184,204	<i>Im-3</i>	1.5614,1.5614,1.5614,90,90,90	-	-	9.54	A	4600
Cd-O	CdO rt	NaCl ₂ cF8,225	<i>Fm-3m</i>	0.471,0.471,0.471,90,90,90	monteponite	brown red	8.16	X	63167
Cd-O	Cd[O ₂]	FeS ₂ cP12,205	<i>Pa-3</i>	0.5313,0.5313,0.5313,90,90,90	pyrite-marcasite family	-	6.40	X	1067
Cd-P	CdP ₂ ht	ZnP ₂ tP24,92	<i>P4₁2₁2</i>	0.52852,0.52852,1.9787,90,90,90	-	red	4.19	X	20533
Cd-P	CdP ₂ rt	CdP ₂ oP12,33	<i>Pna2₁</i>	0.99,0.5408,0.5171,90,90,90	-	red dark	4.18	X	4300
Cd-P	CdP ₄	CdP ₄ mP10,14	<i>P12₁/c1</i>	0.527,0.519,0.766,90,99,47,90	-	black	3.80	X	794
Cd-P	Cd ₃ P ₂ tet1	Cd ₃ As ₂ ,tI160,110	<i>I4₁cd</i>	1.238,1.238,2.474,90,90,90	-	-	5.59	A	6082
Cd-P	Cd ₃ P ₂ tet2	Zn ₃ P ₂ tP40,137	<i>P4₂/nmc</i>	0.8739,0.8739,1.2252,90,90,90	fluorite family	gray steel	5.67	X	48083

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cd-P	Cd ₆ P ₇ ht	*,cF52,*	-	1.058,1.058,1.058,90,90,90	-	gray steel	-	N	4139
Cd-P	Cd ₇ P ₁₀	Cd ₇ P ₁₀ ,oF136,43	<i>Fdd2</i>	2.30,2.75,0.462,90,90,90	-	gray steel	4.99	X	12396
Cd-Pb	Cd _{0.0125} Pb _{0.9875}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.49467,0.49467,0.49467,90,90,90	close-packed structure	-	11.31	X	549
Cd-Pd	CdPd	CuTi ₂ Pt ₂ ,123	<i>P4/mmm</i>	0.30276,0.30276,0.3631,90,90,90	b.c.c. family	-	10.92	X	15279
Cd-Pd	Cd _{0.28} Pd _{0.72}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.398,0.398,0.398,90,90,90	close-packed structure	-	11.39	X	3985
Cd-Pd	Cd _{1.15} Pd _{0.85} ht	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.32446,0.32446,0.32446,90,90,90	b.c.c. family	-	10.68	X	15279
Cd-Pd	Cd _{10.492} Pd ₂	Cd _{10.492} Pd ₂ ,cI66,217	<i>I-43m</i>	1.0017,1.0017,1.0017,90,90,90	γ -brass	gray silver	9.20	X	62027
Cd-Pd	Cd _{6.858} Pd _{2.142}	Zn ₄ (Zn _{0.77} Pt _{0.10} Pd _{0.13}) ₄ (Pt _{0.28} Pd _{0.72}) ₄ ,oF	<i>Fmmm</i>	0.4687,1.1,1.414,90,90,90	-	gray silver	10.01	X	62027
Cd-Po	CdPo	ZnS ₂ cF8,216	<i>F-43m</i>	0.6665,0.6665,0.6665,90,90,90	adamantane structure	gray	7.21	X	1219
Cd-Pr	CdPr It1	CuTi ₂ Pt ₂ ,123	<i>P4/mmm</i>	0.38,0.38,0.3835,90,90,90	b.c.c. family	-	7.60	X	21411
Cd-Pr	CdPr rt	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.383,0.383,0.383,90,90,90	b.c.c. family	-	7.49	X	21411
Cd-Pr	Cd ₁₁ Pr	BaHg ₁₁ cP36,221	<i>Pm-3m</i>	0.93141,0.93141,0.93141,90,90,90	-	-	8.49	X	56006
Cd-Pr	Cd _{18.18} Pr ₃	Cd _{18.18} Pr ₃ ,cI256,204	<i>Im-3</i>	1.5643,1.5643,1.5643,90,90,90	-	-	8.56	X	42954
Cd-Pr	Cd ₂ Pr	Cd ₂ Ce ₂ hP3,164	<i>P-3m1</i>	0.5043,0.5043,0.3445,90,90,120	AlB ₂ family	-	8.00	X	3993
Cd-Pr	Cd ₃ Pr	BiF ₃ cF16,225	<i>Fm-3m</i>	0.7201,0.7201,0.7201,90,90,90	fluorite family	-	8.51	X	595
Cd-Pr	Cd ₄₅ Pr ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	<i>F-43m</i>	2.1842,2.1842,2.1842,90,90,90	Nasicon family	-	8.43	A	7323
Cd-Pr	Cd ₅₈ Pr ₁₃	Zn ₅₈ Gd ₁₃ hP142,194	<i>P6₃/mmc</i>	1.571,1.571,1.552,90,90,120	-	-	8.36	X	7323
Cd-Pt	CdPt	CuAu ₂ Pt ₂ ,123	<i>P4/mmm</i>	0.29586,0.29586,0.38163,90,90,90	close-packed structure	-	15.29	X	11634
Cd-Pt	CdPt ₃ rt	Cu ₃ Au ₂ cP4,221	<i>Pm-3m</i>	0.3977,0.3977,0.3977,90,90,90	close-packed structure	-	18.42	X	433
Cd-Pt	Cd _{0.26} Pt _{0.74}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3986,0.3986,0.3986,90,90,90	close-packed structure	-	18.21	X	433
Cd-Pt	Cd _{40.4} Pt ₈	Cd _{40.4} Pt ₈ ,cI392,217	<i>I-43m</i>	1.98042,1.98042,1.98042,90,90,90	-	-	10.44	X	12913
Cd-Pt	Cd ₅ Pt	Cd ₅ Pt,cP54,215	<i>P-43m</i>	0.992,0.992,0.992,90,90,90	-	-	10.30	X	12913
Cd-Pu	Cd ₁₁ Pu	BaHg ₁₁ cP36,221	<i>Pm-3m</i>	0.9282,0.9282,0.9282,90,90,90	-	-	9.22	A	2746
Cd-Pu	Cd ₆ Pu	Cd ₆ Y ₂ cI184,204	<i>Im-3</i>	1.559,1.559,1.559,90,90,90	-	-	9.66	A	2746
Cd-Rb	RbCd ₁₃	NaZn ₁₃ cF112,226	<i>Fm-3c</i>	1.3844,1.3844,1.3844,90,90,90	-	-	7.74	X	47602
Cd-S	CdS 24H	*,hP48,*	-	0.412,0.412,8.08,90,90,120	-	-	-	N	1708
Cd-S	CdS hp1	NaCl ₂ cF8,225	<i>Fm-3m</i>	0.543,0.543,0.543,90,90,90	rocksalt family	black	5.99	X	13297
Cd-S	CdS hp2	CrN ₂ cP4,59	<i>Pmmn</i>	0.3471,0.4873,0.3399,90,90,90	-	-	8.35	A	15945
Cd-S	CdS ht cub	ZnS ₂ cF8,216	<i>F-43m</i>	0.58304,0.58304,0.58304,90,90,90	hawleyite	orange yellow	4.84	X	32008
Cd-S	CdS ht hex	ZnO ₂ hP4,186	<i>P6₃mc</i>	0.41365,0.41365,0.6716,90,90,120	greenockite	orange yellow	4.82	X	46538
Cd-S	CdS m	*,oP*,48	<i>Pnnn</i>	1.4074,1.4315,1.4568,90,90,90	-	yellow	-	N	22435
Cd-S	CdS ₂	FeS ₂ cP12,205	<i>Pa-3</i>	0.63032,0.63032,0.63032,90,90,90	pyrite-marcasite family	-	4.68	A	3933
Cd-Sb	CdSb	CdSb ₂ cP16,61	<i>Pbca</i>	0.6469,0.8251,0.8522,90,90,90	-	gray	6.84	X	20812
Cd-Sb	Cd _{0.2} Sb _{0.8} hp	W ₂ cI2,229	<i>Im-3m</i>	0.3279,0.3279,0.3279,90,90,90	b.c.c. family	-	11.29	X	48280
Cd-Sb	Cd _{0.44} Sb _{0.56} m hp-ht	(Hg _{0.1} Sn _{0.9}) ₂ hP1,191	<i>P6/mmm</i>	0.30198,0.30198,0.28275,90,90,120	-	-	8.75	X	48280
Cd-Sb	Cd _{12.7} Sb ₁₀ m rhom	Cd _{12.7} Sb ₁₀ hR246,167	<i>R-3c</i>	1.30395,1.30395,1.30346,90,90,120	-	-	6.87	X	49128
Cd-Sb	Cd ₃ Sb ₂ cub	*,cP15,207	<i>P432</i>	1.136,1.136,1.136,90,90,90	-	-	1.97	N	10532
Cd-Sb	Cd ₃ Sb ₂ m	*,oP30,59	<i>Pmmn</i>	0.789,0.84,1.2,90,90,90	-	-	-	N	6537
Cd-Sb	Cd ₄ Sb ₃ m orth	*,oP28,26	<i>Pmc2₁</i>	0.85126,0.75378,1.22169,90,90,90	-	-	-	N	32425
Cd-Sb	Cd ₄ Sb ₃ mon	Cd ₄ Sb ₃ mP276,7	<i>P1c1</i>	1.14478,2.60793,2.6421,90,104.311,90	-	-	7.08	X	51483
Cd-Sb	Cd ₅ Sb ₄ ht	*,o***,*	-	0.506,0.5427,0.7309,90,90,90	-	-	-	N	16278
Cd-Sc	CdSc	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.351,0.351,0.351,90,90,90	b.c.c. family	-	6.04	X	31815
Cd-Sc	Cd ₃ Sc	Mg ₃ Cd ₂ hP8,194	<i>P6₃/mmc</i>	0.6324,0.6324,0.4853,90,90,120	close-packed structure	-	7.55	X	2325
Cd-Sc	Cd ₇ Sc	Cd ₇ Sc ₂ cO32,63	<i>Cmcm</i>	0.7304,0.9993,0.9306,90,90,90	-	-	8.13	X	31244
Cd-Se	CdSe 24H	*,hP48,*	-	0.4291,0.4291,8.43,90,90,120	-	-	-	N	1708
Cd-Se	CdSe hp1	NaCl ₂ cF8,225	<i>Fm-3m</i>	0.55445,0.55445,0.55445,90,90,90	rocksalt family	-	7.46	X	63851
Cd-Se	CdSe hp2	*,oP*,62	<i>Pnma</i>	0.49905,0.4915,0.50903,90,90,90	-	-	-	N	63851
Cd-Se	CdSe rt cub	ZnS ₂ cF8,216	<i>F-43m</i>	0.5873,0.5873,0.5873,90,90,90	adamantane structure	orange red	6.28	X	46478
Cd-Se	CdSe rt hex	ZnO ₂ hP4,186	<i>P6₃mc</i>	0.42982,0.42982,0.70084,90,90,120	cadmoselite	red dark	5.67	X	46513
Cd-Se	CdSe ₂ hp	FeS ₂ cP12,205	<i>Pa-3</i>	0.6615,0.6615,0.6615,90,90,90	pyrite-marcasite family	-	6.20	A	3933
Cd-Sm	CdSm	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3779,0.3779,0.3779,90,90,90	b.c.c. family	-	8.09	X	8151
Cd-Sm	Cd ₁₁ Sm	BaHg ₁₁ cP36,221	<i>Pm-3m</i>	0.9288,0.9288,0.9288,90,90,90	-	-	8.62	A	8135
Cd-Sm	Cd ₂ Sm	Cd ₂ Ce ₂ hP3,164	<i>P-3m1</i>	0.4979,0.4979,0.3458,90,90,120	AlB ₂ family	-	8.39	X	3993
Cd-Sm	Cd ₄₅ Sm ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	<i>F-43m</i>	2.1699,2.1699,2.1699,90,90,90	Nasicon family	-	8.73	X	11078
Cd-Sm	Cd ₅₈ Sm ₁₃	Zn ₅₈ Gd ₁₃ hP142,194	<i>P6₃/mmc</i>	1.551,1.551,1.536,90,90,120	-	-	8.80	X	7323
Cd-Sm	Cd ₆ Sm	Cd ₆ Nd ₂ cI232,204	<i>Im-3</i>	1.5589,1.5589,1.5589,90,90,90	-	-	8.68	X	42954
Cd-Sn	Cd _{0.01} Sn _{0.99} rt	Sn ₂ tl4,141	<i>I4₁/amd</i>	0.5829,0.5829,0.318,90,90,90	-	-	7.29	X	621
Cd-Sn	Cd _{0.05} Sn _{0.95} ht	(Hg _{0.1} Sn _{0.9}) ₂ hP1,191	<i>P6/mmm</i>	0.324,0.324,0.3009,90,90,120	-	-	7.19	X	24841
Cd-Sr	SrCd	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.4025,0.4025,0.4025,90,90,90	b.c.c. family	-	5.09	X	2790
Cd-Sr	SrCd ₁₁	BaCd ₁₁ tl48,141	<i>I4₁/amd</i>	1.198,1.198,0.767,90,90,90	-	-	7.99	A	2790
Cd-Sr	SrCd ₂	KHg ₂ oI12,74	<i>Imma</i>	0.5052,0.8054,0.8526,90,90,90	AlB ₂ family	gray silver	5.98	X	54554
Cd-Sr	SrCd ₆	Cd ₆ Y ₂ cI184,204	<i>Im-3</i>	1.604,1.604,1.604,90,90,90	-	-	7.36	A	6507
Cd-Sr	Sr ₁₃ Cd ₅₈	Zn ₅₈ Gd ₁₃ hP142,194	<i>P6₃/mmc</i>	1.6068,1.6068,1.591,90,90,120	-	-	7.15	A	6507
Cd-Sr	Sr ₃ Cd ₃	Cr ₂ B ₃ tl32,140	<i>I4/mcm</i>	0.8717,0.8717,1.6601,90,90,90	-	gray silver	4.08	X	29537
Cd-Tb	CdTb	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3723,0.3723,0.3723,90,90,90	b.c.c. family	gray silver	8.73	X	8151
Cd-Tb	Cd ₂ Tb	Cd ₂ Ce ₂ hP3,164	<i>P-3m1</i>	0.4905,0.4905,0.345,90,90,120	AlB ₂ family	-	8.87	A	2977
Cd-Tb	Cd ₃ Tb hex	Mg ₃ Cd ₂ hP8,194	<i>P6₃/mmc</i>	0.6585,0.6585,0.4925,90,90,120	close-packed structure	-	8.91	X	7323
Cd-Tb	Cd ₃ Tb orth	Cd ₃ Er ₂ oS16,63	<i>Cmcm</i>	0.6963,1.097,0.4851,90,90,90	close-packed structure	-	8.89	X	7323
Cd-Tb	Cd ₄₅ Tb ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	<i>F-43m</i>	2.155,2.155,2.155,90,90,90	Nasicon family	-	9.04	A	7323
Cd-Tb	Cd ₆ Tb	Cd ₆ Y ₂ cI184,204	<i>Im-3</i>	1.5453,1.5453,1.5453,90,90,90	-	-	9.00	X	48737
Cd-Te	CdTe 12H	ZnS ₂ hP24,186	<i>P6₃mc</i>	0.46,0.46,4.51,90,90,120	adamantane structure	black	5.79	A	1229
Cd-Te	CdTe hp1	CdTe ₂ hP6,152	<i>P3₂1</i>	0.4292,0.4292,1.0235,90,90,120	rocksalt family	-	7.32	X	27916
Cd-Te	CdTe hp2	NaCl ₂ cF8,225	<i>Fm-3m</i>	0.5932,0.5932,0.5932,90,90,90	rocksalt family	-	7.64	X	27919
Cd-Te	CdTe hp3	ZnTe ₂ oS8,63	<i>Cmcm</i>	0.5761,0.5834,0.5715,90,90,90	-	-	8.30	X	30912
Cd-Te	CdTe m	ZnO ₂ hP4,186	<i>P6₃mc</i>	0.4572,0.4572,0.7485,90,90,120	adamantane structure	-	5.88	A	3141
Cd-Te	CdTe rt	ZnS ₂ cF8,216	<i>F-43m</i>	0.64827,0.64827,0.64827,90,90,90	adamantane structure	black	5.85	X	39718
Cd-Th	Cd ₁₁ Th	BaHg ₁₁ cP36,221	<i>Pm-3m</i>	0.9275,0.9275,0.9275,90,90,90	-	-	9.17	A	14078
Cd-Th	Cd ₂ Th	Hg ₂ U ₂ hP3,191	<i>P6/mmm</i>	0.5002,0.5002,0.3517,90,90,120	AlB ₂ family	-	9.96	X	14078

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a\beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cd-Th	Cd ₂₃ Th ₆	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.4142, 1.4142, 1.4142, 90, 90, 90	-	-	9.34	A	14078
Cd-Th	Cd ₃ Th	Mg ₅ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6775, 0.6775, 0.4928, 90, 90, 120	close-packed structure	-	9.65	A	14077
Cd-Th	Cd ₃ Th	Mg ₅ Eu, hP42, 194	<i>P6₃/mmc</i>	0.9801, 0.9801, 1.0113, 90, 90, 120	-	-	9.40	A	14078
Cd-Th	Cd ₇ Th ₆	Cd ₇ Th ₆ , oP26, 55	<i>Pbam</i>	0.9929, 1.1703, 0.6041, 90, 90, 90	Frank-Kasper phase	-	10.31	X	17017
Cd-Ti	CdTi	CdTi, tP4, 129	<i>P4/nmm</i>	0.2904, 0.2904, 0.8954, 90, 90, 90	close-packed structure	-	7.05	X	1719
Cd-Ti	CdTi ₂	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.2865, 0.2865, 1.342, 90, 90, 90	close-packed structure	-	6.28	X	1719
Cd-Tl	Tl _{0.965} Cd _{0.036} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.34672, 0.34672, 0.55343, 90, 90, 120	close-packed structure	-	11.59	X	1224
Cd-Tm	CdTm rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.369, 0.369, 0.369, 90, 90, 90	b.c.c. family	gray silver	9.30	X	18393
Cd-Tm	Cd ₂ Tm	Cd ₂ Ce, hP3, 164	<i>P-3m1</i>	0.488, 0.488, 0.3413, 90, 90, 120	AlB ₂ family	-	9.29	X	3993
Cd-Tm	Cd ₃ Tm	Cd ₃ Er, oS16, 63	<i>Cmcm</i>	0.7103, 1.0617, 0.4795, 90, 90, 90	close-packed structure	-	9.30	X	7323
Cd-Tm	Cd ₄₅ Tm ₁₁	Cd ₄₅ Sm ₁₁ , cF448, 216	<i>F-43m</i>	2.1427, 2.1427, 2.1427, 90, 90, 90	Nasicon family	-	9.34	A	7323
Cd-Tm	Cd ₆ Tm	Cd ₆ Y, cI184, 204	<i>Im-3</i>	1.5423, 1.5423, 1.5423, 90, 90, 90	-	-	9.16	X	48737
Cd-U	Cd ₉ U	BaHg ₁₁ , cP36, 221	<i>Pm-3m</i>	0.9248, 0.9248, 0.9248, 90, 90, 90	-	-	8.23	X	21240
Cd-V	CdV ₃	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.4943, 0.4943, 0.4943, 90, 90, 90	Frank-Kasper phase	-	7.29	X	1917
Cd-Y	CdY rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.3719, 0.3719, 0.3719, 90, 90, 90	b.c.c. family	-	6.50	X	18393
Cd-Y	Cd ₂ Y	Cd ₂ Ce, hP3, 164	<i>P-3m1</i>	0.4882, 0.4882, 0.3501, 90, 90, 120	AlB ₂ family	-	7.21	X	3755
Cd-Y	Cd ₃ Y	Cd ₃ Er, oS16, 63	<i>Cmcm</i>	0.7044, 1.0864, 0.4837, 90, 90, 90	close-packed structure	-	7.65	X	6316
Cd-Y	Cd ₄₅ Y ₁₁	Cd ₄₅ Sm ₁₁ , cF448, 216	<i>F-43m</i>	2.1492, 2.1492, 2.1492, 90, 90, 90	Nasicon family	-	8.08	A	4601
Cd-Y	Cd ₅₈ Y ₁₃	Zn ₅₈ Gd ₁₃ , hP142, 194	<i>P6₃/mmc</i>	1.535, 1.535, 1.524, 90, 90, 120	-	-	8.20	X	7323
Cd-Y	Cd ₆ Y lt	* _o *672, *	-	1.5436, 3.0897, 3.0897, 90, 90, 90	-	-	8.26	N	42968
Cd-Y	Cd ₆ Y rt	Cd ₆ Nd, cI232, 204	<i>Im-3</i>	1.5482, 1.5482, 1.5482, 90, 90, 90	-	-	8.20	X	42954
Cd-Yb	CdYb	CsCl, cP2, 221	<i>Pm-3m</i>	0.3808, 0.3808, 0.3808, 90, 90, 90	b.c.c. family	-	8.58	X	2600
Cd-Yb	Cd ₂ Yb rt	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5989, 0.5989, 0.9597, 90, 90, 120	Friauf-Laves phase	-	8.87	A	5900
Cd-Yb	Cd ₅ Yb ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	<i>P6/m</i>	1.3441, 1.3441, 0.9655, 90, 90, 120	-	-	8.97	A	5900
Cd-Yb	Cd ₆ Yb lt	Cd ₆ Y, cI184, 204	<i>Im-3</i>	1.5539, 1.5539, 1.5539, 90, 90, 90	-	black	9.00	X	49319
Cd-Yb	Cd ₆ Yb rt	Cd ₆ Yb, cI208, 204	<i>Im-3</i>	1.559, 1.559, 1.559, 90, 90, 90	-	black	8.91	X	49319
Cd-Zn	Zn _{0.04} Cd _{0.96}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.29704, 0.29704, 0.56007, 90, 90, 120	close-packed structure	-	8.58	X	2470
Cd-Zn	Zn _{0.986} Cd _{0.014}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.26688, 0.26688, 0.49615, 90, 90, 120	close-packed structure	-	7.17	X	2091
Cd-Zr	CdZr	CdTi, tP4, 129	<i>P4/nmm</i>	0.314, 0.314, 0.875, 90, 90, 90	close-packed structure	-	7.84	A	2791
Cd-Zr	CdZr ₂	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.315, 0.315, 1.33, 90, 90, 90	close-packed structure	-	7.42	A	51791
Cd-Zr	Cd ₂ Zr ₃	Cd ₂ Zr ₃ , oP5, 47	<i>Pmmm</i>	0.530, 0.652, 0.786, 90, 90, 90	-	-	3.05	X	4251
Cd-Zr	Cd ₃ Zr	SRb ₃ , tP4, 123	<i>P4/mmm</i>	0.4375, 0.4375, 0.4362, 90, 90, 90	close-packed structure	-	8.52	X	51791
Ce-Cl	CeCl ₃	UCl ₃ , hP8, 176	<i>P6/m</i>	0.74636, 0.74636, 0.43295, 90, 90, 120	-	-	3.92	X	58828
Ce-Co	CeCo ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7161, 0.7161, 0.7161, 90, 90, 90	Friauf-Laves phase	-	9.33	X	30464
Ce-Co	CeCo ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.499, 0.499, 2.494, 90, 90, 120	Laves-CaCu ₅	-	8.81	X	45859
Ce-Co	CeCo ₅ ht	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.492, 0.492, 0.401, 90, 90, 120	-	-	8.59	X	14054
Ce-Co	Ce _{0.9} Co _{0.1} ht	Cu ₅ Al ₄ Tb _{0.78} , hP8, 191	<i>P6/mmm</i>	0.4848, 0.4848, 0.4071, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.67	A	8329
Ce-Co	Ce ₂ Co ₁₇ ht	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.838, 0.838, 0.812, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.62	X	2121
Ce-Co	Ce ₂ Co ₁₇ rt	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.835, 0.835, 1.221, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.66	A	62311
Ce-Co	Ce ₂ Co ₇ hex	Ce ₂ Ni ₇ , hP36, 194	<i>P6₃/mmc</i>	0.498, 0.498, 2.452, 90, 90, 120	Laves-CaCu ₅	-	8.74	A	53513
Ce-Co	Ce ₂ Co ₇ rhom	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.4938, 0.4938, 3.6501, 90, 90, 120	Laves-CaCu ₅	-	8.96	A	8119
Ce-Co	Ce ₂₄ Co ₁₁	Ce ₂₄ Co ₁₁ , hP70, 186	<i>P6₃/mc</i>	0.9587, 0.9587, 2.1825, 90, 90, 120	-	-	7.67	X	1532
Ce-Co	Ce ₃ Co ₁₉	Ce ₃ Co ₁₉ , hR72, 166	<i>R-3m</i>	0.49475, 0.49475, 4.87434, 90, 90, 120	Laves-CaCu ₅	-	8.78	X	7764
Ce-Cu	CuCe	FeB-b, oP8, 62	<i>Pnma</i>	0.73, 0.43, 0.636, 90, 90, 90	CrB(TlI)-FeB	-	6.78	X	1329
Ce-Cu	Cu ₂ Ce	KHg ₂ , oI12, 74	<i>Imma</i>	0.443, 0.705, 0.745, 90, 90, 90	AlB ₂ family	-	7.63	X	1337
Ce-Cu	Cu _{25.47} Ce ₇ rt	Cu _{25.47} Ce ₇ , hP78, 175	<i>P6/m</i>	1.1858, 1.1858, 0.9107, 90, 90, 120	-	-	7.78	X	16674
Ce-Cu	Cu ₄ Ce	* _o P20, *	-	0.4512, 0.6789, 0.9271, 90, 90, 90	-	-	-	N	33241
Ce-Cu	Cu ₅ Ce	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5147, 0.5147, 0.41072, 90, 90, 120	-	-	8.07	X	25592
Ce-Cu	Cu ₆ Ce lt	Cu ₆ La, mP28, 14	<i>P12₁/c1</i>	0.50841, 1.01279, 0.80731, 90, 91, 442, 90	-	-	8.33	X	23576
Ce-Cu	Cu ₆ Ce rt	Cu ₆ Ce, oP28, 62	<i>Pnma</i>	0.81088, 0.51004, 1.01621, 90, 90, 90	-	-	8.24	X	23576
Ce-D	CeD ₂	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5557, 0.5557, 0.5557, 90, 90, 90	fluorite family	-	5.58	X	6668
Ce-D	CeD ₂ lt	* _o tI*, 79	<i>I4</i>	0.5546, 0.5546, 1.113, 90, 90, 90	-	-	5.60	N	16003
Ce-D	CeD ₂ lt	CeH ₂ , tI30, 107	<i>I4mm</i>	0.5547, 0.5547, 1.113, 90, 90, 90	-	-	5.61	X	17013
Ce-D	CeD _{2.51} rt	CeH ₃ , cF44, 225	<i>Fm-3m</i>	0.5529, 0.5529, 0.5529, 90, 90, 90	fluorite family	-	5.71	X	8188
Ce-Dy	Ce _{0.97} Dy _{0.03} rt	Cu, cF4, 225	<i>Fm-3m</i>	0.51605, 0.51605, 0.51605, 90, 90, 90	close-packed structure	-	6.80	X	1520
Ce-Er	Ce _{0.4} Er _{0.6}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.36197, 0.36197, 0.5726, 90, 90, 120	close-packed structure	-	7.99	X	3498
Ce-Er	Ce _{0.5} Er _{0.5} rt	Sm, hR9, 166	<i>R-3m</i>	0.36168, 0.36168, 2.6072, 90, 90, 120	close-packed structure	-	7.78	A	3498
Ce-Er	Ce _{0.98} Er _{0.02} rt	Cu, cF4, 225	<i>Fm-3m</i>	0.5157, 0.5157, 0.5157, 90, 90, 90	close-packed structure	-	6.81	X	1520
Ce-Eu	Ce _{0.96} Eu _{0.04} rt	Cu, cF4, 225	<i>Fm-3m</i>	0.51669, 0.51669, 0.51669, 90, 90, 90	close-packed structure	-	6.77	X	1864
Ce-F	CeF ₃	HoH ₃ , hP24, 165	<i>P-3c1</i>	0.7131, 0.7131, 0.7286, 90, 90, 120	fluocerite-(Ce)	-	6.12	X	9530
Ce-F	CeF ₄	ZrF ₄ , mS60, 15	<i>C12/c1</i>	1.25883, 1.06263, 0.82241, 90, 126.24, 90	-	colorless	4.85	X	36992
Ce-Fe	CeFe ₂ hp	TbFe ₂ , hR18, 166	<i>R-3m</i>	0.512, 0.512, 1.24331, 90, 90, 120	Friauf-Laves phase	-	8.89	A	60121
Ce-Fe	CeFe ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7305, 0.7305, 0.7305, 90, 90, 90	Friauf-Laves phase	-	8.58	X	23528
Ce-Fe	CeFe ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.486, 0.486, 0.49, 90, 90, 120	-	-	8.51	X	1246
Ce-Fe	Ce _{0.004} Fe _{0.996} rt	W, cI2, 229	<i>Im-3m</i>	0.28653, 0.28653, 0.28653, 90, 90, 90	b.c.c. family	-	7.93	X	13367
Ce-Fe	Ce ₂ Fe ₁₇ ht	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.849, 0.849, 0.8281, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.90	A	5395
Ce-Fe	Ce ₂ Fe ₁₇ rt	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.8489, 0.8489, 1.241, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.91	X	50303
Ce-Fe	Ce _{2.33} Fe _{16.33}	Pr _{2.33} Fe _{16.33} , hR60, 166	<i>R-3m</i>	0.8488, 0.8488, 1.2402, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.97	A	2850
Ce-Ga	CeGa ht	* _o IP*, *	-	0.957, 0.957, 0.6992, 90, 90, 90	-	-	-	N	29447
Ce-Ga	CeGa rt	TlI, oS8, 63	<i>Cmcm</i>	0.4473, 1.1339, 0.4201, 90, 90, 90	CrB(TlI)-FeB	-	6.54	X	4971
Ce-Ga	CeGa ₂	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.42825, 0.42825, 0.43319, 90, 90, 120	AlB ₂ family	-	6.75	X	63689
Ce-Ga	CeGa ₆ rt	PuGa ₆ , tP14, 125	<i>P4/nbm</i>	0.60422, 0.60422, 0.76704, 90, 90, 90	-	-	6.62	X	45733
Ce-Ga	Ce ₃ Ga	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.54, 0.54, 0.54, 90, 90, 90	close-packed structure	-	5.17	X	10809
Ce-Ga	Ce _{4.8} Ga _{3.2}	Ba ₅ Si ₃ , tP32, 130	<i>P4/ncc</i>	0.8066, 0.8066, 1.4495, 90, 90, 90	-	-	6.31	X	23398
Ce-Ga	Ce ₃ Ga ₃	W ₅ Si ₃ , tI32, 140	<i>I4/mcm</i>	1.244, 1.244, 0.5571, 90, 90, 90	-	-	7.01	X	3914
Ce-Gd	Ce _{0.2} Gd _{0.8} ht	Mg, hP2, 194	<i>P6₃/mmc</i>	0.36473, 0.36473, 0.58116, 90, 90, 120	close-packed structure	-	7.63	X	3068
Ce-Gd	Ce _{0.3} Gd _{0.7} rt	Sm, hR9, 166	<i>R-3m</i>	0.3638, 0.3638, 2.6281, 90, 90, 120	close-packed structure	-	7.55	A	3068
Ce-Gd	Ce _{0.6} Gd _{0.4} rt	Nd, hP4, 194	<i>P6₃/mmc</i>	0.36536, 0.36536, 1.1773, 90, 90, 120	close-packed structure	-	7.17	X	3068

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ce-Gd	Ce _{0.9} Gd _{0.1} rt	Cu ₂ F4,225	<i>Fm-3m</i>	0.51588,0.51588,0.51588,90,90,90	close-packed structure	-	6.86	X	3068
Ce-Ge	CeGe	FeB ₂ ,oP8,62	<i>Pnma</i>	0.8355,0.4078,0.6023,90,90,90	CrB(III)-FeB	-	6.89	X	59506
Ce-Ge	CeGe _{1.654}	* _o ***,*	-	0.5961,0.5962,1.4206,90,90,90	-	-	-	N	36142
Ce-Ge	CeGe _{1.72} ht	ThSi ₂ ,tI12,141	<i>I4₁/amd</i>	0.42727,0.42727,1.4072,90,90,90	-	-	6.85	X	61407
Ce-Ge	CeGe _{1.75} ht	GdSi _{1.4} ,oI12,74	<i>Imma</i>	0.426,0.436,1.407,90,90,90	-	-	6.79	X	2225
Ce-Ge	CeGe _{1.768}	* _o ***,*	-	0.6051,0.6053,1.4063,90,90,90	-	-	-	N	36142
Ce-Ge	CeGe _{1.86} rt	* _m ***,*	-	0.4346,0.4254,1.4091,90,90,11,90	-	-	-	N	36142
Ce-Ge	CeGe ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4354,0.4354,0.4354,90,90,90	close-packed structure	-	7.20	X	43637
Ce-Ge	CeGe ₅ hp	LaGe ₅ ,oI12,71	<i>Immm</i>	0.4,0.6192,0.986,90,90,90	-	-	6.84	X	53825
Ce-Ge	Ce ₃ Ge	Ti ₃ P ₂ ,iP32,86	<i>P4₂/n</i>	1.2482,1.2482,0.6137,90,90,90	-	-	6.85	A	20544
Ce-Ge	Ce ₃ Ge ₅ rt	Y ₃ Ge ₅ ,oF64,43	<i>Fdd2</i>	0.5974,1.7931,1.4184,90,90,90	-	-	6.85	A	36142
Ce-Ge	Ce ₄ Ge ₃ rt	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.924,0.924,0.924,90,90,90	-	-	6.55	X	53500
Ce-Ge	Ce ₄ Ge ₇ rt	Nd ₄ Ge ₇ ,oS44,20	<i>C222₁</i>	0.6031,1.4082,1.207,90,90,90	-	-	6.92	A	36142
Ce-Ge	Ce ₂ Ge ₃ hex	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.884,0.884,0.672,90,90,120	-	-	6.71	X	4509
Ce-Ge	Ce ₂ Ge ₃ tet	Pu ₃ Rh ₃ ,iP32,130	<i>P4/ncc</i>	1.1766,1.1766,0.64155,90,90,90	-	-	6.87	X	64818
Ce-Ge	Ce ₂ Ge ₄ rt	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.79611,1.5239,0.80599,90,90,90	-	-	6.73	X	55569
Ce-Ge	Ce ₉ Ge ₁₄	Ce ₉ Ge ₁₄ ,tI104,80	<i>I4₁</i>	1.2669,1.2669,1.4208,90,90,90	-	-	6.63	X	23465
Ce-H	CeH _{2.49} rt	* _i l*,*	-	0.5537,0.5537,0.5566,90,90,90	-	bronze	-	N	20012
Ce-H	CeH _{3.0}	CH ₃ ,cF44,225	<i>Fm-3m</i>	0.55354,0.55354,0.55354,90,90,90	fluorite family	-	5.61	A	20012
Ce-Hf	Ce _{0.0142} Hf _{0.9858} rt	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.32,0.32,0.5056,90,90,120	close-packed structure	-	13.18	X	7710
Ce-Hg	HgCe	CsCl,cP2,221	<i>Pm-3m</i>	0.3808,0.3808,0.3808,90,90,90	b.c.c. family	-	10.25	X	1752
Ce-Hg	Hg ₂ Ce	Hg ₂ U,hP3,191	<i>P6₃/mmm</i>	0.4942,0.4942,0.354,90,90,120	AlB ₂ family	-	12.01	X	1752
Ce-Hg	Hg ₃ Ce	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.676,0.676,0.4941,90,90,120	close-packed structure	-	12.60	A	1752
Ce-Hg	Hg ₄₅ Ce ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	<i>F-43m</i>	2.1857,2.1857,2.1857,90,90,90	Nasicon family	-	13.45	A	12280
Ce-Ho	Ce _{0.3} Ho _{0.7}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.362,0.362,0.573,90,90,120	close-packed structure	-	8.04	X	17966
Ce-Ho	Ce _{0.43} Ho _{0.55} rt	Sm ₂ hP9,166	<i>R-3m</i>	0.363,0.363,2.602,90,90,120	close-packed structure	-	7.74	A	3139
Ce-Ho	Ce _{0.55} Ho _{0.45} rt	Nd ₂ hP4,194	<i>P6₃/mmc</i>	0.362,0.362,1.166,90,90,120	close-packed structure	-	7.59	X	17966
Ce-Ho	Ce _{0.98} Ho _{0.02} rt	Cu ₂ F4,225	<i>Fm-3m</i>	0.51578,0.51578,0.51578,90,90,90	close-packed structure	-	6.81	X	1520
Ce-I	CeI ₂	CuZr ₂ ,tI6,139	<i>I4/mmm</i>	0.3888,0.3888,1.395,90,90,90	close-packed structure	-	6.20	A	9671
Ce-I	CeI ₃	PuBr ₃ ,oS16,63	<i>Cmcm</i>	0.437,1.3967,1.0013,90,90,90	-	-	5.66	A	12650
Ce-In	CeIn ₂	KHg ₂ ,oI12,74	<i>Imma</i>	0.4742,0.7611,0.9051,90,90,90	AlB ₂ family	-	7.52	A	61828
Ce-In	CeIn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4678,0.4678,0.4678,90,90,90	close-packed structure	-	7.86	X	25314
Ce-In	Ce _{0.75} In _{0.25} ht	Cu ₂ F4,225	<i>Fm-3m</i>	0.501,0.501,0.501,90,90,90	close-packed structure	-	7.07	X	13676
Ce-In	Ce ₂ In	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.547,0.547,0.682,90,90,120	AlB ₂ family	-	7.42	X	21139
Ce-In	Ce ₃ In rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.496,0.496,0.496,90,90,90	close-packed structure	-	7.28	X	13676
Ce-In	Ce ₃ In ₅	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	1.025,0.831,1.054,90,90,90	-	-	7.36	A	13676
Ce-Ir	CeIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7578,0.7578,0.7578,90,90,90	Friauf-Laves phase	-	16.01	X	22920
Ce-Ir	CeIr ₃ hex	CeNi ₃ ,hP24,194	<i>P6₃/mmc</i>	0.5288,0.5288,1.747,90,90,120	Laves-CaCu ₅	-	16.88	A	7504
Ce-Ir	CeIr ₃ rhom	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.529,0.529,2.622,90,90,120	Laves-CaCu ₅	-	16.86	X	43986
Ce-Ir	CeIr ₅ cub	Be ₃ Au,cF24,216	<i>F-43m</i>	0.751,0.751,0.751,90,90,90	Friauf-Laves phase	-	17.27	A	7504
Ce-Ir	CeIr ₅ hex	CaCu ₅ ,hP6,191	<i>P6₃/mmm</i>	0.5282,0.5282,0.4328,90,90,120	-	-	17.49	X	22920
Ce-Ir	Ce ₂ Ir ₇	Gd ₂ Co ₇ ,hR54,166	<i>R-3m</i>	0.5294,0.5294,3.8938,90,90,120	Laves-CaCu ₅	-	17.14	A	22920
Ce-Ir	Ce ₃ Ir	Fe ₂ C-b,oP16,62	<i>Pnma</i>	0.7232,1.0057,0.6524,90,90,90	-	-	8.58	A	22920
Ce-Ir	Ce ₅ Ir ₃	Pu ₅ Rh ₃ ,iP32,130	<i>P4/ncc</i>	1.1251,1.1251,0.6371,90,90,90	-	-	10.52	A	22920
Ce-Ir	Ce ₅ Ir ₄	Sm ₅ Ge ₄ ,oP36,62	<i>Pnma</i>	0.7436,1.4776,0.7626,90,90,90	-	-	11.65	X	12934
Ce-Ir	Ce ₇ Ir ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	1.0068,1.0068,0.6323,90,90,120	-	-	9.32	A	22920
Ce-La	La _{0.1} Ce _{0.9} ht1	Cu ₂ F4,225	<i>Fm-3m</i>	0.5182,0.5182,0.5182,90,90,90	close-packed structure	-	6.68	X	13358
Ce-Lu	Ce _{0.2} Lu _{0.8}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.357,0.357,0.565,90,90,120	close-packed structure	-	8.95	X	29486
Ce-Lu	Ce _{0.96} Lu _{0.04} rt	Cu ₂ F4,225	<i>Fm-3m</i>	0.51549,0.51549,0.51549,90,90,90	close-packed structure	-	6.86	X	1520
Ce-Mg	MgCe rt	CsCl,cP2,221	<i>Pm-3m</i>	0.3908,0.3908,0.3908,90,90,90	b.c.c. family	-	4.58	X	11520
Ce-Mg	Mg _{0.06} Ce _{0.94} lt	Cu ₂ F4,225	<i>Fm-3m</i>	0.51321,0.51321,0.51321,90,90,90	close-packed structure	-	6.54	X	2008
Ce-Mg	Mg _{0.999} Ce _{0.001}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.32085,0.32085,0.5211,90,90,120	close-packed structure	-	1.75	X	60067
Ce-Mg	Mg ₁₂ Ce	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	1.03291,1.03291,0.59633,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	2.25	A	59065
Ce-Mg	Mg _{17.58} Ce _{1.71} ht	Mg _{17.58} Ce _{1.71} ,hP44,194	<i>P6₃/mmc</i>	1.033,1.033,1.025,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	2.34	X	3283
Ce-Mg	Mg ₂ Ce ht	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.8731,0.8731,0.8731,90,90,90	Friauf-Laves phase	-	3.77	X	25184
Ce-Mg	Mg ₃ Ce	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.7448,0.7448,0.7448,90,90,90	fluorite family	-	3.43	X	32642
Ce-Mg	Mg ₄₁ Ce ₅ ht	Mg ₄₁ Ce ₅ ,tI92,87	<i>I4/m</i>	1.478,1.478,1.043,90,90,90	-	-	2.47	X	3242
Ce-N	CeN	NaCl,cF8,225	<i>Fm-3m</i>	0.5022,0.5022,0.5022,90,90,90	rocksalt family	golden	8.08	X	12338
Ce-N	CeN ₂	* _h P*,*	-	0.3894,0.3894,0.6038,90,90,120	-	-	-	N	6741
Ce-Nd	Ce _{0.6} Nd _{0.4} rt	Nd ₂ hP4,194	<i>P6₃/mmc</i>	0.36729,0.36729,1.18358,90,90,120	close-packed structure	-	6.81	X	3995
Ce-Nd	Ce _{0.7} Nd _{0.3} rt	Cu ₂ F4,225	<i>Fm-3m</i>	0.51611,0.51611,0.51611,90,90,90	close-packed structure	-	6.83	X	3995
Ce-Ni	CeNi	TiI ₂ ,oS8,63	<i>Cmcm</i>	0.379,1.055,0.437,90,90,90	CrB(III)-FeB	-	7.56	X	17997
Ce-Ni	CeNi ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.722,0.722,0.722,90,90,90	Friauf-Laves phase	-	9.09	X	20088
Ce-Ni	CeNi ₃	CeNi ₃ ,hP24,194	<i>P6₃/mmc</i>	0.49613,0.49613,1.65216,90,90,120	Laves-CaCu ₅	-	8.95	X	49360
Ce-Ni	CeNi ₅	CaCu ₅ ,hP6,191	<i>P6₃/mmm</i>	0.4885,0.4885,0.4006,90,90,120	-	-	8.70	X	29357
Ce-Ni	Ce _{0.006} Ni _{0.994}	Cu ₂ F4,225	<i>Fm-3m</i>	0.35301,0.35301,0.35301,90,90,90	close-packed structure	-	8.94	X	49552
Ce-Ni	Ce _{0.95} Ni _{0.05}	TmNi ₂ ,cF192,216	<i>F-43m</i>	1.4417,1.4417,1.4417,90,90,90	Friauf-Laves phase	-	8.88	X	24493
Ce-Ni	Ce ₂ Ni ₇	Ce ₂ Ni ₇ ,hP36,194	<i>P6₃/mmc</i>	0.49413,0.49413,2.45136,90,90,120	Laves-CaCu ₅	-	8.86	X	49971
Ce-Ni	Ce ₇ Ni ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	0.992,0.992,0.633,90,90,120	-	-	7.12	X	1300
Ce-Ni	Ce ₇ Ni ht1	Cu ₂ F4,225	<i>Fm-3m</i>	0.352,0.352,0.352,90,90,90	close-packed structure	-	8.94	X	63955
Ce-O	CeO hp-ht	NaCl,cF8,225	<i>Fm-3m</i>	0.5089,0.5089,0.5089,90,90,90	rocksalt family	golden	7.87	X	27837
Ce-O	CeO _{1.695} ht2	UN _{1.6} ,cI96,206	<i>Ia-3</i>	1.1111,1.1111,1.1111,90,90,90	-	pink pale	6.48	X	36536
Ce-O	CeO _{1.785} rt	* _h hR*,*	-	0.9775,0.9775,0.9502,90,90,120	-	blue	-	N	676
Ce-O	CeO ₂ hex	* _h P48*,*	-	0.8368,0.8368,1.0693,90,90,120	-	-	7.05	N	39836
Ce-O	CeO ₂ hp	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.5579,0.3407,0.6527,90,90,90	-	-	9.22	A	27882
Ce-O	CeO ₂ rt	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.54052,0.54052,0.54052,90,90,90	cerianite-(Ce)	yellow	7.24	X	58825
Ce-O	Ce ₁₁ O ₂₀ rt	Tb ₁₁ O ₂₀ -b,aP31,2	<i>P-1</i>	0.6732,0.6757,1.026,96.22,90.04,99.8	-	pink pale	6.76	X	36536
Ce-O	Ce ₁₉ O ₃₄ rt	* _a P*,*	-	0.6627,1.0123,1.1478,100.9,95.5,90.	-	-	-	N	18075

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ce-O	Ce ₂ O ₃ rt	La ₂ O ₃ , hP5, 164	<i>P-3m1</i>	0.3891, 0.3891, 0.6059, 90, 90, 120	-	yellow	6.86	X	17936
Ce-O	Ce ₂ O ₁₁ rt	* _m P144, 14	<i>P12₁/c1</i>	0.6781, 1.1893, 1.31583, 90, 100.083, 90	-	-	-	N	9853
Ce-O	Ce ₂ O _{11.89} rt	Pr ₂ O ₁₂ , hR57, 148	<i>R-3</i>	1.0351, 1.0351, 0.9638, 90, 90, 120	fluorite family	pink pale	6.52	X	36536
Ce-Os	CeOs ₂ hp	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.53502, 0.53502, 0.88165, 90, 90, 120	Friauf-Laves phase	-	15.82	A	18207
Ce-Os	CeOs ₂ ht	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.75934, 0.75934, 0.75934, 90, 90, 90	Friauf-Laves phase	-	15.79	X	18207
Ce-Os	Ce ₃ Os	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7348, 0.967, 0.6378, 90, 90, 90	-	-	8.95	A	13172
Ce-P	CeP hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.328, 0.328, 0.328, 90, 90, 90	b.c.c. family	-	8.05	X	20146
Ce-P	CeP rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.592, 0.592, 0.592, 90, 90, 90	rocksalt family	-	5.48	X	27837
Ce-P	CeP ₂ ht	LaP ₂ , mS48, 9	<i>C1c1</i>	1.26719, 1.3967, 0.8962, 90, 134.97, 90	-	-	4.78	A	33241
Ce-P	CeP ₂ rt	NdAs ₂ , mP12, 14	<i>P12₁/c1</i>	0.4066, 0.6577, 1.0157, 90, 105.67, 90	-	-	5.13	A	38311
Ce-P	CeP ₃ hp	NdP ₃ , mP12, 11	<i>P12₁/m1</i>	0.49143, 0.96226, 0.55152, 90, 104.303, 90	-	black	3.88	X	43960
Ce-P	CeP ₃	LaP ₃ , mP24, 11	<i>P12₁/m1</i>	0.5501, 0.9618, 0.9831, 90, 104.21, 90	-	black	3.89	X	35541
Ce-Pb	CePb ₂	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.3315, 0.3315, 1.6187, 90, 90, 90	close-packed structure	-	10.35	A	28906
Ce-Pb	CePb ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4876, 0.4876, 0.4876, 90, 90, 90	close-packed structure	-	10.91	X	16430
Ce-Pb	Ce ₃ Pb	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4964, 0.4964, 0.4964, 90, 90, 90	close-packed structure	-	8.52	X	2237
Ce-Pb	Ce ₃ Pb ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.9473, 0.9473, 0.6825, 90, 90, 120	-	-	8.28	A	2419
Ce-Pb	Ce ₃ Pb ₄	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.8435, 1.615, 0.8571, 90, 90, 90	-	-	8.70	A	4240
Ce-Pd	CePd rt	TiI ₂ , oS8, 63	<i>Cmcm</i>	0.38893, 1.0932, 0.46229, 90, 90, 90	CrB(TiI)-FeB	-	8.33	A	53852
Ce-Pd	CePd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4135, 0.4135, 0.4135, 90, 90, 90	close-packed structure	-	10.79	X	21883
Ce-Pd	CePd ₃ hex	CaCu ₂ , hP6, 191	<i>P6/mmm</i>	0.5373, 0.5373, 0.4177, 90, 90, 120	-	-	10.69	X	22106
Ce-Pd	CePd ₃ ht	* _c * _c * _c	-	0.4056, 0.4056, 0.4056, 90, 90, 90	-	-	-	N	24165
Ce-Pd	CePd ₃ lt	CePd ₃ , oP12, 51	<i>Pmma</i>	0.57004, 0.40622, 0.84617, 90, 90, 90	-	-	11.39	X	25932
Ce-Pd	CePd ₇ ht	* _j * _j * _j	-	0.2594, 0.2594, 0.4133, 90, 90, 120	-	-	-	N	24165
Ce-Pd	Ce _{0.12} Pd _{0.88} rt	Cu, cF4, 225	<i>Fm-3m</i>	0.3997, 0.3997, 0.3997, 90, 90, 90	close-packed structure	-	11.49	X	22106
Ce-Pd	Ce _{0.77} Pd _{0.23} rt	CuPt ₇ , cF32, 225	<i>Fm-3m</i>	0.7946, 0.7946, 0.7946, 90, 90, 90	close-packed structure	-	11.61	X	53852
Ce-Pd	Ce ₃ Pd ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3699, 1.3699, 0.5813, 90, 90, 120	b.c.c. family	-	8.92	A	53852
Ce-Pd	Ce ₃ Pd ₅	Th ₃ Pd ₅ , hP8, 189	<i>P-62m</i>	0.725, 0.725, 0.385, 90, 90, 120	AlB ₂ family	-	9.02	A	17947
Ce-Pd	Ce ₃ Pd ₃	Th ₃ Fe ₃ , hP20, 186	<i>P6₃/mc</i>	1.021, 1.021, 0.644, 90, 90, 120	-	-	7.43	A	17947
Ce-Pr	Ce _{0.95} Pr _{0.05} rt	Cu, cF4, 225	<i>Fm-3m</i>	0.51609, 0.51609, 0.51609, 90, 90, 90	close-packed structure	-	6.77	X	1520
Ce-Pt	CePt	TiI ₂ , oS8, 63	<i>Cmcm</i>	0.3884, 1.0845, 0.4517, 90, 90, 90	CrB(TiI)-FeB	-	11.70	X	28030
Ce-Pt	CePt ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.77312, 0.77312, 0.77312, 90, 90, 90	Friauf-Laves phase	-	15.25	X	65067
Ce-Pt	CePt ₃	CaCu ₂ , hP6, 191	<i>P6/mmm</i>	0.5365, 0.5365, 0.4379, 90, 90, 120	-	-	16.97	X	22789
Ce-Pt	Ce ₃ Pt ₃ rt	Er ₃ Ni ₂ , hR45, 148	<i>R-3</i>	0.8962, 0.8962, 1.7119, 90, 90, 120	-	-	10.17	A	55193
Ce-Pt	Ce ₃ Pt ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3683, 1.3683, 0.5796, 90, 90, 120	b.c.c. family	-	12.73	A	55193
Ce-Pt	Ce ₃ Pt ₃	Pu ₃ Rh ₃ , tP32, 130	<i>P4/ncc</i>	1.1405, 1.1405, 0.6648, 90, 90, 90	-	-	9.88	A	55193
Ce-Pt	Ce ₃ Pt ₄ ht	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.7665, 1.5066, 0.7616, 90, 90, 90	-	-	11.18	A	55193
Ce-Pt	Ce ₃ Pt ₃	Th ₃ Fe ₃ , hP20, 186	<i>P6₃/mc</i>	1.021, 1.021, 0.6403, 90, 90, 120	-	-	9.00	A	55193
Ce-Pu	Ce _{0.01} Pu _{0.99} ht1	Pu, mS34, 12	<i>C12/m1</i>	1.19433, 1.0451, 0.7852, 90, 129.013, 90	-	-	18.01	A	1769
Ce-Pu	Ce _{0.08} Pu _{0.92} ht3	Cu, cF4, 225	<i>Fm-3m</i>	0.4659, 0.4659, 0.4659, 90, 90, 90	close-packed structure	-	15.48	X	1293
Ce-Pu	Ce _{0.5} Pu _{0.5} m	Cu, cF4, 225	<i>Fm-3m</i>	0.476, 0.476, 0.476, 90, 90, 90	close-packed structure	-	11.83	X	9091
Ce-Pu	Ce _{0.7} Pu _{0.3} lt	Cu, cF4, 225	<i>Fm-3m</i>	0.5009, 0.5009, 0.5009, 90, 90, 90	close-packed structure	-	9.05	X	1133
Ce-Rh	CeRh	TiI ₂ , oS8, 63	<i>Cmcm</i>	0.3844, 1.0946, 0.4174, 90, 90, 90	CrB(TiI)-FeB	-	9.19	A	55980
Ce-Rh	CeRh ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7545, 0.7545, 0.7545, 90, 90, 90	Friauf-Laves phase	-	10.70	X	27307
Ce-Rh	CeRh ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.40284, 0.40284, 0.40284, 90, 90, 90	close-packed structure	-	11.40	X	54378
Ce-Rh	Ce ₃ Rh ₂	Er ₃ Ni ₂ , hR45, 148	<i>R-3</i>	0.8858, 0.8858, 1.6794, 90, 90, 120	-	-	8.20	A	27307
Ce-Rh	Ce ₃ Rh ₃ rt	Pu ₃ Rh ₃ , tP32, 130	<i>P4/ncc</i>	1.126, 1.126, 0.645, 90, 90, 90	-	-	8.20	A	27307
Ce-Rh	Ce ₃ Rh ₄	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.7434, 1.486, 0.7604, 90, 90, 90	-	-	8.79	X	9767
Ce-Rh	Ce ₃ Rh ₃	Th ₃ Fe ₃ , hP20, 186	<i>P6₃/mc</i>	1.0051, 1.0051, 0.6378, 90, 90, 120	-	-	7.68	A	27307
Ce-Ru	CeRu ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7545, 0.7545, 0.7545, 90, 90, 90	Friauf-Laves phase	-	10.59	X	24622
Ce-Ru	Ce _{0.05} Ru _{0.95}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2718, 0.2718, 0.4298, 90, 90, 120	close-packed structure	-	12.44	X	17525
Ce-Ru	Ce ₁₆ Ru ₉	Ce ₁₆ Ru ₉ , hR150, 166	<i>R-3m</i>	1.3645, 1.3645, 2.2742, 90, 90, 120	-	-	8.56	X	25474
Ce-Ru	Ce ₃ Ru	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7242, 0.9863, 0.6419, 90, 90, 90	-	-	7.55	X	24622
Ce-Ru	Ce ₄ Ru ₃	Ce ₄ Ru ₃ , mS28, 12	<i>C12/m1</i>	0.8400, 1.3837, 0.5985, 90, 117.90, 90	-	-	9.33	X	26800
Ce-Ru	Ce ₇ Ru ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃/mc</i>	0.9802, 0.9802, 0.6261, 90, 90, 120	-	-	8.19	X	24622
Ce-S	CeS	NaCl, cF8, 225	<i>Fm-3m</i>	0.5785, 0.5785, 0.5785, 90, 90, 90	rocksalt family	golden	5.91	X	13461
Ce-S	CeS ₂ cub	* _c F*, *	-	0.808, 0.808, 0.808, 90, 90, 90	-	-	-	N	27238
Ce-S	CeS ₂ hp	LaS ₂ , oP24, 62	<i>Pnma</i>	0.8068, 1.6216, 0.4095, 90, 90, 90	-	red dark	5.06	X	54546
Ce-S	CeS ₂ mon	CeSe ₂ , mP12, 14	<i>P12₁/c1</i>	0.8097, 0.4075, 0.8105, 90, 89.97, 90	-	red dark	5.07	X	54546
Ce-S	Ce ₁₀ S ₁₅	Pr ₁₀ Si ₄ O, tI200, 142	<i>I4₁/acd</i>	1.52326, 1.52326, 2.0096, 90, 90, 90	-	-	5.36	A	60267
Ce-S	Ce ₁₀ S ₁₉ tet	Ce ₁₀ Se ₁₉ , tP58, 86	<i>P4₂/n</i>	0.9015, 0.9015, 1.6168, 90, 90, 90	-	black	5.08	X	50593
Ce-S	Ce ₂ S ₃ cub	* _c F*, 227	<i>Fd-3m</i>	2.031, 2.031, 2.031, 90, 90, 90	-	-	-	N	5399
Ce-S	Ce ₂ S ₃ orth	* _o * _o * _o	-	0.7554, 1.064, 1.3187, 90, 90, 90	-	-	-	N	27238
Ce-S	Ce ₂ S ₃ rt	Cr ₃ C ₂ -b, oP20, 62	<i>Pnma</i>	0.75323, 0.40967, 1.57276, 90, 90, 90	-	red dark	5.15	X	36877
Ce-S	Ce ₂ FeS ₄ ht	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8651, 0.8651, 0.8651, 90, 90, 90	-	red	5.15	X	30236
Ce-S	Ce ₃ S ₄ rt	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.863, 0.863, 0.863, 90, 90, 90	-	black	5.67	A	4386
Ce-S	Ce _{4.67} S ₇ rt	* _i l192, 142	<i>I4₁/acd</i>	1.534, 1.534, 2.033, 90, 90, 90	-	-	-	N	5070
Ce-Sb	CeSb hp	CuTi, tP2, 123	<i>P4/mmm</i>	0.3933, 0.3933, 0.3209, 90, 90, 90	b.c.c. family	-	8.76	X	17014
Ce-Sb	CeSb lt	* _i *, 8, *	-	0.6407, 0.6407, 0.6392, 90, 90, 90	-	-	-	N	4718
Ce-Sb	CeSb rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.64208, 0.64208, 0.64208, 90, 90, 90	rocksalt family	-	6.57	X	33429
Ce-Sb	CeSb ₂ rt	SmSb ₂ , oS24, 64	<i>Cmce</i>	0.62807, 0.61561, 1.8267, 90, 90, 90	-	-	7.22	A	43097
Ce-Sb	Ce ₂ Sb	La ₂ Sb, tI12, 139	<i>I4/mmm</i>	0.4538, 0.4538, 1.7861, 90, 90, 90	-	-	7.26	X	41726
Ce-Sb	Ce ₄ Sb ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.9519, 0.9519, 0.9519, 90, 90, 90	-	gray	7.13	X	53664
Ce-Sb	Ce ₃ Sb ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.9302, 0.9302, 0.6514, 90, 90, 120	-	-	7.25	X	3753
Ce-Se	Sc _{0.17} Ce _{0.83} ht1	Cu, cF4, 225	<i>Fm-3m</i>	0.51236, 0.51236, 0.51236, 90, 90, 90	close-packed structure	-	6.12	X	1520
Ce-Se	CeSe rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.599, 0.599, 0.599, 90, 90, 90	rocksalt family	red wine	6.77	X	27837
Ce-Se	CeSe _{1.75}	* _m P24, 14	<i>P12₁/c1</i>	0.8487, 0.8375, 0.8375, 90, 90, 90	-	-	-	N	3451
Ce-Se	CeSe _{1.83}	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.4178, 0.4178, 0.8471, 90, 90, 90	-	black	6.39	X	54488
Ce-Se	CeSe ₂	CeSe ₂ , mP12, 14	<i>P12₁/c1</i>	0.8482, 0.4210, 0.8420, 90, 90, 90	-	-	6.58	X	3873

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ce-Se	Ce ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ ,tP58,86	$P4_2/n$	0.93598,0.93598,1.6938,90,90,90	-	-	6.49	X	22378
Ce-Se	Ce _{2,67} Se ₄ ht	Th ₃ P ₄ ,cI28,220	$I-43d$	0.89774,0.89774,0.89774,90,90,90	-	red dark	6.33	X	44842
Ce-Si	CeSi	FeB-b,oP8,62	$Pnma$	0.83002,0.39522,0.59519,90,90,90	CrB(III)-FeB	gray	5.72	X	28952
Ce-Si	CeSi _{1,82}	GdSi _{1,4} ,oI12,74	$Imma$	0.41802,0.41859,1.38501,90,90,90	-	gray	5.24	X	46693
Ce-Si	CeSi ₂	ThSi ₂ ,tI12,141	$I4_1/amd$	0.41874,0.41874,1.3904,90,90,90	-	-	5.35	X	47557
Ce-Si	CeSi ₅ hp	LaGe ₅ ,oI12,71	$Immm$	0.37774,0.60189,0.92979,90,90,90	-	-	4.41	X	54597
Ce-Si	Ce _{0,0021} Si _{0,9979}	C ₂ F8,227	$Fd-3m$	0.5428,0.5428,0.5428,90,90,90	-	-	2.35	X	57691
Ce-Si	Ce ₂ Si _{2,7}	V ₂ B ₃ ,oS20,63	$Cmcm$	0.44043,2.48498,0.39527,90,90,90	-	-	5.47	X	27343
Ce-Si	Ce ₂ Si ₇ hp	Ce ₂ Si ₇ ,oS18,65	$Cmmm$	0.70893,0.99644,0.44868,90,90,90	-	-	5.00	X	54597
Ce-Si	Ce ₃ Si ₂	U ₃ Si ₂ ,tP10,127	$P4/mbm$	0.7717,0.7717,0.437,90,90,90	-	-	6.08	A	57691
Ce-Si	Ce ₅ Si ₃ (C)	* ₁ ** *	-	1.101,1.101,0.403,90,90,90	-	-	-	N	16970
Ce-Si	Ce ₅ Si ₃ rt	Cr ₃ B ₃ ,tI32,140	$I4/mcm$	0.789,0.789,1.377,90,90,90	-	-	6.08	X	5574
Ce-Si	Ce ₅ Si ₄	Zr ₅ Si ₄ ,tP36,92	$P4_12_12$	0.79539,0.79539,1.50723,90,90,90	-	-	5.66	X	53511
Ce-Sm	Ce _{0,4} Sm _{0,6} rt	Nd ₄ hP4,194	$P6_3/mmc$	0.36477,0.36477,1.176,90,90,120	close-packed structure	-	7.17	X	3995
Ce-Sm	Ce _{0,8} Sm _{0,2} rt	Cu ₂ cF4,225	$Fm-3m$	0.51564,0.51564,0.51564,90,90,90	close-packed structure	-	6.89	X	3995
Ce-Sn	CeSn ₃	Cu ₃ Au ₂ cP4,221	$Pm-3m$	0.4722,0.4722,0.4722,90,90,90	close-packed structure	-	7.83	X	13441
Ce-Sn	Ce ₁₁ Sn ₁₀ orth	* ₂ o** *	-	0.43868,0.94176,1.17954,90,90,90	-	-	-	N	24771
Ce-Sn	Ce ₁₁ Sn ₁₀ tet	Ho ₁₁ Ge ₁₀ ,tI84,139	$I4/mmm$	1.212,1.212,1.795,90,90,90	-	gray	6.87	A	31652
Ce-Sn	Ce ₂ Sn ₃	Nd ₃ Sn ₃ ,aP20,2	$P-1$	0.6444,0.851,1.1195,107.36,96.78,99.42	-	-	7.43	A	43304
Ce-Sn	Ce ₂ Sn ₅	Ce ₂ Sn ₅ ,oS28,65	$Cmmm$	0.4559,3.5014,0.4619,90,90,90	close-packed structure	-	7.87	X	20896
Ce-Sn	Ce ₂ Sn	Cu ₃ Au ₂ cP4,221	$Pm-3m$	0.49479,0.49479,0.49479,90,90,90	close-packed structure	gray	7.39	X	24771
Ce-Sn	Ce ₃ Sn ₅	Pu ₃ Pd ₅ ,oS32,63	$Cmcm$	1.02485,0.82003,1.0569,90,90,90	-	-	7.58	A	24771
Ce-Sn	Ce ₃ Sn ₇	Ce ₃ Sn ₇ ,oS20,65	$Cmmm$	0.4524,2.5742,0.4610,90,90,90	close-packed structure	-	7.74	X	20896
Ce-Sn	Ce ₅ Sn ₃ ht	Mn ₃ Si ₃ ,hP16,193	$P6_3/mcm$	0.9316,0.9316,0.6833,90,90,120	-	-	6.83	A	24771
Ce-Sn	Ce ₅ Sn ₃ rt	W ₅ Si ₃ ,tI32,140	$I4/mcm$	1.25668,1.25668,0.61676,90,90,90	-	gray	7.21	X	25134
Ce-Sn	Ce ₅ Sn ₄	Sm ₅ Ge ₄ ,oP36,62	$Pnma$	0.8333,1.6001,0.8473,90,90,90	-	gray	6.91	X	26174
Ce-Tb	Ce _{0,25} Tb _{0,75} rt	Mg ₂ hP2,194	$P6_3/mmc$	0.36285,0.36285,0.57577,90,90,120	close-packed structure	-	7.80	X	3995
Ce-Tb	Ce _{0,4} Tb _{0,6} rt	Sm ₂ hR9,166	$R-3m$	0.36247,0.36247,2.6159,90,90,120	close-packed structure	-	7.60	A	3995
Ce-Tb	Ce _{0,6} Tb _{0,4} rt	Nd ₄ hP4,194	$P6_3/mmc$	0.36399,0.36399,1.172,90,90,120	close-packed structure	-	7.29	X	3995
Ce-Tb	Ce _{0,9} Tb _{0,1} rt	Cu ₂ cF4,225	$Fm-3m$	0.5154,0.5154,0.5154,90,90,90	close-packed structure	-	6.89	X	3995
Ce-Te	CeTe rt	NaCl,cF8,225	$Fm-3m$	0.636,0.636,0.636,90,90,90	rocksalt family	blue	6.91	X	27837
Ce-Te	CeTe ₂	CeTe ₂ ,tP72,75	$P4$	0.89975,0.89975,1.8212,90,90,90	-	black	7.12	X	37709
Ce-Te	CeTe ₃	CeTe ₃ ,oS16,40	$Ama2$	0.43849,2.59733,0.43732,90,90,90	-	brown	6.97	X	45698
Ce-Te	Ce ₁₀ Te ₁₉	Ce ₁₀ Se ₁₉ ,tP58,86	$P4_2/n$	1.00261,1.00261,1.81336,90,90,90	-	black	6.97	X	48005
Ce-Te	Ce ₂ Te ₃	Th ₂ Si ₃ ,oP20,62	$Pnma$	1.23334,0.44478,1.19953,90,90,90	-	-	6.69	X	64760
Ce-Te	Ce ₂ Te ₃ ht	Nd ₂ Te ₅ ,oS28,63	$Cmcm$	0.442,4.435,0.442,90,90,90	-	lilac	7.04	A	3454
Ce-Te	Ce ₃ Te ₄	Th ₃ P ₄ ,cI28,220	$I-43d$	0.95297,0.95297,0.95297,90,90,90	-	gray	7.14	X	57125
Ce-Te	Ce ₄ Te ₇	* ₁ tP22,127	$P4/mbm$	0.8988,0.8988,0.9167,90,90,90	-	black	-	N	3454
Ce-Th	Th _{0,1} Ce _{0,9} rt	Cu ₂ cF4,225	$Fm-3m$	0.5137,0.5137,0.5137,90,90,90	close-packed structure	-	7.32	X	52156
Ce-Tl	TlCe lt	CuTi,tP2,123	$P4/mmm$	0.367,0.367,0.434,90,90,90	b.c.c. family	-	9.79	X	14286
Ce-Tl	TlCe rt	CsCl,cP2,221	$Pm-3m$	0.3888,0.3888,0.3888,90,90,90	b.c.c. family	-	9.73	X	14286
Ce-Tl	TlCe ₃ rt	Cu ₃ Au ₂ cP4,221	$Pm-3m$	0.495,0.495,0.495,90,90,90	close-packed structure	-	8.55	X	13676
Ce-Tl	Tl _{0,25} Ce _{0,75} ht	Cu ₂ cF4,225	$Fm-3m$	0.501,0.501,0.501,90,90,90	close-packed structure	-	8.25	X	13676
Ce-Tl	Tl ₃ Ce	Cu ₃ Au ₂ cP4,221	$Pm-3m$	0.47674,0.47674,0.47674,90,90,90	close-packed structure	-	11.54	X	13222
Ce-Tl	Tl ₃ Ce ₅	W ₃ Si ₃ ,tI32,140	$I4/mcm$	1.265,1.265,0.6197,90,90,90	-	-	8.80	A	13676
Ce-Tl	Tl ₃ Ce ₃	Pu ₃ Pd ₅ ,oS32,63	$Cmcm$	1.0325,0.832,1.0555,90,90,90	-	-	10.57	A	13676
Ce-Tm	Ce _{0,98} Tm _{0,02} rt	Cu ₂ cF4,225	$Fm-3m$	0.51575,0.51575,0.51575,90,90,90	close-packed structure	-	6.81	X	1520
Ce-Y	Y _{0,1} Ce _{0,9} htI	Cu ₂ cF4,225	$Fm-3m$	0.51596,0.51596,0.51596,90,90,90	close-packed structure	-	6.53	X	3068
Ce-Y	Y _{0,25} Ce _{0,75} rt	Nd ₄ hP4,194	$P6_3/mmc$	0.3668,0.3668,1.175,90,90,120	close-packed structure	-	6.18	X	20143
Ce-Y	Y _{0,45} Ce _{0,55} rt	Sm ₂ hR9,166	$R-3m$	0.36677,0.36677,2.6448,90,90,120	close-packed structure	-	5.68	A	3068
Ce-Y	Y _{0,7} Ce _{0,3} rt	Mg ₂ hP2,194	$P6_3/mmc$	0.3675,0.3675,0.57981,90,90,120	close-packed structure	-	5.11	X	3068
Ce-Yb	Ce _{0,75} Yb _{0,25} m	Cu ₂ cF4,225	$Fm-3m$	0.497,0.497,0.497,90,90,90	close-packed structure	-	8.03	X	27334
Ce-Zn	ZnCe hp	AuCd,oP4,51	$Pmma$	0.445,0.2704,0.5229,90,90,90	close-packed structure	-	10.85	A	33225
Ce-Zn	ZnCe lt	CuTi,tP2,123	$P4/mmm$	0.3677,0.3677,0.3745,90,90,90	b.c.c. family	-	6.74	X	23844
Ce-Zn	ZnCe rt	CsCl,cP2,221	$Pm-3m$	0.3694,0.3694,0.3694,90,90,90	b.c.c. family	-	6.77	X	23844
Ce-Zn	Zn ₁₁ Ce	BaCd ₁₁ ,tI48,141	$I4_1/amd$	1.06588,1.06588,0.68626,90,90,90	-	-	7.32	X	44992
Ce-Zn	Zn ₁₁ Ce ₃	La ₃ Al ₁₁ ,oI28,71	$Immm$	0.45242,0.88942,1.34754,90,90,90	-	-	6.98	X	57793
Ce-Zn	Zn ₁₇ Ce ₂ hex	Th ₃ Ni ₁₇ ,hP38,194	$P6_3/mmc$	0.9088,0.9088,0.8856,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	7.30	A	3487
Ce-Zn	Zn ₁₇ Ce ₂ rhom	Zn ₁₇ Th ₃ ,hR57,166	$R-3m$	0.90907,0.90907,1.32847,90,90,120	CaCu ₅ -Zr ₄ Al ₃	gray	7.29	X	19986
Ce-Zn	Zn ₂ Ce	KH ₂ Ge ₂ ,oI12,74	$Imma$	0.4639,0.7552,0.751,90,90,90	AlB ₂ family	-	6.84	X	6616
Ce-Zn	Zn ₂₂ Ce ₃	Zn ₂₂ Ce ₃ ,tI100,141	$I4_1/amd$	0.89363,0.89363,2.13804,90,90,90	-	-	7.23	X	57793
Ce-Zn	Zn ₃ Ce	Zn ₃ Ce,oS16,63	$Cmcm$	0.4627,1.0437,0.6644,90,90,90	-	-	6.96	X	5221
Ce-Zn	Zn ₅ Ce	CaCu ₅ ,hP6,191	$P6/mmm$	0.543,0.543,0.428,90,90,120	-	-	7.10	X	20096
Ce-Zn	Zn _{5,66} Ce _{0,67} rt	Cu _{5,44} Tb _{0,78} ,hP8,191	$P6/mmm$	0.52424,0.52424,0.44274,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	7.31	X	57793
Ce-Zn	Zn ₅₈ Ce ₁₃	Zn ₅₈ Gd ₁₃ ,hP142,194	$P6_3/mmc$	1.4638,1.4638,1.4158,90,90,120	-	-	7.10	X	48647
Ce-Zr	Ce _{0,07} Zr _{0,93} rt	Mg ₂ hP2,194	$P6_3/mmc$	0.3234,0.3234,0.51531,90,90,120	close-packed structure	-	6.73	X	2176
CF-Cl	CFCl ₃ ht	PuBr ₃ ,oS16,63	$Cmcm$	0.3869,1.1748,0.8561,90,90,90	-	-	6.10	X	7364
CF-Cl	CFCl ₃ rt	UCl ₃ ,hP8,176	$P6_3/m$	0.7379,0.7379,0.409,90,90,120	-	-	6.15	X	7364
CF-F	CF ₃ ht	HoH ₃ ,hP24,165	$P-3c1$	0.6945,0.6945,0.7101,90,90,120	-	-	10.35	A	7373
CF-F	CF ₃ rt	Fe ₂ C-b,oP16,62	$Pnma$	0.6653,0.7039,0.4393,90,90,90	-	-	9.94	A	7373
CF-I	CF ₃ ht	CdCl ₂ ,hR9,166	$R-3m$	0.45735,0.45735,2.08477,90,90,120	-	-	6.66	A	11516
CF-I	CF ₃ rt	CdI ₂ ,hP3,164	$P-3m1$	0.4557,0.4557,0.6992,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.67	A	11516
CF-I	CF ₃	BiI ₃ ,hR24,148	$R-3$	0.75874,0.75874,2.08132,90,90,120	-	-	6.07	A	11516
CF-O	CF ₂ O ₂ hp	* ₁ hR* *	-	0.75918,0.75918,0.93176,90,90,120	-	-	-	N	6647
CF-O	CF ₂ O ₂	CaF ₂ ,cF12,225	$Fm-3m$	0.531,0.531,0.531,90,90,90	fluorite family	black	12.56	X	6647
CF-O	CF ₂ O ₃ htI	Sm ₂ O ₃ ,mS30,12	$C12/m1$	1.4101,0.3592,0.8796,90,100.16,90	-	green lime	12.50	A	6647
CF-O	CF ₂ O ₃ ht2	La ₂ O ₃ ,hP5,164	$P-3m1$	0.372,0.372,0.596,90,90,120	-	-	12.79	A	7375
CF-O	CF ₂ O ₃ rt	(Mn _{0,5} Fe _{0,5}) ₂ O ₃ ,cI80,206	$Ia-3$	1.085,1.085,1.085,90,90,90	-	-	11.44	A	23555

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a\beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cf-Pt	CfPt ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5264, 0.5264, 0.4417, 90, 90, 120	-	-	19.21	X	23556
Cf-S	CfS	NaCl, cF8, 225	<i>Fm-3m</i>	0.5744, 0.5744, 0.5744, 90, 90, 90	rocksalt family	-	9.92	X	8961
Cf-Sb	CfSb	NaCl, cF8, 225	<i>Fm-3m</i>	0.6165, 0.6165, 0.6165, 90, 90, 90	rocksalt family	-	10.57	X	13108
Cl-Cm	CmCl ₃	UCl ₃ , hP8, 176	<i>P6₃/m</i>	0.73743, 0.73743, 0.4185, 90, 90, 120	-	-	5.95	X	7365
Cl-Co	CoCl ₂ rt	CdCl ₂ , hR9, 166	<i>R-3m</i>	0.35434, 0.35434, 1.74311, 90, 90, 120	-	blue	3.41	X	72
Cl-Cr	CrCl ₂ ht	CrCl ₂ , oP12, 62	<i>Pnma</i>	1.1794, 0.3429, 0.6514, 90, 90, 90	-	-	3.10	X	33507
Cl-Cr	CrCl ₂ rt	CaCl ₂ , oP6, 58	<i>Pnnm</i>	0.59848, 0.66439, 0.34885, 90, 90, 90	-	-	2.94	X	46430
Cl-Cr	CrCl ₃ lt	BiI ₃ , hR24, 148	<i>R-3</i>	0.5942, 0.5942, 1.7333, 90, 90, 120	-	-	2.98	X	2186
Cl-Cr	CrCl ₃ rt	AlCl ₃ , mS16, 12	<i>C12/m1</i>	0.59588, 1.03206, 0.61138, 90, 108.495, 90	-	purple	2.95	X	2186
Cl-Cs	CsCl ht	NaCl, cF8, 225	<i>Fm-3m</i>	0.693, 0.693, 0.693, 90, 90, 90	rocksalt family	-	3.36	X	18311
Cl-Cs	CsCl rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.4088, 0.4088, 0.4088, 90, 90, 90	b.c.c. family	-	4.09	X	5521
Cl-Cu	CuCl hp1	CuCl, cP16, 205	<i>Pa-3</i>	0.63104, 0.63104, 0.63104, 90, 90, 90	-	colorless	5.23	X	29366
Cl-Cu	CuCl hp2	NaCl, cF8, 225	<i>Fm-3m</i>	0.4929, 0.4929, 0.4929, 90, 90, 90	rocksalt family	colorless	5.49	X	29366
Cl-Cu	CuCl hp3	ZnS, cF8, 216	<i>F-43m</i>	0.5406, 0.5406, 0.5406, 90, 90, 90	adamantane structure	-	4.16	X	664
Cl-Cu	CuCl ht	ZnO, hP4, 186	<i>P6₃mc</i>	0.3893, 0.3893, 0.6375, 90, 90, 120	adamantane structure	-	3.93	X	21716
Cl-Cu	CuCl rt	CuI, cF20, 216	<i>F-43m</i>	0.54203, 0.54203, 0.54203, 90, 90, 90	nantokite	white	4.13	X	28201
Cl-Cu	CuCl ₂ hp	CuBr ₂ , mS6, 12	<i>C12/m1</i>	0.67986, 0.32942, 0.65324, 90, 118.981, 90	tolbachite	brown	3.49	X	54169
Cl-Cu	Cu ₃ Cl ₄ tf	Fe ₃ O ₄ , cF56, 227	<i>Fd-3m</i>	0.8265, 0.8265, 0.8265, 90, 90, 90	spinel family	-	7.82	X	1664
Cl-D	DCl lt1	HCl, cF52, 225	<i>Fm-3m</i>	0.547, 0.547, 0.547, 90, 90, 90	-	-	1.52	X	3594
Cl-D	DCl lt3	HCl, oS8, 36	<i>Cmc2₁</i>	0.5825, 0.5053, 0.5373, 90, 90, 90	-	-	1.57	X	3593
Cl-Dy	DyCl ₂ ht	* _o *12,*	-	0.669, 0.676, 0.706, 90, 90, 90	-	-	4.86	N	3013
Cl-Dy	DyCl ₂ mon	* _m P24, 14	<i>P12₁/c1</i>	0.681, 1.329, 0.71, 90, 91.56, 90	-	black	-	N	25220
Cl-Dy	DyCl ₂ rt	SrBr ₂ , tP30, 85	<i>P4/n</i>	1.07713, 1.07713, 0.66394, 90, 90, 90	-	-	5.03	A	18893
Cl-Dy	DyCl ₃ ht	AlCl ₃ , mS16, 12	<i>C12/m1</i>	0.69048, 1.19607, 0.6398, 90, 111.18, 90	-	-	3.62	A	18893
Cl-Dy	DyCl ₃ rt	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.3816, 1.1815, 0.8507, 90, 90, 90	-	-	4.66	X	24063
Cl-Dy	Dy ₂ Cl ₁₁	Dy ₂ Cl ₁₁ , mP64, 11	<i>P12₁/m1</i>	0.6634, 3.468, 0.7110, 90, 90.23, 90	-	-	4.88	X	9352
Cl-Dy	Dy ₆ Cl ₁₃	Sm ₆ Br ₁₃ , mS76, 15	<i>C12/c1</i>	4.1835, 0.6667, 0.7096, 90, 98.383, 90	-	-	4.87	A	9352
Cl-Er	ErCl ₃ hp2	FeF ₃ , hR24, 167	<i>R-3c</i>	0.6457, 0.6457, 1.81, 90, 90, 120	-	-	4.17	A	16477
Cl-Er	ErCl ₃ hp3	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.376, 1.1868, 0.8487, 90, 90, 90	-	-	4.80	A	16501
Cl-Er	ErCl ₃	AlCl ₃ , mS16, 12	<i>C12/m1</i>	0.68116, 1.17986, 0.63932, 90, 110.778, 90	-	-	3.78	A	22286
Cl-Eu	EuCl ₂ ht	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.715, 0.715, 0.715, 90, 90, 90	fluorite family	-	4.05	X	9985
Cl-Eu	EuCl ₂ rt	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.7538, 0.4511, 0.8965, 90, 90, 90	-	-	4.86	X	7606
Cl-Eu	EuCl ₃	UCl ₃ , hP8, 176	<i>P6₃/m</i>	0.73746, 0.73746, 0.41323, 90, 90, 120	-	-	4.41	X	4015
Cl-Eu	Eu ₁₄ Cl ₃₃ ht1	* _h R*, 148	<i>R-3</i>	1.2815, 1.2815, 2.4768, 90, 90, 120	-	-	-	N	21819
Cl-Eu	Eu ₃ Cl ₇	* _h P10,*	-	0.4841, 0.4841, 1.241, 90, 90, 120	-	-	4.64	N	10804
Cl-Eu	Eu ₄ Cl ₉ rt	* _o *52,*	-	0.6693, 0.6956, 0.7108, 90, 90, 90	-	-	-	N	14390
Cl-Eu	Eu ₂ Cl ₁₁ ht1	* _o P*, 62	<i>Pnma</i>	0.7253, 3.535, 0.681, 90, 90, 90	-	blue	-	N	25768
Cl-Eu	Eu ₂ Cl ₁₁ rt	Dy ₂ Cl ₁₁ , mP64, 11	<i>P12₁/m1</i>	0.6758, 3.509, 0.7201, 90, 90.3, 90	-	blue	4.47	X	25768
Cl-F	ClF	ClF, mP8, 14	<i>P12₁/c1</i>	0.6378, 0.4247, 0.6425, 90, 104.55, 90	-	-	2.15	X	32857
Cl-F	ClF ₃ lt1	ClF ₃ , oP16, 62	<i>Pnma</i>	0.8825, 0.609, 0.452, 90, 90, 90	-	-	2.53	X	499
Cl-F	ClF ₃ lt2	ClF ₃ , mP32, 14	<i>P12₁/c1</i>	0.8051, 0.4402, 1.4612, 90, 96.05, 90	-	-	2.38	X	22673
Cl-F	ClF ₃ lt2	* _c 112,*	-	0.57, 0.57, 0.57, 90, 90, 90	-	-	2.34	N	11296
Cl-F	ClF ₃ lt3	BrF ₃ , oS24, 36	<i>Cmc2₁</i>	0.617, 0.722, 0.766, 90, 90, 90	-	-	2.54	A	11296
Cl-Fe	FeCl ₂ hp	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.35429, 0.35429, 0.5502, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	3.52	X	54155
Cl-Fe	FeCl ₂	CdCl ₂ , hR9, 166	<i>R-3m</i>	0.36065, 0.36065, 1.757, 90, 90, 120	lawrencite	-	3.19	X	64733
Cl-Fe	FeCl ₃ 12-lay	FeCl ₃ , hP96, 147	<i>P-3</i>	0.6063, 0.6063, 6.97, 90, 90, 120	-	greenish	2.91	X	27976
Cl-Fe	FeCl ₃ 3-lay1	BiI ₃ , hR24, 148	<i>R-3</i>	0.6056, 0.6056, 1.7407, 90, 90, 120	molysite	green	2.92	X	27976
Cl-Fe	FeCl ₃ 3-lay2	Ti ₂ O, hP24, 149	<i>P312</i>	0.6056, 0.6056, 1.7401, 90, 90, 120	-	green	2.92	X	27976
Cl-Ga	GaCl ₂ ht	GaCl ₂ , oP24, 52	<i>Pnna</i>	0.72, 0.9625, 0.9498, 90, 90, 90	-	white	2.84	X	20747
Cl-Ga	GaCl ₃	GaCl ₃ , mS16, 12	<i>C12/m1</i>	1.19152, 0.68128, 0.70258, 90, 125.749, 90	-	colorless	2.53	X	45013
Cl-Ga	Ga ₃ Cl ₇	Ga ₃ Cl ₇ , oP40, 33	<i>Pna2₁</i>	1.1818, 0.8897, 1.0575, 90, 90, 90	-	-	2.73	X	24175
Cl-Gd	GdCl ₃ ht (H)	ZrBr, hR12, 166	<i>R-3m</i>	0.3819, 0.3819, 2.7482, 90, 90, 120	-	-	5.53	A	13617
Cl-Gd	GdCl ₃ rt	ZrCl, hR12, 166	<i>R-3m</i>	0.3819, 0.3819, 2.7482, 90, 90, 120	-	gray graphite	5.53	X	9554
Cl-Gd	GdCl ₃ ht	UCl ₃ , hP8, 176	<i>P6₃/m</i>	0.73663, 0.73663, 0.41059, 90, 90, 120	-	-	4.54	X	4015
Cl-Gd	GdCl ₃ rt	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.388, 1.173, 0.852, 90, 90, 90	-	-	4.52	A	2618
Cl-Gd	Gd ₂ Cl ₃	Gd ₂ Cl ₃ , mS20, 12	<i>C12/m1</i>	1.5231, 0.3895, 1.0175, 90, 117.64, 90	-	bronze dark	5.23	X	12661
Cl-Ge	GeCl ₄ lt	SnBr ₄ , mP20, 14	<i>P12₁/c1</i>	0.969, 0.6451, 0.9774, 90, 103.075, 90	-	colorless	2.39	X	40265
Cl-Ge	Ge ₂ Cl ₈	Si ₂ Cl ₈ , cF176, 219	<i>F-43c</i>	1.7437, 1.7437, 1.7437, 90, 90, 90	-	-	2.51	X	34546
Cl-H	HCl lt1	HCl, cF52, 225	<i>Fm-3m</i>	0.5482, 0.5482, 0.5482, 90, 90, 90	-	-	1.47	X	6720
Cl-H	HCl lt3	HCl, oS8, 36	<i>Cmc2₁</i>	0.571, 0.503, 0.535, 90, 90, 90	-	-	1.58	A	54
Cl-Hf	HfCl	ZrBr, hR12, 166	<i>R-3m</i>	0.33697, 0.33697, 2.6582, 90, 90, 120	-	gray	8.15	A	10490
Cl-Hf	HfCl ₄	ZrCl ₄ , mP10, 13	<i>P12/c1</i>	0.6327, 0.7377, 0.62, 90, 109.05, 90	-	colorless	3.89	X	31211
Cl-Hg	HgCl ₂ rt	HgCl ₂ , tI8, 139	<i>I4/mmm</i>	0.44795, 0.44795, 1.09054, 90, 90, 90	calomel	-	7.16	X	22900
Cl-Hg	HgCl ₂	HgCl ₂ , b, oP12, 62	<i>Pnma</i>	1.2776, 0.5986, 0.4333, 90, 90, 90	-	brown	5.44	X	12843
Cl-Ho	HoCl ₂	* _o P12,*	-	0.656, 0.687, 0.703, 90, 90, 90	-	-	-	N	22642
Cl-Ho	HoCl ₃ hp	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.3792, 1.1844, 0.8497, 90, 90, 90	-	-	4.72	A	16501
Cl-Ho	HoCl ₃	AlCl ₃ , mS16, 12	<i>C12/m1</i>	0.685, 1.185, 0.639, 90, 110.8, 90	-	-	3.72	A	616
Cl-Ho	Ho ₂ Cl ₁₁	Dy ₂ Cl ₁₁ , mP64, 11	<i>P12₁/m1</i>	0.6603, 3.457, 0.7078, 90, 90.19, 90	-	-	4.99	A	10492
Cl-I	ICl mon1	ICl-a, mP16, 14	<i>P12₁/c1</i>	1.2162, 0.4286, 1.1889, 90, 117.5, 90	-	red dark	3.92	X	37113
Cl-I	ICl mon2	ICl-b, mP16, 14	<i>P12₁/c1</i>	0.8883, 0.8400, 0.7568, 90, 91.35, 90	-	-	3.82	X	1547
Cl-I	ICl ₃	ICl ₃ , aP8, 2	<i>P-1</i>	0.548, 0.571, 0.839, 72.10, 78.78, 80.83	-	yellow	3.18	X	544
Cl-In	InCl ht	InCl, oS8, 40	<i>Ama2</i>	0.4689, 1.232, 0.4242, 90, 90, 90	-	red	4.07	X	11139
Cl-In	InCl rt	InCl, cP64, 198	<i>P2₁3</i>	1.2373, 1.2373, 1.2373, 90, 90, 90	rocksalt family	yellow	4.22	X	11139
Cl-In	InCl ₂ ht	GaCl ₂ , oP24, 52	<i>Pnna</i>	0.71, 1.069, 1.021, 90, 90, 90	-	-	3.18	A	3077
Cl-In	InCl ₃	AlCl ₃ , mS16, 12	<i>C12/m1</i>	0.641, 1.11, 0.631, 90, 109.8, 90	-	-	3.48	A	616
Cl-In	In ₂ Cl ₃ rt	Tl ₂ Cl ₃ , oP160, 62	<i>Pnma</i>	1.2614, 2.5238, 1.4562, 90, 90, 90	-	colorless	3.85	X	14532
Cl-In	In ₂ Cl ₃ rt	In ₂ Cl ₃ , hR84, 167	<i>R-3c</i>	1.2343, 1.2343, 1.7831, 90, 90, 120	-	colorless	3.78	X	16506
Cl-In	In ₇ Cl ₉ rt	In ₇ Cl ₉ , cP64, 205	<i>Pa-3</i>	1.2218, 1.2218, 1.2218, 90, 90, 90	-	yellow	4.09	X	24368

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cl-Ir	IrCl ₃ mon	AlCl ₃ ,mS16,12	<i>C12/m1</i>	0.599,1.037,0.599,90,109.4,90	-	brown honey	5.65	X	2687
Cl-Ir	IrCl ₃ orth	IrCl ₃ ,oF64,70	<i>Fddd</i>	0.695,0.981,2.082,90,90,90	-	red dark	5.59	X	2777
Cl-K	KCl hp	CsCl,cP2,221	<i>Pm-3m</i>	0.3634,0.3634,0.3634,90,90,90	b.c.c. family	-	2.58	X	13973
Cl-K	KCl rt	NaCl,cF8,225	<i>Fm-3m</i>	0.62849,0.62849,0.62849,90,90,90	ylvite	colorless	1.99	X	47416
Cl-La	LaCl	ZrCl ₃ ,hR12,166	<i>R-3m</i>	0.41026,0.41026,2.7597,90,90,120	-	blue	4.32	X	13988
Cl-La	LaCl ₃	UCl ₃ ,hP8,176	<i>P6₃/m</i>	0.74779,0.74779,0.43745,90,90,120	-	-	3.85	X	4015
Cl-Li	LiCl hp	NaCl,cF8,225	<i>Fm-3m</i>	0.51741,0.51741,0.51741,90,90,90	rocksalt family	-	2.03	X	58828
Cl-Li	LiCl tf	ZnO,hP4,186	<i>P6₃mc</i>	0.3852,0.3852,0.6118,90,90,120	adamantane structure	-	1.79	X	54421
Cl-Lu	LuCl ₃ hp	FeF ₃ ,hR24,167	<i>R-3c</i>	0.6403,0.6403,1.7868,90,90,120	-	-	4.42	A	16477
Cl-Lu	LuCl ₃	AlCl ₃ ,mS16,12	<i>C12/m1</i>	0.672,1.16,0.639,90,110.4,90	-	-	4.00	A	616
Cl-Mg	MgCl ₂ rhom	CdCl ₂ ,hR9,166	<i>R-3m</i>	0.36363,0.36363,1.76663,90,90,120	chloromagnesite	-	2.35	X	24980
Cl-Mg	MgCl ₂ trig	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.3641,0.3641,0.5927,90,90,120	CdI ₂ -PbI ₂ polytype	-	2.32	X	15533
Cl-Mn	MnCl ₂	CdCl ₂ ,hR9,166	<i>R-3m</i>	0.3711,0.3711,1.759,90,90,120	scacchite	-	2.99	X	24135
Cl-Mo	MoCl ₂	MoCl ₂ ,oS72,64	<i>Cmce</i>	1.4054,1.1244,1.1267,90,90,90	Chevre phase	yellow	3.73	X	28251
Cl-Mo	MoCl ₃ mon1	AlCl ₃ ,mS16,12	<i>C12/m1</i>	0.6098,0.9757,0.6301,90,108.06,90	-	black	3.77	X	33227
Cl-Mo	MoCl ₃ mon2	MoCl ₃ ,mS36,12	<i>C12/m1</i>	0.6094,0.9801,1.2026,90,90,92.79	-	brown	3.75	X	33227
Cl-Mo	MoCl ₄ ht	MoCl ₄ ,hP30,162	<i>P-31m</i>	1.209,1.209,0.586,90,90,120	-	black brown	3.19	X	13911
Cl-Mo	MoCl ₄ rt	NbCl ₄ ,mS20,12	<i>C12/m1</i>	1.19029,0.6778,0.8236,90,131.772,90	-	-	3.19	A	15325
Cl-Mo	MoCl ₃ mon1	MoCl ₃ ,mS72,12	<i>C12/m1</i>	1.731,1.781,0.6079,90,95.7,90	-	black bluish	2.92	X	1033
Cl-Mo	MoCl ₃ mon2	ReCl ₃ ,mP48,14	<i>P12₁/c1</i>	0.94682,1.17496,1.21619,90,108.879,90	-	-	2.84	X	32990
Cl-Mo	MoCl ₃ orth	MoCl ₃ ,oP48,62	<i>Pnma</i>	1.1700,1.7874,0.6085,90,90,90	-	black	2.85	X	32990
Cl-Mo	MoCl ₃ tricl	UCl ₃ ,aP12,2	<i>P-1</i>	0.6074,0.65941,0.9048,108.424,90.81,116.124	-	-	2.99	X	32990
Cl-Mo	MoCl ₆ lt	MoCl ₆ ,hP24,164	<i>P-3m1</i>	1.0341,1.0341,0.554,90,90,120	-	black	3.00	X	60461
Cl-Mo	MoO ₃ Cl ₃ rt	TiCl ₃ ,hP8,193	<i>P6₃/mcm</i>	0.5964,0.5964,0.5539,90,90,120	-	-	3.00	X	60461
Cl-N	Cl[N ₃]	Cl[N ₃],oS16,36	<i>Cmc2₁</i>	0.56456,1.17515,0.43077,90,90,90	-	yellow	1.80	X	58455
Cl-N	NCl ₃	NCl ₃ ,oP48,62	<i>Pnma</i>	0.748,0.935,1.648,90,90,90	-	yellow	2.08	X	9261
Cl-Na	NaCl hp	CsCl,cP2,221	<i>Pm-3m</i>	0.27376,0.27376,0.27376,90,90,90	b.c.c. family	-	4.73	X	59309
Cl-Na	NaCl	NaCl,cF8,225	<i>Fm-3m</i>	0.55672,0.55672,0.55672,90,90,90	halite	colorless	2.25	X	64891
Cl-Nb	NbCl ₄ rt	NbCl ₄ ,mS20,12	<i>C12/m1</i>	1.1823,0.6823,0.8140,90,131.56,90	-	brown	3.17	X	10508
Cl-Nb	NbCl ₃ mon1	NbCl ₃ ,mS72,12	<i>C12/m1</i>	1.8338,1.7861,0.5890,90,90.69,90	-	yellow	2.79	X	24125
Cl-Nb	NbCl ₃ mon2	UCl ₃ ,mP24,14	<i>P12₁/c1</i>	0.7785,1.0201,1.1159,90,133.655,90	-	yellow faint	2.80	X	24286
Cl-Nb	Nb ₃ Cl ₇	Nb ₃ Cl ₇ ,oS80,64	<i>Cmce</i>	1.3494,1.2252,1.1019,90,90,90	Chevre phase	black	3.84	X	2775
Cl-Nb	Nb ₃ Cl ₈	Nb ₃ Cl ₈ ,hP22,164	<i>P-3m1</i>	0.67295,0.67295,1.2232,90,90,120	-	-	3.89	X	40013
Cl-Nd	NdCl ₂	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.76147,0.45562,0.90849,90,90,90	-	green	4.53	X	18458
Cl-Nd	NdCl ₂ 31	*tI100,87	<i>I4/m</i>	1.1041,1.1041,2.1209,90,90,90	-	-	4.36	N	21809
Cl-Nd	NdCl ₃	UCl ₃ ,hP8,176	<i>P6₃/m</i>	0.73988,0.73988,0.42423,90,90,120	-	-	4.14	X	4015
Cl-Nd	Nd ₁₄ Cl ₃₃	*aP*,2	<i>P-1</i>	1.1167,1.1168,2.1488,99.69,100.55,108.89	-	-	-	N	21819
Cl-Ni	NiCl ₂ rt	CdCl ₂ ,hR9,166	<i>R-3m</i>	0.3483,0.3483,1.74,90,90,120	-	-	3.53	X	1788
Cl-Np	NpCl ₃	UCl ₃ ,hP8,176	<i>P6₃/m</i>	0.7405,0.7405,0.4273,90,90,120	-	green	5.62	X	311
Cl-Np	NpCl ₄	ThCl ₄ ,tI20,141	<i>I4₁/amd</i>	0.8229,0.8229,0.7437,90,90,90	-	red dark	5.00	X	28820
Cl-O	ClO ₂ lt	ClO ₂ ,oP24,61	<i>Pbca</i>	0.5518,1.0767,0.6654,90,90,90	-	-	2.27	X	25850
Cl-O	ClO ₃ lt	ClO ₃ ,mS32,9	<i>C1c1</i>	0.5563,0.8613,0.9785,90,100.56,90	-	red	2.41	X	20637
Cl-O	Cl ₂ O lt	[H ₂ O],tI24,141	<i>I4₁/amd</i>	0.77246,0.77246,0.92606,90,90,90	-	-	2.09	X	35462
Cl-O	Cl ₂ O ₇ lt	Cl ₂ O ₇ ,mS36,15	<i>C12/c1</i>	1.3696,0.4617,0.8722,90,111.94,90	-	colorless	2.37	X	20878
Cl-Os	OsCl ₄ ht	OsCl ₄ ,oS10,65	<i>Cmmm</i>	0.7929,0.8326,0.3560,90,90,90	-	black	4.69	X	10488
Cl-Os	OsCl ₅	*mP8,14	<i>P12₁/c1</i>	0.917,1.15,1.197,90,109.9,90	-	-	4.09	P	12181
Cl-P	PCl ₃ lt	PCl ₃ ,oP16,62	<i>Pnma</i>	0.8129,0.94,0.609,90,90,90	-	-	1.96	X	12693
Cl-P	PCl ₃ m	*mS36,12	<i>C12/m1</i>	1.48302,0.84765,0.87981,90,123.589,90	-	-	2.25	N	27446
Cl-P	PCl ₃ rt	PCl ₃ ,tP24,85	<i>P4/n</i>	0.922,0.922,0.744,90,90,90	-	-	2.19	X	6178
Cl-Pa	PaCl ₄	ThCl ₄ ,tI20,141	<i>I4₁/amd</i>	0.8377,0.8377,0.7481,90,90,90	-	-	4.72	X	7310
Cl-Pa	PaCl ₅	PaCl ₅ ,mS24,15	<i>C12/c1</i>	0.797,1.135,0.836,90,106.4,90	-	yellow	3.74	X	3265
Cl-Pb	PbCl ₂ hp	PbCl ₂ ,mP24,14	<i>P12₁/c1</i>	0.8589,0.4491,1.1995,90,90.8,90	-	-	7.99	X	30919
Cl-Pb	PbCl ₂ rt	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.7619,0.45336,0.9043,90,90,90	cotunnite	-	5.91	X	19457
Cl-Pb	PbCl ₄ lt	OsO ₄ ,mS20,15	<i>C12/c1</i>	1.20115,0.5359,1.0542,90,116.353,90	-	colorless	3.81	X	40360
Cl-Pd	PdCl ₂ ht1	PdCl ₂ ,oP6,58	<i>Pnnm</i>	0.38115,1.10371,0.33429,90,90,90	-	red	4.19	X	54588
Cl-Pd	PdCl ₂ ht2	PdCl ₂ ,mP6,10	<i>P12/m1</i>	0.4012,0.3288,1.1782,90,97.03,90	-	-	3.82	X	54588
Cl-Pd	PdCl ₂ rhom	PdCl ₂ ,hR54,148	<i>R-3</i>	1.30471,1.30471,0.86017,90,90,120	-	black reddish	4.18	X	31457
Cl-Pd	PdCl ₂ rt	PdCl ₂ ,mP8,14	<i>P12₁/c1</i>	0.55496,0.38608,0.64105,90,107.151,90	-	-	4.49	X	54588
Cl-Pm	PmCl ₃	UCl ₃ ,hP8,176	<i>P6₃/m</i>	0.74,0.74,0.423,90,90,120	-	blue lavender	4.16	A	21161
Cl-Po	PoCl ₂	PoCl ₂ ,oP3,47	<i>Pmmm</i>	0.367,0.435,0.450,90,90,90	-	-	6.47	X	670
Cl-Pr	PrCl ₃ rt	UCl ₃ ,hP8,176	<i>P6₃/m</i>	0.73958,0.73958,0.42675,90,90,120	-	-	4.06	X	20736
Cl-Pr	Pr ₁₂₉ Cl ₃ ht	Pr ₁₂₉ Cl ₃ ,hP10,176	<i>P6₃/m</i>	0.7417,0.7417,0.4272,90,90,120	-	black	4.70	X	22223
Cl-Pt	PtCl ₂ ht	PtCl ₂ ,mS16,12	<i>C12/m1</i>	1.3258,0.3194,0.6802,90,107.75,90	-	black	6.44	X	21770
Cl-Pt	PtCl ₂ orth	PdCl ₂ ,oP6,58	<i>Pnnm</i>	0.386,1.105,0.335,90,90,90	-	-	6.18	A	930
Cl-Pt	PtCl ₂ rt	PtCl ₂ ,hR54,166	<i>R-3m</i>	1.3126,1.3126,0.8666,90,90,120	-	red dark	6.15	X	43186
Cl-Pt	PtCl ₃	PtBr ₃ ,hR144,148	<i>R-3</i>	2.1213,2.1213,0.86,90,90,120	-	-	5.38	X	44829
Cl-Pt	PtCl ₄	SnI ₄ ,cP40,205	<i>Pa-3</i>	1.045,1.045,1.045,90,90,90	-	-	3.92	X	931
Cl-Pu	PuCl ₃	UCl ₃ ,hP8,176	<i>P6₃/m</i>	0.7394,0.7394,0.4243,90,90,120	-	green	5.79	X	8969
Cl-Rb	RbCl hp	CsCl,cP2,221	<i>Pm-3m</i>	0.391,0.391,0.391,90,90,90	b.c.c. family	-	3.36	X	2207
Cl-Rb	RbCl ht	NaCl,cF8,225	<i>Fm-3m</i>	0.6581,0.6581,0.6581,90,90,90	rocksalt family	-	2.82	X	4840
Cl-Re	ReCl ₃	ReCl ₃ ,hR72,166	<i>R-3m</i>	1.02062,1.02062,2.0353,90,90,120	-	red dark	4.76	X	20656
Cl-Re	ReCl ₄ ht	ReCl ₄ ,mP20,13	<i>P12₁/c1</i>	0.6362,0.6273,1.2165,90,93.15,90	-	-	4.49	X	7287
Cl-Re	ReCl ₄ mon	*m*,80*	-	1.817,0.627,1.843,90,104.9,90	-	brown	4.28	N	6565
Cl-Re	ReCl ₄ rt	NbCl ₄ ,mS20,12	<i>C12/m1</i>	1.17669,0.6501,0.8037,90,129.591,90	-	-	4.60	A	15325
Cl-Re	ReCl ₅	ReCl ₅ ,mP48,14	<i>P12₁/c1</i>	0.924,1.154,1.203,90,109.1,90	-	brown dark	3.98	X	3768
Cl-Re	ReCl ₆	WCl ₆ ,hR21,148	<i>R-3</i>	0.5975,0.5975,1.6453,90,90,120	-	black	3.91	X	60461
Cl-Rh	RhCl ₃	AlCl ₃ ,mS16,12	<i>C12/m1</i>	0.595,1.03,0.603,90,109.2,90	-	golden red	3.98	X	2167
Cl-Ru	RuCl ₃ lt	RuBr ₃ ,oP16,59	<i>Pmmn</i>	0.5634,1.0576,0.6106,90,90,90	-	gray silver	3.79	X	44877

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cl-Ru	RuCl ₃ mon	Ti ₃ O ₃ hP24,149	<i>P312</i>	0.5979,0.5979,1.717,90,90,120	-	black	3.89	A	3517
Cl-Ru	RuCl ₃ rt	TiCl ₃ hP8,193	<i>P6₃/mcm</i>	0.6121,0.6121,0.5655,90,90,120	-	brown	3.75	X	44877
Cl-S	SCl ₃ lt	SCl ₃ oF64,43	<i>Fdd2</i>	1.7276,2.1370,0.47616,90,90,90	-	yellow light	2.04	X	16573
Cl-S	SCl ₂ lt	SCl ₂ oP24,19	<i>P2₁2₁2₁</i>	0.40019,0.9188,1.7505,90,90,90	-	-	2.13	X	17545
Cl-S	SCl ₄ lt	SeCl ₄ cP160,218	<i>P-43n</i>	1.58,1.58,1.58,90,90,90	-	-	2.34	A	17545
Cl-Sb	SbCl ₃	SbCl ₃ oP16,62	<i>Pnma</i>	0.8111,0.9419,0.6313,90,90,90	-	-	3.14	X	12037
Cl-Sb	SbCl ₃ lt	ReCl ₃ mP48,14	<i>P12₁/c1</i>	0.9524,1.1869,1.2197,90,108,27,90	-	orange yellow	3.03	X	41665
Cl-Sb	SbCl ₃ rt	SbCl ₃ hP12,194	<i>P6₃/mmc</i>	0.7414,0.7414,0.794,90,90,120	-	colorless	2.63	X	41665
Cl-Se	SeCl ₃	ZrCl ₃ hR12,166	<i>R-3m</i>	0.3473,0.3473,2.671,90,90,120	-	black gray	2.87	X	10501
Cl-Se	SeCl ₃	BiI ₃ hR24,148	<i>R-3</i>	0.63775,0.63775,1.779,90,90,120	-	-	2.41	X	28332
Cl-Se	Se ₂ Cl ₈	Tb ₂ Br ₈ mS26,12	<i>C12/m1</i>	1.778,0.3523,1.204,90,130,1,90	-	black	2.93	X	11422
Cl-Se	Se ₂ Cl ₁₀	Se ₂ Cl ₁₀ mS34,12	<i>C12/m1</i>	1.8620,0.35366,1.2250,90,91,98,90	-	-	2.76	X	10484
Cl-Se	Se ₂ Cl ₁₂	Se ₂ Cl ₁₂ hR57,148	<i>R-3</i>	1.2959,1.2959,0.8825,90,90,120	-	black	2.87	X	15499
Cl-Se	SeCl ₄	SeBr ₄ mP16,14	<i>P12₁/c1</i>	0.7081,1.4058,0.4814,90,97,06,90	-	red dark	3.20	X	16573
Cl-Se	SeCl ₄ m	TeCl ₄ mS80,15	<i>C12/c1</i>	1.6548,0.981,1.50291,90,116,95,90	-	-	2.70	X	14621
Cl-Se	SeCl ₄	SeCl ₄ cP160,218	<i>P-43n</i>	1.6433,1.6433,1.6433,90,90,90	-	yellow pale	2.64	X	14626
Cl-Si	SiCl ₂ mon	SiCl ₂ mS72,15	<i>C12/c1</i>	1.7624,0.9765,1.3506,90,109,914,90	-	colorless	1.81	X	57238
Cl-Si	SiCl ₂ orth	SiCl ₂ oP12,19	<i>P2₁2₁2₁</i>	0.40569,0.6783,1.3346,90,90,90	adamantane structure	yellow pale	1.79	X	34284
Cl-Si	SiCl ₄ lt2	SnBr ₄ mP20,14	<i>P12₁/c1</i>	0.9608,0.6356,0.9672,90,102,909,90	-	-	1.96	X	19430
Cl-Si	Si ₃ Cl ₈	Si ₃ Cl ₈ cF176,219	<i>F-43c</i>	1.71884,1.71884,1.71884,90,90,90	-	colorless	1.92	X	56814
Cl-Si	Si ₃ Cl ₁₂	Si ₃ Cl ₁₂ hP55,147	<i>P-3</i>	1.34123,1.34123,0.90631,90,90,120	-	colorless	2.00	X	56814
Cl-Sm	SmCl ₂ ht	CaF ₂ cF12,225	<i>Fm-3m</i>	0.71496,0.71496,0.71496,90,90,90	fluorite family	-	4.02	X	14397
Cl-Sm	SmCl ₂ rt	PbCl ₂ oP12,62	<i>Pnma</i>	0.75628,0.45077,0.90109,90,90,90	-	red blood	4.79	X	18893
Cl-Sm	SmCl ₃	UCl ₃ hP8,176	<i>P6₃/m</i>	0.73733,0.73733,0.41684,90,90,120	-	-	4.35	A	18893
Cl-Sm	Sm ₂ Cl ₇	*hP10,*	-	0.4857,0.4857,1.237,90,90,120	-	brown	4.60	N	12505
Cl-Sn	SnCl ₂ hp	PbCl ₂ mP24,14	<i>P12₁/c1</i>	0.842,0.439,1.194,90,91,90	-	-	5.71	X	32078
Cl-Sn	SnCl ₂ rt	PbCl ₂ oP12,62	<i>Pnma</i>	0.74,0.437,0.881,90,90,90	-	-	4.42	X	32078
Cl-Sn	SnCl ₄ lt	SnBr ₄ mP20,14	<i>P12₁/c1</i>	0.98642,0.668,0.99377,90,102,945,90	-	-	2.71	X	38661
Cl-Sr	SrCl ₂ ht	UO ₂ 12,cF92,225	<i>Fm-3m</i>	0.71806,0.71806,0.71806,90,90,90	fluorite family	-	2.84	X	57798
Cl-Sr	SrCl ₂ rt	CaF ₂ cF12,225	<i>Fm-3m</i>	0.6978,0.6978,0.6978,90,90,90	fluorite family	-	3.10	X	57798
Cl-Ta	TaCl ₄	NbCl ₄ mS20,12	<i>C12/m1</i>	1.1898,0.6775,0.8145,90,131,53,90	-	black	4.36	X	32713
Cl-Ta	TaCl ₅	NbCl ₅ mS72,12	<i>C12/m1</i>	1.8278,1.7766,0.585,90,90,62,90	-	colorless	3.76	X	38695
Cl-Ta	Ta ₂ Cl ₅	Ta ₂ Cl ₅ cI336,230	<i>Ia-3d</i>	2.0326,2.0326,2.0326,90,90,90	-	green olive	5.12	X	37054
Cl-Tb	TbCl ₃ lt	ZrCl ₃ hR12,166	<i>R-3m</i>	0.3781,0.3781,2.7461,90,90,120	-	gray graphite	5.70	X	13617
Cl-Tb	TbCl ₃ rt (H)	ZrBr ₃ hR12,166	<i>R-3m</i>	0.3786,0.3786,2.7461,90,90,120	-	-	5.68	X	13617
Cl-Tb	TbCl ₃ ht1	UCl ₃ hP8,176	<i>P6₃/m</i>	0.73763,0.73763,0.40571,90,90,120	-	-	4.61	X	21847
Cl-Tb	TbCl ₃ ht2	TbCl ₃ hP16,136	<i>P4₂/mnm</i>	0.64251,0.64251,1.17714,90,90,90	-	-	3.63	X	21847
Cl-Tb	TbCl ₃ rt	PuBr ₃ oS16,63	<i>Cmcm</i>	0.38471,1.17737,0.85177,90,90,90	-	-	4.57	X	21847
Cl-Tb	Tb ₂ Cl ₃	Gd ₂ Cl ₃ mS20,12	<i>C12/m1</i>	1.5184,0.3869,1.0135,90,118,07,90	-	-	5.36	A	12661
Cl-Tc	TcCl ₃ mon	TcCl ₃ mS16,12	<i>C12/m1</i>	1.21495,0.34251,0.8591,90,135,90	-	black	4.44	X	61453
Cl-Tc	TcCl ₂ tet	TcCl ₂ hI16,87	<i>I4/m</i>	0.8557,0.8557,0.3417,90,90,90	-	black	4.48	X	57365
Cl-Tc	TcCl ₃ mon	AlCl ₃ mS16,12	<i>C12/m1</i>	0.5986,0.9725,0.6194,90,108,687,90	-	-	3.97	X	59218
Cl-Tc	TcCl ₃ rhom	ReCl ₃ hR72,166	<i>R-3m</i>	1.01035,1.01035,2.012,90,90,120	-	black	3.43	X	55394
Cl-Tc	TcCl ₄	TcCl ₄ oP40,61	<i>Pbca</i>	0.60111,1.15308,1.39334,90,90,90	-	red	3.30	X	59277
Cl-Te	TeCl ₄	TeCl ₄ mS80,15	<i>C12/c1</i>	1.6846,1.0347,1.5051,90,116,87,90	-	green yellow	3.06	X	37207
Cl-Te	Te ₂ Cl ₄	Te ₂ Br ₂ oP24,62	<i>Pnma</i>	1.482,0.4,1.281,90,90,90	-	-	5.08	A	7102
Cl-Te	Te ₂ Cl ₂	Te ₂ Cl ₂ mP20,14	<i>P12₁/c1</i>	0.7039,0.8635,1.1211,90,117,35,90	-	-	4.98	X	10094
Cl-Th	ThCl ₄ ht	ThCl ₄ hI20,141	<i>I4₁/amd</i>	0.8486,0.8486,0.7465,90,90,90	-	-	4.62	X	4298
Cl-Th	ThCl ₄ rt tet	ThCl ₄ hI20,88	<i>I4₁/a</i>	0.6408,0.6408,1.2924,90,90,90	-	-	4.68	X	8117
Cl-Ti	TiCl ₂ ht	CdI ₂ hP3,164	<i>P-3m1</i>	0.343,0.343,0.61,90,90,120	CdI ₂ -PbI ₂ polytype	violet	3.17	X	1704
Cl-Ti	TiCl ₃ ht	TiCl ₃ hP8,193	<i>P6₃/mcm</i>	0.627,0.627,0.582,90,90,120	-	brown	2.59	X	1415
Cl-Ti	TiCl ₃ lt1	TiCl ₃ mS48,12	<i>C12/m1</i>	0.6051,1.0569,1.7559,90,91,21,90	-	-	2.74	X	25222
Cl-Ti	TiCl ₃ lt2	TiCl ₃ mS32,15	<i>C12/c1</i>	0.6064,1.0571,1.171,90,90,28,90	-	-	2.73	X	25222
Cl-Ti	TiCl ₃ rt rhom	BiI ₃ hR24,148	<i>R-3</i>	0.6153,0.6153,1.7599,90,90,120	-	-	2.66	X	25222
Cl-Ti	TiCl ₃ rt trig1	Ti ₃ O ₃ hP16,163	<i>P-31c</i>	0.6143,0.6143,1.1718,90,90,120	-	violet	2.68	X	25222
Cl-Ti	TiCl ₃ rt trig2	Ti ₃ O ₃ hP24,149	<i>P312</i>	0.6151,0.6151,1.76,90,90,120	-	violet	2.67	X	25222
Cl-Ti	TiCl ₃ tricl	TiBr ₃ hP8,2	<i>P-1</i>	0.6087,0.6098,0.679,63.94,64.41,60.17	-	-	2.71	X	38421
Cl-Ti	TiCl ₄	SnBr ₄ mP20,14	<i>P12₁/c1</i>	0.967,0.64737,0.9682,90,102,168,90	-	colorless	2.13	X	40367
Cl-Ti	Ti ₇ Cl ₁₆	Ti ₇ Cl ₁₆ oP46,58	<i>Pnnm</i>	0.9987,1.4421,0.689,90,90,90	-	black	3.02	X	14510
Cl-Tl	TlCl m1	NaClcF8,225	<i>Fm-3m</i>	0.632,0.632,0.632,90,90,90	rocksalt family	-	6.31	X	3146
Cl-Tl	TlCl m2	TlI ₂ oS8,63	<i>Cmcm</i>	0.474,1.24,0.427,90,90,90	CrB(TlI)-FeB	-	6.35	A	3146
Cl-Tl	TlCl	CsClcP2,221	<i>Pm-3m</i>	0.38416,0.38416,0.38416,90,90,90	lafossaite	yellow pale	7.02	X	8341
Cl-Tl	TlCl ₂	TlCl ₂ hI24,88	<i>I4₁/a</i>	0.69645,0.69645,1.5528,90,90,90	-	yellow	4.86	X	9269
Cl-Tl	TlCl ₃	AlCl ₃ mS16,12	<i>C12/m1</i>	0.654,1.133,0.632,90,110,2,90	-	-	4.70	A	616
Cl-Tl	Tl ₂ Cl ₃ ht	*hR480,167	<i>R-3c</i>	1.4727,1.4727,7.4808,90,90,120	-	-	5.84	N	21811
Cl-Tl	Tl ₂ Cl ₃ rt	Tl ₂ Cl ₃ oP160,62	<i>Pnma</i>	1.2676,2.5087,1.4748,90,90,90	-	yellow lemon	5.84	X	13699
Cl-Tm	TmCl ₂	SrI ₂ oP24,61	<i>Pbca</i>	0.6702,1.3161,0.6959,90,90,90	-	red dark	5.19	X	9762
Cl-Tm	TmCl ₃ hp1	PuBr ₃ oS16,63	<i>Cmcm</i>	0.3734,1.1877,0.8492,90,90,90	-	-	4.86	A	12650
Cl-Tm	TmCl ₃ hp2	FeF ₃ hR24,167	<i>R-3c</i>	0.6438,0.6438,1.8015,90,90,120	-	-	4.24	X	16477
Cl-Tm	TmCl ₃	AlCl ₃ mS16,12	<i>C12/m1</i>	0.67483,1.1726,0.63905,90,110,6,90	-	-	3.86	A	18893
Cl-U	UCl ₃ rt	UCl ₃ hP8,176	<i>P6₃/m</i>	0.74439,0.74439,0.43243,90,90,120	-	red dark	5.51	X	20038
Cl-U	UCl ₄	ThCl ₄ hI20,141	<i>I4₁/amd</i>	0.83018,0.83018,0.74813,90,90,90	-	yellow	4.89	X	20038
Cl-U	UCl ₅ mon	UCl ₅ mP24,14	<i>P12₁/c1</i>	0.799,1.069,1.150,90,132,5,90	-	brown dark	3.81	X	3236
Cl-U	UCl ₅ tricl	UCl ₅ hP12,164	<i>P-1</i>	0.635,0.7003,0.965,107.86,90,116.28	-	-	3.83	X	8491
Cl-U	UCl ₆	UCl ₆ hP21,164	<i>P-3m1</i>	1.097,1.097,0.6025,90,90,120	-	black	3.58	X	7762
Cl-V	VCl ₂	CdI ₂ hP3,164	<i>P-3m1</i>	0.3581,0.3581,0.5798,90,90,120	CdI ₂ -PbI ₂ polytype	green apple	3.14	X	16162
Cl-V	VCl ₃	BiI ₃ hR24,148	<i>R-3</i>	0.6012,0.6012,1.734,90,90,120	-	-	2.89	X	267
Cl-V	VCl ₄	SnBr ₄ mP20,14	<i>P12₁/c1</i>	0.9603,0.6417,0.9622,90,102,2,90	-	-	2.21	X	46815

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cl-V	VCl ₅	UCl ₅ ,aP12,2	<i>P</i> -1	0.5942,0.6464,0.8792,108.94,90.95,116.08	-	black	2.69	X	60461
Cl-W	WCl ₂	MoCl ₂ ,oS72,64	<i>Cmce</i>	1.404,1.127,1.128,90,90,90	Chevrel phase	-	5.69	A	3674
Cl-W	WCl ₃	WCl ₃ ,hR72,148	<i>R</i> -3	1.4989,1.4989,0.84547,90,90,120	-	black	5.27	X	44951
Cl-W	WCl ₄	NbCl ₄ ,mS20,12	<i>C12/m1</i>	1.1782,0.6475,0.8062,90,131.14,90	-	black	4.67	X	34518
Cl-W	WCl ₅ rt	MoCl ₅ ,mS72,12	<i>C12/m1</i>	1.7438,1.7706,0.6063,90,95.51,90	-	black green	3.86	X	11110
Cl-W	WCl ₆ ht1	UCl ₆ ,hP21,164	<i>P</i> -3m1	1.0419,1.0419,0.56435,90,90,120	-	-	3.72	X	60461
Cl-W	WCl ₆ rt	WCl ₆ ,hR21,148	<i>R</i> -3	0.60856,0.60856,1.6679,90,90,120	-	black	3.69	X	60461
Cl-Y	YCl	ZrCl ₁ ,hR12,166	<i>R</i> -3m	0.37523,0.37523,2.7525,90,90,120	-	black	3.69	X	16814
Cl-Y	YCl ₃	AlCl ₃ ,mS16,12	<i>C12/m1</i>	0.692,1.194,0.644,90,111,90	-	-	2.61	X	616
Cl-Y	Y ₂ Cl ₃	Gd ₂ Cl ₃ ,mS20,12	<i>C12/m1</i>	1.5144,0.3825,1.0077,90,118.24,90	-	black	3.67	X	13068
Cl-Yb	YbCl ₂	SrCl ₂ ,oP24,61	<i>Pbca</i>	0.6693,1.315,0.6942,90,90,90	-	green faint	5.30	X	8456
Cl-Yb	YbCl ₃ hp1	FeF ₃ ,hR24,167	<i>R</i> -3c	0.6415,0.6415,1.7941,90,90,120	-	-	4.35	A	16477
Cl-Yb	YbCl ₃ hp2	PuBr ₃ ,oS16,63	<i>Cmcm</i>	0.371,1.187,0.85,90,90,90	-	-	4.96	A	16501
Cl-Yb	YbCl ₃	AlCl ₃ ,mS16,12	<i>C12/m1</i>	0.6739,1.1651,0.6383,90,110.51,90	-	white	3.95	A	23636
Cl-Yb	Yb ₆ Cl ₁₃	SmBr ₃ ,mS76,15	<i>C12/c1</i>	4.142,0.6539,0.6953,90,98.48,90	-	colorless	5.35	A	14983
Cl-Zn	ZnCl ₂ (aq)	ZnCl ₂ ,tI12,122	<i>I</i> -42d	0.541,0.541,1.03,90,90,90	-	-	3.00	X	1517
Cl-Zn	ZnCl ₂ mon (aq)	ZnCl ₂ ,mP36,14	<i>P12</i> / _c 1	0.654,1.131,1.396,90,117.94,90	-	-	2.98	X	1517
Cl-Zn	ZnCl ₂ orth	ZnCl ₂ ,oP12,33	<i>Pna</i> 2 ₁	0.6443,0.7693,0.6125,90,90,90	-	-	2.98	X	11370
Cl-Zn	ZnCl ₂ tet (aq)	HgCl ₂ ,iP6,137	<i>P4</i> ₃ / <i>nmc</i>	0.37,0.37,1.06,90,90,90	-	-	3.12	X	1090
Cl-Zr	ZrCl	ZrCl ₁ ,hR12,166	<i>R</i> -3m	0.3424,0.3424,2.657,90,90,120	-	black	4.68	X	9679
Cl-Zr	ZrCl ₂ 18T	* _h P*,*	-	0.3382,0.3382,11.6312,90,90,120	-	-	-	N	12191
Cl-Zr	ZrCl ₂ 36R	ZrCl ₂ ,hR54,148	<i>R</i> -3	1.2973,1.2973,0.8782,90,90,120	-	brown red	3.79	X	13978
Cl-Zr	ZrCl ₂ 3R	MoS ₂ ,hR9,160	<i>R</i> 3m	0.33819,0.33819,1.9378,90,90,120	-	gray	4.21	X	12191
Cl-Zr	ZrCl ₂ 6T	* _h P*,*	-	1.0146,1.0146,3.877,90,90,120	-	-	-	N	12191
Cl-Zr	ZrCl ₃	TiCl ₃ ,hP8,193	<i>P6</i> ₃ / <i>mcm</i>	0.6383,0.6383,0.6139,90,90,120	-	green	3.03	X	14971
Cl-Zr	ZrCl ₄	ZrCl ₄ ,mP10,13	<i>P12</i> / _c 1	0.6361,0.7407,0.6256,90,109.30,90	-	colorless	2.78	X	5478
Cl-Zr	Zr ₂ Cl ₅	Ta ₂ Cl ₅ ,cI336,230	<i>Ia</i> -3d	2.1141,2.1141,2.1141,90,90,90	-	-	3.03	X	15499
Cl-Zr	Zr ₆ Cl ₁₂	Zr ₆ Cl ₁₂ ,hP19,164	<i>P</i> -3m1	0.33791,0.33791,3.8713,90,90,120	-	gray	4.34	X	12191
Cm-Co	CoCo ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.7242,0.7242,0.7242,90,90,90	Friauf-Laves phase	-	12.76	X	44695
Cm-Co	CoCo ₅	CaCu ₅ ,hP6,191	<i>P6</i> / <i>mmm</i>	0.4867,0.4867,0.403,90,90,120	-	-	10.88	X	44695
Cm-Co	Co ₂ Co ₁₇	Th ₃ Ni ₁₇ ,hP38,194	<i>P6</i> ₃ / <i>mmc</i>	0.8378,0.8378,0.807,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	10.13	A	44695
Cm-F	CoF ₃	HoH ₃ ,hP24,165	<i>P</i> -3c1	0.7012,0.7012,0.7198,90,90,120	-	-	9.88	A	16265
Cm-F	CoF ₄	ZrF ₄ ,mS60,15	<i>C12</i> / _c 1	1.25,1.051,0.816,90,126.25,90	-	-	7.44	A	16265
Cm-Fe	CoFe ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.7213,0.7213,0.7213,90,90,90	Friauf-Laves phase	-	12.70	X	44700
Cm-Fe	Co ₂ Fe ₁₇	Th ₃ Ni ₁₇ ,hP38,194	<i>P6</i> ₃ / <i>mmc</i>	0.8406,0.8406,0.8122,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	9.65	A	44700
Cm-H	CoH ₂	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.5322,0.5322,0.5322,90,90,90	fluorite family	-	10.97	X	18085
Cm-H	CoH ₃	Na ₃ As ₃ ,hP8,194	<i>P6</i> ₃ / <i>mmc</i>	0.3769,0.3769,0.6732,90,90,120	-	-	10.03	A	18085
Cm-I	CoI ₃	BiI ₃ ,hR24,148	<i>R</i> -3	0.744,0.744,2.04,90,90,120	-	-	6.40	A	2551
Cm-Ir	CoIr ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.75616,0.75616,0.75616,90,90,90	Friauf-Laves phase	-	19.40	X	26650
Cm-Ir	CoIr ₃	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.41729,0.41729,0.41729,90,90,90	close-packed structure	-	18.82	X	29390
Cm-Ir	Co ₃ Ir	Cu ₃ cF4,225	<i>Fm</i> -3m	0.3839,0.3839,0.3839,90,90,90	close-packed structure	-	22.57	X	26650
Cm-N	CoN	NaCl,cF8,225	<i>Fm</i> -3m	0.50261,0.50261,0.50261,90,90,90	rocksalt family	-	13.65	X	64074
Cm-Ni	CoNi ₃	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.4145,0.4145,0.4145,90,90,90	close-packed structure	-	9.87	X	30979
Cm-Ni	CoNi ₅	CaCu ₅ ,hP6,191	<i>P6</i> / <i>mmm</i>	0.48713,0.48713,0.40142,90,90,120	-	-	10.88	X	30979
Cm-Ni	Co _{0.001} Ni _{0.999}	Cu ₃ cF4,225	<i>Fm</i> -3m	0.35266,0.35266,0.35266,90,90,90	close-packed structure	-	8.92	X	30979
Cm-Ni	Co _{0.977} Ni _{0.023} rt	Nd ₃ hP4,194	<i>P6</i> ₃ / <i>mmc</i>	0.3473,0.3473,1.1293,90,90,120	close-packed structure	-	13.66	X	30979
Cm-Ni	Co _{2.2} Ni _{16.6}	Th ₃ Ni ₁₇ ,hP38,194	<i>P6</i> ₃ / <i>mmc</i>	0.8347,0.8347,0.80685,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	10.35	A	30979
Cm-O	CoO	NaCl,cF8,225	<i>Fm</i> -3m	0.5019,0.5019,0.5019,90,90,90	rocksalt family	-	13.82	X	23555
Cm-O	CoO ₂	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.53642,0.53642,0.53642,90,90,90	fluorite family	-	12.01	X	22293
Cm-O	Co ₂ O ₃ cub	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia</i> -3	1.0996,1.0996,1.0996,90,90,90	-	-	10.83	A	6646
Cm-O	Co ₂ O ₃ mon	Sm ₂ O ₃ ,mS30,12	<i>C12/m1</i>	1.429,0.3657,0.89,90,100.28,90	-	-	11.80	A	48352
Cm-O	Co ₂ O ₃ trig	La ₂ O ₃ ,hP5,164	<i>P</i> -3m1	0.3799,0.3799,0.599,90,90,120	-	-	12.02	A	5182
Cm-O	Co ₃ O ₁₂ rt	Pr ₂ O ₁₂ ,hR57,148	<i>R</i> -3	1.01937,1.01937,0.94608,90,90,120	fluorite family	-	11.24	A	6646
Cm-P	CoP	NaCl,cF8,225	<i>Fm</i> -3m	0.5725,0.5725,0.5725,90,90,90	rocksalt family	-	9.84	X	9150
Cm-Pd	CoPd ₃	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.41174,0.41174,0.41174,90,90,90	close-packed structure	-	13.47	X	29391
Cm-Pd	Co _{0.03} Pd _{0.97}	Cu ₃ cF4,225	<i>Fm</i> -3m	0.3902,0.3902,0.3902,90,90,90	close-packed structure	-	12.37	X	22802
Cm-Pt	CoPt ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.7625,0.7625,0.7625,90,90,90	Friauf-Laves phase	-	19.09	X	9807
Cm-Pt	CoPt ₃	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.4176,0.4176,0.4176,90,90,90	close-packed structure	-	18.98	X	29390
Cm-Pt	CoPt ₅ hex	CaCu ₅ ,hP6,191	<i>P6</i> / <i>mmm</i>	0.5308,0.5308,0.442,90,90,120	-	-	18.82	X	22803
Cm-Pt	CoPt ₅ orth	* _o P72,*	-	0.5329,0.9108,2.638,90,90,90	-	-	19.03	N	9807
Cm-Rh	CoRh ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.75187,0.75187,0.75187,90,90,90	Friauf-Laves phase	-	14.15	X	29390
Cm-Rh	CoRh ₃	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.4161,0.4161,0.4161,90,90,90	close-packed structure	-	12.81	X	29390
Cm-Ru	CoRu ₂	MgZn ₂ ,hP12,194	<i>P6</i> ₃ / <i>mmc</i>	0.532,0.532,0.878,90,90,120	Friauf-Laves phase	-	13.86	A	48352
Cm-Ru	CoRu ₃	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.4151,0.4151,0.4151,90,90,90	close-packed structure	-	7.05	X	48352
Cm-S	CoS	NaCl,cF8,225	<i>Fm</i> -3m	0.5575,0.5575,0.5575,90,90,90	rocksalt family	-	10.70	X	12303
Cm-S	CoS ₂	UAS ₂ ,iP6,129	<i>P4</i> / <i>nm</i>	0.3926,0.3926,0.801,90,90,90	-	-	8.37	X	8902
Cm-S	Co ₂ S ₃ ht	* _{tl} *,*	-	1.478,1.478,1.976,90,90,90	-	-	-	N	9729
Cm-S	Co ₂ S ₃ rt	Cr ₃ C ₂ -b _o P20,62	<i>Pnma</i>	0.739,0.398,1.535,90,90,90	-	-	8.68	A	9729
Cm-S	Co _{2.67} S ₄ rt cub	Th ₃ P ₄ ,cI28,220	<i>I</i> -43d	0.8452,0.8452,0.8452,90,90,90	-	-	8.67	A	8902
Cm-Sb	CoSb	NaCl,cF8,225	<i>Fm</i> -3m	0.6248,0.6248,0.6248,90,90,90	rocksalt family	-	10.04	X	9150
Cm-Se	CoSe	NaCl,cF8,225	<i>Fm</i> -3m	0.5798,0.5798,0.5798,90,90,90	rocksalt family	-	11.11	X	12303
Cm-Se	CoSe ₂	UAS ₂ ,iP6,129	<i>P4</i> / <i>nm</i>	0.4096,0.4096,0.8396,90,90,90	-	-	9.55	X	8902
Cm-Se	Co _{2.67} Se ₄	Th ₃ P ₄ ,cI28,220	<i>I</i> -43d	0.8788,0.8788,0.8788,90,90,90	-	-	9.55	A	8902
Cm-Si	CoSi	FeB ₂ ,oP8,62	<i>Pnma</i>	0.8278,0.8278,0.5954,90,90,90	CrB(III)-FeB	black	9.47	X	15969
Cm-Si	CoSi _{1.5}	AlB ₂ ,hP3,191	<i>P6</i> / <i>mmm</i>	0.387,0.387,0.4145,90,90,120	AlB ₂ family	gray silver	8.93	X	15969
Cm-Si	CoSi ₂	ThSi ₂ ,tI12,141	<i>I</i> 4 ₁ / <i>amd</i>	0.3963,0.3963,1.372,90,90,90	-	gray silver	9.35	X	15969
Cm-Te	CoTe	NaCl,cF8,225	<i>Fm</i> -3m	0.615,0.615,0.615,90,90,90	rocksalt family	-	10.70	X	12303
Cm-Te	CoTe ₂	UAS ₂ ,iP6,129	<i>P4</i> / <i>nm</i>	0.4328,0.4328,0.893,90,90,90	-	-	9.97	X	9728

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cm-Te	CmTe ₃	NdTe ₃ , oS16,63	<i>Cmcm</i>	0.434, 2.51, 0.434, 90, 90, 90	-	-	8.85	A	9728
Cm-Te	Cm ₂ Te ₃	Th ₂ S ₃ , oP20,62	<i>Pnma</i>	1.213, 0.433, 1.194, 90, 90, 90	-	-	9.29	A	9728
Co-Cr	Cr _{0.38} Co _{0.62} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.253, 0.253, 0.408, 90, 90, 120	close-packed structure	-	8.27	X	22185
Co-Cr	Cr _{0.66} Co _{0.34} rt	(Cr _{0.49} Fe _{0.51}), tP30, 136	<i>P4₂/mmn</i>	0.8789, 0.8789, 0.45388, 90, 90, 90	Frank-Kasper phase	-	7.72	X	58685
Co-Cr	Cr _{0.7} Co _{0.3}	W, cI2, 229	<i>Im-3m</i>	0.286, 0.286, 0.286, 90, 90, 90	b.c.c. family	-	7.68	X	22185
Co-Cr	Cr _{2.28} Co _{1.72} ht	Cr ₂ Si, cP8, 223	<i>Pm-3n</i>	0.4558, 0.4558, 0.4558, 90, 90, 90	Frank-Kasper phase	-	7.71	X	6779
Co-Cr	Cr ₃ Co	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.5028, 0.5028, 0.4034, 90, 90, 120	close-packed structure	-	8.08	A	4767
Co-Cu	Cu _{0.5} Co _{0.5} m	Cu, cF4, 225	<i>Fm-3m</i>	0.3591, 0.3591, 0.3591, 90, 90, 90	close-packed structure	-	8.78	X	44638
Co-D	CoD _{0.18} m	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.2529, 0.2529, 0.4091, 90, 90, 120	AlB ₂ family	-	8.69	X	36163
Co-D	CoD _{0.38}	Cr _{0.88} S, hP4, 164	<i>P-3m1</i>	0.2565, 0.2565, 0.4142, 90, 90, 120	-	-	8.40	X	36163
Co-D	CoD _{0.50} m	Cr _{0.88} S, hP4, 164	<i>P-3m1</i>	0.2579, 0.2579, 0.4162, 90, 90, 120	-	-	8.30	X	36163
Co-Dy	DyCo ₂ lt	*, i*24, *	-	0.7176, 0.7176, 0.7186, 90, 90, 90	-	-	-	N	14450
Co-Dy	DyCo ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7194, 0.7194, 0.7194, 90, 90, 90	Friauf-Laves phase	-	10.00	X	53174
Co-Dy	DyCo ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.5004, 0.5004, 2.435, 90, 90, 120	Laves-CaCu ₅	-	9.60	X	9111
Co-Dy	DyCo ₅ ht	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.49249, 0.49249, 0.3985, 90, 90, 120	-	-	9.07	X	16418
Co-Dy	Dy ₁₂ Co ₇	Ho ₁₂ Co ₇ , mP38, 14	<i>P12₁/c1</i>	0.836, 1.125, 1.10945, 90, 124.265, 90	-	-	9.10	A	9468
Co-Dy	Dy ₂ Co ₁₇ ht	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8307, 0.8307, 0.8045, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.17	X	62561
Co-Dy	Dy ₂ Co ₁₇ rt	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.842, 0.842, 1.2216, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.81	A	36195
Co-Dy	Dy ₂ Co ₇	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.4997, 0.4997, 3.6192, 90, 90, 120	Laves-CaCu ₅	gray	9.39	A	61165
Co-Dy	Dy ₃ Co	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.6977, 0.9338, 0.6243, 90, 90, 90	-	-	8.92	X	30302
Co-Dy	Dy ₆ Co _{4.5} rt	Ho ₆ Co _{4.5} , hP22, 176	<i>P6₃/m</i>	1.146, 1.146, 0.4005, 90, 90, 120	-	-	9.04	X	3909
Co-Er	ErCo ₂ lt	TbFe ₂ , hR18, 166	<i>R-3m</i>	0.5071, 0.5071, 1.2188, 90, 90, 120	Friauf-Laves phase	-	10.47	A	14450
Co-Er	ErCo ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.71561, 0.71561, 0.71561, 90, 90, 90	Friauf-Laves phase	-	10.34	X	65090
Co-Er	ErCo ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.49781, 0.49781, 2.42459, 90, 90, 120	Laves-CaCu ₅	-	9.88	X	47877
Co-Er	ErCo ₅ ht	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.487, 0.487, 0.4002, 90, 90, 120	-	-	9.33	X	3211
Co-Er	Er _{0.9} Co _{5.2} ht	Cu _{5.44} Tb _{0.78} , hP8, 191	<i>P6/mmm</i>	0.4841, 0.4841, 0.4038, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.26	A	8329
Co-Er	Er ₁₂ Co ₇	Ho ₁₂ Co ₇ , mP38, 14	<i>P12₁/c1</i>	0.83, 1.116, 1.10388, 90, 124.28, 90	-	-	9.51	A	9468
Co-Er	Er ₂ Co ₁₇ hex	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.83068, 0.83068, 0.81212, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.15	X	23318
Co-Er	Er ₂ Co ₁₇ rhom	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.8315, 0.8315, 1.2203, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.11	A	34827
Co-Er	Er ₂ Co ₇	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.497, 0.497, 3.591, 90, 90, 120	Laves-CaCu ₅	gray dark	9.69	X	48509
Co-Er	Er ₃ Co rt	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.6902, 0.9191, 0.6189, 90, 90, 90	-	-	9.49	A	6074
Co-Er	Er ₆ Co _{4.5} rt	Ho ₆ Co _{4.5} , hP22, 176	<i>P6₃/m</i>	1.136, 1.136, 0.3975, 90, 90, 120	-	-	9.49	X	3909
Co-F	CoF ₂ hp-ht	FeS ₂ , oP6, 58	<i>Pnnm</i>	0.464, 0.48, 0.316, 90, 90, 90	pyrite-marcasite family	-	4.57	X	4660
Co-F	CoF ₂ hp1	CaCl ₂ , oP6, 58	<i>Pnnm</i>	0.4485, 0.4679, 0.3133, 90, 90, 90	-	-	4.90	X	62434
Co-F	CoF ₂ hp2	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.4934, 0.4934, 0.4934, 90, 90, 90	pyrite-marcasite family	-	5.36	X	62434
Co-F	CoF ₂ hp3	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.4805, 0.4805, 0.4805, 90, 90, 90	fluorite family	-	5.80	X	62434
Co-F	CoF ₂ rt	TiO ₂ , tP6, 136	<i>P4₂/mmn</i>	0.46956, 0.46956, 0.31793, 90, 90, 90	-	pink	4.59	X	38888
Co-F	CoF ₃	FeF ₃ , hR24, 167	<i>R-3c</i>	0.50423, 0.50423, 1.3218, 90, 90, 120	-	-	3.97	X	35407
Co-Fe	FeCo rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.2856, 0.2856, 0.2856, 90, 90, 90	wairauite	-	8.18	X	47317
Co-Fe	Fe _{0.01} Co _{0.99} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2509, 0.2509, 0.4072, 90, 90, 120	close-packed structure	-	8.81	X	8256
Co-Fe	Fe _{0.05} Co _{0.95}	Nd, hP4, 194	<i>P6₃/mmc</i>	0.251, 0.251, 0.818, 90, 90, 120	close-packed structure	-	8.75	X	8256
Co-Fe	Fe _{0.08} Co _{0.92} ht	Cu, cF4, 225	<i>Fm-3m</i>	0.3551, 0.3551, 0.3551, 90, 90, 90	close-packed structure	-	8.71	X	8256
Co-Fe	Fe _{0.28} Co _{0.72} ht	W, cI2, 229	<i>Im-3m</i>	0.2842, 0.2842, 0.2842, 90, 90, 90	b.c.c. family	black	8.40	X	31908
Co-Fe	Fe _{0.28} Co _{0.72} stab	Mn, cI58, 217	<i>I-43m</i>	0.8747, 0.8747, 0.8747, 90, 90, 90	-	-	8.36	X	31908
Co-Fe	Fe _{0.5} Co _{0.5} hp	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2386, 0.2386, 0.3834, 90, 90, 120	close-packed structure	-	10.08	X	62432
Co-Ga	CoGa	CsCl, cP2, 221	<i>Pm-3m</i>	0.28832, 0.28832, 0.28832, 90, 90, 90	b.c.c. family	-	8.91	X	27941
Co-Ga	CoGa ₃	IrIn ₃ , tP16, 136	<i>P4₂/mmn</i>	0.623, 0.623, 0.64312, 90, 90, 90	-	gray silver	7.13	X	41115
Co-Ga	Co _{0.8} Ga _{0.2} ht	Cu, cF4, 225	<i>Fm-3m</i>	0.3596, 0.3596, 0.3596, 90, 90, 90	close-packed structure	-	8.73	X	1821
Co-Ga	Co _{0.92} Ga _{0.08} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2522, 0.2522, 0.4096, 90, 90, 120	close-packed structure	-	8.80	X	16054
Co-Gd	GdCo	*, o*4, *	-	0.39, 0.422, 0.487, 90, 90, 90	-	-	-	N	1491
Co-Gd	GdCo ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.726, 0.726, 0.726, 90, 90, 90	Friauf-Laves phase	-	9.55	X	19286
Co-Gd	GdCo ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.5053, 0.5053, 2.459, 90, 90, 120	Laves-CaCu ₅	-	9.18	A	53756
Co-Gd	GdCo ₅ ht	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.4979, 0.4979, 0.3972, 90, 90, 120	-	-	8.80	X	25092
Co-Gd	Gd _{0.9} Co _{5.2} ht	Cu _{5.44} Tb _{0.78} , hP8, 191	<i>P6/mmm</i>	0.4837, 0.4837, 0.4062, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.04	A	8329
Co-Gd	Gd ₁₂ Co ₇	Ho ₁₂ Co ₇ , mP38, 14	<i>P12₁/c1</i>	0.841, 1.139, 1.11628, 90, 124.179, 90	-	-	8.63	A	9468
Co-Gd	Gd ₂ Co ₁₇ ht	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8378, 0.8378, 0.8139, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.84	A	7014
Co-Gd	Gd ₂ Co ₁₇ rt	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.8377, 0.8377, 1.2198, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.85	X	2939
Co-Gd	Gd ₂ Co ₃	*, c*30, *	-	0.798, 0.798, 0.798, 90, 90, 90	-	-	-	N	1491
Co-Gd	Gd ₂ Co ₇ ht	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.502, 0.502, 3.63, 90, 90, 120	Laves-CaCu ₅	-	9.14	X	2497
Co-Gd	Gd ₂ Co ₇ rt	Ce ₂ Ni ₇ , hP36, 194	<i>P6₃/mmc</i>	0.5032, 0.5032, 2.428, 90, 90, 120	Laves-CaCu ₅	-	9.07	A	14151
Co-Gd	Gd ₃ Co	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.705, 0.954, 0.632, 90, 90, 90	-	-	8.29	X	5226
Co-Gd	Gd ₆ Co _{4.5}	Ho ₆ Co _{4.5} , hP22, 176	<i>P6₃/m</i>	1.1565, 1.1565, 0.404, 90, 90, 120	-	-	8.58	X	39219
Co-Gd	Gd ₉ Co	*, o***, *	-	0.909, 0.983, 1.267, 90, 90, 90	-	-	-	N	4371
Co-Ge	CoGe hp	FeSi, cP8, 198	<i>P2₁3</i>	0.4637, 0.4637, 0.4637, 90, 90, 90	-	-	8.76	X	15106
Co-Ge	CoGe rt	CoGe, mS16, 12	<i>C12/m1</i>	1.1648, 0.3807, 0.4945, 90, 101.103, 90	-	-	8.12	X	1285
Co-Ge	CoGe ₄ hp	*, cI*, *	-	1.099, 1.099, 1.099, 90, 90, 90	-	-	-	N	23641
Co-Ge	Co _{0.1} Ge _{0.9} m	C, cF8, 227	<i>Fd-3m</i>	0.56576, 0.56576, 0.56576, 90, 90, 90	-	-	5.23	X	51129
Co-Ge	Co _{0.83} Ge _{0.17} ht	Cu, cF4, 225	<i>Fm-3m</i>	0.3575, 0.3575, 0.3575, 90, 90, 90	close-packed structure	-	8.91	X	1821
Co-Ge	Co _{0.875} Ge ₂	CoGe ₂ , oS24, 64	<i>Cmce</i>	1.0818, 0.5681, 0.5681, 90, 90, 90	-	-	7.49	X	347
Co-Ge	Co _{1.7} Ge ht	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.3914, 0.3914, 0.5004, 90, 90, 120	AlB ₂ family	-	8.64	X	9769
Co-Ge	Co ₂ Ge rt	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.502, 0.382, 0.726, 90, 90, 90	-	-	9.09	A	4593
Co-Ge	Co ₃ Ge ₂ ht	*, hP*, *	-	0.406, 0.406, 0.59, 90, 90, 120	-	-	-	N	13167
Co-Ge	Co ₃ Ge ₇	Co ₃ Ge ₇ , tI24, 107	<i>I4mm</i>	0.764, 0.764, 0.581, 90, 90, 90	-	-	7.86	X	1240
Co-H	CoH ht	NaCl, cF8, 225	<i>Fm-3m</i>	0.37124, 0.37124, 0.37124, 90, 90, 90	rocksalt family	-	7.78	X	45874
Co-H	CoH _{0.19}	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.2538, 0.2538, 0.4102, 90, 90, 120	AlB ₂ family	-	8.58	X	36163
Co-H	Co ₃ H lt	Co ₃ H, hP8, 186	<i>P6₃mc</i>	0.2555, 0.2555, 1.2406, 90, 90, 120	-	-	8.42	X	36163
Co-Hf	HfCo	CsCl, cP2, 221	<i>Pm-3m</i>	0.3171, 0.3171, 0.3171, 90, 90, 90	b.c.c. family	-	12.37	X	54078
Co-Hf	HfCo ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.6912, 0.6912, 0.6912, 90, 90, 90	Friauf-Laves phase	-	11.92	X	1483

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Co-Hf	HfCo ₇ ht	* _o P*,50	<i>Pban</i>	0.47,3.8,0.83,90,90,90	-	-	-	N	24600
Co-Hf	Hf ₂ Co ht	Ti ₂ Ni,cF96,227	<i>Fd-3m</i>	1.2045,1.2045,1.2045,90,90,90	-	-	12.65	A	54078
Co-Hf	Hf ₂ Co ₇	Zr ₂ Ni ₇ ,mS36,12	<i>C12/m1</i>	0.4444,0.8191,1.214,90,90,90	-	-	11.57	A	11468
Co-Hf	Hf ₆ Co ₂₃ ht	Th ₆ Mn ₂₃ ,cF116,225	<i>Fm-3m</i>	1.1502,1.1502,1.1502,90,90,90	-	-	10.59	A	19480
Co-Ho	HoCo ₂ lt1	YMn ₂ ,tI12,141	<i>I4₁/amd</i>	0.5067,0.5067,0.7136,90,90,90	-	-	10.25	X	63701
Co-Ho	HoCo ₂ lt2	UMn ₂ ,oI12,74	<i>Imma</i>	0.5061,0.5064,0.717,90,90,90	Friauf-Laves phase	-	10.22	A	23501
Co-Ho	HoCo ₂ rt	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.71781,0.71781,0.71781,90,90,90	Friauf-Laves phase	-	10.16	X	49813
Co-Ho	HoCo ₃	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.4992,0.4992,2.43,90,90,120	Laves-CaCu ₅	-	9.74	X	2489
Co-Ho	HoCo ₃ ht	CaCu ₅ ,hP6,191	<i>P6₃/mmm</i>	0.49138,0.49138,0.3975,90,90,120	-	-	9.18	X	16418
Co-Ho	Ho ₁₂ Co ₇	Ho ₁₂ Co ₇ ,mP38,14	<i>P12₁/c1</i>	0.8327,1.1191,1.1051,90,124,2,90	-	-	9.33	X	9468
Co-Ho	Ho ₂ Co ₁₇ ht	Zn ₁₇ Th ₃ ,hR57,166	<i>R-3m</i>	0.8332,0.8332,1.2201,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	9.04	A	7014
Co-Ho	Ho ₂ Co ₁₇ lt	Th ₃ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.8331,0.8331,0.8117,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	9.07	X	2939
Co-Ho	Ho ₂ Co ₇	Gd ₂ Co ₇ ,hR54,166	<i>R-3m</i>	0.4985,0.4985,3.614,90,90,120	Laves-CaCu ₅	-	9.51	A	23497
Co-Ho	Ho ₃ Co	Fe ₃ C-b,P16,62	<i>Pnma</i>	0.692,0.9293,0.6213,90,90,90	-	-	9.21	X	4596
Co-Ho	Ho ₆ Co _{4.5} rt	Ho ₆ Co _{4.5} ,hP22,176	<i>P6₃/m</i>	1.140,1.140,0.399,90,90,120	-	-	9.28	X	4327
Co-I	CoI ₂	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.396,0.396,0.665,90,90,120	CdI ₂ -PbI ₂ polytype	black	5.75	X	20
Co-In	CoIn ₂	Mg ₂ Cu,oF48,70	<i>Fddd</i>	0.5282,0.9402,1.7846,90,90,90	-	-	8.65	X	8686
Co-In	CoIn ₃	IrIn ₃ ,tP16,136	<i>P4₂/mm</i>	0.68343,0.68343,0.70922,90,90,90	-	gray silver	8.09	X	41115
Co-Ir	Co _{0.65} Ir _{0.35} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.2602,0.2602,0.4183,90,90,120	close-packed structure	-	14.30	X	16054
Co-Ir	Co _{0.7} Ir _{0.3} ht	Cu,cF4,225	<i>Fm-3m</i>	0.3696,0.3696,0.3696,90,90,90	close-packed structure	-	13.01	X	49853
Co-La	LaCo _{0.85}	LaCo _{0.85} ,mS8,12	<i>C12/m1</i>	0.8478,0.4895,0.4335,90,90,90	-	black	6.98	X	37290
Co-La	LaCo ₁₃	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.133,1.133,1.133,90,90,90	-	-	8.27	X	3652
Co-La	LaCo ₂ hp	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7449,0.7449,0.7449,90,90,90	Friauf-Laves phase	-	8.25	X	6775
Co-La	LaCo ₅	CaCu ₅ ,hP6,191	<i>P6₃/mmm</i>	0.51085,0.51085,0.39667,90,90,120	-	-	8.03	X	32364
Co-La	La ₂ Co ₃	La ₂ Ni ₃ ,oS20,64	<i>Cmce</i>	0.4853,1.035,0.7801,90,90,90	-	-	7.71	X	18209
Co-La	La ₂ Co ₇ ht	Gd ₂ Co ₇ ,hR54,166	<i>R-3m</i>	0.513,0.513,3.666,90,90,120	Laves-CaCu ₅	-	8.23	A	59758
Co-La	La ₂ Co ₇ rt	Ce ₂ Ni ₇ ,hP36,194	<i>P6₃/mmc</i>	0.508,0.508,2.48,90,90,120	Laves-CaCu ₅	-	8.27	A	13512
Co-La	La ₃ Co	Fe ₃ C-b,P16,62	<i>Pnma</i>	0.7279,1.0088,0.6578,90,90,90	-	-	6.54	X	1306
Co-Lu	LuCo ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.71,0.71,0.71,90,90,90	Friauf-Laves phase	-	10.87	X	10633
Co-Lu	LuCo ₃	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.4942,0.4942,2.408,90,90,120	Laves-CaCu ₅	-	10.32	A	3662
Co-Lu	Lu ₂ Co ₁₇	Th ₃ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.82529,0.82529,0.8106,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	9.39	A	64552
Co-Lu	Lu ₂ Co ₇	Gd ₂ Co ₇ ,hR54,166	<i>R-3m</i>	0.4946,0.4946,3.598,90,90,120	Laves-CaCu ₅	-	9.97	A	3500
Co-Lu	Lu ₃ Co	Fe ₃ C-b,P16,62	<i>Pnma</i>	0.687,0.903,0.614,90,90,90	-	-	10.18	A	6157
Co-Lu	Lu ₆ Co _{4.5}	Ho ₆ Co _{4.5} ,hP22,176	<i>P6₃/m</i>	1.121,1.121,0.392,90,90,120	-	-	10.24	A	6157
Co-Mg	MgCo	CdNi,cF96,227	<i>Fd-3m</i>	1.1434,1.1434,1.1434,90,90,90	-	-	4.44	X	27278
Co-Mg	MgCo ₂	MgZn ₃ ,hP12,194	<i>P6₃/mmc</i>	0.4859,0.4859,0.7954,90,90,120	Friauf-Laves phase	-	5.81	A	16054
Co-Mg	Mg _{0.5} Co _{0.5} m	W,cI2,229	<i>Im-3m</i>	0.3,0.3,0.3,90,90,90	b.c.c. family	-	5.12	X	54245
Co-Mn	Mn _{0.5} Co _{0.5} ht	Cu,cF4,225	<i>Fm-3m</i>	0.361,0.361,0.361,90,90,90	close-packed structure	-	8.04	X	30471
Co-Mn	Mn _{0.75} Co _{0.25} ht1	Mn,cP20,213	<i>P4₃2</i>	0.6306,0.6306,0.6306,90,90,90	-	-	7.41	X	53429
Co-Mo	MoCo ₃ rt	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.51245,0.51245,0.41125,90,90,120	close-packed structure	-	9.69	X	2405
Co-Mo	Mo _{0.1} Co _{0.9} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.254,0.254,0.4105,90,90,120	close-packed structure	-	9.07	X	16054
Co-Mo	Mo _{0.2} Co _{0.8} ht	Mg,hP2,194	<i>P6₃/mmc</i>	0.25973,0.25973,0.42123,90,90,120	close-packed structure	-	8.95	X	1870
Co-Mo	Mo _{0.35} Co _{0.65} m	* _h P*,*	-	0.327,0.327,0.522,90,90,120	-	-	-	N	16271
Co-Mo	Mo _{0.6} Co _{0.4} ht	(Cr _{0.49} Fe _{0.51}),tP30,136	<i>P4₂/mm</i>	0.92287,0.92287,0.48269,90,90,90	Frank-Kasper phase	-	9.83	X	1775
Co-Mo	Mo _{0.92} Co _{0.08}	W,cI2,229	<i>Im-3m</i>	0.31363,0.31363,0.31363,90,90,90	b.c.c. family	-	10.01	X	1870
Co-Mo	Mo _{0.89} Co _{0.11} rt	W ₆ Fe ₇ ,hR39,166	<i>R-3m</i>	0.4761,0.4761,2.559,90,90,120	Frank-Kasper phase	-	9.76	X	43741
Co-N	CoN rt	ZnS,cF8,216	<i>F-43m</i>	0.4297,0.4297,0.4297,90,90,90	adamantane structure	-	6.11	X	30260
Co-N	Co ₂ N	CaCl ₂ ,oP6,58	<i>Pnmm</i>	0.4332,0.4662,0.2749,90,90,90	-	-	7.89	X	45848
Co-N	Co ₃ N ht	Fe ₃ N,hP8,182	<i>P6₃22</i>	0.464,0.464,0.437,90,90,120	-	-	7.78	A	63798
Co-N	Co ₄ N rt	Fe ₄ N,cP5,221	<i>Pm-3m</i>	0.357,0.357,0.357,90,90,90	-	-	9.11	X	63798
Co-Nb	Nb _{0.065} Co _{0.935} ht	Cu,cF4,225	<i>Fm-3m</i>	0.35706,0.35706,0.35706,90,90,90	close-packed structure	-	8.92	X	14646
Co-Nb	Nb _{0.14} Co _{0.86} m	W,cI2,229	<i>Im-3m</i>	0.28609,0.28609,0.28609,90,90,90	b.c.c. family	-	9.03	X	14646
Co-Nb	Nb _{0.735} Co _{0.265} ht	Nb _{0.74} Co _{0.26} ,hP40,194	<i>P6₃/mmc</i>	0.47414,0.47414,1.5458,90,90,120	Friauf-Laves phase	-	8.91	X	48644
Co-Nb	Nb _{0.77} Co _{0.23} m	Cu,cF4,225	<i>Fm-3m</i>	0.411,0.411,0.411,90,90,90	close-packed structure	-	8.14	X	28830
Co-Nb	Nb _{1.05} Co _{1.95} ht	MgZn ₃ ,hP12,194	<i>P6₃/mmc</i>	0.4834,0.4834,0.7853,90,90,120	Friauf-Laves phase	-	8.88	X	2123
Co-Nb	Nb _{1.06} Co _{1.94}	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.6802,0.6802,0.6802,90,90,90	Friauf-Laves phase	-	8.98	X	51331
Co-Nb	Nb ₂ Co ₇ rt	Zr ₂ Ni ₇ ,mS18,12	<i>C12/m1</i>	0.45874,0.81509,0.62223,90,107.181,90	-	-	8.94	X	59078
Co-Nb	Nb _{6.7} Co _{6.3}	W ₆ Fe ₇ ,hR39,166	<i>R-3m</i>	0.4904,0.4904,2.6186,90,90,120	Frank-Kasper phase	gray silver	9.08	X	29763
Co-Nd	NdCo ₂ lt1	YMn ₂ ,tI12,141	<i>I4₁/amd</i>	0.51564,0.51564,0.72705,90,90,90	-	-	9.01	X	47596
Co-Nd	NdCo ₂ lt2	UMn ₂ ,oI12,74	<i>Imma</i>	0.51512,0.51431,0.72973,90,90,90	Friauf-Laves phase	-	9.01	X	47596
Co-Nd	NdCo ₂ rt	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.73049,0.73049,0.73049,90,90,90	Friauf-Laves phase	-	8.93	X	47596
Co-Nd	NdCo ₃	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.506,0.506,2.4781,90,90,120	Laves-CaCu ₅	-	8.73	A	27405
Co-Nd	NdCo ₅	CaCu ₅ ,hP6,191	<i>P6₃/mmm</i>	0.5034,0.5034,0.3977,90,90,120	-	-	8.35	X	15310
Co-Nd	Nd ₂ Co _{1.7}	* _h P*,*	-	0.4795,0.4795,0.408,90,90,120	-	-	-	N	7495
Co-Nd	Nd ₂ Co ₁₇ rt	Zn ₁₇ Th ₃ ,hR57,166	<i>R-3m</i>	0.8398,0.8398,1.2218,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	8.61	X	15028
Co-Nd	Nd ₂ Co ₃ rt	La ₂ Ni ₃ ,oS20,64	<i>Cmce</i>	0.4986,1.,0.7546,90,90,90	-	-	8.21	A	55498
Co-Nd	Nd ₂ Co ₇ hex	Ce ₂ Ni ₇ ,hP36,194	<i>P6₃/mmc</i>	0.50628,0.50628,2.44469,90,90,120	Laves-CaCu ₅	-	8.58	X	56933
Co-Nd	Nd ₂ Co ₇ rhom	Gd ₂ Co ₇ ,hR54,166	<i>R-3m</i>	0.5059,0.5059,3.643,90,90,120	Laves-CaCu ₅	-	8.65	A	6074
Co-Nd	Nd ₂₄ Co ₁₁	Ce ₂₄ Co ₁₁ ,hP70,186	<i>P6₃mc</i>	0.9596,0.9596,2.17,90,90,120	-	-	7.89	A	4104
Co-Nd	Nd ₃ Co	Fe ₃ C-b,P16,62	<i>Pnma</i>	0.7107,0.975,0.6386,90,90,90	-	-	7.38	A	6074
Co-Nd	Nd ₃ Co ₁₉	Ce ₃ Co ₁₉ ,hR72,166	<i>R-3m</i>	0.5054,0.5054,4.866,90,90,120	Laves-CaCu ₅	-	8.52	A	7495
Co-Nd	Nd ₃ Co ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.637,0.643,0.708,90,96,70	-	-	7.53	A	9411
Co-Nd	Nd ₇ Co ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	0.9888,0.9888,0.5937,90,90,120	-	-	7.84	A	4104
Co-Ni	Co _{0.35} Ni _{0.65} ht	Cu,cF4,225	<i>Fm-3m</i>	0.3543,0.3543,0.3543,90,90,90	close-packed structure	-	8.78	X	24643
Co-Ni	Co _{0.9} Ni _{0.1} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.2507,0.2507,0.407,90,90,120	close-packed structure	-	8.83	X	62311
Co-Np	NpCo ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7043,0.7043,0.7043,90,90,90	Friauf-Laves phase	-	13.50	X	9108
Co-Np	Np ₂ Co ₁₇	Th ₃ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.83107,0.83107,0.81058,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	10.11	X	60081
Co-O	CoO lt1	CoO,mS4,12	<i>C12/m1</i>	0.51738,0.30119,0.30258,90,125.587,90	-	-	6.49	X	21276

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Co-O	CoO It2	CoO,It4,139	$I4/mmm$	0.3015,0.3015,0.42143,90,90,90	rocksalt family	-	6.50	X	336
Co-O	CoO m1	ZnO,hO4,186	$P6_3mc$	0.322,0.322,0.515,90,90,120	adamantane structure	green	5.38	A	63855
Co-O	CoO m2	ZnS,cF8,216	$F-43m$	0.455,0.455,0.455,90,90,90	adamantane structure	green	5.28	X	24613
Co-O	CoO rt	NaCl,cF8,225	$Fm-3m$	0.4267,0.4267,0.4267,90,90,90	rocksalt family	green olive	6.41	X	24613
Co-O	CoO ₂ rhom	Ni(O _{0.5} [OH] _{0.5}) ₂ ,hR9,166	$R-3m$	0.28388,0.28388,1.3439,90,90,120	-	-	4.83	X	51677
Co-O	CoO ₂ trig	CdI ₂ ,hP3,164	$P-3m1$	0.28208,0.28208,0.42403,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.17	X	36530
Co-O	Co ₂ O ₃ hp	Al ₂ O ₃ ,hR30,167	$R-3c$	0.4782,0.4782,1.296,90,90,120	-	-	6.44	X	6153
Co-O	Co ₂ O ₃ rt	* _h *10,*	-	0.464,0.464,0.575,90,90,120	-	-	-	N	17
Co-O	Co ₃ O ₄ hp	* _m P14,14	$P12_1/c1$	0.41928,0.30462,0.8685,90,95.05,90	-	-	7.24	N	60624
Co-O	Co ₃ O ₄ m	* _m S14,12	$C12/m1$	0.4836,0.9307,0.2974,90,106.3,90	-	-	6.22	N	60624
Co-O	Co ₃ O ₄ tf	Mn ₃ O ₄ ,It28,141	$I4_1/amd$	0.57205,0.57205,0.8262,90,90,90	-	-	5.92	A	16310
Co-O	Co ₃ O ₄	Fe ₃ O ₄ ,cF56,227	$Fd-3m$	0.8072,0.8072,0.8072,90,90,90	spinel family	black	6.08	X	13185
Co-Os	Os _{0.2} Co _{0.8} ht	Cu,cF4,225	$Fm-3m$	0.357,0.357,0.357,90,90,90	close-packed structure	-	12.44	X	457
Co-Os	Os _{0.5} Co _{0.5}	Mg,hP2,194	$P6_3/mmc$	0.266,0.266,0.424,90,90,120	close-packed structure	-	15.92	X	457
Co-P	CoP	FeAs,oP8,62	$Pnma$	0.5077,0.3281,0.5587,90,90,90	AlB ₂ family	-	6.42	X	1584
Co-P	CoP ₂	CoSb ₂ ,mP12,14	$P12_1/c1$	0.5551,0.5549,0.5614,90,114.71,90	pyrite-marcasite family	-	5.11	X	17051
Co-P	CoP ₃	CoAs ₃ ,cI32,204	$Im-3$	0.7705,0.7705,0.7705,90,90,90	-	black	4.41	X	38527
Co-P	Co ₂ P rt	Co ₂ P,oP12,62	$Pnma$	0.56536,0.35111,0.66056,90,90,90	-	-	7.54	X	39938
Co-P	Co ₃ P	Ni ₃ P,It32,82	$I-4$	0.878,0.878,0.4336,90,90,90	-	-	8.26	A	1579
Co-Pd	Co _{0.33} Pd _{0.67}	Cu,cF4,225	$Fm-3m$	0.3888,0.3888,0.3888,90,90,90	close-packed structure	-	10.25	X	49850
Co-Pr	PrCo ₂ It	YMn ₂ ,It12,141	$I4_1/amd$	0.51619,0.51619,0.7264,90,90,90	-	-	8.88	A	28903
Co-Pr	PrCo ₂ rt	MgCu ₂ ,cF24,227	$Fd-3m$	0.7312,0.7312,0.7312,90,90,90	Friauf-Laves phase	-	8.79	X	3620
Co-Pr	PrCo ₃	PuNi ₃ ,hR36,166	$R-3m$	0.50778,0.50778,2.47668,90,90,120	Laves-CaCu ₅	-	8.59	X	61681
Co-Pr	PrCo ₅	CaCu ₅ ,hP6,191	$P6_3/mmm$	0.5011,0.5011,0.3982,90,90,120	-	-	8.35	X	28963
Co-Pr	Pr ₂ Co _{1.7}	* _h P*,*	-	0.481,0.481,0.409,90,90,120	-	-	-	N	7495
Co-Pr	Pr ₂ Co ₇ hex	Ce ₂ Ni ₇ ,hP36,194	$P6_3/mmc$	0.5068,0.5068,2.4457,90,90,120	Laves-CaCu ₅	-	8.48	X	61580
Co-Pr	Pr ₂ Co ₇ rhom	Gd ₂ Co ₇ ,hR54,166	$R-3m$	0.5068,0.5068,3.6549,90,90,120	Laves-CaCu ₅	-	8.51	X	59404
Co-Pr	Pr _{2.05} Co _{16.90} rt	Pr _{2.05} Co _{16.90} ,hR78,160	$R3m$	0.845,0.845,1.2255,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	8.45	X	42956
Co-Pr	Pr ₃ Co	Fe ₃ C-b,oP16,62	$Pnma$	0.7143,0.978,0.641,90,90,90	-	-	7.14	A	6074
Co-Pr	Pr ₃ Co ₁₉	Ce ₃ Co ₁₉ ,hR72,166	$R-3m$	0.5053,0.5053,4.871,90,90,120	Laves-CaCu ₅	-	8.44	A	7495
Co-Pr	Pr ₃ Co ₂ rt	Mn ₃ C ₃ ,mS28,15	$C12/c1$	1.654,0.648,0.71,90,96.8,90	-	-	7.23	A	9411
Co-Pt	CoPt rt	CuAu,It2,123	$P4/mmm$	0.2682,0.2682,0.3675,90,90,90	close-packed structure	-	15.96	X	58221
Co-Pt	CoPt ₃	Cu ₃ Au,cP4,221	$Pm-3m$	0.38535,0.38535,0.38535,90,90,90	close-packed structure	-	18.69	X	32373
Co-Pt	Co _{0.46} Pt _{0.54} ht	Cu,cF4,225	$Fm-3m$	0.3749,0.3749,0.3749,90,90,90	close-packed structure	black	16.70	X	57701
Co-Pt	Co _{0.8} Pt _{0.2} rt	Mg,hP2,194	$P6_3/mmc$	0.257,0.257,0.4189,90,90,120	close-packed structure	-	11.94	X	16054
Co-Pu	PuCo ₂	MgCu ₂ ,cF24,227	$Fd-3m$	0.7043,0.7043,0.7043,90,90,90	Friauf-Laves phase	-	13.76	X	1114
Co-Pu	PuCo ₃	PuNi ₃ ,hR36,166	$R-3m$	0.5003,0.5003,2.442,90,90,120	Laves-CaCu ₅	-	11.88	A	1294
Co-Pu	Pu ₂ Co	* _h P*,*	-	0.7803,0.7803,0.3606,90,90,120	-	-	-	N	1294
Co-Pu	Pu ₃ Co ₁₇	Th ₂ Ni ₁₇ ,hP38,194	$P6_3/mmc$	0.8327,0.8327,0.8107,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	10.16	A	1294
Co-Pu	Pu ₃ Co	Re ₃ B,oS16,63	$Cmcm$	0.3475,1.0976,0.922,90,90,90	-	-	14.94	X	1787
Co-Pu	Pu ₆ Co rt	U ₆ Mn,It28,140	$I4/mcm$	1.0475,1.0475,0.534,90,90,90	-	-	17.26	A	1294
Co-Re	Re _{0.2} Co _{0.8} ht	Cu,cF4,225	$Fm-3m$	0.367,0.367,0.367,90,90,90	close-packed structure	-	11.34	X	457
Co-Re	Re _{0.67} Co _{0.33}	Mg,hP2,194	$P6_3/mmc$	0.268,0.268,0.431,90,90,120	close-packed structure	-	17.86	X	48073
Co-Rh	Co _{0.35} Rh _{0.65} ht	Cu,cF4,225	$Fm-3m$	0.3698,0.3698,0.3698,90,90,90	close-packed structure	-	11.49	X	58141
Co-Rh	Co _{0.65} Rh _{0.35} rt	Mg,hP2,194	$P6_3/mmc$	0.2602,0.2602,0.419,90,90,120	close-packed structure	-	10.05	X	16054
Co-Ru	Ru _{0.15} Co _{0.85} ht	Cu,cF4,225	$Fm-3m$	0.3548,0.3548,0.3548,90,90,90	close-packed structure	-	9.70	X	49013
Co-Ru	Ru _{0.5} Co _{0.5}	Mg,hP2,194	$P6_3/mmc$	0.26239,0.26239,0.41884,90,90,120	close-packed structure	-	10.64	X	53541
Co-S	CoS ₂	FeS ₂ ,cP12,205	$Pa-3$	0.55385,0.55385,0.55385,90,90,90	cattierite	gray	4.81	X	24392
Co-S	Co _{0.88} S ht	NiAs,hP4,194	$P6_3/mmc$	0.337,0.337,0.516,90,90,120	jaipurite	-	5.49	X	26144
Co-S	Co _{0.90} S ht	* _h P54,194	$P6_3/mmc$	1.01,1.01,1.548,90,90,120	-	-	-	N	2573
Co-S	Co ₃ S ₄ rt	Fe ₃ O ₄ ,cF56,227	$Fd-3m$	0.9406,0.9406,0.9406,90,90,90	linnaeite	-	4.87	X	24596
Co-S	Co ₅ S ₈ rt	Co ₅ S ₈ ,cF68,225	$Fm-3m$	0.9923,0.9923,0.9923,90,90,90	-	white grayish	5.35	X	8771
Co-Sb	CoSb	NiAs,hP4,194	$P6_3/mmc$	0.38906,0.38906,0.51875,90,90,120	AlB ₂ family	-	8.82	X	55532
Co-Sb	CoSb ₂ ht	FeAs ₂ ,oP6,58	$Pnmm$	0.5517,0.6406,0.3411,90,90,90	pyrite-marcasite family	-	8.33	X	57482
Co-Sb	CoSb ₂ rt	CoSb ₂ ,mP12,14	$P12_1/c1$	0.65051,0.63833,0.65410,90,117.65,90	pyrite-marcasite family	-	8.35	X	19099
Co-Sb	CoSb ₃	CoAs ₃ ,cI32,204	$Im-3$	0.9036,0.9036,0.9036,90,90,90	kiefite	-	7.64	X	44256
Co-Sb	Co _{1.6} Sb _{0.4}	Co(Co _{0.6} Sb _{0.4}),mP4,10	$P12/m1$	0.37806,0.37612,0.3797,90,90,842.90	-	-	8.80	X	63371
Co-Sb	Co ₃ Sb ₂	Co ₃ Sb ₂ ,aP6,2	$P-1$	0.40292,0.40409,0.52351,89.995,89.831,60.133	-	-	9.44	X	63371
Co-Se	SeCo	CSCl,cP2,221	$Pm-3m$	0.316,0.316,0.316,90,90,90	b.c.c. family	-	5.47	X	2122
Co-Se	SeCo ₂	MgCu ₂ ,cF24,227	$Fd-3m$	0.6875,0.6875,0.6875,90,90,90	Friauf-Laves phase	-	6.66	X	25184
Co-Se	Se ₂ Co cub	Ti ₂ Ni,cF96,227	$Fd-3m$	1.223,1.223,1.223,90,90,90	-	-	4.32	A	2005
Co-Se	Se ₂ Co tet	CuAl ₂ ,It12,140	$I4/mcm$	0.6377,0.6377,0.5618,90,90,90	-	-	4.33	X	6603
Co-Se	Se ₃ Co	Se ₃ Co,oP32,62	$Pnma$	1.3102,0.8624,0.5829,90,90,90	-	-	3.91	X	11121
Co-Se	CoSe	NiAs,hP4,194	$P6_3/mmc$	0.3585,0.3585,0.54747,90,90,120	AlB ₂ family	golden	7.52	X	55745
Co-Se	CoSe ₂ has	FeS ₂ ,oP6,58	$Pnmm$	0.484,0.572,0.36,90,90,90	hastite [not IMA]	-	7.23	A	681
Co-Se	CoSe ₂ rt	FeS ₂ ,cP12,205	$Pa-3$	0.58593,0.58593,0.58593,90,90,90	trogtalite	rose violet	7.16	X	4353
Co-Se	Co ₂ Se ₂ rt	* _m ***,*	-	0.5188,0.3553,0.6114,90,91.25,90	-	-	-	N	6747
Co-Se	Co ₃ Se ₄ bor	Fe ₃ O ₄ ,cF56,227	$Fd-3m$	1.02,1.02,1.02,90,90,90	bornhardtite	rose	6.17	A	681
Co-Se	Co ₃ Se ₄ rt	Cr ₃ S ₄ ,mS14,12	$C12/m1$	1.21,0.357,0.6183,90,120.73,90	-	golden	7.13	X	44791
Co-Se	Co ₆ S ₈ Se ₈	Cr ₇ Se ₈ ,mS30,12	$C12/m1$	1.04002,0.71402,0.80798,90,130.066,90	-	golden	7.47	X	44791
Co-Se	Co ₉ Se ₈ rt	Co ₉ S ₈ ,cF68,225	$Fm-3m$	1.1435,1.1435,1.1435,90,90,90	-	-	5.16	A	4719
Co-Si	CoSi	FeSi,cP8,198	$P2_13$	0.445,0.445,0.445,90,90,90	-	gray dark	6.56	X	51078
Co-Si	CoSi ₂ hp	* _o P12,*	$Pnma$	0.44615,0.36098,0.8807,90,90,90	-	-	5.39	N	51697
Co-Si	CoSi ₂ rt	CaF ₂ ,cF12,225	$Fm-3m$	0.5364,0.5364,0.5364,90,90,90	fluorite family	gray dark	4.95	X	20399
Co-Si	Co _{0.008} Si _{0.992}	C,cF8,227	$Fd-3m$	0.54297,0.54297,0.54297,90,90,90	-	-	2.35	X	61129
Co-Si	Co _{0.85} Si _{0.15} ht	Cu,cF4,225	$Fm-3m$	0.3534,0.3534,0.3534,90,90,90	close-packed structure	-	8.17	X	1821
Co-Si	Co _{0.9} Si _{0.1} rt	Mg,hP2,194	$P6_3/mmc$	0.2507,0.2507,0.4065,90,90,120	close-packed structure	-	8.38	X	16054
Co-Si	Co ₂ Si rt	Co ₂ Si-b,oP12,62	$Pnma$	0.4906,0.3729,0.709,90,90,90	-	-	7.47	X	34539

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Co-Si	Co ₂ Si ₃ hp-ht	Ru ₂ Sn ₃ , tP20, 116	<i>P</i> -4c2	0.5234, 0.5234, 0.8543, 90, 90, 90	chimney-ladder structure	-	5.74	A	15079
Co-Si	Co ₃ Si m	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.4976, 0.4976, 0.4069, 90, 90, 120	close-packed structure	-	7.80	A	7681
Co-Sm	SmCo ₂ lt	TbFe ₂ , hR18, 166	<i>R</i> -3m	0.5138, 0.5138, 1.25, 90, 90, 120	Friauf-Laves phase	-	9.35	A	28903
Co-Sm	SmCo ₂ rt	MgCu ₂ , cF24, 227	<i>Fd</i> -3m	0.727, 0.727, 0.727, 90, 90, 90	Friauf-Laves phase	-	9.28	X	22215
Co-Sm	SmCo ₃	PuNi ₃ , hR36, 166	<i>R</i> -3m	0.5084, 0.5084, 2.5016, 90, 90, 120	Laves-CaCu ₅	-	8.73	X	56105
Co-Sm	SmCo ₅ m	*, hP48, *	-	0.99952, 0.99952, 0.79559, 90, 90, 120	-	-	-	N	7330
Co-Sm	SmCo ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5, 0.5, 0.398, 90, 90, 120	-	-	8.58	X	21227
Co-Sm	Sm _{0.67} Co _{5.67} ht	Cu _{5.44} Tb _{0.78} , hP8, 191	<i>P6/mmm</i>	0.48562, 0.48562, 0.40813, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.66	X	7014
Co-Sm	Sm _{0.97} Co _{5.06} ht	Cu _{5.44} Tb _{0.78} , hP8, 191	<i>P6/mmm</i>	0.4979, 0.4979, 0.3991, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.61	A	8339
Co-Sm	Sm ₂ Co ₁₇ ht	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8341, 0.8341, 0.8153, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.81	X	33323
Co-Sm	Sm ₂ Co ₁₇ rt	Zn ₁₇ Th ₂ , hR57, 166	<i>R</i> -3m	0.83657, 0.83657, 1.22336, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.75	X	53313
Co-Sm	Sm ₂ Co ₇ ht	Gd ₂ Co ₇ , hR54, 166	<i>R</i> -3m	0.507, 0.507, 3.64, 90, 90, 120	Laves-CaCu ₅	-	8.77	A	21227
Co-Sm	Sm ₂ Co ₇ rt	Ce ₂ Ni ₁₇ , hP36, 194	<i>P6₃/mmc</i>	0.50433, 0.50433, 2.43117, 90, 90, 120	Laves-CaCu ₅	-	8.85	X	7863
Co-Sm	Sm ₃ Co	Fe ₂ C-b, oP16, 62	<i>Pnma</i>	0.706, 0.96, 0.634, 90, 90, 90	-	-	7.89	A	11243
Co-Sm	Sm ₃ Co ₁₉ ht1	Ce ₃ Co ₁₉ , hR72, 166	<i>R</i> -3m	0.50314, 0.50314, 4.8402, 90, 90, 120	Laves-CaCu ₅	-	8.79	A	8495
Co-Sm	Sm ₃ Co ₁₉ ht2	Sm ₃ Co ₁₉ , hP48, 194	<i>P6₃/mmc</i>	0.50312, 0.50312, 3.2265, 90, 90, 120	Laves-CaCu ₅	-	8.79	X	8343
Co-Sm	Sm ₃ Co ₂	Mn ₃ C ₂ , mS28, 15	<i>C12/c1</i>	1.6282, 0.6392, 0.7061, 90, 96.6, 90	-	-	7.92	X	9411
Co-Sn	CoSn rt	CoSn, hP6, 191	<i>P6/mmm</i>	0.5279, 0.5279, 0.42597, 90, 90, 120	AlB ₂ family	-	8.61	X	31853
Co-Sn	CoSn ₂ m	CoSn ₂ , tP3, 99	<i>P4mm</i>	0.3089, 0.3089, 0.5846, 90, 90, 90	-	-	8.82	X	53744
Co-Sn	CoSn ₂	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.6373, 0.6373, 0.5463, 90, 90, 90	-	gray silver	8.87	X	54854
Co-Sn	CoSn ₃ hp1	PdSn ₃ , oS32, 64	<i>Cmce</i>	1.6864, 0.6268, 0.627, 90, 90, 90	-	gray tin	8.32	X	32737
Co-Sn	CoSn ₃ ht	CoSn ₃ , tI64, 142	<i>I4₁/acd</i>	0.6275, 0.6275, 3.374, 90, 90, 90	-	gray tin	8.30	X	32737
Co-Sn	CoSn ₄	*, o***, *	-	0.571, 0.629, 0.641, 90, 90, 90	-	-	-	N	22631
Co-Sn	Co _{0.75} Sn _{0.25} m	W, cI2, 229	<i>Im</i> -3m	0.29228, 0.29228, 0.29228, 90, 90, 90	b.c.c. family	-	9.83	X	13680
Co-Sn	Co _{0.83} Sn ₅	Co _{0.83} Sn ₅ , tP12, 124	<i>P4/mcc</i>	0.69328, 0.69328, 0.57924, 90, 90, 90	-	-	7.66	X	59695
Co-Sn	Co _{0.9} Sn _{0.1} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2522, 0.2522, 0.4159, 90, 90, 120	close-packed structure	-	9.41	X	16054
Co-Sn	Co _{0.985} Sn _{0.015} ht	Cu, cF4, 225	<i>Fm</i> -3m	0.35523, 0.35523, 0.35523, 90, 90, 90	close-packed structure	-	8.87	X	33258
Co-Sn	Co _{1.5} Sn ht	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.4113, 0.4113, 0.5185, 90, 90, 120	AlB ₂ family	-	9.05	X	9769
Co-Sn	Co _{1.5} Sn _{0.5} hp2	CsCl, cP2, 221	<i>Pm</i> -3m	0.2939, 0.2939, 0.2939, 90, 90, 90	b.c.c. family	-	9.66	X	20422
Co-Sn	Co _{2.9} Sn ₂ rt	Ni ₃ Sn ₂ , oP20, 62	<i>Pnma</i>	0.7085, 0.5216, 0.8194, 90, 90, 90	AlB ₂ family	-	8.96	X	18577
Co-Ta	TaCo ₂ ht	MgZn ₃ , hP12, 194	<i>P6₃/mmc</i>	0.4787, 0.4787, 0.7827, 90, 90, 120	Friauf-Laves phase	-	12.78	X	1554
Co-Ta	TaCo ₂ rt	MgNi ₃ , hP24, 194	<i>P6₃/mmc</i>	0.4732, 0.4732, 1.542, 90, 90, 120	Friauf-Laves phase	-	13.28	X	1554
Co-Ta	TaCo ₃ ht	Cu ₃ Au, cP4, 221	<i>Pm</i> -3m	0.367, 0.367, 0.367, 90, 90, 90	close-packed structure	-	12.02	X	5776
Co-Ta	TaCo ₃ rt	BaPb ₃ , hR36, 166	<i>R</i> -3m	0.51864, 0.51864, 1.887, 90, 90, 120	close-packed structure	-	12.16	X	3617
Co-Ta	Ta _{0.75} Co _{2.25}	MgCu ₂ , cF24, 227	<i>Fd</i> -3m	0.6788, 0.6788, 0.6788, 90, 90, 90	Friauf-Laves phase	-	11.40	X	16054
Co-Ta	Ta ₂ Co	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.6116, 0.6116, 0.4969, 90, 90, 90	-	-	15.04	X	6603
Co-Ta	Ta _{6.5} Co _{6.5}	W ₆ Fe ₇ , hR39, 166	<i>R</i> -3m	0.4905, 0.4905, 2.633, 90, 90, 120	Frank-Kasper phase	-	14.16	X	4148
Co-Tb	TbCo ₂ lt	TbFe ₂ , hR18, 166	<i>R</i> -3m	0.5093, 0.5093, 1.2514, 90, 90, 120	Friauf-Laves phase	-	9.81	X	16032
Co-Tb	TbCo ₂ rt	MgCu ₂ , cF24, 227	<i>Fd</i> -3m	0.721, 0.721, 0.721, 90, 90, 90	Friauf-Laves phase	-	9.81	X	16032
Co-Tb	TbCo ₃ ht	PuNi ₃ , hR36, 166	<i>R</i> -3m	0.502, 0.502, 2.445, 90, 90, 120	Laves-CaCu ₅	-	9.40	A	23773
Co-Tb	TbCo ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.4952, 0.4952, 0.3974, 90, 90, 120	-	-	8.93	X	45519
Co-Tb	Tb _{0.86} Co _{5.28}	Cu _{5.44} Tb _{0.78} , hP8, 191	<i>P6/mmm</i>	0.48637, 0.48637, 0.40216, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.03	A	45519
Co-Tb	Tb ₁₂ Co ₇	Ho ₁₂ Co ₇ , mP38, 14	<i>P12₁/c1</i>	0.839, 1.132, 1.11343, 90, 124.265, 90	-	-	8.82	A	9468
Co-Tb	Tb ₂ Co ₁₇ ht	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8347, 0.8347, 0.81435, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.92	A	45519
Co-Tb	Tb ₂ Co ₁₇ rt	Zn ₁₇ Th ₂ , hR57, 166	<i>R</i> -3m	0.8376, 0.8376, 1.2198, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.87	A	9124
Co-Tb	Tb ₂ Co ₇	Gd ₂ Co ₇ , hR54, 166	<i>R</i> -3m	0.5002, 0.5002, 3.6221, 90, 90, 120	Laves-CaCu ₅	-	9.27	A	51324
Co-Tb	Tb ₃ Co	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.6997, 0.9417, 0.6274, 90, 90, 90	-	-	8.61	A	19267
Co-Tb	Tb ₃ Co _{4.5} rt	Ho ₃ Co _{4.5} , hP22, 176	<i>P6₃/m</i>	1.152, 1.152, 0.4008, 90, 90, 120	-	-	8.79	X	3909
Co-Tc	Tc _{0.5} Co _{0.5} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2628, 0.2628, 0.4193, 90, 90, 120	close-packed structure	-	10.39	X	1871
Co-Te	CoTe ₂ hp	FeS ₂ , cP12, 205	<i>Pa</i> -3	0.632, 0.632, 0.632, 90, 90, 90	pyrite-marcasite family	-	8.27	A	9689
Co-Te	CoTe ₂ rt	FeS ₂ , oP6, 58	<i>Pnmm</i>	0.53267, 0.63219, 0.39059, 90, 90, 90	mattagamite	gray	7.93	X	34821
Co-Te	Co _{0.90} Te	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.3887, 0.3887, 0.5379, 90, 90, 120	AlB ₂ family	gray silver	8.52	X	18925
Co-Th	ThCo	TiI ₃ , oS8, 63	<i>Cmcm</i>	0.374, 1.088, 0.416, 90, 90, 90	CrB(TiI)-FeB	gray	11.42	X	717
Co-Th	ThCo ₃	PuNi ₃ , hR36, 166	<i>R</i> -3m	0.5038, 0.5038, 2.464, 90, 90, 120	Laves-CaCu ₅	-	11.28	A	3059
Co-Th	ThCo ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.4999, 0.4999, 0.40015, 90, 90, 120	-	-	10.10	X	9118
Co-Th	Th ₂ Co ₁₇ rhom	Zn ₁₇ Th ₂ , hR57, 166	<i>R</i> -3m	0.8438, 0.8438, 1.2254, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.67	X	4314
Co-Th	Th ₂ Co ₇ ht	Gd ₂ Co ₇ , hR54, 166	<i>R</i> -3m	0.5035, 0.5035, 3.6986, 90, 90, 120	Laves-CaCu ₅	-	10.76	A	22271
Co-Th	Th ₂ Co ₇ rt	Ce ₂ Ni ₁₇ , hP36, 194	<i>P6₃/mmc</i>	0.503, 0.503, 2.462, 90, 90, 120	Laves-CaCu ₅	-	10.79	X	4865
Co-Th	Th ₇ Co ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃/mc</i>	0.983, 0.983, 0.617, 90, 90, 120	-	-	11.59	X	717
Co-Ti	TiCo rt	CsCl, cP2, 221	<i>Pm</i> -3m	0.2995, 0.2995, 0.2995, 90, 90, 90	b.c.c. family	-	6.60	X	20426
Co-Ti	TiCo ₂	MgCu ₂ , cF24, 227	<i>Fd</i> -3m	0.669, 0.669, 0.669, 90, 90, 90	Friauf-Laves phase	-	7.35	X	20046
Co-Ti	TiCo ₃ rt	Cu ₃ Au, cP4, 221	<i>Pm</i> -3m	0.3597, 0.3597, 0.3597, 90, 90, 90	close-packed structure	-	8.02	X	42868
Co-Ti	Ti _{0.13} Co _{0.87} ht	Cu, cF4, 225	<i>Fm</i> -3m	0.3588, 0.3588, 0.3588, 90, 90, 90	close-packed structure	-	8.27	X	6017
Co-Ti	Ti _{0.77} Co _{0.23} ht	W, cI2, 229	<i>Im</i> -3m	0.314, 0.314, 0.314, 90, 90, 90	b.c.c. family	-	5.41	X	18340
Co-Ti	Ti _{0.9} Co _{2.1}	MgNi ₃ , hP24, 194	<i>P6₃/mmc</i>	0.4732, 0.4732, 1.5427, 90, 90, 120	Friauf-Laves phase	-	7.41	A	6017
Co-Ti	Ti ₂ Co cub1	Ti ₂ Ni, cF96, 227	<i>Fd</i> -3m	1.12881, 1.12881, 1.12881, 90, 90, 90	-	-	5.72	X	50209
Co-Ti	Ti ₂ Co cub2	MgCu ₂ , cF24, 227	<i>Fd</i> -3m	0.673, 0.673, 0.673, 90, 90, 90	Friauf-Laves phase	-	6.74	X	440
Co-Tm	TmCo ₂ lt	TbFe ₂ , hR18, 166	<i>R</i> -3m	0.50399, 0.50399, 1.22806, 90, 90, 120	Friauf-Laves phase	-	10.58	A	30494
Co-Tm	TmCo ₂ rt	MgCu ₂ , cF24, 227	<i>Fd</i> -3m	0.71181, 0.71181, 0.71181, 90, 90, 90	Friauf-Laves phase	-	10.56	X	30494
Co-Tm	TmCo ₃ ht	PuNi ₃ , hR36, 166	<i>R</i> -3m	0.4966, 0.4966, 2.423, 90, 90, 120	Laves-CaCu ₅	-	9.99	A	23773
Co-Tm	Tm ₂ Co ₁₇	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8298, 0.8298, 0.8136, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.17	A	40577
Co-Tm	Tm ₂ Co ₇ lt	*, o***, *	-	0.285, 0.4954, 3.604, 90, 90, 90	-	-	-	N	26043
Co-Tm	Tm ₂ Co ₇ rt	Gd ₂ Co ₇ , hR54, 166	<i>R</i> -3m	0.4962, 0.4962, 3.608, 90, 90, 120	Laves-CaCu ₅	-	9.72	A	26043
Co-Tm	Tm ₃ Co	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.68635, 0.90895, 0.61277, 90, 90, 90	-	-	9.83	X	61565
Co-Tm	Tm ₆ Co _{4.5}	Ho ₆ Co _{4.5} , hP22, 176	<i>P6₃/m</i>	1.129, 1.129, 0.3953, 90, 90, 120	-	-	9.73	X	3909
Co-U	UCo	UCo, cI16, 199	<i>I2₁3</i>	0.63557, 0.63557, 0.63557, 90, 90, 90	b.c.c. family	-	15.37	X	320
Co-U	UCo ₂	MgCu ₂ , cF24, 227	<i>Fd</i> -3m	0.6992, 0.6992, 0.6992, 90, 90, 90	Friauf-Laves phase	-	13.83	X	19256
Co-U	UCo ₃ rt	PuNi ₃ , hR36, 166	<i>R</i> -3m	0.498, 0.498, 2.418, 90, 90, 120	Laves-CaCu ₅	-	11.94	A	28709

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Co-U	UCo ₅	UCo ₅ , hR54, 166	<i>R-3m</i>	0.478, 0.478, 3.634, 90, 90, 120	-	gray	11.07	X	23370
Co-U	U ₆ Co	U ₆ Mn, tI28, 140	<i>I4/mcm</i>	1.036, 1.036, 0.521, 90, 90, 90	-	-	17.66	X	425
Co-V	VCo ₃ rt	PuAl ₃ , hP24, 194	<i>P6₃/mmc</i>	0.5032, 0.5032, 1.227, 90, 90, 120	close-packed structure	-	8.43	X	1019
Co-V	V _{0.124} Co _{0.876} ht	Cu ₆ Fe ₄ , 225	<i>Fm-3m</i>	0.3555, 0.3555, 0.3555, 90, 90, 90	close-packed structure	-	8.57	X	9963
Co-V	V _{0.62} Co _{0.38}	(Cr _{0.49} Fe _{0.51}), tP30, 136	<i>P4₂/mnm</i>	0.8834, 0.8834, 0.45865, 90, 90, 90	Frank-Kasper phase	-	7.51	X	15296
Co-V	V _{0.7} Co _{0.3} ht1	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3555, 0.3555, 0.3555, 90, 90, 90	close-packed structure	-	8.51	X	12688
Co-V	V _{0.7} Co _{0.3} rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3552, 0.3552, 0.3552, 90, 90, 90	close-packed structure	-	8.53	X	12688
Co-V	V _{0.93} Co _{0.07}	W ₆ Cl ₂ , 229	<i>Im-3m</i>	0.3006, 0.3006, 0.3006, 90, 90, 90	b.c.c. family	-	6.30	X	52207
Co-V	V ₃ Co rt	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.4676, 0.4676, 0.4676, 90, 90, 90	Frank-Kasper phase	-	6.88	X	8105
Co-W	WCo ₃ rt	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.512, 0.512, 0.412, 90, 90, 120	close-packed structure	-	12.81	X	146
Co-W	W _{0.15} Co _{0.85} rt	Mg ₃ hP2, 194	<i>P6₃/mmc</i>	0.2544, 0.2544, 0.4146, 90, 90, 120	close-packed structure	-	11.10	X	16054
Co-W	W _{0.2} Co _{0.8} ht	Cu ₆ Fe ₄ , 225	<i>Fm-3m</i>	0.3628, 0.3628, 0.3628, 90, 90, 90	close-packed structure	-	11.67	X	16054
Co-W	W ₆ Co ₇ rt	W ₆ Fe ₇ , hR39, 166	<i>R-3m</i>	0.4755, 0.4755, 2.56817, 90, 90, 120	Frank-Kasper phase	-	15.01	X	146
Co-Y	YCo	TiI ₂ , oS8, 63	<i>Cmcm</i>	0.4106, 1.0358, 0.3906, 90, 90, 90	CrB(TiI)-FeB	-	5.91	X	17342
Co-Y	YCo ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7221, 0.7221, 0.7221, 90, 90, 90	Friauf-Laves phase	-	7.30	X	24822
Co-Y	YCo ₃ hex	CeNi ₃ , hP24, 194	<i>P6₃/mmc</i>	0.501, 0.501, 1.623, 90, 90, 120	Laves-CaCu ₅	-	7.50	A	18921
Co-Y	YCo ₃ rhom	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.50152, 0.50152, 2.43805, 90, 90, 120	Laves-CaCu ₅	-	7.48	X	50325
Co-Y	YCo ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.495, 0.495, 0.3973, 90, 90, 120	-	-	7.56	X	21076
Co-Y	Y ₂ Co ₁₇ ht	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8347, 0.8347, 0.8142, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.98	A	45752
Co-Y	Y ₂ Co ₁₇ rt	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.8356, 0.8356, 1.22, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.97	A	25551
Co-Y	Y ₂ Co ₃	*cP*, *	-	0.7996, 0.7996, 0.7996, 90, 90, 90	-	-	-	N	2604
Co-Y	Y ₂ Co ₇ rt	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.5, 0.5, 3.622, 90, 90, 120	Laves-CaCu ₅	-	7.50	A	25551
Co-Y	Y ₃ Co lt	Y ₃ Co, oP16, 19	<i>P2₁2₁2₁</i>	0.6354, 0.7021, 0.9428, 90, 90, 90	-	-	5.14	X	62411
Co-Y	Y ₃ Co rt	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7024, 0.9429, 0.6358, 90, 90, 90	-	-	5.14	X	62411
Co-Y	Y ₃ Co ₂ rt	Y ₃ Co ₂ , oP20, 58	<i>Pnnm</i>	0.9389, 1.2248, 0.3975, 90, 90, 90	-	-	5.59	X	8705
Co-Y	Y ₆ Co _{4.5} rt	Ho ₆ Co _{4.5} , hP22, 176	<i>P6₃/m</i>	1.1528, 1.1528, 0.4051, 90, 90, 120	-	-	5.69	X	19806
Co-Y	Y ₈ Co ₅	Y ₈ Co ₅ , mP52, 14	<i>P12₁/c1</i>	0.7058, 0.7286, 2.4277, 90, 102, 11, 90	-	-	5.47	X	9510
Co-Yb	YbCo ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.706, 0.706, 0.706, 90, 90, 90	Friauf-Laves phase	-	10.98	X	2726
Co-Yb	YbCo ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.4946, 0.4946, 2.4184, 90, 90, 120	Laves-CaCu ₅	-	10.20	A	10008
Co-Yb	YbCo ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.4869, 0.4869, 0.3988, 90, 90, 120	-	-	9.49	X	22027
Co-Yb	Yb ₂ Co ₁₇	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8308, 0.8308, 0.8098, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.25	A	41334
Co-Yb	Yb ₃ Co hp	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.714, 0.912, 0.613, 90, 90, 90	-	-	9.62	A	18910
Co-Zn	Zn _{0.1} Co _{0.9} ht	Cu ₆ Fe ₄ , 225	<i>Fm-3m</i>	0.3595, 0.3595, 0.3595, 90, 90, 90	close-packed structure	-	8.52	X	30521
Co-Zn	Zn ₁₁ Co ₂	Zn ₁₁ Co ₂ , cI52, 217	<i>I-43m</i>	0.89654, 0.89654, 0.89654, 90, 90, 90	γ-brass	-	7.72	X	63103
Co-Zn	Zn ₁₃ Co	Zn ₁₃ Co, mS28, 12	<i>C12/m1</i>	1.0846, 0.7535, 0.4992, 90, 100, 72, 90	-	-	7.53	X	1559
Co-Zn	Zn _{17.5} Co _{2.5}	Zn _{17.5} (Zn _{0.3} Co _{0.3})Co ₂ , hP60, 171	<i>P6₂</i>	1.1292, 1.1292, 0.775, 90, 90, 120	-	gray	7.52	X	41157
Co-Zn	Zn _{2.50} Co _{2.50} rt	Mg ₃ Ru ₂ , cP20, 213	<i>P4₁32</i>	0.63358, 0.63358, 0.63358, 90, 90, 90	-	-	8.12	X	61405
Co-Zn	Zn _{7.8} Co inc	Zn _{7.8} Co, mS28, 12	<i>C12/m1</i>	0.903, 0.4338, 0.77083, 90, 125, 755, 90	-	gray silver	7.71	X	41990
Co-Zr	ZrCo	CsCl, cP2, 221	<i>Pm-3m</i>	0.31957, 0.31957, 0.31957, 90, 90, 90	b.c.c. family	-	7.64	X	62147
Co-Zr	ZrCo ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.6933, 0.6933, 0.6933, 90, 90, 90	Friauf-Laves phase	-	8.34	X	42408
Co-Zr	Zr ₂ Co ht	Ti ₂ Ni, cF96, 227	<i>Fd-3m</i>	1.2179, 1.2179, 1.2179, 90, 90, 90	-	-	7.10	A	63709
Co-Zr	Zr ₂ Co rt	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.63642, 0.63642, 0.55204, 90, 90, 90	-	-	7.17	X	27351
Co-Zr	Zr ₂ Co ₁₁	*oP*, 50	<i>Pban</i>	0.4795, 3.6192, 0.8178, 90, 90, 90	-	-	-	N	63709
Co-Zr	Zr ₃ Co hex	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.5966, 0.5966, 0.466, 90, 90, 120	close-packed structure	-	7.69	A	2560
Co-Zr	Zr ₃ Co orth	Re ₃ B, oS16, 63	<i>Cmcm</i>	0.327, 1.084, 0.895, 90, 90, 90	-	-	6.96	X	5101
Co-Zr	Zr ₃ Co ₂	*o*, **, *	-	0.344, 0.861, 1.203, 90, 90, 90	-	-	-	N	15081
Co-Zr	Zr ₄ Co m1	*hP*, *	-	0.5038, 0.5038, 0.3126, 90, 90, 120	-	-	-	N	15081
Co-Zr	Zr ₄ Co m2	*o*, **, *	-	0.3281, 0.3553, 0.6864, 90, 90, 90	-	-	-	N	15081
Co-Zr	Zr ₆ Co ₂₃	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.1516, 1.1516, 1.1516, 90, 90, 90	-	-	8.28	X	3035
Cr-Cu	Cu _{0.063} Cr _{0.937}	W ₆ Cl ₂ , 229	<i>Im-3m</i>	0.2933, 0.2933, 0.2933, 90, 90, 90	b.c.c. family	-	6.94	X	47645
Cr-Cu	Cu _{0.77} Cr _{0.23} m	Cu ₆ Fe ₄ , 225	<i>Fm-3m</i>	0.3623, 0.3623, 0.3623, 90, 90, 90	close-packed structure	-	8.50	X	21088
Cr-F	CrF ₂	CuF ₂ , mP6, 14	<i>P12₁/c1</i>	0.3505, 0.4718, 0.55597, 90, 122, 262, 90	-	-	3.84	X	867
Cr-F	CrF ₃ rt	FeF ₃ , hR24, 167	<i>R-3c</i>	0.49863, 0.49863, 1.32142, 90, 90, 120	-	-	3.82	X	43521
Cr-F	CrF ₄ mon	CrF ₄ , mS80, 15	<i>C12/c1</i>	1.457, 0.972, 0.719, 90, 102, 68, 90	-	red dark	3.42	X	40252
Cr-F	CrF ₄ tet	CrF ₄ , tP20, 136	<i>P4₂/mnm</i>	0.8296, 0.8296, 0.3737, 90, 90, 90	-	violet	3.31	X	31106
Cr-F	CrF ₅	CrF ₅ , oP24, 57	<i>Pbcm</i>	0.78299, 0.7534, 0.55181, 90, 90, 90	-	red	3.00	X	54370
Cr-F	Cr ₂ F ₅	Cr ₂ F ₅ , mS28, 15	<i>C12/c1</i>	0.77526, 0.75228, 0.71317, 90, 120, 124, 90	-	-	3.67	X	26246
Cr-Fe	Cr _{0.03} Fe _{0.97} ht2	W ₆ Cl ₂ , 229	<i>Im-3m</i>	0.28692, 0.28692, 0.28692, 90, 90, 90	b.c.c. family	-	7.84	X	3183
Cr-Fe	Cr _{0.35} Fe _{0.65} tf	In, oF4, 69	<i>Fmmm</i>	0.3753, 0.4089, 0.4206, 90, 90, 90	-	-	5.61	X	53458
Cr-Fe	Cr _{0.49} Fe _{0.51} ht1	(Cr _{0.49} Fe _{0.51}), tP30, 136	<i>P4₂/mnm</i>	0.87966, 0.87966, 0.45582, 90, 90, 90	Frank-Kasper phase	-	7.62	X	15759
Cr-Fe	Cr _{0.52} Fe _{0.48} tf cub	Cr ₆ cP8, 223	<i>Pm-3n</i>	0.4638, 0.4638, 0.4638, 90, 90, 90	-	-	7.17	X	53458
Cr-Fe	Cr _{0.52} Fe _{0.48} tf orth	*oP8*, *	-	0.4601, 0.4638, 0.4848, 90, 90, 90	-	-	6.91	N	53458
Cr-Ga	CrGa ht	MnGa, hR78, 166	<i>R-3m</i>	1.2625, 1.2625, 0.7785, 90, 90, 120	-	-	7.34	X	43789
Cr-Ga	CrGa ₄	Hg ₄ Pt, cI10, 229	<i>Im-3m</i>	0.56497, 0.56497, 0.56497, 90, 90, 90	-	-	6.09	X	45525
Cr-Ga	Cr ₃ Ga rt	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.4646, 0.4646, 0.4646, 90, 90, 90	Frank-Kasper phase	-	7.47	X	57946
Cr-Ga	Cr ₃ Ga ₄	Fe ₃ Ga ₄ , mS42, 12	<i>C12/m1</i>	1.0135, 0.7845, 0.7986, 90, 105, 99, 90	-	-	7.10	X	8689
Cr-Ge	CrGe	FeSi, cP8, 198	<i>P2₁3</i>	0.48, 0.48, 0.48, 90, 90, 90	-	-	7.48	X	7587
Cr-Ge	Cr _{0.04} Ge _{0.96}	C ₆ F8, 227	<i>Fd-3m</i>	0.56491, 0.56491, 0.56491, 90, 90, 90	-	-	5.29	X	13168
Cr-Ge	Cr _{0.93} Ge _{0.07}	W ₆ Cl ₂ , 229	<i>Im-3m</i>	0.2897, 0.2897, 0.2897, 90, 90, 90	b.c.c. family	-	7.30	X	13168
Cr-Ge	Cr ₁₁ Ge ₁₉	Mn ₁₁ Si ₁₉ , tP120, 118	<i>P-An2</i>	0.58, 0.58, 5.234, 90, 90, 90	chimney-ladder structure	-	7.36	X	3698
Cr-Ge	Cr ₁₁ Ge ₈	Cr ₁₁ Ge ₈ , oP76, 62	<i>Pnma</i>	1.3171, 0.4939, 1.5775, 90, 90, 90	-	-	7.46	X	8269
Cr-Ge	Cr ₃ Ge	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.46338, 0.46338, 0.46338, 90, 90, 90	Frank-Kasper phase	-	7.63	X	63699
Cr-Ge	Cr ₃ Ge ₃ ht	W ₅ Si ₃ , tI32, 140	<i>I4/mcm</i>	0.9413, 0.9413, 0.478, 90, 90, 90	-	-	7.49	X	900
Cr-H	CrH cub	NaCl, cF8, 225	<i>Fm-3m</i>	0.3854, 0.3854, 0.3854, 90, 90, 90	rocksalt family	-	6.15	X	49529
Cr-H	CrH hex	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.2719, 0.2719, 0.4433, 90, 90, 120	AlB ₂ family	-	6.20	X	49529
Cr-H	CrH _{0.08}	W ₆ Cl ₂ , 229	<i>Im-3m</i>	0.2888, 0.2888, 0.2888, 90, 90, 90	b.c.c. family	-	7.18	F	5251
Cr-H	CrH ₂	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.38605, 0.38605, 0.38605, 90, 90, 90	fluorite family	-	6.24	X	305
Cr-Hf	HfCr ₂ ht2	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5067, 0.5067, 0.8237, 90, 90, 120	Friauf-Laves phase	-	10.25	X	1483

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cr-Hf	HfCr ₂ rt	MgCu ₂ cF24,227	<i>Fd-3m</i>	0.715,0.715,0.715,90,90,90	Friauf-Laves phase	-	10.27	X	46295
Cr-Hf	Hf ₁₁ Cr _{1.89} ht1	MgNi ₂ hP24,194	<i>P6₃/mmc</i>	0.508,0.508,1.656,90,90,120	Friauf-Laves phase	-	10.64	A	7597
Cr-I	CrI ₂ mon	CuBr ₂ mS6,12	<i>C12/m1</i>	0.7545,0.3929,0.7505,90,115.52,90	-	-	5.06	X	1551
Cr-I	CrI ₂ orth	CrI ₂ oS12,36	<i>Cmc2₁</i>	0.3915,0.756,1.3553,90,90,90	-	brown red	5.06	X	6977
Cr-I	CrI ₃	CrCl ₃ hP24,151	<i>P3₁12</i>	0.685,0.685,1.989,90,90,120	-	-	5.33	A	6472
Cr-In	Cr _{0.25} In _{0.75}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.469,0.469,0.469,90,90,90	close-packed structure	-	6.38	X	2263
Cr-Ir	Cr _{0.2} Ir _{0.8}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.38,0.38,0.38,90,90,90	close-packed structure	-	19.87	X	699
Cr-Ir	Cr _{0.5} Ir _{0.5}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2674,0.2674,0.4278,90,90,120	close-packed structure	-	15.31	X	7341
Cr-Ir	Cr ₃ Ir	Cr ₂ Si ₂ cP8,223	<i>Pm-3n</i>	0.4681,0.4681,0.4681,90,90,90	Frank-Kasper phase	-	11.28	X	3734
Cr-Mn	Cr _{0.2} Mn _{0.8} ht2	(Cr _{0.40} Fe _{0.51}),tP30,136	<i>P4₂/mmn</i>	0.8865,0.8865,0.4598,90,90,90	Frank-Kasper phase	-	7.49	A	1276
Cr-Mn	Cr _{0.4} Mn _{0.6}	W ₂ cI2,229	<i>Im-3m</i>	0.29,0.29,0.29,90,90,90	b.c.c. family	-	7.32	X	12404
Cr-Mo	Cr _{0.3} Mo _{0.7}	W ₂ cI2,229	<i>Im-3m</i>	0.3083,0.3083,0.3083,90,90,90	b.c.c. family	-	9.38	X	25889
Cr-N	CrN lt	CrN _{0.4} p4,59	<i>Pmmn</i>	0.29698,0.41318,0.28796,90,90,90	-	-	6.20	X	4409
Cr-N	CrN rt	NaCl ₂ cF8,225	<i>Fm-3m</i>	0.41668,0.41668,0.41668,90,90,90	rocksalt family	gray dark	6.06	X	64784
Cr-N	Cr ₂ N prec	W ₂ C ₂ hP11,162	<i>P-31m</i>	0.48,0.48,0.4472,90,90,120	-	-	6.59	X	48495
Cr-N	Cr ₂ N _{0.9} rt	Fe ₂ N _{0.9} p9,162	<i>P-31m</i>	0.4752,0.4752,0.4429,90,90,120	-	gray silver	6.71	X	23380
Cr-Nb	NbCr ₂ ht1	Ti ₂ Ni ₂ cF96,227	<i>Fd-3m</i>	1.146,1.146,1.146,90,90,90	-	-	6.95	A	3039
Cr-Nb	NbCr ₂ ht2	MgZn ₂ hP12,194	<i>P6₃/mmc</i>	0.4931,0.4931,0.8123,90,90,120	Friauf-Laves phase	-	7.65	A	18929
Cr-Nb	NbCr ₂ rt	MgCu ₂ cF24,227	<i>Fd-3m</i>	0.6912,0.6912,0.6912,90,90,90	Friauf-Laves phase	-	7.92	X	57312
Cr-Nb	Nb _{0.04} Cr _{0.96}	W ₂ cI2,229	<i>Im-3m</i>	0.2891,0.2891,0.2891,90,90,90	b.c.c. family	-	7.37	X	1399
Cr-Nb	Nb _{0.98} Cr _{0.02}	W ₂ cI2,229	<i>Im-3m</i>	0.3255,0.3255,0.3255,90,90,90	b.c.c. family	-	8.87	X	1399
Cr-Ni	CrNi ₂ rt	* ₂ cF*,*	-	1.064,1.064,1.064,90,90,90	close-packed structure	-	7.47	N	773
Cr-Ni	Cr _{0.114} Ni _{0.886} ht	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3543,0.3543,0.3543,90,90,90	close-packed structure	-	8.65	X	57974
Cr-Ni	Cr _{0.7} Ni _{0.3} m	(Cr _{0.40} Fe _{0.51}),tP30,136	<i>P4₂/mmn</i>	0.8825,0.8825,0.4598,90,90,90	Frank-Kasper phase	-	7.51	A	6779
Cr-Ni	Cr _{0.8} Ni _{0.2}	W ₂ cI2,229	<i>Im-3m</i>	0.2872,0.2872,0.2872,90,90,90	b.c.c. family	-	7.48	X	377
Cr-Ni	Cr _{3.5} Ni _{0.5} m	Cr ₂ Si ₂ cP8,223	<i>Pm-3n</i>	0.4588,0.4588,0.4588,90,90,90	Frank-Kasper phase	-	7.27	X	6779
Cr-O	CrO _{0.87}	NaCl ₂ cF8,225	<i>Fm-3m</i>	0.404,0.404,0.404,90,90,90	rocksalt family	gray silver	6.64	X	3574
Cr-O	CrO ₂ hp	CaCl ₂ oP6,58	<i>Pnnm</i>	0.42818,0.43874,0.28779,90,90,90	-	-	5.16	X	48270
Cr-O	CrO ₂ rt	TiO ₂ iP6,136	<i>P4₂/mmn</i>	0.4419,0.4419,0.29154,90,90,90	-	-	4.90	X	6759
Cr-O	CrO ₃	CrO ₃ oS16,40	<i>Ama2</i>	0.5743,0.8557,0.4789,90,90,90	-	red dark	2.82	X	4895
Cr-O	Cr ₂ O	CaF ₂ cF12,225	<i>Fm-3m</i>	0.5512,0.5512,0.5512,90,90,90	fluorite family	-	4.76	X	47209
Cr-O	Cr ₂ O ₃ mon	V ₂ O ₃ mS20,15	<i>C12/c1</i>	0.85887,0.49599,0.53602,90,122.275,90	-	-	5.23	X	64890
Cr-O	Cr ₂ O ₃	Al ₂ O ₃ hR30,167	<i>R-3c</i>	0.4821,0.4821,1.324,90,90,120	eskolaite	black	5.68	X	57804
Cr-O	Cr ₂ O ₅	* ₂ mP*,*	-	0.939,0.852,1.201,90,92.,90	-	black	-	N	16994
Cr-O	Cr ₃ O	Cr ₂ Si ₂ cP8,223	<i>Pm-3n</i>	0.4544,0.4544,0.4544,90,90,90	Frank-Kasper phase	-	6.09	X	571
Cr-O	Cr ₃ O ₁₂	Cr ₂ O ₁₂ oP68,60	<i>Pbcn</i>	1.2044,0.8212,0.8177,90,90,90	-	-	3.71	X	2446
Cr-O	Cr ₆ O ₁₁	Ti ₆ O ₁₁ aP34,2	<i>P-1</i>	0.53,0.68999,0.90975,87.148,82.039,72.499	-	-	5.16	A	8232
Cr-O	Cr ₈ O ₂₁ rt	Cr ₃ O ₂₁ aP29,2	<i>P-1</i>	0.5433,0.6557,1.2044,74.87,89.25,77.96	-	black	3.09	X	24967
Cr-Os	Cr _{0.1} Os _{0.9}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2676,0.2676,0.4277,90,90,120	close-packed structure	-	22.09	X	952
Cr-Os	Cr _{0.67} Os _{0.33} ht	(Cr _{0.40} Fe _{0.51}),tP30,136	<i>P4₂/mmn</i>	0.905,0.905,0.469,90,90,90	Frank-Kasper phase	-	12.66	X	12823
Cr-Os	Cr _{0.75} Os _{0.25}	W ₂ cI2,229	<i>Im-3m</i>	0.2927,0.2927,0.2927,90,90,90	b.c.c. family	-	11.46	X	2118
Cr-Os	Cr _{2.88} Os _{1.12} rt	Cr ₂ Si ₂ cP8,223	<i>Pm-3n</i>	0.46842,0.46842,0.46842,90,90,90	Frank-Kasper phase	-	11.72	X	3734
Cr-P	CrP	FeAs ₂ oP8,62	<i>Pnma</i>	0.5356,0.3117,0.6007,90,90,90	AlB ₂ family	-	5.50	X	6378
Cr-P	CrP ₂	OsGe ₂ mS12,12	<i>C12/m1</i>	0.8206,0.3079,0.7038,90,120.15,90	-	black	4.92	A	50500
Cr-P	CrP ₄ hp	CrP ₄ mS20,15	<i>C12/c1</i>	0.51914,1.07600,0.57712,90,110.648,90	-	black	3.87	X	6266
Cr-P	Cr ₁₂ P ₇	V ₁₂ P ₇ hP26,176	<i>P6₃/m</i>	0.8981,0.8981,0.3313,90,90,120	-	brown dark	6.03	X	12033
Cr-P	Cr ₂ P rt	Cr ₂ PoS6,44	<i>Imm2</i>	0.66097,1.04023,0.63371,90,90,90	-	-	6.17	X	32159
Cr-P	Cr ₃ P	Ni ₃ P ₃ iJ32,82	<i>I-4</i>	0.9193,0.9193,0.4563,90,90,90	-	-	6.44	X	65087
Cr-Pd	Cr _{0.25} Pd _{0.75} ht	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3589,0.3589,0.3589,90,90,90	close-packed structure	-	13.33	X	16890
Cr-Pd	Cr _{0.495} Pd _{0.505} rt	In ₂ iJ2,139	<i>I4/mmm</i>	0.2745,0.2745,0.3784,90,90,90	close-packed structure	-	9.26	X	635
Cr-Pd	Cr _{1.33} Pd _{2.67} rt	Cu ₃ Au ₂ cP4,221	<i>Pm-3m</i>	0.3852,0.3852,0.3852,90,90,90	close-packed structure	-	10.26	X	3685
Cr-Pt	CrPt rt	CuAu ₂ tP2,123	<i>P4/mmm</i>	0.27146,0.27146,0.3827,90,90,90	close-packed structure	-	14.55	X	48371
Cr-Pt	CrPt ₃ rt	Cu ₃ Au ₂ cP4,221	<i>Pm-3m</i>	0.3876,0.3876,0.3876,90,90,90	close-packed structure	-	18.17	X	19019
Cr-Pt	Cr _{0.5} Pt _{0.5} ht	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3825,0.3825,0.3825,90,90,90	close-packed structure	-	14.66	X	45047
Cr-Pt	Cr _{2.52} Pt _{1.48} cub2	Cu ₃ Au ₂ cP4,221	<i>Pm-3m</i>	0.3775,0.3775,0.3775,90,90,90	close-packed structure	-	12.96	X	786
Cr-Pt	Cr _{3.16} Pt _{0.84} cub1	Cr ₂ Si ₂ cP8,223	<i>Pm-3n</i>	0.47058,0.47058,0.47058,90,90,90	Frank-Kasper phase	-	10.46	X	3734
Cr-Re	Cr _{0.003} Re _{0.997}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2762,0.2762,0.4458,90,90,120	close-packed structure	-	20.95	X	48073
Cr-Re	Cr _{0.4} Re _{0.6}	(Cr _{0.40} Fe _{0.51}),tP30,136	<i>P4₂/mmn</i>	0.93,0.93,0.485,90,90,90	Frank-Kasper phase	-	15.74	X	2031
Cr-Re	Cr _{0.8} Re _{0.2}	W ₂ cI2,229	<i>Im-3m</i>	0.2935,0.2935,0.2935,90,90,90	b.c.c. family	-	10.36	X	16164
Cr-Rh	CrRh ₃	Cu ₃ Au ₂ cP4,221	<i>Pm-3m</i>	0.3786,0.3786,0.3786,90,90,90	close-packed structure	-	11.04	X	4767
Cr-Rh	Cr _{0.2} Rh _{0.8}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.378,0.378,0.378,90,90,90	close-packed structure	-	11.40	X	21166
Cr-Rh	Cr _{0.5} Rh _{0.5}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2665,0.2665,0.4251,90,90,120	close-packed structure	-	9.84	X	21166
Cr-Rh	Cr ₃ Rh rt	Cr ₂ Si ₂ cP8,223	<i>Pm-3n</i>	0.46731,0.46731,0.46731,90,90,90	Frank-Kasper phase	-	8.43	X	3734
Cr-Ru	Cr _{0.4} Ru _{0.6}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2665,0.2665,0.4265,90,90,120	close-packed structure	-	10.31	X	699
Cr-Ru	Cr _{0.67} Ru _{0.33} ht	(Cr _{0.40} Fe _{0.51}),tP30,136	<i>P4₂/mmn</i>	0.90635,0.90635,0.4743,90,90,90	Frank-Kasper phase	-	8.72	X	12823
Cr-Ru	Cr _{0.95} Ru _{0.05}	W ₂ cI2,229	<i>Im-3m</i>	0.2898,0.2898,0.2898,90,90,90	b.c.c. family	-	7.43	X	14156
Cr-Ru	Cr _{2.88} Ru _{1.12} ht	Cr ₂ Si ₂ cP8,223	<i>Pm-3n</i>	0.46768,0.46768,0.46768,90,90,90	Frank-Kasper phase	-	8.54	X	3734
Cr-S	CrS m	ZnS ₂ cF8,216	<i>F-43m</i>	0.5387,0.5387,0.5387,90,90,90	adamantane structure	-	3.57	X	48338
Cr-S	CrS rt	CrS ₂ mS8,15	<i>C12/c1</i>	0.3826,0.5913,0.6089,90,101.6,90	AlB ₂ family	-	4.14	X	821
Cr-S	Cr _{0.67} S ht	NiAs ₂ hP4,194	<i>P6₃/mmc</i>	0.3419,0.3419,0.5551,90,90,120	AlB ₂ family	-	3.95	X	20115
Cr-S	Cr ₂ S ₃ rt rhom	Cr ₂ S ₃ hR30,148	<i>R-3</i>	0.5957,0.5957,1.684,90,90,120	-	-	3.85	X	64784
Cr-S	Cr ₂ S ₃ rt trig	Cr ₂ S ₃ hP20,163	<i>P-31c</i>	0.5941,0.5941,1.1188,90,90,120	-	-	3.89	X	821
Cr-S	Cr ₃ S ₄ rt	Cr ₃ S ₄ mS14,12	<i>C12/m1</i>	1.25909,0.34241,0.59558,90,116.697,90	breznaitite	brown gray	4.12	X	64784
Cr-S	Cr ₅ S ₆ rt	Cr ₅ S ₆ hP22,163	<i>P-31c</i>	0.5962,0.5962,1.1506,90,90,120	murchisite	-	4.24	X	3613
Cr-S	Cr ₅ S ₈ rt	V ₅ S ₈ mS26,12	<i>C12/m1</i>	1.1063,0.6786,0.8023,90,132.76,90	-	-	3.88	A	4536
Cr-S	Cr _{5.2} S ₈ rt	Cr ₇ Se ₈ mS30,12	<i>C12/m1</i>	1.10332,0.67933,0.79562,90,132.663,90	-	black gray	3.99	X	41695
Cr-Sb	CrSb ₂ hp	CoAl ₂ iJ12,140	<i>I4/mcm</i>	0.64913,0.64913,0.5744,90,90,90	-	gray	8.11	X	36107
Cr-Sb	CrSb ₂ rt	FeAs ₂ oP6,58	<i>Pnnm</i>	0.60275,0.68738,0.32715,90,90,90	pyrite-marcasite family	-	7.24	X	4942

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a\beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cr-Sb	Cr _{0.1} Sb _{0.9} m	Po, cP1, 221	<i>Pm-3m</i>	0.3074, 0.3074, 0.3074, 90, 90, 90	-	-	6.56	X	6776
Cr-Sb	Cr _{1.04} Sb _{0.96}	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.412, 0.412, 0.5464, 90, 90, 120	AlB ₂ family	-	7.07	X	57312
Cr-Sb	Cr ₃ Sb _{0.5}	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.46796, 0.46796, 0.46796, 90, 90, 90	Frank-Kasper phase	-	7.03	X	64840
Cr-Se	CrSe ₂ m	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.3399, 0.3399, 0.5915, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	5.89	A	13443
Cr-Se	Cr _{0.67} Se ht2	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.36083, 0.36083, 0.57757, 90, 90, 120	AlB ₂ family	-	5.80	X	29196
Cr-Se	Cr _{0.68} Se ht1	Cr _{0.88} S, hP4, 164	<i>P-3m1</i>	0.3612, 0.3612, 0.5775, 90, 90, 120	-	-	5.82	X	5127
Cr-Se	Cr ₂ Se ₃ ht Cr ⁺	Cr ₂ S ₃ , hP20, 163	<i>P-31c</i>	0.62577, 0.62577, 1.1602, 90, 90, 120	-	-	5.75	A	20051
Cr-Se	Cr ₂ Se ₃ rt	Cr ₂ S ₃ , hR30, 148	<i>R-3</i>	0.625, 0.625, 1.728, 90, 90, 120	-	-	5.81	X	29194
Cr-Se	Cr _{2.80} Se ₄ rt	Cr ₂ S ₄ , mS14, 12	<i>C12/m1</i>	1.3132, 0.3598, 0.6270, 90, 117.34, 90	-	-	5.82	X	13318
Cr-Se	Cr ₃ Se ₈	V ₅ S ₈ , mS26, 12	<i>C12/m1</i>	1.1462, 0.7148, 0.8348, 90, 132.29, 90	-	-	5.85	A	4536
Cr-Se	Cr _{5.095} Se ₈ rt	Cr ₇ Se ₈ , mS30, 12	<i>C12/m1</i>	1.14486, 0.71275, 0.83334, 90, 132.452, 90	-	-	5.93	X	43316
Cr-Si	CrSi	FeSi, cP8, 198	<i>P2₁3</i>	0.462, 0.462, 0.462, 90, 90, 90	-	-	5.39	X	65
Cr-Si	CrSi ₂	CrSi ₂ , hP9, 180	<i>P6₂22</i>	0.44283, 0.44283, 0.6368, 90, 90, 120	-	-	4.98	X	39779
Cr-Si	Cr _{0.001} Si _{0.999}	C, cF8, 227	<i>Fd-3m</i>	0.54324, 0.54324, 0.54324, 90, 90, 90	-	-	2.33	X	49558
Cr-Si	Cr _{0.93} Si _{0.07}	W, cI2, 229	<i>Im-3m</i>	0.28826, 0.28826, 0.28826, 90, 90, 90	b.c.c. family	-	6.98	X	1398
Cr-Si	Cr ₃ Si	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.45599, 0.45599, 0.45599, 90, 90, 90	Frank-Kasper phase	-	6.45	X	14800
Cr-Si	Cr ₃ Si ₃ rt	W ₅ Si ₃ , tI32, 140	<i>I4/mcm</i>	0.917, 0.917, 0.4636, 90, 90, 90	-	-	5.87	X	763
Cr-Sn	CrSn ₂	Mg ₂ Cu, oF48, 70	<i>Fddd</i>	0.5425, 0.941, 1.8462, 90, 90, 90	-	-	8.16	X	30216
Cr-Ta	TaCr ₂ ht	Mg ₂ Te, hP12, 194	<i>P6₃/mmc</i>	0.4933, 0.4933, 0.8085, 90, 90, 120	Friauf-Laves phase	-	11.11	A	22278
Cr-Ta	TaCr ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.701, 0.701, 0.701, 90, 90, 90	Friauf-Laves phase	-	10.99	X	46295
Cr-Ta	Ta _{0.04} Cr _{0.96} stab	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2847, 0.2847, 0.4796, 90, 90, 120	close-packed structure	-	5.64	X	1250
Cr-Ta	Ta _{0.05} Cr _{0.95}	W, cI2, 229	<i>Im-3m</i>	0.2911, 0.2911, 0.2911, 90, 90, 90	b.c.c. family	-	7.87	X	2578
Cr-Ta	Ta _{0.85} Cr _{0.15}	W, cI2, 229	<i>Im-3m</i>	0.3291, 0.3291, 0.3291, 90, 90, 90	b.c.c. family	-	15.06	X	2698
Cr-Ta	Ta _{1.05} Cr _{1.95} stab	Ti ₂ Ni, cF96, 227	<i>Fd-3m</i>	1.145, 1.145, 1.145, 90, 90, 90	-	-	10.31	A	2578
Cr-Ta	Ta _{1.2} Cr _{1.8} rt	MgNi ₂ , hP24, 194	<i>P6₃/mmc</i>	0.4963, 0.4963, 1.626, 90, 90, 120	Friauf-Laves phase	-	11.90	A	7498
Cr-Tc	Cr _{0.25} Tc _{0.75}	(Cr _{0.49} Fe _{0.51}), tP30, 136	<i>P4₂/mmn</i>	0.929, 0.929, 0.4846, 90, 90, 90	Frank-Kasper phase	-	10.30	A	1636
Cr-Te	CrTe hp	FeAs, oP8, 62	<i>Pnma</i>	0.5699, 0.3476, 0.6133, 90, 90, 90	AlB ₂ family	-	9.82	X	39202
Cr-Te	CrTe ₂ rt	*aP*, *	-	0.497, 0.95889, 1.278, 107.285, 90.37, 97.915	-	-	-	N	40237
Cr-Te	CrTe ₃	CrTe ₃ , mP32, 14	<i>P12₁/c1</i>	0.7887, 1.122, 1.156, 90, 118.41, 90	-	-	6.42	X	14873
Cr-Te	Cr _{0.67} Te ht2	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.39335, 0.39335, 0.60353, 90, 90, 120	AlB ₂ family	-	6.67	X	29196
Cr-Te	Cr _{0.83} Te ht	Cr _{0.83} Te, mS16, 12	<i>C12/m1</i>	1.3935, 0.3954, 0.6857, 90, 118.3, 90	-	-	6.82	X	4947
Cr-Te	Cr _{0.92} Te ht	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.401, 0.401, 0.62537, 90, 90, 120	AlB ₂ family	black	6.69	X	47609
Cr-Te	Cr ₂ Te ₃ rt	Cr ₂ S ₃ , hP20, 163	<i>P-31c</i>	0.6814, 0.6814, 1.2073, 90, 90, 120	-	black	6.66	X	9226
Cr-Te	Cr ₃ Te ₄ rt	Cr ₃ S ₄ , mS14, 12	<i>C12/m1</i>	1.39156, 0.3932, 0.6854, 90, 118.301, 90	-	-	6.70	A	32047
Cr-Te	Cr ₃ Te ₈ mon	Cr ₇ Se ₈ , mS30, 12	<i>C12/m1</i>	1.20727, 0.78587, 0.90559, 90, 131.453, 90	-	black	6.61	X	33724
Cr-Te	Cr ₃ Te ₈ trig	Cr ₇ Te ₈ , hP26, 165	<i>P-3c1</i>	0.7824, 0.7824, 1.202, 90, 90, 120	-	black	6.68	X	15988
Cr-Te	Cr ₇ Te ₈ rt	Cr ₇ Se ₈ , mS30, 12	<i>C12/m1</i>	1.24, 0.802, 0.9138, 90, 131.92, 90	-	-	6.80	A	26152
Cr-Ti	TiCr _{1.968} ht1	MgNi ₂ , hP24, 194	<i>P6₃/mmc</i>	0.49031, 0.49031, 1.5953, 90, 90, 120	Friauf-Laves phase	-	6.01	X	55533
Cr-Ti	TiCr ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.6939, 0.6939, 0.6939, 90, 90, 90	Friauf-Laves phase	-	6.04	X	11369
Cr-Ti	Ti _{0.14} Cr _{0.86} ht	W, cI2, 229	<i>Im-3m</i>	0.2932, 0.2932, 0.2932, 90, 90, 90	b.c.c. family	-	6.78	X	9993
Cr-Ti	Ti _{0.95} Cr _{0.05} m	(Ti _{0.95} Cr _{0.05}), hP3, 164	<i>P-3m1</i>	0.461, 0.461, 0.283, 90, 90, 120	-	-	4.60	X	667
Cr-Ti	Ti _{1.07} Cr _{1.93} ht2	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.49261, 0.49261, 0.79724, 90, 90, 120	Friauf-Laves phase	-	6.01	A	46290
Cr-U	U _{0.9864} Cr _{0.0136} ht1	U ₁ P30, 136	<i>P4₂/mmn</i>	1.052, 1.052, 0.557, 90, 90, 90	Frank-Kasper phase	-	19.03	A	405
Cr-V	V _{0.90} Cr _{0.10}	W, cI2, 229	<i>Im-3m</i>	0.3021, 0.3021, 0.3021, 90, 90, 90	b.c.c. family	-	6.15	X	63196
Cr-W	Cr _{0.5} W _{0.5}	W, cI2, 229	<i>Im-3m</i>	0.3048, 0.3048, 0.3048, 90, 90, 90	b.c.c. family	-	13.83	X	16446
Cr-Zn	Zn _{0.008} Cr _{0.992}	W, cI2, 229	<i>Im-3m</i>	0.288, 0.288, 0.288, 90, 90, 90	b.c.c. family	-	7.24	X	183
Cr-Zn	Zn ₁₉ Cr	*hP*, *	-	1.289, 1.289, 3.05, 90, 90, 120	-	-	-	N	183
Cr-Zn	Zn _{0.437} Cr _{0.563}	Au _{2.5} Zn _{0.7} Cr _{1.5} , cF548, 216	<i>F-43m</i>	1.82727, 1.82727, 1.82727, 90, 90, 90	γ-brass	gray silver	7.08	X	63791
Cr-Zr	ZrCr ₂ ht1	MgNi ₂ , hP24, 194	<i>P6₃/mmc</i>	0.51, 0.51, 1.661, 90, 90, 120	Friauf-Laves phase	-	6.93	X	7499
Cr-Zr	ZrCr ₂ ht2	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5113, 0.5113, 0.8309, 90, 90, 120	Friauf-Laves phase	gray	6.89	X	30206
Cr-Zr	ZrCr ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.72067, 0.72067, 0.72067, 90, 90, 90	Friauf-Laves phase	-	6.93	X	57674
Cs-D	CsD	NaCl, cF8, 225	<i>Fm-3m</i>	0.63741, 0.63741, 0.63741, 90, 90, 90	rocksalt family	-	3.46	X	24269
Cs-F	CsF hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.339, 0.339, 0.339, 90, 90, 90	b.c.c. family	-	6.47	X	2207
Cs-F	CsF	NaCl, cF8, 225	<i>Fm-3m</i>	0.6259, 0.6259, 0.6259, 90, 90, 90	rocksalt family	yellow	4.12	X	17419
Cs-Ga	CsGa ₃	RbGa ₃ , tI24, 119	<i>I-4m2</i>	0.6393, 0.6393, 1.5289, 90, 90, 90	-	-	5.45	X	17901
Cs-Ga	CsGa ₇	RbGa ₇ , hR48, 166	<i>R-3m</i>	0.662, 0.662, 2.9045, 90, 90, 120	-	-	5.61	X	17901
Cs-Ga	Cs ₈ Ga ₁₁	K ₃ In ₁₁ , hR114, 167	<i>R-3c</i>	0.99962, 0.99962, 5.0839, 90, 90, 120	-	-	4.14	X	33189
Cs-Ge	CsGe hp	NaPb, tI64, 142	<i>I4₁/acd</i>	1.138, 1.138, 1.85, 90, 90, 90	-	-	4.56	A	16714
Cs-Ge	CsGe	KGes, cP64, 218	<i>P-43n</i>	1.3654, 1.3654, 1.3654, 90, 90, 90	-	blue reddish	4.29	X	46758
Cs-Ge	CsGe ₄	*cP*, *	-	0.658, 0.658, 0.658, 90, 90, 90	-	-	-	N	22698
Cs-Ge	Cs ₁₂ Ge ₁₇	*hP*, *	-	1.4585, 1.4585, 2.372, 90, 90, 120	-	gray dark	-	N	42457
Cs-Ge	Cs ₄ Ge _{22,2}	Cs ₈ Sn ₂₂ , cP78, 223	<i>Pm-3n</i>	1.08238, 1.08238, 1.08238, 90, 90, 90	-	gray steel	5.61	X	58314
Cs-Ge	Cs ₄ Ge ₉	Cs ₄ Ge ₉ , tP208, 76	<i>P4₁</i>	1.55074, 1.55074, 3.13997, 90, 90, 90	-	red ruby	4.17	X	32967
Cs-H	CsH hp1	CsCl, cP2, 221	<i>Pm-3m</i>	0.382, 0.382, 0.382, 90, 90, 90	b.c.c. family	-	3.99	X	18570
Cs-H	CsH hp2	TiI, cS8, 63	<i>Cmcm</i>	0.3368, 0.9514, 0.3908, 90, 90, 90	CrB(TiI)-FeB	colorless	7.10	A	30966
Cs-H	CsH rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.6365, 0.6365, 0.6365, 90, 90, 90	rocksalt family	-	3.45	X	18570
Cs-Hg	CsHg	KHg, aP8, 2	<i>P-1</i>	0.7154, 0.747, 0.7635, 107.82, 103.34, 90.95	b.c.c. family	bronze	5.89	X	22869
Cs-Hg	CsHg ₂ rt	KHg ₂ , oI12, 74	<i>Imma</i>	0.5488, 0.8727, 0.9082, 90, 90, 90	AlB ₂ family	black reddish	8.16	X	21754
Cs-Hg	Cs ₂ Hg ₂₇ lt	Cs ₂ Hg ₂₇ , cI174, 204	<i>Im-3</i>	1.6557, 1.6557, 1.6557, 90, 90, 90	-	-	12.47	X	52530
Cs-Hg	Cs ₃ Hg ₂₀	Rb ₃ Hg ₂₀ , cP46, 223	<i>Pm-3n</i>	1.0913, 1.0913, 1.0913, 90, 90, 90	-	-	11.27	X	37910
Cs-Hg	Cs ₅ Hg ₁₉	Rb ₅ Hg ₁₉ , tI48, 87	<i>I4/m</i>	1.1803, 1.1803, 1.0814, 90, 90, 90	-	-	9.87	X	37910
Cs-I	CsI hp1	CuAu, tP2, 123	<i>P4/mmm</i>	0.3499, 0.3499, 0.4084, 90, 90, 90	close-packed structure	-	8.63	X	17211
Cs-I	CsI hp2	*o*, *	-	0.3374, 0.3542, 0.405, 90, 90, 90	-	-	-	N	17211
Cs-I	CsI lt	*tP*, *	-	0.7746, 0.7746, 0.412, 90, 90, 90	-	-	-	N	5572
Cs-I	CsI rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.4503, 0.4503, 0.4503, 90, 90, 90	b.c.c. family	-	4.73	X	17210
Cs-I	CsI tf	NaCl, cF8, 225	<i>Fm-3m</i>	0.7631, 0.7631, 0.7631, 90, 90, 90	rocksalt family	-	3.88	X	1456
Cs-I	CsI ₄	CsI ₄ , mP20, 14	<i>P12₁/c1</i>	1.023, 0.90, 1.119, 90, 114.33, 90	-	purple	4.53	X	546
Cs-I	Cs[I ₃]	Cs[I ₃], oP16, 62	<i>Pnma</i>	1.0997, 0.6751, 0.9963, 90, 90, 90	-	-	4.61	X	6247

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cs-In	CsIn ₃	RbGa ₃ ,tI24,119	<i>I</i> -4m2	0.7047,0.7047,1.6803,90,90,90	-	-	5.70	X	16973
Cs-In	Cs ₂ In ₃	Cs ₂ In ₃ ,tI20,119	<i>I</i> -4m2	0.6910,0.6910,1.6612,90,90,90	-	-	5.11	X	17906
Cs-K	CsK ₂ It	MgZn ₂ ,hP12,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.9065,0.9065,1.4755,90,90,120	Friauf-Laves phase	-	1.34	X	10080
Cs-K	Cs _{0.5} K _{0.5}	W,cI2,229	<i>Im</i> -3m	0.571,0.571,0.571,90,90,90	b.c.c. family	-	1.53	X	168
Cs-K	Cs ₆ K ₇ It	Cs ₆ K ₇ ,hP26,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.9078,0.9078,3.295,90,90,120	Frank-Kasper phase	-	1.51	X	10080
Cs-N	Cs[N ₃] hp1	Cs[N ₃],mS16,12	<i>C</i> 12/ <i>m</i> 1	0.6072,0.5906,0.8322,90,98.78,90	-	-	3.94	X	58072
Cs-N	Cs[N ₃] hp2	*,mP*,*	<i>P</i> 12 ₁ / <i>m</i> 1	0.8083,0.5716,0.9141,90,110.54,90	-	-	5.88	N	58072
Cs-N	Cs[N ₃] ht	Cs[N ₃],cP8,221	<i>P</i> m-3m	0.4537,0.4537,0.4537,90,90,90	-	-	3.11	X	2804
Cs-N	Cs[N ₃] rt	K[N ₃],tI16,140	<i>I</i> 4/ <i>mcm</i>	0.65412,0.65412,0.80908,90,90,90	-	-	3.36	X	6914
Cs-Na	CsNa ₂ It	MgZn ₂ ,hP12,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.7861,0.7861,1.3062,90,90,120	Friauf-Laves phase	-	1.70	X	8533
Cs-O	Cs[O ₂] ht	NaCl,cF8,225	<i>F</i> m-3m	0.6553,0.6553,0.6553,90,90,90	rocksalt family	yellow	3.89	X	54158
Cs-O	Cs[O ₂] rt	CaC ₂ ,tI6,139	<i>I</i> 4/ <i>mmm</i>	0.4477,0.4477,0.735,90,90,90	-	-	3.72	X	9675
Cs-O	Cs[O ₃] It	Rb[O ₃],mP16,14	<i>P</i> 12 ₁ / <i>c</i> 1	0.6709,0.6244,0.8997,90,120.85,90	-	-	3.71	X	25448
Cs-O	Cs[O ₃] rt	K[O ₃],tI32,140	<i>I</i> 4/ <i>mcm</i>	0.973,0.973,0.876,90,90,90	-	-	2.90	A	3096
Cs-O	Cs ₁₁ O ₃ rt	Cs ₁₁ O ₃ ,mP56,14	<i>P</i> 12 ₁ / <i>c</i> 1	1.7610,0.9218,2.4047,90,100.14,90	-	purple	2.61	X	10887
Cs-O	Cs ₂ O	CdCl ₂ ,hR9,166	<i>R</i> -3m	0.4256,0.4256,1.899,90,90,120	-	orange yellow	4.71	X	761
Cs-O	Cs ₂ [O ₂]	Rb ₂ [O ₂],oI8,71	<i>I</i> mmm	0.4322,0.643,0.7517,90,90,90	-	-	4.73	X	889
Cs-O	Cs ₂ [O ₂] _{1.5}	Pu ₂ C ₃ ,cI40,220	<i>I</i> -43d	0.98458,0.98458,0.98458,90,90,90	-	black	4.37	X	54158
Cs-O	Cs ₃ O	Cs ₃ O,hP8,193	<i>P</i> 6 ₃ / <i>mcm</i>	0.878,0.878,0.752,90,90,120	-	greenish dark	2.74	X	762
Cs-O	Cs ₄ O It	Cs ₄ O,oP60,33	<i>P</i> na2 ₁	1.6833,2.0569,1.2400,90,90,90	-	-	2.54	X	10102
Cs-O	Cs ₇ O It	Cs ₇ O,hP24,187	<i>P</i> -6m2	1.6244,1.6244,0.9145,90,90,120	-	bronze	2.26	X	10095
Cs-P	CsP ₇	CsP ₇ ,oP32,57	<i>P</i> bcm	0.9082,0.94193,0.96548,90,90,90	-	red blood	2.81	X	64769
Cs-P	Cs ₂ P ₃	Rb ₂ P ₃ ,oF40,69	<i>F</i> mmm	0.9438,0.9972,1.4999,90,90,90	-	blue violet	3.38	X	20669
Cs-P	Cs ₃ P ₁₁ ht	Cs ₃ P ₁₁ ,cF188,225	<i>F</i> m-3m	1.2063,1.2063,1.2063,90,90,90	-	red	2.80	X	18486
Cs-P	Cs ₃ P ₇ rt	Cs ₃ P ₇ ,tP40,76	<i>P</i> 4 ₁	0.9046,0.9046,1.6714,90,90,90	-	yellow	2.99	X	20655
Cs-P	Cs ₃ P _{8.33} ht	Cs ₃ P _{8.33} ,cF592,225	<i>F</i> m-3m	1.1495,1.1495,1.1495,90,90,90	-	orange	2.87	X	20655
Cs-Pb	CsPb rt	NaPb,tI64,142	<i>I</i> 4 ₁ / <i>acd</i>	1.2244,1.2244,2.0001,90,90,90	-	gray silver	6.03	X	37092
Cs-Pb	Cs ₄ Pb ₉	Cs ₄ Pb ₉ ,mP52,14	<i>P</i> 12 ₁ / <i>c</i> 1	1.0042,1.4781,1.7211,90,114.88,90	-	-	6.87	X	34524
Cs-Pt	Cs _{0.5} Pt rt	*,hR*,*	-	0.26505,0.26505,1.8536,90,90,120	-	black	-	N	48629
Cs-Pt	Cs ₂ Pt	Co _{1.75} Ge,hP6,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.5676,0.5676,0.9471,90,90,120	AlB ₂ family	red dark	5.79	X	41831
Cs-Rb	Cs _{0.5} Rb _{0.5}	W,cI2,229	<i>Im</i> -3m	0.584,0.584,0.584,90,90,90	b.c.c. family	-	1.82	X	168
Cs-S	CsS ₃	CsS ₃ ,aP16,2	<i>P</i> -1	0.467,0.918,1.153,84.87,84.80,89.22	-	-	3.10	X	3783
Cs-S	Cs ₂ S hp	PbCl ₂ ,oP12,62	<i>P</i> nma	0.7,0.541,0.97,90,90,90	-	-	5.39	X	57529
Cs-S	Cs ₂ S	Cs ₂ S,oP12,62	<i>P</i> nma	0.8541,0.5365,1.0354,90,90,90	-	colorless	4.17	X	57529
Cs-S	Cs ₂ S ₂ ht	Rb ₂ [O ₂],oI8,71	<i>I</i> mmm	0.5232,0.6992,0.9615,90,90,90	-	ochre yellow	3.12	X	12272
Cs-S	Cs ₂ S ₃	K ₂ S ₃ ,oS20,36	<i>C</i> mc2 ₁	0.7712,1.0939,0.8111,90,90,90	-	-	3.51	X	13593
Cs-S	Cs ₂ S ₅	Tl ₂ S ₅ ,oP28,19	<i>P</i> 2 ₁ 2 ₁ 2 ₁	0.678,0.7148,1.848,90,90,90	-	orange red	3.16	X	15058
Cs-Sb	CsSb mon	CsSb,mP32,14	<i>P</i> 12 ₁ / <i>c</i> 1	1.5194,0.734,1.4322,90,113.661,90	-	-	4.62	X	41655
Cs-Sb	CsSb orth	NaP,oP16,19	<i>P</i> 2 ₁ 2 ₁ 2 ₁	0.7345,0.7575,1.3273,90,90,90	-	black	4.58	X	12716
Cs-Sb	Cs _{1.5} Sb _{0.5}	NaTl,cF16,227	<i>F</i> d-3m	0.914,0.914,0.914,90,90,90	b.c.c. family	black	4.53	X	771
Cs-Sb	Cs ₂ Sb	Cs ₂ Sb,oP24,62	<i>P</i> nma	1.5985,0.6319,1.0995,90,90,90	-	-	4.64	X	38580
Cs-Sb	Cs ₃ Sb ₇ rt	Cs ₃ Sb ₇ ,mP160,14	<i>P</i> 12 ₁ / <i>c</i> 1	1.6057,1.5711,2.7939,90,96.3,90	-	-	4.74	X	38580
Cs-Sb	Cs ₅ Sb ₈	Cs ₅ Sb ₈ ,mP52,14	<i>P</i> 12 ₁ / <i>c</i> 1	0.7244,1.1352,2.7509,90,96.663,90	-	-	4.84	X	41655
Cs-Se	CsSe ₄	CsSe ₄ ,oP80,57	<i>P</i> bcm	1.006,1.3865,1.8964,90,90,90	-	red dark	4.51	X	22935
Cs-Se	Cs ₂ Se hp	Cs ₂ Se,oF24,43	<i>F</i> dd2	1.175,1.649,0.6775,90,90,90	Friauf-Laves phase	colorless	3.49	X	13195
Cs-Se	Cs ₂ Se	Cs ₂ S,oP12,62	<i>P</i> nma	0.879,0.555,1.078,90,90,90	-	yellow	4.35	X	10889
Cs-Se	Cs ₂ Se ₃	K ₂ S ₃ ,oS20,36	<i>C</i> mc2 ₁	0.8015,1.1406,0.8282,90,90,90	-	-	4.41	X	13593
Cs-Se	Cs ₂ Se ₄	Tl ₂ S ₃ ,oP28,19	<i>P</i> 2 ₁ 2 ₁ 2 ₁	0.7105,0.742,1.8879,90,90,90	-	black gray	4.41	X	18565
Cs-Se	Cs ₃ Se ₂₂	Cs ₃ Se ₂₂ ,tI70,87	<i>I</i> 4/ <i>m</i>	0.8749,0.8749,1.9554,90,90,90	-	black	4.74	X	48554
Cs-Si	CsSi hp	NaPb,tI64,142	<i>I</i> 4 ₁ / <i>acd</i>	1.123,1.123,1.834,90,90,90	-	-	3.70	A	16714
Cs-Si	CsSi rt	KGe,cP64,218	<i>P</i> -43n	1.351,1.351,1.351,90,90,90	-	red	3.47	X	46764
Cs-Si	Cs _{0.875} Si _{1.17}	Na _{1.5} Si _{1.7} ,cF160,227	<i>F</i> d-3m	1.464,1.464,1.464,90,90,90	clathrate	-	2.51	A	5329
Cs-Si	Cs ₁₂ Si ₁₇	*,h***,*	-	2.8723,2.8723,7.06,90,90,120	-	gray dark	-	N	42457
Cs-Si	Cs _{3.9} Si ₂₃	Na ₄ Si ₂₃ ,cP54,223	<i>P</i> m-3n	1.04176,1.04176,1.04176,90,90,90	clathrate	-	3.42	X	52896
Cs-Sn	CsSn ht	KGe,cP64,218	<i>P</i> -43n	1.4447,1.4447,1.4447,90,90,90	-	-	4.43	X	41558
Cs-Sn	CsSn rt	NaPb,tI64,142	<i>I</i> 4 ₁ / <i>acd</i>	1.2122,1.2122,1.982,90,90,90	-	gray silver	4.59	X	37093
Cs-Sn	Cs ₁₂ Sn ₁₇	Rb ₁₂ Sn ₁₇ ,oP136,19	<i>P</i> 2 ₁ 2 ₁ 2 ₁	1.552,1.593,2.217,90,90,90	-	gray dark	4.38	A	42457
Cs-Sn	Cs ₂ Sn ₁₁ rt	Cs ₂ Sn ₁₁ ,cI528,230	<i>I</i> a-3d	2.4256,2.4256,2.4256,90,90,90	clathrate	-	5.85	X	49238
Cs-Sn	Cs ₂₆ Sn ₄₁	Cs ₂₆ Sn ₄₁ ,mP560,14	<i>P</i> 12 ₁ / <i>c</i> 1	2.712,1.555,5.8782,90,99.157,90	-	-	4.52	X	43154
Cs-Sn	Cs ₈ Sn ₂₂	Na ₄ Si ₂₃ ,cP54,223	<i>P</i> m-3n	1.2105,1.2105,1.2105,90,90,90	clathrate	blackish	5.88	X	38705
Cs-Te	CsTe ht	CsTe,oP8,55	<i>P</i> bam	0.61278,1.1629,0.49602,90,90,90	-	black violet	4.90	X	32721
Cs-Te	CsTe ₄ rt	CsTe ₄ ,mP20,14	<i>P</i> 12 ₁ / <i>c</i> 1	0.7857,0.7286,1.4155,90,93.83,90	-	gray	5.29	X	18434
Cs-Te	CsTe ₇	*,tP128,130	<i>P</i> 4/ <i>ncc</i>	1.8885,1.8885,1.3517,90,90,90	-	-	5.66	N	31534
Cs-Te	Cs ₂ Te rt	Cs ₂ S,oP12,62	<i>P</i> nma	0.9109,0.5871,1.1494,90,90,90	-	yellow	4.25	X	25478
Cs-Te	Cs ₂ Te ₁₃	*,oP60,57	<i>P</i> bcm	0.7341,1.3953,2.2652,90,90,90	-	-	5.51	N	31534
Cs-Te	Cs ₂ Te ₃	K ₂ S ₃ ,oS20,36	<i>C</i> mc2 ₁	0.8666,1.2065,0.868,90,90,90	-	black	4.75	X	13153
Cs-Te	Cs ₂ Te ₅	Cs ₂ Te ₅ ,oS28,63	<i>C</i> mc ₁	0.9373,1.2288,1.014,90,90,90	-	gray	5.14	X	15497
Cs-Te	Cs ₃ Te ₂₂	Cs ₃ Te ₂₂ ,tI50,87	<i>I</i> 4/ <i>m</i>	0.9586,0.9586,2.0537,90,90,90	-	gray	5.64	X	29871
Cs-Te	Cs _{4.75} Te _{8.88} rt	K _{4.75} Se _{8.88} ,mS32,12	<i>C</i> 12/ <i>m</i> 1	2.14862,0.6655,1.50699,90,135.541,90	-	-	4.40	X	25478
Cs-Tl	CsTl	CsTl,oF96,70	<i>F</i> ddd	0.924,1.5136,3.214,90,90,90	-	gray dark	5.98	X	31663
Cs-Tl	Cs ₁₅ Tl ₂₇	Rb ₁₅ Tl ₂₇ ,hP42,189	<i>P</i> -62m	1.0503,1.0503,1.8142,90,90,120	-	-	7.20	X	31656
Cs-Zn	Cs _{0.34} Zn _{0.66}	Cs _{0.34} Zn _{0.66} ,tI20,74	<i>I</i> mma	0.2642,0.7208,1.76,90,90,90	-	-	6.08	X	47602
Cu-D	CuD _{0.74}	SeH _{0.33} ,hP6,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.29024,0.29024,0.4632,90,90,120	-	-	6.39	X	64801
Cu-Dy	CuDy	CsCl,cP2,221	<i>P</i> m-3m	0.3462,0.3462,0.3462,90,90,90	b.c.c. family	-	9.05	X	8337
Cu-Dy	Cu _{0.991} Dy _{0.009}	Cu,cF4,225	<i>F</i> m-3m	0.36158,0.36158,0.36158,90,90,90	close-packed structure	-	9.05	X	25952
Cu-Dy	Cu ₂ Dy	KHg ₂ ,oI12,74	<i>I</i> mma	0.4299,0.6794,0.729,90,90,90	AlB ₂ family	-	9.03	A	59374
Cu-Dy	Cu ₂₃ Dy ₆ hp	Th ₆ Mn ₂₃ ,cF116,225	<i>F</i> m-3m	1.214,1.214,1.214,90,90,90	-	-	9.05	A	16981
Cu-Dy	Cu ₁₅ Dy	*,mS*,*	-	1.891,2.1292,2.1328,90,108.26,90	-	-	-	N	42692

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Cu-Dy	Cu ₄ Dy	* ₂ mS*, *	-	2.5658, 2.836, 2.837, 90, 103.494, 90	-	-	-	N	42692
Cu-Dy	Cu ₂ Dy rt	Be ₂ Au, cF24, 216	<i>F-43m</i>	0.7027, 0.7027, 0.7027, 90, 90, 90	Friauf-Laves phase	-	9.19	X	4616
Cu-Dy	Cu _{5.44} Dy _{0.78} ht	Cu _{5.44} Tb _{0.78} , hP8, 191	<i>P6/mmm</i>	0.4932, 0.4932, 0.4156, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	-	8.96	A	15438
Cu-Dy	Cu ₉ Dy ₂	* ₂ t***, *	-	0.5002, 0.5002, 1.399, 90, 90, 90	-	-	-	N	27306
Cu-Er	CuEr	CsCl, cP2, 221	<i>Pm-3m</i>	0.2833, 0.2833, 0.2833, 90, 90, 90	b.c.c. family	gray silver	16.86	X	62922
Cu-Er	Cu _{0.991} Er _{0.009}	Cu, cF4, 225	<i>Fm-3m</i>	0.36156, 0.36156, 0.36156, 90, 90, 90	close-packed structure	-	9.06	X	25952
Cu-Er	Cu ₂ Er	KHg ₂ , oI12, 74	<i>Imma</i>	0.42809, 0.67502, 0.72659, 90, 90, 90	AlB ₂ family	-	9.31	A	55149
Cu-Er	Cu ₂ Er	Be ₂ Au, cF24, 216	<i>F-43m</i>	0.7003, 0.7003, 0.7003, 90, 90, 90	Friauf-Laves phase	-	9.38	X	4616
Cu-Eu	CuEu rt	FeB-b, oP8, 62	<i>Pnma</i>	0.7976, 0.4407, 0.6054, 90, 90, 90	CrB(TiI)-FeB	-	6.73	A	17875
Cu-Eu	CuEu stab	CsCl, cP2, 221	<i>Pm-3m</i>	0.3479, 0.3479, 0.3479, 90, 90, 90	b.c.c. family	-	8.50	X	2869
Cu-Eu	CuEu ₂	Ca ₂ Cu, oP12, 62	<i>Pnma</i>	0.64, 0.421, 1.508, 90, 90, 90	-	-	6.01	A	17875
Cu-Eu	Cu _{0.996} Eu _{0.004}	Cu, cF4, 225	<i>Fm-3m</i>	0.36153, 0.36153, 0.36153, 90, 90, 90	close-packed structure	-	8.98	X	25952
Cu-Eu	Cu ₂ Eu	KHg ₂ , oI12, 74	<i>Imma</i>	0.4434, 0.7234, 0.7539, 90, 90, 90	AlB ₂ family	-	7.67	A	17875
Cu-Eu	Cu ₂ Eu	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.511, 0.511, 0.414, 90, 90, 120	-	-	8.33	X	51073
Cu-F	CuF	ZnS, cF8, 216	<i>F-43m</i>	0.4255, 0.4255, 0.4255, 90, 90, 90	adamantane structure	-	7.12	X	58
Cu-F	CuF ₂ rt	CuF ₂ , mP6, 14	<i>P12₁/c1</i>	0.32973, 0.45624, 0.53499, 90, 121.035, 90	-	blue	4.89	X	25124
Cu-F	CuF ₂ stab	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5406, 0.5406, 0.5406, 90, 90, 90	fluorite family	-	4.27	X	58
Cu-Fe	Cu _{0.003} Fe _{0.997} rt	W, cI2, 229	<i>Im-3m</i>	0.28679, 0.28679, 0.28679, 90, 90, 90	b.c.c. family	-	7.87	X	3183
Cu-Fe	Cu _{0.3} Fe _{0.7} m	Cu, cF4, 225	<i>Fm-3m</i>	0.3614, 0.3614, 0.3614, 90, 90, 90	close-packed structure	-	8.18	X	30497
Cu-Fe	Cu _{0.3} Fe _{0.7} m	W, cI2, 229	<i>Im-3m</i>	0.2879, 0.2879, 0.2879, 90, 90, 90	b.c.c. family	-	8.09	X	30497
Cu-Fe	Cu _{0.77} Fe _{0.23} ht	Cu, cF4, 225	<i>Fm-3m</i>	0.363, 0.363, 0.363, 90, 90, 90	close-packed structure	-	8.58	X	53559
Cu-Ga	CuGa ₂	Fe _{0.92} Si ₂ , tP3, 123	<i>P4/mmm</i>	0.283, 0.283, 0.5839, 90, 90, 90	-	blue yellow	7.21	X	6927
Cu-Ga	Cu _{0.785} Ga _{0.215} ht	Mg, hP2, 194	<i>P6₃/mmc</i>	0.25993, 0.25993, 0.42406, 90, 90, 120	close-packed structure	-	8.68	X	49569
Cu-Ga	Cu _{0.85} Ga _{0.15}	Cu, cF4, 225	<i>Fm-3m</i>	0.3659, 0.3659, 0.3659, 90, 90, 90	close-packed structure	-	8.74	X	56343
Cu-Ga	Cu ₂₉ Ga ₁₉ 33	Cu _{30.5} (Cu _{0.27} Al _{0.73}) ₃ Al ₁₆ , hR153, 160	<i>R3m</i>	1.2258, 1.2258, 1.50444, 90, 90, 120	-	-	8.12	X	56132
Cu-Ga	Cu _{7.15} Ga _{5.85} rt	* ₂ cP52, *	-	0.86949, 0.86949, 0.86949, 90, 90, 90	-	-	-	N	4736
Cu-Ga	Cu _{8.2} Ga _{4.8}	* ₂ cP52, *	-	0.87373, 0.87373, 0.87373, 90, 90, 90	-	-	-	N	4736
Cu-Ga	Cu _{8.62} Ga _{4.38} ht	Cu ₉ Al ₄ , cP52, 215	<i>P-43m</i>	0.87462, 0.87462, 0.87462, 90, 90, 90	γ-brass	-	8.47	A	49569
Cu-Ga	Cu ₉ Ga ₄ rt	Cu ₉ Al ₄ , cP52, 215	<i>P-43m</i>	0.8747, 0.8747, 0.8747, 90, 90, 90	γ-brass	-	8.44	X	7835
Cu-Gd	CuGd hp	AuCd, oP4, 51	<i>Pnma</i>	0.4481, 0.3042, 0.4814, 90, 90, 90	close-packed structure	-	11.17	A	33225
Cu-Gd	CuGd rt cub	CsCl, cP2, 221	<i>Pm-3m</i>	0.3518, 0.3518, 0.3518, 90, 90, 90	b.c.c. family	-	8.42	X	58033
Cu-Gd	CuGd rt orth	FeB-b, oP8, 62	<i>Pnma</i>	0.711, 0.4536, 0.5509, 90, 90, 90	CrB(TiI)-FeB	-	8.25	A	53679
Cu-Gd	Cu _{0.988} Gd _{0.012}	Cu, cF4, 225	<i>Fm-3m</i>	0.36165, 0.36165, 0.36165, 90, 90, 90	close-packed structure	-	9.08	X	25952
Cu-Gd	Cu ₂ Gd	KHg ₂ , oI12, 74	<i>Imma</i>	0.4326, 0.6882, 0.7322, 90, 90, 90	AlB ₂ family	-	8.66	A	60286
Cu-Gd	Cu ₅ Gd ht	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.501, 0.501, 0.412, 90, 90, 120	-	-	8.81	X	22552
Cu-Gd	Cu ₂ Gd rt	Be ₂ Au, cF24, 216	<i>F-43m</i>	0.706, 0.706, 0.706, 90, 90, 90	Friauf-Laves phase	-	8.97	A	52929
Cu-Gd	Cu _{5.4} Gd _{0.8} ht	Cu _{5.44} Tb _{0.78} , hP8, 191	<i>P6/mmm</i>	0.4974, 0.4974, 0.4145, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	-	8.77	A	15984
Cu-Gd	Cu ₆ Gd	Cu ₆ Ce, oP28, 62	<i>Pnma</i>	0.8023, 0.5027, 1.0075, 90, 90, 90	-	-	8.80	X	53569
Cu-Gd	Cu ₉ Gd ₂ lt	* ₂ t***, *	-	0.5, 0.5, 1.39, 90, 90, 90	-	-	-	N	15984
Cu-Ge	Cu _{0.005} Ge _{0.995}	C, cF8, 227	<i>Fd-3m</i>	0.56579, 0.56579, 0.56579, 90, 90, 90	-	-	5.32	X	64247
Cu-Ge	Cu _{0.85} Ge _{0.15}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.25923, 0.25923, 0.42217, 90, 90, 120	close-packed structure	-	8.77	X	1802
Cu-Ge	Cu _{0.9075} Ge _{0.0925}	Cu, cF4, 225	<i>Fm-3m</i>	0.3664, 0.3664, 0.3664, 90, 90, 90	close-packed structure	-	8.69	X	10992
Cu-Ge	Cu _{2.5} Ge ht	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.5906, 0.5906, 0.5906, 90, 90, 90	fluorite family	-	7.46	X	6206
Cu-Ge	Cu ₃ Ge ht	Na ₃ As, hP8, 194	<i>P6₃/mmc</i>	0.417, 0.417, 0.738, 90, 90, 120	-	-	7.87	A	455
Cu-Ge	Cu ₃ Ge rt	Cu ₃ Ti, oP8, 59	<i>Pmmn</i>	0.4576, 0.5272, 0.42, 90, 90, 90	-	-	8.63	X	34690
Cu-H	CuH	SeH _{0.33} , hP6, 194	<i>P6₃/mmc</i>	0.28777, 0.28777, 0.45695, 90, 90, 120	-	-	6.54	X	64801
Cu-Hf	CuHf ₂	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.3168, 0.3168, 1.1137, 90, 90, 90	close-packed structure	-	12.50	X	39384
Cu-Hf	Cu ₁₀ Hf ₇	Zr ₇ Ni ₁₀ , oS68, 64	<i>Cmce</i>	1.25872, 0.92376, 0.92354, 90, 90, 90	-	-	11.66	A	8939
Cu-Hf	Cu ₅₁ Hf ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	<i>P6/m</i>	1.118, 1.118, 0.8235, 90, 90, 120	-	-	10.69	X	8698
Cu-Hf	Cu ₈ Hf ₃	Cu ₈ Hf ₃ , oP44, 62	<i>Pnma</i>	0.78113, 0.81014, 0.99470, 90, 90, 90	-	-	11.01	X	9441
Cu-Hg	Cu ₁₄ Hg ₁₂ bel	Cr ₄ (Cr _{0.56} Al _{0.44}) ₉ Al ₁₂ , hR78, 160	<i>R3m</i>	1.33463, 1.33463, 0.8082, 90, 90, 120	belendorffite	white silver	13.17	X	4343
Cu-Ho	CuHo	CsCl, cP2, 221	<i>Pm-3m</i>	0.3451, 0.3451, 0.3451, 90, 90, 90	b.c.c. family	gray silver	9.23	X	53373
Cu-Ho	CuHo	KHg ₂ , oI12, 74	<i>Imma</i>	0.428, 0.676, 0.727, 90, 90, 90	AlB ₂ family	-	9.22	X	19017
Cu-Ho	Cu ₃ Ho ht	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.496, 0.496, 0.4016, 90, 90, 120	-	-	9.37	X	1484
Cu-Ho	Cu ₃ Ho rt	Be ₂ Au, cF24, 216	<i>F-43m</i>	0.7016, 0.7016, 0.7016, 90, 90, 90	Friauf-Laves phase	-	9.28	X	4616
Cu-I	CuI 12R	CuI, hR36, 166	<i>R-3m</i>	0.4265, 0.4265, 4.196, 90, 90, 120	-	colorless	5.74	X	14679
Cu-I	CuI 12T	CuI, hP12, 156	<i>P3m1</i>	0.425, 0.425, 2.086, 90, 90, 120	-	-	5.82	X	1475
Cu-I	CuI hp1	CuI, hR12, 166	<i>R-3m</i>	0.40826, 0.40826, 2.0077, 90, 90, 120	-	-	6.55	X	29366
Cu-I	CuI hp2	PbO, tP4, 129	<i>P4/nmm</i>	0.40229, 0.40229, 0.56506, 90, 90, 90	-	-	6.92	X	29366
Cu-I	CuI hp3	ZnTe, oS8, 63	<i>Cmcm</i>	0.53727, 0.61154, 0.46087, 90, 90, 90	-	-	8.35	X	30907
Cu-I	CuI ht1	CuI, hR12, 166	<i>R-3m</i>	0.4155, 0.4155, 2.04803, 90, 90, 120	-	-	6.20	X	27169
Cu-I	CuI ht2	UO ₂ , cF36, 225	<i>Fm-3m</i>	0.6134, 0.6134, 0.6134, 90, 90, 90	fluorite family	-	5.48	X	30387
Cu-I	CuI rt	CuI, cF20, 216	<i>F-43m</i>	0.60847, 0.60847, 0.60847, 90, 90, 90	marshite	orange pink	5.62	X	30387
Cu-In	Cu _{0.8} In _{0.2} ht	W, cI2, 229	<i>Im-3m</i>	0.299, 0.299, 0.299, 90, 90, 90	b.c.c. family	-	9.17	X	26472
Cu-In	Cu _{0.932} In _{0.068}	Cu, cF4, 225	<i>Fm-3m</i>	0.3647, 0.3647, 0.3647, 90, 90, 90	close-packed structure	-	9.18	X	63951
Cu-In	Cu _{1.1} In _{0.9} ht	CuAl, mS20, 12	<i>C12/m1</i>	1.2814, 0.43543, 0.7353, 90, 125.51, 90	-	-	8.61	X	14602
Cu-In	Cu ₁₀ In ₇	Cu ₁₀ In ₇ , mS68, 12	<i>C12/m1</i>	1.38453, 1.18462, 0.67388, 90, 91.063, 90	-	colorless	8.65	X	52486
Cu-In	Cu ₂ In ht	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.42943, 0.42943, 0.52328, 90, 90, 120	AlB ₂ family	-	9.61	X	26472
Cu-In	Cu ₇ In ₃ rt	Cu ₇ In ₃ , aP40, 2	<i>P-1</i>	0.6733, 0.9134, 1.0074, 73.2, 82.77, 89.76	-	gray	8.92	X	33305
Cu-In	Cu ₇ In ₄ ht1	* ₂ oP*, *	-	0.5262, 0.7395, 3.4194, 90, 90, 90	-	-	-	N	6925
Cu-In	Cu ₇ In ₄ ht2	* ₂ oP*, *	-	0.5218, 0.7405, 2.1375, 90, 90, 90	-	-	-	N	6925
Cu-In	Cu ₉ In ₄ ht	Cu ₉ Al ₄ , cP52, 215	<i>P-43m</i>	0.9097, 0.9097, 0.9097, 90, 90, 90	γ-brass	-	9.10	A	26472
Cu-Ir	Cu _{0.95} Ir _{0.05}	Cu, cF4, 225	<i>Fm-3m</i>	0.3628, 0.3628, 0.3628, 90, 90, 90	close-packed structure	-	9.73	X	4805
Cu-La	CuLa	FeB-b, oP8, 62	<i>Pnma</i>	0.7538, 0.4619, 0.5727, 90, 90, 90	CrB(TiI)-FeB	-	6.74	A	49490
Cu-La	Cu ₁₃ La ht	NaZn ₁₃ , cF112, 226	<i>Fm-3c</i>	1.16, 1.16, 1.16, 90, 90, 90	-	-	8.21	A	14100
Cu-La	Cu ₂ La	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.4342, 0.4342, 0.3817, 90, 90, 120	AlB ₂ family	-	7.09	X	17942
Cu-La	Cu ₄ La	Cu ₄ La, tI90, 119	<i>I-4m2</i>	0.8904, 0.8904, 1.9210, 90, 90, 90	-	-	7.71	X	17942
Cu-La	Cu ₅ La	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.51827, 0.51827, 0.41155, 90, 90, 120	-	-	7.92	X	49636

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cu-La	Cu ₆ La ht	Cu ₆ Ce ₂ oP28,62	<i>Pnma</i>	0.81954,0.51584,1.02524,90,90,90	-	-	7.97	X	23576
Cu-La	Cu ₆ La rt	Cu ₆ La,mP28,14	<i>P12₁/c1</i>	0.51364,1.01763,0.81072,90,92.186,90	-	-	8.16	X	23576
Cu-Lu	Cu ₂ Lu	KHg ₂ oI12,74	<i>Imma</i>	0.4245,0.6627,0.722,90,90,90	AlB ₂ family	-	9.88	A	1781
Cu-Lu	Cu ₂₃ Lu ₆ hp	Th ₆ Mn ₂₃ cF116,225	<i>Fm-3m</i>	1.2,1.2,1.2,90,90,90	-	-	9.65	A	16981
Cu-Lu	Cu ₅ Lu	Be ₃ Au,cF24,216	<i>F-43m</i>	0.697,0.697,0.697,90,90,90	Friauf-Laves phase	-	9.67	X	5899
Cu-Mg	MgCu ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7034,0.7034,0.7034,90,90,90	Friauf-Laves phase	-	5.78	X	16632
Cu-Mg	Mg _{0.03} Cu _{0.97}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.36272,0.36272,0.36272,90,90,90	close-packed structure	-	8.68	X	349
Cu-Mg	Mg ₂ Cu	Mg ₂ Cu,oF48,70	<i>Fddd</i>	0.5275,0.9044,1.8328,90,90,90	-	-	3.41	X	27003
Cu-Mn	Cu _{0.15} Mn _{0.85} ht	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3743,0.3743,0.3743,90,90,90	close-packed structure	-	7.12	X	1068
Cu-Mn	Cu _{0.15} Mn _{0.85} rt	In ₂ It ₂ ,139	<i>I4/mmm</i>	0.26707,0.26707,0.3635,90,90,90	close-packed structure	-	7.20	X	1068
Cu-Mo	Cu _{0.75} Mo _{0.25} m	Cu ₂ cF4,225	<i>Fm-3m</i>	0.337,0.337,0.337,90,90,90	close-packed structure	-	12.43	X	33387
Cu-N	CuN _{0.33} hp	CoO,It ₄ ,139	<i>I4/mmm</i>	0.2655,0.2655,0.3911,90,90,90	rocksalt family	-	8.21	X	54400
Cu-N	Cu[N ₃] orth	Cu[N ₃],oP32,61	<i>Pbca</i>	0.6625,1.1021,0.7234,90,90,90	-	blue	2.66	X	56242
Cu-N	Cu[N ₃] tet	Cu[N ₃],It32,88	<i>I4₁/a</i>	0.8653,0.8653,0.5594,90,90,90	-	colorless	3.35	X	272
Cu-N	Cu[N ₃] ₂	Cu[N ₃] ₂ ,oP28,62	<i>Pnma</i>	1.3454,0.3079,0.9084,90,90,90	-	black brown	2.61	X	3752
Cu-N	Cu ₃ N hp1	Cu _{3.24} N _{1.08} ,tP8,123	<i>P4/mmm</i>	0.3745,0.3745,0.378,90,90,90	-	-	6.41	X	56268
Cu-N	Cu ₃ N	ReO ₃ ,cP4,221	<i>Pm-3m</i>	0.3819,0.3819,0.3819,90,90,90	-	green	6.10	X	23406
Cu-Nd	CuNd rt	FeB-b,oP8,62	<i>Pnma</i>	0.731,0.4564,0.5583,90,90,90	CrB(III)-FeB	gray	7.41	X	44685
Cu-Nd	Cu ₂ Nd	KHg ₂ oI12,74	<i>Imma</i>	0.43843,0.70326,0.71494,90,90,90	AlB ₂ family	gray	7.88	X	24783
Cu-Nd	Cu ₄ Nd	*,o***,*	-	0.45,0.806,0.915,90,90,90	-	gray	-	N	13256
Cu-Nd	Cu ₅ Nd rt	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.51,0.51,0.41,90,90,120	-	gray	8.31	X	26057
Cu-Nd	Cu ₆ Nd lt	Cu ₆ La,mP28,14	<i>P12₁/c1</i>	0.50568,1.00933,0.804,90,91.163,90	-	-	8.51	X	23576
Cu-Nd	Cu ₆ Nd rt	Cu ₆ Ce,oP28,62	<i>Pnma</i>	0.80777,0.50672,1.01268,90,90,90	-	gray	8.42	X	23576
Cu-Ni	Cu _{0.5} Ni _{0.5} rt	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3572,0.3572,0.3572,90,90,90	close-packed structure	-	8.91	X	28853
Cu-O	CuO lt	CuO,mS8,9	<i>C1c1</i>	0.46927,0.34283,0.51370,90,99.546,90	-	black gray	6.48	X	24782
Cu-O	CuO rt	CuO,mS8,15	<i>C12/c1</i>	0.46837,0.34226,0.51288,90,99.54,90	tenorite	black	6.52	X	4913
Cu-O	Cu ₂ O hp1	Cu ₂ O,tP6,134	<i>P4₂/nm</i>	0.41937,0.41937,0.42435,90,90,90	-	-	6.37	X	42492
Cu-O	Cu ₂ O hp2	*,hP12,*	-	0.29,0.29,1.931,90,90,120	-	-	6.76	N	15299
Cu-O	Cu ₂ O hp3	CdCl ₂ ,hR9,166	<i>R-3m</i>	0.282,0.282,1.27,90,90,120	-	-	8.15	A	15299
Cu-O	Cu ₂ O	Cu ₂ O,cP6,224	<i>Pn-3m</i>	0.42685,0.42685,0.42685,90,90,90	cuprite	red	6.11	X	22964
Cu-O	Cu ₄ O ₃	Cu ₄ O ₃ ,It28,141	<i>I4₁/amd</i>	0.5837,0.5837,0.9932,90,90,90	paramelaconite	-	5.93	X	11214
Cu-O	Cu ₆₄ O	Cu ₆₄ O,oS130,38	<i>Amm2</i>	1.058,0.974,1.62,90,90,90	-	-	8.12	X	17688
Cu-O	Cu ₈ O	Cu ₈ O,oS18,38	<i>Amm2</i>	0.602,0.547,0.934,90,90,90	-	-	5.66	X	16737
Cu-P	CuP ₁₀	CuP ₁₀ ,aP44,2	<i>P-1</i>	0.7131,1.1437,1.175,68.53,83.6,84.39	-	red dark	2.80	X	50757
Cu-P	CuP ₂	CuP ₂ ,mP12,14	<i>P12₁/c1</i>	0.58004,0.48063,0.75263,90,112.70,90	-	-	4.31	X	15486
Cu-P	Cu _{0.985} P _{0.015}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.36119,0.36119,0.36119,90,90,90	close-packed structure	-	8.89	X	131
Cu-P	Cu ₂ P ₇	Cu ₂ P ₇ ,mS72,12	<i>C12/m1</i>	1.2658,0.7256,1.4630,90,107.46,90	-	black	3.56	X	15486
Cu-P	Cu _{2.82} P ht	Cu ₃ P,hP24,185	<i>P6₃cm</i>	0.69593,0.69593,0.7143,90,90,120	-	gray silver	6.99	X	6366
Cu-Pb	Cu _{0.95} Pb _{0.05}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3688,0.3688,0.3688,90,90,90	close-packed structure	-	9.37	X	15064
Cu-Pd	Cu _{0.74} Pd _{0.26}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.37,0.37,0.37,90,90,90	close-packed structure	-	9.79	X	63408
Cu-Pd	Cu _{1.04} Pd _{0.96} rt	CsCl,cP2,221	<i>Pm-3m</i>	0.3096,0.3096,0.3096,90,90,90	skaaergaardite	-	9.41	X	57334
Cu-Pd	Cu ₃ Pd rt Pd+	Cu ₃ Pd,oP320,58	<i>Pnmm</i>	2.942,3.711,0.3711,90,90,90	close-packed structure	-	9.74	X	767
Cu-Pd	Cu ₃ Pd rt	Cu ₃ Pd,tP28,123	<i>P4/mmm</i>	0.371,0.371,2.5655,90,90,90	nielsenite	-	9.78	X	5342
Cu-Pd	Cu _{3.36} Pd _{0.64} rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.36875,0.36875,0.36875,90,90,90	close-packed structure	-	9.33	X	64140
Cu-Pd	Cu ₄ Pd	Cu ₄ Pd,tP20,84	<i>P4₂/m</i>	0.5826,0.5826,0.7328,90,90,90	-	-	9.63	X	623
Cu-Pr	CuPr	FeB-b,oP8,62	<i>Pnma</i>	0.7242,0.4336,0.6307,90,90,90	CrB(III)-FeB	-	6.86	A	39252
Cu-Pr	Cu ₂ Pr rt	KHg ₂ oI12,74	<i>Imma</i>	0.4411,0.7058,0.7448,90,90,90	AlB ₂ family	-	7.68	A	50740
Cu-Pr	Cu ₄ Pr	*,o***,*	-	0.454,0.808,0.922,90,90,90	-	-	-	N	12500
Cu-Pr	Cu ₅ Pr	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5128,0.5128,0.4106,90,90,120	-	-	8.14	X	5528
Cu-Pr	Cu ₆ Pr lt	Cu ₆ La,mP28,14	<i>P12₁/c1</i>	0.5094,1.0154,0.8088,90,91.33,90	-	-	8.29	X	20288
Cu-Pr	Cu ₆ Pr rt	Cu ₆ Ce,oP28,62	<i>Pnma</i>	0.80921,0.50845,1.01458,90,90,90	-	-	8.31	X	23576
Cu-Pt	CuPt rt	CuPt,hR6,166	<i>R-3m</i>	0.27,0.27,1.2918,90,90,120	close-packed structure	-	15.80	X	50664
Cu-Pt	CuPt ₃ orth	CuPt ₃ ,oS32,65	<i>Cmmm</i>	0.54405,0.76763,0.27204,90,90,90	-	-	18.97	X	62744
Cu-Pt	CuPt ₃ rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3849,0.3849,0.3849,90,90,90	close-packed structure	-	18.89	X	53403
Cu-Pt	CuPt ₇ rt	CuPt ₇ ,cF32,225	<i>Fm-3m</i>	0.77891,0.77891,0.77891,90,90,90	kitagoite	white grayish	20.09	X	64391
Cu-Pt	Cu _{0.70} Pt _{0.30} ht	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3705,0.3705,0.3705,90,90,90	close-packed structure	-	13.45	X	57701
Cu-Pt	Cu ₃ Pt rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3641,0.3641,0.3641,90,90,90	close-packed structure	-	13.27	X	57701
Cu-Pt	Cu ₃ Pt rt	SrPb ₃ ,tP4,123	<i>P4/mmm</i>	0.3708,0.3708,0.3692,90,90,90	close-packed structure	-	12.62	X	703
Cu-Pu	Cu ₂ Pu	KHg ₂ oI12,74	<i>Imma</i>	0.4332,0.6686,0.7376,90,90,90	AlB ₂ family	-	11.54	A	6569
Cu-Pu	Cu ₄ Pu	*,oP20,*	-	0.432,0.8264,0.9229,90,90,90	-	-	-	N	6569
Cu-Pu	Cu ₆ Pu	Cu ₆ Ce,oP28,62	<i>Pnma</i>	0.805,0.5025,1.0059,90,90,90	-	-	10.21	A	3637
Cu-Rh	Cu _{0.5} Rh _{0.5} ht	Cu ₂ cF4,225	<i>Fm-3m</i>	0.373,0.373,0.373,90,90,90	close-packed structure	-	10.65	X	2169
Cu-Ru	CuRu ₄	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3613,0.3613,0.3613,90,90,90	close-packed structure	-	8.95	X	20032
Cu-Ru	Cu _{0.03} Ru _{0.97}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2699,0.2699,0.4285,90,90,120	close-packed structure	-	12.28	X	64210
Cu-S	CuS lt	CuS,oS24,63	<i>Cmcm</i>	0.3760,0.6564,1.622,90,90,90	-	-	4.76	X	21827
Cu-S	CuS rt	CuS-b,hP12,194	<i>P6₃/mmc</i>	0.3757,0.3757,1.619,90,90,120	covellite	-	4.81	X	18506
Cu-S	CuS ₂ hp	FeS ₂ ,cP12,205	<i>P4-3</i>	0.57891,0.57891,0.57891,90,90,90	pyrite-marcasite family	purple	4.37	X	12082
Cu-S	CuS ₂ rt	FeS ₂ ,oP6,58	<i>Pnmm</i>	0.4651,0.5793,0.3532,90,90,90	pyrite-marcasite family	-	4.46	A	11901
Cu-S	Cu _{1.8} S ht dig	Cu ₂ Se,cF44,225	<i>Fm-3m</i>	0.5564,0.5564,0.5564,90,90,90	digenite high	black	5.65	X	24932
Cu-S	Cu _{1.96} S m	Cu _{1.96} S,tP12,92	<i>P4₁2₁2</i>	0.39962,0.39962,1.1287,90,90,90	-	-	5.77	X	2038
Cu-S	Cu ₂ S hp1	*,mP36,*	-	0.7382,0.6773,1.0331,90,100.24,90	-	gray dark	6.24	N	63793
Cu-S	Cu ₂ S hp2	Cu ₂ S,mP24,4	<i>P12₁1</i>	0.6726,0.6703,0.6968,90,93.2,90	-	gray dark	6.74	X	63793
Cu-S	Cu ₂ S ht cha	Cu ₂ S,hP16,194	<i>P6₃/mmc</i>	0.3967,0.3967,0.6795,90,90,120	chalcocite high	gray steel	5.71	X	14477
Cu-S	Cu ₂ S ht	Cu ₂ S,mP144,14	<i>P12₁/c1</i>	1.5228,1.1884,1.3494,90,116.22,90	chalcocite low	gray dark	5.79	X	12683
Cu-S	Cu ₂₉ S ₁₆	Cu ₂₉ S ₁₆ ,aP180,2	<i>P-1</i>	1.34051,1.3409,1.54852,90.022,90.021,90.02	roxbyite	-	5.62	X	58732
Cu-S	Cu ₃₁ S ₁₆ rt dju	Cu ₃₁ S ₁₆ ,mP376,14	<i>P12₁/c1</i>	1.3465,1.5745,3.0052,90,116.49,90	djurleite	black bluish	5.78	X	12683
Cu-S	Cu ₇ S ₄ rt ani	Cu ₇ S ₄ ,oP44,62	<i>Pnma</i>	0.789,0.784,1.101,90,90,90	anilite	-	5.59	X	4924
Cu-S	Cu ₆ S ₅ dig	Cu ₆ S ₅ ,hR42,166	<i>R-3m</i>	0.39192,0.39192,4.80024,90,90,120	digenite low	black	5.71	X	929

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Cu-Sb	Cu _{0.8} Sb _{0.2} ht	Mg,hP2,194	$P6_3/mmc$	0.2688,0.2688,0.4328,90,90,120	close-packed structure	-	9.22	X	2706
Cu-Sb	Cu _{0.9995} Sb _{0.0005}	Cu,cF4,225	$Fm-3m$	0.367,0.367,0.367,90,90,90	close-packed structure	-	8.54	X	15553
Cu-Sb	Cu ₁₀ Sb ₃ ht	Cu ₁₀ Sb ₃ ,hP26,176	$P6_3/m$	0.992,0.992,0.43197,90,90,120	close-packed structure	-	9.03	X	996
Cu-Sb	Cu ₁₁ Sb ₃ rt	Cu ₁₁ Sb ₃ ,oS28,38	$Amm2$	0.4324,1.908,0.4724,90,90,90	close-packed structure	-	9.07	X	15556
Cu-Sb	Cu ₂ Sb	Cu ₂ Sb,tP6,129	$P4/nmm$	0.40021,0.40021,0.61038,90,90,90	-	violet	8.45	X	41526
Cu-Sb	Cu ₃ Sb ht1	Cu ₃ Ti,oP8,59	$Pmmn$	0.4353,0.5504,0.4768,90,90,90	close-packed structure	-	9.08	X	996
Cu-Sb	Cu ₃ Sb ht2	BiF ₃ ,cF16,225	$Fm-3m$	0.5908,0.5908,0.5908,90,90,90	fluorite family	-	10.06	X	15553
Cu-Sb	Cu _{39.89} Sb _{9.11}	Au ₁₂ (Au _{0.58} Cd _{0.42}) ₃₆ Cd,hP98,194	$P6_3/mmc$	1.9124,1.9124,0.4326,90,90,120	-	-	8.83	X	6729
Cu-Sc	CuSc	CsCl,cP2,221	$Pm-3m$	0.324,0.324,0.324,90,90,90	b.c.c. family	-	5.30	X	2122
Cu-Sc	Cu ₂ Sc	MoSi ₂ ,tI6,139	$I4/mmm$	0.329,0.329,0.8388,90,90,90	b.c.c. family	-	6.29	A	3255
Cu-Sc	Cu ₄ Sc	*,tI*,*	-	0.6536,0.6536,0.4031,90,90,90	-	-	-	N	31828
Cu-Sc	CuSe ht orth	*,oS*,*	-	0.3949,0.6935,1.72,90,90,90	-	-	-	N	4719
Cu-Sc	CuSe ht1	CuS,oS24,63	$Cmcm$	0.396,0.6947,1.7253,90,90,90	-	-	5.98	A	30678
Cu-Sc	CuSe ht2	CuS-b,hP12,194	$P6_3/mmc$	0.3988,0.3988,1.7264,90,90,120	-	gray	5.97	A	30678
Cu-Sc	CuSe tf	*,hP2,*	-	0.394,0.394,0.288,90,90,120	-	-	-	N	6343
Cu-Sc	CuSe _{0.75} tf	CuSe _{0.75} ,hR12,166	$R-3m$	0.414,0.414,1.015,90,90,120	-	-	8.12	X	12099
Cu-Sc	CuSe ₂ hp	FeS ₂ ,cP12,205	$Pa-3$	0.6116,0.6116,0.6116,90,90,90	pyrite-marcasite family	blue	6.43	X	9628
Cu-Sc	CuSe ₂ rt	FeS ₂ ,oP6,58	$Pnnm$	0.5005,0.6182,0.374,90,90,90	krutaite	gray	6.36	X	9628
Cu-Sc	Cu _{0.87} Se rt	Cu _{0.87} Se,hP26,194	$P6_3/mmc$	0.3939,0.3939,1.725,90,90,120	klockmannite	-	5.77	X	14334
Cu-Sc	Cu _{1.75} Se ht	Cu ₂ Se,cF44,225	$Fm-3m$	0.5755,0.5755,0.5755,90,90,90	berzelianite	black	6.63	X	47607
Cu-Sc	Cu _{1.80} Se It cub	*,cP*,*	-	1.1414,1.1414,1.1414,90,90,90	-	-	-	N	4719
Cu-Sc	Cu _{1.80} Se It tet	*,tP*,*	-	0.8071,0.8071,1.1414,90,90,90	-	-	-	N	4719
Cu-Sc	Cu _{1.80} Se rt	CaF ₂ ,cF12,225	$Fm-3m$	0.5751,0.5751,0.5751,90,90,90	fluorite family	-	6.75	X	4719
Cu-Sc	Cu _{1.98} Se tricl	*,aP*,*	-	0.71,0.713,1.234,89.74,89.56,72.06	-	-	-	N	42791
Cu-Sc	Cu ₂ Se bel	*,tP96,134	$P4_2/nmm$	1.152,1.152,1.174,90,90,90	bellidoite	white creamy	-	N	8840
Cu-Sc	Cu ₂ Se orth	*,oP*,*	-	0.4118,0.7032,2.0381,90,90,90	-	-	-	N	4719
Cu-Sc	Cu ₂ Se rt hex	*,hP*,*	-	0.707,0.707,0.668,90,90,120	-	-	-	N	10066
Cu-Sc	Cu ₂ Se rt mon	Cu ₂ Se,mS144,15	$C12/c1$	0.71379,1.23823,2.73904,90,94.308,90	-	-	6.80	X	56845
Cu-Sc	Cu ₃ Se ₂ rt	Cu ₃ Se ₂ ,tP10,113	$P-42,m$	0.64024,0.64024,0.42786,90,90,90	umangite	black blue	6.60	X	9628
Cu-Si	Cu _{0.83} Si _{0.17} ht	*,tP*,*	-	0.8815,0.8815,0.7903,90,90,90	-	-	-	N	4766
Cu-Si	Cu _{0.83} Si _{0.17} rt	Mn,cP20,213	$P4_132$	0.6222,0.6222,0.6222,90,90,90	-	-	7.93	X	49515
Cu-Si	Cu _{0.875} Si _{0.125} ht	Mg,hP2,194	$P6_3/mmc$	0.256,0.256,0.4186,90,90,120	close-packed structure	-	8.26	X	49515
Cu-Si	Cu _{0.9} Si _{0.1}	Cu,cF4,225	$Fm-3m$	0.3621,0.3621,0.3621,90,90,90	close-packed structure	-	8.39	X	49515
Cu-Si	Cu ₁₅ Si ₄ rt	Cu ₁₅ Si ₄ ,cI76,220	$I-43d$	0.9718,0.9718,0.9718,90,90,90	-	-	7.71	X	49515
Cu-Si	Cu ₃ Si ht	*,hR*,166	$R-3m$	0.4047,0.4047,0.244,90,90,120	-	-	-	N	49566
Cu-Si	Cu ₃ Si rt	*,oS*,*	-	0.7,2.194,7.676,90,90,90	-	-	-	N	11000
Cu-Si	Cu _{6.75} Si _{2.25} ht1	Cu(Cu _{0.96} Si _{0.04}) ₆ Si ₂ ,hR27,148	$R-3$	0.69998,0.69998,0.73152,90,90,120	-	-	7.90	X	11000
Cu-Si	Cu ₇ Si ₂	Li ₉ Pb ₂ ,hP9,164	$P-3m1$	0.4052,0.4052,0.7321,90,90,120	b.c.c. family	-	7.99	X	49515
Cu-Si	Cu ₈ Si	C,cF8,227	$Fd-3m$	0.54316,0.54316,0.54316,90,90,90	-	-	2.33	X	63380
Cu-Sm	CuSm cub	CsCl,cP2,221	$Pm-3m$	0.353,0.353,0.353,90,90,90	b.c.c. family	-	8.08	X	29419
Cu-Sm	CuSm orth	FeB-b,oP8,62	$Pnma$	0.7225,0.4166,0.6316,90,90,90	CrB(TlI)-FeB	-	7.48	A	16877
Cu-Sm	Cu _{0.991} Sm _{0.009}	Cu,cF4,225	$Fm-3m$	0.36163,0.36163,0.36163,90,90,90	close-packed structure	-	9.04	X	25952
Cu-Sm	Cu ₂ Sm	KHg ₂ ,oI12,74	$Imma$	0.4362,0.6928,0.7378,90,90,90	AlB ₂ family	-	8.27	A	28724
Cu-Sm	Cu ₂ Sm	CaCu ₅ ,hP6,191	$P6/mmm$	0.507,0.507,0.4104,90,90,120	-	-	8.51	X	22264
Cu-Sm	Cu ₆ Sm rt	Cu ₆ Ce,oP28,62	$Pnma$	0.806,0.5034,1.0049,90,90,90	-	-	8.66	X	5207
Cu-Sm	Cu ₅ Sm ₂	*,t**,*	-	0.712,0.712,0.715,90,90,90	-	-	-	N	22264
Cu-Sn	Cu _{0.35} Sn _{0.65} m	(Hg _{0.35} Sn _{0.65}),hP1,191	$P6/mmm$	0.3188,0.3188,0.2976,90,90,120	-	-	6.30	X	2908
Cu-Sn	Cu _{0.86} Sn _{0.14} ht	W,cI2,229	$Im-3m$	0.30189,0.30189,0.30189,90,90,90	b.c.c. family	-	8.60	X	710
Cu-Sn	Cu _{0.90} Sn _{0.10}	Cu,cF4,225	$Fm-3m$	0.3699,0.3699,0.3699,90,90,90	close-packed structure	-	9.06	X	56339
Cu-Sn	Cu _{1.2} Sn ht	Co _{1.75} Ge,hP6,194	$P6_3/mmc$	0.42372,0.42372,0.51349,90,90,120	AlB ₂ family	-	8.11	X	58489
Cu-Sn	Cu ₁₀ Sn ₃ ht	Cu ₁₀ Sn ₃ ,hP26,173	$P6_3$	0.733,0.733,0.7864,90,90,120	-	-	9.00	X	8707
Cu-Sn	Cu ₃ Sn ht	BiF ₃ ,cF16,225	$Fm-3m$	0.61166,0.61166,0.61166,90,90,90	fluorite family	-	8.98	X	710
Cu-Sn	Cu ₃ Sn rt	Cu ₃ Sn,oS80,63	$Cmcm$	0.55185,4.7768,0.4332,90,90,90	close-packed structure	-	9.00	X	62769
Cu-Sn	Cu _{40.4} Sn ₁₁ ht	Cu ₄₁ Sn ₁₁ ,cF416,216	$F-43m$	1.7980,1.7980,1.7980,90,90,90	γ -brass	-	8.85	X	10292
Cu-Sn	Cu ₆ Sn ₃ rt	Cu ₆ Sn ₃ ,mS44,15	$C12/c1$	1.1022,0.7282,0.9827,90,98.84,90	-	gray	8.31	X	28467
Cu-Sn	Cu _{6.75} Sn _{2.25} m	(Ag _{0.56} Zn _{0.44}) ₈ Zn,hP9,147	$P-3$	0.729,0.729,0.259,90,90,120	b.c.c. family	-	9.70	X	876
Cu-Sr	SrCu	BaCu,hP8,194	$P6_3/mmc$	0.4325,0.4325,1.537,90,90,120	-	-	4.03	A	51274
Cu-Sr	SrCu ₅	CaCu ₅ ,hP6,191	$P6/mmm$	0.52635,0.52635,0.4047,90,90,120	-	golden	6.93	X	29628
Cu-Tb	CuTb It1	CuTi,tP2,123	$P4/mmm$	0.3457,0.3457,0.3497,90,90,90	b.c.c. family	-	8.84	X	8337
Cu-Tb	CuTb rt	CsCl,cP2,221	$Pm-3m$	0.3481,0.3481,0.3481,90,90,90	b.c.c. family	gray silver	8.76	X	8337
Cu-Tb	Cu _{0.993} Tb _{0.007}	Cu,cF4,225	$Fm-3m$	0.36157,0.36157,0.36157,90,90,90	close-packed structure	-	9.02	X	25952
Cu-Tb	Cu ₂ Tb	KHg ₂ ,oI12,74	$Imma$	0.4318,0.6891,0.7326,90,90,90	AlB ₂ family	-	8.72	A	27461
Cu-Tb	Cu ₂₃ Tb ₆ hp	Th ₆ Mn ₂₃ ,cF116,225	$Fm-3m$	1.22,1.22,1.22,90,90,90	-	-	8.83	A	16981
Cu-Tb	Cu ₅ Tb ht	CaCu ₅ ,hP6,191	$P6/mmm$	0.50798,0.50798,0.41476,90,90,120	-	-	8.54	X	31018
Cu-Tb	Cu ₅ Tb rt	Be ₅ Au,cF24,216	$F-43m$	0.7041,0.7041,0.7041,90,90,90	Friauf-Laves phase	-	9.07	A	4616
Cu-Tb	Cu _{5.44} Tb _{0.78} ht	Cu _{5.44} Tb _{0.78} ,hP8,191	$P6/mmm$	0.4942,0.4942,0.4164,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	8.86	X	5528
Cu-Te	CuTe	CuTe,oP4,59	$Pnnm$	0.3155,0.4092,0.6956,90,90,90	vulcanite	bronze	7.07	X	39731
Cu-Te	CuTe ₂ hp	FeS ₂ ,cP12,205	$Pa-3$	0.66052,0.66052,0.66052,90,90,90	pyrite-marcasite family	gray silver	7.35	A	3933
Cu-Te	CuTe ₂ rt	CdI ₂ ,hP3,164	$P-3m1$	0.395,0.395,0.549,90,90,120	CdI ₂ -PbI ₂ polytype	-	7.14	X	26243
Cu-Te	Cu _{1.43} Te ht1	Cu _{1.43} Te,cF28,216	$F-43m$	0.6032,0.6032,0.6032,90,90,90	-	purple red	6.61	X	6101
Cu-Te	Cu _{1.43} Te ht2	*,h**,*	-	2.023,2.023,4.191,90,90,120	-	-	-	N	4719
Cu-Te	Cu _{1.46} Te rt	Cu _{1.43} Te,oP6,59	$Pnnm$	0.39727,0.4002,0.61066,90,90,90	-	purple red	7.54	X	27010
Cu-Te	Cu _{1.65} Te ht1	Cu ₂ Sb,tP6,129	$P4/nmm$	0.398,0.398,0.655,90,90,90	rickardite	purple red	7.44	X	4748
Cu-Te	Cu _{1.75} Te ht	Cu _{1.75} Te,hP18,187	$P-6m2$	0.417,0.417,2.165,90,90,120	-	-	7.30	X	4740
Cu-Te	Cu _{1.77} Te rt	*,cI*,229	$Im-3m$	1.019,1.019,1.019,90,90,90	-	-	-	N	4719
Cu-Te	Cu _{1.79} Te ht	Cu _{1.81} Te,hP72,156	$P3m1$	0.83124,0.83124,2.1546,90,90,120	weissite	black purplish	7.46	X	62252
Cu-Te	Cu _{1.82} Te rt	*,hP*,*	-	0.8378,0.8378,1.0877,90,90,120	-	-	-	N	16123
Cu-Te	Cu _{1.85} Te ht2	Cu _{1.43} Te,cF28,216	$F-43m$	0.6103,0.6103,0.6103,90,90,90	-	-	7.16	A	24551

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Cu-Te	Cu _{1.9} Te ht2	* _h P* *	-	0.853,0.853,3.603,90,90,120	-	-	-	N	16123
Cu-Te	Cu _{1.9} Te rt	* _o *** *	-	0.4234,1.0186,1.0308,90,90,90	-	-	-	N	16123
Cu-Te	Cu _{1.94} Te ht1	* _o P* *	-	0.7308,1.6876,2.1702,90,90,90	-	-	-	N	4719
Cu-Te	Cu _{1.94} Te ht2	* _o *** *	-	0.4227,0.729,0.7403,90,90,90	-	-	-	N	4719
Cu-Te	Cu _{1.94} Te rt	* _o *** *	-	0.4187,0.7189,0.7207,90,90,90	-	-	-	N	4719
Cu-Te	Cu ₂ Te hex	* _h P* *	-	0.418,0.418,0.7237,90,90,120	-	-	-	N	804
Cu-Te	Cu ₂ Te ht1	Cu ₂ Te,hP6,191	<i>P6/mmm</i>	0.4237,0.4237,0.7274,90,90,120	-	blue gray	7.48	X	249
Cu-Te	Cu ₂ Te rt	* _o *** *	-	0.7319,2.2236,3.6458,90,90,90	-	-	-	N	16123
Cu-Te	Cu ₇ Te ₄ rt	Cu ₇ Te ₄ ,hP22,156	<i>P3m1</i>	0.828,0.828,0.722,90,90,120	-	-	7.40	X	3647
Cu-Te	Cu _{7.2} Te ₄ ht mon	Pd ₅ Te ₄ ,mP52,14	<i>P12₁/c1</i>	0.7199,1.46,0.873,90,90,33,90	-	-	7.01	A	16123
Cu-Th	CuTh ₂	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.7324,0.7324,0.5816,90,90,90	-	black	11.23	X	6603
Cu-Th	Cu _{0.9999} Th _{0.0001}	Cu,cF4,225	<i>Fm-3m</i>	0.36151,0.36151,0.36151,90,90,90	close-packed structure	-	8.94	X	5892
Cu-Th	Cu ₂ Th	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.43789,0.43789,0.34877,90,90,120	AlB ₂ family	gray	10.30	X	6614
Cu-Th	Cu ₅₁ Th ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.18262,1.18262,0.88223,90,90,120	-	gray	10.08	A	6614
Cu-Th	Cu ₆ Th ht	Cu ₆ Ce ₆ ,oP28,62	<i>Pnma</i>	0.81103,0.50817,1.01046,90,90,90	-	gray	9.78	X	5892
Cu-Ti	CuTi tet1	CuTi,tP4,129	<i>P4/nmm</i>	0.3108,0.3108,0.5887,90,90,90	b.c.c. family	-	6.51	X	376
Cu-Ti	CuTi tet2	CuTi,tP2,123	<i>P4/mmm</i>	0.3140,0.3140,0.2856,90,90,90	b.c.c. family	-	6.57	X	376
Cu-Ti	CuTi ₂ rt	CuZr ₂ ,tI6,139	<i>I4/mmm</i>	0.2935,0.2935,1.0772,90,90,90	close-packed structure	-	5.70	X	39384
Cu-Ti	CuTi ₂ stab	Ti ₂ Ni,cF96,227	<i>Fd-3m</i>	1.124,1.124,1.124,90,90,90	-	-	5.96	A	440
Cu-Ti	CuTi ₃	CuTi ₃ ,tP4,123	<i>P4/mmm</i>	0.4158,0.4158,0.3594,90,90,90	close-packed structure	-	5.54	X	376
Cu-Ti	Cu _{0.95} Ti _{0.05}	Cu,cF4,225	<i>Fm-3m</i>	0.36375,0.36375,0.36375,90,90,90	close-packed structure	-	8.66	X	15295
Cu-Ti	Cu _{1.6} Ti _{5.4} rt	Cu(Cu _{0.4} Ti _{0.4})Ti ₅ ,oP28,55	<i>Pbam</i>	1.19802,1.20357,0.29872,90,90,90	-	-	5.56	X	41705
Cu-Ti	Cu ₂ Ti ht1	Au ₂ Y,oI52,63	<i>Cmcm</i>	0.7988,0.4458,0.4397,90,90,90	close-packed structure	-	7.42	A	5452
Cu-Ti	Cu ₃ Ti ₂ rt	Cu ₃ Ti ₂ ,tP10,129	<i>P4/nmm</i>	0.313,0.313,1.395,90,90,90	b.c.c. family	-	6.96	X	2784
Cu-Ti	Cu ₄ Ti	Au ₄ Zr,oP20,62	<i>Pnma</i>	0.45,0.43,1.29,90,90,90	close-packed structure	-	8.04	A	18253
Cu-Ti	Cu ₄ Ti ₃	Cu ₄ Ti ₃ ,tI14,139	<i>I4/mmm</i>	0.313,0.313,1.994,90,90,90	b.c.c. family	-	6.76	X	2784
Cu-Ti	Cu _{0.997} Ti _{0.003}	Cu,cF4,225	<i>Fm-3m</i>	0.36122,0.36122,0.36122,90,90,90	close-packed structure	-	9.02	X	252
Cu-Tm	CuTm rt	CsCl,cP2,221	<i>Pm-3m</i>	0.3406,0.3406,0.3406,90,90,90	b.c.c. family	gray silver	9.77	X	13240
Cu-Tm	Cu ₂ Tm	KHg ₂ ,oI12,74	<i>Imma</i>	0.4267,0.6713,0.7248,90,90,90	AlB ₂ family	-	9.47	A	27462
Cu-Tm	Cu ₅ Tm	Be ₅ Au,cF24,216	<i>F-43m</i>	0.6991,0.6991,0.6991,90,90,90	Friauf-Laves phase	-	9.46	X	4616
Cu-U	Cu ₅ U	Be ₅ Au,cF24,216	<i>F-43m</i>	0.704,0.704,0.704,90,90,90	Friauf-Laves phase	-	10.58	X	8345
Cu-W	Cu _{0.84} W _{0.16}	Cu,cF4,225	<i>Fm-3m</i>	0.335,0.335,0.335,90,90,90	close-packed structure	-	14.63	X	33387
Cu-Y	CuY lt	FeB-b,oP8,62	<i>Pnma</i>	0.707,0.451,0.538,90,90,90	CrB(III)-FeB	-	5.90	A	27464
Cu-Y	CuY rt	CsCl,cP2,221	<i>Pm-3m</i>	0.34765,0.34765,0.34765,90,90,90	b.c.c. family	-	6.03	X	59438
Cu-Y	Cu _{0.971} Y _{0.029}	Cu,cF4,225	<i>Fm-3m</i>	0.36158,0.36158,0.36158,90,90,90	close-packed structure	-	9.03	X	33370
Cu-Y	Cu ₂ Y rt	KHg ₂ ,oI12,74	<i>Imma</i>	0.4301,0.6851,0.7288,90,90,90	AlB ₂ family	-	6.68	X	59438
Cu-Y	Cu ₃ Y ₂ m	* _o *** *	-	0.745,0.89,0.948,90,90,90	-	-	-	N	34627
Cu-Y	Cu ₅ Y	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5005,0.5005,0.4097,90,90,120	-	-	7.60	X	5528
Cu-Y	Cu ₅ Y _{1.25}	Cu ₅ Y _{1.25} ,mP16,10	<i>P12/m1</i>	0.5,0.4105,0.8765,90,91.09,90	-	-	7.92	X	54343
Cu-Y	Cu _{5.34} Y _{0.83}	Cu _{5.44} Tb _{0.78} ,hP8,191	<i>P6/mmm</i>	0.49771,0.49771,0.4128,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	7.75	X	37763
Cu-Y	Cu ₅₁ Y ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.1569,1.1569,0.8674,90,90,120	-	-	7.41	X	54343
Cu-Y	Cu ₉ Y m	* _o *** *	-	0.9623,1.6667,1.6667,90,90,90	-	-	-	N	26961
Cu-Y	Cu ₉ Y ₂ tf	* _t IP*,130	<i>P4/ncc</i>	0.502,0.502,1.398,90,90,90	-	-	-	N	34628
Cu-Yb	CuYb	FeB-b,oP8,62	<i>Pnma</i>	0.75653,0.42553,0.57667,90,90,90	CrB(III)-FeB	gray	8.47	X	34091
Cu-Yb	Cu _{0.99} Yb _{0.01}	Cu,cF4,225	<i>Fm-3m</i>	0.36162,0.36162,0.36162,90,90,90	close-packed structure	-	9.08	X	25952
Cu-Yb	Cu ₂ Yb hp	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.526,0.526,0.8567,90,90,120	Friauf-Laves phase	-	9.71	A	18912
Cu-Yb	Cu ₂ Yb	KHg ₂ ,oI12,74	<i>Imma</i>	0.4291,0.6899,0.7386,90,90,90	AlB ₂ family	-	9.12	X	5899
Cu-Yb	Cu ₂₃ Yb ₆ hp	Th ₆ Mn ₂₃ ,cF116,225	<i>Fm-3m</i>	1.203,1.203,1.203,90,90,90	-	-	9.54	A	16981
Cu-Yb	Cu _{4.5} Yb	* _m S7448,5	<i>C121</i>	4.8961,4.8994,4.5643,90,91.24,90	-	-	-	N	31955
Cu-Yb	Cu ₅ Yb hp	Be ₅ Au,cF24,216	<i>F-43m</i>	0.6973,0.6973,0.6973,90,90,90	Friauf-Laves phase	-	9.61	A	34649
Cu-Yb	Cu ₅ Yb rt	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.4995,0.4995,0.4176,90,90,120	-	-	9.03	X	35962
Cu-Yb	Cu _{5.36} Yb _{0.82}	Cu _{5.36} Yb _{0.82} ,hP14,191	<i>P6/mmm</i>	0.5004,0.5004,0.4118,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	8.97	X	6601
Cu-Zn	CuZn rt	CsCl,cP2,221	<i>Pm-3m</i>	0.29582,0.29582,0.29582,90,90,90	b.c.c. family	-	8.27	X	4806
Cu-Zn	Cu _{0.025} Zn _{0.975}	Mg,hP2,194	<i>P6₃/mmc</i>	0.26773,0.26773,0.48317,90,90,120	close-packed structure	-	7.23	X	2091
Cu-Zn	Cu _{0.2} Zn _{0.8}	Mg,hP2,194	<i>P6₃/mmc</i>	0.27383,0.27383,0.42939,90,90,120	close-packed structure	-	7.74	X	1590
Cu-Zn	Cu _{0.53} Zn _{0.47} ht	W,cI2,229	<i>Im-3m</i>	0.2955,0.2955,0.2955,90,90,90	zhanghengite	-	8.29	X	6726
Cu-Zn	Cu _{0.7} Zn ₂ ht	Cu _{0.7} Zn ₂ ,hP3,187	<i>P-6m2</i>	0.4275,0.4275,0.259,90,90,120	AlB ₂ family	-	7.10	X	6206
Cu-Zn	Cu _{0.85} Zn _{0.15} rt	Cu,cF4,225	<i>Fm-3m</i>	0.3649,0.3649,0.3649,90,90,90	close-packed structure	-	8.73	X	58272
Cu-Zn	Cu ₅ Zn ₈	Cu ₅ Zn ₈ ,cI52,217	<i>I-43m</i>	0.8856,0.8856,0.8856,90,90,90	γ-brass	-	8.04	X	45929
Cu-Zr	CuZr ht	CsCl,cP2,221	<i>Pm-3m</i>	0.3262,0.3262,0.3262,90,90,90	b.c.c. family	-	7.40	X	13241
Cu-Zr	CuZr mon1	TiNi,mP4,11	<i>P12₁/m1</i>	0.3299,0.4177,0.5212,90,104.22,90	-	-	7.38	X	55008
Cu-Zr	CuZr mon2	CuZr,mS16,8	<i>C1m1</i>	0.6356,0.8504,0.534,90,105.51,90	-	-	7.39	X	55008
Cu-Zr	CuZr ₂ ht	CuZr ₂ ,tI6,139	<i>I4/mmm</i>	0.3218,0.3218,1.118,90,90,90	close-packed structure	-	7.06	X	44574
Cu-Zr	CuZr ₂ rt	* _t IP150,*	-	1.592,1.592,1.132,90,90,90	-	-	-	N	19595
Cu-Zr	Cu _{0.5} Zr _{0.5} ht Zr+	Cu,cF4,225	<i>Fm-3m</i>	0.421,0.421,0.421,90,90,90	close-packed structure	-	6.89	X	19595
Cu-Zr	Cu ₁₀ Zr ₇	Zr ₇ Ni ₁₀ ,oS68,64	<i>Cmce</i>	1.2675,0.9313,0.9347,90,90,90	-	-	7.67	A	14089
Cu-Zr	Cu _{2.4} Zr ₁₃ ht	* _o *37,*	-	0.646,0.7912,1.119,90,90,90	-	-	-	N	19595
Cu-Zr	Cu ₅ Zr	Be ₅ Au,cF24,216	<i>F-43m</i>	0.687,0.687,0.687,90,90,90	Friauf-Laves phase	-	8.38	X	12982
Cu-Zr	Cu ₅ Zr ₈ ht	* _o *26,*	-	0.5641,0.7806,1.121,90,90,90	-	-	-	N	19595
Cu-Zr	Cu ₅₁ Zr ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.1241,1.1241,0.828,90,90,120	-	-	8.28	A	58282
Cu-Zr	Cu ₈ Zr ₅ ht	Cu ₈ Hf ₅ ,oP44,62	<i>Pnma</i>	0.78693,0.81547,0.99848,90,90,90	-	-	8.11	A	8939
D-Dy	DyD _{0.2} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.3594,0.3594,0.5655,90,90,120	close-packed structure	-	8.55	F	14102
D-Dy	DyD _{2.01}	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.5206,0.5206,0.5206,90,90,90	fluorite family	-	7.84	X	59767
D-Dy	DyD ₃	HoH ₃ ,hP24,165	<i>P-3c1</i>	0.63442,0.63442,0.65984,90,90,120	-	-	7.30	X	36717
D-Er	ErD _{1.93}	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.5116,0.5116,0.5116,90,90,90	fluorite family	blue dark	8.49	X	46385
D-Er	ErD _{2.1}	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.51166,0.51166,0.51166,90,90,90	fluorite family	-	8.50	X	47057
D-Er	ErD ₃	HoH ₃ ,hP24,165	<i>P-3c1</i>	0.62577,0.62577,0.65146,90,90,120	-	-	7.82	X	52551
D-Eu	EuD ₂	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.6239,0.3796,0.7196,90,90,90	-	violet	6.08	X	37661

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
D-F	DF It	HCl, oS8,36	<i>Cmc2₁</i>	0.331,0.522,0.426,90,90,90	-	-	1.90	X	8625
D-Fe	FeD	FeH, hP14,194	<i>P6₃/mmc</i>	0.2668,0.2668,0.875,90,90,120	-	-	7.13	X	34580
D-Fe	FeD _{0.42}	NiAs, hP4,194	<i>P6₃/mmc</i>	0.2583,0.2583,0.4176,90,90,120	AlB ₂ family	-	7.80	X	34580
D-Ge	GeD ₄ It	GeH ₄ , oP20,19	<i>P2₁2₁2₁</i>	0.45393,0.73556,0.81593,90,90,90	-	-	1.97	X	50973
D-H	[HD]	*, $\bar{t}$ *,79	<i>I4</i>	0.339,0.339,0.586,90,90,90	-	-	-	N	1480
D-Hf	HfD _{1.628}	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.468,0.468,0.468,90,90,90	fluorite family	-	11.78	X	726
D-Hf	HfD _{1.98}	ThH ₂ , tI6,139	<i>I4/mmm</i>	0.34556,0.34556,0.4345,90,90,90	fluorite family	-	11.68	X	726
D-Ho	HoD _{0.2}	Mg, hP2,194	<i>P6₃/mmc</i>	0.3581,0.3581,0.5633,90,90,120	close-packed structure	-	8.78	F	14102
D-Ho	HoD ₂	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.515,0.515,0.515,90,90,90	fluorite family	-	8.22	X	1862
D-Ho	HoD ₃	HoH ₃ , hP24,165	<i>P-3c1</i>	0.62991,0.62991,0.65538,90,90,120	-	-	7.56	X	52551
D-I	DI It1	HCl, cF52,225	<i>Fm-3m</i>	0.63062,0.63062,0.63062,90,90,90	close-packed structure	-	3.41	X	27775
D-I	DI It2	HBr, oS12,64	<i>Cmce</i>	0.65517,0.60143,0.60835,90,90,90	-	-	3.57	X	27775
D-I	DI It3	HI, aP16,2	<i>P-1</i>	0.84403,0.84562,0.87919,118.410,118.171,90.601-	-	-	3.69	X	27775
D-La	LaD ₂	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.5648,0.5648,0.5648,90,90,90	fluorite family	-	5.27	X	12760
D-La	LaD _{2.50} rt	CeH _{2.43} , tI32,141	<i>I4₁/amd</i>	0.56194,0.56194,1.12732,90,90,90	-	-	5.37	X	32119
D-La	LaD ₃ It4	CeH ₃ , cF44,225	<i>Fm-3m</i>	0.5602,0.5602,0.5602,90,90,90	fluorite family	-	5.48	X	11474
D-La	La ₂ D _{4.5} rt	La ₂ H _{4.5} , tI28,139	<i>I4/mmm</i>	0.56175,0.56175,1.13055,90,90,90	-	-	5.34	X	30909
D-Li	LiD	NaCl, cF8,225	<i>Fm-3m</i>	0.40615,0.40615,0.40615,90,90,90	rocksalt family	colorless	0.89	X	18705
D-Lu	LuD _{0.19} rt	ScH _{0.33} , hP6,194	<i>P6₃/mmc</i>	0.3523,0.3523,0.5607,90,90,120	-	-	9.66	A	8186
D-Lu	LuD ₂	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.5022,0.5022,0.5022,90,90,90	fluorite family	-	9.39	X	10571
D-Mg	MgD ₂ hp	Fe ₂ N _{0.94} , oP12,60	<i>Pbcn</i>	0.45056,0.54212,0.49183,90,90,90	-	-	1.57	X	36122
D-Mg	MgD ₂	TiO ₂ , tP6,136	<i>P4₂/mnm</i>	0.45029,0.45029,0.30126,90,90,90	-	-	1.54	X	53412
D-Mn	MnD _{0.65}	NiAs, hP4,194	<i>P6₃/mmc</i>	0.268,0.268,0.435,90,90,120	AlB ₂ family	-	6.90	X	11386
D-Mn	Mn ₂ D	CdI ₂ , hP3,164	<i>P-3m1</i>	0.268,0.268,0.435,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.87	X	18569
D-N	[ND ₃] hp1	Mg, hP2,194	<i>P6₃/mmc</i>	0.3588,0.3588,0.587,90,90,120	close-packed structure	-	1.02	X	16983
D-N	[ND ₃] hp2	[NH ₃], oP16,19	<i>P2₁2₁2₁</i>	0.31868,0.52559,0.55433,90,90,90	-	-	1.43	X	54125
D-N	[ND ₃] It	[NH ₃], cP16,198	<i>P2₁3</i>	0.5035,0.5035,0.5035,90,90,90	-	-	1.04	X	16983
D-Na	NaD	NaCl, cF8,225	<i>Fm-3m</i>	0.48714,0.48714,0.48714,90,90,90	rocksalt family	-	1.44	X	51104
D-Nb	NbD	VH _{0.5} , cI14,229	<i>Im-3m</i>	0.344,0.344,0.344,90,90,90	-	-	7.74	X	45690
D-Nb	NbD _{0.95} rt	NbH _{0.95} , oP8,48	<i>Pnnn</i>	0.3447,0.486,0.486,90,90,90	-	-	7.74	X	4166
D-Nb	NbD _{1.9} rt	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.454,0.454,0.454,90,90,90	fluorite family	-	6.87	X	25917
D-Nd	NdD ₂	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.5453,0.5453,0.5453,90,90,90	fluorite family	brown dark	6.07	X	12760
D-Nd	NdD ₃	NdH ₃ , hP26,165	<i>P-3c1</i>	0.66581,0.66581,0.68778,90,90,120	-	brown dark	5.67	X	37770
D-Nd	Nd ₂ D _{4.54} rt	Nd ₂ H _{4.54} , tI28,141	<i>I4₁/amd</i>	0.54254,0.54254,1.08819,90,90,90	-	-	6.17	X	39358
D-Ni	NiD _{0.75}	NaCl, cF8,225	<i>Fm-3m</i>	0.372,0.372,0.372,90,90,90	rocksalt family	-	7.77	X	11386
D-O	[D ₂ O] hp II	[H ₂ O], hR108,148	<i>R-3</i>	1.28708,1.28708,0.61827,90,90,120	ice-D II	-	1.35	X	53314
D-O	[D ₂ O] hp III	[H ₂ O], tP60,92	<i>P4₂1,2</i>	0.673,0.673,0.683,90,90,90	ice-D III	-	1.29	X	7356
D-O	[D ₂ O] hp IV	[H ₂ O], hR240,167	<i>R-3c</i>	0.86238,0.86238,1.6934,90,90,120	ice-D IV	-	1.46	X	43202
D-O	[D ₂ O] hp IX	[H ₂ O], tP36,92	<i>P4₂1,2</i>	0.66748,0.66748,0.66838,90,90,90	ice-D IX	-	1.34	X	53314
D-O	[D ₂ O] hp VI	[H ₂ O], tP50,137	<i>P4₂/mnc</i>	0.6186,0.6186,0.57157,90,90,90	ice-D VI	-	1.52	X	53314
D-O	[D ₂ O] hp VII	[H ₂ O], cP10,224	<i>Pn-3m</i>	0.33501,0.33501,0.33501,90,90,90	ice-D VII	-	1.77	X	17972
D-O	[D ₂ O] hp VIII	[H ₂ O], tI24,141	<i>I4₁/amd</i>	0.46744,0.46744,0.67972,90,90,90	ice-D VIII	-	1.79	X	29333
D-O	[D ₂ O] hp XII	[H ₂ O], tI60,122	<i>I-42d</i>	0.8304,0.8304,0.4024,90,90,90	ice-D XII	-	1.44	X	35173
D-O	[D ₂ O] hp XIII	[H ₂ O], mP84,14	<i>P12₁/c1</i>	1.0297,0.74724,0.92417,90,109.687,90	ice-D XIII	-	1.39	X	48390
D-O	[D ₂ O] hp XIV	[H ₂ O], oP44,19	<i>P2₁2₁2₁</i>	0.40825,0.81391,0.83499,90,90,90	ice-D XIV	-	1.44	X	48390
D-O	[D ₂ O] hp XV	[H ₂ O], aP30,2	<i>P-1</i>	0.57903,0.62323,0.62438,90.08.90.06.90.01	ice-D XV	-	1.48	X	54201
D-O	[D ₂ O] hp XVI	[H ₂ O], cF680,227	<i>Fd-3m</i>	1.7124,1.7124,1.7124,90,90,90	ice-D I cubic	-	0.90	X	64424
D-O	[D ₂ O] It (KOD)	[H ₂ O], oS24,36	<i>Cmc2₁</i>	0.45019,0.77978,0.73280,90,90,90	-	-	1.03	X	17971
D-O	[D ₂ O] It hex	[H ₂ O], hP20,194	<i>P6₃/mmc</i>	0.45222,0.45222,0.73638,90,90,120	ice-D I hexagonal	-	1.02	X	52131
D-O	[D ₂ O ₂] It	[H ₂ O ₂], tP16,92	<i>P4₂1,2</i>	0.4035,0.4035,0.797,90,90,90	-	-	1.84	X	8957
D-Pd	PdD _{0.038} rt	NaCl, cF8,225	<i>Fm-3m</i>	0.39033,0.39033,0.39033,90,90,90	rocksalt family	-	11.89	X	62620
D-Pd	PdD _{0.65} rt	PdH _{0.65} , cP64,223	<i>Pm-3n</i>	0.8036,0.8036,0.8036,90,90,90	-	-	11.03	X	30396
D-Pd	PdD _{0.78} It	PdH _{0.78} , tI20,87	<i>I4/m</i>	0.6391,0.6391,0.4052,90,90,90	-	-	10.83	X	31949
D-Pr	PrD _{1.95}	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.5491,0.5491,0.5491,90,90,90	fluorite family	-	5.81	X	18386
D-Pr	Pr ₂ D _{4.72}	Nd ₂ H _{4.72} , tI28,109	<i>I4₁md</i>	0.5463,0.5463,1.0992,90,90,90	-	-	5.90	A	16012
D-Pu	PuD _{2.25}	BiF ₃ , cF16,225	<i>Fm-3m</i>	0.5344,0.5344,0.5344,90,90,90	fluorite family	-	10.82	X	17369
D-Rb	RbD	NaCl, cF8,225	<i>Fm-3m</i>	0.60255,0.60255,0.60255,90,90,90	rocksalt family	-	2.66	X	57339
D-S	[D ₂ S] It2	[H ₂ S], cP4,205	<i>Pa-3</i>	0.57647,0.57647,0.57647,90,90,90	-	-	1.25	X	24144
D-S	[D ₂ S] It3	[H ₂ S], oP24,57	<i>Pbcm</i>	0.4076,1.33801,0.67215,90,90,90	-	-	1.31	X	24144
D-Sc	ScD _{0.33}	ScH _{0.33} , hP6,194	<i>P6₃/mmc</i>	0.3338,0.3338,0.5299,90,90,120	-	-	2.96	X	16263
D-Sc	ScD ₂ rt	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.47774,0.47774,0.47774,90,90,90	fluorite family	-	2.98	X	53879
D-Sc	ScD _{2.87} hp	ScH _{2.9} , hP10,194	<i>P6₃/mmc</i>	0.3361,0.3361,0.6101,90,90,120	-	-	2.82	X	48256
D-Se	[D ₂ Se]	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.5973,0.5973,0.5973,90,90,90	fluorite family	-	2.59	X	203
D-Si	SiD ₄ It1	*, $\bar{t}$ P*,*	-	1.263,1.263,1.434,90,90,90	-	-	-	N	10056
D-Sm	SmD ₂	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.5362,0.5362,0.5362,90,90,90	fluorite family	-	6.65	X	14255
D-Sm	SmD ₃	HoH ₃ , hP24,165	<i>P-3c1</i>	0.6539,0.6539,0.6767,90,90,120	-	-	6.22	X	49084
D-Sm	Sm ₃ D ₇	*, $\bar{t}$ *,87	<i>I4/m</i>	0.37716,0.37716,0.53503,90,90,90	-	-	-	N	14255
D-Sn	SnD ₄	CF ₄ , mS20,15	<i>C12/c1</i>	0.88743,0.45474,0.8757,90,119.288,90	-	-	2.73	X	50973
D-Sr	SrD ₂	PbCl ₂ , oP12,62	<i>Pnma</i>	0.6361,0.3857,0.7303,90,90,90	-	white	3.40	X	31624
D-Ta	TaD	NbH _{0.95} , oP8,48	<i>Pnnn</i>	0.341,0.482,0.482,90,90,90	-	-	15.34	X	9029
D-Ta	TaD _{0.11} rt	W, cI2,229	<i>Im-3m</i>	0.3324,0.3324,0.3324,90,90,90	b.c.c. family	-	16.38	F	8347
D-Ta	TaD _{0.27} ht	W, cI2,229	<i>Im-3m</i>	0.3348,0.3348,0.3348,90,90,90	b.c.c. family	-	16.06	F	8347
D-Ta	TaD _{0.5} rt	TaH _{0.5} , oS8,21	<i>C222</i>	0.3398,0.4738,0.4763,90,90,90	-	-	15.76	X	16939
D-Ta	TaD _{0.665}	*, $\bar{m}$ S*,*	-	0.3394,0.3447,0.3394,90.90.4.90	-	-	-	N	8347
D-Ta	Ta ₂ D rt	Ta ₂ H, oS6,21	<i>C222</i>	0.3409,0.4750,0.4773,90,90,90	-	-	15.64	X	18402
D-Ta	Ta ₄ D ₃	Ta ₄ H ₃ , oI14,23	<i>I222</i>	0.341,0.482,0.964,90,90,90	-	-	15.30	X	9029
D-Tb	TbD _{0.2} rt	Mg, hP2,194	<i>P6₃/mmc</i>	0.361,0.361,0.5695,90,90,120	close-packed structure	-	8.23	F	14102
D-Tb	TbD ₂ rt	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.5233,0.5233,0.5233,90,90,90	fluorite family	-	7.55	X	10747

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
D-Tb	TbD ₃	HoH ₃ ,hP24,165	<i>P</i> -3c1	0.63928,0.63928,0.66412,90,90,120	-	-	6.99	X	52551
D-Tb	Tb ₂ D _{4.5} lt	La ₂ H _{4.5} ,tI28,139	<i>I4/mmm</i>	0.52196,0.52196,1.04462,90,90,90	-	-	7.63	X	30352
D-Th	Th ₄ D ₁₅	Cu ₁₅ Si ₄ ,cI76,220	<i>I</i> -43d	0.911,0.911,0.911,90,90,90	-	-	8.42	X	10555
D-Ti	TiD m2	NbH _{0.95} ,oP8,48	<i>Pnnn</i>	0.415,0.434,0.434,90,90,90	-	-	4.24	X	9171
D-Ti	TiD _{0.85} m1	TiH _{0.85} ,oS8,66	<i>Ccm</i>	0.4189,0.4230,0.4584,90,90,90	-	-	4.06	X	20851
D-Ti	TiD _{1.94} lt	ThH ₂ ,tI6,139	<i>I4/mmm</i>	0.31608,0.31608,0.4394,90,90,90	fluorite family	-	3.92	X	26493
D-Ti	TiD ₂ rt	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.44316,0.44316,0.44316,90,90,90	fluorite family	-	3.96	X	42397
D-Tm	TmD _{0.09}	ScH _{0.33} ,hP6,194	<i>P6₃/mmc</i>	0.35463,0.35463,0.5584,90,90,120	-	-	9.24	X	16070
D-Tm	TmD ₃	HoH ₃ ,hP24,165	<i>P</i> -3c1	0.62169,0.62169,0.6477,90,90,120	-	-	8.04	X	52551
D-U	UD ₃ m	Cr ₃ Si ₄ ,cP8,223	<i>Pm</i> -3n	0.4147,0.4147,0.4147,90,90,90	Frank-Kasper phase	-	11.37	X	9810
D-U	UD ₃	UH ₃ ,cP32,223	<i>Pm</i> -3n	0.6635,0.6635,0.6635,90,90,90	-	-	11.10	X	23368
D-V	VD _{0.43} rt	* ₂ tI*,*	-	0.3009,0.3009,0.3287,90,90,90	-	-	5.78	N	6660
D-V	VD _{0.5} ht	VH _{0.5} ,cI14,229	<i>Im</i> -3m	0.314,0.314,0.314,90,90,90	b.c.c. family	-	5.57	X	7283
D-V	VD _{0.5} lt	* ₂ tI*,*	-	0.298,0.298,0.34,90,90,90	-	-	5.71	N	6660
D-V	VD _{0.77} ltI	NbH _{0.95} ,oP8,48	<i>Pnnn</i>	0.3158,0.4466,0.4466,90,90,90	-	-	5.54	X	7577
D-V	VD ₂ rt	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.426,0.426,0.426,90,90,90	fluorite family	-	4.72	X	18924
D-V	V ₂ D rt mon	V ₂ H,mS6,12	<i>C12/m1</i>	0.446,0.3,0.446,90,95.5,90	-	-	5.81	X	7283
D-V	V ₂ D rt tet	V ₂ H _{1.1} ,tI56,141	<i>I4₁/amd</i>	0.6022,0.6022,0.659,90,90,90	-	-	5.78	X	7577
D-V	V ₄ D _{2.88} lt2	V ₄ H ₃ ,oP14,49	<i>Pccm</i>	0.4445,0.6286,0.4445,90,90,90	-	-	5.60	X	7577
D-Y	YD _{0.18}	YH _{0.18} ,hP8,194	<i>P6₃/mmc</i>	0.3665,0.3665,0.5779,90,90,120	-	-	4.41	X	20004
D-Y	YD _{1.96} rt	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.5192,0.5192,0.5192,90,90,90	fluorite family	-	4.41	X	13448
D-Y	YD ₃	DyH ₃ ,hP32,165	<i>P</i> -3c1	0.6344,0.6344,0.65999,90,90,120	-	-	4.11	X	32077
D-Yb	YbD ₂	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.5879,0.3565,0.6758,90,90,90	-	-	8.30	X	16004
D-Yb	YbD _{2.6} ht	BiF ₃ ,cF16,225	<i>Fm</i> -3m	0.5168,0.5168,0.5168,90,90,90	fluorite family	-	8.58	X	18982
D-Yb	Yb ₃ D ₈	Yb ₃ H ₈ ,hP33,162	<i>P</i> -31m	0.63428,0.63428,0.90018,90,90,120	-	black	8.50	X	41568
D-Zr	ZrD orth	TiH _{0.85} ,oS8,66	<i>Ccm</i>	0.4549,0.4618,0.4965,90,90,90	-	-	5.94	X	28910
D-Zr	ZrD _{1.5}	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.4768,0.4768,0.4768,90,90,90	fluorite family	-	5.78	X	1801
D-Zr	ZrD ₂ pyr	ThH ₂ ,tI6,139	<i>I4/mmm</i>	0.3506,0.3506,0.4455,90,90,90	fluorite family	-	5.78	X	37609
Dy-Er	Dy _{0.53} Er _{0.47}	Mg,hP2,194	<i>P6₃/mmc</i>	0.35773,0.35773,0.56182,90,90,120	close-packed structure	-	8.79	X	7327
Dy-F	DyF ₃ ht	HoH ₃ ,hP24,165	<i>P</i> -3c1	0.701,0.701,0.705,90,90,120	-	-	7.29	A	6138
Dy-F	DyF ₃ rt	Fe ₂ C-b,oP16,62	<i>Pnma</i>	0.64545,0.68909,0.43618,90,90,90	-	-	7.52	A	13535
Dy-Fe	DyFe ₂ lt	* ₂ tI**,*	-	0.7314,0.7314,0.7312,90,90,90	-	-	-	N	14341
Dy-Fe	DyFe ₂ rt	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.7327,0.7327,0.7327,90,90,90	Friauf-Laves phase	-	9.26	X	17865
Dy-Fe	DyFe ₃	PuNi ₃ ,hR36,166	<i>R</i> -3m	0.51203,0.51203,2.4521,90,90,120	Laves-CaCu ₅	black brown	8.86	X	56139
Dy-Fe	DyFe ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.49,0.49,0.41,90,90,120	-	-	8.60	X	1246
Dy-Fe	Dy _{1.79} Fe _{16.84} ht	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.833,0.833,0.8065,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	8.44	X	63038
Dy-Fe	Dy ₂ Fe ₁₇ rt	Zn ₁₇ Th ₂ ,hR57,166	<i>R</i> -3m	0.8496,0.8496,1.2412,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	8.18	X	60473
Dy-Fe	Dy ₆ Fe ₂₃	Th ₆ Mn ₂₃ ,cF116,225	<i>Fm</i> -3m	1.256,1.256,1.256,90,90,90	-	-	7.57	A	30346
Dy-Ga	DyGa	TiI ₂ ,oS8,63	<i>Cmcm</i>	0.43,1.089,0.4067,90,90,90	CrB(III)-FeB	-	8.10	X	1345
Dy-Ga	DyGa ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.4194,0.4194,0.4061,90,90,120	AlB ₂ family	-	8.11	X	53174
Dy-Ga	DyGa ₃ ht1	Ta(Rh _{0.33} Pd _{0.67}) ₃ ,hP40,194	<i>P6₃/mmc</i>	0.617,0.617,2.3035,90,90,120	close-packed structure	-	8.13	X	14079
Dy-Ga	DyGa ₃ ht2	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.4271,0.4271,0.4271,90,90,90	close-packed structure	-	7.92	X	59876
Dy-Ga	DyGa ₃ rt	Mg ₃ In,hR48,166	<i>R</i> -3m	0.6169,0.6169,2.7726,90,90,120	close-packed structure	-	8.10	X	14079
Dy-Ga	DyGa ₆	PuGa ₆ ,tP14,125	<i>P4/nbm</i>	0.593,0.593,0.755,90,90,90	-	-	7.27	A	18927
Dy-Ga	Dy ₃ Ga ₂	Gd ₃ Ga ₂ ,tI80,140	<i>I4/mcm</i>	1.1566,1.1566,1.483,90,90,90	-	-	8.40	A	18883
Dy-Ga	Dy ₃ Ga ₅	Tm ₃ Ga ₅ ,oP32,62	<i>Pnma</i>	1.143,0.9652,0.608,90,90,90	-	-	8.28	A	15978
Dy-Ga	Dy ₃ Ga ₃	Cr ₃ B ₃ ,tI32,140	<i>I4/mcm</i>	0.7642,0.7642,1.391,90,90,90	-	-	8.35	X	4490
Dy-Gd	Gd _{0.6} Dy _{0.4} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.3605,0.3605,0.5652,90,90,120	close-packed structure	-	8.32	X	50341
Dy-Ge	DyGe	TiI ₂ ,oS8,63	<i>Cmcm</i>	0.4254,1.0623,0.3904,90,90,90	CrB(III)-FeB	-	8.85	X	21150
Dy-Ge	DyGe _{1.3} rt	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.3918,0.3918,0.41191,90,90,120	AlB ₂ family	-	7.79	X	33420
Dy-Ge	DyGe _{1.591} rt	* ₂ m**,*	-	0.3944,0.68,0.4135,90,90,12.90	-	-	-	N	36074
Dy-Ge	DyGe _{1.85}	DyGe _{1.85} ,oS24,36	<i>Cmc2₁</i>	0.41027,2.9705,0.39316,90,90,90	-	-	8.23	X	22073
Dy-Ge	DyGe _{1.9}	TbGe ₂ ,oS24,65	<i>Cmmm</i>	0.4091,2.9807,0.3987,90,90,90	-	-	8.21	X	23442
Dy-Ge	DyGe ₂	* ₂ ,oP*,*	-	0.799,0.812,1.489,90,90,90	-	-	-	N	3097
Dy-Ge	DyGe ₃	DyGe ₃ ,oS16,63	<i>Cmcm</i>	0.4042,2.072,0.3919,90,90,90	-	-	7.70	X	25954
Dy-Ge	Dy _{1.04} Ge _{2.96} hp	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.4286,0.4286,0.4286,90,90,90	close-packed structure	-	8.10	X	61526
Dy-Ge	Dy ₁₁ Ge ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	<i>I4/mmm</i>	1.081,1.081,1.629,90,90,90	-	-	8.77	A	2831
Dy-Ge	Dy ₁₁ Ge ₁₈	Dy ₁₁ Ge ₁₈ ,oF232,43	<i>Fdd2</i>	1.3692,6.2997,0.57159,90,90,90	-	-	8.34	X	36090
Dy-Ge	Dy ₃ Ge ₄	Er ₃ Ge ₄ ,oS28,63	<i>Cmcm</i>	0.40242,1.0602,1.4175,90,90,90	-	-	8.54	X	33420
Dy-Ge	Dy ₃ Ge ₃ ht	Sm ₃ Ge ₃ ,hP16,190	<i>P</i> -62c	0.68387,0.68387,0.8293,90,90,120	-	-	8.41	X	53517
Dy-Ge	Dy ₃ Ge ₃ rt	Y ₃ Ge ₃ ,oF64,43	<i>Fdd2</i>	0.5729,1.719,1.3678,90,90,90	-	-	8.39	X	23442
Dy-Ge	Dy ₃ Ge ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.844,0.844,0.633,90,90,120	-	-	8.76	X	4509
Dy-Ge	Dy ₃ Ge ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.7603,1.464,0.768,90,90,90	-	-	8.57	A	57415
Dy-H	DyH _{0.2} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.3592,0.3592,0.5653,90,90,120	close-packed structure	-	8.55	F	14102
Dy-H	DyH ₂	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.51994,0.51994,0.51994,90,90,90	fluorite family	-	7.77	X	28320
Dy-H	DyH ₃	HoH ₃ ,hP24,165	<i>P</i> -3c1	0.6359,0.6359,0.6615,90,90,120	-	-	7.12	A	2211
Dy-Hg	HgDy	CsCl,cP2,221	<i>Pm</i> -3m	0.3676,0.3676,0.3676,90,90,90	b.c.c. family	gray silver	12.14	X	2600
Dy-Hg	Hg ₂ Dy	Cd ₂ Ce,hP3,164	<i>P</i> -3m1	0.4816,0.4816,0.3466,90,90,120	AlB ₂ family	-	13.45	A	3993
Dy-Hg	Hg ₃ Dy	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.6543,0.6543,0.488,90,90,120	close-packed structure	-	14.03	A	3057
Dy-Ho	Dy _{0.5} Ho _{0.5} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.35851,0.35851,0.56338,90,90,120	close-packed structure	-	8.67	X	7327
Dy-I	DyI ₂	CdCl ₂ ,hR9,166	<i>R</i> -3m	0.46178,0.46178,2.0806,90,90,120	-	-	5.40	A	28070
Dy-I	DyI ₃ rt	BiI ₃ ,hR24,148	<i>R</i> -3	0.7488,0.7488,2.0833,90,90,120	-	-	5.35	A	2129
Dy-In	DyIn rt	CsCl,cP2,221	<i>Pm</i> -3m	0.3791,0.3791,0.3791,90,90,90	b.c.c. family	-	8.45	X	15971
Dy-In	DyIn ₃	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.45806,0.45806,0.45806,90,90,90	close-packed structure	-	8.76	X	53400
Dy-In	Dy ₂ In	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.5349,0.5349,0.6675,90,90,120	AlB ₂ family	-	8.83	X	21139
Dy-In	Dy ₃ In	SrPb ₃ ,tP4,123	<i>P4/mmm</i>	0.4602,0.4602,0.4945,90,90,90	close-packed structure	-	9.55	X	1346
Dy-In	Dy ₃ In ₄	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	0.9835,0.799,1.026,90,90,90	-	-	8.75	A	14115
Dy-In	Dy ₃ In ₃	W ₃ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.217,1.217,0.5988,90,90,90	-	-	8.67	X	8130

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a\beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Dy-Ir	DyIr ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7517, 0.7517, 0.7517, 90, 90, 90	Friauf-Laves phase	-	17.11	X	3180
Dy-Ir	DyIr ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3842, 0.3842, 0.3842, 90, 90, 90	close-packed structure	-	21.64	X	19819
Dy-Ir	Dy ₃ Ir	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7187, 0.9237, 0.6344, 90, 90, 90	-	-	10.72	A	11937
Dy-Ir	Dy ₃ Ir ₂	Y ₃ Rh ₂ , tI140, 140	<i>I4/mcm</i>	1.1183, 1.1183, 2.5, 90, 90, 90	-	-	12.97	A	13188
Dy-Ir	Dy ₂ Ir ₂	Mn ₅ C ₂ , mS28, 15	<i>C12/c1</i>	1.5676, 0.6442, 0.7197, 90, 96.89, 90	-	-	11.02	A	13170
Dy-Ir	Dy ₂ Ir ₃ ht	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8172, 0.8172, 0.6334, 90, 90, 120	-	-	12.59	A	15093
Dy-Ir	Dy ₃ Ir ₃ rt	Pu ₃ Rh ₃ , tP32, 130	<i>P4/ncc</i>	1.0866, 1.0866, 0.6276, 90, 90, 90	-	-	12.45	A	13188
Dy-La	La _{0.5} Dy _{0.5} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.36534, 0.36534, 0.58071, 90, 90, 120	close-packed structure	-	7.46	X	8143
Dy-La	La _{0.6} Dy _{0.4} rt	Sm, hR9, 166	<i>R-3m</i>	0.36119, 0.36119, 2.61257, 90, 90, 120	close-packed structure	-	7.51	A	8143
Dy-La	La _{0.9} Dy _{0.1} rt	Nd, hP4, 194	<i>P6₃/mmc</i>	0.38199, 0.38199, 1.2521, 90, 90, 120	close-packed structure	-	5.93	X	8143
Dy-Mg	MgDy	CsCl, cP2, 221	<i>Pm-3m</i>	0.3776, 0.3776, 0.3776, 90, 90, 90	b.c.c. family	gray silver	5.76	X	25548
Dy-Mg	Mg _{0.25} Dy _{0.75} ht	W, cI2, 229	<i>Im-3m</i>	0.3896, 0.3896, 0.3896, 90, 90, 90	b.c.c. family	-	7.19	X	22536
Dy-Mg	Mg _{0.965} Dy _{0.035}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3218, 0.3218, 0.5215, 90, 90, 120	close-packed structure	-	2.07	X	25548
Dy-Mg	Mg _{1.33} Dy _{0.67} Mg+	NaTl, cF16, 227	<i>Fd-3m</i>	0.7402, 0.7402, 0.7402, 90, 90, 90	b.c.c. family	-	4.63	X	3677
Dy-Mg	Mg ₂ Dy	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.60303, 0.60303, 0.97726, 90, 90, 120	Friauf-Laves phase	-	4.56	X	58262
Dy-Mg	Mg ₂ Dy ₅	Ti ₃ Re ₂ , cI58, 217	<i>I-43m</i>	1.1246, 1.1246, 1.1246, 90, 90, 90	-	white silver	3.26	X	2314
Dy-Mg	Mg ₃ Dy rt	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.7296, 0.7296, 0.7296, 90, 90, 90	fluorite family	-	4.03	X	25548
Dy-Mn	DyMn ₁₂	ThMn ₁₂ , tI26, 139	<i>I4/mmm</i>	0.868, 0.868, 0.476, 90, 90, 90	CaCu ₂ -Zr ₄ Al ₃	-	7.61	X	2854
Dy-Mn	DyMn ₂ ht-hp	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.538, 0.538, 0.8767, 90, 90, 120	Friauf-Laves phase	-	8.23	A	30774
Dy-Mn	DyMn ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7582, 0.7582, 0.7582, 90, 90, 90	Friauf-Laves phase	-	8.30	X	55156
Dy-Mn	DyMn ₃	* ₀ * ₀ * ₀	-	0.311, 0.44, 0.718, 90, 90, 90	-	-	-	N	1246
Dy-Mn	Dy ₆ Mn ₂₃	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.2439, 1.2439, 1.2439, 90, 90, 90	-	-	7.73	A	13179
Dy-N	DyN	NaCl, cF8, 225	<i>Fm-3m</i>	0.49028, 0.49028, 0.49028, 90, 90, 90	rocksalt family	-	9.95	X	49587
Dy-N	Dy ₂ N ₃	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	<i>Ia-3</i>	1.058, 1.058, 1.058, 90, 90, 90	-	-	8.23	A	6741
Dy-Nd	Nd _{0.3} Dy _{0.7} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3598, 0.3598, 0.5744, 90, 90, 120	close-packed structure	-	8.10	X	6667
Dy-Nd	Nd _{0.5} Dy _{0.5} rt	Sm, hR9, 166	<i>R-3m</i>	0.36, 0.36, 2.601, 90, 90, 120	close-packed structure	-	7.85	A	6667
Dy-Nd	Nd _{0.7} Dy _{0.3} rt	Nd, hP4, 194	<i>P6₃/mmc</i>	0.3616, 0.3616, 1.1652, 90, 90, 120	close-packed structure	-	7.54	X	6667
Dy-Ni	DyNi	FeB-b, oP8, 62	<i>Pnma</i>	0.703, 0.417, 0.544, 90, 90, 90	CrB(TlI)-FeB	-	9.21	X	6876
Dy-Ni	DyNi ₂ lt	* ₁ * ₂₄ , *	-	0.7134, 0.7134, 0.7146, 90, 90, 90	-	-	-	N	14448
Dy-Ni	DyNi ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7156, 0.7156, 0.7156, 90, 90, 90	Friauf-Laves phase	-	10.15	X	23501
Dy-Ni	DyNi ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.4966, 0.4966, 2.437, 90, 90, 120	Laves-CaCu ₅	gray	9.72	X	58572
Dy-Ni	DyNi ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.4899, 0.4899, 0.3973, 90, 90, 120	-	-	9.17	X	64708
Dy-Ni	Dy _{0.95} Ni _{0.05} rt	TmNi ₂ , cF192, 216	<i>F-43m</i>	1.4282, 1.4282, 1.4282, 90, 90, 90	Friauf-Laves phase	-	9.91	X	47308
Dy-Ni	Dy ₂ Ni ₁₇	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8332, 0.8332, 0.8069, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	-	9.06	X	63038
Dy-Ni	Dy ₂ Ni ₇ hex	Ce ₂ Ni ₇ , hP36, 194	<i>P6₃/mmc</i>	0.4928, 0.4928, 2.41, 90, 90, 120	Laves-CaCu ₅	-	9.64	A	5223
Dy-Ni	Dy ₂ Ni ₇ rhom	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.4946, 0.4946, 3.6191, 90, 90, 120	Laves-CaCu ₅	gray	9.56	X	58526
Dy-Ni	Dy ₃ Ni	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.6863, 0.9553, 0.6302, 90, 90, 90	-	gray	8.78	X	60564
Dy-Ni	Dy ₃ Ni ₂	Dy ₃ Ni ₂ , mS20, 12	<i>C12/m1</i>	1.3321, 0.3662, 0.9512, 90, 105.72, 90	-	-	9.00	X	7817
Dy-O	DyO _{1.5} ht3	NdO _{1.5} , cI26, 229	<i>Im-3m</i>	0.425, 0.425, 0.425, 90, 90, 90	-	-	8.07	A	5758
Dy-O	DyO _{1.5} tf	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.52127, 0.52127, 0.52127, 90, 90, 90	fluorite family	-	8.75	X	52185
Dy-O	Dy ₂ O ₃ ht1	Sm ₂ O ₃ , mS30, 12	<i>C12/m1</i>	1.39, 0.3504, 0.8624, 90, 100.06, 90	-	-	8.99	X	48231
Dy-O	Dy ₂ O ₃ ht2	La ₂ O ₃ , hP10, 194	<i>P-3m1</i>	0.3864, 0.3864, 0.6173, 90, 90, 120	-	-	7.76	A	2506
Dy-O	Dy ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	<i>Ia-3</i>	1.06706, 1.06706, 1.06706, 90, 90, 90	-	white	8.16	X	31469
Dy-Os	DyOs ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5306, 0.5306, 0.8788, 90, 90, 120	Friauf-Laves phase	-	16.83	A	3180
Dy-Os	Dy ₃ Os	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7347, 0.9064, 0.6254, 90, 90, 90	-	-	10.81	A	13171
Dy-P	DyP lt	* ₁ * ₈ , *	-	0.5655, 0.5655, 0.5638, 90, 90, 90	-	-	-	N	4718
Dy-P	DyP rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.5653, 0.5653, 0.5653, 90, 90, 90	rocksalt family	black	7.11	X	4718
Dy-P	DyP ₃	NdP ₃ , mP12, 11	<i>P12₁/m1</i>	0.4901, 0.9396, 0.5338, 90, 102.53, 90	-	black	4.39	X	35543
Dy-Pb	DyPb ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4806, 0.4806, 0.4806, 90, 90, 90	close-packed structure	-	11.73	X	2119
Dy-Pb	Dy ₃ Pb ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8957, 0.8957, 0.6546, 90, 90, 120	-	-	10.47	X	2810
Dy-Pb	Dy ₅ Pb ₄	Sm ₅ Ge ₄ , oP36, 62	<i>Pnma</i>	0.8127, 1.538, 0.8127, 90, 90, 90	-	-	10.73	A	4178
Dy-Pd	DyPd ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.3486, 0.3486, 0.3486, 90, 90, 90	b.c.c. family	-	10.54	X	9233
Dy-Pd	DyPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4066, 0.4066, 0.4066, 90, 90, 90	close-packed structure	-	11.90	X	25591
Dy-Pd	Dy _{0.08} Pd _{0.92} rt	Cu, cF4, 225	<i>Fm-3m</i>	0.3957, 0.3957, 0.3957, 90, 90, 90	close-packed structure	-	11.89	X	27292
Dy-Pd	Dy _{2.125} Pd _{0.875} ht	Dy ₂ (Dy _{0.12} Pd _{0.88}), cF112, 227	<i>Fd-3m</i>	1.3545, 1.3545, 1.3545, 90, 90, 90	-	-	9.37	X	59767
Dy-Pd	Dy _{2.125} Pd _{0.875} rt	Dy _{2.12} Pd _{0.88} , cF144, 227	<i>Fd-3m</i>	1.3529, 1.3529, 1.3529, 90, 90, 90	-	-	9.41	X	8145
Dy-Pd	Dy ₃ Pd ₂	U ₃ Si ₂ , tP10, 127	<i>P4/mbm</i>	0.7767, 0.7767, 0.3893, 90, 90, 90	-	-	9.90	A	7325
Dy-Pd	Dy ₃ Pd ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3131, 1.3131, 0.569, 90, 90, 120	b.c.c. family	-	10.71	A	8116
Dy-Po	DyPo	NaCl, cF8, 225	<i>Fm-3m</i>	0.6214, 0.6214, 0.6214, 90, 90, 90	rocksalt family	-	10.28	X	3080
Dy-Pt	DyPt	FeB-b, oP8, 62	<i>Pnma</i>	0.69687, 0.44808, 0.55436, 90, 90, 90	CrB(TlI)-FeB	-	13.72	A	15080
Dy-Pt	DyPt ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.75966, 0.75966, 0.75966, 90, 90, 90	Friauf-Laves phase	-	16.75	X	1346
Dy-Pt	DyPt ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4072, 0.4072, 0.4072, 90, 90, 90	close-packed structure	-	18.39	X	4622
Dy-Pt	DyPt ₅	* ₀ * ₇₂ , *	-	0.5237, 0.9098, 2.647, 90, 90, 90	-	-	-	N	7645
Dy-Pt	Dy ₂ Pt	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.7101, 0.4747, 0.8731, 90, 90, 90	-	-	11.74	A	11195
Dy-Pt	Dy ₃ Pt	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7049, 0.9485, 0.6417, 90, 90, 90	-	-	10.57	A	11937
Dy-Pt	Dy ₃ Pt ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3107, 1.3107, 0.5673, 90, 90, 120	b.c.c. family	-	14.97	A	10597
Dy-Pt	Dy ₅ Pt ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8367, 0.8367, 0.621, 90, 90, 120	-	-	12.33	A	11195
Dy-Pt	Dy ₅ Pt ₄	Sm ₅ Ge ₄ , oP36, 62	<i>Pnma</i>	0.7452, 1.4533, 0.7526, 90, 90, 90	-	-	12.98	A	11134
Dy-Re	DyRe ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.537, 0.537, 0.8767, 90, 90, 120	Friauf-Laves phase	-	16.23	X	64705
Dy-Rh	DyRh	CsCl, cP2, 221	<i>Pm-3m</i>	0.3401, 0.3401, 0.3401, 90, 90, 90	b.c.c. family	-	11.20	X	7679
Dy-Rh	DyRh ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7488, 0.7488, 0.7488, 90, 90, 90	Friauf-Laves phase	-	11.65	X	7679
Dy-Rh	DyRh ₃ ht	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5144, 0.5144, 0.4294, 90, 90, 120	-	-	11.43	X	7679
Dy-Rh	Dy ₃ Rh	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7142, 0.9397, 0.6276, 90, 90, 90	-	-	9.31	A	7679
Dy-Rh	Dy ₃ Rh ₂	Y ₃ Rh ₂ , tI140, 140	<i>I4/mcm</i>	1.116, 1.116, 2.507, 90, 90, 90	-	-	10.32	A	9419
Dy-Rh	Dy ₃ Rh ₃ ht	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8153, 0.8153, 0.6365, 90, 90, 120	-	-	10.16	A	15093
Dy-Rh	Dy ₃ Rh ₃ rt	* ₀ * ₀ * ₀	-	1.53, 1.53, 1.53, 90, 90, 90	-	-	-	N	7679
Dy-Rh	Dy ₇ Rh ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	0.9749, 0.9749, 0.6107, 90, 90, 120	-	-	9.56	A	7350
Dy-Ru	DyRu ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5275, 0.5275, 0.8854, 90, 90, 120	Friauf-Laves phase	-	11.35	A	17525

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Dy-Ru	Dy _{0.05} Ru _{0.95}	Mg ₂ hP2, 194	$P6_3/mmc$	0.2719, 0.2719, 0.4289, 90, 90, 120	close-packed structure	-	12.60	X	17525
Dy-Ru	Dy ₃ Ru	Fe ₂ C-b, oP16, 62	$Pnma$	0.7275, 0.9175, 0.6247, 90, 90, 90	-	-	9.38	A	17525
Dy-Ru	Dy ₃ Ru ₂	Er ₃ Ru ₂ hP10, 176	$P6_3/m$	0.7953, 0.7953, 0.3972, 90, 90, 120	-	-	10.53	A	23428
Dy-Ru	Dy ₄₄ Ru ₂₅	Y ₄₄ Ru ₂₅ , oP276, 52	$Pnna$	2.795, 1.5125, 1.5125, 90, 90, 90	-	-	10.05	A	23428
Dy-Ru	Dy ₅ Ru ₂	Mn ₃ C ₂ , mS28, 15	$C12/c1$	1.5658, 0.62899, 0.72584, 90, 97.25, 90	-	-	9.50	X	12814
Dy-S	DyS lt	* ₁ t*8,*	-	0.5487, 0.5487, 0.5458, 90, 90, 90	-	-	-	N	15323
Dy-S	DyS rt	NaCl, cF8, 225	$Fm-3m$	0.5485, 0.5485, 0.5485, 90, 90, 90	rocksalt family	orange yellow	7.83	X	2507
Dy-S	DyS ₂ hp1-ht	NdS ₂ , tP24, 117	$P-4b2$	0.7696, 0.7696, 0.7861, 90, 90, 90	-	brown red	6.47	A	5117
Dy-S	DyS ₂ hp2-ht	* _c *24,*	-	0.7809, 0.7809, 0.7809, 90, 90, 90	-	black gray	-	N	5117
Dy-S	DyS ₂ rt	CeSe ₂ , mP12, 14	$P12_1/c1$	0.7844, 0.38912, 0.78063, 90, 90, 106, 90	-	-	6.32	A	58385
Dy-S	Dy ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ , tP58, 86	$P4_2/n$	0.86123, 0.86123, 1.57254, 90, 90, 90	-	-	6.36	A	60350
Dy-S	Dy ₁₂ S _{21.2}	Dy ₁₂ S _{21.2} , mP70, 11	$P12_1/m1$	1.10044, 1.1539, 1.10294, 90, 91, 107, 90	-	red	6.24	X	29432
Dy-S	Dy ₂ S ₃ ht1	Th ₂ S ₃ , oP20, 62	$Pnma$	1.06245, 0.38659, 1.04436, 90, 90, 90	-	black	6.52	X	26863
Dy-S	Dy ₂ S ₃ mon	Ho ₂ S ₃ , mP30, 11	$P12_1/m1$	1.017, 0.402, 1.757, 90, 98.5, 90	-	-	5.91	A	1189
Dy-S	Dy ₂ S ₃ rt	Cr ₃ C ₂ -b, oP20, 62	$Pnma$	0.7284, 0.3881, 1.5143, 90, 90, 90	-	brown red	6.54	X	24280
Dy-S	Dy _{2.67} S ₄ ht2	Th ₃ P ₄ , cI28, 220	$I-43d$	0.8308, 0.8308, 0.8308, 90, 90, 90	-	black	6.51	A	11688
Dy-S	Dy ₅ S ₇	Y ₅ S ₇ , mS24, 12	$C12/m1$	1.279, 0.381, 1.156, 90, 104.85, 90	-	black	6.32	A	3846
Dy-S	Dy ₈ S _{14.9}	Y ₈ S _{14.8} , mS174, 5	$C121$	1.54, 1.5789, 1.1584, 90, 90, 34, 90	-	red	6.29	X	59178
Dy-Sb	DySb lt	* ₁ t**,*	-	0.6154, 0.6154, 0.6113, 90, 90, 90	-	-	-	N	4718
Dy-Sb	DySb rt	NaCl, cF8, 225	$Fm-3m$	0.6155, 0.6155, 0.6155, 90, 90, 90	rocksalt family	gray	8.10	X	21721
Dy-Sb	DySb ₂ hp	HoSb ₂ , oS6, 21	$C222$	0.3273, 0.5888, 0.7965, 90, 90, 90	-	-	8.78	A	4513
Dy-Sb	Dy ₂ Sb ₅	Dy ₂ Sb ₅ , mP28, 11	$P12_1/m1$	1.3066, 0.41627, 1.4584, 90, 102.213, 90	-	-	8.00	X	40009
Dy-Sb	Dy ₄ Sb ₃ rt	Th ₃ P ₄ , cI28, 220	$I-43d$	0.924, 0.924, 0.924, 90, 90, 90	-	-	8.55	A	40741
Dy-Sb	Dy ₅ Sb ₃ hex	Mn ₅ Si ₃ , hP16, 193	$P6_3/mcm$	0.888, 0.888, 0.627, 90, 90, 120	-	-	9.14	X	26172
Dy-Sb	Dy ₅ Sb ₃ orth	Yb ₅ Sb ₃ , oP32, 62	$Pnma$	1.1942, 0.8984, 0.7896, 90, 90, 90	-	-	9.23	A	57133
Dy-Se	Sc _{0.5} Dy _{0.5} rt	Mg ₂ hP2, 194	$P6_3/mmc$	0.346, 0.346, 0.547, 90, 90, 120	close-packed structure	-	6.07	X	25246
Dy-Se	DySe lt	* ₁ t*8,*	-	0.5697, 0.5697, 0.5677, 90, 90, 90	-	-	-	N	15323
Dy-Se	DySe rt	NaCl, cF8, 225	$Fm-3m$	0.569, 0.569, 0.569, 90, 90, 90	rocksalt family	orange yellow	8.71	X	15323
Dy-Se	DySe tf	ZnO, hP4, 186	$P6_3/mc$	0.4, 0.4, 0.698, 90, 90, 120	adamantane structure	-	8.29	X	10935
Dy-Se	DySe _{1.84} tet	UAs ₂ , oP6, 129	$P4/nmm$	0.40124, 0.40124, 0.8261, 90, 90, 90	-	-	7.69	X	27073
Dy-Se	DySe _{1.84}	DySe _{1.84} , oP6, 31	$Pmm2_1$	0.39912, 0.8206, 0.39863, 90, 90, 90	-	-	7.83	X	33041
Dy-Se	DySe ₂ mon	CeSe ₂ , mP12, 14	$P12_1/c1$	0.82276, 0.40551, 0.81939, 90, 90, 09, 90	-	-	7.79	A	58385
Dy-Se	Dy _{0.67} Se ht	NaCl, cF8, 225	$Fm-3m$	0.579, 0.579, 0.579, 90, 90, 90	rocksalt family	black brown	6.43	X	2082
Dy-Se	Dy _{0.75} Se	Sc _{0.685} S, hR12, 166	$R-3m$	0.40429, 0.40429, 1.97981, 90, 90, 120	-	blue	7.14	A	3836
Dy-Se	Dy ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ , tP58, 86	$P4_2/n$	0.89871, 0.89871, 1.64828, 90, 90, 90	-	-	7.80	A	60350
Dy-Se	Dy ₂ Se ₃ rt	Th ₂ S ₃ , oP20, 62	$Pnma$	1.1077, 0.4007, 1.0912, 90, 90, 90	-	black	7.71	X	10177
Dy-Se	Dy _{2.67} Se ₄ ht1	Th ₃ P ₄ , cI28, 220	$I-43d$	0.862, 0.862, 0.862, 90, 90, 90	-	-	7.77	A	4969
Dy-Se	Dy ₃ Se ₄ ht	Th ₃ P ₄ , cI28, 220	$I-43d$	0.867, 0.867, 0.867, 90, 90, 90	-	brown	8.19	A	15004
Dy-Se	Dy ₈ Se _{14.8}	Gd ₈ Se _{14.9} , oS150, 38	$Amm2$	1.2036, 1.606, 1.6475, 90, 90, 90	-	gray silver	7.72	X	50586
Dy-Si	DySi ht	FeB-b, oP8, 62	$Pnma$	0.78604, 0.38018, 0.56614, 90, 90, 90	CrB(III)-FeB	gray	7.48	X	55711
Dy-Si	DySi lt mon1	DySi, mP8, 14	$P12_1/c1$	0.38031, 0.78662, 0.68234, 90, 123.85, 90	-	-	7.47	X	57634
Dy-Si	DySi lt mon2	DySi, mS8, 12	$C12/m1$	1.04844, 0.42512, 0.38054, 90, 90, 133, 90	-	-	7.46	X	57634
Dy-Si	DySi rt	TiI ₂ , oS8, 63	$Cmcm$	0.42438, 1.04857, 0.38151, 90, 90, 90	CrB(III)-FeB	-	7.46	X	47581
Dy-Si	DySi _{1.67} ht2	AlB ₂ , hP3, 191	$P6/mmm$	0.383, 0.383, 0.4116, 90, 90, 120	AlB ₂ family	-	6.65	X	40835
Dy-Si	DySi _{1.75} rt	GdSi _{1.4} , oI12, 74	$Imma$	0.3952, 0.4052, 1.338, 90, 90, 90	-	gray	6.56	X	22340
Dy-Si	DySi ₂ ht1	ThSi ₂ , I12, 141	$I4_1/amd$	0.3982, 0.3982, 1.3345, 90, 90, 90	-	-	6.86	A	61134
Dy-Si	Dy ₁₀ Si ₁₇	Dy ₁₀ Si ₁₇ , oI54, 44	$Imm2$	0.82562, 1.9144, 0.66571, 90, 90, 90	-	-	6.64	X	48652
Dy-Si	Dy ₂ Si _{7.7} rt	Ho ₂ Si _{2.67} , oS24, 63	$Cmcm$	0.41955, 2.3811, 0.3805, 90, 90, 90	-	gray	7.00	X	45771
Dy-Si	Dy ₅ Si ₃	Mn ₅ Si ₃ , hP16, 193	$P6_3/mcm$	0.83953, 0.83953, 0.63138, 90, 90, 120	-	-	7.73	X	47944
Dy-Si	Dy ₅ Si ₄	Gd ₅ Si ₄ , oP36, 62	$Pnma$	0.73673, 1.45245, 0.76616, 90, 90, 90	-	-	7.49	X	47581
Dy-Sn	DySn ₂	ZrSi ₂ , oS12, 63	$Cmcm$	0.4377, 1.6158, 0.4283, 90, 90, 90	close-packed structure	-	8.77	X	55531
Dy-Sn	DySn ₃ hp	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4659, 0.4659, 0.4659, 90, 90, 90	close-packed structure	-	8.52	X	6515
Dy-Sn	DySn ₃ ht	DyGe ₃ , oS16, 63	$Cmcm$	0.4378, 2.1807, 0.4339, 90, 90, 90	-	-	8.32	X	51583
Dy-Sn	Dy _{0.941} Sn _{0.059} rt	Mg ₂ hP2, 194	$P6_3/mmc$	0.358, 0.358, 0.5636, 90, 90, 120	close-packed structure	-	8.49	X	26046
Dy-Sn	Dy ₁₁ Sn ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	$I4/mmm$	1.1503, 1.1503, 1.688, 90, 90, 90	-	-	8.85	A	26046
Dy-Sn	Dy ₂ Sn ₅	Er ₂ Ge ₅ , oP14, 59	$Pmmn$	0.4317, 0.4398, 1.899, 90, 90, 90	-	-	8.46	X	51583
Dy-Sn	Dy ₃ Sn ₇ ht	* _o *20,*	-	0.4328, 0.4416, 2.6566, 90, 90, 90	-	-	-	N	27386
Dy-Sn	Dy ₃ Sn ₇ rt	Tb ₃ Sn ₇ , oS28, 65	$Cmmm$	0.4351, 2.6248, 0.4426, 90, 90, 90	close-packed structure	-	8.66	A	51583
Dy-Sn	Dy ₅ Sn ₁₁	Dy ₅ Sn ₁₁ , oI32, 71	$Immm$	0.4328, 0.4411, 4.225, 90, 90, 90	-	-	8.67	X	51583
Dy-Sn	Dy ₃ Sn ₁₃	Dy ₃ Sn ₁₃ , oI36, 71	$Immm$	0.4341, 0.4405, 4.805, 90, 90, 90	-	-	8.51	X	51583
Dy-Sn	Dy ₅ Sn ₃ rt	Mn ₅ Si ₃ , hP16, 193	$P6_3/mcm$	0.8873, 0.8873, 0.6455, 90, 90, 120	-	-	8.82	A	45451
Dy-Sn	Dy ₅ Sn ₄	Sm ₅ Ge ₄ , oP36, 62	$Pnma$	0.796, 1.536, 0.811, 90, 90, 90	-	-	8.62	A	26046
Dy-Te	DyTe ₂	MgZn ₂ , hP12, 194	$P6_3/mmc$	0.5365, 0.5365, 0.883, 90, 90, 120	Friauf-Laves phase	-	10.82	A	2166
Dy-Te	DyTe rt	NaCl, cF8, 225	$Fm-3m$	0.6102, 0.6102, 0.6102, 90, 90, 90	rocksalt family	gray	8.48	X	9354
Dy-Te	DyTe _{1.7} ht	UAs ₂ , tP6, 129	$P4/nmm$	0.427, 0.427, 0.886, 90, 90, 90	-	-	7.80	A	18286
Dy-Te	DyTe _{2.75}	NdTe ₃ , oS16, 63	$Cmcm$	0.428, 2.528, 0.428, 90, 90, 90	-	-	7.36	A	18286
Dy-Te	Dy ₂ Te	Se ₂ Te, oP36, 62	$Pnma$	2.1922, 0.4065, 1.1428, 90, 90, 90	-	-	8.86	X	39073
Dy-Te	Dy ₂ Te ₃ rt	Se ₂ S ₃ , oF80, 70	$Fddd$	0.8637, 1.2216, 2.5911, 90, 90, 90	-	-	6.88	X	2478
Dy-Te	Dy ₂ Te _{4.5} ht	Nd ₂ Te ₅ , oS28, 63	$Cmcm$	0.43, 4.32, 0.43, 90, 90, 90	-	brown	7.48	A	18286
Dy-Th	Th _{0.113} Dy _{0.887} rt	Mg ₂ hP2, 194	$P6_3/mmc$	0.359, 0.359, 0.5689, 90, 90, 120	close-packed structure	-	8.91	X	6793
Dy-Th	Th _{0.43} Dy _{0.57} rt	Cu ₂ cF4, 225	$Fm-3m$	0.505, 0.505, 0.505, 90, 90, 90	close-packed structure	-	9.92	X	4726
Dy-Tl	TlDy lt	CuTi ₂ , tP2, 123	$P4/mmm$	0.352, 0.352, 0.421, 90, 90, 90	b.c.c. family	-	11.68	X	14286
Dy-Tl	TlDy rt	CsCl, cP2, 221	$Pm-3m$	0.3747, 0.3747, 0.3747, 90, 90, 90	b.c.c. family	-	11.58	X	14286
Dy-Tl	TlDy ₂	Co _{1.75} Ge, hP6, 194	$P6_3/mmc$	0.5301, 0.5301, 0.6652, 90, 90, 120	AlB ₂ family	-	10.86	X	21110
Dy-Tl	Tl ₃ Dy	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4672, 0.4672, 0.4672, 90, 90, 90	close-packed structure	-	12.63	X	3057
Dy-Tl	Tl ₃ Dy ₅ Tl+	Cr ₃ B ₂ , tI32, 140	$I4/mcm$	0.801, 0.801, 1.429, 90, 90, 90	-	-	10.33	A	21110
Dy-Tl	Tl ₃ Dy ₅ Tl-	Mn ₅ Si ₃ , hP16, 193	$P6_3/mcm$	0.891, 0.891, 0.656, 90, 90, 120	-	-	10.50	A	21110
Dy-Tl	Tl ₅ Dy ₃	Pu ₃ Pd ₅ , oS32, 63	$Cmcm$	0.995, 0.803, 1.033, 90, 90, 90	-	-	12.15	A	14115

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Dy-Y	Y _{0.17} Dy _{0.83} rt	Mg,hP2,194	$P6_3/mmc$	0.361,0.361,0.566,90,90,120	close-packed structure	-	7.80	X	5415
Dy-Zn	ZnDy lt	CuTi,tP2,123	$P4/mmm$	0.3564,0.3564,0.3553,90,90,90	b.c.c. family	-	8.38	X	8337
Dy-Zn	ZnDy rt	CsCl,cP2,221	$Pm-3m$	0.3563,0.3563,0.3563,90,90,90	b.c.c. family	gray silver	8.37	X	8337
Dy-Zn	Zn ₁₁ Dy ₃	La ₃ Al ₁₁ ,oI28,71	$Immm$	0.4395,0.883,1.2922,90,90,90	-	-	7.99	A	5221
Dy-Zn	Zn ₁₂ Dy	ThMn ₁₂ ,tI26,139	$I4/mmm$	0.8872,0.8872,0.5204,90,90,90	CaCu ₂ -Zr ₄ Al ₃	-	7.68	A	2559
Dy-Zn	Zn ₁₇ Dy ₂ Zn+	Th ₂ Ni ₁₇ ,hP38,194	$P6_3/mmc$	0.8956,0.8956,0.8776,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	7.83	X	3487
Dy-Zn	Zn ₁₇ Dy ₂ ht Dy+	Zn ₁₇ Th ₂ ,hR57,166	$R-3m$	0.89658,0.89658,1.31339,90,90,120	CaCu ₂ -Zr ₄ Al ₃	gray	7.83	X	19986
Dy-Zn	Zn ₂ Dy	KHg ₂ ,oI12,74	$Imma$	0.4481,0.7107,0.7619,90,90,90	AlB ₂ family	-	8.03	X	23535
Dy-Zn	Zn ₂₃ Dy ₆	Th ₆ Mn ₂₃ ,cF116,225	$Fm-3m$	1.271,1.271,1.271,90,90,90	-	-	8.02	A	3040
Dy-Zn	Zn ₃ Dy	Zn ₃ Y,oP16,62	$Pnma$	0.67,0.4398,1.006,90,90,90	-	-	8.04	X	3720
Dy-Zn	Zn ₅ Dy	CaCu ₅ ,hP6,191	$P6/mmm$	0.5411,0.5411,0.4199,90,90,120	-	-	7.63	X	7340
Dy-Zn	Zn ₅₇ Dy ₁₃	Zn ₅₇ Dy ₁₃ ,oP280,62	$Pnma$	1.406,1.426,2.47,90,90,90	-	-	7.83	X	41504
Dy-Zr	Dy _{0.5} Zr _{0.5} m	Mg,hP2,194	$P6_3/mmc$	0.34,0.34,0.5375,90,90,120	close-packed structure	-	7.83	X	6777
Er-F	ErF ₃ ht	HoH ₃ ,hP24,165	$P-3c1$	0.697,0.697,0.827,90,90,120	-	-	6.42	A	2997
Er-F	ErF ₃ rt	Fe ₃ C-b,oP16,62	$Pnma$	0.63452,0.68457,0.43895,90,90,90	-	-	7.81	X	46462
Er-Fe	ErFe ₂ hp-ht	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.533,0.533,0.857,90,90,120	Friauf-Laves phase	-	8.79	A	17900
Er-Fe	ErFe ₂ rhom	TbFe ₂ ,hR18,166	$R-3m$	0.51523,0.51523,1.2612,90,90,120	Friauf-Laves phase	-	9.59	A	62313
Er-Fe	ErFe ₂ rt	MgCu ₂ ,cF24,227	$Fd-3m$	0.79,0.79,0.79,90,90,90	Friauf-Laves phase	-	7.52	X	39259
Er-Fe	ErFe ₃	PuNi ₃ ,hR36,166	$R-3m$	0.50897,0.50897,2.4464,90,90,120	Laves-CaCu ₂	-	9.12	A	55545
Er-Fe	Er ₂ Fe ₁₇	Th ₂ Ni ₁₇ ,hP38,194	$P6_3/mmc$	0.8451,0.8451,0.8264,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	8.34	X	60154
Er-Fe	Er ₆ Fe ₂₃	Th ₆ Mn ₂₃ ,cF116,225	$Fm-3m$	1.1994,1.1994,1.1994,90,90,90	-	-	8.81	X	16899
Er-Ga	ErGa	TlI,oS8,63	$Cmcm$	0.426,1.0722,0.4028,90,90,90	CrB(TlI)-FeB	-	8.56	A	27407
Er-Ga	ErGa ₂	AlB ₂ ,hP3,191	$P6/mmm$	0.4186,0.4186,0.4018,90,90,120	AlB ₂ family	-	8.35	X	15132
Er-Ga	ErGa ₃	Cu ₃ Au,cP4,221	$Pm-3m$	0.42149,0.42149,0.42149,90,90,90	close-packed structure	-	8.35	X	63084
Er-Ga	ErGa ₆	PuGa ₆ ,tP14,125	$P4/nbm$	0.591,0.591,0.753,90,90,90	-	-	7.39	A	18927
Er-Ga	Er ₂ Ga ₂	Gd ₃ Ga ₂ ,tI80,140	$I4/mcm$	1.1385,1.1385,1.454,90,90,90	-	-	9.04	A	18883
Er-Ga	Er ₃ Ga ₅	Tm ₃ Ga ₅ ,oP32,62	$Pnma$	1.1309,0.9566,0.6012,90,90,90	-	-	8.68	A	27407
Er-Ga	Er ₅ Ga ₃ ht	Mn ₃ Si ₅ ,hP16,193	$P6_3/mcm$	0.8497,0.8497,0.6377,90,90,120	-	-	8.71	X	4490
Er-Ga	Er ₅ Ga ₃ rt	Ba ₅ Si ₃ ,tP32,130	$P4/ncc$	0.75892,0.75892,1.38545,90,90,90	-	-	8.70	A	60740
Er-Gd	Gd _{0.51} Er _{0.49}	Mg,hP2,194	$P6_3/mmc$	0.3602,0.3602,0.5691,90,90,120	close-packed structure	-	8.42	X	2277
Er-Ge	ErGe	TlI,oS8,63	$Cmcm$	0.42199,1.0581,0.3906,90,90,90	CrB(TlI)-FeB	-	9.13	X	17944
Er-Ge	ErGe _{1.5} ht	AlB ₂ ,hP3,191	$P6/mmm$	0.38845,0.38845,0.4067,90,90,120	AlB ₂ family	-	8.63	X	54353
Er-Ge	ErGe _{1.594} rt	ErGe _{1.59} ,mS6,12	$C12/m1$	0.39208,0.67547,0.40945,90,90,189,90	-	-	8.67	X	50970
Er-Ge	ErGe _{1.83} rt	DyGe _{1.85} ,oS24,36	$Cmc2_1$	0.40526,2.94964,0.38871,90,90,90	-	-	8.58	X	33758
Er-Ge	ErGe ₂ orth	ZrSi ₂ ,oS12,63	$Cmcm$	0.40185,1.58379,0.38802,90,90,90	close-packed structure	-	8.40	A	55141
Er-Ge	ErGe ₂ rt	* ₆ ,m* ₆ *	-	0.3919,0.6748,0.4093,90,90,19,90	-	-	-	N	36172
Er-Ge	ErGe _{2.16}	ErGe _{2.16} ,oS16,63	$Cmcm$	0.4039,1.5662,0.39093,90,90,90	-	-	8.70	X	36128
Er-Ge	ErGe ₃	DyGe ₃ ,oS16,63	$Cmcm$	0.39968,2.0659,0.38843,90,90,90	-	-	7.97	X	31749
Er-Ge	Er ₁₁ Ge ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	$I4/mmm$	1.076,1.076,1.609,90,90,90	-	-	9.15	A	14419
Er-Ge	Er ₂ Ge ₅	Er ₂ Ge ₅ ,oP14,59	$Pmnn$	0.3872,0.3993,1.8125,90,90,90	-	-	8.27	X	36128
Er-Ge	Er ₂₆ Ge _{22.77}	Er ₂₆ Ge _{22.77} ,tP98,129	$P4/nmm$	1.4576,1.4576,1.0228,90,90,90	-	-	9.17	X	22079
Er-Ge	Er ₃ Ge ₄ rt	Er ₃ Ge ₄ ,oS28,63	$Cmcm$	0.39883,1.0513,1.4083,90,90,90	-	-	8.91	X	33478
Er-Ge	Er ₃ Ge ₃	Mn ₃ Si ₃ ,hP16,193	$P6_3/mcm$	0.836,0.836,0.62754,90,90,120	-	-	9.22	X	47822
Er-Ge	Er ₃ Ge ₄	Sm ₃ Ge ₄ ,oP36,62	$Pnma$	0.75448,1.4515,0.76081,90,90,90	-	-	8.98	A	44671
Er-H	ErH _{0.66} rt	Mg,hP2,194	$P6_3/mmc$	0.3566,0.3566,0.3602,90,90,120	close-packed structure	-	14.06	F	60670
Er-H	ErH ₂ rt	CaF ₂ ,cF12,225	$Fm-3m$	0.51288,0.51288,0.51288,90,90,90	fluorite family	blue dark	8.33	X	52164
Er-H	ErH ₃ hp	BiF ₃ ,cF16,225	$Fm-3m$	0.523,0.523,0.523,90,90,90	fluorite family	-	7.91	X	49641
Er-H	ErH ₃	HoH ₃ ,hP24,165	$P-3c1$	0.6264,0.6264,0.652,90,90,120	-	-	7.66	A	60670
Er-Hg	HgEr	CsCl,cP2,221	$Pm-3m$	0.3645,0.3645,0.3645,90,90,90	b.c.c. family	gray silver	12.61	X	2600
Er-Hg	Hg ₂ Er	Hg ₂ U,hP3,191	$P6/mmm$	0.479,0.479,0.3442,90,90,120	AlB ₂ family	-	13.80	X	2249
Er-Hg	Hg ₃ Er	Mg ₃ Cd,hP8,194	$P6_3/mmc$	0.6505,0.6505,0.4866,90,90,120	close-packed structure	-	14.32	A	3057
Er-Ho	Ho _{0.53} Er _{0.47}	Mg,hP2,194	$P6_3/mmc$	0.35692,0.35692,0.56026,90,90,120	close-packed structure	-	8.92	X	7327
Er-I	ErI ₃	BiI ₃ ,hR24,148	$R-3$	0.7451,0.7451,2.078,90,90,120	-	-	5.46	A	2129
Er-I	Er ₄ I ₅	Er ₄ I ₅ ,mS18,12	$C12/m1$	1.8521,0.4015,0.8478,90,103,07,90	-	black	7.05	X	13200
Er-I	Er ₆ I ₇	Er ₆ I ₇ ,mS26,12	$C12/m1$	2.1375,0.3869,1.2319,90,123,50,90	-	black	7.40	X	13721
Er-I	Er ₇ I ₁₀	Er ₇ I ₁₀ ,mS38,12	$C12/m1$	2.0966,0.4187,1.4585,90,96,56,90	-	black	6.37	X	13200
Er-In	ErIn rt	CsCl,cP2,221	$Pm-3m$	0.3745,0.3745,0.3745,90,90,90	b.c.c. family	-	8.92	X	2421
Er-In	ErIn ₃	Cu ₃ Au,cP4,221	$Pm-3m$	0.45658,0.45658,0.45658,90,90,90	close-packed structure	-	8.93	X	53400
Er-In	Er ₂ In	Co _{1.75} Ge,hP6,194	$P6_3/mmc$	0.5297,0.5297,0.6641,90,90,120	AlB ₂ family	-	9.25	X	27527
Er-In	Er ₃ In ₅	Pu ₃ Pd ₅ ,oS32,63	$Cmcm$	0.977,0.7955,1.025,90,90,90	-	-	8.97	A	14115
Er-In	Er ₃ In ₃	Mn ₃ Si ₃ ,hP16,193	$P6_3/mcm$	0.8889,0.8889,0.6558,90,90,120	-	-	8.74	A	4002
Er-Ir	ErIr	CsCl,cP2,221	$Pm-3m$	0.3367,0.3367,0.3367,90,90,90	b.c.c. family	-	15.64	X	22920
Er-Ir	ErIr ₂	MgCu ₂ ,cF24,227	$Fd-3m$	0.7488,0.7488,0.7488,90,90,90	Friauf-Laves phase	-	17.46	X	22920
Er-Ir	Er ₃ Ir	Fe ₃ C-b,oP16,62	$Pnma$	0.716,0.9072,0.6302,90,90,90	-	-	11.26	A	22920
Er-Ir	Er ₃ Ir ₂	Y ₃ Rh ₂ ,tI140,140	$I4/mcm$	1.1047,1.1047,2.4775,90,90,90	-	-	13.63	A	22920
Er-Ir	Er ₅ Ir ₂	Mn ₅ C ₂ ,mS28,15	$C12/c1$	1.5395,0.6385,0.7159,90,96,9,90	-	-	11.61	A	22920
Er-Ir	Er ₃ Ir ₃ ht	Mn ₃ Si ₃ ,hP16,193	$P6_3/mcm$	0.8112,0.8112,0.6295,90,90,120	-	-	13.08	A	22920
Er-Ir	Er ₃ Ir ₃ rt	Pu ₃ Rh ₃ ,tP32,130	$P4/ncc$	1.0754,1.0754,0.6218,90,90,90	-	-	13.05	A	22920
Er-Mg	MgEr ₂ hp	CuZr ₂ ,tI6,139	$I4/mmm$	0.3724,0.3724,1.2452,90,90,90	close-packed structure	gray silver	6.90	X	31809
Er-Mg	Mg _{0.3} Er _{0.7} ht	W,cI2,229	$Im-3m$	0.3833,0.3833,0.3833,90,90,90	b.c.c. family	-	7.34	X	2327
Er-Mg	Mg _{0.96} Er _{1.04}	CsCl,cP2,221	$Pm-3m$	0.3761,0.3761,0.3761,90,90,90	b.c.c. family	gray silver	6.16	X	26414
Er-Mg	Mg _{0.963} Er _{0.035}	Mg,hP2,194	$P6_3/mmc$	0.3215,0.3215,0.5215,90,90,120	close-packed structure	-	2.09	X	26414
Er-Mg	Mg ₂ Er	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.5971,0.5971,0.968,90,90,120	Friauf-Laves phase	-	4.80	X	14050
Er-Mg	Mg ₂₄ Er ₅	Ti ₅ Re ₂₄ ,cI58,217	$I-43m$	1.1263,1.1263,1.1263,90,90,90	-	white silver	3.30	X	44533
Er-Mn	ErMn ₁₂	ThMn ₁₂ ,tI26,139	$I4/mmm$	0.854,0.854,0.474,90,90,90	CaCu ₂ -Zr ₄ Al ₃	-	7.94	X	3692
Er-Mn	ErMn ₂	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.52942,0.52942,0.86444,90,90,120	Friauf-Laves phase	gray olive	8.77	A	43953
Er-Mn	Er ₆ Mn ₂₃	Th ₆ Mn ₂₃ ,cF116,225	$Fm-3m$	1.22,1.22,1.22,90,90,90	-	-	8.29	A	53407
Er-N	ErN	NaCl,cF8,225	$Fm-3m$	0.4842,0.4842,0.4842,90,90,90	rocksalt family	-	10.61	X	12338

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Er-Ni	ErNi	FeB-b, oP8, 62	<i>Pnma</i>	0.699, 0.412, 0.541, 90, 90, 90	CrB(III)-FeB	-	9.63	X	6953
Er-Ni	ErNi ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.71373, 0.71373, 0.71373, 90, 90, 90	Friauf-Laves phase	gray	10.40	X	63393
Er-Ni	ErNi ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.49479, 0.49479, 2.42909, 90, 90, 120	Laves-CaCu ₅	-	9.96	X	45876
Er-Ni	ErNi ₄	PuNi ₄ , mS30, 12	<i>C12/m1</i>	0.4855, 0.8444, 1.0231, 90, 99, 54, 90	-	-	9.69	X	8545
Er-Ni	ErNi ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.4866, 0.4866, 0.3977, 90, 90, 120	-	-	9.38	X	31758
Er-Ni	Er ₁₅ Ni ₃₃ ht-hp	Er ₁₅ Ni ₃₃ , cF192, 216	<i>F-43m</i>	1.42325, 1.42325, 1.42325, 90, 90, 90	Friauf-Laves phase	gray	10.24	X	63393
Er-Ni	Er ₂ Ni ₁₇	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.828, 0.828, 0.801, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.30	X	10760
Er-Ni	Er ₂ Ni ₇ ht	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.4973, 0.4973, 3.611, 90, 90, 120	Laves-CaCu ₅	-	9.60	A	44048
Er-Ni	Er ₂ Ni ₇ rt	Ce ₂ Ni ₇ , hP36, 194	<i>P6₃/mmc</i>	0.4951, 0.4951, 2.421, 90, 90, 120	Laves-CaCu ₅	-	9.63	A	4602
Er-Ni	Er ₃ Ni	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.689, 0.93, 0.61, 90, 90, 90	-	-	9.52	A	49564
Er-Ni	Er ₃ Ni ₂	Er ₃ Ni ₂ , hR45, 148	<i>R-3</i>	0.8472, 0.8472, 1.5680, 90, 90, 120	-	-	9.49	X	7795
Er-Ni	Er ₄ Ni ₁₇	* _h P126, *	-	0.4869, 0.4869, 8.407, 90, 90, 120	-	-	-	N	4005
Er-Ni	Er ₃ Ni ₂₂	* _h P108, *	-	0.4862, 0.4862, 7.177, 90, 90, 120	-	-	-	N	4005
Er-O	ErO _{1.5} tf	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.515, 0.515, 0.515, 90, 90, 90	fluorite family	-	9.30	X	9185
Er-O	Er ₂ O ₃ hp	Sm ₂ O ₃ , mS30, 12	<i>C12/m1</i>	1.38712, 0.34684, 0.85639, 90, 100, 172, 90	-	-	9.40	X	52470
Er-O	Er ₂ O ₃ ht	La ₂ O ₃ , hP5, 164	<i>P-3m1</i>	0.378, 0.378, 0.605, 90, 90, 120	-	-	8.48	A	2509
Er-O	Er ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	<i>Ia-3</i>	1.0536, 1.0536, 1.0536, 90, 90, 90	-	red	8.69	X	25304
Er-Os	ErOs ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5286, 0.5286, 0.8732, 90, 90, 120	Friauf-Laves phase	-	17.22	A	3180
Er-Os	Er ₃ Os	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.734, 0.8927, 0.6183, 90, 90, 90	-	-	11.35	A	13171
Er-P	ErP rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.56, 0.56, 0.56, 90, 90, 90	rocksalt family	-	7.50	X	1939
Er-Pb	ErPb ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4799, 0.4799, 0.4799, 90, 90, 90	close-packed structure	-	11.85	X	7337
Er-Pb	Er ₃ Pb ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8867, 0.8867, 0.6504, 90, 90, 120	-	-	10.93	X	2810
Er-Pb	Er ₃ Pb ₄	Sm ₃ Gd ₄ , oP36, 62	<i>Pnma</i>	0.8081, 1.533, 0.8117, 90, 90, 90	-	-	11.00	A	4240
Er-Pd	ErPd ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.3459, 0.3459, 0.3459, 90, 90, 90	b.c.c. family	-	10.98	X	9233
Er-Pd	ErPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4045, 0.4045, 0.4045, 90, 90, 90	close-packed structure	-	12.21	X	25591
Er-Pd	Er ₁₀ 0.08Pd _{0.92}	Cu ₃ cF4, 225	<i>Fm-3m</i>	0.3942, 0.3942, 0.3942, 90, 90, 90	close-packed structure	-	12.07	X	27292
Er-Pd	Er _{2.2} Pd _{0.88}	Dy _{2.12} Pd _{0.88} , cF144, 227	<i>Fd-3m</i>	1.336, 1.336, 1.336, 90, 90, 90	-	-	10.29	A	7325
Er-Pd	Er ₃ Pd ₂	U ₃ Si ₂ , tP10, 127	<i>P4/mbm</i>	0.767, 0.767, 0.3906, 90, 90, 90	-	-	10.33	A	7325
Er-Pd	Er ₃ Pd ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3, 1.3, 0.5671, 90, 90, 120	b.c.c. family	-	11.13	A	8116
Er-Pt	ErPt	FeB-b, oP8, 62	<i>Pnma</i>	0.6906, 0.4451, 0.5509, 90, 90, 90	CrB(III)-FeB	-	14.21	A	13263
Er-Pt	ErPt ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7576, 0.7576, 0.7576, 90, 90, 90	Friauf-Laves phase	-	17.03	X	5871
Er-Pt	ErPt ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.405, 0.405, 0.405, 90, 90, 90	close-packed structure	-	18.81	X	2421
Er-Pt	ErPt ₅	* _o *72, *	-	0.5229, 0.9085, 2.651, 90, 90, 90	-	-	-	N	7645
Er-Pt	Er ₂ Pt	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.7037, 0.4705, 0.8668, 90, 90, 90	-	-	12.26	X	17233
Er-Pt	Er ₃ Pt	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7008, 0.9373, 0.6374, 90, 90, 90	-	-	11.06	A	11937
Er-Pt	Er ₇ Pt ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3004, 1.3004, 0.5651, 90, 90, 120	b.c.c. family	-	15.44	A	10597
Er-Pt	Er ₃ Pt ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8298, 0.8298, 0.6181, 90, 90, 120	-	-	12.81	A	11195
Er-Pt	Er ₃ Pt ₄	Sm ₃ Gd ₄ , oP36, 62	<i>Pnma</i>	0.7386, 1.4423, 0.7461, 90, 90, 90	-	-	13.51	A	14106
Er-Re	ErRe ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.53731, 0.53731, 0.8777, 90, 90, 120	Friauf-Laves phase	-	16.34	X	64705
Er-Rh	ErRh	CsCl, cP2, 221	<i>Pm-3m</i>	0.3377, 0.3377, 0.3377, 90, 90, 90	b.c.c. family	-	11.65	X	7559
Er-Rh	ErRh ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7465, 0.7465, 0.7465, 90, 90, 90	Friauf-Laves phase	-	11.91	X	7559
Er-Rh	ErRh ₃ ht	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5118, 0.5118, 0.4292, 90, 90, 120	-	-	11.63	X	22211
Er-Rh	Er ₃ Rh	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7075, 0.9235, 0.6218, 90, 90, 90	-	-	9.89	X	6594
Er-Rh	Er ₃ Rh ₂	Y ₃ Rh ₂ , tI140, 140	<i>I4/mcm</i>	1.109, 1.109, 2.488, 90, 90, 90	-	-	10.75	A	9419
Er-Rh	Er ₃ Rh ₃ ht	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8084, 0.8084, 0.6306, 90, 90, 120	-	-	10.66	X	7316
Er-Rh	Er ₇ Rh ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃/mcm</i>	0.9643, 0.9643, 0.607, 90, 90, 120	-	-	10.05	X	6594
Er-Ru	ErRu ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5227, 0.5227, 0.878, 90, 90, 120	Friauf-Laves phase	-	11.81	X	1024
Er-Ru	Er ₁₀ 0.05Ru _{0.95}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2717, 0.2717, 0.4294, 90, 90, 120	close-packed structure	-	12.63	X	17525
Er-Ru	Er ₃ Ru	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7258, 0.903, 0.6203, 90, 90, 90	-	-	9.85	A	23391
Er-Ru	Er ₃ Ru ₂	Er ₃ Ru ₂ , hP10, 176	<i>P6₃/m</i>	0.7875, 0.7875, 0.3931, 90, 90, 120	-	-	11.07	X	24137
Er-Ru	Er ₄₄ Ru ₂₅	Y ₄₄ Ru ₂₅ , oP276, 52	<i>Pnna</i>	2.7775, 1.4998, 1.4998, 90, 90, 90	-	-	10.51	A	23428
Er-Ru	Er ₃ Ru ₂	Mn ₃ C ₂ , mS28, 15	<i>C12/c1</i>	1.5491, 0.6221, 0.7266, 90, 97, 31, 90	-	-	9.93	A	23391
Er-S	ErS rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.5422, 0.5422, 0.5422, 90, 90, 90	rocksalt family	-	8.31	X	18213
Er-S	ErS ₂ hp1-ht	NdS ₂ , tP24, 117	<i>P-4b2</i>	0.763, 0.763, 0.789, 90, 90, 90	-	black gray	6.69	A	11684
Er-S	ErS ₂ lt	* _c ***, *	-	0.7745, 0.7745, 0.7745, 90, 90, 90	-	black gray	-	N	5117
Er-S	ErS ₂ rt	CeSe ₂ , mP12, 14	<i>P12₁/c1</i>	0.781, 0.3862, 0.7774, 90, 89, 96, 90	-	-	6.55	X	58385
Er-S	Er ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ , tP58, 86	<i>P4₂/n</i>	0.85334, 0.85334, 1.56525, 90, 90, 90	-	-	6.65	A	60350
Er-S	Er ₂ S ₃ cub	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	<i>Ia-3</i>	1.25518, 1.25518, 1.25518, 90, 90, 90	-	rose	5.79	X	44860
Er-S	Er ₂ S ₃ hp	Th ₂ S ₃ , oP20, 62	<i>Pnma</i>	1.0526, 0.3824, 1.0374, 90, 90, 90	-	-	6.85	A	9344
Er-S	Er ₂ S ₃ mon1	Tm ₂ S ₃ , mP20, 11	<i>P12₁/m1</i>	1.0901, 0.3896, 1.1167, 90, 108, 804, 90	-	golden	6.37	X	27383
Er-S	Er ₂ S ₃ mon2	Ho ₂ S ₃ , mP30, 11	<i>P12₁/m1</i>	1.0072, 0.3976, 1.7389, 90, 98, 66, 90	-	yellow	6.23	X	39320
Er-S	Er _{2.67} S ₄ m	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8338, 0.8338, 0.8338, 90, 90, 90	-	-	6.59	A	25930
Er-S	Er ₅ S ₇	Y ₅ S ₇ , mS24, 12	<i>C12/m1</i>	1.267, 0.378, 1.148, 90, 104, 75, 90	-	black	6.63	A	3846
Er-Sb	ErSb rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.611, 0.611, 0.611, 90, 90, 90	rocksalt family	gray	8.42	X	23451
Er-Sb	ErSb ₂ hp-ht	HoSb ₂ , oS6, 21	<i>C222</i>	0.3259, 0.5866, 0.7926, 90, 90, 90	-	-	9.00	A	4513
Er-Sb	Er ₄ Sb ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.902, 0.902, 0.902, 90, 90, 90	-	-	9.36	A	16835
Er-Sb	Er ₅ Sb ₃ ht	Yb ₅ Sb ₃ , oP32, 62	<i>Pnma</i>	1.1662, 0.9136, 0.8007, 90, 90, 90	-	-	9.36	X	23045
Er-Sb	Er ₅ Sb ₃ rt orth	Y ₅ Bi ₃ , oP32, 62	<i>Pnma</i>	0.79646, 0.9176, 1.1662, 90, 90, 90	-	-	9.36	X	53231
Er-Sb	Er ₅ Sb ₃ stab?	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.88062, 0.88062, 0.62139, 90, 90, 120	-	-	9.56	X	49564
Er-Se	ErSe rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.5642, 0.5642, 0.5642, 90, 90, 90	rocksalt family	rose	9.11	X	18213
Er-Se	ErSe _{1.5} hp	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.3984, 0.3984, 0.8228, 90, 90, 90	-	-	7.27	X	31974
Er-Se	ErSe ₂ ht	UTe ₂ , oI12, 71	<i>Immm</i>	0.4061, 0.5571, 1.316, 90, 90, 90	-	-	7.25	A	2545
Er-Se	Er _{0.75} Se	Se _{0.685} S, hR12, 166	<i>R-3m</i>	0.40002, 0.40002, 1.9506, 90, 90, 120	-	-	7.53	A	3836
Er-Se	Er _{0.8} Se ht	NaCl, cF8, 225	<i>Fm-3m</i>	0.5649, 0.5649, 0.5649, 90, 90, 90	rocksalt family	brown	7.84	X	3394
Er-Se	Er ₁₀ Se ₁₉ rt	Ce ₁₀ Se ₁₉ , tP58, 86	<i>P4₂/n</i>	0.89098, 0.89098, 1.64114, 90, 90, 90	-	-	8.09	A	60350
Er-Se	Er ₂ Se ₃ rt	Se ₂ S ₃ , oF80, 70	<i>Fddd</i>	0.8093, 1.1357, 2.4186, 90, 90, 90	-	yellow	6.83	X	24745
Er-Se	Er _{2.67} Se ₄ hp	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8581, 0.8581, 0.8581, 90, 90, 90	-	-	8.02	A	4518
Er-Se	Er ₈ Se _{14.7} rt	Er ₈ Se _{14.7} , oS158, 38	<i>Amm2</i>	1.1908, 1.5921, 1.6428, 90, 90, 90	-	gray silver	7.99	X	50586

System	Substance	Prototype	H-M	Unit Cell Parameters <i>a,b,c,aβ,γ</i> (nm, $^{\circ}$)	Family	Color	<i>D_x</i>	C	Ref.
Er-Si	ErSi ht	FeB-b, oP8, 62	<i>Pnma</i>	0.787, 0.38, 0.5648, 90, 90, 90	CrB(TlI)-FeB	-	7.68	A	47581
Er-Si	ErSi rt	TlI, oS8, 63	<i>Cmcm</i>	0.4195, 1.0353, 0.3779, 90, 90, 90	CrB(TlI)-FeB	gray	7.91	X	26158
Er-Si	ErSi _{1.16}	ErSi _{1.67} , oP6, 47	<i>Pmmm</i>	0.38009, 0.40883, 0.65734, 90, 90, 90	AlB ₂ family	-	6.50	X	22052
Er-Si	ErSi _{1.56}	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.37943, 0.37943, 0.40911, 90, 90, 120	AlB ₂ family	-	6.87	X	51061
Er-Si	Er ₂ Si _{2.67}	Ho ₂ Si _{2.67} , oS24, 63	<i>Cmcm</i>	0.416, 2.3615, 0.3774, 90, 90, 90	-	-	7.34	A	47581
Er-Si	Er ₃ Si _{4.7}	Er ₃ Si _{4.7} , oS16, 38	<i>Amn2</i>	0.40872, 1.13516, 0.65739, 90, 90, 90	-	-	6.90	X	49276
Er-Si	Er ₅ Si ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8297, 0.8297, 0.6221, 90, 90, 120	-	-	8.24	X	57142
Er-Si	Er ₅ Si ₄ lt	Gd ₅ (Ge _{0.5} Si _{0.5}) ₄ , mP36, 14	<i>P12₁/c1</i>	1.43752, 0.75571, 0.7346, 90, 92.992, 90	-	-	7.91	X	44644
Er-Si	Er ₅ Si ₄ rt	Gd ₅ Si ₄ , oP36, 62	<i>Pnma</i>	0.72838, 1.43627, 0.75943, 90, 90, 90	-	-	7.93	X	44644
Er-Sn	ErSn ₂	ZrSi ₂ , oS12, 63	<i>Cmcm</i>	0.4346, 1.6038, 0.4265, 90, 90, 90	close-packed structure	-	9.04	X	55531
Er-Sn	ErSn ₃ hp	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.46498, 0.46498, 0.46498, 90, 90, 90	close-packed structure	-	8.64	X	56393
Er-Sn	ErSn ₃ rt	GdSn _{2.75} , oS16, 38	<i>Amn2</i>	0.4329, 0.4367, 2.178, 90, 90, 90	-	-	8.44	A	65088
Er-Sn	Er ₁₁ Sn ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	<i>I4/mmm</i>	1.1434, 1.1434, 1.6739, 90, 90, 90	-	-	9.19	A	57450
Er-Sn	Er ₂ Sn ₅	Er ₂ Ge ₂ , oP14, 59	<i>Pmmn</i>	0.4298, 0.4389, 1.8867, 90, 90, 90	-	-	8.66	A	55519
Er-Sn	Er ₃ Sn ₇	Gd ₃ Sn ₇ , oS20, 65	<i>Cmmm</i>	0.43429, 2.6072, 0.44149, 90, 90, 90	close-packed structure	-	8.85	X	56393
Er-Sn	Er ₅ Sn ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.87333, 0.87333, 0.6369, 90, 90, 120	-	-	9.41	X	37658
Er-Tb	Tb _{0.54} Er _{0.46}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.35862, 0.35862, 0.56438, 90, 90, 120	close-packed structure	-	8.60	X	7327
Er-Tc	ErTc ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.534, 0.534, 0.8792, 90, 90, 120	Friauf-Laves phase	-	11.11	A	2166
Er-Te	ErTe rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.606, 0.606, 0.606, 90, 90, 90	rocksalt family	gray	8.80	X	1447
Er-Te	ErTe ₂	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.4248, 0.4248, 0.8865, 90, 90, 90	-	-	8.77	A	5123
Er-Te	ErTe ₃	NdTe ₃ , oS16, 63	<i>Cmcm</i>	0.431, 2.545, 0.431, 90, 90, 90	-	golden	7.73	A	18291
Er-Te	Er _{0.86} Te	Zr _{0.66} S, cF64, 227	<i>Fd-3m</i>	1.202, 1.202, 1.202, 90, 90, 90	rocksalt family	black	8.31	X	35015
Er-Te	Er ₂ Te ₃ rt	Sc ₂ S ₃ , oF80, 70	<i>Fddd</i>	0.8581, 1.2127, 2.5728, 90, 90, 90	-	black	7.12	X	35450
Er-Th	Th _{0.215} Er _{0.785}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3565, 0.3565, 0.5671, 90, 90, 120	close-packed structure	-	9.64	X	6795
Er-Th	Th _{0.43} Er _{0.57} rt	Cu, cF4, 225	<i>Fm-3m</i>	0.503, 0.503, 0.503, 90, 90, 90	close-packed structure	-	10.18	X	4726
Er-Tl	ErTl lt	CuTi, tP2, 123	<i>I4/mmm</i>	0.347, 0.347, 0.415, 90, 90, 90	b.c.c. family	-	12.35	X	20722
Er-Tl	ErTl rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.3709, 0.3709, 0.3709, 90, 90, 90	b.c.c. family	gray silver	12.09	X	20502
Er-Tl	Tl ₃ Er	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4664, 0.4664, 0.4664, 90, 90, 90	close-packed structure	-	12.77	X	20722
Er-Tl	Tl ₃ Er ₃ Tl+	Cr ₃ B ₃ , tI32, 140	<i>I4/mcm</i>	0.7925, 0.7925, 1.419, 90, 90, 90	-	-	10.80	A	20722
Er-Tl	Tl ₃ Er ₃ Tl-	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8845, 0.8845, 0.652, 90, 90, 120	-	-	10.90	A	20722
Er-Tl	Tl ₄ Er ₃	Pu ₃ Pd ₃ , oS32, 63	<i>Cmcm</i>	0.9901, 0.8058, 1.0314, 90, 90, 90	-	-	12.30	A	20502
Er-Y	Y _{0.5} Er _{0.5}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3605, 0.3605, 0.56604, 90, 90, 120	close-packed structure	-	6.68	X	7327
Er-Zn	ZnEr rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.3535, 0.3535, 0.3535, 90, 90, 90	b.c.c. family	gray silver	8.75	X	46725
Er-Zn	Zn ₁₂ Er	ThMn ₁₂ , tI26, 139	<i>I4/mmm</i>	0.885, 0.885, 0.5195, 90, 90, 90	CaCu ₅ -Zr ₄ Al ₃	-	7.77	X	2559
Er-Zn	Zn ₁₇ Er ₂ ht	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.89465, 0.89465, 1.31199, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	gray	7.92	X	19986
Er-Zn	Zn ₁₇ Er ₂ rt	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8954, 0.8954, 0.8744, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.91	A	46725
Er-Zn	Zn ₂ Er	KH ₂ , oI12, 74	<i>Imma</i>	0.4451, 0.7001, 0.7632, 90, 90, 90	AlB ₂ family	-	8.32	A	46725
Er-Zn	Zn ₂₃ Er ₆	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.263, 1.263, 1.263, 90, 90, 90	-	-	8.27	X	2559
Er-Zn	Zn ₃ Er	Zn ₃ Y, oP16, 62	<i>Pnma</i>	0.6678, 0.4382, 1.0044, 90, 90, 90	-	-	8.21	A	46725
Er-Zn	Zn ₂ Er hex1	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5388, 0.5388, 0.4185, 90, 90, 120	-	-	7.80	X	7340
Er-Zn	Zn ₃ Er hex2	Zn ₃ Er, hP36, 194	<i>P6₃/mmc</i>	0.8848, 0.8848, 0.9164, 90, 90, 120	-	-	7.92	X	5898
Er-Zn	Zn ₃₈ Er ₁₃	Zn ₃₈ Gd ₁₃ , hP142, 194	<i>P6₃/mmc</i>	1.423, 1.423, 1.401, 90, 90, 120	-	-	8.07	A	46725
Er-Zn	Zn _{58.82} Er _{12.89}	Zn _{58.82} Er _{12.89} , oP312, 33	<i>Pna2₁</i>	1.4045, 2.4695, 1.4247, 90, 90, 90	-	-	8.07	X	49399
Er-Zr	Er _{0.15} Zr _{0.85} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.32786, 0.32786, 0.51882, 90, 90, 120	close-packed structure	-	7.06	X	55748
Er-Zr	Er _{0.5} Zr _{0.5} m	Mg, hP2, 194	<i>P6₃/mmc</i>	0.338, 0.338, 0.534, 90, 90, 120	close-packed structure	-	8.12	X	6777
Er-Zr	Er _{0.89} Zr _{0.11}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.35222, 0.35222, 0.55305, 90, 90, 120	close-packed structure	-	8.88	X	55748
Es-O	Es ₂ O ₃	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	<i>Ia-3</i>	1.0766, 1.0766, 1.0766, 90, 90, 90	-	-	11.75	A	7377
Eu-F	EuF ₂ rt	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5819, 0.5819, 0.5819, 90, 90, 90	fluorite family	beige	6.40	X	27084
Eu-F	EuF _{2.15}	*cF*, 225	<i>Fm-3m</i>	0.5816, 0.5816, 0.5816, 90, 90, 90	-	-	-	N	46824
Eu-F	EuF _{2.25} rt	*tP7*, *	-	0.4085, 0.4085, 0.5806, 90, 90, 90	-	-	6.67	N	6423
Eu-F	EuF _{2.41}	*hR*, *	-	0.4072, 0.4072, 2.0081, 90, 90, 120	-	-	-	N	46824
Eu-F	EuF ₃ ht1	Cu ₃ F, hP24, 165	<i>P-3c1</i>	0.6785, 0.6785, 0.6934, 90, 90, 120	-	-	7.53	X	64116
Eu-F	EuF ₃ rt	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.6616, 0.7013, 0.4392, 90, 90, 90	-	white	6.81	X	40881
Eu-F	Eu ₁₄ F ₃₃	*hR141, 148	<i>R-3</i>	1.07938, 1.07938, 2.0127, 90, 90, 120	-	-	6.76	N	11805
Eu-F	Eu ₂₇ F ₆₄	*cP364, *	-	1.73421, 1.73421, 1.73421, 90, 90, 90	-	-	6.77	N	11805
Eu-F	Eu ₃ F ₇ rt	*tI100, *	-	0.91363, 0.91363, 1.73943, 90, 90, 90	-	-	6.73	N	11805
Eu-Fe	EuFe ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5889, 0.5889, 0.9624, 90, 90, 120	Friauf-Laves phase	-	6.06	A	18412
Eu-Ga	EuGa	EuGa, aP8, 2	<i>P-1</i>	0.5878, 0.6293, 0.6546, 68.00, 78.96, 84.51	-	-	6.68	X	24116
Eu-Ga	EuGa ₂ ht	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.4359, 0.4359, 0.4494, 90, 90, 120	AlB ₂ family	-	6.54	X	16961
Eu-Ga	EuGa ₂ rt	KH ₂ , oI12, 74	<i>Imma</i>	0.46459, 0.76255, 0.76379, 90, 90, 90	AlB ₂ family	gray silver	7.15	X	48698
Eu-Ga	EuGa ₄	BaAl ₄ , tI10, 139	<i>I4/mmm</i>	0.4407, 0.4407, 1.0635, 90, 90, 90	BaAl ₄ family	-	6.93	X	44151
Eu-Ga	Eu _{2.88} Ga _{8.36}	Eu _{2.88} Ga _{8.36} , oI42, 71	<i>Immm</i>	0.43732, 0.44105, 2.5852, 90, 90, 90	-	-	6.80	X	48700
Eu-Ga	Eu ₃ Ga ₂	Eu ₃ Ga ₂ , mS20, 15	<i>C12/c1</i>	0.868, 0.8491, 0.8658, 90, 108.59, 90	-	-	6.54	X	24116
Eu-Ga	Eu ₃ Ga ₅	Eu ₃ Ga ₅ , oS32, 38	<i>Amn2</i>	1.5333, 0.4577, 1.1018, 90, 90, 90	-	-	6.91	X	20074
Eu-Ga	Eu ₄ Ga ₃	Y ₄ Ga ₃ , mS32, 12	<i>C12/m1</i>	0.85081, 1.4721, 0.63776, 90, 91.3, 90	-	-	8.06	A	39067
Eu-Ga	Eu ₂ Ga ₉	Eu ₂ Ga ₉ , oS56, 63	<i>Cmcm</i>	0.4613, 1.0902, 2.6097, 90, 90, 90	-	gray silver	7.02	X	42759
Eu-Ge	EuGe	TlI, oS8, 63	<i>Cmcm</i>	0.473, 1.1194, 0.4105, 90, 90, 90	CrB(TlI)-FeB	-	6.86	X	2831
Eu-Ge	EuGe ₂ rt	EuGe ₂ , hP3, 164	<i>P-3m1</i>	0.41035, 0.41035, 0.49972, 90, 90, 120	AlB ₂ family	gray	6.77	X	44329
Eu-Ge	Eu ₂ Ge	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.7869, 0.5077, 0.9416, 90, 90, 90	-	-	6.65	X	42336
Eu-Ge	Eu ₃ Ge ₅ rt	Pu ₃ Pd ₅ , oS32, 63	<i>Cmcm</i>	0.9769, 0.7971, 0.9851, 90, 90, 90	-	-	7.09	X	47945
Eu-Ge	Eu ₄ Ge ₃	Cr ₅ B ₃ , tI32, 140	<i>I4/mcm</i>	0.799, 0.799, 1.5367, 90, 90, 90	-	gray silver	6.62	X	32612
Eu-H	EuH ₂ hp1	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.3927, 0.3927, 0.5243, 90, 90, 120	AlB ₂ family	-	7.30	X	58117
Eu-H	EuH ₂ rt	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.62513, 0.38042, 0.72131, 90, 90, 90	-	violet	5.96	A	37661
Eu-H	EuH ₃ hp2	EuH ₃ , tI40, 87	<i>I4/m</i>	0.8351, 0.8351, 0.5352, 90, 90, 90	-	-	6.90	X	58117
Eu-H	EuH ₃ hp3	EuH ₃ , tI8, 139	<i>I4/mmm</i>	0.3654, 0.3654, 0.5211, 90, 90, 90	-	-	7.40	X	58117
Eu-Hg	HgEu	CsCl, cP2, 221	<i>Pm-3m</i>	0.388, 0.388, 0.388, 90, 90, 90	b.c.c. family	gray silver	10.02	X	2600
Eu-Hg	Hg ₂ Eu	Cd ₂ Ce, hP3, 164	<i>P-3m1</i>	0.4978, 0.4978, 0.371, 90, 90, 120	AlB ₂ family	-	11.54	X	3993
Eu-Hg	Hg ₃ Eu	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6794, 0.6794, 0.5074, 90, 90, 120	close-packed structure	-	12.34	A	2013

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Eu-Hg	Hg ₅₁ Eu ₁₄	Ag ₅₁ Gd ₁₄ ,hP68,175	<i>P6/m</i>	1.357,1.357,0.974,90,90,120	-	-	13.21	A	12280
Eu-Hg	Hg ₅₃ Eu ₁₀	Hg ₅₃ Eu ₁₀ ,hP68,174	<i>P-6</i>	1.3595,1.3595,0.9735,90,90,120	-	-	13.38	X	65216
Eu-I	EuI ₂ hp1	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.8886,0.4579,1.1208,90,90,90	-	-	5.91	A	12671
Eu-I	EuI ₂ hp2	* _o *48,*	-	0.8391,1.3052,1.761,90,90,90	-	-	5.59	N	30273
Eu-I	EuI ₂ mon	EuI ₂ ,mP12,14	<i>P12₁/c1</i>	0.764,0.826,0.788,90,98,0.90	-	colorless	5.47	X	4255
Eu-I	EuI ₂ orth1	SrI ₂ ,oP24,61	<i>Pbca</i>	0.783,1.512,0.818,90,90,90	-	-	5.57	X	5515
Eu-I	EuI ₂ orth2	Sr[OH] ₂ ,oP12,62	<i>Pnma</i>	1.22665,0.48875,0.83697,90,90,90	-	yellow	5.37	X	52655
Eu-In	EuIn	CuTi ₂ ,tP2,123	<i>P4/mmm</i>	0.3784,0.3784,0.4288,90,90,90	b.c.c. family	-	7.22	X	24116
Eu-In	EuIn ₂	CaIn ₂ ,hP6,194	<i>P6₃/mmc</i>	0.4975,0.4975,0.7869,90,90,120	AlB ₂ family	-	7.51	X	2343
Eu-In	EuIn ₄	EuIn ₄ ,mS20,12	<i>C12/m1</i>	1.1928,0.5099,0.9865,90,114.56,90	-	-	7.44	X	24116
Eu-In	Eu ₂ In rt	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.7445,0.5573,1.0306,90,90,90	-	-	6.50	X	24116
Eu-In	Eu ₈ In ₃ ht	Ca ₈ In ₃ ,aP22,2	<i>P-1</i>	0.99267,0.99808,1.00789,99.14,101.172,119.452	-	black	6.36	X	56397
Eu-In	Eu ₈ In ₃ rt	Yb ₈ In ₃ ,hR132,167	<i>R-3c</i>	0.9577,0.9577,5.674,90,90,120	-	black	6.90	X	56397
Eu-Ir	EuIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7564,0.7564,0.7564,90,90,90	Friauf-Laves phase	gray faint	16.47	X	36450
Eu-Ir	Eu ₄ Ir	ThCl ₄ ,tI20,141	<i>I4₁/amd</i>	0.9326,0.9326,0.8572,90,90,90	-	-	7.13	X	22258
Eu-Mg	MgEu	CsCl,cP2,221	<i>Pm-3m</i>	0.4102,0.4102,0.4102,90,90,90	b.c.c. family	-	4.24	X	2081
Eu-Mg	Mg ₁₇ Eu ₂	Th ₃ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	1.0493,1.0493,1.0327,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	2.42	X	17943
Eu-Mg	Mg ₂ Eu	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.63877,0.63877,1.03223,90,90,120	Friauf-Laves phase	-	3.65	X	44053
Eu-Mg	Mg ₄ Eu	SrMg ₄ ,hP90,194	<i>P6₃/mmc</i>	1.0416,1.0416,2.8051,90,90,120	-	-	2.83	X	22269
Eu-Mg	Mg _{5.23} Eu	Mg _{5.23} Eu,hP42,194	<i>P6₃/mmc</i>	1.0395,1.0395,1.0746,90,90,120	-	-	2.77	X	19792
Eu-Mn	Eu _{0.03} Mn _{0.97} rt	Mn ₂ ,cI58,217	<i>I-43m</i>	0.899,0.899,0.899,90,90,90	-	-	7.67	X	7598
Eu-N	EuN	NaCl,cF8,225	<i>Fm-3m</i>	0.50178,0.50178,0.50178,90,90,90	rocksalt family	black	8.73	X	46375
Eu-Ni	EuNi ₂ cub	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.73152,0.73152,0.73152,90,90,90	Friauf-Laves phase	-	9.14	X	29479
Eu-Ni	EuNi ₂ hex	MgNi ₂ ,hP24,194	<i>P6₃/mmc</i>	0.539,0.539,1.749,90,90,120	Friauf-Laves phase	-	8.13	A	22211
Eu-Ni	EuNi ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.4924,0.4924,0.3963,90,90,120	-	-	8.89	X	18166
Eu-Ni	Eu _{1.7} Ni _{1.3} hp	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7334,0.7334,0.7334,90,90,90	Friauf-Laves phase	-	11.27	X	23475
Eu-Ni	Eu ₂ Ni ₁₇	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.835,0.835,0.806,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	8.88	X	3630
Eu-Ni	Eu ₂ Ni ₇	Ce ₂ Ni ₇ ,hP36,194	<i>P6₃/mmc</i>	0.4967,0.4967,2.4249,90,90,120	Laves-CaCu ₅	-	9.16	A	29479
Eu-O	EuO hp	CsCl,cP2,221	<i>Pm-3m</i>	0.283,0.283,0.283,90,90,90	b.c.c. family	-	12.31	X	30341
Eu-O	EuO rt	NaCl,cF8,225	<i>Fm-3m</i>	0.5141,0.5141,0.5141,90,90,90	rocksalt family	violet reddish	8.21	X	26480
Eu-O	EuO ₂ tf	Cu ₂ Sb,tP6,129	<i>P4/nmm</i>	0.396,0.396,0.663,90,90,90	-	-	5.88	A	9170
Eu-O	Eu ₁₆ O ₂₁	* _o P*,*	-	0.563,0.971,4.95,90,90,90	-	orange	-	N	2007
Eu-O	Eu ₂ O ₃ Eu+	* _o ***,*	-	0.563,0.708,0.971,90,90,90	-	orange	-	N	1951
Eu-O	Eu ₂ O ₃ ht1	Sm ₂ O ₃ ,mS30,12	<i>C12/m1</i>	1.41105,0.36021,0.8808,90,100.037,90	-	white	7.95	X	12056
Eu-O	Eu ₂ O ₃ ht2	La ₂ O ₃ ,hP5,164	<i>P-3m1</i>	0.3725,0.3725,0.5831,90,90,120	-	-	8.34	A	29111
Eu-O	Eu ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	1.0866,1.0866,1.0866,90,90,120	-	white	7.29	X	64096
Eu-O	Eu ₃ O ₄	Eu ₃ O ₄ ,oP28,62	<i>Pnma</i>	1.0085,0.3502,1.2054,90,90,90	-	brown red	8.11	X	2836
Eu-P	EuP	NaCl,cF8,225	<i>Fm-3m</i>	0.57562,0.57562,0.57562,90,90,90	rocksalt family	-	6.37	X	8086
Eu-P	EuP ₃	SrP ₃ ,mS32,12	<i>C12/m1</i>	1.123,0.7345,0.8394,90,103.34,90	-	-	4.83	A	21519
Eu-P	EuP ₇ rt	EuP ₇ ,mP32,14	<i>P12₁/c1</i>	1.0610,0.5700,1.3305,90,123.94,90	-	black	3.67	X	13728
Eu-P	Eu ₃ P ₄	Sr ₃ As ₄ ,oF56,43	<i>Fdd2</i>	1.405,1.7085,0.5738,90,90,90	-	black	5.59	X	17412
Eu-P	Eu ₄ P _{2.67}	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.9026,0.9026,0.9026,90,90,90	-	-	6.24	X	5456
Eu-P	Eu ₄ P ₃	* _h R*,161	<i>R3c</i>	1.279,1.279,0.765,90,90,120	-	-	-	N	43179
Eu-Pb	EuPb rt	CuAu,tP2,123	<i>P4/mmm</i>	0.3696,0.3696,0.4586,90,90,90	close-packed structure	-	9.52	X	9766
Eu-Pb	EuPb ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4917,0.4917,0.4917,90,90,90	close-packed structure	-	10.81	X	3057
Eu-Pb	Eu ₂ Pb	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.787,0.54,1.003,90,90,90	-	-	7.96	X	3497
Eu-Pb	Eu ₃ Pb ₃	W ₃ Si,tI32,140	<i>I4/mcm</i>	1.3184,1.3184,0.6214,90,90,90	-	-	8.50	X	5220
Eu-Pd	EuPd	TlI ₂ ,oS8,63	<i>Cmcm</i>	0.4082,1.1055,0.4431,90,90,90	CrB(TII)-FeB	-	8.58	A	10570
Eu-Pd	EuPd ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.77682,0.77682,0.77682,90,90,90	Friauf-Laves phase	-	10.34	X	55186
Eu-Pd	EuPd ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.41,0.41,0.41,90,90,90	close-packed structure	-	11.35	X	15033
Eu-Pd	EuPd ₅	* _o P*,*	-	0.5268,0.8984,2.553,90,90,90	-	-	-	N	20876
Eu-Pd	Eu _{0.1} Pd _{0.9}	Cu ₂ ,cF4,225	<i>Fm-3m</i>	0.39755,0.39755,0.39755,90,90,90	close-packed structure	-	11.73	X	5872
Eu-Pd	Eu ₃ Pd ₂	Er ₃ Ni ₂ ,hR45,148	<i>R-3</i>	0.9204,0.9204,1.7384,90,90,120	-	-	7.84	X	8934
Eu-Pd	Eu ₃ Pd ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.7399,0.6985,0.7919,90,97.25,90	-	-	6.77	A	8138
Eu-Po	EuPo	NaCl,cF8,225	<i>Fm-3m</i>	0.672,0.672,0.672,90,90,90	rocksalt family	-	7.90	X	3080
Eu-Pt	EuPt ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7723,0.7723,0.7723,90,90,90	Friauf-Laves phase	-	15.64	X	5961
Eu-Pt	EuPt ₅	* _o *72,*	-	0.5304,0.9189,2.6366,90,90,90	-	-	-	N	14106
Eu-Pt	Eu ₂ Pt ₇	Ce ₂ Ni ₇ ,hP36,194	<i>P6₃/mmc</i>	0.5304,0.5304,2.687,90,90,120	Laves-CaCu ₅	-	16.94	A	14106
Eu-Pt	Eu ₃ Pt ₂	Er ₃ Ni ₂ ,hR45,148	<i>R-3</i>	0.9063,0.9063,1.727,90,90,120	-	-	10.29	A	14106
Eu-Pt	Eu ₅ Pt ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.6776,0.6877,0.7843,90,97.24,90	-	-	8.51	A	14106
Eu-Pt	Eu ₃ Pt ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.7703,1.5217,0.7982,90,90,90	-	-	10.93	A	14106
Eu-Pt	Eu ₉ Pt	* _c F*,*	-	0.5857,0.5857,0.5857,90,90,90	-	-	-	N	14106
Eu-Re	EuRe ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5316,0.5316,0.8742,90,90,120	Friauf-Laves phase	-	16.28	A	2373
Eu-Rh	EuRh ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7498,0.7498,0.7498,90,90,90	Friauf-Laves phase	-	11.28	X	10570
Eu-Rh	Eu ₃ Rh	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.7818,0.9967,0.6759,90,90,90	-	-	7.05	A	16366
Eu-Rh	Eu ₃ Rh ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.6649,0.676,0.7796,90,96.82,90	-	-	7.36	A	16366
Eu-Rh	Eu ₉ Rh	* _c F*,*	-	0.5832,0.5832,0.5832,90,90,90	-	-	-	N	16366
Eu-S	EuS rt	NaCl,cF8,225	<i>Fm-3m</i>	0.5968,0.5968,0.5968,90,90,90	rocksalt family	brown violet	5.75	X	26480
Eu-S	EuS ₂ lt	* _t P24,129	<i>P4/nmm</i>	0.7871,0.7871,0.8041,90,90,90	-	black	-	N	11684
Eu-S	Eu ₂ S ₃ rt	Cr ₃ C ₂ -b,oP20,62	<i>Pnma</i>	0.728,0.3742,1.5232,90,90,90	-	-	6.40	A	10782
Eu-S	Eu ₃ S ₄ lt	Eu ₃ S ₄ ,tI28,122	<i>I-42d</i>	0.8508,0.8508,0.8514,90,90,90	-	-	6.30	X	44581
Eu-S	Eu ₃ S ₄ rt	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.8534,0.8534,0.8534,90,90,90	-	black	6.24	X	44581
Eu-Sb	EuSb ₂	CaSb ₂ ,mP6,11	<i>P12₁/m1</i>	0.4768,0.4299,0.91618,90,107.458,90	-	-	7.33	X	11593
Eu-Sb	Eu ₁₁ Sb ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	<i>I4/mmm</i>	1.2325,1.2325,1.8024,90,90,90	-	-	7.01	X	12702
Eu-Sb	Eu ₁₆ Sb ₁₁	Ca ₁₆ Sb ₁₁ ,tP56,113	<i>P-42₁m</i>	1.2674,1.2674,1.172,90,90,90	-	-	6.65	X	38066
Eu-Sb	Eu ₂ Sb ₃	Sr ₂ Sb ₃ ,mP40,14	<i>P12₁/c1</i>	0.657,1.276,1.5028,90,90.04,90	-	-	7.06	X	13273
Eu-Sb	Eu ₅ Sb ₃ (H)	Yb ₅ Sb ₃ ,oP32,62	<i>Pnma</i>	1.29826,1.00033,0.86325,90,90,90	-	-	6.67	A	12230
Eu-Sb	Eu ₅ Sb ₃ hex	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.94183,0.94183,0.72124,90,90,120	-	-	6.74	X	47173

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Eu-Sb	Eu ₅ Sb ₃ tet	* ₁ I [*] , 97	I422	0.4903,0.4903,1.71,90,90,90	-	-	-	N	49583
Eu-Se	EuSe rt	NaCl,cF8,225	Fm-3m	0.6195,0.6195,0.6195,90,90,90	rocksalt family	brown red	6.45	X	26480
Eu-Se	EuSe ₂ m	SrS ₂ ,tI12,140	I4/mcm	0.6391,0.6391,0.7848,90,90,90	-	red	6.42	X	34424
Eu-Se	Eu _{0.75} Se	Lu _{0.68} S ₂ ,oF96,70	Fddd	0.876,1.239,2.628,90,90,90	-	-	5.39	A	8887
Eu-Si	EuSi	TlI ₂ oS8,63	Cmcm	0.46958,1.11242,0.39799,90,90,90	CrB(TlI)-FeB	gray	5.75	X	51073
Eu-Si	EuSi _{1.94}	ThSi ₂ ,tI12,141	I4 ₁ /amd	0.4303,0.4303,1.366,90,90,90	-	brown red	5.42	X	15973
Eu-Si	EuSi ₆ m	Eu(Ga _{0.33} Ge _{0.67}) ₆ ,oS28,63	Cmcm	0.44489,1.02229,1.1616,90,90,90	clathrate	-	4.03	X	48481
Eu-Si	Eu ₂ Si	PbCl ₂ ,oP12,62	Pnma	0.783,0.50471,0.9378,90,90,90	-	gray silver	5.95	X	41666
Eu-Si	Eu ₂ Si ₄	Eu ₂ Si ₄ ,oI18,71	Immm	0.39583,0.46164,1.8229,90,90,90	-	-	5.67	X	44254
Eu-Si	Eu ₂ Si ₃	Cr ₂ B ₃ ,tI32,140	I4/mcm	0.79188,0.79188,1.5322,90,90,90	-	gray dark	5.84	X	35452
Eu-Sn	EuSn	TlI ₂ oS8,63	Cmcm	0.4976,1.19,0.4456,90,90,90	CrB(TlI)-FeB	-	6.81	X	3505
Eu-Sn	EuSn ₃	Cu ₃ Au,cP4,221	Pm-3m	0.476,0.476,0.476,90,90,90	close-packed structure	-	7.82	X	28961
Eu-Sn	Eu ₂ Sn	Co ₂ Si-b,oP12,62	Pnma	0.7857,0.539,0.991,90,90,90	-	-	6.69	A	34767
Eu-Sn	Eu ₂ Sn ₃	Pu ₃ Pd ₃ ,oS32,63	Cmcm	1.0466,0.8445,1.0662,90,90,90	-	black	7.40	X	49753
Eu-Sn	Eu ₂ Sn ₃	W ₂ Si ₃ ,tI32,140	I4/mcm	1.3122,1.3122,0.6048,90,90,90	-	-	7.12	X	34767
Eu-Te	EuTe hp cub1	NaCl,cF8,225	Fm-3m	0.6598,0.6598,0.6598,90,90,90	rocksalt family	brown	6.46	X	26480
Eu-Te	EuTe hp cub2	CsCl,cP2,221	Pm-3m	0.3739,0.3739,0.3739,90,90,90	b.c.c. family	-	8.88	X	6801
Eu-Te	Eu ₂ Te ₃	* ₁ C ^{**} , *	-	0.656,0.656,0.656,90,90,90	-	gray	-	N	6558
Eu-Te	Eu ₃ Te ₄ rt	* ₁ I ^{**} , *	-	1.28,1.28,0.64,90,90,90	-	brown	-	N	6558
Eu-Tl	TlEu	CsCl,cP2,221	Pm-3m	0.397,0.397,0.397,90,90,90	b.c.c. family	gray silver	9.46	X	2600
Eu-Tl	Tl ₂ Eu	CaIn ₂ ,hP6,194	P6 ₃ /mmc	0.5035,0.5035,0.7964,90,90,120	AlB ₂ family	-	10.65	X	2343
Eu-Tl	Tl ₃ Eu ht	Cu ₃ Au,cP4,221	Pm-3m	0.4718,0.4718,0.4718,90,90,90	close-packed structure	-	12.10	X	2869
Eu-Tl	Tl ₃ Eu rt	Mg ₃ Cd,hP8,194	P6 ₃ /mmc	0.7018,0.7018,0.5313,90,90,120	close-packed structure	-	11.21	A	3057
Eu-Yb	Eu _{0.4} Yb _{0.6} rt	Cu ₂ cF4,225	Fm-3m	0.5497,0.5497,0.5497,90,90,90	close-packed structure	-	6.58	X	20290
Eu-Yb	Eu _{0.5} Yb _{0.5} ht	W ₂ cI2,229	Im-3m	0.4467,0.4467,0.4467,90,90,90	b.c.c. family	-	6.05	X	20290
Eu-Zn	ZnEu	CsCl,cP2,221	Pm-3m	0.3812,0.3812,0.3812,90,90,90	b.c.c. family	gray silver	6.52	X	2600
Eu-Zn	Zn ₁₁ Eu	BaCd ₁₁ ,tI48,141	I4 ₁ /amd	1.072,1.072,0.6877,90,90,90	-	-	7.32	A	2559
Eu-Zn	Zn _{12.75} Eu	NaZn ₁₃ ,cF112,226	Fm-3c	1.21651,1.21651,1.21651,90,90,90	-	gray silver	7.27	X	51613
Eu-Zn	Zn ₂ Eu	KHg ₂ ,oI12,74	Imma	0.4728,0.765,0.7655,90,90,90	AlB ₂ family	-	6.78	X	2013
Eu-Zn	Zn ₃ Eu	CaCu ₃ ,hP6,191	P6/mmm	0.5473,0.5473,0.4286,90,90,120	-	-	7.15	X	2559
F-Fe	FeF ₂	TiO ₂ ,tP6,136	P4 ₂ /mnm	0.47,0.47,0.331,90,90,90	-	-	4.26	X	22010
F-Fe	FeF ₃ (NH ₃)	Ho ₅ (Ta _{0.5} W _{0.5})O ₃ ,cF64,227	Fd-3m	1.0325,1.0325,1.0325,90,90,90	pyrochlore family	green faint	2.72	X	19228
F-Fe	FeF ₃ HTB lt	FeF ₃ ,hP24,176	P6 ₃ /m	0.7402,0.7402,0.7569,90,90,120	-	green	3.13	X	19435
F-Fe	FeF ₃ HTB rt	AlF ₃ ,oS48,63	Cmcm	0.7423,1.273,0.7526,90,90,90	-	-	3.16	A	16105
F-Fe	FeF ₃ hex	WO ₃ ,hP12,191	P6/mmm	0.7413,0.7413,0.37949,90,90,120	-	green faint	3.11	X	19435
F-Fe	FeF ₃ ht	ReO ₃ ,cP4,221	Pm-3m	0.3814,0.3814,0.3814,90,90,90	-	-	3.38	X	11257
F-Fe	FeF ₃ rt	FeF ₃ ,hR24,167	R-3c	0.5194,0.5194,1.3335,90,90,120	-	green pale	3.61	X	18320
F-Fe	Fe ₂ F ₃	* ₁ IP [*] , *	-	0.806,0.806,0.956,90,90,90	-	gray steel	3.32	N	993
F-Ga	GaF ₃ ht1	* ₁ IP [*] , *	-	0.365,0.365,0.63,90,90,90	-	-	-	N	7470
F-Ga	GaF ₃ ht2	FeF ₃ ,hR24,167	R-3c	0.5012,0.5012,1.299,90,90,120	-	colorless	4.47	X	40142
F-Ga	GaF ₃ m	AlF ₃ ,oS48,63	Cmcm	0.721,1.2398,0.7333,90,90,90	-	-	3.85	X	21400
F-Gd	GdF ₃ ht	HoH ₃ ,hP24,165	P-3c1	0.68836,0.68836,0.70727,90,90,120	-	-	7.35	A	13535
F-Gd	GdF ₃ rt	Fe ₃ C-b,oP16,62	Pnma	0.6571,0.6995,0.4393,90,90,90	-	-	7.05	A	44020
F-Ge	GeF ₂ ht	TeO ₂ ,tP12,92	P4 ₂ ,2,2	0.4853,0.4853,0.8579,90,90,90	-	-	3.64	A	22394
F-Ge	GeF ₂ rt	GeF ₂ ,oP12,19	P2 ₂ ,2,2 ₁	0.46818,0.51753,0.83153,90,90,90	-	white	3.65	X	60127
F-Ge	GeF ₄	SiF ₄ ,cI10,217	I-43m	0.5485,0.5485,0.5485,90,90,90	-	-	2.99	X	21133
F-Ge	Ge ₃ F ₈	Sn ₃ F ₈ ,mP22,14	P12 ₁ /c1	0.49793,0.5081,1.27422,90,112.025,90	-	colorless	4.11	X	63230
F-Ge	Ge ₂ F ₁₂	Ge ₂ F ₁₂ ,mP34,14	P12 ₁ /c1	0.8536,0.7570,0.7969,90,93.03,90	-	-	3.82	X	7288
F-Ge	Ge ₇ F ₁₆ rt	Ge ₇ F ₁₆ ,mS92,9	C1c1	1.8167,0.7537,1.0294,90,90.32,90	-	colorless	3.83	X	33985
F-Hf	HfF ₄	* ₁ oS4,63	Cmcm	0.342,0.541,0.432,90,90,90	CrB(TlI)-FeB	-	-	P	535
F-Hf	HfF ₄ mon	ZrF ₄ ,mS60,15	C12/c1	1.1725,0.9869,0.7636,90,126.15,90	-	colorless	7.11	X	24077
F-Hf	HfF ₄ tet	ZrF ₄ ,tP40,84	P4 ₂ /m	0.786,0.786,0.771,90,90,90	-	-	7.10	A	6828
F-Hg	HgF	HgCl ₂ ,tI8,139	I4/mmm	0.367,0.367,1.0901,90,90,90	-	yellow	9.93	X	26759
F-Hg	HgF ₂	CaF ₂ ,cF12,225	Fm-3m	0.554,0.554,0.554,90,90,90	fluorite family	white	9.32	X	58
F-Ho	HoF ₃ ht	HoH ₃ ,hP24,165	P-3c1	0.701,0.701,0.708,90,90,120	-	-	7.34	A	6138
F-Ho	HoF ₃ rt	Fe ₃ C-b,oP16,62	Pnma	0.641,0.6873,0.4376,90,90,90	-	-	7.65	X	10826
F-I	IF ₃ lt	ClF ₃ ,oP16,62	Pnma	0.8755,0.6655,0.465,90,90,90	-	yellow	4.51	X	37132
F-I	IF ₃ lt	IF ₃ ,mS120,15	C12/c1	1.507,0.6836,1.824,90,92.96,90	-	-	3.93	X	8035
F-I	IF ₇ lt2	IF ₇ ,oS52,64	Cmce	0.6145,0.8843,0.871,90,90,90	-	-	3.65	X	28914
F-I	IF ₇ lt3	IF ₇ ,oP32,54	Pcca	0.85216,0.59909,0.8841,90,90,90	-	-	3.82	X	28914
F-In	InF ₃ ht	FeF ₃ ,hR24,167	R-3c	0.54103,0.54103,1.43775,90,90,120	-	colorless	4.70	X	16987
F-In	InF ₃ m	AlF ₃ ,oS48,63	Cmcm	0.7875,1.3499,0.7956,90,90,90	-	-	4.05	A	21400
F-In	InF ₃ rt	* ₁ IP [*] , *	-	0.397,0.397,0.674,90,90,90	-	-	-	N	7470
F-Ir	IrF ₃	FeF ₃ ,hR24,167	R-3c	0.49432,0.49432,1.38195,90,90,120	-	brown faint	8.49	X	35407
F-Ir	IrF ₄ rt	IrF ₄ ,oF40,43	Fdd2	0.925,0.964,0.567,90,90,90	-	brown light	7.05	X	7948
F-Ir	IrF ₆ lt	UF ₆ ,oP28,62	Pnma	0.9411,0.8547,0.4952,90,90,90	-	-	5.11	X	47371
F-Ir	IrF ₆ rt	SF ₆ ,cI14,229	Im-3m	0.623,0.623,0.623,90,90,90	-	-	4.21	A	3001
F-K	KF hp	CsCl,cP2,221	Pm-3m	0.306,0.306,0.306,90,90,90	b.c.c. family	-	3.37	X	2207
F-K	KF	NaCl,cF8,225	Fm-3m	0.544,0.544,0.544,90,90,90	carbide	colorless	2.40	X	16373
F-Kr	KrF ₂ lt	XeF ₂ ,tI6,139	I4/mmm	0.4179,0.4179,0.6489,90,90,90	-	-	3.57	X	39096
F-Kr	KrF ₂ rt	KrF ₂ ,tP6,136	P4 ₂ /mnm	0.4585,0.4585,0.5827,90,90,90	-	-	3.30	X	6837
F-La	LaF ₂	CaF ₂ ,cF12,225	Fm-3m	0.585,0.585,0.585,90,90,90	fluorite family	-	5.87	X	16289
F-La	LaF ₃ hp1	Cu ₃ Ti,oP8,59	Pmmn	0.40305,0.51223,0.41925,90,90,90	close-packed structure	-	7.52	X	55040
F-La	LaF ₃ ht	HoH ₃ ,hP24,165	P-3c1	0.71907,0.71907,0.73531,90,90,120	fluocerite-(La)	colorless	5.93	X	52551
F-Li	LiF	NaCl,cF8,225	Fm-3m	0.402,0.402,0.402,90,90,90	griceite	-	2.65	X	19125
F-Lu	LuF ₃ ht	HoH ₃ ,hP24,165	P-3c1	0.696,0.696,0.83,90,90,120	-	-	6.64	A	2997
F-Lu	LuF ₃ rt	Fe ₃ C-b,oP16,62	Pnma	0.61091,0.67309,0.44818,90,90,90	-	-	8.36	A	13535
F-Mg	MgF ₂ hp1	CaCl ₂ ,oP6,58	Pnnm	0.4592,0.4938,0.2959,90,90,90	-	-	3.08	X	57204

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
F-Mg	MgF ₂ hp2	FeS ₂ ,cP12,205	<i>Pa</i> -3	0.47313,0.47313,0.47313,90,90,90	pyrite-marcasite family	-	3.91	X	39840
F-Mg	MgF ₂ hp3	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.4914,0.2932,0.5937,90,90,90	-	-	4.84	A	39840
F-Mg	MgF ₂ m	Fe ₂ N _{0.94} ,oP12,60	<i>Pbcn</i>	0.4587,0.5511,0.5082,90,90,90	-	-	3.22	A	39840
F-Mg	MgF ₂ rt	TiO ₂ ,tP6,136	<i>P4₂/mnm</i>	0.4628,0.4628,0.3045,90,90,90	sellaitite	-	3.17	X	11960
F-Mn	MnF ₂ hp1	MnF ₂ ,tP12,111	<i>P</i> -42m	0.5122,0.5122,0.5256,90,90,90	-	-	4.48	X	12319
F-Mn	MnF ₂ hp2	Fe ₂ N _{0.94} ,oP12,60	<i>Pbcn</i>	0.496,0.58,0.5359,90,90,90	-	-	4.00	X	1839
F-Mn	MnF ₂	TiO ₂ ,tP6,136	<i>P4₂/mnm</i>	0.48736,0.48736,0.33102,90,90,90	-	-	3.93	X	23125
F-Mn	MnF ₃ rt	MnF ₃ ,mS48,15	<i>C12/c1</i>	0.89202,0.50472,1.34748,90,92.64,90	-	red ruby	3.68	X	28075
F-Mn	MnF ₄	MnF ₄ ,tI80,88	<i>I4₁/a</i>	1.263,1.263,0.6049,90,90,90	-	blue dark	3.61	X	20728
F-Mn	Mn _{0.51} F _{2.03} rhom	FeF ₃ ,hR24,167	<i>R</i> -3c	0.4892,0.4892,1.3,90,90,120	-	blue dark	2.46	X	20728
F-Mn	Mn ₂ F ₅	* _o P56,*	-	0.617,0.727,1.544,90,90,90	-	violet	3.93	N	7958
F-Mo	MoF ₃ cub	ReO ₃ ,cP4,221	<i>Pm</i> -3m	0.38985,0.38985,0.38985,90,90,90	-	-	4.29	X	355
F-Mo	MoF ₃ rhom	FeF ₃ ,hR24,167	<i>R</i> -3c	0.52118,0.52118,1.4407,90,90,120	-	brown yellow	4.50	X	23403
F-Mo	MoF ₃ rt	MoF ₃ ,mS48,12	<i>C12/m1</i>	0.961,1.422,0.516,90,94.35,90	-	yellow	3.61	X	1642
F-Mo	MoF ₆ lt1	SF ₆ ,cI14,229	<i>Im</i> -3m	0.6221,0.6221,0.6221,90,90,90	-	-	2.90	A	8569
F-Mo	MoF ₆ lt2	UF ₆ ,oP28,62	<i>Pnma</i>	0.9394,0.8543,0.4959,90,90,90	-	-	3.50	X	47371
F-Na	NaF	NaCl,cF8,225	<i>Fm</i> -3m	0.46391,0.46391,0.46391,90,90,90	villiaumite	colorless	2.79	X	59797
F-Nb	NbF ₃	ReO ₃ ,cP4,221	<i>Pm</i> -3m	0.3903,0.3903,0.3903,90,90,90	-	blue	4.19	X	696
F-Nb	NbF ₄	SnF ₄ ,tI10,139	<i>I4/mmm</i>	0.4081,0.4081,0.8162,90,90,90	-	black	4.13	X	2537
F-Nb	NbF ₅	MoF ₃ ,mS48,12	<i>C12/m1</i>	0.962,1.443,0.512,90,96.1,90	-	-	3.53	X	2193
F-Nb	Nb ₂ F ₅	Nb ₂ F ₅ ,cI42,229	<i>Im</i> -3m	0.81878,0.81878,0.81878,90,90,90	-	brown	5.10	X	48204
F-Nd	NdF ₃	HoH ₃ ,hP24,165	<i>P</i> -3c1	0.703,0.703,0.72,90,90,120	-	brown	6.51	X	21658
F-Ni	NiF ₂ lt	CaCl ₂ ,oP6,58	<i>Pnnm</i>	0.46472,0.46484,0.30745,90,90,90	-	-	4.84	X	27034
F-Ni	NiF ₂ rt	TiO ₂ ,tP6,136	<i>P4₂/mnm</i>	0.46501,0.46501,0.30835,90,90,90	-	-	4.82	X	27034
F-Ni	NiF ₃ ht	H _{0.5} (Ta _{0.5} W _{0.5})O ₃ ,cF64,227	<i>Fd</i> -3m	0.996,0.996,0.996,90,90,90	pyrochlore family	-	3.11	A	30402
F-Ni	NiF ₃ rt	PdF ₃ ,hR24,148	<i>R</i> -3	0.47933,0.47933,1.30231,90,90,120	-	black	4.45	X	35828
F-Np	NpF ₃	Na ₃ As,hP8,194	<i>P6₃/mmc</i>	0.4108,0.4108,0.7273,90,90,120	-	-	9.19	X	310
F-Np	NpF ₄	ZrF ₄ ,mS60,15	<i>C12/c1</i>	1.2676,1.0745,0.8306,90,126.41,90	-	-	6.85	A	28915
F-Np	NpF ₅	UF ₃ ,tI12,87	<i>I4/m</i>	0.65358,0.65358,0.44562,90,90,90	-	-	5.79	A	27302
F-Np	NpF ₆	UF ₆ ,oP28,62	<i>Pnma</i>	0.991,0.897,0.521,90,90,90	-	-	5.03	A	310
F-Os	OsF ₅	RuF ₅ ,mP48,14	<i>P12₁/c1</i>	0.553,0.991,1.259,90,99.5,90	-	blue green	5.57	X	5923
F-Os	OsF ₆ lt	UF ₆ ,oP28,62	<i>Pnma</i>	0.9387,0.8543,0.4944,90,90,90	-	-	5.10	X	47371
F-Os	OsF ₆ rt	SF ₆ ,cI14,229	<i>Im</i> -3m	0.625,0.625,0.625,90,90,90	-	-	4.14	A	3001
F-P	PF ₅	SbCl ₅ ,hP12,194	<i>P6₃/mmc</i>	0.5563,0.5563,0.6176,90,90,120	-	-	2.53	X	20608
F-Pa	PaF ₄	ZrF ₄ ,mS60,15	<i>C12/c1</i>	1.286,1.088,0.854,90,126.35,90	-	brown red	6.36	A	3447
F-Pa	PaF ₅	* _t I*,*	-	1.153,1.153,0.519,90,90,90	-	white	-	N	2154
F-Pb	PbF ₂ hp	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.6213,0.38088,0.752,90,90,90	-	-	9.15	X	42591
F-Pb	PbF ₂ ht2	UO ₂ ,cF6,225	<i>Fm</i> -3m	0.5931,0.5931,0.5931,90,90,90	fluorite family	-	7.81	A	35313
F-Pb	PbF ₂ rt	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.59292,0.59292,0.59292,90,90,90	fluorite family	-	7.81	X	25000
F-Pb	PbF ₃	PbF ₃ ,tP16,116	<i>P</i> -4c2	0.5201,0.5201,0.9046,90,90,90	-	-	7.17	X	6477
F-Pb	PbF ₄	SnF ₄ ,tI10,139	<i>I4/mmm</i>	0.42475,0.42475,0.7977,90,90,90	-	colorless	6.54	X	32525
F-Pd	PdF ₂ hp	PdF ₂ ,cP12,198	<i>P2₁3</i>	0.5329,0.5329,0.5329,90,90,90	-	black	6.34	X	14312
F-Pd	PdF ₂	TiO ₂ ,tP6,136	<i>P4₂/mnm</i>	0.49544,0.49544,0.33848,90,90,90	-	violet	5.77	X	28122
F-Pd	PdF ₃	PdF ₃ ,hR24,148	<i>R</i> -3	0.50062,0.50062,1.4119,90,90,120	-	-	5.31	X	9592
F-Pd	PdF ₄	IrF ₄ ,oF40,43	<i>Fdd2</i>	0.924,0.9339,0.5828,90,90,90	-	-	4.82	X	11377
F-Pm	PmF ₃	HoH ₃ ,hP24,165	<i>P</i> -3c1	0.698,0.698,0.718,90,90,120	-	pink	6.64	A	21161
F-Pr	PrF ₃ ht	* _c F*,225	<i>Fm</i> -3m	0.7239,0.7239,0.7239,90,90,90	-	-	-	N	55682
F-Pr	PrF ₃ rt	HoH ₃ ,hP24,165	<i>P</i> -3c1	0.70795,0.70795,0.7238,90,90,120	-	green faint	6.28	X	30903
F-Pt	PtF ₄	IrF ₄ ,oF40,43	<i>Fdd2</i>	0.9284,0.959,0.5712,90,90,90	-	orange red	7.08	X	25807
F-Pt	PtF ₅	RuF ₅ ,mP48,14	<i>P12₁/c1</i>	0.5523,0.9942,1.243,90,99.98,90	-	red ruby	5.73	X	25807
F-Pt	PtF ₆ lt	UF ₆ ,oP28,62	<i>Pnma</i>	0.92815,0.84613,0.48961,90,90,90	-	-	5.34	X	31964
F-Pt	PtF ₆ rt	SF ₆ ,cI14,229	<i>Im</i> -3m	0.621,0.621,0.621,90,90,90	-	-	4.29	A	3001
F-Pu	PuF ₃	Na ₃ As,hP8,194	<i>P6₃/mmc</i>	0.4087,0.4087,0.724,90,90,120	-	black	9.55	X	310
F-Pu	PuF ₄	ZrF ₄ ,mS60,15	<i>C12/c1</i>	1.262,1.057,0.828,90,126.03,90	-	-	7.14	A	298
F-Ra	RaF ₂	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.6368,0.6368,0.6368,90,90,90	fluorite family	-	6.79	X	119
F-Rb	RbF hp	CsCl,cP2,221	<i>Pm</i> -3m	0.329,0.329,0.329,90,90,90	b.c.c. family	-	4.87	X	2207
F-Rb	RbF rt	NaCl,cF8,225	<i>Fm</i> -3m	0.5804,0.5804,0.5804,90,90,90	rocksalt family	-	3.55	X	17419
F-Re	ReF ₄	* _t P*,*	-	1.012,1.012,1.595,90,90,90	-	blue	-	N	3084
F-Re	ReF ₆ lt1	SF ₆ ,cI14,229	<i>Im</i> -3m	0.626,0.626,0.626,90,90,90	-	-	4.06	A	3001
F-Re	ReF ₆ lt2	UF ₆ ,oP28,62	<i>Pnma</i>	0.9417,0.857,0.4965,90,90,90	-	-	4.98	A	47371
F-Re	ReF ₇ lt	ReF ₇ ,aP16,2	<i>P</i> -1	0.50439,0.50845,0.90916,90.835,93.350,114.169	-	yellow	5.00	X	29449
F-Re	ReF ₇ rt	* _c ***	-	0.626,0.626,0.626,90,90,90	-	-	-	N	3001
F-Rh	RhF ₃	FeF ₃ ,hR24,167	<i>R</i> -3c	0.4873,0.4873,1.355,90,90,120	-	brown red	5.72	X	20653
F-Rh	RhF ₅	RuF ₅ ,mP48,14	<i>P12₁/c1</i>	0.55173,0.99173,1.23376,90,100.42,90	-	red ruby	3.96	X	7232
F-Rh	RhF ₆ lt	UF ₆ ,oP28,62	<i>Pnma</i>	0.9323,0.8474,0.491,90,90,90	-	-	3.71	A	47371
F-Rh	RhF ₆ rt	SF ₆ ,cI14,229	<i>Im</i> -3m	0.613,0.613,0.613,90,90,90	-	-	3.13	A	3001
F-Ru	RuF ₃	FeF ₃ ,hR24,167	<i>R</i> -3c	0.49666,0.49666,1.37556,90,90,120	-	-	5.36	X	822
F-Ru	RuF ₄	VF ₄ ,mP10,14	<i>P12₁/c1</i>	0.5414,0.49508,0.53989,90,117.444,90	-	pink	4.58	X	25844
F-Ru	RuF ₅	RuF ₅ ,mP48,14	<i>P12₁/c1</i>	0.54967,0.99459,1.25278,90,99.958,90	-	green emerald	3.86	X	25844
F-Ru	RuF ₆ lt	UF ₆ ,oP28,62	<i>Pnma</i>	0.9313,0.8484,0.491,90,90,90	-	-	3.68	A	47371
F-Ru	RuF ₆ rt	SF ₆ ,cI14,229	<i>Im</i> -3m	0.611,0.611,0.611,90,90,90	-	-	3.13	A	3001
F-S	SF ₄ lt	SF ₄ ,oP40,19	<i>P2₁2₁2₁</i>	0.6773,0.6812,1.3122,90,90,90	-	-	2.37	X	60462
F-S	SF ₆ lt1	SF ₆ ,cI14,229	<i>Im</i> -3m	0.57951,0.57951,0.57951,90,90,90	-	-	2.49	X	21828
F-S	SF ₆ lt2	UCl ₆ ,hP21,164	<i>P</i> -3m1	0.801,0.801,0.483,90,90,120	-	-	2.71	A	14728
F-S	SF ₆ lt3	SF ₆ ,mS42,12	<i>C12/m1</i>	1.38028,0.81392,0.47494,90,95.586,90	-	-	2.74	X	37463
F-Sb	SbF ₃	SbF ₃ ,oS16,40	<i>Ama2</i>	0.726,0.746,0.495,90,90,90	-	-	4.43	X	5246
F-Sb	SbF ₄	SbF ₄ ,mP80,14	<i>P12₁/c1</i>	0.932,1.207,1.160,90,107.1,90	-	colorless	4.21	X	10581
F-Sb	Sb ₁₁ F ₄₃ rt	Sb ₁₁ F ₄₃ ,mP108,14	<i>P12₁/c1</i>	1.1638,0.8995,1.6723,90,106.81,90	-	white	4.27	X	17850

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
F-Sb	Sb ₂ F ₇	Sb ₂ F ₇ ,mp36,11	$P12_1/m1$	0.4772,1.0941,1.0895,90,96.66,90	-	colorless	4.43	X	15960
F-Sb	Sb ₄ F ₁₅ orth1	Sb ₄ F ₁₅ ,p304,62	$Pnma$	1.9187,1.5890,1.5713,90,90,90	-	-	4.28	X	19970
F-Sb	Sb ₄ F ₁₅ orth2	Sb ₄ F ₁₅ ,p152,29	$Pca2_1$	1.1157,1.1002,1.9178,90,90,90	-	colorless	4.36	X	25427
F-Sb	Sb ₇ F ₂₉	Sb ₇ F ₂₉ ,mp144,14	$P12_1/c1$	0.8547,1.3521,1.9551,90,100,3,90	-	colorless	4.19	X	22042
F-Se	SeF _{2,76}	*,tP*,*	-	0.397,0.397,0.674,90,90,90	-	colorless	-	N	33406
F-Sc	ScF ₃ cub	ReO ₃ ,cp4,221	$Pm-3m$	0.40098,0.40098,0.40098,90,90,90	-	-	2.63	X	63639
F-Sc	ScF ₃ hp1	ScF ₃ ,hR24,161	$R3c$	0.53087,0.53087,1.40705,90,90,120	-	-	2.96	X	54208
F-Sc	ScF ₃ rt	ScF ₃ ,hR12,155	$R32$	0.5685,0.5685,0.6968,90,90,120	-	white	2.60	X	15482
F-Se	SeF ₄	SeF ₄ ,p20,19	$P2_12_12_1$	0.5169,0.5548,1.1345,90,90,90	-	-	3.16	X	16631
F-Si	SiF ₄	SiF ₄ ,c110,217	$I-43m$	0.5476,0.5476,0.5476,90,90,90	-	-	2.11	X	17536
F-Sm	SmF ₂	CaF ₂ ,cF12,225	$Fm-3m$	0.5871,0.5871,0.5871,90,90,90	fluorite family	red	6.18	X	11559
F-Sm	SmF _{2,35} rt	*,t**,*	-	0.4109,0.4109,0.5856,90,90,90	-	red dark	-	N	56260
F-Sm	SmF ₃ ht	HoH ₃ ,hP24,165	$P-3c1$	0.699,0.699,0.7142,90,90,120	-	-	6.84	X	34810
F-Sm	SmF ₃ rt	Fe ₃ C-b,p16,62	$Pnma$	0.6676,0.7062,0.4411,90,90,90	-	-	6.62	X	10826
F-Sm	Sm ₁₃ F ₃₂	*,hR132,148	$R-3$	1.4736,1.4736,1.01,90,90,120	-	-	-	N	11559
F-Sm	Sm ₁₄ F ₃₃	*,hR**,*	-	1.08505,1.08505,2.02,90,90,90	-	-	-	N	11559
F-Sm	Sm ₂₇ F ₆₄	*,cP**,*	-	1.7423,1.7423,1.7423,90,90,90	-	-	-	N	11559
F-Sm	Sm ₃ F ₇	*,tI**,*	-	0.91806,0.91806,1.7488,90,90,90	-	-	-	N	11559
F-Sn	SnF ₂ ht	TeO ₂ ,tP12,92	$P4_12_12$	0.50733,0.50733,0.8491,90,90,90	-	-	4.76	X	13292
F-Sn	SnF ₂ m orth	GeF ₂ ,oP12,19	$P2_12_12_1$	0.51392,0.49889,0.84777,90,90,90	-	-	4.79	X	13292
F-Sn	SnF ₂ rt	SnF ₂ ,mS48,15	$C12/c1$	1.3353,0.4909,1.3787,90,109,11,90	-	colorless	4.88	X	9696
F-Sn	SnF ₃ ht	SnF ₃ ,cF32,225	$Fm-3m$	0.8321,0.8321,0.8321,90,90,90	-	-	4.05	X	24090
F-Sn	SnF ₄	SnF ₄ ,tI10,139	$I4/mmm$	0.40442,0.40442,0.79241,90,90,90	-	colorless	4.99	X	32525
F-Sn	Sn ₃ F ₈ rt	Sn ₃ F ₈ ,mp22,14	$P12_1/c1$	0.5209,0.5320,1.3496,90,112,32,90	-	-	4.88	X	12636
F-Sr	SrF ₂ hp1	PbCl ₂ ,oP12,62	$Pnma$	0.6154,0.3645,0.7312,90,90,90	-	-	5.09	X	59751
F-Sr	SrF ₂ hp2	Co _{1,75} Ge,hP6,194	$P6_3/mmc$	0.3841,0.3841,0.4783,90,90,120	AlB ₂ family	-	6.83	X	59751
F-Sr	SrF ₂ rt	CaF ₂ ,cF12,225	$Fm-3m$	0.5768,0.5768,0.5768,90,90,90	strontiofluorite	-	4.35	X	59751
F-Ta	TaF ₃	ReO ₃ ,cp4,221	$Pm-3m$	0.39012,0.39012,0.39012,90,90,90	-	-	6.65	X	355
F-Ta	TaF ₅	MoF ₅ ,mS48,12	$C12/m1$	0.964,1.445,0.512,90,96,3,90	-	white	5.17	X	2193
F-Tb	TbF ₃ ht	HoH ₃ ,hP24,165	$P-3c1$	0.6865,0.6865,0.7026,90,90,120	-	-	7.50	A	8393
F-Tb	TbF ₃ rt	Fe ₃ C-b,oP16,62	$Pnma$	0.6513,0.6949,0.4384,90,90,90	-	gray	7.23	X	12502
F-Tb	TbF ₄	ZrF ₄ ,mS60,15	$C12/c1$	1.211,1.015,0.792,90,126,1,90	-	-	5.95	A	604
F-Tb	Tb ₄ F ₁₅	Tb ₄ F ₁₅ ,hR114,167	$R-3c$	1.2747,1.2747,1.1539,90,90,120	-	-	5.65	X	25216
F-Tc	TcF ₆ lt	UF ₆ ,oP28,62	$Pnma$	0.936,0.8517,0.4934,90,90,90	-	-	3.58	A	47371
F-Tc	TcF ₆ rt	SF ₆ ,cI14,229	$Im-3m$	0.616,0.616,0.616,90,90,90	-	-	3.01	A	3001
F-Te	TeF ₄	TeF ₄ ,oP20,19	$P2_12_12_1$	0.536,0.622,0.964,90,90,90	-	colorless	4.21	X	4023
F-Te	TeF ₆ lt1	SF ₆ ,cI14,229	$Im-3m$	0.6293,0.6293,0.6293,90,90,90	-	-	3.22	A	26375
F-Te	TeF ₆ lt2	UF ₆ ,oP28,62	$Pnma$	0.97903,0.87798,0.5114,90,90,90	-	-	3.65	X	26375
F-Th	ThF ₄	ZrF ₄ ,mS60,15	$C12/c1$	1.3049,1.112,0.8538,90,126,31,90	-	colorless	6.15	X	24077
F-Th	Th _{0,75} F ₃ hp	HoH ₃ ,hP24,165	$P-3c1$	0.7041,0.7041,0.7296,90,90,120	-	-	7.35	A	12514
F-Ti	TiF ₂ hp-ht	CaF ₂ ,cF12,225	$Fm-3m$	0.51555,0.51555,0.51555,90,90,90	fluorite family	-	4.16	X	20127
F-Ti	TiF ₃ rt	FeF ₃ ,hR24,167	$R-3c$	0.54338,0.54338,1.36421,90,90,120	-	blue	3.00	X	22807
F-Ti	TiF ₄	TiF ₄ ,oP60,62	$Pnma$	2.2811,0.3848,0.9568,90,90,90	-	colorless	2.94	X	31066
F-Tl	TlF ht	CuTi,tP4,129	$P4/nmm$	0.37828,0.37828,0.61231,90,90,90	b.c.c. family	-	8.47	X	37938
F-Tl	TlF rt	TlF,oP8,28	$Pma2$	0.5175,0.5488,0.6092,90,90,90	-	-	8.58	X	4246
F-Tl	TlF ₂	*,o*24,*	-	0.6262,0.8228,0.8348,90,90,90	-	-	7.49	N	5735
F-Tl	TlF ₃	Fe ₃ C-b,oP16,62	$Pnma$	0.5825,0.7024,0.4851,90,90,90	-	colorless	8.75	X	6921
F-Tl	Tl ₃ F ₃	BaBiO ₃ ,cF40,225	$Fm-3m$	0.9208,0.9208,0.9208,90,90,90	perovskite family	-	7.92	A	5735
F-Tl	Tl ₃ F ₅ mon	*,mS8,*	-	0.46697,0.6336,0.411,90,123,631,90	-	-	-	N	9059
F-Tl	Tl ₃ F ₅ orth	*,oP**,*	-	0.7961,0.8115,3.4584,90,90,90	-	-	-	N	9157
F-Tl	Tl ₃ F ₇ mon	*,mP*,3	$P121$	0.6523,0.4222,0.6574,90,117,59,90	-	-	-	N	8283
F-Tl	Tl ₃ F ₇ orth	*,oP**,*	-	0.8454,0.8544,3.9193,90,90,90	-	-	-	N	9157
F-Tm	TmF ₃ ht	HoH ₃ ,hP24,165	$P-3c1$	0.703,0.703,0.835,90,90,120	-	brown	6.30	A	2997
F-Tm	TmF ₃ rt	Fe ₃ C-b,oP16,62	$Pnma$	0.62655,0.67855,0.44091,90,90,90	-	-	8.01	A	13535
F-Tm	Tm ₁₃ F ₃₁	Na ₇ Zr ₆ F ₃₁ ,hR135,148	$R-3$	1.42648,1.42648,0.97067,90,90,120	-	-	8.11	A	55674
F-U	UF ₃	Cu ₃ P,hP24,185	$P6_3cm$	0.7179,0.7179,0.7345,90,90,120	-	violet reddish	8.97	X	3381
F-U	UF ₄ rt	ZrF ₄ ,mS60,15	$C12/c1$	1.27941,1.07901,0.83687,90,126,25,90	-	green	6.72	X	28915
F-U	UF ₅ ht	UF ₅ ,tI12,87	$I4/m$	0.6518,0.6518,0.447,90,90,90	-	blue white	5.82	X	12167
F-U	UF ₅ rt	UF ₅ -b,tI48,122	$I-42d$	1.1456,1.1456,0.5195,90,90,90	-	green	6.49	X	9502
F-U	UF ₆	UF ₆ ,oP28,62	$Pnma$	0.99,0.8962,0.5207,90,90,90	-	-	5.06	X	9745
F-U	U _{0,75} F ₃ hp	Cu ₃ P,hP24,185	$P6_3cm$	0.705,0.705,0.727,90,90,120	-	-	7.50	A	13471
F-U	U ₂ F ₉	U ₂ F ₉ ,cI44,217	$I-43m$	0.8462,0.8462,0.8462,90,90,90	-	black	7.09	X	12167
F-V	VF ₂ V+	*,oI*,*	-	0.205,0.3,0.642,90,90,90	-	black	-	N	14215
F-V	VF ₂ rt	TiO ₂ ,tP6,136	$P4_2/mnm$	0.47977,0.47977,0.32469,90,90,90	-	blue	3.95	X	14801
F-V	VF ₃ rt	FeF ₃ ,hR24,167	$R-3c$	0.5168,0.5168,1.3438,90,90,120	-	green yellow	3.46	X	23729
F-V	VF ₄	VF ₄ ,mP10,14	$P12_1/c1$	0.5340,0.5170,0.5340,90,119,49,90	-	green light	3.29	X	23100
F-V	VF ₅	VF ₅ ,oP48,62	$Pnma$	0.753,0.540,1.672,90,90,90	-	colorless	2.85	X	4629
F-W	WF ₆ lt2	UF ₆ ,oP28,62	$Pnma$	0.93774,0.85397,0.49567,90,90,90	-	-	4.98	X	31964
F-W	WF ₆ rt	SF ₆ ,cI14,229	$Im-3m$	0.628,0.628,0.628,90,90,90	-	-	3.99	A	3001
F-Xe	XeF ₂	XeF ₂ ,tI6,139	$I4/mmm$	0.42188,0.42188,0.69912,90,90,90	-	colorless	4.52	X	55340
F-Xe	XeF ₃	XeF ₃ ,mP16,14	$P12_1/c1$	0.664,0.733,0.640,90,92,67,90	-	-	4.02	X	2382
F-Xe	XeF ₄	XeF ₄ ,mP10,14	$P12_1/c1$	0.5050,0.5922,0.7006,90,125,7,90	-	-	4.05	X	1856
F-Xe	XeF ₆ lt	XeF ₆ ,cF1792,226	$Fm-3c$	2.4917,2.4917,2.4917,90,90,90	-	colorless	3.79	X	47772
F-Xe	XeF ₆ mon1	XeF ₆ ,mP224,14	$P12_1/c1$	1.434,1.28,1.8529,90,90,017,90	-	colorless	3.83	X	47772
F-Xe	XeF ₆ mon2	XeF ₆ ,mS224,15	$C12/c1$	2.2983,1.2994,1.4125,90,126,156,90	-	yellow	3.83	X	47772
F-Xe	XeF ₆ mon3	XeF ₆ ,mP112,14	$P12_1/c1$	1.452,0.8452,1.4636,90,110,996,90	-	colorless	3.89	X	47772
F-Xe	XeF ₆ mon4	*,mP56,4	$P12_1$	0.8957,1.0989,0.9332,90,91,84,90	-	-	-	N	47772
F-Xe	XeF ₆ mon5	*,mS448,*	-	1.68,2.393,1.695,90,90,67,90	-	-	-	N	47772

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
F-Xe	XeF ₆ orth	XeF ₆ , oP112,33	<i>Pna2</i> ₁	1.723, 0.8659, 1.1979, 90, 90, 90	-	colorless	3.65	X	47772
F-Y	YF ₃ ht	HoH ₃ , hP24,165	<i>P-3c1</i>	0.713, 0.713, 0.845, 90, 90, 120	-	-	3.91	A	2997
F-Y	YF ₃ rt	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.63537, 0.68545, 0.43953, 90, 90, 90	wairirite	gray	5.06	X	7732
F-Y	YF ₃ stab	YF ₃ , cP15,221	<i>Pm-3m</i>	0.5644, 0.5644, 0.5644, 90, 90, 90	-	-	4.04	X	150
F-Yb	YbF ₃ 1,91	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.56078, 0.56078, 0.56078, 90, 90, 90	fluorite family	green	7.88	X	56260
F-Yb	YbF ₃ ht	HoH ₃ , hP24,165	<i>P-3c1</i>	0.699, 0.699, 0.832, 90, 90, 120	-	-	6.51	A	7627
F-Yb	YbF ₃ rt	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.6218, 0.6785, 0.4431, 90, 90, 90	-	white	8.17	X	10826
F-Yb	Yb ₁₃ F _{31,33}	*hR135,148	<i>R-3</i>	1.41871, 1.41871, 0.9671, 90, 90, 120	-	-	8.41	N	10892
F-Yb	Yb ₂₇ F ₆₄ rt	*c***, *	-	1.67367, 1.67367, 1.67367, 90, 90, 90	-	beige	-	N	56260
F-Yb	Yb ₃ F ₇ rt	*tI100, *	-	0.8787, 0.8787, 1.676, 90, 90, 90	-	-	8.37	N	10892
F-Yb	Yb ₇ F ₁₇	Ba ₄ Y ₃ F ₁₇ , hR159,148	<i>R-3</i>	1.03671, 1.03671, 1.94894, 90, 90, 120	-	-	8.43	A	55674
F-Zn	ZnF ₂ hp-ht	Fe ₂ N _{0,94} , oP12,60	<i>Pbcn</i>	0.4683, 0.5658, 0.5166, 90, 90, 90	-	-	5.02	X	1839
F-Zn	ZnF ₂	TiO ₂ , iP6,136	<i>P4₂/mnm</i>	0.47038, 0.47038, 0.31336, 90, 90, 90	-	colorless	4.95	X	38888
F-Zr	ZrF ₄ hp	ZrF ₄ , mP20,14	<i>P12₁/c1</i>	0.5554, 0.5639, 0.7973, 90, 105.98, 90	-	colorless	4.63	X	62787
F-Zr	ZrF ₄ ht1	ZrF ₄ , iP40,84	<i>P4₂/m</i>	0.7896, 0.7896, 0.7724, 90, 90, 90	-	-	4.61	X	14751
F-Zr	ZrF ₄ rt	ZrF ₄ , mS60,15	<i>C12/c1</i>	1.1824, 0.993, 0.773, 90, 126.205, 90	-	-	4.55	X	47334
Fe-Ga	FeGa	MnGa, hR78,166	<i>R-3m</i>	1.24368, 1.24368, 0.77642, 90, 90, 120	-	-	7.82	X	43789
Fe-Ga	FeGa ₃	IrIn ₃ , iP16,136	<i>P4₃/mm</i>	0.62628, 0.62628, 0.65546, 90, 90, 90	-	gray silver	6.85	X	41138
Fe-Ga	Fe _{0,7} Ga _{0,3} ht	Mg, hP2,194	<i>P6₃/mmc</i>	0.2617, 0.2617, 0.4213, 90, 90, 120	close-packed structure	-	7.98	X	1239
Fe-Ga	Fe _{0,748} Ga _{0,252} ht	Cu, cF4,225	<i>Fm-3m</i>	0.3738, 0.3738, 0.3738, 90, 90, 90	close-packed structure	-	7.55	X	55719
Fe-Ga	Fe _{0,8} Ga _{0,2} rt	W, cI2,229	<i>Im-3m</i>	0.2907, 0.2907, 0.2907, 90, 90, 90	b.c.c. family	-	7.93	X	16054
Fe-Ga	Fe _{0,81} Ga _{0,19} tf	Pa, tI2,139	<i>I4/mmm</i>	0.2902, 0.2902, 0.294, 90, 90, 90	b.c.c. family	-	7.84	X	55553
Fe-Ga	Fe _{1,4} Ga _{0,6} ht	CsCl, cP2,221	<i>Pm-3m</i>	0.29375, 0.29375, 0.29375, 90, 90, 90	b.c.c. family	-	7.86	X	56932
Fe-Ga	Fe ₃ Ga ht Ga ⁺	Mg ₃ Cd, hP8,194	<i>P6₃/mmc</i>	0.5163, 0.5163, 0.423, 90, 90, 120	close-packed structure	-	8.07	A	60278
Fe-Ga	Fe ₃ Ga ht	BiF ₃ , cF16,225	<i>Fm-3m</i>	0.58604, 0.58604, 0.58604, 90, 90, 90	fluorite family	-	7.83	X	56932
Fe-Ga	Fe ₃ Ga rt	Cu ₃ Au, cP4,221	<i>Fm-3m</i>	0.3675, 0.3675, 0.3675, 90, 90, 90	close-packed structure	-	7.94	X	6725
Fe-Ga	Fe ₃ Ga ₄	Fe ₃ Ga ₄ , mS42,12	<i>C12/m1</i>	1.0091, 0.7666, 0.7866, 90, 106.67, 90	-	-	7.63	X	8689
Fe-Ga	Fe ₆ Ga ₅ rt	Fe ₆ Ge ₅ , mS44,12	<i>C12/m1</i>	1.0058, 0.7946, 0.7747, 90, 109.33, 90	AlB ₂ family	-	7.77	X	7791
Fe-Gd	GdFe ₂ rt	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.739, 0.739, 0.739, 90, 90, 90	Friauf-Laves phase	-	8.85	X	62563
Fe-Gd	GdFe ₃	PuNi ₃ , hR36,166	<i>R-3m</i>	0.51705, 0.51705, 2.47107, 90, 90, 120	Laves-CaCu ₅	-	8.48	X	61138
Fe-Gd	GdFe ₄ lt	*hP10, *	-	0.515, 0.515, 0.664, 90, 90, 120	-	-	-	N	1489
Fe-Gd	GdFe ₅	CaCu ₃ , hP6,191	<i>P6/mmm</i>	0.492, 0.492, 0.411, 90, 90, 120	-	-	8.41	X	1206
Fe-Gd	Gd _{0,9} Fe _{0,1}	Cu _{5,44} Tb _{0,78} , hP8,191	<i>P6/mmm</i>	0.4907, 0.4907, 0.4168, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.25	X	5215
Fe-Gd	Gd ₂ Fe ₁₇ ht	Th ₂ Ni ₁₇ , hP38,194	<i>P6₃/mmc</i>	0.8496, 0.8496, 0.8345, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.05	X	5215
Fe-Gd	Gd ₂ Fe ₁₇ rt	Zn ₁₇ Th ₂ , hR57,166	<i>R-3m</i>	0.851, 0.851, 1.251, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.03	X	42411
Fe-Gd	Gd ₃ Fe ₃	*c*30, *	-	0.825, 0.825, 0.825, 90, 90, 90	-	-	-	N	1489
Fe-Gd	Gd ₆ Fe ₂₃	Th ₆ Mn ₂₃ , cF116,225	<i>Fm-3m</i>	1.2138, 1.2138, 1.2138, 90, 90, 90	-	-	8.28	A	40745
Fe-Ge	FeGe ht1	CoSn, hP6,191	<i>P6/mmm</i>	0.5, 0.5, 0.405, 90, 90, 120	AlB ₂ family	-	7.30	X	3099
Fe-Ge	FeGe ht2	CoGe, mS16,12	<i>C12/m1</i>	1.1841, 0.39376, 0.49354, 90, 103.508, 90	-	-	7.63	X	16073
Fe-Ge	FeGe rt	FeSi, cP8,198	<i>P2₁3</i>	0.46995, 0.46995, 0.46995, 90, 90, 90	-	-	8.22	X	50490
Fe-Ge	FeGe ₂ rt	CuAl ₂ , tI12,140	<i>I4/mcm</i>	0.5908, 0.5908, 0.4957, 90, 90, 90	-	-	7.72	X	6603
Fe-Ge	Fe _{0,1} Ge _{0,9}	C, cF8,227	<i>Fd-3m</i>	0.56576, 0.56576, 0.56576, 90, 90, 90	-	-	5.20	X	51129
Fe-Ge	Fe _{0,75} Ge _{0,25} m2	W, cI2,229	<i>Im-3m</i>	0.2904, 0.2904, 0.2904, 90, 90, 90	b.c.c. family	-	8.14	X	49523
Fe-Ge	Fe _{0,85} Ge _{0,15} rt	W, cI2,229	<i>Im-3m</i>	0.29, 0.29, 0.29, 90, 90, 90	b.c.c. family	-	7.95	X	16054
Fe-Ge	Fe _{1,3} Ge ₃ rt	Fe _{1,3} Ge ₃ , cP16,221	<i>Pm-3m</i>	0.5763, 0.5763, 0.5763, 90, 90, 90	b.c.c. family	-	8.19	X	1596
Fe-Ge	Fe ₂ Ge	Co _{1,75} Ge, hP6,194	<i>P6₃/mmc</i>	0.4058, 0.4058, 0.5038, 90, 90, 120	AlB ₂ family	-	8.52	X	22550
Fe-Ge	Fe ₂ Ge ₃ rt	Ru ₂ Sn ₃ , iP20,116	<i>P-4c2</i>	0.559, 0.559, 0.892, 90, 90, 90	chimney-ladder structure	-	7.85	A	37479
Fe-Ge	Fe ₂ Ge ht1	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.359, 0.359, 0.359, 90, 90, 90	close-packed structure	-	8.62	X	24729
Fe-Ge	Fe ₂ Ge ht2	Mg ₃ Cd, hP8,194	<i>P6₃/mmc</i>	0.51614, 0.51614, 0.42138, 90, 90, 120	close-packed structure	-	8.20	X	64039
Fe-Ge	Fe ₆ Ge ₅ rt	Fe ₆ Ge ₅ , mS44,12	<i>C12/m1</i>	0.9965, 0.7826, 0.7801, 90, 109.67, 90	AlB ₂ family	-	8.09	X	7791
Fe-Ge	Fe _{6,5} Ge ₄ ht	Fe _{6,5} Ge ₄ , hP22,194	<i>P6₃/mmc</i>	0.7976, 0.7976, 0.4993, 90, 90, 120	AlB ₂ family	-	7.89	X	13182
Fe-H	FeH m	FeH, hP14,194	<i>P6₃/mmc</i>	0.2679, 0.2679, 0.877, 90, 90, 120	-	-	6.93	X	34580
Fe-H	FeH ₂ hp	FeH ₂ , tI12,139	<i>I4/mmm</i>	0.2479, 0.2479, 0.8415, 90, 90, 90	-	-	7.43	X	64586
Fe-H	FeH ₃	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.2437, 0.2437, 0.2437, 90, 90, 90	close-packed structure	-	6.75	X	64586
Fe-Hf	HfFe ₂ ht2	MgNi ₂ , hP24,194	<i>P6₃/mmc</i>	0.4968, 0.4968, 1.6167, 90, 90, 120	Friauf-Laves phase	-	11.16	X	1483
Fe-Hf	HfFe ₂ rt	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.7021, 0.7021, 0.7021, 90, 90, 90	Friauf-Laves phase	-	11.14	X	60017
Fe-Hf	Hf _{0,001} Fe _{0,999} rt	W, cI2,229	<i>Im-3m</i>	0.28674, 0.28674, 0.28674, 90, 90, 90	b.c.c. family	-	7.88	X	3183
Fe-Hf	Hf _{0,93} Fe ₂ ht1	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.4944, 0.4944, 0.8066, 90, 90, 120	Friauf-Laves phase	-	10.80	X	60017
Fe-Hf	Hf ₂ Fe rt	Ti ₂ Ni, cF96,227	<i>Fd-3m</i>	1.20246, 1.20246, 1.20246, 90, 90, 90	-	-	12.62	X	24743
Fe-Ho	HoFe ₂ hp-ht	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.53, 0.53, 0.854, 90, 90, 120	Friauf-Laves phase	-	8.84	A	17900
Fe-Ho	HoFe ₂ rt	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.7333, 0.7333, 0.7333, 90, 90, 90	Friauf-Laves phase	-	9.32	X	28866
Fe-Ho	HoFe ₃	PuNi ₃ , hR36,166	<i>R-3m</i>	0.511, 0.511, 2.453, 90, 90, 120	Laves-CaCu ₅	-	8.96	X	7326
Fe-Ho	HoFe ₅	CaCu ₃ , hP6,191	<i>P6/mmm</i>	0.4933, 0.4933, 0.4176, 90, 90, 120	-	-	8.38	X	24546
Fe-Ho	Ho ₂ Fe ₁₇ rt	Th ₂ Ni ₁₇ , hP38,194	<i>P6₃/mmc</i>	0.84553, 0.84553, 0.83353, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.23	X	34847
Fe-Ho	Ho ₆ Fe ₂₃	Th ₆ Mn ₂₃ , cF116,225	<i>Fm-3m</i>	1.2029, 1.2029, 1.2029, 90, 90, 90	-	-	8.68	X	16007
Fe-I	FeI ₂	CdI ₂ , hP3,164	<i>P-3m1</i>	0.405, 0.405, 0.675, 90, 90, 120	CdI ₂ -PbI ₂ polytype	brown dark	5.36	X	21226
Fe-Ir	Fe _{0,4} Ir _{0,6} ht	Cu, cF4,225	<i>Fm-3m</i>	0.3766, 0.3766, 0.3766, 90, 90, 90	close-packed structure	-	17.12	X	4177
Fe-Ir	Fe _{0,64} Ir _{0,36} rt	Mg, hP2,194	<i>P6₃/mmc</i>	0.263, 0.263, 0.423, 90, 90, 120	close-packed structure	-	13.75	X	2360
Fe-Ir	Fe _{0,94} Ir _{0,06} rt	W, cI2,229	<i>Im-3m</i>	0.28908, 0.28908, 0.28908, 90, 90, 90	b.c.c. family	-	8.80	X	3183
Fe-Lu	LuFe ₂ hp-ht	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.527, 0.527, 0.851, 90, 90, 120	Friauf-Laves phase	-	9.30	A	17900
Fe-Lu	LuFe ₂ rt	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.723, 0.723, 0.723, 90, 90, 90	Friauf-Laves phase	-	10.08	X	19286
Fe-Lu	Lu _{1,83} Fe _{17,46}	Y ₂ Fe ₁₇ , hP56,194	<i>P6₃/mmc</i>	0.8418, 0.8418, 0.8295, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.47	X	39350
Fe-Lu	Lu ₆ Fe ₂₃	Th ₆ Mn ₂₃ , cF116,225	<i>Fm-3m</i>	1.1936, 1.1936, 1.1936, 90, 90, 90	-	-	9.12	A	62317
Fe-Mg	Mg _{0,10} Fe _{0,90} m	W, cI2,229	<i>Im-3m</i>	0.2895, 0.2895, 0.2895, 90, 90, 90	b.c.c. family	-	7.21	X	55562
Fe-Mg	Mg _{0,20} Fe _{0,80} m	*oI*, *	-	0.28745, 0.28735, 0.28745, 90, 90, 90	-	-	6.93	N	55562
Fe-Mn	Mn _{0,05} Fe _{0,95} rt	W, cI2,229	<i>Im-3m</i>	0.28706, 0.28706, 0.28706, 90, 90, 90	b.c.c. family	-	7.83	X	3183
Fe-Mn	Mn _{0,2} Fe _{0,8} m	W, cI2,229	<i>Im-3m</i>	0.29, 0.29, 0.29, 90, 90, 90	b.c.c. family	-	7.58	X	19318
Fe-Mn	Mn _{0,224} Fe _{0,776} rt	Mg, hP2,194	<i>P6₃/mmc</i>	0.2535, 0.2535, 0.409, 90, 90, 120	close-packed structure	-	8.12	X	40132

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Fe-Mn	Mn _{0.3} Fe _{0.7} m	Mn ₂ c158,217	<i>I</i> -43m	0.8805,0.8805,0.8805,90,90,90	-	-	7.84	A	19318
Fe-Mn	Mn _{0.5} Fe _{0.5} ht	Cu ₂ cF4,225	<i>Fm</i> -3m	0.3629,0.3629,0.3629,90,90,90	close-packed structure	-	7.70	X	21083
Fe-Mn	Mn _{0.67} Fe _{0.33} ht1	Mn ₂ cP20,213	<i>P</i> 4 ₁ 32	0.6263,0.6263,0.6263,90,90,90	-	-	7.47	A	93
Fe-Mn	Mn _{0.69} Fe _{0.31} rt	Mn ₂ c158,217	<i>I</i> -43m	0.8872,0.8872,0.8872,90,90,90	-	-	7.62	A	53407
Fe-Mn	Mn _{0.85} Fe _{0.15} stab	In ₂ tI2,139	<i>I</i> 4/ <i>mmm</i>	0.26361,0.26361,0.3615,90,90,90	close-packed structure	-	7.28	X	6005
Fe-Mo	MoFe ₂ rt	MgZn ₂ ,hP12,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.472,0.472,0.7795,90,90,120	Friauf-Laves phase	-	9.17	A	61414
Fe-Mo	Mo _{0.08} Fe _{0.92} rt	W ₂ cI2,229	<i>Im</i> -3m	0.29,0.29,0.29,90,90,90	b.c.c. family	-	8.04	X	27426
Fe-Mo	Mo _{0.368} Fe _{0.632} ht	(Cr _{0.16} Mo _{0.38} Co _{0.46}),hR159,148	<i>R</i> -3	1.0927,1.0927,1.9354,90,90,120	Frank-Kasper phase	-	9.31	A	57992
Fe-Mo	Mo _{0.37} Fe _{0.63}	Mn ₂ cP20,213	<i>P</i> 4 ₁ 32	0.6364,0.6364,0.6364,90,90,90	-	-	9.11	A	55151
Fe-Mo	Mo _{0.55} Fe _{0.45} ht	(Cr _{0.49} Fe _{0.51}),tP30,136	<i>P</i> 4 ₂ / <i>mmn</i>	0.92402,0.92402,0.48275,90,90,90	Frank-Kasper phase	-	9.42	X	59085
Fe-Mo	Mo _{0.73} Fe _{0.27} m1	Mg ₂ hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.273,0.273,0.445,90,90,120	close-packed structure	-	9.84	X	30395
Fe-Mo	Mo _{0.73} Fe _{0.27} m2	Cu ₂ cF4,225	<i>Fm</i> -3m	0.386,0.386,0.386,90,90,90	close-packed structure	-	9.83	X	30395
Fe-Mo	Mo _{0.8} Fe _{0.2} m	W ₂ cI2,229	<i>Im</i> -3m	0.312,0.312,0.312,90,90,90	b.c.c. family	-	9.61	X	20139
Fe-Mo	Mo _{0.533} Fe _{0.467} rt	W ₂ Fe ₇ ,hR39,166	<i>R</i> -3m	0.47667,0.47667,2.57707,90,90,120	Frank-Kasper phase	-	9.23	X	63801
Fe-Mo	Mo _{0.9} Fe _{0.1} prec	Mo _{0.9} Fe _{0.1} ,mS88,12	<i>C</i> 12/ <i>m</i> 1	2.04,0.47,1.17,90,112,4,90	Frank-Kasper phase	-	10.18	X	21993
Fe-N	FeN rt	ZnS ₂ cF8,216	<i>F</i> -43m	0.4307,0.4307,0.4307,90,90,90	adamantane structure	-	5.81	X	27371
Fe-N	FeN _{0.04} m	NaCl ₂ cF8,225	<i>Fm</i> -3m	0.3692,0.3692,0.3692,90,90,90	rocksalt family	-	7.45	X	64733
Fe-N	FeN _{0.112}	Cu ₂ cF4,225	<i>Fm</i> -3m	0.3659,0.3659,0.3659,90,90,90	close-packed structure	-	7.79	F	7494
Fe-N	FeN ₂ rt	W ₂ cI2,229	<i>Im</i> -3m	0.2875,0.2875,0.2875,90,90,90	b.c.c. family	-	7.81	X	62620
Fe-N	Fe ₂ N	Fe ₂ N _{0.94} ,oP12,60	<i>P</i> bcn	0.44388,0.55571,0.48678,90,90,90	-	-	6.95	X	64733
Fe-N	Fe ₃ N _{1.20}	Re _{1.16} O ₃ ,hP10,182	<i>P</i> 6 ₃ 22	0.47241,0.47241,0.43862,90,90,120	-	white silver	7.22	X	52975
Fe-N	Fe ₄ N	Fe ₄ N,cP5,221	<i>P</i> m-3m	0.379,0.379,0.379,90,90,90	-	-	7.24	X	30305
Fe-N	Fe ₈ N	Fe ₈ N,tI18,139	<i>I</i> 4/ <i>mmm</i>	0.57115,0.57115,0.6287,90,90,90	-	-	7.46	X	62621
Fe-Nb	Nb _{0.002} Fe _{0.998} rt	W ₂ cI2,229	<i>Im</i> -3m	0.28676,0.28676,0.28676,90,90,90	b.c.c. family	-	7.88	X	3183
Fe-Nb	Nb _{0.8} Fe _{0.2} m1	Cu ₂ cF4,225	<i>Fm</i> -3m	0.411,0.411,0.411,90,90,90	close-packed structure	-	8.18	X	28830
Fe-Nb	Nb _{0.8} Fe _{0.2} m2	Mg ₂ hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.294,0.294,0.48,90,90,120	close-packed structure	-	7.90	X	28830
Fe-Nb	Nb _{0.8} Fe _{0.2}	MgZn ₂ ,hP12,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.482,0.482,0.7866,90,90,120	Friauf-Laves phase	-	8.28	A	58281
Fe-Nb	Nb _{0.5} Fe _{0.5}	W ₂ Fe ₇ ,hR39,166	<i>R</i> -3m	0.4928,0.4928,2.683,90,90,120	Frank-Kasper phase	-	8.54	X	4148
Fe-Nd	NdFe ₂ hp	MgCu ₂ cF24,227	<i>F</i> d-3m	0.7462,0.7462,0.7462,90,90,90	Friauf-Laves phase	-	8.18	X	23856
Fe-Nd	NdFe ₅ m	CaCu ₅ ,hP6,191	<i>P</i> 6/ <i>mmm</i>	0.4946,0.4946,0.417,90,90,120	-	-	7.96	X	18887
Fe-Nd	Nd ₂ Fe ₁₇ ht	Zn ₁₇ Th ₂ ,hR57,166	<i>R</i> -3m	0.8584,0.8584,1.2463,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	7.75	X	55625
Fe-Nd	Nd ₅ Fe ₁₇	Nd ₅ Fe ₁₇ ,hP264,193	<i>P</i> 6 ₃ / <i>mcm</i>	2.0214,2.0214,1.2329,90,90,120	-	-	7.63	X	23440
Fe-Ni	FeNi tae 1M	FeNi ₂ mP4,6	<i>P</i> 1m1	0.3581,0.3582,0.3587,90,90,04,90	taenite 1M	-	8.27	X	31153
Fe-Ni	FeNi ₃ rt	Cu ₃ Au,cP4,221	<i>P</i> m-3m	0.35545,0.35545,0.35545,90,90,90	awaruite	-	8.58	X	49847
Fe-Ni	Fe _{0.17} Ni _{0.83}	Mg ₂ hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.245,0.245,0.396,90,90,120	close-packed structure	-	9.39	X	55180
Fe-Ni	Fe _{0.3} Ni _{0.5} rt	Cu ₂ cF4,225	<i>Fm</i> -3m	0.3758,0.3758,0.3758,90,90,90	taenite cF	-	7.17	X	30501
Fe-Ni	Fe _{0.6} Ni _{0.4} tf	W ₂ cI2,229	<i>Im</i> -3m	0.2872,0.2872,0.2872,90,90,90	b.c.c. family	-	7.99	X	23500
Fe-Ni	Fe _{0.686} Ni _{0.314} mart	Mg ₂ hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.2535,0.2535,0.4132,90,90,120	close-packed structure	-	8.20	X	64462
Fe-Ni	Fe _{0.7113} Ni _{0.2887} tae cub	*cI32,*	-	0.7168,0.7168,0.7168,90,90,90	taenite cP	-	-	N	2914
Fe-Ni	Fe _{0.8782} Ni _{0.1218} kam cub	*cP*,*	-	0.8617,0.8617,0.8617,90,90,90	kamacite C [not IMA]	-	-	N	2914
Fe-Ni	Fe _{0.91} Ni _{0.09} hp	Mg ₂ hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.23211,0.23211,0.37492,90,90,120	close-packed structure	-	10.65	X	60033
Fe-Ni	Fe _{0.92} Ni _{0.08} rt	W ₂ cI2,229	<i>Im</i> -3m	0.28704,0.28704,0.28704,90,90,90	b.c.c. family	-	7.87	X	3183
Fe-Ni	Fe _{0.9381} Ni _{0.0619} kam tet	*tP*,*	-	0.716,0.716,0.574,90,90,90	kamacite Q [not IMA]	-	-	N	2914
Fe-Ni	Fe _{1.009} Ni _{0.991} tet	CuAu ₂ ,tP2,123	<i>P</i> 4/ <i>mmm</i>	0.25329,0.25329,0.3607,90,90,90	tetrataenite	white creamy	8.22	X	63889
Fe-Np	NpFe ₂	MgCu ₂ cF24,227	<i>F</i> d-3m	0.7144,0.7144,0.7144,90,90,90	Friauf-Laves phase	-	12.71	X	9108
Fe-Np	Np ₂ Fe	U ₆ Mn,tI28,140	<i>I</i> 4/ <i>mcm</i>	1.0224,1.0224,0.5238,90,90,90	-	-	17.93	A	10599
Fe-O	Fe _{0.9} O hp2	NiO,hR6,166	<i>R</i> -3m	0.2599,0.2599,0.7307,90,90,120	rocksalt family	-	7.72	X	49688
Fe-O	Fe _{0.94} O hp1	NiO,hR6,166	<i>R</i> -3m	0.28278,0.28278,0.7311,90,90,120	rocksalt family	-	6.74	X	60038
Fe-O	Fe _{0.95} O ht-hp	*mP*,11	<i>P</i> 12 ₁ / <i>m</i> 1	0.2925,0.2731,0.39749,90,97.211,90	-	-	-	N	52546
Fe-O	Fe _{0.952} O ht	NaCl ₂ cF8,225	<i>Fm</i> -3m	0.43109,0.43109,0.43109,90,90,90	wüstite	black	5.73	X	26136
Fe-O	Fe _{0.96} O hp-ht	NiAs ₂ ,hP4,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.267,0.267,0.521,90,90,120	AlB ₂ family	-	7.19	X	58091
Fe-O	Fe _{0.97} O lt	NiO,hR6,166	<i>R</i> -3m	0.30249,0.30249,0.75012,90,90,120	rocksalt family	-	5.88	X	476
Fe-O	Fe ₂ O ₃ hp1	Rh ₂ S ₃ ,oP20,60	<i>P</i> bcn	0.7161,0.4823,0.5009,90,90,90	-	-	6.13	X	55133
Fe-O	Fe ₂ O ₃ hp2	Fe ₂ O ₃ ,oS20,63	<i>C</i> mcm	0.2665,0.8609,0.6379,90,90,90	-	-	7.25	X	61049
Fe-O	Fe ₂ O ₃ hp3	V ₂ O ₅ ,mS20,15	<i>C</i> 12/ <i>c</i> 1	0.8738,0.50117,0.54417,90,122.629,90	-	-	5.29	X	64930
Fe-O	Fe ₂ O ₃ lt	Al ₂ O ₃ ,hR30,167	<i>R</i> -3c	0.50354,0.50354,1.37477,90,90,120	hematite	black	5.27	X	56701
Fe-O	Fe ₂ O ₃ rt orth	Fe ₂ O ₃ ,oP40,33	<i>P</i> na2 ₁	0.50715,0.87359,0.94178,90,90,90	-	brown	5.08	X	46638
Fe-O	Fe ₂ O ₃ tet	Fe ₂ O ₃ ,tP160,92	<i>P</i> 4 ₂ ,2	0.8332,0.8332,2.5113,90,90,90	-	-	4.87	X	49916
Fe-O	Fe ₂ O ₃ tf	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>I</i> a-3	0.94039,0.94039,0.94039,90,90,90	-	-	5.10	X	60712
Fe-O	Fe ₂ O ₃ trig	Fe ₂ O ₃ ,hP30,143	<i>P</i> 3	0.503,0.503,1.373,90,90,120	-	-	5.29	X	871
Fe-O	Fe _{2.67} O ₄ ht	Fe _{2.67} O ₄ ,cP56,213	<i>P</i> 4 ₁ 32	0.83364,0.83364,0.83364,90,90,90	maghemite	-	4.89	X	63627
Fe-O	Fe ₃ O ₄ hp	Fe ₃ O ₄ ,oS28,63	<i>C</i> mcm	0.27555,0.9326,0.9288,90,90,90	-	-	6.44	X	42493
Fe-O	Fe ₃ O ₄ lt rhom	Fe ₃ O ₄ ,hR42,166	<i>R</i> -3m	0.59277,0.59277,1.45699,90,90,120	-	-	5.20	X	38500
Fe-O	Fe ₃ O ₄ rt	Fe ₃ O ₄ ,cF56,227	<i>F</i> d-3m	0.83198,0.83198,0.83198,90,90,90	magnetite	-	5.34	X	50195
Fe-O	Fe ₄ O ₅ hp	Fe ₄ O ₅ ,oS36,63	<i>C</i> mcm	0.2843,0.97,1.229,90,90,90	-	-	5.95	X	57994
Fe-Os	Fe _{0.7} Os _{0.3}	Mg ₂ hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.2618,0.2618,0.4189,90,90,120	close-packed structure	-	12.84	X	6012
Fe-Os	Fe _{0.985} Os _{0.015} rt	W ₂ cI2,229	<i>Im</i> -3m	0.28715,0.28715,0.28715,90,90,90	b.c.c. family	-	8.12	X	3183
Fe-P	FeP	FeAs ₂ ,oP8,62	<i>P</i> nma	0.5191,0.3099,0.5792,90,90,90	murashkoite	-	6.19	X	1584
Fe-P	FeP ₂	FeAs ₂ ,oP6,58	<i>P</i> nnm	0.49729,0.56568,0.2723,90,90,90	zuktamurite	-	5.11	X	4354
Fe-P	FeP ₄ hp	FeP ₄ ,oS20,20	<i>C</i> 222 ₁	0.5005,1.0212,0.5530,90,90,90	-	black	4.22	X	11587
Fe-P	FeP ₄ mon1	FeP ₄ ,mP30,14	<i>P</i> 12 ₁ / <i>c</i> 1	0.4619,1.3670,0.7002,90,101.48,90	-	black	4.13	X	11126
Fe-P	FeP ₄ mon2	FeP ₄ ,mS40,15	<i>C</i> 12/ <i>c</i> 1	0.50543,1.0407,1.1069,90,91.14,90	-	-	4.10	X	20272
Fe-P	Fe _{0.96} P _{0.04} rt	W ₂ cI2,229	<i>Im</i> -3m	0.2859,0.2859,0.2859,90,90,90	b.c.c. family	-	7.80	X	58281
Fe-P	Fe ₂ P hp-ht	Co ₂ P,tP12,62	<i>P</i> nma	0.5775,0.3571,0.6641,90,90,90	-	-	6.92	A	9932
Fe-P	Fe ₂ P	Fe ₂ P,hP9,189	<i>P</i> -62m	0.58675,0.58675,0.34581,90,90,120	Fe ₂ P family	-	6.89	X	7476
Fe-P	Fe ₃ P	Ni ₃ P,tI32,82	<i>I</i> -4	0.9107,0.9107,0.446,90,90,90	-	-	7.13	X	1579
Fe-P	Fe ₄ P prec	Fe ₄ P,oP5,47	<i>P</i> mmm	0.359,0.401,0.432,90,90,90	-	-	6.79	X	1485
Fe-Pb	Fe _{0.97} Pb _{0.03} rt	W ₂ cI2,229	<i>Im</i> -3m	0.2882,0.2882,0.2882,90,90,90	b.c.c. family	-	8.38	X	51461

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Fe-Pd	FePd ₃ rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3852,0.3852,0.3852,90,90,90	close-packed structure	-	10.90	X	14347
Fe-Pd	Fe _{0.699} Pd _{0.301} rt	Cu ₃ cF4,225	<i>Fm-3m</i>	0.3752,0.3752,0.3752,90,90,90	close-packed structure	-	8.94	X	23682
Fe-Pd	Fe _{0.7} Pd _{0.3} lt	In ₂ tI ₂ ,139	<i>I4/mmm</i>	0.27047,0.27047,0.3542,90,90,90	close-packed structure	-	9.10	X	56090
Fe-Pd	Fe _{0.8} Pd _{0.2} tf	W ₂ cI ₂ ,229	<i>Im-3m</i>	0.297,0.297,0.297,90,90,90	b.c.c. family	-	8.36	X	21217
Fe-Pd	Fe _{0.97} Pd _{0.03} rt	W ₂ cI ₂ ,229	<i>Im-3m</i>	0.28811,0.28811,0.28811,90,90,90	b.c.c. family	-	7.97	X	3183
Fe-Pd	Fe _{1.396} Pd _{0.604} lt	CuAu,tP2,123	<i>P4/mmm</i>	0.2679,0.2679,0.3635,90,90,90	close-packed structure	-	9.05	X	23682
Fe-Pd	Fe ₂ Pd	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3818,0.3818,0.3818,90,90,90	close-packed structure	-	8.17	X	16054
Fe-Pr	PrFe ₂ hp-ht	MgCu ₂ cF24,227	<i>Fd-3m</i>	0.7464,0.7464,0.7464,90,90,90	Friauf-Laves phase	-	8.07	X	17977
Fe-Pr	Pr ₂ Fe ₁₇	Zn ₁₇ Th ₂ hR57,166	<i>R-3m</i>	0.8588,0.8588,1.24699,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	7.70	X	55796
Fe-Pt	FePt rt	CuAu,tP2,123	<i>P4/mmm</i>	0.2728,0.2728,0.3736,90,90,90	tetraferroplatinum	black	14.99	X	59659
Fe-Pt	FePt ₃ rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.387,0.387,0.387,90,90,90	isoferroplatinum	-	18.37	X	15289
Fe-Pt	Fe _{0.3} Pt _{0.5} ht	Cu ₂ cF4,225	<i>Fm-3m</i>	0.384,0.384,0.384,90,90,90	close-packed structure	-	14.72	X	59659
Fe-Pt	Fe _{0.97} Pt _{0.03} rt	W ₂ cI ₂ ,229	<i>Im-3m</i>	0.28832,0.28832,0.28832,90,90,90	b.c.c. family	-	8.32	X	3183
Fe-Pt	Fe ₂ Pt mart	SrPb ₃ tP4,123	<i>P4/mmm</i>	0.3805,0.3805,0.3632,90,90,90	close-packed structure	-	11.45	X	52109
Fe-Pt	Fe ₂ Pt rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3837,0.3837,0.3837,90,90,90	close-packed structure	-	10.66	X	52109
Fe-Pu	PuFe ₂ ht	MgCu ₂ cF24,227	<i>Fd-3m</i>	0.7183,0.7183,0.7183,90,90,90	Friauf-Laves phase	-	12.75	X	12323
Fe-Pu	Pu ₆ Fe	U ₆ Mn,tI28,140	<i>I4/mcm</i>	1.0405,1.0405,0.5349,90,90,90	-	-	17.43	A	858
Fe-Re	Re _{0.08} Fe _{0.92} rt	W ₂ cI ₂ ,229	<i>Im-3m</i>	0.28911,0.28911,0.28911,90,90,90	b.c.c. family	-	9.11	X	3183
Fe-Re	Re _{0.47} Fe _{0.53}	(Cr ₁₀ Fe _{0.51})tP30,136	<i>P4₃/mmn</i>	0.91438,0.91438,0.47717,90,90,90	Frank-Kasper phase	-	14.62	X	62192
Fe-Re	Re _{0.6} Fe _{0.4}	Mn ₂ cP20,213	<i>P4₁32</i>	0.643,0.643,0.643,90,90,90	-	-	16.75	X	3157
Fe-Rh	FeRh ht1	CsCl,cP2,221	<i>Pm-3m</i>	0.2997,0.2997,0.2997,90,90,90	b.c.c. family	-	9.79	X	3614
Fe-Rh	FeRh rt	CsCl,cP2,221	<i>Pm-3m</i>	0.2983,0.2983,0.2983,90,90,90	b.c.c. family	-	9.93	X	52988
Fe-Rh	Fe _{0.5} Rh _{0.5} ht	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3724,0.3724,0.3724,90,90,90	close-packed structure	-	10.21	X	27434
Fe-Rh	Fe _{0.7} Rh _{0.3} tf	W ₂ cI ₂ ,229	<i>Im-3m</i>	0.2941,0.2941,0.2941,90,90,90	b.c.c. family	-	9.13	X	27434
Fe-Rh	Fe _{0.94} Rh _{0.06} rt	W ₂ cI ₂ ,229	<i>Im-3m</i>	0.2888,0.2888,0.2888,90,90,90	b.c.c. family	-	8.09	X	3183
Fe-Ru	Fe _{0.4} Ru _{0.6}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.266,0.266,0.423,90,90,120	close-packed structure	-	10.63	X	21551
Fe-Ru	Fe _{0.9} Ru _{0.1} rt	W ₂ cI ₂ ,229	<i>Im-3m</i>	0.29,0.29,0.29,90,90,90	b.c.c. family	-	8.22	X	21551
Fe-S	FeS hp1	FeAs,oP8,62	<i>Pnma</i>	0.49371,0.30844,0.51576,90,90,90	AlB ₂ family	-	7.43	X	51270
Fe-S	FeS hp2	FeS,mP24,14	<i>P12₁/c1</i>	0.64832,0.56666,0.81103,90,93.05,90	-	-	5.89	X	36734
Fe-S	FeS ht1	Nb _{0.92} S ₈ hP16,186	<i>P6₃/mc</i>	0.67175,0.67175,0.56542,90,90,120	AlB ₂ family	-	5.29	X	35083
Fe-S	FeS ht2	NiAs,hP4,194	<i>P6₃/mmc</i>	0.35538,0.35538,0.581,90,90,120	AlB ₂ family	-	4.59	X	46242
Fe-S	FeS lt ble	FeS,oF8,22	<i>F222</i>	0.5195,0.5487,0.554,90,90,90	-	-	3.70	X	11771
Fe-S	FeS mac	PbO,tP4,129	<i>P4/nmm</i>	0.36735,0.36735,0.50328,90,90,90	mackinawite	-	4.30	X	30796
Fe-S	FeS rt ble	ZnS,cF8,216	<i>F-43m</i>	0.542,0.542,0.542,90,90,90	adamantane structure	-	3.67	X	11771
Fe-S	FeS rt tro	FeS,hP24,190	<i>P-62c</i>	0.5965,0.5965,1.1756,90,90,120	troilite	-	4.84	X	23563
Fe-S	FeS ₂ ht	FeS ₂ cP12,205	<i>Pa-3</i>	0.54281,0.54281,0.54281,90,90,90	pyrite	gray dark	4.98	X	9357
Fe-S	FeS ₂ lt pyr	FeS ₂ oP12,29	<i>Pca2₁</i>	0.5418,0.5418,0.5418,90,90,90	-	-	5.01	X	21966
Fe-S	FeS ₂ rt	FeS ₂ oP6,58	<i>Pnnm</i>	0.4432,0.54246,0.33872,90,90,90	marcasite	-	4.89	X	7075
Fe-S	Fe _{0.91} S 5.5C	Fe _{0.91} S,oS8,63	<i>Cmcm</i>	0.3446,0.5976,0.5744,90,90,90	pyrrhotite 5.5C	-	4.65	X	14654
Fe-S	Fe _{1.1} S ₁₂ 6C	Fe _{1.1} S ₁₂ mS96,9	<i>C1c1</i>	0.68973,1.1954,1.76015,90,101.296,90	pyrrhotite 6C	-	4.66	X	54736
Fe-S	Fe ₂ S ₃ hp mon	*mS80,15	<i>C12/c1</i>	0.711,1.13,1.0697,90,104.19,90	-	-	-	N	2916
Fe-S	Fe ₂ S ₃ hp tet	*tP80,94	<i>P4₂/2₁</i>	1.083,1.083,1.001,90,90,90	-	-	-	N	4678
Fe-S	Fe ₂ S hp	Ni ₂ P,tI32,82	<i>I-4</i>	0.9144,0.9144,0.4509,90,90,90	-	-	7.03	A	37234
Fe-S	Fe ₂ S tf	Fe ₂ C-b,oP16,62	<i>Pnma</i>	0.509,0.67,0.456,90,90,90	-	-	8.53	A	9944
Fe-S	Fe ₃ S ₄ ht gre	Fe ₃ O ₄ cF56,227	<i>Fd-3m</i>	0.9868,0.9868,0.9868,90,90,90	greigite	black	4.09	X	37254
Fe-S	Fe ₃ S ₄ smy	Fe ₃ S ₄ hR21,166	<i>R-3m</i>	0.347,0.347,3.45,90,90,120	smythite	black jet	4.10	X	840
Fe-S	Fe ₇ S ₈ 3C	Fe ₇ S ₈ hP45,152	<i>P3₁21</i>	0.68652,0.68652,1.7046,90,90,120	pyrrhotite 3C	-	4.64	X	12062
Fe-S	Fe ₇ S ₈ 4C-h	*hP60,*	-	0.688,0.688,2.29,90,90,120	pyrrhotite 4C-h	-	-	N	4324
Fe-S	Fe ₇ S ₈ 4C-m	Fe ₇ S ₈ mS60,15	<i>C12/c1</i>	1.1902,0.6859,1.2814,90,117.24,90	pyrrhotite 4C-m	-	4.62	X	6386
Fe-S	Fe ₉ S ₁₀ 5C	Fe ₉ S ₁₀ mP80,4	<i>P12₁</i>	0.68915,2.8695,0.68984,90,119.956,90	pyrrhotite 5C-m	black	4.63	X	58649
Fe-Sb	FeSb ₂ hp	CuAl ₂ tI12,140	<i>I4/mcm</i>	0.68441,0.68441,0.52563,90,90,90	-	-	8.08	X	60056
Fe-Sb	FeSb ₂	FeAs ₂ oP6,58	<i>Pnnm</i>	0.5823,0.6523,0.3194,90,90,90	seinäjokite	-	8.19	X	37721
Fe-Sb	FeSb ₃ tf	CoAs ₃ cI32,204	<i>Im-3</i>	0.92383,0.92383,0.92383,90,90,90	-	-	7.10	X	58073
Fe-Sb	Fe _{0.95} Sb _{0.05} rt	W ₂ cI ₂ ,229	<i>Im-3m</i>	0.29,0.29,0.29,90,90,90	b.c.c. family	-	8.05	X	8317
Fe-Sb	Fe _{1.14} Sb	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.407,0.407,0.513,90,90,120	AlB ₂ family	-	8.37	X	18247
Fe-Sc	ScFe _{1.8} ht2 Sc+	MgCu ₂ cF24,227	<i>Fd-3m</i>	0.706,0.706,0.706,90,90,90	Friauf-Laves phase	-	5.49	X	16836
Fe-Sc	ScFe ₂ rt	MgZn ₂ hP12,194	<i>P6₃/mmc</i>	0.492,0.492,0.79,90,90,120	Friauf-Laves phase	-	6.28	X	3641
Fe-Sc	Sc _{0.95} Fe _{2.05} ht1	MgNi ₂ hP24,194	<i>P6₃/mmc</i>	0.4975,0.4975,1.6318,90,90,120	Friauf-Laves phase	-	5.97	A	19264
Fe-Sc	Sc ₂₉ Fe ₆ rt	Sc ₂₉ Fe ₆ cP140,200	<i>Pm-3</i>	1.4361,1.4361,1.4361,90,90,90	-	-	3.68	X	18748
Fe-Se	FeSe hp1	NiAs,hP4,194	<i>P6₃/mmc</i>	0.35839,0.35839,0.58302,90,90,120	AlB ₂ family	-	6.90	X	55759
Fe-Se	FeSe hp2	FeAs,oP8,62	<i>Pnma</i>	0.5281,0.3538,0.5346,90,90,90	AlB ₂ family	-	8.96	X	55759
Fe-Se	FeSe rt	PbO,tP4,129	<i>P4/nmm</i>	0.37719,0.37719,0.55237,90,90,90	-	black	5.70	X	64744
Fe-Se	FeSe tf cub	*c***,*	-	0.537,0.537,0.537,90,90,90	-	-	-	N	8544
Fe-Se	FeSe tf hex	NiAs,hP4,194	<i>P6₃/mmc</i>	0.4,0.4,0.588,90,90,120	AlB ₂ family	-	5.50	X	8544
Fe-Se	FeSe tf tet	CuAu,tP2,123	<i>P4/mmm</i>	0.296,0.296,0.473,90,90,90	close-packed structure	-	5.40	X	8544
Fe-Se	FeSe _{0.98} lt	PbO,oS8,67	<i>Cmme</i>	0.53093,0.53343,0.54879,90,90,90	-	-	5.69	X	56103
Fe-Se	FeSe ₂ hp	FeS ₂ cP12,205	<i>Pa-3</i>	0.57859,0.57859,0.57859,90,90,90	dzarkenite	-	7.33	A	3933
Fe-Se	FeSe ₂ rt	FeS ₂ oP6,58	<i>Pnnm</i>	0.4804,0.5784,0.3586,90,90,90	ferroselite	-	7.13	X	9028
Fe-Se	FeSe _x rt	W ₂ cI ₂ ,229	<i>Im-3m</i>	0.28458,0.28458,0.28458,90,90,90	b.c.c. family	-	8.05	X	55745
Fe-Se	Fe _{0.96} Se ht	NiAs,hP4,194	<i>P6₃/mmc</i>	0.37565,0.37565,0.59627,90,90,120	achavalite	black	6.04	X	64744
Fe-Se	Fe ₃ Se ₄ rt	Cr ₃ S ₄ mS14,12	<i>C12/m1</i>	1.26404,0.3534,0.6172,90,117.706,90	-	-	6.58	X	3794
Fe-Se	Fe ₇ Se ₈ ht	Fe ₇ Se ₈ hP45,152	<i>P3₁21</i>	0.72613,0.72613,1.7675,90,90,120	-	-	6.31	X	11920
Fe-Se	Fe ₇ Se ₈ rt	*aP120,*	-	0.7236,1.253,2.354,90.6,90.2,90.	-	-	-	N	1421
Fe-Si	FeSi ht	CsCl,cP2,221	<i>Pm-3m</i>	0.26238,0.26238,0.26238,90,90,90	b.c.c. family	-	7.72	X	49244
Fe-Si	FeSi ht-hp	CsCl,cP2,221	<i>Pm-3m</i>	0.27917,0.27917,0.27917,90,90,90	b.c.c. family	-	6.41	X	40393
Fe-Si	FeSi	FeSi,cP8,198	<i>P2₁3</i>	0.4495,0.4495,0.4495,90,90,90	naquite	gray dark	6.14	X	34087
Fe-Si	FeSi ₂ ht	Fe _{0.92} Si ₂ tP3,123	<i>P4/mmm</i>	0.2696,0.2696,0.5147,90,90,90	linzhiite	gray steel	4.97	X	59008
Fe-Si	FeSi ₂ rt	FeSi ₂ oS48,64	<i>Cmce</i>	0.98362,0.78301,0.78655,90,90,90	luobusaite	-	4.91	X	50093

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Fe-Si	Fe _{0.80} Si _{0.20} m	W, c12, 229	<i>Im-3m</i>	0.28634, 0.28634, 0.28634, 90, 90, 90	b.c.c. family	-	7.11	X	64473
Fe-Si	Fe _{0.933} Si _{0.067} rt	W, c12, 229	<i>Im-3m</i>	0.28618, 0.28618, 0.28618, 90, 90, 90	suessite	white creamy	7.65	X	21544
Fe-Si	Fe ₁₁ Si ₅	Fe ₁₁ Si ₅ , cP16, 221	<i>Pm-3m</i>	0.56264, 0.56264, 0.56264, 90, 90, 90	-	-	7.04	X	179
Fe-Si	Fe ₂ Si ht	Ni ₂ Al, hP6, 164	<i>P-3m1</i>	0.4052, 0.4052, 0.50855, 90, 90, 120	b.c.c. family	-	6.42	X	10937
Fe-Si	Fe ₃ Si	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.5665, 0.5665, 0.5665, 90, 90, 90	güpeite	-	7.15	X	43134
Fe-Si	Fe ₃ Si ₃ ht	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.67108, 0.67108, 0.4688, 90, 90, 120	xifengite	gray	6.60	X	44788
Fe-Sm	SmFe ₁₂	ThMn ₁₂ , tI26, 139	<i>I4/mmm</i>	0.8589, 0.8589, 0.4807, 90, 90, 90	CaCu ₅ -Zr ₄ Al ₃	-	7.69	A	27513
Fe-Sm	SmFe ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7436, 0.7436, 0.7436, 90, 90, 90	Friauf-Laves phase	-	8.47	X	28850
Fe-Sm	SmFe ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.518, 0.518, 2.4789, 90, 90, 120	Laves-CaCu ₅	-	8.25	A	27284
Fe-Sm	SmFe ₅ tf	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.496, 0.496, 0.413, 90, 90, 120	-	-	8.11	X	21227
Fe-Sm	Sm _{0.6} Fe _{5.8} ht	Cu _{5.44} Tb _{0.78} , hP8, 191	<i>P6/mmm</i>	0.4918, 0.4918, 0.419, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.84	A	24658
Fe-Sm	Sm ₂ Fe ₁₇	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.8558, 0.8558, 1.2447, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.89	X	44534
Fe-Sm	Sm ₂ Fe ₇ tf	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.505, 0.505, 3.84, 90, 90, 120	Laves-CaCu ₅	-	8.13	A	21227
Fe-Sm	Sm ₆ Fe ₁₇	Nd ₆ Fe ₁₇ , hP264, 193	<i>P6₃/mcm</i>	2.052, 2.052, 1.229, 90, 90, 120	-	-	7.57	A	53406
Fe-Sm	Sm ₆ Fe ₂₃ stab	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.223, 1.223, 1.223, 90, 90, 90	-	-	7.94	X	13237
Fe-Sn	FeSn	CoSn, hP6, 191	<i>P6/mmm</i>	0.53002, 0.53002, 0.44504, 90, 90, 120	AlB ₂ family	-	8.03	X	39044
Fe-Sn	FeSn ₂ rt	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.6545, 0.6545, 0.5326, 90, 90, 90	-	gray silver	8.54	X	54854
Fe-Sn	Fe _{0.92} Sn _{0.08} rt	W, c12, 229	<i>Im-3m</i>	0.2924, 0.2924, 0.2924, 90, 90, 90	b.c.c. family	-	8.09	X	47610
Fe-Sn	Fe _{1.5} Sn _{0.5} m	CsCl, cP2, 221	<i>Pm-3m</i>	0.2989, 0.2989, 0.2989, 90, 90, 90	b.c.c. family	-	8.90	X	15318
Fe-Sn	Fe _{1.67} Sn ht	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.4225, 0.4225, 0.5241, 90, 90, 120	AlB ₂ family	-	8.69	X	47610
Fe-Sn	Fe ₃ Sn hp-ht	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3873, 0.3873, 0.3873, 90, 90, 90	close-packed structure	-	8.18	X	17181
Fe-Sn	Fe ₃ Sn ht	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.5464, 0.5464, 0.4352, 90, 90, 120	close-packed structure	-	8.45	X	47610
Fe-Sn	Fe ₃ Sn ₂ ht	Fe ₃ Sn ₂ , hR30, 166	<i>R-3m</i>	0.5344, 0.5344, 1.9845, 90, 90, 120	-	-	8.22	X	9389
Fe-Ta	Ta _{0.004} Fe _{0.996} rt	W, c12, 229	<i>Im-3m</i>	0.28687, 0.28687, 0.28687, 90, 90, 90	b.c.c. family	-	7.93	X	3183
Fe-Ta	Ta _{0.65} Fe _{0.35} m	*, tP*, *	-	0.83, 0.83, 0.485, 90, 90, 90	-	-	-	N	36127
Fe-Ta	Ta _{0.9} Fe _{2.1}	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.48, 0.48, 0.784, 90, 90, 120	Friauf-Laves phase	-	11.89	A	6503
Fe-Ta	Ta _{0.5} Fe _{0.5}	W ₆ Fe ₇ , hR39, 166	<i>R-3m</i>	0.4919, 0.4919, 2.7, 90, 90, 120	Frank-Kasper phase	-	13.55	X	4148
Fe-Tb	TbFe ₂ hp-ht	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.527, 0.527, 0.864, 90, 90, 120	Friauf-Laves phase	-	8.65	A	17900
Fe-Tb	TbFe ₂ lt	TbFe ₂ , hR18, 166	<i>R-3m</i>	0.5177, 0.5177, 1.279, 90, 90, 120	Friauf-Laves phase	-	9.08	X	7830
Fe-Tb	TbFe ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7346, 0.7346, 0.7346, 90, 90, 90	Friauf-Laves phase	-	9.07	X	28869
Fe-Tb	TbFe ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.515, 0.515, 2.457, 90, 90, 120	Laves-CaCu ₅	-	8.65	X	12242
Fe-Tb	Tb ₂ Fe ₁₇ ht	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.848, 0.848, 0.8324, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.12	A	39279
Fe-Tb	Tb ₂ Fe ₁₇ rt	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.85152, 0.85152, 1.24079, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.10	X	47504
Fe-Tb	Tb ₆ Fe ₂₃	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.20811, 1.20811, 1.20811, 90, 90, 90	-	-	8.43	A	64137
Fe-Tc	Tc _{0.6} Fe _{0.4}	(Cr _{0.49} Fe _{0.51}), tP30, 136	<i>P4₂/nmn</i>	0.913, 0.913, 0.4788, 90, 90, 90	Frank-Kasper phase	-	10.13	A	1636
Fe-Te	FeTe ₂ hp	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.62937, 0.62937, 0.62937, 90, 90, 90	pyrite-marcasite family	-	8.29	A	3933
Fe-Te	FeTe ₂ rt	FeS ₂ , oP6, 58	<i>Pnnm</i>	0.5268, 0.6273, 0.3879, 90, 90, 90	frohbergite	-	8.06	X	19248
Fe-Te	Fe _{0.67} Te ht	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.3818, 0.3818, 0.5651, 90, 90, 120	AlB ₂ family	-	7.68	X	8268
Fe-Te	Fe _{0.75} Te ht	*, mS*, *	-	0.386, 0.666, 0.564, 90, 90, 2.90	-	-	-	N	8268
Fe-Te	Fe _{1.08} Te hp	Cu _{1.43} Te, oP6, 59	<i>Pmmn</i>	0.37506, 0.37746, 0.61757, 90, 90, 90	-	-	7.14	X	60139
Fe-Te	Fe _{1.08} Te lt	Fe _{1.068} Te, mP6, 11	<i>P12₁/m1</i>	0.38337, 0.37893, 0.62594, 90, 90, 661, 90	-	-	6.86	X	60139
Fe-Te	Fe _{1.119} Te rt	Cu ₂ Sb, tP6, 129	<i>P4/nmm</i>	0.38197, 0.38197, 0.62587, 90, 90, 90	-	black	6.91	X	55377
Fe-Te	Fe _{2.2} Te ₂ ht	(Fe _{0.5} Ni _{0.5}) ₂ Te ₂ , hR24, 166	<i>R-3m</i>	0.4013, 0.4013, 2.096, 90, 90, 120	-	-	6.44	X	7729
Fe-Th	ThFe ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.518, 0.518, 2.52, 90, 90, 120	Laves-CaCu ₅	-	10.20	X	2409
Fe-Th	ThFe ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.51113, 0.51113, 0.40522, 90, 90, 120	-	-	9.26	X	8346
Fe-Th	Th ₂ Fe ₁₇	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.8578, 0.8578, 1.2476, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.86	X	26006
Fe-Th	Th ₂ Fe ₇ ht	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.5195, 0.5195, 3.7133, 90, 90, 120	Laves-CaCu ₅	-	9.82	A	22271
Fe-Th	Th ₂ Fe ₇ rt	Ce ₂ Ni ₃ , hP36, 194	<i>P6₃/mmc</i>	0.5193, 0.5193, 2.4785, 90, 90, 120	Laves-CaCu ₅	-	9.81	X	5873
Fe-Th	Th ₇ Fe ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃/mc</i>	0.985, 0.985, 0.615, 90, 90, 120	-	-	11.52	X	425
Fe-Ti	TiFe rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.29789, 0.29789, 0.29789, 90, 90, 90	b.c.c. family	-	6.52	X	22170
Fe-Ti	TiFe ₂ ht-hp	*, o*, *	-	0.2504, 1.1402, 1.4076, 90, 90, 90	-	-	-	N	61542
Fe-Ti	TiFe ₂ rt	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.47929, 0.47929, 0.78234, 90, 90, 120	Friauf-Laves phase	-	6.81	X	47323
Fe-Ti	Ti _{0.2} Fe _{0.8} rt	W, c12, 229	<i>Im-3m</i>	0.293, 0.293, 0.293, 90, 90, 90	b.c.c. family	-	7.16	X	19303
Fe-Ti	Ti _{0.75} Fe _{0.25} ht	W, c12, 229	<i>Im-3m</i>	0.314, 0.314, 0.314, 90, 90, 90	b.c.c. family	-	5.35	X	19303
Fe-Ti	Ti ₂ Fe stab	Ti ₂ Ni, cF96, 227	<i>Fd-3m</i>	1.1328, 1.1328, 1.1328, 90, 90, 90	-	-	5.54	A	3453
Fe-Tm	TmFe ₂ hp	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.529, 0.529, 0.854, 90, 90, 120	Friauf-Laves phase	-	9.01	A	17900
Fe-Tm	TmFe ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.725, 0.725, 0.725, 90, 90, 90	Friauf-Laves phase	-	9.78	X	19286
Fe-Tm	TmFe ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.5063, 0.5063, 2.4621, 90, 90, 120	Laves-CaCu ₅	-	9.20	A	16058
Fe-Tm	Tm _{1.9} Fe _{17.2}	Mg _{17.58} Ce _{1.71} , hP44, 194	<i>P6₃/mmc</i>	0.8428, 0.8428, 0.82764, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.36	X	63764
Fe-Tm	Tm ₆ Fe ₂₃	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.198, 1.198, 1.198, 90, 90, 90	-	-	8.88	A	2738
Fe-U	UF ₆ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.75055, 0.75055, 0.75055, 90, 90, 90	Friauf-Laves phase	-	10.99	X	22303
Fe-U	U ₆ Fe	U ₆ Mn, tI28, 140	<i>I4/mcm</i>	1.03022, 1.03022, 0.52386, 90, 90, 90	-	-	17.73	X	18243
Fe-V	VFe ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.291, 0.291, 0.291, 90, 90, 90	b.c.c. family	-	7.20	X	12328
Fe-V	V _{0.015} Fe _{0.985} ht	Cu, cF4, 225	<i>Fm-3m</i>	0.36543, 0.36543, 0.36543, 90, 90, 90	close-packed structure	-	7.59	X	2329
Fe-V	V _{0.45} Fe _{0.55} ht	W, c12, 229	<i>Im-3m</i>	0.2911, 0.2911, 0.2911, 90, 90, 90	b.c.c. family	-	7.22	X	18252
Fe-V	V _{0.62} Fe _{0.38} rt	(Cr _{0.49} Fe _{0.51}), tP30, 136	<i>P4₂/nmn</i>	0.8996, 0.8996, 0.454, 90, 90, 90	Frank-Kasper phase	-	7.16	A	52397
Fe-W	WF ₆ rt	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.4743, 0.4743, 0.7604, 90, 90, 120	Friauf-Laves phase	-	13.25	A	21197
Fe-W	W _{0.2} Fe _{0.8} tf	W, c12, 229	<i>Im-3m</i>	0.2948, 0.2948, 0.2948, 90, 90, 90	b.c.c. family	-	10.56	X	23328
Fe-W	W _{0.7} Fe _{0.3} rt	W, c12, 229	<i>Im-3m</i>	0.316, 0.316, 0.316, 90, 90, 90	b.c.c. family	-	15.31	X	23328
Fe-W	W ₆ Fe ₇ rt	W ₆ Fe ₇ , hR39, 166	<i>R-3m</i>	0.47463, 0.47463, 2.5781, 90, 90, 120	Frank-Kasper phase	-	14.80	X	88
Fe-Y	YFe ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7356, 0.7356, 0.7356, 90, 90, 90	Friauf-Laves phase	-	6.70	X	45931
Fe-Y	YFe ₃ hex	CeNi ₃ , hP24, 194	<i>P6₃/mmc</i>	0.513, 0.513, 1.643, 90, 90, 120	Laves-CaCu ₅	-	6.82	A	18921
Fe-Y	YFe ₃ rhom	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.5095, 0.5095, 2.439, 90, 90, 120	Laves-CaCu ₅	-	6.99	A	60017
Fe-Y	YFe ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.487, 0.487, 0.406, 90, 90, 120	-	-	7.33	X	1246
Fe-Y	YFe _x rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3659, 0.3659, 0.5791, 90, 90, 120	close-packed structure	-	4.40	X	39383
Fe-Y	Y ₂ Fe ₁₇ ht	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.84688, 0.84688, 0.8305, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.26	X	30858
Fe-Y	Y ₂ Fe ₁₇ rt	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.85014, 0.85014, 1.23989, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.24	X	30858
Fe-Y	Y ₆ Fe ₂₃ rt	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.2055, 1.2055, 1.2055, 90, 90, 90	-	-	6.89	X	16006

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Fe-Yb	YbFe ₂ hp-ht	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7231,0.7231,0.7231,90,90,90	Friauf-Laves phase	-	10.00	X	17900
Fe-Yb	Yb _{1.25} Fe _{1.75} hp-ht	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5272,0.5272,0.8487,90,90,120	Friauf-Laves phase	-	10.21	X	17900
Fe-Yb	Yb _{1.79} Fe _{1.743}	Y ₂ Fe ₁₇ ,hP56,194	<i>P6₃/mmc</i>	0.85965,0.85965,0.83871,90,90,120	CaCu ₅ -Zr ₄ Al ₃	black	7.94	X	43566
Fe-Yb	Yb ₆ Fe ₂₃	Th ₃ Mn ₂₃ ,cF116,225	<i>Fm-3m</i>	1.2028,1.2028,1.2028,90,90,90	-	-	8.87	A	45676
Fe-Zn	Zn _{0.1} Fe _{0.9} rt	W ₂ cI2,229	<i>Im-3m</i>	0.2888,0.2888,0.2888,90,90,90	b.c.c. family	-	7.83	X	30521
Fe-Zn	Zn ₁₀ Fe	Zn ₁₀ Fe,hP632,194	<i>P6₃/mmc</i>	1.2787,1.2787,5.7222,90,90,120	-	white silver	7.27	X	37980
Fe-Zn	Zn ₁₂₆ Fe ₁₃	Zn ₁₂₆ Fe ₁₃ ,hP652,194	<i>P6₃/mmc</i>	1.28297,1.28297,5.7286,90,90,120	-	-	7.29	X	62753
Fe-Zn	Zn ₁₃ Fe	Zn ₁₃ Co,mS28,12	<i>C12/m1</i>	1.08557,0.7598,0.5066,90,100.769,90	-	gray silver	7.33	X	37164
Fe-Zn	Zn ₄₀ Fe ₁₁ rt	Zn ₃₈ (Zn _{0.33} Fe _{0.67}) ₆ Fe ₇ ,cF408,216	<i>F-43m</i>	1.7963,1.7963,1.7963,90,90,90	-	-	7.40	X	13824
Fe-Zn	Zn _{9.40} Fe _{3.60}	Zn ₉ (Zn _{0.5} Fe _{0.5}) ₂ Fe ₂ ,cI52,217	<i>I-43m</i>	0.8979,0.8979,0.8979,90,90,90	γ-brass	blackish	7.48	X	65210
Fe-Zr	ZrFe ₂ Fe+	MgNi ₂ ,hP24,194	<i>P6₃/mmc</i>	0.4954,0.4954,1.6304,90,90,120	Friauf-Laves phase	-	7.78	A	4067
Fe-Zr	ZrFe ₂ hex	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5134,0.5134,0.8448,90,90,120	Friauf-Laves phase	-	6.99	A	17392
Fe-Zr	ZrFe ₂ rt	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7063,0.7063,0.7063,90,90,90	Friauf-Laves phase	-	7.65	X	26100
Fe-Zr	Zr _{0.001} Fe _{0.999} rt	W ₂ cI2,229	<i>Im-3m</i>	0.28673,0.28673,0.28673,90,90,90	b.c.c. family	-	7.87	X	3183
Fe-Zr	Zr ₂ Fe ht	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.6385,0.6385,0.5596,90,90,90	-	-	6.94	X	6603
Fe-Zr	Zr ₂ Fe stab	Ti ₂ Ni,cF96,227	<i>Fd-3m</i>	1.214,1.214,1.214,90,90,90	-	-	7.08	X	3035
Fe-Zr	Zr ₃ Fe rt	Re ₃ B ₂ ,oS16,63	<i>Cmcm</i>	0.3321,1.0966,0.8825,90,90,90	-	-	6.81	X	23696
Fe-Zr	Zr ₄ Fe m hex	* ₂ hP* *	-	0.5045,0.5045,0.3121,90,90,120	-	-	-	N	14098
Fe-Zr	Zr ₄ Fe m orth	* ₂ o** *	-	0.3283,0.3553,0.6867,90,90,90	-	-	-	N	14098
Fe-Zr	Zr ₆ Fe ₂₃	Th ₆ Mn ₂₃ ,cF116,225	<i>Fm-3m</i>	1.169,1.169,1.169,90,90,90	-	-	7.62	X	2703
Ga-Gd	GdGa	TlI ₂ oS8,63	<i>Cmcm</i>	0.43388,1.10104,0.41058,90,90,90	CrB(III)-FeB	-	7.69	X	53385
Ga-Gd	GdGa ₂ hp	Hg ₂ U,hP3,191	<i>P6/mmm</i>	0.42105,0.42105,0.34044,90,90,120	AlB ₂ family	-	9.43	X	40115
Ga-Gd	GdGa ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.42298,0.42298,0.41369,90,90,120	AlB ₂ family	-	7.69	X	40115
Ga-Gd	GdGa ₆	PuGa ₆ ,tP14,125	<i>P4/nbm</i>	0.595,0.595,0.757,90,90,90	-	-	7.13	A	18927
Ga-Gd	Gd _{2.5} Ga ₇	Gd _{2.5} Ga ₇ ,hP15,191	<i>P6/mmm</i>	0.74,0.74,0.4184,90,90,120	-	-	7.37	X	36707
Ga-Gd	Gd ₃ Ga ₂	Gd ₃ Ga ₂ ,tI80,140	<i>I4/mcm</i>	1.1666,1.1666,1.5061,90,90,90	-	-	7.92	X	18883
Ga-Gd	Gd ₅ Ga ₃	Ba ₅ Si ₃ ,IP32,130	<i>P4/ncc</i>	0.7716,0.7716,1.4223,90,90,90	-	black	7.81	X	28778
Ga-Ge	Ga _{0.0125} Ge _{0.9875}	C ₂ cF8,227	<i>Fd-3m</i>	0.5658,0.5658,0.5658,90,90,90	-	-	5.32	X	685
Ga-Hf	HfGa	ThIn ₂ ,oP24,57	<i>Pbcm</i>	0.9171,0.8503,0.5648,90,90,90	-	-	11.23	X	18751
Ga-Hf	HfGa ₂ rt	HfGa ₂ ,tI24,141	<i>I4₁/amd</i>	0.4046,0.4046,2.5446,90,90,90	close-packed structure	blue dark	10.14	X	1736
Ga-Hf	HfGa ₃	TiAl ₃ ,tI8,139	<i>I4/mmm</i>	0.38779,0.38779,0.90166,90,90,90	close-packed structure	-	9.50	X	56844
Ga-Hf	Hf ₁₁ Ga ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	<i>I4/mmm</i>	1.0282,1.0282,1.473,90,90,90	-	-	11.35	X	22699
Ga-Hf	Hf ₂ Ga rt	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.66815,0.66815,0.5363,90,90,90	-	-	11.84	A	56844
Ga-Hf	Hf ₂ Ga ₃	Zr ₂ Al ₃ ,oF40,43	<i>Fdd2</i>	0.9402,1.363,0.5472,90,90,90	-	-	10.73	X	1736
Ga-Hf	Hf ₃ Ga ₃	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.7962,0.7962,0.5677,90,90,120	-	-	11.74	X	1915
Ga-Ho	HoGa	TlI ₂ oS8,63	<i>Cmcm</i>	0.42779,1.07595,0.40353,90,90,90	CrB(III)-FeB	-	8.39	X	59704
Ga-Ho	HoGa ₂ hp	Hg ₂ U,hP3,191	<i>P6/mmm</i>	0.42506,0.42506,0.34557,90,90,120	AlB ₂ family	gray silver	9.35	X	34644
Ga-Ho	HoGa ₂ rt	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.4192,0.4192,0.4044,90,90,120	AlB ₂ family	-	8.21	X	18190
Ga-Ho	HoGa ₃ ht2	HoAl ₃ ,hR60,166	<i>R-3m</i>	0.6078,0.6078,3.5295,90,90,120	close-packed structure	-	8.25	X	14079
Ga-Ho	HoGa ₃ ht3	PuAl ₃ ,hP24,194	<i>P6₃/mmc</i>	0.6084,0.6084,1.4061,90,90,120	close-packed structure	-	8.27	X	14108
Ga-Ho	HoGa ₃ ht4	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4226,0.4226,0.4226,90,90,90	close-packed structure	-	8.23	X	15278
Ga-Ho	HoGa ₃ rt	TiNi ₃ ,hP16,194	<i>P6₃/mmc</i>	0.6082,0.6082,0.9417,90,90,120	close-packed structure	-	8.24	A	14079
Ga-Ho	HoGa ₆	PuGa ₆ ,tP14,125	<i>P4/nbm</i>	0.592,0.592,0.755,90,90,90	-	-	7.32	A	18927
Ga-Ho	Ho ₃ Ga ₂	Gd ₃ Ga ₂ ,tI80,140	<i>I4/mcm</i>	1.15,1.15,1.4766,90,90,90	-	-	8.63	A	57392
Ga-Ho	Ho ₃ Ga ₅	Tm ₃ Ga ₅ ,oP32,62	<i>Pnma</i>	1.13755,0.96227,0.6061,90,90,90	-	-	8.44	X	58290
Ga-Ho	Ho ₅ Ga ₃ ht	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8521,0.8521,0.6411,90,90,120	-	-	8.52	X	65062
Ga-Ho	Ho ₅ Ga ₃ rt	Ba ₅ Si ₃ ,IP32,130	<i>P4/ncc</i>	0.75856,0.75856,1.4001,90,90,90	-	-	8.52	A	28778
Ga-I	GaI ₂	GaI ₂ ,hR108,161	<i>R3c</i>	2.5215,2.5215,0.7839,90,90,120	-	yellow	4.48	X	15454
Ga-I	GaI ₃	InI ₃ ,mP16,14	<i>P12₁/c1</i>	0.9584,0.6084,1.1839,90,107.78,90	-	-	4.55	X	44968
Ga-I	Ga ₂ I ₃	Ga ₂ I ₃ ,mP20,14	<i>P12₁/c1</i>	0.7603,0.8715,1.3453,90,122.94,90	-	yellow	4.62	X	15454
Ga-In	Ga _{0.0182} In _{0.9818}	In ₂ ,tI2,139	<i>I4/mmm</i>	0.3244,0.3244,0.4936,90,90,90	close-packed structure	-	7.29	X	8897
Ga-In	Ga _{0.90} In _{0.10} m	(Ga _{0.90} In _{0.10}),oS4,63	<i>Cmcm</i>	0.2770,0.3183,0.3306,90,90,90	-	-	6.58	X	12394
Ga-Ir	IrGa	CsCl,cP2,221	<i>Pm-3m</i>	0.3004,0.3004,0.3004,90,90,90	b.c.c. family	-	16.05	X	1924
Ga-Ir	IrGa ₂	IrGa ₂ ,oS36,63	<i>Cmcm</i>	0.39021,1.29925,1.08808,90,90,90	-	-	11.98	X	44779
Ga-Ir	IrGa ₃ ht	IrIn ₃ ,tP16,136	<i>P4₃/mnm</i>	0.641,0.641,0.66,90,90,90	-	-	9.83	A	1128
Ga-Ir	Ir ₂ Ga ₉	Rh ₂ Ga ₉ ,mP22,7	<i>P1c1</i>	0.64329,0.64099,0.88068,90,93.464,90	-	gray	9.27	X	46674
Ga-Ir	Ir ₃ Ga ₅	Ir ₃ Ga ₅ ,tP32,118	<i>P-4n2</i>	0.5823,0.5823,1.42,90,90,90	chimney-ladder structure	-	12.76	X	3568
Ga-K	KGa ₃	RbGa ₃ ,tI24,119	<i>I-4m2</i>	0.6268,0.6268,1.4782,90,90,90	-	-	4.26	X	16403
Ga-K	K ₂ Ga ₃	Rb ₂ In ₃ ,tI20,139	<i>I4/mmm</i>	0.61382,0.61382,1.4815,90,90,90	-	-	3.42	X	36001
Ga-K	K ₃ Ga ₁₃	K ₃ Ga ₁₃ ,oS128,63	<i>Cmcm</i>	0.6441,1.6143,2.8404,90,90,90	-	-	4.60	X	12800
Ga-La	LaGa	TlI ₂ oS8,63	<i>Cmcm</i>	0.45134,1.156,0.42476,90,90,90	CrB(III)-FeB	gray silver	6.25	X	58415
Ga-La	LaGa ₂ hp	* ₂ o** *	-	0.509,0.528,1.279,90,90,90	-	-	-	N	57991
Ga-La	LaGa ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.43092,0.43092,0.44251,90,90,120	AlB ₂ family	gray	6.50	X	40185
Ga-La	LaGa ₄ rt	LaGa ₄ ,oP20,47	<i>Pmmm</i>	0.4403,0.7542,1.3015,90,90,90	-	-	6.42	X	31744
Ga-La	LaGa ₆	PuGa ₆ ,tP14,125	<i>P4/nbm</i>	0.61041,0.61041,0.77052,90,90,90	-	-	6.45	X	16457
Ga-La	La ₃ Ga	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.561,0.561,0.561,90,90,90	close-packed structure	-	4.58	X	27336
Ga-La	La ₅ Ga ₃	Ba ₅ Si ₃ ,IP32,130	<i>P4/ncc</i>	0.8068,0.8068,1.4756,90,90,90	-	black	6.25	X	28778
Ga-Li	Li _{0.892} Ga _{1.108} lt	* ₂ t*16,*	-	0.6132,0.6132,0.6146,90,90,90	-	-	2.40	N	44971
Ga-Li	Li _{0.892} Ga _{1.108} rt	NaTl,cF16,227	<i>Fd-3m</i>	0.6168,0.6168,0.6168,90,90,90	b.c.c. family	-	4.72	X	44971
Ga-Li	Li _{1.5} Ga ₇ rt	Li ₂ Ga ₇ ,hR60,166	<i>R-3m</i>	0.8461,0.8461,1.6845,90,90,120	-	-	4.76	X	15370
Ga-Li	Li ₂ Ga	Li ₂ Ga,oS12,63	<i>Cmcm</i>	0.4562,0.9542,0.4364,90,90,90	b.c.c. family	gray	2.92	X	10980
Ga-Li	Li ₃ Ga ₂ rt	Li ₃ Al ₂ ,hR15,166	<i>R-3m</i>	0.4367,0.4367,1.3896,90,90,120	b.c.c. family	gray	3.48	X	10980
Ga-Li	Li ₄ Ga _{13.67}	Li ₄ Ga _{13.67} ,oS304,63	<i>Cmcm</i>	1.3860,3.0519,1.3729,90,90,90	-	-	4.49	X	17296
Ga-Li	Li ₅ Ga ₄ rt	Li ₅ Ga ₄ ,hP9,164	<i>P-3m1</i>	0.4375,0.4375,0.8257,90,90,120	b.c.c. family	-	3.80	X	14513
Ga-Lu	LuGa	TlI ₂ oS8,63	<i>Cmcm</i>	0.4209,1.05817,0.40001,90,90,90	CrB(III)-FeB	-	9.12	A	3306
Ga-Lu	LuGa ₂	KHg ₂ ,oI12,74	<i>Imma</i>	0.4185,0.685,0.8044,90,90,90	AlB ₂ family	-	9.06	A	16343
Ga-Lu	LuGa ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.419,0.419,0.419,90,90,90	close-packed structure	-	8.67	X	60107
Ga-Lu	Lu ₃ Ga ₂	Gd ₃ Ga ₂ ,tI80,140	<i>I4/mcm</i>	1.1238,1.1238,1.4541,90,90,90	-	-	9.61	A	62317

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Ga-Lu	Lu ₃ Ga ₅	Tm ₃ Ga ₅ , oP32, 62	<i>Pnma</i>	1.1249, 0.9522, 0.595, 90, 90, 90	-	-	9.10	A	62317
Ga-Lu	Lu ₂ Ga ₃	Y ₂ Ga ₃ , mS32, 12	<i>C12/m1</i>	0.84021, 1.4553, 0.62811, 90, 91.11, 90	-	-	9.38	A	39067
Ga-Mg	MgGa	MgGa, tI32, 88	<i>I4₁/a</i>	1.053, 1.053, 0.553, 90, 90, 90	-	-	4.07	X	1994
Ga-Mg	MgGa ₂ m	CaIn ₂ , hP6, 194	<i>P6₃/mmc</i>	0.4343, 0.4343, 0.6982, 90, 90, 120	AlB ₂ family	-	4.77	X	13608
Ga-Mg	MgGa ₂	MgGa ₂ , oP24, 55	<i>Pbam</i>	0.6802, 1.6346, 0.4111, 90, 90, 90	-	-	4.76	X	4315
Ga-Mg	Mg _{0.72} Ga _{0.28} m	*oP128, 28	<i>Pma2</i>	1.1406, 1.4057, 1.6214, 90, 90, 90	-	-	-	N	12269
Ga-Mg	Mg _{0.81} Ga _{0.19}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3191, 0.3191, 0.51827, 90, 90, 120	close-packed structure	-	2.40	X	12269
Ga-Mg	Mg ₂ Ga	Mg ₂ Ga, hP18, 190	<i>P-62c</i>	0.7794, 0.7794, 0.6893, 90, 90, 120	Fe ₂ P family	-	3.25	X	5203
Ga-Mg	Mg ₂ Ga ₅	Mg ₂ Ga ₅ , tI28, 139	<i>I4/mmm</i>	0.8627, 0.8627, 0.7111, 90, 90, 90	-	-	4.99	X	4316
Ga-Mg	Mg ₅ Ga ₂	Mg ₅ Ga ₂ , oI28, 72	<i>lbam</i>	0.7017, 1.3708, 0.6020, 90, 90, 90	-	-	2.99	X	1994
Ga-Mn	MnGa ht	MnGa, hR78, 166	<i>R-3m</i>	1.2605, 1.2605, 0.80424, 90, 90, 120	-	-	7.30	X	42663
Ga-Mn	MnGa ₄	Hg ₄ Pt, cI10, 229	<i>Im-3m</i>	0.55941, 0.55941, 0.55941, 90, 90, 90	-	-	6.33	X	59083
Ga-Mn	MnGa _{4.96} ht	MnGa _{4.96} , tP40, 128	<i>P4/mnc</i>	0.63395, 0.63395, 1.00275, 90, 90, 90	-	-	6.61	X	59083
Ga-Mn	MnGa ₆ lt	*oS*, 66	<i>Cccm</i>	0.8814, 0.8949, 0.9944, 90, 90, 90	-	-	-	N	2697
Ga-Mn	Mn _{0.75} Ga _{0.25} ht	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2728, 0.2728, 0.4442, 90, 90, 120	close-packed structure	-	6.80	X	63893
Ga-Mn	Mn _{0.75} Ga _{0.25} ht3	Cu, cF4, 125	<i>Fm-3m</i>	0.37807, 0.37807, 0.37807, 90, 90, 90	close-packed structure	-	7.21	X	63893
Ga-Mn	Mn _{0.85} Ga _{0.15} ht1	Mn, cP20, 213	<i>P4₃2</i>	0.6375, 0.6375, 0.6375, 90, 90, 90	-	-	7.33	A	2697
Ga-Mn	Mn _{1.34} Ga _{0.66} rt	CuAu, tP2, 123	<i>P4/mmm</i>	0.2756, 0.2756, 0.3624, 90, 90, 90	close-packed structure	-	7.22	X	4721
Ga-Mn	Mn _{1.6} Ga _{0.4} ht	CuAu, tP2, 123	<i>P4/mmm</i>	0.2687, 0.2687, 0.368, 90, 90, 90	close-packed structure	-	7.24	X	6010
Ga-Mn	Mn _{12.7} Ga _{20.3}	Mn ₈ (Mn _{0.59} Ga _{0.41}) ₈ Ga ₁₇ , tP264, 137	<i>P4₂/nmc</i>	1.2659, 1.2659, 2.4616, 90, 90, 90	-	-	7.12	X	38023
Ga-Mn	Mn ₂ Ga ₅ rt	Hg ₂ Mn ₂ , tP14, 127	<i>P4/mbm</i>	0.8859, 0.8859, 0.27094, 90, 90, 90	-	-	7.16	X	51475
Ga-Mn	Mn ₃ Ga lt	*oS16, *	-	0.5353, 0.9403, 0.4346, 90, 90, 90	-	-	-	N	16160
Ga-Mn	Mn ₃ Ga rt hex	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.54, 0.54, 0.4356, 90, 90, 120	close-packed structure	-	7.08	A	21261
Ga-Mn	Mn ₃ Ga rt tet	TiAl ₃ , tI8, 139	<i>I4/mmm</i>	0.39042, 0.39042, 0.70882, 90, 90, 90	close-packed structure	-	7.21	X	49008
Ga-Mn	Mn _{30.75} Ga _{34.25}	Mn _{30.75} Ga _{34.25} , mS276, 15	<i>C12/c1</i>	2.0239, 1.479, 1.4908, 90, 120, 93, 90	-	-	7.08	X	39190
Ga-Mn	Mn ₆ Ga ₂₉ rt	Mn ₆ Ga ₂₉ , aP70, 2	<i>P-1</i>	0.63114, 0.99557, 1.892, 89.527, 89.153, 90.396	-	gray	6.57	X	61994
Ga-Mn	Mn ₉ Ga ₅ ht	Cu ₉ Al ₄ , cP52, 215	<i>P-43m</i>	0.9, 0.9, 0.9, 90, 90, 90	γ-brass	-	7.68	A	2789
Ga-Mo	Mo ₃ Ga	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.4944, 0.4944, 0.4944, 90, 90, 90	Frank-Kasper phase	-	9.83	X	7317
Ga-Mo	Mo ₆ Ga ₃₁ rt	Mo ₆ Ga ₃₁ , mP148, 14	<i>P12₁/c1</i>	0.9517, 1.6067, 1.6995, 90, 95, 90, 90	-	-	7.02	X	7862
Ga-Mo	Mo ₆ Ga ₄₁ (O)	V ₂ Ga ₄₁ , hR147, 148	<i>R-3</i>	1.404, 1.404, 1.505, 90, 90, 120	-	-	7.03	X	8578
Ga-N	GaN hp	NaCl, cF8, 225	<i>Fm-3m</i>	0.3985, 0.3985, 0.3985, 90, 90, 90	rocksalt family	-	8.79	X	29335
Ga-N	GaN m	ZnS, cF8, 216	<i>F-43m</i>	0.45019, 0.45019, 0.45019, 90, 90, 90	adamantane structure	-	6.10	X	38173
Ga-N	GaN rt	ZnO, hP4, 186	<i>P6₃/mc</i>	0.31972, 0.31972, 0.5207, 90, 90, 120	adamantane structure	yellowish	6.03	X	49721
Ga-Na	NaGa ₄	BaAl ₄ , tI10, 139	<i>I4/mmm</i>	0.423, 0.423, 1.1272, 90, 90, 90	BaAl ₄ family	gray light	4.97	X	15567
Ga-Na	Na ₂₂ Ga ₃₉	Na ₂₂ Ga ₃₉ , oP244, 62	<i>Pnma</i>	1.5585, 1.4948, 2.1632, 90, 90, 90	-	gray light	4.25	X	14674
Ga-Na	Na ₂ Ga ₁₃	Na ₂ Ga ₁₃ , hR360, 166	<i>R-3m</i>	1.4965, 1.4965, 3.893, 90, 90, 120	-	gray light	4.23	X	15567
Ga-Nb	NbGa ₃ rt	TiAl ₃ , tI8, 139	<i>I4/mmm</i>	0.375, 0.375, 0.871, 90, 90, 90	close-packed structure	-	8.19	X	48297
Ga-Nb	Nb _{0.82} Ga _{0.18}	W, cI2, 229	<i>Im-3m</i>	0.32905, 0.32905, 0.32905, 90, 90, 90	b.c.c. family	-	8.27	X	10607
Ga-Nb	Nb ₃ Ga	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.5165, 0.5165, 0.5165, 90, 90, 90	Frank-Kasper phase	-	8.40	X	10933
Ga-Nb	Nb ₃ Ga ₂	U ₃ Si ₂ , tP10, 127	<i>P4/mbm</i>	0.6922, 0.6922, 0.35, 90, 90, 90	-	-	8.28	X	2255
Ga-Nb	Nb ₄ Ga ₅	Nb ₄ Ga ₅ , tP144, 136	<i>P4₂/mmn</i>	1.1817, 1.1817, 1.7108, 90, 90, 90	-	gray silver	8.01	X	65035
Ga-Nb	Nb ₅ Ga ₁₃	Nb ₅ Ga ₁₃ , oS36, 65	<i>Cmmm</i>	0.3778, 0.0335, 0.3778, 90, 90, 90	close-packed structure	-	7.91	X	2787
Ga-Nb	Nb ₅ Ga ₃ (O)	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.7786, 0.7786, 0.533, 90, 90, 120	-	-	8.00	A	2679
Ga-Nb	Nb ₅ Ga ₃ rt	W ₅ Si ₃ , tI32, 140	<i>I4/mcm</i>	1.0301, 1.0301, 0.506, 90, 90, 90	-	-	8.33	X	7108
Ga-Nb	Nb ₅ Ga ₄ rt	Ti ₅ Ga ₄ , hP18, 193	<i>P6₃/mcm</i>	0.7962, 0.7962, 0.5447, 90, 90, 120	AlB ₂ family	-	8.26	X	7107
Ga-Nd	NdGa	TiI, oS8, 63	<i>Cmcm</i>	0.44164, 1.12758, 0.41835, 90, 90, 90	CrB(TlI)-FeB	-	6.82	X	3306
Ga-Nd	NdGa ₂	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.4247, 0.4247, 0.4247, 90, 90, 120	AlB ₂ family	-	7.10	X	28980
Ga-Nd	NdGa ₄ rt	PuGa ₆ , tP14, 125	<i>P4/nbm</i>	0.599, 0.599, 0.764, 90, 90, 90	-	-	6.82	A	18927
Ga-Nd	Nd _{2.5} Ga _{7.1}	Nd _{2.5} Ga _{7.1} , hP15, 191	<i>P6/mmm</i>	0.7467, 0.7467, 0.4276, 90, 90, 120	-	-	6.88	X	36707
Ga-Nd	Nd ₃ Ga	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.543, 0.543, 0.543, 90, 90, 90	close-packed structure	-	5.21	X	10809
Ga-Nd	Nd ₃ Ga ₂	Gd ₃ Ga ₂ , tI80, 140	<i>I4/mcm</i>	1.1915, 1.1915, 1.534, 90, 90, 90	-	-	6.98	A	18883
Ga-Nd	Nd ₃ Ga ₃	Cr ₃ B ₃ , tI32, 140	<i>I4/mcm</i>	0.7881, 0.7881, 1.4395, 90, 90, 90	-	-	6.91	X	3988
Ga-Nd	Nd ₉ Ga ₄	Sm ₉ Ga ₄ , tI26, 87	<i>I4/m</i>	1.2001, 1.2001, 0.5121, 90, 90, 90	-	-	7.10	A	17883
Ga-Ni	NiGa	CsCl, cP2, 221	<i>Pm-3m</i>	0.2888, 0.2888, 0.2888, 90, 90, 90	b.c.c. family	-	8.85	X	63753
Ga-Ni	NiGa ₅	PdGa ₅ , tI24, 140	<i>I4/mcm</i>	0.63128, 0.63128, 0.97217, 90, 90, 90	-	-	6.98	X	55196
Ga-Ni	Ni _{0.92} Ga _{0.08}	Cu, cF4, 225	<i>Fm-3m</i>	0.3543, 0.3543, 0.3543, 90, 90, 90	close-packed structure	-	8.90	X	17661
Ga-Ni	Ni _{0.97} Ga _{0.03}	Ni _{0.97} Ga _{0.03} , cI40, 197	<i>I23</i>	0.84295, 0.84295, 0.84295, 90, 90, 90	-	-	6.86	X	16423
Ga-Ni	Ni ₁₃ Ga ₉ rt	Ni ₁₃ Ga ₉ , mS44, 12	<i>C12/m1</i>	0.9938, 0.7894, 0.8478, 90, 125, 40, 90	AlB ₂ family	-	8.52	X	4609
Ga-Ni	Ni ₅ Ga ht	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.3991, 0.3991, 0.4975, 90, 90, 120	AlB ₂ family	-	9.06	X	63753
Ga-Ni	Ni ₂ Ga ₃	Ni ₂ Al ₃ , hP5, 164	<i>P-3m1</i>	0.40532, 0.40532, 0.48857, 90, 90, 120	-	-	7.80	X	63753
Ga-Ni	Ni ₃ Ga	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3585, 0.3585, 0.3585, 90, 90, 90	close-packed structure	-	8.86	X	22183
Ga-Ni	Ni ₃ Ga ₄ rt	Ni ₃ Ga ₄ , cI112, 230	<i>Ia-3d</i>	1.1411, 1.1411, 1.1411, 90, 90, 90	-	-	8.14	X	4612
Ga-Ni	Ni ₃ Ga ₇	Ru ₃ Sn ₇ , cI40, 229	<i>Im-3m</i>	0.84285, 0.84285, 0.84285, 90, 90, 90	-	-	7.37	X	34366
Ga-Ni	Ni ₅ Ga _{2.7} rt	Pt ₅ Ga _{2.7} , oS16, 65	<i>Cmmm</i>	0.703, 0.7277, 0.3735, 90, 90, 90	close-packed structure	-	8.37	X	63753
Ga-Ni	Ni ₄ Ga	Ga, oS8, 64	<i>Cmce</i>	0.4515, 0.7635, 0.4525, 90, 90, 90	-	-	5.94	A	55196
Ga-Np	NpGa ₂ m	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.4412, 0.4412, 0.3642, 90, 90, 120	AlB ₂ family	-	10.18	X	9942
Ga-Np	NpGa ₂	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.4259, 0.4259, 0.4077, 90, 90, 120	AlB ₂ family	-	9.76	X	26489
Ga-Np	NpGa ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.42545, 0.42545, 0.42545, 90, 90, 90	close-packed structure	-	9.62	X	9732
Ga-O	Ga ₂ O ₃ hp1	Al ₂ O ₃ , hR30, 167	<i>R-3c</i>	0.49825, 0.49825, 1.3433, 90, 90, 120	-	-	6.47	X	3509
Ga-O	Ga ₂ O ₃ hp2	Rh ₂ S ₃ , oP20, 60	<i>Pbcn</i>	0.6942, 0.4732, 0.4855, 90, 90, 90	-	-	7.81	X	52180
Ga-O	Ga ₂ O ₃ hp3	*oS20, 63	<i>Cmcm</i>	0.252, 0.8257, 0.6223, 90, 90, 90	-	-	9.62	N	50317
Ga-O	Ga ₂ O ₃ hp4	*t***, *	-	0.8097, 0.8097, 1.0062, 90, 90, 90	-	-	-	N	40890
Ga-O	Ga ₂ O ₃ ht	Ga ₂ O ₃ , mS20, 12	<i>C12/m1</i>	1.2214, 0.30371, 0.57981, 90, 103.83, 90	-	white	5.96	X	31366
Ga-O	Ga ₂ O ₃ orth	Fe ₂ O ₃ , oP40, 33	<i>Pna2₁</i>	0.50557, 0.86884, 0.92759, 90, 90, 90	-	-	6.11	A	60689
Ga-O	Ga _{2.67} O ₄ m	Ga _{2.67} O ₄ , cF128, 227	<i>Fd-3m</i>	0.82376, 0.82376, 0.82376, 90, 90, 90	-	white	5.95	X	60689
Ga-O	Ga _{2.67} O ₄	Ga _{2.67} O ₄ , hP10, 186	<i>P6₃/mc</i>	0.29036, 0.29036, 0.92554, 90, 90, 120	-	-	6.15	X	60689
Ga-Os	OsGa ₂ hp	TiSi ₃ , oF24, 70	<i>Fddd</i>	0.474, 0.8242, 0.8747, 90, 90, 90	-	-	12.82	X	15001
Ga-Os	OsGa ₃ hp	*o***, *	-	0.5627, 0.5662, 1.536, 90, 90, 90	-	-	-	N	15001

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Ga-Os	OsGa ₃	IrIn ₃ , tP16, 136	$P4_2/mnm$	0.6488, 0.6488, 0.6748, 90, 90, 90	-	-	9.34	A	1128
Ga-P	GaP orth hp	ZnTe, oS8, 63	$Cmcm$	0.4679, 0.4933, 0.4728, 90, 90, 90	-	-	6.13	X	50304
Ga-P	GaP rt	ZnS, cF8, 216	$F-43m$	0.5448, 0.5448, 0.5448, 90, 90, 90	adamantane structure	-	4.14	X	33073
Ga-P	GaP tf	* _h ***	-	0.376, 0.376, 1.57, 90, 90, 120	-	-	-	N	3806
Ga-P	Ga _{0.5} P _{0.5} hp	Sn, tI4, 141	$I4_1/amd$	0.472, 0.472, 0.2468, 90, 90, 90	-	-	6.08	X	15032
Ga-Pd	PdGa rt	FeSi, cP8, 198	$P2_13$	0.48969, 0.48969, 0.48969, 90, 90, 90	-	gray	9.96	X	56506
Ga-Pd	PdGa ₅	PdGa ₅ , tI24, 140	$I4/mcm$	0.6436, 0.6436, 0.999, 90, 90, 90	-	-	7.30	X	34093
Ga-Pd	Pd _{0.85} Ga _{0.15}	Cu, cF4, 225	$Fm-3m$	0.3877, 0.3877, 0.3877, 90, 90, 90	close-packed structure	-	11.50	X	11484
Ga-Pd	Pd _{1.12} Ga _{0.88} ht	CsCl, cP2, 221	$Pm-3m$	0.31283, 0.31283, 0.31283, 90, 90, 90	b.c.c. family	-	9.79	X	11850
Ga-Pd	Pd ₁₃ Ga ₅ rt	Pd ₁₃ Ga ₅ , mS36, 12	$C12/m1$	2.42599, 0.40506, 0.54437, 90, 102.69, 90	-	gray	11.02	X	38554
Ga-Pd	Pd ₂ Ga	Co ₂ Si-b, oP12, 62	$Pnma$	0.54829, 0.4056, 0.77863, 90, 90, 90	-	gray	10.84	X	52576
Ga-Pd	Pd ₅ Ga ₂ rt	Pd ₅ Ga ₂ , oP28, 62	$Pnma$	0.5485, 0.4083, 1.8396, 90, 90, 90	-	-	10.83	X	8129
Ga-Pd	Pd ₅ Ga ₃	Rh ₅ Ge ₃ , oP16, 55	$Pbam$	0.542, 1.056, 0.403, 90, 90, 90	-	-	10.67	X	962
Ga-Pd	Pd ₇ Ga ₃ rt	Pd ₇ Ga ₃ , mS20, 12	$C12/m1$	1.35946, 0.40551, 0.54434, 90, 105.222, 90	-	gray	10.94	X	39229
Ga-Pr	PrGa	TiI ₂ oS8, 63	$Cmcm$	0.446, 1.1338, 0.4199, 90, 90, 90	CrB(III)-FeB	-	6.59	X	4971
Ga-Pr	PrGa ₂	AlB ₂ , hP3, 191	$P6/mmm$	0.4292, 0.4292, 0.4293, 90, 90, 120	AlB ₂ family	-	6.80	X	27507
Ga-Pr	PrGa ₆	PuGa ₆ , tP14, 125	$P4/nbm$	0.6014, 0.6014, 0.7654, 90, 90, 90	-	-	6.71	A	17861
Ga-Pr	Pr ₂ Ga	Co ₂ Si-b, oP12, 62	$Pnma$	0.669, 0.5188, 0.9714, 90, 90, 90	-	-	6.93	X	12293
Ga-Pr	Pr ₃ Ga	Cu ₃ Au, cP4, 221	$Pm-3m$	0.551, 0.551, 0.551, 90, 90, 90	close-packed structure	-	4.89	X	12279
Ga-Pr	Pr ₅ Ga ₃ tet1	W ₅ Si ₃ , tI32, 140	$I4/mcm$	1.248, 1.248, 0.5488, 90, 90, 90	-	-	7.10	A	3914
Ga-Pr	Pr ₅ Ga ₃ tet2	Ba ₂ Si ₃ , tP32, 130	$P4/ncc$	0.7939, 0.7939, 1.45, 90, 90, 90	-	-	6.64	X	12293
Ga-Pr	Pr ₉ Ga ₄	Sm ₉ Ga ₄ , tI26, 87	$I4/m$	1.2008, 1.2008, 0.5182, 90, 90, 90	-	-	6.88	A	17883
Ga-Pt	PtGa	FeSi, cP8, 198	$P2_13$	0.491, 0.491, 0.491, 90, 90, 90	-	-	14.86	A	8950
Ga-Pt	PtGa ₂ ht	CaF ₂ , cF12, 225	$Fm-3m$	0.5911, 0.5911, 0.5911, 90, 90, 90	fluorite family	brass	10.76	X	138
Ga-Pt	PtGa ₂ rt	PtGa ₂ , tI96, 142	$I4_1/acd$	0.85544, 0.85544, 2.1574, 90, 90, 90	fluorite family	gray silver	11.26	X	31887
Ga-Pt	PtGa ₅	PtGa ₅ , mP48, 11	$P12_1/m1$	0.63977, 1.58823, 0.88326, 90, 110.198, 90	-	-	8.58	X	57136
Ga-Pt	PtGa ₆	* _o P*, *	-	0.8866, 1.2034, 1.5946, 90, 90, 90	-	-	-	N	1285
Ga-Pt	Pt _{0.94} Ga _{0.06}	Cu, cF4, 225	$Fm-3m$	0.3916, 0.3916, 0.3916, 90, 90, 90	close-packed structure	-	20.75	X	11484
Ga-Pt	Pt ₂ Ga rt	Pt ₂ Ga, oP24, 51	$Pnma$	1.6440, 0.3922, 0.5488, 90, 90, 90	-	-	17.27	X	8319
Ga-Pt	Pt ₂ Ga ₃	Ni ₂ Al ₃ , hP5, 164	$P-3m1$	0.422, 0.422, 0.517, 90, 90, 120	-	-	12.48	X	269
Ga-Pt	Pt _{2.67} Ga _{1.33} ht	SrPb ₃ , tP4, 123	$P4/mmm$	0.393, 0.393, 0.379, 90, 90, 90	close-packed structure	-	17.41	X	4111
Ga-Pt	Pt ₃ Ga ht	Cu ₃ Au, cP4, 221	$Pm-3m$	0.3896, 0.3896, 0.3896, 90, 90, 90	close-packed structure	-	18.39	X	20720
Ga-Pt	Pt ₃ Ga rt Ga+	Ir ₃ Si, tI16, 140	$I4/mcm$	0.5492, 0.5492, 0.78102, 90, 90, 90	close-packed structure	-	18.47	A	20720
Ga-Pt	Pt ₃ Ga rt Pt+	Pt ₃ Ga, tP16, 127	$P4/mbm$	0.54723, 0.54723, 0.7886, 90, 90, 90	close-packed structure	-	18.42	X	8942
Ga-Pt	Pt ₃ Ga ₇	Ru ₃ Sn ₇ , cI40, 229	$Im-3m$	0.8786, 0.8786, 0.8786, 90, 90, 90	-	-	10.51	X	57136
Ga-Pt	Pt ₅ Ga ₃	Pt ₅ Ga ₃ , oS16, 65	$Cmmm$	0.744, 0.8031, 0.3948, 90, 90, 90	close-packed structure	-	16.68	X	1239
Ga-Pt	Pt _{5.33} Ga _{2.67} ht	Rh ₅ Ge ₃ , oP16, 55	$Pbam$	0.5484, 1.086, 0.395, 90, 90, 90	-	-	17.31	X	8319
Ga-Pu	PuGa ht	PuGa, tI16, 139	$I4/mmm$	0.6641, 0.6641, 0.8069, 90, 90, 90	b.c.c. family	-	11.71	X	9349
Ga-Pu	PuGa rt	PuGa, tI16, 107	$I4mm$	0.66408, 0.66408, 0.80833, 90, 90, 90	b.c.c. family	-	11.69	X	12234
Ga-Pu	PuGa ₂	AlB ₂ , hP3, 191	$P6/mmm$	0.4258, 0.4258, 0.412, 90, 90, 120	AlB ₂ family	-	9.84	X	2630
Ga-Pu	PuGa ₃ ht1	Mg ₃ Cd, hP8, 194	$P6_3/mmc$	0.63148, 0.63148, 0.45239, 90, 90, 120	close-packed structure	-	9.63	X	46418
Ga-Pu	PuGa ₃ rt	Mg ₃ In, hR48, 166	$R-3m$	0.618, 0.618, 2.8035, 90, 90, 120	close-packed structure	-	9.74	X	46418
Ga-Pu	PuGa ₄ ht	UAl ₄ , oI20, 74	$Imma$	0.438, 0.629, 1.3673, 90, 90, 90	-	-	9.22	X	2420
Ga-Pu	PuGa ₆ ht	PuGa ₆ , tP14, 125	$P4/nbm$	0.5942, 0.5942, 0.7617, 90, 90, 90	-	-	8.18	X	2420
Ga-Pu	Pu _{0.88} Ga _{0.12} ht3	Cu, cF4, 225	$Fm-3m$	0.4552, 0.4552, 0.4552, 90, 90, 90	close-packed structure	-	15.71	X	2630
Ga-Pu	Pu _{0.977} Ga _{0.023} ht2	Pu, oF8, 70	$Fddd$	0.3145, 0.5691, 0.9986, 90, 90, 90	-	-	17.84	X	55746
Ga-Pu	Pu _{0.977} Ga _{0.023} rt	Pu, mP16, 11	$P12_1/m1$	0.6145, 0.4805, 1.0906, 90, 101.99, 90	-	-	20.24	A	55746
Ga-Pu	Pu _{0.9988} Ga _{0.0012} ht5	W, cI2, 229	$Im-3m$	0.363, 0.363, 0.363, 90, 90, 90	b.c.c. family	-	16.93	X	2630
Ga-Pu	Pu _{1.16} Ga _{0.84} ht	UCo, cI16, 199	$I2_13$	0.7167, 0.7167, 0.7167, 90, 90, 90	b.c.c. family	-	12.33	X	9349
Ga-Pu	Pu ₂ Ga ₁₅	* _t *17*, *	-	0.6206, 0.6206, 0.8332, 90, 90, 90	-	-	-	N	9349
Ga-Pu	Pu ₂ Ga ₃ rt	* _h P*, *	-	0.4378, 0.4378, 0.3792, 90, 90, 120	-	-	-	N	9349
Ga-Pu	Pu ₂ Ga ₇ rt	* _t *9*, *	-	0.4253, 0.4253, 0.9695, 90, 90, 90	-	-	-	N	9349
Ga-Pu	Pu ₃ Ga ht	Cu ₃ Au, cP4, 221	$Pm-3m$	0.45, 0.45, 0.45, 90, 90, 90	close-packed structure	-	14.61	X	2630
Ga-Pu	Pu ₃ Ga rt	SrPb ₃ , tP4, 123	$P4/mmm$	0.4506, 0.4506, 0.4555, 90, 90, 90	close-packed structure	-	14.40	X	2630
Ga-Pu	Pu ₅ Ga ₃ rt	W ₅ Si ₃ , tI32, 140	$I4/mcm$	1.1736, 1.1736, 0.5559, 90, 90, 90	-	-	12.40	A	9349
Ga-Rb	RbGa ₂	* _o ***	-	0.61, 0.616, 1.113, 90, 90, 90	-	-	-	N	7602
Ga-Rb	RbGa ₃	RbGa ₃ , tI24, 119	$I-4m2$	0.6315, 0.6315, 1.5000, 90, 90, 90	-	-	4.91	X	14545
Ga-Rb	RbGa ₇	RbGa ₇ , hR48, 166	$R-3m$	0.6600, 0.6600, 2.8563, 90, 90, 120	-	-	5.30	X	17901
Ga-Re	ReGa ₃ hp	* _o ***	-	0.5728, 0.5747, 1.559, 90, 90, 90	-	-	-	N	15001
Ga-Re	ReGa ₃ hp-ht	IrIn ₃ , tP16, 136	$P4_2/mnm$	0.6511, 0.6511, 0.679, 90, 90, 90	-	-	9.12	A	15001
Ga-Re	Re _{0.6} Ga _{0.4} hp	Mg, hP2, 194	$P6_3/mmc$	0.2823, 0.2823, 0.4238, 90, 90, 120	close-packed structure	-	15.85	X	15001
Ga-Rh	RhGa	CsCl, cP2, 221	$Pm-3m$	0.30063, 0.30063, 0.30063, 90, 90, 90	b.c.c. family	-	10.55	X	16268
Ga-Rh	RhGa ₃	IrIn ₃ , tP16, 136	$P4_2/mnm$	0.6488, 0.6488, 0.6552, 90, 90, 90	-	-	7.52	A	1128
Ga-Rh	Rh ₁₀ Ga ₁₇	Rh ₁₀ Ga ₁₇ , tP108, 116	$P-4c2$	0.5813, 0.5813, 4.746, 90, 90, 90	chimney-ladder structure	-	9.17	X	3568
Ga-Rh	Rh ₅ Ga ₉	Rh ₅ Ga ₉ , mP22, 7	$P1c1$	0.64164, 0.64119, 0.87847, 90, 93.39, 90	-	gray	7.67	X	46674
Ga-Rh	Rh ₃ Ga ₁₆	Rh ₃ Ga ₁₆ , oS76, 68	$Ccce$	0.6476, 3.0424, 0.6468, 90, 90, 90	-	-	7.42	X	47953
Ga-Rh	Rh ₂ Ga ₅	Rh ₂ Ga ₅ , aP16, 2	$P-1$	0.4961, 0.6655, 0.787, 100.76, 104.67, 101.5	-	black	9.15	X	42426
Ga-Rh	Rh ₄ Ga ₂₁	Rh ₄ Ga ₂₁ , oS100, 64	$Cmce$	4.0135, 0.647, 0.6473, 90, 90, 90	-	-	7.41	X	47953
Ga-Ru	RuGa	CsCl, cP2, 221	$Pm-3m$	0.301, 0.301, 0.301, 90, 90, 90	b.c.c. family	-	10.40	X	1923
Ga-Ru	RuGa ₂	TiSi ₂ , oF24, 70	$Fddd$	0.474, 0.818, 0.87, 90, 90, 90	-	-	9.47	A	17143
Ga-Ru	RuGa ₃	IrIn ₃ , tP16, 136	$P4_2/mnm$	0.64729, 0.64729, 0.67062, 90, 90, 90	-	gray silver	7.33	X	41138
Ga-S	GaS hp	GaS-b, hP8, 194	$P6_3/mmc$	0.3547, 0.3547, 1.474, 90, 90, 120	-	-	4.21	X	15426
Ga-S	GaS m	GaSe, hR12, 160	$R3m$	0.3605, 0.3605, 2.345, 90, 90, 120	-	-	3.84	X	20358
Ga-S	GaS rt	GaS-a, hP8, 194	$P6_3/mmc$	0.3592, 0.3592, 1.5465, 90, 90, 120	-	yellow	3.91	X	15297
Ga-S	Ga _{0.67} S ht Ga+	ZnS, cF8, 216	$F-43m$	0.52071, 0.52071, 0.52071, 90, 90, 90	adamantane structure	yellow shadow	3.71	X	61789
Ga-S	Ga _{0.67} S ht2	ZnO, hP4, 186	$P6_3/mc$	0.3682, 0.3682, 0.6031, 90, 90, 120	adamantane structure	-	3.69	X	20351
Ga-S	Ga ₂ S ₃ hp	Bi ₂ Te ₃ , hR15, 166	$R-3m$	0.33849, 0.33849, 2.3428, 90, 90, 120	-	-	5.05	A	63865
Ga-S	Ga ₂ S ₃ ht1	Ga ₂ S ₃ , hP36, 169	$P6_1$	0.6385, 0.6385, 1.8040, 90, 90, 120	-	-	3.69	X	20351

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Ga-S	Ga ₂ S ₃ mon	Ga ₂ S ₃ ,mS20,9	C1c1	1.1107,0.6395,0.7021,90,121,17,90	-	yellow shadow	3.67	X	40162
Ga-Sb	GaSb hp3	* _o S**	-	0.22479,0.26122,0.42727,90,90,90	-	-	-	N	20414
Ga-Sb	GaSb rt	ZnS,cF8,216	F-43m	0.6095,0.6095,0.6095,90,90,90	adamantane structure	-	5.62	X	19292
Ga-Sb	Ga _{0.5} Sb _{0.5} hp1	Si ₃ Al ₄ ,74	Imma	0.5151,0.5276,0.2386,90,90,90	-	-	9.81	X	29355
Ga-Sb	Ga _{0.5} Sb _{0.5} hp2	(Hg _{0.1} Sn _{0.9}),hP1,191	P6/mmm	0.26981,0.26981,0.2479,90,90,120	-	-	10.17	X	21625
Ga-Sb	Ga _{0.5} Sb _{0.5} m	C,cF8,227	Fd-3m	0.60976,0.60976,0.60976,90,90,90	-	-	5.61	X	10520
Ga-Se	SeGa	TlI ₂ oS8,63	Cmcm	0.4022,1.0205,0.3895,90,90,90	CrB(TlI)-FeB	-	4.76	X	2416
Ga-Se	SeGa ₂ hp	ZrGa ₂ ,oS12,65	Cmmm	0.4098,1.331,0.4242,90,90,90	close-packed structure	-	5.29	X	13085
Ga-Se	SeGa ₂	KHg ₂ ,oI12,74	Imma	0.414,0.6614,0.7914,90,90,90	AlB ₂ family	-	5.65	X	13044
Ga-Se	SeGa ₃	Cu ₃ Au,cP4,221	Pm-3m	0.409,0.409,0.409,90,90,90	close-packed structure	-	6.17	X	60107
Ga-Se	Sc ₁₁ Ga ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	I4/mmm	1.0366,1.0366,1.5305,90,90,90	-	-	4.81	X	22699
Ga-Se	Sc ₂ Ga ₂	Gd ₃ Ga ₂ ,tI80,140	I4/mcm	1.0767,1.0767,1.4045,90,90,90	-	-	4.48	A	19855
Ga-Se	Sc ₃ Ga ₅	Tm ₃ Ga ₅ ,oP32,62	Pnma	1.091,0.9231,0.5695,90,90,90	-	-	5.60	A	13969
Ga-Se	Sc ₂ Ga ₃	Y ₂ Ga ₃ ,mS32,12	C12/m1	0.8092,1.4015,0.5933,90,91.022,90	-	-	4.28	X	39067
Ga-Se	GaSe 12R	* _h R48,160	R3m	0.375,0.375,9.564,90,90,120	-	-	-	N	9078
Ga-Se	GaSe 15R	* _h R60,160	R3m	0.375,0.375,11.955,90,90,120	-	-	-	N	9078
Ga-Se	GaSe 2Hα	GaSe,hP8,187	P-6m2	0.37425,0.37425,1.59191,90,90,120	-	red ruby	5.11	X	700
Ga-Se	GaSe 2Hβ	GaS-a,hP8,194	P6 ₃ /mmc	0.375,0.375,1.5995,90,90,120	-	red	5.07	X	20816
Ga-Se	GaSe 3R	GaSe,hR12,160	R3m	0.3747,0.3747,2.3910,90,90,120	-	red ruby	5.10	X	700
Ga-Se	GaSe 4H	GaSe,hP16,186	P6 ₃ mc	0.3755,0.3755,3.1990,90,90,120	-	-	5.06	X	8677
Ga-Se	GaSe 9R	* _h R36,160	R3m	0.375,0.375,7.173,90,90,120	-	-	-	N	9078
Ga-Se	Ga _{0.67} Se ht	ZnS,cF8,216	F-43m	0.5422,0.5422,0.5422,90,90,90	adamantane structure	red	5.24	X	14136
Ga-Se	Ga ₂ Se ₃ hp	Bi ₂ Te ₃ ,hR15,160	R3m	0.399,0.399,2.78,90,90,120	-	-	4.89	A	4220
Ga-Se	Ga ₂ Se ₃ rt	Ga ₂ Se ₃ ,mS20,9	C1c1	0.666,1.165,0.666,90,108.12,90	-	brown	5.09	X	15726
Ga-Sm	SmGa	TlI ₂ oS8,63	Cmcm	0.433,1.134,0.4196,90,90,90	CrB(TlI)-FeB	-	7.10	X	4971
Ga-Sm	SmGa ₂	AlB ₂ ,hP3,191	P6/mmm	0.4238,0.4238,0.4187,90,90,120	AlB ₂ family	-	7.39	X	18190
Ga-Sm	SmGa ₃ ,64	SmGa ₃ ,64,oF140,69	Fmmm	0.8493,1.4912,1.708,90,90,90	-	black	7.45	X	53221
Ga-Sm	SmGa ₆ rt	PuGa ₆ ,tP14,125	P4/nbm	0.597,0.597,0.761,90,90,90	-	-	6.96	A	18927
Ga-Sm	Sm _{0.86} Ga _{2.41}	Sm _{0.86} Ga _{2.41} ,hP15,149	P312	0.7424,0.7424,0.42176,90,90,120	-	black	7.36	X	53221
Ga-Sm	Sm _{0.92} Ga ₂	Sm _{0.92} Ga ₂ ,oS6,65	Cmmm	0.42484,0.73648,0.41856,90,90,90	-	-	7.05	X	26574
Ga-Sm	Sm _{1.06} Ga _{2.83}	Sm _{1.06} Ga _{2.83} ,hP66,190	P-62c	1.2861,1.2861,0.84402,90,90,120	-	black	7.35	X	53221
Ga-Sm	Sm ₃ Ga	Cu ₃ Au,cP4,221	Pm-3m	0.539,0.539,0.539,90,90,90	close-packed structure	-	5.52	X	10809
Ga-Sm	Sm ₃ Ga ₂	Gd ₃ Ga ₂ ,tI80,140	I4/mcm	1.1713,1.1713,1.517,90,90,90	-	-	7.54	A	18883
Ga-Sm	Sm ₂ Ga ₃	Ba ₂ Si ₃ ,tP32,130	P4/ncc	0.78026,0.78026,1.4188,90,90,90	-	black	7.39	X	45131
Ga-Sm	Sm ₉ Ga ₄	Sm ₉ Ga ₄ ,tI26,87	I4/m	1.1940,1.1940,0.5081,90,90,90	-	-	7.48	X	17883
Ga-Sn	Ga _{0.07} Sn _{0.93} rt	Sn,tI4,141	I4/amd	0.5785,0.5785,0.317,90,90,90	-	-	7.22	X	2184
Ga-Sn	Ga _{0.15} Sn _{0.85} m	(Hg _{0.1} Sn _{0.9}),hP1,191	P6/mmm	0.2995,0.2995,0.2779,90,90,120	-	-	8.56	X	40902
Ga-Sr	SrGa ₂	AlB ₂ ,hP3,191	P6/mmm	0.43484,0.43484,0.4736,90,90,120	AlB ₂ family	gray silver	4.86	X	52890
Ga-Sr	SrGa ₄	BaAl ₄ ,tI10,139	I4/mmm	0.44474,0.44474,1.073,90,90,90	BaAl ₄ family	gray silver	5.74	X	45170
Ga-Sr	Sr _{2.85} Ga _{8.45}	Sr _{2.85} Ga _{8.45} ,oI34,71	Immm	0.43958,0.45298,2.6002,90,90,90	-	gray	5.38	X	48696
Ga-Sr	Sr ₈ Ga ₇	Ba ₈ Ga ₇ ,cP60,198	P2 ₁ 3	1.2484,1.2484,1.2484,90,90,90	-	-	4.06	X	15719
Ga-Ta	TaGa ₂	* _t P**	-	1.1778,1.1778,1.6927,90,90,90	-	-	-	N	10595
Ga-Ta	TaGa ₃	TiAl ₃ ,tI8,139	I4/mmm	0.3798,0.3798,0.8704,90,90,90	close-packed structure	-	10.32	X	12226
Ga-Ta	Ta _{0.88} Ga _{0.12}	W,cI2,229	Im-3m	0.332,0.332,0.332,90,90,90	b.c.c. family	-	15.21	X	12226
Ga-Ta	Ta ₃ Ga ₂	U ₃ Si ₂ ,tP10,127	P4/mbm	0.6868,0.6868,0.3503,90,90,90	-	-	13.71	A	12226
Ga-Ta	Ta ₄ Ga ₅ rt	Ta ₄ Ga ₅ ,tP156,136	P4 ₂ /mnm	1.17888,1.17888,1.69818,90,90,90	-	black	12.07	X	65035
Ga-Ta	Ta ₅ Ga ₃ ht	W ₅ Si ₃ ,tI32,140	I4/mcm	1.0208,1.0208,0.5116,90,90,90	-	-	13.88	X	2305
Ga-Ta	Ta ₂ Ga ₃ rt	Cr ₂ B ₃ ,tI32,140	I4/mcm	0.6588,0.6588,1.192,90,90,90	-	-	14.30	A	2255
Ga-Ta	Ta ₂ Ga ₃ stab	Mn ₅ Si ₃ ,hP16,193	P6 ₃ /mcm	0.7681,0.7681,0.528,90,90,120	-	-	13.71	X	12226
Ga-Ta	Ta ₆ Ga ₅ hp	Ti ₆ Sn ₅ ,hP22,194	P6 ₃ /mmc	0.877,0.877,0.535,90,90,120	AlB ₂ family	-	13.37	A	12226
Ga-Tb	TbGa	TlI ₂ oS8,63	Cmcm	0.433,1.09,0.409,90,90,90	CrB(TlI)-FeB	-	7.87	X	2268
Ga-Tb	TbGa ₂	AlB ₂ ,hP3,191	P6/mmm	0.4211,0.4211,0.4096,90,90,120	AlB ₂ family	-	7.88	X	47566
Ga-Tb	TbGa ₃ ht	Cu ₃ Au,cP4,221	Pm-3m	0.4285,0.4285,0.4285,90,90,90	close-packed structure	-	7.77	X	59876
Ga-Tb	TbGa ₃ rt	Mg ₃ Cd,hP8,194	P6 ₃ /mmc	0.6278,0.6278,0.4507,90,90,120	close-packed structure	-	7.95	X	14079
Ga-Tb	TbGa ₆	PuGa ₆ ,tP14,125	P4/nbm	0.594,0.594,0.756,90,90,90	-	-	7.19	A	18927
Ga-Tb	Tb ₃ Ga ₂	Gd ₃ Ga ₂ ,tI80,140	I4/mcm	1.16275,1.16275,1.49191,90,90,90	-	-	8.12	A	53173
Ga-Tb	Tb ₃ Ga ₅	Tm ₃ Ga ₅ ,oP32,62	Pnma	1.1472,0.9688,0.6114,90,90,90	-	-	8.07	A	53173
Ga-Tb	Tb ₃ Ga ₃	Cr ₃ B ₃ ,tI32,140	I4/mcm	0.7654,0.7654,1.398,90,90,90	-	-	8.14	X	4490
Ga-Te	GaTe hp	NaCl,cF8,225	Fm-3m	0.556,0.556,0.556,90,90,90	rocksalt family	-	7.63	X	30257
Ga-Te	GaTe tf hex	GaS-a,hP8,194	P6 ₃ /mmc	0.406,0.406,1.696,90,90,120	-	-	5.41	X	2304
Ga-Te	GaTe tf mon	* _m P24,4	P12 ₁ 1	1.195,0.404,1.482,90,104,90	-	-	-	N	2304
Ga-Te	GaTe	SiAs,mS24,12	C12/m1	1.7404,0.4077,1.0456,90,104,44,90	-	black	5.47	X	12023
Ga-Te	GaTe ₃	* _h P**	-	0.643,0.643,1.42,90,90,120	-	-	-	N	1459
Ga-Te	Ga _{0.67} Te ht	ZnS,cF8,216	F-43m	0.5896,0.5896,0.5896,90,90,90	adamantane structure	-	5.65	X	26470
Ga-Te	Ga _{0.67} Te tf	Ga _{0.67} Te,oS16,38	Anm2	0.3946,0.7891,1.1160,90,90,90	-	-	6.66	X	27439
Ga-Te	Ga _{0.9} Te _{1.1} tf	* _c P**	-	1.032,1.032,1.032,90,90,90	-	-	-	N	2304
Ga-Te	Ga ₂ Te ₃ hp	Bi ₂ Te ₃ ,hR15,160	R3m	0.3987,0.3987,2.645,90,90,120	-	-	7.15	A	26479
Ga-Te	Ga ₂ Te ₃	* _o **	-	0.417,1.252,2.36,90,90,90	-	-	-	N	1933
Ga-Te	Ga ₂ Te ₅ ht	Ga ₂ Te ₅ ,tI14,87	I4/m	0.7913,0.7913,0.6848,90,90,90	-	black	6.02	X	10257
Ga-Te	Ga ₃ Te ₄	* _h P**	-	0.8278,0.8278,0.6906,90,90,120	-	-	-	N	17959
Ga-Te	Ga ₇ Te ₁₀	Al ₇ Te ₁₀ ,hR102,155	R32	1.4323,1.4323,1.7855,90,90,120	-	black	5.54	X	31193
Ga-Th	ThGa	SrAg,oP16,62	Pnma	1.6346,0.4136,0.6053,90,90,90	CrB(TlI)-FeB	-	9.80	X	16940
Ga-Th	ThGa ₂	ThSi ₂ ,tI12,141	I4/amd	0.4247,0.4247,1.4701,90,90,90	-	-	9.31	X	16940
Ga-Th	Th ₂ Ga	CuAl ₂ ,tI12,140	I4/mcm	0.7481,0.7481,0.595,90,90,90	-	-	10.65	X	6603
Ga-Th	Th ₃ Ga ₂	U ₃ Si ₂ ,tP10,127	P4/mbm	0.8,0.8,0.4224,90,90,90	-	-	10.27	X	16940
Ga-Ti	TiGa	CuAu,tP2,123	P4/mmm	0.28089,0.28089,0.39736,90,90,90	close-packed structure	-	6.23	X	39248
Ga-Ti	TiGa ₂	HfGa ₂ ,tI24,141	I4/amd	0.39405,0.39405,2.4406,90,90,90	close-packed structure	-	6.57	A	39248
Ga-Ti	TiGa ₃	TiAl ₃ ,tI8,139	I4/mmm	0.3795,0.3795,0.8748,90,90,90	close-packed structure	-	6.78	X	42135

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ga-Ti	Ti _{0.91} Ga _{0.09} rt	Mg ₂ hP2, 194	$P6_3/mmc$	0.293, 0.293, 0.467, 90, 90, 120	close-packed structure	white silver	4.77	X	17695
Ga-Ti	Ti ₂ Ga	Co _{1.75} Ge ₂ hP6, 194	$P6_3/mmc$	0.45262, 0.45262, 0.55208, 90, 90, 120	AlB ₂ family	-	5.61	X	57122
Ga-Ti	Ti ₂ Ga ₃ rt	Ti ₂ Ga ₃ iP10, 83	$P4/m$	0.6284, 0.6284, 0.4010, 90, 90, 90	close-packed structure	-	6.40	X	1736
Ga-Ti	Ti ₃ Ga rt	Mg ₂ Cd ₂ hP8, 194	$P6_3/mmc$	0.57528, 0.57528, 0.46568, 90, 90, 120	close-packed structure	white silver	5.31	X	57122
Ga-Ti	Ti ₃ Ga ₃ stab	Mn ₂ Si ₃ hP16, 193	$P6_3/mcm$	0.7604, 0.7604, 0.5288, 90, 90, 120	-	-	5.63	X	1915
Ga-Ti	Ti ₃ Ga ₃	W ₂ Si ₃ iI32, 140	$I4/mcm$	1.01906, 1.01906, 0.5042, 90, 90, 90	-	-	5.69	A	39248
Ga-Ti	Ti ₃ Ga ₄	Ti ₃ Ga ₄ hP18, 193	$P6_3/mcm$	0.7861, 0.7861, 0.5452, 90, 90, 120	AlB ₂ family	green	5.90	X	1676
Ga-Tm	TmGa	TiI ₂ oS8, 63	$Cmcm$	0.42367, 1.06472, 0.40041, 90, 90, 90	CrB(III)-FeB	-	8.78	X	63891
Ga-Tm	TmGa ₂ hp	AlB ₂ hP3, 191	$P6/mmm$	0.407, 0.407, 0.315, 90, 90, 120	AlB ₂ family	-	11.33	X	31912
Ga-Tm	TmGa ₂ rt	KH ₂ Si ₂ oI12, 74	$Imma$	0.42, 0.6879, 0.8067, 90, 90, 90	AlB ₂ family	-	8.79	X	15068
Ga-Tm	TmGa ₃	Cu ₃ Au ₂ cP4, 221	$Pm-3m$	0.42027, 0.42027, 0.42027, 90, 90, 90	close-packed structure	-	8.46	X	63084
Ga-Tm	TmGa ₆	PuGa ₆ iP14, 125	$P4/nbm$	0.585, 0.585, 0.751, 90, 90, 90	-	-	7.59	A	14113
Ga-Tm	Tm ₃ Ga ₂	Gd ₃ Ga ₂ iI80, 140	$I4/mcm$	1.124, 1.124, 1.447, 90, 90, 90	-	-	9.39	A	18883
Ga-Tm	Tm ₃ Ga ₅	Tm ₃ Ga ₅ oP32, 62	$Pnma$	1.1293, 0.9561, 0.6001, 90, 90, 90	-	-	8.77	X	15978
Ga-Tm	Tm ₃ Ga ₃	Y ₃ Ga ₃ mS32, 12	$C12/m1$	0.8467, 1.4647, 0.63489, 90, 91, 28, 90	-	-	8.89	A	39067
Ga-U	UGa ₂ lt	*oS6, 65	$Cmmm$	0.4202, 0.7185, 0.4012, 90, 90, 90	-	-	-	N	11763
Ga-U	UGa ₂ rt	AlB ₂ hP3, 191	$P6/mmm$	0.4213, 0.4213, 0.40171, 90, 90, 120	AlB ₂ family	-	10.15	X	11763
Ga-U	UGa ₃	Cu ₃ Au ₂ cP4, 221	$Pm-3m$	0.4255, 0.4255, 0.4255, 90, 90, 90	close-packed structure	-	9.64	X	27921
Ga-U	U _{0.918} Ga _{0.082} m	U ₂ P30, 136	$P4_3/mnm$	1.0662, 1.0662, 0.5703, 90, 90, 90	Frank-Kasper phase	-	17.23	A	49634
Ga-U	U _{0.985} Ga _{0.015} rt	U ₂ oS4, 63	$Cmcm$	0.2851, 0.5852, 0.4948, 90, 90, 90	close-packed structure	-	18.95	A	18010
Ga-U	U _{2.67} Ga _{5.33}	Pu ₃ Pd ₅ oS32, 63	$Cmcm$	0.9257, 0.7439, 0.9359, 90, 90, 90	-	-	10.38	X	45776
Ga-V	V _{0.6} Ga _{0.4} stab	Mn ₂ cP20, 213	$P4_32$	0.662, 0.662, 0.662, 90, 90, 90	-	-	6.69	A	2787
Ga-V	V _{0.67} Ga _{0.33} stab	Mg ₂ hP2, 194	$P6_3/mmc$	0.275, 0.275, 0.445, 90, 90, 120	close-packed structure	-	6.51	X	2787
Ga-V	V _{0.9} Ga _{0.1} m	W ₂ cI2, 229	$Im-3m$	0.30354, 0.30354, 0.30354, 90, 90, 90	b.c.c. family	-	6.27	X	2272
Ga-V	V _{1.5} Ga _{0.5} ht	CrSi ₂ cP2, 221	$Pm-3m$	0.3048, 0.3048, 0.3048, 90, 90, 90	b.c.c. family	-	6.53	X	3465
Ga-V	V ₂ Ga ₅	Hg ₂ Mn ₂ iP14, 127	$P4/mbm$	0.8936, 0.8936, 0.2683, 90, 90, 90	-	-	6.98	X	40878
Ga-V	V ₃ Ga rt	Cr ₃ Si ₂ cP8, 223	$Pm-3n$	0.48196, 0.48196, 0.48196, 90, 90, 90	Frank-Kasper phase	-	6.60	X	19297
Ga-V	V ₃ Ga ₃ stab	Mn ₂ Si ₃ hP16, 193	$P6_3/mcm$	0.7356, 0.7356, 0.4971, 90, 90, 120	-	-	6.61	A	3465
Ga-V	V ₆ Ga ₅ rt	Ti ₂ Sn ₃ hP22, 194	$P6_3/mmc$	0.8496, 0.8496, 0.5174, 90, 90, 120	AlB ₂ family	-	6.72	A	4163
Ga-V	V ₆ Ga ₇ rt	Cu ₂ Zn ₈ cI52, 217	$I-43m$	0.917, 0.917, 0.917, 90, 90, 90	γ-brass	-	6.84	A	4163
Ga-V	V ₈ Ga ₄₁	V ₈ Ga ₄₁ hR147, 148	$R-3$	1.39351, 1.39351, 1.48828, 90, 90, 120	-	gray silver	6.50	X	38929
Ga-W	W _{0.4} Ga _{0.6} hp	Mg ₂ hP2, 194	$P6_3/mmc$	0.3006, 0.3006, 0.4738, 90, 90, 120	close-packed structure	-	10.33	X	14075
Ga-W	W _{0.97} Ga _{0.03}	W ₂ cI2, 229	$Im-3m$	0.3146, 0.3146, 0.3146, 90, 90, 90	b.c.c. family	-	19.25	X	14075
Ga-W	W ₂ Ga ₃ hp	Hg ₂ Mn ₂ iP14, 127	$P4/mbm$	0.8984, 0.8984, 0.2674, 90, 90, 90	-	-	11.02	A	14075
Ga-Y	YGa	TiI ₂ oS8, 63	$Cmcm$	0.4302, 1.086, 0.4073, 90, 90, 90	CrB(III)-FeB	-	5.54	X	2416
Ga-Y	YGa ₂	AlB ₂ hP3, 191	$P6/mmm$	0.4217, 0.4217, 0.4111, 90, 90, 120	AlB ₂ family	-	5.99	X	12279
Ga-Y	YGa ₆	PuGa ₆ iP14, 125	$P4/nbm$	0.5947, 0.5947, 0.7549, 90, 90, 90	-	-	6.31	X	17740
Ga-Y	Y ₃ Ga ₂	Gd ₃ Ga ₂ iI80, 140	$I4/mcm$	1.162, 1.162, 1.486, 90, 90, 90	-	-	5.38	A	18883
Ga-Y	Y ₃ Ga ₅ rt	Tm ₃ Ga ₅ oP32, 62	$Pnma$	1.145, 0.9674, 0.6098, 90, 90, 90	-	-	6.05	A	15978
Ga-Y	Y ₃ Ga ₃ ht	Y ₃ Ga ₃ mS32, 12	$C12/m1$	0.8635, 1.4894, 0.651, 90, 91, 19, 90	-	-	5.19	X	25826
Ga-Y	Y ₃ Ga ₃ rt	Ba ₂ Si ₃ iP32, 130	$P4/ncc$	0.76474, 0.76474, 1.4147, 90, 90, 90	-	black	5.25	X	28778
Ga-Yb	YbGa	CuTi ₂ iP2, 123	$P4/mmm$	0.342, 0.342, 0.394, 90, 90, 90	b.c.c. family	-	8.75	X	12265
Ga-Yb	YbGa ₂ hp	Hg ₂ U ₂ hP3, 191	$P6/mmm$	0.41477, 0.41477, 0.31492, 90, 90, 120	AlB ₂ family	-	11.06	X	40037
Ga-Yb	YbGa ₂	CaIn ₂ hP6, 194	$P6_3/mmc$	0.44527, 0.44527, 0.71969, 90, 90, 120	AlB ₂ family	-	8.40	X	53292
Ga-Yb	YbGa _{2.64} rt	YbGa _{2.64} hP63, 191	$P6/mmm$	1.3025, 1.3025, 0.836, 90, 90, 120	-	-	7.24	X	23443
Ga-Yb	YbGa ₄	CaGa ₄ mS10, 12	$C12/m1$	0.6129, 0.6109, 0.6097, 90, 119.05, 90	BaAl ₄ family	-	7.52	X	53292
Ga-Yb	YbGa ₅	YbGa ₅ iI24, 139	$I4/mmm$	0.43059, 0.43059, 2.5871, 90, 90, 90	-	-	7.22	X	41574
Ga-Yb	YbGa ₆	PuGa ₆ iP14, 125	$P4/nbm$	0.60921, 0.60921, 0.7659, 90, 90, 90	-	-	6.91	X	61179
Ga-Yb	Yb _{0.89} Ga _{2.97}	Yb _{0.89} Ga _{2.97} oI34, 71	$Immm$	0.42049, 0.4332, 2.5691, 90, 90, 90	-	-	7.69	X	53292
Ga-Yb	Yb ₂ Ga	Co ₂ Si ₂ b-oP12, 62	$Pnma$	0.7063, 0.505, 0.9427, 90, 90, 90	-	-	8.21	A	12265
Ga-Yb	Yb ₃ Ga ₈ ht	Eu ₃ Ga ₈ oI22, 71	$Immm$	0.4225, 0.434, 2.5665, 90, 90, 90	-	-	7.60	A	23443
Ga-Zn	Zn _{0.98} Ga _{0.02}	Mg ₂ hP2, 194	$P6_3/mmc$	0.26591, 0.26591, 0.49923, 90, 90, 120	close-packed structure	-	7.11	X	2091
Ga-Zr	ZrGa rt	MoB ₂ iI16, 141	$I4_1/amd$	0.3865, 0.3865, 2.056, 90, 90, 90	-	-	6.96	X	1676
Ga-Zr	ZrGa ₂	ZrGa ₂ oS12, 65	$Cmmm$	0.3994, 1.2894, 0.4123, 90, 90, 90	close-packed structure	gray dark	7.22	X	1736
Ga-Zr	ZrGa ₃	ZrAl ₃ iI16, 139	$I4/mmm$	0.3964, 0.3964, 1.7465, 90, 90, 90	close-packed structure	-	7.27	A	31592
Ga-Zr	Zr ₂ Ga rt	CuAl ₂ iI12, 140	$I4/mcm$	0.6708, 0.6708, 0.5437, 90, 90, 90	-	-	6.85	X	6603
Ga-Zr	Zr ₂ Ga ₃	Zr ₂ Al ₃ oF40, 43	$Fdd2$	0.9444, 1.3755, 0.5497, 90, 90, 90	-	-	7.29	X	1736
Ga-Zr	Zr ₃ Ga ₂	U ₃ Si ₂ iP10, 127	$P4/mbm$	0.7349, 0.7349, 0.3692, 90, 90, 90	-	-	6.88	X	1736
Ga-Zr	Zr ₃ Ga ₅ rt	Pu ₃ Pd ₅ oS32, 63	$Cmcm$	0.8839, 0.7104, 0.9069, 90, 90, 90	-	-	7.26	A	31592
Ga-Zr	Zr ₃ Ga ₃ ht	W ₂ Si ₃ iI32, 140	$I4/mcm$	1.0891, 1.0891, 0.5389, 90, 90, 90	-	-	6.91	X	31592
Ga-Zr	Zr ₃ Ga ₃ rt	Mn ₂ Si ₃ hP16, 193	$P6_3/mcm$	0.8041, 0.8041, 0.56766, 90, 90, 120	-	-	6.95	X	31592
Ga-Zr	Zr ₃ Ga ₄ ht	Ti ₃ Ga ₄ hP18, 193	$P6_3/mcm$	0.8313, 0.8313, 0.5746, 90, 90, 120	AlB ₂ family	-	7.10	A	31592
Gd-Ge	GdGe	TiI ₂ oS8, 63	$Cmcm$	0.4339, 1.0788, 0.3973, 90, 90, 90	CrB(III)-FeB	-	8.21	X	2831
Gd-Ge	GdGe _{1.5} rt	AlB ₂ hP3, 191	$P6/mmm$	0.3972, 0.3972, 0.4203, 90, 90, 120	AlB ₂ family	-	7.70	X	58284
Gd-Ge	GdGe _{1.57} ht1	ThSi ₂ iI12, 141	$I4_1/amd$	0.41234, 0.41234, 1.37594, 90, 90, 90	-	-	7.70	X	65099
Gd-Ge	GdGe ₂	TbGe ₂ oS24, 65	$Cmmm$	0.4138, 3.0038, 0.403, 90, 90, 90	-	-	8.02	A	35945
Gd-Ge	GdGe ₃ ht	DyGe ₃ oS16, 63	$Cmcm$	0.4092, 2.0897, 0.3951, 90, 90, 90	-	-	7.37	A	35945
Gd-Ge	GdGe ₃ hp	LaGe ₅ oI12, 71	$Immm$	0.39686, 0.613, 0.9847, 90, 90, 90	-	black	7.21	X	54525
Gd-Ge	Gd ₁₁ Ge ₁₀	Ho ₁₁ Ge ₁₀ iI84, 139	$I4/mmm$	1.095, 1.095, 1.667, 90, 90, 90	-	-	8.16	A	58284
Gd-Ge	Gd ₁₇ Ge ₂₉	Gd ₁₇ Ge ₂₉ oF368, 43	$Fdd2$	0.58331, 9.928, 1.3749, 90, 90, 90	-	-	7.97	X	36090
Gd-Ge	Gd ₃ Ge ₄	Er ₃ Ge ₄ oS28, 63	$Cmcm$	0.41025, 1.07444, 1.43121, 90, 90, 90	-	-	8.02	X	49266
Gd-Ge	Gd ₃ Ge ₅ rt	Y ₃ Ge ₅ oF64, 43	$Fdd2$	0.5784, 1.7355, 1.3785, 90, 90, 90	-	-	8.01	X	47415
Gd-Ge	Gd ₅ Ge ₃ lt	Mn ₂ Si ₃ oS32, 63	$Cmcm$	1.48806, 0.85604, 0.64388, 90, 90, 90	-	-	8.13	X	60079
Gd-Ge	Gd ₅ Ge ₃ rt	Mn ₂ Si ₃ hP16, 193	$P6_3/mcm$	0.857, 0.857, 0.643, 90, 90, 120	-	-	8.15	X	4509
Gd-Ge	Gd ₅ Ge ₄	Sm ₅ Ge ₄ oP36, 62	$Pnma$	0.7676, 1.47819, 0.77738, 90, 90, 90	-	-	8.11	X	58863
Gd-Ge	Gd ₇ Ge ₁₁	*oF152, 43	$Fdd2$	1.3759, 4.092, 0.5833, 90, 90, 90	-	-	-	N	30044
Gd-Ge	Gd _{7.5} Ge ₁₂₄	*o***	-	0.5789, 0.5796, 1.382, 90, 90, 90	-	-	-	N	36090
Gd-H	GdH _{1.93}	CaF ₂ cF12, 225	$Fm-3m$	0.5303, 0.5303, 0.5303, 90, 90, 90	fluorite family	-	7.09	X	34755

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Gd-H	GdH ₃ hp	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.536, 0.536, 0.536, 90, 90, 90	fluorite family	-	6.91	X	49641
Gd-H	GdH ₃ rt	HoH ₃ , hP24, 165	<i>P-3c1</i>	0.64662, 0.64662, 0.6717, 90, 90, 120	-	-	6.57	X	37734
Gd-Hg	HgGd	CsCl, cP2, 221	<i>Pm-3m</i>	0.37, 0.37, 0.37, 90, 90, 90	b.c.c. family	-	11.73	X	20119
Gd-Hg	Hg ₂ Gd	Cd ₂ Ce, hP3, 164	<i>P-3m1</i>	0.4854, 0.4854, 0.3496, 90, 90, 120	AlB ₂ family	-	13.00	A	3993
Gd-Hg	Hg ₃ Gd	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6591, 0.6591, 0.4889, 90, 90, 120	close-packed structure	-	13.71	A	3057
Gd-Hg	Hg ₄ Gd ₁₁	Cd ₄ Sm ₁₁ , cF448, 216	<i>F-43m</i>	2.1551, 2.1551, 2.1551, 90, 90, 90	Nasicon family	-	14.28	A	12280
Gd-I	GdI ₂ 2H	MoS ₂ , hP6, 194	<i>P6₃/mmc</i>	0.4075, 0.4075, 1.5049, 90, 90, 120	-	-	6.31	A	46098
Gd-I	GdI ₂ rt	* _h P*, *	-	0.867, 0.867, 0.575, 90, 90, 120	-	brass	-	N	2550
Gd-I	GdI ₃ hp	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.4202, 1.3993, 0.9999, 90, 90, 90	-	-	6.08	A	12650
Gd-I	GdI ₃	* _h P168, *	-	2.0034, 2.0034, 2.0921, 90, 90, 120	-	-	-	N	29404
Gd-In	GdIn Gd+	CsCl, cP2, 221	<i>Pm-3m</i>	0.3795, 0.3795, 0.3795, 90, 90, 90	b.c.c. family	-	8.27	X	16569
Gd-In	GdIn rt	CuTi, tP2, 123	<i>P4/mmm</i>	0.383, 0.383, 0.364, 90, 90, 90	b.c.c. family	-	8.46	X	15134
Gd-In	GdIn ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.46066, 0.46066, 0.46066, 90, 90, 90	close-packed structure	-	8.52	X	2607
Gd-In	Gd _{0.98} In _{0.02} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3636, 0.3636, 0.5764, 90, 90, 120	close-packed structure	-	7.87	X	51636
Gd-In	Gd ₂ In	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.541, 0.541, 0.6751, 90, 90, 120	AlB ₂ family	-	8.33	X	21139
Gd-In	Gd ₃ In	Fe ₂ C-b, oP16, 62	<i>Pnma</i>	0.6783, 0.935, 0.6174, 90, 90, 90	-	-	9.95	A	62490
Gd-In	Gd ₃ In ₅	Pu ₃ Pd ₅ , oS32, 63	<i>Cmcm</i>	0.993, 0.806, 1.0345, 90, 90, 90	-	-	8.39	A	16569
Gd-In	Gd ₅ In ₃	W ₅ Si ₃ , tI32, 140	<i>I4/mcm</i>	1.2345, 1.2345, 0.6065, 90, 90, 90	-	-	8.13	A	16569
Gd-Ir	GdIr ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7555, 0.7555, 0.7555, 90, 90, 90	Friauf-Laves phase	-	16.69	X	22920
Gd-Ir	GdIr ₃ cub	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3839, 0.3839, 0.3839, 90, 90, 90	close-packed structure	-	21.54	X	19819
Gd-Ir	GdIr ₃ rhom	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.5295, 0.5295, 2.6028, 90, 90, 120	Laves-CaCu ₅	-	17.36	A	22920
Gd-Ir	Gd ₃ Ir	Fe ₂ C-b, oP16, 62	<i>Pnma</i>	0.7251, 0.9572, 0.6375, 90, 90, 90	-	-	9.97	A	22920
Gd-Ir	Gd ₃ Ir ₂	Y ₃ Rh ₂ , tI40, 140	<i>I4/mcm</i>	1.1298, 1.1298, 2.5265, 90, 90, 90	-	-	12.34	A	22920
Gd-Ir	Gd ₂ Ir ₂	Mn ₅ C ₂ , mS28, 15	<i>C12/c1</i>	1.5913, 0.6488, 0.7248, 90, 96, 82, 90	-	-	10.47	X	37579
Gd-Ir	Gd ₃ Ir ₃	Pu ₃ Rh ₃ , tP32, 130	<i>P4/ncc</i>	1.0969, 1.0969, 0.6352, 90, 90, 90	-	-	11.85	A	22920
Gd-La	La _{0.22} Gd _{0.78} ht	Mg, hP2, 194	<i>P6₃/mmc</i>	0.36557, 0.36557, 0.58552, 90, 90, 120	close-packed structure	-	7.51	X	5086
Gd-La	La _{0.32} Gd _{0.68} rt	Sm, hR9, 166	<i>R-3m</i>	0.36638, 0.36638, 2.6518, 90, 90, 120	close-packed structure	-	7.34	A	5086
Gd-La	La _{0.33} Gd _{0.67} hp	Nd, hP4, 194	<i>P6₃/mmc</i>	0.363, 0.363, 1.179, 90, 90, 120	close-packed structure	-	7.46	X	3139
Gd-Lu	Gd _{0.20} Lu _{0.80}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3539, 0.3539, 0.5604, 90, 90, 120	close-packed structure	-	9.37	X	1898
Gd-Mg	MgGd	CsCl, cP2, 221	<i>Pm-3m</i>	0.3811, 0.3811, 0.3811, 90, 90, 90	b.c.c. family	gray silver	5.45	X	9230
Gd-Mg	Mg _{0.3} Gd _{0.7} ht	W, cI2, 229	<i>Im-3m</i>	0.3928, 0.3928, 0.3928, 90, 90, 90	b.c.c. family	-	6.43	X	22536
Gd-Mg	Mg _{0.9831} Gd _{0.0169}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.32208, 0.32208, 0.52164, 90, 90, 120	close-packed structure	-	1.88	X	47287
Gd-Mg	Mg ₂ Gd	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.85762, 0.85762, 0.85762, 90, 90, 90	Friauf-Laves phase	-	4.34	X	11432
Gd-Mg	Mg ₃ Gd	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.7326, 0.7326, 0.7326, 90, 90, 90	fluorite family	-	3.89	X	11413
Gd-Mg	Mg ₄₆ Gd ₉	Mg ₄₄ (Mg _{0.32} Gd _{0.68}) ₆ Gd ₅ , cF448, 216	<i>F-43m</i>	2.2344, 2.2344, 2.2344, 90, 90, 90	Nasicon family	-	3.02	X	18610
Gd-Mn	GdMn ₁₂	ThMn ₁₂ , tI26, 139	<i>I4/mmm</i>	0.8624, 0.8624, 0.4782, 90, 90, 90	CaCu ₅ -Zr ₄ Al ₃	-	7.62	X	3692
Gd-Mn	GdMn ₂ hp-ht	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5476, 0.5476, 0.8933, 90, 90, 120	Friauf-Laves phase	-	7.65	A	30774
Gd-Mn	GdMn ₂ lt	UR ₂ , oS24, 63	<i>Cmcm</i>	0.5436, 0.9453, 0.886, 90, 90, 90	Friauf-Laves phase	-	7.79	A	30774
Gd-Mn	GdMn ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.77382, 0.77382, 0.77382, 90, 90, 90	Friauf-Laves phase	-	7.66	X	11451
Gd-Mn	GdMn ₅	* _o *, *	-	0.313, 0.441, 0.723, 90, 90, 90	-	-	-	N	1246
Gd-Mn	Gd ₆ Mn ₂₃	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.2578, 1.2578, 1.2578, 90, 90, 90	-	-	7.37	X	2064
Gd-N	GdN	NaCl, cF8, 225	<i>Fm-3m</i>	0.4739, 0.4739, 0.4739, 90, 90, 90	rocksalt family	-	10.69	X	53437
Gd-Nb	Gd _{0.01} Nb _{0.99}	W, cI2, 229	<i>Im-3m</i>	0.33017, 0.33017, 0.33017, 90, 90, 90	b.c.c. family	-	8.63	X	8936
Gd-Nd	Nd _{0.2} Gd _{0.8} ht	Mg, hP2, 194	<i>P6₃/mmc</i>	0.365, 0.365, 0.5798, 90, 90, 120	close-packed structure	-	7.68	X	8839
Gd-Nd	Nd _{0.5} Gd _{0.5} rt	Sm, hR9, 166	<i>R-3m</i>	0.3644, 0.3644, 2.632, 90, 90, 120	close-packed structure	-	7.44	A	5205
Gd-Nd	Nd _{0.6} Gd _{0.4} hp	Nd, hP4, 194	<i>P6₃/mmc</i>	0.364, 0.364, 1.1786, 90, 90, 120	close-packed structure	-	7.34	X	8839
Gd-Ni	GdNi	TiI, oS8, 63	<i>Cmcm</i>	0.37713, 1.03272, 0.42488, 90, 90, 90	CrB(TiI)-FeB	-	8.67	X	52241
Gd-Ni	GdNi ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7212, 0.7212, 0.7212, 90, 90, 90	Friauf-Laves phase	-	9.73	X	21495
Gd-Ni	GdNi ₂	TmNi ₂ , cF192, 216	<i>F-43m</i>	1.4408, 1.4408, 1.4408, 90, 90, 90	Friauf-Laves phase	-	9.76	X	47308
Gd-Ni	GdNi ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.4993, 0.4993, 2.4536, 90, 90, 120	Laves-CaCu ₅	-	9.40	X	59090
Gd-Ni	GdNi ₄	* _h P10, *	-	0.535, 0.535, 0.583, 90, 90, 120	-	-	-	N	1490
Gd-Ni	GdNi ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.4915, 0.4915, 0.3967, 90, 90, 120	-	-	9.02	X	36227
Gd-Ni	Gd ₂ Ni ₁₇	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.843, 0.843, 0.804, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.81	X	4402
Gd-Ni	Gd ₂ Ni ₇ ht	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.496, 0.496, 3.614, 90, 90, 120	Laves-CaCu ₅	-	9.39	X	4402
Gd-Ni	Gd ₂ Ni ₇ rt	Ce ₂ Ni ₇ , hP36, 194	<i>P6₃/mmc</i>	0.496, 0.496, 2.409, 90, 90, 120	Laves-CaCu ₅	-	9.39	X	4402
Gd-Ni	Gd ₃ Ni	Fe ₂ C-b, oP16, 62	<i>Pnma</i>	0.6942, 0.968, 0.6348, 90, 90, 90	-	-	8.26	X	37579
Gd-Ni	Gd ₃ Ni ₂	* _t 20, *	-	0.728, 0.728, 0.861, 90, 90, 90	-	-	-	N	1490
Gd-Ni	Gd ₃ Ni ₁₉ 2H	Sm ₅ Co ₁₉ , hP48, 194	<i>P6₃/mmc</i>	0.495, 0.495, 3.2161, 90, 90, 120	Laves-CaCu ₅	-	9.25	X	57186
Gd-O	GdO tf	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.54, 0.54, 0.54, 90, 90, 90	fluorite family	-	7.31	X	8415
Gd-O	GdO tf	ZnS, cF8, 216	<i>F-43m</i>	0.54, 0.54, 0.54, 90, 90, 90	adamantane structure	-	7.31	X	8415
Gd-O	GdO _{0.656} tf	* _h R192, 160	<i>R3m</i>	1.482, 1.482, 1.815, 90, 90, 120	-	-	-	N	6814
Gd-O	GdO _{1.5} ht4	NdO _{1.5} , cI26, 229	<i>Im-3m</i>	0.431, 0.431, 0.431, 90, 90, 90	-	-	7.52	A	3898
Gd-O	GdO ₂ tf	Cu ₂ Sb, tP6, 129	<i>P4/nmm</i>	0.394, 0.394, 0.676, 90, 90, 90	-	-	5.99	X	9170
Gd-O	Gd ₂ O ₃ ht1	Sm ₂ O ₃ , mS30, 12	<i>C12/m1</i>	1.4032, 0.3583, 0.8742, 90, 100, 13, 90	-	-	8.35	X	52227
Gd-O	Gd ₂ O ₃ ht2	La ₂ O ₃ , hP5, 164	<i>P-3m1</i>	0.368, 0.368, 0.5597, 90, 90, 120	-	-	9.17	X	52227
Gd-O	Gd ₂ O ₃ ht3	La ₂ O ₃ , hP10, 194	<i>P6₃/mmc</i>	0.3858, 0.3858, 0.616, 90, 90, 120	-	-	7.58	A	2506
Gd-O	Gd ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	<i>Ia-3</i>	1.08077, 1.08077, 1.08077, 90, 90, 90	-	-	7.63	X	58825
Gd-Os	GdOs ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5319, 0.5319, 0.8838, 90, 90, 120	Friauf-Laves phase	-	16.49	X	1024
Gd-Os	Gd ₃ Os	Fe ₂ C-b, oP16, 62	<i>Pnma</i>	0.7406, 0.921, 0.6337, 90, 90, 90	-	-	10.17	A	13171
Gd-P	GdP rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.573, 0.573, 0.573, 90, 90, 90	rocksalt family	black	6.65	X	5156
Gd-P	GdP ₅	NdP ₅ , mP12, 11	<i>P12₁/m1</i>	0.4928, 0.9446, 0.537, 90, 102, 58, 90	-	-	4.25	X	10097
Gd-Pb	GdPb ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.48261, 0.48261, 0.48261, 90, 90, 90	close-packed structure	-	11.51	X	4651
Gd-Pb	Gd ₂ Pb ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.9077, 0.9077, 0.6637, 90, 90, 120	-	-	9.87	X	2810
Gd-Pb	Gd ₃ Pb ₄ rt	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.82, 1.562, 0.82, 90, 90, 90	-	-	10.21	A	4651
Gd-Pd	GdPd rt	TiI, oS8, 63	<i>Cmcm</i>	0.3736, 1.055, 0.4548, 90, 90, 90	CrB(TiI)-FeB	-	9.77	X	3855
Gd-Pd	GdPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4089, 0.4089, 0.4089, 90, 90, 90	close-packed structure	-	11.57	X	53665
Gd-Pd	Gd _{0.11} Pd _{0.89}	Cu, cF4, 225	<i>Fm-3m</i>	0.399, 0.399, 0.399, 90, 90, 90	close-packed structure	-	11.71	X	6703
Gd-Pd	Gd ₃ Pd	Fe ₂ C-b, oP16, 62	<i>Pnma</i>	0.771, 0.9188, 0.6635, 90, 90, 90	-	-	8.17	A	30243

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Gd-Pd	Gd ₃ Pd ₂	U ₃ Si ₂ ,tP10,127	<i>P4/mbm</i>	0.7864,0.7864,0.3901,90,90,90	-	-	9.42	A	17230
Gd-Pd	Gd ₃ Pd ₄ rt	Pu ₃ Pd ₄ ,hR42,148	<i>R-3</i>	1.3249,1.3249,0.5726,90,90,120	b.c.c. family	-	10.27	A	20378
Gd-Pd	Gd ₇ Pd ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	0.998,0.998,0.6276,90,90,120	-	-	8.71	X	7342
Gd-Pr	Pr _{0.7} Gd _{0.93} ht	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.364,0.364,0.5775,90,90,120	close-packed structure	-	7.82	X	5192
Gd-Pr	Pr _{0.4} Gd _{0.6} rt	Sm,hR9,166	<i>R-3m</i>	0.36402,0.36402,2.6301,90,90,120	close-packed structure	-	7.46	A	3068
Gd-Pr	Pr _{0.54} Gd _{0.46} rt	Nd,hP4,194	<i>P6₃/mmc</i>	0.364,0.364,1.171,90,90,120	close-packed structure	-	7.34	X	5192
Gd-Pt	GdPt	FeB-b,pP8,62	<i>Pnma</i>	0.7164,0.4458,0.5574,90,90,90	CrB(TII)-FeB	-	13.15	X	1345
Gd-Pt	GdPt ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7606,0.7606,0.7606,90,90,90	Friauf-Laves phase	-	16.53	X	19263
Gd-Pt	GdPt ₃	* ₀ *72,*	-	0.5289,0.9071,2.643,90,90,90	-	-	-	N	7645
Gd-Pt	Gd _{1.12} Pt _{2.88}	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4091,0.4091,0.4091,90,90,90	close-packed structure	-	17.90	X	19263
Gd-Pt	Gd ₂ Pt	Co ₂ Si-b,pP12,62	<i>Pnma</i>	0.7186,0.4813,0.8854,90,90,90	-	-	11.05	X	11195
Gd-Pt	Gd ₃ Pt	Fe ₃ C-b,pP16,62	<i>Pnma</i>	0.7139,0.9651,0.6464,90,90,90	-	-	9.95	A	20378
Gd-Pt	Gd ₃ Pt ₄	Pu ₃ Pd ₄ ,hR42,148	<i>R-3</i>	1.3245,1.3245,0.5702,90,90,120	b.c.c. family	-	14.40	A	20378
Gd-Pt	Gd ₃ Pt ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8479,0.8479,0.6275,90,90,120	-	-	11.66	A	11195
Gd-Pt	Gd ₇ Pt ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	0.9923,0.9923,0.6215,90,90,120	-	-	10.57	A	20378
Gd-Re	GdRe ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.54291,0.54291,0.88522,90,90,120	Friauf-Laves phase	-	15.57	X	64705
Gd-Rh	GdRh	CsCl,cP2,221	<i>Pm-3m</i>	0.3447,0.3447,0.3447,90,90,90	b.c.c. family	-	10.55	X	61634
Gd-Rh	GdRh ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7514,0.7514,0.7514,90,90,90	Friauf-Laves phase	-	11.37	X	7679
Gd-Rh	GdRh ₃	CeNi ₃ ,hP24,194	<i>P6₃/mmc</i>	0.5235,0.5235,1.74,90,90,120	Laves-CaCu ₅	-	11.24	A	7679
Gd-Rh	GdRh ₃ ht	CaCu ₃ ,hP6,191	<i>P6/mmm</i>	0.5168,0.5168,0.4306,90,90,120	-	-	11.20	X	7679
Gd-Rh	Gd ₃ Rh	Fe ₃ C-b,pP16,62	<i>Pnma</i>	0.7186,0.9594,0.6338,90,90,90	-	-	8.74	A	37579
Gd-Rh	Gd ₃ Rh ₂ ht	Y ₃ Rh ₂ ,tI140,140	<i>I4/mcm</i>	1.127,1.127,2.532,90,90,90	-	-	9.80	A	9419
Gd-Rh	Gd ₃ Rh ₃ ht	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8244,0.8244,0.6455,90,90,120	-	-	9.57	A	7679
Gd-Rh	Gd ₃ Rh ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.7342,1.4539,0.7521,90,90,90	-	-	9.91	X	61634
Gd-Rh	Gd ₇ Rh ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	0.98611,0.98611,0.62113,90,90,120	-	-	8.95	A	49496
Gd-Ru	GdRu ₂ ht	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.756,0.756,0.756,90,90,90	Friauf-Laves phase	-	11.05	X	1964
Gd-Ru	GdRu ₂ rt	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5271,0.5271,0.8904,90,90,120	Friauf-Laves phase	-	11.14	X	1024
Gd-Ru	Gd _{0.05} Ru _{0.95}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2726,0.2726,0.4311,90,90,120	close-packed structure	-	12.44	X	17525
Gd-Ru	Gd ₃ Ru	Fe ₃ C-b,pP16,62	<i>Pnma</i>	0.7347,0.9441,0.6354,90,90,90	-	-	8.63	A	17525
Gd-Ru	Gd ₄₄ Ru ₂₅	Y ₄₄ Ru ₂₅ ,oP276,52	<i>Pnna</i>	2.8201,1.5314,1.5314,90,90,90	-	-	9.49	A	23428
Gd-Ru	Gd ₃ Ru ₂	Mn ₃ C ₃ ,mS28,15	<i>C12/c1</i>	1.594,0.639,0.733,90,97.06,90	-	-	8.86	A	17525
Gd-S	GdS	NaCl,cF8,225	<i>Fm-3m</i>	0.55516,0.55516,0.55516,90,90,90	rocksalt family	golden	7.35	X	8985
Gd-S	GdS _{1.82} ht	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.38951,0.38951,0.79343,90,90,90	-	orange	5.95	X	41989
Gd-S	GdS ₂ hp-ht	* _c *24,*	-	0.7882,0.7882,0.7882,90,90,90	-	black gray	-	N	5117
Gd-S	GdS ₂ rt	CeSe ₂ ,mP12,14	<i>P12₁/c1</i>	0.7926,0.3936,0.7879,90,89.92,90	-	-	5.98	X	56462
Gd-S	Gd ₁₀ S ₁₉	Ce ₁₀ Se ₁₉ ,tP58,86	<i>P4₂/n</i>	0.8714,0.8714,1.5791,90,90,90	-	-	6.04	X	50593
Gd-S	Gd ₂ S ₃ ht	Cr ₃ C ₂ -b,pP20,62	<i>Pnma</i>	0.7339,0.39318,1.5273,90,90,90	-	brown red	6.19	X	3922
Gd-S	Gd ₂ S ₃ m	Th ₂ S ₃ ,oP20,62	<i>Pnma</i>	1.07447,0.38985,1.05462,90,90,90	-	black	6.18	X	24089
Gd-S	Gd _{2.67} S ₄ ht	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.83847,0.83847,0.83847,90,90,90	-	yellow faint	6.18	X	35438
Gd-S	Gd ₃ S ₄ rt	* _h P* ₈ *	-	1.566,1.566,1.444,90,90,120	-	yellow	-	N	3558
Gd-Sb	GdSb rt	NaCl,cF8,225	<i>Fm-3m</i>	0.6219,0.6219,0.6219,90,90,90	rocksalt family	gray	7.70	X	30446
Gd-Sb	GdSb ₂ hp1-ht	SmSb ₂ ,oS24,64	<i>Cmce</i>	0.6157,0.5986,1.783,90,90,90	-	-	8.10	A	4513
Gd-Sb	GdSb ₂ hp2-ht	HoSb ₂ ,oS6,21	<i>C222</i>	0.3296,0.593,0.803,90,90,90	-	-	8.48	A	4513
Gd-Sb	Gd ₁₆ Sb ₃₉	Gd ₁₆ Sb ₃₉ ,mS124,12	<i>C12/m1</i>	5.7395,0.4151,1.3209,90,99.21,90	-	-	7.77	X	37473
Gd-Sb	Gd ₂ Sb ₅	Dy ₂ Sb ₅ ,mP28,11	<i>P12₁/m1</i>	1.31747,0.41864,1.47521,90,102.485,90	-	-	7.72	A	40009
Gd-Sb	Gd ₄ Sb ₃	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.92149,0.92149,0.92149,90,90,90	-	gray	8.44	X	59107
Gd-Sb	Gd ₃ Sb ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8975,0.8975,0.6343,90,90,120	-	-	8.64	X	3753
Gd-Sc	Sc _{0.5} Gd _{0.5} rt	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.3492,0.3492,0.5528,90,90,120	close-packed structure	-	5.75	X	2171
Gd-Se	GdSe rt	NaCl,cF8,225	<i>Fm-3m</i>	0.5781,0.5781,0.5781,90,90,90	rocksalt family	orange	8.12	X	12251
Gd-Se	GdSe ₂ hp	CeSe ₂ ,mP12,14	<i>P12₁/c1</i>	0.82955,0.40912,0.82547,90,90.107,90	-	-	7.47	A	58385
Gd-Se	GdSe ₂	* _t I24,*	-	0.8089,0.8089,0.8287,90,90,90	-	-	7.72	N	3083
Gd-Se	Gd _{0.88} Se	Mo _{0.75} N _{0.50} ,cP8,221	<i>Pm-3m</i>	0.57669,0.57669,0.57669,90,90,90	rocksalt family	blue	7.53	X	20194
Gd-Se	Gd ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ ,tP58,86	<i>P4₂/n</i>	0.90762,0.90762,1.66113,90,90,90	-	-	7.46	A	60350
Gd-Se	Gd ₂ Se ₃	Th ₂ S ₃ ,oP20,62	<i>Pnma</i>	1.1182,0.40348,1.0971,90,90,90	-	black red	7.40	X	44842
Gd-Se	Gd _{2.67} Se ₄ cub	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.87256,0.87256,0.87256,90,90,90	-	red ruby	7.36	X	39988
Gd-Se	Gd ₃ Se ₄ hex	* _h P* ₈ *	-	0.8175,0.8175,1.512,90,90,120	-	brown	-	N	3558
Gd-Se	Gd ₈ Se ₁₅	Gd ₈ Se ₁₅ ,oS146,38	<i>Amm2</i>	1.2136,1.6167,1.658,90,90,90	-	gray silver	7.48	X	50586
Gd-Si	GdSi	FeB-b,pP8,62	<i>Pnma</i>	0.7973,0.3858,0.5753,90,90,90	CrB(TII)-FeB	gray	6.96	X	22984
Gd-Si	GdSi _{1.5} ht hex	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.39,0.39,0.42,90,90,120	AlB ₂ family	-	5.98	X	15886
Gd-Si	GdSi _{1.85} rt	GdSi _{1.4} ,oI12,74	<i>Imma</i>	0.40171,0.40684,1.3499,90,90,90	-	-	6.30	X	40583
Gd-Si	GdSi ₂ ht tet	ThSi ₂ ,tI12,141	<i>I4₁/amd</i>	0.408,0.408,1.344,90,90,90	-	gray silver	6.34	A	3102
Gd-Si	GdSi ₃	LaGe ₃ ,oI12,71	<i>Immm</i>	0.3775,0.6032,0.9233,90,90,90	-	-	4.70	X	54597
Gd-Si	Gd ₂ Si _{2.67}	Ho ₂ Si _{2.67} ,oS24,63	<i>Cmcm</i>	0.4251,2.405,0.3833,90,90,90	-	-	6.60	A	47509
Gd-Si	Gd ₃ Si ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.85133,0.85133,0.64206,90,90,120	-	-	7.17	X	47944
Gd-Si	Gd ₃ Si ₄	Gd ₃ Si ₄ ,oP36,62	<i>Pnma</i>	0.74743,1.47529,0.77424,90,90,90	-	gray silver	6.99	X	53340
Gd-Sn	GdSn ₂	ZrSi ₂ ,oS12,63	<i>Cmcm</i>	0.4423,1.6498,0.4327,90,90,90	close-packed structure	-	8.30	X	64205
Gd-Sn	GdSn _{2.75} rt	GdSn _{2.75} ,oS16,38	<i>Amm2</i>	0.43552,0.44039,2.2044,90,90,90	-	-	7.60	X	18749
Gd-Sn	GdSn ₃ ht	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.467,0.467,0.467,90,90,90	close-packed structure	-	8.37	X	28961
Gd-Sn	Gd ₁₁ Sn ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	<i>I4/mmm</i>	1.1668,1.1668,1.7147,90,90,90	-	-	8.30	A	57450
Gd-Sn	Gd ₃ Sn ₇	Gd ₃ Sn ₇ ,oS20,65	<i>Cmm</i>	0.44597,2.6523,0.43823,90,90,90	close-packed structure	-	8.35	X	18749
Gd-Sn	Gd ₃ Sn ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.90305,0.90305,0.65942,90,90,120	-	-	8.15	A	63029
Gd-Sn	Gd ₃ Sn ₄ rt	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.80446,1.55404,0.82025,90,90,90	-	-	8.17	X	44084
Gd-Tb	Gd _{0.60} Tb _{0.40} rt	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.3623,0.3623,0.5747,90,90,120	close-packed structure	-	8.03	X	47821
Gd-Tc	GdTc ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5397,0.5397,0.8883,90,90,120	Friauf-Laves phase	-	10.47	A	2166
Gd-Te	GdTe	NaCl,cF8,225	<i>Fm-3m</i>	0.6165,0.6165,0.6165,90,90,90	rocksalt family	blue	8.07	X	32043
Gd-Te	GdTc ₂	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.4317,0.4317,0.8951,90,90,90	-	violet	8.21	A	6403
Gd-Te	GdTc ₃	NdTe ₃ ,oS16,63	<i>Cmcm</i>	0.4326,2.528,0.4326,90,90,90	-	-	7.58	A	3366
Gd-Te	Gd ₂ Te	Sc ₂ Te ₂ ,oP36,62	<i>Pnma</i>	2.2492,0.405,1.2064,90,90,90	-	-	8.02	A	39073

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Gd-Te	Gd ₂ Te ₃	Th ₂ S ₃ , oP20, 62	<i>Pnma</i>	1.2009, 0.43012, 1.1818, 90, 90, 90	-	-	7.59	X	19942
Gd-Te	Gd ₂ Te ₃ ht	Nd ₂ Te ₃ , oS28, 63	<i>Cmcm</i>	0.4336, 4.36, 0.4336, 90, 90, 90	-	brown	7.72	A	3366
Gd-Th	Th _{0.1} Gd _{0.9} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.3628, 0.3628, 0.5774, 90, 90, 120	close-packed structure	-	8.31	X	6793
Gd-Th	Th _{0.4} Gd _{0.6} rt	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.5075, 0.5075, 0.5075, 90, 90, 90	close-packed structure	-	9.51	X	4726
Gd-Tl	TlGd ht	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.3781, 0.3781, 0.3781, 90, 90, 90	b.c.c. family	-	11.11	X	16035
Gd-Tl	TlGd rt	CuTi ₂ P2, 123	<i>P4/mmm</i>	0.354, 0.354, 0.426, 90, 90, 90	b.c.c. family	-	11.25	X	16035
Gd-Tl	TlGd ₂	Co _{1.75} Ge ₂ hP6, 194	<i>P6₃/mmc</i>	0.536, 0.536, 0.67, 90, 90, 120	AlB ₂ family	-	10.34	X	16569
Gd-Tl	Tl ₃ Gd	Cu ₃ Au ₂ cP4, 221	<i>Pm-3m</i>	0.4694, 0.4694, 0.4694, 90, 90, 90	close-packed structure	-	12.37	X	16569
Gd-Tl	Tl ₃ Gd ₃ Tl-	Mn ₃ Si ₃ hP16, 193	<i>P6₃/mcm</i>	0.9042, 0.9042, 0.6664, 90, 90, 120	-	-	9.85	A	16569
Gd-Tl	Tl ₃ Gd ₃ Tl-	Pu ₃ Pd ₃ , oS32, 63	<i>Cmcm</i>	1.0035, 0.8105, 1.039, 90, 90, 90	-	-	11.74	A	16569
Gd-Y	Y _{0.4} Gd _{0.6} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.3665, 0.3665, 0.5808, 90, 90, 120	close-packed structure	-	6.39	X	63845
Gd-Yb	Gd _{0.022} Yb _{0.978} rt	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.547, 0.547, 0.547, 90, 90, 90	close-packed structure	-	7.01	X	8318
Gd-Zn	ZnGd	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.36, 0.36, 0.36, 90, 90, 90	b.c.c. family	-	7.92	X	20119
Gd-Zn	Zn ₁₁ Gd ₃	La ₃ Al ₁₁ , oI28, 71	<i>Immm</i>	0.4423, 0.8842, 1.3063, 90, 90, 90	-	-	7.74	X	5221
Gd-Zn	Zn ₁₂ Gd	ThMn ₁₂ , tI26, 139	<i>I4/mmm</i>	0.8915, 0.8915, 0.5214, 90, 90, 90	CaCu ₂ -Zr ₄ Al ₃	-	7.55	A	3040
Gd-Zn	Zn ₁₇ Gd ₃ hex	Th ₂ Ni ₁₇ hP38, 194	<i>P6₃/mmc</i>	0.898, 0.898, 0.877, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	-	7.73	A	40133
Gd-Zn	Zn ₁₇ Gd ₃ rhom	Zn ₁₇ Th ₂ hR57, 166	<i>R-3m</i>	0.89963, 0.89963, 1.31691, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	gray	7.70	X	19986
Gd-Zn	Zn ₂ Gd	KHg ₂ , oI12, 74	<i>Imma</i>	0.4446, 0.7174, 0.7585, 90, 90, 90	AlB ₂ family	-	7.91	A	40133
Gd-Zn	Zn ₂₂ Gd ₃	Zn ₂₂ Ce ₃ , tI100, 141	<i>I4₁/amd</i>	0.89, 0.89, 2.1359, 90, 90, 90	-	-	7.50	A	40133
Gd-Zn	Zn ₂₃ Gd ₆	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.275, 1.275, 1.275, 90, 90, 90	-	-	7.84	A	3040
Gd-Zn	Zn ₃ Gd	Zn ₃ Y ₂ , oP16, 62	<i>Pnma</i>	0.6725, 0.4462, 1.0201, 90, 90, 90	-	-	7.67	X	62686
Gd-Zn	Zn ₅ Gd	CaCu ₅ hP6, 191	<i>P6₃/mmm</i>	0.5383, 0.5383, 0.4215, 90, 90, 120	-	-	7.60	X	7340
Gd-Zn	Zn ₅₈ Gd ₁₃	Zn ₅₈ Gd ₁₃ hP142, 194	<i>P6₃/mmc</i>	1.431, 1.431, 1.405, 90, 90, 120	-	-	7.78	X	6235
Gd-Zr	Gd _{0.11} Zr _{0.89} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.3265, 0.3265, 0.519, 90, 90, 120	close-packed structure	-	6.83	X	6777
Gd-Zr	Gd _{0.985} Zr _{0.015} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.3623, 0.3623, 0.5763, 90, 90, 120	close-packed structure	-	7.92	X	55780
Ge-Hf	HfGe ₂	ZrSi ₂ , oS12, 63	<i>Cmcm</i>	0.38154, 1.5004, 0.37798, 90, 90, 90	close-packed structure	-	9.94	X	814
Ge-Hf	Hf ₂ Ge	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.6596, 0.6596, 0.5291, 90, 90, 90	-	-	12.40	X	6603
Ge-Hf	Hf ₂ Ge	Ti ₃ P ₂ , tP32, 86	<i>P4₂/n</i>	1.0901, 1.0901, 0.541, 90, 90, 90	-	-	12.57	A	25242
Ge-Hf	Hf ₃ Ge ₂	U ₃ Si ₂ , tP10, 127	<i>P4/mbm</i>	0.706, 0.706, 0.372, 90, 90, 90	-	-	12.19	A	2792
Ge-Hf	Hf ₂ Ge ₃	Mn ₃ Si ₃ hP16, 193	<i>P6₃/mcm</i>	0.7883, 0.7883, 0.5537, 90, 90, 120	-	-	12.37	X	1020
Ge-Hf	Hf ₂ Ge ₄ stab	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.7017, 1.3434, 0.7105, 90, 90, 90	-	-	11.73	X	23438
Ge-Ho	HoGe	TlI ₂ , oS8, 63	<i>Cmcm</i>	0.4234, 1.0577, 0.3896, 90, 90, 90	CrB(TlI)-FeB	-	9.04	X	16995
Ge-Ho	HoGe _{1.5} ht	AlB ₂ hP3, 191	<i>P6/mmm</i>	0.38952, 0.38952, 0.4092, 90, 90, 120	AlB ₂ family	-	8.46	X	34820
Ge-Ho	HoGe _{1.56} ht	ThSi ₂ , tI12, 141	<i>I4₁/amd</i>	0.4051, 0.4051, 1.3651, 90, 90, 90	-	-	8.25	A	24685
Ge-Ho	HoGe _{1.8}	* ₂ , o*48, *	-	0.781, 0.798, 1.478, 90, 90, 90	-	-	-	N	13049
Ge-Ho	HoGe _{1.85}	YGe _{1.85} , oS28, 63	<i>Cmcm</i>	0.40809, 2.965, 0.39093, 90, 90, 90	-	-	8.40	X	34775
Ge-Ho	HoGe ₃	DyGe ₃ , oS16, 63	<i>Cmcm</i>	0.39915, 2.06976, 0.38809, 90, 90, 90	-	-	7.93	X	51678
Ge-Ho	Ho ₁₁ Ge ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	<i>I4/mmm</i>	1.079, 1.079, 1.623, 90, 90, 90	-	-	8.93	X	3295
Ge-Ho	Ho ₁₄ Ge ₂₃	Ho ₁₄ Ge ₂₃ , oS148, 20	<i>C22₂₁</i>	0.54021, 1.3648, 4.0000, 90, 90, 90	-	-	8.96	X	36090
Ge-Ho	Ho ₂ Ge ₃ rt	* ₂ , o*20, *	-	0.6792, 0.7862, 0.8233, 90, 90, 90	-	-	-	N	24685
Ge-Ho	Ho ₃ Ge ₄ rt	Er ₃ Ge ₄ , oS28, 63	<i>Cmcm</i>	0.40085, 1.055, 1.4132, 90, 90, 90	-	-	8.73	X	34820
Ge-Ho	Ho ₃ Ge ₅	Y ₃ Ge ₅ , oF64, 43	<i>Fdd2</i>	0.57158, 1.71475, 1.36332, 90, 90, 90	-	-	8.53	X	34775
Ge-Ho	Ho ₃ Ge ₃	Mn ₃ Si ₃ hP16, 193	<i>P6₃/mcm</i>	0.8368, 0.8368, 0.6283, 90, 90, 120	-	-	9.09	X	51617
Ge-Ho	Ho ₃ Ge ₄ lt	Ho ₃ Ge ₄ , mP36, 11	<i>P12₁/m1</i>	0.7559, 1.4544, 0.7614, 90, 90, 55, 90	-	-	8.85	X	54181
Ge-Ho	Ho ₃ Ge ₄ rt	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.75841, 1.45968, 0.76541, 90, 90, 90	-	-	8.74	X	54181
Ge-I	GeI ₂ 4L tf	CdI ₂ hP6, 186	<i>P6₃/mc</i>	0.417, 0.417, 1.333, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	5.40	A	4160
Ge-I	GeI ₂ tf	CdI ₂ hP3, 164	<i>P-3m1</i>	0.413, 0.413, 0.679, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	5.40	X	142
Ge-I	GeI ₂	GeI ₂ hP9, 164	<i>P-3m1</i>	0.417, 0.417, 2.016, 90, 90, 120	-	-	5.36	X	4160
Ge-I	GeI ₄ rt	SnI ₄ cP40, 205	<i>Pa-3</i>	1.20303, 1.20303, 1.20303, 90, 90, 90	-	-	4.43	X	28247
Ge-I	Ge _{21.7} I _{5.3}	Na ₄ Si ₂₃ cP54, 223	<i>Pm-3n</i>	1.0814, 1.0814, 1.0814, 90, 90, 90	clathrate	-	5.90	X	18696
Ge-Ir	IrGe	FeAs ₂ , oP8, 62	<i>Pnma</i>	0.5605, 0.3484, 0.6296, 90, 90, 90	AlB ₂ family	-	14.31	X	62179
Ge-Ir	IrGe ₄	IrGe ₄ hP15, 152	<i>P3₂1</i>	0.6215, 0.6215, 0.7784, 90, 90, 120	-	-	9.23	X	4593
Ge-Ir	Ir ₅ Ge ₇	Ru ₅ Sn ₇ , cI40, 229	<i>Im-3m</i>	0.8753, 0.8753, 0.8753, 90, 90, 90	-	-	10.74	X	337
Ge-Ir	Ir ₄ Ge ₅	Ir ₄ Ge ₅ , tP36, 116	<i>P-4c2</i>	0.5615, 0.5615, 1.8308, 90, 90, 90	chimney-ladder structure	-	13.02	X	4089
Ge-K	KGe hp	NaPb ₂ tI64, 142	<i>I4₁/acd</i>	1.069, 1.069, 1.737, 90, 90, 90	-	-	2.99	A	16714
Ge-K	KGe rt	KGe ₂ cP64, 218	<i>P-43n</i>	1.2784, 1.2784, 1.2784, 90, 90, 90	-	black	2.84	X	46758
Ge-K	KGe ₄	* ₂ , cP*, *	-	0.644, 0.644, 0.644, 90, 90, 90	-	-	-	N	22698
Ge-K	K ₁₂ Ge ₁₇	* ₂ , mP232, 4	<i>P12₁1</i>	2.2655, 1.3831, 2.3966, 90, 90, 76, 90	-	black	3.01	N	33893
Ge-K	K ₃ Ge ₁₇	Na ₁₅ Si ₁₇ , cF160, 227	<i>Fd-3m</i>	1.5358, 1.5358, 1.5358, 90, 90, 90	clathrate	-	4.96	X	64843
Ge-K	K ₄ Ge ₂₂	Na ₄ Si ₂₃ cP54, 223	<i>Pm-3n</i>	1.06677, 1.06677, 1.06677, 90, 90, 90	clathrate	gray	4.80	X	38062
Ge-K	K ₄ Ge ₉	K ₄ Ge ₉ hR372, 161	<i>R3c</i>	2.1208, 2.1208, 2.5096, 90, 90, 120	-	red deep	3.30	X	50597
Ge-La	LaGe ht1	FeB ₂ b, oP8, 62	<i>Pnma</i>	0.84271, 0.41228, 0.61215, 90, 90, 90	CrB(TlI)-FeB	gray silver	6.61	X	58415
Ge-La	LaGe rt	LaSi ₂ , oS16, 63	<i>Cmcm</i>	0.4559, 1.3766, 0.6745, 90, 90, 90	-	gray silver	6.64	X	45027
Ge-La	LaGe _{1.6} rt	GdSi _{1.6} , oI12, 74	<i>Imma</i>	0.4268, 0.42735, 1.4404, 90, 90, 90	-	black	6.45	X	24526
Ge-La	LaGe _{1.78} mon2	* ₂ , m***	-	0.4411, 0.4296, 1.4188, 90, 90, 06, 90	-	-	-	N	36142
Ge-La	LaGe _{1.78} mon3	* ₂ , m***	-	0.4409, 0.4301, 1.4192, 90, 90, 12, 90	-	-	-	N	36142
Ge-La	LaGe _{1.86} mon1	* ₂ , m***	-	0.4416, 0.4323, 1.4179, 90, 90, 11, 90	-	-	-	N	36142
Ge-La	LaGe ₂ ht1	ThSi ₂ , tI12, 141	<i>I4₁/amd</i>	0.433, 0.433, 1.423, 90, 90, 90	-	-	7.07	X	2225
Ge-La	LaGe ₃	BaPb ₃ hR36, 166	<i>R-3m</i>	0.6376, 0.6376, 2.2272, 90, 90, 120	close-packed structure	-	6.80	X	57235
Ge-La	LaGe ₃ hp	LaGe ₃ , oI12, 71	<i>Immm</i>	0.4029, 0.6307, 0.9978, 90, 90, 90	-	-	6.57	X	42939
Ge-La	La ₃ Ge ht	Ti ₃ P ₂ , tP32, 86	<i>P4₂/n</i>	1.27391, 1.27391, 0.6294, 90, 90, 90	-	-	6.36	X	20544
Ge-La	La ₃ Ge rt	Fe ₂ C ₂ b, oP16, 62	<i>Pnma</i>	0.7416, 0.9954, 0.6497, 90, 90, 90	-	-	6.78	A	27336
Ge-La	La ₃ Ge ₅ rt	Y ₃ Ge ₅ , oF64, 43	<i>Fdd2</i>	0.6056, 1.8156, 1.4328, 90, 90, 90	-	-	6.57	A	36142
Ge-La	La ₃ Ge ₃ rt	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.93563, 0.93563, 0.93563, 90, 90, 90	-	-	6.27	X	2851
Ge-La	La ₄ Ge ₇	Nd ₄ Ge ₇ , oS44, 20	<i>C22₂₁</i>	0.6042, 1.438, 1.208, 90, 90, 90	-	-	6.73	A	36142
Ge-La	La ₃ Ge ₃ ht	Pu ₃ Rh ₃ , tP32, 130	<i>P4/ncc</i>	1.18491, 1.18491, 0.67174, 90, 90, 90	-	-	6.43	X	64818
Ge-La	La ₃ Ge ₃ rt	Mn ₃ Si ₃ hP16, 193	<i>P6₃/mcm</i>	0.89409, 0.89409, 0.68784, 90, 90, 120	-	-	6.36	X	27194
Ge-La	La ₃ Ge ₄ rt	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.80761, 1.55209, 0.81725, 90, 90, 90	-	-	6.39	X	42453

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ge-Li	LiGe hp	LiGe,tI24,141	$I4_1/amd$	0.40529,0.40529,2.3282,90,90,90	-	-	4.14	X	19785
Ge-Li	LiGe	LiGe,tI32,88	$I4_1/a$	0.9764,0.9764,0.5784,90,90,90	-	black	3.83	X	33128
Ge-Li	Li ₁₁ Ge ₆	Li ₁₁ Ge ₆ ,oS68,63	$Cmcm$	0.438,2.455,1.064,90,90,90	-	gray silver	2.97	X	9330
Ge-Li	Li ₁₂ Ge ₇	Li ₁₂ Si ₇ ,oP152,62	$Pnma$	0.8763,2.0115,1.4642,90,90,90	-	-	3.04	A	39936
Ge-Li	Li ₁₅ Ge ₄	Cu ₁₅ Si ₄ ,cI76,220	$I-43d$	1.072,1.072,1.072,90,90,90	-	-	2.13	X	2384
Ge-Li	Li ₁₇ Ge ₄	Li ₁₇ Ge ₄ ,cF436,216	$F-43m$	1.8756,1.8756,1.8756,90,90,90	-	gray silver	2.06	X	39357
Ge-Li	Li _{4,10} Ge ht	Li _{4,10} Si ₄ ,oS96,63	$Cmcm$	0.45511,2.20862,1.32751,90,90,90	-	gray silver	2.01	X	63234
Ge-Li	Li ₇ Ge ₁₂	Na ₇ Sn ₁₂ ,mP78,13	$P12/c1$	1.1527,0.8031,1.91994,90,126.897,90	-	gray silver	4.30	X	58260
Ge-Li	Li ₇ Ge ₂	Li ₇ Ge ₂ ,oS36,65	$Cmmm$	0.924,1.321,0.463,90,90,90	-	gray	2.28	X	6930
Ge-Li	Li ₉ Ge ₄	Li ₉ Ge ₄ ,oS52,63	$Cmcm$	0.449,0.787,2.444,90,90,90	-	purple dark	2.71	X	5498
Ge-Lu	LuGe _{1,5} ht	AlB ₂ ,hP3,191	$P6/mmm$	0.383,0.383,0.405,90,90,120	AlB ₂ family	-	9.16	X	2225
Ge-Lu	LuGe ₂	ZrSi ₂ ,oS12,63	$Cmcm$	0.3984,1.556,0.3854,90,90,90	close-packed structure	-	8.90	A	23397
Ge-Lu	Lu ₁₁ Ge ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	$I4/mmm$	1.0668,1.0668,1.598,90,90,90	-	-	9.68	A	19857
Ge-Lu	Lu ₂ Ge ₃ rt	* _o *20,*	-	0.6629,0.7585,0.8069,90,90,90	-	-	-	N	19857
Ge-Lu	Lu ₃ Ge ₄ rt	Er ₃ Ge ₄ ,oS28,63	$Cmcm$	0.3968,1.0438,1.404,90,90,90	-	-	9.31	A	28785
Ge-Lu	Lu ₅ Ge ₃	Mn ₅ Si ₃ ,hP16,193	$P6_3/mcm$	0.823,0.823,0.616,90,90,120	-	-	10.04	X	4509
Ge-Lu	Lu ₅ Ge ₄ ht	Sm ₅ Ge ₄ ,oP36,62	$Pnma$	0.746,1.429,0.746,90,90,90	-	-	9.73	A	19857
Ge-Mg	Mg _{0.996} Ge _{0.004}	Mg,hP2,194	$P6_3/mmc$	0.3209,0.3209,0.5211,90,90,120	close-packed structure	-	1.75	X	64256
Ge-Mg	Mg ₂ Ge hp	* _h P45,*	-	1.254,1.254,0.649,90,90,120	-	-	-	N	10054
Ge-Mg	Mg ₂ Ge hp-ht	* _h P*,*	-	0.72,0.72,0.824,90,90,120	-	-	-	N	2296
Ge-Mg	Mg ₂ Ge rt	CaF ₂ ,cF12,225	$Fm-3m$	0.63849,0.63849,0.63849,90,90,90	fluorite family	gray silver	3.10	X	31793
Ge-Mn	MnGe hp	FeSi,cP8,198	$P2_13$	0.47983,0.47983,0.47983,90,90,90	-	-	7.73	X	62763
Ge-Mn	MnGe lt	MnGe,oP8,19	$P2_12_12_1$	0.47807,0.47808,0.47938,90,90,90	-	-	7.73	X	60111
Ge-Mn	MnGe ₄ hp	* _{tl} *,*	-	1.103,1.103,0.5598,90,90,90	-	-	-	N	23641
Ge-Mn	Mn _{0.03} Ge _{0.97}	C ₃ ,cF8,227	$Fd-3m$	0.56587,0.56587,0.56587,90,90,90	-	-	5.28	X	53596
Ge-Mn	Mn _{0.1} Ge _{0.9} m	C ₃ ,cF8,227	$Fd-3m$	0.56576,0.56576,0.56576,90,90,90	-	-	5.20	X	51129
Ge-Mn	Mn _{0.77} Ge _{0.23} rt	In ₂ ,tI2,139	$I4/mmm$	0.2689,0.2689,0.3618,90,90,90	close-packed structure	-	7.49	X	25243
Ge-Mn	Mn _{0.86} Ge _{0.14} ht3	Cu ₃ ,cF4,225	$Fm-3m$	0.3721,0.3721,0.3721,90,90,90	close-packed structure	-	7.40	X	315
Ge-Mn	Mn _{0.9225} Ge _{0.0775} ht1	Mn,cP20,213	$P4_132$	0.6344,0.6344,0.6344,90,90,90	-	-	7.32	A	315
Ge-Mn	Mn _{0.9225} Ge _{0.0775} rt	Mn,cI58,217	$I-43m$	0.8946,0.8946,0.8946,90,90,90	-	-	7.57	A	315
Ge-Mn	Mn _{1.1} Ge ₈	Cr ₁₁ Ge ₈ ,oP76,62	$Pnma$	1.3214,0.50905,1.588,90,90,90	-	gray	7.37	X	16732
Ge-Mn	Mn _{1.2} Ge ₅	Mn ₁₂ Ge ₅ ,hR51,155	$R32$	0.7091,0.7091,1.6264,90,90,120	-	-	7.19	X	63817
Ge-Mn	Mn ₂ Ge ht	Co _{1.75} Ge,hP6,194	$P6_3/mmc$	0.4171,0.4171,0.5278,90,90,120	AlB ₂ family	-	7.62	X	25243
Ge-Mn	Mn _{2.3} Ge ₉ ht	Mn ₂₃ Ge ₉ ,hP128,158	$P3c1$	0.7198,0.7198,3.9227,90,90,120	-	-	7.23	X	19744
Ge-Mn	Mn ₃ Ge ht	Mg ₃ Cd,hP8,194	$P6_3/mmc$	0.5346,0.5346,0.4316,90,90,120	close-packed structure	-	7.38	A	21494
Ge-Mn	Mn ₃ Ge rt	Cu ₃ Au,cP4,221	$Pm-3m$	0.38019,0.38019,0.38019,90,90,90	close-packed structure	-	7.17	X	40892
Ge-Mn	Mn ₃ Ge ₅ hp	Ir ₃ Ge ₅ ,tP32,118	$P-4n2$	0.5745,0.5745,1.389,90,90,90	chimney-ladder structure	-	7.65	A	20197
Ge-Mn	Mn ₃ Ge ₂ ht	Mn ₃ Ge ₂ ,hP42,158	$P3c1$	0.7198,0.7198,1.3076,90,90,120	-	-	7.13	X	19801
Ge-Mn	Mn ₃ Ge ₂ rt	Mg ₃ Ge ₂ ,oI28,72	$Ibam$	0.6156,1.1807,0.5374,90,90,90	-	-	7.14	X	20294
Ge-Mn	Mn ₃ Ge ₃ rt	Mn ₃ Si ₃ ,hP16,193	$P6_3/mcm$	0.7184,0.7184,0.5059,90,90,120	-	-	7.23	X	23471
Ge-Mo	MoGe _{1,7}	* _{tl} *,*98	$I4_122$	0.5944,0.5944,4.3995,90,90,90	-	-	-	N	2685
Ge-Mo	MoGe ₂ hp	MoSi ₂ ,tI6,139	$I4/mmm$	0.3313,0.3313,0.8195,90,90,90	b.c.c. family	-	8.90	X	497
Ge-Mo	MoGe ₂ rt tf	PbCl ₂ ,oP12,62	$Pnma$	0.6343,0.3451,0.8582,90,90,90	-	-	8.53	X	2685
Ge-Mo	Mo _{1.3} Ge _{2.3}	Mo ₁₃ Ge ₂₃ ,tP144,118	$P-4n2$	0.5987,0.5987,6.354,90,90,90	chimney-ladder structure	-	8.51	X	3698
Ge-Mo	Mo ₃ Ge	Cr ₃ Si,cP8,223	$Pm-3n$	0.493,0.493,0.493,90,90,90	Frank-Kasper phase	-	9.99	X	8426
Ge-Mo	Mo ₃ Ge ₃ rt	W ₃ Si ₃ ,tI32,140	$I4/mcm$	0.9845,0.9845,0.4965,90,90,90	-	gray silver	9.63	X	25492
Ge-Mo	Mo ₃ Ge ₃ stab	Mn ₃ Si ₃ ,hP16,193	$P6_3/mcm$	0.7369,0.7369,0.5047,90,90,120	-	-	9.76	A	2240
Ge-N	Ge ₃ N ₄ hp	Fe ₃ O ₄ ,cF56,227	$Fd-3m$	0.82125,0.82125,0.82125,90,90,90	spinel family	-	6.57	X	35844
Ge-N	Ge ₃ N ₄ ht	Si ₃ N ₄ ,hP14,176	$P6_3/m$	0.80276,0.80276,0.30774,90,90,120	-	gray olive	5.29	X	6836
Ge-N	Ge ₃ N ₄ rt	Si ₃ N ₄ ,hP28,159	$P31c$	0.8196,0.8196,0.59301,90,90,120	-	-	5.27	X	6836
Ge-Na	NaGe	NaGe,mP32,14	$P12_1/c1$	1.19045,0.66586,1.14783,90,116.195,90	-	black	3.11	X	65077
Ge-Na	NaGe _{1,7}	Na _{1,5} Si _{1,7} ,cF160,227	$Fd-3m$	1.54,1.54,1.54,90,90,90	clathrate	gray dark	4.57	A	5329
Ge-Na	NaGe ₄	* _c P*,*	-	0.64,0.64,0.64,90,90,90	-	-	-	N	22698
Ge-Na	Na _{1.2} Ge _{1.7}	Na ₁₂ Ge ₁₇ ,mP528,14	$P12_1/c1$	2.21117,1.2803,4.1557,90,91.31,90	-	gray dark	3.41	X	43192
Ge-Na	Na ₄ Ge ₁₃	Na ₄ Ge ₁₃ ,hP44,175	$P6/m$	1.50052,1.50052,0.39546,90,90,120	-	-	4.46	X	49115
Ge-Na	Na _{5.70} Ge _{24.62}	Na _{5.70} Ge _{24.62} ,hP33,175	$P6/m$	1.5054,1.5054,0.39685,90,90,120	-	-	4.09	X	55840
Ge-Nb	NbGe ₂	CrSi ₂ ,hP9,180	$P6_222$	0.4967,0.4967,0.6783,90,90,120	-	-	8.18	X	6402
Ge-Nb	Nb _{0.7} Ge _{0.3} m	* _c P*,*	-	0.746,0.746,0.746,90,90,90	-	-	-	N	15903
Ge-Nb	Nb _{0.9} Ge _{0.1}	W ₃ ,cI2,229	$Im-3m$	0.32942,0.32942,0.32942,90,90,90	b.c.c. family	-	8.44	X	11495
Ge-Nb	Nb ₁₀ Ge ₇ rt	Nb ₁₀ Ge ₇ ,hP51,164	$P-3m1$	1.337,1.337,0.537,90,90,120	-	-	8.61	X	23571
Ge-Nb	Nb ₃ Ge m cub	Cu ₃ Au,cP4,221	$Pm-3m$	0.458,0.458,0.458,90,90,90	close-packed structure	-	6.07	X	13148
Ge-Nb	Nb ₃ Ge m tet	Ti ₃ P,tP32,86	$P4_3/n$	1.097,1.097,0.558,90,90,90	-	-	6.95	A	13148
Ge-Nb	Nb _{3.2} Ge _{0.8}	Cr ₃ Si,cP8,223	$Pm-3n$	0.51692,0.51692,0.51692,90,90,90	Frank-Kasper phase	-	8.54	X	11964
Ge-Nb	Nb ₃ Ge ₃ ht	W ₃ Si ₃ ,tI32,140	$I4/mcm$	1.0146,1.0146,0.5136,90,90,90	-	-	8.57	X	8678
Ge-Nb	Nb ₃ Ge ₃ m	Cr ₃ B ₃ ,tI32,140	$I4/mcm$	0.6678,0.6678,1.205,90,90,90	-	-	8.43	A	15903
Ge-Nb	Nb ₃ Ge ₃ stab	Mn ₃ Si ₃ ,hP16,193	$P6_3/mcm$	0.7718,0.7718,0.537,90,90,120	-	-	8.18	X	764
Ge-Nb	Nb ₃ Ge _{3.5} ht	Ti ₃ Ge ₄ ,hP18,193	$P6_3/mcm$	0.7783,0.7783,0.5388,90,90,120	AlB ₂ family	-	8.44	X	39285
Ge-Nb	Nb ₆ Ge	* _h P*,*	-	0.5346,0.5346,0.5021,90,90,120	-	-	-	N	10203
Ge-Nd	NdGe	TiI ₂ ,oS8,63	$Cmcm$	0.4482,1.1102,0.4065,90,90,90	CrB(TII)-FeB	-	7.12	X	17945
Ge-Nd	NdGe _{1,6} rt	GdSi ₄ ,oI12,74	$Imma$	0.417,0.422,1.403,90,90,90	-	-	7.01	A	8060
Ge-Nd	NdGe _{1.642} rt	* _o ***,*	-	0.5894,0.5898,1.4065,90,90,90	-	-	-	N	36142
Ge-Nd	NdGe _{1.66} ht	ThSi ₂ ,tI12,141	$I4_1/amd$	0.418,0.418,1.398,90,90,90	-	-	7.20	X	39211
Ge-Nd	NdGe _{1.67}	YGe _{1.67} ,hP24,190	$P-62c$	0.7008,0.7008,0.8604,90,90,120	-	-	7.23	A	36074
Ge-Nd	NdGe _{1.760} rt	* _o ***,*	-	0.5984,0.5987,1.3914,90,90,90	-	-	-	N	36142
Ge-Nd	NdGe _{2.25} hp	Y(Ga _{0.13} Ge _{0.87}) _{3.34} ,oS20,65	$Cmmm$	0.4073,2.0961,0.4254,90,90,90	-	-	6.95	X	54814
Ge-Nd	NdGe ₃ rt	LaGe ₃ ,oI12,71	$Immm$	0.3993,0.62,0.9865,90,90,90	-	black	6.90	X	53825
Ge-Nd	Nd ₂ Ge ₉	Nd ₂ Ge ₉ ,oP22,59	$Pmmm$	0.39634,0.95405,1.2384,90,90,90	-	-	6.68	X	60306
Ge-Nd	Nd ₃ Ge ₅	Y ₃ Ge ₅ ,oF64,43	$Fdd2$	0.5899,1.7696,1.4008,90,90,90	-	-	7.23	X	22351

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Ge-Nd	Nd ₄ Ge ₇	Nd ₄ Ge ₇ , oS44, 20	<i>C222₁</i>	0.5958, 1.3857, 1.1919, 90, 90, 90	-	-	7.32	X	36142
Ge-Nd	Nd ₃ Ge ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8743, 0.8743, 0.6625, 90, 90, 120	-	-	7.11	X	37768
Ge-Nd	Nd ₂ Ge ₄	Sm ₂ Ge ₄ , oP36, 62	<i>Pnma</i>	0.7841, 1.5071, 0.7937, 90, 90, 90	-	-	7.16	X	14179
Ge-Ni	NiGe	FeAs, oP8, 62	<i>Pnma</i>	0.5381, 0.3428, 0.5811, 90, 90, 90	AlB ₂ family	-	8.14	X	344
Ge-Ni	NiGe ₂ hp	CoGe ₂ , oS24, 64	<i>Cmce</i>	1.083, 0.5763, 0.5762, 90, 90, 90	-	gray	7.53	X	37690
Ge-Ni	Ni _{0.92} Ge _{0.08}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.354, 0.354, 0.354, 90, 90, 90	close-packed structure	-	8.96	X	17661
Ge-Ni	Ni _{1.38} Ge ht	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.382, 0.382, 0.498, 90, 90, 120	AlB ₂ family	-	8.11	X	30123
Ge-Ni	Ni _{1.48} Ge _{0.52} ht	NaTi, cF16, 227	<i>Fd-3m</i>	0.57436, 0.57436, 0.57436, 90, 90, 90	b.c.c. family	-	8.74	X	11850
Ge-Ni	Ni ₁₉ Ge ₁₂ ht	Ni ₁₉ Ge ₁₂ , mS62, 5	<i>C121</i>	1.1631, 0.6715, 1.0048, 90, 90, 90	-	-	8.41	X	5883
Ge-Ni	Ni ₂ Ge ht	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.3948, 0.3948, 0.5036, 90, 90, 120	AlB ₂ family	-	9.28	X	1805
Ge-Ni	Ni ₂ Ge rt	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.5113, 0.383, 0.7264, 90, 90, 90	-	-	8.87	X	5883
Ge-Ni	Ni ₃ Ge	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3572, 0.3572, 0.3572, 90, 90, 90	close-packed structure	-	9.06	X	17184
Ge-Ni	Ni ₃ Ge ₂ rt	Ni ₃ Ge ₂ , hP34, 190	<i>P-62c</i>	0.66585, 0.66585, 0.9962, 90, 90, 120	-	black	8.37	X	64916
Ge-Ni	Ni ₃ Ge ₂ ht	Pd ₃ Sb ₂ , hP42, 185	<i>P6₃cm</i>	0.6827, 0.6827, 1.2395, 90, 90, 120	-	-	8.74	A	5883
Ge-Ni	Ni ₃ Ge ₃ rt	Ni ₃ Ge ₃ , mS32, 5	<i>C121</i>	1.0763, 0.6737, 0.6364, 90, 121.06, 90	-	-	8.59	X	5883
Ge-Ni	Ni ₇ Ge ₄ rt	*, mS44, 12	<i>C12/m1</i>	1.013, 0.78, 0.683, 90, 90, 4, 90	-	-	-	N	3673
Ge-Np	NpGe _{1.59}	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.39686, 0.39686, 0.41705, 90, 90, 120	AlB ₂ family	-	10.29	X	39544
Ge-Np	NpGe _{1.72}	ThSi ₂ , tI12, 141	<i>I4₁/amd</i>	0.408, 0.408, 1.3909, 90, 90, 90	-	-	10.38	X	39544
Ge-Np	NpGe ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.42114, 0.42114, 0.42114, 90, 90, 90	close-packed structure	-	10.11	X	39544
Ge-Np	Np ₃₄ Ge _{33.7}	U ₃₄ Si _{34.5} , tI138, 139	<i>I4/mmm</i>	1.09117, 1.09117, 2.5358, 90, 90, 90	-	-	11.56	X	39544
Ge-Np	Np ₂ Ge ₃	W ₃ Si ₃ , tI32, 140	<i>I4/mcm</i>	1.1434, 1.1434, 0.55197, 90, 90, 90	-	-	12.91	X	39544
Ge-Np	Np ₂ Ge ₄	Ti ₂ Ga ₄ , hP18, 193	<i>P6₃/mcm</i>	0.88004, 0.88004, 0.59274, 90, 90, 120	AlB ₂ family	-	12.33	X	39544
Ge-O	GeO m	*, c***, *	-	0.56447, 0.56447, 0.56447, 90, 90, 90	-	-	-	N	606
Ge-O	GeO ₂ cri	SiO ₂ , tP12, 92	<i>P4₁2₁2</i>	0.499, 0.499, 0.706, 90, 90, 90	-	-	3.95	X	6023
Ge-O	GeO ₂ cub	GeO ₂ , cI288, 230	<i>Ia-3d</i>	1.8411, 1.8411, 1.8411, 90, 90, 90	-	colorless	2.67	X	63347
Ge-O	GeO ₂ hp cub	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.43365, 0.43365, 0.43365, 90, 90, 90	pyrite-marcasite family	-	8.52	X	41988
Ge-O	GeO ₂ hp mon	SiO ₂ , mP20, 14	<i>P12₁/c1</i>	0.72917, 0.432, 0.541, 90, 100.07, 90	-	-	6.21	X	38345
Ge-O	GeO ₂ hp1	CaCl ₂ , oP6, 58	<i>Pnnm</i>	0.42025, 0.42499, 0.28039, 90, 90, 90	-	-	6.94	X	41988
Ge-O	GeO ₂ hp2	Fe ₂ Ni _{0.94} , oP12, 60	<i>Pbcn</i>	0.40423, 0.50396, 0.45288, 90, 90, 90	-	-	7.53	X	42941
Ge-O	GeO ₂ hp3	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.4333, 0.4333, 0.4333, 90, 90, 90	pyrite-marcasite family	-	8.54	X	42950
Ge-O	GeO ₂ ht hex1	SiO ₂ , hP9, 152	<i>P3₁21</i>	0.4989, 0.4989, 0.56527, 90, 90, 120	-	colorless	4.28	X	59308
Ge-O	GeO ₂ ht hex2	SiO ₂ , hP9, 180	<i>P6₂22</i>	0.4986, 0.4986, 0.5647, 90, 90, 120	-	-	4.29	A	1357
Ge-O	GeO ₂ rt	TiO ₂ , tP6, 136	<i>P4₂/mmm</i>	0.44019, 0.44019, 0.28651, 90, 90, 90	-	colorless	6.26	X	38683
Ge-Os	OsGe ₂	OsGe ₂ , mS12, 12	<i>C12/m1</i>	0.8995, 0.3094, 0.7685, 90, 119.17, 90	-	-	11.93	X	1283
Ge-Os	Os ₂ Ge ₃ rt	Ru ₂ Ge ₃ , oP40, 60	<i>Pbcn</i>	1.1544, 0.9281, 0.5783, 90, 90, 90	chimney-ladder structure	-	12.83	A	7826
Ge-P	GeP hp1	*, hP*, *	-	1.002, 1.002, 1.392, 90, 90, 120	-	-	-	N	3634
Ge-P	GeP hp2	*, hP*, *	-	0.8603, 0.8603, 1.2622, 90, 90, 120	-	-	-	N	3634
Ge-P	GeP hp3	*, hP*, *	-	0.8192, 0.8192, 1.244, 90, 90, 120	-	-	-	N	3634
Ge-P	GeP hp4	*, t***, *	-	0.6809, 0.6809, 0.828, 90, 90, 90	-	-	-	N	3634
Ge-P	GeP hp6	ZnS ₂ , cF8, 216	<i>F-43m</i>	0.54861, 0.54861, 0.54861, 90, 90, 90	adamantane structure	-	4.17	X	49441
Ge-P	GeP hp7	*, t***, *	-	0.7101, 0.7101, 0.9129, 90, 90, 90	-	-	-	N	3634
Ge-P	GeP hp8	*, c***, *	-	0.6451, 0.6451, 0.6451, 90, 90, 90	-	-	-	N	3634
Ge-P	GeP hp9	GeP, tI4, 107	<i>I4mm</i>	0.3544, 0.3544, 0.5581, 90, 90, 90	-	black	4.91	X	5285
Ge-P	GeP rt	SiAs, mS24, 12	<i>C12/m1</i>	1.51948, 0.36337, 0.91941, 90, 101.239, 90	-	black	4.14	X	65132
Ge-P	GeP ₂ hp	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.5619, 0.5619, 0.5619, 90, 90, 90	pyrite-marcasite family	-	5.04	A	3634
Ge-P	GeP ₃ hp	SnP ₃ , hR24, 166	<i>R-3m</i>	0.705, 0.705, 0.9932, 90, 90, 120	-	-	3.86	X	6706
Ge-P	GeP ₃ hp	*, hR*, *	-	0.3467, 0.3467, 1.004, 90, 90, 120	-	-	-	N	5285
Ge-P	Ge _{0.5} P _{0.5} hp5	C ₂ cF8, 227	<i>Fd-3m</i>	0.5581, 0.5581, 0.5581, 90, 90, 90	-	-	3.96	X	3634
Ge-Pb	Pb _{0.87} Ge _{0.13} m	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.49225, 0.49225, 0.49225, 90, 90, 90	close-packed structure	-	10.56	X	13243
Ge-Pd	PdGe	FeAs, oP8, 62	<i>Pnma</i>	0.5782, 0.3481, 0.6259, 90, 90, 90	AlB ₂ family	-	9.44	X	344
Ge-Pd	Pd _{0.84} Ge _{0.16} ht	W ₂ cI2, 229	<i>Im-3m</i>	0.3137, 0.3137, 0.3137, 90, 90, 90	b.c.c. family	-	10.87	X	1934
Ge-Pd	Pd _{0.91} Ge _{0.09}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3883, 0.3883, 0.3883, 90, 90, 90	close-packed structure	-	11.73	X	14094
Ge-Pd	Pd ₂ Ge	Fe ₂ P, hP9, 189	<i>P-62m</i>	0.6712, 0.6712, 0.3408, 90, 90, 120	Fe ₂ P family	red wine	10.69	X	10588
Ge-Pd	Pd ₂₁ Ge ₈	Pt ₈ Al ₂₁ , tI116, 88	<i>I4₁/a</i>	1.3067, 1.3067, 1.0033, 90, 90, 90	-	-	10.92	X	10612
Ge-Pd	Pd ₂₅ Ge ₉ ht	Pd ₂₅ Ge ₉ , hP34, 147	<i>P-3</i>	0.7351, 0.7351, 1.0605, 90, 90, 120	-	-	11.09	X	8947
Ge-Pd	Pd ₅ Ge	Pd ₅ As, mS24, 5	<i>C121</i>	0.5509, 0.7725, 0.8375, 90, 98.09, 90	-	-	11.38	A	11466
Ge-Pr	PrGe ht	FeB-b, oP8, 62	<i>Pnma</i>	0.8294, 0.4053, 0.5982, 90, 90, 90	CrB(TlI)-FeB	-	7.05	X	17945
Ge-Pr	PrGe rt	TlI, oS8, 63	<i>Cmcm</i>	0.44808, 1.1087, 0.405, 90, 90, 90	CrB(TlI)-FeB	-	7.05	X	59531
Ge-Pr	PrGe _{1.6} ht	ThSi ₂ , tI12, 141	<i>I4₁/amd</i>	0.4228, 0.4228, 1.4, 90, 90, 90	-	-	6.82	X	28908
Ge-Pr	PrGe _{3.36} hp	Y(Ga _{0.13} Ge _{0.87}) _{3.34} , oS20, 65	<i>Cmmm</i>	0.4062, 2.143, 0.4212, 90, 90, 90	-	-	6.97	X	54814
Ge-Pr	PrGe ₅	LaGe ₅ , oI12, 71	<i>Immm</i>	0.3998, 0.6228, 0.9887, 90, 90, 90	-	-	6.80	X	53825
Ge-Pr	Pr ₃ Ge	Ti ₃ P, tP32, 86	<i>P4₂/n</i>	1.2418, 1.2418, 0.6133, 90, 90, 90	-	-	6.96	X	36863
Ge-Pr	Pr ₃ Ge ₃ rt	Y ₃ Ge ₃ , oF64, 43	<i>Fdd2</i>	0.5937, 1.7817, 1.4111, 90, 90, 90	-	-	6.99	A	36142
Ge-Pr	Pr ₄ Ge ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.9146, 0.9146, 0.9146, 90, 90, 90	-	-	6.78	A	52918
Ge-Pr	Pr ₄ Ge ₇ rt	Nd ₄ Ge ₇ , oS44, 20	<i>C222₁</i>	0.599, 1.3958, 1.1973, 90, 90, 90	-	gray steel	7.11	X	61407
Ge-Pr	Pr ₅ Ge ₃ rt	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8804, 0.8804, 0.6588, 90, 90, 120	-	-	6.93	X	54115
Ge-Pr	Pr ₅ Ge ₄	Sm ₅ Ge ₄ , oP36, 62	<i>Pnma</i>	0.79172, 1.51916, 0.80112, 90, 90, 90	-	-	6.86	X	44637
Ge-Pt	PtGe	FeAs, oP8, 62	<i>Pnma</i>	0.5719, 0.3697, 0.6084, 90, 90, 90	AlB ₂ family	-	13.82	X	6993
Ge-Pt	PtGe ₂	CaCl ₂ , oP6, 58	<i>Pnnm</i>	0.5767, 0.6185, 0.2908, 90, 90, 90	-	-	10.90	X	1091
Ge-Pt	Pt _{0.95} Ge _{0.05}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.392, 0.392, 0.392, 90, 90, 90	close-packed structure	-	20.84	X	20721
Ge-Pt	Pt ₂ Ge	Fe ₂ P, hP9, 189	<i>P-62m</i>	0.668, 0.668, 0.353, 90, 90, 120	Fe ₂ P family	-	16.90	A	527
Ge-Pt	Pt ₂ Ge ₃	Pt ₂ Ge ₃ , oP20, 62	<i>Pnma</i>	1.643, 0.3378, 0.6221, 90, 90, 90	-	-	11.70	X	1285
Ge-Pt	Pt ₃ Ge ht	Ir ₃ Si ₃ , tI16, 140	<i>I4/mcm</i>	0.5499, 0.5499, 0.7933, 90, 90, 90	close-packed structure	-	18.22	X	13191
Ge-Pt	Pt ₃ Ge rt	Pt ₃ Ge, mS16, 12	<i>C12/m1</i>	0.7769, 0.7767, 0.5520, 90, 134.09, 90	close-packed structure	-	18.27	X	1285
Ge-Pt	Pt ₅ Ge ₂ rt	Pt ₅ Ge ₂ , oP40, 62	<i>Pnma</i>	1.2240, 0.7549, 0.6854, 90, 90, 90	-	-	15.32	X	9755
Ge-Rb	RbGe hp	NaPt, tI64, 142	<i>I4₁/acd</i>	1.104, 1.104, 1.787, 90, 90, 90	-	-	3.86	A	16714
Ge-Rb	RbGe	KGe, cP64, 218	<i>P-43n</i>	1.3198, 1.3198, 1.3198, 90, 90, 90	-	black	3.65	X	46758
Ge-Rb	RbGe ₄	*, cP*, *	-	0.65, 0.65, 0.65, 90, 90, 90	-	-	-	N	22698

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ge-Rb	Rb ₁₂ Ge ₁₇	* _h ***	-	2.9156,2.9156,14.2703,90,90,120	-	gray dark	-	N	42457
Ge-Rb	Rb ₃ Ge ₂₃ rt	Na ₃ Si ₂₃ ,cP54,223	<i>Pm-3n</i>	1.071,1.071,1.07,90,90,90	clathrate	-	5.45	A	5329
Ge-Rb	Rb ₄ Ge ₉	Cs ₄ Ge ₉ ,tP208,76	<i>P4₁</i>	1.5154,1.5154,3.082,90,90,90	-	red ruby	3.74	A	32967
Ge-Re	Re ₂ Ge ₇	Re ₂ Ge ₇ ,oS40,63	<i>Cmcm</i>	0.3227,0.9045,2.1956,90,90,90	-	greenish	11.06	X	15966
Ge-Re	Re ₄ Ge ₇ hp	Mn ₄ Si ₇ ,tP44,116	<i>P-4c2</i>	0.5895,0.5895,1.886,90,90,90	chimney-ladder structure	-	12.70	A	15079
Ge-Rh	RhGe hp	FeSi ₂ cP8,198	<i>P2₁3</i>	0.4862,0.4862,0.4862,90,90,90	-	-	10.14	X	15106
Ge-Rh	RhGe	FeAs ₂ oP8,62	<i>Pnma</i>	0.5704,0.3215,0.6504,90,90,90	AlB ₂ family	-	9.77	X	62179
Ge-Rh	RhGe ₄ hp	IrGe ₄ hP15,152	<i>P3₁21</i>	0.619,0.619,0.7802,90,90,120	-	-	7.57	A	16969
Ge-Rh	Rh ₁₇ Ge ₂₂	Rh ₁₇ Ge ₂₂ ,tI156,122	<i>I-42d</i>	0.5604,0.5604,7.845,90,90,90	chimney-ladder structure	-	9.02	X	3244
Ge-Rh	Rh ₂ Ge	Co ₂ Si-b ₂ oP12,62	<i>Pnma</i>	0.544,0.4,0.757,90,90,90	-	-	11.23	X	640
Ge-Rh	Rh ₃ Ge ₃	Rh ₃ Ge ₃ ,oP16,55	<i>Pbam</i>	0.542,1.032,0.396,90,90,90	-	-	10.98	X	640
Ge-Ru	RuGe ht-hp	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.30114,0.30114,0.30114,90,90,90	b.c.c. family	-	10.56	X	63335
Ge-Ru	RuGe rt	FeSi ₂ cP8,198	<i>P2₁3</i>	0.48468,0.48468,0.48468,90,90,90	-	-	10.13	X	33754
Ge-Ru	Ru ₁₇ Ge ₂₂	Ru ₁₇ Ge ₂₂ ,tP92,118	<i>P-4n2</i>	1.1428,1.1428,0.9237,90,90,90	-	-	9.13	X	25830
Ge-Ru	Ru ₂ Ge ₃ ht	Ru ₂ Sn ₃ ,tP20,116	<i>P-4c2</i>	0.5739,0.5739,0.9952,90,90,90	chimney-ladder structure	-	8.51	X	8930
Ge-Ru	Ru ₂ Ge ₃ rt	Ru ₂ Ge ₃ ,oP40,60	<i>Pbcn</i>	1.14477,0.92438,0.57182,90,90,90	chimney-ladder structure	-	9.22	X	33754
Ge-S	GeS ht	* _h P*,182	<i>P6₃22</i>	0.8706,0.8706,0.8731,90,90,120	-	-	-	N	5148
Ge-S	GeS rt	GeS ₂ oP8,62	<i>Pnma</i>	1.0481,0.3646,0.4299,90,90,90	-	gray steel	4.23	X	11845
Ge-S	GeS ₂ hp1	ZnCl ₂ ,tI12,122	<i>I-42d</i>	0.4977,0.4977,0.95355,90,90,90	-	-	3.84	X	53591
Ge-S	GeS ₂ hp2	HgI ₂ ,tP6,137	<i>P4₂/nmc</i>	0.34691,0.34691,1.09745,90,90,90	-	green olive	3.44	X	63616
Ge-S	GeS ₂ hp3	* _o *24,*	-	0.627,0.678,1.196,90,90,90	-	-	-	N	15241
Ge-S	GeS ₂ ht	GeS ₂ ,mP48,14	<i>P12₁/c1</i>	0.6720,1.6101,1.1436,90,90,88,90	-	-	2.94	X	8627
Ge-S	GeS ₂ rt	GeS ₂ ,mP36,7	<i>P1c1</i>	0.6796,2.255,0.6809,90,119,29,90	-	white milky	2.99	X	9378
Ge-S	GeS ₂ tet	ZnI ₂ ,tI96,142	<i>I4₁/acd</i>	1.1065,1.1065,1.87178,90,90,90	-	white	3.17	X	34286
Ge-Sb	GeSb m	CoO,tI4,139	<i>I4/mmm</i>	0.4154,0.4154,0.6204,90,90,90	rocksalt family	-	6.03	X	6684
Ge-Sb	Ge _{0.35} Sb _{0.65} hp	(Ge _{0.35} Sb _{0.65}),tI4,139	<i>I4/mmm</i>	0.4084,0.4084,0.6228,90,90,90	-	-	6.69	X	16422
Ge-Sc	ScGe	TiI ₂ oS8,63	<i>Cmcm</i>	0.4007,1.006,0.3762,90,90,90	CrB(TII)-FeB	-	5.15	X	2416
Ge-Sc	ScGe ₂	ZrSi ₂ ,oS12,63	<i>Cmcm</i>	0.3888,1.4873,0.3793,90,90,90	close-packed structure	-	5.76	X	2245
Ge-Sc	Sc ₁₁ Ge ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	<i>I4/mmm</i>	1.012,1.012,1.554,90,90,90	-	-	5.09	A	25243
Ge-Sc	Sc ₂ Ge ₃	Mn ₂ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.7939,0.7939,0.5883,90,90,120	-	-	4.58	X	1531
Ge-Sc	Sc ₂ Ge ₄	Sm ₂ Ge ₄ ,oP36,62	<i>Pnma</i>	0.7118,1.379,0.714,90,90,90	-	-	4.88	A	25242
Ge-Se	GeSe ht	NaCl,cF8,225	<i>Fm-3m</i>	0.573,0.573,0.573,90,90,90	rocksalt family	-	5.35	X	9251
Ge-Se	GeSe rt	GeS ₂ oP8,62	<i>Pnma</i>	1.0825,0.3833,0.4388,90,90,90	-	black	5.53	X	11845
Ge-Se	GeSe ₂ hp1	GeSe ₂ ,tI12,82	<i>I-4</i>	0.55073,0.55073,0.99374,90,90,90	-	-	5.08	X	37923
Ge-Se	GeSe ₂ hp2	GeSe ₂ ,tP12,81	<i>P-4</i>	0.53389,0.53389,1.00361,90,90,90	-	-	5.35	X	37923
Ge-Se	GeSe ₂ hp3	* _h P36,*	-	0.6468,0.6468,2.449,90,90,120	-	black	5.18	N	63616
Ge-Se	GeSe ₂ ht	GeS ₂ ,mP48,14	<i>P12₁/c1</i>	0.7016,1.6796,1.1831,90,90,65,90	-	golden bright	4.39	X	9471
Ge-Se	GeSe ₂ ht-hp	* _o *24,*	-	0.7071,0.733,1.212,90,90,90	-	-	-	N	15241
Ge-Se	Ge ₄ Se ₉	Ge ₄ Se ₉ ,oP52,29	<i>Pca2₁</i>	1.7805,0.7002,1.2071,90,90,90	-	orange	4.42	X	45135
Ge-Si	Ge _{0.04} Si _{0.96} rt	C ₂ cF8,227	<i>Fd-3m</i>	0.54401,0.54401,0.54401,90,90,90	-	-	2.46	X	52113
Ge-Si	Ge _{0.5} Si _{0.5} hp	Sn,tI4,141	<i>I4₁/amd</i>	0.473,0.473,0.252,90,90,90	-	-	5.93	X	15416
Ge-Sm	SmGe	TiI ₂ oS8,63	<i>Cmcm</i>	0.4387,1.089,0.3993,90,90,90	CrB(TII)-FeB	-	7.76	X	2831
Ge-Sm	SmGe _{1.5} ht2	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.4002,0.4002,0.4244,90,90,120	AlB ₂ family	-	7.31	X	43908
Ge-Sm	SmGe _{1.741} rt	* _o ***	-	0.5906,0.5907,1.3799,90,90,90	-	-	-	N	36142
Ge-Sm	SmGe ₂	ThSi ₂ ,tI12,141	<i>I4₁/amd</i>	0.418,0.418,1.38,90,90,90	-	-	8.14	X	2225
Ge-Sm	SmGe ₃ rt	SmGe ₃ ,oI18,71	<i>Immm</i>	0.39805,0.61522,0.9839,90,90,90	-	black	7.08	X	54517
Ge-Sm	Sm ₂ Ge ₉	Nd ₂ Ge ₉ ,oP22,59	<i>Pmmn</i>	0.39546,0.9464,1.2321,90,90,90	-	-	6.87	A	60306
Ge-Sm	Sm ₃ Ge ₅ ht	Sm ₃ Ge ₅ ,hP16,190	<i>P-62c</i>	0.69238,0.69238,0.8491,90,90,120	-	-	7.67	X	47415
Ge-Sm	Sm ₃ Ge ₅ rt	Y ₃ Ge ₅ ,oF64,43	<i>Fdd2</i>	0.58281,1.7476,1.38749,90,90,90	-	-	7.65	X	47415
Ge-Sm	Sm ₄ Ge ₇	Nd ₄ Ge ₇ ,oS44,20	<i>C222₁</i>	0.5892,1.3781,1.1792,90,90,90	-	gray silver	7.70	X	61407
Ge-Sm	Sm ₃ Ge ₃	Mn ₂ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.864,0.864,0.652,90,90,120	-	-	7.64	X	4509
Ge-Sm	Sm ₃ Ge ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.775,1.494,0.784,90,90,90	-	-	7.63	X	3235
Ge-Sn	Sn _{0.19} Ge _{0.81} m	C ₂ cF8,227	<i>Fd-3m</i>	0.5833,0.5833,0.5833,90,90,90	-	-	5.45	X	42085
Ge-Sr	SrGe	TiI ₂ oS8,63	<i>Cmcm</i>	0.486,1.14,0.419,90,90,90	CrB(TII)-FeB	-	4.58	X	3687
Ge-Sr	SrGe _{0.76} (Al ₁ O)	SrSi ₂ oI40,71	<i>Immm</i>	0.484,1.338,1.852,90,90,90	-	-	3.95	X	8527
Ge-Sr	SrGe _{1.85} ht	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.4259,0.4259,0.4578,90,90,120	AlB ₂ family	-	5.12	X	45841
Ge-Sr	SrGe ₂ hp	EuGe ₂ ,hP3,164	<i>P-3m1</i>	0.4104,0.4104,0.5165,90,90,120	AlB ₂ family	-	5.13	X	12738
Ge-Sr	SrGe ₂ rt	BaSi ₂ ,oP24,62	<i>Pnma</i>	0.8739,0.6567,1.1215,90,90,90	-	-	4.81	X	45841
Ge-Sr	SrGe _{2.5}	SrGe _{2.5} ,oS44,63	<i>Cmcm</i>	0.40981,1.1159,1.26825,90,90,90	-	gray silver	5.58	X	45568
Ge-Sr	Sr ₂ Ge	Co ₂ Si-b ₂ oP12,62	<i>Pnma</i>	0.813,0.52,0.958,90,90,90	-	-	4.06	X	9339
Ge-Sr	Sr ₃ Ge ₃	Cr ₂ B ₃ ,tI32,140	<i>I4/mcm</i>	0.8134,0.8134,1.5771,90,90,90	-	black gray	4.18	X	37059
Ge-Sr	Sr ₇ Ge ₆	Ca ₇ Sn ₆ ,oP52,62	<i>Pnma</i>	0.779,2.358,0.859,90,90,90	-	-	4.42	X	59809
Ge-Ta	TaGe ₂	CrSi ₂ ,hP9,180	<i>P6₂22</i>	0.4938,0.4938,0.673,90,90,120	-	-	11.43	X	6402
Ge-Ta	Ta ₃ Ge ht	Ni ₃ P,tI32,82	<i>I-4</i>	1.03421,1.03421,0.51532,90,90,90	-	-	14.83	X	14239
Ge-Ta	Ta ₃ Ge ht1	Ti ₃ P,tP32,86	<i>P4₂/n</i>	1.02679,1.02679,0.52167,90,90,90	-	-	14.87	A	15094
Ge-Ta	Ta ₅ Ge ₃ ht	W ₅ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.001,1.001,0.515,90,90,90	-	-	14.45	X	764
Ge-Ta	Ta ₃ Ge ₃ rt	Cr ₂ B ₃ ,tI32,140	<i>I4/mcm</i>	0.6599,0.6599,1.201,90,90,90	-	-	14.26	X	764
Ge-Ta	Ta ₅ Ge ₃ stab	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.7581,0.7581,0.5235,90,90,120	-	-	14.31	X	900
Ge-Tb	TbGe	TiI ₂ oS8,63	<i>Cmcm</i>	0.4264,1.0683,0.396,90,90,90	CrB(TII)-FeB	-	8.53	X	59632
Ge-Tb	TbGe _{1.5} ht	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.3931,0.3931,0.4137,90,90,120	AlB ₂ family	-	8.03	X	33449
Ge-Tb	TbGe _{1.7} ht	TbSi ₂ ,tI12,141	<i>I4₁/amd</i>	0.4075,0.4075,1.3745,90,90,90	-	-	8.22	A	36869
Ge-Tb	TbGe ₂	TbGe ₂ ,oS24,65	<i>Cmmm</i>	0.40964,2.9834,0.39877,90,90,90	-	-	8.29	X	21192
Ge-Tb	TbGe ₃ ht	DyGe ₃ ,oS16,63	<i>Cmcm</i>	0.40446,2.0786,0.39126,90,90,90	-	-	7.61	X	49706
Ge-Tb	TbGe ₃ ht-hp	LaGe ₃ ,oI12,71	<i>Immm</i>	0.3957,0.6111,0.9836,90,90,90	-	-	7.29	X	56387
Ge-Tb	Tb _{0.57} Ge ₂	ZrGa ₂ ,oS12,65	<i>Cmmm</i>	0.4043,2.0738,0.3914,90,90,90	close-packed structure	-	4.77	X	34789
Ge-Tb	Tb _{1.04} Ge _{2.96} hp	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4287,0.4287,0.4287,90,90,90	close-packed structure	-	8.01	X	61526
Ge-Tb	Tb ₁₁ Ge ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	<i>I4/mmm</i>	1.088,1.088,1.6475,90,90,90	-	-	8.43	A	21626
Ge-Tb	Tb ₂ Ge ₄	Er ₃ Ge ₄ ,oS28,63	<i>Cmcm</i>	0.40454,1.0633,1.4218,90,90,90	-	-	8.33	X	33449

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ge-Tb	Tb ₅ Ge ₅ rt cub	Y ₃ Ge ₅ , oF64, 43	<i>Fdd2</i>	0.5745, 1.7253, 1.3724, 90, 90, 90	-	-	8.20	X	53517
Ge-Tb	Tb ₃ Ge ₃ rt hex	Sm ₃ Ge ₃ , hP16, 190	<i>P-62c</i>	0.6861, 0.6861, 0.8339, 90, 90, 120	-	-	8.20	X	53517
Ge-Tb	Tb ₂ Ge ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.84956, 0.84956, 0.63861, 90, 90, 120	-	-	8.42	X	59625
Ge-Tb	Tb ₃ Ge ₄	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.7581, 1.4565, 0.7645, 90, 90, 90	-	-	8.54	X	11532
Ge-Te	GeTe hp	GeTe, oP16, 60	<i>Pbcn</i>	0.7441, 0.7678, 0.5435, 90, 90, 90	-	-	8.56	X	33807
Ge-Te	GeTe ht	NaCl, cF8, 225	<i>Fm-3m</i>	0.59859, 0.59859, 0.59859, 90, 90, 90	rocksalt family	-	6.20	X	15914
Ge-Te	GeTe rt Te+	GeS, oP8, 62	<i>Pnma</i>	1.1848, 0.4094, 0.4365, 90, 90, 90	-	-	6.28	A	15009
Ge-Te	GeTe rt	GeTe, hR6, 160	<i>R3m</i>	0.41639, 0.41639, 1.06922, 90, 90, 120	rocksalt family	-	6.21	X	20144
Ge-Te	GeTe ₄ hp	*cF*, *	-	0.642, 0.642, 0.642, 90, 90, 90	-	-	-	N	17363
Ge-Te	GeTe ₄	*cP40, *	-	1.109, 1.109, 1.109, 90, 90, 90	-	-	-	N	11522
Ge-Te	Ge ₂ Te ₃ tf	*hP*, 164	<i>P-3m1</i>	0.417, 0.417, 5.3, 90, 90, 120	-	-	-	N	2725
Ge-Th	ThGe	NaCl, cF8, 225	<i>Fm-3m</i>	0.6053, 0.6053, 0.6053, 90, 90, 90	rocksalt family	-	9.12	X	43909
Ge-Th	ThGe _{1.5} orth2	*oP*, 27	<i>Pcc2</i>	0.6989, 0.8432, 0.8136, 90, 90, 90	-	-	-	N	1869
Ge-Th	ThGe _{1.6} orth1	*oF*, 70	<i>Fddd</i>	0.5889, 0.5913, 1.4219, 90, 90, 90	-	-	-	N	1869
Ge-Th	ThGe ₂ ht	ThSi ₂ , tI12, 141	<i>I4₁/amd</i>	0.4106, 0.4106, 1.4193, 90, 90, 90	-	-	10.47	X	950
Ge-Th	ThGe ₂ rt orth1	ZrSi ₂ , oS12, 63	<i>Cmcm</i>	0.4223, 1.6911, 0.4052, 90, 90, 90	close-packed structure	-	8.66	X	1562
Ge-Th	ThGe ₂ rt orth2	ZrGa ₂ , oS12, 65	<i>Cmmm</i>	0.4023, 1.6642, 0.416, 90, 90, 90	close-packed structure	-	9.00	X	1562
Ge-Th	ThGe ₃ stab	*cP*, *	-	1.172, 1.172, 1.172, 90, 90, 90	-	-	-	N	950
Ge-Th	Th ₂ Ge	CuAl ₃ , tI12, 140	<i>I4/mcm</i>	0.7403, 0.7403, 0.6088, 90, 90, 90	-	-	10.68	X	6603
Ge-Th	Th ₃ Ge ₂	U ₃ Si ₂ , tP10, 127	<i>P4/mbm</i>	0.7971, 0.7971, 0.417, 90, 90, 90	-	-	10.55	X	950
Ge-Ti	TiGe	TiSi, oP8, 25	<i>Pmm2</i>	0.3809, 0.6834, 0.5235, 90, 90, 90	-	-	5.87	A	1103
Ge-Ti	TiGe ₂	TiSi ₂ , oF24, 70	<i>Fddd</i>	0.50312, 0.86106, 0.87888, 90, 90, 90	-	-	6.74	A	61584
Ge-Ti	Ti _{0.85} Ge _{0.15} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.2947, 0.2947, 0.4677, 90, 90, 120	close-packed structure	-	4.87	X	50237
Ge-Ti	Ti ₃ Ge	Ni ₃ P, tI32, 82	<i>I-4</i>	1.029, 1.029, 0.514, 90, 90, 90	-	-	5.28	A	2792
Ge-Ti	Ti ₅ Ge ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.76518, 0.76518, 0.5309, 90, 90, 120	-	-	5.64	A	61584
Ge-Ti	Ti ₃ Ge ₄ rt	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.66638, 1.28522, 0.67698, 90, 90, 90	-	-	6.07	X	61584
Ge-Ti	Ti ₆ Ge ₅	V ₆ Si ₅ , oI44, 72	<i>Ibam</i>	0.7954, 1.6915, 0.5233, 90, 90, 90	-	-	6.14	X	4996
Ge-Tm	TmGe rt	TiI, oS8, 63	<i>Cmcm</i>	0.4185, 1.0524, 0.3885, 90, 90, 90	CrB(TiI)-FeB	-	9.38	X	22776
Ge-Tm	TmGe _{1.5}	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.388, 0.388, 0.407, 90, 90, 120	AlB ₂ family	-	8.69	X	58284
Ge-Tm	TmGe _{1.83} ht	DyGe _{1.85} , oS24, 36	<i>Cmc2₁</i>	0.405, 2.946, 0.3887, 90, 90, 90	-	-	8.64	A	58284
Ge-Tm	TmGe _{1.9}	TmGe _{1.9} , oP20, 51	<i>Pnma</i>	0.3879, 0.4034, 2.2544, 90, 90, 90	-	-	8.67	X	37727
Ge-Tm	TmGe ₂	ZrSi ₂ , oS12, 63	<i>Cmcm</i>	0.3997, 1.5719, 0.38604, 90, 90, 90	close-packed structure	-	8.60	X	51101
Ge-Tm	TmGe ₃	DyGe ₃ , oS16, 63	<i>Cmcm</i>	0.399, 2.0488, 0.38794, 90, 90, 90	-	-	8.10	X	54814
Ge-Tm	Tm ₁₁ Ge ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	<i>I4/mmm</i>	1.072, 1.072, 1.605, 90, 90, 90	-	-	9.31	A	58284
Ge-Tm	Tm ₂ Ge ₃	Tm ₂ Ge ₃ , mS20, 15	<i>C12/c1</i>	0.90577, 0.66386, 0.77596, 90, 115.678, 90	-	-	8.78	X	36074
Ge-Tm	Tm ₂ Ge ₅	Er ₂ Ge ₅ , oP14, 59	<i>Pmmn</i>	0.3875, 0.4, 1.8103, 90, 90, 90	-	-	8.30	A	37727
Ge-Tm	Tm ₃ Ge ₄	Er ₃ Ge ₄ , oS28, 63	<i>Cmcm</i>	0.39629, 1.0437, 1.3988, 90, 90, 90	-	-	9.15	X	34836
Ge-Tm	Tm ₃ Ge ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.83, 0.83, 0.622, 90, 90, 120	-	-	9.51	X	4509
Ge-Tm	Tm ₃ Ge ₄	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.71, 1.442, 0.729, 90, 90, 90	-	-	10.10	A	58284
Ge-U	UGe	ThIn, oP24, 57	<i>Pbcm</i>	0.9827, 0.8932, 0.5841, 90, 90, 90	-	-	12.07	X	33532
Ge-U	UGe _{1.57}	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.3954, 0.3954, 0.4125, 90, 90, 120	AlB ₂ family	-	10.47	X	36057
Ge-U	UGe ₂	ZrGa ₂ , oS12, 65	<i>Cmmm</i>	0.4036, 1.4928, 0.4116, 90, 90, 90	close-packed structure	-	10.26	X	33228
Ge-U	UGe ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4206, 0.4206, 0.4206, 90, 90, 90	close-packed structure	-	10.17	X	13741
Ge-U	U ₅ Ge ₄	Ti ₅ Ga ₄ , hP18, 193	<i>P6₃/mcm</i>	0.8744, 0.8744, 0.5863, 90, 90, 120	AlB ₂ family	-	12.67	X	33402
Ge-V	VGe ₂ hp	CrSi ₂ , hP9, 180	<i>P6₂22</i>	0.4806, 0.4806, 0.6634, 90, 90, 120	-	-	7.36	A	21297
Ge-V	V ₁₁ Ge ₈	Cr ₁₁ Ge ₈ , oP76, 62	<i>Pnma</i>	1.3396, 0.5002, 1.612, 90, 90, 90	-	-	7.02	X	61085
Ge-V	V ₁₇ Ge ₃₁	V ₁₇ Ge ₃₁ , tP192, 118	<i>P-4n2</i>	0.591, 0.591, 8.365, 90, 90, 90	chimney-ladder structure	grayish	7.08	X	3698
Ge-V	V ₃ Ge	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.47832, 0.47832, 0.47832, 90, 90, 90	Frank-Kasper phase	-	6.84	X	16258
Ge-V	V ₃ Ge ₃ stab	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.7295, 0.7295, 0.497, 90, 90, 120	-	-	6.85	X	942
Ge-V	V ₃ Ge ₃	W ₃ Si ₃ , tI32, 140	<i>I4/mcm</i>	0.9566, 0.9566, 0.4841, 90, 90, 90	-	-	7.08	A	21143
Ge-W	WGe ₂ hp1	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.6399, 0.3445, 0.8549, 90, 90, 90	-	-	11.60	A	31899
Ge-W	WGe ₂ hp2	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.332, 0.332, 0.8192, 90, 90, 90	b.c.c. family	-	12.10	X	11404
Ge-W	W ₃ Ge ₃ hp1	W ₃ Si ₃ , tI32, 140	<i>I4/mcm</i>	0.981, 0.981, 0.492, 90, 90, 90	-	-	15.95	A	11404
Ge-W	W ₃ Ge ₃ hp2	Cr ₃ B ₃ , tI32, 140	<i>I4/mcm</i>	0.625, 0.625, 1.172, 90, 90, 90	-	-	16.50	A	11404
Ge-Y	YGe	TiI, oS8, 63	<i>Cmcm</i>	0.4262, 1.0694, 0.3941, 90, 90, 90	CrB(TiI)-FeB	-	5.97	X	2416
Ge-Y	YGe _{1.5} ht	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.39337, 0.39337, 0.41424, 90, 90, 120	AlB ₂ family	-	5.92	X	38520
Ge-Y	YGe _{1.67}	YGe _{1.67} , hP24, 190	<i>P-62c</i>	0.6838, 0.6838, 0.8298, 90, 90, 120	-	-	6.23	X	36140
Ge-Y	YGe _{1.82}	YGe _{1.82} , oS28, 63	<i>Cmcm</i>	0.41158, 2.9835, 0.39351, 90, 90, 90	-	-	6.08	X	36071
Ge-Y	YGe _{1.9}	TbGe ₂ , oS24, 65	<i>Cmmm</i>	0.4106, 2.9986, 0.39955, 90, 90, 90	-	-	6.13	X	36054
Ge-Y	YGe ₂ ht	*oP48, *	-	0.8, 0.82, 1.492, 90, 90, 90	-	-	-	N	6599
Ge-Y	YGe ₂ ht?	ThSi ₂ , tI12, 141	<i>I4₁/amd</i>	0.406, 0.406, 1.3683, 90, 90, 90	-	-	6.89	X	2245
Ge-Y	YGe _{2.69}	DyGe ₃ , oS16, 63	<i>Cmcm</i>	0.40431, 2.0765, 0.3912, 90, 90, 90	-	-	5.75	X	36071
Ge-Y	Y ₁₁ Ge ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	<i>I4/mmm</i>	1.0881, 1.0881, 1.643, 90, 90, 90	-	-	5.82	A	38520
Ge-Y	Y ₂ Ge ₃	*oP20, 49	<i>Pccm</i>	0.6943, 0.8276, 0.7845, 90, 90, 90	-	-	-	N	6599
Ge-Y	Y ₂ Ge ₇ ht	*oS72, *	-	0.4047, 1.5636, 2.084, 90, 90, 90	-	-	-	N	6599
Ge-Y	Y ₃ Ge ₄	Er ₃ Ge ₄ , oS28, 63	<i>Cmcm</i>	0.40562, 1.0655, 1.4252, 90, 90, 90	-	-	6.01	X	36071
Ge-Y	Y ₃ Ge ₅	Y ₃ Ge ₅ , oF64, 43	<i>Fdd2</i>	0.5746, 1.7284, 1.3696, 90, 90, 90	-	-	6.15	X	16389
Ge-Y	Y ₃ Ge ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.846, 0.846, 0.636, 90, 90, 120	-	-	5.58	X	4509
Ge-Y	Y ₃ Ge ₄	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.76316, 1.46976, 0.76966, 90, 90, 90	-	-	5.65	X	51476
Ge-Yb	YbGe _{1.5} ht	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.396, 0.396, 0.418, 90, 90, 120	AlB ₂ family	-	8.25	X	2225
Ge-Yb	YbGe _{2.83}	YbGe _{2.83} , hP20, 164	<i>P-3m1</i>	0.83657, 0.83657, 0.70469, 90, 90, 120	-	-	5.89	X	55884
Ge-Yb	Yb _{1.04} Ge _{2.96} hp	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4274, 0.4274, 0.4274, 90, 90, 90	close-packed structure	-	8.40	X	61526
Ge-Yb	Yb ₁₁ Ge ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	<i>I4/mmm</i>	1.0728, 1.0728, 1.6474, 90, 90, 90	-	-	9.21	X	42437
Ge-Yb	Yb ₂ Ge	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.7567, 0.4822, 0.9022, 90, 90, 90	-	-	8.45	X	42336
Ge-Yb	Yb ₃ Ge ₅ ht	Pu ₃ Pd ₅ , oS32, 63	<i>Cmcm</i>	0.93739, 0.75569, 0.9517, 90, 90, 90	-	gray silver	8.69	X	59684
Ge-Yb	Yb ₃ Ge ₅ rt	Th ₃ Pd ₅ , hP8, 189	<i>P-62m</i>	0.685, 0.685, 0.4177, 90, 90, 120	AlB ₂ family	-	8.63	X	42437
Ge-Yb	Yb ₃ Ge ₈	Yb ₃ Ge ₈ , aP22, 2	<i>P-1</i>	0.7307, 0.7415, 1.0365, 69.32, 70.24, 65.02	-	-	7.87	X	42437
Ge-Yb	Yb ₂ Ge ₃ stab	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8413, 0.8413, 0.6474, 90, 90, 120	-	-	9.06	X	42437

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ge-Yb	Yb ₅ Ge ₄	Sm ₅ Ge ₄ , oP36,62	<i>Pnma</i>	0.7342, 1.4958, 0.7828, 90, 90, 90	-	-	8.93	X	42437
Ge-Zr	ZrGe	FeB ₃ , oP8,62	<i>Pnma</i>	0.7068, 0.3899, 0.5396, 90, 90, 90	CrB(TiI)-FeB	-	7.32	A	21143
Ge-Zr	ZrGe ₂	ZrSi ₂ , oS12,63	<i>Cmcm</i>	0.37893, 1.4975, 0.37606, 90, 90, 90	close-packed structure	-	7.36	X	814
Ge-Zr	Zr ₃ Ge	Ti ₃ P, tP32,86	<i>P4₃/n</i>	1.1073, 1.1073, 0.5474, 90, 90, 90	-	-	6.85	A	21143
Ge-Zr	Zr ₅ Ge ₃	Mn ₅ Si ₃ , hP16,193	<i>P6₃/mcm</i>	0.8029, 0.8029, 0.5594, 90, 90, 120	-	-	7.17	A	21143
Ge-Zr	Zr ₃ Ge ₄	Zr ₃ Si ₄ , tP36,92	<i>P4₁2₁2</i>	0.723, 0.723, 1.315, 90, 90, 90	-	-	7.21	A	54322
H-Hf	HfH _{1.74}	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.4701, 0.4701, 0.4701, 90, 90, 90	fluorite family	-	11.52	X	15911
H-Hf	HfH _{1.98} hex	Mg, hP2,194	<i>P6₃/mmc</i>	0.4918, 0.4918, 0.5354, 90, 90, 120	close-packed structure	-	5.35	F	15911
H-Hf	HfH ₂ tet	ThH ₂ , tI6,139	<i>I4/mmm</i>	0.34726, 0.34726, 0.4405, 90, 90, 90	fluorite family	-	11.29	X	33275
H-Ho	HoH _{0.2}	Mg, hP2,194	<i>P6₃/mmc</i>	0.3584, 0.3584, 0.562, 90, 90, 120	close-packed structure	-	8.77	F	14102
H-Ho	HoH _{1.8}	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.51649, 0.51649, 0.51649, 90, 90, 90	fluorite family	-	8.04	X	53373
H-Ho	HoH ₃ hp	BiF ₃ , cF16,225	<i>Fm-3m</i>	0.525, 0.525, 0.525, 90, 90, 90	fluorite family	-	7.71	X	49641
H-Ho	HoH ₃	*, hP8, *	-	0.364, 0.364, 0.657, 90, 90, 120	-	-	-	N	49641
H-I	HI lt1	HCl, cF52,225	<i>Fm-3m</i>	0.629, 0.629, 0.629, 90, 90, 90	-	-	3.41	A	5494
H-I	HI lt2	HBr, oS12,64	<i>Cmce</i>	0.6566, 0.6049, 0.6127, 90, 90, 90	-	-	3.49	A	5494
H-K	KH	NaCl, cF8,225	<i>Fm-3m</i>	0.571, 0.571, 0.571, 90, 90, 90	rocksalt family	-	1.43	X	1655
H-La	LaH _{2.23} lt	*, t*, *	-	0.5633, 0.5633, 0.5667, 90, 90, 90	-	-	10.43	N	22292
H-La	LaH _{2.6} lt1	CeH ₃ , cF44,225	<i>Fm-3m</i>	0.56239, 0.56239, 0.56239, 90, 90, 90	fluorite family	-	5.29	X	17217
H-Li	LiH rt	NaCl, cF8,225	<i>Fm-3m</i>	0.40752, 0.40752, 0.40752, 90, 90, 90	rocksalt family	colorless	0.78	X	18705
H-Lu	LuH _{0.19} lt	Mg, hP2,194	<i>P6₃/mmc</i>	0.3525, 0.3525, 0.5608, 90, 90, 120	close-packed structure	-	9.64	F	8186
H-Lu	LuH ₂	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.5033, 0.5033, 0.5033, 90, 90, 90	fluorite family	-	9.22	X	10571
H-Lu	LuH ₃ hp	BiF ₃ , cF16,225	<i>Fm-3m</i>	0.512, 0.512, 0.512, 90, 90, 90	fluorite family	-	8.81	X	49641
H-Lu	LuH ₃	HoH ₃ , hP24,165	<i>P-3c1</i>	0.6143, 0.6143, 0.6443, 90, 90, 120	-	-	8.42	A	2211
H-Mg	MgH ₂ hp-ht	*, hR24, *	-	0.453, 0.453, 1.099, 90, 90, 120	-	black	-	N	13395
H-Mg	MgH ₂ hp1	Fe ₂ N ₉ , oP12,60	<i>Pbcn</i>	0.45139, 0.54391, 0.49406, 90, 90, 90	-	brown	1.44	X	48099
H-Mg	MgH ₂ hp2	ZrO ₂ , cP12,29	<i>Pca2₁</i>	0.46965, 0.43966, 0.44118, 90, 90, 90	-	-	1.92	X	48099
H-Mg	MgH ₂ hp3	SrH ₂ , oP12,62	<i>Pnma</i>	0.49536, 0.29453, 0.56677, 90, 90, 90	-	-	2.11	X	48099
H-Mg	MgH ₂	TiO ₂ , tP6,136	<i>P4₂/mm</i>	0.45147, 0.45147, 0.30193, 90, 90, 90	-	gray	1.42	X	48099
H-Mn	MnH _{0.073}	MnH _{0.038} , cI70,217	<i>I-43m</i>	0.89403, 0.89403, 0.89403, 90, 90, 90	-	-	7.41	X	34830
H-Mn	MnH _{0.41}	NaCl, cF8,225	<i>Fm-3m</i>	0.3776, 0.3776, 0.3776, 90, 90, 90	rocksalt family	-	6.83	X	35305
H-Mn	MnH _{0.95} hp	NiAs, hP4,194	<i>P6₃/mmc</i>	0.2695, 0.2695, 0.4373, 90, 90, 120	AlB ₂ family	-	6.75	X	20006
H-Mo	MoH _{0.95} lt	NiAs, hP4,194	<i>P6₃/mmc</i>	0.2937, 0.2937, 0.4758, 90, 90, 120	AlB ₂ family	-	9.05	X	21651
H-N	N ₄ H ₄ lt	N ₄ H ₄ , aP34,2	<i>P-1</i>	0.419, 0.712, 1.023, 106.5, 90, 0, 102.0	-	colorless	1.40	X	15514
H-N	[NH ₃] hp1	Cu, cF4,225	<i>Fm-3m</i>	0.4968, 0.4968, 0.4968, 90, 90, 90	close-packed structure	-	0.92	X	16650
H-N	[NH ₃] hp2	Mg, hP2,194	<i>P6₃/mmc</i>	0.329, 0.329, 0.538, 90, 90, 120	-	-	1.12	X	22365
H-N	[NH ₃] lt	[NH ₃], cP16,198	<i>P2₁3</i>	0.51305, 0.51305, 0.51305, 90, 90, 90	-	colorless	0.84	X	33489
H-N	[NH ₄][N ₃] hp	*, o*, *	-	0.365, 0.855, 0.859, 90, 90, 90	-	-	-	N	60629
H-N	[NH ₄][N ₃]	[NH ₄][N ₃], oP32,53	<i>Pmna</i>	0.88978, 0.38067, 0.86735, 90, 90, 90	-	colorless	1.36	X	43291
H-N	[N ₂ H ₄] lt	[N ₂ H ₄], mP8,11	<i>P12₁/m1</i>	0.356, 0.578, 0.453, 90, 109.5, 90	-	-	2.42	X	351
H-N	[N ₂ H ₄][N ₃]	[N ₂ H ₄][N ₃], mP40,14	<i>P12₁/c1</i>	0.5663, 0.5506, 1.2436, 90, 114.0, 90	-	-	1.41	X	7802
H-Na	NaH rt	NaCl, cF8,225	<i>Fm-3m</i>	0.4901, 0.4901, 0.4901, 90, 90, 90	rocksalt family	-	1.35	X	56884
H-Nb	NbH _{0.021} ht	W, cI2,229	<i>Im-3m</i>	0.3307, 0.3307, 0.3307, 90, 90, 90	b.c.c. family	-	8.53	F	47626
H-Nb	NbH _{0.75} hp	*, tI*, *	-	0.311, 0.311, 0.354, 90, 90, 90	-	-	-	N	16163
H-Nb	NbH _{0.85} rt	TaH _{0.5} , oS8,21	<i>C222</i>	0.3436, 0.4832, 0.4883, 90, 90, 90	-	-	7.68	A	16570
H-Nb	NbH ₂	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.4564, 0.4564, 0.4564, 90, 90, 90	fluorite family	-	6.63	X	18923
H-Nd	NdH ₂	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.5469, 0.5469, 0.5469, 90, 90, 90	fluorite family	brown dark	5.94	X	15029
H-Nd	NdH _{2.2}	BiF ₃ , cF16,225	<i>Fm-3m</i>	0.5451, 0.5451, 0.5451, 90, 90, 90	fluorite family	-	6.01	X	33275
H-Nd	NdH ₃	HoH ₃ , hP24,165	<i>P-3c1</i>	0.66629, 0.66629, 0.68853, 90, 90, 120	-	brown dark	5.54	A	37770
H-Nd	Nd ₂ H _{4.70}	Nd ₂ H _{4.72} , tI28,109	<i>I4₁md</i>	0.5422, 0.5422, 1.0908, 90, 90, 90	-	-	6.07	A	16012
H-Ni	NiH hp	NaCl, cF8,225	<i>Fm-3m</i>	0.374, 0.374, 0.374, 90, 90, 90	rocksalt family	-	7.58	X	21651
H-Ni	NiH	Cu, cF4,225	<i>Fm-3m</i>	0.3743, 0.3743, 0.3743, 90, 90, 90	close-packed structure	-	7.56	F	60627
H-Ni	Ni ₂ H ht	Ni ₂ H, hP3,156	<i>P3m1</i>	0.266, 0.266, 0.433, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	7.41	X	11387
H-Np	NpH ₂	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.53475, 0.53475, 0.53475, 90, 90, 90	fluorite family	-	10.38	X	20019
H-Np	NpH _{2.7}	BiF ₃ , cF16,225	<i>Fm-3m</i>	0.5348, 0.5348, 0.5348, 90, 90, 90	fluorite family	-	10.41	X	2632
H-Np	NpH ₃	HoH ₃ , hP24,165	<i>P-3c1</i>	0.65045, 0.65045, 0.67086, 90, 90, 120	-	-	9.73	A	20019
H-O	[H ₂ O] hp II	[H ₂ O], hR108,148	<i>R-3</i>	1.29827, 1.29827, 0.6253, 90, 90, 120	ice II	-	1.18	X	2027
H-O	[H ₂ O] hp III	[H ₂ O], tP60,92	<i>P4₁2₁2</i>	0.673, 0.673, 0.683, 90, 90, 90	ice III	-	1.16	X	3724
H-O	[H ₂ O] hp IV	[H ₂ O], hR240,167	<i>R-3c</i>	0.87292, 0.87292, 1.70658, 90, 90, 120	ice IV	-	1.28	X	14134
H-O	[H ₂ O] hp V	[H ₂ O], mS140,15	<i>C12/c1</i>	1.035, 0.754, 0.922, 90, 109.2, 90	ice V	-	1.23	X	3254
H-O	[H ₂ O] hp VI	[H ₂ O], tP50,137	<i>P4₃/nmc</i>	0.60871, 0.60871, 0.5579, 90, 90, 90	ice VI	-	1.45	A	47843
H-O	[H ₂ O] hp VII	[H ₂ O], cP20,224	<i>Pn-3m</i>	0.3368, 0.3368, 0.3368, 90, 90, 90	ice VII	-	1.57	A	15031
H-O	[H ₂ O] lt cub	[H ₂ O], cF40,227	<i>Fd-3m</i>	0.636, 0.636, 0.636, 90, 90, 90	ice I cubic	-	0.93	A	1222
H-O	[H ₂ O] lt hex	[H ₂ O], hP20,194	<i>P6₃/mmc</i>	0.44975, 0.44975, 0.73224, 90, 90, 120	ice I hexagonal	-	0.93	X	44116
H-O	[H ₂ O ₂] lt	[H ₂ O ₂], tP16,92	<i>P4₁2₁2</i>	0.40162, 0.40162, 0.78545, 90, 90, 90	-	-	1.78	X	13115
H-O	[H ₂ O ₂][H ₂ O] ₂ lt	[H ₂ O ₂][H ₂ O] ₂ , mS40,15	<i>C12/c1</i>	0.9030, 0.9479, 0.4510, 90, 117.23, 90	-	-	1.36	X	1169
H-Pa	PaH _{1.67} ht	*, cF*, 227	<i>Fd-3m</i>	0.9219, 0.9219, 0.9219, 90, 90, 90	-	-	-	N	16921
H-Pa	PaH ₃ ht	UH ₃ , cP32,223	<i>Pm-3n</i>	0.6642, 0.6642, 0.6642, 90, 90, 90	-	-	10.61	A	16921
H-Pd	PdH _{0.01}	Cu, cF4,225	<i>Fm-3m</i>	0.409, 0.409, 0.409, 90, 90, 90	close-packed structure	-	10.33	F	16275
H-Pd	PdH _{0.64} rt	NaCl, cF8,225	<i>Fm-3m</i>	0.403, 0.403, 0.403, 90, 90, 90	rocksalt family	-	10.86	X	11387
H-Pd	Pd _{0.75} H tf cub	Pd _{0.75} H, cP14,221	<i>Pm-3m</i>	0.2995, 0.2995, 0.2995, 90, 90, 90	-	-	9.99	X	13565
H-Pd	Pd _{0.75} H tf tet	Pd _{0.75} H, tP4,115	<i>P-4m2</i>	0.2896, 0.2896, 0.3330, 90, 90, 90	-	-	9.61	X	13561
H-Pd	Pd ₂ H	Cu ₂ O, cP6,224	<i>Pn-3m</i>	0.4036, 0.4036, 0.4036, 90, 90, 90	-	-	10.80	X	5
H-Pr	PrH ₂	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.5517, 0.5517, 0.5517, 90, 90, 90	fluorite family	-	5.65	X	12760
H-Pr	PrH ₃	BiF ₃ , cF16,225	<i>Fm-3m</i>	0.5468, 0.5468, 0.5468, 90, 90, 90	fluorite family	-	5.85	X	54246
H-Pr	Pr ₂ H _{4.72}	Nd ₂ H _{4.72} , tI28,109	<i>I4₁md</i>	0.5472, 0.5472, 1.102, 90, 90, 90	-	-	5.77	A	16012
H-Pu	PuH _{1.93} rt	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.53593, 0.53593, 0.53593, 90, 90, 90	fluorite family	-	10.61	X	18212
H-Pu	PuH _{2.13}	BiF ₃ , cF16,225	<i>Fm-3m</i>	0.5356, 0.5356, 0.5356, 90, 90, 90	fluorite family	-	10.64	X	20042
H-Pu	PuH ₃ rt	Na ₃ As, hP8,194	<i>P6₃/mmc</i>	0.378, 0.378, 0.676, 90, 90, 120	-	-	9.81	A	749

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
H-Rb	RbH rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.6037, 0.6037, 0.6037, 90, 90, 90	rocksalt family	-	2.61	X	36
H-Re	ReH _{0.09} lt	NiAs ₂ , hP4, 194	<i>P6₃/mmc</i>	0.27688, 0.27688, 0.44559, 90, 90, 120	AlB ₂ family	-	20.91	X	39848
H-Re	Re ₂ H _{0.72}	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.2793, 0.2793, 0.44149, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	20.78	X	44720
H-Rh	RhH _{0.95} lt	NaCl, cF8, 225	<i>Fm-3m</i>	0.401, 0.401, 0.401, 90, 90, 90	rocksalt family	-	10.70	X	21651
H-S	[H ₂ S] hp2	[H ₂ S], cP28, 198	<i>P2₁3</i>	0.4931, 0.4931, 0.4931, 90, 90, 90	-	-	1.89	X	35235
H-S	[H ₂ S] hp3	[H ₂ S], tI48, 142	<i>I4₁/acd</i>	0.685, 0.685, 0.9203, 90, 90, 90	-	yellow	2.10	X	35235
H-S	[H ₂ S] hp4	[H ₂ S], oP8, 54	<i>Pcca</i>	1.0189, 0.404, 0.7809, 90, 90, 90	-	-	1.41	X	44651
H-S	[H ₂ S] hp5	[H ₂ S], oI16, 73	<i>Ibca</i>	0.7389, 0.7574, 0.9829, 90, 90, 90	-	-	1.65	X	44651
H-S	[H ₂ S] lt1	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5797, 0.5797, 0.5797, 90, 90, 90	fluorite family	-	1.16	X	203
H-S	[H ₂ S] lt2	[H ₂ S], cP52, 205	<i>Pa-3</i>	0.5765, 0.5765, 0.5765, 90, 90, 90	-	-	1.18	A	4705
H-S	[H ₂ S] lt3	[H ₂ S], tP4, 77	<i>P4₂</i>	0.675, 0.675, 0.4131, 90, 90, 90	-	-	1.20	X	1663
H-Sc	ScH _{0.39} lt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.334, 0.334, 0.529, 90, 90, 120	close-packed structure	-	2.95	F	2721
H-Sc	ScH ₂ hp	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.47796, 0.47796, 0.47796, 90, 90, 90	fluorite family	-	2.86	X	47980
H-Sc	ScH _{2.9} hp	ScH _{2.9} , hP10, 194	<i>P6₃/mmc</i>	0.3373, 0.3373, 0.6121, 90, 90, 120	-	-	2.64	X	48256
H-Se	[H ₂ Se]	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.6024, 0.6024, 0.6024, 90, 90, 90	fluorite family	-	2.46	X	203
H-Si	SiH	SiH ₃ , hP4, 164	<i>P-3m1</i>	0.383, 0.383, 0.54, 90, 90, 120	-	-	1.41	X	27925
H-Si	SiH ₂	SiH ₂ , mP30, 11	<i>P12₁/m1</i>	0.48205, 1.2988, 0.68199, 90, 98.257, 90	-	-	1.18	X	61095
H-Si	SiH ₄ hp	SnBr ₄ , mP20, 14	<i>P12₁/c1</i>	0.5699, 0.3814, 0.5643, 90, 104.38, 90	-	-	1.80	X	50305
H-Sm	SmH ₂	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.53773, 0.53773, 0.53773, 90, 90, 90	fluorite family	-	6.51	X	22785
H-Sm	SmH ₃ hp	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.537, 0.537, 0.537, 90, 90, 90	fluorite family	-	6.58	X	49641
H-Sm	SmH ₃	HoH ₃ , hP24, 165	<i>P-3c1</i>	0.6567, 0.6567, 0.6801, 90, 90, 120	-	-	6.02	A	49084
H-Sm	Sm ₃ H ₇	*, tI*, 87	<i>I4/m</i>	0.3778, 0.3778, 0.53647, 90, 90, 90	-	-	-	N	14255
H-Sr	SrH ₂ hp	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.39583, 0.39583, 0.52527, 90, 90, 120	AlB ₂ family	-	4.18	X	54270
H-Sr	SrH ₂ rt	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.61, 0.37664, 0.7141, 90, 90, 90	-	white	3.63	X	54270
H-Ta	TaH _{0.1} lt	W, cI2, 229	<i>Im-3m</i>	0.3322, 0.3322, 0.3322, 90, 90, 90	b.c.c. family	-	16.40	F	9905
H-Ta	TaH _{0.84} ht2	TaH _{0.5} , oS8, 21	<i>C222</i>	0.346, 0.483, 0.479, 90, 90, 90	-	-	15.08	A	16926
H-Ta	TaH _{0.84} lt	*, tI*, *	-	0.345, 0.345, 0.34, 90, 90, 90	-	-	-	N	16926
H-Ta	Ta ₂ H rt	Ta ₂ H, oS6, 21	<i>C222</i>	0.3398, 0.4738, 0.4763, 90, 90, 90	-	-	15.72	X	11417
H-Tb	TbH _{0.2} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3612, 0.3612, 0.57, 90, 90, 120	close-packed structure	-	8.21	F	14102
H-Tb	TbH ₂	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.52425, 0.52425, 0.52425, 90, 90, 90	fluorite family	-	7.42	X	28320
H-Tb	TbH ₃ hp	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.5135, 0.5135, 0.5135, 90, 90, 90	fluorite family	-	7.94	X	63761
H-Tb	TbH ₃ rt	HoH ₃ , hP24, 165	<i>P-3c1</i>	0.6409, 0.6409, 0.6658, 90, 90, 120	-	-	6.81	A	2211
H-Tc	Tc ₂ H _{0.9}	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.2801, 0.2801, 0.4454, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	10.80	X	17355
H-Th	ThH ₂	ThH ₂ , tI6, 139	<i>I4/mmm</i>	0.41, 0.41, 0.503, 90, 90, 90	fluorite family	-	9.19	X	399
H-Th	Th ₄ H ₁₅	Cu ₁₅ Si ₄ , cI76, 220	<i>I-43d</i>	0.911, 0.911, 0.911, 90, 90, 90	-	-	8.29	X	468
H-Ti	TiH m	PtS, tP4, 131	<i>P4₂/mmc</i>	0.297, 0.297, 0.459, 90, 90, 90	-	-	4.01	X	16704
H-Ti	TiH _{0.13} hp	Ti, hP3, 191	<i>P6₃/mmc</i>	0.4625, 0.4625, 0.2828, 90, 90, 120	-	-	4.57	F	20015
H-Ti	TiH _{0.17} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.29472, 0.29472, 0.46758, 90, 90, 120	close-packed structure	-	4.54	F	29416
H-Ti	TiH _{0.23}	W, cI2, 229	<i>Im-3m</i>	0.3343, 0.3343, 0.3343, 90, 90, 90	b.c.c. family	-	4.28	F	39746
H-Ti	TiH _{0.71} hp	*, tI4, *	-	0.321, 0.321, 0.357, 90, 90, 90	-	-	-	N	20015
H-Ti	TiH _{0.85} hp	NbH _{0.95} , oP8, 48	<i>Pnnn</i>	0.409, 0.434, 0.445, 90, 90, 90	-	-	4.10	X	20015
H-Ti	TiH ₂ lt	ThH ₂ , tI6, 139	<i>I4/mmm</i>	0.2998, 0.2998, 0.3415, 90, 90, 90	fluorite family	-	5.40	X	55577
H-Ti	TiH ₂ rt	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.44512, 0.44512, 0.44512, 90, 90, 90	fluorite family	gray	3.76	X	55577
H-Tm	TmH _{0.3}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3589, 0.3589, 0.5685, 90, 90, 120	close-packed structure	-	8.86	F	12336
H-Tm	TmH ₂	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.50915, 0.50915, 0.50915, 90, 90, 90	fluorite family	green dark	8.60	X	10571
H-Tm	TmH ₃	HoH ₃ , hP24, 165	<i>P-3c1</i>	0.6234, 0.6234, 0.6489, 90, 90, 120	-	-	7.85	A	2211
H-U	UH ₃ ht	UH ₃ , cP2, 223	<i>Pm-3n</i>	0.6643, 0.6643, 0.6643, 90, 90, 90	-	-	10.92	X	18380
H-U	UH ₃ rt	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.416, 0.416, 0.416, 90, 90, 90	Frank-Kasper phase	-	11.12	X	599
H-V	VH _{0.9} rt	*, tI*, *	-	0.446, 0.446, 0.3666, 90, 90, 90	-	-	-	N	33275
H-V	VH ₂ ht	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.4271, 0.4271, 0.4271, 90, 90, 90	fluorite family	-	4.52	X	18923
H-V	V ₂ H rt	V ₂ H, mS6, 12	<i>C12/m1</i>	0.44566, 0.30022, 0.4476, 90, 95.609, 90	-	-	5.73	X	19797
H-V	V ₂ H _{1.10} rt	V ₂ H _{1.1} , tI56, 141	<i>I4₁/amd</i>	0.6035, 0.6035, 0.6872, 90, 90, 90	-	-	5.47	X	18567
H-W	WH hp	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.288, 0.288, 0.46, 90, 90, 120	AlB ₂ family	-	18.58	X	59508
H-Y	YH _{1.98}	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5205, 0.5205, 0.5205, 90, 90, 90	fluorite family	-	4.28	X	13448
H-Y	YH ₃ hp1	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.528, 0.528, 0.528, 90, 90, 90	fluorite family	-	4.15	X	49641
H-Y	YH ₃ hp2	*, hR27, 166	<i>R-3m</i>	0.35146, 0.35146, 8.1455, 90, 90, 120	-	-	4.73	P	50298
H-Y	YH ₃ rt	HoH ₃ , hP24, 165	<i>P-3c1</i>	0.63587, 0.63587, 0.66068, 90, 90, 120	-	-	3.96	X	47697
H-Y	YH _x rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3652, 0.3652, 0.5777, 90, 90, 120	close-packed structure	-	4.43	F	9773
H-Yb	YbH ₂ hp	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3596, 0.3596, 0.4802, 90, 90, 120	close-packed structure	-	10.81	F	17207
H-Yb	YbH ₂ ht	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5192, 0.5192, 0.5192, 90, 90, 90	fluorite family	-	8.31	X	3998
H-Yb	YbH ₂ m	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5253, 0.5253, 0.5253, 90, 90, 90	fluorite family	-	8.02	X	3998
H-Yb	YbH ₂ rt	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.59, 0.3576, 0.6776, 90, 90, 90	-	purple	8.13	X	15640
H-Yb	YbH _{2.6}	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.518, 0.518, 0.518, 90, 90, 90	fluorite family	black	8.39	X	18982
H-Yb	Yb ₃ H ₈	Yb ₃ H ₈ , hP33, 162	<i>P-31m</i>	0.6344, 0.6344, 0.9002, 90, 90, 120	-	black	8.37	A	41568
H-Zr	ZrH tet	PtS, tP4, 131	<i>P4₂/mmc</i>	0.32995, 0.32995, 0.48386, 90, 90, 90	-	-	5.81	X	57381
H-Zr	ZrH _{1.651}	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.4777, 0.4777, 0.4777, 90, 90, 90	fluorite family	-	5.66	X	18230
H-Zr	ZrH ₂ rt	ThH ₂ , tI6, 139	<i>I4/mmm</i>	0.35179, 0.35179, 0.4447, 90, 90, 90	fluorite family	-	5.63	X	27305
He-N	He[N ₂] ₁₁ hp	He[N ₂] ₁₁ , hP54, 176	<i>P6₃/m</i>	0.7936, 0.7936, 0.936, 90, 90, 120	-	-	2.03	X	58029
He-Ne	NeHe ₂ hp	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.377, 0.377, 0.6155, 90, 90, 120	Friauf-Laves phase	-	2.47	X	55616
Hf-Hg	HgHf ₂	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.3345, 0.3345, 1.1496, 90, 90, 90	close-packed structure	-	14.40	A	3573
Hf-I	HfI ₄ mon	HfI ₄ , mS40, 15	<i>C12/c1</i>	1.1787, 1.1801, 1.2905, 90, 116.30, 90	-	orange red	5.66	X	13201
Hf-I	HfI ₄ tricl	ZrI ₄ , aP20, 2	<i>P-1</i>	0.8337, 0.8337, 1.2915, 108.25, 108.25, 90.09	-	-	5.66	X	19324
Hf-I	HfI _{0.86} I ₃	HfI _{0.86} I ₃ , hR72, 166	<i>R-3m</i>	1.2503, 1.2503, 1.9996, 90, 90, 120	-	-	5.90	X	56958
Hf-In	HfI _{0.67} In _{1.33}	CuAu, tP2, 123	<i>P4/mmm</i>	0.308, 0.308, 0.451, 90, 90, 90	close-packed structure	-	10.57	X	2786
Hf-In	Hf ₂ In ₅	Hg ₅ Mn ₂ , tP14, 127	<i>P4/mbm</i>	1.02471, 1.02471, 0.30566, 90, 90, 90	-	-	9.63	X	31526
Hf-In	Hf ₂ In ₄	Ti ₃ In ₄ , tP14, 127	<i>P4/mbm</i>	1.023, 1.023, 0.3053, 90, 90, 90	-	-	10.34	A	2786
Hf-Ir	HfIr ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.39054, 0.39054, 0.39054, 90, 90, 90	close-packed structure	-	21.05	X	55791
Hf-Ir	HfI _{0.01} Ir _{0.99}	Cu, cF4, 225	<i>Fm-3m</i>	0.3844, 0.3844, 0.3844, 90, 90, 90	close-packed structure	-	22.46	X	63383

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Hf-Ir	Hf _{0.94} Ir _{1.06} rt orth	* _o *** *	-	0.305,0.468,0.475,90,90,90	-	-	-	N	2263
Hf-Ir	Hf ₂ Ir	Ti ₂ Ni,cF96,227	<i>Fd-3m</i>	1.232,1.232,1.232,90,90,90	-	-	15.61	A	4599
Hf-Ir	Hf ₃ Ir ₃	Zr ₃ Ir ₃ ,hP48,178	<i>P6₃/22</i>	0.7863,0.7863,1.689,90,90,120	-	-	16.19	A	18593
Hf-Mn	HfMn ₂ hex1	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.4956,0.4956,0.8122,90,90,120	Friauf-Laves phase	-	11.09	X	1483
Hf-Mn	HfMn ₂ hex2	MgNi ₂ ,hP24,194	<i>P6₃/mmc</i>	0.5016,0.5016,1.6367,90,90,120	Friauf-Laves phase	-	10.74	A	978
Hf-Mn	Hf ₂ Mn cub	Ti ₂ Ni,cF96,227	<i>Fd-3m</i>	1.1886,1.1886,1.1886,90,90,90	-	-	13.04	A	12281
Hf-Mo	HfMo ₂ rt	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.75696,0.75696,0.75696,90,90,90	Friauf-Laves phase	-	11.34	X	51060
Hf-Mo	Hf _{0.2} Mo _{0.8}	W,cI2,229	<i>Im-3m</i>	0.31992,0.31992,0.31992,90,90,90	b.c.c. family	-	11.41	X	1395
Hf-Mo	Hf _{0.33} Mo _{0.67} m	W,cI2,229	<i>Im-3m</i>	0.3226,0.3226,0.3226,90,90,90	b.c.c. family	-	12.19	X	15993
Hf-Mo	Hf _{0.7} Mo _{0.3} ht	W,cI2,229	<i>Im-3m</i>	0.34167,0.34167,0.34167,90,90,90	b.c.c. family	-	12.80	X	51060
Hf-Mo	Hf _{1.1} Mo _{0.9} ht2	MgNi ₂ ,hP24,194	<i>P6₃/mmc</i>	0.5354,0.5354,1.735,90,90,120	Friauf-Laves phase	-	11.68	A	7500
Hf-N	HfN _{0.41} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.3222,0.3222,0.5157,90,90,120	close-packed structure	-	13.20	F	1433
Hf-N	HfN _{0.67} rt	TiS,hR18,166	<i>R-3m</i>	0.3206,0.3206,2.326,90,90,120	-	-	13.56	X	5375
Hf-N	HfN _{0.75} ht	Sc _{0.67} Te,hR24,166	<i>R-3m</i>	0.3214,0.3214,3.112,90,90,120	-	-	13.53	X	5375
Hf-N	HfN _{0.75}	NaCl,cF8,225	<i>Fm-3m</i>	0.4525,0.4525,0.4525,90,90,90	rocksalt family	-	13.55	X	22971
Hf-N	HfN _{1.33} orth	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.5588,0.3317,0.6475,90,90,90	-	orange	10.91	X	61481
Hf-N	HfN _{1.33} tet	ThH ₂ ,tI6,139	<i>I4/mmm</i>	0.3547,0.3547,0.5064,90,90,90	fluorite family	orange	10.28	X	61481
Hf-N	Hf ₃ N ₄	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.6701,0.6701,0.6701,90,90,90	-	-	13.06	X	42881
Hf-Nb	Hf _{0.17} Nb _{0.83} m	Cu,cF4,225	<i>Fm-3m</i>	0.419,0.419,0.419,90,90,90	close-packed structure	-	9.70	X	30391
Hf-Nb	Hf _{0.22} Nb _{0.78}	W,cI2,229	<i>Im-3m</i>	0.33466,0.33466,0.33466,90,90,90	b.c.c. family	-	9.90	X	3501
Hf-Nb	Hf _{0.9} Nb _{0.1} m	Cu,cF4,225	<i>Fm-3m</i>	0.457,0.457,0.457,90,90,90	close-packed structure	-	11.83	X	30391
Hf-Ni	HfNi ht	CsCl,cP2,221	<i>Pm-3m</i>	0.313,0.313,0.313,90,90,90	b.c.c. family	-	12.84	X	39827
Hf-Ni	HfNi rt	TiI ₂ ,oS8,63	<i>Cmcm</i>	0.321,0.999,0.41,90,90,90	CrB(III)-FeB	-	11.98	A	39827
Hf-Ni	HfNi ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.6906,0.6906,0.6906,90,90,90	Friauf-Laves phase	-	11.93	X	6830
Hf-Ni	HfNi ₃ ht	BaPb ₃ ,hR36,166	<i>R-3m</i>	0.52787,0.52787,1.92324,90,90,120	close-packed structure	-	11.42	X	11128
Hf-Ni	HfNi ₃ rt	Ta(Rh _{0.33} Pd _{0.67}) ₃ ,hP40,194	<i>P6₃/mmc</i>	0.52822,0.52822,2.13916,90,90,120	close-packed structure	-	11.39	X	11128
Hf-Ni	HfNi ₅	Be ₃ Au,cF24,216	<i>F-43m</i>	0.669,0.669,0.669,90,90,90	Friauf-Laves phase	-	10.47	A	38516
Hf-Ni	Hf _{0.01} Ni _{0.99}	Cu,cF4,225	<i>Fm-3m</i>	0.3536,0.3536,0.3536,90,90,90	close-packed structure	-	9.00	X	17661
Hf-Ni	Hf _{0.97} Ni _{0.03} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.319,0.319,0.5,90,90,120	close-packed structure	-	13.18	X	39827
Hf-Ni	Hf ₂ Ni ht	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.6405,0.6405,0.5252,90,90,90	-	-	12.82	X	6603
Hf-Ni	Hf ₂ Ni m cub	Ti ₂ Ni,cF96,227	<i>Fd-3m</i>	1.21,1.21,1.21,90,90,90	-	-	12.47	A	45097
Hf-Ni	Hf ₂ Ni m tet	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.647,0.647,0.548,90,90,90	-	-	12.04	A	45097
Hf-Ni	Hf ₂ Ni ₇	Zr ₂ Ni ₇ ,hS36,12	<i>C12/m1</i>	0.4657,0.8191,1.2102,90,95.509,90	-	-	11.10	A	7683
Hf-Ni	Hf ₃ Ni ₅ ht	Hf ₃ Ni ₅ ,aP20,2	<i>P-1</i>	0.65138,0.65890,0.76271,104.87,104.60,112.71	-	-	11.72	X	11130
Hf-Ni	Hf ₇ Ni ₁₀	Zr ₇ Ni ₁₀ ,oS68,64	<i>Cmce</i>	1.2248,0.909,0.9116,90,90,90	-	-	12.02	A	45870
Hf-Ni	Hf ₆ Ni ₂₁ ht	Hf ₆ Ni ₂₁ ,aP29,2	<i>P-1</i>	0.64275,0.80007,0.85540,75.18,68.14,75.61	-	-	11.36	X	11129
Hf-Ni	Hf ₉ Ni ₁₁	Zr ₉ Pt ₁₁ ,tI40,87	<i>I4/m</i>	0.979,0.979,0.653,90,90,90	-	-	11.95	A	1363
Hf-O	HfO _{0.25} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.3213,0.3213,0.51,90,90,120	close-packed structure	-	13.29	F	1873
Hf-O	HfO ₂ hp1	ZrO ₂ ,oP24,61	<i>Pbca</i>	0.50598,1.00172,0.52276,90,90,90	-	-	10.55	X	25087
Hf-O	HfO ₂ hp2	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.55544,0.3307,0.64572,90,90,90	-	-	11.79	X	33216
Hf-O	HfO ₂ hp3	* _t *12,*	-	0.498,0.498,0.426,90,90,90	-	-	13.23	N	27935
Hf-O	HfO ₂ ht	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.51165,0.51165,0.51165,90,90,90	fluorite family	-	10.44	X	28684
Hf-O	HfO ₂ ht1	ZrO ₂ ,oP16,57	<i>Pbcm</i>	0.50073,0.52276,0.5058,90,90,90	-	-	10.56	X	20600
Hf-O	HfO ₂ ht2	ZrO ₂ ,tP6,137	<i>P4₂/nmc</i>	0.3635,0.3635,0.52809,90,90,90	fluorite family	-	10.02	A	63674
Hf-O	HfO ₂ rt	ZrO ₂ -b,mP12,14	<i>P12₁/c1</i>	0.51187,0.51693,0.5297,90,99.18,90	-	-	10.10	X	24847
Hf-O	Hf ₃ O _{0.5} rt	Ti ₃ O,hP16,163	<i>P-31c</i>	0.5559,0.5559,1.02,90,90,120	-	-	13.22	X	7491
Hf-O	Hf ₆ O rt Hf+	WCl ₆ ,hR21,148	<i>R-3</i>	0.5559,0.5559,1.53,90,90,120	-	-	13.22	X	7491
Hf-Os	HfOs	CsCl,cP2,221	<i>Pm-3m</i>	0.3239,0.3239,0.3239,90,90,90	b.c.c. family	-	18.02	X	1110
Hf-Os	HfOs ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5184,0.5184,0.8468,90,90,120	Friauf-Laves phase	-	18.84	X	1024
Hf-Os	Hf ₂ Os stab	Ti ₂ Ni,cF96,227	<i>Fd-3m</i>	1.2278,1.2278,1.2278,90,90,90	-	-	15.71	A	16013
Hf-Os	Hf ₅₄ Os ₁₇	Hf ₅₄ Os ₁₇ ,oI142,71	<i>Immm</i>	1.3856,1.4104,1.457,90,90,90	-	-	15.01	X	17634
Hf-P	HfP	TiP,hP8,194	<i>P6₃/mmc</i>	0.365,0.365,1.237,90,90,120	-	-	9.75	X	1668
Hf-P	HfP ₂	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.6467,0.3497,0.8646,90,90,90	-	-	8.17	A	2259
Hf-P	Hf ₂ P	Ta ₂ P,oP36,58	<i>Pnnm</i>	1.2258,1.5031,0.35738,90,90,90	-	-	11.74	X	3778
Hf-P	Hf ₃ P	Ti ₃ P,iP32,86	<i>P4₃/n</i>	1.06654,1.06654,0.52925,90,90,90	-	-	12.50	X	15700
Hf-P	Hf ₃ P ₂	Th ₂ S ₃ ,oP20,62	<i>Pnma</i>	1.0128,0.35707,0.9868,90,90,90	-	black	11.12	X	31384
Hf-P	Hf ₅ P ₄	Nb ₇ P ₄ ,mS44,12	<i>C12/m1</i>	1.5488,0.3526,1.4553,90,104.83,90	-	black	11.87	X	31340
Hf-Pd	HfPd ₂	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3399,0.3399,0.8658,90,90,90	b.c.c. family	-	12.99	A	28705
Hf-Pd	HfPd ₃ stab	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3961,0.3961,0.3961,90,90,90	close-packed structure	-	13.30	X	5852
Hf-Pd	HfPd ₃	TiNi ₃ ,hP16,194	<i>P6₃/mmc</i>	0.5593,0.5593,0.9197,90,90,120	close-packed structure	-	13.27	A	28705
Hf-Pd	Hf _{0.09} Pd _{0.91}	Cu,cF4,225	<i>Fm-3m</i>	0.39172,0.39172,0.39172,90,90,90	close-packed structure	-	12.48	X	43920
Hf-Pd	Hf ₂ Pd stab	Ti ₂ Ni,cF96,227	<i>Fd-3m</i>	1.23605,1.23605,1.23605,90,90,90	-	-	13.04	A	984
Hf-Pd	Hf ₂ Pd	CuZr ₂ ,tI6,139	<i>I4/mmm</i>	0.3251,0.3251,1.1061,90,90,90	close-packed structure	-	13.16	X	1717
Hf-Po	HfPo	NiAs,hP4,194	<i>P6₃/mmc</i>	0.4058,0.4058,0.6717,90,90,120	AlB ₂ family	-	13.43	X	11774
Hf-Pt	HfPt ht	CsCl,cP2,221	<i>Pm-3m</i>	0.33623,0.33623,0.33623,90,90,90	b.c.c. family	-	16.32	X	64136
Hf-Pt	HfPt rt	TiI ₂ ,oS8,63	<i>Cmcm</i>	0.33524,1.0255,0.4287,90,90,90	CrB(III)-FeB	-	16.84	A	64136
Hf-Pt	HfPt ₃ hex	TiNi ₃ ,hP16,194	<i>P6₃/mmc</i>	0.56353,0.56353,0.9216,90,90,120	close-packed structure	-	20.02	A	64136
Hf-Pt	Hf _{0.10} Pt _{0.90}	Cu,cF4,225	<i>Fm-3m</i>	0.39557,0.39557,0.39557,90,90,90	close-packed structure	-	20.76	X	64136
Hf-Pt	Hf _{0.82} Pt _{0.18} cub	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.39796,0.39796,0.39796,90,90,90	close-packed structure	-	20.20	X	64136
Hf-Pt	Hf _{0.93} Pt _{0.07} ht	W,cI2,229	<i>Im-3m</i>	0.3564,0.3564,0.3564,90,90,90	b.c.c. family	-	13.18	X	64136
Hf-Pt	Hf _{0.97} Pt _{0.03} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.31796,0.31796,0.50696,90,90,120	close-packed structure	-	13.39	X	64136
Hf-Pt	Hf _{1.2} Pt _{1.8} rt	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.343,0.343,0.873,90,90,90	b.c.c. family	-	18.28	A	2263
Hf-Pt	Hf ₂ Pt stab	Ti ₂ Ni,cF96,227	<i>Fd-3m</i>	1.2467,1.2467,1.2467,90,90,90	-	-	15.14	A	64136
Hf-Pt	Hf ₂ Pt ₃ ht	Ti ₂ Pd ₃ ,oS20,63	<i>Cmcm</i>	1.4653,0.48741,0.48671,90,90,90	-	-	18.01	X	61910
Hf-Pt	Hf ₃ Pt ₄ ht	Pu ₃ Pd ₄ ,hR42,148	<i>R-3</i>	1.2455,1.2455,0.5541,90,90,120	b.c.c. family	-	17.61	X	64136
Hf-Pu	Pu _{0.96} Hf _{0.10} rt	* _o *** *	-	1.0415,1.0428,1.1245,90,90,90	-	-	-	N	3637
Hf-Pu	Pu _{0.91} Hf _{0.09} m	Mg,hP2,194	<i>P6₃/mmc</i>	0.3205,0.3205,0.51,90,90,120	close-packed structure	-	17.43	X	3221
Hf-Pu	Pu _{0.92} Hf _{0.08} ht5	W,cI2,229	<i>Im-3m</i>	0.36358,0.36358,0.36358,90,90,90	b.c.c. family	-	16.50	X	2215

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Hf-Pu	Pu _{0.94} Hf _{0.06} ht3	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.46346, 0.46346, 0.46346, 90, 90, 90	close-packed structure	-	16.02	X	4043
Hf-Re	HfRe ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5239, 0.5239, 0.8584, 90, 90, 120	Friauf-Laves phase	-	17.93	X	1024
Hf-Re	Hf _{0.01} Re _{0.99}	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.27557, 0.27557, 0.4446, 90, 90, 120	close-packed structure	-	21.14	X	4725
Hf-Re	Hf _{0.88} Re _{0.12} ht	W ₂ cI2, 229	<i>Im-3m</i>	0.35, 0.35, 0.35, 90, 90, 90	b.c.c. family	-	13.90	X	1469
Hf-Re	Hf _{0.99} Re _{0.01} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.32, 0.32, 0.508, 90, 90, 120	close-packed structure	-	13.16	X	1469
Hf-Re	Hf ₂₁ Re ₂₅	Zr ₂₁ Re ₂₅ , hR276, 167	<i>R-3c</i>	2.5773, 2.5773, 0.876, 90, 90, 120	-	-	16.62	A	18630
Hf-Re	Hf ₂ Re ₂₄	Ti ₃ Re ₂₄ , cI58, 217	<i>I-43m</i>	0.9708, 0.9708, 0.9708, 90, 90, 90	-	-	19.46	A	1693
Hf-Rh	HfRh Rh+	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.3227, 0.3227, 0.3227, 90, 90, 90	b.c.c. family	-	13.91	X	2367
Hf-Rh	HfRh ₃	Cu ₃ Au ₂ cP4, 221	<i>Pm-3m</i>	0.3912, 0.3912, 0.3912, 90, 90, 90	close-packed structure	-	13.51	X	2367
Hf-Rh	Hf _{0.84} Rh _{1.16} ht	*, oS*, *	-	0.37, 0.431, 0.439, 90, 90, 90	-	-	-	N	2263
Hf-Rh	Hf _{0.96} Rh _{1.04} rt	CuTi ₂ tP2, 123	<i>P4/mmm</i>	0.3275, 0.3275, 0.3157, 90, 90, 90	b.c.c. family	-	13.65	X	25247
Hf-Rh	Hf ₂ Rh	Ti ₂ Ni ₂ cF96, 227	<i>Fd-3m</i>	1.2271, 1.2271, 1.2271, 90, 90, 90	-	-	13.23	A	12281
Hf-Rh	Hf ₃ Rh ₅	Rh ₃ Ge ₃ , oP16, 55	<i>Pbam</i>	0.558, 1.073, 0.425, 90, 90, 90	-	-	13.70	X	4763
Hf-Ru	HfRu	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.3225, 0.3225, 0.3225, 90, 90, 90	b.c.c. family	-	13.84	X	28773
Hf-S	HfS	WC, hP2, 187	<i>P-6m2</i>	0.3378, 0.3378, 0.3434, 90, 90, 120	AlB ₂ family	-	10.30	X	22887
Hf-S	HfS ₂	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.3622, 0.3622, 0.5848, 90, 90, 120	CdI ₂ -PbI ₂ polytype	brown purple	6.06	A	10637
Hf-S	HfS ₃	ZrSe ₃ , mP8, 11	<i>P12₁/m1</i>	0.50923, 0.35952, 0.8967, 90, 97.38, 90	-	orange	5.60	X	8558
Hf-S	Hf _{0.67} S	NiAs ₂ , hP4, 194	<i>P6₃/mmc</i>	0.3635, 0.3635, 0.5839, 90, 90, 120	AlB ₂ family	brown yellow	7.54	X	927
Hf-S	Hf _{0.7} S rt	Zr _{0.65} S ₂ cF64, 227	<i>Fd-3m</i>	1.018, 1.018, 1.018, 90, 90, 90	rocksalt family	black	7.91	X	5465
Hf-S	Hf ₂ S	NbS ₂ , hP6, 194	<i>P6₃/mmc</i>	0.33736, 0.33736, 1.17882, 90, 90, 120	-	-	11.12	X	3216
Hf-Sb	HfSb cub	FeSi ₂ cP8, 198	<i>P2₁3</i>	0.559, 0.559, 0.559, 90, 90, 90	-	-	11.42	A	2792
Hf-Sb	HfSb orth	ZrSb ₂ , oS24, 63	<i>Cmcm</i>	0.3779, 1.0338, 1.3842, 90, 90, 90	-	-	11.06	X	40010
Hf-Sb	HfSb ₂ ht	UAs ₂ tP6, 129	<i>P4/nmm</i>	0.392, 0.392, 0.868, 90, 90, 90	-	-	10.51	A	2792
Hf-Sb	HfSb ₂ rt	TiAs ₂ , oP24, 58	<i>Pnnm</i>	0.98781, 1.4989, 0.38506, 90, 90, 90	-	-	9.83	X	6362
Hf-Sb	Hf ₂ Sb	Ni ₃ P ₂ tI32, 82	<i>I-4</i>	1.11899, 1.11899, 0.56364, 90, 90, 90	-	-	12.37	X	14239
Hf-Sb	Hf ₂ Sb ₃	Y ₃ Bi ₃ , oP32, 62	<i>Pnma</i>	0.74075, 0.8718, 1.0736, 90, 90, 90	-	-	12.05	X	36183
Hf-Sb	Hf ₂ Sb ₉	Hf ₂ Sb ₉ , tP28, 85	<i>P4/n</i>	0.87483, 0.87483, 0.86646, 90, 90, 90	-	black	9.96	X	43363
Hf-Sc	Sc _{0.3} Hf _{0.5} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.3231, 0.3231, 0.5087, 90, 90, 120	close-packed structure	-	8.07	X	25229
Hf-Se	HfSe ₂	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.3746, 0.3746, 0.6155, 90, 90, 120	CdI ₂ -PbI ₂ polytype	brown	7.47	A	17094
Hf-Se	HfSe ₃	TiS ₃ , mP8, 11	<i>P12₁/m1</i>	0.5388, 0.37216, 0.9428, 90, 97.78, 90	-	black purple	7.36	X	8558
Hf-Se	Hf _{0.67} Se	Ti _{0.65} S ₂ , hP8, 186	<i>P6₃mc</i>	0.37165, 0.37165, 1.24304, 90, 90, 120	-	-	8.87	X	28810
Hf-Se	Hf _{0.92} Se	WC, hP2, 187	<i>P-6m2</i>	0.34958, 0.34958, 0.36069, 90, 90, 120	AlB ₂ family	-	10.58	X	28810
Hf-Se	Hf ₂ Se	NbS ₂ , hP6, 194	<i>P6₃/mmc</i>	0.344, 0.344, 1.232, 90, 90, 120	-	-	11.47	A	3583
Hf-Si	HfSi rt	FeB-b, oP8, 62	<i>Pnma</i>	0.6889, 0.3772, 0.5223, 90, 90, 90	CrB(TiI)-FeB	-	10.11	X	4723
Hf-Si	HfSi ₂	ZrSi ₂ , oS12, 63	<i>Cmcm</i>	0.3672, 1.457, 0.3641, 90, 90, 90	close-packed structure	gray dark	8.00	X	4723
Hf-Si	Hf ₂ Si	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.6553, 0.6553, 0.5186, 90, 90, 90	-	-	11.49	X	6603
Hf-Si	Hf ₂ Si ₂	U ₃ Si ₂ , tP10, 127	<i>P4/mbm</i>	0.6988, 0.6988, 0.3675, 90, 90, 90	-	-	10.95	X	4723
Hf-Si	Hf ₂ Si ₃ stab	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.7844, 0.7844, 0.5492, 90, 90, 120	-	-	11.08	X	4723
Hf-Si	Hf ₂ Si ₄	Zr ₃ Si ₄ , tP36, 92	<i>P4₂/2</i>	0.7039, 0.7039, 1.283, 90, 90, 90	-	-	10.50	X	4723
Hf-Sn	HfSn	FeSi ₂ cP8, 198	<i>P2₁3</i>	0.5594, 0.5594, 0.5594, 90, 90, 90	-	-	11.28	X	2043
Hf-Sn	HfSn ₂	CrSi ₂ , hP9, 180	<i>P6₂22</i>	0.54816, 0.54816, 0.76113, 90, 90, 120	-	-	10.46	A	56844
Hf-Sn	Hf ₂ Sn ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.83656, 0.83656, 0.57077, 90, 90, 120	-	-	11.99	X	59376
Hf-Sn	Hf ₂ Sn ₄	Ti ₃ Ga ₃ , hP18, 193	<i>P6₃/mcm</i>	0.8334, 0.8334, 0.5694, 90, 90, 120	AlB ₂ family	-	13.26	A	56847
Hf-Ta	Hf _{0.5} Ta _{0.5}	W ₂ cI2, 229	<i>Im-3m</i>	0.3419, 0.3419, 0.3419, 90, 90, 90	b.c.c. family	-	14.93	X	9093
Hf-Tc	HfTc	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.327, 0.327, 0.327, 90, 90, 90	b.c.c. family	-	13.13	X	1636
Hf-Tc	HfTc ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.52001, 0.52001, 0.86175, 90, 90, 120	Friauf-Laves phase	-	12.33	X	5219
Hf-Tc	Hf _{0.125} Tc _{0.875}	Mn ₂ cI58, 217	<i>I-43m</i>	0.9603, 0.9603, 0.9603, 90, 90, 90	-	-	11.75	A	1443
Hf-Te	HfTe ₂	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.3949, 0.3949, 0.6651, 90, 90, 120	CdI ₂ -PbI ₂ polytype	brown faint	8.02	X	26243
Hf-Te	HfTe ₃	ZrSe ₃ , mP8, 11	<i>P12₁/m1</i>	0.5879, 0.3902, 1.0056, 90, 97.98, 90	-	-	8.16	A	26365
Hf-Te	HfTe ₅	HfTe ₅ , oS24, 63	<i>Cmcm</i>	0.39743, 1.4492, 1.3730, 90, 90, 90	-	-	6.86	X	7071
Hf-Te	Hf _{0.62} Te	NiAs ₂ , hP4, 194	<i>P6₃/mmc</i>	0.3954, 0.3954, 0.6652, 90, 90, 120	AlB ₂ family	black	8.79	X	5615
Hf-Te	Hf ₂ Te ht	Nb ₂ Se ₂ , mS24, 12	<i>C12/m1</i>	1.5163, 0.37026, 1.0064, 90, 90, 5.90	-	-	11.39	X	33301
Hf-Te	Hf ₂ Te ₂	Hf ₂ Te ₂ , tI10, 139	<i>I4/mnm</i>	0.36837, 0.36837, 1.7901, 90, 90, 90	-	black	10.81	X	28446
Hf-Th	Th _{0.053} Hf _{0.947} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.3202, 0.3202, 0.5061, 90, 90, 120	close-packed structure	-	13.40	X	977
Hf-Th	Th _{0.95} Hf _{0.05} rt	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.507, 0.507, 0.507, 90, 90, 90	close-packed structure	-	11.69	X	977
Hf-Ti	Hf _{0.33} Ti _{0.67} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.3056, 0.3056, 0.4827, 90, 90, 120	close-packed structure	-	7.74	X	34658
Hf-U	UHf ₂ m	Hg ₂ U ₂ , hP3, 191	<i>P6/mmm</i>	0.497, 0.497, 0.304, 90, 90, 120	AlB ₂ family	-	15.19	X	1274
Hf-U	U _{0.01} Hf _{0.99} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.32116, 0.32116, 0.51, 90, 90, 120	close-packed structure	-	13.06	X	45720
Hf-V	HfV ₂ tI1	YMn ₂ , tI12, 141	<i>I4₁/amd</i>	0.52071, 0.52071, 0.74014, 90, 90, 90	-	-	9.28	X	37279
Hf-V	HfV ₂ tI2	UMn ₂ , oI12, 74	<i>Imma</i>	0.52124, 0.5191, 0.74175, 90, 90, 90	Friauf-Laves phase	-	9.28	X	37279
Hf-V	HfV ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.73752, 0.73752, 0.73752, 90, 90, 90	Friauf-Laves phase	-	9.28	X	37279
Hf-V	Hf _{0.013} V _{0.987}	W ₂ cI2, 229	<i>Im-3m</i>	0.3028, 0.3028, 0.3028, 90, 90, 90	b.c.c. family	-	6.29	X	18267
Hf-W	HfW ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7591, 0.7591, 0.7591, 90, 90, 90	Friauf-Laves phase	-	16.59	X	1483
Hf-W	Hf _{0.045} W _{0.955}	W ₂ cI2, 229	<i>Im-3m</i>	0.318, 0.318, 0.318, 90, 90, 90	b.c.c. family	-	18.96	X	4477
Hf-W	Hf _{0.33} W _{0.67} ht	W ₂ cI2, 229	<i>Im-3m</i>	0.3185, 0.3185, 0.3185, 90, 90, 90	b.c.c. family	-	18.72	X	15968
Hf-Zn	ZnHf ₂	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.325, 0.325, 1.116, 90, 90, 90	close-packed structure	-	11.90	A	2791
Hf-Zn	Zn ₂ Hf ht	MgNi ₂ , hP24, 194	<i>P6₃/mmc</i>	0.519, 0.519, 1.689, 90, 90, 120	Friauf-Laves phase	-	10.43	A	2791
Hf-Zn	Zn ₂ Hf rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.732, 0.732, 0.732, 90, 90, 90	Friauf-Laves phase	-	10.47	X	14623
Hf-Zn	Zn ₂₂ Hf	Zn ₂₂ Zr, cF184, 227	<i>Fd-3m</i>	1.407, 1.407, 1.407, 90, 90, 90	-	-	7.71	A	2791
Hf-Zn	Zn ₃ Hf rt	*, t***, *	-	0.812, 0.812, 1.612, 90, 90, 90	-	-	-	N	2791
Hf-Zn	Zn ₃ Hf	*, t***, *	-	1.17, 1.17, 1.16, 90, 90, 90	-	-	-	N	2791
Hf-Zr	Hf _{0.43} Zr _{0.57} hp	Ti ₂ hP3, 191	<i>P6/mmm</i>	0.4991, 0.4991, 0.3093, 90, 90, 120	-	-	9.61	X	14049
Hf-Zr	Hf _{0.43} Zr _{0.57} rt	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.3209, 0.3209, 0.5126, 90, 90, 120	close-packed structure	-	9.35	X	14049
Hg-Ho	HgHo	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.366, 0.366, 0.366, 90, 90, 90	b.c.c. family	gray silver	12.38	X	2600
Hg-Ho	Hg ₂ Ho	Cd ₂ Ce, hP3, 164	<i>P-3m1</i>	0.4798, 0.4798, 0.347, 90, 90, 120	AlB ₂ family	-	13.59	A	3993
Hg-Ho	Hg ₃ Ho	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6526, 0.6526, 0.4872, 90, 90, 120	close-packed structure	-	14.17	A	3057
Hg-I	HgI	HgCl ₂ , tI8, 139	<i>I4/mnm</i>	0.48974, 0.48974, 1.1649, 90, 90, 90	moschelite	black	7.79	X	58517
Hg-I	HgI ₂ hp hex	HgI ₂ , hP6, 191	<i>P6/mmm</i>	0.422, 0.422, 1.185, 90, 90, 120	-	-	8.26	X	6740

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Hg-I	HgI ₂ hp mon	* ₂ mP12,14	$P12_1/c1$	0.51057,0.54009,1.39574,90,106.64,90	-	-	-	N	44338
Hg-I	HgI ₂ ht1	HgI ₂ ,tP6,137	$P4_2/nmc$	0.437,0.437,1.2443,90,90,90	-	red	6.35	X	20588
Hg-I	HgI ₂ ht2	HgI ₂ ,mP12,4	$P12_11$	0.44081,1.39239,0.80206,90,95.062,90	-	-	6.16	X	42186
Hg-I	HgI ₂ m1	HgI ₂ ,tI48,141	$I4_1/amd$	0.87863,0.87863,2.4667,90,90,90	-	orange	6.34	X	40410
Hg-I	HgI ₂ m2	HgI ₂ ,tP24,137	$P4_2/nmc$	0.87863,0.87863,1.23335,90,90,90	-	orange	6.34	X	40410
Hg-I	HgI ₂ m3	ZnI ₂ ,tI96,142	$I4_1/acd$	1.2393,1.2393,2.4889,90,90,90	-	orange yellow	6.32	X	40411
Hg-I	HgI ₂ rt	HgBr ₂ ,oS12,36	$Cmc2_1$	0.4734,0.7408,1.3943,90,90,90	-	yellow	6.17	X	42186
Hg-In	HgIn lt	HgIn,hR6,166	$R-3m$	0.3571,0.3571,1.3157,90,90,120	-	-	10.81	X	6321
Hg-In	Hg _{0.06} In _{0.94}	In ₂ ,tI2,139	$I4/mmm$	0.32862,0.32862,0.48324,90,90,90	close-packed structure	-	7.63	X	625
Hg-In	Hg _{0.083} In _{0.917}	Cu ₂ cF4,225	$Fm-3m$	0.4675,0.4675,0.4675,90,90,90	close-packed structure	-	7.93	X	5414
Hg-In	Hg _{0.8} In _{0.2} lt	Pu ₂ oF8,70	$Fddd$	0.3522,0.4847,1.0872,90,90,90	-	-	13.13	X	12266
Hg-K	KHg	KHg,aP8,2	$P-1$	0.6601,0.6758,0.7052,105.9,101.4,92.8	b.c.c. family	golden	5.40	X	32692
Hg-K	KHg ₁₁	BaHg ₁₁ ,cP36,221	$Pm-3m$	0.963,0.963,0.963,90,90,90	-	gray silver	12.53	X	36879
Hg-K	KHg ₂ hp	Hg ₂ U,hP3,191	$P6/mmm$	0.5093,0.5093,0.2974,90,90,120	AlB ₂ family	purple	10.94	X	28276
Hg-K	KHg ₂ rt	KHg ₂ ,oI12,74	$Imma$	0.516,0.81,0.877,90,90,90	AlB ₂ family	purple	7.98	X	652
Hg-K	KHg ₆	BaHg ₆ ,oP28,62	$Pnma$	1.341,0.5269,1.0459,90,90,90	-	gray silver	11.17	X	65054
Hg-K	K ₂ Hg ₇	K ₂ Hg ₇ ,hP9,164	$P-3m1$	0.67175,0.67175,0.64133,90,90,120	-	gray silver	9.82	X	36899
Hg-K	K ₃ Hg ₁₁	La ₃ Al ₁₁ ,oI28,71	$Immm$	0.5122,1.0063,1.4782,90,90,90	-	-	10.13	X	37910
Hg-K	K ₃ Hg ₇	K ₃ Hg ₇ ,oP48,57	$Pbcm$	1.006,1.945,0.834,90,90,90	-	-	6.51	X	1150
Hg-K	K ₇ Hg ₃₁	Ba ₇ Cd ₃₁ ,hP41,191	$P6/mmm$	1.085,1.085,1.021,90,90,120	-	-	10.36	X	37910
Hg-La	HgLa	CsCl,cP2,221	$Pm-3m$	0.3864,0.3864,0.3864,90,90,90	b.c.c. family	-	9.77	X	9754
Hg-La	Hg ₂ La	Cd ₂ Ce,hP3,164	$P-3m1$	0.496,0.496,0.365,90,90,120	AlB ₂ family	-	11.53	X	3993
Hg-La	Hg ₃ La	Mg ₃ Cd,hP8,194	$P6_3/mmc$	0.6816,0.6816,0.4971,90,90,120	close-packed structure	-	12.30	A	9754
Hg-La	Hg ₄₅ La ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	$F-43m$	2.1977,2.1977,2.1977,90,90,90	Nasicon family	-	13.21	A	12280
Hg-La	Hg ₅₈ La ₁₃	Zn ₅₈ Gd ₁₃ ,hP142,194	$P6_3/mmc$	1.567,1.567,1.548,90,90,120	-	-	13.56	A	9754
Hg-La	Hg ₆ La	* ₂ oS* ₂ *	-	0.5004,0.9763,2.886,90,90,90	-	-	-	N	9754
Hg-Li	LiHg rt	CsCl,cP2,221	$Pm-3m$	0.3286,0.3286,0.3286,90,90,90	b.c.c. family	-	9.71	X	4209
Hg-Li	LiHg ₃	Mg ₃ Cd,hP8,194	$P6_3/mmc$	0.624,0.624,0.4794,90,90,120	close-packed structure	-	12.51	X	97
Hg-Li	Li ₃ Hg	BiF ₃ ,cF16,225	$Fm-3m$	0.6548,0.6548,0.6548,90,90,90	fluorite family	-	5.24	X	97
Hg-Lu	HgLu	CsCl,cP2,221	$Pm-3m$	0.3607,0.3607,0.3607,90,90,90	b.c.c. family	gray silver	13.29	X	2600
Hg-Lu	Hg ₃ Lu	Mg ₃ Cd,hP8,194	$P6_3/mmc$	0.6467,0.6467,0.4851,90,90,120	close-packed structure	-	14.68	A	3057
Hg-Mg	MgHg	CsCl,cP2,221	$Pm-3m$	0.3448,0.3448,0.3448,90,90,90	b.c.c. family	yellowish	9.11	X	17205
Hg-Mg	MgHg ₂	MoSi ₂ ,tI6,139	$I4/mmm$	0.383,0.383,0.8781,90,90,90	b.c.c. family	-	10.97	X	198
Hg-Mg	Mg _{0.9883} Hg _{0.0117}	Mg,hP2,194	$P6_3/mmc$	0.32042,0.32042,0.52023,90,90,120	close-packed structure	-	1.90	X	338
Hg-Mg	Mg ₂ Hg	Co ₂ Si-b,oP12,62	$Pnma$	0.622,0.4618,0.88,90,90,90	-	-	6.55	A	17205
Hg-Mg	Mg ₃ Hg	Mg ₃ Hg,hR72,155	$R32$	0.8351,0.8351,2.5845,90,90,120	-	-	5.24	X	17205
Hg-Mg	Mg ₅ Hg ₃	Mn ₅ Si ₃ ,hP16,193	$P6_3/mcm$	0.8243,0.8243,0.5919,90,90,120	-	-	6.90	X	262
Hg-Mn	HgMn lt	CuTi,tP2,123	$P4/mmm$	0.3288,0.3288,0.3313,90,90,90	b.c.c. family	-	11.85	X	19168
Hg-Mn	HgMn rt	CsCl,cP2,221	$Pm-3m$	0.3316,0.3316,0.3316,90,90,90	b.c.c. family	gray	11.64	X	3275
Hg-Mn	Hg ₅ Mn ₂	Hg ₅ Mn ₂ ,tP14,127	$P4/mbm$	0.97577,0.97577,0.2998,90,90,90	-	-	12.95	X	1338
Hg-N	Hg[N ₃]	Hg[N ₃],mP16,14	$P12_1/c1$	0.35659,1.25414,0.61937,90,110.846,90	-	colorless	6.23	X	60450
Hg-N	Hg[N ₃] ₂ orth1	Hg[N ₃] ₂ ,oP28,29	$Pca2_1$	1.06483,0.62635,0.63267,90,90,90	-	colorless	4.48	X	60450
Hg-N	Hg[N ₃] ₂ orth2	Hg[N ₃] ₂ ,oI56,45	$Iba2$	0.75617,1.80296,0.63052,90,90,90	-	colorless	4.40	X	60450
Hg-N	Hg ₂ N[N ₃] cub	Hg ₂ N[N ₃],cF96,227	$Fd-3m$	0.95167,0.95167,0.95167,90,90,90	-	yellow pale	7.05	X	60450
Hg-N	Hg ₂ N[N ₃] hex	Hg ₂ N[N ₃],hP36,194	$P6_3/mmc$	0.67058,0.67058,1.11259,90,90,120	-	orange	7.01	X	60450
Hg-Na	NaHg rt	NaHg,oS16,63	$Cmcm$	0.719,1.079,0.521,90,90,90	b.c.c. family	golden	7.35	X	540
Hg-Na	NaHg ₂	Hg ₂ U,hP3,191	$P6/mmm$	0.5029,0.5029,0.32304,90,90,120	AlB ₂ family	-	9.96	X	540
Hg-Na	NaHg ₄	* ₂ hP1150,*	-	6.15,6.15,0.97,90,90,120	-	-	-	N	540
Hg-Na	Na ₁₁ Hg ₅₂	Na ₁₁ Hg ₅₂ ,hP567,174	$P-6$	3.9703,3.9703,0.9681,90,90,120	-	-	12.08	X	58467
Hg-Na	Na ₂ o ₇ Hg ht2	BiF ₃ ,cF16,225	$Fm-3m$	0.7674,0.7674,0.7674,90,90,90	fluorite family	-	3.85	X	26731
Hg-Na	Na ₃ Hg ht	Na ₃ Hg,hR12,166	$R-3m$	0.5404,0.5404,1.342,90,90,120	b.c.c. family	gray silver	3.96	X	26986
Hg-Na	Na ₃ Hg rt	Na ₃ Hg,hP18,194	$P6_3/mmc$	0.5405,0.5405,0.9766,90,90,120	-	gray silver	3.62	X	29531
Hg-Na	Na ₃ Hg ₂	Zr ₃ Al ₂ ,tP20,136	$P4_2/mmm$	0.84587,0.84587,0.77078,90,90,90	-	golden	5.66	X	46900
Hg-Na	Na ₈ Hg ₃ ht1	* ₂ ,mS* ₂ *	-	0.7676,0.7676,0.7676,90,90,7.90	-	-	-	N	26731
Hg-Na	Na ₈ Hg ₃ rt	Yb ₈ In ₃ ,hR132,167	$R-3c$	0.9228,0.9228,5.2638,90,90,120	-	gray silver	4.03	X	24064
Hg-Nd	HgNd	CsCl,cP2,221	$Pm-3m$	0.3772,0.3772,0.3772,90,90,90	b.c.c. family	-	10.67	X	350
Hg-Nd	Hg ₂ Nd	Cd ₂ Ce,hP3,164	$P-3m1$	0.4904,0.4904,0.352,90,90,120	AlB ₂ family	-	12.35	X	3993
Hg-Nd	Hg ₄₅ Nd ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	$F-43m$	2.1716,2.1716,2.1716,90,90,90	Nasicon family	-	13.77	A	12280
Hg-Ni	HgNi rt	CuTi,tP2,123	$P4/mmm$	0.298,0.298,0.314,90,90,90	b.c.c. family	-	15.44	X	10975
Hg-Ni	Hg ₄ Ni	Hg ₄ Pt,cI10,229	$Im-3m$	0.6016,0.6016,0.6016,90,90,90	-	-	13.13	X	529
Hg-O	HgO orth	HgO,oP8,62	$Pnma$	0.66225,0.5525,0.3524,90,90,90	montroydite	yellow	11.16	X	22720
Hg-O	HgO tricl	HgO,aP16,2	$P-1$	0.554,0.665,0.701,90.4,90.1,90.9	-	gray	11.14	X	15261
Hg-O	HgO trig	HgS,hP6,152	$P3_121$	0.3577,0.3577,0.8681,90,90,120	-	-	11.22	X	925
Hg-O	Hg[O ₂] cub	FeS ₂ ,cI2,205	$Pa-3$	0.532,0.532,0.532,90,90,90	pyrite-marcasite family	-	10.26	A	739
Hg-O	Hg[O ₂] mon	Hg[O ₂],mS6,12	$C12/m1$	0.4470,0.5459,0.3519,90,108.45,90	-	-	9.48	X	18456
Hg-O	Hg[O ₂] orth	Hg[O ₂],oP12,61	$Pbca$	0.4800,0.6080,0.6010,90,90,90	-	red yellow	8.81	X	1054
Hg-Pb	Hg _{0.22} Pb _{0.78}	Cu ₂ cF4,225	$Fm-3m$	0.4858,0.4858,0.4858,90,90,90	close-packed structure	-	11.92	X	3660
Hg-Pb	Hg _{0.7} Pb _{1.3}	CuAu,tP2,123	$P4/mmm$	0.3517,0.3517,0.4508,90,90,90	close-packed structure	-	12.20	X	9295
Hg-Pd	HgPd	CuAu,tP2,123	$P4/mmm$	0.3026,0.3026,0.3702,90,90,90	potarite	-	15.04	X	1183
Hg-Pd	Hg _{0.124} Pd _{0.876}	Cu ₂ cF4,225	$Fm-3m$	0.3943,0.3943,0.3943,90,90,90	close-packed structure	-	12.79	X	1312
Hg-Pd	Hg ₅ Pd ₂	Hg ₅ Mn ₂ ,tP14,127	$P4/mbm$	0.9463,0.9463,0.3031,90,90,90	-	-	14.88	X	2678
Hg-Po	HgPo cub	NaCl,cF8,225	$Fm-3m$	0.625,0.625,0.625,90,90,90	rocksalt family	-	11.14	X	1219
Hg-Pr	HgPr	CsCl,cP2,221	$Pm-3m$	0.3791,0.3791,0.3791,90,90,90	b.c.c. family	-	10.41	X	350
Hg-Pr	Hg ₄₅ Pr ₁₁	Cd ₄₅ Sm ₁₁ ,cF448,216	$F-43m$	2.1786,2.1786,2.1786,90,90,90	Nasicon family	-	13.59	A	12280
Hg-Pt	HgPt ht	CuAu,tP2,123	$P4/mmm$	0.2971,0.2971,0.3825,90,90,90	close-packed structure	-	19.46	X	511
Hg-Pt	Hg _{0.22} Pt _{0.78}	Cu ₂ cF4,225	$Fm-3m$	0.398,0.398,0.398,90,90,90	close-packed structure	-	20.68	X	7512
Hg-Pt	Hg ₂ Pt	Hg ₂ Pt,tP3,123	$P4/mmm$	0.4687,0.4687,0.2913,90,90,90	-	black gray	15.47	X	511
Hg-Pt	Hg ₄ Pt	Hg ₄ Pt,cI10,229	$Im-3m$	0.62001,0.62001,0.62001,90,90,90	-	black gray	13.90	X	15017

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Hg-Pu	Hg ₄₂ Pu ₁₀	Cu ₄₁ Sn ₁₁ , cF416, 216	<i>F-43m</i>	2.178, 2.178, 2.178, 90, 90, 90	γ -brass	-	13.97	A	3063
Hg-Rb	RbHg ₁₁	BaHg ₁₁ , cP36, 221	<i>Pm-3m</i>	0.9707, 0.9707, 0.9707, 90, 90, 90	-	gray silver	12.48	X	36879
Hg-Rb	RbHg ₂	KHg ₂ , oI12, 74	<i>Imma</i>	0.53, 0.8449, 0.8981, 90, 90, 90	AlB ₂ family	black reddish	8.04	X	21754
Hg-Rb	Rb ₁₃ Hg ₁₆	* _t I124, 88	<i>I4₁/a</i>	1.665, 1.665, 1.813, 90, 90, 90	-	golden	-	N	21984
Hg-Rb	Rb ₂ Hg ₇	K ₂ Hg ₇ , hP9, 164	<i>P-3m1</i>	0.68436, 0.68436, 0.65774, 90, 90, 120	-	gray silver	9.80	X	36899
Hg-Rb	Rb ₃ Hg ₂₀	Rb ₃ Hg ₂₀ , cP46, 223	<i>Pm-3n</i>	1.0737, 1.0737, 1.0737, 90, 90, 90	-	-	11.45	X	37910
Hg-Rb	Rb ₅ Hg ₁₉	Rb ₅ Hg ₁₉ , tI48, 87	<i>I4/m</i>	1.1561, 1.1561, 1.051, 90, 90, 90	-	gray silver	10.02	X	36969
Hg-Rb	Rb ₇ Hg ₃₁	Ba ₇ Cd ₃₁ , hP41, 191	<i>P6₃/mmm</i>	1.1, 1.1, 1.0377, 90, 90, 120	-	-	10.41	A	37910
Hg-Rh	Hg ₂ Rh rt	Hg ₂ Pt, tP3, 123	<i>P4/mmm</i>	0.4551, 0.4551, 0.2998, 90, 90, 90	-	-	13.48	X	3579
Hg-S	HgS hp	NaCl, cF8, 225	<i>Fm-3m</i>	0.507, 0.507, 0.507, 90, 90, 90	rocksalt family	-	11.86	X	15940
Hg-S	HgS ht1	ZnS, cF8, 216	<i>F-43m</i>	0.58537, 0.58537, 0.58537, 90, 90, 90	metacinnabar	black	7.70	X	32008
Hg-S	HgS ht2	* _h P24, *	-	0.701, 0.701, 1.413, 90, 90, 120	hypercinnabar	black	-	N	11207
Hg-S	HgS rt	HgS, hP6, 152	<i>P3₁21</i>	0.41317, 0.41317, 0.94451, 90, 90, 120	cinnabar	red	8.30	X	32008
Hg-Sc	HgSc	CsCl, cP2, 221	<i>Pm-3m</i>	0.348, 0.348, 0.348, 90, 90, 90	b.c.c. family	-	9.68	X	1926
Hg-Sc	Hg ₃ Sc	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6369, 0.6369, 0.4762, 90, 90, 120	close-packed structure	-	12.84	X	1926
Hg-Se	HgSe 12L	* _h P*, *	-	0.43, 0.43, 4.21, 90, 90, 120	-	-	-	N	4558
Hg-Se	HgSe 2L	* _h P*, *	-	0.43, 0.43, 0.702, 90, 90, 120	-	-	-	N	4558
Hg-Se	HgSe hp1	HgS, hP6, 152	<i>P3₁21</i>	0.432, 0.432, 0.968, 90, 90, 120	-	-	8.90	A	1955
Hg-Se	HgSe hp2	NaCl, cF8, 225	<i>Fm-3m</i>	0.536, 0.536, 0.536, 90, 90, 90	rocksalt family	-	12.06	X	18232
Hg-Se	HgSe rt	ZnS, cF8, 216	<i>F-43m</i>	0.60864, 0.60864, 0.60864, 90, 90, 90	tiemannite	red	8.24	X	4839
Hg-Se	Hg _{0.5} Se _{0.5} hp3	Sn, tI4, 141	<i>I4₁/amd</i>	0.5112, 0.5112, 0.2721, 90, 90, 90	-	-	13.06	X	18232
Hg-Sm	Hg ₂ Sm	Cd ₂ Ce, hP3, 164	<i>P-3m1</i>	0.4877, 0.4877, 0.3515, 90, 90, 120	AlB ₂ family	-	12.65	A	3993
Hg-Sm	Hg ₄₅ Sm ₁₁	Cd ₄₅ Sm ₁₁ , cF448, 216	<i>F-43m</i>	2.1651, 2.1651, 2.1651, 90, 90, 90	Nasicon family	-	13.98	A	12280
Hg-Sn	Hg _{0.01} Sn _{0.99} rt	Sn, tI4, 141	<i>I4₁/amd</i>	0.57903, 0.57903, 0.3177, 90, 90, 90	-	-	7.45	X	265
Hg-Sn	Hg _{0.05} Sn _{0.95} ht	(Hg _{0.05} Sn _{0.95}), hP1, 191	<i>P6₃/mmm</i>	0.32415, 0.32415, 0.30066, 90, 90, 120	-	-	7.45	X	584
Hg-Sn	Hg _{0.1} Sn _{0.9} rt	(Hg _{0.1} Sn _{0.9}), hP1, 191	<i>P6₃/mmm</i>	0.32074, 0.32074, 0.29865, 90, 90, 120	-	-	7.92	X	24841
Hg-Sn	Hg _{0.12} Sn _{0.88} hp1	Pa, tI2, 139	<i>I4/mmm</i>	0.3494, 0.3494, 0.3197, 90, 90, 90	b.c.c. family	-	10.94	X	40902
Hg-Sn	Hg _{0.12} Sn _{0.88} hp2	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2853, 0.2853, 0.4668, 90, 90, 120	close-packed structure	-	12.97	X	40902
Hg-Sn	Hg _{0.5} Sn _{0.5} hp	In, tI2, 139	<i>I4/mmm</i>	0.29, 0.29, 0.4368, 90, 90, 90	close-packed structure	-	14.43	X	40902
Hg-Sr	SrHg	CsCl, cP2, 221	<i>Pm-3m</i>	0.3955, 0.3955, 0.3955, 90, 90, 90	b.c.c. family	-	7.74	X	8122
Hg-Sr	SrHg ₁₁	BaHg ₁₁ , cP36, 221	<i>Pm-3m</i>	0.95102, 0.95102, 0.95102, 90, 90, 90	-	gray silver	13.29	A	36879
Hg-Sr	SrHg ₂	KHg ₂ , oI12, 74	<i>Imma</i>	0.4934, 0.7697, 0.8472, 90, 90, 90	AlB ₂ family	-	10.09	X	4837
Hg-Sr	SrHg ₃	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6906, 0.6906, 0.5106, 90, 90, 120	close-packed structure	-	10.86	A	8122
Hg-Sr	SrHg ₈	SrHg ₈ , oP72, 62	<i>Pnma</i>	1.3328, 0.49128, 2.6446, 90, 90, 90	-	black	12.98	X	55060
Hg-Sr	Sr _{10.5} Hg _{54.5}	Ca ₉ Ca _{0.95} Hg _{0.05} ₂ Hg ₅₄ , hP65, 174	<i>P-6</i>	1.3602, 1.3602, 0.9818, 90, 90, 120	-	-	12.51	X	51361
Hg-Sr	Sr ₁₃ Hg ₅₈	Zn ₃₈ Gd ₁₃ , hP142, 194	<i>P6₃/mmc</i>	1.594, 1.594, 1.579, 90, 90, 120	-	-	12.21	A	8122
Hg-Sr	Sr ₁₄ Hg ₅₁	Ag ₅₁ Gd ₁₄ , hP68, 175	<i>P6₃/m</i>	1.378, 1.378, 0.988, 90, 90, 120	-	-	11.71	A	8122
Hg-Sr	Sr ₃ Hg	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.8523, 1.108, 0.7405, 90, 90, 90	-	-	4.40	A	8122
Hg-Sr	Sr ₃ Hg ₂	U ₃ Si ₂ , tP10, 127	<i>P4/mbm</i>	0.8883, 0.8883, 0.4553, 90, 90, 90	-	gray silver	6.14	X	32576
Hg-Tb	HgTb	CsCl, cP2, 221	<i>Pm-3m</i>	0.3678, 0.3678, 0.3678, 90, 90, 90	b.c.c. family	gray silver	12.00	X	2268
Hg-Tb	Hg ₂ Tb	Cd ₂ Ce, hP3, 164	<i>P-3m1</i>	0.4833, 0.4833, 0.3487, 90, 90, 120	AlB ₂ family	-	13.19	A	3993
Hg-Tb	Hg ₃ Tb	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6565, 0.6565, 0.4887, 90, 90, 120	close-packed structure	-	13.85	A	3057
Hg-Te	HgTe hp1	HgS, hP6, 152	<i>P3₁21</i>	0.4392, 0.4392, 1.0033, 90, 90, 120	-	-	9.75	X	30932
Hg-Te	HgTe hp2	NaCl, cF8, 225	<i>Fm-3m</i>	0.5843, 0.5843, 0.5843, 90, 90, 90	rocksalt family	-	10.93	X	16277
Hg-Te	HgTe hp3	ZnTe, oS8, 63	<i>Cmcm</i>	0.55626, 0.61516, 0.5105, 90, 90, 90	-	-	12.48	X	32372
Hg-Te	HgTe rt	ZnS, cF8, 216	<i>F-43m</i>	0.6463, 0.6463, 0.6463, 90, 90, 90	coloradoite	-	8.08	X	19918
Hg-Th	HgTh ₂	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.7696, 0.7696, 0.5902, 90, 90, 90	-	-	12.63	X	18995
Hg-Th	Hg _{0.5} Th _{0.5} ht	Cu, cF4, 225	<i>Fm-3m</i>	0.48, 0.48, 0.48, 90, 90, 90	close-packed structure	-	12.99	X	982
Hg-Th	Hg ₂ Th	CaIn ₂ , hP6, 194	<i>P6₃/mmc</i>	0.4822, 0.4822, 0.7438, 90, 90, 120	AlB ₂ family	-	14.04	X	18995
Hg-Th	Hg ₃ Th	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6716, 0.6716, 0.4902, 90, 90, 120	close-packed structure	-	14.46	X	18995
Hg-Ti	HgTi	CuAu, tP2, 123	<i>P4/mmm</i>	0.3009, 0.3009, 0.4041, 90, 90, 90	close-packed structure	-	11.28	X	624
Hg-Ti	HgTi ₃ ht1	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.51888, 0.51888, 0.51888, 90, 90, 90	Frank-Kasper phase	-	8.18	X	624
Hg-Ti	HgTi ₃ ht2	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.41654, 0.41654, 0.41654, 90, 90, 90	close-packed structure	-	7.91	X	624
Hg-Tl	TlHg m	CsCl, cP2, 221	<i>Pm-3m</i>	0.3712, 0.3712, 0.3712, 90, 90, 90	b.c.c. family	-	13.15	X	11460
Hg-Tl	Tl _{0.15} Hg _{0.85} m	In, tI2, 139	<i>I4/mmm</i>	0.3271, 0.3271, 0.4692, 90, 90, 90	close-packed structure	-	13.31	X	11460
Hg-Tl	Tl _{0.25} Hg _{0.75} lt	Cu, cF4, 225	<i>Fm-3m</i>	0.4624, 0.4624, 0.4624, 90, 90, 90	close-packed structure	-	13.54	X	11460
Hg-Tl	Tl _{0.85} Hg _{0.15} m	W, cI2, 229	<i>Im-3m</i>	0.3794, 0.3794, 0.3794, 90, 90, 90	b.c.c. family	-	12.39	X	11460
Hg-Tl	Tl _{0.95} Hg _{0.05} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3425, 0.3425, 0.5476, 90, 90, 120	close-packed structure	-	12.19	X	11460
Hg-Tm	HgTm	CsCl, cP2, 221	<i>Pm-3m</i>	0.3632, 0.3632, 0.3632, 90, 90, 90	b.c.c. family	gray silver	12.81	X	2600
Hg-Tm	Hg ₃ Tm	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6491, 0.6491, 0.4856, 90, 90, 120	close-packed structure	-	14.45	A	3057
Hg-U	Hg _{0.75} U _{0.25} ht	Mg, hP2, 194	<i>P6₃/mmc</i>	0.332, 0.332, 0.4875, 90, 90, 120	close-packed structure	-	14.98	X	503
Hg-U	Hg ₂ U	Hg ₂ U, hP3, 191	<i>P6₃/mmm</i>	0.4976, 0.4976, 0.3218, 90, 90, 120	AlB ₂ family	-	15.38	X	503
Hg-U	Hg ₄₅ U ₁₁	Cd ₄₅ Sm ₁₁ , cF448, 216	<i>F-43m</i>	2.172, 2.172, 2.172, 90, 90, 90	Nasicon family	-	15.10	A	12280
Hg-Y	HgY	CsCl, cP2, 221	<i>Pm-3m</i>	0.368, 0.368, 0.368, 90, 90, 90	b.c.c. family	-	9.65	X	1926
Hg-Y	Hg ₂ Y	Hg ₂ U, hP3, 191	<i>P6₃/mmm</i>	0.4771, 0.4771, 0.3536, 90, 90, 120	AlB ₂ family	-	11.68	X	2246
Hg-Y	Hg ₃ Y	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6541, 0.6541, 0.487, 90, 90, 120	close-packed structure	-	12.71	X	1926
Hg-Yb	HgYb	CsCl, cP2, 221	<i>Pm-3m</i>	0.3731, 0.3731, 0.3731, 90, 90, 90	b.c.c. family	gray silver	11.95	X	2600
Hg-Yb	Hg ₂ Yb	Cd ₂ Ce, hP3, 164	<i>P-3m1</i>	0.4896, 0.4896, 0.3534, 90, 90, 120	AlB ₂ family	-	13.00	X	3993
Hg-Yb	Hg ₃ Yb	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6596, 0.6596, 0.5021, 90, 90, 120	close-packed structure	-	13.60	A	3057
Hg-Yb	Hg ₅₁ Yb ₁₄	Ag ₅₁ Gd ₁₄ , hP68, 175	<i>P6₃/m</i>	1.341, 1.341, 0.961, 90, 90, 120	-	-	14.04	A	12280
Hg-Zn	ZnHg ₃ lt	* _h P*, *	-	0.4703, 0.4703, 3.3251, 90, 90, 120	-	-	-	N	20931
Hg-Zn	Zn _{0.75} Hg _{0.25}	(Cu _{0.75} Tl _{0.25}), oS4, 63	<i>Cmcm</i>	0.2708, 0.4696, 0.5471, 90, 90, 90	close-packed structure	-	9.47	X	15589
Hg-Zn	Zn _{0.98} Hg _{0.02}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.26617, 0.26617, 0.49771, 90, 90, 120	close-packed structure	-	7.40	X	265
Hg-Zr	HgZr	CuAu, tP2, 123	<i>P4/mmm</i>	0.315, 0.315, 0.417, 90, 90, 90	close-packed structure	-	11.71	X	624
Hg-Zr	HgZr ₃	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.55583, 0.55583, 0.55583, 90, 90, 90	Frank-Kasper phase	-	9.17	X	624
Hg-Zr	Hg ₂ Zr	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.43652, 0.43652, 0.43652, 90, 90, 90	close-packed structure	-	13.84	X	624
Ho-I	HoI ₃ rt	* _h P168, *	-	1.9772, 1.9772, 2.0846, 90, 90, 120	-	yellow	-	N	27994
Ho-In	HoIn rt	* _h P*, *	-	0.97, 0.97, 0.85, 90, 90, 90	-	-	-	N	9764

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ho-In	HoIn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.45734,0.45734,0.45734,90,90,90	close-packed structure	-	8.84	X	53400
Ho-In	Ho ₂ In	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.53216,0.53216,0.66667,90,90,120	AlB ₂ family	-	9.03	X	48201
Ho-In	Ho ₃ In ₅	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	0.981,0.799,1.026,90,90,90	-	-	8.83	A	14115
Ho-In	Ho ₃ In ₃ ht	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8939,0.8939,0.6595,90,90,120	-	-	8.51	A	4002
Ho-In	Ho ₃ In ₃ rt	W ₃ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.2092,1.2092,0.601,90,90,90	-	-	8.84	A	8130
Ho-Ir	HoIr	CsCl,cP2,221	<i>Pm-3m</i>	0.3383,0.3383,0.3383,90,90,90	b.c.c. family	-	15.32	X	2404
Ho-Ir	HoIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7503,0.7503,0.7503,90,90,90	Friauf-Laves phase	-	17.28	X	1938
Ho-Ir	Ho ₃ Ir	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.7186,0.9139,0.6326,90,90,90	-	-	10.98	A	11937
Ho-Ir	Ho ₃ Ir ₂	Y ₃ Rh ₂ ,tI140,140	<i>I4/mcm</i>	1.1132,1.1132,2.492,90,90,90	-	-	13.24	A	13188
Ho-Ir	Ho ₅ Ir ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.5497,0.6399,0.7169,90,96.74,90	-	-	11.38	A	13170
Ho-Ir	Ho ₃ Ir ₃ ht	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.813,0.813,0.6318,90,90,120	-	-	12.87	A	15093
Ho-Ir	Ho ₃ Ir ₃ rt	Pu ₃ Rh ₃ ,iP32,130	<i>P4/ncc</i>	1.0822,1.0822,0.6255,90,90,90	-	-	12.71	A	13188
Ho-Mg	MgHo	CsCl,cP2,221	<i>Pm-3m</i>	0.377,0.377,0.377,90,90,90	b.c.c. family	gray silver	5.87	X	2600
Ho-Mg	Mg _{0.3} Ho _{0.7} ht	W,cI2,229	<i>Im-3m</i>	0.3845,0.3845,0.3845,90,90,90	b.c.c. family	-	7.17	X	2327
Ho-Mg	Mg ₂ Ho	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.6015,0.6015,0.9746,90,90,120	Friauf-Laves phase	gray silver	4.65	X	31811
Ho-Mg	Mg ₂₄ Ho ₅	Ti ₃ Re ₂₄ ,cI58,217	<i>I-43m</i>	1.1233,1.1233,1.1233,90,90,90	-	white silver	3.30	X	2314
Ho-Mn	HoMn ₁₂	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.857,0.857,0.4747,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	7.85	X	3692
Ho-Mn	HoMn ₂ ht	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.74614,0.74614,0.74614,90,90,90	Friauf-Laves phase	-	8.79	X	26094
Ho-Mn	HoMn ₂ rt	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5282,0.5282,0.8622,90,90,120	Friauf-Laves phase	-	8.76	X	15023
Ho-Mn	HoMn ₅	* ₀ ** ₂ *	-	0.309,0.436,0.71,90,90,90	-	-	-	N	1246
Ho-Mn	Ho ₆ Mn ₂₃	Th ₃ Mn ₂₃ ,cF116,225	<i>Fm-3m</i>	1.2341,1.2341,1.2341,90,90,90	-	-	7.96	A	53423
Ho-N	HoN	NaCl,cF8,225	<i>Fm-3m</i>	0.4871,0.4871,0.4871,90,90,90	rocksalt family	-	10.28	X	51611
Ho-N	Ho ₂ N ₃	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	1.058,1.058,1.058,90,90,90	-	-	8.34	A	6741
Ho-Nd	Nd _{0.6} Ho _{0.4} rt	Sm,hR9,166	<i>R-3m</i>	0.3636,0.3636,2.6146,90,90,120	close-packed structure	-	7.61	A	31861
Ho-Ni	HoNi	FeB-b,oP8,62	<i>Pnma</i>	0.696,0.4126,0.5384,90,90,90	CrB(III)-FeB	-	9.61	X	30381
Ho-Ni	HoNi ₂ lt	* ₁ * ₂₄ * ₂	-	0.7123,0.7123,0.7129,90,90,90	-	-	-	N	14448
Ho-Ni	HoNi ₂ rt	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7143,0.7143,0.7143,90,90,90	Friauf-Laves phase	-	10.29	X	23501
Ho-Ni	HoNi ₃	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.49574,0.49574,2.43475,90,90,120	Laves-CaCu ₅	-	9.84	X	47538
Ho-Ni	HoNi ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.4856,0.4856,0.3967,90,90,120	-	-	9.40	X	65088
Ho-Ni	Ho _{0.95} Ni ₂ ht	TmNi ₂ ,cF192,216	<i>F-43m</i>	1.4259,1.4259,1.4259,90,90,90	Friauf-Laves phase	-	10.05	X	47308
Ho-Ni	Ho ₂ Ni ₁₇	Th ₃ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.8287,0.8287,0.8032,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	9.23	A	65088
Ho-Ni	Ho ₂ Ni ₇	Gd ₂ Co ₇ ,hR54,166	<i>R-3m</i>	0.49325,0.49325,3.61646,90,90,120	Laves-CaCu ₅	-	9.69	A	47538
Ho-Ni	Ho ₃ Ni	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.6785,0.9482,0.6197,90,90,90	-	-	9.22	A	65088
Ho-Ni	Ho ₃ Ni ₂ ht	Er ₃ Ni ₂ ,hR45,148	<i>R-3</i>	0.8499,0.8499,1.5701,90,90,120	-	-	9.32	A	35187
Ho-Ni	Ho ₃ Ni ₂ rt	Dy ₃ Ni ₂ ,mS20,12	<i>C12/m1</i>	1.33,0.365,0.951,90,105.6,90	-	-	9.15	A	7817
Ho-O	HoO _{1.5} tf	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.518,0.518,0.518,90,90,90	fluorite family	-	9.03	X	9185
Ho-O	Ho ₂ O ₃ ht1	Sm ₂ O ₃ ,mS30,12	<i>C12/m1</i>	1.3943,0.35,0.8644,90,100.18,90	-	-	9.07	X	54534
Ho-O	Ho ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	1.0606,1.0606,1.0606,90,90,90	-	colorless	8.42	X	31469
Ho-Os	HoOs ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5297,0.5297,0.8749,90,90,120	Friauf-Laves phase	-	17.04	A	3180
Ho-Os	Ho ₃ Os	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.734,0.8985,0.6222,90,90,90	-	-	11.09	A	13171
Ho-P	HoP rt	NaCl,cF8,225	<i>Fm-3m</i>	0.5604,0.5604,0.5604,90,90,90	rocksalt family	-	7.39	X	12325
Ho-P	HoP ₅	NdP ₅ ,mP12,11	<i>P12/m1</i>	0.4896,0.937,0.5324,90,102.55,90	-	black	4.46	X	35543
Ho-Pb	HoPb ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4801,0.4801,0.4801,90,90,90	close-packed structure	-	11.80	X	7337
Ho-Pb	Ho ₅ Pb ₃	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8915,0.8915,0.6541,90,90,120	-	-	10.67	X	3248
Ho-Pb	Ho ₃ Pb ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.8095,1.541,0.8148,90,90,90	-	-	10.81	A	4240
Ho-Pd	HoPd ht	CsCl,cP2,221	<i>Pm-3m</i>	0.3469,0.3469,0.3469,90,90,90	b.c.c. family	-	10.79	X	9233
Ho-Pd	HoPd rt	FeB-b,oP8,62	<i>Pnma</i>	0.7199,0.4242,0.5604,90,90,90	CrB(III)-FeB	-	10.53	A	8252
Ho-Pd	HoPd ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4067,0.4067,0.4067,90,90,90	close-packed structure	-	11.95	X	14309
Ho-Pd	Ho _{0.1} Pd _{0.9}	Cu ₃ cF4,225	<i>Fm-3m</i>	0.3963,0.3963,0.3963,90,90,90	close-packed structure	white silver	11.98	X	7325
Ho-Pd	Ho _{2.12} Pd _{0.88}	Dy _{2.12} Pd _{0.88} ,cF144,227	<i>Fd-3m</i>	1.3467,1.3467,1.3467,90,90,90	-	-	9.64	X	61695
Ho-Pd	Ho ₃ Pd ₂	U ₃ Si ₂ ,tP10,127	<i>P4/mbm</i>	0.7718,0.7718,0.3909,90,90,90	-	-	10.09	A	7325
Ho-Pd	Ho ₃ Pd ₄	Pu ₃ Pd ₄ ,hR42,148	<i>R-3</i>	1.307,1.307,0.5677,90,90,120	b.c.c. family	-	10.92	A	8116
Ho-Po	HoPo	NaCl,cF8,225	<i>Fm-3m</i>	0.62,0.62,0.62,90,90,90	rocksalt family	-	10.42	X	3080
Ho-Pr	Pr _{0.35} Ho _{0.65} rt	Nd,hP4,194	<i>P6₃/mmc</i>	0.3627,0.3627,1.168,90,90,120	close-packed structure	-	7.81	X	17966
Ho-Pr	Pr _{0.4} Ho _{0.6}	Mg,hP2,194	<i>P6₃/mmc</i>	0.363,0.363,0.575,90,90,120	close-packed structure	-	7.86	X	17966
Ho-Pr	Pr _{0.4} Ho _{0.4} rt	Sm,hR9,166	<i>R-3m</i>	0.3623,0.3623,2.664,90,90,120	close-packed structure	-	7.43	A	17966
Ho-Pt	HoPt	FeB-b,oP8,62	<i>Pnma</i>	0.6932,0.4465,0.5528,90,90,90	CrB(III)-FeB	-	13.98	A	13263
Ho-Pt	HoPt ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7586,0.7586,0.7586,90,90,90	Friauf-Laves phase	-	16.89	X	3180
Ho-Pt	HoPt ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4058,0.4058,0.4058,90,90,90	close-packed structure	-	18.64	X	2421
Ho-Pt	HoPt ₅	* ₀ * ₇₂ *	-	0.5231,0.9091,2.649,90,90,90	-	-	-	N	7645
Ho-Pt	Ho ₂ Pt	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.7054,0.4722,0.8686,90,90,90	-	-	12.05	A	11195
Ho-Pt	Ho ₃ Pt	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.7019,0.9436,0.6394,90,90,90	-	-	10.82	A	11937
Ho-Pt	Ho ₃ Pt ₄	Pu ₃ Pd ₄ ,hR42,148	<i>R-3</i>	1.3061,1.3061,0.5661,90,90,120	b.c.c. family	-	15.19	A	10597
Ho-Pt	Ho ₃ Pt ₃	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8319,0.8319,0.6191,90,90,120	-	-	12.62	A	11195
Ho-Pt	Ho ₃ Pt ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.7426,1.4492,0.7508,90,90,90	-	-	13.19	A	14106
Ho-Re	HoRe ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5378,0.5378,0.8785,90,90,120	Friauf-Laves phase	-	16.22	A	2562
Ho-Rh	HoRh	CsCl,cP2,221	<i>Pm-3m</i>	0.3377,0.3377,0.3377,90,90,90	b.c.c. family	-	11.55	X	6873
Ho-Rh	HoRh ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7475,0.7475,0.7475,90,90,90	Friauf-Laves phase	-	11.79	X	9760
Ho-Rh	Ho ₃ Rh ₂	Y ₃ Rh ₂ ,tI140,140	<i>I4/mcm</i>	1.111,1.111,2.499,90,90,90	-	-	10.56	A	9419
Ho-Rh	Ho ₃ Rh ₃ ht	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.81,0.81,0.6337,90,90,120	-	-	10.45	X	15093
Ho-Rh	Ho ₇ Rh ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	0.9694,0.9694,0.6098,90,90,120	-	-	9.79	A	7350
Ho-Ru	HoRu ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5231,0.5231,0.88265,90,90,120	Friauf-Laves phase	-	11.66	X	56177
Ho-Ru	Ho ₃ Ru	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.7242,0.9087,0.6225,90,90,90	-	-	9.66	A	13171
Ho-Ru	Ho ₃ Ru ₂	Er ₃ Ru ₂ ,hP10,176	<i>P6₃/m</i>	0.7919,0.7919,0.3958,90,90,120	-	-	10.77	A	23428
Ho-Ru	Ho ₄₄ Ru ₂₅	Y ₄₄ Ru ₂₅ ,oP276,52	<i>Pnna</i>	2.7811,1.5043,1.5043,90,90,90	-	-	10.33	A	23428
Ho-Ru	Ho ₅ Ru ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.5564,0.6251,0.7264,90,97.26,90	-	-	9.73	A	12299
Ho-S	HoS lt	* ₁ * ₁₁ *	-	0.5438,0.5438,0.5435,90,90,90	-	-	-	N	15323
Ho-S	HoS rt	NaCl,cF8,225	<i>Fm-3m</i>	0.5461,0.5461,0.5461,90,90,90	rocksalt family	-	8.03	X	18213

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ho-S	HoS _{1.863}	HoS _{1.863} , mp72, 11	$P12_1/m1$	1.0961, 1.1465, 1.0984, 90, 91, 27, 90	-	red	6.49	X	39692
Ho-S	HoS _{1.885}	UAs ₂ , tP6, 129	$P4/nmm$	0.382, 0.382, 0.784, 90, 90, 90	-	red dark	6.54	X	39692
Ho-S	HoS ₂ hp	* _c ***	-	0.7784, 0.7784, 0.7784, 90, 90, 90	-	black gray	-	N	5117
Ho-S	Ho ₁₀ S ₁₉	Ce ₁₀ Se ₁₉ , tP58, 86	$P4_2/n$	0.85694, 0.85694, 1.56929, 90, 90, 90	-	-	6.51	A	60350
Ho-S	Ho ₂ S ₃ hp1-ht	Th ₂ S ₃ , oP20, 62	$Pnma$	1.05724, 0.38448, 1.04115, 90, 90, 90	-	black	6.69	X	26720
Ho-S	Ho ₂ S ₃	Ho ₂ S ₃ , mP30, 11	$P12_1/m1$	1.01243, 0.40023, 1.74615, 90, 98, 529, 90	-	-	6.07	X	32814
Ho-S	Ho _{2.67} S ₄ hp2-ht	Th ₃ P ₄ , cI28, 220	$I-43d$	0.8265, 0.8265, 0.8265, 90, 90, 90	-	-	6.69	A	4518
Ho-S	Ho ₂ S ₇ hp	Y ₂ S ₇ , mS24, 12	$C12/m1$	1.273, 0.379, 1.152, 90, 104, 85, 90	-	-	6.49	A	3846
Ho-Sb	HoSb lt	* _t ***	-	0.6122, 0.6122, 0.6104, 90, 90, 90	-	-	-	N	4718
Ho-Sb	HoSb rt	NaCl, cF8, 225	$Fm-3m$	0.613, 0.613, 0.613, 90, 90, 90	rocksalt family	gray	8.27	X	23451
Ho-Sb	HoSb ₂ hp-ht	HoSb ₂ , oS6, 21	$C222$	0.3343, 0.5790, 0.7840, 90, 90, 90	-	-	8.94	X	5800
Ho-Sb	Ho ₂ Sb ₃	Dy ₂ Sb ₃ , mP28, 11	$P12_1/m1$	1.3018, 0.4149, 1.4511, 90, 102, 14, 90	-	-	8.14	X	42670
Ho-Sb	Ho ₄ Sb ₃ rt	Th ₃ P ₄ , cI28, 220	$I-43d$	0.9071, 0.9071, 0.9071, 90, 90, 90	-	-	9.12	A	18989
Ho-Sb	Ho ₂ Sb ₃	Mn ₂ Si ₃ , hP16, 193	$P6_3/mcm$	0.8819, 0.8819, 0.6184, 90, 90, 120	-	-	9.49	X	51755
Ho-Se	Sc _{0.4} Ho _{0.6}	Mg, hP2, 194	$P6_3/mmc$	0.348, 0.348, 0.547, 90, 90, 120	close-packed structure	-	6.77	X	26621
Ho-Se	HoSe lt	* _t ***	-	0.5666, 0.5666, 0.5663, 90, 90, 90	-	-	-	N	15323
Ho-Se	HoSe rt	NaCl, cF8, 225	$Fm-3m$	0.5666, 0.5666, 0.5666, 90, 90, 90	rocksalt family	-	8.91	X	15323
Ho-Se	HoSe ₂	CeSe ₂ , mP12, 14	$P12_1/c1$	0.82131, 0.40382, 0.81633, 90, 90, 071, 90	-	-	7.92	A	58385
Ho-Se	Ho _{0.75} Se	Se _{0.685} S _{0.815} , hR12, 166	$R-3m$	0.40257, 0.40257, 1.96495, 90, 90, 120	-	-	7.32	A	3836
Ho-Se	Ho ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ , tP58, 86	$P4_2/n$	0.89437, 0.89437, 1.64541, 90, 90, 90	-	-	7.95	A	60350
Ho-Se	Ho ₂ Se ₃	Sc ₂ S ₃ , oF80, 70	$Fddd$	0.8126, 1.1407, 2.4239, 90, 90, 90	-	yellow	6.70	X	35614
Ho-Se	Ho _{2.67} Se ₄ hp-ht	Th ₃ P ₄ , cI28, 220	$I-43d$	0.8614, 0.8614, 0.8614, 90, 90, 90	-	-	7.86	A	4518
Ho-Se	Ho ₈ Se _{14.7}	Gd ₈ Se _{14.9} , oS150, 38	$Amm2$	1.1993, 1.5999, 1.6471, 90, 90, 90	-	gray silver	7.82	X	50586
Ho-Si	HoSi ht	FeB-b, oP8, 62	$Pnma$	0.78269, 0.38045, 0.56431, 90, 90, 90	CrB(TlI)-FeB	gray	7.63	X	47581
Ho-Si	HoSi rt	TlI, oS8, 63	$Cmcm$	0.42313, 1.04474, 0.38054, 90, 90, 90	CrB(TlI)-FeB	-	7.62	X	47581
Ho-Si	HoSi _{1.7} ht1	GdSi _{1.4} , oI12, 74	$Imma$	0.393, 0.4017, 1.337, 90, 90, 90	-	gray	6.69	X	22340
Ho-Si	HoSi ₂ ht2	AlB ₂ , hP3, 191	$P6_3/mmm$	0.3816, 0.3816, 0.4107, 90, 90, 120	AlB ₂ family	-	7.09	X	19464
Ho-Si	HoSi ₃ hp	YbSi ₃ , tI32, 139	$I4/mmm$	0.72047, 0.72047, 1.06861, 90, 90, 90	-	gray	5.97	X	58393
Ho-Si	Ho ₁₀ Si ₁₇	Dy ₁₀ Si ₁₇ , oI54, 44	$Imm2$	0.8212, 1.9063, 0.66313, 90, 90, 90	-	-	6.80	X	48652
Ho-Si	Ho ₂ Si _{2.5} rt	V ₂ B ₃ , oS20, 63	$Cmcm$	0.4197, 2.368, 0.3798, 90, 90, 90	-	-	7.04	A	30197
Ho-Si	Ho ₂ Si _{2.67}	Ho ₂ Si _{2.67} , oS24, 63	$Cmcm$	0.4191, 2.3785, 0.38013, 90, 90, 90	-	-	7.10	X	34678
Ho-Si	Ho ₂ Si ₃	Mn ₂ Si ₃ , hP16, 193	$P6_3/mcm$	0.83533, 0.83533, 0.628, 90, 90, 120	-	-	7.95	X	47944
Ho-Si	Ho ₂ Si ₄ ht	Gd ₂ Si ₄ , oP36, 62	$Pnma$	0.73406, 1.44574, 0.76264, 90, 90, 90	-	-	7.69	X	47581
Ho-Sn	HoSn ₂	ZrSi ₂ , oS12, 63	$Cmcm$	0.4358, 1.6103, 0.4274, 90, 90, 90	close-packed structure	-	8.91	X	55531
Ho-Sn	HoSn _{2.85} hp	Cu ₃ Au, cP4, 221	$Pm-3m$	0.46544, 0.46544, 0.46544, 90, 90, 90	close-packed structure	-	8.29	X	56393
Ho-Sn	HoSn ₃ rt	GdSn _{2.75} , oS16, 38	$Amm2$	0.4337, 0.4335, 2.1776, 90, 90, 90	-	-	8.45	A	65088
Ho-Sn	Ho ₁₁ Sn ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	$I4/mmm$	1.152, 1.152, 1.68, 90, 90, 90	-	-	8.94	A	5517
Ho-Sn	Ho ₂ Sn ₅	Er ₂ Ge ₅ , oP14, 59	$Pnmm$	0.4305, 0.4385, 1.8903, 90, 90, 90	-	-	8.59	A	65088
Ho-Sn	Ho ₂ Sn ₇	Gd ₃ Sn ₇ , oS20, 65	$Cmmm$	0.43495, 2.6156, 0.44209, 90, 90, 90	close-packed structure	-	8.75	X	56393
Ho-Sn	Ho ₂ Sn ₃	Mn ₂ Si ₃ , hP16, 193	$P6_3/mcm$	0.8847, 0.8847, 0.6458, 90, 90, 120	-	-	8.96	X	3248
Ho-Tb	Tb _{0.5} Ho _{0.5} rt	Mg, hP2, 194	$P6_3/mmc$	0.35929, 0.35929, 0.56572, 90, 90, 120	close-packed structure	-	8.50	X	7327
Ho-Tc	HoTc ₂	MgZn ₂ , hP12, 194	$P6_3/mmc$	0.5353, 0.5353, 0.8813, 90, 90, 120	Friauf-Laves phase	-	10.96	A	2166
Ho-Te	HoTe rt	NaCl, cF8, 225	$Fm-3m$	0.60187, 0.60187, 0.60187, 90, 90, 90	rocksalt family	gray	8.91	X	61697
Ho-Te	HoTe ₂ hp-ht	UAs ₂ , tP6, 129	$P4/nmm$	0.4264, 0.4264, 0.8872, 90, 90, 90	-	-	8.65	A	5123
Ho-Te	HoTe ₃	NdTe ₃ , oS16, 63	$Cmcm$	0.4293, 2.54, 0.4293, 90, 90, 90	-	-	7.77	A	18291
Ho-Te	Ho ₂ Te ₃	Sc ₂ S ₃ , oF80, 70	$Fddd$	0.8606, 1.2172, 2.5818, 90, 90, 90	-	-	7.00	X	2478
Ho-Te	Ho ₂ Te ₅	Nd ₂ Te ₅ , oS28, 63	$Cmcm$	0.4411, 4.503, 0.4411, 90, 90, 90	-	-	7.34	A	8061
Ho-Th	Th _{0.15} Ho _{0.85}	Mg, hP2, 194	$P6_3/mmc$	0.359, 0.359, 0.566, 90, 90, 120	close-packed structure	-	9.20	X	3478
Ho-Th	Th _{0.43} Ho _{0.57} rt	Cu, cF4, 225	$Fm-3m$	0.5038, 0.5038, 0.5038, 90, 90, 90	close-packed structure	-	10.07	X	4726
Ho-Tl	TlHo lt	CuTi, tP2, 123	$P4/mmm$	0.35, 0.35, 0.42, 90, 90, 90	b.c.c. family	-	11.92	X	14286
Ho-Tl	TlHo rt	CsCl, cP2, 221	$Pm-3m$	0.3735, 0.3735, 0.3735, 90, 90, 90	b.c.c. family	gray silver	11.77	X	2600
Ho-Tl	Tl ₃ Ho	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4668, 0.4668, 0.4668, 90, 90, 90	close-packed structure	-	12.70	X	20722
Ho-Tl	Tl ₃ Ho ₅ Tl+	Cr ₃ B ₃ , tI32, 140	$I4/mcm$	0.7965, 0.7965, 1.425, 90, 90, 90	-	-	10.56	A	20722
Ho-Tl	Tl ₃ Ho ₅ Tl-	Mn ₂ Si ₃ , hP16, 193	$P6_3/mcm$	0.885, 0.885, 0.655, 90, 90, 120	-	-	10.75	A	20722
Ho-Tl	Tl ₃ Ho ₃	Pu ₃ Pd ₅ , oS32, 63	$Cmcm$	0.993, 0.804, 1.031, 90, 90, 90	-	-	12.24	A	14115
Ho-Zn	ZnHo rt	CsCl, cP2, 221	$Pm-3m$	0.3548, 0.3548, 0.3548, 90, 90, 90	b.c.c. family	gray silver	8.56	X	46725
Ho-Zn	Zn ₁₂ Ho	ThMn ₁₂ , tI26, 139	$I4/mmm$	0.8858, 0.8858, 0.5184, 90, 90, 90	CaCu ₂ -Zr ₄ Al ₃	-	7.75	A	3040
Ho-Zn	Zn ₁₇ Ho ₂ ht	Zn ₁₇ Th ₂ , hR57, 166	$R-3m$	0.89566, 0.89566, 1.31261, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	gray	7.87	X	19986
Ho-Zn	Zn ₁₇ Ho ₂ rt	Th ₂ Ni ₁₇ , hP38, 194	$P6_3/mmc$	0.8963, 0.8963, 0.8747, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	-	7.87	A	2559
Ho-Zn	Zn ₂ Ho	KHg ₂ , oI12, 74	$Imma$	0.447, 0.7048, 0.7611, 90, 90, 90	AlB ₂ family	-	8.19	X	6618
Ho-Zn	Zn ₂₃ Ho ₆	Th ₆ Mn ₂₃ , cF116, 225	$Fm-3m$	1.265, 1.265, 1.265, 90, 90, 90	-	-	8.18	A	2559
Ho-Zn	Zn ₃ Ho	Zn ₃ Y, oP16, 62	$Pnma$	0.6697, 0.43655, 1.0099, 90, 90, 90	-	-	8.12	X	3720
Ho-Zn	Zn ₃ Ho	Zn ₃ Er, hP36, 194	$P6_3/mmc$	0.8866, 0.8866, 0.9188, 90, 90, 120	-	-	7.83	A	5898
Ho-Zn	Zn ₅₈ Ho ₁₃	Zn ₅₈ Gd ₁₃ , hP142, 194	$P6_3/mmc$	1.4238, 1.4238, 1.3995, 90, 90, 120	-	-	8.02	A	46725
Ho-Zn	Zn _{58.71} Ho ₁₃	Zn _{58.71} Ho ₁₃ , oP324, 62	$Pnma$	1.4007, 1.4245, 2.4625, 90, 90, 90	-	-	8.09	X	49399
Ho-Zr	Ho _{0.5} Zr _{0.5} m	Mg, hP2, 194	$P6_3/mmc$	0.3385, 0.3385, 0.534, 90, 90, 120	close-packed structure	-	8.03	X	6777
Ho-Zr	Ho _{0.92} Zr _{0.08}	Mg, hP2, 194	$P6_3/mmc$	0.3594, 0.3594, 0.5628, 90, 90, 120	close-packed structure	-	8.39	X	55550
Ho-Zr	Ho ₂ Zr rt	Mg, hP2, 194	$P6_3/mmc$	0.3239, 0.3239, 0.518, 90, 90, 120	close-packed structure	-	6.44	X	55550
I-In	InI	TlI, oS8, 63	$Cmcm$	0.4763, 1.2781, 0.4909, 90, 90, 90	CrB(TlI)-FeB	red	5.37	X	22851
I-In	InI ₂	GaCl ₂ , oP24, 52	$Pnna$	0.8427, 1.0965, 1.1173, 90, 90, 90	-	yellow pale	4.74	X	17546
I-In	InI ₃ mon	InI ₃ , mP16, 14	$P12_1/c1$	0.9837, 0.6102, 1.2195, 90, 107, 69, 90	-	-	4.72	X	2145
I-In	InI ₃ rhom	* _h R24, 146	$R3$	0.7229, 0.7229, 2.0514, 90, 90, 120	-	red	-	N	16715
I-Ir	IrI ₃	AlCl ₃ , mS16, 12	$C12/m1$	0.674, 1.175, 0.688, 90, 108, 90	-	brown red	7.34	A	3996
I-K	KI hp	CsCl, cP2, 221	$Pm-3m$	0.394, 0.394, 0.394, 90, 90, 90	b.c.c. family	-	4.51	X	2207
I-K	KI	NaCl, cF8, 225	$Fm-3m$	0.7005, 0.7005, 0.7005, 90, 90, 90	rocksalt family	-	3.21	X	46341
I-La	LaI (H)	ZrCl ₂ , hR12, 166	$R-3m$	0.42063, 0.42063, 3.1947, 90, 90, 120	-	green	5.41	A	29868
I-La	LaI rt	NiAs, hP4, 194	$P6_3/mmc$	0.39292, 0.39292, 0.9712, 90, 90, 120	AlB ₂ family	-	6.80	X	47352
I-La	LaI ₂	CuZr ₂ , tI6, 139	$I4/mmm$	0.3912, 0.3912, 1.3937, 90, 90, 90	close-packed structure	violet	6.12	X	26211

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
I-La	LaI ₃	PuBr ₃ ,oS16,63	<i>Cmcm</i>	0.4425,1.3979,1.0048,90,90,90	-	-	5.55	A	12650
I-La	La ₂ I ₅	Pr ₂ I ₅ ,mP14,11	<i>P12₁/m1</i>	0.8618,0.44038,1.458,90,89,8,90	-	bronze	5.48	X	43260
I-Li	LiI lt	ZnO,hP4,186	<i>P6₃mc</i>	0.4514,0.4514,0.7311,90,90,120	adamantane structure	-	3.45	X	44909
I-Li	LiI rt	NaCl,cF8,225	<i>Fm-3m</i>	0.606,0.606,0.606,90,90,90	rocksalt family	-	3.99	X	19125
I-Lu	LuI ₃	*,hP168,*	-	1.958,1.958,2.077,90,90,120	-	-	-	N	26536
I-Mg	MgI ₂	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.41537,0.41537,0.6862,90,90,120	CdI ₂ -PbI ₂ polytype	colorless	4.51	X	41852
I-Mn	MnI ₂	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.416,0.416,0.682,90,90,120	CdI ₂ -PbI ₂ polytype	brown pink	5.02	X	20
I-Mo	MoI ₂	MoCl ₂ ,oS72,64	<i>Cmce</i>	1.5803,1.2562,1.2562,90,90,90	Chevrel phase	brown	5.59	X	14362
I-Mo	MoI ₃	RuBr ₃ ,oP16,59	<i>Pmmn</i>	0.642,1.2322,0.7115,90,90,90	-	-	5.63	A	24517
I-N	I[N ₃] lt orth1	I[N ₃]-a,oP24,55	<i>Pbam</i>	0.65551,1.27764,0.39837,90,90,90	-	brown dark	3.36	X	58455
I-N	I[N ₃] lt orth2	I[N ₃]-b,oP24,55	<i>Pbam</i>	0.84583,0.97872,0.39894,90,90,90	-	-	3.40	X	58455
I-Na	NaI hp	TlI,oS8,63	<i>Cmcm</i>	0.299,0.926,0.358,90,90,90	CrB(TII)-FeB	-	10.04	A	37878
I-Na	NaI	NaCl,cF8,225	<i>Fm-3m</i>	0.64651,0.64651,0.64651,90,90,90	rocksalt family	white	3.68	X	47455
I-Nb	NbI ₄ m	RuBr ₃ ,oP16,59	<i>Pmmn</i>	0.6353,1.214,0.7009,90,90,90	-	-	5.82	A	24517
I-Nb	NbI ₄ rt	NbI ₄ ,oS40,36	<i>Cmc2₁</i>	0.767,1.323,1.393,90,90,90	-	-	5.64	X	1574
I-Nb	NbI ₅ mon	NbI ₅ ,mP24,14	<i>P12₁/c1</i>	1.058,0.658,1.388,90,109,14,90	-	-	5.29	X	1991
I-Nb	NbI ₅ tricl	UCI ₅ ,aP12,2	<i>P-1</i>	0.6977,0.7591,1.0322,109.07,90.93,116.17	-	yellow	5.31	X	13691
I-Nb	Nb ₃ I ₈	Nb ₃ Br ₈ ,hR66,166	<i>R-3m</i>	0.76,0.76,4.1715,90,90,120	-	-	6.18	X	3067
I-Nb	Nb ₆ I ₁₁ lt	Nb ₆ I ₁₁ ,oP68,33	<i>Pna2₁</i>	1.3502,1.5325,1.132,90,90,90	-	-	5.54	X	14975
I-Nb	Nb ₆ I ₁₁ rt	Nb ₆ I ₁₁ ,oP68,56	<i>Pccn</i>	1.132,1.531,1.355,90,90,90	Chevrel phase	black	5.53	X	14975
I-Nd	NdI ₂ hp1	CuZr ₂ ,tI6,139	<i>I4/mmm</i>	0.3848,0.3848,1.3953,90,90,90	close-packed structure	black	6.40	X	26210
I-Nd	NdI ₂ rt	SrBr ₂ ,tP30,85	<i>P4/n</i>	1.2592,1.2592,0.76682,90,90,90	-	-	5.44	A	28071
I-Nd	NdI ₃ rt	PuBr ₃ ,oS16,63	<i>Cmcm</i>	0.4295,1.4009,0.9971,90,90,90	-	-	5.81	A	12650
I-Ni	NiI ₂ rt	CdCl ₂ ,hR9,166	<i>R-3m</i>	0.3895,0.3895,1.963,90,90,120	-	black	6.04	X	74
I-Np	NpI ₃	PuBr ₃ ,oS16,63	<i>Cmcm</i>	0.431,1.393,0.994,90,90,90	-	-	6.88	X	311
I-O	IO ₂	IO ₂ ,mP24,14	<i>P12₁/c1</i>	0.78078,0.66997,0.83409,90,116.672,90	-	yellow	5.41	X	19943
I-O	IO ₃	IO ₃ ,aP16,2	<i>P-1</i>	0.5006,0.6741,0.6795,97.31,96.43,105.36	-	yellow	5.36	X	32530
I-O	I ₂ O ₅	I ₂ O ₅ ,mP28,14	<i>P12₁/c1</i>	1.1036,0.5063,0.8135,90,107,18,90	-	-	5.11	X	4933
I-Os	OsI ₃	RuBr ₃ ,oP16,59	<i>Pmmn</i>	0.6277,1.212,0.7012,90,90,90	-	-	7.11	A	24517
I-P	PI ₂	PI ₂ ,aP6,2	<i>P-1</i>	0.4538,0.7092,0.7382,80.49,73.07,81.81	-	orange red	4.24	X	62681
I-P	PI ₃	PI ₃ ,hP8,173	<i>P6₃</i>	0.7133,0.7133,0.7414,90,90,120	-	orange red	4.19	X	9698
I-Pb	PbI ₂ 10H ₁	PbI ₂ -a,hP15,156	<i>P3m1</i>	0.4557,0.4557,3.4895,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	4838
I-Pb	PbI ₂ 10H ₃	PbI ₂ -b,hP15,156	<i>P3m1</i>	0.4557,0.4557,3.4895,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	12232
I-Pb	PbI ₂ 10H _a	CdI ₂ -d,hP15,156	<i>P3m1</i>	0.4557,0.4557,3.4895,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	12232
I-Pb	PbI ₂ 18R ₁	PbI ₂ -a,hR27,166	<i>R-3m</i>	0.456,0.456,6.281,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.09	X	8581
I-Pb	PbI ₂ 20H	PbI ₂ ,hP30,156	<i>P3m1</i>	0.4557,0.4557,6.979,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	4838
I-Pb	PbI ₂ 22H	PbI ₂ ,hP33,156	<i>P3m1</i>	0.4557,0.4557,7.6769,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	12232
I-Pb	PbI ₂ 24H ₁	PbI ₂ ,hP36,156	<i>P3m1</i>	0.456,0.456,8.375,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.09	X	9789
I-Pb	PbI ₂ 24R ₂	PbI ₂ ,hR36,166	<i>R-3m</i>	0.4557,0.4557,8.376,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	17596
I-Pb	PbI ₂ 30H ₁	PbI ₂ ,hP45,156	<i>P3m1</i>	0.4557,0.4557,10.47,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	17596
I-Pb	PbI ₂ 30R	PbI ₂ ,hR45,166	<i>R-3m</i>	0.4557,0.4557,10.4685,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	12232
I-Pb	PbI ₂ 36R ₁	PbI ₂ ,hR54,166	<i>R-3m</i>	0.4557,0.4557,12.564,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	17596
I-Pb	PbI ₂ 48R	PbI ₂ ,hR72,166	<i>R-3m</i>	0.456,0.456,16.748,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.09	X	10145
I-Pb	PbI ₂ 4H	PbI ₂ ,hP20,156	<i>P3m1</i>	0.4554,0.4554,1.3962,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.11	X	23477
I-Pb	PbI ₂ 6H	PbI ₂ ,hP9,156	<i>P3m1</i>	0.4557,0.4557,2.0937,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	1129
I-Pb	PbI ₂ 6R	CdCl ₂ ,hR9,166	<i>R-3m</i>	0.454,0.454,2.07,90,90,120	-	-	6.22	X	237
I-Pb	PbI ₂ 8H	CdI ₂ ,hP12,164	<i>P-3m1</i>	0.4557,0.4557,2.7916,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	12232
I-Pb	PbI ₂ hp 14H	PbI ₂ ,hP21,156	<i>P3m1</i>	0.4557,0.4557,4.8853,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	4838
I-Pb	PbI ₂ ht	PbI ₂ ,hR18,166	<i>R-3m</i>	0.4557,0.4557,4.1874,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	1129
I-Pb	PbI ₂ ht1 4H	CdI ₂ ,hP6,186	<i>P6₃mc</i>	0.4557,0.4557,1.3958,90,90,120	CdI ₂ -PbI ₂ polytype	-	6.10	X	1129
I-Pb	PbI ₂ rt 2H	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.4558,0.4558,0.69986,90,90,120	CdI ₂ -PbI ₂ polytype	yellow	6.08	X	23477
I-Pd	PdI ₂ ht	CaCl ₂ ,oP6,58	<i>Pnnm</i>	0.669,0.8,0.38,90,90,90	-	black	5.88	X	3602
I-Pd	PdI ₂ rt	PdI ₂ ,mP12,14	<i>P12₁/c1</i>	0.669,0.860,0.687,90,103.5,90	-	black	6.23	X	3854
I-Pm	PmI ₃ orth	PuBr ₃ ,oS16,63	<i>Cmcm</i>	0.424,1.393,0.996,90,90,90	-	red dark	5.94	A	21161
I-Pm	PmI ₃ rhom	BiI ₃ ,hR24,148	<i>R-3</i>	0.765,0.765,2.11,90,90,120	-	red	4.90	A	21161
I-Pr	PrI ₂ cub	PrI ₂ ,cF48,216	<i>F-43m</i>	1.236,1.236,1.236,90,90,90	-	black	5.55	X	12670
I-Pr	PrI ₂ hex	MoS ₂ ,hP6,194	<i>P6₃/mmc</i>	0.4182,0.4182,1.518,90,90,120	-	-	5.70	A	12670
I-Pr	PrI ₂ rhom1	MoS ₂ ,hR9,160	<i>R3m</i>	0.4182,0.4182,2.2765,90,90,120	-	-	5.70	A	12670
I-Pr	PrI ₂ rhom2	CdCl ₂ ,hR9,166	<i>R-3m</i>	0.4265,0.4265,2.2471,90,90,120	-	black	5.55	X	44021
I-Pr	PrI ₂ tet	CuZr ₂ ,tI6,139	<i>I4/mmm</i>	0.3864,0.3864,1.394,90,90,90	close-packed structure	-	6.30	A	12670
I-Pr	PrI ₃	PuBr ₃ ,oS16,63	<i>Cmcm</i>	0.43281,1.4003,0.9988,90,90,90	-	green faint	5.72	A	12670
I-Pr	Pr ₂ I ₅	Pr ₂ I ₅ ,mP14,11	<i>P12₁/m1</i>	0.86335,0.43108,1.43871,90,90.542,90	-	-	5.68	X	24974
I-Pt	PtI ₂ ht	*,cI48,*	-	1.109,1.109,1.109,90,90,90	-	black	-	N	19528
I-Pt	PtI ₂ rt	PdI ₂ ,mP12,14	<i>P12₁/c1</i>	0.65877,0.8715,0.68894,90,102.76,90	-	-	7.73	X	19528
I-Pt	PtI ₃	PtI ₃ ,mS32,15	<i>C12/c1</i>	0.6735,1.2061,1.3313,90,101.25,90	-	-	7.21	X	17447
I-Pt	PtI ₄ orth	TcCl ₄ ,oP40,61	<i>Pbca</i>	0.69,1.29,1.564,90,90,90	-	black	6.71	X	4795
I-Pt	PtI ₄ tet	PtI ₄ ,tI40,88	<i>I4₁/a</i>	0.6769,0.6769,3.1095,90,90,90	-	black	6.55	X	9097
I-Pt	Pt ₃ I ₈	Pt ₃ I ₈ ,tP44,92	<i>P4₁2₁2</i>	1.1664,1.1664,1.0682,90,90,90	-	black	7.32	X	19528
I-Pu	PuI ₃	PuBr ₃ ,oS16,63	<i>Cmcm</i>	0.429,1.39,0.99,90,90,90	-	-	7.03	X	311
I-Rb	RbI hp1	NaCl,cF8,225	<i>Fm-3m</i>	0.73466,0.73466,0.73466,90,90,90	rocksalt family	-	3.56	X	2115
I-Rb	RbI hp2	CsCl,cP2,221	<i>Pm-3m</i>	0.434,0.434,0.434,90,90,90	b.c.c. family	-	4.31	X	2207
I-Rb	Rb[I ₃]	Cs[I ₃],oP16,62	<i>Pnma</i>	1.0908,0.6655,0.9711,90,90,90	-	black	4.39	X	18619
I-Re	ReI ₃	ReI ₃ ,mP24,11	<i>P12₁/m1</i>	0.8799,1.1309,0.9234,90,110.25,90	-	-	6.55	X	3927
I-Rh	RhI ₃	AlCl ₃ ,mS16,12	<i>C12/m1</i>	0.677,1.172,0.683,90,109.3,90	-	-	6.28	X	3982
I-Ru	RuI ₃	*,hP6,*	-	0.6982,0.6982,0.6231,90,90,120	-	-	-	N	3065
I-Sb	SbI ₃ mon	BiBr ₃ ,mP16,14	<i>P12₁/c1</i>	0.7281,1.0902,0.8946,90,109.93,90	-	green yellow	5.00	X	17508
I-Sb	SbI ₃ rhom	BiI ₃ ,hR24,148	<i>R-3</i>	0.7302,0.7302,2.0016,90,90,120	-	red	5.42	X	35239
I-Sc	ScI ₃	BiI ₃ ,hR24,148	<i>R-3</i>	0.7149,0.7149,2.0401,90,90,120	-	yellow	4.70	A	2286

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
I-Sc	Sc _{0.93} I ₂ rt	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.40851, 0.40851, 0.69824, 90, 90, 120	CdI ₂ -PbI ₂ polytype	black	4.86	X	23224
I-Si	SiI ₂	SiI ₂ , mP60, 14	<i>P12₁/c1</i>	1.0966, 1.5782, 1.62292, 90, 120, 20, 90	-	-	3.86	X	17655
I-Si	SiI ₃	SiI ₃ , hR24, 148	<i>R-3</i>	0.71436, 0.71436, 2.2213, 90, 90, 120	-	white	4.15	X	62775
I-Si	SiI ₄	SnI ₄ , cP40, 205	<i>Pa-3</i>	1.198, 1.198, 1.198, 90, 90, 90	-	orange	4.14	X	38188
I-Si	Si ₂ I ₆	C ₂ Cl ₆ , oP32, 62	<i>Pnma</i>	1.3702, 1.2498, 0.7894, 90, 90, 90	-	colorless	4.02	X	31364
I-Si	Si ₂₂ I ₄₉	Na ₄ Si ₂₃ , cP54, 223	<i>Pm-3n</i>	1.04195, 1.04195, 1.04195, 90, 90, 90	clathrate	-	3.65	X	37352
I-Sm	SmI ₂ hp1-ht	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.8893, 0.4575, 1.1184, 90, 90, 90	-	green dark	5.90	A	12671
I-Sm	SmI ₃ hp	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.4236, 1.4, 0.9969, 90, 90, 90	-	-	5.97	A	12650
I-Sm	SmI ₃ rt	BiI ₃ , hR24, 148	<i>R-3</i>	0.749, 0.749, 2.08, 90, 90, 120	-	-	5.24	A	2129
I-Sn	SnI ₂	SnI ₂ , mS18, 12	<i>C12/m1</i>	1.417, 0.4535, 1.087, 90, 92, 0, 90	-	red	5.32	X	6313
I-Sn	SnI ₄ hp	SnI ₄ , cP40, 205	<i>Pa-3</i>	1.22681, 1.22681, 1.22681, 90, 90, 90	-	orange red	4.51	X	40116
I-Sr	SrI ₂ hp1-ht	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.8889, 0.463, 1.123, 90, 90, 90	-	-	4.91	A	12671
I-Sr	SrI ₂ m	Sr[OH] ₂ , oP12, 62	<i>Pnma</i>	1.2328, 0.492, 0.8384, 90, 90, 90	-	-	4.46	X	22290
I-Sr	SrI ₂ rt	SrI ₂ , oP24, 61	<i>Pbca</i>	0.79, 1.522, 0.822, 90, 90, 90	-	-	4.59	X	4793
I-Ta	TaI ₄	TaI ₄ , aP20, 2	<i>P-1</i>	0.7059, 1.0623, 1.0723, 79.55, 89.78, 75.57	-	black	5.98	X	52527
I-Ta	TaI ₅	NbBr ₅ , oP48, 62	<i>Pnma</i>	1.3962, 2.0095, 0.6607, 90, 90, 90	-	-	5.84	X	52528
I-Ta	Ta ₂ I ₅	Nb ₂ F ₅ , cI42, 229	<i>Im-3m</i>	1.102, 1.102, 1.102, 90, 90, 90	-	-	7.42	A	3990
I-Ta	Ta ₂ I ₇	Nb ₂ Cl ₇ , oS80, 64	<i>Cmce</i>	1.5032, 1.4487, 1.2518, 90, 90, 90	Chevre phase	black	6.97	X	28230
I-Tb	TbI ₃ hp	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.4161, 1.3978, 0.9999, 90, 90, 90	-	-	6.16	A	12650
I-Tb	TbI ₃ rt	BiI ₃ , hR24, 148	<i>R-3</i>	0.7526, 0.7526, 2.0838, 90, 90, 120	-	-	5.26	A	2129
I-Te	TeI m	TeI, mS16, 12	<i>C12/m1</i>	1.5383, 0.4182, 1.1999, 90, 128, 09, 90	-	-	5.57	X	10094
I-Te	TeI	TeI, aP16, 2	<i>P-1</i>	0.7992, 0.8198, 0.9946, 90.03, 103.06, 104.37	-	black	5.51	X	62681
I-Te	TeI ₄ m mon	TeI ₄ , mP80, 14	<i>P12₁/c1</i>	1.1199, 1.3599, 2.2158, 90, 98.1, 90	-	black	5.05	X	21875
I-Te	TeI ₄ m orth	TeI ₄ , oP40, 31	<i>Pmn2₁</i>	1.6753, 0.6888, 1.4539, 90, 90, 90	-	black	5.03	X	21875
I-Te	TeI ₄ m tet	TeI ₄ , tI80, 141	<i>I4₁/amd</i>	1.6875, 1.6875, 1.1829, 90, 90, 90	-	black	5.01	X	21875
I-Te	TeI ₄ orth	TeI ₄ , oP80, 62	<i>Pnma</i>	1.3635, 1.6798, 1.4624, 90, 90, 90	-	black	5.04	X	9396
I-Te	Te _{0.5} I ₂ m trig	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.4228, 0.4228, 0.6684, 90, 90, 120	CdI ₂ -PbI ₂ polytype	black	5.10	X	21875
I-Te	Te ₂ I m	Te ₂ Br, oP24, 62	<i>Pnma</i>	1.5295, 0.4123, 1.3694, 90, 90, 90	-	gray	5.88	X	10094
I-Te	Te ₂ I _{0.88} rt	Te ₂ I _{0.88} , oS8, 65	<i>Cmmm</i>	0.4464, 0.4924, 0.9037, 90, 90, 90	-	black	6.13	X	17680
I-Th	ThI ₂ ht	ThI ₂ , hP12, 194	<i>P6₃/mmc</i>	0.397, 0.397, 3.175, 90, 90, 120	-	golden	7.45	X	3934
I-Th	ThI ₂ rt	*hP**	-	0.8, 0.8, 0.787, 90, 90, 120	-	black	-	N	2196
I-Th	ThI ₃ mon	*mS*, 15	<i>C12/c1</i>	0.787, 3.1492, 2.6991, 90, 90, 90	-	black	-	N	14869
I-Th	ThI ₃ orth	ThI ₃ , oS64, 66	<i>Cccm</i>	0.8735, 2.0297, 1.4661, 90, 90, 90	-	-	6.26	X	14869
I-Th	ThI ₄	ThI ₄ , mP20, 14	<i>P12₁/c1</i>	0.7766, 0.8068, 1.4283, 90, 113.83, 90	-	yellow	6.00	X	2147
I-Ti	TiI ₂ rt	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.4122, 0.4122, 0.6789, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	5.02	X	38421
I-Ti	TiI ₃ ht	TiCl ₃ , hP8, 193	<i>P6₃/mcm</i>	0.71446, 0.71446, 0.65099, 90, 90, 120	-	black violet	4.95	X	58384
I-Ti	TiI ₃ rt	RuBr ₃ , oP16, 59	<i>Pmmn</i>	0.64984, 1.23391, 0.7133, 90, 90, 90	-	-	4.98	X	58384
I-Ti	TiI ₄ ht	SnI ₄ , cP40, 205	<i>Pa-3</i>	1.203, 1.203, 1.203, 90, 90, 90	-	-	4.24	A	16304
I-Ti	TiI ₄ m	*aP100,*	-	0.8114, 0.8124, 6.793, 90.07, 90.05, 90.04	-	-	-	N	17186
I-Ti	TiI ₄ rt	UI ₄ , mS20, 15	<i>C12/c1</i>	1.3218, 0.8075, 0.6859, 90, 90, 65, 90	-	-	5.04	X	27981
I-Tl	TlI ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.4211, 0.4211, 0.4211, 90, 90, 90	b.c.c. family	yellow	7.37	X	16282
I-Tl	TlI rt	TlI, oS8, 63	<i>Cmcm</i>	0.457, 1.292, 0.524, 90, 90, 90	CrB(TlI)-FeB	yellow	7.11	X	115
I-Tl	TlI tf	NaCl, cF8, 225	<i>Fm-3m</i>	0.694, 0.694, 0.694, 90, 90, 90	rocksalt family	-	6.58	X	359
I-Tl	Tl[I ₃]	Cs[I ₃], oP16, 62	<i>Pnma</i>	1.0599, 0.6419, 0.9436, 90, 90, 90	-	black	6.05	X	18619
I-Tm	TmI ₂	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.45196, 0.45196, 0.69755, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	5.69	A	26762
I-Tm	TmI ₃	BiI ₃ , hR24, 148	<i>R-3</i>	0.7415, 0.7415, 2.078, 90, 90, 120	-	-	5.53	A	2129
I-U	UI ₃	PuBr ₃ , oS16, 63	<i>Cmcm</i>	0.4334, 1.4024, 1.0013, 90, 90, 90	-	-	6.75	X	14184
I-U	UI ₄	UI ₄ , mS20, 15	<i>C12/c1</i>	1.3967, 0.8472, 0.7510, 90, 90, 54, 90	-	-	5.57	X	13078
I-V	VI ₂	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.4057, 0.4057, 0.676, 90, 90, 120	CdI ₂ -PbI ₂ polytype	black violet	5.25	X	12606
I-W	WI ₂	MoCl ₂ , oS72, 64	<i>Cmce</i>	1.584, 1.258, 1.259, 90, 90, 90	Chevre phase	-	6.95	A	3674
I-W	W ₁₅ I ₄₇	W ₁₅ I ₄₇ , mS124, 5	<i>C121</i>	4.0883, 0.9523, 1.1985, 90, 103.97, 90	-	-	6.40	X	56449
I-Y	YI ₃ rt	BiI ₃ , hR24, 148	<i>R-3</i>	0.74864, 0.74864, 2.088, 90, 90, 120	-	colorless	4.62	X	45161
I-Yb	YbI ₂ ht	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.45097, 0.45097, 0.69683, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	5.78	A	26762
I-Yb	YbI ₂ rt	*cP**	-	0.4403, 0.4403, 0.4403, 90, 90, 90	-	yellow	-	N	5186
I-Yb	YbI ₃	BiI ₃ , hR24, 148	<i>R-3</i>	0.7434, 0.7434, 2.072, 90, 90, 120	-	-	5.56	A	2129
I-Zn	ZnI ₂	ZnI ₂ , tI96, 142	<i>I4₁/acd</i>	1.2284, 1.2284, 2.3582, 90, 90, 90	-	colorless	4.77	X	11119
I-Zr	ZrI ₂ mon	MoTe ₂ , mP12, 11	<i>P12₁/m1</i>	0.6821, 0.3741, 1.4937, 90, 95.66, 90	-	black	6.04	X	14216
I-Zr	ZrI ₂ orth	WTe ₂ , oP12, 31	<i>Pmn2₁</i>	0.3744, 0.6831, 1.4886, 90, 90, 90	-	black	6.02	X	14966
I-Zr	ZrI ₂ rhom	ZrCl ₂ , hR54, 148	<i>R-3</i>	1.4502, 1.4502, 0.9996, 90, 90, 120	-	-	5.66	X	14976
I-Zr	ZrI ₃ orth	RuBr ₃ , oP16, 59	<i>Pmmn</i>	0.6679, 1.2594, 0.7292, 90, 90, 90	-	black	5.11	X	23225
I-Zr	ZrI ₄ mon	ZrI ₄ , mP30, 13	<i>P12/c1</i>	0.8356, 0.8326, 1.7926, 90, 103.21, 90	-	orange red	4.91	X	12017
I-Zr	ZrI ₄ orth	*oP20, 29	<i>Pca2₁</i>	0.7077, 0.8379, 1.364, 90, 90, 90	-	-	-	N	14330
I-Zr	ZrI ₄ tricl	ZrI ₄ , aP20, 2	<i>P-1</i>	0.8343, 0.8348, 1.2978, 108.27, 108.18, 90.04	-	-	4.91	X	19408
I-Zr	Zr _{0.88} I ₃ hex	TiCl ₃ , hP8, 193	<i>P6₃/mcm</i>	0.7239, 0.7239, 0.6673, 90, 90, 120	-	black blue	5.06	X	14971
In-Ir	IrIn ₂	Mg ₂ Cu, oF48, 70	<i>Fddd</i>	0.53467, 0.9801, 1.8049, 90, 90, 90	-	gray light	11.85	X	37930
In-Ir	IrIn ₃ orth	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.746, 0.8319, 0.5315, 90, 90, 90	-	-	10.81	X	43952
In-Ir	IrIn ₃ tet	IrIn ₃ , tP16, 136	<i>P4₂/mmn</i>	0.69933, 0.69933, 0.71908, 90, 90, 90	-	gray faint	10.14	X	35416
In-Ir	Ir _{0.988} In _{0.012}	Cu, cF4, 225	<i>Fm-3m</i>	0.3842, 0.3842, 0.3842, 90, 90, 90	close-packed structure	-	22.41	X	40832
In-K	KIn ₄	BaAl ₄ , tI10, 139	<i>I4/mmm</i>	0.48462, 0.48462, 1.2687, 90, 90, 90	BaAl ₄ family	gray silver	5.56	X	46660
In-K	K ₁₇ In ₄₁	K ₁₇ In ₄₁ , cF464, 227	<i>Fd-3m</i>	2.4241, 2.4241, 2.4241, 90, 90, 90	-	gray silver	5.01	X	28215
In-K	K ₂₁ In ₃₃ In _{39,67}	K ₂₁ [K _{0.33} In _{0.67}]In ₃₉ , hR366, 166	<i>R-3m</i>	1.7214, 1.7214, 4.4612, 90, 90, 120	-	gray silver	4.69	X	26778
In-K	K ₃₉ In ₈₀	K ₃₉ In ₈₀ , hP238, 164	<i>P-3m1</i>	1.7211, 1.7211, 2.8888, 90, 90, 120	-	gray silver	4.80	X	42301
In-K	K ₈ In ₁₁	K ₈ In ₁₁ , hR114, 167	<i>R-3c</i>	1.0021, 1.0021, 5.0891, 90, 90, 120	-	gray silver	3.55	X	25442
In-La	LaIn	CsCl, cP2, 221	<i>Pm-3m</i>	0.3985, 0.3985, 0.3985, 90, 90, 90	b.c.c. family	-	6.66	X	2869
In-La	LaIn ₂	KHg ₂ , oI12, 74	<i>Imma</i>	0.4759, 0.7695, 0.9092, 90, 90, 90	AlB ₂ family	-	7.35	X	8139
In-La	LaIn ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4745, 0.4745, 0.4745, 90, 90, 90	close-packed structure	-	7.51	X	53624
In-La	La ₂ In	Co _{1.35} Ge, hP6, 194	<i>P6₃/mmc</i>	0.5636, 0.5636, 0.7065, 90, 90, 120	AlB ₂ family	-	6.71	X	4002
In-La	La ₃ In	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.507, 0.507, 0.507, 90, 90, 90	close-packed structure	-	6.77	X	27336

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
In-La	La ₃ In ₅	Pu ₃ Pd ₅ , oS32, 63	<i>Cmcm</i>	1.0345, 0.8424, 1.0643, 90, 90, 90	-	-	7.10	X	30090
In-Li	LiIn hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.313, 0.313, 0.313, 90, 90, 90	b.c.c. family	-	6.59	X	34956
In-Li	LiIn lt	LiIn, tI8, 141	<i>I4₁/amd</i>	0.4783, 0.4783, 0.6799, 90, 90, 90	-	-	5.20	X	41161
In-Li	LiIn rt	NaTi, cF16, 227	<i>Fd-3m</i>	0.68014, 0.68014, 0.68014, 90, 90, 90	b.c.c. family	gray bluish	5.14	X	41161
In-Li	LiIn ₃ hp	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4404, 0.4404, 0.4404, 90, 90, 90	close-packed structure	-	6.83	X	34956
In-Li	Li _{0.14} In _{0.86}	In, tI2, 139	<i>I4/mmm</i>	0.32533, 0.32533, 0.49329, 90, 90, 90	close-packed structure	-	6.34	X	869
In-Li	Li _{0.95} In _{0.05}	Li ₉ (Li _{0.975} In _{0.025}) ₂ In ₄ , mS30, 12	<i>C12/m1</i>	1.4156, 0.4729, 0.8617, 90, 105.89, 90	b.c.c. family	gray light	3.24	X	63292
In-Li	Li ₁₃ In ₃	Li ₁₃ In ₃ , cF128, 227	<i>Fd-3m</i>	1.3556, 1.3556, 1.3556, 90, 90, 90	b.c.c. family	gray	2.32	X	11860
In-Li	Li ₂ In rt	Li ₂ Ga, oS12, 63	<i>Cmcm</i>	0.4767, 1.0017, 0.4735, 90, 90, 90	b.c.c. family	gray	3.78	X	11860
In-Li	Li ₃ In ₂ rt	Li ₃ Al ₂ , hR15, 166	<i>R-3m</i>	0.4748, 0.4748, 1.474, 90, 90, 120	b.c.c. family	-	4.34	X	12742
In-Li	Li _{4.20} In _{1.80}	Li ₃ (Li _{0.60} In _{0.40}) ₂ In, hP12, 191	<i>P6/mmm</i>	0.46975, 0.46975, 1.1526, 90, 90, 120	-	gray light	3.56	X	63292
In-Li	Li ₅ In ₄ rt	Li ₅ Ga, hP9, 164	<i>P-3m1</i>	0.478, 0.478, 0.888, 90, 90, 120	b.c.c. family	-	4.67	A	16386
In-Li	Li _{9.95} In _{0.05}	(Li _{0.90} In _{0.10}) ₁₁ In ₄ , hP15, 164	<i>P-3m1</i>	0.4748, 0.4748, 1.4283, 90, 90, 120	-	gray light	3.86	X	63292
In-Lu	LuIn	CuAu, tP2, 123	<i>P4/mmm</i>	0.32506, 0.32506, 0.4326, 90, 90, 90	close-packed structure	-	10.53	X	31888
In-Lu	LuIn ₂	ZrGa ₂ , oS12, 65	<i>Cmmm</i>	0.4541, 1.3904, 0.4564, 90, 90, 90	close-packed structure	-	9.33	A	34623
In-Lu	LuIn ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4544, 0.4544, 0.4544, 90, 90, 90	close-packed structure	-	9.19	X	15971
In-Lu	Lu ₂ In	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.5237, 0.5237, 0.6568, 90, 90, 120	AlB ₂ family	-	9.89	X	15971
In-Lu	Lu ₃ In ₅	TmGa ₃ , oP32, 62	<i>Pnma</i>	1.2062, 1.0255, 0.633, 90, 90, 90	-	-	9.32	A	34623
In-Lu	Lu ₅ In ₄	Ti ₅ Ga ₄ , hP18, 193	<i>P6₃/mcm</i>	0.9011, 0.9011, 0.6551, 90, 90, 120	AlB ₂ family	-	9.62	A	34623
In-Mg	Mg _{0.04} In _{0.96}	In, tI2, 139	<i>I4/mmm</i>	0.32718, 0.32718, 0.4845, 90, 90, 90	close-packed structure	-	7.12	X	3992
In-Mg	Mg _{0.1} In _{0.9} ht	Cu, cF4, 225	<i>Fm-3m</i>	0.4675, 0.4675, 0.4675, 90, 90, 90	close-packed structure	-	6.88	X	3992
In-Mg	Mg _{0.978} In _{0.022}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.32062, 0.32062, 0.52103, 90, 90, 120	close-packed structure	-	1.88	X	51783
In-Mg	Mg _{1.05} In _{0.95} rt	CuAu, tP2, 123	<i>P4/mmm</i>	0.32421, 0.32421, 0.43967, 90, 90, 90	close-packed structure	-	4.84	X	2742
In-Mg	Mg _{1.2} In _{2.8} rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4589, 0.4589, 0.4589, 90, 90, 90	close-packed structure	-	6.03	X	3992
In-Mg	Mg ₂ In rt	Mg ₂ In, hP9, 189	<i>P-62m</i>	0.827, 0.827, 0.342, 90, 90, 120	Fe ₂ P family	-	4.02	X	1994
In-Mg	Mg ₃ In rt	Mg ₃ In, hR48, 166	<i>R-3m</i>	0.6323, 0.6323, 3.106, 90, 90, 120	close-packed structure	-	3.48	X	1994
In-Mg	Mg ₃ In ₂ rt	Mg ₃ Ga ₂ , oI28, 72	<i>Ibam</i>	0.736, 1.423, 0.619, 90, 90, 90	-	-	3.60	A	1994
In-Mn	Mn _{0.86} In _{0.14} ht1	Mn, cP20, 213	<i>P4₃2</i>	0.657, 0.657, 0.657, 90, 90, 90	-	-	7.42	A	345
In-Mn	Mn _{0.75} In _{0.25}	CuAl ₄ , cP52, 215	<i>P-43m</i>	0.942, 0.942, 0.942, 90, 90, 90	γ-brass	gray silver	7.22	X	11975
In-N	InN hp	NaCl, cF8, 225	<i>Fm-3m</i>	0.4532, 0.4532, 0.4532, 90, 90, 90	rocksalt family	-	9.19	X	29335
In-N	InN rt	ZnO, hP4, 186	<i>P6₃/mc</i>	0.35372, 0.35372, 0.57029, 90, 90, 120	adamantane structure	-	6.92	X	42923
In-Na	NaIn rt	NaTi, cF16, 227	<i>Fd-3m</i>	0.7332, 0.7332, 0.7332, 90, 90, 90	b.c.c. family	gray silver	4.64	X	12337
In-Na	Na ₁₅ In _{27.4}	Na ₁₅ In _{27.4} , oS344, 63	<i>Cmcm</i>	1.6108, 3.5279, 1.5931, 90, 90, 90	-	gray silver	5.12	X	27584
In-Na	Na ₂ In	Na ₂ Tl, oS48, 20	<i>C222₁</i>	0.8836, 1.3855, 1.1762, 90, 90, 90	-	-	2.97	X	27584
In-Na	Na ₇ In _{11.76}	Na ₇ In _{11.76} , tP228, 137	<i>P4₃/nmc</i>	1.6093, 1.6093, 2.3384, 90, 90, 90	-	-	4.97	X	25837
In-Nb	Nb _{0.75} In _{0.25}	W, cI2, 229	<i>Im-3m</i>	0.3326, 0.3326, 0.3326, 90, 90, 90	b.c.c. family	-	8.88	X	2212
In-Nb	Nb ₃ In	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.5293, 0.5293, 0.5293, 90, 90, 90	Frank-Kasper phase	-	8.81	X	15549
In-Nd	NdIn	CsCl, cP2, 221	<i>Pm-3m</i>	0.3819, 0.3819, 0.3819, 90, 90, 90	b.c.c. family	-	7.72	X	12535
In-Nd	NdIn ₃ rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.464, 0.464, 0.464, 90, 90, 90	close-packed structure	-	8.12	X	14400
In-Nd	Nd ₂ In	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.549, 0.549, 0.685, 90, 90, 120	AlB ₂ family	-	7.49	X	21139
In-Nd	Nd ₃ In rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.494, 0.494, 0.494, 90, 90, 90	close-packed structure	-	7.54	X	14400
In-Nd	Nd ₃ In ₅	Pu ₃ Pd ₅ , oS32, 63	<i>Cmcm</i>	1.008, 0.8155, 1.044, 90, 90, 90	-	-	7.79	A	14115
In-Ni	NiIn ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.312, 0.312, 0.312, 90, 90, 90	b.c.c. family	-	9.49	X	52172
In-Ni	NiIn rt	CoSn, hP6, 191	<i>P6/mmm</i>	0.5245, 0.5245, 0.4352, 90, 90, 120	AlB ₂ family	-	8.34	X	64712
In-Ni	Ni _{0.8} In _{0.2} m	W, cI2, 229	<i>Im-3m</i>	0.2929, 0.2929, 0.2929, 90, 90, 90	b.c.c. family	-	9.24	X	3592
In-Ni	Ni _{0.96} In _{0.04}	Cu, cF4, 225	<i>Fm-3m</i>	0.3566, 0.3566, 0.3566, 90, 90, 90	close-packed structure	-	8.93	X	17661
In-Ni	Ni _{1.78} In ht	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.4265, 0.4265, 0.5163, 90, 90, 120	AlB ₂ family	-	8.96	X	2217
In-Ni	Ni ₁₃ In ₃ rt	Ni ₁₃ Ga ₃ , mS44, 12	<i>C12/m1</i>	1.07215, 0.83905, 0.90376, 90, 125.368, 90	AlB ₂ family	-	9.00	X	47622
In-Ni	Ni ₂ In rt	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.41889, 0.41889, 0.5123, 90, 90, 120	AlB ₂ family	-	9.91	X	9940
In-Ni	Ni ₂ In ₃	Ni ₂ Al ₃ , hP5, 164	<i>P-3m1</i>	0.439, 0.439, 0.51, 90, 90, 120	-	-	9.01	X	269
In-Ni	Ni ₃ In hp	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3762, 0.3762, 0.3762, 90, 90, 90	close-packed structure	-	9.07	X	17181
In-Ni	Ni ₃ In rt	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.532, 0.532, 0.4242, 90, 90, 120	close-packed structure	-	9.29	X	346
In-Ni	Ni ₃ In _{6.4}	Ru ₃ Sn ₇ , cI40, 229	<i>Im-3m</i>	0.918, 0.918, 0.918, 90, 90, 90	-	-	7.82	X	3161
In-Ni	Ni ₇ In ₃ rt	Cu ₇ In ₃ , aP40, 2	<i>P-1</i>	0.65697, 0.89083, 0.97945, 73.144, 82.911, 90.285	-	-	9.22	X	47622
In-Np	NpIn ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4611, 0.4611, 0.4611, 90, 90, 90	close-packed structure	-	9.85	X	27834
In-O	In ₂ O ₃ hp1	Al ₂ O ₃ , hR30, 167	<i>R-3c</i>	0.5487, 0.5487, 1.451, 90, 90, 120	-	colorless	7.31	X	4516
In-O	In ₂ O ₃ hp2	Rh ₂ Si, oP20, 60	<i>Pbcn</i>	0.7875, 0.5432, 0.5539, 90, 90, 90	-	-	7.78	X	52180
In-O	In ₂ O ₃ hp3	Cr ₃ C ₂ -b, oP20, 62	<i>Pnma</i>	0.5473, 0.3003, 1.1618, 90, 90, 90	-	-	9.66	X	52230
In-O	In ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	<i>Ia-3</i>	1.01206, 1.01206, 1.01206, 90, 90, 90	-	yellow	7.12	X	46479
In-P	InP hp1	NaCl, cF8, 225	<i>Fm-3m</i>	0.5243, 0.5243, 0.5243, 90, 90, 90	rocksalt family	-	6.72	X	20409
In-P	InP rt	ZnS, cF8, 216	<i>F-43m</i>	0.587, 0.587, 0.587, 90, 90, 90	adamantane structure	black	4.79	X	26801
In-P	InP ₃ hp	SnP ₃ , hR24, 166	<i>R-3m</i>	0.7449, 0.7449, 0.9885, 90, 90, 120	-	-	4.36	X	16211
In-P	In _{0.5} P _{0.5} hp2	Sn, tI4, 141	<i>I4₁/amd</i>	0.498, 0.498, 0.258, 90, 90, 90	-	-	7.57	X	20409
In-Pb	In ₀ cPb _{0.4}	Cu, cF4, 225	<i>Fm-3m</i>	0.4831, 0.4831, 0.4831, 90, 90, 90	close-packed structure	-	8.94	X	42775
In-Pb	In _{0.90} Pb _{0.10}	In, tI2, 139	<i>I4/mmm</i>	0.3224, 0.3224, 0.4962, 90, 90, 90	close-packed structure	-	7.99	X	42473
In-Pb	In _{0.90} Pb _{0.10}	In, tI2, 139	<i>I4/mmm</i>	0.32714, 0.32714, 0.5007, 90, 90, 90	close-packed structure	-	7.69	X	42775
In-Pd	PdIn	CsCl, cP2, 221	<i>Pm-3m</i>	0.32425, 0.32425, 0.32425, 90, 90, 90	b.c.c. family	-	10.78	X	64795
In-Pd	Pd _{0.85} In _{0.15}	Cu, cF4, 225	<i>Fm-3m</i>	0.3939, 0.3939, 0.3939, 90, 90, 90	close-packed structure	-	11.70	X	11484
In-Pd	Pd _{1.5} In _{0.5} tet1	CuAu, tP2, 123	<i>P4/mmm</i>	0.28722, 0.28722, 0.38008, 90, 90, 90	close-packed structure	-	11.49	X	50738
In-Pd	Pd ₂ In rt	Co ₃ Si-b, oP12, 62	<i>Pnma</i>	0.56168, 0.42171, 0.82278, 90, 90, 90	-	-	11.17	X	50738
In-Pd	Pd ₃ In ₃	Ni ₂ Al ₃ , hP5, 164	<i>P-3m1</i>	0.452, 0.452, 0.549, 90, 90, 120	-	-	9.53	X	269
In-Pd	Pd ₃ In m	TiAl ₃ , tI8, 139	<i>I4/mmm</i>	0.40996, 0.40996, 0.74759, 90, 90, 90	close-packed structure	gray	11.47	X	54385
In-Pd	Pd ₃ In tet2	ZrAl ₃ , tI6, 139	<i>I4/mmm</i>	0.4062, 0.4062, 1.52031, 90, 90, 90	close-packed structure	gray	11.49	X	54385
In-Pd	Pd ₃ In tf	SnPb ₃ , tP4, 123	<i>P4/mmm</i>	0.40711, 0.40711, 0.38044, 90, 90, 90	close-packed structure	-	11.43	X	51560
In-Pd	Pd ₃ In ₇	Ru ₃ Sn ₇ , cI40, 229	<i>Im-3m</i>	0.94323, 0.94323, 0.94323, 90, 90, 90	-	-	8.89	X	34366
In-Pd	Pd ₃ In ₃ rt	Rh ₃ Ge ₃ , oP16, 55	<i>Pbam</i>	0.56135, 1.1042, 0.42426, 90, 90, 90	-	-	11.07	X	50738
In-Pr	PrIn m	CsCl, cP2, 221	<i>Pm-3m</i>	0.3955, 0.3955, 0.3955, 90, 90, 90	b.c.c. family	-	6.86	X	2869
In-Pr	PrIn ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.46716, 0.46716, 0.46716, 90, 90, 90	close-packed structure	-	7.91	X	2607

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
In-Pr	Pr ₂ In	Co _{1.75} Ge ₄ hP6, 194	$P6_3/mmc$	0.5534, 0.5534, 0.6893, 90, 90, 120	AlB ₂ family	-	7.21	X	4002
In-Pr	Pr ₃ In	Cu ₃ Au, cP4, 221	$Pm-3m$	0.499, 0.499, 0.499, 90, 90, 90	close-packed structure	-	7.18	X	12287
In-Pr	Pr ₃ In ₅ rt	Pu ₃ Pd ₃ , oS32, 63	$Cmcm$	1.0147, 0.8208, 1.043, 90, 90, 90	-	-	7.62	A	12287
In-Pt	PtIn Pt+	CuAl ₁₁ mS20, 12	$C12/m1$	1.31641, 0.44299, 0.75797, 90, 123.261, 90	-	-	13.92	X	11455
In-Pt	PtIn ₂ ht	CaF ₂ , cF12, 225	$Fm-3m$	0.6365, 0.6365, 0.6365, 90, 90, 90	damiaoite	red copper	10.94	X	27436
In-Pt	Pt _{0.5} In _{0.5} ht	Cu ₂ cF4, 225	$Fm-3m$	0.3948, 0.3948, 0.3948, 90, 90, 90	yixunite	-	16.73	X	8432
In-Pt	Pt _{0.94} In _{0.06}	Cu ₂ cF4, 225	$Fm-3m$	0.3938, 0.3938, 0.3938, 90, 90, 90	close-packed structure	-	20.70	X	11484
In-Pt	Pt _{1.5} In ht	Co _{1.75} Ge ₄ hP6, 194	$P6_3/mmc$	0.43807, 0.43807, 0.55752, 90, 90, 120	AlB ₂ family	-	14.60	X	44961
In-Pt	Pt ₁₃ In ₉	Ni ₁₃ Ga ₉ , mS44, 12	$C12/m1$	1.11258, 0.8802, 0.9439, 90, 125.663, 90	AlB ₂ family	-	15.79	X	11848
In-Pt	Pt ₂ In ₃ rt	Ni ₂ Al ₃ hP5, 164	$P-3m1$	0.453, 0.453, 0.551, 90, 90, 120	-	-	12.46	A	27436
In-Pt	Pt ₃ In cub	Cu ₃ Au, cP4, 221	$Pm-3m$	0.401, 0.401, 0.401, 90, 90, 90	close-packed structure	-	18.03	X	27436
In-Pt	Pt ₃ In tet	SrPb ₃ , tP4, 123	$P4/mmm$	0.393, 0.393, 0.387, 90, 90, 90	close-packed structure	-	19.45	X	1513
In-Pt	Pt ₃ In ₂ rt	Ti ₃ Pt ₃ hP20, 194	$P6_3/mmc$	0.5575, 0.5575, 1.3657, 90, 90, 120	-	-	14.73	X	4003
In-Pt	Pt ₃ In ₇	Ru ₃ Sn ₇ , cI40, 229	$Im-3m$	0.94274, 0.94274, 0.94274, 90, 90, 90	-	-	11.01	X	41729
In-Pt	Pt _{3.5} In _{2.5} rt	Pt ₃ Ga ₃ , oS16, 65	$Cmmm$	0.818, 0.781, 0.409, 90, 90, 90	close-packed structure	-	17.29	X	4590
In-Pu	PuIn rt	CuAu, tP2, 123	$P4/mmm$	0.3402, 0.3402, 0.4538, 90, 90, 90	close-packed structure	-	11.35	X	2743
In-Pu	PuIn ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.46096, 0.46096, 0.46096, 90, 90, 90	close-packed structure	-	9.98	X	2743
In-Pu	Pu _{0.5} In _{0.5} ht	In, tI2, 139	$I4/mmm$	0.338, 0.338, 0.455, 90, 90, 90	close-packed structure	-	11.46	X	2630
In-Pu	Pu _{0.75} In _{0.25} ht	Cu ₂ cF4, 225	$Fm-3m$	0.475, 0.475, 0.475, 90, 90, 90	close-packed structure	-	13.12	X	2630
In-Pu	Pu _{0.94} In _{0.06} ht3	Cu ₂ cF4, 225	$Fm-3m$	0.465, 0.465, 0.465, 90, 90, 90	close-packed structure	-	15.61	X	2743
In-Pu	Pu ₃ In rt	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4705, 0.4705, 0.4705, 90, 90, 90	close-packed structure	-	13.50	X	2743
In-Rb	RbIn ₄	BaAl ₄ , tI10, 139	$I4/mmm$	0.4928, 0.4928, 1.2575, 90, 90, 90	BaAl ₄ family	gray silver	5.92	X	46660
In-Rb	Rb ₂ In ₃	Rb ₂ In ₃ , tI20, 139	$I4/mmm$	0.68735, 0.68735, 1.5899, 90, 90, 90	-	-	4.56	X	28065
In-Rb	Rb ₈ In ₁₁	K ₈ In ₁₁ , hR114, 167	$R-3c$	1.0301, 1.0301, 5.2367, 90, 90, 120	-	gray silver	4.03	X	28165
In-Rh	RhIn	CsCl ₂ cP2, 221	$Pm-3m$	0.319, 0.319, 0.319, 90, 90, 90	b.c.c. family	-	11.14	X	16268
In-Rh	RhIn ₃	IrIn ₃ , tP16, 136	$P4_2/mnm$	0.69828, 0.69828, 0.7111, 90, 90, 90	-	gray faint	8.57	X	35416
In-Ru	RuIn ₃	IrIn ₃ , tP16, 136	$P4_2/mnm$	0.7003, 0.7003, 0.7247, 90, 90, 90	-	black purple	8.33	X	30300
In-Ru	Ru ₃ In	Mg ₃ Cd, hP8, 194	$P6_3/mmc$	0.5942, 0.5942, 0.4689, 90, 90, 120	close-packed structure	-	9.68	A	2243
In-S	InS hp	InS, mP8, 14	$P12_1/c1$	0.38554, 1.07668, 0.54157, 90, 134.503, 90	-	red	6.08	X	41757
In-S	InS rt	InS, oP8, 58	$Pnmm$	0.4453, 1.065, 0.39457, 90, 90, 90	-	red	5.21	X	31184
In-S	In ₂ S ₃ hp1	Al ₂ O ₃ , hR30, 167	$R-3c$	0.6561, 0.6561, 1.757, 90, 90, 120	-	-	4.96	X	11871
In-S	In ₂ S ₃ ht2	* _o *, *	-	0.413, 0.539, 1.059, 90, 90, 90	-	-	-	N	6229
In-S	In ₂ S ₃ rt	In ₂ S ₃ , tI80, 141	$I4_1/amd$	0.76205, 0.76205, 3.23603, 90, 90, 90	-	red	4.61	X	56923
In-S	In _{2.67} S ₄ hp	Th ₃ P ₄ , cI28, 220	$I-43d$	0.72423, 0.72423, 0.72423, 90, 90, 90	-	-	7.60	X	64185
In-S	In _{2.67} S ₄ ht1	Fe ₃ O ₄ , cF56, 227	$Fd-3m$	1.0774, 1.0774, 1.0774, 90, 90, 90	spinel family	orange red	4.62	X	20504
In-S	In ₅ S ₄ (Sn)	In ₅ S ₄ , cP72, 205	$Pa-3$	1.2341, 1.234, 1.234, 90, 90, 90	-	red	4.97	X	12852
In-S	In ₆ S ₇	In ₅ (In _{0.91} Sn _{0.09}) _{0.92} S ₇ , mP26, 11	$P12_1/m1$	0.909, 0.3887, 1.71919, 90, 101.951, 90	-	black	5.10	X	3277
In-Sb	InSb hp1	InSb, oP2, 25	$Pnm2$	0.299, 0.585, 0.3117, 90, 90, 90	-	-	7.21	X	16421
In-Sb	InSb hp2	InSb, oP4, 59	$Pmnm$	0.5357, 0.5712, 0.3063, 90, 90, 90	-	-	8.38	X	11437
In-Sb	InSb hp2-ht	NaCl, cF8, 225	$Fm-3m$	0.6132, 0.6132, 0.6132, 90, 90, 90	rocksalt family	-	6.82	X	12402
In-Sb	InSb hp4	CsCl ₂ cP2, 221	$Pm-3m$	0.339, 0.339, 0.339, 90, 90, 90	b.c.c. family	-	10.08	X	22603
In-Sb	InSb rt	ZnS, cF8, 216	$F-43m$	0.6463, 0.6463, 0.6463, 90, 90, 90	adamantane structure	-	5.82	X	58405
In-Sb	InSb tf	ZnO, hP4, 186	$P6_3/mc$	0.457, 0.457, 0.748, 90, 90, 120	adamantane structure	-	5.81	A	877
In-Sb	In _{0.4} Sb _{0.6} hp1-ht	Po, cP1, 221	$Pm-3m$	0.3047, 0.3047, 0.3047, 90, 90, 90	-	-	6.98	X	16421
In-Sb	In _{0.44} Sb _{0.56} hp2-ht	Po, hR3, 166	$R-3m$	0.42916, 0.42916, 0.53665, 90, 90, 120	-	-	6.91	X	16421
In-Sb	In _{0.5} Sb _{0.5} hp1-ht	Sn, tI4, 141	$I4_1/amd$	0.581, 0.581, 0.3136, 90, 90, 90	-	-	7.42	X	11437
In-Sb	In _{0.5} Sb _{0.5} hp3	(Hg _{0.5} Sn _{0.5}), hP1, 191	$P6/mmm$	0.301, 0.301, 0.279, 90, 90, 120	-	-	8.97	X	22603
In-Sb	In _{0.7} Sb _{0.3} m	(Hg _{0.7} Sn _{0.3}), hP1, 191	$P6/mmm$	0.3205, 0.3205, 0.2981, 90, 90, 120	-	-	7.32	X	2686
In-Sb	In ₂ Sb hp	Co _{1.75} Ge ₄ hP6, 194	$P6_3/mmc$	0.5364, 0.5364, 0.6408, 90, 90, 120	AlB ₂ family	-	7.31	X	14449
In-Sb	In ₃ Sb ₃ hp	In ₃ Bi ₃ , tI32, 140	$I4/mcm$	0.834, 0.834, 1.234, 90, 90, 90	-	-	7.27	A	14449
In-Sc	ScIn tet	CuAu, tP2, 123	$P4/mmm$	0.32096, 0.32096, 0.4326, 90, 90, 90	close-packed structure	-	5.95	X	31888
In-Sc	ScIn ₂	ZrGa ₂ , oS12, 65	$Cmmm$	0.444, 1.3571, 0.4459, 90, 90, 90	close-packed structure	-	6.79	A	31888
In-Sc	ScIn ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.446, 0.446, 0.446, 90, 90, 90	close-packed structure	-	7.29	X	15971
In-Sc	Sc _{1.1} In _{0.9} cub	CsCl ₂ cP2, 221	$Pm-3m$	0.3564, 0.3564, 0.3564, 90, 90, 90	b.c.c. family	-	5.60	X	31888
In-Sc	Sc ₂ In	Co _{1.75} Ge ₄ hP6, 194	$P6_3/mmc$	0.505, 0.505, 0.63, 90, 90, 120	AlB ₂ family	-	4.89	X	48336
In-Sc	Sc ₃ In hp-ht	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4458, 0.4458, 0.4458, 90, 90, 90	close-packed structure	-	4.68	X	17181
In-Sc	Sc ₃ In	Mg ₃ Cd, hP8, 194	$P6_3/mmc$	0.6421, 0.6421, 0.5183, 90, 90, 120	close-packed structure	-	4.48	X	1575
In-Se	InSe hp	HgCl ₂ , tI8, 139	$I4/mmm$	0.387, 0.387, 1.085, 90, 90, 90	-	-	7.92	A	52177
In-Se	InSe ht-hp	InSe, mS8, 12	$C12/m1$	1.174, 0.411, 0.461, 90, 110.3, 90	-	-	6.17	X	15176
In-Se	InSe lt	GaSe, hP8, 194	$P6_3/mmc$	0.40037, 0.40037, 1.6644, 90, 90, 120	-	-	5.57	X	59420
In-Se	InSe rt	GaSe, hR12, 160	$R3m$	0.4002, 0.4002, 2.4946, 90, 90, 120	-	-	5.58	X	12936
In-Se	In ₂ Se ₃ hp1	In ₂ Se ₃ , mS10, 12	$C12/m1$	0.68268, 0.39731, 0.9394, 90, 103.3, 90	-	-	6.25	X	64114
In-Se	In ₂ Se ₃ hp2	Bi ₂ Te ₃ , hR15, 166	$R-3m$	0.3868, 0.3868, 2.6388, 90, 90, 120	-	-	6.80	X	64114
In-Se	In ₂ Se ₃ ht 2H	* _h P10, 194	$P6_3/mmc$	0.40242, 0.40242, 1.9251, 90, 90, 120	-	-	5.74	N	56108
In-Se	In ₂ Se ₃ ht 3R	Bi ₂ Te ₃ , hR15, 166	$R-3m$	0.405, 0.405, 2.941, 90, 90, 120	-	-	5.56	X	3098
In-Se	In ₂ Se ₃ ht1	In ₂ Se ₃ , hP30, 169	$P6_1$	0.71286, 0.71286, 1.9381, 90, 90, 120	-	black	5.45	X	32186
In-Se	In ₂ Se ₃ ht2	* _h P5*, *	-	0.4, 0.4, 0.956, 90, 90, 120	-	-	-	N	7976
In-Se	In ₂ Se ₃ rt 3R	In ₂ Se ₃ , hR15, 160	$R3m$	0.40286, 0.40286, 2.8731, 90, 90, 120	-	-	5.76	X	64114
In-Se	In ₂ Se ₃ rt hex	In ₂ Se ₃ , hP160, 173	$P6_3$	1.6, 1.6, 1.924, 90, 90, 120	-	-	5.81	X	1471
In-Se	In _{2.67} Se ₄ hp3	Th ₃ P ₄ , cI28, 220	$I-43d$	0.77243, 0.77243, 0.77243, 90, 90, 90	-	-	8.97	X	64114
In-Se	In _{2.67} Se ₄ ht2	Fe ₃ O ₄ , cF56, 227	$Fd-3m$	1.0099, 1.0099, 1.0099, 90, 90, 90	spinel family	-	8.03	A	2566
In-Se	In ₃ Se ₄ rhom	In ₃ Te ₄ , hR21, 166	$R-3m$	0.3964, 0.3964, 3.959, 90, 90, 120	-	-	6.11	X	63150
In-Se	In ₄ Se ₃ orth	In ₄ Se ₃ , oP28, 58	$Pnmm$	1.23126, 1.5293, 0.40843, 90, 90, 90	-	black	6.01	X	62634
In-Se	In ₃ Se ₇ ht	* _c *48*, *	-	1.096, 1.096, 1.096, 90, 90, 90	-	-	-	N	6456
In-Se	In ₆ Se ₇ (Sn)	In ₅ (In _{0.91} Sn _{0.09}) _{0.92} S ₇ , mP26, 11	$P12_1/m1$	0.9433, 0.4064, 1.7663, 90, 100.92, 90	-	black	6.20	X	31173
In-Sm	SmIn	CsCl ₂ cP2, 221	$Pm-3m$	0.3815, 0.3815, 0.3815, 90, 90, 90	b.c.c. family	-	7.93	X	15076
In-Sm	SmIn ₃ rt	Cu ₃ Au, cP4, 221	$Pm-3m$	0.462, 0.462, 0.462, 90, 90, 90	close-packed structure	-	8.33	X	14400
In-Sm	Sm ₂ In	Co _{1.75} Ge ₄ hP6, 194	$P6_3/mmc$	0.545, 0.545, 0.679, 90, 90, 120	AlB ₂ family	-	7.90	X	14400

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
In-Sm	Sm ₃ In rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.488,0.488,0.488,90,90,90	close-packed structure	-	8.09	X	14400
In-Sm	Sm ₃ In ₅	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	1.00137,0.81211,1.03858,90,90,90	-	gray	8.06	X	57570
In-Sn	In _{0.05} Sn _{0.95} rt	Sn,tI4,141	<i>I4₁/amd</i>	0.5826,0.5826,0.31815,90,90,90	-	-	7.29	X	40902
In-Sn	In _{0.2} Sn _{0.8}	(Hg _{0.5} Sn _{0.5}),hP1,191	<i>P6/mmm</i>	0.3206,0.3206,0.2996,90,90,120	-	-	7.34	X	7895
In-Sn	In _{0.25} Sn _{0.75} hp	Mg,hP2,194	<i>P6₃/mmc</i>	0.3135,0.3135,0.516,90,90,120	close-packed structure	-	8.90	X	39850
In-Sn	In _{0.25} Sn _{0.75} hp	Pa,tI2,139	<i>I4/mmm</i>	0.3669,0.3669,0.3295,90,90,90	b.c.c. family	-	8.81	X	39850
In-Sn	In _{0.75} Sn _{0.25} rt	In,tI2,139	<i>I4/mmm</i>	0.3459,0.3459,0.4397,90,90,90	close-packed structure	-	7.31	X	7895
In-Sn	In _{0.87} Sn _{0.13}	In,tI2,139	<i>I4/mmm</i>	0.325,0.325,0.505,90,90,90	close-packed structure	-	7.18	X	16227
In-Sr	SrIn	SrIn,oF64,43	<i>Fdd2</i>	1.023,2.615,0.84,90,90,90	-	gray silver	4.79	X	46660
In-Sr	SrIn ₂	CaIn ₂ ,hP6,194	<i>P6₃/mmc</i>	0.5009,0.5009,0.8036,90,90,120	AlB ₂ family	gray silver	6.03	X	46660
In-Sr	SrIn ₃	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.6769,0.6769,0.5481,90,90,120	close-packed structure	gray white	6.60	A	3064
In-Sr	SrIn ₄	EuIn ₄ ,mS20,12	<i>C12/m1</i>	1.2079,0.51245,0.992,90,114.85,90	-	gray silver	6.52	X	37595
In-Sr	SrIn ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5937,0.5937,0.4827,90,90,120	-	gray white	7.46	X	3064
In-Sr	Sr ₁₁ In ₇	Ca ₁₁ Ga ₇ ,cF144,225	<i>Fm-3m</i>	1.772,1.772,1.772,90,90,90	-	-	4.22	X	51513
In-Sr	Sr ₂₈ In ₁₁	Ca ₂₈ Ga ₁₁ ,oI78,44	<i>Imm2</i>	0.5826,6.6878,0.8235,90,90,90	-	gray silver	3.85	X	45029
In-Sr	Sr ₃ In ₁₁	La ₃ Al ₁₁ ,oI28,71	<i>Immm</i>	0.49328,1.124,1.428,90,90,90	-	black	6.40	X	43892
In-Sr	Sr ₃ In ₅	Ca ₃ Ga ₅ ,oS32,63	<i>Cmcm</i>	0.49683,1.1958,1.6664,90,90,90	-	-	5.62	X	39175
In-Sr	Sr ₃ In ₃	Cr ₃ B ₃ ,tI32,140	<i>I4/mcm</i>	0.8744,0.8744,1.6429,90,90,90	-	gray silver	4.14	X	45029
In-Tb	TbIn rt	* ₁ ** ₁ *	-	0.962,0.962,0.842,90,90,90	-	-	-	N	9764
In-Tb	TbIn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4593,0.4593,0.4593,90,90,90	close-packed structure	-	8.63	X	55778
In-Tb	Tb ₂ In	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.536,0.536,0.6702,90,90,120	AlB ₂ family	-	8.62	X	21139
In-Tb	Tb ₃ In ₃	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	0.987,0.802,1.028,90,90,90	-	-	8.58	A	14115
In-Tb	Tb ₅ In ₃	W ₅ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.224,1.224,0.601,90,90,90	-	gray silver	8.40	A	15971
In-Te	InTe hp1	NaCl,cF8,225	<i>Fm-3m</i>	0.6133,0.6133,0.6133,90,90,90	rocksalt family	-	6.98	X	57880
In-Te	InTe hp2	CsCl,cP2,221	<i>Pm-3m</i>	0.363,0.363,0.363,90,90,90	b.c.c. family	-	8.42	X	19257
In-Te	InTe m	* ₁ IP8, *	-	0.606,0.606,0.655,90,90,90	-	-	-	N	2714
In-Te	InTe rt	TlSe,tI16,140	<i>I4/mcm</i>	0.8454,0.8454,0.7152,90,90,90	-	black	6.30	X	9467
In-Te	InTe _x	In,tI2,139	<i>I4/mmm</i>	0.326,0.326,0.494,90,90,90	close-packed structure	-	7.26	X	57885
In-Te	In _{0.67} Te ht	ZnS,cF8,216	<i>F-43m</i>	0.616,0.616,0.616,90,90,90	adamantane structure	-	5.81	X	19918
In-Te	In ₂ Te ₃ hp	Bi ₂ Te ₃ ,hR15,166	<i>R-3m</i>	0.4143,0.4143,2.676,90,90,120	-	-	7.67	A	26479
In-Te	In ₂ Te ₃ orth	* ₀ I* ₄₄	<i>Imm2</i>	0.4357,1.3072,0.6162,90,90,90	-	-	-	N	33300
In-Te	In ₂ Te ₃ rt	In ₂ Te ₃ ,cF180,216	<i>F-43m</i>	1.85,1.85,1.85,90,90,90	-	-	5.78	X	1481
In-Te	In ₂ Te ₃ tet	In ₂ Te ₃ ,tI30,107	<i>I4mm</i>	1.30779,1.30779,0.6165,90,90,90	-	-	5.79	X	1071
In-Te	In ₂ Te ₃ tf	* ₁ hP5, *	-	0.435,0.435,0.713,90,90,120	-	-	-	N	5116
In-Te	In ₂ Te ₅ mon1	In ₂ Te ₅ ,mS28,9	<i>C1c1</i>	0.439,1.639,1.352,90,91.65,90	-	black	5.93	X	9461
In-Te	In ₂ Te ₅ mon2	In ₂ Te ₅ ,mS84,15	<i>C12/c1</i>	1.666,0.436,4.134,90,100,1.90	-	black	5.85	X	11175
In-Te	In ₃ Te ₄ cub	* ₁ cP*, *	-	1.05,1.05,1.05,90,90,90	-	-	-	N	3564
In-Te	In ₃ Te ₄ rhom	In ₃ Te ₄ ,hR21,166	<i>R-3m</i>	0.426,0.426,4.06,90,90,120	-	-	6.67	X	2641
In-Te	In ₃ Te ₄ tet	* ₁ tI14, *	-	0.6173,0.6173,1.2438,90,90,90	-	-	-	N	10990
In-Te	In ₄ Te ₃	In ₄ Se ₃ ,oP28,58	<i>Pnmm</i>	1.2749,1.5619,0.44348,90,90,90	-	black	6.33	X	31172
In-Te	In ₇ Te ₁₀	Al ₇ Te ₁₀ ,hR102,155	<i>R32</i>	1.4873,1.4873,1.891,90,90,120	-	black	5.72	X	31193
In-Th	ThIn	ThIn,oP24,57	<i>Pbcm</i>	1.0806,0.9954,0.6520,90,90,90	-	-	9.86	X	17017
In-Th	ThIn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4701,0.4701,0.4701,90,90,90	close-packed structure	-	9.21	X	16955
In-Th	Th ₂ In	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.7775,0.7775,0.6087,90,90,90	-	-	10.45	X	6603
In-Th	Th ₃ In ₃	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	1.0193,0.8205,1.0374,90,90,90	-	-	9.72	X	16955
In-Ti	Ti _{1.12} In _{0.88}	InBi,IP4,129	<i>P4/nmm</i>	0.42369,0.42369,0.42176,90,90,90	-	-	6.79	X	42434
In-Ti	Ti ₂ In ₅	Hg ₅ Mn ₂ ,tP14,127	<i>P4/mbm</i>	1.00035,1.00035,0.29977,90,90,90	-	gray faint	7.42	X	31280
In-Ti	Ti ₃ In rt	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.5978,0.5978,0.4812,90,90,120	close-packed structure	-	5.77	A	42434
In-Ti	Ti ₈ In ₅	Ti ₈ In ₅ ,cP52,215	<i>P-43m</i>	0.99578,0.99578,0.99578,90,90,90	-	-	6.44	X	42434
In-Tl	Tl _{0.12} In _{0.88} rt	In,tI2,139	<i>I4/mmm</i>	0.32824,0.32824,0.4912,90,90,90	close-packed structure	-	7.88	X	2638
In-Tl	Tl _{0.5} In _{0.5} rt	Cu,cF4,225	<i>Fm-3m</i>	0.4784,0.4784,0.4784,90,90,90	close-packed structure	-	9.68	X	1803
In-Tl	Tl _{0.749} In _{0.251} ht	W,cI2,229	<i>Im-3m</i>	0.3828,0.3828,0.3828,90,90,90	b.c.c. family	-	10.77	X	339
In-Tl	Tl _{0.9} In _{0.1} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.34475,0.34475,0.5525,90,90,120	close-packed structure	-	11.41	X	1803
In-Tm	TmIn	CsCl,cP2,221	<i>Pm-3m</i>	0.3737,0.3737,0.3737,90,90,90	b.c.c. family	-	9.03	X	15971
In-Tm	TmIn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.45207,0.45207,0.45207,90,90,90	close-packed structure	-	9.23	X	22319
In-Tm	Tm ₂ In	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.5273,0.5273,0.662,90,90,120	AlB ₂ family	-	9.43	X	15971
In-Tm	Tm ₃ In ₅	Tm ₃ Ga ₅ ,oP32,62	<i>Pnma</i>	1.2107,1.0243,0.6351,90,90,90	-	-	9.12	A	31888
In-Tm	Tm ₃ In ₄	Ti ₃ Ga ₄ ,hP18,193	<i>P6₃/mcm</i>	0.9095,0.9095,0.6568,90,90,120	AlB ₂ family	-	9.20	A	31888
In-U	UIn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4606,0.4606,0.4606,90,90,90	close-packed structure	-	9.90	X	7586
In-V	V ₃ In hp	* ₁ t** ₁ *	-	0.6153,0.6153,0.9477,90,90,90	-	-	-	N	8118
In-Y	YIn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.45935,0.45935,0.45935,90,90,90	close-packed structure	-	7.42	X	2607
In-Y	Y _{0.5} In _{0.5}	In,tI2,139	<i>I4/mmm</i>	0.32569,0.32569,0.4942,90,90,90	close-packed structure	-	6.45	X	52884
In-Y	Y ₂ In	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.537,0.537,0.679,90,90,120	AlB ₂ family	gray silver	5.73	X	15971
In-Y	Y ₃ In ₅ ht	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	0.984,0.8002,1.0315,90,90,90	-	-	6.88	X	30090
In-Y	Y ₃ In ₅ rt	Tm ₃ Ga ₅ ,oP32,62	<i>Pnma</i>	1.2219,1.0328,0.6424,90,90,90	-	-	6.89	X	30090
In-Y	Y ₃ In ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.896,0.896,0.671,90,90,120	-	gray silver	5.62	A	15971
In-Yb	YbIn	CsCl,cP2,221	<i>Pm-3m</i>	0.3828,0.3828,0.3828,90,90,90	b.c.c. family	-	8.52	X	4002
In-Yb	YbIn ₂	CaIn ₂ ,hP6,194	<i>P6₃/mmc</i>	0.4889,0.4889,0.763,90,90,120	AlB ₂ family	-	8.47	X	2343
In-Yb	YbIn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4613,0.4613,0.4613,90,90,90	close-packed structure	-	8.75	X	3492
In-Yb	Yb ₂ In rt	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.7072,0.534,0.9866,90,90,90	-	-	8.22	X	5870
In-Yb	Yb ₈ In ₃	Yb ₈ In ₃ ,hR132,167	<i>R-3c</i>	0.9545,0.9545,5.4272,90,90,120	-	-	8.05	X	22273
In-Zr	ZrIn ₂	HfGa ₂ ,tI24,141	<i>I4₁/amd</i>	0.4387,0.4387,2.7238,90,90,90	close-packed structure	gray light	8.13	X	37930
In-Zr	ZrIn ₃ ht	TiAl ₃ ,tI8,139	<i>I4/mmm</i>	0.4238,0.4238,0.9786,90,90,90	close-packed structure	-	8.23	X	2786
In-Zr	ZrIn ₃ rt	ZrAl ₃ ,tI16,139	<i>I4/mmm</i>	0.4303,0.4303,1.894,90,90,90	close-packed structure	-	8.25	A	2786
In-Zr	Zr _{0.5} In _{0.5} ht	Cu,cF4,225	<i>Fm-3m</i>	0.4418,0.4418,0.4418,90,90,90	close-packed structure	-	7.94	X	2260
In-Zr	Zr _{1.33} In _{0.67}	CuAu,tP2,123	<i>P4/mmm</i>	0.3097,0.3097,0.45318,90,90,90	close-packed structure	-	7.57	X	38506
In-Zr	Zr ₃ In	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.446,0.446,0.446,90,90,90	close-packed structure	-	7.27	X	1676
Ir-La	LaIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7603,0.7603,0.7603,90,90,90	Friauf-Laves phase	-	15.82	X	57132

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Ir-La	LaIr ₃	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.537,0.537,2.6418,90,90,120	Laves-CaCu ₅	-	16.21	A	22920
Ir-La	LaIr ₃	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5385,0.5385,0.4213,90,90,120	-	-	17.26	X	22920
Ir-La	La ₂ Ir ₇ ht	Gd ₂ Co ₇ ,hR54,166	<i>R-3m</i>	0.5281,0.5281,3.9537,90,90,120	Laves-CaCu ₅	-	16.94	A	22920
Ir-La	La ₂ Ir ₇ rt	Ce ₂ Ni ₇ ,hP36,194	<i>P6₃/mmc</i>	0.5371,0.5371,2.5995,90,90,120	Laves-CaCu ₅	-	16.60	A	22920
Ir-La	La ₃ Ir	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.7458,1.0096,0.6662,90,90,90	-	-	8.06	A	27336
Ir-La	La ₃ Ir ₂	Er ₃ Ni ₂ ,hR45,148	<i>R-3</i>	0.89526,0.89526,1.71301,90,90,120	-	gray dark	10.07	X	64860
Ir-La	La ₃ Ir ₂ rt	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.6884,0.6759,0.741,90,95.92,90	-	-	8.52	A	22920
Ir-La	La ₃ Ir ₃ ht	Pu ₃ Rh ₃ ,tP32,130	<i>P4/ncc</i>	1.1435,1.1435,0.6604,90,90,90	-	-	9.78	A	22920
Ir-La	La ₇ Ir ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	1.0214,1.0214,0.6462,90,90,120	-	-	8.81	A	22920
Ir-Li	LiIr	LiRh,hP2,187	<i>P-6m2</i>	0.26493,0.26493,0.4397,90,90,120	close-packed structure	black gray	12.37	X	11485
Ir-Li	LiIr ₃	LiIr ₃ ,oI8,44	<i>Imm2</i>	0.26726,0.86946,0.46703,90,90,90	close-packed structure	-	17.86	X	9780
Ir-Lu	LuIr	CsCl,cP2,221	<i>Pm-3m</i>	0.333,0.333,0.333,90,90,90	b.c.c. family	-	16.51	X	2694
Ir-Lu	LuIr ₂ m	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7457,0.7457,0.7457,90,90,90	Friauf-Laves phase	-	17.92	X	20572
Ir-Lu	Lu ₃ Ir	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.7101,0.8884,0.6247,90,90,90	-	-	12.09	A	11937
Ir-Lu	Lu ₃ Ir ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.5062,0.6279,0.7073,90,96.94,90	-	-	12.60	X	13170
Ir-Lu	Lu ₅ Ir ₃ ht	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8024,0.8024,0.6217,90,90,120	-	-	13.91	A	15093
Ir-Lu	Lu ₅ Ir ₃ rt	Pu ₃ Rh ₃ ,tP32,130	<i>P4/ncc</i>	1.0539,1.0539,0.6093,90,90,90	-	-	14.25	A	13188
Ir-Mg	MgIr ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5169,0.5169,0.8385,90,90,120	Friauf-Laves phase	-	14.00	X	45036
Ir-Mg	Mg _{1.037} Ir _{0.963}	MgIr, oS304,64	<i>Cmce</i>	1.8505,1.6191,1.6801,90,90,90	-	black	10.55	X	43514
Ir-Mg	Mg ₁₃ Ir ₃	(Mg _{0.75} In _{0.25}) ₁₃ Ir ₃ ,hR96,167	<i>R-3c</i>	1.607,1.607,0.84488,90,90,120	-	-	4.71	X	45020
Ir-Mg	Mg _{2.30} Ir _{2.70}	V ₂ (Co _{0.57} Si _{0.43}) ₃ ,mS50,12	<i>C12/m1</i>	1.8582,0.52308,0.8551,90,97.645,90	Frank-Kasper phase	-	11.59	X	44749
Ir-Mg	Mg ₃ Ir	Cu ₃ P,hP24,185	<i>P6₃cm</i>	0.7927,0.7927,0.819,90,90,120	-	-	5.93	X	27290
Ir-Mg	Mg ₄₄ Ir ₇	Mg ₄₄ Rh ₇ ,cF408,216	<i>F-43m</i>	2.0097,2.0097,2.0097,90,90,90	-	gray dark	3.96	X	6370
Ir-Mg	Mg ₇ Ir ₃	Ru ₃ Sn ₇ ,cI40,229	<i>Im-3m</i>	0.9061,0.9061,0.9061,90,90,90	-	-	6.67	A	42685
Ir-Mn	MnIr rt	CuAu,tP2,123	<i>P4/mmm</i>	0.2726,0.2726,0.3643,90,90,90	close-packed structure	-	15.16	X	2441
Ir-Mn	Mn _{0.4} Ir _{0.6}	Cu,cF4,225	<i>Fm-3m</i>	0.3811,0.3811,0.3811,90,90,90	close-packed structure	-	16.48	X	701
Ir-Mn	Mn _{0.8} Ir _{0.2} ht	Cu,cF4,225	<i>Fm-3m</i>	0.378,0.378,0.378,90,90,90	close-packed structure	-	10.13	X	8253
Ir-Mn	Mn _{0.9} Ir _{0.1} rt	In,tI2,139	<i>I4/mmm</i>	0.26375,0.26375,0.379,90,90,90	close-packed structure	-	8.65	X	8253
Ir-Mn	Mn ₃ Ir rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3772,0.3772,0.3772,90,90,90	close-packed structure	-	11.05	X	8253
Ir-Mo	MoIr rt	AuCd,oP4,51	<i>Pnma</i>	0.4429,0.2752,0.4804,90,90,90	close-packed structure	-	16.34	A	2379
Ir-Mo	MoIr ₃	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.5487,0.5487,0.4385,90,90,120	close-packed structure	-	19.54	A	2379
Ir-Mo	Mo _{0.01} Ir _{0.99}	Cu,cF4,225	<i>Fm-3m</i>	0.3839,0.3839,0.3839,90,90,90	close-packed structure	-	22.45	X	63383
Ir-Mo	Mo _{0.5} Ir _{0.5} ht	Mg,hP2,194	<i>P6₃/mmc</i>	0.277,0.277,0.4424,90,90,120	close-packed structure	-	16.28	X	1971
Ir-Mo	Mo _{0.72} Ir _{0.28} ht	(Cr _{0.49} Fe _{0.51}) ₁₃ ,tP30,136	<i>P4₂/mnm</i>	0.9631,0.9631,0.4957,90,90,90	Frank-Kasper phase	-	13.32	X	2031
Ir-Mo	Mo _{0.9} Ir _{0.1}	W,cI2,229	<i>Im-3m</i>	0.3141,0.3141,0.3141,90,90,90	b.c.c. family	-	11.31	X	1971
Ir-Mo	Mo _{3.06} Ir _{0.94}	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.4967,0.4967,0.4967,90,90,90	Frank-Kasper phase	-	12.85	X	22169
Ir-Nb	NbIr ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.389,0.389,0.389,90,90,90	close-packed structure	-	18.89	X	2324
Ir-Nb	Nb _{0.01} Ir _{0.99}	Cu,cF4,225	<i>Fm-3m</i>	0.3839,0.3839,0.3839,90,90,90	close-packed structure	-	22.45	X	63383
Ir-Nb	Nb _{0.6} Ir _{0.4}	(Cr _{0.49} Fe _{0.51}) ₁₃ ,tP30,136	<i>P4₂/mnm</i>	0.986,0.986,0.505,90,90,90	Frank-Kasper phase	-	13.46	X	2031
Ir-Nb	Nb _{0.8} Ir _{1.2}	TaIr,oP12,51	<i>Pnma</i>	1.3633,0.2817,0.4813,90,90,90	close-packed structure	-	16.44	A	2324
Ir-Nb	Nb _{0.93} Ir _{0.07}	W,cI2,229	<i>Im-3m</i>	0.3273,0.3273,0.3273,90,90,90	b.c.c. family	-	9.46	X	2324
Ir-Nb	Nb _{0.95} Ir _{0.05}	CuAu,tP2,123	<i>P4/mmm</i>	0.2851,0.2851,0.3861,90,90,90	close-packed structure	-	15.35	X	2324
Ir-Nb	Nb ₂ Ir	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.51333,0.51333,0.51333,90,90,90	Frank-Kasper phase	-	11.56	X	3734
Ir-Nd	NdIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7602,0.7602,0.7602,90,90,90	Friauf-Laves phase	-	15.99	X	22920
Ir-Nd	NdIr ₃ cub	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3836,0.3836,0.3836,90,90,90	close-packed structure	-	21.21	X	22211
Ir-Nd	NdIr ₃ rhom	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.5328,0.5328,2.5998,90,90,120	Laves-CaCu ₅	-	16.86	A	22920
Ir-Nd	NdIr ₃	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5324,0.5324,0.4332,90,90,120	-	-	17.26	X	22920
Ir-Nd	Nd ₂ Ir ₇	Gd ₂ Co ₇ ,hR54,166	<i>R-3m</i>	0.5298,0.5298,3.888,90,90,120	Laves-CaCu ₅	-	17.23	A	22920
Ir-Nd	Nd ₃ Ir	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.7315,0.9702,0.6447,90,90,90	-	-	9.07	A	22920
Ir-Nd	Nd ₃ Ir ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.6409,0.6584,0.7305,90,96.6,90	-	-	9.37	A	22920
Ir-Nd	Nd ₃ Ir ₃ ht	Pu ₃ Rh ₃ ,tP32,130	<i>P4/ncc</i>	1.1157,1.1157,0.6432,90,90,90	-	-	10.77	X	11923
Ir-Ni	Ir _{0.38} Ni _{0.62}	Cu,cF4,225	<i>Fm-3m</i>	0.37755,0.37755,0.37755,90,90,90	close-packed structure	-	13.51	X	57132
Ir-Np	NpIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7509,0.7509,0.7509,90,90,90	Friauf-Laves phase	-	19.50	X	6654
Ir-O	IrO ₂ hp	FeS ₂ ,cP12,205	<i>Pa-3</i>	0.48906,0.48906,0.48906,90,90,90	pyrite-marcasite family	-	12.73	X	63438
Ir-O	IrO ₂ rt	TiO ₂ ,tP6,136	<i>P4₂/mnm</i>	0.45051,0.45051,0.31586,90,90,90	-	-	11.62	X	32979
Ir-Os	Os _{0.25} Ir _{0.75}	Cu,cF4,225	<i>Fm-3m</i>	0.3836,0.3836,0.3836,90,90,90	close-packed structure	-	22.56	X	46183
Ir-Os	Os _{0.65} Ir _{0.35}	Mg,hP2,194	<i>P6₃/mmc</i>	0.27361,0.27361,0.43417,90,90,120	close-packed structure	-	22.52	X	3493
Ir-P	IrP ₂	CoSb ₂ ,mP12,14	<i>P12₁/c1</i>	0.57453,0.57915,0.58494,90,111.575,90	pyrite-marcasite family	-	9.33	X	5624
Ir-P	IrP ₃	CoAs ₃ ,cI32,204	<i>Im-3</i>	0.80151,0.80151,0.80151,90,90,90	-	-	7.36	X	4372
Ir-P	Ir ₂ P	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.5543,0.5543,0.5543,90,90,90	fluorite family	-	16.20	X	1236
Ir-Pa	PaIr ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4047,0.4047,0.4047,90,90,90	close-packed structure	-	20.24	X	9807
Ir-Pb	IrPb	NiAs,hP4,194	<i>P6₃/mmc</i>	0.3993,0.3993,0.5566,90,90,120	AlB ₂ family	-	17.26	X	344
Ir-Pd	Ir _{0.08} Pd _{0.92}	Cu,cF4,225	<i>Fm-3m</i>	0.38845,0.38845,0.38845,90,90,90	close-packed structure	-	12.84	X	63806
Ir-Pr	PrIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7621,0.7621,0.7621,90,90,90	Friauf-Laves phase	-	15.77	X	17218
Ir-Pr	PrIr ₃	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.53325,0.53325,2.628,90,90,120	Laves-CaCu ₅	-	16.57	A	49278
Ir-Pr	Pr ₃ Ir	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.7329,0.9844,0.6518,90,90,90	-	-	8.69	A	11937
Ir-Pr	Pr ₅ Ir ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.6538,0.661,0.7329,90,96.67,90	-	-	9.09	A	13170
Ir-Pr	Pr ₅ Ir ₃	Pu ₃ Rh ₃ ,tP32,130	<i>P4/ncc</i>	1.1276,1.1276,0.6499,90,90,90	-	-	10.30	A	11923
Ir-Pr	Pr ₇ Ir ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	1.0043,1.0043,0.6312,90,90,120	-	-	9.42	A	7350
Ir-Pt	Ir _{0.5} Pt _{0.5}	Cu,cF4,225	<i>Fm-3m</i>	0.3894,0.3894,0.3894,90,90,90	close-packed structure	-	21.79	X	53477
Ir-Pu	PuIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7518,0.7518,0.7518,90,90,90	Friauf-Laves phase	-	19.65	X	7450
Ir-Pu	Pu ₂ Ir ₃	W ₂ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.1015,1.1015,0.5621,90,90,90	-	-	17.50	X	10252
Ir-Pu	Pu ₃ Ir ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.7245,1.46,0.7455,90,90,90	-	-	16.75	X	9347
Ir-Re	Re _{0.2} Ir _{0.8}	Cu,cF4,225	<i>Fm-3m</i>	0.3845,0.3845,0.3845,90,90,90	close-packed structure	-	22.32	X	61166
Ir-Re	Re _{0.4} Ir _{0.6}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2752,0.2752,0.4371,90,90,120	close-packed structure	-	21.99	X	61166
Ir-Rh	Ir _{0.99} Rh _{0.01}	Cu,cF4,225	<i>Fm-3m</i>	0.3842,0.3842,0.3842,90,90,90	close-packed structure	-	22.41	X	63383
Ir-Ru	Ru _{0.4} Ir _{0.6}	Cu,cF4,225	<i>Fm-3m</i>	0.382,0.382,0.382,90,90,90	close-packed structure	-	18.56	X	50383
Ir-Ru	Ru _{0.67} Ir _{0.33}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2716,0.2716,0.4312,90,90,120	close-packed structure	-	15.81	X	50383

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ir-S	IrS _{1,9}	FeS ₂ ,cP12,205	<i>Pa</i> -3	0.568,0.568,0.568,90,90,90	pyrite-marcasite family	-	9.18	A	3936
Ir-S	IrS ₂	IrSe ₂ ,oP24,62	<i>Pnma</i>	1.9791,0.35673,0.56242,90,90,90	pyrite-marcasite family	-	8.58	X	23664
Ir-S	Ir ₂ S ₃	Rh ₂ S ₃ ,oP20,60	<i>Pbcn</i>	0.85,0.602,0.617,90,90,90	-	-	10.11	A	21572
Ir-S	Ir ₃ S ₈	Rh ₃ Se ₈ ,hR33,148	<i>R</i> -3	0.79277,0.79277,0.96587,90,90,120	-	-	7.90	A	4836
Ir-Sb	IrSb	NiAs,hP4,194	<i>P6₃/mmc</i>	0.3978,0.3978,0.5521,90,90,120	AlB ₂ family	-	13.78	X	958
Ir-Sb	IrSb ₂	CoSb ₂ ,mP12,14	<i>P12₁/c1</i>	0.65945,0.65492,0.66951,90,115.158,90	pyrite-marcasite family	-	11.06	X	5624
Ir-Sb	IrSb ₃	CoAs ₃ ,tI32,204	<i>Im</i> -3	0.91491,0.91491,0.91491,90,90,90	-	gray dark	9.67	X	37405
Ir-Se	ScIr	CsCl,cP2,221	<i>Pm</i> -3m	0.3206,0.3206,0.3206,90,90,90	b.c.c. family	-	11.95	X	28711
Ir-Se	ScIr ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.735,0.735,0.735,90,90,90	Friauf-Laves phase	-	14.37	X	28711
Ir-Se	ScIr ₃	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.39,0.39,0.39,90,90,90	close-packed structure	-	17.40	X	28711
Ir-Se	Sc ₁₁ Ir ₄	Sc ₁₁ Ir ₄ ,cF120,225	<i>Fm</i> -3m	1.335,1.335,1.335,90,90,90	-	-	7.05	X	12927
Ir-Se	Sc ₂ Ir	Ti ₂ Ni,cF96,227	<i>Fd</i> -3m	1.229,1.229,1.229,90,90,90	-	-	8.08	A	28711
Ir-Se	Sc ₄₄ Ir ₇	Mg ₄₄ Rh ₇ ,cF408,216	<i>F</i> -43m	2.075,2.075,2.075,90,90,90	-	-	4.94	A	28711
Ir-Se	Sc ₅₇ Ir ₁₃	Sc ₅ Rh ₁₃ ,cP140,200	<i>Pm</i> -3	1.435,1.435,1.435,90,90,90	-	-	5.69	A	28711
Ir-Se	IrSe ₂	IrSe ₂ ,oP24,62	<i>Pnma</i>	2.0955,0.37429,0.59381,90,90,90	pyrite-marcasite family	-	9.99	X	23664
Ir-Se	IrSe ₃	IrSe ₃ ,aP32,2	<i>P</i> -1	0.8405,0.8405,1.0236,90,90,120	-	-	9.10	X	4836
Ir-Se	Ir _{0.58} Se _{1.68}	Ir _{0.58} Se _{1.68} ,hR36,148	<i>R</i> -3	0.83636,0.83636,1.02101,90,90,120	pyrite-marcasite family	black	7.87	X	20371
Ir-Si	IrSi ht	FeAs,oP8,62	<i>Pnma</i>	0.5558,0.3211,0.6273,90,90,90	AlB ₂ family	-	13.07	X	862
Ir-Si	IrSi ₂	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.567,0.567,0.567,90,90,90	fluorite family	-	9.05	X	54128
Ir-Si	IrSi ₃ ht	IrSi ₃ ,hP8,186	<i>P6₃mc</i>	0.4351,0.4351,0.6622,90,90,120	-	-	8.46	X	5798
Ir-Si	IrSi ₃ rt	* ₁ mS* ₁ *	-	0.65467,0.4377,0.76976,90,91.594,90	-	-	-	N	14665
Ir-Si	Ir _{1.4} Si ht	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.3963,0.3963,0.5126,90,90,120	AlB ₂ family	-	14.16	X	1633
Ir-Si	Ir ₂ Si	Co ₂ Si-b,oP12,62	<i>Pnma</i>	0.5284,0.3989,0.7615,90,90,90	-	-	17.07	A	1285
Ir-Si	Ir ₃ Si	Ir ₅ Si,tI16,140	<i>I4/mcm</i>	0.5232,0.5232,0.7973,90,90,90	-	-	18.41	A	13191
Ir-Si	Ir ₃ Si ₄ rt	Rh ₃ Si ₄ ,oP28,62	<i>Pnma</i>	1.88741,0.36979,0.57717,90,90,90	-	-	11.36	X	4935
Ir-Si	Ir ₃ Si ₅ rt	Ir ₃ Si ₅ ,mP64,14	<i>P12₁/c1</i>	0.64060,1.4162,1.1553,90,116.69,90	-	-	10.17	X	19637
Ir-Si	Ir ₄ Si ₅ rt	Rh ₄ Si ₅ ,mP18,11	<i>P12₁/m1</i>	0.58805,0.36181,1.2359,90,100.14,90	-	-	11.67	A	4935
Ir-Sm	SmIr ₃	PuNi ₃ ,hR36,166	<i>R</i> -3m	0.53007,0.53007,2.597,90,90,120	Laves-CaCu ₅	-	17.20	A	49278
Ir-Sm	Sm ₃ Ir	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.7273,0.9584,0.6397,90,90,90	-	-	9.58	X	11937
Ir-Sm	Sm ₃ Ir ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.6144,0.6522,0.7264,90,96.7,90	-	-	9.94	A	13170
Ir-Sm	Sm ₃ Ir ₃	Pu ₃ Rh ₃ ,tP32,130	<i>P4/ncc</i>	1.1035,1.1035,0.6372,90,90,90	-	-	11.37	A	11923
Ir-Sn	IrSn	NiAs,hP4,194	<i>P6₃/mmc</i>	0.398,0.398,0.563,90,90,120	AlB ₂ family	-	13.37	X	11491
Ir-Sn	IrSn ₂	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.6338,0.6338,0.6338,90,90,90	fluorite family	-	11.21	X	264
Ir-Sn	IrSn ₄ hp-ht	AuSn ₄ ,oS20,41	<i>Aea</i> 2	0.6274,0.6337,1.1352,90,90,90	-	-	9.82	A	16969
Ir-Sn	IrSn ₄ ht	IrSn ₄ ,tI40,142	<i>I4₁/acd</i>	0.63096,0.63096,2.277,90,90,90	-	-	9.77	X	41210
Ir-Sn	IrSn ₄ rt	IrGe ₄ ,hP15,152	<i>P3</i> ,21	0.6791,0.6791,0.8575,90,90,120	-	-	9.70	X	31993
Ir-Sn	Ir _{0.985} Sn _{0.015}	Cu ₂ ,cF4,225	<i>Fm</i> -3m	0.384,0.384,0.384,90,90,90	close-packed structure	-	22.42	X	33258
Ir-Sn	Ir ₃ Sn ₇	Ru ₃ Sn ₇ ,cI40,229	<i>Im</i> -3m	0.93529,0.93529,0.93529,90,90,90	-	-	11.43	X	42685
Ir-Sn	Ir ₅ Sn ₇	Co ₂ Ge ₇ ,tI24,107	<i>I4mm</i>	0.8536,0.8536,0.6465,90,90,90	-	gray silver	12.63	X	37731
Ir-Sr	SrIr ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.77,0.77,0.77,90,90,90	Friauf-Laves phase	-	13.74	X	909
Ir-Ta	TaIr	TaIr,oP12,51	<i>Pmma</i>	1.3661,0.2830,0.4803,90,90,90	close-packed structure	gray	20.02	X	1972
Ir-Ta	TaIr ₃	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.3886,0.3886,0.3886,90,90,90	close-packed structure	-	21.44	X	1972
Ir-Ta	Ta _{0.01} Ir _{0.99}	Cu ₂ ,cF4,225	<i>Fm</i> -3m	0.3845,0.3845,0.3845,90,90,90	close-packed structure	-	22.45	X	63383
Ir-Ta	Ta _{0.75} Ir _{0.25}	(Cr _{0.40} Fe _{0.51}),tP30,136	<i>P4₂/mnm</i>	0.9928,0.9928,0.5159,90,90,90	Frank-Kasper phase	-	18.00	A	1972
Ir-Ta	Ta _{0.82} Ir _{1.18} rt	CuAu,tP2,123	<i>P4/mmm</i>	0.282,0.282,0.3859,90,90,90	close-packed structure	-	20.30	X	1972
Ir-Tb	TbIr ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.7532,0.7532,0.7532,90,90,90	Friauf-Laves phase	-	16.89	X	2373
Ir-Tb	Tb ₃ Ir	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.7217,0.9318,0.6361,90,90,90	-	-	10.39	A	11937
Ir-Tb	Tb ₃ Ir ₂	Y ₃ Rh ₃ ,tI140,140	<i>I4/mcm</i>	1.1206,1.1206,2.504,90,90,90	-	-	12.74	A	13188
Ir-Tb	Tb ₅ Ir ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.5749,0.6462,0.7208,90,96.73,90	-	-	10.75	A	13170
Ir-Tb	Tb ₅ Ir ₃ ht	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8211,0.8211,0.6361,90,90,120	-	-	12.26	A	15093
Ir-Tb	Tb ₅ Ir ₃ rt	Pu ₃ Rh ₃ ,tP32,130	<i>P4/ncc</i>	1.0905,1.0905,0.6299,90,90,90	-	-	12.16	A	13188
Ir-Tc	Tc _{0.5} Ir _{0.5}	Mg,hP2,194	<i>P6₃/mmc</i>	0.274,0.274,0.4348,90,90,120	close-packed structure	-	17.05	X	1871
Ir-Te	IrTe ₂ cub	FeS ₂ ,cP12,205	<i>Pa</i> -3	0.6432,0.6432,0.6432,90,90,90	pyrite-marcasite family	-	11.17	X	37881
Ir-Te	IrTe ₂ hp	IrTe ₂ ,mP18,12	<i>C12/m1</i>	1.9975,0.40016,0.53119,90,90.818,90	-	-	10.50	X	37547
Ir-Te	IrTe ₂ lt	IrTe ₂ ,aP75,1	<i>P</i> 1	0.39545,1.67274,2.7089,90.037.91.26,94.56	-	-	10.40	X	62422
Ir-Te	IrTe ₂ rt trig2	IrTe ₂ ,hP6,165	<i>P</i> -3c1	0.3929,0.3929,1.0805,90,90,120	-	-	10.29	X	64541
Ir-Te	IrTe ₂ rt	CdI ₂ ,hP3,164	<i>P</i> -3m1	0.39253,0.39253,0.53952,90,90,120	shuangfengite	-	10.32	X	64316
Ir-Te	Ir _{0.62} Te _{1.68}	Ir _{0.58} Se _{1.68} ,hR36,148	<i>R</i> -3	0.90669,0.90669,1.11047,90,90,120	pyrite-marcasite family	black	8.41	X	24988
Ir-Th	ThIr	TlI ₂ O ₈ ,63	<i>Cmcm</i>	0.3894,1.113,0.4266,90,90,90	CrB(III)-FeB	-	15.24	A	2170
Ir-Th	ThIr ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.7661,0.7661,0.7661,90,90,90	Friauf-Laves phase	-	18.21	X	2170
Ir-Th	ThIr ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5335,0.5335,0.4286,90,90,120	-	-	18.75	X	2170
Ir-Th	Th _{0.99} Ir _{0.01} rt	Cu ₂ ,cF4,225	<i>Fm</i> -3m	0.50873,0.50873,0.50873,90,90,90	close-packed structure	-	11.69	X	2170
Ir-Th	Th ₇ Ir ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	1.0076,1.0076,0.6296,90,90,120	-	-	13.20	A	2170
Ir-Ti	TiIr lt	* ₁ oS* ₁ *	-	0.41017,0.34712,0.41628,90,90,90	-	-	-	N	23375
Ir-Ti	TiIr rt	CuAu,tP2,123	<i>P4/mmm</i>	0.2925,0.2925,0.3446,90,90,90	close-packed structure	-	13.52	X	4769
Ir-Ti	TiIr ₃	Cu ₃ Au,cP4,221	<i>Pm</i> -3m	0.3858,0.3858,0.3858,90,90,90	close-packed structure	-	18.06	X	2367
Ir-Ti	Ti _{0.01} Ir _{0.99}	Cu ₂ ,cF4,225	<i>Fm</i> -3m	0.3842,0.3842,0.3842,90,90,90	close-packed structure	-	22.34	X	63383
Ir-Ti	Ti _{0.6} Ir _{1.4}	CuAu,tP2,123	<i>P4/mmm</i>	0.276,0.276,0.378,90,90,90	close-packed structure	-	17.18	X	2367
Ir-Ti	Ti _{1.2} Ir _{0.8}	CsCl,cP2,221	<i>Pm</i> -3m	0.3106,0.3106,0.3106,90,90,90	b.c.c. family	-	11.71	X	3171
Ir-Ti	Ti ₃ Ir	Cr ₃ Si,cP8,223	<i>Pm</i> -3n	0.50118,0.50118,0.50118,90,90,90	Frank-Kasper phase	-	8.86	X	33862
Ir-Tm	TmIr	CsCl,cP2,221	<i>Pm</i> -3m	0.3353,0.3353,0.3353,90,90,90	b.c.c. family	-	15.91	X	2404
Ir-Tm	TmIr ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.74736,0.74736,0.74736,90,90,90	Friauf-Laves phase	-	17.61	X	17986
Ir-Tm	Tm ₃ Ir	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.7133,0.899,0.6285,90,90,90	-	-	11.52	A	11937
Ir-Tm	Tm ₃ Ir ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.5263,0.6345,0.7141,90,97.01,90	-	-	11.89	A	13170
Ir-Tm	Tm ₃ Ir ₃ ht	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8094,0.8094,0.6248,90,90,120	-	-	13.32	A	15093
Ir-Tm	Tm ₃ Ir ₃ rt	Pu ₃ Rh ₃ ,tP32,130	<i>P4/ncc</i>	1.0721,1.0721,0.6189,90,90,90	-	-	13.27	A	13188
Ir-U	UIr	PdBi,mP16,4	<i>P12</i> ,1	0.562,1.059,0.5598,90,98.93,90	CrB(III)-FeB	-	17.37	X	20102
Ir-U	UIr ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.74954,0.74954,0.74954,90,90,90	Friauf-Laves phase	-	19.64	X	19256

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ir-U	UIr ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.40221,0.40221,0.40221,90,90,90	close-packed structure	-	20.79	X	3542
Ir-U	U ₂ Ir rt	*mP12,*	-	0.5095,0.3457,1.321,90,96,57,90	-	-	-	N	2749
Ir-V	VIr rt	VIr,oS8,65	<i>Cmmm</i>	0.5797,0.6762,0.2805,90,90,90	b.c.c. family	-	14.69	X	23389
Ir-V	VIr ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.38124,0.38124,0.38124,90,90,90	close-packed structure	-	18.81	X	3507
Ir-V	V _{0.01} Ir _{0.99}	Cu,cF4,225	<i>Fm-3m</i>	0.3839,0.3839,0.3839,90,90,90	close-packed structure	-	22.40	X	63383
Ir-V	V _{0.8} Ir _{0.2}	W,cI2,229	<i>Im-3m</i>	0.301,0.301,0.301,90,90,90	b.c.c. family	-	9.65	X	3507
Ir-V	V _{1.08} Ir _{0.92} ht	CuAu,tP2,123	<i>P4/mmm</i>	0.277,0.277,0.3651,90,90,90	close-packed structure	-	13.74	X	23389
Ir-V	V ₃ Ir	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.47876,0.47876,0.47876,90,90,90	Frank-Kasper phase	-	10.44	X	3734
Ir-W	WIr rt	AuCd,oP4,51	<i>Pmma</i>	0.4452,0.276,0.4811,90,90,90	close-packed structure	-	21.13	A	2379
Ir-W	WIr ₃ rt	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.5496,0.5496,0.439,90,90,120	close-packed structure	-	21.99	A	3056
Ir-W	W _{0.01} Ir _{0.99}	Cu,cF4,225	<i>Fm-3m</i>	0.3838,0.3838,0.3838,90,90,90	close-packed structure	-	22.57	X	63383
Ir-W	W _{0.5} Ir _{0.5}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2774,0.2774,0.4468,90,90,120	close-packed structure	-	20.97	X	952
Ir-W	W _{0.72} Ir _{0.28} ht	(Cr _{0.49} Fe _{0.51}),tP30,136	<i>P4₂/mnm</i>	0.967,0.967,0.5,90,90,90	Frank-Kasper phase	-	19.84	A	1389
Ir-W	W _{0.99} Ir _{0.01}	W,cI2,229	<i>Im-3m</i>	0.317,0.317,0.317,90,90,90	b.c.c. family	-	19.18	X	1945
Ir-Y	YIr	CsCl,cP2,221	<i>Pm-3m</i>	0.34,0.34,0.34,90,90,90	b.c.c. family	-	11.88	X	22920
Ir-Y	YIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7512,0.7512,0.7512,90,90,90	Friauf-Laves phase	-	14.83	X	19005
Ir-Y	YIr ₃	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.5279,0.5279,2.5878,90,90,120	Laves-CaCu ₅	-	15.93	A	22920
Ir-Y	Y ₃ Ir	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.7237,0.927,0.6329,90,90,90	-	-	7.18	A	22920
Ir-Y	Y ₃ Ir ₂	Y ₃ Rh ₂ ,tI140,140	<i>I4/mcm</i>	1.1232,1.1232,2.5158,90,90,90	-	-	9.54	A	22920
Ir-Y	Y ₃ Ir ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.5691,0.6474,0.724,90,96,7,90	-	-	7.54	A	22920
Ir-Y	Y ₃ Ir ₃ ht	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8168,0.8168,0.6407,90,90,120	-	-	9.16	A	22920
Ir-Y	Y ₃ Ir ₃ rt	Pu ₃ Rh ₃ ,tP32,130	<i>P4/ncc</i>	1.0895,1.0895,0.6325,90,90,90	-	-	9.03	A	22920
Ir-Y	Y ₆₄ Ir ₃₇	*tP202,126	<i>P4/nnc</i>	1.088,1.088,4.018,90,90,90	-	-	-	N	11016
Ir-Yb	YbIr	CsCl,cP2,221	<i>Pm-3m</i>	0.3346,0.3346,0.3346,90,90,90	b.c.c. family	-	16.19	X	10008
Ir-Yb	YbIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.74638,0.74638,0.74638,90,90,90	Friauf-Laves phase	-	17.81	X	17986
Ir-Yb	Yb ₃ Ir ₃ ht	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8048,0.8048,0.6194,90,90,120	-	-	13.78	A	15067
Ir-Yb	Yb ₃ Ir ₃ rt	Pu ₃ Rh ₃ ,tP32,130	<i>P4/ncc</i>	1.0678,1.0678,0.6157,90,90,90	-	-	13.64	A	15067
Ir-Zn	ZnIr rt	LiRh,hP2,187	<i>P-6m2</i>	0.2761,0.2761,0.4222,90,90,120	close-packed structure	-	15.35	X	48676
Ir-Zn	Zn ₁₁ Ir ₂	Cu ₂ Zn ₈ ,cI52,217	<i>I-43m</i>	0.91075,0.91075,0.91075,90,90,90	γ -brass	-	9.70	X	6381
Ir-Zn	Zn _{90.6} Ir _{11.1} ht	Zn _{90.6} Ir _{11.1} ,cF452,216	<i>F-43m</i>	1.8224,1.8224,1.8224,90,90,90	-	gray silver	8.84	X	43573
Ir-Zr	ZrIr ht	CsCl,cP2,221	<i>Pm-3m</i>	0.3318,0.3318,0.3318,90,90,90	b.c.c. family	-	12.89	X	13510
Ir-Zr	ZrIr rt	ZrIr,oS16,63	<i>Cmcm</i>	0.33686,1.9608,0.43982,90,90,90	-	-	12.96	X	53432
Ir-Zr	ZrIr ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.738,0.738,0.738,90,90,90	Friauf-Laves phase	-	15.72	X	13510
Ir-Zr	ZrIr ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.394,0.394,0.394,90,90,90	close-packed structure	-	18.13	X	13510
Ir-Zr	Zr _{0.01} Ir _{0.99}	Cu,cF4,225	<i>Fm-3m</i>	0.3842,0.3842,0.3842,90,90,90	close-packed structure	-	22.40	X	63383
Ir-Zr	Zr ₂ Ir rt	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.651,0.651,0.562,90,90,90	-	-	10.45	A	13510
Ir-Zr	Zr ₂ Ir stab	Ti ₂ Ni,cF96,227	<i>Fd-3m</i>	1.247,1.247,1.247,90,90,90	-	-	10.27	A	984
Ir-Zr	Zr ₃ Ir	V ₃ Si,tI32,121	<i>I-42m</i>	1.0788,1.0788,0.5602,90,90,90	-	-	9.49	X	17654
Ir-Zr	Zr ₃ Ir ₃ Ir+	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.802,0.802,0.55,90,90,120	-	-	11.20	A	13510
Ir-Zr	Zr ₃ Ir ₃	Zr ₃ Ir ₃ ,hP48,178	<i>P6₃/22</i>	0.79306,0.79306,1.7010,90,90,120	-	-	11.11	X	18593
K-N	K[N ₃]	K[N ₃],tI16,140	<i>I4/mcm</i>	0.61188,0.61188,0.71015,90,90,90	-	-	2.03	X	10183
K-N	K ₃ N	Cs ₃ O,hP8,193	<i>P6₃/mcm</i>	0.7798,0.7798,0.7592,90,90,120	-	-	1.09	X	44848
K-Na	KNa ₂ lt	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.748,0.748,1.227,90,90,120	Friauf-Laves phase	-	0.95	A	216
K-O	K[O ₂] ht	NaCl,cF8,225	<i>Fm-3m</i>	0.609,0.609,0.609,90,90,90	rocksalt family	-	2.09	X	417
K-O	K[O ₂] lt2	K[O ₂],mS12,15	<i>C12/c1</i>	0.788,0.4036,0.75806,90,117.991,90	-	-	2.22	X	8842
K-O	K[O ₂] rt	CaC ₂ ,tI6,139	<i>I4/mmm</i>	0.4033,0.4033,0.6699,90,90,90	-	-	2.17	X	647
K-O	K[O ₃] m	K[O ₃],tI32,140	<i>I4/mcm</i>	0.86358,0.86358,0.71406,90,90,90	-	red dark	2.17	X	20516
K-O	K ₂ O ht1	*cP72,*	-	1.2125,1.2125,1.2125,90,90,90	-	-	-	N	5079
K-O	K ₂ O ht2	*h**,*	-	1.7768,1.7768,2.1235,90,90,120	-	-	-	N	16373
K-O	K ₂ O rt	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.6436,0.6436,0.6436,90,90,90	fluorite family	-	2.35	X	5079
K-O	K ₂ [O ₂]	K ₂ [O ₂],oS16,64	<i>Cmce</i>	0.6733,0.6996,0.6474,90,90,90	-	colorless	2.40	X	26692
K-P	KP	NaP,oP16,19	<i>P2₁2₁2₁</i>	0.6016,0.65,1.1288,90,90,90	-	black	2.11	A	12660
K-P	KP ₁₅	KP ₁₅ ,aP32,2	<i>P-1</i>	0.71568,0.91528,1.19446,89.628,78.54,71.853	-	red ruby	2.30	X	3345
K-P	K ₂ P ₃ ht	K ₂ P ₃ ,oF80,70	<i>Fddd</i>	0.8305,1.4772,1.8650,90,90,90	-	black	1.99	X	17469
K-P	K ₂ P ₃ rt	Rb ₂ P ₃ ,oF40,69	<i>Fmmm</i>	0.8624,0.9347,1.4253,90,90,90	-	black	1.98	X	17469
K-P	K ₃ P	Na ₃ As,hP8,194	<i>P6₃/mmc</i>	0.5691,0.5691,1.005,90,90,120	-	green	1.75	X	1499
K-P	K ₃ P ₁₁ ht	*cP*,221	<i>Pm-3m</i>	0.9282,0.9282,0.9282,90,90,90	-	red	-	N	25408
K-P	K ₃ P ₁₁ rt	Na ₃ P ₁₁ ,oP56,60	<i>Pbcn</i>	1.045,1.394,1.0315,90,90,90	-	orange red	2.02	X	25408
K-P	K ₄ P ₃	K ₄ P ₃ ,oS28,63	<i>Cmcm</i>	0.5049,1.1197,1.4788,90,90,90	-	black blue	1.98	X	21990
K-Pb	KPb	NaPb,tI64,142	<i>I4₁/acd</i>	1.1532,1.1532,1.8868,90,90,90	-	black gray	5.22	X	31314
K-Pb	KPb _{0.83}	DyAl ₁₀ P16,57	<i>Pbcm</i>	0.672,1.3389,0.652,90,90,90	-	gray	4.78	X	37084
K-Pb	KPb ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.666,0.666,1.076,90,90,120	Friauf-Laves phase	-	7.29	X	793
K-Pb	K ₄ Pb ₉	K ₄ Pb ₉ ,mP52,11	<i>P12₁/m1</i>	0.9648,1.3243,1.5909,90,103.24,90	-	gray dark	6.79	X	34502
K-Pb	K ₃ Pb ₂₄	Ti ₆ Re ₂₄ ,cI58,217	<i>I-43m</i>	1.2358,1.2358,1.2358,90,90,90	-	gray silver	9.09	X	36910
K-Pt	K _{0.4} Pt	*hR**,*	-	0.26462,0.26462,1.7123,90,90,120	-	gray	-	N	48629
K-S	KS ₂	*aP42,*	-	0.688,1.3284,1.3837,65.5,89.88,87.77	-	-	-	N	8743
K-S	KS ₃ mon	KS ₃ ,mP32,14	<i>P12₁/c1</i>	0.64483,1.18095,1.20242,90,106.234,90	-	orange	2.04	X	64826
K-S	KS ₃ tricl	*aP56,*	-	0.793,1.37463,1.4266,115.68,99.22,91.697	-	-	-	N	8743
K-S	K ₂ S hp	K ₂ S,oP12,51	<i>Pmma</i>	0.6529,0.5094,0.8772,90,90,90	-	white	2.51	X	41441
K-S	K ₂ S rt	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.74048,0.74048,0.74048,90,90,90	fluorite family	white	1.80	X	41441
K-S	K ₂ S ₂ rt	Na ₂ [O ₂],hP12,189	<i>P-62m</i>	0.8494,0.8494,0.5836,90,90,120	-	yellow faint	1.94	X	28126
K-S	K ₂ S ₃	K ₂ S ₃ ,oS20,36	<i>Cmc2₁</i>	0.7309,0.9914,0.7473,90,90,90	-	orange red	2.14	X	10901
K-S	K ₂ S ₅	Tl ₂ S ₅ ,oP28,19	<i>P2₁2₁2₁</i>	0.6494,0.66,1.7414,90,90,90	-	orange red	2.12	X	9739
K-Sb	KSb	LiAs,mP16,14	<i>P12₁/c1</i>	0.7156,0.6917,1.3355,90,115.17,90	-	gray	3.57	X	14577
K-Sb	KSb ₂	KSb ₂ ,mS12,12	<i>C12/m1</i>	1.4055,0.4233,0.7053,90,95.02,90	-	black	4.49	X	30112
K-Sb	K ₃ Sb ht	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.8493,0.8493,0.8493,90,90,90	fluorite family	-	2.59	X	3052
K-Sb	K ₃ Sb rt	Na ₃ As,hP8,194	<i>P6₃/mmc</i>	0.6025,0.6025,1.0693,90,90,120	-	-	2.36	X	139
K-Sb	K ₅ Sb ₄	Rb ₅ As ₄ ,mS20,12	<i>C12/m1</i>	1.2319,0.54866,1.1258,90,112.27,90	-	black	3.22	X	39119

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
K-Se	K ₂ Se	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.7676, 0.7676, 0.7676, 90, 90, 90	fluorite family	-	2.31	X	70
K-Se	K ₂ Se ₂	Na[O ₂], hP12, 189	<i>P-62m</i>	0.8908, 0.8908, 0.6039, 90, 90, 120	-	black	2.83	X	28126
K-Se	K ₂ Se ₃	K ₂ S ₃ , oS20, 36	<i>Cmc2₁</i>	0.7692, 1.041, 0.7717, 90, 90, 90	-	black brown	3.39	X	10901
K-Se	K ₂ Se ₅	Tl ₂ S ₅ , oP28, 19	<i>P2₁2₁2₁</i>	0.6715, 0.6949, 1.7764, 90, 90, 90	-	black	3.79	X	26854
K-Se	K _{4.75} Se _{2.82} rt	K _{4.75} Se _{2.85} , mS32, 12	<i>C12/m1</i>	1.8289, 0.5861, 1.2973, 90, 134.75, 90	-	red dark	2.75	X	25478
K-Se	K ₅ Se ₃ ht	K ₅ Te ₃ , tI32, 87	<i>I4/m</i>	1.3159, 1.3159, 0.5909, 90, 90, 90	-	black	2.81	A	25478
K-Si	KS ₂ hp	NaPb ₂ tl64, 142	<i>I4₁/acd</i>	1.057, 1.057, 1.71, 90, 90, 90	-	-	1.87	A	16714
K-Si	KS ₂ rt	KGe ₂ , cP64, 218	<i>P-43n</i>	1.262, 1.262, 1.262, 90, 90, 90	-	black	1.78	X	46764
K-Si	KS ₂	* _c * _c * _c *	-	1.34, 1.34, 1.34, 90, 90, 90	-	-	-	N	1506
K-Si	K ₁₂ Si ₁₇	Rb ₁₂ Si ₁₇ , mP464, 14	<i>P12₁/c1</i>	2.3689, 1.3572, 4.4509, 90, 91.248, 90	-	gray dark	1.76	X	42457
K-Si	K _{2.23} Si ₁₇	Na ₅ S ₁₇ , cF160, 227	<i>Fd-3m</i>	1.47264, 1.47264, 1.47264, 90, 90, 90	clathrate	blue	2.35	X	56828
K-Si	K _{3.75} Si ₂₃ rt	Na ₄ Si ₂₃ , cP54, 223	<i>Pm-3n</i>	1.02639, 1.02639, 1.02639, 90, 90, 90	clathrate	bluish	2.43	X	56828
K-Sn	KSn	NaPb ₂ tl64, 142	<i>I4₁/acd</i>	1.1409, 1.1409, 1.8649, 90, 90, 90	-	black gray	3.45	X	37091
K-Sn	K ₁₂ Sn ₁₇ hex	* _h P* _c *	-	1.411, 1.411, 2.315, 90, 90, 120	-	-	-	N	37141
K-Sn	K ₁₂ Sn ₁₇ mon1	Rb ₁₂ Si ₁₇ , mP464, 14	<i>P12₁/c1</i>	2.571, 1.477, 4.819, 90, 91.64, 90	-	-	3.61	A	34568
K-Sn	K ₁₂ Sn ₁₇ mon2	* _m S* _c *	-	3.6456, 2.6075, 4.4805, 90, 102.5, 90	-	gray dark	-	N	42457
K-Sn	K ₂₆ Sn ₄₁	CS ₂₆ Sn ₄₁ , mP560, 14	<i>P12₁/c1</i>	2.5618, 1.4792, 5.5653, 90, 98.923, 90	-	-	3.75	A	43154
K-Sn	K ₄ Sn ₂₃	Na ₄ Si ₂₃ , cP54, 223	<i>Pm-3n</i>	1.203, 1.203, 1.203, 90, 90, 90	clathrate	-	5.51	X	4820
K-Sn	K ₄ Sn ₉	K ₄ Sn ₉ , mP52, 14	<i>P12₁/c1</i>	1.4238, 0.83554, 1.6487, 90, 95.261, 90	-	gray silver	4.16	X	40300
K-Sn	K _{7.4} Sn ₂₅	K ₈ Sn ₂₅ , cP136, 213	<i>P4₁32</i>	1.6294, 1.6294, 1.6294, 90, 90, 90	clathrate	black	5.00	X	28641
K-Te	K ₂ Te	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.8152, 0.8152, 0.8152, 90, 90, 90	fluorite family	-	2.52	X	70
K-Te	K ₂ Te ₂ ht	Li ₂ [O ₂]-b, hP8, 194	<i>P6₃/mmc</i>	0.5589, 0.5589, 1.2188, 90, 90, 120	-	black purple	3.36	X	28126
K-Te	K ₂ Te ₂ rt	Na ₂ [O ₂], hP12, 189	<i>P-62m</i>	0.9514, 0.9514, 0.65, 90, 90, 120	-	purple	3.26	X	28126
K-Te	K ₂ Te ₃	K ₂ Te ₃ , oP20, 62	<i>Pnma</i>	1.5938, 1.0097, 0.4686, 90, 90, 90	-	gray	4.06	X	11233
K-Te	K ₅ Te ₃	K ₅ Te ₃ , tI32, 87	<i>I4/m</i>	1.3742, 1.3742, 0.6364, 90, 90, 90	-	black	3.20	X	24193
K-Tl	KTl hp	NaTl, cF16, 227	<i>Fd-3m</i>	0.756, 0.756, 0.756, 90, 90, 90	b.c.c. family	-	7.49	X	37568
K-Tl	KTl rt	KTl, oS48, 64	<i>Cmce</i>	1.5329, 1.5069, 0.8137, 90, 90, 90	-	black	5.16	X	27254
K-Tl	K ₁₀ Tl ₇	K ₁₀ Tl ₇ , mP68, 14	<i>P12₁/c1</i>	1.0132, 2.2323, 1.3376, 90, 93.14, 90	-	gray	4.01	X	37573
K-Tl	K ₄₉ Tl ₁₀₈	K ₄₉ Tl ₁₀₈ , cP157, 200	<i>Pm-3</i>	1.7287, 1.7287, 1.7287, 90, 90, 90	-	gray silver	7.71	X	28163
K-Tl	K ₆ Tl ₁₇	K ₆ Tl ₁₇ , oS184, 66	<i>Cccm</i>	1.6625, 2.3594, 1.5369, 90, 90, 90	-	gray silver	8.17	X	42226
K-Tl	K ₈ Tl ₁₁	K ₈ In ₁₁ , hR114, 167	<i>R-3c</i>	0.9991, 0.9991, 5.084, 90, 90, 120	-	gray silver	5.81	X	26773
K-Zn	KZn ₁₃	NaZn ₁₃ , cF112, 226	<i>Fm-3c</i>	1.2379, 1.2379, 1.2379, 90, 90, 90	-	-	6.23	X	47602
Kr-Xe	Xe _{0.5} Kr _{0.5}	Cu ₂ , cF4, 225	<i>Fm-3m</i>	0.6048, 0.6048, 0.6048, 90, 90, 90	close-packed structure	-	3.23	X	6809
La-Mg	MgLa	CsCl, cP2, 221	<i>Pm-3m</i>	0.3965, 0.3965, 0.3965, 90, 90, 90	b.c.c. family	gray silver	4.35	X	64256
La-Mg	Mg _{0.2} La _{0.8} ht2	W ₂ , cI2, 229	<i>Im-3m</i>	0.413, 0.413, 0.413, 90, 90, 90	b.c.c. family	-	5.47	X	22536
La-Mg	Mg _{0.9997} La _{0.0003} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.32095, 0.32095, 0.52114, 90, 90, 120	close-packed structure	-	1.74	X	25244
La-Mg	Mg _{11.82} La _{1.09} rt	Mg _{11.82} La _{1.09} , oI346, 71	<i>Immm</i>	1.03391, 1.03554, 7.7484, 90, 90, 90	-	brown yellow	2.28	X	54601
La-Mg	Mg ₁₇ La ₂	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	1.036, 1.036, 1.024, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	brown yellow	2.41	X	1963
La-Mg	Mg ₂ La ht	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.881, 0.881, 0.881, 90, 90, 90	Friauf-Laves phase	colorless	3.64	X	45163
La-Mg	Mg ₃ La	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.74819, 0.74819, 0.74819, 90, 90, 90	fluorite family	-	3.36	X	59095
La-Mg	Mg ₄₁ La ₅ ht	Mg ₄₁ Ce ₅ , tI92, 87	<i>I4/m</i>	1.4822, 1.4822, 1.0468, 90, 90, 90	-	-	2.44	A	30791
La-N	LaN hp	BaO, tP4, 129	<i>P4/nmm</i>	0.41875, 0.41875, 0.31579, 90, 90, 90	b.c.c. family	-	9.17	X	59461
La-N	LaN	NaCl, cF8, 225	<i>Fm-3m</i>	0.52912, 0.52912, 0.52912, 90, 90, 90	rocksalt family	white	6.86	X	59461
La-N	La[N ₂]	La[N ₂], hP18, 157	<i>P31m</i>	0.6494, 0.6494, 0.7974, 90, 90, 120	-	brown light	5.71	X	61044
La-Ni	LaNi	Tl ₂ , oS8, 63	<i>Cmcm</i>	0.39, 1.079, 0.438, 90, 90, 90	CrB(III)-FeB	-	7.12	A	19008
La-Ni	LaNi ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.734, 0.734, 0.734, 90, 90, 90	Friauf-Laves phase	-	8.61	X	20024
La-Ni	LaNi ₃	PuNi ₃ , hP36, 166	<i>R-3m</i>	0.50817, 0.50817, 2.5092, 90, 90, 120	Laves-CaCu ₅	-	8.39	X	49639
La-Ni	LaNi ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.50033, 0.50033, 0.3982, 90, 90, 120	-	-	8.32	X	34562
La-Ni	La _{0.94} Ni _{15.12}	Cu _{5.36} Yb _{0.82} , hP14, 191	<i>P6/mmm</i>	0.49933, 0.49933, 0.39998, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.29	X	41139
La-Ni	La ₂ Ni ₃	La ₂ Ni ₃ , oS20, 64	<i>Cmce</i>	0.51138, 0.97316, 0.79075, 90, 90, 90	-	-	7.66	X	9761
La-Ni	La ₂ Ni ₇ ht	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.5056, 0.5056, 3.698, 90, 90, 120	Laves-CaCu ₅	-	8.38	A	4602
La-Ni	La ₂ Ni ₇ rt	Ce ₂ Ni ₇ , hP36, 194	<i>P6₃/mmc</i>	0.50577, 0.50577, 2.47336, 90, 90, 120	Laves-CaCu ₅	-	8.35	X	44562
La-Ni	La ₃ Ni	Fe ₂ C-b, oP16, 62	<i>Pnma</i>	0.7232, 1.0236, 0.6599, 90, 90, 90	-	-	6.46	A	51321
La-Ni	La ₃ Ni ₁₉	Sm ₅ Co ₁₉ , hP48, 194	<i>P6₃/mmc</i>	0.50491, 0.50491, 3.2642, 90, 90, 120	Laves-CaCu ₅	-	8.34	X	53109
La-Ni	La ₇ Ni ₁₆ rt	La ₇ Ni ₁₆ , tI46, 121	<i>I-42m</i>	0.7355, 0.7355, 1.451, 90, 90, 90	-	-	8.09	X	21188
La-Ni	La ₇ Ni ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	1.014, 1.014, 0.6475, 90, 90, 120	-	-	6.62	X	11474
La-O	LaO hp	NaCl, cF8, 225	<i>Fm-3m</i>	0.5144, 0.5144, 0.5144, 90, 90, 90	rocksalt family	golden	7.56	X	14201
La-O	LaO _{1.5} ht2	NdO _{1.5} , cI26, 229	<i>Im-3m</i>	0.451, 0.451, 0.451, 90, 90, 90	-	-	5.90	A	3898
La-O	La ₂ O ₃ (Ni)	Sm ₂ O ₃ , mS30, 12	<i>C12/m1</i>	1.46, 0.3717, 0.9275, 90, 99.77, 90	-	-	6.54	A	3876
La-O	La ₂ O ₃ cub	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	<i>Ia-3</i>	1.1414, 1.1414, 1.1414, 90, 90, 90	-	-	5.82	X	36443
La-O	La ₂ O ₃ ht1	La ₂ O ₃ , hP10, 194	<i>P6₃/mmc</i>	0.393, 0.393, 0.612, 90, 90, 120	-	colorless	6.61	X	2779
La-O	La ₂ O ₃ mon	Sm ₂ O ₃ , mS30, 12	<i>C12/m1</i>	1.442, 0.3722, 0.9109, 90, 99.73, 90	-	-	6.74	A	8373
La-O	La ₂ O ₃ rt	La ₂ O ₃ , hP5, 164	<i>P-3m1</i>	0.39381, 0.39381, 0.61361, 90, 90, 120	-	yellow	6.56	X	12452
La-Os	LaOs ₂ hp-ht	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.542, 0.542, 0.9, 90, 90, 120	Friauf-Laves phase	-	15.07	A	6611
La-Os	LaOs ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7744, 0.7744, 0.7744, 90, 90, 90	Friauf-Laves phase	-	14.86	X	15096
La-Os	La ₃ Os	Fe ₂ C-b, oP16, 62	<i>Pnma</i>	0.753, 0.9919, 0.6597, 90, 90, 90	-	-	8.18	A	13171
La-P	LaP	NaCl, cF8, 225	<i>Fm-3m</i>	0.6025, 0.6025, 0.6025, 90, 90, 90	rocksalt family	-	5.16	X	24990
La-P	LaP ₂	LaP ₂ , mS48, 9	<i>C1c1</i>	1.2505, 1.3942, 0.8825, 90, 134.74, 90	-	gray dark	4.88	X	9255
La-P	LaP ₅ mon1	LaP ₅ , mP24, 11	<i>P12₁/m1</i>	0.5576, 0.9679, 0.9768, 90, 105.25, 90	-	black gray	3.84	X	10083
La-P	LaP ₅ mon2	NdP ₅ , mP12, 11	<i>P12₁/m1</i>	0.4885, 0.9673, 0.5577, 90, 105.32, 90	-	black	3.84	X	42686
La-P	LaP ₇	LaP ₇ , mP32, 14	<i>P12₁/c1</i>	0.6989, 1.1656, 1.02645, 90, 129.59, 90	-	black	3.67	X	9096
La-Pb	LaPb ₂	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.3331, 0.3331, 1.6918, 90, 90, 90	close-packed structure	-	9.79	A	28906
La-Pb	LaPb ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4902, 0.4902, 0.4902, 90, 90, 90	close-packed structure	-	10.72	X	16430
La-Pb	La ₃ Pb ₃	Mn ₂ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.9534, 0.9534, 0.6977, 90, 90, 120	-	-	7.96	A	29058
La-Pb	La ₃ Pb ₃ rt	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.8538, 1.631, 0.8674, 90, 90, 90	-	-	8.38	X	4240
La-Pd	LaPd rt	Tl ₂ , oS8, 63	<i>Cmcm</i>	0.3945, 1.1032, 0.466, 90, 90, 90	CrB(III)-FeB	-	8.03	A	9233
La-Pd	LaPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4183, 0.4183, 0.4183, 90, 90, 90	close-packed structure	-	10.39	X	23533
La-Pd	LaPd ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.53, 0.53, 0.4431, 90, 90, 120	-	-	10.34	X	22211

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
La-Pd	La ₃ Pd ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.386, 1.386, 0.5848, 90, 90, 120	b.c.c. family	-	8.63	A	8116
La-Pd	La ₇ Pd ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	1.0387, 1.0387, 0.6552, 90, 90, 120	-	-	7.01	A	7342
La-Pt	LaPt	TiI ₂ oS8, 63	<i>Cmcm</i>	0.3972, 1.1023, 0.4548, 90, 90, 90	CrB(TiI)-FeB	-	11.14	A	16431
La-Pt	LaPt ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7781, 0.7781, 0.7781, 90, 90, 90	Friauf-Laves phase	-	14.92	X	7450
La-Pt	LaPt ₅	CaCu ₅ , hP6, 191	<i>P6₃/mmm</i>	0.5392, 0.5392, 0.438, 90, 90, 120	-	-	16.78	X	42680
La-Pt	La ₃ Pt ₂	Er ₃ Ni ₂ , hR45, 148	<i>R-3</i>	0.9096, 0.9096, 1.7303, 90, 90, 120	-	-	9.73	A	10263
La-Pt	La ₃ Pt ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3812, 1.3812, 0.5812, 90, 90, 120	b.c.c. family	-	12.42	A	35307
La-Pt	La ₇ Pt ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	1.0336, 1.0336, 0.6516, 90, 90, 120	-	-	8.58	A	7350
La-Pu	La _{0.85} Pu _{0.15} ht1	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.5256, 0.5256, 0.5256, 90, 90, 90	close-packed structure	-	7.08	X	3665
La-Rh	LaRh	TiI ₂ oS8, 63	<i>Cmcm</i>	0.3985, 1.1143, 0.4247, 90, 90, 90	CrB(TiI)-FeB	-	8.52	A	26061
La-Rh	LaRh ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7648, 0.7648, 0.7648, 90, 90, 90	Friauf-Laves phase	-	10.24	X	26061
La-Rh	LaRh ₃ ht	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.5326, 0.5326, 2.646, 90, 90, 120	Laves-CaCu ₅	-	10.29	A	6594
La-Rh	LaRh ₃ rt	CeNi ₃ , hP24, 194	<i>P6₃/mmc</i>	0.5306, 0.5306, 1.7592, 90, 90, 120	Laves-CaCu ₅	-	10.40	A	30159
La-Rh	La ₂ Rh ₇ ht1	Ce ₂ Ni ₇ , hP36, 194	<i>P6₃/mmc</i>	0.5296, 0.5296, 2.613, 90, 90, 120	Laves-CaCu ₅	-	10.45	A	4765
La-Rh	La ₂ Rh ₇ ht2	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.5333, 0.5333, 3.946, 90, 90, 120	Laves-CaCu ₅	-	10.23	A	4765
La-Rh	La ₃ Rh ₂	Er ₃ Ni ₂ , hR45, 148	<i>R-3</i>	0.897, 0.897, 1.7024, 90, 90, 120	-	-	7.84	A	26061
La-Rh	La ₄ Rh ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8922, 0.8922, 0.8922, 90, 90, 90	-	-	8.08	X	5139
La-Rh	La ₅ Rh ₄	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.7601, 1.5111, 0.7802, 90, 90, 90	-	-	8.20	A	26061
La-Rh	La ₇ Rh ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	1.0202, 1.0202, 0.6506, 90, 90, 120	-	-	7.26	A	26061
La-Ru	LaRu ₂ lt	* ₂ II2, *	-	0.544, 0.544, 0.7758, 90, 90, 90	-	-	-	N	8350
La-Ru	LaRu ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7716, 0.7716, 0.7716, 90, 90, 90	Friauf-Laves phase	-	9.86	X	25184
La-Ru	La _{0.05} Ru _{0.95}	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.2719, 0.2719, 0.4302, 90, 90, 120	close-packed structure	-	12.42	X	17525
La-Ru	La ₃ Ru	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7465, 1.0016, 0.657, 90, 90, 90	-	-	7.00	A	27336
La-Ru	La ₅ Ru ₂	Mn ₃ C ₂ , mS28, 15	<i>C12/c1</i>	1.6806, 0.6693, 0.7444, 90, 95.86, 90	-	-	7.15	A	23355
La-Ru	La ₅ Ru ₃	* ₂ o***, *	-	1.6, 1.6, 19.134, 90, 90, 90	-	-	-	N	23355
La-Ru	La ₇ Ru ₃	Sr ₇ Pt ₃ , oP40, 62	<i>Pnma</i>	0.7422, 2.3562, 0.6732, 90, 90, 90	-	-	7.20	A	23355
La-S	LaS hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.33068, 0.33068, 0.33068, 90, 90, 90	b.c.c. family	-	7.85	X	50282
La-S	LaS	NaCl, cF8, 225	<i>Fm-3m</i>	0.5848, 0.5848, 0.5848, 90, 90, 90	rocksalt family	golden	5.68	X	17982
La-S	LaS _{1.91}	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.3975, 0.3975, 0.8184, 90, 90, 90	-	-	5.14	A	12145
La-S	LaS _{1.96} ht	LaS ₂ , oP24, 62	<i>Pnma</i>	0.8133, 1.6345, 0.4133, 90, 90, 90	-	red dark	4.88	X	42762
La-S	LaS ₂ cub	* ₂ c*24, *	-	0.82, 0.82, 0.82, 90, 90, 90	-	brown	-	N	1060
La-S	LaS ₂ rt	CeSe ₂ , mP12, 14	<i>P12₁/c1</i>	0.8317, 0.4096, 0.8254, 90, 90, 3.90	-	brown	4.80	A	30659
La-S	LaS ₂ tet	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.40782, 0.40782, 0.81587, 90, 90, 90	-	-	4.97	A	29168
La-S	La ₁₀ S ₁₅	Pr ₁₀ Si ₁₄ O, tI200, 142	<i>I4₁/acd</i>	1.572, 1.572, 2.07, 90, 90, 90	-	yellow faint	4.86	A	33848
La-S	La ₁₀ S ₁₉	Ce ₁₀ Se ₁₉ , tP58, 86	<i>P4₂/n</i>	0.9111, 0.9111, 1.6336, 90, 90, 90	-	-	4.89	X	50593
La-S	La ₃ S ₃ rt	Cr ₃ C ₂ -b, oP20, 62	<i>Pnma</i>	0.766, 0.422, 1.588, 90, 90, 90	-	maroon	4.84	X	4441
La-S	La _{2.67} S ₄ ht2	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8731, 0.8731, 0.8731, 90, 90, 90	-	yellow	4.98	X	30236
La-S	La ₃ S ₄ lt	* ₂ t*28, *	-	0.8754, 0.8754, 0.8613, 90, 90, 90	-	-	-	N	13578
La-S	La ₃ S ₄ rt	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8728, 0.8728, 0.8728, 90, 90, 90	-	gray green	5.44	A	17839
La-S	La ₃ S ₇	* ₂ t***, *	-	0.8185, 0.8185, 1.656, 90, 90, 90	-	-	-	N	11684
La-S	La ₅ S ₇ hp	La ₅ S ₇ , tP26, 100	<i>P4bm</i>	1.144, 1.144, 0.528, 90, 90, 90	-	red ruby	4.42	X	9147
La-Sb	LaSb hp	CuTi, tP2, 123	<i>P4/mmm</i>	0.3965, 0.3965, 0.3233, 90, 90, 90	b.c.c. family	-	8.52	X	17014
La-Sb	LaSb	NaCl, cF8, 225	<i>Fm-3m</i>	0.649, 0.649, 0.649, 90, 90, 90	rocksalt family	-	6.33	X	17014
La-Sb	LaSb ₂	SmSb ₂ , oS24, 64	<i>Cmce</i>	0.6319, 0.6173, 1.857, 90, 90, 90	-	-	7.01	A	12288
La-Sb	La ₂ Sb	La ₂ Sb, tI12, 139	<i>I4/mmm</i>	0.46357, 0.46357, 1.81195, 90, 90, 90	-	-	6.82	X	58334
La-Sb	La ₄ Sb ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.9649, 0.9649, 0.9649, 90, 90, 90	-	-	6.81	X	12848
La-Sb	La ₅ Sb ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.942, 0.942, 0.662, 90, 90, 120	-	-	6.92	X	3753
La-Se	LaSe hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.33684, 0.33684, 0.33684, 90, 90, 90	b.c.c. family	-	9.47	X	50282
La-Se	LaSe	NaCl, cF8, 225	<i>Fm-3m</i>	0.6064, 0.6064, 0.6064, 90, 90, 90	rocksalt family	golden	6.49	X	20090
La-Se	LaSe _{1.85}	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.4207, 0.4207, 0.8512, 90, 90, 90	-	black	6.28	X	54488
La-Se	LaSe ₂ rt	CeSe ₂ , mP12, 14	<i>P12₁/c1</i>	0.858, 0.426, 0.851, 90, 89.88, 90	-	black	6.34	X	14798
La-Se	La ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ , tP58, 86	<i>P4₂/n</i>	0.94688, 0.94688, 1.71088, 90, 90, 90	-	gray	6.26	X	24719
La-Se	La _{2.67} Se ₄ rt	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.90521, 0.90521, 0.90521, 90, 90, 90	-	red ruby	6.15	X	39988
La-Se	La ₃ Se ₄ lt	* ₂ t*28, *	-	0.8971, 0.8971, 0.9055, 90, 90, 90	-	-	-	N	9023
La-Si	LaSi ht	FeB-b, oP8, 62	<i>Pnma</i>	0.8392, 0.3999, 0.6062, 90, 90, 90	CrB(TiI)-FeB	gray silver	5.45	X	58415
La-Si	LaSi rt	LaSi, oS16, 63	<i>Cmcm</i>	0.45621, 1.34803, 0.66259, 90, 90, 90	-	golden	5.44	X	36887
La-Si	LaSi _{1.88} lt	GdSi _{1.4} , oI12, 74	<i>Imma</i>	0.4184, 0.4272, 1.402, 90, 90, 90	-	-	5.08	X	2568
La-Si	LaSi ₁₀	LaSi ₁₀ , hP22, 194	<i>P6₃/mmc</i>	0.9623, 0.9623, 0.4723, 90, 90, 120	-	-	3.68	X	53823
La-Si	LaSi ₂ rt	ThSi ₂ , tI12, 141	<i>I4₁/amd</i>	0.4326, 0.4326, 1.384, 90, 90, 90	-	-	5.00	X	29018
La-Si	LaSi ₃ mon1	LaSi ₃ , mS24, 12	<i>C12/m1</i>	1.511, 0.4032, 0.8263, 90, 109.111, 90	-	-	3.90	X	53823
La-Si	LaSi ₃ mon2	LaSi ₃ , mS36, 12	<i>C12/m1</i>	1.4922, 0.3906, 0.8807, 90, 107.19, 90	-	-	3.78	X	53823
La-Si	La _{2.9} Si _{1.1} m	* ₂ oP*, *	-	0.3833, 0.6821, 0.9121, 90, 90, 90	-	-	-	N	19484
La-Si	La ₃ Si ₂	U ₃ Si ₂ , tP10, 127	<i>P4/mbm</i>	0.787, 0.787, 0.45, 90, 90, 90	-	-	5.63	X	2575
La-Si	La ₅ Si ₃ stab	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.975, 0.975, 0.709, 90, 90, 120	-	-	4.43	A	2710
La-Si	La ₅ Si ₃ tet1	Cr ₅ B ₃ , tI32, 140	<i>I4₁/mcm</i>	0.7976, 0.7976, 1.4107, 90, 90, 90	-	-	5.76	X	40772
La-Si	La ₅ Si ₄	Zr ₅ Si ₄ , tP36, 92	<i>P4₂/2</i>	0.8059, 0.8059, 1.545, 90, 90, 90	-	-	5.34	X	57199
La-Sn	LaSn ht	LaSn, oS120, 65	<i>Cmmm</i>	1.76697, 1.76828, 1.19432, 90, 90, 90	-	-	6.88	X	60314
La-Sn	LaSn rt	TiI ₂ oS8, 63	<i>Cmcm</i>	0.47633, 1.1911, 0.44089, 90, 90, 90	CrB(TiI)-FeB	-	6.84	X	60314
La-Sn	LaSn ₂	ZrGa ₂ , oS12, 65	<i>Cmmm</i>	0.44267, 1.58552, 0.45136, 90, 90, 90	close-packed structure	-	7.89	A	26300
La-Sn	LaSn ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.47777, 0.47777, 0.47777, 90, 90, 90	close-packed structure	-	7.54	X	57764
La-Sn	La ₁₁ Sn ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	<i>I4/mmm</i>	1.20898, 1.20898, 1.8166, 90, 90, 90	-	-	6.79	X	60314
La-Sn	La ₂ Sn ₃	Nd ₂ Sn ₃ , aP20, 2	<i>P-1</i>	0.6518, 0.8592, 1.1296, 107.29, 96.63, 100.32	-	-	7.20	X	43304
La-Sn	La ₂ Sn ₅	Ce ₂ Sn ₅ , oS28, 65	<i>Cmmm</i>	0.46385, 3.5813, 0.46983, 90, 90, 90	close-packed structure	-	7.42	X	57764
La-Sn	La ₃ Sn lt1	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.5102, 0.5102, 0.5102, 90, 90, 90	close-packed structure	-	6.69	X	27336
La-Sn	La ₃ Sn ₄	Er ₃ Ge ₄ , oS28, 63	<i>Cmcm</i>	0.45145, 1.19044, 1.5838, 90, 90, 90	-	-	6.96	X	60314
La-Sn	La ₃ Sn ₅	Pu ₃ Pd ₅ , oS32, 63	<i>Cmcm</i>	1.0352, 0.829, 1.0652, 90, 90, 90	-	-	7.34	X	39141
La-Sn	La ₃ Sn ₇	Gd ₃ Sn ₇ , oS20, 65	<i>Cmmm</i>	0.45783, 2.6284, 0.46799, 90, 90, 90	close-packed structure	-	7.36	X	57764
La-Sn	La ₅ Sn ₃ ht	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.945, 0.945, 0.6975, 90, 90, 120	-	-	6.47	A	16499

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
La-Sn	La ₅ Sn ₃ rt	W ₅ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.2755,1.2755,0.6336,90,90,90	-	-	6.77	A	23147
La-Sn	La ₅ Sn ₄	Sm ₅ Ge ₄ ,oP36,62	<i>Pnma</i>	0.8435,1.6194,0.863,90,90,90	-	-	6.59	A	46030
La-Te	LaTe hp	CsCl,cP2,221	<i>Pm-3m</i>	0.364,0.364,0.364,90,90,90	b.c.c. family	-	9.18	X	61697
La-Te	LaTe	NaCl,cF8,225	<i>Fm-3m</i>	0.643,0.643,0.643,90,90,90	rocksalt family	violet	6.66	X	32043
La-Te	LaTe ₂ rt	LaTe ₂ ,mP24,7	<i>P1c1</i>	0.919,0.9107,0.907,90,90,04,90	-	black	6.90	X	37892
La-Te	LaTe ₃	NdTe ₃ ,oS16,63	<i>Cmcm</i>	0.4434,2.534,0.441,90,90,90	-	golden	6.99	A	30659
La-Te	La ₂ Te ₅ ht	Nd ₂ Te ₅ ,oS28,63	<i>Cmcm</i>	0.4465,4.47,0.4465,90,90,90	-	brown	6.83	A	3366
La-Te	La _{2.67} Te ₄	Th ₃ Pa ₃ ,cI28,220	<i>I-43d</i>	0.9619,0.9619,0.9619,90,90,90	-	black gray	6.58	X	3004
La-Te	La ₄ Te ₇	* _t P22,127	<i>P4/mbm</i>	0.9011,0.9011,0.9172,90,90,90	-	black	-	N	3034
La-Th	La _{0.5} Th _{0.5} rt	Cu ₂ cF4,225	<i>Fm-3m</i>	0.5185,0.5185,0.5185,90,90,90	close-packed structure	-	8.84	X	4726
La-Th	La _{0.8} Th _{0.2}	Pr ₂ hP6,152	<i>P3₁21</i>	0.371,0.371,1.803,90,90,120	close-packed structure	-	7.30	X	18265
La-Tl	TlLa hp	CuTi ₂ tP2,123	<i>P4/mmm</i>	0.371,0.371,0.437,90,90,90	b.c.c. family	-	9.48	X	14286
La-Tl	TlLa	CsCl,cP2,221	<i>Pm-3m</i>	0.3936,0.3936,0.3936,90,90,90	b.c.c. family	gray silver	9.35	X	2600
La-Tl	TlLa ₃ rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.506,0.506,0.506,90,90,90	close-packed structure	-	7.96	X	11320
La-Tl	Tl ₃ La	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4803,0.4803,0.4803,90,90,90	close-packed structure	-	11.27	X	18521
La-Tl	Tl ₃ La ₅	W ₅ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.2798,1.2798,0.6347,90,90,90	-	-	8.36	A	18521
La-Tl	Tl ₃ La ₃ rt	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	1.039,0.84,1.078,90,90,90	-	-	10.16	A	18521
La-Y	La _{0.3} Y _{0.7} rt	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.37021,0.37021,0.58437,90,90,120	close-packed structure	-	4.98	X	2178
La-Y	La _{0.5} Y _{0.5} hp	Nd ₂ hP4,194	<i>P6₃/mmc</i>	0.369,0.369,1.185,90,90,120	close-packed structure	-	5.41	X	3139
La-Y	La _{0.5} Y _{0.5} rt	Sm ₂ hR9,166	<i>R-3m</i>	0.37,0.37,2.665,90,90,120	close-packed structure	-	5.39	A	3139
La-Zn	ZnLa	CsCl,cP2,221	<i>Pm-3m</i>	0.376,0.376,0.376,90,90,90	b.c.c. family	-	6.38	X	58271
La-Zn	Zn ₁₁ La	BaCd ₁₁ ,tI48,141	<i>I4₁/amd</i>	1.066,1.066,0.686,90,90,90	-	-	7.31	A	58271
La-Zn	Zn _{12.37} La rt	Na ₂ Si ₃ ,cF12,226	<i>Fm-3c</i>	1.2094,1.2094,1.2094,90,90,90	-	gray	7.12	X	56640
La-Zn	Zn _{16.06} La ₂ rhom	Zn ₁₇ Th ₂ hP57,166	<i>R-3m</i>	0.9125,0.9125,1.333,90,90,120	CaCu ₅ -Zr ₄ Al ₃	gray	6.88	X	40486
La-Zn	Zn ₁₇ La ₂ hex	Th ₂ Ni ₁₇ hP38,194	<i>P6₃/mmc</i>	0.9125,0.9125,0.8896,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	7.19	A	18344
La-Zn	Zn ₂ La	KHg ₂ ,oI12,74	<i>Imma</i>	0.468,0.763,0.756,90,90,90	AlB ₂ family	-	6.64	A	58271
La-Zn	Zn ₂₂ La ₃	Zn ₂₂ Ce ₃ ,tI100,141	<i>I4₁/amd</i>	0.893,0.893,2.136,90,90,90	-	-	7.23	A	58271
La-Zn	Zn ₄ La	Zn ₄ La,oS20,63	<i>Cmcm</i>	0.634,1.0312,0.6122,90,90,90	-	gray	6.65	X	58498
La-Zn	Zn ₅ La	CaCu ₅ hP6,191	<i>P6/mmm</i>	0.54654,0.54654,0.42574,90,90,120	-	gray	7.02	X	58516
Li-Mg	Li _{0.13} Mg _{0.87}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.31964,0.31964,0.51555,90,90,120	close-packed structure	-	1.61	X	51783
Li-Mg	Li _{0.81} Mg _{0.19} mart	Cu ₂ cF4,225	<i>Fm-3m</i>	0.4378,0.4378,0.4378,90,90,90	close-packed structure	-	0.81	X	736
Li-Mg	Li _{0.9} Mg _{0.1} rt	W ₂ cI2,229	<i>Im-3m</i>	0.35007,0.35007,0.35007,90,90,90	b.c.c. family	-	0.67	X	4379
Li-N	Li[N ₃]	Na[N ₃],mS8,12	<i>C12/m1</i>	0.5627,0.3319,0.4979,90,107,4,90	-	-	1.83	X	3741
Li-N	Li ₂ [N ₂]	Li ₂ [N ₂],oI16,71	<i>Immm</i>	0.31181,0.44372,1.07912,90,90,90	-	black	1.86	X	58461
Li-N	Li _{2.91} N	Li ₃ N ₂ hP4,191	<i>P6/mmm</i>	0.36576,0.36576,0.38735,90,90,120	-	red ruby	1.27	X	40479
Li-N	Li ₃ N hp	Na ₃ As ₂ hP8,194	<i>P6₃/mmc</i>	0.3567,0.3567,0.63407,90,90,120	-	black	1.66	X	49557
Li-O	LiO ₂ rt	FeS ₂ ,oP6,58	<i>Pnnm</i>	0.494,0.591,0.438,90,90,90	pyrite-marcasite family	-	1.01	A	3557
Li-O	Li ₂ O hp	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.4456,0.27865,0.5212,90,90,90	-	-	3.07	X	48277
Li-O	Li ₂ O rt	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.46159,0.46159,0.46159,90,90,90	fluorite family	-	2.02	X	51747
Li-O	Li ₂ [O ₂] ht	* _t 1*32,*	-	0.548,0.548,0.774,90,90,90	-	-	-	N	140
Li-O	Li ₂ [O ₂] rt	Li ₂ [O ₂]-b,hP8,194	<i>P6₃/mmc</i>	0.3142,0.3142,0.7650,90,90,120	-	-	2.33	X	889
Li-O	Li ₃ O ₂	* _o ***	-	1.036,1.084,1.284,90,90,90	-	-	-	N	7345
Li-P	LiP	LiAs,mP16,14	<i>P12₁/c1</i>	0.5582,0.494,1.0255,90,118.15,90	-	black gray	2.02	X	14577
Li-P	LiP ₁₅	LiP ₁₅ ,aP32,2	<i>P-1</i>	0.6974,0.9008,1.1294,104.51,93.78,106.33	-	black	2.40	X	63307
Li-P	LiP ₅	LiP ₅ ,oP24,33	<i>Pna2₁</i>	1.0437,0.65892,0.6549,90,90,90	-	black	2.39	X	36524
Li-P	LiP ₇	LiP ₇ ,tI128,142	<i>I4₁/acd</i>	1.3417,1.3417,1.4649,90,90,90	-	red ruby	2.25	X	6785
Li-P	Li ₃ P	Na ₃ As ₂ hP8,194	<i>P6₃/mmc</i>	0.42286,0.42286,0.75566,90,90,120	-	red	1.47	X	48929
Li-P	Li ₃ P ₇ rt	Li ₃ P ₇ ,oP40,19	<i>P2₁2₁2₁</i>	0.7596,0.9742,1.0535,90,90,90	-	yellow	2.02	X	19535
Li-Pb	LiPb ht	CsCl,cP2,221	<i>Pm-3m</i>	0.3586,0.3586,0.3586,90,90,90	b.c.c. family	-	7.71	X	861
Li-Pb	LiPb rt	LiPb ₂ hR6,166	<i>R-3m</i>	0.49872,0.49872,0.61882,90,90,120	b.c.c. family	-	8.00	X	861
Li-Pb	Li ₁₇ Pb ₄	Li ₁₇ Pb ₄ ,cF420,216	<i>F-43m</i>	1.9842,1.9842,1.9842,90,90,90	-	black	4.03	X	39357
Li-Pb	Li ₃ Pb	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.6687,0.6687,0.6687,90,90,90	fluorite family	-	5.07	X	52403
Li-Pb	Li ₇ Pb ₂	Li ₇ Pb ₂ hP9,164	<i>P-3m1</i>	0.4751,0.4751,0.8589,90,90,120	b.c.c. family	-	4.58	X	758
Li-Pb	Li ₈ Pb ₃	Li ₈ Pb ₃ hR33,166	<i>R-3m</i>	0.476,0.476,3.204,90,90,120	b.c.c. family	-	5.37	X	757
Li-Pd	LiPd	LiRh,hP2,187	<i>P-6m2</i>	0.2751,0.2751,0.4227,90,90,120	close-packed structure	-	6.79	X	10594
Li-Pd	LiPd ₇	CuPt ₇ ,cF32,225	<i>Fm-3m</i>	0.766,0.766,0.766,90,90,90	close-packed structure	-	11.11	X	9771
Li-Pd	Li _{0.06} Pd _{0.94}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3878,0.3878,0.3878,90,90,90	close-packed structure	-	11.44	X	10610
Li-Pd	Li _{1.2} Pd _{0.8} ht	CsCl,cP2,221	<i>Pm-3m</i>	0.2971,0.2971,0.2971,90,90,90	b.c.c. family	-	5.92	X	10594
Li-Pd	Li _{1.37} Pd _{0.63}	Li(Li _{0.37} Pd _{0.63})Pd ₂ ,mP4,10	<i>P12/m1</i>	0.4635,0.2725,0.4718,90,109.91,90	-	-	8.58	X	12276
Li-Pd	Li _{1.5} Pd ₄	Cu ₁₅ Si ₄ ,cI76,220	<i>I-43d</i>	1.0676,1.0676,1.0676,90,90,90	-	green	2.89	X	9771
Li-Pd	Li ₂ Pd	Hg ₂ U,hP3,191	<i>P6/mmm</i>	0.42267,0.42267,0.27319,90,90,120	AlB ₂ family	-	4.73	X	9771
Li-Pd	Li ₃ Pd ht	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.6187,0.6187,0.6187,90,90,90	fluorite family	-	3.57	X	9771
Li-Pt	LiPt	LiRh,hP2,187	<i>P-6m2</i>	0.2728,0.2728,0.4226,90,90,120	close-packed structure	-	12.32	X	8953
Li-Pt	LiPt ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.76,0.76,0.76,90,90,90	Friauf-Laves phase	-	12.02	X	1203
Li-Pt	LiPt ₇	CuPt ₇ ,cF32,225	<i>Fm-3m</i>	0.7725,0.7725,0.7725,90,90,90	close-packed structure	-	19.78	X	17924
Li-Pt	Li ₂ Pt	Hg ₂ U,hP3,191	<i>P6/mmm</i>	0.4186,0.4186,0.2661,90,90,120	AlB ₂ family	-	8.59	X	8953
Li-Rh	LiRh	LiRh,hP2,187	<i>P-6m2</i>	0.2649,0.2649,0.4359,90,90,120	close-packed structure	-	6.89	X	2407
Li-Rh	LiRh ₃	LiIr ₃ ,oI8,44	<i>Immm</i>	0.26586,0.86023,0.4657,90,90,90	close-packed structure	-	9.84	A	9780
Li-S	Li ₂ S hp	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.57353,0.35448,0.66861,90,90,90	-	-	2.24	X	38059
Li-S	Li ₂ S ht	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.5859,0.5859,0.5859,90,90,90	fluorite family	-	1.52	X	24777
Li-S	Li ₂ S m	Li ₂ S,oP12,33	<i>Pna2₁</i>	0.59219,0.68977,0.36463,90,90,90	-	-	2.05	X	38059
Li-S	Li ₂ S rt	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.57158,0.57158,0.57158,90,90,90	fluorite family	black	1.63	X	37065
Li-Sb	Li ₂ Sb	Mg ₂ Ga,hP18,190	<i>P-62c</i>	0.7946,0.7946,0.6527,90,90,120	Fe ₂ P family	gray silver	3.79	X	10971
Li-Sb	Li ₃ Sb ht	Na ₃ As ₂ hP8,194	<i>P6₃/mmc</i>	0.46884,0.46884,0.83258,90,90,120	-	-	2.99	X	60281
Li-Sb	Li ₃ Sb rt	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.65709,0.65709,0.65709,90,90,90	fluorite family	-	3.34	X	60281
Li-Se	Li ₂ Se	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.60014,0.60014,0.60014,90,90,90	fluorite family	brown red	2.85	X	5931
Li-Si	LiSi	LiGe,tI32,88	<i>I4₁/a</i>	0.9354,0.9354,0.5746,90,90,90	-	-	1.85	X	42669
Li-Si	Li ₁₂ Si ₇	Li ₁₂ Si ₇ ,oP152,62	<i>Pnma</i>	0.8566,1.9706,1.4299,90,90,90	-	black gray	1.54	X	18728

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Li-Si	Li ₁₃ Si ₄	Li ₁₃ Si ₄ , oP34,55	<i>Pbam</i>	0.799, 1.521, 0.443, 90, 90, 90	-	gray silver	1.25	X	9321
Li-Si	Li ₁₅ Si ₄	Cu ₁₅ Si ₄ , cI76,220	<i>I-43d</i>	1.0687, 1.0687, 1.0687, 90, 90, 90	-	gray silver	1.18	X	60825
Li-Si	Li ₁₇ Si ₄	Li ₁₇ Pb ₄ , cF420,216	<i>F-43m</i>	1.87353, 1.87353, 1.87353, 90, 90, 90	-	gray silver	1.16	X	60794
Li-Si	Li _{4,11} Si ht	Li _{4,11} Si, oS96,63	<i>Cmcm</i>	0.45246, 2.1944, 1.32001, 90, 90, 90	-	gray silver	1.15	X	60829
Li-Si	Li _{4,7} Si ₂	Li ₅ Sn ₂ , hR21,166	<i>R-3m</i>	0.4435, 0.4435, 1.8134, 90, 90, 120	b.c.c. family	purple	1.43	X	13678
Li-Sn	LiSn mon	LiSn, mP6,10	<i>P12/m1</i>	0.517, 0.318, 0.774, 90, 104, 5, 90	close-packed structure	gray	5.08	X	7703
Li-Sn	LiSn tet	LiGe, tI24,141	<i>I4₁/amd</i>	0.4387, 0.4387, 2.5511, 90, 90, 90	-	-	5.10	X	24160
Li-Sn	Li ₁₃ Sn ₅	Li ₁₃ Sn ₅ , hP18,164	<i>P-3m1</i>	0.470, 0.470, 1.712, 90, 90, 120	-	gray	3.47	X	9331
Li-Sn	Li ₁₇ Sn ₄	Li ₁₇ Pb ₄ , cF420,216	<i>F-43m</i>	1.96907, 1.96907, 1.96907, 90, 90, 90	-	gray dark	2.58	X	42246
Li-Sn	Li ₂ Sn ₅	Hg ₅ Mn ₂ , tP14,127	<i>P4/mbm</i>	1.0274, 1.0274, 0.3125, 90, 90, 90	-	gray bright	6.11	X	4301
Li-Sn	Li ₂₂ Sn ₅	Li ₂₂ Si ₆ , cF432,196	<i>F23</i>	1.98, 1.98, 1.98, 90, 90, 90	-	-	2.55	A	35329
Li-Sn	Li ₅ Sn ₂	Li ₅ Sn ₂ , hR21,166	<i>R-3m</i>	0.474, 0.474, 1.983, 90, 90, 120	b.c.c. family	gray	3.51	X	9320
Li-Sn	Li ₇ Sn ₂	Li ₇ Ge ₂ , oS36,65	<i>Cmmm</i>	0.98, 1.38, 0.475, 90, 90, 90	-	gray	2.96	X	9335
Li-Sn	Li ₇ Sn ₃	Li ₇ Sn ₃ , mP20,11	<i>P12₁/m1</i>	0.856, 0.472, 0.945, 90, 105, 95, 90	b.c.c. family	gray	3.66	X	8521
Li-Sr	LiSr ₇ ht	*, tI*, *	-	0.761, 0.761, 0.65, 90, 90, 90	-	-	-	N	1650
Li-Sr	LiSr ₈ ht	*, hP*, *	-	0.431, 0.431, 1.385, 90, 90, 120	-	-	-	N	1650
Li-Sr	LiSr ₈ rt	*, tP*, *	-	0.616, 0.616, 0.886, 90, 90, 90	-	-	-	N	1650
Li-Sr	Li ₂ Sr ₃	Li ₂ Sr ₃ , tP20,136	<i>P4₂/mmn</i>	0.98034, 0.98034, 0.87837, 90, 90, 90	-	-	2.18	X	65031
Li-Sr	Li ₂₃ Sr ₆	Th ₆ Mn ₂₃ , cF116,225	<i>Fm-3m</i>	1.505, 1.505, 1.505, 90, 90, 90	-	-	1.34	X	1842
Li-Sr	Li ₄₄ Sr ₁₉	Li ₄₄ Ba ₁₉ , tI252,122	<i>I-42d</i>	1.5912, 1.5912, 3.1831, 90, 90, 90	-	gray silver	1.62	X	65031
Li-Te	LiTe ₃	LiTe ₃ , hP48,165	<i>P-3c1</i>	0.87144, 0.87144, 2.135, 90, 90, 120	-	gray	5.53	X	10220
Li-Te	Li ₂ Te	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.6504, 0.6504, 0.6504, 90, 90, 90	fluorite family	-	3.42	X	70
Li-Tl	LiTi	CsCl, cP2,221	<i>Pm-3m</i>	0.3438, 0.3438, 0.3438, 90, 90, 90	b.c.c. family	-	8.64	X	12496
Li-Tl	Li ₂ Tl rt	Li ₂ Ga, oS12,63	<i>Cmcm</i>	0.4741, 1.0023, 0.4786, 90, 90, 90	b.c.c. family	-	6.37	A	16386
Li-Tl	Li ₂₂ Tl ₅	Li ₂₂ Pb ₅ , cF432,216	<i>F-43m</i>	2.0003, 2.0003, 2.0003, 90, 90, 90	b.c.c. family	-	3.90	A	16386
Li-Tl	Li ₃ Tl	BiF ₃ , cF16,225	<i>Fm-3m</i>	0.6671, 0.6671, 0.6671, 90, 90, 90	fluorite family	-	5.04	X	12742
Li-Tl	Li ₅ Tl ₂	Li ₅ Sn ₂ , hR21,166	<i>R-3m</i>	0.4716, 0.4716, 2.0399, 90, 90, 120	b.c.c. family	-	5.62	X	12742
Li-Zn	LiZn rt	NaTi, cF16,227	<i>Fd-3m</i>	0.6234, 0.6234, 0.6234, 90, 90, 90	b.c.c. family	pink red	3.97	X	12337
Li-Zn	LiZn ₁₃ m	NaZn ₁₃ , cF112,226	<i>Fm-3c</i>	1.23492, 1.23492, 1.23492, 90, 90, 90	-	-	6.04	X	56409
Li-Zn	Li _{0,07} Zn _{0,93} rt	Mg, hP2,194	<i>P6₃/mmc</i>	0.27704, 0.27704, 0.43907, 90, 90, 120	close-packed structure	-	6.97	X	56409
Li-Zn	Li _{0,2} Zn _{0,8} ht	Mg, hP2,194	<i>P6₃/mmc</i>	0.27702, 0.27702, 0.43785, 90, 90, 120	close-packed structure	-	6.13	X	45425
Li-Zn	Li _{0,24} Zn _{0,76}	(Cu _{0,75} Ti _{0,25}), oS4,63	<i>Cmcm</i>	0.2768, 0.47942, 0.43864, 90, 90, 90	close-packed structure	-	5.86	X	62749
Li-Zn	Li _{2,9} Zn _{4,1} rt	Li ₂ Sn ₂ , hR21,166	<i>R-3m</i>	0.4386, 0.4386, 1.8738, 90, 90, 120	b.c.c. family	gray	4.60	X	58691
Li-Zn	Li _{3,7} Zn _{5,3} ht	Li ₂ Ga ₄ , hP9,164	<i>P-3m1</i>	0.43528, 0.43528, 0.8003, 90, 90, 120	b.c.c. family	gray	4.71	X	58691
Lu-Mg	MgLu	CsCl, cP2,221	<i>Pm-3m</i>	0.37, 0.37, 0.37, 90, 90, 90	b.c.c. family	-	6.53	X	3677
Lu-Mg	Mg _{0,1} Lu _{0,9} ht	W, cI2,229	<i>Im-3m</i>	0.3797, 0.3797, 0.3797, 90, 90, 90	b.c.c. family	-	7.87	X	2327
Lu-Mg	Mg ₂ Lu	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.596, 0.596, 0.971, 90, 90, 120	Friauf-Laves phase	-	4.97	X	3677
Lu-Mg	Mg ₂₄ Lu ₅	Ti ₃ Re ₂₄ , cI58,217	<i>I-43m</i>	1.1185, 1.1185, 1.1185, 90, 90, 90	-	white silver	3.46	X	2314
Lu-Mn	LuMn ₂	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.522, 0.522, 0.854, 90, 90, 120	Friauf-Laves phase	-	9.39	A	30765
Lu-Mn	LuMn ₅	LuMn ₅ , hP12,186	<i>P6₃/mc</i>	0.5186, 0.5186, 0.8566, 90, 90, 120	Friauf-Laves phase	-	7.49	X	2854
Lu-Mn	Lu ₆ Mn ₂₃	Th ₆ Mn ₂₃ , cF116,225	<i>Fm-3m</i>	1.22, 1.22, 1.22, 90, 90, 90	-	-	8.46	A	2738
Lu-N	LuN	NaCl, cF8,225	<i>Fm-3m</i>	0.4542, 0.4542, 0.4542, 90, 90, 90	rocksalt family	-	13.40	X	53437
Lu-N	Lu ₂ N ₃	(Mn _{0,3} Fe _{0,3}) ₂ O ₃ , cI80,206	<i>la-3</i>	1.032, 1.032, 1.032, 90, 90, 90	-	-	9.48	A	6741
Lu-Ni	LuNi	FeB-b, oP8,62	<i>Pnma</i>	0.6912, 0.4073, 0.5366, 90, 90, 90	CrB(TiI)-FeB	-	10.27	A	15080
Lu-Ni	LuNi ₂	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.7077, 0.7077, 0.7077, 90, 90, 90	Friauf-Laves phase	-	10.96	X	57416
Lu-Ni	LuNi ₃	PuNi ₃ , hR36,166	<i>R-3m</i>	0.49218, 0.49218, 2.4087, 90, 90, 120	Laves-CaCu ₃	-	10.38	X	56850
Lu-Ni	LuNi ₄	LuNi ₄ , hP45,151	<i>P3₁12</i>	0.4872, 0.4872, 3.048, 90, 90, 120	-	-	9.77	X	17742
Lu-Ni	LuNi ₅	CaCu ₅ , hP6,191	<i>P6/mmm</i>	0.4834, 0.4834, 0.3969, 90, 90, 120	-	-	9.69	X	7278
Lu-Ni	Lu ₂ Ni ₁₇	Th ₂ Ni ₁₇ , hP38,194	<i>P6₃/mmc</i>	0.82659, 0.82659, 0.80278, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.42	X	64552
Lu-Ni	Lu ₃ Ni	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.67504, 0.92991, 0.6163, 90, 90, 90	-	-	10.02	X	56850
Lu-Ni	Lu ₃ Ni ₂	Er ₃ Ni ₂ , hR45,148	<i>R-3</i>	0.8372, 0.8372, 1.55314, 90, 90, 120	-	-	10.18	X	56850
Lu-O	LuO _{1,5} tf	CaF ₂ , cF12,225	<i>Fm-3m</i>	0.511, 0.511, 0.511, 90, 90, 90	fluorite family	-	9.90	X	11402
Lu-O	Lu ₂ O ₃ hp	Sm ₂ O ₃ , mS30,12	<i>C12/m1</i>	1.352, 0.3387, 0.8289, 90, 100, 24, 90	-	-	10.61	A	6473
Lu-O	Lu ₂ O ₃ rt	(Mn _{0,3} Fe _{0,3}) ₂ O ₃ , cI80,206	<i>la-3</i>	1.0403, 1.0403, 1.0403, 90, 90, 90	-	colorless	9.39	X	62991
Lu-Os	LuOs ₂	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.5254, 0.5254, 0.8661, 90, 90, 120	Friauf-Laves phase	-	17.82	X	1024
Lu-Os	Lu ₃ Os	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.7331, 0.8798, 0.6093, 90, 90, 90	-	-	12.09	A	13172
Lu-P	LuP	NaCl, cF8,225	<i>Fm-3m</i>	0.55291, 0.55291, 0.55291, 90, 90, 90	rocksalt family	-	8.09	X	7640
Lu-P	LuP ₃	NdP ₃ , mP12,11	<i>P12₁/m1</i>	0.4871, 0.9283, 0.5277, 90, 102, 57, 90	-	black	4.70	X	35545
Lu-Pb	LuPb ₂	CuZr ₂ , tI6,139	<i>I4/mmm</i>	0.37061, 0.37061, 1.312, 90, 90, 90	close-packed structure	-	10.86	X	4614
Lu-Pb	LuPb ₃ hp	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.4786, 0.4786, 0.4786, 90, 90, 90	close-packed structure	-	12.07	X	7337
Lu-Pb	Lu ₂ Pb ₃	Mn ₅ Si ₃ , hP16,193	<i>P6₃/mcm</i>	0.87452, 0.87452, 0.64336, 90, 90, 120	-	-	11.66	X	55517
Lu-Pb	Lu ₄ Pb ₄ rt	*, oP*, *	-	0.65, 1.655, 1.954, 90, 90, 90	-	-	-	N	4614
Lu-Pb	Lu ₆ Pb ₅	V ₆ Si ₅ , oI44,72	<i>Ibam</i>	0.919, 2.002, 0.642, 90, 90, 90	-	-	11.73	A	30209
Lu-Pd	LuPd	CsCl, cP2,221	<i>Pm-3m</i>	0.3415, 0.3415, 0.3415, 90, 90, 90	b.c.c. family	-	11.73	X	13198
Lu-Pd	LuPd ₃	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.4033, 0.4033, 0.4033, 90, 90, 90	close-packed structure	-	12.51	X	36802
Lu-Pd	Lu _{0,1} Pd _{0,9}	Cu, cF4,225	<i>Fm-3m</i>	0.3953, 0.3953, 0.3953, 90, 90, 90	close-packed structure	-	12.18	X	36802
Lu-Pd	Lu _{2,12} Pd _{0,88}	Dy _{2,12} Pd _{0,88} , cF144,227	<i>Fd-3m</i>	1.3241, 1.3241, 1.3241, 90, 90, 90	-	-	10.63	A	8145
Lu-Pd	Lu ₃ Pd ₄	Pu ₃ Pd ₄ , hR42,148	<i>R-3</i>	1.288, 1.288, 0.566, 90, 90, 120	b.c.c. family	-	11.65	X	20405
Lu-Po	LuPo	NaCl, cF8,225	<i>Fm-3m</i>	0.6159, 0.6159, 0.6159, 90, 90, 90	rocksalt family	-	10.92	X	3080
Lu-Pt	LuPt	FeB-b, oP8,62	<i>Pnma</i>	0.681, 0.4417, 0.5479, 90, 90, 90	CrB(TiI)-FeB	-	14.91	A	2404
Lu-Pt	LuPt ₃	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.403, 0.403, 0.403, 90, 90, 90	close-packed structure	-	19.29	X	3491
Lu-Pt	Lu ₂ Pt	Co ₂ Si-b, oP12,62	<i>Pnma</i>	0.6978, 0.463, 0.8584, 90, 90, 90	-	-	13.05	A	11195
Lu-Pt	Lu ₃ Pt	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.6926, 0.9225, 0.6293, 90, 90, 90	-	-	11.89	A	11937
Lu-Pt	Lu ₃ Pt ₄	Pu ₃ Pd ₄ , hR42,148	<i>R-3</i>	1.2842, 1.2842, 0.5622, 90, 90, 120	b.c.c. family	-	16.20	A	10597
Lu-Pt	Lu ₅ Pt ₃	Mn ₅ Si ₃ , hP16,193	<i>P6₃/mcm</i>	0.8183, 0.8183, 0.6155, 90, 90, 120	-	-	13.59	A	11195
Lu-Pt	Lu ₄ Pt ₄	Sm ₅ Ge ₄ , oP36,62	<i>Pnma</i>	0.7323, 1.4261, 0.7388, 90, 90, 90	-	-	14.25	A	11134
Lu-Re	LuRe ₂	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.5342, 0.5342, 0.8722, 90, 90, 120	Friauf-Laves phase	-	16.87	A	14114
Lu-Rh	LuRh	CsCl, cP2,221	<i>Pm-3m</i>	0.3334, 0.3334, 0.3334, 90, 90, 90	b.c.c. family	-	12.45	X	2694

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Lu-Rh	LuRh ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7404,0.7404,0.7404,90,90,90	Friauf-Laves phase	-	12.46	X	2694
Lu-Rh	Lu ₃ Rh ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8002,0.8002,0.6213,90,90,120	-	-	11.41	A	15093
Lu-Ru	LuRu	CsCl,cP2,221	<i>Pm-3m</i>	0.3329,0.3329,0.3329,90,90,90	b.c.c. family	-	12.42	X	10008
Lu-Ru	LuRu ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5204,0.5204,0.8725,90,90,120	Friauf-Laves phase	-	12.24	X	1024
Lu-Ru	Lu ₃ Ru	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.6247,0.8915,0.6131,90,90,90	-	-	12.18	A	12299
Lu-Ru	Lu ₃ Ru ₂	Er ₃ Ru ₂ ,hP10,176	<i>P6₃/m</i>	0.7788,0.7788,0.3894,90,90,120	-	-	11.81	A	23428
Lu-Ru	Lu ₃ Ru ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.5252,0.6109,0.7223,90,97.37,90	-	-	10.72	A	12299
Lu-S	LuS ₂ ht-hp1	NdS ₂ ,tP24,117	<i>P-4b2</i>	0.76,0.76,0.782,90,90,90	-	black gray	7.03	A	11684
Lu-S	LuS ₂ ht-hp2	*c*24,*	-	0.7687,0.7687,0.7687,90,90,90	-	black gray	-	N	5117
Lu-S	Lu _{0.75} S	NaCl,cF8,225	<i>Fm-3m</i>	0.53797,0.53797,0.53797,90,90,90	rocksalt family	golden	6.97	X	23352
Lu-S	Lu _{0.757} S	Lu _{0.76} S,oF96,70	<i>Fddd</i>	0.7602,1.0747,2.2813,90,90,90	-	-	7.04	X	14193
Lu-S	Lu ₂ S ₃ ht-hp2	Th ₃ S ₃ ,oP20,62	<i>Pnma</i>	1.0411,0.3773,1.032,90,90,90	-	-	7.31	A	9344
Lu-S	Lu ₂ S ₃	Al ₂ O ₃ ,hR30,167	<i>R-3c</i>	0.67286,0.67286,1.81684,90,90,120	-	gray light	6.24	X	26720
Lu-S	Lu _{2.67} S ₄ hp	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.79957,0.79957,0.79957,90,90,90	-	-	7.74	A	37650
Lu-Sb	LuSb rt	NaCl,cF8,225	<i>Fm-3m</i>	0.606,0.606,0.606,90,90,90	rocksalt family	-	8.86	X	23451
Lu-Sb	LuSb ₂	*oP* *	-	0.3244,0.5835,0.7885,90,90,90	-	-	-	N	5140
Lu-Sb	Lu ₅ Sb ₃ rt	Y ₃ Bi ₃ ,oP32,62	<i>Pnma</i>	0.78847,0.9077,1.15055,90,90,90	-	-	10.00	X	53231
Lu-Sb	Lu ₅ Sb ₃ stab?	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.89,0.89,0.633,90,90,120	-	-	9.48	A	23452
Lu-Sb	Lu ₇ Sb ₃	Lu ₇ Sb ₃ ,tI80,140	<i>I4/mcm</i>	1.55974,1.55974,0.8813,90,90,90	-	-	9.85	X	49349
Lu-Se	LuSe	NaCl,cF8,225	<i>Fm-3m</i>	0.5575,0.5575,0.5575,90,90,90	rocksalt family	-	9.73	X	3836
Lu-Se	LuSe ₂ hp	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.3936,0.3936,0.8147,90,90,90	-	-	8.76	A	5145
Lu-Se	Lu _{0.67} Se ht	NaCl,cF8,225	<i>Fm-3m</i>	0.562,0.562,0.562,90,90,90	rocksalt family	brown	7.34	X	2082
Lu-Se	Lu _{0.67} Se rt	Lu _{0.68} S,oF96,70	<i>Fddd</i>	0.79806,1.1251,2.3877,90,90,90	-	orange yellow	7.29	X	44842
Lu-Se	Lu _{0.75} Se ht	Sc _{0.685} S,hR12,166	<i>R-3m</i>	0.39632,0.39632,1.93696,90,90,120	-	-	7.95	A	3836
Lu-Se	Lu _{2.67} Se ₄ hp	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.857,0.857,0.857,90,90,90	-	-	8.26	A	5141
Lu-Si	LuSi	TiI ₂ ,oS8,63	<i>Cmcm</i>	0.4095,1.0129,0.3712,90,90,90	CrB(III)-FeB	gray	8.76	A	28669
Lu-Si	LuSi _{1.67}	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.3756,0.3756,0.405,90,90,120	AlB ₂ family	-	7.45	X	28669
Lu-Si	LuSi ₃	YbSi ₃ ,tI32,139	<i>I4/mmm</i>	0.71835,0.71835,1.0471,90,90,90	-	-	6.37	X	59325
Lu-Si	Lu ₅ Si ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.82,0.82,0.6142,90,90,120	-	gray silver	8.91	X	45039
Lu-Si	Lu ₅ Si ₄	*mP36,14	<i>P12/c1</i>	1.411,0.746,0.72,90,92,1.90	-	-	-	N	3270
Lu-Sn	LuSn ₂	ZrSi ₂ ,oS12,63	<i>Cmcm</i>	0.43266,1.5968,0.42488,90,90,90	close-packed structure	-	9.33	X	64205
Lu-Sn	Lu ₁₁ Sn ₁₀	Lu ₁₁ Sn ₁₀ ,tI100,139	<i>I4/mmm</i>	1.12953,1.12953,1.6424,90,90,90	-	white silver	9.86	X	61755
Lu-Sn	Lu ₂ Sn ₅	Er ₂ Gd ₅ ,oP14,59	<i>Pmmn</i>	0.4292,0.4359,1.8748,90,90,90	-	-	8.93	A	27386
Lu-Sn	Lu ₅ Sn ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.87,0.87,0.6355,90,90,120	-	-	9.81	A	3248
Lu-Tb	Tb _{0.233} Lu _{0.767}	Mg ₂ ,hP2,194	<i>P6₃/mmc</i>	0.3537,0.3537,0.5587,90,90,120	close-packed structure	-	9.39	X	1898
Lu-Tc	LuTc ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.531,0.531,0.8736,90,90,120	Friauf-Laves phase	-	11.55	A	14114
Lu-Te	LuTe	NaCl,cF8,225	<i>Fm-3m</i>	0.592,0.592,0.592,90,90,90	rocksalt family	-	9.69	X	12251
Lu-Te	LuTe ₂	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.4222,0.4222,0.8807,90,90,90	-	-	9.10	A	5123
Lu-Te	LuTe ₃	NdTe ₃ ,oS16,63	<i>Cmcm</i>	0.4286,2.5188,0.4286,90,90,90	-	-	8.01	A	18291
Lu-Te	Lu ₁₁ Te ₄	Lu ₁₁ Te ₄ ,mS90,12	<i>C12/m1</i>	3.0412,0.39504,2.1073,90,102.96,90	-	black	9.83	X	45590
Lu-Te	Lu ₂ Te ₃	Sc ₂ S ₃ ,oF80,70	<i>Fddd</i>	0.8499,1.2022,2.5497,90,90,90	-	-	7.47	X	2478
Lu-Te	Lu ₇ Te	Lu ₇ Te,oS32,63	<i>Cmcm</i>	0.37418,1.2278,1.977,90,90,90	-	-	9.89	X	42325
Lu-Te	Lu ₆ Te	Lu ₆ Te,hP9,189	<i>P-62m</i>	0.9,0.9,0.3687,90,90,120	Fe ₂ P family	-	9.81	X	42325
Lu-Th	Th _{0.2} Lu _{0.8}	Mg ₂ ,hP2,194	<i>P6₃/mmc</i>	0.3542,0.3542,0.5593,90,90,120	close-packed structure	-	10.19	X	6795
Lu-Th	Th _{0.6} Lu _{0.4} rt	Cu ₂ ,cF4,225	<i>Fm-3m</i>	0.503,0.503,0.503,90,90,90	close-packed structure	-	10.92	X	4726
Lu-Tl	TlLu rt	CuAu,tP2,123	<i>P4/nmm</i>	0.386,0.386,0.544,90,90,90	close-packed structure	-	7.77	X	22697
Lu-Tl	Tl ₃ Lu	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4638,0.4638,0.4638,90,90,90	close-packed structure	-	13.12	X	22697
Lu-Tl	Tl ₃ Lu ₅	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8726,0.8726,0.6572,90,90,120	-	-	11.40	A	22697
Lu-Tl	Tl ₃ Lu ₃	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	0.986,0.8053,1.0307,90,90,90	-	-	12.55	A	22697
Lu-Zn	ZnLu	CsCl,cP2,221	<i>Pm-3m</i>	0.3491,0.3491,0.3491,90,90,90	b.c.c. family	gray silver	9.38	X	2600
Lu-Zn	Zn ₁₂ Lu	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.8831,0.8831,0.5179,90,90,90	CaCu ₂ -Zr ₄ Al ₃	-	7.89	A	3040
Lu-Zn	Zn ₁₇ Lu ₂ ht	Zn ₁₇ Th ₂ ,hR57,166	<i>R-3m</i>	0.89223,0.89223,1.31016,90,90,120	CaCu ₂ -Zr ₄ Al ₃	gray	8.06	X	19986
Lu-Zn	Zn ₁₇ Lu ₂ rt	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.8899,0.8899,0.872,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	8.12	A	3040
Lu-Zn	Zn ₂ Lu	KHg ₂ ,oI12,74	<i>Imma</i>	0.4416,0.6866,0.76,90,90,90	AlB ₂ family	-	8.81	A	3227
Lu-Zn	Zn ₂₃ Lu ₆	Th ₆ Mn ₂₃ ,cF116,225	<i>Fm-3m</i>	1.253,1.253,1.253,90,90,90	-	-	8.62	A	3040
Lu-Zn	Zn ₃ Lu	Zn ₃ Y,oP16,62	<i>Pnma</i>	0.665,0.43,0.9974,90,90,90	-	-	8.64	A	5221
Lu-Zn	Zn ₄ Lu	Zn ₄ Er,hP36,194	<i>P6₃/mmc</i>	0.8811,0.8811,0.9139,90,90,120	-	-	8.14	A	5898
Lu-Zn	Zn ₅₈ Lu ₁₃	Zn ₅₈ Gd ₁₃ ,hP142,194	<i>P6₃/mmc</i>	1.409,1.409,1.389,90,90,120	-	-	8.44	A	5221
Lu-Zn	Zn _{58.54} Lu _{12.71}	Zn _{58.54} Lu _{12.71} ,oP304,33	<i>Pna2₁</i>	1.3919,2.4428,1.4112,90,90,90	-	-	8.38	X	49399
Lu-Zr	Lu _{0.5} Zr _{0.5} m	Mg ₂ ,hP2,194	<i>P6₃/mmc</i>	0.3335,0.3335,0.529,90,90,120	close-packed structure	-	8.68	X	6777
Mg-Mn	Mg _{0.996} Mn _{0.004}	Mg ₂ ,hP2,194	<i>P6₃/mmc</i>	0.32086,0.32086,0.52104,90,90,120	close-packed structure	-	1.75	X	60067
Mg-N	Mg ₃ N ₂ hp	Sm ₂ O ₃ ,mS30,12	<i>C12/m1</i>	1.2229,0.3157,0.7618,90,99.03,90	-	-	3.46	X	53300
Mg-N	Mg ₃ N ₂	(Mn _{0.3} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	0.9955,0.9955,0.9955,90,90,90	-	orange	2.72	X	60822
Mg-Nd	MgNd lt	CuTi,tP2,123	<i>P4/nmm</i>	0.3847,0.3847,0.387,90,90,90	b.c.c. family	-	4.89	X	8910
Mg-Nd	MgNd rt	CsCl,cP2,221	<i>Pm-3m</i>	0.38677,0.38677,0.38677,90,90,90	b.c.c. family	gray silver	4.84	X	8910
Mg-Nd	Mg ₁₂ Nd	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	1.031,1.031,0.593,90,90,90	CaCu ₂ -Zr ₄ Al ₃	-	2.30	X	1963
Mg-Nd	Mg ₂ Nd ht	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.8663,0.8663,0.8663,90,90,90	Friauf-Laves phase	-	3.94	X	14050
Mg-Nd	Mg ₃ Nd	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.7399,0.7399,0.7399,90,90,90	fluorite family	-	3.56	X	23751
Mg-Nd	Mg ₄₁ Nd ₅	Mg ₄₁ Ce ₅ ,tI92,87	<i>I4/m</i>	1.4741,1.4741,1.0396,90,90,90	-	-	2.53	A	23751
Mg-Ni	MgNi ht-hp	CuTi,tP2,123	<i>P4/nmm</i>	0.2997,0.2997,0.3166,90,90,90	b.c.c. family	-	4.85	X	52118
Mg-Ni	MgNi ₂	MgNi ₂ ,hP24,194	<i>P6₃/mmc</i>	0.4824,0.4824,1.5826,90,90,120	Friauf-Laves phase	-	5.90	X	12813
Mg-Ni	MgNi ₃ rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3717,0.3717,0.3717,90,90,90	close-packed structure	-	6.48	X	51515
Mg-Ni	Mg _{0.04} Ni _{0.96}	Cu ₂ ,cF4,225	<i>Fm-3m</i>	0.3533,0.3533,0.3533,90,90,90	close-packed structure	-	8.63	X	49580
Mg-Ni	Mg _{0.992} Ni _{0.008}	Mg ₂ ,hP2,194	<i>P6₃/mmc</i>	0.32144,0.32144,0.52163,90,90,120	close-packed structure	-	1.75	X	51340
Mg-Ni	Mg ₂ Ni	Mg ₂ Ni,hP18,180	<i>P6₂22</i>	0.5205,0.5205,1.2236,90,90,120	-	-	3.72	X	17177
Mg-Ni	Mg _{84.8} Ni _{14.2} m	Mg ₈₃ (Mg _{0.51} Pd _{0.49}) ₄ Pd ₁₂ ,cF396,216	<i>F-43m</i>	2.0037,2.0037,2.0037,90,90,90	-	-	2.39	X	53414
Mg-O	MgO	NaCl,cF8,225	<i>Fm-3m</i>	0.42121,0.42121,0.42121,90,90,90	periclase	white	3.59	X	9543
Mg-O	Mg[O ₂]	FeS ₂ ,cP12,205	<i>Pa-3</i>	0.48441,0.48441,0.48441,90,90,90	pyrite-marcasite family	white	3.29	X	11901

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Mg-O	Mg(O ₂) ₂	*hR**	-	1.144, 1.144, 1.2584, 90, 90, 120	-	-	-	N	5333
Mg-P	MgP ₄	CoDP, mP10, 14	$P12_1/c1$	0.5144, 0.5085, 0.7526, 90, 98.66, 90	-	black	2.53	X	10096
Mg-P	Mg ₃ P ₂	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	$Ia-3$	1.203, 1.203, 1.203, 90, 90, 90	-	-	2.06	X	62
Mg-Pb	Mg _{0.95} Pb _{0.05}	Mg ₂ hP2, 194	$P6_3/mmc$	0.32132, 0.32132, 0.52337, 90, 90, 120	close-packed structure	-	2.38	X	1050
Mg-Pb	Mg ₂ Pb ht Pb+	PbCl ₂ , oP12, 62	$Pnma$	0.75, 0.445, 0.882, 90, 90, 90	-	-	5.77	A	2745
Mg-Pb	Mg ₂ Pb rt	CaF ₂ , cF12, 225	$Fm-3m$	0.6815, 0.6815, 0.6815, 90, 90, 90	fluorite family	gray silver	5.37	X	37085
Mg-Pd	MgPd rt	CsCl, cP2, 221	$Pm-3m$	0.3157, 0.3157, 0.3157, 90, 90, 90	b.c.c. family	-	6.90	X	53412
Mg-Pd	MgPd ₂	Co ₂ Si-b, oP12, 62	$Pnma$	0.54421, 0.41673, 0.80129, 90, 90, 90	-	gray	8.67	X	39599
Mg-Pd	MgPd ₃ cub	Cu ₃ Au, cP4, 221	$Pm-3m$	0.39178, 0.39178, 0.39178, 90, 90, 90	close-packed structure	-	9.49	X	46039
Mg-Pd	MgPd ₃ tet	ZrAl ₃ , tI16, 139	$I4/mmm$	0.39226, 0.39226, 1.56527, 90, 90, 90	close-packed structure	gray	9.47	X	39599
Mg-Pd	Mg _{0.25} Pd _{0.75}	Cu, cF4, 225	$Fm-3m$	0.392, 0.392, 0.392, 90, 90, 90	close-packed structure	-	9.47	X	1073
Mg-Pd	Mg _{0.9} Pd _{1.1} lt	CuTi ₂ tP2, 123	$P4/mmm$	0.303, 0.303, 0.342, 90, 90, 90	b.c.c. family	-	7.35	X	1270
Mg-Pd	Mg ₂ Pd stab	Ti ₂ Ni, cF96, 227	$Fd-3m$	1.20535, 1.20535, 1.20535, 90, 90, 90	-	-	4.71	X	46739
Mg-Pd	Mg ₃ Pd	Cu ₃ P, hP24, 185	$P6_3cm$	0.7987, 0.7987, 0.8422, 90, 90, 120	-	-	3.84	X	46738
Mg-Pd	Mg ₃ Pd ₅	Rh ₅ Ge ₃ , oP16, 55	$Pbam$	0.5427, 1.0588, 0.41304, 90, 90, 90	-	gray	8.47	A	39599
Mg-Pd	Mg ₄ Pd	*oS1532, 67	$Cmme$	2.8054, 2.8062, 3.8387, 90, 90, 90	-	-	-	N	35497
Mg-Pd	Mg ₃ Pd ₂ rt	Co ₂ Al ₃ , hP28, 194	$P6_3/mmc$	0.8671, 0.8671, 0.8164, 90, 90, 120	-	-	4.18	X	43752
Mg-Pd	Mg ₈₅ Pd ₁₄	Mg ₈₅ (Mg _{0.51} Pd _{0.49}) ₄ Pd ₁₂ , cF396, 216	$F-43m$	2.0108, 2.0108, 2.0108, 90, 90, 90	-	-	2.90	X	6354
Mg-Po	MgPo	NiAs, hP4, 194	$P6_3/mmc$	0.4345, 0.4345, 0.7077, 90, 90, 120	AlB ₂ family	black	6.70	X	1219
Mg-Pr	MgPr lt	CuTi ₂ tP2, 123	$P4/mmm$	0.388, 0.388, 0.383, 90, 90, 90	b.c.c. family	-	4.76	X	11767
Mg-Pr	MgPr rt	CsCl, cP2, 221	$Pm-3m$	0.3891, 0.3891, 0.3891, 90, 90, 90	b.c.c. family	gray silver	4.66	X	7278
Mg-Pr	Mg ₁₂ Pr	ThMn ₁₂ , tI26, 139	$I4/mmm$	1.034, 1.034, 0.598, 90, 90, 90	CaCu ₂ -Zr ₄ Al ₃	-	2.25	X	2730
Mg-Pr	Mg ₂ Pr ht	MgCu ₂ , cF24, 227	$Fd-3m$	0.8688, 0.8688, 0.8688, 90, 90, 90	Friauf-Laves phase	-	3.84	X	14050
Mg-Pr	Mg ₃ Pr	BiF ₃ , cF16, 225	$Fm-3m$	0.7416, 0.7416, 0.7416, 90, 90, 90	fluorite family	-	3.48	X	21164
Mg-Pr	Mg ₄₁ Pr ₅	Mg ₄₁ Ce ₅ , tI92, 87	$I4/m$	1.475, 1.475, 1.041, 90, 90, 90	-	-	2.50	A	21617
Mg-Pt	MgPt cub	FeSi, cP8, 198	$P2_13$	0.4863, 0.4863, 0.4863, 90, 90, 90	-	-	12.67	A	1513
Mg-Pt	MgPt tet	CuAu, tP2, 123	$P4/mmm$	0.2945, 0.2945, 0.3495, 90, 90, 90	close-packed structure	-	12.02	X	57396
Mg-Pt	MgPt ₃ cub	Cu ₃ Au, cP4, 221	$Pm-3m$	0.3906, 0.3906, 0.3906, 90, 90, 90	close-packed structure	-	16.99	X	1732
Mg-Pt	MgPt ₃ tet	SrPb ₃ , tP4, 123	$P4/mmm$	0.388, 0.388, 0.372, 90, 90, 90	close-packed structure	-	18.08	X	1513
Mg-Pt	MgPt ₇	CuPt ₇ , cF32, 225	$Fm-3m$	0.7824, 0.7824, 0.7824, 90, 90, 90	close-packed structure	-	19.28	X	1732
Mg-Pt	Mg ₂ Pt	CuAl ₃ , tI12, 140	$I4/mcm$	0.6334, 0.6334, 0.5621, 90, 90, 90	-	-	7.18	X	48592
Mg-Pt	Mg ₃ Pt	Cu ₃ P, hP24, 185	$P6_3cm$	0.79103, 0.79103, 0.83223, 90, 90, 120	-	-	5.92	X	25968
Mg-Pu	Mg _{0.86} Pu _{0.14} rt	Cu, cF4, 225	$Fm-3m$	0.475, 0.475, 0.475, 90, 90, 90	close-packed structure	-	3.42	X	22357
Mg-Pu	Mg ₄ Pu rt	*h**	-	1.38, 1.38, 0.97, 90, 90, 120	-	-	-	N	22357
Mg-Rh	MgRh rt	CuTi ₂ tP2, 123	$P4/mmm$	0.31636, 0.31636, 0.31222, 90, 90, 90	b.c.c. family	-	6.76	X	25896
Mg-Rh	MgRh stab	CsCl, cP2, 221	$Pm-3m$	0.30992, 0.30992, 0.30992, 90, 90, 90	b.c.c. family	-	7.10	X	26009
Mg-Rh	Mg ₂ Rh	CuZr ₂ , tI6, 139	$I4/mmm$	0.3188, 0.3188, 1.00667, 90, 90, 90	close-packed structure	-	4.92	X	25896
Mg-Rh	Mg ₃ Rh	Cu ₃ P, hP24, 185	$P6_3cm$	0.7905, 0.7905, 0.8256, 90, 90, 120	-	gray light	3.92	X	45020
Mg-Rh	Mg ₄₄ Rh ₇	Mg ₄₄ Rh ₇ , cF408, 216	$F-43m$	2.0148, 2.0148, 2.0148, 90, 90, 90	-	-	2.91	X	5601
Mg-Rh	Mg ₅ Rh ₂	Co ₂ Al ₃ , hP28, 194	$P6_3/mmc$	0.8536, 0.8536, 0.8025, 90, 90, 120	-	-	4.30	X	1135
Mg-Ru	Mg ₃ Ru ₂	Mg ₃ Ru ₂ , cP20, 213	$P4_32$	0.69352, 0.69352, 0.69352, 90, 90, 90	-	-	5.48	X	51411
Mg-Ru	Mg _{44.5} Ru _{6.5}	Mg ₄₄ Rh ₇ , cF408, 216	$F-43m$	2.019, 2.019, 2.019, 90, 90, 90	-	-	2.81	X	7205
Mg-S	MgS tf	*hP**	-	0.3972, 0.3972, 0.6307, 90, 90, 120	-	-	-	N	2797
Mg-S	MgS	NaCl, cF8, 225	$Fm-3m$	0.52, 0.52, 0.52, 90, 90, 90	niningerite	-	2.66	X	27475
Mg-Sb	Mg ₃ Sb ₂ rt	La ₂ O ₃ , hP5, 164	$P-3m1$	0.4559, 0.4559, 0.7243, 90, 90, 120	-	-	4.03	X	27202
Mg-Sc	Mg _{0.04} Sc _{0.96} rt	Mg ₂ hP2, 194	$P6_3/mmc$	0.33015, 0.33015, 0.5268, 90, 90, 120	close-packed structure	-	2.95	X	13449
Mg-Sc	Mg _{1.3} Sc _{0.7} rt	CsCl, cP2, 221	$Pm-3m$	0.36013, 0.36013, 0.36013, 90, 90, 90	b.c.c. family	-	2.24	X	51836
Mg-Se	MgSe rt	NaCl, cF8, 225	$Fm-3m$	0.5462, 0.5462, 0.5462, 90, 90, 90	rocksalt family	-	4.21	X	9861
Mg-Se	MgSe tf	*hP**	-	0.4145, 0.4145, 0.6723, 90, 90, 120	adamantane structure	-	-	N	2797
Mg-Se	MgSe ₂	FeS ₂ , cP12, 205	$Pa-3$	0.65, 0.65, 0.65, 90, 90, 90	pyrite-marcasite family	-	4.41	A	11901
Mg-Si	Mg _{0.002} Si _{0.998}	C, cF8, 227	$Fd-3m$	0.5429, 0.5429, 0.5429, 90, 90, 90	-	-	2.33	X	52880
Mg-Si	Mg ₂ Si hp1	Co ₂ , oP12, 62	$Pnma$	0.60354, 0.45911, 0.67839, 90, 90, 90	-	-	2.71	A	54269
Mg-Si	Mg ₂ Si hp2	Co _{1.75} Ge, hP6, 194	$P6_3/mmc$	0.41658, 0.41658, 0.52866, 90, 90, 120	AlB ₂ family	-	3.21	X	54269
Mg-Si	Mg ₂ Si rt	CaF ₂ , cF12, 225	$Fm-3m$	0.63703, 0.63703, 0.63703, 90, 90, 90	fluorite family	-	1.97	X	53453
Mg-Si	Mg ₃ Si _{1.67}	Mg ₃ Si _{1.67} , hP18, 176	$P6_3/m$	0.715, 0.715, 0.405, 90, 90, 120	-	black	2.22	X	48785
Mg-Si	Mg ₅ Si ₆ prec	Mg ₅ Si ₆ -a, mS22, 12	$C12/m1$	1.516, 0.405, 0.674, 90, 105, 3, 90	-	-	2.41	X	34192
Mg-Sm	MgSm	CsCl, cP2, 221	$Pm-3m$	0.381, 0.381, 0.381, 90, 90, 90	b.c.c. family	gray silver	5.25	X	7278
Mg-Sm	Mg _{0.02} Sm _{0.98} rt	Sm, hR9, 166	$R-3m$	0.3618, 0.3618, 2.6142, 90, 90, 120	close-packed structure	-	7.46	A	22270
Mg-Sm	Mg _{0.06} Sm _{0.92} ht1	Mg ₂ hP2, 194	$P6_3/mmc$	0.3626, 0.3626, 0.577, 90, 90, 120	close-packed structure	-	7.09	X	22270
Mg-Sm	Mg _{0.991} Sm _{0.009}	Mg ₂ hP2, 194	$P6_3/mmc$	0.3213, 0.3213, 0.521, 90, 90, 120	close-packed structure	-	1.81	X	50175
Mg-Sm	Mg ₂ Sm	MgCu ₂ , cF24, 227	$Fd-3m$	0.8639, 0.8639, 0.8639, 90, 90, 90	Friauf-Laves phase	-	4.10	X	22270
Mg-Sm	Mg ₃ Sm	BiF ₃ , cF16, 225	$Fm-3m$	0.736, 0.736, 0.736, 90, 90, 90	fluorite family	-	3.72	X	21164
Mg-Sm	Mg ₄₁ Sm ₅	Mg ₄₁ Ce ₅ , tI92, 87	$I4/m$	1.48, 1.48, 1.036, 90, 90, 90	-	-	2.56	A	22270
Mg-Sm	Mg ₄₅ Sm ₉	Mg ₄₄ (Mg _{0.32} Gd _{0.68}) ₆ Gd ₅ , cF448, 216	$F-43m$	2.246, 2.246, 2.246, 90, 90, 90	Nasicon family	-	2.87	A	22270
Mg-Sn	Mg _{0.15} Sn _{0.85} m	(Hg _{0.15} Sn _{0.85}), hP1, 191	$P6_3/mmm$	0.3186, 0.3186, 0.3011, 90, 90, 120	-	-	6.56	X	2908
Mg-Sn	Mg _{0.974} Sn _{0.026}	Mg ₂ hP2, 194	$P6_3/mmc$	0.32068, 0.32068, 0.52149, 90, 90, 120	close-packed structure	-	1.92	X	1094
Mg-Sn	Mg ₂ Sn	CaF ₂ , cF12, 225	$Fm-3m$	0.67594, 0.67594, 0.67594, 90, 90, 90	fluorite family	white silver	3.60	X	31793
Mg-Sn	Mg ₉ Sn ₅ hp	Mg ₉ Sn ₅ , hR84, 146	$R3$	1.3222, 1.3222, 1.315, 90, 90, 120	-	gray	4.06	X	31905
Mg-Sr	SrMg	CsCl, cP2, 221	$Pm-3m$	0.39, 0.39, 0.39, 90, 90, 90	b.c.c. family	-	3.13	X	220
Mg-Sr	SrMg ₂	MgZn ₂ , hP12, 194	$P6_3/mmc$	0.64838, 0.64838, 1.04514, 90, 90, 120	Friauf-Laves phase	gray silver	2.38	X	43811
Mg-Sr	SrMg _{5.2}	SrMg _{5.2} , hP46, 194	$P6_3/mmc$	1.0463, 1.0463, 1.0834, 90, 90, 120	-	-	2.08	X	21125
Mg-Sr	Sr ₂ Mg ₁₇	Th ₂ Ni ₁₇ , hP38, 194	$P6_3/mmc$	1.0535, 1.0535, 1.0356, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	white silver	1.97	X	7343
Mg-Sr	Sr ₆ Mg ₂₃	Th ₆ Mn ₂₃ , cF116, 225	$Fm-3m$	1.4914, 1.4914, 1.4914, 90, 90, 90	-	-	2.17	X	2388
Mg-Sr	Sr ₉ Mg ₃₈ rt	Sr ₉ Mg ₃₈ , hP94, 194	$P6_3/mmc$	1.0500, 1.0500, 2.8251, 90, 90, 120	-	-	2.11	X	14721
Mg-Tb	MgTb	CsCl, cP2, 221	$Pm-3m$	0.3778, 0.3778, 0.3778, 90, 90, 90	b.c.c. family	gray silver	5.64	X	10632
Mg-Tb	MgTb ₂ hp	CuZr ₂ , tI6, 139	$I4/mmm$	0.38356, 0.38356, 1.2436, 90, 90, 90	close-packed structure	gray silver	6.21	X	31809
Mg-Tb	Mg _{0.3} Tb _{0.7} ht	W, cI2, 229	$Im-3m$	0.3902, 0.3902, 0.3902, 90, 90, 90	b.c.c. family	-	6.63	X	2327
Mg-Tb	Mg ₂ Tb	MgZn ₂ , hP12, 194	$P6_3/mmc$	0.609, 0.609, 0.981, 90, 90, 120	Friauf-Laves phase	-	4.38	X	2124

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Mg-Tb	Mg ₂₄ Tb ₅	Ti ₅ Re ₂₄ cI58,217	<i>I</i> -43 <i>m</i>	1.1283,1.1283,1.1283,90,90,90	-	white silver	3.19	X	2314
Mg-Tb	Mg ₃ Tb	BiF ₃ ,cF16,225	<i>Fm</i> -3 <i>m</i>	0.73,0.73,0.73,90,90,90	fluorite family	-	3.96	X	10636
Mg-Te	MgTe hex	ZnO,hP4,186	<i>P6</i> ₃ <i>mc</i>	0.453,0.453,0.738,90,90,120	adamantane structure	-	3.85	A	392
Mg-Te	MgTe rt tf	ZnS,cF8,216	<i>F</i> -43 <i>m</i>	0.6419,0.6419,0.6419,90,90,90	adamantane structure	-	3.82	X	36103
Mg-Te	MgTe ₂	FeS ₂ ,cP12,205	<i>Pa</i> -3	0.70212,0.70212,0.70212,90,90,90	pyrite-marcasite family	gray	5.36	X	11901
Mg-Th	Mg ₂ Th ht	MgCu ₂ ,cF24,227	<i>Fd</i> -3 <i>m</i>	0.857,0.857,0.857,90,90,90	Friauf-Laves phase	-	5.93	X	12608
Mg-Th	Mg ₂ Th rt	MgNi ₂ ,hP24,194	<i>P6</i> ₃ / <i>mmc</i>	0.6086,0.6086,1.964,90,90,120	Friauf-Laves phase	-	5.92	A	711
Mg-Th	Mg ₂₃ Th ₆	ThMn ₂₃ ,cF116,225	<i>Fm</i> -3 <i>m</i>	1.427,1.427,1.427,90,90,90	-	-	4.46	A	1698
Mg-Ti	Mg _{0.26} Ti _{0.74} m2	W,cI2,229	<i>Im</i> -3 <i>m</i>	0.333,0.333,0.333,90,90,90	b.c.c. family	-	3.76	X	53626
Mg-Ti	Mg _{0.32} Ti _{0.68} m3	Cu,cF4,225	<i>Fm</i> -3 <i>m</i>	0.442,0.442,0.442,90,90,90	close-packed structure	-	3.10	X	53626
Mg-Ti	Mg _{0.5} Ti _{0.5} m1	Mg,hP2,194	<i>P6</i> ₃ / <i>mmc</i>	0.303,0.303,0.484,90,90,120	close-packed structure	-	3.12	X	51822
Mg-Tl	MgTl	CsCl,cP2,221	<i>Pm</i> -3 <i>m</i>	0.3628,0.3628,0.3628,90,90,90	b.c.c. family	-	7.95	X	61
Mg-Tl	Mg _{0.955} Tl _{0.045}	Mg,hP2,194	<i>P6</i> ₃ / <i>mmc</i>	0.32057,0.32057,0.52122,90,90,120	close-packed structure	-	2.32	X	338
Mg-Tl	Mg ₂ Tl	Mg ₂ In,hP9,189	<i>P</i> -62 <i>m</i>	0.80828,0.80828,0.36796,90,90,120	Fe ₂ P family	-	6.06	A	5203
Mg-Tl	Mg ₂ Tl ₂	Mg ₃ Ga ₂ ,oI28,72	<i>Ibam</i>	0.7328,1.4285,0.6197,90,90,90	-	-	5.43	A	5203
Mg-Tm	MgTm	CsCl,cP2,221	<i>Pm</i> -3 <i>m</i>	0.3744,0.3744,0.3744,90,90,90	b.c.c. family	gray silver	6.12	X	2600
Mg-Tm	Mg _{0.3} Tm _{0.7} ht	W,cI2,229	<i>Im</i> -3 <i>m</i>	0.3815,0.3815,0.3815,90,90,90	b.c.c. family	-	7.51	X	2327
Mg-Tm	Mg ₂ Tm	MgZn ₂ ,hP12,194	<i>P6</i> ₃ / <i>mmc</i>	0.59808,0.59808,0.9695,90,90,120	Friauf-Laves phase	gray silver	4.81	X	31811
Mg-Tm	Mg ₂₄ Tm ₅	Ti ₅ Re ₂₄ cI58,217	<i>I</i> -43 <i>m</i>	1.1215,1.1215,1.1215,90,90,90	-	white silver	3.36	X	44533
Mg-Y	MgY	CsCl,cP2,221	<i>Pm</i> -3 <i>m</i>	0.379,0.379,0.379,90,90,90	b.c.c. family	-	3.45	X	53172
Mg-Y	Mg _{0.99} Y _{0.01}	Mg,hP2,194	<i>P6</i> ₃ / <i>mmc</i>	0.3228,0.3228,0.5221,90,90,120	close-packed structure	-	1.76	X	57941
Mg-Y	Mg ₂ Y _{0.7}	MgZn ₂ ,hP12,194	<i>P6</i> ₃ / <i>mmc</i>	0.6024,0.6024,0.9748,90,90,120	Friauf-Laves phase	-	2.40	X	33696
Mg-Y	Mg _{25.18} Y _{3.82}	Ti ₅ Re ₂₄ cI58,217	<i>I</i> -43 <i>m</i>	1.12531,1.12531,1.12531,90,90,90	-	gray silver	2.22	X	62067
Mg-Yb	Mg _{0.04} Yb _{0.96} rt	Cu,cF4,225	<i>Fm</i> -3 <i>m</i>	0.54261,0.54261,0.54261,90,90,90	close-packed structure	-	6.95	X	2598
Mg-Yb	Mg _{0.995} Yb _{0.005}	Mg,hP2,194	<i>P6</i> ₃ / <i>mmc</i>	0.32475,0.32475,0.5178,90,90,120	close-packed structure	-	1.76	X	49267
Mg-Yb	Mg ₂ Yb	MgZn ₂ ,hP12,194	<i>P6</i> ₃ / <i>mmc</i>	0.62551,0.62551,1.012,90,90,120	Friauf-Laves phase	-	4.30	X	31811
Mg-Zn	MgZn	*,h**,*	-	1.81632,2.5465,2.5465,120,90,90	-	-	-	N	56798
Mg-Zn	MgZn ₂	MgZn ₂ ,hP12,194	<i>P6</i> ₃ / <i>mmc</i>	0.5223,0.5223,0.8566,90,90,120	Friauf-Laves phase	-	5.09	X	16632
Mg-Zn	Mg _{0.997} Zn _{0.003}	Mg,hP2,194	<i>P6</i> ₃ / <i>mmc</i>	0.32076,0.32076,0.52091,90,90,120	close-packed structure	-	1.75	X	51783
Mg-Zn	Mg ₂ Zn ₁₁	MgZn ₁₁ ,cP39,200	<i>Pm</i> -3	0.85398,0.85398,0.85398,90,90,90	-	-	6.14	X	58035
Mg-Zn	Mg ₂ Zn ₃ mon	*,mS*,12	<i>C</i> 12/ <i>m</i> 1	1.72041,0.52028,1.44018,90,102.5,90	-	-	-	N	56798
Mg-Zn	Mg ₂ Zn ₃ prec	*,aP*,*	-	0.53,1.16515,1.445,81.918,84.84,041	-	-	-	N	2938
Mg-Zn	Mg ₂₁ Zn ₂₅	Zr ₂ Re ₂₅ ,hR276,167	<i>R</i> -3 <i>c</i>	2.57758,2.57758,0.87624,90,90,120	-	gray dark	4.24	X	40283
Mg-Zn	Mg ₄ Zn ₇	Mg ₄ Zn ₇ ,mS110,12	<i>C</i> 12/ <i>m</i> 1	2.596,0.524,1.428,90,102.5,90	Frank-Kasper phase	-	4.86	X	9200
Mg-Zn	Mg ₅₁ Zn ₂₀ ht	Mg ₅₁ Zn ₂₀ ,oI158,71	<i>I</i> mm	1.4025,1.4083,1.4486,90,90,90	-	-	2.96	X	14199
Mg-Zr	Mg _{0.9975} Zr _{0.0025}	Mg,hP2,194	<i>P6</i> ₃ / <i>mmc</i>	0.3204,0.3204,0.5207,90,90,120	close-packed structure	-	1.76	X	1937
Mn-Mo	Mo _{0.36} Mn _{0.64} ht	(Cr _{0.49} Fe _{0.51}),tP30,136	<i>P</i> ₄ / <i>2</i> mm	0.91,0.91,0.474,90,90,90	Frank-Kasper phase	-	8.85	A	515
Mn-Mo	Mo _{0.85} Mn _{0.15}	W,cI2,229	<i>Im</i> -3 <i>m</i>	0.3122,0.3122,0.3122,90,90,90	b.c.c. family	-	9.80	X	698
Mn-N	MnN _{0.421} ht	ZrO _{0.37} ,hP12,182	<i>P6</i> ₃ 22	0.48859,0.48859,0.45396,90,90,120	-	-	6.46	X	43950
Mn-N	MnN _{0.43} rt	MnN _{0.43} ,oS24,20	<i>C</i> 222 ₁	0.48552,0.84088,0.45327,90,90,90	-	-	6.56	X	10872
Mn-N	MnN _{0.457}	MoC _{0.5} ,oP16,60	<i>Pbcn</i>	0.45401,0.5663,0.4904,90,90,90	-	-	6.46	X	43950
Mn-N	MnN _{0.5} ht	NiAs,hP4,194	<i>P6</i> ₃ / <i>mmc</i>	0.28185,0.28185,0.45371,90,90,120	AlB ₂ family	black	6.59	X	44522
Mn-N	MnN _{0.88} ht	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	0.42153,0.42153,0.42153,90,90,90	rocksalt family	-	5.97	X	37834
Mn-N	MnN _{0.88} rt	CoO,tI4,139	<i>I</i> 4/ <i>mmm</i>	0.29835,0.29835,0.41287,90,90,90	rocksalt family	-	6.08	X	37834
Mn-N	Mn ₂ N	Fe ₂ N _{0.94} ,oP12,60	<i>Pbcn</i>	0.4537,0.5668,0.4909,90,90,90	-	-	6.52	X	4068
Mn-N	Mn ₂ N _{0.97}	(Ti _{0.11} V _{0.89}) ₂ C,oP8,58	<i>Pnnm</i>	0.46451,0.49114,0.29369,90,90,90	-	-	6.12	X	43950
Mn-N	Mn ₃ N ₂ ht1	Mn ₃ N ₂ ,tI10,139	<i>I</i> 4/ <i>mmm</i>	0.29731,0.29731,1.2124,90,90,90	-	black	5.98	X	37834
Mn-N	Mn ₄ N rt	Fe ₄ N,cP5,221	<i>Pm</i> -3 <i>m</i>	0.3871,0.3871,0.3871,90,90,90	-	-	6.69	X	12427
Mn-Nb	NbMn ₂	MgZn ₂ ,hP12,194	<i>P6</i> ₃ / <i>mmc</i>	0.487,0.487,0.7404,90,90,120	Friauf-Laves phase	-	8.86	A	57312
Mn-Nb	Nb _{0.02} Mn _{0.98} ht1	Mn,cP20,213	<i>P</i> ₄ 32	0.6303,0.6303,0.6303,90,90,90	-	-	7.39	A	1251
Mn-Nb	Nb _{0.02} Mn _{0.98} rt	Mn,cI58,217	<i>I</i> -43 <i>m</i>	0.891,0.891,0.891,90,90,90	-	-	7.58	A	1251
Mn-Nd	NdMn ₁₂	ThMn ₁₂ ,tI26,139	<i>I</i> 4/ <i>mmm</i>	0.866,0.866,0.481,90,90,90	CaCu ₂ -Zr ₄ Al ₃	-	7.40	X	3692
Mn-Nd	NdMn ₂ lt	NdMn ₂ ,mS24,12	<i>C</i> 12/ <i>m</i> 1	0.9694,0.55225,0.8981,90,90,03.90	Friauf-Laves phase	-	7.02	X	59410
Mn-Nd	NdMn ₂ rt	MgZn ₂ ,hP12,194	<i>P6</i> ₃ / <i>mmc</i>	0.55672,0.55672,0.90633,90,90,120	Friauf-Laves phase	-	6.94	X	59410
Mn-Nd	Nd ₆ Mn ₂₃ ht	Th ₆ Mn ₂₃ ,cF116,225	<i>Fm</i> -3 <i>m</i>	1.27017,1.27017,1.27017,90,90,90	-	-	6.90	A	27552
Mn-Ni	MnNi ht1	CuAu,tP2,123	<i>P</i> 4/ <i>mmm</i>	0.26446,0.26446,0.352,90,90,90	close-packed structure	-	7.67	X	4048
Mn-Ni	MnNi ht2	CsCl,cP2,221	<i>Pm</i> -3 <i>m</i>	0.298,0.298,0.298,90,90,90	b.c.c. family	-	7.13	X	4048
Mn-Ni	MnNi ₃ rt	Cu ₃ Au,cP4,221	<i>Pm</i> -3 <i>m</i>	0.3598,0.3598,0.3598,90,90,90	close-packed structure	-	8.24	X	56119
Mn-Ni	Mn _{0.7} Ni _{0.3} rt	Cu,cF4,225	<i>Fm</i> -3 <i>m</i>	0.3698,0.3698,0.3698,90,90,90	close-packed structure	-	7.36	X	9901
Mn-Ni	Mn _{0.861} Ni _{0.139} lt	In,tI2,139	<i>I</i> 4/ <i>mmm</i>	0.26361,0.26361,0.366,90,90,90	close-packed structure	-	7.24	X	9901
Mn-Ni	Mn _{0.87} Ni _{0.13} ht1	Mn,cP20,213	<i>P</i> ₄ 32	0.6354,0.6354,0.6354,90,90,90	-	-	7.18	A	1690
Mn-Np	NpMn ₂	MgCu ₂ ,cF24,227	<i>Fd</i> -3 <i>m</i>	0.723,0.723,0.723,90,90,90	Friauf-Laves phase	-	12.19	X	9108
Mn-O	MnO hex	ZnO,hP4,186	<i>P6</i> ₃ <i>mc</i>	0.33718,0.33718,0.53854,90,90,120	adamantane structure	-	4.44	X	59359
Mn-O	MnO lt	NiO,hR6,166	<i>R</i> -3 <i>m</i>	0.31536,0.31536,0.76028,90,90,120	rocksalt family	-	5.40	X	21276
Mn-O	MnO rt	NaCl,cF8,225	<i>Fm</i> -3 <i>m</i>	0.4446,0.4446,0.4446,90,90,90	manganosite	green olive	5.36	X	12766
Mn-O	MnO ₂ cub	Ti ₂ C,cF48,227	<i>Fd</i> -3 <i>m</i>	0.8064,0.8064,0.8064,90,90,90	-	brown dark	4.40	X	60834
Mn-O	MnO ₂ hp1	CaCl ₂ ,oP6,58	<i>Pnnm</i>	0.4312,0.4437,0.2862,90,90,90	-	-	5.27	X	30516
Mn-O	MnO ₂ hp2	*,c**,*	-	0.4484,0.4484,0.4484,90,90,90	-	-	-	N	30516
Mn-O	MnO ₂ ram	MnO ₂ ,oP12,62	<i>Pnma</i>	0.93229,0.28482,0.44533,90,90,90	ramsdellite	-	4.88	X	29665
Mn-O	MnO ₂ rt tet1	TiO ₂ ,tP6,136	<i>P</i> ₄ / <i>2</i> mm	0.44041,0.44041,0.28765,90,90,90	pyrolusite	-	5.18	X	26960
Mn-O	MnO ₂ rt tet2	MnO ₂ ,tI24,87	<i>I</i> 4/ <i>m</i>	0.97876,0.97876,0.2865,90,90,90	-	-	4.21	X	26394
Mn-O	Mn _{0.5} O hp	NiAs,hP4,194	<i>P6</i> ₃ / <i>mmc</i>	0.2786,0.2786,0.4412,90,90,120	AlB ₂ family	-	4.87	X	369
Mn-O	Mn ₂ O ₃ rhom	Al ₂ O ₃ ,hR30,167	<i>R</i> -3 <i>c</i>	0.50282,0.50282,1.41125,90,90,120	-	-	5.09	X	60454
Mn-O	Mn ₂ O ₃ rt cub	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia</i> -3	0.94173,0.94173,0.94173,90,90,90	-	-	5.02	X	50092
Mn-O	Mn ₂ O ₃ rt orth	Mn ₂ O ₃ ,oP80,61	<i>Pbca</i>	0.94047,0.94233,0.94157,90,90,90	bixbyite	-	5.03	X	5589
Mn-O	Mn ₂ O ₃ tricl	Mn ₂ O ₃ ,aP80,2	<i>P</i> -1	1.02941,1.03026,1.04369,119.457,90.087,119.918-	-	-	5.31	X	60454
Mn-O	Mn ₂ O ₇	Mn ₂ O ₇ ,mP72,14	<i>P</i> 12/ <i>c</i> 1	0.67956,1.6687,0.9454,90,100,20,90	-	green	2.79	X	21758
Mn-O	Mn ₃ O ₄ hp	Mn ₃ O ₄ ,oP28,57	<i>Pbcm</i>	0.30276,0.98176,0.95799,90,90,90	-	-	5.34	X	62844

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Mn-O	Mn ₃ O ₄ ht	Fe ₃ O ₄ , cF56, 227	<i>Fd-3m</i>	0.8524, 0.8524, 0.8524, 90, 90, 90	spinel family	-	4.91	A	58237
Mn-O	Mn ₃ O ₄ lt	Mn ₃ O ₄ , oF56, 70	<i>Fddd</i>	0.8116, 0.81672, 0.94421, 90, 90, 90	spinel family	-	4.86	X	64557
Mn-O	Mn ₃ O ₄ rt	Mn ₃ O ₄ , tI28, 141	<i>I4₁/amd</i>	0.5765, 0.5765, 0.9442, 90, 90, 90	hausmannite	-	4.84	X	20317
Mn-O	Mn ₂ O ₈ rt	Mn ₂ O ₈ , mS26, 12	<i>C12/m1</i>	1.0347, 0.5724, 0.4852, 90, 109.42, 90	-	black	4.93	X	3431
Mn-Os	Mn _{0.87} Os _{0.13} ht1	Mn ₂ cP20, 213	<i>P4₃32</i>	0.64, 0.64, 0.64, 90, 90, 90	-	-	9.19	A	37743
Mn-P	MnP	FeAs, oP8, 62	<i>Pnma</i>	0.5259, 0.3173, 0.592, 90, 90, 90	AlB ₂ family	-	5.78	X	18585
Mn-P	MnP ₄ 2-lay	MnP ₄ , aP10, 2	<i>P-1</i>	0.5104, 0.5836, 0.5861, 69.17, 64.19, 86.18	-	-	4.07	X	13403
Mn-P	MnP ₄ 6-lay	MnP ₄ , aP30, 2	<i>P-1</i>	0.5108, 0.5847, 1.6347, 89.21, 84.85, 64.34	-	black	4.07	X	13850
Mn-P	MnP ₄ hp 8-lay	MnP ₄ , mS80, 15	<i>C12/c1</i>	1.0513, 0.50944, 2.1804, 90, 94.71, 90	-	black	4.08	X	8695
Mn-P	Mn ₂ P	Fe ₂ P, hP9, 189	<i>P-62m</i>	0.6081, 0.6081, 0.346, 90, 90, 120	Fe ₂ P family	-	6.33	X	1589
Mn-P	Mn ₃ P rt	Ni ₃ P, tI32, 82	<i>I-4</i>	0.9181, 0.9181, 0.4568, 90, 90, 90	-	-	6.76	X	1589
Mn-Pd	MnPd ht cub	CsCl, cP2, 221	<i>Pm-3m</i>	0.3156, 0.3156, 0.3156, 90, 90, 90	b.c.c. family	-	8.52	X	3611
Mn-Pd	MnPd ₃ rt	ZrAl ₃ , tI16, 139	<i>I4/mmm</i>	0.39036, 0.39036, 1.5624, 90, 90, 90	close-packed structure	-	10.44	X	25316
Mn-Pd	Mn _{0.5} Pd _{0.7} ht	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3912, 0.3912, 0.3912, 90, 90, 90	close-packed structure	-	10.09	X	25918
Mn-Pd	Mn _{0.916} Pd _{1.084} ht tet	CuAu, tP2, 123	<i>P4/mmm</i>	0.28765, 0.28765, 0.3625, 90, 90, 90	close-packed structure	-	9.17	X	57950
Mn-Pd	Mn _{0.92} Pd _{0.08} ht1	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3902, 0.3902, 0.3902, 90, 90, 90	close-packed structure	-	10.57	X	47580
Mn-Pd	Mn ₃ Pd ₅ rt	Pt ₂ Ga ₃ , oS16, 65	<i>Cmmm</i>	0.7263, 0.8107, 0.4053, 90, 90, 90	close-packed structure	-	9.70	X	57950
Mn-Pd	Mn ₇ Pd ₉ rt	Mn ₇ Pd ₉ , tI32, 139	<i>I4/mmm</i>	0.8112, 0.8112, 0.724, 90, 90, 90	close-packed structure	-	9.36	X	3611
Mn-Pr	PrMn ₂ lt	* m **,	-	0.5543, 0.9011, 0.9788, 90, 90, 2, 90	-	-	-	N	18128
Mn-Pr	PrMn ₂ rt	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.559, 0.559, 0.9106, 90, 90, 120	Friauf-Laves phase	-	6.76	A	18128
Mn-Pr	Pr _{0.33} Mn _{0.67} rt	Mn ₂ cI58, 217	<i>I-43m</i>	0.8902, 0.8902, 0.8902, 90, 90, 90	-	-	11.37	A	5876
Mn-Pr	Pr ₆ Mn ₂₃ ht	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.2725, 1.2725, 1.2725, 90, 90, 90	-	-	6.80	A	17910
Mn-Pt	MnPt rt	CuAu, tP2, 123	<i>P4/mmm</i>	0.28249, 0.28249, 0.3675, 90, 90, 90	close-packed structure	-	14.16	X	20094
Mn-Pt	MnPt ₃ rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.387, 0.387, 0.387, 90, 90, 90	close-packed structure	-	18.34	X	32022
Mn-Pt	Mn _{0.25} Pt _{0.75}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3908, 0.3908, 0.3908, 90, 90, 90	close-packed structure	-	17.81	X	19019
Mn-Pt	Mn _{0.5} Pt _{0.5} ht	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.387, 0.387, 0.387, 90, 90, 90	close-packed structure	-	14.33	X	2174
Mn-Pt	Mn _{3.07} Pt _{0.93} rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3872, 0.3872, 0.3872, 90, 90, 90	close-packed structure	-	10.01	X	3976
Mn-Pu	PuMn ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.729, 0.729, 0.729, 90, 90, 90	Friauf-Laves phase	-	12.13	X	743
Mn-Re	Mn _{0.392} Re _{0.608} ht	(Cr _{0.49} Fe _{0.51}), tP30, 136	<i>P4₂/mm</i>	0.925, 0.925, 0.482, 90, 90, 90	Frank-Kasper phase	-	16.28	X	61576
Mn-Re	Mn _{0.47} Re _{0.53}	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.2753, 0.2753, 0.4447, 90, 90, 120	close-packed structure	-	14.17	X	4077
Mn-Re	Mn _{0.883} Re _{0.115} rt	Mn ₂ cI58, 217	<i>I-43m</i>	0.894, 0.894, 0.894, 90, 90, 90	-	-	9.44	X	61576
Mn-Re	Mn _{0.95} Re _{0.05} rt	Mn ₂ cI58, 217	<i>I-43m</i>	0.8938, 0.8938, 0.8938, 90, 90, 90	-	-	8.30	A	4088
Mn-Rh	MnRh lt	CuAu, tP2, 123	<i>P4/mmm</i>	0.278, 0.278, 0.356, 90, 90, 90	close-packed structure	-	9.53	X	1861
Mn-Rh	MnRh rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.3044, 0.3044, 0.3044, 90, 90, 90	b.c.c. family	-	9.29	X	1861
Mn-Rh	Mn _{0.3} Rh _{0.7}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.383, 0.383, 0.383, 90, 90, 90	close-packed structure	-	10.47	X	701
Mn-Rh	Mn ₃ Rh rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3813, 0.3813, 0.3813, 90, 90, 90	close-packed structure	-	8.02	X	20297
Mn-Ru	Mn _{0.5} Ru _{0.5}	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.2666, 0.2666, 0.4267, 90, 90, 120	close-packed structure	-	9.86	X	701
Mn-Ru	Mn _{0.88} Ru _{0.12} ht1	Mn ₂ cP20, 213	<i>P4₃32</i>	0.6425, 0.6425, 0.6425, 90, 90, 90	-	-	7.57	A	39323
Mn-S	MnS ht1	ZnS, cF8, 216	<i>F-43m</i>	0.5601, 0.5601, 0.5601, 90, 90, 90	browneite	orange	3.29	X	13269
Mn-S	MnS ht2	ZnO, hP4, 186	<i>P6₃mc</i>	0.3986, 0.3986, 0.64457, 90, 90, 120	adamantane structure	red	3.26	A	36916
Mn-S	MnS rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.52245, 0.52245, 0.52245, 90, 90, 90	alabandite	green dark	4.05	X	25089
Mn-S	MnS ₂ hp	FeS ₂ , oP6, 58	<i>Pnnm</i>	0.443, 0.55, 0.342, 90, 90, 90	pyrite-marcasite family	-	4.75	A	18018
Mn-S	MnS ₂ rt	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.6104, 0.6104, 0.6104, 90, 90, 90	hauerite	green	3.48	X	26785
Mn-Sb	MnSb ₂ hp	FeAs ₂ , oP6, 58	<i>Pnnm</i>	0.603, 0.688, 0.331, 90, 90, 90	pyrite-marcasite family	-	7.22	A	55366
Mn-Sb	Mn _{0.2} Sb _{0.8} m	Po, hR3, 166	<i>R-3m</i>	0.42603, 0.42603, 0.56899, 90, 90, 120	-	-	6.04	X	6776
Mn-Sb	Mn _{1.09} Sb	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.417, 0.417, 0.5755, 90, 90, 120	AlB ₂ family	-	6.96	X	16068
Mn-Sb	Mn ₂ Sb	Cu ₂ Sb, tP6, 129	<i>P4/mmm</i>	0.4082, 0.4082, 0.6558, 90, 90, 90	-	-	7.04	X	48658
Mn-Sb	Mn ₃ Sb hp	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.40017, 0.40017, 0.40017, 90, 90, 90	close-packed structure	gray	7.43	X	42338
Mn-Sc	ScMn ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.503, 0.503, 0.819, 90, 90, 120	Friauf-Laves phase	-	5.73	X	2122
Mn-Se	MnSe lt	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.3827, 0.3827, 0.6342, 90, 90, 120	AlB ₂ family	-	5.53	X	13221
Mn-Se	MnSe m cub	ZnS, cF8, 216	<i>F-43m</i>	0.582, 0.582, 0.582, 90, 90, 90	adamantane structure	-	4.51	X	154
Mn-Se	MnSe m hex	ZnO, hP4, 186	<i>P6₃mc</i>	0.412, 0.412, 0.672, 90, 90, 120	adamantane structure	-	4.50	A	154
Mn-Se	MnSe rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.5462, 0.5462, 0.5462, 90, 90, 90	rocksalt family	black gray	5.46	X	6745
Mn-Se	MnSe ₂ rt	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.6417, 0.6417, 0.6417, 90, 90, 90	pyrite-marcasite family	-	5.35	X	1096
Mn-Si	MnSi rt	FeSi, cP8, 198	<i>P2₃</i>	0.45559, 0.45559, 0.45559, 90, 90, 90	brownleeite	-	5.83	X	25128
Mn-Si	MnSi _x	Mn ₂ cP20, 213	<i>P4₃32</i>	0.62869, 0.62869, 0.62869, 90, 90, 90	-	-	7.34	A	20232
Mn-Si	Mn _{0.855} Si _{0.145} rt	(Cr _{0.16} Mo _{0.38} Co _{0.46}), hR159, 148	<i>R-3</i>	1.08705, 1.08705, 1.91799, 90, 90, 120	Frank-Kasper phase	-	6.87	X	11183
Mn-Si	Mn ₁₁ Si ₁₉	Mn ₁₁ Si ₁₉ , tP120, 118	<i>P-4n2</i>	0.552, 0.552, 4.82, 90, 90, 90	chimney-ladder structure	-	5.15	X	2247
Mn-Si	Mn _{11.15} Si _{18.85} rt	W ₆ Fe ₇ , hR39, 166	<i>R-3m</i>	0.47, 0.47, 2.561, 90, 90, 120	Frank-Kasper phase	-	6.76	X	2582
Mn-Si	Mn ₁₅ Si ₃₆	Mn ₁₅ Si ₃₆ , tI164, 122	<i>I-42d</i>	0.5531, 0.5531, 6.5311, 90, 90, 90	chimney-ladder structure	-	5.17	X	3289
Mn-Si	Mn _{25.18} Si _{5.82}	Mn ₁₉ (Mn _{0.62} Si _{0.38}) ₁₀ Si ₂ , oI186, 71	<i>Immm</i>	0.46556, 1.6992, 2.8634, 90, 90, 90	Frank-Kasper phase	-	6.80	X	5559
Mn-Si	Mn ₂₇ Si ₄₇	Mn ₂₇ Si ₄₇ , tP296, 118	<i>P-4n2</i>	0.553, 0.553, 11.79, 90, 90, 90	chimney-ladder structure	-	5.16	X	7520
Mn-Si	Mn ₃ Si ht	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.542, 0.542, 0.542, 90, 90, 90	fluorite family	-	8.05	X	59400
Mn-Si	Mn ₄ Si ₇	Mn ₄ Si ₇ , tP44, 116	<i>P-4c2</i>	0.55259, 0.55259, 1.75156, 90, 90, 90	chimney-ladder structure	-	5.17	X	42455
Mn-Si	Mn _{44.5} Si _{10.5} (Fe)	Mn ₄₀ (Mn _{0.5} Si _{0.5}) ₅ Si ₆ , mS220, 5	<i>C121</i>	1.3362, 1.1645, 1.7468, 90, 90, 53, 90	Frank-Kasper phase	-	6.70	X	10355
Mn-Si	Mn ₅ Si ₂ rt	Mn ₅ Si ₂ , tP56, 92	<i>P4₂2</i>	0.89097, 0.89097, 0.87153, 90, 90, 90	-	-	6.35	X	9446
Mn-Si	Mn ₂ Si ₃ lt1	Mn ₂ Si ₃ , oS32, 63	<i>Cmcm</i>	1.18956, 0.6904, 0.47959, 90, 90, 90	-	-	6.05	X	59585
Mn-Si	Mn ₅ Si ₃ lt2	Mn ₅ Si ₃ , mP16, 11	<i>P12₁/m1</i>	0.68726, 0.48048, 0.68924, 90, 119.895, 90	-	-	6.04	X	59585
Mn-Si	Mn ₂ Si ₃ rt	Mn ₂ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.68971, 0.68971, 0.48075, 90, 90, 120	mavlyanovite	gray	6.02	X	53991
Mn-Sm	SmMn ₂ lt	*, o*24, *	-	0.5421, 0.8873, 0.9523, 90, 90, 90	-	-	7.55	N	36818
Mn-Sm	SmMn ₂ rt	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5493, 0.5493, 0.8945, 90, 90, 120	Friauf-Laves phase	-	7.40	A	18128
Mn-Sm	Sm ₆ Mn ₂₃	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.257, 1.257, 1.257, 90, 90, 90	-	-	7.24	X	13237
Mn-Sn	MnSn ₂	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.6671, 0.6671, 0.5443, 90, 90, 90	-	black	8.02	X	54854
Mn-Sn	Mn _{0.9} Sn _{0.1} ht1	Mn ₂ cP20, 213	<i>P4₃32</i>	0.6511, 0.6511, 0.6511, 90, 90, 90	-	-	7.38	A	4172
Mn-Sn	Mn _{1.64} Sn _{0.94} ht	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.4398, 0.4398, 0.5519, 90, 90, 120	AlB ₂ family	-	7.24	X	33359
Mn-Sn	Mn ₃ Sn ₂ rt	Ni ₃ Sn ₂ , oP20, 62	<i>Pnma</i>	0.75578, 0.55007, 0.8584, 90, 90, 90	AlB ₂ family	-	7.49	X	33359
Mn-Sn	Mn _{3.078} Sn _{0.922}	Mg ₅ Cd, hP8, 194	<i>P6₃/mmc</i>	0.5665, 0.5665, 0.4531, 90, 90, 120	close-packed structure	-	7.35	X	15227
Mn-Sn	Mn ₈ Sn ₃ rt	Mn ₈ Sn ₃ , oP52, 62	<i>Pnma</i>	0.76003, 0.55247, 2.19114, 90, 90, 90	-	gray	7.46	X	32978

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Mn-Ta	TaMn ₂	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.4864,0.4864,0.7943,90,90,120	Friauf-Laves phase	-	11.87	A	22278
Mn-Tb	TbMn ₁₂	ThMn ₁₂ ,tI26,139	$I4/mmm$	0.8551,0.8551,0.473,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	7.86	X	50289
Mn-Tb	TbMn ₂ hp	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.54,0.54,0.88,90,90,120	Friauf-Laves phase	-	8.03	A	30765
Mn-Tb	TbMn ₂ rt	MgCu ₂ ,cF24,227	$Fd-3m$	0.7643,0.7643,0.7643,90,90,90	Friauf-Laves phase	-	8.00	X	26093
Mn-Tb	Tb ₆ Mn ₂₃	Th ₆ Mn ₂₃ ,cF116,225	$Fm-3m$	1.2447,1.2447,1.2447,90,90,90	-	-	7.64	A	8539
Mn-Tc	Mn _{0.4} Tc _{0.6}	(Cr _{0.40} Fe _{0.51}),tP30,136	$P4_2/mmm$	0.915,0.915,0.48,90,90,90	Frank-Kasper phase	-	10.01	A	1636
Mn-Te	MnTe hp	FeAs ₂ ,oP8,62	$Pnma$	0.5773,0.3763,0.6119,90,90,90	AlB ₂ family	-	9.12	X	20149
Mn-Te	MnTe ht3	NaCl,cF8,225	$Fm-3m$	0.5875,0.5875,0.5875,90,90,90	rocksalt family	-	5.98	X	12236
Mn-Te	MnTe rt	NiAs ₂ ,hP4,194	$P6_3/mmc$	0.4193,0.4193,0.6752,90,90,120	AlB ₂ family	gray	5.90	X	45977
Mn-Te	MnTe ₂ hp cub	FeS ₂ ,cP12,205	$Pa-3$	0.6943,0.6943,0.6943,90,90,90	pyrite-marcasite family	-	6.16	X	1096
Mn-Te	MnTe ₂ hp orth	FeS ₂ ,oP6,58	$Pnmm$	0.5272,0.6144,0.3795,90,90,90	pyrite-marcasite family	-	8.38	A	30475
Mn-Th	ThMn ₁₂	ThMn ₁₂ ,tI26,139	$I4/mmm$	0.874,0.874,0.495,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	7.83	X	408
Mn-Th	ThMn ₂	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.5464,0.5464,0.8842,90,90,120	Friauf-Laves phase	-	9.93	X	20113
Mn-Th	Th ₆ Mn ₂₃	Th ₆ Mn ₂₃ ,cF116,225	$Fm-3m$	1.2523,1.2523,1.2523,90,90,90	-	-	8.98	X	408
Mn-Ti	TiMn ₂	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.48333,0.48333,0.79384,90,90,120	Friauf-Laves phase	-	6.53	X	19282
Mn-Ti	Ti _{0.08} Mn _{0.92}	Mn ₂ cI58,217	$I-43m$	0.8926,0.8926,0.8926,90,90,90	-	-	7.36	A	53422
Mn-Ti	Ti _{0.17} Mn _{0.83} ht	(Cr _{0.16} Mo _{0.38} Co _{0.46}),hR159,148	$R-3$	1.1007,1.1007,1.9441,90,90,120	Frank-Kasper phase	-	6.96	X	61680
Mn-Ti	Ti _{0.47} Mn _{0.53}	* ₁ ** *	-	0.8159,0.8159,1.2767,90,90,90	-	-	-	N	53422
Mn-Ti	Ti _{0.5} Mn _{0.5} rt	(Cr _{0.40} Fe _{0.51}),tP30,136	$P4_2/mmm$	0.887,0.887,0.455,90,90,90	Frank-Kasper phase	-	7.16	A	39276
Mn-Ti	Ti _{0.85} Mn _{0.15} ht	W ₂ cI2,229	$Im-3m$	0.3211,0.3211,0.3211,90,90,90	b.c.c. family	-	4.91	X	53422
Mn-Ti	Ti ₂₁ Mn ₂₅ rt	Zr ₂₁ Re ₂₅ ,hR276,167	$R-3c$	2.3596,2.3596,0.8035,90,90,120	-	-	6.12	A	18630
Mn-Ti	Ti ₃ Mn ₃	Mn ₂ Si ₃ ,hP16,193	$P6_3/mcm$	0.741,0.741,0.5131,90,90,120	-	-	5.50	A	49510
Mn-Tm	TmMn ₁₂	ThMn ₁₂ ,tI26,139	$I4/mmm$	0.854,0.854,0.473,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	7.97	A	2854
Mn-Tm	TmMn ₂	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.524,0.524,0.856,90,90,120	Friauf-Laves phase	-	9.10	A	39826
Mn-Tm	Tm ₆ Mn ₂₃	Th ₆ Mn ₂₃ ,cF116,225	$Fm-3m$	1.2242,1.2242,1.2242,90,90,90	-	-	8.24	A	18024
Mn-U	UMn ₂ tI1	TbFe ₂ ,hR18,166	$R-3m$	0.5078,0.5078,1.2246,90,90,120	Friauf-Laves phase	-	12.68	A	20031
Mn-U	UMn ₂ tI2	UMn ₂ ,oI12,74	$Imma$	0.48163,0.52478,0.71820,90,90,90	Friauf-Laves phase	-	12.73	X	17893
Mn-U	UMn ₂ rt	MgCu ₂ ,cF24,227	$Fd-3m$	0.71595,0.71595,0.71595,90,90,90	Friauf-Laves phase	-	12.59	X	17893
Mn-U	U ₆ Mn	U ₆ Mn,tI28,140	$I4/mcm$	1.029,1.029,0.524,90,90,90	-	-	17.76	X	320
Mn-V	VMn rt	CsCl,cP2,221	$Pm-3m$	0.291,0.291,0.291,90,90,90	b.c.c. family	-	7.14	X	9234
Mn-V	V _{0.02} Mn _{0.98} ht1	Mn ₂ cP20,213	$P4_132$	0.6326,0.6326,0.6326,90,90,90	-	-	7.20	A	54359
Mn-V	V _{0.05} Mn _{0.95} rt	Mn ₂ cI58,217	$I-43m$	0.8937,0.8937,0.8937,90,90,90	-	-	7.39	A	54359
Mn-V	V _{0.1} Mn _{0.9} ht1	Mn ₂ cI58,217	$I-43m$	0.9058,0.9058,0.9058,90,90,90	-	-	7.07	A	6028
Mn-V	V _{0.1} Mn _{0.9} ht2	Mn ₂ cP20,213	$P4_132$	0.6453,0.6453,0.6453,90,90,90	-	-	6.74	A	6028
Mn-V	V _{0.204} Mn _{0.796} rt	(Cr _{0.40} Fe _{0.51}),tP30,136	$P4_2/mmm$	0.896,0.896,0.4621,90,90,90	Frank-Kasper phase	-	7.27	A	6028
Mn-V	V _{0.5} Mn _{0.5}	W ₂ cI2,229	$Im-3m$	0.292,0.292,0.292,90,90,90	b.c.c. family	-	7.06	X	9234
Mn-Y	YMn ₁₂	ThMn ₁₂ ,tI26,139	$I4/mmm$	0.8597,0.8597,0.47637,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	7.06	X	16757
Mn-Y	YMn ₂ hp-ht	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.54086,0.54086,0.88341,90,90,120	Friauf-Laves phase	-	5.90	X	57151
Mn-Y	YMn ₂ tI1	YMn ₂ ,tI12,141	$I4_1/amd$	0.5473,0.5473,0.77001,90,90,90	-	-	5.72	X	24781
Mn-Y	YMn ₂ rt	MgCu ₂ ,cF24,227	$Fd-3m$	0.76806,0.76806,0.76806,90,90,90	Friauf-Laves phase	-	5.83	X	57151
Mn-Y	YMn ₄ tI	* ₁ tI60,139	$I4/mmm$	0.8808,0.8808,1.2521,90,90,90	-	-	-	N	1718
Mn-Y	YMn ₅	* ₀ ** *	-	0.305,0.434,0.712,90,90,90	-	-	-	N	1246
Mn-Y	Y ₆ Mn ₂₃	Th ₆ Mn ₂₃ ,cF116,225	$Fm-3m$	1.2403,1.2403,1.2403,90,90,90	-	-	6.26	X	16006
Mn-Yb	YbMn ₂ hp	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.5242,0.5242,0.8582,90,90,120	Friauf-Laves phase	-	9.20	A	30774
Mn-Yb	Yb _{0.03} Mn _{0.97} rt	Mn ₂ cI58,217	$I-43m$	0.896,0.896,0.896,90,90,90	-	-	7.83	X	7598
Mn-Yb	Yb ₂ Mn ₁₇ hp	Th ₂ Ni ₁₇ ,hP38,194	$P6_3/mmc$	0.848,0.848,0.789,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	8.65	A	15967
Mn-Yb	Yb ₆ Mn ₂₃ hp	Th ₆ Mn ₂₃ ,cF116,225	$Fm-3m$	1.2189,1.2189,1.2189,90,90,90	-	-	8.44	A	15967
Mn-Yb	Yb ₆ Mn _{4.5} hp	Ho ₆ Co _{4.5} ,hP22,176	$P6_3/m$	1.1336,1.1336,0.4029,90,90,120	-	-	9.52	A	15967
Mn-Zn	ZnMn rt	CsCl,cP2,221	$Pm-3m$	0.3071,0.3071,0.3071,90,90,90	b.c.c. family	-	6.90	X	6880
Mn-Zn	Zn _{0.15} Mn _{0.85} rt	Cu ₂ cF4,225	$Fm-3m$	0.377,0.377,0.377,90,90,90	close-packed structure	-	7.00	X	6010
Mn-Zn	Zn _{0.4} Mn _{0.6} ht1	Mn ₂ cP20,213	$P4_132$	0.648,0.648,0.648,90,90,90	-	-	7.22	A	6880
Mn-Zn	Zn _{0.6} Mn _{0.4} rt	SrPb ₃ ,tP4,123	$P4/mmm$	0.381,0.381,0.364,90,90,90	close-packed structure	-	7.10	X	6010
Mn-Zn	Zn _{0.7} Mn _{0.3} ht	Mg ₂ hP2,194	$P6_3/mmc$	0.27584,0.27584,0.44456,90,90,120	close-packed structure	-	7.06	X	5348
Mn-Zn	Zn _{0.988} Mn _{0.012}	Mg ₂ hP2,194	$P6_3/mmc$	0.26681,0.26681,0.49561,90,90,120	close-packed structure	-	7.09	X	5348
Mn-Zn	Zn _{10.5} Mn _{2.5}	Zn ₉ (Zn ₉ cF _{0.5}) ₂ Fe ₂ ,cI52,217	$I-43m$	0.91605,0.91605,0.91605,90,90,90	γ -brass	-	7.12	A	55448
Mn-Zn	Zn ₁₃ Mn	Zn ₁₃ Co,smS28,12	$C12/m1$	1.08441,0.76626,0.5134,90,100.67,90	-	-	7.17	X	1559
Mn-Zn	Zn _{2.92} Mn _{1.08} tI	SrPb ₃ ,tP4,123	$P4/mmm$	0.392,0.392,0.371,90,90,90	close-packed structure	-	7.29	X	2231
Mn-Zn	Zn _{2.92} Mn _{1.08} rt	Cu ₃ Au,cP4,221	$Pm-3m$	0.386,0.386,0.386,90,90,90	close-packed structure	-	7.23	X	2231
Mn-Zr	ZrMn stab?	* ₁ c** *	-	1.1295,1.1295,1.1295,90,90,90	-	-	-	N	40873
Mn-Zr	ZrMn ₂ rt	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.50293,0.50293,0.82669,90,90,120	Friauf-Laves phase	-	7.38	X	48321
Mn-Zr	Zr ₂ Mn stab	Ti ₂ Ni,cF96,227	$Fd-3m$	1.1999,1.1999,1.1999,90,90,90	-	-	7.30	A	3654
Mo-N	MoN hex1	WC,hP2,187	$P-6m2$	0.2868,0.2868,0.281,90,90,120	AlB ₂ family	-	9.12	X	47947
Mo-N	MoN hex2	NiAs ₂ ,hP4,194	$P6_3/mmc$	0.287,0.287,0.562,90,90,120	AlB ₂ family	-	9.11	X	46724
Mo-N	MoN ht2	Nb _{0.92} S ₂ ,hP16,186	$P6_3/mc$	0.57366,0.57366,0.56188,90,90,120	AlB ₂ family	-	9.12	X	44217
Mo-N	MoN trig	MoN-b,hP16,164	$P-3m1$	0.5665,0.5665,0.552,90,90,120	-	-	9.52	X	1476
Mo-N	MoN _{0.5} ht1	NaCl,cF8,225	$Fm-3m$	0.41613,0.41613,0.41613,90,90,90	rocksalt family	-	9.49	X	50225
Mo-N	Mo _{0.75} N _{0.50} tf	Mo _{0.75} N _{0.50} ,cP8,221	$Pm-3m$	0.4165,0.4165,0.4165,90,90,90	rocksalt family	-	7.26	X	1256
Mo-N	Mo _{1.67} N ₂ tf	Nb _{1.35} S ₂ ,hP8,194	$P6_3/mmc$	0.2867,0.2867,1.119,90,90,120	AlB ₂ family	-	7.85	X	64973
Mo-N	Mo ₂ N	* ₀ ** *	-	0.404,0.4131,0.4208,90,90,90	-	-	-	N	48329
Mo-N	Mo ₂ N _{0.75} rt	Mo ₂ N _{0.75} ,tI12,141	$I4_1/amd$	0.4200,0.4200,0.8010,90,90,90	-	-	9.51	X	837
Mo-N	Mo ₃ N ₆	Mo ₃ N ₆ ,hP24,176	$P6_3/m$	0.48924,0.48924,1.10643,90,90,120	-	-	8.16	X	47947
Mo-Nb	Nb _{0.484} Mo _{0.516}	W ₂ cI2,229	$Im-3m$	0.32,0.32,0.32,90,90,90	b.c.c. family	-	9.58	X	6575
Mo-Ni	MoNi ₃ rt	Cu ₃ Ti,oP8,59	$Pmnm$	0.4224,0.5064,0.4448,90,90,90	close-packed structure	-	9.50	X	1113
Mo-Ni	MoNi ₄ rt	MoNi ₄ ,tI10,87	$I4/m$	0.5720,0.5720,0.3564,90,90,90	close-packed structure	-	9.42	X	234
Mo-Ni	Mo _{0.09} Ni _{0.91}	Cu ₂ cF4,225	$Fm-3m$	0.3565,0.3565,0.3565,90,90,90	close-packed structure	-	9.10	X	17661
Mo-Ni	Mo _{0.35} Ni _{0.65} tf	Mg ₂ hP2,194	$P6_3/mmc$	0.325,0.325,0.521,90,90,120	close-packed structure	-	5.00	X	16271
Mo-Ni	Mo _{0.84} Ni _{0.16} m1	Mg ₂ hP2,194	$P6_3/mmc$	0.294,0.294,0.479,90,90,120	close-packed structure	-	8.33	X	30395
Mo-Ni	Mo _{0.84} Ni _{0.16} m2	Cu ₂ cF4,225	$Fm-3m$	0.422,0.422,0.422,90,90,90	close-packed structure	-	7.95	X	30395

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Mo-Ni	Mo _{0.98} Ni _{0.02}	W, c12, 229	<i>Im-3m</i>	0.31441, 0.31441, 0.31441, 90, 90, 90	b.c.c. family	-	10.17	X	2181
Mo-Ni	Mo ₇ Ni ₇	Mo ₃ (Mo _{0.8} Ni _{0.2}) ₃ Ni ₆ , oP56, 19	<i>P2₁2₁2₁</i>	0.8852, 0.9108, 0.9108, 90, 90, 90	Frank-Kasper phase	-	9.79	X	1791
Mo-O	MoO ₂ mon	VO ₂ , mP12, 14	<i>P12₁/c1</i>	0.55385, 0.486, 0.5628, 90, 119.701, 90	tugarinovite	black	6.46	X	18081
Mo-O	MoO ₂ tet	TiO ₂ , tP6, 136	<i>P4₂/mmn</i>	0.48473, 0.48473, 0.28136, 90, 90, 90	-	black	6.43	X	44470
Mo-O	MoO ₃ hp-ht	MoO ₃ , mP8, 11	<i>P12₁/m1</i>	0.3954, 0.3687, 0.7095, 90, 103.75, 90	-	white	4.76	X	24880
Mo-O	MoO ₃ hp2	MoO ₃ , mP16, 14	<i>P12₁/c1</i>	0.5749, 0.4804, 0.6095, 90, 116.73, 90	-	-	6.36	X	53521
Mo-O	MoO ₃ m1	MoO ₃ , mP22, 14	<i>P12₁/c1</i>	0.71228, 0.5366, 0.55665, 90, 92.01, 90	-	green yellow	4.50	X	24931
Mo-O	MoO ₃ m2	WO ₃ , mP32, 14	<i>P12₁/c1</i>	0.7415, 0.7433, 1.06484, 90, 134.045, 90	-	yellow	4.53	X	21476
Mo-O	MoO ₃ m3	*hP*, 176	<i>P6₃/m</i>	1.0619, 1.0619, 0.3719, 90, 90, 120	-	-	-	N	30660
Mo-O	MoO ₃ rt	MoO ₃ , oP16, 62	<i>Pnma</i>	1.386, 0.36971, 0.39624, 90, 90, 90	molybdenite	white	4.71	X	54108
Mo-O	Mo ₁₀ O ₂₉	*aP156, 2	<i>P-1</i>	0.8097, 1.1744, 2.20325, 96.369, 92.796, 109.962	-	-	-	N	6226
Mo-O	Mo ₁₁ O ₃₂	*aP172, 2	<i>P-1</i>	0.8097, 1.1744, 2.43905, 95.194, 95.401, 109.962	-	-	-	N	6226
Mo-O	Mo ₁₇ O ₄₇	Mo ₁₇ O ₄₇ , oP128, 32	<i>Pba2</i>	1.9632, 2.1615, 0.39515, 90, 90, 90	-	black blue	4.72	X	1172
Mo-O	Mo ₁₉ O ₅₅	*aP148, 2	<i>P-1</i>	0.8097, 1.1744, 2.13064, 101.454, 93.488, 109.962	-	-	-	N	6226
Mo-O	Mo ₂ O ₃ tf	*c*, 176	-	0.684, 0.684, 0.684, 90, 90, 90	-	-	-	N	7270
Mo-O	Mo _{2.25} O _{0.75}	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.5549, 0.5549, 0.5549, 90, 90, 90	fluorite family	-	8.86	X	576
Mo-O	Mo ₂₁ O ₆₁	*aP164, 2	<i>P-1</i>	0.8097, 1.1744, 2.2941, 89.724, 88.474, 70.038	-	-	-	N	6226
Mo-O	Mo ₄ O ₁₁ ht	Mo ₄ O ₁₁ , oP60, 33	<i>Pna2₁</i>	2.40723, 0.66483, 0.53569, 90, 90, 90	-	black	4.34	X	35715
Mo-O	Mo ₄ O ₁₁ rt	Mo ₄ O ₁₁ , mP60, 14	<i>P12₁/c1</i>	0.6695, 0.544, 2.4573, 90, 94.31, 90	-	black red	4.17	X	31126
Mo-O	Mo ₅ O ₁₄ rt	Mo ₅ O ₁₄ , tP192, 127	<i>P4/mbm</i>	2.300, 2.300, 0.3937, 90, 90, 90	-	-	4.49	X	2084
Mo-O	Mo ₈ O ₂₃ ht	Mo ₈ O ₂₃ , mP62, 13	<i>P12/c1</i>	1.3384, 0.40616, 1.6883, 90, 106.27, 90	-	black blue	4.28	X	20160
Mo-O	Mo ₈ O ₂₃ lt	Mo ₈ O ₂₃ , mP124, 7	<i>P1c1</i>	1.339, 0.8062, 1.682, 90, 106.02, 90	-	-	4.32	X	20160
Mo-O	Mo ₈ O ₂₃ rt	Mo ₈ O ₂₃ , mP62, 13	<i>P12/c1</i>	1.3382, 0.40519, 1.6877, 90, 106.197, 90	-	-	4.29	X	23474
Mo-O	Mo ₉ O ₂₆ ht1	Mo ₉ O ₂₆ , mS280, 15	<i>C12/c1</i>	2.9194, 0.8083, 1.6816, 90, 95.47, 90	-	-	4.30	X	20150
Mo-O	Mo ₉ O ₂₆ ht2	Mo ₉ O ₂₆ , mP70, 13	<i>P12/c1</i>	1.445, 0.403, 1.675, 90, 95, 90	-	black blue	4.37	X	279
Mo-O	Mo ₉ O ₂₆ rt	Mo ₉ O ₂₆ , aP140, 2	<i>P-1</i>	0.8145, 1.1890, 1.9659, 95.47, 90.38, 109.97	-	black	4.78	X	2085
Mo-Os	Mo _{0.4} Os _{0.6}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2735, 0.2735, 0.4322, 90, 90, 120	close-packed structure	-	18.09	X	1634
Mo-Os	Mo _{0.65} Os _{0.35}	(Cr _{0.49} Fe _{0.51}), tP30, 136	<i>P4₂/mmn</i>	0.9631, 0.9631, 0.4957, 90, 90, 90	Frank-Kasper phase	-	13.97	X	2031
Mo-Os	Mo _{0.86} Os _{0.14}	W, c12, 229	<i>Im-3m</i>	0.3136, 0.3136, 0.3136, 90, 90, 90	b.c.c. family	-	11.75	X	1634
Mo-Os	Mo ₃ Os rt	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.49689, 0.49689, 0.49689, 90, 90, 90	Frank-Kasper phase	gray silver	12.94	X	3734
Mo-P	MoP	WC, hP2, 187	<i>P-6m2</i>	0.3223, 0.3223, 0.31915, 90, 90, 120	AlB ₂ family	black	7.34	X	27344
Mo-P	MoP ₂	MoP ₂ , oS12, 36	<i>Cmc2₁</i>	0.31442, 1.11801, 0.49816, 90, 90, 90	-	-	5.99	X	16188
Mo-P	MoP ₄ hp-ht	CrP ₄ , mS20, 15	<i>C12/c1</i>	0.5313, 1.1139, 0.582, 90, 110.64, 90	-	-	4.53	A	6266
Mo-P	Mo ₃ P	V ₃ Si, tI32, 121	<i>I-42m</i>	0.97925, 0.97925, 0.48246, 90, 90, 90	-	black	9.15	X	61414
Mo-P	Mo ₄ P ₃ ht	Mo ₄ P ₃ , oP56, 62	<i>Pnma</i>	1.24316, 0.31581, 2.04468, 90, 90, 90	-	-	7.89	X	21940
Mo-P	Mo ₄ P ₃ ht	Mo ₈ P ₃ , mP13, 6	<i>P1m1</i>	0.65369, 0.32088, 0.93992, 90, 109.592, 90	-	-	8.25	X	6371
Mo-Pb	Mo _{0.395} Pb _{0.605} tf	Cu, cF4, 225	<i>Fm-3m</i>	0.4947, 0.4947, 0.4947, 90, 90, 90	close-packed structure	-	8.96	X	64460
Mo-Pb	Mo _{0.92} Pb _{0.08} tf	W, c12, 229	<i>Im-3m</i>	0.3159, 0.3159, 0.3159, 90, 90, 90	b.c.c. family	-	11.05	X	64460
Mo-Pb	Mo ₃ Pb	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.5051, 0.5051, 0.5051, 90, 90, 90	Frank-Kasper phase	-	12.76	X	64460
Mo-Pd	MoPd ₂ rt	MoPt ₂ , oI6, 71	<i>Immm</i>	0.275, 0.389, 0.825, 90, 90, 90	close-packed structure	-	11.62	A	2366
Mo-Pd	Mo _{0.33} Pd _{0.67} rt	W, c12, 229	<i>Im-3m</i>	0.413, 0.413, 0.413, 90, 90, 90	b.c.c. family	-	4.85	X	57898
Mo-Pd	Mo _{0.5} Pd _{0.5} ht	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2777, 0.2777, 0.449, 90, 90, 120	close-packed structure	-	11.21	X	2177
Mo-Pd	Mo _{0.5} Pd _{0.5}	Cu, cF4, 225	<i>Fm-3m</i>	0.3939, 0.3939, 0.3939, 90, 90, 90	close-packed structure	-	11.00	X	62552
Mo-Pd	Mo _{0.95} Pd _{0.05}	W, c12, 229	<i>Im-3m</i>	0.3144, 0.3144, 0.3144, 90, 90, 90	b.c.c. family	-	10.31	X	951
Mo-Pt	MoPt rt	AuCd, oP4, 51	<i>Pnma</i>	0.448, 0.2735, 0.491, 90, 90, 90	close-packed structure	-	16.07	A	7335
Mo-Pt	MoPt ₂ rt	MoPt ₂ , oI6, 71	<i>Immm</i>	0.2766, 0.3938, 0.8297, 90, 90, 90	close-packed structure	-	17.86	X	772
Mo-Pt	Mo _{0.25} Pt _{0.75}	Cu, cF4, 225	<i>Fm-3m</i>	0.3912, 0.3912, 0.3912, 90, 90, 90	close-packed structure	-	18.90	X	52416
Mo-Pt	Mo _{0.25} Pt _{0.75}	In, tI2, 139	<i>I4/mmm</i>	0.27521, 0.27521, 0.3936, 90, 90, 90	close-packed structure	-	18.97	X	2173
Mo-Pt	Mo _{0.6} Pt _{0.4} ht2	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2795, 0.2795, 0.4488, 90, 90, 120	close-packed structure	-	14.83	X	7335
Mo-Pt	Mo _{0.98} Pt _{0.02}	W, c12, 229	<i>Im-3m</i>	0.3144, 0.3144, 0.3144, 90, 90, 90	b.c.c. family	-	10.46	X	52416
Mo-Pt	Mo _{2.4} Pt _{1.6} ht1	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.556, 0.556, 0.449, 90, 90, 120	close-packed structure	-	14.99	A	52416
Mo-Pt	Mo _{3.2} Pt _{0.8} ht	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.49878, 0.49878, 0.49878, 90, 90, 90	Frank-Kasper phase	-	12.39	X	3734
Mo-Re	Mo _{0.08} Re _{0.92}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.27572, 0.27572, 0.4456, 90, 90, 120	close-packed structure	-	20.26	X	4725
Mo-Re	Mo _{0.249} Re _{0.751} rt	Mn, cI58, 217	<i>I-43m</i>	0.959, 0.959, 0.959, 90, 90, 90	-	-	17.88	A	52882
Mo-Re	Mo _{0.45} Re _{0.55} ht	(Cr _{0.49} Fe _{0.51}), tP30, 136	<i>P4₂/mmn</i>	0.9601, 0.9601, 0.4985, 90, 90, 90	Frank-Kasper phase	-	15.78	X	1782
Mo-Re	Mo _{0.85} Re _{0.15}	Cu, cF4, 225	<i>Fm-3m</i>	0.37, 0.37, 0.37, 90, 90, 90	close-packed structure	-	14.36	X	514
Mo-Re	Mo _{0.92} Re _{0.08}	W, c12, 229	<i>Im-3m</i>	0.3134, 0.3134, 0.3134, 90, 90, 90	b.c.c. family	-	11.13	X	5837
Mo-Re	Mo _{2.8} Re _{1.2} m	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.4982, 0.4982, 0.4982, 90, 90, 90	Frank-Kasper phase	-	13.22	X	10749
Mo-Rh	MoRh rt	AuCd, oP4, 51	<i>Pnma</i>	0.4413, 0.2745, 0.4785, 90, 90, 90	close-packed structure	-	11.39	A	3056
Mo-Rh	MoRh ₃ rt	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.5456, 0.5456, 0.435, 90, 90, 120	close-packed structure	-	11.98	A	3056
Mo-Rh	Mo _{0.1} Rh _{0.9}	Cu, cF4, 225	<i>Fm-3m</i>	0.38141, 0.38141, 0.38141, 90, 90, 90	close-packed structure	-	12.24	X	24637
Mo-Rh	Mo _{0.5} Rh _{0.5} ht	Mg, hP2, 194	<i>P6₃/mmc</i>	0.27554, 0.27554, 0.44238, 90, 90, 120	close-packed structure	-	11.35	X	24637
Mo-Rh	Mo _{0.65} Rh _{0.35}	W, c12, 229	<i>Im-3m</i>	0.31449, 0.31449, 0.31449, 90, 90, 90	b.c.c. family	-	10.50	X	24637
Mo-Ru	Mo _{0.5} Ru _{0.5}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.276, 0.276, 0.4462, 90, 90, 120	close-packed structure	-	11.11	X	21112
Mo-Ru	Mo _{0.7} Ru _{0.3} ht	(Cr _{0.49} Fe _{0.51}), tP30, 136	<i>P4₂/mmn</i>	0.95569, 0.95569, 0.49418, 90, 90, 90	Frank-Kasper phase	-	10.76	A	20403
Mo-Ru	Mo _{0.7} Ru _{0.3}	W, c12, 229	<i>Im-3m</i>	0.3128, 0.3128, 0.3128, 90, 90, 90	b.c.c. family	-	10.58	X	21112
Mo-S	MoS ₂ 1T	MoS ₂ , hP12, 143	<i>P3</i>	0.65, 0.65, 0.614, 90, 90, 120	-	-	4.73	X	34401
Mo-S	MoS ₂ 2H	MoS ₂ , hP6, 194	<i>P6₃/mmc</i>	0.31504, 0.31504, 1.2016, 90, 90, 120	molybdenite 2H	gray dark	5.15	X	64110
Mo-S	MoS ₂ 3R	MoS ₂ , hR9, 160	<i>R3m</i>	0.3163, 0.3163, 1.837, 90, 90, 120	molybdenite 3R	-	5.01	X	15769
Mo-S	MoS ₂ hp	NbS ₂ , hP6, 194	<i>P6₃/mmc</i>	0.3048, 0.3048, 1.041, 90, 90, 120	-	-	6.35	X	64110
Mo-S	Mo _{0.98} S _{0.02}	W, c12, 229	<i>Im-3m</i>	0.31471, 0.31471, 0.31471, 90, 90, 90	b.c.c. family	-	10.09	X	4208
Mo-S	Mo ₁₄ S ₃	*O*, 176	-	0.337, 1.848, 1.979, 90, 90, 90	-	-	-	N	20195
Mo-S	Mo ₁₅ S ₁₉	Mo ₁₅ Se ₁₉ , hP68, 176	<i>P6₃/m</i>	0.91838, 0.91838, 1.90483, 90, 90, 120	Chevrete phase	black	4.89	X	44230
Mo-S	Mo ₂ S ₃ ht	Mo ₂ S ₃ , mP10, 11	<i>P12₁/m1</i>	0.6087, 0.3214, 0.8627, 90, 102.43, 90	-	-	5.80	X	19352
Mo-S	Mo ₂ S ₃ lt1	Mo ₂ S ₃ , mP10, 11	<i>P12₁/m1</i>	0.6079, 0.32, 0.8616, 90, 102.33, 90	-	-	5.84	X	16274
Mo-S	Mo ₂ S ₃ rt	Mo ₂ S ₃ , mP10, 11	<i>P12₁/m1</i>	0.6092, 0.3208, 0.86335, 90, 102.43, 90	-	-	5.81	X	5307
Mo-S	Mo ₂₁ S ₈	Nb ₂₁ S ₈ , tI58, 87	<i>I4/m</i>	1.676, 1.676, 0.335, 90, 90, 90	-	-	8.02	A	20195
Mo-S	Mo ₃ S ₄ m	Mo ₃ S ₄ , hP98, 176	<i>P6₃/m</i>	0.92473, 0.92473, 1.75943, 90, 90, 120	Chevrete phase	black	5.30	X	47104

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Mo-S	Mo ₃ S ₄ rhom	Mo ₃ Se ₄ ,hR42,148	<i>R</i> -3	0.9202,0.9202,1.08769,90,90,120	Chevrel phase	-	5.20	X	8289
Mo-S	Mo ₃ S ₄ tricl	Mo ₃ Se ₄ ,aP14,2	<i>P</i> -1	0.6364,0.6608,0.6809,103.899,117.753,103.958	-	-	6.16	X	61377
Mo-S	Mo _{3.58} S ₄ ht	Mo _{3.58} Se ₄ ,hR60,148	<i>R</i> -3	0.90788,0.90788,1.12709,90,90,120	-	-	5.84	X	35148
Mo-S	Mo ₉ S ₁₁	Mo ₉ Se ₁₁ ,hR120,148	<i>R</i> -3	0.91996,0.91996,3.51028,90,90,120	-	-	4.71	X	17304
Mo-Sb	Mo ₃ Sb ₇ lt	Mo ₃ Sb ₇ ,tI40,139	<i>I4/mmm</i>	0.9555,0.9555,0.9536,90,90,90	-	-	8.70	X	53745
Mo-Sb	Mo ₃ Sb ₇ rt	Ru ₃ Sn ₇ ,cI40,229	<i>Im</i> -3m	0.95715,0.95715,0.95715,90,90,90	-	-	8.64	X	53238
Mo-Se	MoSe ₂ 2H	MoS ₂ ,hP6,194	<i>P6₃/mmc</i>	0.3289,0.3289,1.2927,90,90,120	-	gray	6.96	X	19537
Mo-Se	MoSe ₂ hp 3R	MoS ₂ ,hR9,160	<i>R</i> 3m	0.3292,0.3292,1.9392,90,90,120	-	-	6.95	X	3155
Mo-Se	Mo _{0.98} Se _{0.02}	W,cI2,229	<i>Im</i> -3m	0.31471,0.31471,0.31471,90,90,90	b.c.c. family	-	10.19	X	4208
Mo-Se	Mo _{1.5} Se _{1.9} hex	Mo _{1.5} Se _{1.9} ,hP68,176	<i>P6₃/m</i>	0.9450,0.9450,1.9600,90,90,120	Chevrel phase	black	6.44	X	23590
Mo-Se	Mo _{1.5} Se _{1.9} rhom	Mo _{1.5} Se _{1.9} ,hR204,167	<i>R</i> -3c	0.94993,0.94993,5.88222,90,90,120	Chevrel phase	-	6.37	X	24266
Mo-Se	Mo ₃ Se tf	Cr ₃ Si,cP8,223	<i>Pm</i> -3n	0.5092,0.5092,0.5092,90,90,90	Frank-Kasper phase	-	9.23	X	33187
Mo-Se	Mo ₃ Se ₄	Mo ₃ Se ₄ ,hR42,148	<i>R</i> -3	0.9545,0.9545,1.1210,90,90,120	Chevrel phase	black	6.80	X	7418
Mo-Se	Mo ₉ Se ₁₁ m1	Mo ₉ Se ₁₁ ,oS80,63	<i>Cmcm</i>	1.1963,1.3065,1.1046,90,90,90	Chevrel phase	-	6.66	X	20278
Mo-Se	Mo ₉ Se ₁₁ m2	Mo ₉ Se ₁₁ ,hP40,176	<i>P6₃/m</i>	0.94204,0.94204,1.21226,90,90,120	-	black	6.17	X	43759
Mo-Si	MoSi ₂ ht	CrSi ₂ ,hP9,180	<i>P6₂/22</i>	0.46016,0.46016,0.657,90,90,120	-	-	6.29	X	57144
Mo-Si	MoSi ₂ rt	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.32112,0.32112,0.78249,90,90,90	b.c.c. family	-	6.26	X	27472
Mo-Si	Mo ₃ Si	Cr ₃ Si,cP8,223	<i>Pm</i> -3n	0.4897,0.4897,0.4897,90,90,90	Frank-Kasper phase	-	8.93	X	15614
Mo-Si	Mo ₅ Si ₃ rt	W ₅ Si ₃ ,tI32,140	<i>I4/mcm</i>	0.965,0.965,0.4911,90,90,90	-	-	8.19	X	15614
Mo-Si	Mo ₅ Si ₃ stab	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.7286,0.7286,0.5002,90,90,120	-	-	8.14	A	617
Mo-Sn	MoSn ₂	Mg ₂ Ni,hP18,180	<i>P6₂/22</i>	0.5488,0.5488,1.4171,90,90,120	-	black	8.99	X	29573
Mo-Sn	Mo _{0.75} Sn _{0.25} ht-hp2	W,cI2,229	<i>Im</i> -3m	0.3165,0.3165,0.3165,90,90,90	b.c.c. family	-	10.65	X	2213
Mo-Sn	Mo ₃ Sn ht-hp1	Cr ₃ Si,cP8,223	<i>Pm</i> -3n	0.5094,0.5094,0.5094,90,90,90	Frank-Kasper phase	-	10.21	X	2213
Mo-Ta	Ta _{0.04} Mo _{0.96}	W,cI2,229	<i>Im</i> -3m	0.3146,0.3146,0.3146,90,90,90	b.c.c. family	-	10.60	X	5837
Mo-Tc	Mo _{0.25} Tc _{0.75}	Mg,hP2,194	<i>P6₃/mmc</i>	0.265,0.265,0.4446,90,90,120	close-packed structure	-	11.97	X	9105
Mo-Tc	Mo _{0.33} Tc _{0.67}	(Cr _{0.4} Fe _{0.51}),tP30,136	<i>P4₂/mnm</i>	0.9515,0.9515,0.495,90,90,90	Frank-Kasper phase	-	10.82	A	1811
Mo-Tc	Mo _{0.5} Tc _{0.5}	W,cI2,229	<i>Im</i> -3m	0.3107,0.3107,0.3107,90,90,90	b.c.c. family	-	10.74	X	12490
Mo-Tc	Mo _{1.6} Tc _{0.4} rt	Cr ₃ Si,cP8,223	<i>Pm</i> -3n	0.4935,0.4935,0.4935,90,90,90	Frank-Kasper phase	-	10.74	X	6816
Mo-Te	MoTe ₂ ht	MoTe ₂ ,mP12,11	<i>P12₁/m1</i>	0.633,0.3469,1.386,90,93.92,90	-	-	7.68	X	2817
Mo-Te	MoTe ₂ rt	MoS ₂ ,hP6,194	<i>P6₃/mmc</i>	0.35182,0.35182,1.39736,90,90,120	-	black	7.79	X	1370
Mo-Te	Mo _{0.98} Te _{0.02}	W,cI2,229	<i>Im</i> -3m	0.31472,0.31472,0.31472,90,90,90	b.c.c. family	-	10.29	X	4208
Mo-Te	Mo ₃ Te ₄	Mo ₃ Se ₄ ,hR42,148	<i>R</i> -3	1.0179,1.0179,1.1674,90,90,120	Chevrel phase	black	7.59	X	34244
Mo-Ti	Ti _{0.75} Mo _{0.25} ht	W,cI2,229	<i>Im</i> -3m	0.3225,0.3225,0.3225,90,90,90	b.c.c. family	-	5.93	X	48213
Mo-Ti	Ti _{0.99} Mo _{0.01} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.29405,0.29405,0.4651,90,90,120	close-packed structure	-	4.61	X	39290
Mo-U	U _{0.65} Mo _{0.35} ht	W,cI2,229	<i>Im</i> -3m	0.3347,0.3347,0.3347,90,90,90	b.c.c. family	-	16.68	X	60235
Mo-U	U _{0.88} Mo _{0.12}	Pa,tI2,139	<i>I4/mmm</i>	0.34451,0.34451,0.33966,90,90,90	b.c.c. family	-	18.21	X	59426
Mo-U	U ₂ Mo rt	MoSi ₂ ,tI6,139	<i>I4/mmm</i>	0.3427,0.3427,0.9834,90,90,90	b.c.c. family	-	16.45	X	808
Mo-U	U _{3.5} Mo _{0.5} m	U ₃ (U _{0.5} Mo _{0.5}),tP4,123	<i>P4/mmm</i>	0.49019,0.49019,0.33916,90,90,90	b.c.c. family	-	17.95	X	1440
Mo-V	V _{0.5} Mo _{0.5}	W,cI2,229	<i>Im</i> -3m	0.308,0.308,0.308,90,90,90	b.c.c. family	-	8.35	X	20498
Mo-W	W _{0.5} Mo _{0.5}	W,cI2,229	<i>Im</i> -3m	0.3156,0.3156,0.3156,90,90,90	b.c.c. family	gray silver	14.78	X	17376
Mo-Zn	Zn ₇ Mo	CuPt ₇ ,cF32,225	<i>Fm</i> -3m	0.7732,0.7732,0.7732,90,90,90	close-packed structure	-	7.96	X	4807
Mo-Zn	Zn _{93.44} Mo _{0.57}	Zn ₉₃ (Zn _{0.43} Mo _{0.57}),Mo ₄ cF420,216	<i>F</i> -43m	1.8464,1.8464,1.8464,90,90,90	-	gray silver	6.91	X	36414
Mo-Zr	ZrMo ₂ rt	MgCu ₂ ,cF24,227	<i>Fd</i> -3m	0.7598,0.7598,0.7598,90,90,90	Friauf-Laves phase	-	8.57	X	19233
Mo-Zr	ZrMo ₃	Cr ₃ Si,cP8,223	<i>Pm</i> -3n	0.4942,0.4942,0.4942,90,90,90	Frank-Kasper phase	-	10.43	X	212
Mo-Zr	Zr _{0.15} Mo _{0.85}	W,cI2,229	<i>Im</i> -3m	0.3185,0.3185,0.3185,90,90,90	b.c.c. family	-	9.79	X	4480
Mo-Zr	Zr _{0.47} Mo _{0.53} ht	W,cI2,229	<i>Im</i> -3m	0.333,0.333,0.333,90,90,90	b.c.c. family	-	8.43	X	5210
Mo-Zr	Zr _{0.87} Mo _{0.13} ht	W,cI2,229	<i>Im</i> -3m	0.3531,0.3531,0.3531,90,90,90	b.c.c. family	-	6.93	X	8250
N-Na	Na[N ₃] hp	K[N ₃],tI16,140	<i>I4/mcm</i>	0.55965,0.55965,0.60136,90,90,90	-	-	2.29	A	64832
N-Na	Na[N ₃] lt	Na[N ₃],mS8,12	<i>C12/m1</i>	0.62233,0.36510,0.53359,90,108.444,90	-	-	1.88	X	16727
N-Na	Na[N ₃] rt	Na[N ₃],hR12,166	<i>R</i> -3m	0.3646,0.3646,1.5223,90,90,120	-	-	1.85	X	10185
N-Na	Na ₃ N hp1	Li ₃ N,hP4,191	<i>P6/mmm</i>	0.44414,0.44414,0.46133,90,90,120	-	-	1.75	X	54161
N-Na	Na ₃ N hp2	Fe ₃ C-b,pP16,62	<i>Pnma</i>	0.709,0.7518,0.4794,90,90,90	-	-	2.16	X	54161
N-Na	Na ₃ N hp3	Cu ₃ P,hP24,185	<i>P6₃/cm</i>	0.70356,0.70356,0.71661,90,90,120	-	-	2.69	X	54161
N-Na	Na ₃ N hp4	BiF ₃ ,cF16,225	<i>Fm</i> -3m	0.54322,0.54322,0.54322,90,90,90	fluorite family	-	3.44	X	54161
N-Na	Na ₃ N rt	ReO ₃ ,cP4,221	<i>Pm</i> -3m	0.4725,0.4725,0.4725,90,90,90	-	blue	1.31	X	49385
N-Nb	NbN cub	NbO,cP6,221	<i>Pm</i> -3m	0.4378,0.4378,0.4378,90,90,90	-	-	6.35	X	30935
N-Nb	NbN rt	TiP,hP8,194	<i>P6₃/mmc</i>	0.2952,0.2952,1.125,90,90,120	-	gray	8.36	X	569
N-Nb	NbN _{0.0125}	W,cI2,229	<i>Im</i> -3m	0.3305,0.3305,0.3305,90,90,90	b.c.c. family	-	8.56	F	3087
N-Nb	NbN _{0.5} ht1	NiAs,hP4,194	<i>P6₃/mmc</i>	0.30563,0.30563,0.49549,90,90,120	AlB ₂ family	gray dark	8.28	X	22580
N-Nb	NbN _{0.80}	NbN _{0.75} ,tI16,139	<i>I4/mmm</i>	0.4377,0.4377,0.8719,90,90,90	rocksalt family	gray	8.28	X	13764
N-Nb	NbN _{0.9} hex	WC,hP2,187	<i>P</i> -6m2	0.2958,0.2958,0.2779,90,90,120	AlB ₂ family	-	8.32	X	569
N-Nb	NbN _{0.9} ht2	NaCl,cF8,225	<i>Fm</i> -3m	0.4377,0.4377,0.4377,90,90,90	rocksalt family	gray yellowish	8.36	X	11029
N-Nb	Nb _{0.84} N	TiS,hR18,166	<i>R</i> -3m	0.2985,0.2985,2.3843,90,90,120	-	gray	7.48	X	58406
N-Nb	Nb _{1.54} N _{0.71}	Fe ₂ N,hP9,162	<i>P</i> -31m	0.5267,0.5267,0.4988,90,90,120	-	-	6.36	X	9359
N-Nb	Nb ₃ N ₅ tf	Ti ₄ O ₈ ,tI18,87	<i>I4/m</i>	0.6853,0.6853,0.427,90,90,90	-	-	7.31	X	36299
N-Nb	Nb ₃ N ₆ tf	Ta ₃ N ₆ ,hP22,193	<i>P6₃/mcm</i>	0.5193,0.5193,1.038,90,90,120	-	-	7.52	X	5868
N-Nd	NdN	NaCl,cF8,225	<i>Fm</i> -3m	0.5132,0.5132,0.5132,90,90,90	rocksalt family	gray	7.78	X	12338
N-Nd	Nd _{1.5} N ₃	La ₂ O ₃ ,hP5,164	<i>P</i> -3m1	0.379,0.379,0.599,90,90,120	-	-	5.76	A	6741
N-Ne	Ne ₇ [N ₂] ₆ m	Ne ₇ [N ₂] ₆ ,hR114,166	<i>R</i> -3m	1.43996,1.43996,0.8094,90,90,120	-	-	2.12	X	64585
N-Ni	Ni ₂ N	Ni ₂ N,tP3,123	<i>P4/mmm</i>	0.2815,0.2815,0.3665,90,90,90	-	-	7.51	X	64475
N-Ni	Ni ₃ N	Fe ₃ N,hP8,182	<i>P6₃/22</i>	0.4594,0.4594,0.4325,90,90,120	-	-	7.99	X	45848
N-Ni	Ni ₄ N rt	Fe ₄ N,cP5,221	<i>Pm</i> -3m	0.374,0.374,0.374,90,90,90	-	-	7.90	X	7488
N-Ni	Ni ₄ N tf	*tP10,*	-	0.372,0.372,0.728,90,90,90	-	-	-	N	3399
N-Np	NpN	NaCl,cF8,225	<i>Fm</i> -3m	0.48999,0.48999,0.48999,90,90,90	rocksalt family	-	14.18	X	59346
N-Np	NpN ₂	CaF ₂ ,cF12,225	<i>Fm</i> -3m	0.53236,0.53236,0.53236,90,90,90	fluorite family	-	11.67	X	59346
N-Np	Np ₂ N ₃	(Mn _{0.3} Fe _{0.7}) ₂ O ₃ ,cI80,206	<i>Ia</i> -3	1.06513,1.06513,1.06513,90,90,90	-	-	11.35	X	59346
N-O	N _{0.5} O _{0.5}	(N _{0.5} O _{0.5}),mP8,14	<i>P12₁/c1</i>	0.581,0.396,0.668,90,117.2,90	-	-	1.46	X	475
N-O	N ₂ O ₃ lt1	N ₂ O ₃ ,tI192,88	<i>I4₁/a</i>	1.62557,1.62557,0.88049,90,90,90	-	blue	1.74	X	29929

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
N-O	N ₂ O ₃ lt2	N ₂ O ₃ ,oP20,19	$P2_12_12_1$	0.50686,0.64796,0.86326,90,90,90	-	blue indigo	1.78	X	29929
N-O	N ₂ O ₄ m	N ₂ O ₄ ,mP12,14	$P12_1/c1$	0.5917,0.4758,0.6533,90,117.92,90	-	white	1.88	X	25477
N-O	N ₂ O ₄	N ₂ O ₄ -b,cI36,204	$Im-3$	0.77529,0.77529,0.77529,90,90,90	-	colorless	1.97	X	52833
N-O	[NO ₂][NO ₃]	[NO ₂][NO ₃],hP14,194	$P6_3/mmc$	0.54019,0.54019,0.65268,90,90,120	-	colorless	2.17	X	25714
N-O	[N ₂ O] hp	*,oS12,64	$Cmce$	0.4954,0.4497,0.6201,90,90,90	-	-	-	N	24789
N-O	[N ₂ O] rt	[OCO],cP12,205	$Pa-3$	0.567,0.567,0.567,90,90,90	-	-	1.60	X	1413
N-O	[N ₂] _{0.05} [O ₂] _{0.95} hp1	[O ₂],hR6,166	$R-3m$	0.2758,0.2758,1.02,90,90,120	-	-	2.36	A	44665
N-O	[N ₂] _{0.05} [O ₂] _{0.95} hp2	[O ₂],oF8,69	$Fmmm$	0.2958,0.4248,0.6704,90,90,90	-	-	2.51	A	44665
N-O	[N ₂] _{0.05} [O ₂] _{0.95} hp3	[O ₂],mS16,12	$C12/m1$	0.8096,0.5724,0.3776,90,117.26,90	-	-	2.72	A	44665
N-O	[N ₂] _{0.48} [O ₂] _{0.52} hp	*,hP28,*	-	0.563,0.563,1.2358,90,90,120	-	-	2.06	N	44665
N-O	[N ₂] _{0.90} [O ₂] _{0.10} hp1	Mg,hP2,194	$P6_3/mmc$	0.3537,0.3537,0.5844,90,90,120	close-packed structure	-	1.49	X	44665
N-O	[N ₂] _{0.90} [O ₂] _{0.10} hp2	[F ₂],cP8,223	$Pm-3n$	0.601,0.601,0.601,90,90,90	-	-	1.74	X	44665
N-O	[N ₂] _{0.90} [O ₂] _{0.10} hp3	*,tP32,138	$P4_2/mcm$	0.8075,0.8075,0.5694,90,90,90	-	-	2.03	N	44665
N-P	PN[N ₃] ₂	PN[N ₃] ₂ ,aP48,2	$P-1$	0.71953,0.73718,1.2994,87.41,78.95,89.59	-	colorless	1.90	X	46839
N-P	P ₃ N ₅ hp1	P ₃ N ₅ ,oI16,44	$Imm2$	0.26131,1.28721,0.44003,90,90,90	-	colorless	3.66	X	41545
N-P	P ₃ N ₅ mon1	P ₃ N ₅ ,mS32,15	$C12/c1$	0.81208,0.58343,0.91601,90,115.809,90	-	beige	2.77	X	35440
N-P	P ₃ N ₅ mon2	*,mP144,*	-	0.7936,0.5886,0.9263,90,113.36,90	-	-	-	N	19179
N-Pb	Pb[N ₃] ₂ lt	*,mS56,*	-	0.512,0.888,1.831,90,90,90	-	-	-	N	737
N-Pb	Pb[N ₃] ₂ rt	Pb[N ₃] ₂ ,oP84,62	$Pnma$	0.663,1.625,1.131,90,90,90	-	-	4.76	X	10321
N-Pd	Pd ₂ N	CaCl ₂ ,oP6,58	$Pnnm$	0.44869,0.4863,0.2808,90,90,90	-	-	12.29	X	42629
N-Pr	PrN hp	BaO,tP4,129	$P4/nmm$	0.4052,0.4052,0.3001,90,90,90	b.c.c. family	-	10.44	X	55790
N-Pr	PrN	NaCl,cF8,225	$Fm-3m$	0.4781,0.4781,0.4781,90,90,90	rocksalt family	black	9.42	X	55790
N-Pr	Pr _{1.5} N ₃	La ₂ O ₃ ,hP5,164	$P-3m1$	0.3848,0.3848,0.6001,90,90,120	-	-	5.47	A	6741
N-Pu	PuN	NaCl,cF8,225	$Fm-3m$	0.4918,0.4918,0.4918,90,90,90	rocksalt family	-	14.41	X	17367
N-Rb	Rb[N ₃] ht	CSiCl ₂ ,pP2,221	$Pm-3m$	0.435,0.435,0.435,90,90,90	b.c.c. family	-	2.57	X	2804
N-Rb	Rb[N ₃] rt	K[N ₃],tI16,140	$I4/mcm$	0.63098,0.63098,0.75188,90,90,90	-	-	2.83	X	6914
N-Re	ReN _{0.43}	*,cF*,*	-	0.392,0.392,0.392,90,90,90	-	-	-	N	387
N-Re	ReN ₂	MoS ₂ ,hP6,194	$P6_3/mmc$	0.2806,0.2806,1.0747,90,90,120	-	-	9.71	X	58678
N-Re	Re ₂ N	MoS ₂ ,hP6,194	$P6_3/mmc$	0.27692,0.27692,0.9644,90,90,120	-	-	20.04	X	56229
N-Re	Re ₃ N	Re ₃ N,hP4,187	$P-6m2$	0.27776,0.27776,0.70972,90,90,120	-	-	20.05	X	56229
N-S	SN cage ht	SN ₄ ,oP32,60	$Pbcn$	0.8839,0.8755,0.72581,90,90,90	-	-	2.18	X	40061
N-S	SN cage rt	SN ₄ ,mP32,14	$P12_1/c1$	0.8629,0.7084,1.1890,90,132.73,90	-	orange	2.29	X	11365
N-S	SN poly	SN ₄ ,mP8,14	$P12_1/c1$	0.4153,0.4439,0.7637,90,109.7,90	-	golden	2.31	X	9735
N-S	SN ring	SN ₄ ,mP8,14	$P12_1/c1$	0.4518,0.3845,0.8495,90,106.43,90	-	colorless	2.16	X	33152
N-S	S ₁₁ N ₂	*,mP52,14	$P12_1/c1$	0.851,1.418,1.092,90,115.90	-	-	-	N	9596
N-S	S ₁₆ N ₂	*,oP144,61	$Pbca$	1.0593,1.5373,2.1558,90,90,90	-	-	-	N	9596
N-S	S ₁₇ N ₂	*,mS76,15	$C12/c1$	1.4542,1.6029,0.8303,90,110.90	-	-	-	N	9596
N-S	S ₂ N	S ₂ N,tP24,102	$P4_2nm$	1.1146,1.1146,0.3773,90,90,90	-	red dark	2.21	X	15929
N-S	S ₅ N ₆	S ₅ N ₆ ,mS44,15	$C12/c1$	0.8787,1.1190,0.7427,90,106.46,90	-	red	2.32	X	12124
N-Sb	Sb[N ₃] ₃ rhom	Sb[N ₃] ₃ ,hR60,148	$R-3$	0.72047,0.72047,1.94385,90,90,120	-	colorless	2.83	X	43576
N-Sb	Sb[N ₃] ₃ tricl	Sb[N ₃] ₃ ,aP20,2	$P-1$	0.66694,0.69045,0.70314,83.651,65.85,83.595	-	colorless	2.81	X	56834
N-Sc	ScN	NaCl,cF8,225	$Fm-3m$	0.4498,0.4498,0.4498,90,90,90	rocksalt family	-	4.30	X	63152
N-Se	SeN mon1	SeN ₄ ,mS32,15	$C12/c1$	0.965,0.973,0.647,90,104.9,90	-	-	4.21	X	2855
N-Se	SeN mon2	SN ₄ ,mP32,14	$P12_1/c1$	0.8818,0.7387,1.21975,90,132.601,90	-	brown red	4.22	X	29487
N-Se	SeN poly	*,aP16,*	-	0.647,0.685,0.685,90,5.100,4.100,4	-	red	-	N	1299
N-Si	Si ₃ N ₄ hex	Si ₃ N ₄ ,hP14,173	$P6_3$	0.76044,0.76044,0.29063,90,90,120	nierite	colorless	3.20	X	43518
N-Si	Si ₃ N ₄ hp	Fe ₃ O ₄ ,cF56,227	$Fd-3m$	0.77381,0.77381,0.77381,90,90,90	spinel family	-	4.02	X	43634
N-Si	Si ₃ N ₄ stab	Si ₃ N ₄ ,hP28,159	$P31c$	0.77545,0.77545,0.56214,90,90,120	-	colorless	3.18	X	49825
N-Sm	SmN	NaCl,cF8,225	$Fm-3m$	0.504,0.504,0.504,90,90,90	rocksalt family	black gray	8.53	X	13376
N-Sn	Sn ₃ N ₄	Fe ₃ O ₄ ,cF56,227	$Fd-3m$	0.9037,0.9037,0.9037,90,90,90	spinel family	black brown	7.42	X	36905
N-Sr	Sr[N ₂]	CaC ₂ ,tI6,139	$I4/mmm$	0.38054,0.38054,0.62961,90,90,90	-	-	4.21	X	59171
N-Sr	Sr[N ₃] ₂	Sr[N ₃] ₂ ,oF56,70	$Fddd$	0.61202,1.1546,1.1826,90,90,90	-	colorless	2.73	X	43291
N-Sr	Sr ₂ N	CdCl ₂ ,hR9,166	$R-3m$	0.38625,0.38625,2.0694,90,90,120	-	black	3.53	X	41483
N-Sr	Sr ₄ N ₂ [N ₂]	Sr ₄ N ₂ [N ₂],mS16,12	$C12/m1$	1.3472,0.38121,0.67284,90,94.72,90	-	black gray	3.92	X	38770
N-Sr	Sr ₄ N ₃	Sr ₄ N ₃ ,mS16,12	$C12/m1$	0.6707,0.3828,1.37625,90,96.519,90	-	gray dark	3.71	X	40254
N-Ta	TaN rt	TaN,hP6,189	$P-62m$	0.517,0.517,0.289,90,90,120	-	black	14.52	X	14998
N-Ta	TaN _{0.07}	W,cI2,229	$Im-3m$	0.3328,0.3328,0.3328,90,90,90	b.c.c. family	gray	16.39	F	7556
N-Ta	TaN _{0.5}	NiAs,hP4,194	$P6_3/mmc$	0.3054,0.3054,0.4996,90,90,120	AlB ₂ family	gray	15.47	X	49719
N-Ta	TaN _{0.83} hp	WC,hP2,187	$P-6m2$	0.29438,0.29438,0.2893,90,90,120	AlB ₂ family	-	14.73	X	59991
N-Ta	Ta _{0.83} N ht	NaCl,cF8,225	$Fm-3m$	0.433,0.433,0.433,90,90,90	rocksalt family	brown dark	13.43	X	9104
N-Ta	Ta ₂ N tf	Ni ₂ H,hP3,156	$P3m1$	0.305,0.305,0.493,90,90,120	close-packed structure	-	15.72	A	25020
N-Ta	Ta ₂ N ₃	Th ₂ S ₃ ,oP20,62	$Pnma$	0.8183,0.29823,0.81911,90,90,90	-	-	13.42	X	52754
N-Ta	Ta ₃ N ₅ ht-hp1	YbSb ₃ ,oP32,62	$Pnma$	0.8802,0.6044,0.5492,90,90,90	-	-	13.93	X	63007
N-Ta	Ta ₃ N ₅ ht-hp2	U ₃ Te ₅ ,oP32,62	$Pnma$	0.9944,0.2691,0.9015,90,90,90	-	-	16.88	X	63007
N-Ta	Ta ₄ N ₅ rt	Ta ₄ N ₅ ,oS32,63	$Cmcm$	0.38862,1.02118,1.02624,90,90,90	-	red	10.00	X	24281
N-Ta	Ta ₄ N ₅	Ti ₄ O ₃ ,tI18,87	$I4/m$	0.6842,0.6842,0.4266,90,90,90	-	brown dark	13.20	A	28925
N-Ta	Ta ₅ N ₆	Ta ₅ N ₆ ,hP22,193	$P6_3/mcm$	0.51818,0.51818,1.03611,90,90,120	-	gray dark	13.63	X	32249
N-Ta	Ta ₉ N ₂ lt	*,c*,*	-	1.01,1.01,1.01,90,90,90	-	-	-	N	7556
N-Tb	TbN	NaCl,cF8,225	$Fm-3m$	0.4927,0.4927,0.4927,90,90,90	rocksalt family	-	9.60	X	41406
N-Tb	Tb ₂ N ₃	(Mn ₉ Fe ₉) ₂ O ₃ ,cI80,206	$Ia-3$	1.066,1.066,1.066,90,90,90	-	-	7.89	A	6741
N-Tc	TcN	NaCl,cF8,225	$Fm-3m$	0.3945,0.3945,0.3945,90,90,90	rocksalt family	-	12.12	X	20445
N-Th	ThN	NaCl,cF8,225	$Fm-3m$	0.51666,0.51666,0.51666,90,90,90	rocksalt family	-	11.85	X	17822
N-Th	Th ₂ N ₃	La ₂ O ₃ ,hP5,164	$P-3m1$	0.3883,0.3883,0.6187,90,90,120	-	-	10.40	X	298
N-Th	Th ₃ N ₄	Th ₃ N ₄ ,hR21,166	$R-3m$	0.3875,0.3875,2.739,90,90,120	-	-	10.52	X	5567
N-Ti	TiN _{0.26} m	Cr _{0.88} S,hP4,164	$P-3m1$	0.2956,0.2956,0.4765,90,90,120	-	-	4.75	X	23264
N-Ti	TiN _{0.28} rt	Mg,hP2,194	$P6_3/mmc$	0.2973,0.2973,0.4788,90,90,120	close-packed structure	-	4.70	F	16223
N-Ti	TiN _{0.43} ht	Ti ₅ N ₈ ,hR18,166	$R-3m$	0.29809,0.29809,2.16642,90,90,120	-	-	4.83	X	18990
N-Ti	TiN _{0.5} rt	TiN _{0.5} ,tI16,141	$I4_1/amd$	0.415,0.415,0.8801,90,90,90	rocksalt family	-	4.81	X	58168

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
N-Ti	TiN _{0.58} ht	Sc _{0.67} Te,hR24,166	<i>R-3m</i>	0.29795,0.29795,2.89649,90,90,120	-	-	5.01	X	18937
N-Ti	TiN _{0.9} ht	NaCl,cF8,225	<i>Fm-3m</i>	0.4239,0.4239,0.4239,90,90,90	osbornite	golden	5.28	X	11029
N-Ti	Ti ₂ N _{0.80} rt	TiO ₂ ,tP6,136	<i>P4₂/mm</i>	0.4945,0.4945,0.3034,90,90,90	-	-	4.79	X	58168
N-Ti	TiN	ZnO,hP4,186	<i>P6₃mc</i>	0.368,0.368,0.601,90,90,120	adamantane structure	-	10.29	A	7937
N-Ti	Ti[N ₃] lt	* _o *24,*	-	0.73659,0.87178,0.87655,90,90,90	-	-	-	N	7359
N-Ti	Ti[N ₃] rt	K[N ₃],tI16,140	<i>I4/mcm</i>	0.61896,0.61896,0.73271,90,90,90	-	yellow pale	5.83	X	43291
N-Tm	TmN	NaCl,cF8,225	<i>Fm-3m</i>	0.4802,0.4802,0.4802,90,90,90	rocksalt family	-	10.97	X	17868
N-Tm	Tm ₂ N ₃	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	1.045,1.045,1.045,90,90,90	-	-	8.84	A	6741
N-U	UN hp	NiO,hR6,166	<i>R-3m</i>	0.31701,0.31701,0.86367,90,90,120	-	-	16.70	X	17823
N-U	UN	NaCl,cF8,225	<i>Fm-3m</i>	0.48887,0.48887,0.48887,90,90,90	rocksalt family	gray dark	14.33	X	17823
N-U	UN _{1.6} rt	UN _{1.6} ,cI96,206	<i>Ia-3</i>	1.0676,1.0676,1.0676,90,90,90	-	gray	11.37	X	8973
N-U	UN ₂	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.521,0.521,0.521,90,90,90	fluorite family	-	12.50	X	8155
N-U	U ₂ N ₃ ht	La ₂ O ₃ ,hP5,164	<i>P-3m1</i>	0.37,0.37,0.5825,90,90,120	-	-	12.46	X	8974
N-U	U ₇ N ₁₂	Pr ₇ O ₁₂ ,hR57,148	<i>R-3</i>	0.99367,0.99367,0.91672,90,90,120	-	-	11.66	A	8973
N-V	VN lt	VN,tP8,111	<i>P-42m</i>	0.41272,0.41272,0.41238,90,90,90	-	-	6.14	X	21532
N-V	VN _{0.06}	W,cI2,229	<i>Im-3m</i>	0.3055,0.3055,0.3055,90,90,90	b.c.c. family	-	6.03	F	8123
N-V	VN _{0.81} rt	VN _{0.81} ,tP64,137	<i>P4₂/nmc</i>	0.8174,0.8174,0.8174,90,90,90	rocksalt family	-	6.06	X	11416
N-V	VN _{0.83} rt	NaCl,cF8,225	<i>Fm-3m</i>	0.41189,0.41189,0.41189,90,90,90	rocksalt family	-	5.95	X	62620
N-V	V ₂ N	Fe ₂ N,hP9,162	<i>P-31m</i>	0.4917,0.4917,0.4568,90,90,120	-	-	6.04	X	12013
N-V	V ₈ N tricl1	* _a P*,*	-	0.2994,0.3114,0.3114,90,5,90.5	-	-	-	N	8287
N-V	V ₈ N tricl2	* _a P*,*	-	0.3114,0.5988,0.8807,90.5,90,90.5	-	-	-	N	8287
N-V	V ₈ N _{0.75} m	V ₈ O,tP18,136	<i>P4₂/mm</i>	0.8801,0.8801,0.2985,90,90,90	-	-	6.00	X	13046
N-W	WN	WC,hP2,187	<i>P-6m2</i>	0.2895,0.2895,0.283,90,90,120	AlB ₂ family	-	16.00	X	58844
N-W	WN _{0.67} ht	NaCl,cF8,225	<i>Fm-3m</i>	0.413,0.413,0.413,90,90,90	rocksalt family	-	18.22	X	1259
N-W	WN ₂ tf	WN ₂ ,hR9,166	<i>R-3m</i>	0.289,0.289,1.640,90,90,120	-	-	8.90	X	1697
N-W	W[N ₃] ₆	W[N ₃] ₆ ,hP38,147	<i>P-3</i>	0.93962,0.93962,0.72225,90,90,120	-	red ruby	2.62	X	45078
N-W	W _{1.2} N tf	W _{1.2} N,hP6,186	<i>P6₃mc</i>	0.289,0.289,1.08,90,90,120	-	-	9.98	X	2303
N-W	W _{1.28} N ₂	Nb _{1.35} S ₂ ,hP8,194	<i>P6₃/mmc</i>	0.289,0.289,1.1,90,90,120	AlB ₂ family	-	10.99	X	1967
N-W	W _{1.33} N ₂	W _{1.33} N ₂ ,hR12,160	<i>R3m</i>	0.2889,0.2889,1.5291,90,90,120	-	-	12.28	X	58844
N-W	W ₂ N tf	W ₂ N,hP9,164	<i>P-3m1</i>	0.289,0.289,2.285,90,90,120	-	-	11.51	X	1467
N-W	W ₂ N ₃	W ₂ N ₃ ,hP10,194	<i>P6₃/mmc</i>	0.289,0.289,1.5286,90,90,120	-	-	12.31	X	58844
N-W	W _{2.3} N ₂ tf	W _{2.3} N ₂ ,hP10,194	<i>P6₃/mmc</i>	0.289,0.289,1.530,90,90,120	-	-	13.53	X	1108
N-W	W _{2.36} N ₂	W _{2.36} N ₂ ,hR15,166	<i>R-3m</i>	0.289,0.289,2.335,90,90,120	-	-	13.62	X	1709
N-W	W ₃ N ₄	U ₄ S ₃ ,cP7,221	<i>Pm-3m</i>	0.4125,0.4125,0.4125,90,90,90	-	-	14.37	X	58844
N-W	W ₅ N ₆	* _h P*,*	-	0.5014,0.5014,1.526,90,90,120	-	-	-	N	33416
N-Y	YN	NaCl,cF8,225	<i>Fm-3m</i>	0.4894,0.4894,0.4894,90,90,90	rocksalt family	gray dark	5.83	X	63152
N-Yb	YbN _{0.975}	NaCl,cF8,225	<i>Fm-3m</i>	0.4775,0.4775,0.4775,90,90,90	rocksalt family	-	11.39	X	24207
N-Zn	ZnN ₄	Mg,hP2,194	<i>P6₃/mmc</i>	0.26686,0.26686,0.49459,90,90,120	close-packed structure	-	7.12	X	54981
N-Zn	Zn[N ₃] ₂	Pb[N ₃] ₂ ,oP84,62	<i>Pnma</i>	0.692,1.633,1.098,90,90,90	-	colorless	2.40	A	8843
N-Zn	Zn ₃ N ₂	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	0.97797,0.97797,0.97797,90,90,90	-	black gray	6.37	X	51853
N-Zr	ZrN	NaCl,cF8,225	<i>Fm-3m</i>	0.45593,0.45593,0.45593,90,90,90	rocksalt family	yellow light	7.37	X	53194
N-Zr	ZrN _{0.29} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.32584,0.32584,0.5226,90,90,120	close-packed structure	-	6.59	F	15880
N-Zr	Zr ₃ N ₄ ht	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.674,0.674,0.674,90,90,90	-	-	7.15	X	42881
N-Zr	Zr ₃ N ₄ rt	Zr ₃ N ₄ ,oP28,62	<i>Pnma</i>	0.97294,0.32810,1.08175,90,90,90	-	brown red	6.34	X	32573
Na-O	Na[O ₂] lt1	FeS ₂ ,cP12,205	<i>Pa-3</i>	0.53,0.53,0.53,90,90,90	pyrite-marcasite family	-	2.45	X	9675
Na-O	Na[O ₂] lt2	FeS ₂ ,oP6,58	<i>Pnnm</i>	0.4332,0.554,0.3364,90,90,90	pyrite-marcasite family	-	2.26	X	9675
Na-O	Na[O ₂] lt3	FeS ₂ ,oP6,58	<i>Pnnm</i>	0.4313,0.5508,0.3337,90,90,90	pyrite-marcasite family	-	2.30	X	9675
Na-O	Na[O ₂] rt	NaCl,cF8,225	<i>Fm-3m</i>	0.5512,0.5512,0.5512,90,90,90	rocksalt family	-	2.18	X	9675
Na-O	Na[O ₃]	Na[O ₃],oI8,44	<i>Imn2</i>	0.3507,0.52708,0.57703,90,90,90	-	red bright	2.21	X	38538
Na-O	Na ₂ O rt	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.55476,0.55476,0.55476,90,90,90	fluorite family	-	2.41	X	36458
Na-O	Na ₂ [O ₂] rt	Na ₂ [O ₂],hP12,189	<i>P-62m</i>	0.622,0.622,0.447,90,90,120	-	white	2.59	X	851
Na-O	Na ₃ O	* _t I56,139	<i>I4/mmm</i>	1.159,1.159,0.766,90,90,90	-	-	-	N	2218
Na-P	NaP	NaP,oP16,19	<i>P2₁2₁2₁</i>	0.5643,0.6038,1.0142,90,90,90	-	black	2.07	X	12660
Na-P	NaP ₁₅	* _m **,**	-	0.6521,0.9704,2.2706,90,96.51,90	-	-	-	N	18226
Na-P	NaP ₅	NaP ₅ ,oP24,62	<i>Pnma</i>	1.0993,0.6524,0.6903,90,90,90	-	red dark	2.39	X	43960
Na-P	NaP ₇	LiP ₇ ,tI18,142	<i>I4₁/acd</i>	1.42265,1.42265,1.46784,90,90,90	-	red	2.14	X	65183
Na-P	Na ₃ P	Na ₃ As,hP8,194	<i>P6₃/mmc</i>	0.49512,0.49512,0.87874,90,90,120	-	red	1.78	X	45187
Na-P	Na ₃ P ₁₁	Na ₃ P ₁₁ ,oP56,60	<i>Pbcn</i>	0.9828,1.2466,1.0410,90,90,90	-	orange	2.13	X	7562
Na-Pb	NaPb rt	NaPb,tI64,142	<i>I4₁/acd</i>	1.0580,1.0580,1.7746,90,90,90	-	-	6.16	X	465
Na-Pb	NaPb ₃	Cu ₃ Au,cP4,221	<i>Fm-3m</i>	0.4888,0.4888,0.4888,90,90,90	close-packed structure	-	9.17	X	5280
Na-Pb	Na ₁₃ Pb ₅ rt	* _h P10,194	<i>P6₃/mmc</i>	0.551,0.551,4.039,90,90,120	-	-	-	P	830
Na-Pb	Na ₁₄ Pb ₄	Cu ₁₅ Si ₄ ,cI76,220	<i>I-43d</i>	1.329,1.329,1.329,90,90,90	-	-	3.32	X	120
Na-Pb	Na ₅ Pb	* _h P*,*	-	1.06,1.06,1.15,90,90,120	-	-	-	N	4046
Na-Pb	Na ₅ Pb ₂	* _h R6,166	<i>R-3m</i>	0.554,0.554,2.315,90,90,120	-	-	-	P	830
Na-Pb	Na ₉ Pb ₄ ht	* _h P8,194	<i>P6₃/mmc</i>	0.547,0.547,3.041,90,90,120	-	-	-	P	830
Na-Pt	NaPt ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7482,0.7482,0.7482,90,90,90	Friauf-Laves phase	-	13.10	X	21888
Na-S	NaS ₂	NaS ₂ ,tI48,122	<i>I-42d</i>	0.95965,0.95965,1.17885,90,90,90	-	green olive	2.13	X	6969
Na-S	Na ₂ S hp1	Cs ₂ S,oP12,62	<i>Pnma</i>	0.6707,0.412,0.8025,90,90,90	-	-	2.34	X	38892
Na-S	Na ₂ S hp2	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.4376,0.4376,0.5856,90,90,120	AlB ₂ family	-	2.67	X	38892
Na-S	Na ₂ S	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.65373,0.65373,0.65373,90,90,90	fluorite family	colorless	1.86	X	33500
Na-S	Na ₂ S	Li ₂ [O ₂]-b,hP8,194	<i>P6₃/mmc</i>	0.4489,0.4489,1.0227,90,90,120	-	yellow	1.45	X	28126
Na-S	Na ₂ S ₂ m	Na ₂ [O ₂],hP12,189	<i>P-62m</i>	0.7629,0.7629,0.5394,90,90,120	-	-	2.02	X	1720
Na-S	Na ₂ S ₅ rt	Na ₂ S ₅ ,oP28,62	<i>Pnma</i>	0.7654,1.451,0.5846,90,90,90	-	orange red	2.11	X	17549
Na-Sb	NaSb	LiAs,mP16,14	<i>P12₁/c1</i>	0.68,0.634,1.248,90,117.6,90	-	-	4.03	X	1015
Na-Sb	Na ₃ Sb hp	BiF ₃ ,cF16,225	<i>Fm-3m</i>	0.741,0.741,0.741,90,90,90	fluorite family	-	3.11	X	39155
Na-Sb	Na ₃ Sb	Na ₃ As,hP8,194	<i>P6₃/mmc</i>	0.5355,0.5355,0.9496,90,90,120	-	-	2.69	X	139
Na-Se	NaSe ₂	NaS ₂ ,tI48,122	<i>I-42d</i>	1.01926,1.01926,1.22177,90,90,90	-	red dark	3.79	X	34100
Na-Se	Na ₂ Se	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.6825,0.6825,0.6825,90,90,90	fluorite family	-	2.61	X	25839

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Na-Se	Na ₂ Se ₂	Li ₂ [O ₂]-b, hP8, 194	$P6_3/mmc$	0.4685, 0.4685, 1.053, 90, 90, 120	-	-	3.38	X	1720
Na-Si	NaSi hp	NaSi-b, mS32, 15	$C12/c1$	0.96227, 0.60823, 0.96227, 90, 105.764, 90	-	-	2.50	X	53853
Na-Si	NaSi rt	NaSi-a, mS32, 15	$C12/c1$	1.21561, 0.65465, 1.1132, 90, 118.923, 90	-	black	1.75	X	65077
Na-Si	NaSi ₆ hp	Eu(Ga _{0.33} Ge _{0.67}) ₆ , oS28, 63	$Cmcm$	0.4106, 1.0563, 1.2243, 90, 90, 90	clathrate	-	2.40	X	60700
Na-Si	Na ₃ Si ₁₇	Na ₃ Si ₁₇ , cF160, 227	$Fd-3m$	1.47157, 1.47157, 1.47157, 90, 90, 90	clathrate	gray	2.28	X	53363
Na-Si	Na _{3.065} Si ₁₇ rt	Na _{3.75} Si ₁₇ , cF224, 227	$Fd-3m$	1.4756, 1.4756, 1.4756, 90, 90, 90	clathrate	-	2.27	X	63663
Na-Si	Na _{3.75} Si ₁₇ lt	Na _{3.75} Si ₁₇ , cP192, 198	$P2_13$	1.47679, 1.47679, 1.47679, 90, 90, 90	clathrate	-	2.32	X	63663
Na-Si	Na ₄ Si ₂₃	Na ₄ Si ₂₃ , cP54, 223	$Pm-3n$	1.01973, 1.01973, 1.01973, 90, 90, 90	clathrate	black	2.31	X	56869
Na-Sn	NaSn rt	NaPb, tI64, 142	$I4_1/acd$	1.0475, 1.0475, 1.7412, 90, 90, 90	-	gray silver	3.94	X	37091
Na-Sn	NaSn ₂	NaSn ₂ , mS48, 12	$C12/m1$	1.33916, 0.68854, 1.54889, 90, 102.529, 90	-	-	4.96	X	45608
Na-Sn	NaSn ₅	NaSn ₅ , tP12, 113	$P-42_1m$	0.62992, 0.62992, 0.88172, 90, 90, 90	-	gray silver	5.85	X	34285
Na-Sn	Na ₁₅ Sn ₄	Cu ₁₅ Si ₄ , cI76, 220	$I-43d$	1.31912, 1.31912, 1.31912, 90, 90, 90	-	gray silver	2.37	X	63988
Na-Sn	Na ₄ Sn rt	Na _{3.7} Sn, oP40, 62	$Pnma$	0.98036, 0.55695, 2.27763, 90, 90, 90	-	-	2.25	X	63988
Na-Sn	Na _{4.7} Sn ₂	Li ₃ Sn ₂ , hR21, 166	$R-3m$	0.54385, 0.54385, 2.2428, 90, 90, 120	b.c.c. family	-	3.00	X	63988
Na-Sn	Na ₅ Sn ₁₃	Na ₅ Sn ₁₃ , oS288, 63	$Cmcm$	0.8979, 1.9448, 5.043, 90, 90, 90	-	gray silver	5.00	X	33174
Na-Sn	Na ₇ Sn ₁₂	Na ₇ Sn ₁₂ , mP78, 13	$P12/c1$	1.3375, 0.9329, 2.23779, 90, 126.554, 90	-	-	4.69	X	42266
Na-Sn	Na ₉ Sn ₄	Li ₉ Ge ₄ , oS52, 63	$Cmcm$	0.5417, 0.9413, 2.9621, 90, 90, 90	-	bluish	3.00	X	63988
Na-Te	NaTe	NaTe, oP48, 60	$Pbcn$	1.5892, 0.9947, 0.9179, 90, 90, 90	-	bronze	4.14	X	17919
Na-Te	NaTe ₃	NaTe ₃ , hP48, 165	$P-3c1$	0.9033, 0.9033, 2.193, 90, 90, 120	-	gray	5.22	X	19542
Na-Te	Na ₂ Te	CaF ₂ , cF12, 225	$Fm-3m$	0.73, 0.73, 0.73, 90, 90, 90	fluorite family	white	2.96	X	25839
Na-Tl	Na _{0.85} Tl rt	NaTl, cF16, 227	$Fd-3m$	0.7448, 0.7448, 0.7448, 90, 90, 90	b.c.c. family	gray silver	7.20	X	21475
Na-Tl	Na ₂ Tl	Na ₂ Tl, oS48, 20	$C22_1$	0.88797, 1.39350, 1.16927, 90, 90, 90	-	-	4.60	X	3263
Na-Tl	Na ₄₄ Tl ₇	Mg ₄₄ Rh ₇ , cF408, 216	$F-43m$	2.4154, 2.4154, 2.4154, 90, 90, 90	-	-	2.30	X	6353
Na-Zn	NaZn ₁₃	NaZn ₁₃ , cF112, 226	$Fm-3c$	1.2273, 1.2273, 1.2273, 90, 90, 90	-	-	6.27	X	47602
Nb-Ni	NbNi ₃ prec	TiAl ₃ , tI8, 139	$I4/mmm$	0.3556, 0.3556, 0.7422, 90, 90, 90	close-packed structure	-	9.52	X	45672
Nb-Ni	NbNi ₃ rt	Cu ₃ Ti, oP8, 59	$Pmmn$	0.4244, 0.5114, 0.453, 90, 90, 90	close-packed structure	-	9.09	X	26096
Nb-Ni	Nb _{0.06} Ni _{0.94}	Cu, cF4, 225	$Fm-3m$	0.3562, 0.3562, 0.3562, 90, 90, 90	close-packed structure	-	8.93	X	17661
Nb-Ni	Nb _{0.2} Ni _{0.8} m	Mg, hP2, 194	$P6_3/mmc$	0.2581, 0.2581, 0.4221, 90, 90, 120	close-packed structure	-	8.94	X	3506
Nb-Ni	Nb _{0.35} Ni _{0.65} m	Mg, hP2, 194	$P6_3/mmc$	0.328, 0.328, 0.522, 90, 90, 120	close-packed structure	-	4.83	X	16271
Nb-Ni	Nb _{0.8} Ni _{0.2} m	Cu, cF4, 225	$Fm-3m$	0.418, 0.418, 0.418, 90, 90, 90	close-packed structure	-	7.83	X	28830
Nb-Ni	Nb ₂ Ni rt	Nb ₂ Ni, cF96, 227	$Fd-3m$	1.1642, 1.1642, 1.1642, 90, 90, 90	-	-	8.81	X	3648
Nb-Ni	Nb _{7.2} Ni _{5.8}	W ₆ Fe ₇ , hR39, 166	$R-3m$	0.4954, 0.4954, 2.6978, 90, 90, 120	Frank-Kasper phase	-	8.77	X	46060
Nb-O	NbO cub	NbO, cP6, 221	$Pm-3m$	0.42116, 0.42116, 0.42116, 90, 90, 90	-	gray steel	7.26	X	61410
Nb-O	NbO hex	*, hP*, *	-	0.3612, 0.3612, 0.3932, 90, 90, 120	-	-	-	N	6108
Nb-O	NbO tf	NaCl, cF8, 225	$Fm-3m$	0.439, 0.439, 0.439, 90, 90, 90	rocksalt family	-	8.55	X	5439
Nb-O	NbO _{0.15}	VH _{0.5} , cI14, 229	$Im-3m$	0.33082, 0.33082, 0.33082, 90, 90, 90	-	-	8.74	X	41263
Nb-O	NbO _{0.76} ht	BiF ₃ , cF16, 225	$Fm-3m$	0.511, 0.511, 0.511, 90, 90, 90	fluorite family	-	5.23	X	12595
Nb-O	NbO ₂ hp1	NbO ₂ , tI48, 80	$I4_1$	0.96076, 0.96076, 0.59482, 90, 90, 90	-	-	6.04	A	36720
Nb-O	NbO ₂ hp2	*, mP96, 14	$P12_1/c1$	0.9933, 0.9963, 1.22535, 90, 127.834, 90	-	-	6.93	N	36720
Nb-O	NbO ₂ ht1	NbO ₂ , tI48, 80	$I4_1$	0.9693, 0.9693, 0.5985, 90, 90, 90	-	black	5.90	X	15571
Nb-O	NbO ₂ ht2	TiO ₂ , tP6, 136	$P4_2/mnm$	0.47997, 0.47997, 0.30274, 90, 90, 90	-	-	5.95	A	33672
Nb-O	NbO ₂ rt	NbO ₂ , tI96, 88	$I4_1/a$	1.3695, 1.3695, 0.5981, 90, 90, 90	-	gray	5.92	X	12021
Nb-O	NbO _{2.464} ht	*, mS322, *	-	2.118, 0.3823, 5.60025, 90, 96.073, 90	-	-	-	N	4786
Nb-O	NbO _{2.483}	*, mS*, *	-	6.55053, 0.3827, 2.115, 90, 104.707, 90	-	-	-	N	3678
Nb-O	Nb _{0.91} O _{1.5}	Nb _{0.91} O _{1.5} , cP112, 221	$Pm-3m$	0.78, 0.78, 0.78, 90, 90, 90	-	-	3.04	X	2724
Nb-O	Nb _{1.25} O _{0.9} tf	Ta _{1.1} O _{0.84} , cP5, 221	$Pm-3m$	0.388, 0.388, 0.388, 90, 90, 90	-	-	3.71	X	5439
Nb-O	Nb ₁₁ O ₂₇	Nb ₁₁ O ₂₇ , mP81, 10	$P12/m1$	1.57491, 0.38236, 1.78521, 90, 102.029, 90	-	-	4.59	X	49989
Nb-O	Nb ₁₂ O ₂₉ ht	(Ti _{0.17} Nb _{0.83}) ₁₂ O ₂₉ , oS164, 63	$Cmcm$	0.3832, 2.074, 2.88901, 90, 90, 90	-	-	4.57	X	49989
Nb-O	Nb ₁₂ O ₂₉ lt	Nb ₁₂ O ₂₉ , mS82, 8	$C1m1$	2.07171, 0.38303, 1.5692, 90, 113.112, 90	-	-	4.58	X	44189
Nb-O	Nb ₁₂ O ₂₉ rt	(Ti _{0.17} Nb _{0.83}) ₁₂ O ₂₉ , mS82, 12	$C12/m1$	2.071, 0.38307, 1.56856, 90, 113.056, 90	-	-	4.58	X	44189
Nb-O	Nb ₂ O m	*, t**, *	-	0.6645, 0.6645, 0.9229, 90, 90, 90	-	-	-	N	3458
Nb-O	Nb ₂ O ₅ M	(V _{0.35} W _{0.35}) ₂ O ₅ , tI112, 139	$I4/mmm$	2.044, 2.044, 0.3832, 90, 90, 90	-	blue	4.41	X	5294
Nb-O	Nb ₂ O ₅ R	Nb ₂ O ₅ , mS14, 12	$C12/m1$	1.279, 0.3826, 0.3983, 90, 90, 75, 90	-	-	4.53	X	3061
Nb-O	Nb ₂ O ₅ TT	*, mS56, *	-	0.7182, 1.579, 0.7238, 90, 119.08, 90	-	-	-	N	6651
Nb-O	Nb ₂ O ₅ Z	Nb ₂ O ₅ , mS14, 5	$C121$	0.52193, 0.46995, 0.59285, 90, 108.559, 90	-	white	6.40	X	35049
Nb-O	Nb ₂ O ₅ hp-ht	Nb ₂ O ₅ , mS28, 15	$C12/c1$	1.2740, 0.48830, 0.55609, 90, 105.02, 90	-	colorless	5.28	X	25036
Nb-O	Nb ₂ O ₅ ht mon1	Nb ₂ O ₅ , mP99, 10	$P12/m1$	1.9356, 0.38233, 2.0375, 90, 115.72, 90	-	white	4.55	X	9525
Nb-O	Nb ₂ O ₅ ht mon2	Nb ₂ O ₅ , mS112, 12	$C12/m1$	2.851, 0.3830, 1.748, 90, 120.80, 90	-	colorless	4.31	X	3670
Nb-O	Nb ₂ O ₅ rt	*, o**, *	-	0.393, 0.6175, 2.9175, 90, 90, 90	-	-	-	N	39167
Nb-O	Nb ₂ O ₅ α	*, oS14, 65	$Cmmm$	0.3663, 0.6171, 0.3928, 90, 90, 90	-	-	-	N	21072
Nb-O	Nb ₂ O ₅ γ	Ta ₂ O ₅ , oP84, 25	$Pmm2$	0.392, 4.379, 0.624, 90, 90, 90	-	-	4.95	A	1252
Nb-O	Nb ₂ O ₅ δ	*, hP**, *	-	0.3604, 0.3604, 0.3923, 90, 90, 120	-	-	-	N	21072
Nb-O	Nb ₄ O	*, t**, *	-	1.33, 1.33, 0.664, 90, 90, 90	-	-	-	N	3458
Nb-O	Nb ₄ O ₅	Nb ₄ O ₅ , tP18, 137	$P4_2/nmc$	0.6651, 0.6651, 0.4814, 90, 90, 90	-	violet deep	7.04	X	26593
Nb-O	Nb ₆ O m	*, tP56, 132	$P4_2/mcm$	1.011, 1.011, 0.981, 90, 90, 90	-	-	-	N	5179
Nb-O	Nb ₆ O m	*, tP*, *	-	0.338, 0.338, 0.327, 90, 90, 90	-	-	-	N	7576
Nb-O	Nb _{8.4} O ₂₁ hp	Nb _{8.4} O ₂₁ , oP86, 55	$Pbam$	0.6175, 2.9175, 0.3930, 90, 90, 90	-	colorless	5.24	X	8702
Nb-Os	Nb _{0.2} Os _{0.8}	Mg, hP2, 194	$P6_3/mmc$	0.2762, 0.2762, 0.4415, 90, 90, 120	close-packed structure	-	19.44	X	10587
Nb-Os	Nb _{0.33} Os _{0.67}	Mn, cI58, 217	$I-43m$	0.9661, 0.9661, 0.9661, 90, 90, 90	-	-	16.89	A	10587
Nb-Os	Nb _{0.6} Os _{0.4}	(Cr _{0.40} Fe _{0.51}) ₁₂ P30, 136	$P4_2/mnm$	0.9858, 0.9858, 0.5063, 90, 90, 90	Frank-Kasper phase	-	13.35	X	2031
Nb-Os	Nb _{0.83} Os _{0.17}	W, cI2, 229	$Im-3m$	0.3233, 0.3233, 0.3233, 90, 90, 90	b.c.c. family	-	10.76	X	10587
Nb-Os	Nb ₃ Os rt	Cr ₃ Si, cP8, 223	$Pm-3n$	0.5128, 0.5128, 0.5128, 90, 90, 90	Frank-Kasper phase	-	11.55	X	16060
Nb-P	NbP	NbAs, tI8, 109	$I4_1md$	0.33324, 0.33324, 1.13705, 90, 90, 90	-	gray silver	6.52	X	31706
Nb-P	NbP _{1.7} hp	*, t**, *	-	0.7468, 0.7468, 0.7649, 90, 90, 90	-	-	-	N	9400
Nb-P	NbP ₂	OsGe ₂ , mS12, 12	$C12/m1$	0.88715, 0.32663, 0.75101, 90, 119.097, 90	-	-	5.41	A	3133
Nb-P	Nb _{0.5} P _{0.5} m	In, tI2, 139	$I4/mmm$	0.332, 0.332, 0.569, 90, 90, 90	-	-	3.28	X	572
Nb-P	Nb ₂ P	Nb ₂ P, oP54, 51	$Pnma$	1.8079, 0.3425, 1.3858, 90, 90, 90	-	-	7.55	X	20944
Nb-P	Nb ₂ P ₃ hp	Nb ₂ P ₃ , oP28, 62	$Pnma$	1.6742, 0.33499, 0.7912, 90, 90, 90	-	-	5.10	X	12847

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Nb-P	Nb ₃ P	Ti ₃ P, tP32, 86	$P4_2/n$	1.01282, 1.01282, 0.50891, 90, 90, 90	-	-	7.88	X	2898
Nb-P	Nb ₅ P ₃	Nb ₅ P ₃ , oP64, 62	$Pnma$	2.53843, 0.34329, 1.14834, 90, 90, 90	-	-	7.40	X	5598
Nb-P	Nb ₇ P ₄	Nb ₇ P ₄ , mS44, 12	$C12/m1$	1.49503, 0.34398, 1.38478, 90, 104.743, 90	-	-	7.47	X	2896
Nb-P	Nb ₈ P ₅	Nb ₈ P ₅ , oP54, 55	$Pbam$	0.94652, 2.61998, 0.34641, 90, 90, 90	-	-	6.94	X	7073
Nb-Pb	Nb ₃ Pb hp-ht	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4208, 0.4208, 0.4208, 90, 90, 90	close-packed structure	-	10.83	X	8118
Nb-Pb	Nb ₃ Pb m	Cr ₃ Si, cP8, 223	$Pm-3n$	0.5333, 0.5333, 0.5333, 90, 90, 90	Frank-Kasper phase	-	10.64	X	8106
Nb-Pd	NbPd ₂	MoPt ₂ , oI6, 71	$Immm$	0.2839, 0.3886, 0.8376, 90, 90, 90	close-packed structure	-	10.99	X	2594
Nb-Pd	NbPd ₃ orth	NbPd ₃ , oP24, 59	$Pmmn$	0.5486, 1.3602, 0.4845, 90, 90, 90	close-packed structure	-	11.36	X	2048
Nb-Pd	NbPd ₃ tet	TiAl ₃ , tI8, 139	$I4/mmm$	0.3895, 0.3895, 0.7913, 90, 90, 90	close-packed structure	-	11.40	X	13427
Nb-Pd	Nb _{0.18} Pd _{0.82}	Cu ₂ cF4, 225	$Fm-3m$	0.3905, 0.3905, 0.3905, 90, 90, 90	close-packed structure	-	11.60	X	13427
Nb-Pd	Nb _{0.5} Pd _{0.5} ht	Cu ₂ cF4, 225	$Fm-3m$	0.402, 0.402, 0.402, 90, 90, 90	close-packed structure	-	10.19	X	13427
Nb-Pd	Nb _{0.4} Pd _{0.6} cub	Mn, cI58, 217	$I-43m$	0.977, 0.977, 0.977, 90, 90, 90	-	-	10.15	A	1389
Nb-Pd	Nb _{0.6} Pd _{0.4} tet	(Cr _{0.49} Fe _{0.51}), tP30, 136	$P4_2/mnm$	0.989, 0.989, 0.511, 90, 90, 90	Frank-Kasper phase	-	9.80	A	786
Nb-Pd	Nb _{0.75} Pd _{0.25}	W, cI2, 229	$Im-3m$	0.3242, 0.3242, 0.3242, 90, 90, 90	b.c.c. family	-	9.38	X	13427
Nb-Pt	NbPt	AuCd, oP4, 51	$Pmma$	0.46, 0.275, 0.477, 90, 90, 90	close-packed structure	-	15.85	A	8320
Nb-Pt	NbPt ₂	MoPt ₂ , oI6, 71	$Immm$	0.2801, 0.3951, 0.8459, 90, 90, 90	close-packed structure	-	17.14	X	2594
Nb-Pt	NbPt ₃ ht	NbPt ₃ , mP16, 11	$P12_1/m1$	0.4879, 0.5537, 0.9269, 90, 100.64, 90	close-packed structure	-	18.30	X	2048
Nb-Pt	NbPt ₃ rt	Cu ₃ Ti, oP8, 59	$Pmmn$	0.4873, 0.5534, 0.4564, 90, 90, 90	close-packed structure	-	18.30	A	18191
Nb-Pt	Nb _{0.18} Pt _{0.82}	Cu ₂ cF4, 225	$Fm-3m$	0.394, 0.394, 0.394, 90, 90, 90	close-packed structure	-	19.19	X	18191
Nb-Pt	Nb _{0.62} Pt _{0.38}	(Cr _{0.49} Fe _{0.51}), tP30, 136	$P4_2/mnm$	0.9902, 0.9902, 0.5132, 90, 90, 90	Frank-Kasper phase	-	13.04	A	18191
Nb-Pt	Nb _{0.9} Pt _{0.1}	W, cI2, 229	$Im-3m$	0.326, 0.326, 0.326, 90, 90, 90	b.c.c. family	-	9.89	X	18191
Nb-Pt	Nb ₃ Pt	Cr ₃ Si, cP8, 223	$Pm-3n$	0.51524, 0.51524, 0.51524, 90, 90, 90	Frank-Kasper phase	-	11.50	X	3734
Nb-Re	Nb _{0.01} Re _{0.99}	Mg, hP2, 194	$P6_3/mmc$	0.27554, 0.27554, 0.4446, 90, 90, 120	close-packed structure	-	21.05	X	4725
Nb-Re	Nb _{0.25} Re _{0.75}	Mn, cI58, 217	$I-43m$	0.9691, 0.9691, 0.9691, 90, 90, 90	-	-	17.24	A	1482
Nb-Re	Nb _{0.45} Re _{0.55} ht	(Cr _{0.49} Fe _{0.51}), tP30, 136	$P4_2/mnm$	0.9789, 0.9789, 0.5099, 90, 90, 90	Frank-Kasper phase	-	14.70	X	2031
Nb-Re	Nb _{0.553} Re _{0.447} rt	W, cI2, 229	$Im-3m$	0.314, 0.314, 0.314, 90, 90, 90	b.c.c. family	-	14.44	X	24554
Nb-Rh	NbRh ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.3857, 0.3857, 0.3857, 90, 90, 90	close-packed structure	-	11.62	X	2322
Nb-Rh	NbRh ₃	PuAl ₃ , hP24, 194	$P6_3/mmc$	0.5483, 0.5483, 1.3405, 90, 90, 120	close-packed structure	-	11.47	A	2322
Nb-Rh	Nb _{0.1} Rh _{0.9}	Cu ₂ cF4, 225	$Fm-3m$	0.3835, 0.3835, 0.3835, 90, 90, 90	close-packed structure	-	12.00	X	2322
Nb-Rh	Nb _{0.7} Rh _{0.3}	(Cr _{0.49} Fe _{0.51}), tP30, 136	$P4_2/mnm$	0.9869, 0.9869, 0.5106, 90, 90, 90	Frank-Kasper phase	-	9.61	A	2322
Nb-Rh	Nb _{0.75} Rh _{0.25}	(Nb _{0.75} Rh _{0.25})Rh, mP18, 10	$P12_1/m1$	0.4772, 0.2806, 2.025, 90, 90, 51, 90	-	-	10.93	X	2323
Nb-Rh	Nb _{0.8} Rh _{0.2}	W, cI2, 229	$Im-3m$	0.3241, 0.3241, 0.3241, 90, 90, 90	b.c.c. family	-	9.26	X	9844
Nb-Rh	Nb _{0.85} Rh _{0.15} ht	AuCd, oP4, 51	$Pmma$	0.451, 0.2813, 0.4808, 90, 90, 90	close-packed structure	-	10.74	X	2323
Nb-Rh	Nb _{0.88} Rh _{0.12} rt	TaIr, oP12, 51	$Pmma$	1.3587, 0.2827, 0.477, 90, 90, 90	close-packed structure	-	10.71	A	2322
Nb-Rh	Nb _{0.96} Rh _{0.04} rt	CuAu, tP2, 123	$P4/mmm$	0.2842, 0.2842, 0.3809, 90, 90, 90	close-packed structure	-	10.59	X	2048
Nb-Rh	Nb ₃ Rh rt	Cr ₃ Si, cP8, 223	$Pm-3n$	0.51317, 0.51317, 0.51317, 90, 90, 90	Frank-Kasper phase	-	9.38	X	2695
Nb-Ru	NbRu rt hex	CuTi, tP2, 123	$P4/mmm$	0.305, 0.305, 0.341, 90, 90, 90	AlB ₂ family	-	10.15	X	20932
Nb-Ru	NbRu ₃ ht-hp	Cu ₃ Au, cP4, 221	$Pm-3m$	0.388, 0.388, 0.388, 90, 90, 90	close-packed structure	-	11.26	X	8547
Nb-Ru	Nb _{0.24} Ru _{0.76} stab	* _h P*, *	-	0.834, 0.834, 1.344, 90, 90, 120	-	-	-	N	2752
Nb-Ru	Nb _{0.25} Ru _{0.75} rt	Mg, hP2, 194	$P6_3/mmc$	0.275, 0.275, 0.4418, 90, 90, 120	close-packed structure	-	11.37	X	2183
Nb-Ru	Nb _{0.29} Ru _{0.71}	Mg, hP2, 194	$P6_3/mmc$	0.2762, 0.2762, 0.4432, 90, 90, 120	close-packed structure	-	11.20	X	2183
Nb-Ru	Nb _{0.65} Ru _{0.35}	W, cI2, 229	$Im-3m$	0.3188, 0.3188, 0.3188, 90, 90, 90	b.c.c. family	-	9.82	X	2183
Nb-Ru	Nb _{0.97} Ru _{0.03} rt orth	* ₀ ***, *	-	0.3401, 0.4228, 0.4373, 90, 90, 90	-	-	-	N	5374
Nb-Ru	Nb _{1.24} Ru _{0.76} ht cub	CsCl, cP2, 221	$Pm-3m$	0.321, 0.321, 0.321, 90, 90, 90	b.c.c. family	-	9.64	X	20932
Nb-S	NbS hex I	WC, hP2, 187	$P-6m2$	0.332, 0.332, 0.3225, 90, 90, 120	AlB ₂ family	-	6.74	X	17813
Nb-S	NbS hex2	NiAs, hP4, 194	$P6_3/mmc$	0.325, 0.325, 0.64, 90, 90, 120	AlB ₂ family	-	7.09	X	17240
Nb-S	NbS ₂ ht	NbS ₂ , hP6, 194	$P6_3/mmc$	0.331, 0.331, 1.189, 90, 90, 120	-	-	4.62	X	1237
Nb-S	NbS ₂ rt	MoS ₂ , hR9, 160	$R3m$	0.33303, 0.33303, 1.7918, 90, 90, 120	-	black	4.55	X	7849
Nb-S	NbS ₂ tf	CdI ₂ , hP3, 164	$P-3m1$	0.342, 0.342, 0.5938, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	4.34	X	44138
Nb-S	NbS ₃ rt mon	NbSe ₃ , mP24, 11	$P12_1/m1$	0.968, 0.337, 1.46937, 90, 108.376, 90	-	black	4.14	A	15159
Nb-S	NbS ₃ rt tricl	NbS ₃ , aP16, 2	$P-1$	0.4963, 0.6730, 0.9144, 90, 97.17, 90	-	black	4.14	X	11580
Nb-S	Nb _{0.90} S ht	FeAs, oP8, 62	$Pnma$	0.6396, 0.3334, 0.5845, 90, 90, 90	AlB ₂ family	black	6.16	X	4615
Nb-S	Nb _{0.92} S rt	Nb _{0.92} S, hP16, 186	$P6_3/mc$	0.6702, 0.6702, 0.6405, 90, 90, 120	AlB ₂ family	-	6.27	X	4615
Nb-S	Nb _{1.88} S ₃	Nb _{1.88} S ₃ , hP20, 182	$P6_3/22$	0.5785, 0.5785, 1.2229, 90, 90, 120	-	black	5.08	X	17952
Nb-S	Nb _{1.4} S ₅	Nb _{1.4} S ₅ , oP76, 62	$Pnma$	1.8480, 0.3374, 1.9797, 90, 90, 90	-	-	7.86	X	7243
Nb-S	Nb ₂₁ S ₈	Nb ₂₁ S ₈ , tI58, 87	$I4/m$	1.6794, 1.6794, 0.3359, 90, 90, 90	-	-	7.74	X	3748
Nb-S	Nb ₃ S ₄	Nb ₃ Ta ₄ , hP14, 176	$P6_3/m$	0.95806, 0.95806, 0.33747, 90, 90, 120	-	-	5.04	X	3730
Nb-Sb	NbSb	NiAs, hP4, 194	$P6_3/mmc$	0.427, 0.427, 0.5447, 90, 90, 120	AlB ₂ family	-	8.29	X	3148
Nb-Sb	NbSb ₂	OsGe ₂ , mS12, 12	$C12/m1$	1.02395, 0.36318, 0.83322, 90, 120.035, 90	-	-	8.33	X	45672
Nb-Sb	Nb ₃ Sb	Cr ₃ Si, cP8, 223	$Pm-3n$	0.5261, 0.5261, 0.5261, 90, 90, 90	Frank-Kasper phase	-	9.13	X	45672
Nb-Sb	Nb ₅ Sb ₄	Ti ₅ Te ₄ , tI18, 87	$I4/m$	1.03184, 1.03184, 0.35581, 90, 90, 90	Chevrel phase	black	8.34	X	47539
Nb-Se	NbSe rt	* _h P*, 194	$P6_3/mmc$	0.3437, 0.3437, 1.303, 90, 90, 120	-	-	-	N	1647
Nb-Se	NbSe ₂ 2H (H)	MoS ₂ , hP6, 194	$P6_3/mmc$	0.3445, 0.3445, 1.255, 90, 90, 120	-	-	6.46	A	46778
Nb-Se	NbSe ₂ 3R Nb+	MoS ₂ , hR9, 160	$R3m$	0.345, 0.345, 1.888, 90, 90, 120	-	-	6.42	X	2390
Nb-Se	NbSe ₂ ht1 4H	NbSe ₂ -a, hP12, 187	$P-6m2$	0.344, 0.344, 2.524, 90, 90, 120	-	-	6.44	X	2390
Nb-Se	NbSe ₂ ht2 4H	NbSe ₂ -b, hP12, 187	$P-6m2$	0.348, 0.348, 2.545, 90, 90, 120	-	-	6.24	X	5874
Nb-Se	NbSe ₂ ht3 1T	CdI ₂ , hP3, 164	$P-3m1$	0.353, 0.353, 0.629, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	6.14	X	5874
Nb-Se	NbSe ₂ lt 2H	NbSe ₂ , hP24, 194	$P6_3/mmc$	0.688, 0.688, 1.2482, 90, 90, 120	-	-	6.51	X	6683
Nb-Se	NbSe ₂ rt	NbS ₂ , hP6, 194	$P6_3/mmc$	0.34425, 0.34425, 1.2547, 90, 90, 120	-	-	6.47	X	39749
Nb-Se	NbSe ₃ lt2	NbSe ₃ , mP24, 11	$P12_1/m1$	1.00086, 0.348, 1.563, 90, 109.473, 90	-	-	6.40	X	26483
Nb-Se	NbSe ₃ rt	NbSe ₃ , mP24, 11	$P12_1/m1$	1.0009, 0.34805, 1.5497, 90, 108.042, 90	-	black	6.40	X	11535
Nb-Se	NbSe ₄ tet1	* _t ***, *	-	2.857, 2.857, 0.3836, 90, 90, 90	-	-	-	N	2440
Nb-Se	NbSe ₄ tet2	NbTe ₄ -b, tP60, 75	$P4$	0.9503, 0.9503, 1.915, 90, 90, 90	-	-	4.71	A	2440
Nb-Se	Nb ₁ Se ₂	Nb ₁ Se ₂ , hP8, 187	$P-6m2$	0.3454, 0.3454, 1.258, 90, 90, 120	-	-	6.65	X	3489
Nb-Se	Nb ₂ Se	Nb ₂ Se, mS24, 12	$C12/m1$	1.3992, 0.3422, 0.9283, 90, 91.76, 90	-	-	7.92	X	4277
Nb-Se	Nb ₂ Se ₃	Mo ₂ S ₃ , mP10, 11	$P12_1/m1$	0.6503, 0.3434, 0.9215, 90, 103.39, 90	-	-	7.01	X	3714
Nb-Se	Nb ₂ Se ₉	Nb ₂ Se ₉ , aP22, 2	$P-1$	0.8160, 0.8284, 0.8386, 98.69, 94.14, 91.74	-	-	5.33	X	19646
Nb-Se	Nb ₃ Se ₄	Nb ₃ Te ₄ , hP14, 176	$P6_3/m$	1.00074, 1.00074, 0.34667, 90, 90, 120	-	-	6.57	X	5970

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Nb-Se	Nb ₅ Se ₄	Ti ₅ Te ₄ ,tI18,87	<i>I4/m</i>	0.9871,0.9871,0.34529,90,90,90	Chevrel phase	-	7.70	X	1795
Nb-Si	NbSi _{1.9}	CrSi ₂ ,hP9,180	<i>P6₃22</i>	0.48011,0.48011,0.65808,90,90,120	-	-	5.55	X	59070
Nb-Si	Nb _{0.75} Si _{0.25} tf	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.317,0.317,0.317,90,90,90	b.c.c. family	-	8.00	X	11429
Nb-Si	Nb _{0.999} Si _{0.001}	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.3377,0.3377,0.3377,90,90,90	b.c.c. family	-	8.01	X	7333
Nb-Si	Nb ₃ Si hp tf	* ₁ P*,*	-	0.698,0.698,1.272,90,90,90	-	-	-	N	11429
Nb-Si	Nb ₃ Si hp	Ni ₃ P,tI32,82	<i>I-4</i>	1.039,1.039,0.517,90,90,90	-	-	7.30	A	11429
Nb-Si	Nb ₃ Si ht	Ti ₃ P,tP32,86	<i>P4₃/n</i>	1.0224,1.0224,0.5189,90,90,90	-	-	7.51	X	8673
Nb-Si	Nb ₃ Si rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.422,0.422,0.422,90,90,90	close-packed structure	-	6.78	X	1930
Nb-Si	Nb _{3.61} Si _{0.39} m	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.5213,0.5213,0.5213,90,90,90	Frank-Kasper phase	-	8.12	X	13451
Nb-Si	Nb ₅ Si ₃ ht	W ₅ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.00375,1.00375,0.50358,90,90,90	-	-	7.18	X	63700
Nb-Si	Nb ₅ Si ₃ rt	Cr ₅ B ₃ ,tI32,140	<i>I4/mcm</i>	0.65767,0.65767,1.18967,90,90,90	-	-	7.08	X	59783
Nb-Si	Nb ₅ Si ₃ stab	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.756,0.756,0.526,90,90,120	-	-	7.00	A	768
Nb-Sn	NbSn ₂	Mg ₂ Cu,oF48,70	<i>Fddd</i>	0.5626,0.9874,1.9116,90,90,90	-	-	8.26	X	28784
Nb-Sn	Nb _{0.75} Sn _{0.25} hp-ht	Cu ₅ Cl ₄ ,225	<i>Fm-3m</i>	0.4412,0.4412,0.4412,90,90,90	close-packed structure	-	7.68	X	8118
Nb-Sn	Nb _{0.975} Sn _{0.027}	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.3306,0.3306,0.3306,90,90,90	b.c.c. family	-	8.60	X	2699
Nb-Sn	Nb ₃ Sn hp	* ₁ t* ₁ 6,*	-	0.5169,0.5169,1.0539,90,90,90	-	-	-	N	8118
Nb-Sn	Nb ₃ Sn lt	Nb ₃ Sn,tP8,131	<i>P4₂/mmc</i>	0.5293,0.5293,0.526,90,90,90	-	-	8.96	X	6073
Nb-Sn	Nb ₃ Sn rt	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.527,0.527,0.527,90,90,90	Frank-Kasper phase	-	9.02	X	53584
Nb-Sn	Nb ₆ Sn ₅ ht	Ti ₆ Sn ₅ ,oI44,71	<i>Immm</i>	0.5656,0.9199,1.6843,90,90,90	AlB ₂ family	-	8.72	X	2408
Nb-T	NbT _{0.18}	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.3335,0.3335,0.3335,90,90,90	b.c.c. family	-	8.37	F	18009
Nb-Ta	Ta _{0.5} Nb _{0.5}	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.3306,0.3306,0.3306,90,90,90	b.c.c. family	-	12.59	X	4478
Nb-Tc	Nb _{0.06} Tc _{0.94}	Mg ₅ hP2,194	<i>P6₃/mmc</i>	0.2757,0.2757,0.4432,90,90,120	close-packed structure	-	11.12	X	5202
Nb-Tc	Nb _{0.25} Tc _{0.75}	Mn ₅ Cl ₅ ,217	<i>I-43m</i>	0.9592,0.9592,0.9592,90,90,90	-	-	10.56	A	5202
Nb-Tc	Nb _{0.5} Tc _{0.5}	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.317,0.317,0.317,90,90,90	b.c.c. family	-	9.95	X	1910
Nb-Te	NbTe	* ₁ hR*,166	<i>R-3m</i>	1.0904,1.0904,2.0119,90,90,120	-	-	-	N	1647
Nb-Te	NbTe _{1.86}	* ₁ h***,*	-	1.091,1.091,2.014,90,90,120	-	-	-	N	6818
Nb-Te	NbTe ₂ ht2	* ₁ o***,*	-	0.598,0.678,0.686,90,90,90	-	-	-	N	21583
Nb-Te	NbTe ₂ rt	NbTe ₂ ,mS18,12	<i>C12/m1</i>	1.474,0.3642,0.9375,90,110,41,90	-	-	7.35	X	2816
Nb-Te	NbTe ₄ hp	* ₁ oS16,63	<i>Cmcm</i>	0.3611,1.3265,0.8681,90,90,90	-	-	-	N	3788
Nb-Te	NbTe ₄ ht	NbTe ₄ ,tP10,124	<i>P4/mcc</i>	0.6551,0.6551,0.6847,90,90,90	-	-	6.82	X	20700
Nb-Te	NbTe ₄ lt1	NbTe ₄ ,tP120,75	<i>P4</i>	1.2967,1.2967,2.0465,90,90,90	-	-	6.99	X	28468
Nb-Te	NbTe ₄ rt	NbTe ₄ ,tP10,124	<i>P4/mcc</i>	0.6499,0.6499,0.6837,90,90,90	-	-	6.94	X	18714
Nb-Te	Nb ₂ Te ₃	Mo ₂ As ₃ ,mS20,12	<i>C12/m1</i>	1.5073,0.361,1.0775,90,126.59,90	-	-	8.02	A	35848
Nb-Te	Nb ₃ Te hp	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.5261,0.5261,0.5261,90,90,90	Frank-Kasper phase	-	9.27	X	8179
Nb-Te	Nb ₃ Te ₄ rt	Nb ₃ Te ₄ ,hP14,176	<i>P6₃/m</i>	1.06338,1.06338,0.36371,90,90,120	-	-	7.36	X	38900
Nb-Te	Nb ₃ Te ₇ rt	* ₁ IP*,*	-	0.6469,0.6469,0.682,90,90,90	-	-	-	N	6592
Nb-Te	Nb ₃ Te ₈ rt	* ₁ IP*,*	-	0.6486,0.6486,0.682,90,90,90	-	-	-	N	6592
Nb-Te	Nb _{4.7} Te ₄	Nb _{4.7} Te ₄ ,mS18,12	<i>C12/m1</i>	1.4443,0.3696,1.0132,90,134.47,90	Chevrel phase	-	8.15	X	26765
Nb-Te	Nb ₅ Te ₄	Ti ₅ Te ₄ ,tI18,87	<i>I4/m</i>	1.0231,1.0231,0.37194,90,90,90	Chevrel phase	-	8.32	X	1795
Nb-Th	Th _{0.997} Nb _{0.003} rt	Cu ₅ Cl ₄ ,225	<i>Fm-3m</i>	0.5086,0.5086,0.5086,90,90,90	close-packed structure	-	11.69	X	785
Nb-Ti	Ti _{0.66} Nb _{0.34} ht	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.3283,0.3283,0.3283,90,90,90	b.c.c. family	-	5.93	X	35285
Nb-Ti	Ti _{0.92} Nb _{0.08} rt	(Cu _{0.75} Ti _{0.25}),oS4,63	<i>Cmcm</i>	0.298,0.50761,0.46949,90,90,90	close-packed structure	-	4.82	X	53546
Nb-Ti	Ti _{0.97} Nb _{0.03} rt	Mg ₅ hP2,194	<i>P6₃/mmc</i>	0.2946,0.2946,0.4683,90,90,120	close-packed structure	-	4.65	X	513
Nb-Tl	TlNb ₃ m	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.5297,0.5297,0.5297,90,90,90	Frank-Kasper phase	-	10.80	X	8106
Nb-U	U _{0.5} Nb _{0.5}	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.3402,0.3402,0.3402,90,90,90	b.c.c. family	-	13.96	X	1441
Nb-U	U _{0.8} Nb _{0.2}	* ₁ t***,*	-	0.346,0.346,0.341,90,90,90	-	-	-	N	1750
Nb-V	Nb _{0.0625} V _{0.9375}	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.3051,0.3051,0.3051,90,90,90	b.c.c. family	-	6.26	X	52207
Nb-W	Nb _{0.5} W _{0.5}	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.32224,0.32224,0.32224,90,90,90	b.c.c. family	-	13.73	X	3501
Nb-Y	Y _{0.001} Nb _{0.999}	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.33018,0.33018,0.33018,90,90,90	b.c.c. family	-	8.57	X	8936
Nb-Zn	Zn ₂ Nb	Mg ₂ Ni ₂ ,hP24,194	<i>P6₃/mmc</i>	0.505,0.505,1.632,90,90,120	Friauf-Laves phase	-	8.24	X	1309
Nb-Zn	Zn ₃ Nb	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3934,0.3934,0.3934,90,90,90	close-packed structure	gray faint	7.88	X	15569
Nb-Zn	Zn ₃ Nb ₂	* ₁ h***,*	-	0.506,0.506,2.643,90,90,120	-	-	-	N	2750
Nb-Zn	Zn ₇ Nb ₆	W ₆ Fe ₇ ,hR39,166	<i>R-3m</i>	0.507,0.507,2.749,90,90,120	Frank-Kasper phase	-	8.26	A	4094
Nb-Zr	Zr _{0.19} Nb _{0.81} tf	Cu ₅ Cl ₄ ,225	<i>Fm-3m</i>	0.435,0.435,0.435,90,90,90	close-packed structure	-	7.47	X	28912
Nb-Zr	Zr _{0.686} Nb _{0.314} ht	W ₅ Cl ₂ ,229	<i>Im-3m</i>	0.3497,0.3497,0.3497,90,90,90	b.c.c. family	-	7.13	X	37652
Nb-Zr	Zr _{0.903} Nb _{0.097} m	(Ti _{0.95} Cr _{0.05}),hP3,164	<i>P-3m1</i>	0.5023,0.5023,0.3095,90,90,120	-	-	6.73	X	37652
Nb-Zr	Zr _{0.95} Nb _{0.05} tf	Cu ₅ Cl ₄ ,225	<i>Fm-3m</i>	0.4554,0.4554,0.4554,90,90,90	close-packed structure	-	6.42	X	52111
Nb-Zr	Zr _{0.953} Nb _{0.047} rt	Mg ₅ hP2,194	<i>P6₃/mmc</i>	0.3216,0.3216,0.5134,90,90,120	close-packed structure	-	6.59	X	37652
Nd-Ni	NdNi	TiI ₂ oS8,63	<i>Cmcm</i>	0.38059,1.0462,0.43345,90,90,90	CrB(TiI)-FeB	-	7.81	X	37746
Nd-Ni	NdNi ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.727,0.727,0.727,90,90,90	Friauf-Laves phase	-	9.05	X	7444
Nd-Ni	NdNi ₃	PuNi ₃ ,hR36,166	<i>R-3m</i>	0.5015,0.5015,2.467,90,90,120	Laves-CaCu ₅	-	8.91	A	4602
Nd-Ni	NdNi ₅	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.4973,0.4973,0.40124,90,90,120	-	-	8.46	X	37746
Nd-Ni	Nd ₂ Ni ₁₇ ht	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.8402,0.8402,0.8048,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	8.68	X	4602
Nd-Ni	Nd ₂ Ni ₇ hex	Ce ₂ Ni ₇ ,hP36,194	<i>P6₃/mmc</i>	0.5001,0.5001,2.4437,90,90,120	Laves-CaCu ₅	-	8.78	X	61155
Nd-Ni	Nd ₂ Ni ₇ ht1	* ₁ hP144,*	-	0.4981,0.4981,9.697,90,90,120	-	-	-	N	4602
Nd-Ni	Nd ₂ Ni ₇ ht2	* ₁ hP144,*	-	0.4986,0.4986,7.263,90,90,120	-	-	-	N	4602
Nd-Ni	Nd ₂ Ni ₇ rhom	Gd ₂ Co ₇ ,hR54,166	<i>R-3m</i>	0.4983,0.4983,3.66,90,90,120	Laves-CaCu ₅	-	8.85	A	5223
Nd-Ni	Nd ₃ Ni	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.704,0.986,0.643,90,90,90	-	-	7.31	A	3382
Nd-Ni	Nd ₇ Ni ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	0.98732,0.98732,0.62977,90,90,120	-	-	7.41	X	47525
Nd-O	NdO hp-ht	NaCl,cF8,225	<i>Fm-3m</i>	0.4994,0.4994,0.4994,90,90,90	rocksalt family	golden	8.55	X	14201
Nd-O	NdO[O ₂] _{0.5}	NdO ₂ ,mS12,12	<i>C12/m1</i>	0.66495,0.40173,0.65174,90,98.11,90	-	blue light	6.79	X	19782
Nd-O	NdO _{1.5} ht	NdO _{1.5} ,cI26,229	<i>Im-3m</i>	0.441,0.441,0.441,90,90,90	-	-	6.51	X	12452
Nd-O	Nd ₂ O ₃ ht1	La ₂ O ₃ ,hP10,194	<i>P6₃/mmc</i>	0.384,0.384,0.601,90,90,120	-	blue pale	7.28	X	3191
Nd-O	Nd ₂ O ₃ rt	La ₂ O ₃ ,hP5,164	<i>P-3m1</i>	0.38277,0.38277,0.59908,90,90,120	-	blue	7.35	X	14799
Nd-O	Nd ₂ O ₃ stab	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	1.11023,1.11023,1.11023,90,90,90	-	-	6.53	X	64641
Nd-O	Nd ₂ O ₃ tf	Sm ₂ O ₃ ,mS30,12	<i>C12/m1</i>	1.43,0.369,0.893,90,100,90	-	-	7.22	A	6807
Nd-Os	NdOs ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5368,0.5368,0.8926,90,90,120	Friauf-Laves phase	-	15.64	X	1024
Nd-Os	Nd ₃ Os	Fe ₃ C-b,oP16,62	<i>Pnma</i>	0.7438,0.9522,0.6427,90,90,90	-	-	9.09	A	13171

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Nd-P	NdP rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.5835, 0.5835, 0.5835, 90, 90, 90	rocksalt family	-	5.86	X	7400
Nd-P	NdP ₂	NdAs ₂ , mP12, 14	<i>P12₁/c1</i>	0.40031, 0.65374, 1.009, 90, 105, 8, 90	-	-	5.39	A	41337
Nd-P	NdP ₅	NdP ₅ , mP12, 11	<i>P12₁/m1</i>	0.4938, 0.9551, 0.5444, 90, 103, 27, 90	-	black gray	3.98	X	10083
Nd-Pb	NdPb ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4852, 0.4852, 0.4852, 90, 90, 90	close-packed structure	-	11.13	X	7278
Nd-Pb	Nd ₅ Pb ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.9264, 0.9264, 0.677, 90, 90, 120	-	-	8.86	X	2810
Nd-Pb	Nd ₅ Pb ₄	Sm ₅ Ge ₄ , oP36, 62	<i>Pnma</i>	0.8331, 1.504, 0.8467, 90, 90, 90	-	-	9.70	A	4240
Nd-Pd	NdPd rt	TiI ₂ O ₈ , 63	<i>Cmcm</i>	0.3827, 1.079, 0.4547, 90, 90, 90	CrB(TiI)-FeB	-	8.87	A	24422
Nd-Pd	NdPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4125, 0.4125, 0.4125, 90, 90, 90	close-packed structure	-	10.96	X	25591
Nd-Pd	NdPd ₃ ht	* _o P72, *	-	0.5265, 0.9219, 2.57, 90, 90, 90	-	-	-	N	50515
Nd-Pd	Nd _{0.03} Pd _{0.97}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.39065, 0.39065, 0.39065, 90, 90, 90	close-packed structure	-	11.98	X	24422
Nd-Pd	Nd ₃ Pd ₄ rt	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3541, 1.3541, 0.579, 90, 90, 120	b.c.c. family	-	9.30	A	8116
Nd-Pd	Nd ₇ Pd ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	1.0131, 1.0131, 0.6386, 90, 90, 120	-	-	7.78	A	7342
Nd-Pr	Pr _{0.5} Nd _{0.5} rt	Nd, hP4, 194	<i>P6₃/mmc</i>	0.36646, 0.36646, 1.18181, 90, 90, 120	close-packed structure	-	6.89	X	2459
Nd-Pt	NdPt ht	TiI ₂ O ₈ , 63	<i>Cmcm</i>	0.3846, 1.0769, 0.4542, 90, 90, 90	CrB(TiI)-FeB	-	11.98	X	15422
Nd-Pt	NdPt rt	FeB-b, oP8, 62	<i>Pnma</i>	0.7239, 0.455, 0.5675, 90, 90, 90	CrB(TiI)-FeB	-	12.06	A	11776
Nd-Pt	NdPt ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7694, 0.7694, 0.7694, 90, 90, 90	Friauf-Laves phase	-	15.59	X	5516
Nd-Pt	NdPt ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5346, 0.5346, 0.4392, 90, 90, 120	-	-	17.10	X	28818
Nd-Pt	Nd _{0.75} Pt _{2.25}	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.76258, 0.76258, 0.76258, 90, 90, 90	Friauf-Laves phase	-	16.39	X	7328
Nd-Pt	Nd ₃ Pt ₂	Er ₃ Ni ₂ , hR45, 148	<i>R-3</i>	0.8893, 0.8893, 1.6871, 90, 90, 120	-	-	10.64	A	10263
Nd-Pt	Nd ₃ Pt ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.353, 1.353, 0.5746, 90, 90, 120	b.c.c. family	-	13.27	A	10597
Nd-Pt	Nd ₇ Pt ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	1.0099, 1.0099, 0.6351, 90, 90, 120	-	-	9.44	A	7350
Nd-Pu	Nd _{0.75} Pu _{0.25} rt	Nd, hP4, 194	<i>P6₃/mmc</i>	0.3597, 0.3597, 1.1614, 90, 90, 120	close-packed structure	-	8.64	X	4652
Nd-Re	NdRe ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5364, 0.5364, 0.8772, 90, 90, 120	Friauf-Laves phase	-	15.70	A	2373
Nd-Rh	NdRh	TiI ₂ O ₈ , 63	<i>Cmcm</i>	0.389, 1.084, 0.4247, 90, 90, 90	CrB(TiI)-FeB	-	9.17	A	5379
Nd-Rh	NdRh ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7585, 0.7585, 0.7585, 90, 90, 90	Friauf-Laves phase	-	10.66	X	5379
Nd-Rh	NdRh ₃ m	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.417, 0.417, 0.417, 90, 90, 90	close-packed structure	-	10.37	X	57318
Nd-Rh	NdRh ₃	CeNi ₃ , hP24, 194	<i>P6₃/mmc</i>	0.5266, 0.5266, 1.747, 90, 90, 120	Laves-CaCu ₅	-	10.76	A	57318
Nd-Rh	Nd ₃ Rh ₂	Er ₃ Ni ₂ , hR45, 148	<i>R-3</i>	0.8761, 0.8761, 1.664, 90, 90, 120	-	-	8.63	A	10263
Nd-Rh	Nd _{3.2} Rh _{0.8}	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7258, 0.984, 0.6431, 90, 90, 90	-	-	7.87	A	5379
Nd-Rh	Nd ₅ Rh ₄	Sm ₅ Ge ₄ , oP36, 62	<i>Pnma</i>	0.7396, 1.481, 0.7645, 90, 90, 90	-	-	8.99	A	9767
Nd-Rh	Nd ₇ Rh ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	1.003, 1.003, 0.6336, 90, 90, 120	-	-	7.93	A	6594
Nd-Ru	NdRu ₂ hp	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5293, 0.5293, 0.8955, 90, 90, 120	Friauf-Laves phase	-	10.59	A	17525
Nd-Ru	NdRu ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7608, 0.7608, 0.7608, 90, 90, 90	Friauf-Laves phase	-	10.45	X	23355
Nd-Ru	Nd _{0.05} Ru _{0.95}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2721, 0.2721, 0.4303, 90, 90, 120	close-packed structure	-	12.43	X	17525
Nd-Ru	Nd ₃ Ru	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.7353, 0.9649, 0.6406, 90, 90, 90	-	-	7.80	A	23355
Nd-Ru	Nd ₅ Ru ₂	Mn ₅ C ₂ , mS28, 15	<i>C12/c1</i>	1.629, 0.6503, 0.733, 90, 96, 63, 90	-	-	7.95	A	23355
Nd-Ru	Nd ₅ Ru ₃	* _o ***, *	-	1.56, 1.56, 18.63, 90, 90, 90	-	-	-	N	23355
Nd-Ru	Nd ₇ Ru ₃	Sr ₇ Pt ₃ , oP40, 62	<i>Pnma</i>	0.7303, 2.283, 0.6532, 90, 90, 90	-	-	8.01	A	23355
Nd-S	NdS lt	* _t *8, *	-	0.40234, 0.40234, 0.5673, 90, 90, 90	-	-	-	N	9232
Nd-S	NdS rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.57, 0.57, 0.57, 90, 90, 90	rocksalt family	golden	6.32	X	18279
Nd-S	NdS ₂ mon	CeSe ₂ , mP12, 14	<i>P12₁/c1</i>	0.8032, 0.4019, 0.8008, 90, 90, 90	-	red dark	5.35	X	54546
Nd-S	NdS ₂ tet	NdS ₂ , tP24, 117	<i>P-4b2</i>	0.8044, 0.8044, 0.8034, 90, 90, 90	-	golden	5.32	X	6819
Nd-S	NdS _{2.67}	* _o P8, 59	<i>Pmmn</i>	0.4071, 0.9244, 0.4085, 90, 90, 90	-	-	-	N	11684
Nd-S	Nd ₁₀ S ₁₉	Ce ₁₀ Se ₁₉ , tP58, 86	<i>P4₂/n</i>	0.8901, 0.8901, 1.6022, 90, 90, 90	-	-	5.37	X	50593
Nd-S	Nd ₂ S ₃ cub	* _c F*, 227	<i>Fd-3m</i>	1.992, 1.992, 1.992, 90, 90, 90	-	-	-	N	10799
Nd-S	Nd ₂ S ₃ rt	Cr ₃ C ₂ -b, oP20, 62	<i>Pnma</i>	0.74397, 0.40278, 1.55196, 90, 90, 90	-	black red	5.49	X	26720
Nd-S	Nd _{2.67} S ₄ ht	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8529, 0.8529, 0.8529, 90, 90, 90	-	green yellow	5.50	X	30236
Nd-S	Nd ₃ S ₄	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8526, 0.8526, 0.8526, 90, 90, 90	-	black	6.01	A	4386
Nd-S	Nd ₄ S ₇	Nd ₄ S ₇ , tP11, 111	<i>P-42m</i>	0.5597, 0.5597, 0.8030, 90, 90, 90	-	-	5.29	X	6819
Nd-S	Nd ₅ S ₇	* _t I192, 142	<i>I4₁/acd</i>	1.494, 1.494, 1.982, 90, 90, 90	-	-	-	N	3888
Nd-Sb	NdSb hp	CuTi, tP2, 123	<i>P4/mmm</i>	0.3806, 0.3806, 0.3123, 90, 90, 90	b.c.c. family	-	9.76	X	38437
Nd-Sb	NdSb lt	CoO, tI4, 139	<i>I4/mmm</i>	0.4463, 0.4463, 0.6294, 90, 90, 90	-	-	7.05	X	7400
Nd-Sb	NdSb rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.6338, 0.6338, 0.6338, 90, 90, 90	rocksalt family	-	6.94	X	53512
Nd-Sb	NdSb ₂ hp-ht	SmSb ₂ , oS24, 64	<i>Cmce</i>	0.6326, 0.6102, 1.8086, 90, 90, 90	-	-	7.38	A	36785
Nd-Sb	Nd ₂ Sb	La ₂ Sb, tI12, 139	<i>I4/mmm</i>	0.45134, 0.45134, 1.75823, 90, 90, 90	-	-	7.61	X	46766
Nd-Sb	Nd ₄ Sb ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.94, 0.94, 0.94, 90, 90, 90	-	gray	7.54	X	55485
Nd-Sb	Nd ₅ Sb ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.918, 0.918, 0.6463, 90, 90, 120	-	-	7.65	X	3753
Nd-Sb	Nd _{8.33} Sb ₂₀	Pr _{8.33} Sb ₂₀ , mS62, 8	<i>C1m1</i>	2.8452, 0.4247, 1.3459, 90, 95, 42, 90	-	-	7.46	X	42670
Nd-Se	NdSe lt	* _t *8, *	-	0.58995, 0.58995, 0.58832, 90, 90, 90	-	-	-	N	9232
Nd-Se	NdSe rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.59, 0.59, 0.59, 90, 90, 90	rocksalt family	golden	7.22	X	18279
Nd-Se	NdSe _{1.83}	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.4123, 0.4123, 0.8396, 90, 90, 90	-	black	6.72	X	54488
Nd-Se	NdSe _{1.9} hp	* _c I24, *	-	0.8007, 0.8007, 0.8007, 90, 90, 90	-	-	-	N	5173
Nd-Se	NdSe ₂	CeSe ₂ , mP12, 14	<i>P12₁/c1</i>	0.8412, 0.4164, 0.8352, 90, 90, 90	-	gray silver	6.86	X	46581
Nd-Se	Nd ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ , tP58, 86	<i>P4₂/n</i>	0.92536, 0.92536, 1.6792, 90, 90, 90	-	gray	6.80	X	22944
Nd-Se	Nd _{2.67} Se ₄ ht	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.88632, 0.88632, 0.88632, 90, 90, 90	-	red ruby	6.69	X	52681
Nd-Se	Nd ₃ Se ₄	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8879, 0.8879, 0.8879, 90, 90, 90	-	-	7.10	A	5089
Nd-Si	NdSi	FeB-b, oP8, 62	<i>Pnma</i>	0.81376, 0.39315, 0.59101, 90, 90, 90	CrB(TiI)-FeB	gray	6.05	A	59726
Nd-Si	NdSi _{1.58} rt	GdSi _{1.4} , oI12, 74	<i>Imma</i>	0.40924, 0.41306, 1.37455, 90, 90, 90	-	gray	5.39	X	24831
Nd-Si	NdSi _{1.6} rt	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.3948, 0.3948, 0.4269, 90, 90, 120	AlB ₂ family	-	5.45	X	23521
Nd-Si	NdSi _{1.8} ht	ThSi ₂ , tI12, 141	<i>I4₁/amd</i>	0.4142, 0.4142, 1.365, 90, 90, 90	-	-	5.53	X	22340
Nd-Si	Nd ₂ Si _{2.8} rt	Ho ₂ Si _{2.67} , oS24, 63	<i>Cmcm</i>	0.43589, 2.45774, 0.39161, 90, 90, 90	-	-	5.81	X	39209
Nd-Si	Nd ₅ Si ₃ hex1	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8671, 0.8671, 0.6577, 90, 90, 120	-	-	6.25	A	47562
Nd-Si	Nd ₅ Si ₃ hex2	* _h P48, *	-	1.5045, 1.5045, 0.6623, 90, 90, 120	-	-	-	N	16970
Nd-Si	Nd ₅ Si ₃	Cr ₂ Si ₃ , tI32, 140	<i>I4/mcm</i>	0.7761, 0.7761, 1.3804, 90, 90, 90	-	-	6.43	X	47562
Nd-Si	Nd ₅ Si ₄ orth	Gd ₅ Si ₄ , oP36, 62	<i>Pnma</i>	0.7687, 1.50835, 0.7892, 90, 90, 90	-	-	6.05	X	47562
Nd-Si	Nd ₅ Si ₄ tet	Zr ₅ Si ₄ , tP36, 92	<i>P4₂/2</i>	0.7873, 0.7873, 1.48389, 90, 90, 90	-	-	6.02	X	47562
Nd-Si	Nd _{6.5} Si ₃₅	* _o ***, *	-	0.321, 0.7461, 0.8556, 90, 90, 90	-	-	-	N	16970
Nd-Sm	Nd _{0.2} Sm _{0.8} rt	Sm, hR9, 166	<i>R-3m</i>	0.3636, 0.3636, 2.629, 90, 90, 120	close-packed structure	-	7.41	A	17966

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Nd-Sm	Nd _{0.5} Sm _{0.5} rt	Nd ₂ hP4, 194	$P6_3/mmc$	0.364, 0.364, 1.174, 90, 90, 120	close-packed structure	-	7.26	X	17966
Nd-Sn	NdSn ₂	ZrGa ₂ , oS12, 65	$Cmmm$	0.44404, 1.59436, 0.45628, 90, 90, 90	close-packed structure	-	7.85	X	26300
Nd-Sn	NdSn ₃ rt	Cu ₃ Au, cP4, 221	$Pm-3m$	0.471, 0.471, 0.471, 90, 90, 90	close-packed structure	-	7.95	X	28961
Nd-Sn	Nd ₁₁ Sn ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	$I4/mmm$	1.1844, 1.1844, 1.76122, 90, 90, 90	-	-	7.46	A	26300
Nd-Sn	Nd ₂ Sn ₃	Nd ₂ Sn ₃ , aP20, 2	$P-1$	0.6378, 0.8422, 1.1098, 107.37, 96.78, 100.03	-	-	7.77	X	43304
Nd-Sn	Nd ₂ Sn ₅	Ce ₂ Sn ₅ , oS28, 65	$Cmmm$	0.4576, 3.5123, 0.4616, 90, 90, 90	close-packed structure	-	7.90	A	27393
Nd-Sn	Nd ₃ Sn ₇	Ce ₃ Sn ₇ , oS20, 65	$Cmmm$	0.449, 2.577, 0.4587, 90, 90, 90	close-packed structure	-	7.91	A	35959
Nd-Sn	Nd ₂ Sn ₃	Mn ₅ Si ₃ , hP16, 193	$P6_3/mcm$	0.9248, 0.9248, 0.6735, 90, 90, 120	-	-	7.17	X	27530
Nd-Sn	Nd ₂ Sn ₄	Sm ₃ Ge ₄ , oP36, 62	$Pnma$	0.82012, 1.5783, 0.83354, 90, 90, 90	-	-	7.36	X	45886
Nd-Te	NdTe lt	*, t*8, *	-	0.62715, 0.62715, 0.6262, 90, 90, 90	-	-	-	N	9232
Nd-Te	NdTe rt	NaCl, cF8, 225	$Fm-3m$	0.627, 0.627, 0.627, 90, 90, 90	rocksalt family	violet	7.33	X	18279
Nd-Te	NdTe _{1.89}	UAs ₂ , tP6, 129	$P4/nmm$	0.4377, 0.4377, 0.906, 90, 90, 90	-	black	7.37	X	2988
Nd-Te	NdTe _{1.9}	NdTe _{1.9} , oS180, 38	$Amm2$	1.3289, 1.7677, 1.8069, 90, 90, 90	-	black	7.26	X	40107
Nd-Te	NdTe ₃	CeTe ₃ , oS16, 40	$Ama2$	0.43629, 2.58515, 0.43469, 90, 90, 90	-	golden	7.14	X	45698
Nd-Te	Nd _{0.5} Te _{0.5} ht	Po, cP1, 221	$Pm-3m$	0.3125, 0.3125, 0.3125, 90, 90, 90	-	-	7.40	X	2375
Nd-Te	Nd ₂ Te ₃ rt	Th ₂ Si ₃ , oP20, 62	$Pnma$	1.21856, 0.43869, 1.18687, 90, 90, 90	-	black	7.03	X	40272
Nd-Te	Nd ₂ Te ₅ ht	Nd ₂ Te ₅ , oS28, 63	$Cmcm$	0.4409, 4.41, 0.4409, 90, 90, 90	-	brown	7.18	X	3366
Nd-Te	Nd ₃ Te ₄ ht	Th ₃ P ₄ , tI28, 220	$I-43d$	0.94356, 0.94356, 0.94356, 90, 90, 90	-	gray silver	7.46	X	57125
Nd-Te	Nd ₄ Te ₇	*, tP22, 127	$P4/mbm$	0.8799, 0.8799, 0.9001, 90, 90, 90	-	-	-	N	3034
Nd-Th	Th _{0.1} Nd _{0.9} rt	Nd ₂ hP4, 194	$P6_3/mmc$	0.3646, 0.3646, 1.1765, 90, 90, 120	close-packed structure	-	7.50	X	3631
Nd-Th	Th _{0.2} Nd _{0.8} rt	Cu, cF4, 225	$Fm-3m$	0.513, 0.513, 0.513, 90, 90, 90	close-packed structure	-	7.96	X	4726
Nd-Tl	TlNd lt	CuTi, tP2, 123	$P4/mmm$	0.362, 0.362, 0.432, 90, 90, 90	b.c.c. family	-	10.23	X	14286
Nd-Tl	TlNd rt	CsCl, cP2, 221	$Pm-3m$	0.3848, 0.3848, 0.3848, 90, 90, 90	b.c.c. family	gray silver	10.16	X	2600
Nd-Tl	TlNd ₂	Co _{1.75} Ge, hP6, 194	$P6_3/mmc$	0.552, 0.552, 0.6816, 90, 90, 120	AlB ₂ family	-	9.10	X	11469
Nd-Tl	TlNd ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4922, 0.4922, 0.4922, 90, 90, 90	close-packed structure	-	8.87	X	11469
Nd-Tl	Tl ₃ Nd	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4737, 0.4737, 0.4737, 90, 90, 90	close-packed structure	-	11.83	X	11469
Nd-Tl	Tl ₃ Nd ₅ rt	W ₅ Si ₃ , tI32, 140	$I4/mcm$	1.246, 1.246, 0.6185, 90, 90, 90	-	-	9.23	A	11469
Nd-Tl	Tl ₃ Nd ₃	Pu ₃ Pd ₅ , oS32, 63	$Cmcm$	1.021, 0.823, 1.044, 90, 90, 90	-	-	11.01	A	11469
Nd-Tm	Nd _{0.5} Tm _{0.5} rt	Nd ₂ hP4, 194	$P6_3/mmc$	0.36, 0.36, 1.15, 90, 90, 120	close-packed structure	-	8.06	X	3139
Nd-Tm	Nd _{0.5} Tm _{0.5} rt	Sm, hR9, 166	$R-3m$	0.35, 0.35, 2.6, 90, 90, 120	close-packed structure	-	8.48	A	3139
Nd-Y	Y _{0.35} Nd _{0.65} rt	Nd ₂ hP4, 194	$P6_3/mmc$	0.3654, 0.3654, 1.1781, 90, 90, 120	close-packed structure	-	6.49	X	2374
Nd-Y	Y _{0.431} Nd _{0.569} rt	Sm, hR9, 166	$R-3m$	0.3662, 0.3662, 2.6382, 90, 90, 120	close-packed structure	-	6.09	A	2374
Nd-Y	Y _{0.431} Nd _{0.569} rt	Mg, hP2, 194	$P6_3/mmc$	0.3681, 0.3681, 0.5833, 90, 90, 120	close-packed structure	-	5.84	X	2374
Nd-Zn	ZnNd hp	AuCd, oP4, 51	$Pnma$	0.4772, 0.3361, 0.5142, 90, 90, 90	close-packed structure	-	8.44	A	33225
Nd-Zn	ZnNd lt2	CuTi, tP2, 123	$P4/mmm$	0.365, 0.365, 0.3661, 90, 90, 90	b.c.c. family	-	7.14	X	8910
Nd-Zn	ZnNd rt	CsCl, cP2, 221	$Pm-3m$	0.3666, 0.3666, 0.3666, 90, 90, 90	b.c.c. family	gray silver	7.07	X	8910
Nd-Zn	Zn ₁₁ Nd	BaCd ₁₁ , tI48, 141	$I4_1/amd$	1.064, 1.064, 0.6842, 90, 90, 90	-	-	7.40	X	2559
Nd-Zn	Zn ₁₁ Nd ₃	La ₃ Al ₁₁ , oI28, 71	$Immm$	0.4485, 0.8855, 1.3318, 90, 90, 90	-	-	7.23	A	5221
Nd-Zn	Zn ₁₇ Nd ₅ ht	Zn ₁₇ Th ₂ , hR57, 166	$R-3m$	0.90497, 0.90497, 1.32334, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	gray	7.43	X	19986
Nd-Zn	Zn ₁₇ Nd ₅ rt	Th ₂ Ni ₁₇ , hP38, 194	$P6_3/mmc$	0.9013, 0.9013, 0.8889, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	-	7.44	A	19998
Nd-Zn	Zn ₂ Nd	KHg ₂ , oI12, 74	$Imma$	0.4597, 0.7408, 0.7555, 90, 90, 90	AlB ₂ family	-	7.10	X	7352
Nd-Zn	Zn ₂₂ Nd ₃	Zn ₂₂ Ce ₃ , tI100, 141	$I4_1/amd$	0.8898, 0.8898, 2.129, 90, 90, 90	-	-	7.37	A	19998
Nd-Zn	Zn ₃ Nd	Zn ₃ Y, oP16, 62	$Pnma$	0.6717, 0.4544, 1.0284, 90, 90, 90	-	-	7.20	A	5221
Nd-Zn	Zn ₅ Nd	CaCu ₅ , hP6, 191	$P6/mmm$	0.5404, 0.5404, 0.4243, 90, 90, 120	-	-	7.29	X	7340
Nd-Zn	Zn _{58.35} Nd _{12.82}	Zn _{58.7} Y _{12.65} , hP146, 194	$P6_3/mmc$	1.4514, 1.4514, 1.4124, 90, 90, 120	-	-	7.30	X	48647
Ni-Np	NpNi ₂	MgCu ₂ , cF24, 227	$Fd-3m$	0.7098, 0.7098, 0.7098, 90, 90, 90	Friauf-Laves phase	-	13.17	X	9108
Ni-Np	NpNi ₅	CaCu ₅ , hP6, 191	$P6/mmm$	0.48501, 0.48501, 0.39841, 90, 90, 120	-	-	10.85	X	64554
Ni-O	NiO AFM	CoO, mS4, 12	$C12/m1$	0.51099, 0.29556, 0.29514, 90, 125, 2, 90	-	-	6.81	X	9036
Ni-O	NiO ht	NaCl, cF8, 225	$Fm-3m$	0.41786, 0.41786, 0.41786, 90, 90, 90	bunsenite	green	6.80	X	59236
Ni-O	NiO rt	NiO, hR6, 166	$R-3m$	0.29549, 0.29549, 0.7232, 90, 90, 120	rocksalt family	grayish	6.81	X	38376
Ni-O	NiO ₂ m mon	CuBr ₂ , mS6, 12	$C12/m1$	0.48754, 0.28141, 0.48023, 90, 109.554, 90	-	-	4.85	X	36530
Ni-O	NiO ₂ m trig	CdI ₂ , hP3, 164	$P-3m1$	0.2818, 0.2818, 0.4367, 90, 90, 120	CdI ₂ -PbI ₂ polytype	grayish	5.01	X	41081
Ni-O	Ni _{1.01} O ₂ (Li)	NaFeO ₂ , hR12, 166	$R-3m$	0.28353, 0.28353, 1.43319, 90, 90, 120	rocksalt family	-	4.56	X	31038
Ni-O	Ni ₂ O ₃ tf	*, hP*, *	-	0.461, 0.461, 0.561, 90, 90, 120	-	-	-	N	1414
Ni-O	Ni _{3.75} O ₄ FM	Ni _{3.75} O ₄ , mS36, 12	$C12/m1$	1.02294, 0.59149, 0.59083, 90, 125.187, 90	-	-	6.46	X	765
Ni-Os	Os _{0.89} Ni _{0.11}	Mg, hP2, 194	$P6_3/mmc$	0.27278, 0.27278, 0.4309, 90, 90, 120	close-packed structure	-	21.02	X	57132
Ni-P	NiP hp1	NiP, oS56, 36	$Cmc2_1$	2.3801, 0.59238, 0.48479, 90, 90, 90	-	-	6.10	X	57753
Ni-P	NiP hp2	NiP, oP40, 62	$Pnma$	0.47729, 1.66619, 0.58071, 90, 90, 90	-	-	6.45	X	62298
Ni-P	NiP hp3	NiAs, oS24, 36	$Cmc2_1$	0.9695, 0.57101, 0.47438, 90, 90, 90	AlB ₂ family	-	6.80	X	62298
Ni-P	NiP ht	NiP, oP16, 61	$Pbca$	0.48684, 0.68788, 0.6036, 90, 90, 90	AlB ₂ family	-	5.89	X	57753
Ni-P	NiP ₂ hp	FeS ₂ , cP12, 205	$Pa-3$	0.54706, 0.54706, 0.54706, 90, 90, 90	negevite	-	4.89	X	3942
Ni-P	NiP ₂ rt	PdP ₂ , mS12, 15	$C12/c1$	0.6352, 0.56042, 0.5621, 90, 119.62, 90	-	gray	4.61	X	38139
Ni-P	NiP ₃ ht	CoAs ₃ , cI32, 204	$Im-3$	0.78157, 0.78157, 0.78157, 90, 90, 90	-	black	4.22	X	38527
Ni-P	Ni ₁₂ P ₅ rt	Ni ₁₂ P ₅ , tI34, 87	$I4/m$	0.8646, 0.8646, 0.507, 90, 90, 90	-	-	7.53	X	1046
Ni-P	Ni ₃ P	Fe ₂ P, hP9, 189	$P-62m$	0.5859, 0.5859, 0.3382, 90, 90, 120	transjordanite	-	7.35	X	1589
Ni-P	Ni ₃ P m cub	*, cF*, *	-	0.55, 0.55, 0.55, 90, 90, 90	-	-	-	N	18220
Ni-P	Ni ₃ P m hex1	*, hP*, *	-	0.672, 0.672, 0.952, 90, 90, 120	-	-	-	N	18220
Ni-P	Ni ₃ P m hex2	*, hP*, *	-	0.672, 0.672, 1.428, 90, 90, 120	-	-	-	N	18220
Ni-P	Ni ₃ P m hex3	*, hP*, *	-	0.672, 0.672, 3.808, 90, 90, 120	-	-	-	N	18220
Ni-P	Ni ₃ P	Ni ₃ P, tI32, 82	$I-4$	0.89499, 0.89499, 0.4385, 90, 90, 90	nickelphosphide	-	7.83	X	42832
Ni-P	Ni ₅ P ₂ ht	Ni ₅ As ₂ , hP48, 185	$P6_3cm$	0.65795, 0.65795, 1.2261, 90, 90, 120	-	-	7.70	X	57113
Ni-P	Ni ₄ P ₄	Ni ₄ P ₄ , hP36, 186	$P6_3mc$	0.67921, 0.67921, 1.09922, 90, 90, 120	halamishite	-	6.31	X	48856
Ni-P	Ni ₅ P ₂ rt	Ni ₅ P ₂ , hP62, 165	$P-3c1$	0.6613, 0.6613, 1.2311, 90, 90, 120	-	-	7.72	X	44556
Ni-P	Ni ₄ P ₃ rt	Pd ₄ Sb ₃ , hR132, 161	$R3c$	0.6613, 0.6613, 3.7914, 90, 90, 90	-	-	7.81	X	20534
Ni-Pb	NiPb lt m	NiAs, hP4, 194	$P6_3/mmc$	0.415, 0.415, 0.528, 90, 90, 120	AlB ₂ family	-	11.21	X	3856
Ni-Pb	NiPb rt m	*, hP*, *	-	0.92, 0.92, 0.29, 90, 90, 120	-	-	-	N	3856
Ni-Pd	Ni _{0.25} Pd _{0.75} m	Mg, hP2, 194	$P6_3/mmc$	0.276, 0.276, 0.452, 90, 90, 120	close-packed structure	-	10.52	X	57087
Ni-Pd	Ni _{0.46} Pd _{0.54}	Cu, cF4, 225	$Fm-3m$	0.37563, 0.37563, 0.37563, 90, 90, 90	close-packed structure	-	10.58	X	53728

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ni-Po	NiPo	NiAs, hP4, 194	$P6_3/mmc$	0.395, 0.395, 0.568, 90, 90, 120	AlB ₂ family	-	11.58	X	1219
Ni-Pr	PrNi	TlI, oS8, 63	$Cmcm$	0.38307, 1.0543, 0.4369, 90, 90, 90	CrB(TlI)-FeB	-	7.51	X	42964
Ni-Pr	PrNi ₂	MgCu ₂ , cF24, 227	$Fd-3m$	0.7275, 0.7275, 0.7275, 90, 90, 90	Friauf-Laves phase	-	8.91	X	25184
Ni-Pr	PrNi ₃	PuNi ₃ , hR36, 166	$R-3m$	0.50357, 0.50357, 2.4849, 90, 90, 120	Laves-CaCu ₅	-	8.68	X	63398
Ni-Pr	PrNi ₅	CaCu ₅ , hP6, 191	$P6/mmm$	0.4957, 0.4957, 0.3973, 90, 90, 120	-	-	8.53	X	31031
Ni-Pr	Pr ₂ Ni ₇ hex	Ce ₂ Ni ₇ , hP36, 194	$P6_3/mmc$	0.5009, 0.5009, 2.4472, 90, 90, 120	Laves-CaCu ₅	-	8.65	A	57664
Ni-Pr	Pr ₂ Ni ₇ rhom	Gd ₂ Co ₇ , hR54, 166	$R-3m$	0.4991, 0.4991, 3.646, 90, 90, 120	Laves-CaCu ₅	-	8.78	A	57664
Ni-Pr	Pr ₃ Ni	Fe ₂ C-b, oP16, 62	$Pnma$	0.7182, 0.9786, 0.6479, 90, 90, 90	-	-	7.02	A	33441
Ni-Pr	Pr ₃ Ni ₁₉ hex	Sm ₂ Co ₁₉ , hP48, 194	$P6_3/mmc$	0.4999, 0.4999, 3.241, 90, 90, 120	Laves-CaCu ₅	-	8.62	A	57664
Ni-Pr	Pr ₃ Ni ₁₉ rhom	Ce ₂ Co ₁₉ , hR72, 166	$R-3m$	0.4998, 0.4998, 4.862, 90, 90, 120	Laves-CaCu ₅	-	8.62	A	57664
Ni-Pr	Pr ₇ Ni ₃	Th ₇ Fe ₃ , hP20, 186	$P6_3/mc$	0.9904, 0.9904, 0.6322, 90, 90, 120	-	-	7.19	A	7350
Ni-Pt	NiPt rt	CuAu ₂ , tP2, 123	$P4/mmm$	0.2711, 0.2711, 0.3602, 90, 90, 90	close-packed structure	-	15.92	X	21260
Ni-Pt	Ni _{0.75} Pt _{0.25} ht	Cu ₂ cF4, 225	$Fm-3m$	0.3652, 0.3652, 0.3652, 90, 90, 90	close-packed structure	-	12.66	X	17661
Ni-Pt	Ni _{1.5} Pt _{0.5}	LiRh, hP2, 187	$P-6m2$	0.258, 0.258, 0.42, 90, 90, 120	close-packed structure	-	12.73	X	47657
Ni-Pu	PuNi	TlI, oS8, 63	$Cmcm$	0.359, 1.021, 0.422, 90, 90, 90	CrB(TlI)-FeB	-	13.00	X	1040
Ni-Pu	PuNi ₂	MgCu ₂ , cF24, 227	$Fd-3m$	0.714, 0.714, 0.714, 90, 90, 90	Friauf-Laves phase	-	13.19	X	12763
Ni-Pu	PuNi ₃	PuNi ₃ , hR36, 166	$R-3m$	0.5, 0.5, 2.435, 90, 90, 120	Laves-CaCu ₅	-	11.91	X	1027
Ni-Pu	PuNi ₄	PuNi ₄ , mS30, 12	$C12/m1$	0.487, 0.846, 1.027, 90, 100, 0, 90	-	-	11.45	X	1164
Ni-Pu	PuNi ₅	CaCu ₅ , hP6, 191	$P6/mmm$	0.4875, 0.4875, 0.397, 90, 90, 120	-	-	10.92	X	743
Ni-Pu	Pu ₂ Ni ₁₇	Th ₂ Ni ₁₇ , hP38, 194	$P6_3/mmc$	0.83, 0.83, 0.8, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	10.34	A	743
Ni-Re	Re _{0.04} Ni _{0.96}	Cu ₂ cF4, 225	$Fm-3m$	0.3537, 0.3537, 0.3537, 90, 90, 90	close-packed structure	-	9.58	X	45506
Ni-Re	Re _{0.79} Ni _{0.21}	Mg, hP2, 194	$P6_3/mmc$	0.27496, 0.27496, 0.4439, 90, 90, 120	close-packed structure	-	18.22	X	57132
Ni-Rh	Rh _{0.5} Ni _{0.5}	Cu ₂ cF4, 225	$Fm-3m$	0.36845, 0.36845, 0.36845, 90, 90, 90	close-packed structure	-	10.73	X	15214
Ni-Ru	Ru _{0.10} Ni _{0.90}	Cu ₂ cF4, 225	$Fm-3m$	0.35654, 0.35654, 0.35654, 90, 90, 90	close-packed structure	-	9.22	X	57132
Ni-Ru	Ru _{0.89} Ni _{0.11}	Mg, hP2, 194	$P6_3/mmc$	0.26878, 0.26878, 0.42629, 90, 90, 120	close-packed structure	-	12.01	X	57132
Ni-S	NiS ht	NiAs, hP4, 194	$P6_3/mmc$	0.3435, 0.3435, 0.5348, 90, 90, 120	AlB ₂ family	black	5.52	X	25016
Ni-S	NiS rt	NiS, hR18, 160	$R3m$	0.96112, 0.96112, 0.31508, 90, 90, 120	millerite	golden	5.38	X	44567
Ni-S	NiS ₂ rt	FeS ₂ , cP12, 205	$Pa-3$	0.56765, 0.56765, 0.56765, 90, 90, 90	vaesite	gray	4.46	X	24392
Ni-S	Ni _{1.5} S ht	Cu _{1.9} S, cF12, 216	$F-43m$	0.521, 0.521, 0.521, 90, 90, 90	-	-	5.64	X	39791
Ni-S	Ni _{1.7} S _{1.8} rt	Ni _{1.7} S _{1.8} , hP105, 152	$P3_121$	1.0290, 1.0290, 1.5993, 90, 90, 120	-	-	5.35	X	15765
Ni-S	Ni _{2.75} S	Ni ₃ P, tJ32, 82	$I-4$	0.8831, 0.8831, 0.4455, 90, 90, 90	-	-	7.40	X	55004
Ni-S	Ni ₃ S ₂ hp	Rh ₃ Te ₂ , oS20, 63	$Cmcm$	0.3118, 1.0862, 0.673, 90, 90, 90	-	-	7.00	X	40893
Ni-S	Ni ₃ S ₂ rt	Ni ₃ S ₂ , hR15, 155	$R32$	0.57407, 0.57407, 0.71324, 90, 90, 120	heazlewoodite	bronze	5.88	X	28331
Ni-S	Ni ₃ S ₄ rt	Fe ₂ O ₄ , cF56, 227	$Fd-3m$	0.9488, 0.9488, 0.9488, 90, 90, 90	spinel family	-	4.73	X	24596
Ni-S	Ni ₄ S _{2.31} ht	* ₂ hP* *	-	0.544, 0.544, 1.204, 90, 90, 120	-	-	-	N	1957
Ni-S	Ni ₄ S ₃ ht	* ₂ cP* *	-	0.514, 0.514, 0.514, 90, 90, 90	-	-	-	N	39791
Ni-S	Ni _{5.63} S _{4.86} ht	Ni _{5.63} S _{4.86} , oS56, 63	$Cmcm$	0.3274, 1.1359, 1.6157, 90, 90, 90	-	-	5.38	X	6244
Ni-S	Ni ₉ S ₈ rt	Ni ₉ S ₈ , oS68, 21	$C222$	0.93359, 1.12185, 0.943, 90, 90, 90	godlevskite MDO1	-	5.28	X	19711
Ni-S	Ni ₉ S ₈ tet	Ni ₉ S ₈ , tI136, 122	$I-42d$	0.938, 0.938, 2.244, 90, 90, 90	godlevskite MDO2	-	5.28	X	53105
Ni-Sb	NiSb	NiAs, hP4, 194	$P6_3/mmc$	0.4032, 0.4032, 0.52, 90, 90, 120	breithauptite	pink	8.19	X	45672
Ni-Sb	NiSb ₂ hp	NiAs ₂ , oP24, 61	$Pbca$	0.62866, 0.63643, 1.2367, 90, 90, 90	pyrite-marcasite family	gray	8.11	X	37472
Ni-Sb	NiSb ₂ rt	FeS ₂ , oP6, 58	$Pnmm$	0.5186, 0.63192, 0.38398, 90, 90, 90	nisbite	-	7.98	X	55532
Ni-Sb	Ni _{0.15} Sb _{0.85} m	Po, cP1, 221	$Pm-3m$	0.303, 0.303, 0.303, 90, 90, 90	-	-	6.70	X	4176
Ni-Sb	Ni _{0.92} Sb _{0.08}	Cu ₂ cF4, 225	$Fm-3m$	0.359, 0.359, 0.359, 90, 90, 90	close-packed structure	-	9.15	X	17661
Ni-Sb	Ni ₃ Sb ht Sb+	BiF ₃ , cF16, 225	$Fm-3m$	0.596, 0.596, 0.596, 90, 90, 90	fluorite family	-	9.35	X	772
Ni-Sb	Ni ₃ Sb rt	Cu ₃ Ti, oP8, 59	$Pmnm$	0.4224, 0.5376, 0.4514, 90, 90, 90	close-packed structure	-	9.65	A	62949
Ni-Sb	Ni ₅ Sb ₂ ht	* ₂ hP* *	-	0.355, 0.355, 0.93, 90, 90, 120	-	-	-	N	2332
Ni-Sb	Ni ₅ Sb ₂ rt mon	Ni ₅ Sb ₂ , mS28, 5	$C121$	1.2949, 0.5423, 0.6134, 90, 117.788, 90	-	-	9.36	X	11482
Ni-Sb	Ni ₅ Sb ₂ rt tet	* ₂ t** *	-	0.8766, 0.8766, 1.2535, 90, 90, 90	-	-	-	N	2332
Ni-Sc	ScNi	CsCl, cP2, 221	$Pm-3m$	0.30935, 0.30935, 0.30935, 90, 90, 90	b.c.c. family	-	5.81	X	28674
Ni-Sc	ScNi ₂	MgCu ₂ , cF24, 227	$Fd-3m$	0.6908, 0.6908, 0.6908, 90, 90, 90	Friauf-Laves phase	-	6.54	X	17286
Ni-Sc	ScNi ₃	CaCu ₅ , hP6, 191	$P6/mmm$	0.469, 0.469, 0.3887, 90, 90, 120	-	-	7.59	X	20496
Ni-Sc	Sc _{0.005} Ni _{0.995}	Cu ₂ cF4, 225	$Fm-3m$	0.353, 0.353, 0.353, 90, 90, 90	close-packed structure	-	8.85	X	17286
Ni-Sc	Sc ₂ Ni	Ti ₂ Ni, cF96, 227	$Fd-3m$	1.218, 1.218, 1.218, 90, 90, 90	-	-	4.37	A	64704
Ni-Sc	Sc ₂ Ni ₇	Ce ₂ Ni ₇ , hP36, 194	$P6_3/mmc$	0.475, 0.475, 2.272, 90, 90, 120	Laves-CaCu ₅	-	7.49	A	33403
Ni-Se	NiSe ht	NiAs, hP4, 194	$P6_3/mmc$	0.3652, 0.3652, 0.5347, 90, 90, 120	sederholmite	-	7.40	X	4926
Ni-Se	NiSe rt	NiS, hR18, 160	$R3m$	1.0007, 1.0007, 0.3333, 90, 90, 120	mäkinenite	-	7.12	A	1241
Ni-Se	NiSe ₂	FeS ₂ , cP12, 205	$Pa-3$	0.59629, 0.59629, 0.59629, 90, 90, 90	penroseite	-	6.79	X	4353
Ni-Se	Ni ₂₁ Se ₂₀ rt	* ₂ hP* *	-	0.797, 0.797, 0.978, 90, 90, 120	-	-	-	N	1957
Ni-Se	Ni ₃ Se ₂ ht	* ₂ cF* *	-	0.5423, 0.5423, 0.5423, 90, 90, 90	-	-	-	N	4719
Ni-Se	Ni ₃ Se ₂ m	* ₂ tI* *	-	0.7289, 0.7289, 1.1568, 90, 90, 90	-	-	-	N	4719
Ni-Se	Ni ₃ Se ₂ rt	Ni ₃ S ₂ , hR15, 155	$R32$	0.60338, 0.60338, 0.7251, 90, 90, 120	-	-	7.28	X	2955
Ni-Se	Ni ₃ Se ₄ rt	Cr ₃ S ₄ , mS14, 12	$C12/m1$	1.21499, 0.3633, 0.61903, 90, 120.674, 90	wilkmanite	-	6.95	X	1241
Ni-Se	Ni ₆ Se ₃ ht	Ni ₆ Se ₃ , oP88, 29	$Pca2_1$	0.6863, 1.709, 1.1821, 90, 90, 90	-	-	7.16	X	8551
Ni-Se	Ni ₄ Se	Se, hP3, 152	$P3_121$	0.45367, 0.45367, 0.47286, 90, 90, 120	-	-	4.67	A	55745
Ni-Si	NiSi (Fe)	FeSi, cP8, 198	$P2_13$	0.4437, 0.4437, 0.4437, 90, 90, 90	-	-	6.60	A	65
Ni-Si	NiSi hp1	FeSi, cP8, 198	$P2_13$	0.40471, 0.40471, 0.40471, 90, 90, 90	-	-	8.70	X	59309
Ni-Si	NiSi hp2	CuTi, tP2, 123	$P4/mmm$	0.25788, 0.25788, 0.257, 90, 90, 90	b.c.c. family	-	8.43	X	59309
Ni-Si	NiSi hp3	PbO, oP8, 57	$Pbcm$	0.43903, 0.40079, 0.39546, 90, 90, 90	-	-	8.28	X	59309
Ni-Si	NiSi rt	FeAs, oP8, 62	$Pnma$	0.50324, 0.33153, 0.53474, 90, 90, 90	AlB ₂ family	-	6.46	X	59309
Ni-Si	NiSi ₂ rt	CaF ₂ , cF12, 225	$Fm-3m$	0.54041, 0.54041, 0.54041, 90, 90, 90	fluorite family	-	4.83	X	64272
Ni-Si	Ni _{0.92} Si _{0.08}	Cu ₂ cF4, 225	$Fm-3m$	0.352, 0.352, 0.352, 90, 90, 90	close-packed structure	-	8.57	X	17661
Ni-Si	Ni _{1.5} Si ht	Co _{1.75} Ge, hP6, 194	$P6_3/mmc$	0.382, 0.382, 0.4906, 90, 90, 120	AlB ₂ family	-	6.22	X	12294
Ni-Si	Ni ₂ Si rt	Co ₂ Si-b, oP12, 62	$Pnma$	0.4992, 0.3741, 0.7061, 90, 90, 90	-	-	7.33	X	52184
Ni-Si	Ni ₂₅ Si ₉ ht rhom	* ₂ hR102, *	-	0.67022, 0.67022, 2.88954, 90, 90, 120	-	-	-	N	20232
Ni-Si	Ni ₂₅ Si ₉ ht trig	Pd ₂₅ Co ₉ , hP34, 147	$P-3$	0.6698, 0.6698, 0.9618, 90, 90, 120	-	-	7.64	A	12294
Ni-Si	Ni ₃ Si ht	Fe ₂ C-b, oP16, 62	$Pnma$	0.55, 0.65, 0.435, 90, 90, 90	-	-	8.72	A	17524
Ni-Si	Ni ₃ Si ₂ rt	Ni ₃ Si ₂ , oS80, 36	$Cmc2_1$	1.2229, 1.0805, 0.6924, 90, 90, 90	-	-	6.75	X	1356

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ni-Si	Ni _{3.064} Si _{0.936} rt Ni+	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.35091, 0.35091, 0.35091, 90, 90, 90	close-packed structure	-	7.92	X	10534
Ni-Si	Ni ₃₁ Si ₁₂	Ni ₃₁ Si ₁₂ , hP43, 150	<i>P321</i>	0.6671, 0.6671, 1.2288, 90, 90, 120	-	-	7.56	X	5595
Ni-Sm	SmNi	TiI ₂ , oS8, 63	<i>Cmcm</i>	0.3776, 1.0358, 0.4291, 90, 90, 90	CrB(TiI)-FeB	-	8.28	A	2404
Ni-Sm	SmNi ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.723, 0.723, 0.723, 90, 90, 90	Friauf-Laves phase	-	9.41	X	25184
Ni-Sm	SmNi ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.5, 0.5, 2.459, 90, 90, 120	Laves-CaCu ₅	-	9.17	A	13020
Ni-Sm	SmNi ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.49223, 0.49223, 0.39639, 90, 90, 120	-	-	8.86	X	60289
Ni-Sm	Sm _{0.95} Ni ₂	TmNi ₂ , cF192, 216	<i>F-43m</i>	1.4448, 1.4448, 1.4448, 90, 90, 90	Friauf-Laves phase	-	9.17	X	47308
Ni-Sm	Sm ₂ Ni ₁₇	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8341, 0.8341, 0.8062, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.88	A	3669
Ni-Sm	Sm ₂ Ni ₇ 2H	Ce ₂ Ni ₇ , hP36, 194	<i>P6₃/mmc</i>	0.4969, 0.4969, 2.435, 90, 90, 120	Laves-CaCu ₅	-	9.08	A	5223
Ni-Sm	Sm ₂ Ni ₇ 3R	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.5968, 0.5968, 3.653, 90, 90, 120	Laves-CaCu ₅	-	6.29	A	10071
Ni-Sm	Sm ₃ Ni	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.699, 0.972, 0.637, 90, 90, 90	-	-	7.83	A	3382
Ni-Sm	Sm ₅ Ni ₁₉ 12R	*hR288, 166	<i>R-3m</i>	0.5, 0.5, 19, 90, 90, 120	-	-	-	N	15078
Ni-Sm	Sm ₅ Ni ₁₉ 2H	Sm ₃ Co ₁₉ , hP48, 194	<i>P6₃/mmc</i>	0.5, 0.5, 3.25, 90, 90, 120	Laves-CaCu ₅	-	8.81	A	15078
Ni-Sm	Sm ₅ Ni ₁₉ 3R	Ce ₃ Co ₁₉ , hR72, 166	<i>R-3m</i>	0.5, 0.5, 4.9, 90, 90, 120	Laves-CaCu ₅	-	8.77	A	15078
Ni-Sm	Sm ₅ Ni ₁₉ 4H	*hP96, 194	<i>P6₃/mmc</i>	0.5, 0.5, 6.5, 90, 90, 120	-	-	-	N	15078
Ni-Sm	Sm ₅ Ni ₁₉ 6H	*hP144, 187	<i>P-6m2</i>	0.5, 0.5, 9.7, 90, 90, 120	-	-	-	N	15078
Ni-Sm	Sm ₅ Ni ₁₉ 9R	*hR216, 166	<i>R-3m</i>	0.5, 0.5, 15, 90, 90, 120	-	-	-	N	15078
Ni-Sn	NiSn rt	NiSn, oP32, 55	<i>Pbam</i>	0.52, 2.4452, 0.4091, 90, 90, 90	-	-	9.06	X	7344
Ni-Sn	NiSn ₃ m	*oP*, 16	<i>P222</i>	0.4124, 0.4787, 0.57486, 90, 90, 90	-	-	-	N	53744
Ni-Sn	Ni _{0.03} Sn _{0.97} rt	Sn, tI4, 141	<i>I4₁/amd</i>	0.58305, 0.58305, 0.31811, 90, 90, 90	-	-	7.18	X	53618
Ni-Sn	Ni _{0.75} Sn _{0.25} ht	Mg, hP2, 194	<i>P6₃/mmc</i>	0.263, 0.263, 0.423, 90, 90, 120	close-packed structure	-	9.66	X	2331
Ni-Sn	Ni _{0.92} Sn _{0.08}	Cu, cF4, 225	<i>Fm-3m</i>	0.36, 0.36, 0.36, 90, 90, 90	close-packed structure	-	9.04	X	17661
Ni-Sn	Ni _{1.35} Sn rt	UPt ₂ , oS12, 63	<i>Cmcm</i>	0.40521, 0.70623, 0.51523, 90, 90, 90	AlB ₂ family	-	8.92	X	44202
Ni-Sn	Ni _{1.50} Sn ht	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.4103, 0.4103, 0.5176, 90, 90, 120	AlB ₂ family	-	9.10	X	44419
Ni-Sn	Ni ₃ Sn hp	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.37344, 0.37344, 0.37344, 90, 90, 90	nisnite	bronze	9.40	X	56791
Ni-Sn	Ni ₃ Sn ht	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.598, 0.598, 0.598, 90, 90, 90	fluorite family	-	9.16	X	772
Ni-Sn	Ni ₃ Sn rt	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.5275, 0.5275, 0.4234, 90, 90, 120	close-packed structure	-	9.60	X	128
Ni-Sn	Ni ₃ Sn ₂ rt	Ni ₃ Sn ₂ , oP20, 62	<i>Pnma</i>	0.71240, 0.51970, 0.81562, 90, 90, 90	AlB ₂ family	-	9.10	X	18577
Ni-Sn	Ni ₃ Sn ₄ rt	Ni ₃ Sn ₄ , mS14, 12	<i>C12/m1</i>	1.2214, 0.4060, 0.5219, 105, 90	-	-	8.65	X	14816
Ni-Sn	Ni ₄ Sn ht	*tP*, *	-	0.5109, 0.5109, 0.488, 90, 90, 90	-	-	-	N	53454
Ni-Sr	SrNi	*hP*, *	-	0.3332, 0.3332, 0.7009, 90, 90, 120	-	-	-	N	3131
Ni-Sr	Sr ₂ Ni ₃	Sr ₂ Ni ₃ , hP5, 164	<i>P-3m1</i>	0.41262, 0.41262, 0.86857, 90, 90, 120	-	gray	4.56	X	56813
Ni-Ta	TaNi ₂	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.316, 0.316, 0.795, 90, 90, 90	b.c.c. family	-	12.48	X	3648
Ni-Ta	TaNi ₃ m tet	TiAl ₃ , tI8, 139	<i>I4/mmm</i>	0.3627, 0.3627, 0.7455, 90, 90, 90	close-packed structure	-	12.09	X	2256
Ni-Ta	TaNi ₃ mon	NbPt ₃ , mP16, 11	<i>P12₁/m1</i>	0.45319, 0.51253, 0.8632, 90, 100, 79, 90	close-packed structure	-	12.04	X	24304
Ni-Ta	TaNi ₃ stab	Cu ₃ Ti, oP8, 59	<i>Pmmn</i>	0.424, 0.51, 0.452, 90, 90, 90	close-packed structure	-	12.13	X	1001
Ni-Ta	Ta _{0.08} Ni _{0.92}	Cu, cF4, 225	<i>Fm-3m</i>	0.3579, 0.3579, 0.3579, 90, 90, 90	close-packed structure	-	9.92	X	17661
Ni-Ta	Ta _{0.25} Ni _{0.75} m hex	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2585, 0.2585, 0.4229, 90, 90, 120	close-packed structure	-	12.11	X	3506
Ni-Ta	Ta ₂ Ni	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.6197, 0.6197, 0.486, 90, 90, 90	-	-	14.97	X	6603
Ni-Ta	Ta ₂ Ni	Nb ₂ Ni, cF96, 227	<i>Fd-3m</i>	1.1635, 1.1635, 1.1635, 90, 90, 90	-	-	16.25	A	3648
Ni-Ta	Ta _{6.9} Ni _{16.1}	W ₆ Fe ₇ , hR39, 166	<i>R-3m</i>	0.4911, 0.4911, 2.6836, 90, 90, 120	Frank-Kasper phase	-	14.28	X	43741
Ni-Tb	TbNi ht	TbNi, oP24, 62	<i>Pnma</i>	2.109, 0.422, 0.545, 90, 90, 90	CrB(TiI)-FeB	-	8.94	X	5212
Ni-Tb	TbNi rt	TbNi, mP24, 11	<i>P12₁/m1</i>	0.545, 0.421, 2.125, 90, 97, 31, 90	CrB(TiI)-FeB	-	8.97	X	5212
Ni-Tb	TbNi ₂ lt	TbFe ₂ , hR18, 166	<i>R-3m</i>	0.5063, 0.5063, 1.242, 90, 90, 120	Friauf-Laves phase	-	9.99	A	23501
Ni-Tb	TbNi ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7178, 0.7178, 0.7178, 90, 90, 90	Friauf-Laves phase	gray olive	9.93	X	47308
Ni-Tb	TbNi ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.4979, 0.4979, 2.448, 90, 90, 120	Laves-CaCu ₅	-	9.53	A	15327
Ni-Tb	TbNi ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.48869, 0.48869, 0.39501, 90, 90, 120	-	-	9.20	X	48299
Ni-Tb	Tb _{0.95} Ni ₂ rt	TmNi ₂ , cF192, 216	<i>F-43m</i>	1.4341, 1.4341, 1.4341, 90, 90, 90	Friauf-Laves phase	-	9.67	X	47308
Ni-Tb	Tb ₂ Ni ₁₇	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.831, 0.831, 0.804, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.09	X	10760
Ni-Tb	Tb ₂ Ni ₇ ht	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.4948, 0.4948, 3.623, 90, 90, 120	Laves-CaCu ₅	-	9.45	A	5223
Ni-Tb	Tb ₂ Ni ₇ rt	Ce ₂ Ni ₇ , hP36, 194	<i>P6₃/mmc</i>	0.4944, 0.4944, 2.4129, 90, 90, 120	Laves-CaCu ₅	gray silver	9.48	X	62832
Ni-Tb	Tb ₃ Ni	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.689, 0.958, 0.632, 90, 90, 90	-	-	8.53	X	15425
Ni-Tb	Tb ₃ Ni ₂	Dy ₃ Ni ₂ , mS20, 12	<i>C12/m1</i>	1.338, 0.371, 0.964, 90, 106, 90	-	-	8.58	A	7817
Ni-Tc	Tc _{0.17} Ni _{0.83}	Cu, cF4, 225	<i>Fm-3m</i>	0.358, 0.358, 0.358, 90, 90, 90	close-packed structure	-	9.47	X	9149
Ni-Tc	Tc _{0.3} Ni _{0.5}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.263, 0.263, 0.424, 90, 90, 120	close-packed structure	-	10.25	X	1871
Ni-Te	NiTe _{0.67} tf rhom	Ni _{0.67} (Ni _{0.33} Te _{0.67}), hR12, 166	<i>R-3m</i>	0.388, 0.388, 2.02, 90, 90, 120	-	-	5.46	X	2298
Ni-Te	NiTe ₂ hp	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.6374, 0.6374, 0.6374, 90, 90, 90	pyrite-marcasite family	-	8.05	A	3933
Ni-Te	NiTe ₂	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.3861, 0.3861, 0.5297, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	7.62	A	147
Ni-Te	Ni _{0.528} Te	Cr _{0.88} S, hP4, 164	<i>P-3m1</i>	0.3869, 0.3869, 0.5288, 90, 90, 120	melonite	gray silver	7.68	X	32110
Ni-Te	Ni _{1.38} Te ht1	Cu _{1.43} Te, oP6, 59	<i>Pmmn</i>	0.3761, 0.3796, 0.6084, 90, 90, 90	-	-	7.98	X	27009
Ni-Te	Ni _{1.43} Te ht1	Cu ₂ Sb, tP6, 129	<i>P4/nmm</i>	0.3782, 0.3782, 0.6062, 90, 90, 90	-	-	8.10	X	4719
Ni-Te	Ni _{1.43} Te rt	*tP*, 115	<i>P-4m2</i>	0.7564, 0.7564, 0.6062, 90, 90, 90	-	-	-	N	2712
Ni-Te	Ni _{1.65} Te rt	*mP10, 11	<i>P12₁/m1</i>	0.6089, 0.3799, 0.754, 90, 91, 2, 90	-	-	-	N	2712
Ni-Te	Ni _{1.67} Te ht2	*tP*, *	-	0.2865, 0.2865, 0.662, 90, 90, 90	-	-	-	N	2712
Ni-Te	Ni _{2.59} Te ₂ ht	*hP*, *	-	0.3952, 0.3952, 1.2472, 90, 90, 120	-	-	-	N	4719
Ni-Te	Ni _{2.60} Te ₂ rt	Ni _{2.60} Te ₂ , oP20, 62	<i>Pnma</i>	1.238, 0.39192, 0.68818, 90, 90, 90	-	black	8.11	X	48883
Ni-Te	Ni _{2.86} Te ₂ ht2	*cF*, *	-	0.5709, 0.5709, 0.5709, 90, 90, 90	-	-	-	N	4719
Ni-Te	Ni _{2.88} Te ₂	Ni _{2.88} Te ₂ , oP12, 28	<i>Pma2</i>	0.75382, 0.37879, 0.60647, 90, 90, 90	-	-	8.14	X	43999
Ni-Te	Ni ₃ Te ₂	Ni ₃ Te ₂ , mP10, 11	<i>P12₁/m1</i>	0.60883, 0.37934, 0.75382, 90, 91, 159, 90	-	-	8.23	X	43999
Ni-Te	Ni _{3.08} Te ₂ ht3	*cF*, *	-	0.5726, 0.5726, 0.5726, 90, 90, 90	-	-	-	N	4719
Ni-Te	Ni _{3.34} Te ₂ ht1	*oP*, *	-	0.3834, 0.3853, 0.6089, 90, 90, 90	-	-	-	N	4719
Ni-Te	Ni _{3.34} Te ₂ ht3	*cF*, *	-	1.1439, 1.1439, 1.1439, 90, 90, 90	-	-	-	N	4719
Ni-Te	Ni ₆ Te ₆ tf trig	Ni ₆ (Ni _{0.17} Te _{0.83}) ₆ Te, hP32, 162	<i>P-31m</i>	0.672, 0.672, 2.02, 90, 90, 120	-	-	5.44	X	2298
Ni-Th	ThNi	SrAg, oP16, 62	<i>Pnma</i>	1.4146, 0.4286, 0.5702, 90, 90, 90	CrB(TiI)-FeB	-	11.17	X	15720
Ni-Th	ThNi _{1.75}	ThNi _{1.75} , mS12, 15	<i>C12/c1</i>	0.5509, 0.5510, 0.7445, 90, 111, 71, 90	-	-	10.59	X	21173
Ni-Th	ThNi ₂ rt	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.3965, 0.3965, 0.3856, 90, 90, 120	AlB ₂ family	-	11.05	X	16937
Ni-Th	ThNi ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.4938, 0.4938, 0.402, 90, 90, 120	-	-	10.28	X	8912
Ni-Th	Th ₂ Ni ₁₇	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.837, 0.837, 0.814, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.83	X	717

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Ni-Th	Th ₂ Ni ₇ ht	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.4945, 0.4945, 3.87, 90, 90, 120	Laves-CaCu ₅	-	10.64	A	24005
Ni-Th	Th ₂ Ni ₃ rt	Ce ₂ Ni ₇ , hP36, 194	<i>P6₃/mmc</i>	0.4945, 0.4945, 2.58, 90, 90, 120	Laves-CaCu ₅	-	10.64	A	24005
Ni-Th	Th ₇ Ni ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	0.986, 0.986, 0.623, 90, 90, 120	-	-	11.40	X	717
Ni-Ti	TiNi ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.3011, 0.3011, 0.3011, 90, 90, 90	b.c.c. family	-	6.48	X	57143
Ni-Ti	TiNi tricl	TiNi ₄ P6, 2	<i>P-1</i>	0.3, 0.424, 0.67, 108, 4, 90, 90	-	-	6.57	X	6578
Ni-Ti	TiNi trig	TiNi ₃ hP18, 147	<i>P-3</i>	0.73451, 0.73451, 0.52718, 90, 90, 120	-	-	6.47	X	46850
Ni-Ti	TiNi ₃	TiNi ₃ hP16, 194	<i>P6₃/mmc</i>	0.5109, 0.5109, 0.8299, 90, 90, 120	close-packed structure	-	7.93	X	173
Ni-Ti	Ti _{0.08} Ni _{0.92}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3561, 0.3561, 0.3561, 90, 90, 90	close-packed structure	-	8.51	X	17661
Ni-Ti	Ti _{0.33} Ni _{0.67} m	(Ti _{0.33} Ni _{0.67}), hR21, 166	<i>R-3m</i>	0.2549, 0.2549, 4.3648, 90, 90, 120	close-packed structure	-	7.83	X	5893
Ni-Ti	Ti _{0.49} Ni _{0.51} ht	W, cI2, 229	<i>Im-3m</i>	0.30317, 0.30317, 0.30317, 90, 90, 90	b.c.c. family	-	6.37	X	63818
Ni-Ti	Ti _{0.986} Ni _{0.014} rt	TiNi ₄ mP4, 11	<i>P12₁/m1</i>	0.28758, 0.41264, 0.46325, 90, 96, 964, 90	-	-	6.50	X	54108
Ni-Ti	Ti ₂ Ni	Ti ₂ Ni, cF96, 227	<i>Fd-3m</i>	1.13193, 1.13193, 1.13193, 90, 90, 90	-	-	5.66	X	1976
Ni-Ti	Ti ₃ Ni ₄ m	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.12626, 1.12626, 0.50967, 90, 90, 120	b.c.c. family	-	6.74	X	54108
Ni-Ti	TiNi tf	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.4426, 0.4426, 0.5535, 90, 90, 120	AlB ₂ family	-	9.30	X	4735
Ni-Tm	TmNi	FeB-b, oP8, 62	<i>Pnma</i>	0.696, 0.411, 0.54, 90, 90, 90	CrB(III)-FeB	-	9.79	X	6815
Ni-Tm	TmNi ₂ cub	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7114, 0.7114, 0.7114, 90, 90, 90	Friauf-Laves phase	gray light	10.57	X	46787
Ni-Tm	TmNi ₂ ht	TmNi ₂ , cP24, 215	<i>P-43m</i>	0.7095, 0.7095, 0.7095, 90, 90, 90	Friauf-Laves phase	-	10.65	X	22242
Ni-Tm	TmNi ₂ rt	TmNi ₂ , cF192, 216	<i>F-43m</i>	1.41930, 1.41930, 1.41930, 90, 90, 90	Friauf-Laves phase	-	10.64	X	22242
Ni-Tm	TmNi ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.4935, 0.4935, 2.426, 90, 90, 120	Laves-CaCu ₅	-	10.08	A	15327
Ni-Tm	TmNi ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.4834, 0.4834, 0.397, 90, 90, 120	-	-	9.56	X	7278
Ni-Tm	Tm ₂ Ni ₁₇	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.825, 0.825, 0.8008, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.40	X	10760
Ni-Tm	Tm ₃ Ni	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.677, 0.94, 0.619, 90, 90, 90	-	-	9.54	A	3382
Ni-Tm	Tm ₃ Ni ₂	Er ₃ Ni ₂ , hR45, 148	<i>R-3</i>	0.8433, 0.8433, 1.5593, 90, 90, 120	-	-	9.71	X	31014
Ni-U	UNi ₂ rt	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.49701, 0.49701, 0.82527, 90, 90, 120	Friauf-Laves phase	-	13.37	X	51079
Ni-U	UNi ₅	Be ₅ Au, cF24, 216	<i>F-43m</i>	0.67958, 0.67958, 0.67958, 90, 90, 90	Friauf-Laves phase	-	11.25	X	51079
Ni-U	U _{1.2} Ni _{4.8}	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.48457, 0.48457, 0.40451, 90, 90, 120	-	-	11.45	X	40598
Ni-U	U ₁₀ Ni ₁₃	U ₁₀ Ni ₁₃ , mS46, 12	<i>C12/m1</i>	0.76602, 1.30801, 0.76498, 90, 108, 875, 90	-	-	14.39	X	39512
Ni-U	U ₁₁ Ni ₁₆	U ₁₁ Ni ₁₆ , hR162, 148	<i>R-3</i>	1.17786, 1.17786, 2.07485, 90, 90, 120	-	-	14.22	X	40806
Ni-U	U ₆ Ni	U ₆ Mn, tI28, 140	<i>I4/mcm</i>	1.03835, 1.03835, 0.51565, 90, 90, 90	-	-	17.76	X	51079
Ni-V	VNi ₂ rt	MoPt ₂ , oI6, 71	<i>Immm</i>	0.2559, 0.3549, 0.7641, 90, 90, 90	close-packed structure	-	8.06	X	2594
Ni-V	VNi ₃ rt	TiAl ₃ , tI8, 139	<i>I4/mmm</i>	0.3537, 0.3537, 0.7222, 90, 90, 90	close-packed structure	-	8.35	X	49449
Ni-V	V _{0.25} Ni _{0.75} ht	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3563, 0.3563, 0.3563, 90, 90, 90	close-packed structure	-	8.34	X	17661
Ni-V	V _{0.53} Ni _{0.47} m	W, cI2, 229	<i>Im-3m</i>	0.2904, 0.2904, 0.2904, 90, 90, 90	b.c.c. family	-	7.40	X	3592
Ni-V	V _{0.63} Ni _{0.35}	*, tP240, *	-	1.7116, 1.7116, 0.9353, 90, 90, 90	-	-	-	N	30517
Ni-V	V _{0.70} Ni _{0.30} rt	(Cr _{0.70} Fe _{0.30}), tP30, 136	<i>P4₂/mm</i>	0.904, 0.904, 0.467, 90, 90, 90	Frank-Kasper phase	-	6.95	X	716
Ni-V	V _{0.93} Ni _{0.07}	W, cI2, 229	<i>Im-3m</i>	0.30134, 0.30134, 0.30134, 90, 90, 90	b.c.c. family	-	6.25	X	49449
Ni-V	V _{3.1} Ni _{0.9} rt	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.471, 0.471, 0.471, 90, 90, 90	Frank-Kasper phase	-	6.70	X	8105
Ni-W	WNi rt	*, o***, *	-	0.71, 0.776, 1.248, 90, 90, 90	-	-	-	N	7557
Ni-W	WNi ₄ rt	MoNi ₄ , tI10, 87	<i>I4/m</i>	0.5733, 0.5733, 0.3554, 90, 90, 90	close-packed structure	-	11.90	X	53166
Ni-W	W _{0.09} Ni _{0.91}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3564, 0.3564, 0.3564, 90, 90, 90	close-packed structure	-	10.27	X	17661
Ni-W	W _{0.968} Ni _{0.032}	W, cI2, 229	<i>Im-3m</i>	0.3164, 0.3164, 0.3164, 90, 90, 90	b.c.c. family	-	18.86	X	53166
Ni-W	W ₂ Ni rt	*, tI96, *	-	1.04, 1.04, 1.09, 90, 90, 90	-	-	-	N	8389
Ni-Y	YNi	FeB-b, oP8, 62	<i>Pnma</i>	0.7156, 0.4124, 0.5515, 90, 90, 90	CrB(III)-FeB	-	6.02	X	12907
Ni-Y	YNi ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.49779, 0.49779, 2.4449, 90, 90, 120	Laves-CaCu ₅	-	7.55	X	2409
Ni-Y	YNi ₄	*, hR*, *	-	0.4898, 0.4898, 4.993, 90, 90, 120	-	-	-	N	17522
Ni-Y	YNi ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.4882, 0.4882, 0.3959, 90, 90, 120	-	-	7.77	X	16286
Ni-Y	Y _{0.95} Ni _{0.05}	TmNi ₂ , cF192, 216	<i>F-43m</i>	1.435, 1.435, 1.435, 90, 90, 90	Friauf-Laves phase	-	7.26	X	23421
Ni-Y	Y ₂ Ni ₁₇ rt	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8307, 0.8307, 0.8041, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.13	A	59082
Ni-Y	Y ₂ Ni ₇ ht	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.4924, 0.4924, 3.607, 90, 90, 120	Laves-CaCu ₅	-	7.74	X	4602
Ni-Y	Y ₂ Ni ₇ rt	Ce ₂ Ni ₇ , hP36, 194	<i>P6₃/mmc</i>	0.4897, 0.4897, 2.103, 90, 90, 120	Laves-CaCu ₅	-	8.95	A	56354
Ni-Y	Y ₃ Ni	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.6917, 0.9644, 0.6357, 90, 90, 90	-	-	5.10	A	56354
Ni-Y	Y ₃ Ni ₂	Y ₃ Ni ₂ , tP80, 92	<i>P4₂/2</i>	0.7104, 0.7104, 3.6597, 90, 90, 90	-	-	5.53	X	10314
Ni-Yb	YbNi rt	FeB-b, oP8, 62	<i>Pnma</i>	0.69, 0.41, 0.53, 90, 90, 90	CrB(III)-FeB	-	10.27	A	10179
Ni-Yb	YbNi ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.70998, 0.70998, 0.70998, 90, 90, 90	Friauf-Laves phase	-	10.78	X	60214
Ni-Yb	YbNi ₃	PuNi ₃ , hR36, 166	<i>R-3m</i>	0.492, 0.492, 2.416, 90, 90, 120	Laves-CaCu ₅	-	10.30	A	6597
Ni-Yb	YbNi ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.483, 0.483, 0.3968, 90, 90, 120	-	-	9.66	X	47541
Ni-Yb	Yb ₂ Ni ₁₇	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.828, 0.828, 0.8024, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	9.37	A	6597
Ni-Yb	Yb ₂ Ni ₇ hp	Gd ₂ Co ₇ , hR54, 166	<i>R-3m</i>	0.4965, 0.4965, 3.586, 90, 90, 120	Laves-CaCu ₅	-	9.85	A	18910
Ni-Yb	Yb ₃ Ni hp	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.682, 0.976, 0.626, 90, 90, 90	-	-	9.21	A	18910
Ni-Zn	ZnNi rt	CuTi ₂ P2, 123	<i>P4/mmm</i>	0.2727, 0.2727, 0.3205, 90, 90, 90	b.c.c. family	-	8.65	X	61966
Ni-Zn	Zn _{0.08} Ni _{0.92}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3546, 0.3546, 0.3546, 90, 90, 90	close-packed structure	-	8.82	X	17661
Ni-Zn	Zn _{1.04} Ni _{0.96} ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.2944, 0.2944, 0.2944, 90, 90, 90	b.c.c. family	-	8.09	X	59855
Ni-Zn	Zn ₁₁ Ni ₂	Zn ₉ (Zn _{0.5} Fe _{0.5}) ₂ Fe ₂ , cI52, 217	<i>I-43m</i>	0.8911, 0.8911, 0.8911, 90, 90, 90	γ-brass	-	7.85	X	61128
Ni-Zn	Zn ₂₂ Ni ₃	Zn ₂₂ Ni ₃ , mS50, 12	<i>C12/m1</i>	1.3376, 0.7511, 0.7627, 90, 113, 256, 90	-	-	7.62	X	27805
Ni-Zn	Zn ₅₃ Ni ₁₆ rt	Zn ₅₃ Ni ₁₆ , oS276, 39	<i>Aem2</i>	3.3326, 1.2499, 0.8869, 90, 90, 90	-	gray silver	7.92	X	13184
Ni-Zr	ZrNi	TiI ₂ oS8, 63	<i>Cmcm</i>	0.32712, 0.9931, 0.41072, 90, 90, 90	CrB(III)-FeB	-	7.46	X	42404
Ni-Zr	ZrNi ₂ m	*, oI*, 45	<i>Iba2</i>	0.9, 0.9, 3.14, 90, 90, 90	-	-	-	N	18221
Ni-Zr	ZrNi ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.6925, 0.6925, 0.6925, 90, 90, 90	Friauf-Laves phase	-	8.35	X	6830
Ni-Zr	ZrNi ₃ rt	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.5309, 0.5309, 0.43034, 90, 90, 120	close-packed structure	-	8.45	X	12296
Ni-Zr	ZrNi ₅	Be ₅ Au, cF24, 216	<i>F-43m</i>	0.6687, 0.6687, 0.6687, 90, 90, 90	Friauf-Laves phase	-	8.55	X	61127
Ni-Zr	Zr _{0.01} Ni _{0.99}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3533, 0.3533, 0.3533, 90, 90, 90	close-packed structure	-	8.89	X	17661
Ni-Zr	Zr ₂ Ni	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.64875, 0.64875, 0.52656, 90, 90, 90	-	-	7.23	X	22961
Ni-Zr	Zr ₂ Ni ₇	Zr ₂ Ni ₇ , mS18, 12	<i>C12/m1</i>	0.4698, 0.8235, 0.6307, 90, 105, 92, 90	-	-	8.40	X	8616
Ni-Zr	Zr ₆ Ni ₂₃	Th ₆ Mn ₂₃ , cF116, 225	<i>Fm-3m</i>	1.13534, 1.13534, 1.13534, 90, 90, 90	-	-	8.61	A	16879
Ni-Zr	Zr ₇ Ni ₁₀	Zr ₇ Ni ₁₀ , oS68, 64	<i>Cmce</i>	1.2381, 0.9185, 0.9221, 90, 90, 90	-	gray silver	7.76	X	32892
Ni-Zr	Zr ₈ Ni ₂₁	Hf ₈ Ni ₂₁ , aP29, 2	<i>P-1</i>	0.6476, 0.8064, 0.8594, 75, 15, 68, 07, 75, 23	gray	-	8.23	X	35513
Ni-Zr	Zr ₉ Pt ₁₁ ht	Zr ₉ Pt ₁₁ , tI40, 87	<i>I4/m</i>	0.988, 0.988, 0.661, 90, 90, 90	-	-	7.55	X	12284
Ni-Zr	Zr ₉ Ni ₁₁ rt	Zr ₉ Ni ₁₁ , tP44, 83	<i>P4/m</i>	0.9882, 0.9882, 0.66089, 90, 90, 90	-	-	7.55	X	51688

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Np-O	NpO	NaCl, cF8, 225	<i>Fm-3m</i>	0.501, 0.501, 0.501, 90, 90, 90	rocksalt family	-	13.37	X	298
Np-O	NpO ₂ hp	*oS*, 63	<i>Cmcm</i>	0.346, 0.658, 0.577, 90, 90, 90	-	-	-	N	18958
Np-O	NpO ₂ rt	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5434, 0.5434, 0.5434, 90, 90, 90	fluorite family	-	11.14	X	63621
Np-O	Np ₂ O ₃ lt	Np ₂ O ₃ , mP28, 13	<i>P12/c1</i>	0.8168, 0.6584, 0.9313, 90, 116.09, 90	-	green	8.18	X	49471
Np-Os	NpOs ₂ lt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7528, 0.7528, 0.7528, 90, 90, 90	Friauf-Laves phase	-	19.23	X	6654
Np-P	NpP lt	*t*8*, *	-	0.5616, 0.5616, 0.5592, 90, 90, 90	-	-	-	N	7588
Np-P	NpP rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.56148, 0.56148, 0.56148, 90, 90, 90	rocksalt family	-	10.06	X	7588
Np-Pd	NpPd ₃ ht	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4096, 0.4096, 0.4096, 90, 90, 90	close-packed structure	-	13.44	X	10061
Np-Pd	NpPd ₃ rt	TiNi ₃ , hP16, 194	<i>P6₃/mmc</i>	0.5765, 0.5765, 0.9545, 90, 90, 120	close-packed structure	-	13.45	A	50322
Np-Pt	NpPt	TiI ₂ , oS8, 63	<i>Cmcm</i>	0.3782, 1.0743, 0.4378, 90, 90, 90	CrB(TiI)-FeB	-	16.14	A	8171
Np-Pt	NpPt ₃	TiNi ₃ , hP16, 194	<i>P6₃/mmc</i>	0.5803, 0.5803, 0.9566, 90, 90, 120	close-packed structure	-	19.58	A	8171
Np-Pt	NpPt ₅	*oP72*, *	-	0.5225, 0.9134, 2.743, 90, 90, 90	-	-	-	N	7450
Np-Pu	NpPu ₄ ht	*oP*, *	-	1.0431, 1.067, 1.086, 90, 90, 90	-	-	-	N	1396
Np-Pu	Np _{0.5} Pu _{0.5} ht	W, cI2, 229	<i>Im-3m</i>	0.3565, 0.3565, 0.3565, 90, 90, 90	b.c.c. family	-	17.63	X	1396
Np-Pu	Np _{0.5} Pu _{0.5} ht1	Pu, mS34, 12	<i>C12/m1</i>	1.17554, 1.029, 0.773, 90, 128.567, 90	-	-	18.58	A	1396
Np-Pu	Np _{0.566} Pu _{0.434} rt	Pu, mP16, 11	<i>P12₁/m1</i>	0.612, 0.48, 1.095, 90, 101.74, 90	-	-	20.25	A	2208
Np-Re	NpRe ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5383, 0.5383, 0.8772, 90, 90, 120	Friauf-Laves phase	-	18.39	A	6654
Np-Rh	NpRh ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4007, 0.4007, 0.4007, 90, 90, 90	close-packed structure	-	14.09	X	10061
Np-Ru	NpRu ₂ rt	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.74456, 0.74456, 0.74456, 90, 90, 90	Friauf-Laves phase	-	14.14	X	6654
Np-S	NpS	NaCl, cF8, 225	<i>Fm-3m</i>	0.55326, 0.55326, 0.55326, 90, 90, 90	rocksalt family	-	10.56	X	30202
Np-S	NpS ₃	*mP16*, *	-	0.536, 0.387, 1.80088, 90, 97.571, 90	-	-	-	N	3405
Np-S	Np ₂ S ₃	Th ₂ S ₃ , oP20, 62	<i>Pnma</i>	1.06, 0.386, 1.03, 90, 90, 90	-	-	8.99	A	296
Np-S	Np ₂ S ₅	Th ₂ S ₅ , oP28, 60	<i>Pbcn</i>	0.74, 0.984, 0.74, 90, 90, 90	-	-	7.82	A	3405
Np-S	Np ₃ S ₄ ht	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.844, 0.844, 0.844, 90, 90, 90	-	-	9.27	A	3405
Np-S	Np ₃ S ₅	Yb ₅ Sb ₃ , oP32, 62	<i>Pnma</i>	1.17435, 0.80479, 0.74108, 90, 90, 90	-	black	8.26	X	57174
Np-Sb	NpSb hp	CuTi ₂ , tP2, 123	<i>P4/mmm</i>	0.3761, 0.3761, 0.328, 90, 90, 90	b.c.c. family	-	12.84	X	23399
Np-Sb	NpSb rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.62517, 0.62517, 0.62517, 90, 90, 90	rocksalt family	-	9.75	X	23399
Np-Sb	NpSb ₂	SmSb ₂ , oS24, 64	<i>Cmce</i>	0.617, 0.604, 1.75, 90, 90, 90	-	-	9.79	A	15131
Np-Se	NpSe hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.515, 0.515, 0.515, 90, 90, 90	b.c.c. family	-	3.84	X	27392
Np-Se	NpSe rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.58054, 0.58054, 0.58054, 90, 90, 90	rocksalt family	-	10.73	X	38355
Np-Se	NpSe ₃	ZrSe ₃ , mP8, 11	<i>P12₁/m1</i>	0.5592, 0.4002, 0.9422, 90, 97.4, 90	-	black	7.53	X	60317
Np-Se	Np ₂ Se ₅	Th ₂ Se ₅ , tP14, 137	<i>P4₂/nmc</i>	0.54488, 0.54488, 1.06428, 90, 90, 90	-	black	9.13	X	61399
Np-Se	Np ₃ Se ₄	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.88261, 0.88261, 0.88261, 90, 90, 90	-	-	9.92	A	5952
Np-Se	Np ₃ Se ₅	Yb ₅ Sb ₃ , oP32, 62	<i>Pnma</i>	1.22863, 0.83499, 0.77583, 90, 90, 90	-	black	9.23	X	57174
Np-Si	NpSi ht	FeB-b, oP8, 62	<i>Pnma</i>	0.7798, 0.3836, 0.5657, 90, 90, 90	CrB(TiI)-FeB	-	10.41	X	42348
Np-Si	NpSi rt	LaSi, oS16, 63	<i>Cmcm</i>	0.4229, 1.2618, 0.6309, 90, 90, 90	-	-	10.46	X	42348
Np-Si	NpSi _{1.6}	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.38375, 0.38375, 0.40924, 90, 90, 120	AlB ₂ family	-	8.97	X	42348
Np-Si	NpSi _{1.72}	ThSi ₂ , tI12, 141	<i>I4₁/amd</i>	0.3955, 0.3955, 1.37015, 90, 90, 90	-	-	8.84	X	42348
Np-Si	NpSi ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.40248, 0.40248, 0.40248, 90, 90, 90	close-packed structure	-	8.18	X	42348
Np-Si	Np ₃ Si ₂	Th ₃ P ₄ , cI28, 220	<i>P4/mbm</i>	0.74236, 0.74236, 0.39379, 90, 90, 90	-	-	11.74	A	42348
Np-Sn	NpSn ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.463, 0.463, 0.463, 90, 90, 90	close-packed structure	-	9.92	X	28961
Np-Sn	Np ₃ Sn	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4632, 0.4632, 0.4632, 90, 90, 90	close-packed structure	-	13.87	X	8171
Np-Te	NpTe hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.3612, 0.3612, 0.3612, 90, 90, 90	b.c.c. family	-	12.85	X	23399
Np-Te	NpTe rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.62021, 0.62021, 0.62021, 90, 90, 90	rocksalt family	-	10.15	X	23399
Np-Te	NpTe ₂	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.4424, 0.4424, 0.9004, 90, 90, 90	-	-	9.28	A	15131
Np-Te	NpTe ₃	NdTe ₃ , oS16, 63	<i>Cmcm</i>	0.4355, 2.54, 0.4355, 90, 90, 90	-	-	8.55	A	8164
Np-Te	Np ₂ Te ₃ rt	*o***, *	-	0.4369, 1.189, 1.221, 90, 90, 90	-	-	-	N	8164
Np-Te	Np _{2.67} Te ₄ ht	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.9413, 0.9413, 0.9413, 90, 90, 90	-	-	9.11	A	8164
Np-Te	Np ₃ Te ₄	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.94048, 0.94048, 0.94048, 90, 90, 90	-	-	9.75	A	5952
Np-Ti	TiNp ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4712, 0.4712, 0.4712, 90, 90, 90	close-packed structure	-	14.53	X	8171
Np-U	U _{0.5} Np _{0.5} ht1	Np, tP4, 129	<i>P4/nmm</i>	0.4945, 0.4945, 0.3385, 90, 90, 90	b.c.c. family	-	19.06	A	1074
Np-U	U _{0.5} Np _{0.5} rt cub	*cP58*, *	-	1.063, 1.063, 1.063, 90, 90, 90	-	-	-	N	1074
Np-U	U _{0.5} Np _{0.5} rt orth	Np, oP8, 62	<i>Pnma</i>	0.6697, 0.4734, 0.4912, 90, 90, 90	b.c.c. family	-	20.26	A	1074
Np-Zr	NpZr ₂ rt	Hg ₂ U, hP3, 191	<i>P6/mmm</i>	0.50256, 0.50256, 0.30751, 90, 90, 120	AlB ₂ family	-	10.36	X	31756
Np-Zr	Np _{0.10} Zr _{0.90} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3251, 0.3251, 0.5198, 90, 90, 120	close-packed structure	-	7.39	X	28797
Np-Zr	Np _{0.999} Zr _{0.001} ht1	Np, tP4, 129	<i>P4/nmm</i>	0.4909, 0.4909, 0.33944, 90, 90, 90	b.c.c. family	-	19.24	A	31756
Np-Zr	Np _{0.999} Zr _{0.001} ht2	W, cI2, 229	<i>Im-3m</i>	0.35257, 0.35257, 0.35257, 90, 90, 90	b.c.c. family	-	17.95	X	31756
O-Os	OsO ₂ hp	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.48956, 0.48956, 0.48956, 90, 90, 90	pyrite-marcasite family	-	12.58	X	63438
O-Os	OsO ₂ rt	TiO ₂ , tP6, 136	<i>P4₂/nmm</i>	0.45003, 0.45003, 0.31839, 90, 90, 90	-	brown	11.44	X	4927
O-Os	OsO ₄	OsO ₄ , mS20, 15	<i>C12/c1</i>	0.9379, 0.4515, 0.8630, 90, 116.58, 90	-	colorless	5.17	X	9386
O-P	PO ₂	PO ₂ , mS48, 15	<i>C12/c1</i>	0.97, 1.0179, 0.6923, 90, 96.95, 90	-	colorless	2.47	X	34152
O-P	P ₂ O ₃ rt	P ₂ O ₃ , mP20, 11	<i>P12₁/m1</i>	0.6422, 0.7877, 0.6786, 90, 106.1, 90	-	-	2.21	X	16825
O-P	P ₂ O ₃ [O ₃] ₂	P ₂ O ₃ [O ₃] ₂ , oP88, 19	<i>P2₁2₁2₁</i>	0.83666, 0.90947, 1.42355, 90, 90, 90	-	colorless	2.53	X	41822
O-P	P ₂ O ₃ orth1	P ₂ O ₃ , oP28, 62	<i>Pnma</i>	0.9193, 0.489, 0.7162, 90, 90, 90	-	colorless	2.93	X	29762
O-P	P ₂ O ₃ orth2	P ₂ O ₃ , oF56, 43	<i>Fdd2</i>	0.8115, 1.6314, 0.5265, 90, 90, 90	-	-	2.71	X	32256
O-P	P ₂ O ₃ rhom	P ₂ O ₃ , hR84, 161	<i>R3c</i>	1.03035, 1.03035, 1.35102, 90, 90, 120	-	-	2.28	X	19583
O-P	P ₄ O ₇	P ₄ O ₇ , mP44, 14	<i>P12₁/c1</i>	0.684, 0.9973, 1.12698, 90, 120.228, 90	-	colorless	2.36	X	17425
O-P	P ₄ O ₉	P ₄ O ₉ , hR156, 167	<i>R-3c</i>	0.96936, 0.96936, 2.48823, 90, 90, 120	-	colorless	2.64	X	25514
O-Pa	PaO	NaCl, cF8, 225	<i>Fm-3m</i>	0.49226, 0.49226, 0.49226, 90, 90, 90	rocksalt family	-	13.76	X	8949
O-Pa	PaO ₂ ht	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.5473, 0.5473, 0.5473, 90, 90, 90	pyrite-marcasite family	-	10.66	A	2975
O-Pa	PaO ₂ rt	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.551, 0.551, 0.551, 90, 90, 90	fluorite family	black	10.44	X	2201
O-Pa	PaO _{2.5} ht3	BiF ₃ , cF16, 225	<i>Fm-3m</i>	0.5476, 0.5476, 0.5476, 90, 90, 90	fluorite family	black	10.96	X	605
O-Pa	Pa ₂ O ₃ ht1	*hP*, *	-	0.3817, 0.3817, 1.322, 90, 90, 120	-	-	-	N	2975
O-Pa	Pa ₂ O ₃ ht2	*hR*, *	-	0.76546, 0.76546, 0.94339, 90, 90, 120	-	-	-	N	2975
O-Pa	Pa ₂ O ₃ rt	*t***, *	-	0.5429, 0.5429, 0.5503, 90, 90, 90	-	white	-	N	2975
O-Pb	PbO hp	SnO, oP4, 31	<i>Pmm2₁</i>	0.4127, 0.4767, 0.385, 90, 90, 90	-	-	9.79	A	26492
O-Pb	PbO ht	PbO, oP8, 57	<i>Pbcm</i>	0.58931, 0.54904, 0.47528, 90, 90, 90	massicot	yellow bright	9.64	X	17586
O-Pb	PbO lt	PbO, oS8, 67	<i>Cmme</i>	0.56099, 0.56076, 0.49979, 90, 90, 90	-	-	9.43	X	42865

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
O-Pb	PbO rt	PbO, tP4, 129	$P4/nmm$	0.39777, 0.39777, 0.50259, 90, 90, 90	litharge	red	9.32	X	18060
O-Pb	PbO ₂ hp1	CaCl ₂ , oP6, 58	$Pnnm$	0.4814, 0.493, 0.3363, 90, 90, 90	-	red	9.95	X	31944
O-Pb	PbO ₂ hp2	Fe ₂ N _{0.94} , oP12, 60	$Pbcn$	0.49858, 0.59596, 0.54626, 90, 90, 90	scrutinyite	black	9.79	X	46511
O-Pb	PbO ₂ hp3	FeS ₂ , cP12, 205	$Pa-3$	0.52804, 0.52804, 0.52804, 90, 90, 90	pyrite-marcasite family	red dark	10.79	X	31944
O-Pb	PbO ₂ hp4	ZrO ₂ , oP24, 61	$Pbca$	0.5116, 1.0023, 0.5246, 90, 90, 90	-	red	11.81	X	31944
O-Pb	PbO ₂ hp5	PbCl ₂ , oP12, 62	$Pnma$	0.5298, 0.3269, 0.6239, 90, 90, 90	-	red	14.70	X	62864
O-Pb	PbO ₂ rt	TiO ₂ , tP6, 136	$P4_2/mnm$	0.49578, 0.49578, 0.33878, 90, 90, 90	plattnerite	black	9.54	X	12861
O-Pb	Pb ₁₂ O ₁₉ ht	*, mP62, 14	$P12_1/c1$	1.15057, 1.08362, 0.77354, 90, 90, 76.90	-	black	-	N	5692
O-Pb	Pb ₂ O	Cu ₂ O, cP6, 224	$Pn-3m$	0.538, 0.538, 0.538, 90, 90, 90	-	-	9.18	X	10
O-Pb	Pb ₂ O ₃ m	Pb ₂ O ₃ , mP20, 14	$P12_1/c1$	0.7565, 0.5625, 0.7814, 90, 113.22, 90	-	black	10.05	X	4842
O-Pb	Pb ₂ O ₃	Pb ₂ O ₃ , oP20, 26	$Pmc2_1$	0.764, 0.549, 0.778, 90, 90, 90	-	-	9.41	X	240
O-Pb	Pb ₃ O ₄ hp1	*, oP28, 55	$Pbam$	0.7, 0.96, 0.666, 90, 90, 90	-	-	10.18	N	41971
O-Pb	Pb ₃ O ₄ hp2	Pb ₃ O ₄ , oP14, 55	$Pbam$	0.6461, 0.93812, 0.33168, 90, 90, 90	-	-	11.33	X	41971
O-Pb	Pb ₃ O ₄ lt	Pb ₃ O ₄ , oP28, 55	$Pbam$	0.88068, 0.88189, 0.65636, 90, 90, 90	-	-	8.93	X	11546
O-Pb	Pb ₃ O ₄ rt	Pb ₃ O ₄ , tP28, 135	$P4_2/mbc$	0.8811, 0.8811, 0.6563, 90, 90, 90	minium	orange	8.94	X	8999
O-Pd	PdO hp	CoO, tI4, 139	$I4/mmm$	0.2967, 0.2967, 0.5315, 90, 90, 90	rocksalt family	-	8.69	X	30962
O-Pd	PdO rt	PtS, tP4, 131	$P4_2/mmc$	0.30444, 0.30444, 0.53418, 90, 90, 90	palladinite	black	8.21	X	63172
O-Pd	PdO tf	NaCl, cF8, 225	$Fm-3m$	0.565, 0.565, 0.565, 90, 90, 90	rocksalt family	-	4.51	X	22214
O-Pd	PdO _{0.24}	Cu, cF4, 225	-	0.4043, 0.4043, 0.4043, 90, 90, 90	close-packed structure	black brown	11.08	F	30962
O-Pd	PdO ₂ hp	TiO ₂ , tP6, 136	$P4_2/mnm$	0.4483, 0.4483, 0.3101, 90, 90, 90	-	-	7.38	A	18292
O-Pd	Pd ₂ O tf	Cu ₂ O, cP6, 224	$Pn-3m$	0.428, 0.428, 0.428, 90, 90, 90	-	-	9.69	X	22214
O-Pd	Pd ₃ O ₄	Pt ₃ O ₄ , cP16, 223	$Pm-3n$	0.5756, 0.5756, 0.5756, 90, 90, 90	-	black	7.60	X	12714
O-Pm	Pm ₂ O ₃ ht1	Sm ₂ O ₃ , mS30, 12	$C12/m1$	1.42, 0.37, 0.888, 90, 102, 90	-	pink light	7.38	A	21161
O-Pm	Pm ₂ O ₃ ht2	La ₂ O ₃ , hP5, 164	$P-3m1$	0.3802, 0.3802, 0.5954, 90, 90, 120	-	-	7.53	A	6573
O-Pm	Pm ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	$Ia-3$	1.099, 1.099, 1.099, 90, 90, 90	-	-	6.77	A	6573
O-Po	PoO ₂ cub	CaF ₂ , cF12, 225	$Fm-3m$	0.5637, 0.5637, 0.5637, 90, 90, 90	fluorite family	-	8.94	X	612
O-Po	PoO ₂ tet	*, tP*, *	-	0.545, 0.545, 0.836, 90, 90, 90	-	-	-	N	612
O-Pr	PrO hp	NaCl, cF8, 225	$Fm-3m$	0.4912, 0.4912, 0.4912, 90, 90, 90	rocksalt family	golden	8.79	X	54182
O-Pr	PrO _{1.5} ht3	NdO _{1.5} , cI26, 229	$Im-3m$	0.4415, 0.4415, 0.4415, 90, 90, 90	-	-	6.36	A	3898
O-Pr	PrO _{1.833} rt	CaF ₂ , cF12, 225	$Fm-3m$	0.5472, 0.5472, 0.5472, 90, 90, 90	fluorite family	black	6.90	X	52087
O-Pr	PrO ₂ hp	PbCl ₂ , oP12, 62	$Pnma$	0.6371, 0.3839, 0.7026, 90, 90, 90	-	brown	6.68	X	56435
O-Pr	PrO ₃	UCl ₃ , hP8, 176	$P6_3/m$	0.658, 0.658, 0.381, 90, 90, 120	-	-	4.39	X	61713
O-Pr	Pr ₁₁ O ₂₀	Tb ₁₁ O ₂₀ -b, aP31, 2	$P-1$	0.65, 0.65, 0.99, 96, 3.90, 99.9	-	-	7.58	A	9010
O-Pr	Pr ₂ O ₃ (Ni)	Sm ₂ O ₃ , mS30, 12	$C12/m1$	1.436, 0.372, 0.897, 90, 100, 90	-	-	6.96	A	6807
O-Pr	Pr ₂ O ₃ ht1	La ₂ O ₃ , hP5, 164	$P-3m1$	0.38577, 0.38577, 0.6012, 90, 90, 120	-	yellow	7.07	X	18467
O-Pr	Pr ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	$Ia-3$	1.092, 1.092, 1.092, 90, 90, 90	-	-	6.73	A	54051
O-Pr	Pr ₅ O ₉ rt	Pr ₅ O ₉ -b, mP112, 14	$P12_1/c1$	0.67304, 1.939, 1.2794, 90, 100.213, 90	-	-	6.86	X	30674
O-Pr	Pr ₆ O ₁₁ rt	Pr ₆ O ₁₁ , mP68, 14	$P12_1/c1$	0.6685, 1.16004, 1.28271, 90, 99.974, 90	-	black	6.93	X	32142
O-Pr	Pr ₇ O ₁₂ rt	Pr ₇ O ₁₂ , hR57, 148	$R-3$	1.02783, 1.02783, 0.96069, 90, 90, 120	fluorite family	-	6.68	X	8713
O-Pr	Pr ₉ O ₁₆ rt	Pr ₉ O ₁₆ , aP25, 2	$P-1$	0.66726, 0.67396, 0.8711, 75.301, 82.576, 80.027	-	-	6.81	X	30673
O-Pt	PtO tf1	PtS, tP4, 131	$P4_2/mmc$	0.30777, 0.30777, 0.534, 90, 90, 90	-	-	13.86	X	24639
O-Pt	PtO tf2	NaCl, cF8, 225	$Fm-3m$	0.515, 0.515, 0.515, 90, 90, 90	rocksalt family	-	10.27	X	22214
O-Pt	PtO ₂ 6H	CdI ₂ , hP9, 164	$P-3m1$	0.311, 0.311, 1.26, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	10.72	A	5627
O-Pt	PtO ₂ hex	CdI ₂ , hP6, 186	$P6_3mc$	0.31, 0.31, 0.832, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	10.89	A	5627
O-Pt	PtO ₂ hp cub	FeS ₂ , cP12, 205	$Pa-3$	0.49068, 0.49068, 0.49068, 90, 90, 90	pyrite-marcasite family	-	12.77	X	63438
O-Pt	PtO ₂ hp tet	TiO ₂ , tP6, 136	$P4_2/mnm$	0.4485, 0.4485, 0.313, 90, 90, 90	-	black	11.98	A	16979
O-Pt	PtO ₂ hp-ht	CaCl ₂ , hP6, 58	$Pnnm$	0.44839, 0.45385, 0.3136, 90, 90, 90	-	black	11.82	X	20350
O-Pt	PtO ₂ rt	CdI ₂ , hP3, 164	$P-3m1$	0.31, 0.31, 0.4161, 90, 90, 120	CdI ₂ -PbI ₂ polytype	black	10.89	X	5627
O-Pt	Pt ₂ O tf	Cu ₂ O, cP6, 224	$Pn-3m$	0.395, 0.395, 0.395, 90, 90, 90	-	-	21.89	X	22214
O-Pt	Pt ₃ O ₄	Pt ₃ O ₄ , cP14, 223	$Pm-3n$	0.5585, 0.5585, 0.5585, 90, 90, 90	-	black	12.38	X	18292
O-Pu	PuO stab	NaCl, cF8, 225	$Fm-3m$	0.4948, 0.4948, 0.4948, 90, 90, 90	rocksalt family	-	14.26	X	2209
O-Pu	PuO ₂ rt	CaF ₂ , cF12, 225	$Fm-3m$	0.53982, 0.53982, 0.53982, 90, 90, 90	fluorite family	-	11.65	X	43856
O-Pu	Pu ₂ O ₃ ht O+	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	$Ia-3$	1.098, 1.098, 1.098, 90, 90, 90	-	-	10.76	A	2209
O-Pu	Pu ₂ O ₃ ht	La ₂ O ₃ , hP5, 164	$P-3m1$	0.38381, 0.38381, 0.5917, 90, 90, 120	-	black	11.79	X	14130
O-Pu	Pu ₂ O ₃ rt O+	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	$Ia-3$	1.10446, 1.10446, 1.10446, 90, 90, 90	-	-	10.57	A	9811
O-Rb	Rb[O ₂] ht	NaCl, cF8, 225	$Fm-3m$	0.633, 0.633, 0.633, 90, 90, 90	rocksalt family	-	3.08	X	9675
O-Rb	Rb[O ₂] rt	CaC ₂ , tI6, 139	$I4/mmm$	0.422, 0.422, 0.701, 90, 90, 90	-	-	3.13	A	8394
O-Rb	Rb[O ₃]	Rb[O ₃], mP16, 14	$P12_1/c1$	0.6452, 0.6022, 0.8763, 90, 122.34, 90	-	red dark	3.08	X	19490
O-Rb	Rb ₁₉ O ₃ lt	Rb ₁₉ O ₃ , cF176, 226	$Fm-3c$	2.3152, 2.3152, 2.3152, 90, 90, 90	-	-	1.79	X	11882
O-Rb	Rb ₂ O ht1	*, cP72, *	-	1.244, 1.244, 1.244, 90, 90, 90	-	-	-	N	6104
O-Rb	Rb ₂ O ht2	*, hR216, *	-	1.8243, 1.8243, 2.1228, 90, 90, 120	-	-	-	N	6104
O-Rb	Rb ₂ O rt	CaF ₂ , cF12, 225	$Fm-3m$	0.6755, 0.6755, 0.6755, 90, 90, 90	fluorite family	-	4.03	X	15594
O-Rb	Rb ₂ [O ₂] ht	*, cP32, *	-	0.9, 0.9, 0.9, 90, 90, 90	-	-	3.70	N	2493
O-Rb	Rb ₂ [O ₂] rt	Rb ₂ [O ₂], oI8, 71	$Immm$	0.4201, 0.5983, 0.7075, 90, 90, 90	-	-	3.79	X	889
O-Rb	Rb ₂ [O ₂] _{1.5} cub	Pu ₂ C ₃ , cI40, 220	$I-43d$	0.93327, 0.93327, 0.93327, 90, 90, 90	-	black	3.58	X	25396
O-Rb	Rb ₃ O	*, hP144, *	-	2.261, 2.261, 1.407, 90, 90, 120	-	red golden	2.61	N	6419
O-Rb	Rb ₄ [O ₂] ₃ tet	Rb ₄ [O ₂] ₃ , tI40, 122	$I-42d$	0.8688, 0.8688, 1.0362, 90, 90, 90	-	black	3.72	X	64729
O-Rb	Rb ₆ O lt	Rb ₆ O, hP28, 176	$P6_3/m$	0.8393, 0.8393, 0.0467, 90, 90, 120	-	brass	1.89	X	10012
O-Rb	Rb ₉ O ₃ lt	Rb ₉ O ₃ , mP22, 11	$P12_1/m1$	0.8351, 1.4023, 1.1685, 90, 104.51, 90	-	red copper	2.01	X	10900
O-Re	ReO ₂ ht	ReO ₂ , oP12, 60	$Pbcn$	0.481, 0.5643, 0.4601, 90, 90, 90	-	black	11.61	X	712
O-Re	ReO ₂ rt	ReO ₂ , mP14, 14	$P12_1/c1$	0.55836, 0.4782, 0.5574, 90, 119.57, 90	-	-	11.20	X	43528
O-Re	ReO ₂ tet	TiO ₂ , tP6, 136	$P4_2/mnm$	0.47983, 0.47983, 0.28077, 90, 90, 90	-	-	11.21	X	46438
O-Re	ReO ₃ hp Re+	*, o**, *	-	0.3713, 0.3744, 0.3758, 90, 90, 90	-	red copper	-	N	3176
O-Re	ReO ₃ hp-ht	*, hR96, 167	$R-3c$	0.92322, 0.92322, 1.31234, 90, 90, 120	-	red copper	9.64	N	49720
O-Re	ReO ₃ hp1	ReO ₃ , tP8, 127	$P4/mbm$	0.52968, 0.52968, 0.37415, 90, 90, 90	-	-	7.41	X	19287
O-Re	ReO ₃ hp2	H _{0.5} WO ₃ , cI32, 204	$Im-3$	0.73109, 0.73109, 0.73109, 90, 90, 90	-	-	7.96	X	43861
O-Re	ReO ₃ hp3	FeF ₃ , hR24, 167	$R-3c$	0.50698, 0.50698, 1.26606, 90, 90, 120	-	red copper	8.28	A	49720
O-Re	ReO ₃ mon	MnF ₃ , mS48, 15	$C12/c1$	0.89996, 0.4944, 1.3637, 90, 91, 90	-	red copper	7.69	A	49720

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
O-Re	ReO ₃ rt	ReO ₃ ,cP4,221	<i>Pm-3m</i>	0.37477,0.37477,0.37477,90,90,90	-	purple	7.39	X	52236
O-Re	Re _{1.16} O ₃ hp	Re _{1.16} O ₃ ,hP10,182	<i>P6₃22</i>	0.48350,0.48350,0.45350,90,90,120	-	red copper	9.55	X	6680
O-Re	Re ₂ O ₇	Re ₂ O ₇ ,oP72,19	<i>P2₁2₁2₁</i>	0.5448,1.2508,1.5196,90,90,90	-	yellow	6.21	X	4534
O-Re	Re ₃ O ₁₀	Re ₃ O ₁₀ ,tI40,119	<i>I-4m2</i>	0.5171,0.5171,1.3371,90,90,90	-	blue	6.68	X	39624
O-Rh	RhO ₂ hp1	FeS ₂ ,cP12,205	<i>Pa-3</i>	0.4844,0.4844,0.4844,90,90,90	pyrite-marcasite family	-	7.88	X	58625
O-Rh	RhO ₂ hp2	TiO ₂ ,tP6,136	<i>P4₂/mmn</i>	0.4487,0.4487,0.3089,90,90,90	-	black	7.20	X	48722
O-Rh	Rh ₂ O ₃ hp-ht	Rh ₂ O ₃ ,oP20,60	<i>Pbcn</i>	0.7241,0.5159,0.5381,90,90,90	-	gray	8.39	X	14135
O-Rh	Rh ₂ O ₃ ht	Rh ₂ O ₃ ,oP40,61	<i>Pbca</i>	0.51477,0.54425,1.46977,90,90,90	-	-	8.19	X	7313
O-Rh	Rh ₂ O ₃ rt	Al ₂ O ₃ ,hR30,167	<i>R-3c</i>	0.5127,0.5127,1.3853,90,90,120	-	gray	8.02	X	4884
O-Ru	RuO ₂ hp1	CaCl ₂ ,oP6,58	<i>Pnnm</i>	0.44347,0.44865,0.30934,90,90,90	-	-	7.18	X	32989
O-Ru	RuO ₂ hp2	FeS ₂ ,cP12,205	<i>Pa-3</i>	0.48521,0.48521,0.48521,90,90,90	pyrite-marcasite family	-	7.74	X	63438
O-Ru	RuO ₂ rt	TiO ₂ ,tP6,136	<i>P4₂/mmn</i>	0.44931,0.44931,0.31064,90,90,90	-	black blue	7.05	X	32989
O-Ru	RuO ₄ cub	Os(O _{0.5} F _{0.5}) ₄ ,cP40,218	<i>P-43n</i>	0.8509,0.8509,0.8509,90,90,90	-	-	3.56	X	46134
O-Ru	RuO ₄ mon	OsO ₄ ,mS20,15	<i>C12/c1</i>	0.9302,0.43967,0.8454,90,116.82,90	-	-	3.55	X	46134
O-S	SO ₂ lt	SO ₂ ,oS12,41	<i>Aea2</i>	0.607,0.594,0.614,90,90,90	-	-	1.92	X	404
O-S	SO ₃ mon	SO ₃ ,mP16,14	<i>P12₁/c1</i>	0.620,0.406,0.931,90,109.83,90	-	-	2.41	X	558
O-S	SO ₃ orth	SO ₃ ,oP48,33	<i>Pna2₁</i>	1.082,1.24,0.513,90,90,90	-	-	2.32	X	2403
O-S	S ₈ O	S ₈ O,pP36,29	<i>Pca2₁</i>	1.3197,0.7973,0.8096,90,90,90	-	yellow	2.12	X	9588
O-Sb	SbO ₂ cer	SbO ₂ ,oP24,33	<i>Pna2₁</i>	0.53336,0.47138,1.16146,90,90,90	cervantite	colorless	6.99	X	46103
O-Sb	SbO ₂ cli	SbO ₂ ,mS24,15	<i>C12/c1</i>	1.1896,0.47567,0.52449,90,106.73,90	clinocervantite	colorless	7.19	X	46103
O-Sb	Sb ₂ O ₃ hp	Sb ₂ O ₃ ,oP40,19	<i>P2₁2₁2₁</i>	0.74771,0.75666,1.16411,90,90,90	-	-	5.88	X	58683
O-Sb	Sb ₂ O ₃ sen	As ₂ O ₃ ,cF80,227	<i>Fd-3m</i>	1.1116,1.1116,1.1116,90,90,90	senarmontite	colorless	5.64	X	43662
O-Sb	Sb ₂ O ₃ val	Sb ₂ O ₃ ,oP20,56	<i>Pccn</i>	0.48996,1.2449,0.54103,90,90,90	valentinite	colorless	5.87	X	43662
O-Sb	Sb ₂ O ₅	Nb ₂ O ₅ ,mS28,15	<i>C12/c1</i>	1.2646,0.4782,0.54247,90,103.91,90	-	yellow	6.75	X	12052
O-Sb	Sb ₂ O ₅	Sb ₂ O ₅ ,cF88,227	<i>Fd-3m</i>	1.03024,1.03024,1.03024,90,90,90	pyrochlore family	white	5.70	X	55456
O-Sc	ScO _{0.95}	NaCl,cF8,225	<i>Fm-3m</i>	0.448,0.448,0.448,90,90,90	rocksalt family	black blue	4.44	X	3574
O-Sc	Sc ₂ O ₃ hp	Cr ₃ C ₂ -b,oP20,62	<i>Pnma</i>	0.54796,0.29796,1.15479,90,90,90	-	-	4.86	A	53274
O-Sc	Sc ₂ O ₃	(Mn _{0.5} Fe _{0.5}) ₃ O ₃ ,cI80,206	<i>la-3</i>	0.98446,0.98446,0.98446,90,90,90	kangite	white	3.84	X	22224
O-Se	SeO ₂ hp	SeO ₂ ,oP24,55	<i>Pbam</i>	0.7928,0.8134,0.49491,90,90,90	-	colorless	4.62	X	41195
O-Se	SeO ₂ lt	SeO ₂ ,oP24,26	<i>Pmc2₁</i>	0.5071,0.44832,1.49672,90,90,90	-	white	4.33	X	44226
O-Se	SeO ₂ ml	SeO ₂ ,oP12,26	<i>Pmc2₁</i>	0.50722,0.44704,0.75309,90,90,90	-	white	4.32	X	44226
O-Se	SeO ₂ tet	SeO ₂ ,tP24,135	<i>P4₂/mbc</i>	0.83622,0.83622,0.50612,90,90,90	downeyite	colorless	4.17	X	26833
O-Se	SeO ₃ m	SeO ₃ ,mP48,14	<i>P12₁/c1</i>	0.7008,2.0213,0.5462,90,109.64,90	-	colorless	3.47	X	63546
O-Se	SeO ₃	SeO ₃ ,tP32,114	<i>P-42₁c</i>	0.9527,0.9527,0.5171,90,90,90	-	colorless	3.59	X	63546
O-Se	Se ₂ O ₅	Se ₂ O ₅ ,mP28,14	<i>P12₁/c1</i>	0.4585,0.6972,1.389,90,91.98,90	-	-	3.56	X	13591
O-Si	SiO	ZnS,cF8,216	<i>F-43m</i>	0.545,0.545,0.545,90,90,90	adamantane structure	-	1.81	X	491
O-Si	SiO _{1.66}	*,oP*,18	<i>P2₁2₁2</i>	0.9685,1.487,1.6898,90,90,90	-	-	-	N	47476
O-Si	SiO ₂ CIT-5-1	SiO ₂ ,oI96,74	<i>Imma</i>	0.50213,1.36947,2.5497,90,90,90	zeolite CFI	-	1.82	X	33024
O-Si	SiO ₂ CIT-5-2	SiO ₂ ,oP96,31	<i>Pmn2₁</i>	1.36739,0.50216,2.54884,90,90,90	zeolite CFI	-	1.82	X	34904
O-Si	SiO ₂ COK-5 m	SiO ₂ ,mP188,10	<i>P12/m1</i>	1.427,1.442,1.868,90,103.41,90	zeolite MFS	-	1.92	X	45415
O-Si	SiO ₂ COK-5 o1	SiO ₂ ,oP216,47	<i>Pmmm</i>	1.398,1.446,1.909,90,90,90	zeolite MFS	-	1.86	X	45415
O-Si	SiO ₂ COK-5 o2	SiO ₂ ,oS432,65	<i>Cmmm</i>	1.439,3.767,1.447,90,90,90	zeolite MFS	-	1.83	X	45415
O-Si	SiO ₂ DD-3R	SiO ₂ ,hR360,148	<i>R-3</i>	1.37761,1.37761,4.15456,90,90,120	zeolite DDR	colorless	1.75	X	45295
O-Si	SiO ₂ GUS-1	SiO ₂ ,oS96,21	<i>C222</i>	1.64206,2.0054,0.50464,90,90,90	zeolite GON	-	1.92	X	37349
O-Si	SiO ₂ HPM-1	SiO ₂ ,hP180,178	<i>P6₃22</i>	1.19356,1.19356,2.975,90,90,120	-	-	1.63	X	58471
O-Si	SiO ₂ IM-5	SiO ₂ ,oS864,63	<i>Cmcm</i>	1.42088,5.72368,1.9994,90,90,90	zeolite IMF	-	1.77	X	50402
O-Si	SiO ₂ IPC-2	SiO ₂ ,aP102,2	<i>P-1</i>	1.21799,1.37126,1.37752,119.009,106.899,90.373-	-	-	1.79	X	62286
O-Si	SiO ₂ IPC-4	SiO ₂ ,mS180,8	<i>C1m1</i>	2.0139,1.3973,1.23536,90,114.861,90	zeolite PCR	-	1.90	X	62286
O-Si	SiO ₂ IPC-6	SiO ₂ ,mS384,12	<i>C12/m1</i>	2.19379,1.38895,1.22991,90,112,90	-	-	1.84	X	62714
O-Si	SiO ₂ ITQ-1	SiO ₂ ,hP216,191	<i>P6/mmm</i>	1.42081,1.42081,2.4945,90,90,120	zeolite MWW	-	1.65	X	34903
O-Si	SiO ₂ ITQ-12	SiO ₂ ,mS72,8	<i>C1m1</i>	1.0336,1.50177,0.88639,90,105.356,90	zeolite ITW	-	1.80	X	43862
O-Si	SiO ₂ ITQ-14	SiO ₂ ,tP96,131	<i>P4₂/mmc</i>	1.31,1.31,1.38,90,90,90	zeolite BEC	-	1.35	X	41046
O-Si	SiO ₂ ITQ-24	SiO ₂ ,oS168,38	<i>Amm2</i>	1.24802,2.10374,1.34698,90,90,90	zeolite IWR	-	1.58	X	47482
O-Si	SiO ₂ ITQ-3	SiO ₂ -b,oS192,63	<i>Cmcm</i>	2.0622,0.97242,1.9623,90,90,90	zeolite ITE	white	1.62	X	32866
O-Si	SiO ₂ ITQ-50	SiO ₂ ,tP144,127	<i>P4/mbm</i>	1.53423,1.53423,1.18106,90,90,90	-	-	1.72	X	60449
O-Si	SiO ₂ ITQ-7	SiO ₂ ,tP192,131	<i>P4₂/mmc</i>	1.28528,1.28528,2.52136,90,90,90	zeolite ISV	-	1.53	X	35632
O-Si	SiO ₂ MCM-35	SiO ₂ ,mS132,12	<i>C12/m1</i>	0.95,3.07096,0.73133,90,91.711,90	zeolite MTF	-	2.06	X	35884
O-Si	SiO ₂ MCM-65	SiO ₂ ,oS108,63	<i>Cmcm</i>	0.7373,1.8006,1.3849,90,90,90	zeolite CDO	-	1.95	X	44180
O-Si	SiO ₂ Nu-6(2)	SiO ₂ ,mP72,14	<i>P12₁/c1</i>	1.3848,0.49881,1.7257,90,106.09,90	zeolite NSI	-	2.09	X	43362
O-Si	SiO ₂ RUB-24	SiO ₂ ,tI96,141	<i>I4₁/amd</i>	0.76677,0.76677,2.70625,90,90,90	zeolite RWR	colorless	2.01	X	46230
O-Si	SiO ₂ RUB-3	SiO ₂ ,mS72,12	<i>C12/m1</i>	1.4018,1.3612,0.7418,90,102.12,90	zeolite RTE	-	1.73	X	35120
O-Si	SiO ₂ RUB-37	SiO ₂ ,oS108,36	<i>Cmc2₁</i>	0.7383,1.8412,1.3791,90,90,90	zeolite CDO	-	1.92	X	63205
O-Si	SiO ₂ RUB-41	SiO ₂ ,mP54,13	<i>P12/c1</i>	0.7345,0.8724,1.7152,90,114.2,90	zeolite RRO	-	1.79	X	45400
O-Si	SiO ₂ SSZ-24	(Al _{0.3} P _{0.3})O ₂ ,hP72,192	<i>P6/mcc</i>	1.3603,1.3603,0.8277,90,90,120	zeolite AFI	-	1.81	X	25560
O-Si	SiO ₂ SSZ-31 A	SiO ₂ ,mP84,10	<i>P12/m1</i>	1.235,0.838,1.492,90,106,90	zeolite STO	-	1.88	X	33210
O-Si	SiO ₂ SSZ-31 B	SiO ₂ ,oP168,53	<i>Pmna</i>	0.838,1.235,2.878,90,90,90	-	-	1.88	X	33210
O-Si	SiO ₂ SSZ-31 C	SiO ₂ ,mS168,12	<i>C12/m1</i>	2.993,0.838,1.235,90,106,90	-	-	1.88	X	33210
O-Si	SiO ₂ SSZ-31 D	SiO ₂ ,oP168,57	<i>Pbcm</i>	1.235,2.878,0.838,90,90,90	-	-	1.88	X	33210
O-Si	SiO ₂ SSZ-35	SiO ₂ -a,aP48,2	<i>P-1</i>	0.7377,1.14114,1.15268,104.892,94.661,96.205	zeolite STF	-	1.72	X	35624
O-Si	SiO ₂ SSZ-42	SiO ₂ ,mS96,12	<i>C12/m1</i>	1.86136,1.34777,0.76305,90,101.719,90	zeolite IFR	-	1.70	X	39177
O-Si	SiO ₂ SSZ-44	SiO ₂ ,mP96,11	<i>P12₁/m1</i>	0.73881,2.19458,1.14853,90,94.702,90	zeolite SFF	-	1.72	X	35624
O-Si	SiO ₂ SSZ-53	SiO ₂ -a,mS192,15	<i>C12/c1</i>	0.50192,3.37437,2.11653,90,90.485,90	zeolite SFH	-	1.78	X	42039
O-Si	SiO ₂ SSZ-55	SiO ₂ -b,oS72,36	<i>Cmc2₁</i>	1.29532,2.11851,0.50784,90,90,90	zeolite ATS	-	1.72	X	41044
O-Si	SiO ₂ SSZ-58	SiO ₂ ,oP222,51	<i>Pmma</i>	2.51106,1.24972,1.28596,90,90,90	zeolite SFG	-	1.83	X	42318
O-Si	SiO ₂ SSZ-59	SiO ₂ -b,aP48,2	<i>P-1</i>	0.50231,1.27351,1.47219,103.44,90.51,100.88	zeolite SFN	-	1.78	X	42039
O-Si	SiO ₂ SSZ-73	SiO ₂ ,tI96,139	<i>I4/mmm</i>	1.41039,1.41039,1.01875,90,90,90	zeolite SAS	-	1.58	X	49156
O-Si	SiO ₂ UTD-1 C	SiO ₂ -a,oS192,63	<i>Cmcm</i>	1.898,2.304,0.841,90,90,90	-	-	1.74	X	33215
O-Si	SiO ₂ UTD-1 D	SiO ₂ ,oI192,71	<i>Immm</i>	0.841,1.898,2.304,90,90,90	-	-	1.74	X	33215

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
O-Si	SiO ₂ UTD-1	SiO ₂ , oI192,74	<i>Imma</i>	0.8415, 1.8981, 2.304, 90, 90, 90	zeolite DON	-	1.74	X	32309
O-Si	SiO ₂ ZSM-12-1	SiO ₂ , mS84,12	<i>C12/m1</i>	2.488, 0.502, 1.215, 90, 107, 7.90	zeolite MTW	-	1.93	X	18524
O-Si	SiO ₂ ZSM-12-2	SiO ₂ , mS168,15	<i>C12/c1</i>	2.48633, 0.50124, 2.43275, 90, 107, 721, 90	zeolite MTW	-	1.93	X	23552
O-Si	SiO ₂ ZSM-22	SiO ₂ -a, oS72,36	<i>Cmc2₁</i>	1.3796, 1.7387, 0.5024, 90, 90, 90	zeolite TON	-	1.99	X	53972
O-Si	SiO ₂ ZSM-39	SiO ₂ , cF408,227	<i>Fd-3m</i>	1.9369, 1.9369, 1.9369, 90, 90, 90	zeolite MTN	black	1.87	X	26803
O-Si	SiO ₂ ZSM-48	SiO ₂ , oS144,63	<i>Cmcm</i>	1.424, 2.014, 0.840, 90, 90, 90	zeolite MRE	-	1.99	X	18526
O-Si	SiO ₂ ZSM-5m	SiO ₂ , mP288,14	<i>P12₁/c1</i>	1.3369, 2.0107, 2.38262, 90, 123, 46, 90	zeolite MFI	-	1.79	X	24169
O-Si	SiO ₂ beta B	SiO ₂ -b, mS192,15	<i>C12/c1</i>	1.7606, 1.7656, 1.4336, 90, 113, 84, 90	zeolite BEA	-	1.57	X	46226
O-Si	SiO ₂ cha	SiO ₂ , hR108,166	<i>R-3m</i>	1.35292, 1.35292, 1.47483, 90, 90, 120	zeolite CHA	-	1.54	X	34377
O-Si	SiO ₂ coe-2	*, mP60,3	<i>P121</i>	0.7276, 1.1039, 1.5594, 90, 91, 2, 90	-	-	1.59	N	56890
O-Si	SiO ₂ dod 1H	SiO ₂ , hP102,191	<i>P6/mmm</i>	1.3783, 1.3783, 1.119, 90, 90, 120	zeolite DOH	-	1.84	X	17470
O-Si	SiO ₂ dod 3C	SiO ₂ , cF808,227	<i>Fd-3m</i>	1.9369, 1.9369, 1.9369, 90, 90, 90	zeolite MTN	black	1.87	X	26803
O-Si	SiO ₂ fau	SiO ₂ , cF576,227	<i>Fd-3m</i>	2.4268, 2.4268, 2.4268, 90, 90, 90	zeolite FAU	-	1.34	X	43865
O-Si	SiO ₂ fer ht	SiO ₂ , oI108,71	<i>Immm</i>	0.7428, 1.4065, 1.8765, 90, 90, 90	zeolite FER	-	1.83	X	42322
O-Si	SiO ₂ fib	SiS ₂ , oI12,72	<i>Ibam</i>	0.472, 0.836, 0.516, 90, 90, 90	-	-	1.96	X	630
O-Si	SiO ₂ hex	*, hP36,*	-	0.68, 0.68, 1.122, 90, 90, 120	-	-	2.66	N	7
O-Si	SiO ₂ hp coe	SiO ₂ , mS48,15	<i>C12/c1</i>	0.71367, 1.23695, 0.71190, 90, 119, 570, 90	coesite	colorless	2.92	X	20136
O-Si	SiO ₂ hp cub2	*, cP96,223	<i>Pm-3n</i>	1.3436, 1.3436, 1.3436, 90, 90, 90	melanophlogite	colorless	-	N	13760
O-Si	SiO ₂ hp fer	*, mP108,14	<i>P12₁/c1</i>	0.7318, 1.387, 1.78499, 90, 112, 472, 90	-	-	2.15	N	64341
O-Si	SiO ₂ hp mon	SiO ₂ , mP96,14	<i>P12₁/c1</i>	0.65591, 2.32276, 0.65729, 90, 117, 676, 90	coesite	-	3.60	X	64849
O-Si	SiO ₂ hp mon1	SiO ₂ , mP20,14	<i>P12₁/c1</i>	0.59137, 0.4424, 0.4625, 90, 102, 48, 90	-	-	5.07	X	39340
O-Si	SiO ₂ hp mon2	SiO ₂ , mP12,4	<i>P12₁</i>	0.50096, 0.82147, 0.50322, 90, 119, 576, 90	tridymite high-2	-	2.22	X	46710
O-Si	SiO ₂ hp qua	*, mP*,14	<i>P12₁/c1</i>	0.69223, 0.41, 0.503, 90, 102, 054, 90	-	-	-	N	44535
O-Si	SiO ₂ hp sti	TiO ₂ , tP6,136	<i>P4₂/mnm</i>	0.4134, 0.4134, 0.2654, 90, 90, 90	stishovite	colorless	4.40	X	46196
O-Si	SiO ₂ hp tricl	*, aP96,*	-	0.6788, 0.704, 0.8714, 69, 47, 82, 26, 80, 89	-	-	8.32	N	64849
O-Si	SiO ₂ hp trig	SiO ₂ , tI288,119	<i>P3₁21</i>	0.4921, 0.4921, 0.54163, 90, 90, 120	quartz low	colorless	2.64	X	26771
O-Si	SiO ₂ hp1 cri	*, mP*,4	<i>P12₁</i>	0.82747, 0.4746, 0.84962, 90, 111, 826, 90	crystalite hp	-	-	N	28417
O-Si	SiO ₂ hp2	SiO ₂ , mP24,14	<i>P12₁/c1</i>	0.8011, 0.4544, 0.889, 90, 121, .90	-	-	2.88	X	57969
O-Si	SiO ₂ hp3	*, m**,*	-	0.4327, 0.3622, 0.5686, 90, 91, 65, 90	-	-	-	N	39340
O-Si	SiO ₂ ht ZSM11	SiO ₂ , tI288,119	<i>I-4m2</i>	2.00647, 2.00647, 1.34082, 90, 90, 90	zeolite MEL	-	1.77	X	21246
O-Si	SiO ₂ ht cri	SiO ₂ , cF104,227	<i>Fd-3m</i>	0.7166, 0.7166, 0.7166, 90, 90, 90	crystalite high	-	2.17	X	7696
O-Si	SiO ₂ ht qua	SiO ₂ , hP9,180	<i>P6₂22</i>	0.49965, 0.49965, 0.5457, 90, 90, 120	quartz high	-	2.54	X	23178
O-Si	SiO ₂ ht	SiO ₂ , oP288,62	<i>Pnma</i>	2.01210, 1.99331, 1.33809, 90, 90, 90	zeolite MFI	-	1.78	X	30819
O-Si	SiO ₂ ht1 tri	SiO ₂ , oP72,19	<i>P2₁2₁2₁</i>	0.4987, 0.8199, 2.6163, 90, 90, 90	tridymite high-1	-	2.24	X	45995
O-Si	SiO ₂ ht3 tri	SiO ₂ , oS24,20	<i>C222₁</i>	0.5024, 0.8756, 0.8213, 90, 90, 90	tridymite high-3	-	2.21	X	19588
O-Si	SiO ₂ ht4 tri	SiO ₂ , hP12,194	<i>P6₃/mmc</i>	0.5052, 0.5052, 0.827, 90, 90, 120	tridymite high-4	-	2.18	X	19592
O-Si	SiO ₂ kea	SiO ₂ , tP36,92	<i>P4₁2₁2</i>	0.7464, 0.7464, 0.862, 90, 90, 90	keatite	-	2.49	X	1130
O-Si	SiO ₂ mog ht	P(Nb _{0.5} O _{0.5}) ₂ , oI36,72	<i>Ibam</i>	0.49371, 1.07605, 0.88159, 90, 90, 90	moganite high	-	2.56	X	38865
O-Si	SiO ₂ mog rt	SiO ₂ -a, mS36,15	<i>C12/c1</i>	1.3808, 0.48692, 0.87371, 90, 129, 061, 90	moganite low	-	2.62	X	38865
O-Si	SiO ₂ mon	SiO ₂ , mP48,14	<i>P12₁/c1</i>	0.715, 1.24, 0.716, 90, 119, 90	-	-	2.88	A	21043
O-Si	SiO ₂ qua (Fe)	SiO ₂ -a, aP9,1	<i>P1</i>	0.4916, 0.4916, 0.5407, 90, 90, 119, 99	quartz A	brown	2.64	X	27983
O-Si	SiO ₂ rt ZSM11	SiO ₂ , tI288,82	<i>I-4</i>	2.0019, 2.0019, 1.338, 90, 90, 90	zeolite MEL	-	1.79	X	32643
O-Si	SiO ₂ rt fer	SiO ₂ , oP108,58	<i>Pnmm</i>	0.74119, 1.40747, 1.8681, 90, 90, 90	zeolite FER	-	1.84	X	42322
O-Si	SiO ₂ rt tri-A	SiO ₂ , aP240,1	<i>P1</i>	0.9932, 0.9938, 4.1232, 86, 55, 83, 08, 60, 02	-	-	2.28	X	11174
O-Si	SiO ₂ rt tri-M	SiO ₂ , mS144,9	<i>C1c1</i>	1.8526, 0.5001, 2.38186, 90, 105, 839, 90	tridymite low	-	2.26	X	45995
O-Si	SiO ₂ rt	SiO ₂ , tP12,92	<i>P4₁2₁2</i>	0.49717, 0.49717, 0.69223, 90, 90, 90	crystalite low	colorless	2.33	X	28433
O-Si	SiO ₂ sei	Fe ₂ Nb _{0.94} , oP12,60	<i>Pbcn</i>	0.4097, 0.50462, 0.44946, 90, 90, 90	seifertite	-	4.30	X	51260
O-Si	SiO ₂ sod	SiO ₂ , hR54,148	<i>R-3</i>	1.2441, 1.2441, 0.70911, 90, 90, 120	zeolite SOD	colorless	1.89	X	52894
O-Si	SiO ₂ trig	SiO ₂ , hP31,143	<i>P3</i>	0.831, 0.831, 0.5205, 90, 90, 120	-	-	1.92	X	41327
O-Si	SiO ₂ βC	SiO ₂ , tP96,131	<i>P4₂/mmc</i>	1.26241, 1.26241, 1.31255, 90, 90, 90	zeolite BEC	white	1.53	X	46848
O-Si	Si ₂ O ₄₈	(Ge _{0.5} Si _{0.5}) ₂₄ O ₄₈ , cP72,221	<i>Pm-3m</i>	1.18532, 1.18532, 1.18532, 90, 90, 90	zeolite LTA	-	1.44	X	58797
O-Si	Si ₆₄ O ₁₂₈	Na ₄ Al ₄ Si ₆₀ O ₁₂₈ , tP192,91	<i>P4₂22</i>	1.2464, 1.2464, 2.6223, 90, 90, 90	zeolite BEA	-	1.57	X	46226
O-Sm	SmO tf	ZnS, cF8,216	<i>F-43m</i>	0.515, 0.515, 0.515, 90, 90, 90	adamantane structure	-	8.09	X	6814
O-Sm	SmO	NaCl, cF8,225	<i>Fm-3m</i>	0.4943, 0.4943, 0.4943, 90, 90, 90	rocksalt family	golden	9.15	X	14201
O-Sm	SmO _{0.61} cub	ZnS, cF8,216	<i>F-43m</i>	0.53725, 0.53725, 0.53725, 90, 90, 90	-	-	6.86	X	752
O-Sm	SmO _{0.656} tf	*, hR159,160	<i>R3m</i>	1.457, 1.457, 1.784, 90, 90, 120	-	-	-	N	6814
O-Sm	SmO _{1.5} ht4	NdO _{1.5} , cI26,229	<i>Im-3m</i>	0.434, 0.434, 0.434, 90, 90, 90	-	-	7.09	A	3898
O-Sm	Sm ₂ O ₃ ht1	La ₂ O ₃ , hP5,164	<i>P-3m1</i>	0.3748, 0.3748, 0.579, 90, 90, 120	-	-	8.22	A	22516
O-Sm	Sm ₂ O ₃ ht2	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80,206	<i>Ia-3</i>	1.09295, 1.09295, 1.09295, 90, 90, 90	-	-	7.10	X	53487
O-Sm	Sm ₂ O ₃ rt	Sm ₂ O ₃ , mS30,12	<i>C12/m1</i>	1.41975, 0.36273, 0.88561, 90, 99, 986, 90	-	yellow	7.74	X	22224
O-Sn	SnO hp	SnO, oP4,31	<i>Pmm2₁</i>	0.382, 0.430, 0.361, 90, 90, 90	-	-	7.54	X	5450
O-Sn	SnO m	SnO-b, oS16,36	<i>Cmc2₁</i>	0.50045, 0.57457, 1.10485, 90, 90, 90	-	red ruby	5.63	X	60323
O-Sn	SnO rt	PbO, tP4,129	<i>P4/nmm</i>	0.38494, 0.38494, 0.4894, 90, 90, 90	-	black	6.17	X	56942
O-Sn	SnO ₂ cub	*, cF*,225	<i>Fm-3m</i>	0.53405, 0.53405, 0.53405, 90, 90, 90	fluorite family	-	-	N	45826
O-Sn	SnO ₂ hp cub	FeS ₂ , cP12,205	<i>Pa-3</i>	0.48883, 0.48883, 0.48883, 90, 90, 90	pyrite-marcasite family	-	8.57	X	33799
O-Sn	SnO ₂ hp orth1	ZrO ₂ , oP24,61	<i>Pbca</i>	0.4731, 0.9304, 0.48927, 90, 90, 90	-	-	9.30	X	48251
O-Sn	SnO ₂ hp orth2	CaCl ₂ , oP6,58	<i>Pnmm</i>	0.46313, 0.46533, 0.3155, 90, 90, 90	-	-	7.36	X	33799
O-Sn	SnO ₂ hp orth3	Fe ₂ Nb _{0.94} , oP12,60	<i>Pbcn</i>	0.4744, 0.5707, 0.5209, 90, 90, 90	-	-	7.10	A	33799
O-Sn	SnO ₂ hp orth4	PbCl ₂ , oP12,62	<i>Pnma</i>	0.50156, 0.30282, 0.59044, 90, 90, 90	-	-	11.16	X	48251
O-Sn	SnO ₂ hp orth5	SnO ₂ , oP36,60	<i>Pbcn</i>	0.476, 0.571, 1.584, 90, 90, 90	-	-	6.97	X	16733
O-Sn	SnO ₂ rt	TiO ₂ , tP6,136	<i>P4₂/mnm</i>	0.47397, 0.47397, 0.31877, 90, 90, 90	cassiterite	white	6.99	X	38683
O-Sn	Sn ₃ O ₄	Sn ₃ O ₄ , mP14,14	<i>P12₁/c1</i>	0.8, 0.55, 0.48, 90, 95, 90	-	-	6.64	X	56489
O-Sr	SrO rt	NaCl, cF8,225	<i>Fm-3m</i>	0.51326, 0.51326, 0.51326, 90, 90, 90	rocksalt family	-	5.09	X	47119
O-Sr	SrO _{1.96}	CaC ₂ , tI6,139	<i>I4/mmm</i>	0.35619, 0.35619, 0.6576, 90, 90, 90	-	colorless	4.74	X	36535
O-Ta	TaO stab	NaCl, cF8,225	<i>Fm-3m</i>	0.4422, 0.4422, 0.4422, 90, 90, 90	rocksalt family	-	15.13	X	573
O-Ta	TaO _{0.05}	W, cI2,229	<i>Im-3m</i>	0.3341, 0.3341, 0.3341, 90, 90, 90	b.c.c. family	-	16.19	F	573
O-Ta	TaO _{0.9} tf	BiF ₃ , cF16,225	<i>Fm-3m</i>	0.444, 0.444, 0.444, 90, 90, 90	fluorite family	-	14.82	X	4158
O-Ta	TaO _{1.1} tf	TaO _{1.1} , tI12,139	<i>I4/mmm</i>	0.361, 0.361, 0.51, 90, 90, 90	-	-	9.92	X	12595

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
O-Ta	TaO _{1.67} rt	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.362,0.362,0.3883,90,90,120	AlB ₂ family	-	7.83	X	21072
O-Ta	TaO ₂ hp	TiO ₂ ,tP6,136	<i>P4₂/mmn</i>	0.4709,0.4709,0.3065,90,90,90	-	black	10.41	X	573
O-Ta	TaO ₂ tf	NbO ₂ ,tP6,88	<i>I4₁/a</i>	1.332,1.332,0.612,90,90,90	-	-	10.42	X	4151
O-Ta	TaO _{2.5} rt orth7	* _o P*,17	<i>P222₁</i>	0.86,0.889,0.517,90,90,90	-	-	-	N	4248
O-Ta	TaO _{2.5} rt orth9	TaO _{2.5} ,oS14,38	<i>Amm2</i>	0.38933,0.36555,0.61966,90,90,90	-	-	8.32	X	57329
O-Ta	Ta _{0.36} O _{0.52} tf	Ta _{0.36} O _{0.52} ,hP48,191	<i>P6/mmm</i>	0.716,0.716,1.152,90,90,120	-	-	2.86	X	13562
O-Ta	Ta _{0.38} O _{0.78} tf	Ta _{0.38} O _{0.78} ,hP16,191	<i>P6/mmm</i>	0.620,0.620,0.590,90,90,120	-	-	2.75	X	12586
O-Ta	Ta _{0.625} O tf	Ta _{0.625} O,tP80,123	<i>P4/mmm</i>	0.783,0.783,0.79,90,90,90	-	-	3.54	X	15400
O-Ta	Ta _{1.08} O	Ta _{1.08} O,cP40,221	<i>Pm-3m</i>	0.775,0.775,0.775,90,90,90	-	-	6.03	X	3168
O-Ta	Ta _{1.1} O _{0.84} tf	Ta _{1.1} O _{0.84} ,cP5,221	<i>Pm-3m</i>	0.387,0.387,0.387,90,90,90	-	-	6.09	X	3168
O-Ta	Ta _{1.10} O _{1.05} tf	Ta _{1.10} O _{1.05} ,tP5,123	<i>P4/mmm</i>	0.387,0.387,0.389,90,90,90	-	-	6.15	X	15400
O-Ta	Ta _{1.19} O _{1.5}	Nb _{0.91} O _{1.5} ,cP112,221	<i>Pm-3m</i>	0.79,0.79,0.79,90,90,90	-	-	6.45	X	3168
O-Ta	Ta _{1.5} O _{4.5} tf	Ta _{1.5} O _{4.5} ,mS28,12	<i>C12/m1</i>	1.203,0.376,0.63,90,106.92,90	-	-	4.18	X	10046
O-Ta	Ta _{1.8} O _{2.83} tf	Ta _{1.8} O _{2.8} ,oS46,65	<i>Cmmm</i>	0.3825,2.61,0.547,90,90,90	-	-	2.26	X	6862
O-Ta	Ta ₂ O	Ta ₂ O,cI24,217	<i>I-43m</i>	0.668,0.668,0.668,90,90,90	-	-	16.84	X	2601
O-Ta	Ta ₂ O ₅ (Sc)	Ta ₂ O ₅ ,mS42,5	<i>C121</i>	3.5961,0.3810,0.3810,90,96.04,90	tantite	-	8.48	X	5962
O-Ta	Ta ₂ O ₅ 19L	Ta ₂ O ₅ ,mP81,10	<i>P12/m1</i>	0.61939,0.38895,3.4912,90,95.089,90	-	-	8.76	X	46141
O-Ta	Ta ₂ O ₅ hp	Nb ₂ O ₅ ,mS28,15	<i>C12/c1</i>	1.27853,0.48537,0.55276,90,104.264,90	-	-	8.83	X	37282
O-Ta	Ta ₂ O ₅ ht mon	Ta ₂ O ₅ ,mS44,12	<i>C12/m1</i>	3.632,0.387,0.384,90,95.1,90	-	-	8.19	X	48783
O-Ta	Ta ₂ O ₅ ht orth	Ta ₂ O ₅ ,oS144,74	<i>Imma</i>	0.384,0.387,3.618,90,90,90	-	-	8.19	X	48783
O-Ta	Ta ₂ O ₅ ht tet	Ta ₂ O ₅ ,tI44,141	<i>I4₁/amd</i>	0.386,0.386,3.618,90,90,90	-	-	8.17	X	48783
O-Ta	Ta ₂ O ₅ ht tricl	* _a P42,*	-	0.378,0.38,3.574,89.8,89.04,89.97	-	-	-	N	5295
O-Ta	Ta ₂ O ₅ ht	Ta ₂ O ₅ ,oP84,25	<i>Pmm2</i>	0.3888,4.029,0.6198,90,90,90	-	-	8.31	X	5526
O-Ta	Ta ₂ O ₅ mon	Nb ₂ O ₅ ,mS14,5	<i>C121</i>	0.52252,0.46991,0.58534,90,108.2,90	-	-	10.75	X	37282
O-Ta	Ta ₂ O ₅ rt orth1	* _o S14,65	<i>Cmmm</i>	0.3662,0.6192,0.3885,90,90,90	-	-	-	N	9863
O-Ta	Ta ₂ O ₅ rt orth2	Ta ₂ O ₅ ,oP86,25	<i>Pmm2</i>	0.3894,4.3977,0.6209,90,90,90	-	-	8.28	X	25740
O-Ta	Ta ₂ O ₅ rt orth4	* _o P42,*	-	0.366,0.7551,1.8446,90,90,90	-	-	-	N	4248
O-Ta	Ta ₂ O ₅ rt orth5	* _o P126,33	<i>Pna2₁</i>	2.2541,0.6621,1.0558,90,90,90	-	-	-	N	4248
O-Ta	Ta ₂ O ₅ rt orth6	* _o P336,33	<i>Pna2₁</i>	1.465,0.9395,3.119,90,90,90	-	-	-	N	4248
O-Ta	Ta ₂ O ₅ rt orth8	Ta ₂ O ₅ ,oP14,49	<i>Pccm</i>	0.36623,0.61886,0.77838,90,90,90	-	-	8.32	X	60679
O-Ta	Ta ₂ O ₅ tf orth	* _o *,*,*	-	0.62,1.17,6.96,90,90,90	-	-	-	N	12586
O-Ta	Ta _{2.32} O _{7.40} tf	Ta _{2.32} O _{7.40} ,hP55,191	<i>P6/mmm</i>	0.716,0.716,1.152,90,90,120	-	-	1.75	X	13562
O-Ta	Ta ₃ O _{7.5} F	Ta ₃ O _{7.5} ,oS144,72	<i>Ibam</i>	0.73485,1.04546,0.69576,90,90,90	-	-	8.24	X	43340
O-Ta	Ta ₄ O	Ta ₄ O,oP5,47	<i>Pmmm</i>	0.3273,0.3273,0.7238,90,90,90	-	black bluish	15.84	X	573
O-Ta	Ta ₉ O _{22.5} tf	* _h R30,146	<i>R3</i>	0.61944,0.61944,3.65988,90,90,120	-	-	8.15	P	57755
O-Tb	TbO _{1.5} ht2	NdO _{1.5} ,cI26,229	<i>Im-3m</i>	0.427,0.427,0.427,90,90,90	-	-	7.80	A	5758
O-Tb	TbO _{1.68} cub	UN _{1.6} ,cI96,206	<i>Ia-3</i>	1.071,1.071,1.071,90,90,90	-	-	8.04	X	51536
O-Tb	TbO _{1.75}	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.531,0.531,0.531,90,90,90	fluorite family	-	8.29	X	55454
O-Tb	TbO _{1.82}	* _h P*,*	-	2.5836,2.5836,3.6672,90,90,120	-	black	-	N	38495
O-Tb	Tb ₁₁ O ₂₀ rt	Tb ₁₁ O ₂₀ -b,aP31,2	<i>P-1</i>	0.64878,0.65099,0.98298,95.881,90.019,99.966	-	black	8.45	X	27622
O-Tb	Tb ₂ O ₃ ht1	La ₂ O ₃ ,hP10,194	<i>P6₃/mmc</i>	0.386,0.386,0.613,90,90,120	-	-	7.68	A	5758
O-Tb	Tb ₂ O ₃ mon	Sm ₂ O ₃ ,mS30,12	<i>C12/m1</i>	1.403,0.3536,0.8717,90,100.1,90	-	-	8.56	X	4201
O-Tb	Tb ₂ O ₃ trig	La ₂ O ₃ ,hP5,164	<i>P-3m1</i>	0.384,0.384,0.613,90,90,120	-	-	7.76	A	2500
O-Tb	Tb ₆ O ₁₁ rt	Tb ₆ O ₁₁ ,aP68,1	<i>P1</i>	0.64,1.16723,1.224,73.367,79.97,79.438	-	-	8.79	X	15162
O-Tb	Tb ₇ O ₁₂ rt	Pr ₇ O ₁₂ ,hR57,148	<i>R-3</i>	0.99229,0.99229,0.92637,90,90,120	fluorite family	-	8.23	X	27622
O-Tc	TcO ₂	VO ₂ ,mP12,14	<i>P12₁/c1</i>	0.54828,0.47546,0.55195,90,117.727,90	-	black	6.78	X	49458
O-Tc	Tc ₂ O ₇	Tc ₂ O ₇ ,oP36,61	<i>Pbca</i>	0.5617,1.3756,0.7439,90,90,90	-	yellow light	3.56	X	6174
O-Te	TeO ₂ hp	TeO ₂ -b,oP12,19	<i>P2₁2₁2₁</i>	0.46053,0.48557,0.7530,90,90,90	-	-	6.30	X	9110
O-Te	TeO ₂ m	TeO ₂ -b,oP12,19	<i>P2₁2₁2₁</i>	0.4351,0.4898,0.8576,90,90,90	-	-	5.80	X	37876
O-Te	TeO ₂ rt	TeO ₂ ,tP12,92	<i>P4₂/c1</i>	0.48082,0.48082,0.7612,90,90,90	paratellurite	colorless	6.02	X	21264
O-Te	TeO ₂ tel	TeO ₂ -b,oP24,61	<i>Pbca</i>	0.5464,0.5607,1.2035,90,90,90	tellurite	yellow pale	5.75	X	3693
O-Te	TeO ₃ hex	* _h P*,*	-	0.515,0.515,1.4296,90,90,120	-	-	-	N	37427
O-Te	TeO ₃ rt	FeF ₃ ,hR24,167	<i>R-3c</i>	0.4901,0.4901,1.303,90,90,120	-	whitish	6.45	X	21511
O-Te	Te ₂ O ₅ mon	Te ₂ O ₅ ,mP14,4	<i>P12₁1</i>	0.53680,0.46959,0.79551,90,104.82,90	-	-	5.74	X	7047
O-Te	Te ₂ O ₅ tricl	* _a P*,*	-	0.4317,0.5932,0.74789,80.75,76.292,89.46	-	-	-	N	37427
O-Te	Te ₄ O ₉	Te ₄ O ₉ ,hR78,148	<i>R-3</i>	0.932,0.932,1.4486,90,90,120	-	-	5.98	X	8582
O-Th	ThO m	NaCl,cF8,225	<i>Fm-3m</i>	0.5302,0.5302,0.5302,90,90,90	rocksalt family	-	11.05	X	7374
O-Th	ThO ₂ hp	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.5898,0.36,0.6862,90,90,90	-	-	12.04	X	44653
O-Th	ThO ₂ rt	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.56119,0.56119,0.56119,90,90,90	thorianite	white	9.92	X	60693
O-Ti	TiO ht3	WC,hP2,187	<i>P-6m2</i>	0.3031,0.3031,0.32377,90,90,120	AlB ₂ family	gray dark	4.12	X	29502
O-Ti	TiO rt	TiO,mS20,12	<i>C12/m1</i>	0.9340,0.4142,0.5855,90,107.53,90	-	-	4.91	X	3282
O-Ti	TiO _{0.2} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.2963,0.2963,0.47673,90,90,120	close-packed structure	-	4.68	F	12289
O-Ti	TiO ₂ ana	TiO ₂ ,tI12,141	<i>I4₁/amd</i>	0.37892,0.37892,0.9537,90,90,90	anatase	yellow	3.88	X	6948
O-Ti	TiO ₂ bro	TiO ₂ ,oP24,61	<i>Pbca</i>	0.5138,0.9174,0.5449,90,90,90	brookite	-	4.13	X	12107
O-Ti	TiO ₂ hol	MnO ₂ ,tI24,87	<i>I4/m</i>	1.01568,1.01568,0.29544,90,90,90	-	gray pale	3.48	A	63985
O-Ti	TiO ₂ hp1	ReO ₂ ,oP12,60	<i>Pbcn</i>	0.45271,0.54972,0.49001,90,90,90	-	colorless	4.35	X	49222
O-Ti	TiO ₂ hp2	ZrO ₂ -b,mP12,14	<i>P12₁/c1</i>	0.4525,0.4767,0.4718,90,98.7,90	akaogiite	-	5.28	X	46471
O-Ti	TiO ₂ lt	VO ₂ -b,mS24,12	<i>C12/m1</i>	1.22078,0.37488,0.65296,90,107.065,90	-	-	3.72	X	54967
O-Ti	TiO ₂ ram	MnO ₂ ,oP12,62	<i>Pnma</i>	0.9459,0.29585,0.49022,90,90,90	-	colorless	3.87	X	29163
O-Ti	TiO ₂ rut	TiO ₂ ,tP6,136	<i>P4₂/mmn</i>	0.45924,0.45924,0.29575,90,90,90	rutile	gray	4.25	X	25447
O-Ti	Ti _{0.84} O _{0.84} ht1	Ti _{0.84} O _{0.84} ,mS24,12	<i>C12/m1</i>	0.9340,0.4141,0.5860,90,107.553,90	-	-	4.95	X	10998
O-Ti	Ti _{0.92} O ht2	NaCl,cF8,225	<i>Fm-3m</i>	0.4177,0.4177,0.4177,90,90,90	rocksalt family	blue gray	5.47	X	22971
O-Ti	Ti _{1.90} O ₃ rt	Al ₂ O ₃ ,hR30,167	<i>R-3c</i>	0.5157,0.5157,1.361,90,90,120	tistarite	-	4.42	X	10218
O-Ti	Ti ₁₅ O ₂₉	* _a P88,2	<i>P-1</i>	0.71382,0.87867,1.54622,93.58,101.57,106.2	-	-	-	N	5554
O-Ti	Ti ₁₆ O ₃₁	* _a P94,2	<i>P-1</i>	0.71382,0.87866,1.61302,84.893,89.49,73.799	-	-	-	N	5554
O-Ti	Ti ₁₇ O ₃₃	* _a P100,2	<i>P-1</i>	0.71382,0.87867,1.75808,99.69,96.12,106.2	-	-	-	N	5554
O-Ti	Ti ₁₈ O ₃₅	* _a P106,2	<i>P-1</i>	0.71382,0.87866,1.8171,88.253,86.59,73.799	-	-	-	N	5554
O-Ti	Ti ₁₉ O ₃₇	* _a P112,2	<i>P-1</i>	0.71382,0.87867,1.96677,78.748,80.928,73.8	-	-	-	N	5554

System	Substance	Prototype	H-M	Unit Cell Parameters <i>a,b,c,a₀,β,γ</i> (nm,°)	Family	Color	<i>D_x</i>	C	Ref.
O-Ti	Ti ₂ O rt	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.296,0.296,0.483,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.07	X	5380
O-Ti	Ti ₂ O ₃ hp	Th ₂ S ₂ ,oP20,62	<i>Pnma</i>	0.78248,0.28507,0.80967,90,90,90	-	golden	5.29	X	62430
O-Ti	Ti ₂₀ O ₃₉	*,aP118,2	<i>P-1</i>	0.71382,0.87866,2.04374,82.839,83.52,73.799	-	-	-	N	5554
O-Ti	Ti ₂ O ₄₁	*,aP124,2	<i>P-1</i>	0.71382,0.87867,2.13725,85.052,84.972,73.8	-	-	-	N	5554
O-Ti	Ti ₂₂ O ₄₃ lt2	*,aP130,2	<i>P-1</i>	0.71382,0.87866,2.28052,100.726,92.728,106.201-	-	-	-	N	5554
O-Ti	Ti ₃ O rt	Ti ₃ O,hP24,149	<i>P312</i>	0.51418,0.51418,1.4308,90,90,120	-	-	4.86	X	3736
O-Ti	Ti ₃ O ₃ ht	Ti ₃ O ₃ -b,mS32,12	<i>C12/m1</i>	0.98377,0.37879,0.99737,90,91.269,90	-	-	4.00	X	56768
O-Ti	Ti ₃ O ₃ lt	*,mP32,13	<i>P12/c1</i>	0.721,0.5062,0.9966,90,109.34,90	-	-	-	N	25171
O-Ti	Ti ₃ O ₃ rt mon1	Ti ₃ O ₃ -a,mS32,12	<i>C12/m1</i>	0.97568,0.38008,0.94389,90,91.547,90	-	black	4.25	X	29182
O-Ti	Ti ₃ O ₃ rt mon2	V ₃ O ₅ ,mS32,15	<i>C12/c1</i>	1.0115,0.50747,0.7181,90,112.024,90	-	black	4.35	X	14773
O-Ti	Ti ₃ O ₃ stab	Ta ₃ N ₅ ,oS32,63	<i>Cmcm</i>	0.3798,0.9846,0.9988,90,90,90	-	-	3.98	X	34953
O-Ti	Ti ₄ O ₃ ht1	Ti ₄ O ₃ ,tI18,87	<i>I4/m</i>	0.6594,0.6594,0.4171,90,90,90	-	-	4.97	X	4069
O-Ti	Ti ₄ O ₇ lt1	Ti ₄ O ₇ ,aP110,2	<i>P-1</i>	0.6918,1.1142,1.5127,90.64,92.79,91.45	-	-	4.33	X	17060
O-Ti	Ti ₄ O ₇ lt2	Ti ₄ O ₇ -b,aP22,2	<i>P-1</i>	0.5626,0.6892,0.7202,63.714,70.32,74.759	-	-	4.32	X	17060
O-Ti	Ti ₄ O ₇ rt	Ti ₄ O ₇ -a,aP22,2	<i>P-1</i>	0.5597,0.6903,0.7125,64.12,71.24,75.65	-	-	4.33	X	17060
O-Ti	Ti ₅ O ₉ rt	Ti ₅ O ₉ ,aP28,2	<i>P-1</i>	0.5568,0.7115,0.8484,69.78,75.00,71.49	-	-	4.32	X	10746
O-Ti	Ti ₆ O rt	Ti ₆ O,hP14,163	<i>P-31c</i>	0.506,0.506,0.948,90,90,120	-	-	4.79	X	5380
O-Ti	Ti ₆ O ₁₁ lt1	Ti ₆ O ₁₁ ,aP102,2	<i>P-1</i>	0.7517,1.1986,1.3397,98.29,105.52,107.79	-	-	4.30	X	16106
O-Ti	Ti ₆ O ₁₁ rt	Ti ₆ O ₁₁ ,aP34,2	<i>P-1</i>	0.5552,0.7126,0.9714,89.82,79.75,71.49	-	-	4.30	X	15197
O-Ti	Ti ₇ O ₁₃	Ti ₇ O ₁₃ ,aP40,2	<i>P-1</i>	0.5537,0.7132,1.1306,83.70,89.53,71.50	-	-	4.29	X	15197
O-Ti	Ti ₈ O ₁₅	Ti ₈ O ₁₅ ,aP46,2	<i>P-1</i>	0.5526,0.7133,1.3390,100.57,96.51,108.51	-	-	4.28	X	15197
O-Ti	Ti ₉ O ₁₇	Ti ₉ O ₁₇ ,aP52,2	<i>P-1</i>	0.5524,0.7142,1.4746,96.62,90.42,108.53	-	-	4.27	X	15197
O-Tl	TlO	CsCl,cP2,221	<i>Pm-3m</i>	0.3945,0.3945,0.3945,90,90,90	b.c.c. family	-	5.96	X	40451
O-Tl	Tl ₂ O rt	Tl ₂ O,hR18,166	<i>R-3m</i>	0.32984,0.32984,3.7722,90,90,120	-	black	11.91	X	23786
O-Tl	Tl ₂ O ₃ hp	Al ₂ O ₃ ,hR30,167	<i>R-3c</i>	0.57468,0.57468,1.4851,90,90,120	-	black	10.71	A	4516
O-Tl	Tl ₂ O ₃	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	1.05344,1.05344,1.05344,90,90,90	avicennite	black	10.38	X	27863
O-Tl	Tl ₄ O ₃	Tl ₄ O ₃ ,mP14,11	<i>P12₁/m1</i>	0.761,0.345,1.088,90,109.58,90	-	-	10.68	X	7187
O-Tm	TmO _{1.5} tf	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.512,0.512,0.512,90,90,90	fluorite family	-	9.55	X	11402
O-Tm	Tm ₂ O ₃ mon	Sm ₂ O ₃ ,mS30,12	<i>C12/m1</i>	1.379,0.3445,0.849,90,100.26,90	-	-	9.69	A	6473
O-Tm	Tm ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	1.04908,1.04908,1.04908,90,90,90	-	-	8.88	X	37843
O-U	UO stab	NaCl,cF8,225	<i>Fm-3m</i>	0.5,0.5,0.5,90,90,90	rocksalt family	-	13.50	X	7374
O-U	UO ₂ rt	CaF ₂ ,cF12,225	<i>Fm-3m</i>	0.5468,0.5468,0.5468,90,90,90	uraninite	black	10.97	X	53275
O-U	UO _{2.25} ht1	UO _{2.25} ,cF76,216	<i>F-43m</i>	0.544,0.544,0.544,90,90,90	-	-	11.31	X	22436
O-U	UO ₃ cub	ReO ₃ ,cP4,221	<i>Pm-3m</i>	0.4165,0.4165,0.4165,90,90,90	-	red brick	6.57	X	21506
O-U	UO ₃ hp	UO ₃ ,oP16,19	<i>P2₁2₁2₁</i>	0.5224,0.5466,0.7511,90,90,90	-	-	8.86	X	2820
O-U	UO ₃ ht	UO ₃ ,tI64,141	<i>I4₁/amd</i>	0.69013,0.69013,1.99754,90,90,90	-	yellow	7.99	X	10658
O-U	UO ₃ mon	UO ₃ ,mP40,4	<i>P12₁</i>	0.3910,1.433,1.034,90,99.03,90	-	-	8.30	X	2856
O-U	UO ₃ rt	UO ₃ ,oF128,70	<i>Fddd</i>	0.9705,0.9787,1.9932,90,90,90	-	-	8.03	X	10658
O-U	U _{0.90} O _{2.4} hp	Ag ₂ Te,cF84,225	<i>Fm-3m</i>	0.5415,0.5415,0.5415,90,90,90	-	-	10.57	X	64216
O-U	U ₁₃ O ₃₄	U ₁₃ O ₃₄ ,oS94,38	<i>Amm2</i>	0.4143,5.1532,0.6740,90,90,90	-	-	8.40	X	12616
O-U	U ₁₆ O ₃₇	U ₁₆ O ₃₇ ,tI848,122	<i>I-42d</i>	2.15898,2.15898,2.2229,90,90,90	-	-	11.28	X	53275
O-U	U ₂ O ₃ hp	*,mS28,*	-	0.5675,0.5074,1.24,90,99.2,90	-	-	-	N	6160
O-U	U ₂ O ₃ hp-ht	*,hP14,194	<i>P6₃/mmc</i>	0.3813,0.3813,1.318,90,90,120	-	-	11.13	N	5260
O-U	U ₂ O ₃ m	U ₂ O ₃ ,oP112,62	<i>Pnma</i>	0.6849,0.8274,3.1706,90,90,90	-	-	8.22	X	12616
O-U	U _{2.63} O _{7.89} orth	U _{2.63} O _{7.89} ,oS34,65	<i>Cmmm</i>	0.6842,1.185,0.4157,90,90,90	-	brown	7.41	X	6333
O-U	U ₃ O ₈ ht1	U ₃ O ₈ -b,oS44,63	<i>Cmcm</i>	0.7069,1.1445,0.8303,90,90,90	-	-	8.33	X	4910
O-U	U ₃ O ₈ ht2	U ₃ O ₈ ,hP11,189	<i>P-62m</i>	0.6821,0.6821,0.41517,90,90,120	-	red brown dull	8.36	X	53275
O-U	U ₃ O ₈ mon	U ₃ O ₈ ,mP44,11	<i>P12₁/m1</i>	0.672,0.829,1.193,90,91.90	-	-	8.42	X	897
O-U	U ₃ O ₈ orth	U ₃ O ₈ -a,oS44,63	<i>Cmcm</i>	1.193,0.672,0.829,90,90,90	-	-	8.42	X	897
O-U	U ₃ O ₈ rt	U ₃ O ₈ -a,S22,38	<i>Amm2</i>	0.41607,1.1978,0.6751,90,90,90	-	black	8.31	X	64216
O-U	U ₄ O ₉ rt	U ₄ O ₉ ,aP408,1	<i>P1</i>	1.8727,1.89286,1.89286,109.686,109.256,109.256-	-	-	11.25	X	57265
O-U	U ₆₄ O ₁₄₃	U ₆₄ O ₁₄₃ ,cI864,220	<i>I-43d</i>	2.17666,2.17666,2.17666,90,90,90	-	-	11.29	X	53275
O-V	VO _{0.03}	(Ba _{0.25} Bi _{0.75})O _{1.375} ,cI8,229	<i>Im-3m</i>	0.3043,0.3043,0.3043,90,90,90	-	-	6.06	X	36206
O-V	VO _{0.33} ht	CoO,tI4,139	<i>I4/mmm</i>	0.2912,0.2912,0.3407,90,90,90	rocksalt family	-	6.46	X	687
O-V	VO ₂ (Fe)	MnO ₂ ,oP12,62	<i>Pnma</i>	0.939,0.293,0.489,90,90,90	paramontroseite	-	4.09	X	660
O-V	VO ₂ B m	VO ₂ -b,mS24,12	<i>C12/m1</i>	1.20417,0.36892,0.64312,90,106.965,90	-	black	4.03	X	61320
O-V	VO ₂ ht-A m	VO ₂ ,tI24,87	<i>I4/m</i>	0.8476,0.8476,0.3824,90,90,90	-	black brownish	4.01	X	35074
O-V	VO ₂ ht1	VO ₂ -a,mS24,12	<i>C12/m1</i>	0.90664,0.57970,0.45255,90,91.88,90	-	-	4.63	X	6798
O-V	VO ₂ ht2	TiO ₂ ,tP6,136	<i>P4₂/mm</i>	0.45546,0.45546,0.28514,90,90,90	-	-	4.66	X	8332
O-V	VO ₂ ht3	VO ₂ ,tI24,87	<i>I4/m</i>	0.84819,0.84819,0.38257,90,90,90	-	-	4.00	X	64227
O-V	VO ₂ rt M3 O+	VO ₂ ,mP6,10	<i>P12/m1</i>	0.4506,0.2899,0.4617,90,91.79,90	-	-	4.57	X	36847
O-V	VO ₂ rt mon	VO ₂ ,mP12,14	<i>P12₁/c1</i>	0.53528,0.45378,0.53825,90,115.208,90	-	black	4.66	X	4950
O-V	VO ₂ rt tricl	VO ₂ ,aP12,2	<i>P-1</i>	0.45203,0.53640,0.53785,65.002,88.826,88.812	-	-	4.66	X	10681
O-V	VO ₂ rt-A m	VO ₂ ,tP48,130	<i>P4/mcc</i>	0.84403,0.84403,0.7666,90,90,90	-	black brownish	4.04	X	35074
O-V	V _{0.83} O _{0.87} ht	NaCl,cF8,225	<i>Fm-3m</i>	0.4026,0.4026,0.4026,90,90,90	rocksalt family	gray silver	5.72	X	53307
O-V	V ₁₃ O ₁₆ rt	V ₁₃ O ₁₆ ,tI116,141	<i>I4₁/amd</i>	1.1746,1.1746,0.82527,90,90,90	-	-	5.36	X	57385
O-V	V ₁₆ O ₃ rt	V ₁₆ O ₃ ,tI76,139	<i>I4/mmm</i>	1.196,1.196,0.6604,90,90,90	-	-	6.07	X	7484
O-V	V ₂ O ₃ hp	V ₂ O ₃ ,mP20,14	<i>P12₁/c1</i>	0.69624,0.48719,0.53984,90,98.94,90	-	-	5.50	X	64582
O-V	V ₂ O ₃ lt	V ₂ O ₃ ,mS20,15	<i>C12/c1</i>	0.86138,0.50053,0.55514,90,123.011,90	-	-	4.96	X	42713
O-V	V ₂ O ₃ m	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	0.93947,0.93947,0.93947,90,90,90	-	-	4.80	X	57276
O-V	V ₂ O ₃ rt	Al ₂ O ₃ ,hR30,167	<i>R-3c</i>	0.49605,0.49605,1.39857,90,90,120	karelianite	black	5.01	X	8576
O-V	V ₂ O ₃ hp1	V ₂ O ₃ ,mP14,11	<i>P12₁/m1</i>	0.62846,0.35718,0.7114,90,90.069,90	-	red dark	3.78	X	43516
O-V	V ₂ O ₃ hp2	Nb ₂ O ₅ ,mS28,15	<i>C12/c1</i>	1.19695,0.46992,0.53264,90,104.327,90	-	-	4.16	X	61046
O-V	V ₂ O ₃ m	V ₂ O ₃ ,oP28,62	<i>Pnma</i>	0.99461,0.35852,1.00423,90,90,90	-	-	3.37	X	24951
O-V	V ₂ O ₃ rt	V ₂ O ₅ ,oP14,59	<i>Pmmn</i>	0.3564,1.1512,0.4368,90,90,90	shcherbinaite	brown	3.37	X	18614
O-V	V ₃ O ₄ hp	Fe ₃ O ₄ ,cF56,227	<i>Fd-3m</i>	0.8457,0.8457,0.8457,90,90,90	spinel family	-	4.76	A	9143
O-V	V ₃ O ₃ ht	V ₃ O ₃ ,mS32,15	<i>C12/c1</i>	1.0033,0.5039,0.6988,90,111.5,90	oxyvanite	-	4.70	X	51307
O-V	V ₃ O ₃ m	Ta ₃ N ₅ ,oS32,63	<i>Cmcm</i>	0.37002,0.97187,0.99376,90,90,90	-	black grayish	4.33	X	59279

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
O-V	V ₃ O ₅ rt	V ₃ O ₅ , mP32, 13	<i>P12/c1</i>	0.9859, 0.50416, 0.6991, 90, 109, 478, 90	-	-	4.72	X	12799
O-V	V ₃ O ₇	V ₃ O ₇ , mS120, 15	<i>C12/c1</i>	2.1921, 0.3679, 1.8341, 90, 95, 61, 90	-	black	3.58	X	7821
O-V	V ₃ O _{7,1}	* ₃ tP*, 127	<i>P4/mbm</i>	0.89065, 0.89065, 0.55823, 90, 90, 90	-	-	-	N	34372
O-V	V ₄ O ₇ lt	Ti ₄ O ₇ -a, aP22, 2	<i>P-1</i>	0.5509, 0.67847, 0.7008, 64.13, 70.79, 75.43	-	-	4.75	X	7415
O-V	V ₃ O ₉ lt	V ₃ O ₉ , aP56, 2	<i>P-1</i>	0.7002, 0.83516, 1.09052, 91.91, 108.39, 110.5	-	-	4.73	X	24918
O-V	V ₃ O ₉ rt	Ti ₃ O ₉ , aP28, 2	<i>P-1</i>	0.5472, 0.7003, 0.83491, 69.529, 75.103, 70.99	-	-	4.73	X	8218
O-V	V ₆ O ₁₁ lt	Ti ₆ O ₁₁ , aP34, 2	<i>P-1</i>	0.5448, 0.6998, 0.96105, 89.946, 79.428, 71.1	-	-	4.70	X	9843
O-V	V ₆ O ₁₃ lt	V ₆ O ₁₃ , mP38, 7	<i>P1c1</i>	1.00605, 0.37108, 1.19633, 90, 100, 927, 90	-	black	3.89	X	41992
O-V	V ₆ O ₁₃ orth	V ₆ O ₁₃ , oF76, 69	<i>Fmmm</i>	0.368, 1.1922, 1.9912, 90, 90, 90	-	-	3.91	X	18039
O-V	V ₆ O ₁₃ rt	V ₆ O ₁₃ , mS38, 12	<i>C12/m1</i>	1.1922, 0.3680, 1.0138, 90, 100, 87, 90	-	black bluish	3.91	X	5614
O-V	V ₇ O ₁₃	Ti ₇ O ₁₃ , aP40, 2	<i>P-1</i>	0.5439, 0.7005, 1.1076, 84.316, 88.615, 71.	-	-	4.72	X	9843
O-V	V ₇ O ₃ rt	V ₇ O ₃ , mS20, 12	<i>C12/m1</i>	0.95536, 0.29184, 0.77622, 90, 90, 32, 90	-	-	6.21	X	52016
O-V	V ₈ O rt tet	V ₈ O, tP18, 136	<i>P4₂/mmn</i>	0.8754, 0.8754, 0.2996, 90, 90, 90	-	-	6.13	X	9645
O-V	V ₈ O rt tricl	* ₃ aP*, *	-	0.2994, 0.311, 0.311, 90, 90, 3, 90, 3	-	-	-	N	8287
O-V	V ₈ O ₁₅	Ti ₈ O ₁₅ , aP46, 2	<i>P-1</i>	0.54243, 0.7005, 1.3113, 100.135, 95.864, 108.961	-	-	4.71	X	61963
O-V	V ₉ O ₁₇	Ti ₉ O ₁₇ , aP52, 2	<i>P-1</i>	0.54219, 0.70142, 1.45252, 97.031, 90.99, 108.963	-	-	4.69	X	61963
O-V	[VO] ₂ [V ₂ O ₇]	[VO] ₂ [V ₂ O ₇], oS104, 63	<i>Cmcm</i>	1.0356, 0.8174, 1.6559, 90, 90, 90	-	-	3.30	X	55852
O-W	WO ₂ hp	WO ₂ , oP36, 62	<i>Pnma</i>	0.97164, 0.84380, 0.47564, 90, 90, 90	-	brownish	11.03	X	29648
O-W	WO ₂	VO ₂ , mP12, 14	<i>P12₁/c1</i>	0.55635, 0.48986, 0.56644, 90, 120.444, 90	-	brown	10.77	X	29833
O-W	WO _{2,95}	WO _{2,95} , tP16, 113	<i>P-42₁m</i>	0.739, 0.739, 0.388, 90, 90, 90	-	blue dark	7.24	X	34846
O-W	WO _{2,96}	* ₃ mP*, 10	<i>P12/m1</i>	1.19, 0.3826, 2.982, 90, 98, 4, 90	-	-	-	N	2987
O-W	WO ₃ hex	WO ₃ , hP12, 191	<i>P6/mmm</i>	0.7298, 0.7298, 0.3899, 90, 90, 120	-	white	6.42	X	12377
O-W	WO ₃ hp1	* ₃ mP*, 14	<i>P12₁/c1</i>	0.53159, 0.45758, 0.61669, 90, 101.44, 90	-	-	-	N	40910
O-W	WO ₃ hp2	* ₃ mP*, 6	<i>P1m1</i>	0.93459, 0.39065, 1.03633, 90, 98.539, 90	-	-	-	N	40910
O-W	WO ₃ ht	WO ₃ -b, mP16, 14	<i>P12₁/c1</i>	0.5261, 0.5128, 0.7650, 90, 92.05, 90	-	-	7.47	X	33598
O-W	WO ₃ ht1	WO ₃ , mP32, 14	<i>P12₁/c1</i>	0.73033, 0.75375, 1.05275, 90, 133.065, 90	-	black green	7.27	X	40901
O-W	WO ₃ ht2	WO ₃ , oP32, 60	<i>Pbcn</i>	0.73572, 0.77607, 0.75735, 90, 90, 90	-	-	7.12	X	40901
O-W	WO ₃ ht3	WO ₃ , tP16, 130	<i>P4/ncc</i>	0.52885, 0.52885, 0.78626, 90, 90, 90	-	-	7.00	X	36235
O-W	WO ₃ ht4	WO ₃ , tP8, 129	<i>P4/nmm</i>	0.53031, 0.53031, 0.39348, 90, 90, 90	-	-	6.96	X	36235
O-W	WO ₃ lt1	WO ₃ , mP16, 7	<i>P1c1</i>	0.52778, 0.51559, 0.76639, 90, 91.762, 90	-	yellow	7.39	X	33595
O-W	WO ₃ m hex	WO ₃ , hP30, 193	<i>P6₃/mcm</i>	0.73244, 0.73244, 0.76628, 90, 90, 120	-	-	6.49	X	26240
O-W	WO ₃ rt	WO ₃ , aP32, 2	<i>P-1</i>	0.7309, 0.7522, 0.7678, 88.81, 89.08, 89.07	-	white yellow	7.30	X	11035
O-W	WO ₃ tf	ReO ₃ , cP4, 221	<i>Pm-3m</i>	0.3838, 0.3838, 0.3838, 90, 90, 90	-	-	6.81	X	7270
O-W	W _{0,75} O _{0,25} m	Cr ₂ cP8, 223	<i>Pm-3n</i>	0.5036, 0.5036, 0.5036, 90, 90, 90	Frank-Kasper phase	-	14.76	X	542
O-W	W ₁₀ O ₂₉ hp	W ₁₀ O ₂₉ , mP78, 10	<i>P12/m1</i>	1.21, 0.378, 2.34, 90, 95, 90	-	blue green	7.17	X	328
O-W	W ₁₁ O ₁₂ hp	W ₁₁ O ₁₂ , oS46, 35	<i>Cmm2</i>	0.516, 1.716, 0.378, 90, 90, 90	-	-	21.97	X	25724
O-W	W ₁₇ O ₄₇ ht	W ₁₇ O ₄₇ , mP64, 10	<i>P12/m1</i>	1.2326, 0.3787, 1.884, 90, 102.67, 90	-	mauve pinkish	7.50	X	20899
O-W	W ₁₈ O ₄₉ ht	W ₁₈ O ₄₉ , mP67, 10	<i>P12/m1</i>	1.40280, 0.37828, 1.77039, 90, 110.587, 90	-	red dark	7.73	X	20512
O-W	W ₂ O ₃ tf	* ₃ c*, *	-	0.686, 0.686, 0.686, 90, 90, 90	-	-	-	N	7270
O-W	W ₂₅ O ₇₃ ht	W ₂₅ O ₇₃ , mP196, 13	<i>P12/c1</i>	1.193, 0.3820, 5.972, 90, 98.3, 90	-	blue dark	7.11	X	9438
O-W	W ₃ O ₈ hp1	W ₃ O ₈ , oP44, 55	<i>Pbam</i>	1.035, 1.399, 0.378, 90, 90, 90	-	red dark	8.25	X	27032
O-W	W ₃ O ₈ hp2	U ₃ O ₈ , oS22, 21	<i>C222</i>	0.6386, 1.043, 0.38, 90, 90, 90	-	red dark	8.92	X	27032
O-W	W ₃ O ₁₄ (Fe)	W ₃ O ₁₄ , tP152, 113	<i>P-42₁m</i>	2.333, 2.333, 0.3797, 90, 90, 90	-	purple bluish	7.35	X	11547
O-W	W ₆ O ₁₇	* ₃ mP*, *	-	1.707, 0.3781, 1.931, 90, 104, 4, 90	-	-	-	N	15157
O-W	W ₈ O ₂₁ hp	W ₈ O ₂₁ , oP116, 55	<i>Pbam</i>	1.7766, 2.1431, 0.3783, 90, 90, 90	-	-	8.33	X	27000
O-Xe	XeO ₃	XeO ₃ , oP16, 19	<i>P2₁2₁2₁</i>	0.5234, 0.6163, 0.8115, 90, 90, 90	-	colorless	4.55	X	1857
O-Y	YO _{1,5} ht2	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.52644, 0.52644, 0.52644, 90, 90, 90	fluorite family	-	5.14	X	27890
O-Y	Y ₂ O ₃ hp1	Sm ₂ O ₃ , mS30, 12	<i>C12/m1</i>	1.38714, 0.34487, 0.85862, 90, 100.12, 90	-	-	5.56	X	28541
O-Y	Y ₂ O ₃ hp2	La ₂ O ₃ , hP5, 164	<i>P-3m1</i>	0.35687, 0.35687, 0.54131, 90, 90, 120	-	-	6.28	A	55287
O-Y	Y ₂ O ₃ ht-hp	Cr ₂ C ₂ -b, oP20, 62	<i>Pnma</i>	0.5846, 0.32607, 1.25723, 90, 90, 90	-	-	6.26	A	55287
O-Y	Y ₂ O ₃ ht1	La ₂ O ₃ , hP10, 194	<i>P6₃/mmc</i>	0.381, 0.381, 0.609, 90, 90, 120	-	-	4.90	A	2509
O-Y	Y ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	<i>la-3</i>	1.05981, 1.05981, 1.05981, 90, 90, 90	yttriaite-(Y)	colorless	5.04	X	31469
O-Yb	YbO	NaCl, cF8, 225	<i>Fm-3m</i>	0.486, 0.486, 0.486, 90, 90, 90	rocksalt family	-	10.94	X	937
O-Yb	YbO _{1,5} tf	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.5115, 0.5115, 0.5115, 90, 90, 90	fluorite family	-	9.78	X	11402
O-Yb	Yb ₂ O ₃ hp	Sm ₂ O ₃ , mS30, 12	<i>C12/m1</i>	1.326, 0.341, 0.813, 90, 98.6, 90	-	-	10.80	A	30910
O-Yb	Yb ₂ O ₃ rt	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ , cI80, 206	<i>la-3</i>	1.04342, 1.04342, 1.04342, 90, 90, 90	-	yellow	9.22	X	22224
O-Yb	Yb ₃ O ₄	Eu ₃ O ₄ , oP28, 62	<i>Pnma</i>	0.9758, 0.3333, 1.162, 90, 90, 90	-	-	10.25	A	11275
O-Zn	ZnO hp	NaCl, cF8, 225	<i>Fm-3m</i>	0.42661, 0.42661, 0.42661, 90, 90, 90	rocksalt family	-	6.96	X	64635
O-Zn	ZnO m	ZnS, cF8, 216	<i>F-43m</i>	0.5587, 0.5587, 0.5587, 90, 90, 90	adamantane structure	-	3.10	X	4710
O-Zn	ZnO rt	ZnO, hP4, 186	<i>P6₃/mc</i>	0.32494, 0.32494, 0.52054, 90, 90, 120	zincite	green olive	5.68	X	47464
O-Zn	ZnO ₂	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.4871, 0.4871, 0.4871, 90, 90, 90	pyrite-marcasite family	-	5.60	X	1055
O-Zr	ZrO	NaCl, cF8, 225	<i>Fm-3m</i>	0.462, 0.462, 0.462, 90, 90, 90	rocksalt family	-	7.22	X	577
O-Zr	ZrO _{0,19}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3253, 0.3253, 0.518, 90, 90, 120	close-packed structure	-	6.59	F	18008
O-Zr	ZrO _{0,368} rt	ZrO _{0,37} , hP12, 182	<i>P6₃22</i>	0.5631, 0.5631, 0.5191, 90, 90, 120	-	-	6.79	X	4064
O-Zr	ZrO ₂ (Mg)	ZrO ₂ , oP12, 29	<i>Pca2₁</i>	0.526, 0.5068, 0.5077, 90, 90, 90	-	brown dark	6.05	X	23310
O-Zr	ZrO ₂ hp1 orth	ZrO ₂ , oP16, 57	<i>Pbcm</i>	0.5005, 0.5235, 0.5051, 90, 90, 90	-	-	6.18	X	19253
O-Zr	ZrO ₂ hp1 tet	MnF ₂ , tP12, 111	<i>P-42m</i>	0.5046, 0.5046, 0.5129, 90, 90, 90	-	-	6.27	A	17564
O-Zr	ZrO ₂ hp2	ZrO ₂ , oP24, 61	<i>Pbca</i>	0.5091, 1.00861, 0.52615, 90, 90, 90	-	-	6.06	X	23802
O-Zr	ZrO ₂ hp3	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.55873, 0.33298, 0.64847, 90, 90, 90	-	-	6.78	X	33216
O-Zr	ZrO ₂ hp4	* ₃ tP12, *	-	0.452, 0.452, 0.501, 90, 90, 90	-	-	-	N	23821
O-Zr	ZrO ₂ ht-hp	* ₃ hP24, *	-	0.677, 0.677, 0.684, 90, 90, 120	-	-	-	N	29347
O-Zr	ZrO ₂ ht1	ZrO ₂ , tP6, 137	<i>P4₂/nmc</i>	0.36067, 0.36067, 0.51758, 90, 90, 90	fluorite family	-	6.08	X	27011
O-Zr	ZrO ₂ ht2	CaF ₂ , cF12, 225	<i>Fm-3m</i>	0.4947, 0.4947, 0.4947, 90, 90, 90	fluorite family	-	6.76	X	38369
O-Zr	ZrO ₂ nano	ZrO ₂ -c, mP12, 14	<i>P12₁/c1</i>	0.5107, 0.5107, 0.5107, 90, 90, 90	-	-	6.14	X	48403
O-Zr	ZrO ₂ rt	ZrO ₂ -b, mP12, 14	<i>P12₁/c1</i>	0.51499, 0.51991, 0.53267, 90, 99.124, 90	baddeleyite	colorless	5.81	X	47499
O-Zr	Zr ₂ O tf	Cu ₂ O, cP6, 224	<i>Pn-3m</i>	0.5088, 0.5088, 0.5088, 90, 90, 90	-	-	5.00	X	18375
O-Zr	Zr ₃ O ht1	Fe ₃ , hP8, 182	<i>P6₃22</i>	0.56172, 0.56172, 0.5185, 90, 90, 120	-	-	6.79	X	36206
O-Zr	Zr ₃ O rt Zr+	FeF ₃ , hR24, 167	<i>R-3c</i>	0.56295, 0.56295, 1.55925, 90, 90, 120	-	-	6.74	X	3902

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
O-Zr	Zr ₃ O rt	Zr ₃ O,hR48,155	R32	0.5563,0.5563,3.1185,90,90,120	-	-	6.91	X	4443
O-Zr	Zr ₃ O _{0.89} rt	Zr ₃ O _{0.89} ,hP24,165	P-3c1	0.5634,0.5634,1.5555,90,90,120	-	-	6.71	X	4064
Os-P	OsP ₂	FeAs ₂ ,oP6,58	Pnnm	0.50843,0.58737,0.29041,90,90,90	pyrite-marcasite family	black	9.66	X	63609
Os-P	OsP ₄ ht	RuP ₄ ,aP15,2	P-1	0.4718,0.7153,0.754,111.2,90.34,100.38	-	black	6.73	A	11820
Os-P	OsP ₄ rt	CdP ₄ ,mP10,14	P12 ₁ /c1	0.4694,0.4683,0.7096,90,99.57,90	-	black	6.78	A	15092
Os-Pr	PrOs ₂ cub	MgCu ₂ ,cF24,227	Fd-3m	0.766,0.766,0.766,90,90,90	Friauf-Laves phase	-	15.41	X	7329
Os-Pr	PrOs ₂ hex	MgZn ₂ ,hP12,194	P6 ₃ /mmc	0.5368,0.5368,0.8945,90,90,120	Friauf-Laves phase	-	15.51	X	1024
Os-Pr	Pr ₃ Os	Fe ₃ C-b,oP16,62	Pnma	0.7452,0.961,0.6457,90,90,90	-	-	8.80	A	13171
Os-Pr	Os _{0.55} Pt _{0.45}	Cu,cF4,225	Fm-3m	0.3888,0.3888,0.3888,90,90,90	close-packed structure	-	21.74	X	52002
Os-Pt	Os _{0.89} Pt _{0.11}	Mg,hP2,194	P6 ₃ /mmc	0.2737,0.2737,0.434,90,90,120	close-packed structure	-	22.50	X	52002
Os-Pu	PuOs ₂ Pu+	MgZn ₂ ,hP12,194	P6 ₃ /mmc	0.5329,0.5329,0.8691,90,90,120	Friauf-Laves phase	-	19.40	A	8906
Os-Pu	PuOs ₂	MgCu ₂ ,cF24,227	Fd-3m	0.75299,0.75299,0.75299,90,90,90	Friauf-Laves phase	-	19.43	X	8906
Os-Pu	Pu _{12.35} Os _{0.65} ht	Pu ₁₂ (Pu _{0.35} Os _{0.65}),oP52,52	Pnna	1.5839,0.7819,0.9151,90,90,90	-	-	18.39	X	11976
Os-Pu	Pu _{4.75} Os _{0.25} rt	Pu ₄ (Pu _{0.75} Os _{0.25}),oS40,64	Cmce	0.5345,1.4884,1.0898,90,90,90	-	-	18.49	X	11199
Os-Pu	Pu ₅ Os ₃	W ₅ Si ₃ ,tI32,140	I4/mcm	1.08818,1.08818,0.56645,90,90,90	-	-	17.73	X	8388
Os-Re	Re _{0.5} Os _{0.5}	Mg,hP2,194	P6 ₃ /mmc	0.2751,0.2751,0.4366,90,90,120	close-packed structure	-	21.84	X	50068
Os-Rh	Os _{0.36} Rh _{0.64}	Cu,cF4,225	Fm-3m	0.3806,0.3806,0.3806,90,90,90	close-packed structure	-	16.18	X	45066
Os-Rh	Os _{0.5} Rh _{0.5}	Mg,hP2,194	P6 ₃ /mmc	0.2717,0.2717,0.4326,90,90,120	close-packed structure	-	17.60	X	41230
Os-Ru	Os _{0.5} Ru _{0.5}	Mg,hP2,194	P6 ₃ /mmc	0.2716,0.2716,0.4302,90,90,120	close-packed structure	-	17.60	X	54496
Os-S	OsS ₂	FeS ₂ ,cP12,205	Pa-3	0.56194,0.56194,0.56194,90,90,90	erlichmanite	black	9.52	X	26826
Os-Sb	OsSb ₂	FeAs ₂ ,oP6,58	Pnnm	0.59381,0.66961,0.32044,90,90,90	pyrite-marcasite family	black	11.30	X	63609
Os-Sc	ScOs ₂	MgZn ₂ ,hP12,194	P6 ₃ /mmc	0.5179,0.5179,0.8484,90,90,120	Friauf-Laves phase	-	14.34	X	1024
Os-Sc	Sc ₁₁ Ir ₄ ,cF120,225	Sc ₁₁ Ir ₄ ,cF120,225	Fm-3m	1.3344,1.3344,1.3344,90,90,90	-	-	7.02	X	12927
Os-Sc	Sc ₄₄ Os ₇	Mg ₄₄ Rh ₇ ,cF408,216	F-43m	2.0771,2.0771,2.0771,90,90,90	-	-	4.91	X	12846
Os-Se	OsSe ₂	FeS ₂ ,cP12,205	Pa-3	0.5946,0.5946,0.5946,90,90,90	pyrite-marcasite family	-	11.00	X	3905
Os-Si	OsSi rt	FeSi ₂ ,cP8,198	P2 ₁ 3	0.4729,0.4729,0.4729,90,90,90	-	-	13.71	X	862
Os-Si	OsSi stab	CsCl,cP2,221	Pm-3m	0.296,0.296,0.296,90,90,90	b.c.c. family	-	13.98	X	1633
Os-Si	OsSi ₂ rt	FeSi ₂ ,oS48,64	Cmce	1.01496,0.81168,0.8223,90,90,90	-	-	9.66	X	4936
Os-Si	OsSi ₂ stab	OsGe ₂ ,mS12,12	C12/m1	0.8661,0.2984,0.7472,90,119.01,90	-	-	9.69	A	21196
Os-Si	Os ₂ Si ₃ rt	Ru ₂ Ge ₃ ,oP40,60	Pbcn	1.1157,0.8964,0.558,90,90,90	chimney-ladder structure	-	11.06	A	21196
Os-Sm	SmOs ₂	MgZn ₂ ,hP12,194	P6 ₃ /mmc	0.5336,0.5336,0.8879,90,90,120	Friauf-Laves phase	-	16.10	X	1024
Os-Sm	Sm ₃ Os	Fe ₃ C-b,oP16,62	Pnma	0.7419,0.9365,0.6372,90,90,90	-	-	9.62	A	13171
Os-Sn	Os ₃ Sn ₇ hp-ht	Ru ₃ Sn ₇ ,cI40,229	Im-3m	0.9378,0.9378,0.9378,90,90,90	-	gray silver	11.29	X	37731
Os-Sn	Os ₄ Sn ₁₇	Os ₄ Sn ₁₇ ,oP84,57	Pbcm	0.6949,1.4281,1.9211,90,90,90	-	-	9.68	X	31993
Os-Ta	Ta _{0.2} Os _{0.8}	Mg,hP2,194	P6 ₃ /mmc	0.27627,0.27627,0.44106,90,90,120	close-packed structure	-	21.46	X	2608
Os-Ta	Ta _{0.5} Os _{0.5}	Mn,cI58,217	I-43m	0.97633,0.97633,0.97633,90,90,90	-	-	19.21	A	2608
Os-Ta	Ta _{0.6} Os _{0.4}	(Cr _{0.49} Fe _{0.51}),tP30,136	P4 ₂ /mnm	0.9842,0.9842,0.5121,90,90,90	Frank-Kasper phase	-	18.54	A	2608
Os-Ta	Ta _{0.9} Os _{0.1}	W,cI2,229	Im-3m	0.32732,0.32732,0.32732,90,90,90	b.c.c. family	-	17.22	X	2608
Os-Tb	TbOs ₂	MgZn ₂ ,hP12,194	P6 ₃ /mmc	0.5314,0.5314,0.8802,90,90,120	Friauf-Laves phase	-	16.64	A	3180
Os-Tb	Tb ₃ Os	Fe ₃ C-b,oP16,62	Pnma	0.7368,0.9123,0.6286,90,90,90	-	-	10.49	A	13171
Os-Tc	Tc _{0.5} Os _{0.5}	Mg,hP2,194	P6 ₃ /mmc	0.274,0.274,0.4344,90,90,120	close-packed structure	-	16.94	X	1636
Os-Te	OsTe ₂ ht	FeS ₂ ,cP12,205	Pa-3	0.6397,0.6397,0.6397,90,90,90	pyrite-marcasite family	black	11.30	X	26827
Os-Te	OsTe ₂ rt	FeS ₂ ,oP6,58	Pnnm	0.528,0.6402,0.4048,90,90,90	pyrite-marcasite family	-	10.81	A	8557
Os-Th	ThOs ₂	MgCu ₂ ,cF24,227	Fd-3m	0.7715,0.7715,0.7715,90,90,90	Friauf-Laves phase	-	17.72	X	2170
Os-Th	Th _{0.99} Os _{0.01} rt	Cu,cF4,225	Fm-3m	0.50873,0.50873,0.50873,90,90,90	close-packed structure	-	11.69	X	2170
Os-Th	Th ₇ Os ₃	Th ₇ Fe ₃ ,hP20,186	P6 ₃ mc	1.0031,1.0031,0.6296,90,90,120	-	-	13.29	A	2170
Os-Ti	TiOs	CsCl,cP2,221	Pm-3m	0.308,0.308,0.308,90,90,90	b.c.c. family	-	13.53	X	6099
Os-Tm	TmOs ₂	MgZn ₂ ,hP12,194	P6 ₃ /mmc	0.5424,0.5424,0.8808,90,90,120	Friauf-Laves phase	-	16.26	A	2373
Os-Tm	Tm ₃ Os	Fe ₃ C-b,oP16,62	Pnma	0.7339,0.8873,0.6136,90,90,90	-	-	11.59	A	13172
Os-U	UOs ₂ ht	MgCu ₂ ,cF24,227	Fd-3m	0.7514,0.7514,0.7514,90,90,90	Friauf-Laves phase	-	19.37	X	26151
Os-U	UOs ₂ rt	MgZn ₂ ,hP12,194	P6 ₃ /mmc	0.549,0.549,0.871,90,90,120	Friauf-Laves phase	-	18.07	A	29198
Os-U	U _{0.88} Os _{0.12} ht2	W,cI2,229	Im-3m	0.3485,0.3485,0.3485,90,90,90	b.c.c. family	-	18.23	X	1891
Os-U	U ₂ Os	*mP12,*	-	0.5167,0.3335,1.3366,90,96.68,90	-	-	-	N	2749
Os-U	U ₃ Os	*t**,*	-	0.9142,0.9142,0.5778,90,90,90	-	-	-	N	26151
Os-V	V _{0.4} Os _{0.6}	Mg,hP2,194	P6 ₃ /mmc	0.2725,0.2725,0.442,90,90,120	close-packed structure	-	15.72	X	12273
Os-V	V _{0.8} Os _{0.2}	W,cI2,229	Im-3m	0.3004,0.3004,0.3004,90,90,90	b.c.c. family	-	9.65	X	12273
Os-V	V _{1.2} Os _{0.8} rt	CsCl,cP2,221	Pm-3m	0.3011,0.3011,0.3011,90,90,90	b.c.c. family	-	12.97	X	12273
Os-V	V ₂ Os ₂ ht	Cr ₃ Si ₂ cP8,223	Pm-3n	0.4812,0.4812,0.4812,90,90,90	Frank-Kasper phase	-	14.38	X	12273
Os-W	W _{0.35} Os _{0.65}	Mg,hP2,194	P6 ₃ /mmc	0.2766,0.2766,0.4445,90,90,120	close-packed structure	-	21.20	X	1397
Os-W	W _{0.7} Os _{0.3}	(Cr _{0.49} Fe _{0.51}),tP30,136	P4 ₂ /mnm	0.96463,0.96463,0.49889,90,90,90	Frank-Kasper phase	-	19.93	A	1397
Os-W	W _{0.9} Os _{0.1}	W,cI2,229	Im-3m	0.31573,0.31573,0.31573,90,90,90	b.c.c. family	-	19.47	X	1397
Os-Y	YOs ₂	MgZn ₂ ,hP12,194	P6 ₃ /mmc	0.5307,0.5307,0.8786,90,90,120	Friauf-Laves phase	-	14.55	X	1024
Os-Y	Y ₃ Os	Fe ₃ C-b,oP16,62	Pnma	0.7425,0.9132,0.6337,90,90,90	-	-	7.06	A	13171
Os-Yb	YbOs ₂	MgZn ₂ ,hP12,194	P6 ₃ /mmc	0.5268,0.5268,0.869,90,90,120	Friauf-Laves phase	-	17.60	A	10008
Os-Zr	ZrOs	CsCl,cP2,221	Pm-3m	0.3263,0.3263,0.3263,90,90,90	b.c.c. family	-	13.45	X	31862
Os-Zr	ZrOs ₂	MgZn ₂ ,hP12,194	P6 ₃ /mmc	0.52,0.52,0.853,90,90,120	Friauf-Laves phase	-	15.68	A	8262
Os-Zr	Zr _{0.95} Os _{0.05} ht	W,cI2,229	Im-3m	0.3558,0.3558,0.3558,90,90,90	b.c.c. family	-	7.09	X	37634
Os-Zr	Zr _{0.97} Os _{0.03} m	Ti,hP3,191	P6/mmm	0.5038,0.5038,0.313,90,90,120	-	-	6.82	X	37634
Os-Zr	Zr _{0.9975} Os _{0.0025} rt	Mg,hP2,194	P6 ₃ /mmc	0.3232,0.3232,0.5148,90,90,120	close-packed structure	-	6.52	X	37634
Os-Zr	Zr ₁₁ Os ₄	Sc ₁₁ Ir ₄ ,cF120,225	Fm-3m	1.3414,1.3414,1.3414,90,90,90	-	-	9.71	A	12927
Os-Zr	Zr ₂ Os ht	Ti ₂ Ni,cF96,227	Fd-3m	1.2365,1.2365,1.2365,90,90,90	-	-	10.47	A	31862
Os-Zr	Zr ₅₄ Os ₁₇	Hf ₅₄ Os ₁₇ ,oI142,71	Immm	1.4039,1.4195,1.4724,90,90,90	-	-	9.24	A	31862
P-Pa	PaP ₂	UAs ₂ ,tP6,129	P4/nmm	0.3838,0.3838,0.7845,90,90,90	-	-	8.42	A	15059
P-Pa	Pa ₃ P ₄	Th ₃ P ₄ ,cI28,220	I-43d	0.82424,0.82424,0.82424,90,90,90	-	-	9.69	A	15059
P-Pb	PbP ₇	PbP ₇ ,mP32,14	P12 ₁ /c1	0.9707,0.67334,1.24389,90,122.55,90	-	black	4.11	X	63215
P-Pd	PdP ₂	PdP ₂ ,mS12,15	C12/c1	0.67787,0.5857,0.5874,90,121.769,90	-	-	5.64	X	1761
P-Pd	PdP ₃	CoAs ₃ ,cI32,204	Im-3	0.7705,0.7705,0.7705,90,90,90	-	-	5.79	A	1236
P-Pd	Pd ₁₅ P ₂	Pd ₁₅ P ₂ ,hR51,148	R-3	0.71067,0.71067,1.70867,90,90,120	-	-	11.05	X	10193

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
P-Pd	Pd ₃ P _{0.68} ht	Pd ₃ P _{0.68} , mP24,4	$P12_11$	0.5004, 0.7606, 0.8416, 90, 95, 63, 90	-	-	10.64	X	2892
P-Pd	Pd ₃ P _{0.8}	Fe ₃ C-b, oP16,62	$Pnma$	0.57019, 0.75366, 0.51191, 90, 90, 90	-	-	10.39	X	13288
P-Pd	Pd ₆ P	Pd ₆ P, mP28,14	$P12_1/c1$	0.56740, 0.94409, 0.82100, 90, 110.414, 90	-	-	10.79	X	13829
P-Pd	Pd ₃ P ₃	Pd ₃ P ₃ , hR60,146	$R3$	1.1976, 1.1976, 0.7055, 90, 90, 120	-	-	9.52	X	10605
P-Pr	PrP	NaCl, cF8,225	$Fm-3m$	0.59143, 0.59143, 0.59143, 90, 90, 90	rocksalt family	-	5.52	X	8943
P-Pr	PrP ₂	NdAs ₂ , mP12,14	$P12_1/c1$	0.403, 0.653, 1.014, 90, 105.8, 90	-	-	5.25	A	8943
P-Pr	PrP ₃	NdP ₃ , mP12,11	$P12_1/m1$	0.4938, 0.9595, 0.5482, 90, 103.64, 90	-	black	3.89	X	35542
P-Pt	PtP ₂	FeS ₂ , cP12,205	$Pa-3$	0.56948, 0.56948, 0.56948, 90, 90, 90	pyrite-marcasite family	-	9.24	X	28327
P-Pt	Pt ₃ P ₂	Pt ₃ P ₂ , mS28,15	$C12/c1$	1.07642, 0.53854, 0.74378, 90, 99.17, 90	-	-	16.19	X	3312
P-Pu	PuP	NaCl, cF8,225	$Fm-3m$	0.555, 0.555, 0.555, 90, 90, 90	rocksalt family	-	10.68	X	20082
P-Rb	RbP ₁₁	RbP ₁₁ , mP48,11	$P12_1/m1$	0.6508, 0.9699, 1.8005, 90, 95.62, 90	-	-	2.50	X	13910
P-Rb	RbP ₁₅	KP ₁₅ , aP32,2	$P-1$	0.721, 0.91065, 1.22, 89.072, 78.6, 71.532	-	-	2.46	A	18226
P-Rb	Rb ₂ P ₃	Rb ₂ P ₃ , oF40,69	$Fmmm$	0.9010, 0.9641, 1.4629, 90, 90, 90	-	black	2.76	X	20669
P-Rb	Rb ₃ P ₁₁ ht	Cs ₃ P ₁₁ , cF188,225	$Fm-3m$	1.1592, 1.1592, 1.1592, 90, 90, 90	-	red	2.55	A	25408
P-Rb	Rb ₃ P ₁₁ rt	Na ₃ P ₁₁ , oP56,60	$Pbcn$	1.0754, 1.4555, 1.0512, 90, 90, 90	-	orange red	2.41	A	25408
P-Rb	Rb ₃ P ₇ ht	Rb ₃ P ₇ , cF284,225	$Fm-3m$	1.0837, 1.0837, 1.0837, 90, 90, 90	-	-	2.47	X	18486
P-Re	ReP ₃	TcP ₃ , oP16,62	$Pnma$	1.5354, 0.3122, 0.513, 90, 90, 90	-	black	7.54	A	14778
P-Re	ReP ₄	ReP ₄ , oP40,61	$Pbca$	0.6227, 0.9231, 1.0854, 90, 90, 90	-	black	6.60	X	11978
P-Re	Re ₂ P	Co ₂ P, oP12,62	$Pnma$	0.554, 0.294, 1.0039, 90, 90, 90	-	black	16.39	X	17080
P-Re	Re ₂ P ₅	Re ₂ P ₅ , aP28,2	$P-1$	0.7329, 0.8229, 0.8336, 69.82, 67.72, 87.11	-	black	8.06	X	14967
P-Re	Re ₃ P ₄	Cr ₃ As ₄ , mS14,12	$C12/m1$	1.2173, 0.30149, 0.6039, 90, 114.05, 90	-	gray	11.20	X	35182
P-Re	Re ₆ P ₁₃	Re ₆ P ₁₃ , hR114,148	$R-3$	1.56792, 1.56792, 0.83231, 90, 90, 120	-	black	8.55	X	12433
P-Rh	RhP ₂	CoSb ₂ , mP12,14	$P12_1/c1$	0.57417, 0.57951, 0.58389, 90, 112.911, 90	pyrite-marcasite family	-	6.12	X	5624
P-Rh	RhP ₃	CoAs ₃ , cI32,204	$Im-3$	0.79951, 0.79951, 0.79951, 90, 90, 90	-	-	5.09	X	4372
P-Rh	Rh ₂ P	CaF ₂ , cF12,225	$Fm-3m$	0.55021, 0.55021, 0.55021, 90, 90, 90	fluorite family	-	9.44	X	19001
P-Rh	Rh ₃ P ₂	Rh ₃ P ₂ , iP5,115	$P-4m2$	0.3327, 0.3327, 0.6151, 90, 90, 90	-	-	9.04	X	15647
P-Rh	Rh ₄ P ₃	Rh ₄ P ₃ , oP28,62	$Pnma$	1.1662, 0.3317, 0.9994, 90, 90, 90	-	-	8.67	X	1180
P-Ru	RuP	FeAs ₃ , oP8,62	$Pnma$	0.552, 0.3168, 0.612, 90, 90, 90	AlB ₂ family	-	8.20	A	1584
P-Ru	RuP ₂	FeAs ₂ , oP6,58	$Pnmm$	0.51173, 0.58932, 0.28711, 90, 90, 90	pyrite-marcasite family	-	6.25	X	3786
P-Ru	RuP ₃	RuP ₃ , aP16,2	$P-1$	0.5866, 0.5924, 0.8076, 68.76, 70.15, 72.59	-	-	5.35	X	20699
P-Ru	RuP ₄ ht	RuP ₄ , aP15,2	$P-1$	0.4713, 0.7145, 0.7519, 111.08, 90.35, 100.48	-	black	4.84	X	11820
P-Ru	RuP ₄ rt	CdP ₄ , mP10,14	$P12_1/c1$	0.4686, 0.4678, 0.7102, 90, 99.47, 90	-	black	4.87	A	15092
P-Ru	Ru ₂ P	Co ₂ P, oP12,62	$Pnma$	0.5902, 0.3853, 0.6896, 90, 90, 90	-	-	9.87	A	33438
P-S	PS rt	AsS ₃ , mS32,15	$C12/c1$	0.9779, 0.9055, 0.8759, 90, 102.65, 90	-	-	2.21	X	11361
P-S	P ₂ S ₃ mon1	P ₂ S ₃ , mP40,14	$P12_1/c1$	0.7024, 1.2056, 1.1489, 90, 103.4, 90	-	yellow	2.22	X	31094
P-S	P ₂ S ₃ mon2	P ₂ S ₃ , mP20,11	$P12_1/m1$	0.6627, 1.0504, 0.6878, 90, 90, 18, 90	-	yellow	2.19	X	58322
P-S	P ₂ S ₅ rt	P ₂ S ₅ , aP28,2	$P-1$	0.9007, 0.9208, 0.9195, 92.5, 100.72, 109.84	-	yellow faint	2.11	X	35517
P-S	P ₂ S ₇ mon	P ₂ S ₇ , mP36,14	$P12_1/c1$	0.6526, 1.0817, 1.258, 90, 93.24, 90	-	yellow	2.15	X	56553
P-S	P ₂ S ₇ tricl	P ₂ S ₇ , aP18,2	$P-1$	0.6032, 0.6512, 1.1095, 82.62, 89.2, 85.28	-	yellow	2.21	X	56553
P-S	P ₄ S ₃ ht	*hR*, 146	$R3$	2.22688, 2.22688, 2.76027, 90, 90, 120	-	-	-	N	15576
P-S	P ₄ S ₃ m	As ₄ S ₃ -b, oP28,62	$Pnma$	1.0921, 0.9843, 0.6462, 90, 90, 90	-	yellow	2.10	X	34040
P-S	P ₄ S ₃ rt	P ₄ S ₃ , oP56,62	$Pnma$	1.0596, 0.9667, 1.3670, 90, 90, 90	-	yellow	2.09	X	16562
P-S	P ₄ S ₃ mon1	P ₄ S ₃ , mP18,4	$P12_11$	0.6412, 1.0903, 0.6694, 90, 111.66, 90	-	-	2.17	X	2437
P-S	P ₄ S ₅ mon2	P ₄ S ₅ , mP18,11	$P12_1/m1$	0.6389, 1.0966, 0.6613, 90, 115.65, 90	-	golden	2.26	X	8671
P-S	P ₄ S _{6/76} orth	P ₄ S ₇ , oP44,60	$Pbcn$	0.814, 1.143, 1.139, 90, 90, 90	-	-	2.14	X	2386
P-S	P ₄ S ₇ mon	P ₄ S ₇ , mP44,14	$P12_1/c1$	0.6779, 1.744, 1.092, 90, 125.58, 90	-	-	2.20	X	2437
P-S	P ₄ S ₉ cub	P ₄ S ₉ , cI208,206	$la-3$	1.760, 1.760, 1.760, 90, 90, 90	-	colorless	2.01	X	4261
P-S	P ₄ S ₉ mon	P ₄ S ₉ , mP52,14	$P12_1/c1$	0.8555, 1.2637, 1.31656, 90, 113.95, 90	-	-	2.11	X	24075
P-Sc	ScP	NaCl, cF8,225	$Fm-3m$	0.5313, 0.5313, 0.5313, 90, 90, 90	rocksalt family	black	3.36	X	2558
P-Sc	Sc ₃ P	Fe ₃ C-b, oP16,62	$Pnma$	0.6754, 0.84149, 0.57662, 90, 90, 90	-	-	3.46	A	13773
P-Sc	Sc ₃ P ₂ orth1	Cr ₃ C ₂ -b, oP20,62	$Pnma$	0.69781, 0.3757, 1.43655, 90, 90, 90	-	-	3.47	A	12771
P-Sc	Sc ₃ P ₂ orth2	Th ₂ S ₃ , oP20,62	$Pnma$	1.01075, 0.36944, 1.01793, 90, 90, 90	-	-	3.44	A	12771
P-Sc	Sc ₃ P ₃	Th ₃ Fe ₃ , hP20,186	$P6_3mc$	0.8934, 0.8934, 0.57349, 90, 90, 120	-	-	3.42	A	13773
P-Se	PSe ht	PSe, mP32,14	$P12_1/c1$	1.1192, 0.7282, 1.1425, 90, 115.91, 90	-	amber	3.49	X	29535
P-Se	PSe rt	*oP*, *	-	0.7199, 0.866, 1.2619, 90, 90, 90	-	-	-	N	9274
P-Se	P ₂ Se ₃ rt	P ₂ Se ₃ , mP28,14	$P12_1/c1$	0.6944, 2.0420, 0.5836, 90, 114.15, 90	-	black	4.02	X	28394
P-Se	P ₄ Se ₃ ht1	*cP*, *	-	1.625, 1.625, 1.625, 90, 90, 90	-	-	-	N	7989
P-Se	P ₄ Se ₃ ht2	*cP*, *	-	1.781, 1.781, 1.781, 90, 90, 90	-	-	-	N	7989
P-Se	P ₄ Se ₃ rt orth1	P ₄ Se ₃ , oP112,62	$Pnma$	1.1797, 0.9739, 2.6270, 90, 90, 90	-	-	3.18	X	1012
P-Se	P ₄ Se ₃ rt orth2	P ₄ Se ₃ , oP56,62	$Pnma$	1.0997, 0.9845, 1.3803, 90, 90, 90	-	red	3.21	X	23230
P-Se	P ₄ Se ₃ rt	P ₄ Se ₃ , oP36,33	$Pna2_1$	1.279, 0.666, 1.119, 90, 90, 90	-	red	3.61	X	5921
P-Se	P _{4.69} Se _{0.31}	P _{4.69} Se _{0.31} , oP28,62	$Pnma$	0.9963, 0.3231, 1.3412, 90, 90, 90	-	-	2.61	X	46705
P-Si	SiP hp1	*c***, *	-	1.362, 1.362, 1.362, 90, 90, 90	-	brown reddish	-	N	3152
P-Si	SiP hp2	ZnS ₃ , cF8,216	$F-43m$	0.5241, 0.5241, 0.5241, 90, 90, 90	adamantane structure	-	2.73	X	3152
P-Si	SiP hp3	*tP*, *	-	0.6536, 0.6536, 0.76, 90, 90, 90	-	-	-	N	3152
P-Si	SiP	SiP ₃ , oS48,36	$Cmc2_1$	0.35118, 2.0488, 1.3607, 90, 90, 90	-	golden reddish	2.40	X	8814
P-Si	SiP ₂ cub	FeS ₂ , cP12,205	$Pa-3$	0.5706, 0.5706, 0.5706, 90, 90, 90	pyrite-marcasite family	black	3.22	X	17486
P-Si	SiP ₂ orth1	GeAs ₂ , oP24,55	$Pbam$	1.008, 1.397, 0.3436, 90, 90, 90	-	-	2.47	A	3332
P-Si	SiP ₂ orth2	SiP ₂ , oP24,62	$Pnma$	1.00908, 0.34388, 1.3998, 90, 90, 90	-	black	2.46	X	64687
P-Si	Si ₆ P _{2.5} tf	Si ₆ P _{2.5} , hP11,162	$P-31m$	0.616, 0.616, 1.317, 90, 90, 120	-	-	0.94	X	33683
P-Sm	SmP	NaCl, cF8,225	$Fm-3m$	0.576, 0.576, 0.576, 90, 90, 90	rocksalt family	gray silver	6.30	X	24990
P-Sm	SmP ₃	NdP ₃ , mP12,11	$P12_1/m1$	0.4936, 0.9508, 0.5411, 90, 102.9, 90	-	black	4.10	X	35542
P-Sn	SnP hp cub	NaCl, cF8,225	$Fm-3m$	0.5535, 0.5535, 0.5535, 90, 90, 90	rocksalt family	-	5.86	X	5137
P-Sn	SnP hp tet	GeP ₃ , tI4,107	$I4mm$	0.3831, 0.3831, 0.5963, 90, 90, 90	-	-	5.68	X	5137
P-Sn	SnP _{0.94} rt	SnP ₃ , hP10,164	$P-3m1$	0.43922, 0.43922, 0.6040, 90, 90, 120	-	gray dark	4.86	X	23621
P-Sn	SnP ₃	SnP ₃ , hR24,166	$R-3m$	0.73785, 0.73785, 1.05125, 90, 90, 120	-	gray	4.25	X	6706
P-Sn	Sn ₃ P ₄	Sn ₃ P ₄ , hR57,166	$R-3m$	0.4429, 0.4429, 2.836, 90, 90, 120	-	gray	4.96	X	51107
P-Sn	Sn ₄ P ₃	Sn _{3.6} As ₃ , hR21,166	$R-3m$	0.3963, 0.3963, 3.53, 90, 90, 120	-	black gray	5.89	X	36668

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
P-Sr	SrP ₃ mon1	SrP ₃ ,mS32,12	$C12/m1$	1.1432,0.7387,0.8561,90,103.45,90	-	black	3.41	X	7566
P-Sr	SrP ₃ mon2	SrAs ₃ ,mS16,12	$C12/m1$	0.9199,0.7288,0.569,90,113.45,90	-	black	3.43	X	42686
P-Sr	Sr ₂ P ₂	Na ₂ [O ₂],hP12,189	$P-62m$	0.804,0.804,0.6031,90,90,120	-	black	3.50	X	7318
P-Sr	Sr ₃ P ₁₄	Sr ₃ P ₁₄ ,mP34,14	$P12_1/c1$	0.6352,1.2759,1.1642,90,123.0,90	-	red	2.92	X	6784
P-Sr	Sr ₃ P ₄	Sr ₃ As ₄ ,oF56,43	$Fdd2$	1.43,1.7372,0.5839,90,90,90	-	black	3.54	X	17412
P-Sr	Sr ₄ P _{2,67}	Th ₃ P ₄ ,cI28,220	$I-43d$	0.932,0.932,0.932,90,90,90	-	brown	3.55	A	5462
P-Ta	TaP tet1	NbAs ₂ ,tI8,109	$I4_1md$	0.33184,0.33184,1.1363,90,90,90	-	-	11.25	A	16977
P-Ta	TaP tet2	* ₁ t** ₂	-	0.332,0.332,1.138,90,90,90	-	-	-	N	572
P-Ta	TaP ₂	OsGe ₂ ,mS12,12	$C12/m1$	0.88608,0.32677,0.74882,90,119.308,90	-	-	8.53	A	3133
P-Ta	Ta ₂ P	Ta ₂ P,oP36,58	$Pnnm$	1.1543,1.4407,0.3396,90,90,90	-	-	13.86	X	35085
P-Ta	Ta ₃ P ht	V ₃ S ₄ ,iP32,133	$P4_2/nbc$	1.01542,1.01542,0.50137,90,90,90	-	-	14.75	A	11028
P-Ta	Ta ₃ P rt	Ti ₃ P,iP32,86	$P4_2/n$	1.0155,1.0155,0.50128,90,90,90	-	-	14.75	X	11028
P-Ta	Ta ₅ P ₃	Nb ₅ P ₃ ,oP64,62	$Pnma$	2.5321,0.34013,1.14614,90,90,90	-	-	13.43	X	13114
P-Tb	TbP rt	NaCl,cF8,225	$Fm-3m$	0.5686,0.5686,0.5686,90,90,90	rocksalt family	black	6.86	X	4718
P-Tc	TcP ₃	TcP ₃ ,oP16,62	$Pnma$	1.5359,0.3092,0.5142,90,90,90	-	black	5.19	X	14778
P-Tc	TcP ₄	ReP ₄ ,oP40,61	$Pbca$	0.6238,0.9215,1.0837,90,90,90	-	-	4.73	X	15193
P-Tc	Tc ₂ P ₃	Tc ₂ As ₃ ,aP20,2	$P-1$	0.6266,0.6325,0.7683,95.79,101.76,104.34	-	-	6.73	X	19109
P-Tc	Tc ₃ P	Ni ₃ P,iI32,82	$I-4$	0.9568,0.9568,0.4736,90,90,90	-	-	9.96	X	15193
P-Th	ThP rt	NaCl,cF8,225	$Fm-3m$	0.5827,0.5827,0.5827,90,90,90	rocksalt family	gray	8.83	X	20980
P-Th	ThP ₂	PbCl ₂ ,oP12,62	$Pnma$	0.695,0.39,0.942,90,90,90	-	-	7.65	A	3132
P-Th	ThP ₇	ThP ₇ ,oP40,19	$P2_12_12_1$	0.5671,1.0218,1.0402,90,90,90	-	black	4.95	X	18896
P-Th	Th ₂ P ₁₁	Th ₂ P ₁₁ ,mP156,14	$P12_1/c1$	1.7384,1.0104,1.9193,90,117.62,90	-	black	5.37	X	13193
P-Th	Th ₃ P ₄ rt	Th ₃ P ₄ ,cI28,220	$I-43d$	0.86,0.86,0.86,90,90,90	-	-	8.56	X	166
P-Ti	TiP	TiP,hP8,194	$P6_3/mmc$	0.3499,0.3499,1.1700,90,90,120	-	-	4.22	X	3323
P-Ti	TiP ₂	PbCl ₂ ,oP12,62	$Pnma$	0.61812,0.33455,0.82578,90,90,90	-	-	4.27	X	3779
P-Ti	Ti ₂ P	Ti ₂ P,hP81,189	$P-62m$	1.9969,1.9969,0.34589,90,90,120	Fe ₂ P family	-	4.76	X	41817
P-Ti	Ti ₃ P	Ti ₃ P,iP32,86	$P4_2/n$	0.99592,0.99592,0.49869,90,90,90	-	-	4.69	X	3318
P-Ti	Ti ₃ P ₂	* ₁ t* ₄₀ * ₂	-	0.7483,0.7483,1.0495,90,90,90	-	-	-	N	2522
P-Ti	Ti ₃ P ₄	Th ₃ P ₄ ,cI28,220	$I-43d$	0.7422,0.7422,0.7422,90,90,90	-	-	4.35	A	60671
P-Ti	Ti ₅ P ₃ hex	Mn ₅ Si ₃ ,hP16,193	$P6_3/mcm$	0.7234,0.7234,0.509,90,90,120	-	-	4.79	X	2080
P-Ti	Ti ₅ P ₃ orth	Yb ₅ Sb ₃ ,oP32,62	$Pnma$	0.97475,0.74403,0.65056,90,90,90	-	-	4.68	X	12772
P-Ti	Ti ₇ P ₄	Nb ₇ P ₄ ,mS44,12	$C12/m1$	1.459,0.3416,1.356,90,104.65,90	-	-	4.66	A	60671
P-Ti	TiP ₅	TiP ₅ ,oP24,26	$Pmc2_1$	0.6465,0.69249,1.2118,90,90,90	-	-	4.40	X	5599
P-Ti	Ti ₁₀ S ₃ P ₁₅	ZnS,cF8,216	$F-43m$	0.59437,0.59437,0.59437,90,90,90	adamantane structure	gray	4.70	X	9701
P-Tm	TmP	NaCl,cF8,225	$Fm-3m$	0.5573,0.5573,0.5573,90,90,90	rocksalt family	-	7.67	X	2012
P-Tm	TmP ₅	NdP ₅ ,mP12,11	$P12_1/m1$	0.4876,0.9327,0.5299,90,102.55,90	-	black	4.57	X	35545
P-U	UP hp1	NiO,hR6,166	$R-3m$	0.37899,0.37899,0.94295,90,90,120	-	-	11.43	X	21529
P-U	UP hp2	* ₁ o*** ₂	-	0.347,0.379,1.075,90,90,90	-	-	-	N	21529
P-U	UP rt	NaCl,cF8,225	$Fm-3m$	0.55844,0.55844,0.55844,90,90,90	rocksalt family	gray	10.26	X	21529
P-U	UP _{0.1} stab	Cu,cF4,225	$Fm-3m$	0.489,0.489,0.489,90,90,90	close-packed structure	-	13.70	F	7140
P-U	UP ₂ ht	UAs ₂ ,iP6,129	$P4/nmm$	0.381,0.381,0.7764,90,90,90	-	-	8.84	X	3140
P-U	UP ₂ rt	UP ₂ ,tI24,107	$I4mm$	0.5386,0.5386,1.5563,90,90,90	-	-	8.83	X	5653
P-U	U ₃ P ₄ lt	* ₁ hR84,* ₂	-	1.15908,1.15908,1.42256,90,90,120	-	-	-	N	9816
P-U	U ₃ P ₄ rt	Th ₃ P ₄ ,cI28,220	$I-43d$	0.8214,0.8214,0.8214,90,90,90	-	-	10.04	X	7584
P-V	VP	NiAs,hP4,194	$P6_3/mmc$	0.3177,0.3177,0.6222,90,90,120	AlB ₂ family	-	5.00	X	19197
P-V	VP ₂	OsGe ₂ ,mS12,12	$C12/m1$	0.84641,0.31054,0.71698,90,119.264,90	-	-	4.56	X	8561
P-V	VP ₄	CrP ₄ ,mS20,15	$C12/c1$	0.5259,1.0997,0.5879,90,110.87,90	-	-	3.66	X	17051
P-V	V ₁₂ P ₇	V ₁₂ P ₇ ,hP26,176	$P6_3/m$	0.9299,0.9299,0.3279,90,90,120	-	-	5.60	X	4937
P-V	V ₂ P	Co ₂ P,oP12,62	$Pnma$	0.62045,0.33052,0.7544,90,90,90	-	-	5.70	X	9365
P-V	V ₃ P ht	Ni ₃ P,iI32,82	$I-4$	0.94,0.94,0.477,90,90,90	-	-	5.79	A	21037
P-V	V ₃ P rt	Ti ₃ P,iP32,86	$P4_2/n$	0.9387,0.9387,0.4756,90,90,90	-	-	5.83	X	6070
P-V	V ₄ P ₃	Nb ₄ As ₃ ,oS56,63	$Cmcm$	0.3267,1.322,1.726,90,90,90	-	-	5.29	A	54359
P-V	V ₈ P _{13,96}	V ₈ P ₁₅ ,iP29,115	$P-4m2$	0.63237,0.63237,0.72671,90,90,90	-	black	4.80	X	9400
P-W	WP	FeAs,oP8,62	$Pnma$	0.5731,0.3248,0.6227,90,90,90	AlB ₂ family	-	12.31	X	9088
P-W	WP ₂ ht	MoP ₂ ,oS12,36	$Cmc2_1$	0.31649,1.11599,0.49732,90,90,90	-	black	9.29	X	16188
P-W	WP ₂ rt	OsGe ₂ ,mS12,12	$C12/m1$	0.85,0.3168,0.7466,90,119.35,90	-	-	9.32	X	16188
P-W	WP ₄ hp	* ₁ tI20,* ₂	-	0.5702,0.5702,0.9352,90,90,90	-	black	-	N	16117
P-W	W ₃ P	V ₃ S ₄ ,tI32,121	$I-42m$	0.9858,0.9858,0.48,90,90,90	-	-	16.59	A	3133
P-Y	YP	NaCl,cF8,225	$Fm-3m$	0.5652,0.5652,0.5652,90,90,90	rocksalt family	-	4.41	X	24990
P-Y	YP ₃	NdP ₃ ,mP12,11	$P12_1/m1$	0.4911,0.9384,0.5344,90,102.5,90	-	black	3.37	X	35540
P-Yb	YbP _{0.84}	NaCl,cF8,225	$Fm-3m$	0.5545,0.5545,0.5545,90,90,90	rocksalt family	-	7.76	X	24208
P-Yb	YbP ₅ mon1	NdP ₅ ,mP12,11	$P12_1/m1$	0.4873,0.9308,0.5287,90,102.57,90	-	black	4.65	X	35544
P-Yb	YbP ₅ mon2	YbP ₅ ,mP24,4	$P12_1$	0.5249,1.6877,0.5317,90,102.53,90	-	black	4.74	X	35544
P-Zn	ZnP ₂ hp	* ₁ oP342,18	$P2_12_12_1$	2.069,2.17,1.485,90,90,90	-	-	-	N	22053
P-Zn	ZnP ₂ ht	ZnP ₂ ,iP24,92	$P4_22_12_2$	0.50661,0.50661,1.8532,90,90,90	-	red	3.56	X	42786
P-Zn	ZnP ₂ rt	ZnAs ₂ ,mP24,14	$P12_1/c1$	0.88632,0.72883,0.756,90,102.31,90	-	black	3.55	X	42786
P-Zn	ZnP ₄ hp	MgAs ₄ ,iP20,92	$P4_22_12_2$	0.50154,0.50154,1.45398,90,90,90	-	-	3.44	X	22226
P-Zn	Zn ₃ P ₂ ht	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	$Ia-3$	1.142,1.142,1.142,90,90,90	-	-	4.60	A	64
P-Zn	Zn ₃ P ₂ rt	Zn ₃ P ₂ ,tP40,137	$P4_2/nmc$	0.80785,0.80785,1.13966,90,90,90	fluorite family	gray iron	4.61	X	44433
P-Zn	Zn ₇ P ₁₀ hp	Cd ₇ P ₁₀ ,oF136,43	$Fdd2$	2.1608,2.5236,0.4425,90,90,90	-	-	4.23	A	15848
P-Zr	ZrP rt	TiP,hP8,194	$P6_3/mmc$	0.3684,0.3684,1.2554,90,90,120	-	-	5.50	X	1895
P-Zr	ZrP _{0.9} ht	NaCl,cF8,225	$Fm-3m$	0.5268,0.5268,0.5268,90,90,90	rocksalt family	-	5.41	X	60287
P-Zr	ZrP ₂	PbCl ₂ ,oP12,62	$Pnma$	0.6505,0.35169,0.8757,90,90,90	-	black	5.08	X	29626
P-Zr	Zr ₁₄ P ₉	Zr ₁₄ P ₉ ,oP92,58	$Pnnm$	1.6715,2.7572,0.36742,90,90,90	-	-	6.10	X	13776
P-Zr	Zr ₂ P	Zr ₂ P,oS108,65	$Cmmm$	1.90634,2.95099,0.36076,90,90,90	-	-	6.29	X	22910
P-Zr	Zr ₃ P	Ti ₃ P,iP32,86	$P4_2/n$	1.07994,1.07994,0.53553,90,90,90	-	-	6.48	X	23409
P-Zr	Zr ₄ P ₃ hp	* ₁ hP* ₂	-	0.3706,0.3706,0.9111,90,90,120	-	-	-	N	14988
P-Zr	Zr ₇ P ₄	Nb ₇ P ₄ ,mS44,12	$C12/m1$	1.5814,0.36053,1.4738,90,104.843,90	-	-	6.24	X	22914

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Pa-Pt	PaPt ₃	Mg ₃ Cd, hP8, 194	$P6_3/mmc$	0.5704, 0.5704, 0.4957, 90, 90, 120	close-packed structure	-	19.41	A	9807
Pa-Pt	PaPt ₄	Be ₃ Au, cF24, 216	$F-43m$	0.7413, 0.7413, 0.7413, 90, 90, 90	Friauf-Laves phase	-	19.67	A	9807
Pa-Rh	PaRh ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4037, 0.4037, 0.4037, 90, 90, 90	close-packed structure	-	13.62	X	9807
Pa-Th	Th _{0.93} Pb _{0.07} rt	Cu, cF4, 225	$Fm-3m$	0.5048, 0.5048, 0.5048, 90, 90, 90	close-packed structure	-	11.98	X	5275
Pb-Pd	PdPb rt	PdPb, aP32, 2	$P-1$	0.5552, 0.5571, 2.1464, 95.85, 95.91, 99.98	-	-	12.91	X	13169
Pb-Pd	PdPb ₂	CuAl ₂ , tI12, 140	$I4/mcm$	0.6865, 0.6865, 0.5844, 90, 90, 90	-	-	12.56	X	6603
Pb-Pd	Pd _{0.88} Pb _{0.12}	Cu, cF4, 225	$Fm-3m$	0.3955, 0.3955, 0.3955, 90, 90, 90	close-packed structure	-	12.72	X	14094
Pb-Pd	Pd _{1.44} Pb ht2	Co _{1.75} Ge, hP6, 194	$P6_3/mmc$	0.4493, 0.4493, 0.5762, 90, 90, 120	AlB ₂ family	-	11.88	X	13160
Pb-Pd	Pd _{1.67} Pb ht2	Co _{1.75} Ge, hP6, 194	$P6_3/mmc$	0.44517, 0.44517, 0.57414, 90, 90, 120	AlB ₂ family	-	12.97	X	44961
Pb-Pd	Pd ₁₃ Pb ₉ rt	Pd ₁₃ Pb ₉ , mS88, 15	$C12/c1$	1.56027, 0.90599, 1.3908, 90, 124.106, 90	AlB ₂ family	-	13.25	X	13160
Pb-Pd	Pd ₃ Pb	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4035, 0.4035, 0.4035, 90, 90, 90	close-packed structure	-	13.31	X	14094
Pb-Pd	Pd ₃ Pb ₃ rt	Ni ₃ Ge ₃ , mS32, 5	$C121$	1.2303, 0.7667, 0.7258, 90, 121.075, 90	-	-	13.07	A	7682
Pb-Po	PbPo	NaCl, cF8, 225	$Fm-3m$	0.659, 0.659, 0.659, 90, 90, 90	rocksalt family	-	9.66	X	1219
Pb-Pr	PrPb ₂ tet1	CuZr ₂ , tI6, 139	$I4/mmm$	0.3305, 0.3305, 1.606, 90, 90, 90	close-packed structure	-	10.51	A	34583
Pb-Pr	PrPb ₂ tet2	HfGa ₂ , tI24, 141	$I4_1/amd$	0.466, 0.466, 3.2, 90, 90, 90	close-packed structure	-	10.62	A	9758
Pb-Pr	PrPb ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.486, 0.486, 0.486, 90, 90, 90	close-packed structure	-	11.03	X	62312
Pb-Pr	Pr ₁₁ Pb ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	$I4/mmm$	1.187, 1.187, 1.73, 90, 90, 90	-	-	9.87	A	9758
Pb-Pr	Pr ₃ Pb	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4949, 0.4949, 0.4949, 90, 90, 90	close-packed structure	-	8.63	X	6060
Pb-Pr	Pr ₃ Pb ₃	Mn ₃ Si ₃ , hP16, 193	$P6_3/mcm$	0.9337, 0.9337, 0.6814, 90, 90, 120	-	-	8.56	X	2810
Pb-Pr	Pr ₃ Pb ₄	Sm ₃ Ge ₄ , oP36, 62	$Pnma$	0.8377, 1.604, 0.8532, 90, 90, 90	-	-	8.88	A	9758
Pb-Pt	PtPb	NiAs, hP4, 194	$P6_3/mmc$	0.424, 0.424, 0.548, 90, 90, 120	AlB ₂ family	-	15.66	X	51322
Pb-Pt	PtPb ₂ hp	CuAl ₂ , tI12, 140	$I4/mcm$	0.6934, 0.6934, 0.5764, 90, 90, 90	-	-	14.61	X	24615
Pb-Pt	PtPb ₄	PtPb ₄ , tP10, 125	$P4/nbm$	0.6667, 0.6667, 0.5978, 90, 90, 90	-	yellow light	12.80	X	393
Pb-Pt	Pt _{0.97} Pb _{0.03}	Cu, cF4, 225	$Fm-3m$	0.3926, 0.3926, 0.3926, 90, 90, 90	close-packed structure	-	21.45	X	14094
Pb-Pt	Pt ₃ Pb	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4058, 0.4058, 0.4058, 90, 90, 90	close-packed structure	-	19.69	X	14094
Pb-Pt	Pt ₆ Pb	*cF*, *	-	0.405, 0.405, 0.405, 90, 90, 90	-	-	-	N	5554
Pb-Pu	PuPb ₂ rt	HfGa ₂ , tI24, 141	$I4_1/amd$	0.4621, 0.4621, 3.129, 90, 90, 90	close-packed structure	-	13.09	A	4654
Pb-Pu	PuPb ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.48071, 0.48071, 0.48071, 90, 90, 90	close-packed structure	-	12.94	X	4654
Pb-Pu	Pu ₃ Pb	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4737, 0.4737, 0.4737, 90, 90, 90	close-packed structure	-	14.67	X	4654
Pb-Pu	Pu ₄ Pb ₅	*hP*, 182	$P6_322$	1.652, 1.652, 0.644, 90, 90, 120	-	-	-	N	4654
Pb-Pu	Pu ₄ Pb ₃	W ₅ Si ₃ , tI32, 140	$I4/mcm$	1.231, 1.231, 0.6084, 90, 90, 90	-	-	13.27	A	4654
Pb-Pu	Pu ₅ Pb ₄	Ti ₅ Ga ₄ , hP18, 193	$P6_3/mcm$	0.9523, 0.9523, 0.6482, 90, 90, 120	AlB ₂ family	-	13.37	A	4654
Pb-Rb	RbPb	NaPb, tI64, 142	$I4_1/acd$	1.1892, 1.1892, 1.9429, 90, 90, 90	-	gray silver	5.66	X	37092
Pb-Rb	Rb ₄ Pb ₉	K ₄ Pb ₉ , mP52, 11	$P12_1/m1$	0.9888, 1.3393, 1.6224, 90, 102.987, 90	-	black	7.00	X	41339
Pb-Rh	RhPb	CoSn, hP6, 191	$P6/mmm$	0.5678, 0.5678, 0.4428, 90, 90, 120	AlB ₂ family	-	12.50	X	6928
Pb-Rh	RhPb ₂	CuAl ₂ , tI12, 140	$I4/mcm$	0.6674, 0.6674, 0.5831, 90, 90, 90	-	-	13.23	X	6603
Pb-Rh	Rh _{1.5} Pb	Co _{1.75} Ge, hP6, 194	$P6_3/mmc$	0.433, 0.433, 0.5639, 90, 90, 120	AlB ₂ family	-	13.11	X	6928
Pb-Rh	Rh ₃ Pb stab	Cu ₃ Au, cP4, 221	$Pm-3m$	0.402, 0.402, 0.402, 90, 90, 90	close-packed structure	-	13.19	X	6928
Pb-Rh	Rh ₄ Pb ₅	Rh ₄ Pb ₅ , oF72, 69	$Fmmm$	0.5711, 0.9840, 2.6510, 90, 90, 90	-	-	12.91	X	7351
Pb-S	PbS hp1	TiI ₂ , oS8, 63	$Cmcm$	0.4008, 1.1246, 0.4154, 90, 90, 90	CrB(TiI)-FeB	-	8.49	X	55617
Pb-S	PbS hp2	CsCl, cP2, 221	$Pm-3m$	0.3289, 0.3289, 0.3289, 90, 90, 90	b.c.c. family	-	11.17	X	19258
Pb-S	PbS rt	NaCl, cF8, 225	$Fm-3m$	0.5934, 0.5934, 0.5934, 90, 90, 90	galena	black	7.61	X	15766
Pb-S	PbS tf	BiF ₃ , cF16, 225	$Fm-3m$	0.59395, 0.59395, 0.59395, 90, 90, 90	fluorite family	-	7.58	X	60172
Pb-S	PbS ₂ tet	SrS ₂ , tI12, 140	$I4/mcm$	0.61, 0.61, 0.748, 90, 90, 90	-	-	6.48	A	2999
Pb-S	PbS ₂ trig	CdI ₂ , hP3, 164	$P-3m1$	0.389, 0.389, 0.591, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	5.82	A	2999
Pb-Sb	PbSb m	NaCl, cF8, 225	$Fm-3m$	0.6226, 0.6226, 0.6226, 90, 90, 90	rocksalt family	-	9.05	X	4008
Pb-Sb	Pb _{0.11} Sb _{0.89}	As, hR6, 166	$R-3m$	0.4284, 0.4284, 1.138, 90, 90, 120	-	-	7.22	A	4008
Pb-Sb	Pb _{0.65} Sb _{0.35} hp	W, cI2, 229	$Im-3m$	0.3892, 0.3892, 0.3892, 90, 90, 90	b.c.c. family	-	9.99	X	4008
Pb-Sb	Pb _{0.8} Sb _{0.2} hp	Mg, hP2, 194	$P6_3/mmc$	0.3461, 0.3461, 0.5714, 90, 90, 120	close-packed structure	-	10.65	X	11765
Pb-Sb	Pb _{0.96} Sb _{0.04}	Cu, cF4, 225	$Fm-3m$	0.4947, 0.4947, 0.4947, 90, 90, 90	close-packed structure	-	11.18	X	45778
Pb-Sc	Sc ₃ Pb ₃	Mn ₃ Si ₃ , hP16, 193	$P6_3/mcm$	0.8473, 0.8473, 0.6162, 90, 90, 120	-	-	7.34	A	30210
Pb-Sc	Sc ₄ Pb ₅	V ₅ Si ₅ , oI44, 72	$Ibam$	0.8889, 1.9274, 0.6177, 90, 90, 90	-	-	8.20	X	29774
Pb-Se	PbSe hp1	TiI ₂ , oS8, 63	$Cmcm$	0.4093, 1.12337, 0.43365, 90, 90, 90	CrB(TiI)-FeB	-	9.53	X	65012
Pb-Se	PbSe hp2	GeS, oP8, 62	$Pnma$	1.1074, 0.42228, 0.40839, 90, 90, 90	-	-	9.95	X	63861
Pb-Se	PbSe hp3	CsCl, cP2, 221	$Pm-3m$	0.3379, 0.3379, 0.3379, 90, 90, 90	b.c.c. family	-	12.32	X	19258
Pb-Se	PbSe rt	NaCl, cF8, 225	$Fm-3m$	0.61213, 0.61213, 0.61213, 90, 90, 90	clausthalite	black	8.29	X	19660
Pb-Se	PbSe ₂	SrS ₂ , tI12, 140	$I4/mcm$	0.64269, 0.64269, 0.77025, 90, 90, 90	-	gray	7.62	X	58256
Pb-Sm	SmPb ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.4835, 0.4835, 0.4835, 90, 90, 90	close-packed structure	-	11.34	X	7633
Pb-Sm	Sm ₅ Pb ₃	Mn ₃ Si ₃ , hP16, 193	$P6_3/mcm$	0.9163, 0.9163, 0.6687, 90, 90, 120	-	-	9.38	X	2810
Pb-Sm	Sm ₃ Pb ₄	Sm ₃ Ge ₄ , oP36, 62	$Pnma$	0.8244, 1.578, 0.8363, 90, 90, 90	-	-	9.65	A	4240
Pb-Sn	Pb _{0.015} Sn _{0.985} rt	Sn, tI4, 141	$I4_1/amd$	0.5839, 0.5839, 0.3184, 90, 90, 90	-	-	7.34	X	621
Pb-Sn	Pb _{0.26} Sn _{0.74} m	(Hg _{0.1} , Sn _{0.9}), hP1, 191	$P6/mmm$	0.322, 0.322, 0.3027, 90, 90, 120	-	-	8.66	X	2908
Pb-Sn	Pb _{0.3} Sn _{0.7} m	Sn, tI4, 141	$I4_1/amd$	0.61325, 0.61325, 0.35204, 90, 90, 90	-	-	7.29	X	8002
Pb-Sn	Pb _{0.951} Sn _{0.049}	Cu, cF4, 225	$Fm-3m$	0.49425, 0.49425, 0.49425, 90, 90, 90	close-packed structure	-	11.16	X	549
Pb-Sr	SrPb	TiI ₂ , oS8, 63	$Cmcm$	0.5018, 1.223, 0.4648, 90, 90, 90	CrB(TiI)-FeB	-	6.87	X	3505
Pb-Sr	SrPb ₃	SrPb ₃ , tP4, 123	$P4/mmm$	0.4966, 0.4966, 0.5025, 90, 90, 90	close-packed structure	-	9.50	X	7395
Pb-Sr	Sr ₂ Pb	Co ₂ Si-b, oP12, 62	$Pnma$	0.8445, 0.5391, 1.0139, 90, 90, 90	-	-	5.50	X	11453
Pb-Sr	Sr ₂ Pb ₃	Sr ₂ Pb ₃ , tP10, 127	$P4/nbm$	0.8367, 0.8367, 0.4883, 90, 90, 90	-	-	7.74	X	17310
Pb-Sr	Sr ₃ Pb ₂₀	Pu ₃₁ Pt ₂₀ , tI204, 140	$I4/mcm$	1.32839, 1.32839, 4.2704, 90, 90, 90	-	-	6.05	A	27201
Pb-Sr	Sr ₅ Pb ₃	Cr ₃ B ₃ , tI32, 140	$I4/mcm$	0.867, 0.867, 1.594, 90, 90, 90	-	-	5.87	A	11481
Pb-Sr	Sr ₃ Pb ₄	Sm ₃ Ge ₄ , oP36, 62	$Pnma$	0.848, 1.727, 0.901, 90, 90, 90	-	-	6.38	A	14111
Pb-Sr	Sr _{7.02} Pb _{11.76}	Sr ₇ Pb _{11.67} , tP42, 127	$P4/nbm$	1.617, 1.617, 0.4886, 90, 90, 90	-	-	7.93	X	17310
Pb-Tb	TbPb ₃	Cu ₃ Au, cP4, 221	$Pm-3m$	0.481, 0.481, 0.481, 90, 90, 90	close-packed structure	-	11.65	X	2119
Pb-Tb	Tb ₃ Pb ₃	Mn ₃ Si ₃ , hP16, 193	$P6_3/mcm$	0.9019, 0.9019, 0.6596, 90, 90, 120	-	-	10.12	X	2810
Pb-Tb	Tb ₃ Pb ₄	Sm ₃ Ge ₄ , oP36, 62	$Pnma$	0.8169, 1.555, 0.8218, 90, 90, 90	-	-	10.33	A	4240
Pb-Te	PbTe hp1	FeB-b, oP8, 62	$Pnma$	0.8157, 0.4492, 0.6294, 90, 90, 90	CrB(TiI)-FeB	-	9.64	X	46405
Pb-Te	PbTe hp2	CsCl, cP2, 221	$Pm-3m$	0.357, 0.357, 0.357, 90, 90, 90	b.c.c. family	-	12.22	X	19258
Pb-Te	PbTe rt	NaCl, cF8, 225	$Fm-3m$	0.6462, 0.6462, 0.6462, 90, 90, 90	altaite	black	8.24	X	15766

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Pb-Te	Pb _{0.5} Te _{0.5} ht tf	Po, cP1, 221	<i>Pm-3m</i>	0.323, 0.323, 0.323, 90, 90, 90	-	-	8.25	X	8407
Pb-Th	ThPb	UPb, I18, 141	<i>I4₁/amd</i>	0.4545, 0.4545, 1.1288, 90, 90, 90	close-packed structure	black gray	12.51	X	1343
Pb-Th	ThPb ₂	*, oP*, *	-	0.4525, 0.4561, 1.707, 90, 90, 90	-	-	-	N	15994
Pb-Th	ThPb ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4859, 0.4859, 0.4859, 90, 90, 90	close-packed structure	black gray	12.36	X	15994
Pb-Th	Th ₃ Pb ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.9411, 0.9411, 0.6521, 90, 90, 120	-	-	11.83	A	15994
Pb-Th	Th ₃ Pb ₄	Ti ₃ Ga ₄ , hP18, 193	<i>P6₃/mcm</i>	0.9741, 0.9741, 0.6585, 90, 90, 120	AlB ₂ family	-	12.21	A	15994
Pb-Ti	Ti _{3.2} Pb _{0.8}	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.5985, 0.5985, 0.4846, 90, 90, 120	close-packed structure	-	7.05	X	379
Pb-Ti	Ti ₆ Pb _{4.8}	Ti ₆ Sn ₅ , hP22, 194	<i>P6₃/mmc</i>	0.93923, 0.93923, 0.57901, 90, 90, 120	AlB ₂ family	-	9.63	X	39600
Pb-Tl	Tl _{0.4} Pb _{0.6}	Cu, cF4, 225	<i>Fm-3m</i>	0.49194, 0.49194, 0.49194, 90, 90, 90	close-packed structure	-	11.50	X	3589
Pb-Tm	TmPb ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4799, 0.4799, 0.4799, 90, 90, 90	close-packed structure	-	11.88	X	7337
Pb-Tm	Tm ₃ Pb ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.88214, 0.88214, 0.64787, 90, 90, 120	-	-	11.15	X	55517
Pb-Tm	Tm ₃ Pb ₄	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.8049, 1.526, 0.809, 90, 90, 90	-	-	11.19	A	4240
Pb-U	UPb	UPb, I18, 141	<i>I4₁/amd</i>	0.4579, 0.4579, 1.0518, 90, 90, 90	close-packed structure	black gray	13.41	X	1343
Pb-U	UPb ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4791, 0.4791, 0.4791, 90, 90, 90	close-packed structure	black gray	12.98	X	17835
Pb-V	V ₃ Pb hp	*, tP*, *	-	0.6175, 0.6175, 0.9344, 90, 90, 90	-	-	-	N	8118
Pb-V	V ₃ Pb	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.4937, 0.4937, 0.4937, 90, 90, 90	Frank-Kasper phase	-	9.94	X	52403
Pb-Y	YPb ₂	ZrSi ₂ , oS12, 63	<i>Cmcm</i>	0.455, 1.646, 0.445, 90, 90, 90	close-packed structure	-	10.03	X	3351
Pb-Y	YPb ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4814, 0.4814, 0.4814, 90, 90, 90	close-packed structure	-	10.58	X	2119
Pb-Y	Y ₃ Pb ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8971, 0.8971, 0.6614, 90, 90, 120	-	-	7.68	A	3351
Pb-Y	Y ₃ Pb ₄	Gd ₃ Si ₄ , oP36, 62	<i>Pnma</i>	0.7994, 1.51, 0.8241, 90, 90, 90	-	-	8.50	X	3351
Pb-Yb	YbPb rt	CuAu, tP2, 123	<i>P4/mmm</i>	0.3596, 0.3596, 0.445, 90, 90, 90	close-packed structure	-	10.97	X	27376
Pb-Yb	YbPb ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4865, 0.4865, 0.4865, 90, 90, 90	close-packed structure	-	11.46	X	27376
Pb-Yb	Yb _{0.5} Pb _{0.5} ht	W, cI2, 229	<i>Im-3m</i>	0.3931, 0.3931, 0.3931, 90, 90, 90	b.c.c. family	-	10.39	X	27376
Pb-Yb	Yb ₂ Pb	Co ₂ Si, bO12, 62	<i>Pnma</i>	0.7478, 0.5225, 0.9549, 90, 90, 90	-	-	9.85	X	3663
Pb-Yb	Yb ₃ Pb ₂₀	Pu ₃ Pl ₂₀ , tI204, 140	<i>I4/mcm</i>	1.2527, 1.2527, 4.0453, 90, 90, 90	-	-	9.95	A	27201
Pb-Yb	Yb ₃ Pb ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.9325, 0.9325, 0.6929, 90, 90, 120	-	-	9.46	X	3663
Pb-Zr	Zr _{3.33} Pb _{0.67}	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.56619, 0.56619, 0.56619, 90, 90, 90	Frank-Kasper phase	-	8.10	X	27271
Pb-Zr	Zr ₃ Pb ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8529, 0.8529, 0.5864, 90, 90, 120	-	-	9.69	X	508
Pb-Zr	Zr ₃ Pb _{3.87}	Ti ₃ Ga ₄ , hP18, 193	<i>P6₃/mcm</i>	0.8828, 0.8828, 0.5991, 90, 90, 120	AlB ₂ family	-	10.33	X	27271
Pd-Pr	PrPd rt	TiI, oS8, 63	<i>Cmcm</i>	0.388, 1.089, 0.4571, 90, 90, 90	CrB(III)-FeB	-	8.51	A	25991
Pd-Pr	PrPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4146, 0.4146, 0.4146, 90, 90, 90	close-packed structure	-	10.72	X	25991
Pd-Pr	PrPd ₅	*, oP72, *	-	0.5278, 0.9239, 2.575, 90, 90, 90	-	-	-	N	50515
Pd-Pr	Pr _{0.08} Pd _{0.92}	Cu, cF4, 225	<i>Fm-3m</i>	0.3939, 0.3939, 0.3939, 90, 90, 90	close-packed structure	-	11.86	X	25991
Pd-Pr	Pr ₃ Pd ₄ rt	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3595, 1.3595, 0.5804, 90, 90, 120	b.c.c. family	-	9.10	A	8116
Pd-Pr	Pr ₇ Pd ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃/mcm</i>	1.0176, 1.0176, 0.6415, 90, 90, 120	-	-	7.54	A	7342
Pd-Pt	Pt _{0.2} Pd _{0.8}	Cu, cF4, 225	<i>Fm-3m</i>	0.3912, 0.3912, 0.3912, 90, 90, 90	close-packed structure	-	13.77	X	57693
Pd-Pu	PuPd ht	FeB, b, oP8, 62	<i>Pnma</i>	0.7036, 0.455, 0.5663, 90, 90, 90	CrB(III)-FeB	-	12.84	X	8607
Pd-Pu	PuPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4102, 0.4102, 0.4102, 90, 90, 90	close-packed structure	-	13.55	X	56219
Pd-Pu	Pu _{0.064} Pd _{0.936}	Cu, cF4, 225	<i>Fm-3m</i>	0.3995, 0.3995, 0.3995, 90, 90, 90	close-packed structure	-	12.00	X	3221
Pd-Pu	Pu ₃ Pd ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3344, 1.3344, 0.5744, 90, 90, 120	b.c.c. family	-	13.02	X	7041
Pd-Pu	Pu ₃ Pd ₅	Pu ₃ Pd ₅ , oS32, 63	<i>Cmcm</i>	0.9201, 0.7159, 0.9771, 90, 90, 90	-	-	13.05	X	9427
Pd-Re	Re _{0.12} Pd _{0.88}	Cu, cF4, 225	<i>Fm-3m</i>	0.363, 0.363, 0.363, 90, 90, 90	close-packed structure	-	16.11	X	1695
Pd-Rh	Rh _{0.41} Pd _{0.59}	Cu, cF4, 225	<i>Fm-3m</i>	0.3856, 0.3856, 0.3856, 90, 90, 90	close-packed structure	-	12.16	X	59896
Pd-Ru	Ru _{0.5} Pd _{0.5}	Cu, cF4, 225	<i>Fm-3m</i>	0.3852, 0.3852, 0.3852, 90, 90, 90	close-packed structure	-	12.06	X	63646
Pd-Ru	Ru _{0.9} Pd _{0.1}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2704, 0.2704, 0.43055, 90, 90, 120	close-packed structure	-	12.38	X	63646
Pd-S	PdS	PdS, tP16, 84	<i>P4₂/m</i>	0.6429, 0.6429, 0.6611, 90, 90, 90	-	black	6.73	X	17629
Pd-S	PdS ₂	PdSe ₂ , oP12, 61	<i>Pbca</i>	0.546, 0.5541, 0.7531, 90, 90, 90	pyrite-marcasite family	-	4.97	X	813
Pd-S	Pd ₁₆ S ₇ rt	Pd ₁₆ S ₇ , cI46, 217	<i>I-43m</i>	0.8954, 0.8954, 0.8954, 90, 90, 90	-	-	8.91	X	9366
Pd-S	Pd ₃ S ht	Pd ₃ S, oS16, 40	<i>Ama2</i>	0.6088, 0.5374, 0.7453, 90, 90, 90	-	-	9.57	X	3793
Pd-S	Pd ₄ S	Pd ₄ S, tP10, 114	<i>P-42₁c</i>	0.51147, 0.51147, 0.55903, 90, 90, 90	-	-	10.39	X	1525
Pd-Sb	PdSb	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.40761, 0.40761, 0.55912, 90, 90, 120	sudburyite	yellow creamy	9.42	X	44961
Pd-Sb	PdSb ₂	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.6464, 0.6464, 0.6464, 90, 90, 90	pyrite-marcasite family	-	8.61	X	29570
Pd-Sb	PdSb ₃	*, hR96, *	-	0.759, 0.759, 4.326, 90, 90, 120	-	-	-	N	4153
Pd-Sb	Pd _{0.165} Sb _{0.835} m	Po, cP1, 221	<i>Pm-3m</i>	0.2995, 0.2995, 0.2995, 90, 90, 90	-	-	7.37	X	4176
Pd-Sb	Pd _{0.91} Sb _{0.09}	Cu, cF4, 225	<i>Fm-3m</i>	0.39188, 0.39188, 0.39188, 90, 90, 90	close-packed structure	-	11.90	X	49561
Pd-Sb	Pd _{1.5} Sb _{0.5} ht	NaTi, cF16, 227	<i>Fd-3m</i>	0.63905, 0.63905, 0.63905, 90, 90, 90	b.c.c. family	-	11.22	X	11850
Pd-Sb	Pd ₂ Sb rt	Pd ₂ As, oS24, 36	<i>Cmc2₁</i>	0.3366, 1.7523, 0.6929, 90, 90, 90	naldrettite	white creamy	10.87	A	32318
Pd-Sb	Pd ₂₀ Sb ₇ rt	Pd ₂₀ Sb ₇ , hR81, 148	<i>R-3</i>	1.1734, 1.1734, 1.1021, 90, 90, 120	-	white	11.30	X	10585
Pd-Sb	Pd ₃ Sb ₅ ht	*, hP*, *	-	0.759, 0.759, 1.386, 90, 90, 120	-	-	-	N	4153
Pd-Sb	Pd ₃₁ Sb ₁₂	*, h*129, *	-	0.76006, 0.76006, 4.1945, 90, 90, 120	-	white	11.30	N	32318
Pd-Sb	Pd ₅ Sb ₂ sti	*, hP84, 194	<i>P6₃/mmc</i>	0.7598, 0.7598, 2.8112, 90, 90, 120	stibiopalladinite	white	-	N	9541
Pd-Sb	Pd ₅ Sb ₂ syn	Pd ₅ Sb ₂ , hP42, 185	<i>P6₃/cm</i>	0.7606, 0.7606, 1.3863, 90, 90, 120	-	white creamy	11.12	X	5224
Pd-Sb	Pd ₅ Sb ₃ ht	*, oP*, *	-	0.3362, 0.6934, 1.7484, 90, 90, 90	-	pink yellowish	-	N	32318
Pd-Sb	Pd ₈ Sb ₃ rt	Yb ₈ In ₃ , hR132, 167	<i>R-3c</i>	0.76152, 0.76152, 4.3032, 90, 90, 120	-	yellow creamy	11.22	X	28328
Pd-Sc	ScPd	CSCl, cP2, 221	<i>Pm-3m</i>	0.328, 0.328, 0.328, 90, 90, 90	b.c.c. family	-	7.12	X	13508
Pd-Sc	ScPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.39579, 0.39579, 0.39579, 90, 90, 90	close-packed structure	-	9.75	X	4598
Pd-Sc	Sc _{0.1} Pd _{0.9}	Cu, cF4, 225	<i>Fm-3m</i>	0.3916, 0.3916, 0.3916, 90, 90, 90	close-packed structure	-	11.09	X	27292
Pd-Sc	Sc ₂ Pd	Ti ₂ Ni, cF96, 227	<i>Fd-3m</i>	1.2442, 1.2442, 1.2442, 90, 90, 90	-	-	5.42	A	2694
Pd-Se	PdSe rt	Pd(Se _{0.5} S _{0.5}), tP48, 135	<i>P4₂/mbc</i>	1.15646, 1.15646, 0.69978, 90, 90, 90	-	black	7.89	X	40179
Pd-Se	PdSe ₂ hp1-ht	FeS ₂ , oP6, 58	<i>Pnmm</i>	0.4873, 0.6013, 0.393, 90, 90, 90	pyrite-marcasite family	-	7.62	A	11405
Pd-Se	PdSe ₂ hp2-ht	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.5928, 0.5928, 0.5928, 90, 90, 90	pyrite-marcasite family	-	8.43	A	43771
Pd-Se	PdSe ₂	PdSe ₂ , oP12, 61	<i>Pbca</i>	0.57457, 0.58679, 0.76946, 90, 90, 90	pyrite-marcasite family	-	6.77	X	43771
Pd-Se	Pd ₁₇ Se ₁₅	Pd ₁₇ Se ₁₅ , cP64, 221	<i>Pm-3m</i>	1.0606, 1.0606, 1.0606, 90, 90, 90	palladseite	-	8.33	X	1564
Pd-Se	Pd ₃₄ Se ₁₁	Pd ₃₄ Se ₁₁ , mP90, 14	<i>P12₁/c1</i>	1.2030, 0.5504, 2.2776, 90, 111.96, 90	-	-	10.65	X	21887
Pd-Se	Pd ₄ Se rt	Pd ₄ Se, tP10, 114	<i>P-42₁c</i>	0.52324, 0.52324, 0.56470, 90, 90, 90	-	-	10.84	X	1525
Pd-Se	Pd ₇ Se ₂	Pd ₇ Se ₂ , mP18, 14	<i>P12₁/c1</i>	0.5495, 0.5370, 0.9441, 90, 93.61, 90	-	-	10.78	X	21887
Pd-Se	Pd ₅ Se ₄	Pd ₅ Se ₄ , oP22, 18	<i>P2₁2₁2</i>	0.6863, 1.0162, 0.5375, 90, 90, 90	-	-	9.40	X	11473
Pd-Si	PdSi ht	FeAs, oP8, 62	<i>Pnma</i>	0.56173, 0.33909, 0.61534, 90, 90, 90	AlB ₂ family	-	7.62	X	4929

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Pd-Si	Pd _{0.975} Si _{0.025}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.3894, 0.3894, 0.3894, 90, 90, 90	close-packed structure	-	11.75	X	12605
Pd-Si	Pd ₂ Si	Fe ₂ P, hP9, 189	<i>P-62m</i>	0.6496, 0.6496, 0.3433, 90, 90, 120	Fe ₂ P family	-	9.57	X	2895
Pd-Si	Pd ₃ Si	Fe ₃ C-b, oP16, 62	<i>Pnma</i>	0.5735, 0.7555, 0.526, 90, 90, 90	-	-	10.12	X	1167
Pd-Si	Pd ₃ Si _{0.6} ht	Pd ₃ Pd _{0.68} , mP24, 4	<i>P12₁</i>	0.5555, 0.7485, 0.8465, 90, 100, 7, 90	-	-	9.68	A	14329
Pd-Si	Pd ₂ Si cub	*, cP*, *	-	0.4, 0.4, 0.4, 90, 90, 90	-	-	-	N	33240
Pd-Si	Pd ₄ Si tf	*, aP20, 2	<i>P-1</i>	0.4402, 0.77, 0.899, 68.98, 83.48, 89.15	-	-	-	N	12253
Pd-Si	Pd ₀ Si ₂ ht	Pd ₀ Si ₂ , oP44, 62	<i>Pnma</i>	0.90528, 0.74165, 0.94009, 90, 90, 90	-	-	10.67	X	20933
Pd-Sm	SmPd rt	TlI ₀ S8, 63	<i>Cmcm</i>	0.377, 1.065, 0.456, 90, 90, 90	CrB(TlI)-FeB	-	9.32	A	7325
Pd-Sm	SmPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4109, 0.4109, 0.4109, 90, 90, 90	close-packed structure	-	11.24	X	34659
Pd-Sm	SmPd ₅	*, oP*, *	-	0.5253, 0.9015, 2.568, 90, 90, 90	-	-	-	N	20876
Pd-Sm	Sm _{0.1} Pd _{0.9}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.3972, 0.3972, 0.3972, 90, 90, 90	close-packed structure	-	11.74	X	7325
Pd-Sm	Sm ₁₀ Pd ₂₁	Sm ₁₀ Pd ₂₁ , mS124, 12	<i>C12/m1</i>	2.4853, 0.5765, 1.6509, 90, 90, 88, 90	-	-	10.50	X	11977
Pd-Sm	Sm ₃ Pd ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3387, 1.3387, 0.5758, 90, 90, 120	b.c.c. family	-	9.78	A	8116
Pd-Sm	Sm ₇ Pd ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	1.0014, 1.0014, 0.6301, 90, 90, 120	-	-	8.33	A	7342
Pd-Sn	PdSn	FeAs, oP8, 62	<i>Pnma</i>	0.61388, 0.38923, 0.63377, 90, 90, 90	AlB ₂ family	-	9.87	X	48244
Pd-Sn	PdSn ₂ rt	PdSn ₂ , tI48, 142	<i>I4₁/acd</i>	0.649, 0.649, 2.4327, 90, 90, 90	-	gray silver	8.91	X	37731
Pd-Sn	PdSn ₃	PdSn ₃ , oS32, 64	<i>Cmce</i>	1.7147, 0.6458, 0.6488, 90, 90, 90	-	-	8.55	X	44761
Pd-Sn	PdSn ₄	PtSn ₄ , oS20, 68	<i>Ccce</i>	0.6442, 1.1445, 0.6389, 90, 90, 90	-	-	8.20	X	44761
Pd-Sn	Pd _{0.08} Sn _{0.92} m	(Hg _{0.1} Sn _{0.9}), hP1, 191	<i>P6/mmm</i>	0.3215, 0.3215, 0.2979, 90, 90, 120	-	-	7.33	X	2908
Pd-Sn	Pd _{0.84} Sn _{0.16}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.39716, 0.39716, 0.39716, 90, 90, 90	close-packed structure	-	11.49	X	64140
Pd-Sn	Pd _{0.88} Sn ₂ ht	PdSn ₂ , oS24, 41	<i>Aea2</i>	0.6478, 0.6478, 1.2155, 90, 90, 90	-	-	8.62	X	347
Pd-Sn	Pd _{1.5} Sn _{0.5} ht	CuAu, tP2, 123	<i>P4/mmm</i>	0.288, 0.288, 0.3723, 90, 90, 90	close-packed structure	-	11.77	X	865
Pd-Sn	Pd _{1.74} Sn ht Pd+	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.44053, 0.44053, 0.56461, 90, 90, 120	AlB ₂ family	-	10.63	X	44961
Pd-Sn	Pd ₁₃ Sn ₉	Pd ₁₃ Sn ₉ , hP66, 152	<i>P3₂</i>	0.87985, 0.87985, 1.69837, 90, 90, 120	-	-	10.73	X	14605
Pd-Sn	Pd ₂ Sn	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.5647, 0.4294, 0.8103, 90, 90, 90	paolovite	-	11.21	X	50148
Pd-Sn	Pd ₃ Sn	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.39739, 0.39739, 0.39739, 90, 90, 90	close-packed structure	-	11.59	X	64140
Pd-Sn	Pd ₅ Sn ₇	Pd ₅ Sn ₇ , mS26, 12	<i>C12/m1</i>	1.29475, 0.43764, 0.95659, 90, 111.576, 90	-	gray silver	8.98	X	55504
Pd-Sr	SrPd	TlI ₀ S8, 63	<i>Cmcm</i>	0.419, 1.131, 0.452, 90, 90, 90	CrB(TlI)-FeB	-	6.02	A	8138
Pd-Sr	SrPd ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7826, 0.7826, 0.7826, 90, 90, 90	Friauf-Laves phase	-	8.33	X	909
Pd-Sr	SrPd ₃	CaCu ₃ , hP6, 191	<i>P6/mmm</i>	0.5383, 0.5383, 0.4392, 90, 90, 120	-	-	9.34	X	6030
Pd-Ta	TaPd rt	CuTi, tP4, 129	<i>P4/nmm</i>	0.3279, 0.3279, 0.6036, 90, 90, 90	b.c.c. family	-	14.71	A	1970
Pd-Ta	TaPd ₂	MoPt ₂ , oI6, 71	<i>Immm</i>	0.2896, 0.379, 0.8397, 90, 90, 90	close-packed structure	-	14.19	X	2594
Pd-Ta	TaPd ₃	TiAl ₃ , tI8, 139	<i>I4/mmm</i>	0.388, 0.388, 0.7978, 90, 90, 90	close-packed structure	-	13.83	X	1970
Pd-Ta	Ta _{0.09} Pd _{0.91}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.38995, 0.38995, 0.38995, 90, 90, 90	close-packed structure	-	12.67	X	44972
Pd-Ta	Ta _{0.75} Pd _{0.25}	(Cr _{0.49} Fe _{0.51}), tP30, 136	<i>P4₂/mmn</i>	0.9978, 0.9978, 0.5208, 90, 90, 90	Frank-Kasper phase	-	15.59	A	1970
Pd-Ta	Ta _{0.88} Pd _{0.12}	W, cI2, 229	<i>Im-3m</i>	0.3285, 0.3285, 0.3285, 90, 90, 90	b.c.c. family	-	16.11	X	11635
Pd-Tb	TbPd ht	FeB-b, oP8, 62	<i>Pnma</i>	0.7192, 0.4344, 0.5599, 90, 90, 90	CrB(TlI)-FeB	-	10.08	A	8252
Pd-Tb	TbPd rt	TlI ₀ S8, 63	<i>Cmcm</i>	0.3722, 1.0523, 0.4554, 90, 90, 90	CrB(TlI)-FeB	-	9.88	A	9233
Pd-Tb	TbPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4068, 0.4068, 0.4068, 90, 90, 90	close-packed structure	-	11.79	X	25591
Pd-Tb	Tb _{0.08} Pd _{0.92}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.3952, 0.3952, 0.3952, 90, 90, 90	close-packed structure	-	11.90	X	27292
Pd-Tb	Tb _{2.12} Pd _{0.88}	Dy _{2.12} Pd _{0.88} , cF144, 227	<i>Fd-3m</i>	1.3597, 1.3597, 1.3597, 90, 90, 90	-	-	9.10	X	61695
Pd-Tb	Tb ₃ Pd ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3178, 1.3178, 0.5708, 90, 90, 120	b.c.c. family	-	10.47	A	8116
Pd-Tc	Tc _{0.25} Pd _{0.75}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.3874, 0.3874, 0.3874, 90, 90, 90	close-packed structure	-	11.92	X	1812
Pd-Tc	Tc _{0.53} Pd _{0.47}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2749, 0.2749, 0.4389, 90, 90, 120	close-packed structure	-	11.79	X	1812
Pd-Te	PdTe	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.41485, 0.41485, 0.56629, 90, 90, 120	kotulskite	-	9.21	X	62353
Pd-Te	PdTe ₂	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.4024, 0.4024, 0.5113, 90, 90, 120	merenskyite	black	8.37	X	31363
Pd-Te	Pd _{0.75} Te _{0.25} ht	W, cI2, 229	<i>Im-3m</i>	0.3226, 0.3226, 0.3226, 90, 90, 90	b.c.c. family	-	11.05	X	11850
Pd-Te	Pd _{0.9} Te _{0.1}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.3937, 0.3937, 0.3937, 90, 90, 90	close-packed structure	-	11.81	X	18572
Pd-Te	Pd ₁₃ Te ₃ rt	Li ₁₃ In ₃ , cF128, 227	<i>Fd-3m</i>	1.26681, 1.26681, 1.26681, 90, 90, 90	b.c.c. family	gray silver	11.54	X	48628
Pd-Te	Pd ₂₀ Te ₇ rt	Pd ₂₀ Sb ₇ , hR81, 148	<i>R-3</i>	1.1797, 1.1797, 1.1797, 90, 90, 120	keithconnite	-	11.18	A	10585
Pd-Te	Pd ₃ Te ₂ tf	*, oP45, 17	<i>P222₁</i>	0.905, 1.354, 0.755, 90, 90, 90	-	-	-	N	3950
Pd-Te	Pd ₃ Te ₂	Rh ₃ Te ₂ , oS20, 63	<i>Cmcm</i>	0.3858, 1.2687, 0.79, 90, 90, 90	-	-	9.87	X	10590
Pd-Te	Pd _{3.5} Te rt	Pd _{3.5} Te, cF120, 227	<i>Fd-3m</i>	1.269, 1.269, 1.269, 90, 90, 90	-	-	9.75	X	5429
Pd-Te	Pd ₆ Te ₃ ht	*, oP*, *	-	1.1304, 1.2843, 1.5126, 90, 90, 90	-	-	-	N	23436
Pd-Te	Pd ₆ Te ₄ ht	Pd ₆ Te ₄ , mP52, 14	<i>P12₁/c1</i>	0.7458, 1.3938, 0.8839, 90, 91.97, 90	telluropalladinite	-	10.62	X	11467
Pd-Th	ThPd	FeB-b, oP8, 62	<i>Pnma</i>	0.7249, 0.4571, 0.5856, 90, 90, 90	CrB(TlI)-FeB	-	11.59	X	2052
Pd-Th	ThPd ₃	TiNi ₃ , hP16, 194	<i>P6₃/mmc</i>	0.5858, 0.5858, 0.9814, 90, 90, 120	close-packed structure	-	12.55	A	1810
Pd-Th	Th _{0.14} Pd _{0.86}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.406, 0.406, 0.406, 90, 90, 90	close-packed structure	-	12.31	X	17291
Pd-Th	Th _{0.8} Pd _{0.2}	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.411, 0.411, 0.411, 90, 90, 90	close-packed structure	-	12.58	X	1810
Pd-Th	Th ₂ Pd	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.7313, 0.7313, 0.5942, 90, 90, 90	-	-	11.92	X	6603
Pd-Th	Th ₃ Pd ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.3646, 1.3646, 0.5847, 90, 90, 120	b.c.c. family	-	11.85	A	8116
Pd-Th	Th ₃ Pd ₅	Th ₃ Pd ₅ , hP8, 189	<i>P-62m</i>	0.7149, 0.7149, 0.3899, 90, 90, 120	AlB ₂ family	-	11.82	X	1767
Pd-Ti	TiPd ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.318, 0.318, 0.318, 90, 90, 90	b.c.c. family	-	7.97	X	33283
Pd-Ti	TiPd rt	AuCd, oP4, 51	<i>Pnma</i>	0.459, 0.28, 0.484, 90, 90, 90	close-packed structure	-	8.24	A	16253
Pd-Ti	TiPd ₃ rt orth	ReSi ₂ , oI6, 71	<i>Immm</i>	0.307, 0.341, 0.856, 90, 90, 90	b.c.c. family	-	9.66	A	4211
Pd-Ti	TiPd ₃ rt tet	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.324, 0.324, 0.848, 90, 90, 90	b.c.c. family	-	9.73	A	4211
Pd-Ti	TiPd ₃ cub	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.382, 0.382, 0.382, 90, 90, 90	close-packed structure	-	10.94	X	22254
Pd-Ti	TiPd ₃ hex	TiNi ₃ , hP16, 194	<i>P6₃/mmc</i>	0.54909, 0.54909, 0.89702, 90, 90, 120	close-packed structure	-	10.41	A	43920
Pd-Ti	Ti _{0.09} Pd _{0.91}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.38869, 0.38869, 0.38869, 90, 90, 90	close-packed structure	-	11.44	X	43920
Pd-Ti	Ti _{0.8} Pd _{0.2} ht	W, cI2, 229	<i>Im-3m</i>	0.321, 0.321, 0.321, 90, 90, 90	b.c.c. family	-	5.98	X	16434
Pd-Ti	Ti ₂ Pd rt	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.309, 0.309, 1.0054, 90, 90, 90	close-packed structure	-	7.00	X	1717
Pd-Ti	Ti ₂ Pd ₃ rt	Ti ₂ Pd ₃ , oS20, 63	<i>Cmcm</i>	1.4329, 0.4643, 0.4606, 90, 90, 90	-	-	9.00	X	4211
Pd-Ti	Ti ₃ Pd ₅	Ti ₃ Pd ₅ , tP8, 123	<i>P4/mmm</i>	0.3263, 0.3263, 1.1436, 90, 90, 90	b.c.c. family	-	9.22	X	4211
Pd-Ti	Ti _{3.2} Pd _{0.8} rt	Cr ₂ Si, cP8, 223	<i>Pm-3n</i>	0.5055, 0.5055, 0.5055, 90, 90, 90	Frank-Kasper phase	-	6.13	X	4204
Pd-Tl	TlPd ₂ rt	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.571, 0.422, 0.836, 90, 90, 90	-	-	13.76	A	4590
Pd-Tl	TlPd ₃ ht	TiAl ₃ , tI8, 139	<i>I4/mmm</i>	0.4146, 0.4146, 0.7497, 90, 90, 90	close-packed structure	-	13.49	X	4111
Pd-Tl	TlPd ₃ rt	ZrAl ₃ , tI16, 139	<i>I4/mmm</i>	0.41066, 0.41066, 1.53028, 90, 90, 90	close-packed structure	-	13.48	X	56363
Pd-Tl	Tl _{0.09} Pd _{0.91}	Cu ₂ CF ₄ , 225	<i>Fm-3m</i>	0.3936, 0.3936, 0.3936, 90, 90, 90	close-packed structure	-	12.55	X	11484

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Pd-Tl	Tl ₂ Pd	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.6712, 0.6712, 0.5748, 90, 90, 90	-	-	13.21	X	6603
Pd-Tl	Tl ₉ Pd ₁₃	Tl ₉ Pd ₁₃ , hP22, 164	<i>P-3m1</i>	0.8958, 0.8958, 0.5623, 90, 90, 120	AlB ₂ family	-	13.69	X	4593
Pd-Tm	TmPd	CsCl, cP2, 221	<i>Pm-3m</i>	0.3435, 0.3435, 0.3435, 90, 90, 90	b.c.c. family	-	11.28	X	13198
Pd-Tm	TmPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4038, 0.4038, 0.4038, 90, 90, 90	close-packed structure	-	12.31	X	25591
Pd-Tm	Tm _{0.12} Pd _{0.88}	Cu, cF4, 225	<i>Fm-3m</i>	0.3971, 0.3971, 0.3971, 90, 90, 90	close-packed structure	-	12.08	X	27298
Pd-Tm	Tm _{2.12} Pd _{0.88}	Dy _{2.12} Pd _{0.88} , cF144, 227	<i>Fd-3m</i>	1.329, 1.329, 1.329, 90, 90, 90	-	-	10.23	A	8145
Pd-Tm	Tm ₃ Pd ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.2946, 1.2946, 0.5657, 90, 90, 120	b.c.c. family	-	11.31	A	8116
Pd-U	UPd ₃ rt	TiNi ₃ , hP16, 194	<i>P6₃/mmc</i>	0.57759, 0.57759, 0.95916, 90, 90, 120	close-packed structure	-	13.36	X	55619
Pd-U	UPd ₅ Pd+	* _h P* _h *	-	0.5506, 0.5506, 0.7034, 90, 90, 120	-	-	-	N	20084
Pd-U	U _{0.11} Pd _{0.89} rt	In, tI2, 139	<i>I4/mmm</i>	0.2745, 0.2745, 0.4083, 90, 90, 90	close-packed structure	-	13.05	X	6794
Pd-U	U _{0.17} Pd _{0.83}	Cu, cF4, 225	<i>Fm-3m</i>	0.4061, 0.4061, 0.4061, 90, 90, 90	close-packed structure	-	12.77	X	20084
Pd-U	U _{0.8} Pd _{3.2}	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4067, 0.4067, 0.4067, 90, 90, 90	close-packed structure	-	13.11	X	9116
Pd-U	U _{0.96} Pd _{0.04} rt	U, oS4, 63	<i>Cmcm</i>	0.2852, 0.5897, 0.4962, 90, 90, 90	close-packed structure	-	18.53	A	55619
Pd-V	VPd ₂ rt	MoPt ₂ , oI6, 71	<i>Immm</i>	0.275, 0.3751, 0.825, 90, 90, 90	close-packed structure	-	10.29	X	2594
Pd-V	VPd ₃ rt	TiAl ₃ , tI8, 139	<i>I4/mmm</i>	0.385, 0.385, 0.775, 90, 90, 90	close-packed structure	-	10.70	X	999
Pd-V	V _{0.10} Pd _{0.90} ht	Cu, cF4, 225	<i>Fm-3m</i>	0.38751, 0.38751, 0.38751, 90, 90, 90	close-packed structure	-	11.51	X	44481
Pd-V	V ₃ Pd rt	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.48254, 0.48254, 0.48254, 90, 90, 90	Frank-Kasper phase	-	7.66	X	3734
Pd-W	W _{0.4} Pd _{0.6}	Cu, cF4, 225	<i>Fm-3m</i>	0.3918, 0.3918, 0.3918, 90, 90, 90	close-packed structure	-	15.17	X	3994
Pd-W	W _{0.95} Pd _{0.05}	W, cI2, 229	<i>Im-3m</i>	0.31642, 0.31642, 0.31642, 90, 90, 90	b.c.c. family	-	18.87	X	2172
Pd-Y	YPd rt	TiI ₂ oS8, 63	<i>Cmcm</i>	0.3733, 1.0522, 0.4552, 90, 90, 90	CrB(TII)-FeB	-	7.26	A	52884
Pd-Y	YPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.40694, 0.40694, 0.40694, 90, 90, 90	close-packed structure	-	10.06	X	53421
Pd-Y	Y _{0.1} Pd _{0.9} ht	Cu, cF4, 225	<i>Fm-3m</i>	0.3957, 0.3957, 0.3957, 90, 90, 90	close-packed structure	-	11.22	X	23547
Pd-Y	Y _{2.14} Pd _{0.86}	Dy _{2.12} Pd _{0.88} , cF144, 227	<i>Fd-3m</i>	1.362, 1.362, 1.362, 90, 90, 90	-	-	5.93	A	17882
Pd-Y	Y ₃ Pd rt	Fe ₂ C-b, oP16, 62	<i>Pnma</i>	0.7063, 0.9734, 0.6453, 90, 90, 90	-	-	5.59	A	13171
Pd-Y	Y ₃ Pd ₂	Er ₃ Ni ₂ , hR45, 148	<i>R-3</i>	0.8747, 0.8747, 1.643, 90, 90, 120	-	-	6.58	A	17882
Pd-Y	Y ₃ Pd ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.313, 1.313, 0.569, 90, 90, 120	b.c.c. family	-	8.12	A	17882
Pd-Yb	YbPd ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.344, 0.344, 0.344, 90, 90, 90	b.c.c. family	-	11.40	X	62415
Pd-Yb	YbPd tI1	* _t ** *	-	0.3436, 0.3436, 0.345, 90, 90, 90	-	-	-	N	62169
Pd-Yb	YbPd tI2	YbPd, tP4, 123	<i>P4/mmm</i>	0.3435, 0.3435, 0.6918, 90, 90, 90	-	-	11.37	X	62169
Pd-Yb	YbPd rt	FeB-b, oP8, 62	<i>Pnma</i>	0.722, 0.4123, 0.5578, 90, 90, 90	CrB(TII)-FeB	-	11.18	A	8252
Pd-Yb	YbPd ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.404, 0.404, 0.404, 90, 90, 90	close-packed structure	-	12.40	X	25591
Pd-Yb	Yb _{0.08} Pd _{0.92}	Cu, cF4, 225	<i>Fm-3m</i>	0.3935, 0.3935, 0.3935, 90, 90, 90	close-packed structure	-	12.18	X	27292
Pd-Yb	Yb ₃ Pd	Fe ₂ C-b, oP16, 62	<i>Pnma</i>	0.7662, 0.968, 0.651, 90, 90, 90	-	-	8.61	A	55198
Pd-Yb	Yb ₃ Pd ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.2863, 1.2863, 0.5634, 90, 90, 120	b.c.c. family	-	11.66	X	28973
Pd-Yb	Yb ₅ Pd _{1.94} rt	Mn ₅ C ₂ , mS28, 15	<i>C12/c1</i>	1.63188, 0.65678, 0.76506, 90, 97.317, 90	-	-	8.75	X	55826
Pd-Zn	ZnPd rt	CuTi, tP2, 123	<i>P4/mmm</i>	0.28992, 0.28992, 0.33331, 90, 90, 90	b.c.c. family	-	10.18	X	57389
Pd-Zn	ZnPd ₂ rt	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.535, 0.414, 0.765, 90, 90, 90	-	-	10.91	A	1513
Pd-Zn	Zn _{0.18} Pd _{0.82}	Cu, cF4, 225	<i>Fm-3m</i>	0.3868, 0.3868, 0.3868, 90, 90, 90	close-packed structure	-	11.37	X	378
Pd-Zn	Zn _{1.2} Pd _{0.8} ht	CsCl, cP2, 221	<i>Pm-3m</i>	0.3049, 0.3049, 0.3049, 90, 90, 90	b.c.c. family	-	9.58	X	378
Pd-Zn	Zn _{10.65} Pd _{2.35}	Zn ₉ (Zn _{0.5} Fe _{0.5}) ₂ Fe ₂ , cI52, 217	<i>I-43m</i>	0.90906, 0.90906, 0.90906, 90, 90, 90	γ-brass	-	8.37	X	47140
Pd-Zn	Zn _{5.33} Pd _{2.67} rt	Zn ₅ (Zn _{0.33} Pd _{0.67})Pd ₂ , oS48, 65	<i>Cmmm</i>	0.7363, 0.7525, 1.2307, 90, 90, 90	-	-	9.24	X	11472
Pd-Zn	Zn _{52.32} Pd _{16.68}	Zn ₄₅ (Zn _{0.46} Pd _{0.54}) ₁₆ Pd ₈ , oS276, 64	<i>Cmce</i>	1.2929, 0.9112, 3.332, 90, 90, 90	-	black	8.79	X	47140
Pd-Zn	Zn _{74.86} Pd _{20.14}	Zn ₅₈ (Zn _{0.46} Pd _{0.54}) ₃₇ , oS380, 63	<i>Cmcm</i>	1.2909, 0.9115, 4.6893, 90, 90, 90	-	black	8.47	X	53299
Pd-Zr	ZrPd ht1	TiI ₂ oS8, 63	<i>Cmcm</i>	0.33319, 1.0301, 0.44111, 90, 90, 90	CrB(TII)-FeB	-	8.67	X	31804
Pd-Zr	ZrPd ht2	CsCl, cP2, 221	<i>Pm-3m</i>	0.33597, 0.33597, 0.33597, 90, 90, 90	b.c.c. family	-	8.65	X	31804
Pd-Zr	ZrPd rt	TiI ₂ oS8, 63	<i>Cmcm</i>	0.33305, 1.0304, 0.43745, 90, 90, 90	-	-	8.74	X	31804
Pd-Zr	ZrPd ₂	MoSi ₂ , tI6, 139	<i>I4/mmm</i>	0.3407, 0.3407, 0.8597, 90, 90, 90	b.c.c. family	-	10.12	A	1735
Pd-Zr	ZrPd ₃	TiNi ₃ , hP16, 194	<i>P6₃/mmc</i>	0.561, 0.561, 0.9224, 90, 90, 120	close-packed structure	-	10.84	A	43920
Pd-Zr	Zr _{0.09} Pd _{0.91}	Cu, cF4, 225	<i>Fm-3m</i>	0.39238, 0.39238, 0.39238, 90, 90, 90	close-packed structure	-	11.55	X	43920
Pd-Zr	Zr _{0.17} Pd _{0.83} rt	In, tI2, 139	<i>I4/mmm</i>	0.28093, 0.28093, 0.39142, 90, 90, 90	close-packed structure	-	11.16	X	4598
Pd-Zr	Zr _{0.8} Pd _{0.2} ht	W, cI2, 229	<i>Im-3m</i>	0.347, 0.347, 0.347, 90, 90, 90	b.c.c. family	-	7.49	X	16434
Pd-Zr	Zr ₂ Pd tet	CuZr ₂ , tI6, 139	<i>I4/mmm</i>	0.33086, 0.33086, 1.08918, 90, 90, 90	close-packed structure	-	8.05	X	20014
Pd-Zr	Zr ₃ Pd ₄ rt	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.2497, 1.2497, 0.55409, 90, 90, 120	b.c.c. family	-	9.30	X	27372
Pd-Zr	Zr ₉ Pd ₁₁ rt	Zr ₉ Ni ₁₁ , tP44, 83	<i>P4/m</i>	1.0313, 1.0313, 0.69405, 90, 90, 90	-	-	8.96	A	51688
Pm-Po	PmPo	NaCl, cF8, 225	<i>Fm-3m</i>	0.636, 0.636, 0.636, 90, 90, 90	rocksalt family	-	9.14	X	5258
Po-Sc	ScPo	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.4206, 0.4206, 0.692, 90, 90, 120	AlB ₂ family	-	7.96	X	10876
Po-Sm	SmPo	NaCl, cF8, 225	<i>Fm-3m</i>	0.6724, 0.6724, 0.6724, 90, 90, 90	rocksalt family	-	7.85	X	3080
Po-Sr	SrPo	NaCl, cF8, 225	<i>Fm-3m</i>	0.6796, 0.6796, 0.6796, 90, 90, 90	rocksalt family	gray	6.28	X	1219
Po-Tb	TbPo	NaCl, cF8, 225	<i>Fm-3m</i>	0.6254, 0.6254, 0.6254, 90, 90, 90	rocksalt family	-	9.99	X	3080
Po-Ti	TiPo	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.3992, 0.3992, 0.6569, 90, 90, 120	AlB ₂ family	-	9.41	X	11774
Po-Tm	TmPo	NaCl, cF8, 225	<i>Fm-3m</i>	0.6256, 0.6256, 0.6256, 90, 90, 90	rocksalt family	-	10.25	X	3080
Po-Y	YPo	NaCl, cF8, 225	<i>Fm-3m</i>	0.6251, 0.6251, 0.6251, 90, 90, 90	rocksalt family	-	8.10	X	8865
Po-Yb	YbPo	NaCl, cF8, 225	<i>Fm-3m</i>	0.6542, 0.6542, 0.6542, 90, 90, 90	rocksalt family	-	9.06	X	3080
Po-Zn	ZnPo	ZnS, cF8, 216	<i>F-43m</i>	0.6309, 0.6309, 0.6309, 90, 90, 90	adamantane structure	-	7.26	X	1219
Po-Zr	ZrPo	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.4031, 0.4031, 0.6907, 90, 90, 120	AlB ₂ family	-	10.26	X	11774
Pr-Pt	PrPt ht	TiI ₂ oS8, 63	<i>Cmcm</i>	0.3891, 1.0899, 0.4569, 90, 90, 90	CrB(TII)-FeB	-	11.52	X	15422
Pr-Pt	PrPt rt	FeB-b, oP8, 62	<i>Pnma</i>	0.7282, 0.4594, 0.5696, 90, 90, 90	CrB(TII)-FeB	-	11.71	A	11776
Pr-Pt	PrPt ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7709, 0.7709, 0.7709, 90, 90, 90	Friauf-Laves phase	-	15.40	X	14645
Pr-Pt	PrPt ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4065, 0.4065, 0.4065, 90, 90, 90	close-packed structure	-	17.95	X	2869
Pr-Pt	PrPt ₅	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5348, 0.5348, 0.4385, 90, 90, 120	-	-	17.07	X	3491
Pr-Pt	Pr ₃ Pt ₂	Er ₃ Ni ₂ , hR45, 148	<i>R-3</i>	0.8959, 0.8959, 1.698, 90, 90, 120	-	-	10.29	A	10263
Pr-Pt	Pr ₃ Pt ₄	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.359, 1.359, 0.5769, 90, 90, 120	b.c.c. family	-	12.99	A	10597
Pr-Pt	Pr ₇ Pt ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	1.0137, 1.0137, 0.6376, 90, 90, 120	-	-	9.20	A	7350
Pr-Pu	Pr _{0.85} Pu _{0.15} rt	Nd, hP4, 194	<i>P6₃/mmc</i>	0.3633, 0.3633, 1.171, 90, 90, 120	close-packed structure	-	7.76	X	4652
Pr-Re	PrRe ₂ ht	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7572, 0.7572, 0.7572, 90, 90, 90	Friauf-Laves phase	-	15.71	X	2562
Pr-Re	PrRe ₂ rt	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5336, 0.5336, 0.8805, 90, 90, 120	Friauf-Laves phase	-	15.70	A	2562
Pr-Rh	PrRh	TiI ₂ oS8, 63	<i>Cmcm</i>	0.3905, 1.091, 0.421, 90, 90, 90	CrB(TII)-FeB	-	9.03	A	2404
Pr-Rh	PrRh ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7576, 0.7576, 0.7576, 90, 90, 90	Friauf-Laves phase	-	10.59	X	16892

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Pr-Rh	Pr ₃ Rh ₂	Er ₃ Ni ₂ ,hR45,148	<i>R-3</i>	0.8784,0.8784,1.668,90,90,120	-	-	8.43	A	10263
Pr-Rh	Pr ₇ Rh ₃	Th ₇ Fe ₃ ,hP20,186	<i>P6₃mc</i>	1.0012,1.0012,0.6346,90,90,120	-	-	7.81	A	7350
Pr-Ru	PrRu ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7622,0.7622,0.7622,90,90,90	Friauf-Laves phase	-	10.29	X	2597
Pr-Ru	Pr ₃ Ru	Fe ₃ C ₂ -b,oP16,62	<i>Pnma</i>	0.7379,0.9768,0.6435,90,90,90	-	-	7.50	A	13171
Pr-Ru	Pr ₅ Ru ₂	Mn ₅ C ₂ ,mS28,15	<i>C12/c1</i>	1.6424,0.6545,0.7341,90,96.46,90	-	-	7.68	A	12299
Pr-Ru	Pr ₃ Ru ₃	* _o P1794,*	-	1.569,1.569,18.715,90,90,90	-	-	-	N	23428
Pr-Ru	Pr ₇ Ru ₃	Sr ₇ Pt ₃ ,oP40,62	<i>Pnma</i>	0.7319,2.2961,0.6558,90,90,90	-	-	7.77	A	23428
Pr-S	PrS	NaCl,cF8,225	<i>Fm-3m</i>	0.5729,0.5729,0.5729,90,90,90	rocksalt family	golden	6.11	X	11431
Pr-S	PrS _{1.75} tet1	NdS ₂ ,tP24,117	<i>P-4b2</i>	0.798,0.798,0.807,90,90,90	-	-	5.09	A	11684
Pr-S	PrS ₂ cub	* _c *24,*	-	0.8076,0.8076,0.8076,90,90,90	-	brown	-	N	24441
Pr-S	PrS ₂ orth	LaS ₂ ,oP24,62	<i>Pnma</i>	0.8044,1.6161,0.4073,90,90,90	-	red dark	5.14	X	54546
Pr-S	PrS ₂ rt	CeSe ₂ ,mP12,14	<i>P12₁/c1</i>	0.8079,0.4054,0.8058,90,90.08,90	-	red dark	5.16	X	38672
Pr-S	PrS ₂ tet2	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.4147,0.4147,0.8176,90,90,90	-	-	4.84	A	11684
Pr-S	Pr _{1.5} S ₂ ht-hp	Cr ₃ C ₂ -b,oP20,62	<i>Pnma</i>	0.8025,0.4062,1.6152,90,90,90	-	-	3.88	A	19215
Pr-S	Pr ₁₀ S ₁₅ rt	Pr ₁₀ S ₁₄ O,tI200,142	<i>I4₁/acd</i>	1.51,1.51,2.005,90,90,90	-	-	5.49	A	33848
Pr-S	Pr ₁₀ S ₁₉	Ce ₁₀ Se ₁₉ ,tP58,86	<i>P4₂/n</i>	0.8947,0.8947,1.6054,90,90,90	-	-	5.22	X	50593
Pr-S	Pr ₂ S ₃ cub	* _c I*,*	<i>I-43d</i>	0.8567,0.8567,0.8567,90,90,90	-	-	-	N	28931
Pr-S	Pr ₂ S ₃ ht1	Cr ₃ C ₂ -b,oP20,62	<i>Pnma</i>	0.74822,0.40551,1.56074,90,90,90	-	-	5.30	X	32814
Pr-S	Pr _{2.67} S ₄ ht	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.85768,0.85768,0.85768,90,90,90	-	green	5.31	X	41613
Pr-S	Pr ₃ S ₄ lt	* _t *,*,*	-	0.8539,0.8539,0.8552,90,90,90	-	-	-	N	9023
Pr-S	Pr ₃ S ₄ rt	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.855,0.855,0.855,90,90,90	-	black	5.86	A	11688
Pr-Sb	PrSb hp	CuTi,tP2,123	<i>P4/mmm</i>	0.386,0.386,0.3187,90,90,90	b.c.c. family	-	9.19	X	38437
Pr-Sb	PrSb rt	NaCl,cF8,225	<i>Fm-3m</i>	0.6368,0.6368,0.6368,90,90,90	rocksalt family	-	6.76	X	11431
Pr-Sb	PrSb ₂	SmSb ₂ ,oS24,64	<i>Cmce</i>	0.6224,0.6127,1.8144,90,90,90	-	-	7.38	A	51523
Pr-Sb	Pr ₂ Sb	La ₂ Sb,tI12,139	<i>I4/mmm</i>	0.45321,0.45321,1.7707,90,90,90	-	-	7.37	X	58334
Pr-Sb	Pr ₄ Sb ₃	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.9436,0.9436,0.9436,90,90,90	-	gray	7.34	X	55485
Pr-Sb	Pr ₅ Sb ₃	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.9233,0.9233,0.651,90,90,120	-	-	7.39	X	3753
Pr-Sb	Pr _{8.33} Sb ₂₀	Pr _{8.33} Sb ₂₀ ,mS62,8	<i>C1m1</i>	2.8591,0.4263,1.3561,90,95.52,90	-	-	7.29	X	42670
Pr-Se	PrSe	NaCl,cF8,225	<i>Fm-3m</i>	0.5932,0.5932,0.5932,90,90,90	rocksalt family	red	7.00	X	11431
Pr-Se	PrSe _{1.75}	* _m P24,14	<i>P12₁/c1</i>	0.8426,0.832,0.832,90,90,90	-	gray	-	N	3451
Pr-Se	PrSe _{1.85} ht	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.4147,0.4147,0.8419,90,90,90	-	gray silver	6.58	X	50035
Pr-Se	PrSe ₂ rt	CeSe ₂ ,mP12,14	<i>P12₁/c1</i>	0.8431,0.4184,0.8396,90,89.92,90	-	gray silver	6.70	X	46581
Pr-Se	Pr ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ ,tP58,86	<i>P4₂/n</i>	0.9296,0.9296,1.686,90,90,90	-	-	6.63	X	22378
Pr-Se	Pr _{2.67} Se ₄ ht	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.89117,0.89117,0.89117,90,90,90	-	red ruby	6.50	X	39988
Pr-Se	Pr ₃ Se ₄ lt	* _t *28,*	-	0.8844,0.8844,0.889,90,90,90	-	-	-	N	9023
Pr-Se	Pr ₃ Se ₄ rt	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.89038,0.89038,0.89038,90,90,90	-	blue	6.95	A	9023
Pr-Si	PrSi	FeB-b,oP8,62	<i>Pnma</i>	0.824,0.3942,0.5921,90,90,90	CrB(TiI)-FeB	gray	5.84	X	64525
Pr-Si	PrSi _{1.63} rt orth	GdSi _{1.4} ,oI12,74	<i>Imma</i>	0.4103,0.4162,1.3827,90,90,90	-	gray	5.25	A	58803
Pr-Si	PrSi _{1.95} rt tet	ThSi ₂ ,tI12,141	<i>I4₁/amd</i>	0.4205,0.4205,1.373,90,90,90	-	-	5.35	X	24778
Pr-Si	Pr ₂ Si _{2.7} rt	V ₂ B ₃ ,oS20,63	<i>Cmcm</i>	0.43834,2.472,0.39326,90,90,90	-	-	5.57	X	26164
Pr-Si	Pr ₃ Si ₂	U ₃ Si ₂ ,tP10,127	<i>P4/mbm</i>	0.7765,0.7765,0.436,90,90,90	-	-	6.05	A	61817
Pr-Si	Pr ₅ Si ₃ rt	Cr ₃ B ₃ ,tI32,140	<i>I4/mcm</i>	0.782,0.782,1.3812,90,90,90	-	-	6.20	X	63040
Pr-Si	Pr ₃ Si ₄	Zr ₃ Si ₄ ,tP36,92	<i>P4₂/2</i>	0.79092,0.79092,1.49437,90,90,90	-	-	5.80	X	40795
Pr-Sn	PrSn ₂	ZrGa ₂ ,oS12,65	<i>Cmmm</i>	0.4482,1.58973,0.45901,90,90,90	close-packed structure	-	7.68	A	26300
Pr-Sn	PrSn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.473,0.473,0.473,90,90,90	close-packed structure	-	7.80	X	28961
Pr-Sn	Pr ₂ Sn ₃	Nd ₂ Sn ₃ ,aP20,2	<i>P-1</i>	0.6405,0.8452,1.114,107.33,96.76,99.99	-	-	7.60	A	43304
Pr-Sn	Pr ₂ Sn ₅	Ce ₂ Sn ₅ ,oS28,65	<i>Cmmm</i>	0.45848,3.51784,0.46338,90,90,90	close-packed structure	-	7.78	A	26300
Pr-Sn	Pr ₃ Sn	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.499,0.499,0.499,90,90,90	close-packed structure	gray	7.24	X	3123
Pr-Sn	Pr ₃ Sn ₅ rt	Pu ₃ Pd ₃ ,oS32,63	<i>Cmcm</i>	1.018,0.821,1.054,90,90,90	-	-	7.66	A	21627
Pr-Sn	Pr ₃ Sn ₇	Th ₃ Sn ₇ ,oS28,65	<i>Cmmm</i>	0.45108,2.58235,0.46037,90,90,90	close-packed structure	-	7.76	A	26300
Pr-Sn	Pr ₅ Sn ₃ ht	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.9281,0.9281,0.6779,90,90,120	-	-	6.97	A	3248
Pr-Sn	Pr ₅ Sn ₃ rt	W ₃ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.2512,1.2512,0.6146,90,90,90	-	-	7.32	A	12295
Pr-Sn	Pr ₅ Sn ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.82,1.58,0.838,90,90,90	-	-	7.21	A	21627
Pr-Tb	Pr _{0.25} Tb _{0.75} lt1	Mg,hP2,194	<i>P6₃/mmc</i>	0.36279,0.36279,0.57539,90,90,120	close-packed structure	-	7.82	X	3995
Pr-Tb	Pr _{0.4} Tb _{0.6} lt2	Sm,hR9,166	<i>R-3m</i>	0.36209,0.36209,2.6119,90,90,120	close-packed structure	-	7.65	A	3995
Pr-Tb	Pr _{0.6} Tb _{0.4} rt	Nd,hP4,194	<i>P6₃/mmc</i>	0.36322,0.36322,1.171,90,90,120	close-packed structure	-	7.35	X	3995
Pr-Te	PrTe hp	CsCl,cP2,221	<i>Pm-3m</i>	0.3761,0.3761,0.3761,90,90,90	b.c.c. family	-	8.38	X	6801
Pr-Te	PrTe rt	NaCl,cF8,225	<i>Fm-3m</i>	0.6315,0.6315,0.6315,90,90,90	rocksalt family	red violet	7.08	X	6154
Pr-Te	PrTe _{1.89}	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.4459,0.4459,0.9072,90,90,90	-	-	7.03	A	3461
Pr-Te	PrTe ₂	CeTe ₂ ,tP72,75	<i>P4</i>	0.8968,0.8968,1.8119,90,90,90	-	black	7.22	X	38650
Pr-Te	PrTe ₃	CeTe ₃ ,oS16,40	<i>Ama2</i>	0.43606,2.58878,0.43566,90,90,90	-	-	7.07	X	45698
Pr-Te	Pr ₂ Te ₃	Th ₂ S ₃ ,oP20,62	<i>Pnma</i>	1.22561,0.44123,1.19578,90,90,90	-	-	6.83	X	64760
Pr-Te	Pr ₂ Te ₅ ht	Nd ₂ Te ₅ ,oS28,63	<i>Cmcm</i>	0.4426,4.43,0.4426,90,90,90	-	brown	7.04	A	3366
Pr-Te	Pr _{2.67} Te ₄	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.9483,0.9483,0.9483,90,90,90	-	gray silver	6.91	A	9121
Pr-Te	Pr ₃ Te ₄	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.9482,0.9482,0.9482,90,90,90	-	-	7.27	A	3461
Pr-Te	Pr ₄ Te _{6.8}	* _t P22,127	<i>P4/mbm</i>	0.8858,0.8858,0.9064,90,90,90	-	-	-	N	3461
Pr-Th	Th _{0.05} Pr _{0.95} rt	Nd,hP4,194	<i>P6₃/mmc</i>	0.3645,0.3645,1.1848,90,90,120	close-packed structure	-	7.09	X	3631
Pr-Th	Th _{0.2} Pr _{0.8} rt	Cu,cF4,225	<i>Fm-3m</i>	0.512,0.512,0.512,90,90,90	close-packed structure	-	7.88	X	4726
Pr-Tl	TlPr lt	CuTi,tP2,123	<i>P4/mmm</i>	0.362,0.362,0.433,90,90,90	b.c.c. family	-	10.10	X	14286
Pr-Tl	TlPr rt	CsCl,cP2,221	<i>Pm-3m</i>	0.3871,0.3871,0.3871,90,90,90	b.c.c. family	-	9.88	X	14286
Pr-Tl	TlPr ₂	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.5522,0.5522,0.6869,90,90,120	AlB ₂ family	-	8.90	X	5085
Pr-Tl	TlPr ₃ rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4926,0.4926,0.4926,90,90,90	close-packed structure	-	8.71	X	6803
Pr-Tl	Tl _{0.25} Pr _{0.75} ht	Cu,cF4,225	<i>Fm-3m</i>	0.50309,0.50309,0.50309,90,90,90	close-packed structure	-	8.18	X	6060
Pr-Tl	Tl ₃ Pr	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4753,0.4753,0.4753,90,90,90	close-packed structure	-	11.66	X	15854
Pr-Tl	Tl ₃ Pr ₅	W ₃ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.2553,1.2553,0.6172,90,90,90	-	-	9.00	X	4603
Pr-Tl	Tl ₃ Pr ₇ rt	* _o *,*,*	-	0.3869,0.828,1.026,90,90,90	-	-	-	N	14101
Pr-Y	Y _{0.3} Pr _{0.7} rt	Nd,hP4,194	<i>P6₃/mmc</i>	0.36562,0.36562,1.17821,90,90,120	close-packed structure	-	6.10	X	3068
Pr-Y	Y _{0.4} Pr _{0.6} rt	Sm,hR9,166	<i>R-3m</i>	0.36629,0.36629,2.6416,90,90,120	close-packed structure	-	5.85	A	3068

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Pr-Y	Y _{0.5} Pr _{0.5} rt	Mg ₂ hP2,194	$P6_3/mmc$	0.3682,0.3682,0.58294,90,90,120	close-packed structure	-	5.58	X	3068
Pr-Zn	ZnPr lt	CuTi ₂ P2,123	$P4/mmm$	0.3658,0.3658,0.3685,90,90,90	b.c.c. family	-	6.95	X	9122
Pr-Zn	ZnPr rt	CsCl ₂ cP2,221	$Pm-3m$	0.36865,0.36865,0.36865,90,90,90	b.c.c. family	-	6.84	X	8910
Pr-Zn	Zn ₁₁ Pr	BaCd ₁₁ tI48,141	$I4_1/amd$	1.0646,1.0646,0.685,90,90,90	-	-	7.36	A	5378
Pr-Zn	Zn ₁₁ Pr ₃	La ₃ Al ₁₁ oI28,71	$Immm$	0.4502,0.8956,1.3384,90,90,90	-	-	7.03	A	5378
Pr-Zn	Zn ₁₇ Pr ₂ ht	Zn ₁₇ Th ₂ hR57,166	$R-3m$	0.90711,0.90711,1.32592,90,90,120	CaCu ₂ -Zr ₄ Al ₃	gray	7.35	X	19986
Pr-Zn	Zn ₁₇ Pr ₂ rt	Th ₂ Ni ₁₇ hP38,194	$P6_3/mmc$	0.9064,0.9064,0.8845,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	7.35	A	3040
Pr-Zn	Zn ₂ Pr rt	KH ₂ oI12,74	$Imma$	0.464,0.747,0.755,90,90,90	AlB ₂ family	-	6.90	X	30445
Pr-Zn	Zn ₂₂ Pr ₃	Zn ₂₂ Ce ₃ tI100,141	$I4_1/amd$	0.8908,0.8908,2.1303,90,90,90	-	-	7.31	A	5378
Pr-Zn	Zn ₃ Pr	Zn ₃ Y ₃ oP16,62	$Pnma$	0.6655,0.4595,1.0383,90,90,90	-	-	7.05	A	5378
Pr-Zn	Zn ₅ Pr	CaCu ₅ hP6,191	$P6/mmm$	0.5414,0.5414,0.4211,90,90,120	-	-	7.27	X	7340
Pr-Zn	Zn ₅₈ Pr ₁₃	Zn ₅₈ Gd ₁₃ hP142,194	$P6_3/mmc$	1.4585,1.4585,1.4133,90,90,120	-	-	7.17	X	48647
Pt-Pu	PuPt	TiI ₂ oS8,63	$Cmcm$	0.3816,1.0694,0.4428,90,90,90	CrB(III)-FeB	-	16.14	A	3637
Pt-Pu	PuPt ₂	MgCu ₂ cF24,227	$Fd-3m$	0.76,0.76,0.76,90,90,90	Friauf-Laves phase	-	19.19	X	11526
Pt-Pu	PuPt ₃ ht1	Ni ₃ P ₃ tI32,82	$I-4$	1.039,1.039,0.46,90,90,90	-	-	22.19	A	11526
Pt-Pu	PuPt ₃ rt	Cu ₃ Au ₃ cP4,221	$Pm-3m$	0.4107,0.4107,0.4107,90,90,90	close-packed structure	-	19.88	X	11526
Pt-Pu	PuPt ₄	PuPt ₄ oS10,65	$Cmmm$	0.5258,0.8759,0.4563,90,90,90	-	-	16.19	X	11526
Pt-Pu	PuPt ₅	CaCu ₅ hP6,191	$P6/mmm$	0.5262,0.5262,0.4393,90,90,120	-	-	19.22	X	11526
Pt-Pu	Pu ₂ Pt	Co ₃ Si ₂ b ₂ oP12,62	$Pnma$	0.7046,0.4707,0.8865,90,90,90	-	-	15.43	X	11096
Pt-Pu	Pu ₃₁ Pt ₂₀	Pu ₃₁ Pt ₂₀ tI204,140	$I4/mcm$	1.1302,1.1302,3.7388,90,90,90	-	-	15.95	X	10272
Pt-Pu	Pu ₃ Pt ₃	Mn ₂ Si ₃ hP16,193	$P6_3/mcm$	0.849,0.849,0.6084,90,90,120	-	-	15.79	X	8606
Pt-Rb	Rb _{0.5} Pt	Rb _{0.5} Pt ₂ hR30,160	$R3m$	0.26415,0.26415,1.7871,90,90,120	-	gray	10.97	X	48629
Pt-Re	Re _{0.3} Pt _{0.7}	Cu ₂ cF4,225	$Fm-3m$	0.39016,0.39016,0.39016,90,90,90	close-packed structure	-	21.52	X	3493
Pt-Re	Re _{0.75} Pt _{0.25}	Mg ₂ hP2,194	$P6_3/mmc$	0.2767,0.2767,0.4441,90,90,120	close-packed structure	-	21.25	X	50070
Pt-Rh	Rh _{0.108} Pt _{0.892}	Cu ₂ cF4,225	$Fm-3m$	0.39108,0.39108,0.39108,90,90,90	close-packed structure	-	20.56	X	30208
Pt-Ru	Ru _{0.5} Pt _{0.5}	Cu ₂ cF4,225	$Fm-3m$	0.3857,0.3857,0.3857,90,90,90	close-packed structure	-	17.14	X	50364
Pt-Ru	Ru _{0.96} Pt _{0.03}	Mg ₂ hP2,194	$P6_3/mmc$	0.2709,0.2709,0.4299,90,90,120	close-packed structure	-	12.51	X	57852
Pt-S	PtS	PtS ₂ tP4,131	$P4_2/mmc$	0.34700,0.34700,0.61096,90,90,90	cooperite	black gray	10.26	X	1173
Pt-S	PtS ₂	CdI ₂ hP3,164	$P-3m1$	0.35431,0.35431,0.50389,90,90,120	CdI ₂ -PbI ₂ polytype	gray	7.86	X	1043
Pt-Sb	PtSb rt	NiAs ₂ hP4,194	$P6_3/mmc$	0.413,0.413,0.547,90,90,120	stumpflite	yellow creamy	13.02	X	51322
Pt-Sb	PtSb ₂	FeS ₂ cP12,205	$Pa-3$	0.64423,0.64423,0.64423,90,90,90	geversite	white	10.90	X	29570
Pt-Sb	Pt _{0.94} Sb _{0.06}	Cu ₂ cF4,225	$Fm-3m$	0.39466,0.39466,0.39466,90,90,90	close-packed structure	-	20.61	X	49561
Pt-Sb	Pt ₃ Sb	ZrAl ₃ tI16,139	$I4/mmm$	0.39455,0.39455,1.6959,90,90,90	close-packed structure	yellow	17.79	A	33257
Pt-Sb	Pt ₃ Sb ₂	Pt ₃ Sb ₂ oI20,72	$Ibam$	0.6446,1.0939,0.5319,90,90,90	-	yellow creamy	14.68	X	4605
Pt-Sb	Pt _{3.28} Sb _{0.72}	Cu ₃ Au ₃ cP4,221	$Pm-3m$	0.399,0.399,0.399,90,90,90	close-packed structure	-	19.02	X	4111
Pt-Sb	Pt ₃ Sb rt	CuPt ₃ cF32,225	$Fm-3m$	0.7948,0.7948,0.7948,90,90,90	close-packed structure	-	19.68	X	24621
Pt-Sc	ScPt	CsCl ₂ cP2,221	$Pm-3m$	0.3268,0.3268,0.3268,90,90,90	b.c.c. family	-	11.42	X	2694
Pt-Sc	ScPt ₃	Cu ₃ Au ₃ cP4,221	$Pm-3m$	0.3954,0.3954,0.3954,90,90,90	close-packed structure	-	16.93	X	3491
Pt-Se	Se ₂ Pt	Co ₂ Si ₂ b ₂ oP12,62	$Pnma$	0.6592,0.4491,0.8206,90,90,90	-	-	7.79	X	11967
Pt-Sc	Sc ₅₇ Pt ₁₃	Sc ₅₇ Rh ₁₃ cP140,200	$Pm-3$	1.4415,1.4415,1.4415,90,90,90	-	-	5.65	A	17634
Pt-Se	PtSe ₂	CdI ₂ hP3,164	$P-3m1$	0.37278,0.37278,0.50813,90,90,120	sudovikovite	gray	9.59	X	1043
Pt-Se	Pt _{0.67} Se _{0.33}	Cu ₂ cF4,225	$Fm-3m$	0.3736,0.3736,0.3736,90,90,90	close-packed structure	-	19.97	X	49855
Pt-Se	Pt ₃ Se ₄	Pt ₃ Se ₄ mP18,14	$P12_1/c1$	0.6577,0.4610,1.122,90,101.59,90	luberoite	-	12.98	X	10606
Pt-Si	PtSi	FeAs ₂ oP8,62	$Pnma$	0.5577,0.3587,0.5916,90,90,90	AlB ₂ family	-	12.53	X	6993
Pt-Si	Pt _{0.985} Si _{0.015}	Cu ₂ cF4,225	$Fm-3m$	0.3922,0.3922,0.3922,90,90,90	close-packed structure	-	21.20	X	14094
Pt-Si	Pt ₁₂ Si ₅ ht	Pt ₁₂ Si ₅ iP68,85	$P4/n$	1.3404,1.3404,0.5451,90,90,90	-	-	16.83	X	4824
Pt-Si	Pt ₁₂ Si ₅ rt	Ni ₁₂ P ₅ tI34,87	$I4/m$	0.9607,0.9607,0.5542,90,90,90	-	-	16.11	X	11851
Pt-Si	Pt ₂ Si ht	Fe ₂ P ₂ hP9,189	$P-62m$	0.64567,0.64567,0.35772,90,90,120	Fe ₂ P family	-	16.13	A	51932
Pt-Si	Pt ₂ Si rt	ThH ₂ tI6,139	$I4/mmm$	0.3931,0.3931,0.59231,90,90,90	fluorite family	-	15.18	X	51932
Pt-Si	Pt ₂ Si ₃ m	Pt ₂ Sn ₃ hP10,194	$P6_3/mmc$	0.3841,0.3841,1.1924,90,90,120	-	-	10.34	X	13121
Pt-Si	Pt ₃ Si ht1	Fe ₃ C ₂ b ₂ oP16,62	$Pnma$	0.5579,0.7697,0.552,90,90,90	-	-	17.19	X	11851
Pt-Si	Pt ₃ Si ht2	U ₃ Si ₃ tI16,140	$I4/mcm$	0.546,0.546,0.786,90,90,90	close-packed structure	-	17.39	A	2364
Pt-Si	Pt ₃ Si rt	Pt ₃ Ge ₃ mS16,12	$C12_1/m1$	0.77769,0.7767,0.55694,90,136.127,90	close-packed structure	-	17.47	X	51932
Pt-Si	Pt ₆ Si ₅ rt	Pt ₆ Si ₅ mP22,11	$P12_1/m1$	0.6169,0.3499,1.5462,90,93.68,90	-	-	13.07	X	2364
Pt-Sm	SmPt	FeB ₂ hP8,62	$Pnma$	0.7148,0.451,0.5638,90,90,90	CrB(III)-FeB	-	12.63	A	11776
Pt-Sm	SmPt ₂	MgCu ₂ cF24,227	$Fd-3m$	0.766,0.766,0.766,90,90,90	Friauf-Laves phase	-	15.98	X	7450
Pt-Sm	SmPt ₃	Cu ₃ Au ₃ cP4,221	$Pm-3m$	0.40633,0.40633,0.40633,90,90,90	close-packed structure	-	18.21	X	2869
Pt-Sm	SmPt ₅	* _o *72,*	-	0.5305,0.911,2.642,90,90,90	-	-	-	N	7645
Pt-Sm	Sm ₃ Pt ₄	Pu ₃ Pd ₄ hR42,148	$R-3$	1.3372,1.3372,0.5725,90,90,120	b.c.c. family	-	13.84	A	10597
Pt-Sm	Sm ₇ Pt ₃	Th ₇ Fe ₃ hP20,186	$P6_3/mc$	1.0017,1.0017,0.6298,90,90,120	-	-	9.94	A	11195
Pt-Sn	PtSn	NiAs ₂ hP4,194	$P6_3/mmc$	0.41,0.41,0.544,90,90,120	niggliite	-	13.16	X	51322
Pt-Sn	PtSn ₂ hp	* _t P24,*	-	0.7146,0.7146,0.9861,90,90,90	-	-	-	N	16868
Pt-Sn	PtSn ₂	CaF ₂ cF12,225	$Fm-3m$	0.6445,0.6445,0.6445,90,90,90	fluorite family	-	10.73	X	39197
Pt-Sn	PtSn ₃ hp	* _c P32,*	-	0.9002,0.9002,0.9002,90,90,90	-	-	-	N	16868
Pt-Sn	PtSn ₄	PtSn ₄ oS20,68	$Ccce$	0.6418,1.1366,0.6384,90,90,90	-	gray silver	9.55	X	37731
Pt-Sn	Pt _{0.67} Sn _{0.33} m	Cu ₂ cF4,225	$Fm-3m$	0.39756,0.39756,0.39756,90,90,90	close-packed structure	-	17.96	X	49747
Pt-Sn	Pt _{0.9} Sn _{0.1}	Cu ₂ cF4,225	$Fm-3m$	0.39416,0.39416,0.39416,90,90,90	close-packed structure	-	20.33	X	40404
Pt-Sn	Pt ₂ Sn ₃	Pt ₂ Sn ₃ hP10,194	$P6_3/mmc$	0.4334,0.4334,1.2966,90,90,120	-	-	11.75	X	314
Pt-Sn	Pt ₃ Sn	Cu ₃ Au ₃ cP4,221	$Pm-3m$	0.4,0.4,0.4,90,90,90	close-packed structure	-	18.27	X	14094
Pt-Sr	SrPt ₂	MgCu ₂ cF24,227	$Fd-3m$	0.7777,0.7777,0.7777,90,90,90	Friauf-Laves phase	-	13.49	X	909
Pt-Sr	SrPt ₃	CaCu ₅ hP6,191	$P6/mmm$	0.5397,0.5397,0.4364,90,90,120	-	-	16.04	X	885
Pt-Sr	Sr ₂ Pt ₂	Er ₂ Ni ₂ hR45,148	$R-3$	0.9337,0.9337,1.7762,90,90,120	-	-	7.28	A	14095
Pt-Sr	Sr ₂ Pt ₄	Sm ₅ Ge ₄ oP36,62	$Pnma$	0.7879,1.5606,0.8147,90,90,90	-	-	8.08	A	14095
Pt-Sr	Sr ₇ Pt ₃	Sr ₇ Pt ₃ oP40,62	$Pnma$	0.7929,2.4326,0.7100,90,90,90	-	-	5.81	X	16100
Pt-Sr	Sr ₉ Pt	* _c F*,*	-	0.6091,0.6091,0.6091,90,90,90	-	-	-	N	14095
Pt-Ta	TaPt ht	* _t I12,*	-	0.3353,0.3353,0.2801,90,90,90	-	-	-	N	2751
Pt-Ta	TaPt ₂	Au ₂ V ₂ oS12,63	$Cmcm$	0.8403,0.4785,0.4744,90,90,90	close-packed structure	-	19.89	X	2751
Pt-Ta	TaPt ₃ rt	NbPt ₃ mP16,11	$P12_1/m1$	0.4869,0.5537,0.9269,90,100.62,90	close-packed structure	-	20.72	X	2751

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Pt-Ta	TaPt ₃ stab	Cu ₃ Ti, oP8,59	<i>Pmmn</i>	0.456,0.5538,0.4874,90,90,90	close-packed structure	-	20.67	A	2751
Pt-Ta	Ta _{0.09} Pt _{0.91}	Cu, cF4,225	<i>Fm-3m</i>	0.39298,0.39298,0.39298,90,90,90	close-packed structure	-	21.21	X	44972
Pt-Ta	Ta _{0.8} Pt _{0.2}	(Cr _{0.49} Fe _{0.51}), tP30,136	<i>P4₂/mmn</i>	1.002,1.002,0.52,90,90,90	Frank-Kasper phase	-	17.54	A	1389
Pt-Ta	Ta _{0.8} Pt _{0.2}	TiAl ₃ , tI8,139	<i>I4/mmm</i>	0.391,0.391,0.794,90,90,90	close-packed structure	-	21.04	X	2366
Pt-Tb	TbPt	FeB-b, oP8,62	<i>Pnma</i>	0.7013,0.449,0.5564,90,90,90	CrB(TiI)-FeB	-	13.42	X	13263
Pt-Tb	TbPt ₂ ht	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.67125,0.67125,0.67125,90,90,90	Friauf-Laves phase	-	24.12	X	64137
Pt-Tb	TbPt ₃ rt	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.40824,0.40824,0.40824,90,90,90	close-packed structure	-	18.16	X	3986
Pt-Tb	TbPt ₅	*, o*72,*	-	0.5248,0.9092,2.644,90,90,90	-	-	-	N	7645
Pt-Tb	Tb _{0.75} Pt _{0.25} ht	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.75388,0.75388,0.75388,90,90,90	Friauf-Laves phase	-	17.31	X	7328
Pt-Tb	Tb ₂ Pt	Co ₂ Si-b, oP12,62	<i>Pnma</i>	0.7147,0.4772,0.8763,90,90,90	-	-	11.40	X	15314
Pt-Tb	Tb ₃ Pt	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.70778,0.95421,0.64436,90,90,90	-	-	10.26	A	64137
Pt-Tb	Tb ₃ Pt ₄	Pu ₃ Pd ₄ , hR42,148	<i>R-3</i>	1.31652,1.31652,0.56895,90,90,120	b.c.c. family	-	14.67	A	64137
Pt-Tb	Tb ₅ Pt ₃	Mn ₅ Si ₃ , hP16,193	<i>P6₃/mcm</i>	0.84156,0.84156,0.62303,90,90,120	-	-	11.99	A	64137
Pt-Tb	Tb ₂ Pt ₄	Sm ₃ Ge ₄ , oP36,62	<i>Pnma</i>	0.74944,1.42068,0.75654,90,90,90	-	-	12.99	A	64137
Pt-Tc	Tc _{0.38} Pt _{0.62}	Cu, cF4,225	<i>Fm-3m</i>	0.389,0.389,0.389,90,90,90	close-packed structure	-	17.85	X	1812
Pt-Tc	Tc _{0.67} Pt _{0.33}	Mg, hP2,194	<i>P6₃/mmc</i>	0.276,0.276,0.4385,90,90,120	close-packed structure	-	14.93	X	1871
Pt-Te	PtTe	ZrCl, hR12,166	<i>R-3m</i>	0.3963,0.3963,1.998,90,90,120	-	gray yellowish	11.83	X	24147
Pt-Te	PtTe ₂	CdI ₂ , hP3,164	<i>P-3m1</i>	0.4009,0.4009,0.51,90,90,120	CdI ₂ -PbI ₂ polytype	white	10.53	X	46079
Pt-Te	Pt ₂ Te ₃ rt	Pt ₂ Te ₃ , hR30,166	<i>R-3m</i>	0.4003,0.4003,5.089,90,90,120	-	yellow	10.91	X	24147
Pt-Te	Pt ₃ Te ₄	Pt ₃ Te ₄ , hR21,166	<i>R-3m</i>	0.3988,0.3988,3.539,90,90,120	-	yellow pale	11.20	X	24147
Pt-Th	ThPt	TiI, oS8,63	<i>Cmcm</i>	0.39,1.109,0.4454,90,90,90	CrB(TiI)-FeB	-	14.73	X	1536
Pt-Th	ThPt ₅	*, o**,*	-	0.5364,0.9157,2.66,90,90,90	-	-	-	N	7450
Pt-Th	Th _{0.99} Pt _{0.01} rt	Cu, cF4,225	<i>Fm-3m</i>	0.50942,0.50942,0.50942,90,90,90	close-packed structure	-	11.64	X	2170
Pt-Th	Th ₃ Pt ₅	Th ₃ Pd ₅ , hP8,189	<i>P-62m</i>	0.7162,0.7162,0.3908,90,90,120	AlB ₂ family	-	15.99	A	2170
Pt-Th	Th ₇ Pt ₃	Th ₇ Fe ₃ , hP20,186	<i>P6₃/mc</i>	1.0126,1.0126,0.6346,90,90,120	-	-	13.02	A	2170
Pt-Ti	TiPt ht	CSiCl, cP2,221	<i>Pm-3m</i>	0.3192,0.3192,0.3192,90,90,90	b.c.c. family	-	12.41	X	5209
Pt-Ti	TiPt rt	AuCd, oP4,51	<i>Pnma</i>	0.45915,0.27607,0.48359,90,90,90	close-packed structure	-	13.17	A	15542
Pt-Ti	TiPt ₃ Pt+	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.39056,0.39056,0.39056,90,90,90	close-packed structure	-	17.65	X	43920
Pt-Ti	TiPt ₃ Pt-	TiNi ₃ , hP16,194	<i>P6₃/mmc</i>	0.552,0.552,0.9019,90,90,120	close-packed structure	-	17.67	A	4767
Pt-Ti	TiPt ₈ rt	TiPt ₈ , tI18,139	<i>I4/mmm</i>	0.8312,0.8312,0.3897,90,90,90	close-packed structure	-	19.84	X	2684
Pt-Ti	Ti _{0.06} Pt _{0.94}	Cu, cF4,225	<i>Fm-3m</i>	0.39173,0.39173,0.39173,90,90,90	close-packed structure	-	20.58	X	43920
Pt-Ti	Ti _{0.25} Pt _{0.75} m	Cu, cF4,225	<i>Fm-3m</i>	0.3925,0.3925,0.3925,90,90,90	close-packed structure	-	17.39	X	55802
Pt-Ti	Ti _{0.75} Pt _{0.25} m	Cu, cF4,225	<i>Fm-3m</i>	0.3917,0.3917,0.3917,90,90,90	close-packed structure	-	9.36	X	49749
Pt-Ti	Ti ₃ Pt	Cr ₃ Si, cP8,223	<i>Pm-3n</i>	0.50327,0.50327,0.50327,90,90,90	Frank-Kasper phase	-	8.83	X	3734
Pt-Ti	Ti ₃ Pt ₅ ht	Au ₅ (Zn _{0.67} Gd _{0.33}) ₃ , oI32,72	<i>Ibam</i>	0.5441,1.0953,0.8169,90,90,90	close-packed structure	-	15.27	X	4211
Pt-Tl	TlPt	CoSn, hP6,191	<i>P6/mmm</i>	0.5605,0.5605,0.4639,90,90,120	AlB ₂ family	-	15.77	X	96
Pt-Tl	Tl _{0.06} Pt _{0.94}	Cu, cF4,225	<i>Fm-3m</i>	0.3941,0.3941,0.3941,90,90,90	close-packed structure	-	21.23	X	11484
Pt-Tl	Tl ₂ Pt	CuAl ₂ , tI12,140	<i>I4/mcm</i>	0.6822,0.6822,0.5565,90,90,90	-	-	15.49	X	6603
Pt-Tl	Tl ₂ Pt ₃	Tl ₂ Pt ₃ , hP20,194	<i>P6₃/mmc</i>	0.5645,0.5645,1.3851,90,90,120	-	-	17.27	X	4003
Pt-Tm	TmPt	FeB-b, oP8,62	<i>Pnma</i>	0.6855,0.4446,0.5496,90,90,90	CrB(TiI)-FeB	-	14.44	A	13263
Pt-Tm	TmPt ₂	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.7556,0.7556,0.7556,90,90,90	Friauf-Laves phase	-	17.22	X	2869
Pt-Tm	TmPt ₃	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.4044,0.4044,0.4044,90,90,90	close-packed structure	-	18.94	X	3491
Pt-Tm	TmPt ₅ hex	*, hP36,*	-	0.522,0.522,2.647,90,90,120	-	gray silver	-	N	33220
Pt-Tm	TmPt ₅ orth	*, o*72,*	-	0.5213,0.9071,2.641,90,90,90	-	-	-	N	7645
Pt-Tm	Tm ₂ Pt	Co ₂ Si-b, oP12,62	<i>Pnma</i>	0.7008,0.4688,0.8619,90,90,90	-	-	12.50	A	11195
Pt-Tm	Tm ₃ Pt	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.6981,0.9314,0.6349,90,90,90	-	-	11.29	A	11937
Pt-Tm	Tm ₃ Pt ₄	Pu ₃ Pd ₄ , hR42,148	<i>R-3</i>	1.2933,1.2933,0.5635,90,90,120	b.c.c. family	-	15.71	A	10597
Pt-Tm	Tm ₅ Pt ₃	Mn ₅ Si ₃ , hP16,193	<i>P6₃/mcm</i>	0.8252,0.8252,0.6128,90,90,120	-	-	13.14	A	11195
Pt-Tm	Tm ₅ Pt ₄	Sm ₃ Ge ₄ , oP36,62	<i>Pnma</i>	0.7385,1.4378,0.746,90,90,90	-	-	13.63	A	11134
Pt-U	UPt rt	PdBi, mP16,4	<i>P12₁</i>	0.5727,1.078,0.576,90,99,6,90	CrB(TiI)-FeB	-	16.41	X	21681
Pt-U	UPt ₂	UPt ₂ , oS12,63	<i>Cmcm</i>	0.412,0.968,0.560,90,90,90	AlB ₂ family	-	18.68	X	1025
Pt-U	UPt ₃ rt	Mg ₃ Cd, hP8,194	<i>P6₃/mmc</i>	0.5764,0.5764,0.4899,90,90,120	close-packed structure	-	19.40	X	646
Pt-U	UPt ₅	Be ₅ Au, cF24,216	<i>F-43m</i>	0.7427,0.7427,0.7427,90,90,90	Friauf-Laves phase	-	19.68	A	21236
Pt-U	U _{0.076} Pt _{0.924}	Cu, cF4,225	<i>Fm-3m</i>	0.3956,0.3956,0.3956,90,90,90	close-packed structure	-	21.28	X	1215
Pt-V	VPt rt	AuCd, oP4,51	<i>Pnma</i>	0.4413,0.2693,0.4767,90,90,90	close-packed structure	-	14.42	X	7558
Pt-V	VPt ₂ ht	MoPt ₂ , oI6,71	<i>Immm</i>	0.273,0.38,0.8323,90,90,90	close-packed structure	-	16.97	X	2594
Pt-V	VPt ₃ ht	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.3887,0.3887,0.3887,90,90,90	close-packed structure	-	17.99	X	7558
Pt-V	VPt ₃ rt	TiAl ₃ , tI8,139	<i>I4/mmm</i>	0.3839,0.3839,0.7796,90,90,90	close-packed structure	-	18.39	X	7558
Pt-V	V _{0.05} Pt _{0.95} ht	Cu, cF4,225	<i>Fm-3m</i>	0.3916,0.3916,0.3916,90,90,90	close-packed structure	-	20.78	X	53476
Pt-V	V _{0.9375} Pt _{0.0625}	W, cI2,229	<i>Im-3m</i>	0.3034,0.3034,0.3034,90,90,90	b.c.c. family	-	7.13	X	52207
Pt-V	V ₃ Pt rt	Cr ₃ Si, cP8,223	<i>Pm-3n</i>	0.48155,0.48155,0.48155,90,90,90	Frank-Kasper phase	-	10.35	X	19297
Pt-V	V ₃ Pt stab	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.3918,0.3918,0.3918,90,90,90	close-packed structure	-	9.61	X	2034
Pt-W	WPt ₂ rt	MoPt ₂ , oI6,71	<i>Immm</i>	0.2762,0.3907,0.8251,90,90,90	close-packed structure	-	21.41	A	4767
Pt-W	W _{0.5} Pt _{0.5}	Cu, cF4,225	<i>Fm-3m</i>	0.39223,0.39223,0.39223,90,90,90	close-packed structure	-	20.86	X	49854
Pt-Y	YPt	FeB-b, oP8,62	<i>Pnma</i>	0.7018,0.4476,0.5547,90,90,90	CrB(TiI)-FeB	-	10.83	A	5871
Pt-Y	YPt ₂	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.75936,0.75936,0.75936,90,90,90	Friauf-Laves phase	-	14.54	X	5871
Pt-Y	YPt ₃	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.4069,0.4069,0.4069,90,90,90	close-packed structure	-	16.62	X	7450
Pt-Y	YPt ₅	*, o*72,*	-	0.5239,0.9123,2.6533,90,90,90	-	-	-	N	5871
Pt-Y	Y ₂ Pt	Co ₂ Si-b, oP12,62	<i>Pnma</i>	0.7141,0.4764,0.8753,90,90,90	-	-	8.32	A	11195
Pt-Y	Y ₃ Pt	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.7101,0.9584,0.6454,90,90,90	-	-	6.98	X	11937
Pt-Y	Y ₃ Pt ₃	Mn ₅ Si ₃ , hP16,193	<i>P6₃/mcm</i>	0.837,0.837,0.6276,90,90,120	-	-	8.98	A	11195
Pt-Y	Y ₃ Pt ₄	Sm ₃ Ge ₄ , oP36,62	<i>Pnma</i>	0.7458,1.4546,0.7519,90,90,90	-	-	9.97	X	11134
Pt-Y	Y ₇ Pt ₃	Th ₇ Fe ₃ , hP20,186	<i>P6₃/mc</i>	0.9864,0.9864,0.6299,90,90,120	-	-	7.56	A	2694
Pt-Yb	YbPt	FeB-b, oP8,62	<i>Pnma</i>	0.6805,0.4416,0.5492,90,90,90	CrB(TiI)-FeB	-	14.82	X	5888
Pt-Yb	YbPt ₂ ht	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.7546,0.7546,0.7546,90,90,90	Friauf-Laves phase	-	17.41	X	8954
Pt-Yb	YbPt ₃	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.4081,0.4081,0.4081,90,90,90	close-packed structure	blue silver	18.53	X	20093
Pt-Yb	Yb ₂ Pt	PbCl ₂ , oP12,62	<i>Pnma</i>	0.7614,0.44,0.8957,90,90,90	-	-	11.98	A	8954
Pt-Yb	Yb ₃ Pt ₄	Pu ₃ Pd ₄ , hR42,148	<i>R-3</i>	1.28687,1.28687,0.5616,90,90,120	b.c.c. family	-	16.08	X	56156

System	Substance	Prototype	H-M	Unit Cell Parameters <i>a,b,c,a,β,γ</i> (nm,°)	Family	Color	<i>D</i> _X	C	Ref.
Pt-Yb	Yb ₃ Pt ₅ rt	* ₃ mS32,12	<i>C12/m1</i>	0.7009,0.8889,0.9488,90,94,8,90	-	gray silver	-	N	20052
Pt-Yb	Yb ₃ Pt ₂	Mn ₃ C ₂ ,mS28,15	<i>C12/c1</i>	1.5896,0.6486,0.7576,90,97,62,90	-	-	10.77	A	8954
Pt-Yb	Yb ₃ Pt ₃ rt	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8337,0.8337,0.6251,90,90,120	-	-	12.80	A	8954
Pt-Yb	Yb ₃ Pt ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.739,1.4319,0.7506,90,90,90	-	-	13.76	A	8954
Pt-Yb	Yb ₃ Pt ₉	Yb ₃ Pt ₉ ,oS56,65	<i>Cmmm</i>	1.3372,1.3555,0.5654,90,90,90	-	-	16.99	X	48322
Pt-Zn	ZnPt	CuAu,tP2,123	<i>P4/mmm</i>	0.2858,0.2858,0.3465,90,90,90	close-packed structure	-	15.28	X	51302
Pt-Zn	ZnPt ₃ rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3893,0.3893,0.3893,90,90,90	close-packed structure	-	18.31	X	433
Pt-Zn	Zn _{0.25} Pt _{0.75}	Cu ₃ cF4,225	<i>Fm-3m</i>	0.3964,0.3964,0.3964,90,90,90	close-packed structure	-	17.35	X	433
Pt-Zn	Zn _{1.7} Pt ₁ ht2	Zn _{1.7} Pt ₁ hP6,164	<i>P-3m1</i>	0.41113,0.41113,0.27445,90,90,120	-	yellowish	12.66	X	433
Pt-Zn	Zn _{10.72} Pt ₂	Zn ₉ (Zn _{0.5} Fe _{0.5}) ₂ Fe ₂ ,cI52,217	<i>I-43m</i>	0.90819,0.90819,0.90819,90,90,90	γ-brass	-	9.67	X	41638
Pt-Zn	Zn ₁₂ Pt ₇ ht1	Zn ₁₂ Pt ₇ ,oP38,55	<i>Pbam</i>	0.694,2.879,0.276,90,90,90	-	-	12.95	X	4611
Pt-Zn	Zn _{20.34} Pt _{4.25}	Zn _{20.34} Pt _{4.25} cF448,216	<i>F-43m</i>	1.814,1.814,1.814,90,90,90	-	-	9.61	X	43048
Pt-Zn	Zn _{20.47} Pt _{5.12}	Zn _{20.47} Pt _{5.12} cF464,216	<i>F-43m</i>	1.8091,1.8091,1.8091,90,90,90	-	-	10.49	X	43048
Pt-Zn	Zn _{36.17} Pt _{10.83}	Zn ₃₀ (Zn _{0.56} Pt _{0.44}) ₁₁ Pt ₆ cF392,216	<i>F-43m</i>	1.81128,1.81128,1.81128,90,90,90	-	-	10.01	X	4946
Pt-Zn	Zn ₄₉ Pt ₂₉	Zn ₄₉ Pt ₂₉ ,oS156,38	<i>Amm2</i>	0.279,1.18952,0.698,90,90,90	-	golden	12.70	X	47578
Pt-Zr	ZrPt ht	CsCl,cP2,221	<i>Pm-3m</i>	0.3385,0.3385,0.3385,90,90,90	b.c.c. family	-	12.26	X	49524
Pt-Zr	ZrPt rt	TiLoS8,63	<i>Cmcm</i>	0.34082,1.03,0.42806,90,90,90	CrB(TII)-FeB	-	12.66	X	49524
Pt-Zr	ZrPt ₃ hex	TiNi ₃ ,hP16,194	<i>P6₃/mmc</i>	0.56524,0.56524,0.9242,90,90,120	close-packed structure	-	17.57	A	43920
Pt-Zr	ZrPt ₈	TiPt ₈ ,tI18,139	<i>I4/mmm</i>	0.8386,0.8386,0.4027,90,90,90	close-packed structure	-	19.37	A	4221
Pt-Zr	Zr _{0.09} Pt _{0.91}	Cu ₃ cF4,225	<i>Fm-3m</i>	0.39471,0.39471,0.39471,90,90,90	close-packed structure	-	20.06	X	43920
Pt-Zr	Zr _{1.2} Pt _{2.8} Pt+	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4051,0.4051,0.4051,90,90,90	close-packed structure	-	16.38	X	49524
Pt-Zr	Zr ₂ Pt stab	Ti ₂ Ni,cF96,227	<i>Fd-3m</i>	1.2574,1.2574,1.2574,90,90,90	-	-	10.09	A	984
Pt-Zr	Zr ₃ Pt ₄ ht	Pu ₃ Pd ₄ ,hR42,148	<i>R-3</i>	1.2558,1.2558,0.5545,90,90,120	b.c.c. family	-	13.87	X	49524
Pt-Zr	Zr ₃ Pt ₄ lt	* ₃ aP28,2	<i>P-1</i>	0.7368,0.7535,1.0527,101.71,97.1,116.	-	-	14.03	N	49524
Pt-Zr	Zr ₃ Pt ₄ rt	* ₃ aP14,2	<i>P-1</i>	0.55212,0.7388,0.7485,111.7,106.481,104.412	-	-	14.02	N	49524
Pt-Zr	Zr ₃ Pt ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.821,0.821,0.5385,90,90,120	-	-	11.00	X	53811
Pt-Zr	Zr ₇ Pt ₁₀	Zr ₇ Ni ₁₀ ,oS68,64	<i>Cmce</i>	1.3087,0.9613,0.9612,90,90,90	-	-	14.22	A	49524
Pt-Zr	Zr ₉ Pt ₁₁	Zr ₉ Ni ₁₁ ,tP44,83	<i>P4/m</i>	1.0356,1.0356,0.6913,90,90,90	-	-	13.29	A	51688
Pu-Re	PuRe ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.53956,0.53956,0.87228,90,90,120	Friauf-Laves phase	-	18.62	A	9348
Pu-Rh	PuRh ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7488,0.7488,0.7488,90,90,90	Friauf-Laves phase	-	14.23	X	7450
Pu-Rh	PuRh ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.404,0.404,0.404,90,90,90	close-packed structure	-	13.92	X	5271
Pu-Rh	Pu ₃₁ Rh ₂₀	Pu ₃₁ Pt ₂₀ ,tI204,140	<i>I4/mcm</i>	1.1076,1.1076,3.6933,90,90,90	-	-	14.11	X	10272
Pu-Rh	Pu ₃ Rh ₃	Pu ₃ Rh ₃ ,tP32,130	<i>P4/ncc</i>	1.0941,1.0941,0.60203,90,90,90	-	-	14.09	X	8388
Pu-Rh	Pu ₃ Rh ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.7276,1.4332,0.7419,90,90,90	-	-	14.01	X	10251
Pu-Ru	PuRu	CsCl,cP2,221	<i>Pm-3m</i>	0.33635,0.33635,0.33635,90,90,90	b.c.c. family	-	15.06	X	3637
Pu-Ru	PuRu ₂	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7472,0.7472,0.7472,90,90,90	Friauf-Laves phase	-	14.21	X	3637
Pu-Ru	Pu ₃ Ru	* ₃ oP16,47	<i>Pmmm</i>	0.6216,0.6924,0.8093,90,90,90	-	-	-	N	1809
Pu-Ru	Pu ₅ Ru ₃	W ₅ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.0745,1.0745,0.5719,90,90,90	-	-	15.32	X	8605
Pu-S	PuS	NaCl,cF8,225	<i>Fm-3m</i>	0.55437,0.55437,0.55437,90,90,90	rocksalt family	yellow	10.76	X	30202
Pu-S	PuS _{1.9}	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.3943,0.3943,0.7962,90,90,90	-	black	8.18	X	2946
Pu-S	PuS ₂	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.3981,0.3981,0.7962,90,90,90	-	-	8.11	A	3083
Pu-S	Pu ₂ S ₃ ht1	* ₃ o***,*	-	0.718,1.05,1.298,90,90,90	-	-	-	N	2946
Pu-S	Pu ₂ S ₃ rt	* ₃ oP*,*	-	0.769,0.841,1.515,90,90,90	-	-	-	N	2946
Pu-S	Pu _{2.67} S ₄ ht2	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.84584,0.84584,0.84584,90,90,90	-	-	8.56	A	4834
Pu-Sb	PuSb hp1	CsCl,cP2,221	<i>Pm-3m</i>	0.366,0.366,0.366,90,90,90	b.c.c. family	-	12.39	X	23399
Pu-Sb	PuSb hp2	CuTi,tP2,123	<i>P4/mmm</i>	0.361,0.361,0.322,90,90,90	b.c.c. family	-	14.47	X	23399
Pu-Sb	PuSb rt	NaCl,cF8,225	<i>Fm-3m</i>	0.62375,0.62375,0.62375,90,90,90	rocksalt family	-	10.01	X	23399
Pu-Sb	PuSb ₂	SmSb ₂ ,oS24,64	<i>Cmce</i>	0.619,0.605,1.758,90,90,90	-	-	9.84	A	10811
Pu-Sb	Pu ₄ Sb ₃	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.92394,0.92394,0.92394,90,90,90	-	-	11.30	A	30202
Pu-Sc	Sc _{0.06} Pu _{0.92} ht	W ₂ cI2,229	<i>Im-3m</i>	0.3657,0.3657,0.3657,90,90,90	b.c.c. family	-	15.49	X	2215
Pu-Sc	Sc _{0.08} Pu _{0.92} stab	Cu ₃ cF4,225	<i>Fm-3m</i>	0.4655,0.4655,0.4655,90,90,90	close-packed structure	-	15.02	X	2215
Pu-Sc	Sc _{0.41} Pu _{0.59} rt	Nd,hP4,194	<i>P6₃/mmc</i>	0.331,0.331,1.0715,90,90,120	close-packed structure	-	10.61	X	3637
Pu-Se	PuSe rt	NaCl,cF8,225	<i>Fm-3m</i>	0.57992,0.57992,0.57992,90,90,90	rocksalt family	-	11.00	X	30202
Pu-Se	PuSe ₂ Pu+	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.4132,0.4132,0.8343,90,90,90	-	-	9.37	A	4834
Pu-Se	Pu ₂ Se ₃ rt	Th ₂ S ₃ ,oP20,62	<i>Pnma</i>	1.11,0.41,1.132,90,90,90	-	-	9.35	A	2946
Pu-Se	Pu _{2.67} Se ₄ ht	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.8802,0.8802,0.8802,90,90,90	-	-	9.42	A	4834
Pu-Si	PuSi	FeB-b,oP8,62	<i>Pnma</i>	0.7936,0.3851,0.57336,90,90,90	CrB(TII)-FeB	-	10.31	A	42502
Pu-Si	PuSi _{1.86}	GdSi ₄ ,oI12,74	<i>Imma</i>	0.3964,0.3978,1.36,90,90,90	-	-	9.18	A	2629
Pu-Si	PuSi ₂	AlB ₂ ,hP3,191	<i>P6/mmm</i>	0.38793,0.38793,0.4086,90,90,120	AlB ₂ family	-	9.36	X	42502
Pu-Si	PuSi ₂	ThSi ₂ ,tI12,141	<i>I4₁/amd</i>	0.398,0.398,1.358,90,90,90	-	-	9.27	X	300
Pu-Si	Pu _{0.99} Si _{0.01} ht3	Cu ₃ cF4,225	<i>Fm-3m</i>	0.4626,0.4626,0.4626,90,90,90	close-packed structure	-	16.23	X	2629
Pu-Si	Pu ₃ Si ₂	U ₃ Si ₂ ,tP10,127	<i>P4/mbm</i>	0.75061,0.75061,0.40642,90,90,90	-	-	11.43	A	42502
Pu-Si	Pu ₅ Si ₃	W ₅ Si ₃ ,tI32,140	<i>I4/mcm</i>	1.1409,1.1409,0.5448,90,90,90	-	-	12.22	X	2065
Pu-Sm	Pu _{0.1} Sm _{0.9} rt	Sm,hR9,166	<i>R-3m</i>	0.3607,0.3607,2.6068,90,90,120	close-packed structure	-	8.13	A	4652
Pu-Sm	Pu _{0.2} Sm _{0.8} rt	Nd,hP4,194	<i>P6₃/mmc</i>	0.358,0.358,1.1556,90,90,120	close-packed structure	-	8.76	X	4652
Pu-Sn	PuSn ₂	HfGa ₂ ,tI24,141	<i>I4₁/amd</i>	0.443,0.443,3.1,90,90,90	close-packed structure	-	10.51	A	8172
Pu-Sn	PuSn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.463,0.463,0.463,90,90,90	close-packed structure	-	10.04	X	28961
Pu-Te	PuTe hp	CsCl,cP2,221	<i>Pm-3m</i>	0.357,0.357,0.357,90,90,90	b.c.c. family	-	13.56	X	23399
Pu-Te	PuTe	NaCl,cF8,225	<i>Fm-3m</i>	0.61774,0.61774,0.61774,90,90,90	rocksalt family	-	10.47	X	23399
Pu-Te	PuTe ₂	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.4391,0.4391,0.8938,90,90,90	-	-	9.62	A	4834
Pu-Te	PuTe ₃	NdTe ₃ ,oS16,63	<i>Cmcm</i>	0.4338,2.56,0.4338,90,90,90	-	-	8.64	A	9350
Pu-Te	Pu _{2.67} Te ₄	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.9355,0.9355,0.9355,90,90,90	-	-	9.43	A	4834
Pu-Th	Th _{0.55} Pu _{0.45} rt	Cu ₃ cF4,225	<i>Fm-3m</i>	0.4956,0.4956,0.4956,90,90,90	close-packed structure	-	12.96	X	859
Pu-Th	Th ₃ Pu ₇	* ₃ o*20,*	-	0.622,0.709,1.162,90,90,90	-	-	-	N	4044
Pu-U	U _{0.002} Pu _{0.998} ht3	Cu ₃ cF4,225	<i>Fm-3m</i>	0.463,0.463,0.463,90,90,90	close-packed structure	-	16.33	X	2215
Pu-U	U _{0.02} Pu _{0.98} ht1	Pu,mS34,12	<i>C12/m1</i>	1.1818,1.0418,0.7815,90,128.83,90	-	-	18.37	X	1769
Pu-U	U _{0.0097} Pu _{0.9903} ht	W ₂ cI2,229	<i>Im-3m</i>	0.3608,0.3608,0.3608,90,90,90	b.c.c. family	-	17.21	X	2215
Pu-U	U _{0.4} Pu _{0.6} rt	(U _{0.4} Pu _{0.6}),hR174,166	<i>R-3m</i>	1.50764,1.50764,1.85926,90,90,120	-	-	19.08	X	31467

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Pu-U	U _{0.85} Pu _{0.15} ht1	U ₂ P30,136	$P4_2/mnm$	1.061,1.061,0.5605,90,90,90	Frank-Kasper phase	-	18.86	A	1080
Pu-U	U _{0.855} Pu _{0.145} rt	U ₂ O ₈ ,63	$Cmcm$	0.28624,0.58561,0.49627,90,90,90	close-packed structure	-	19.08	A	1892
Pu-Zn	Zn _{0.0292} Pu _{0.9708} ht3	Cu ₂ CF ₄ ,225	$Fm-3m$	0.4621,0.4621,0.4621,90,90,90	close-packed structure	-	16.07	X	1293
Pu-Zn	Zn ₁₇ Pu ₂ ht Zn+	Zn ₁₇ Th ₂ ,hR57,166	$R-3m$	0.895,0.895,1.31,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	8.77	A	3496
Pu-Zn	Zn ₁₇ Pu ₂ rt Zn+	Th ₂ Ni ₁₇ ,hP38,194	$P6_3/mmc$	0.898,0.898,0.885,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	8.59	A	3496
Pu-Zn	Zn ₂ Pu	MgCu ₂ ,cF24,227	$Fd-3m$	0.776,0.776,0.776,90,90,90	Friauf-Laves phase	-	10.65	X	1134
Pu-Zn	Zn ₂₂ Pu ₃	Zn ₂₂ Ce ₃ ,tI100,141	$I4_1/amd$	0.885,0.885,2.118,90,90,90	-	-	8.69	X	3756
Pu-Zn	Zn ₃₈ Pu ₁₃	Zn ₃₈ Gd ₁₃ ,hP142,194	$P6_3/mmc$	1.443,1.443,1.414,90,90,120	-	-	9.07	X	3296
Pu-Zr	Pu _{0.1} Zr _{0.9} rt	Mg,hP2,194	$P6_3/mmc$	0.32351,0.32351,0.51892,90,90,120	close-packed structure	-	7.52	X	6067
Pu-Zr	Pu _{0.5} Zr _{0.5} ht3	Cu ₂ CF ₄ ,225	$Fm-3m$	0.4585,0.4585,0.4585,90,90,90	close-packed structure	-	11.55	X	6067
Pu-Zr	Pu _{0.72} Zr _{0.28} rt	Hg ₂ U ₂ ,hP3,191	$P6/mmm$	0.5055,0.5055,0.3123,90,90,120	AlB ₂ family	-	9.22	X	1294
Pu-Zr	Pu _{0.80} Zr _{0.20} ht	W,cI2,229	$Im-3m$	0.3648,0.3648,0.3648,90,90,90	b.c.c. family	-	14.60	X	2215
Pu-Zr	Pu ₂₈ Zr rt	Pu ₂₈ Zr,tI116,88	$I4_1/a$	1.81899,1.81899,0.78576,90,90,90	-	-	17.69	X	11931
Pu-Zr	Pu ₄ Zr rt	*tP80,130	$P4/ncc$	1.0893,1.0893,1.4889,90,90,90	-	-	-	N	3494
Ra-S	RaS	NaCl,cF8,225	$Fm-3m$	0.6575,0.6575,0.6575,90,90,90	rocksalt family	-	6.03	X	4720
Ra-Se	RaSe	NaCl,cF8,225	$Fm-3m$	0.68,0.68,0.68,90,90,90	rocksalt family	-	6.44	X	4720
Rb-S	Rb ₂ S hp1	Cs ₂ S,oP12,62	$Pnma$	0.8167,0.5101,0.9957,90,90,90	-	white	3.25	X	56744
Rb-S	Rb ₂ S hp2	Co _{1.75} Ge ₂ ,hP6,194	$P6_3/mmc$	0.53076,0.53076,0.68061,90,90,120	AlB ₂ family	white	4.06	X	56744
Rb-S	Rb ₂ S	CaF ₂ ,cF12,225	$Fm-3m$	0.7726,0.7726,0.7726,90,90,90	fluorite family	white	2.92	X	56744
Rb-S	Rb ₂ S ₂ ht	Na ₂ [O ₂],hP12,189	$P-62m$	0.887,0.887,0.6071,90,90,120	-	yellow bright	2.83	X	28126
Rb-S	Rb ₂ S ₂ rt	Rb ₂ [O ₂],oI8,71	$Immm$	0.4994,0.6857,0.8656,90,90,90	-	-	2.63	X	28126
Rb-S	Rb ₂ S ₃	K ₂ S ₃ ,oS20,36	$Cmc2_1$	0.7513,1.0375,0.7769,90,90,90	-	-	2.93	X	13593
Rb-S	Rb ₂ S ₅	Tl ₂ S ₅ ,oP28,19	$P2_12_12_1$	0.6633,0.6837,1.7845,90,90,90	-	orange red	2.72	X	12685
Rb-Sb	RbSb mon	LiAs,mP16,14	$P12_1/c1$	0.73566,0.71341,1.3793,90,114.28,90	-	black	4.17	X	38799
Rb-Sb	RbSb orth	NaP,oP16,19	$P2_12_12_1$	0.7197,0.7315,1.2815,90,90,90	-	black	4.08	X	12716
Rb-Sb	RbSb ₂ rt	RbSb ₂ ,mS12,12	$C12/m1$	1.403,0.414,0.8557,90,104.45,90	-	gray dark	4.54	X	52452
Rb-Sb	Rb _{1.5} Sb _{0.5} Sb+	NaTi,cF16,227	$Fd-3m$	0.884,0.884,0.884,90,90,90	b.c.c. family	-	3.64	X	1422
Rb-Sb	Rb ₃ Sb rt	Na ₃ As,hP8,194	$P6_3/mmc$	0.6283,0.6283,1.118,90,90,120	-	gray dark	3.29	X	1499
Rb-Sb	Rb ₃ Sb ₄	Rb ₅ As ₄ ,mS20,12	$C12/m1$	1.27803,0.57518,1.1631,90,113.701,90	-	-	3.88	X	39119
Rb-Se	Rb ₂ Se	CaF ₂ ,cF12,225	$Fm-3m$	0.8019,0.8019,0.8019,90,90,90	fluorite family	yellow	3.22	X	10889
Rb-Se	Rb ₂ Se ₂	Na ₂ [O ₂],hP12,189	$P-62m$	0.9305,0.9305,0.6202,90,90,120	-	red rusty	3.52	X	28126
Rb-Se	Rb ₂ Se ₃	K ₂ S ₃ ,oS20,36	$Cmc2_1$	0.7856,1.0858,0.7977,90,90,90	-	black	3.98	X	13593
Rb-Se	Rb ₂ Se ₅	Tl ₂ S ₅ ,oP28,19	$P2_12_12_1$	0.691,0.7135,1.8299,90,90,90	-	black brown	4.17	X	12685
Rb-Si	RbSi hp	NaPb,tI64,142	$I4_1/acd$	1.083,1.083,1.758,90,90,90	-	-	2.93	A	16714
Rb-Si	RbSi rt	KGe,cP64,218	$P-43n$	1.3042,1.3042,1.3042,90,90,90	-	black	2.72	X	46764
Rb-Si	Rb ₁₂ Si ₁₇	Rb ₁₂ Si ₁₇ ,mP464,14	$P12_1/c1$	2.4445,1.4017,4.6038,90,91.32,90	-	-	2.53	X	34568
Rb-Si	Rb _{3.075} Si ₂₃ rt	Na ₄ Si ₂₃ ,cP54,223	$Pm-3n$	1.02719,1.02719,1.02719,90,90,90	clathrate	-	2.78	X	38062
Rb-Sn	RbSn	NaPb,tI64,142	$I4_1/acd$	1.1757,1.1757,1.9215,90,90,90	-	gray silver	4.08	X	37093
Rb-Sn	Rb ₁₂ Sn ₁₇	Rb ₁₂ Sn ₁₇ ,oP136,19	$P2_12_12_1$	1.5041,1.5393,2.1478,90,90,90	-	gray dark	4.07	X	42457
Rb-Sn	Rb ₂ Sn ₁₁	Rb ₂ Sn ₁₁ ,cI592,230	$la-3d$	2.41162,2.41162,2.41162,90,90,90	clathrate	black	5.59	X	45695
Rb-Sn	Rb ₄ Sn ₂₂ ht	Cs ₄ Sn ₂₂ ,cP78,223	$Pm-3n$	1.20645,1.20645,1.20645,90,90,90	-	-	5.59	X	51752
Rb-Te	RbTe	CsTe,oP8,55	$Pbam$	0.5854,1.1151,0.4821,90,90,90	-	black violet	4.50	X	32721
Rb-Te	RbTe ₆	RbTe ₆ ,mS28,15	$C12/c1$	1.1300,0.7443,1.2702,90,109.37,90	-	black	5.61	X	29738
Rb-Te	Rb ₂ Te ht1	Co _{1.75} Ge ₂ ,hP6,194	$P6_3/mmc$	0.6111,0.6111,0.919,90,90,120	AlB ₂ family	-	3.34	X	40255
Rb-Te	Rb ₂ Te m	CaF ₂ ,cF12,225	$Fm-3m$	0.84902,0.84902,0.84902,90,90,90	fluorite family	green yellow	3.24	X	40255
Rb-Te	Rb ₂ Te rt	PbCl ₂ ,oP12,62	$Pnma$	0.8966,0.55715,1.09543,90,90,90	-	yellow light	3.62	X	40255
Rb-Te	Rb ₂ Te ₂ m	Na ₂ [O ₂],hP12,189	$P-62m$	0.9935,0.9935,0.6627,90,90,120	-	-	3.75	X	28126
Rb-Te	Rb ₂ Te ₃	K ₂ Te ₃ ,oP20,62	$Pnma$	1.6109,1.0591,0.4786,90,90,90	-	gray	4.50	X	13153
Rb-Te	Rb ₂ Te ₅	Rb ₂ Te ₅ ,mS14,12	$C12/m1$	1.1633,0.9124,0.5750,90,116.67,90	-	gray	4.93	X	16015
Rb-Tl	Rb ₁₅ Tl ₁₇	Rb ₁₅ Tl ₁₇ ,hP42,189	$P-62m$	1.03248,1.03248,1.7558,90,90,120	-	-	6.97	X	31656
Rb-Tl	Rb ₈ Tl ₁₁	K ₈ In ₁₁ ,hR114,167	$R-3c$	1.028,1.028,5.2305,90,90,120	-	gray silver	6.10	X	28164
Rb-Zn	RbZn ₁₃	NaZn ₁₃ ,cF112,226	$Fm-3m$	1.24519,1.24519,1.24519,90,90,90	-	-	6.44	X	47602
Re-Rh	Re _{0.15} Rh _{0.85}	Cu ₂ CF ₄ ,225	$Fm-3m$	0.38158,0.38158,0.38158,90,90,90	close-packed structure	-	13.80	X	57860
Re-Rh	Re _{0.5} Rh _{0.5} m	Mg,hP2,194	$P6_3/mmc$	0.273,0.273,0.4354,90,90,120	close-packed structure	-	17.08	X	50663
Re-Rh	Re _{0.75} Rh _{0.25}	Mg,hP2,194	$P6_3/mmc$	0.2749,0.2749,0.4395,90,90,120	close-packed structure	-	19.10	X	50072
Re-Ru	Re _{0.5} Ru _{0.5}	Mg,hP2,194	$P6_3/mmc$	0.2735,0.2735,0.4354,90,90,120	close-packed structure	-	16.91	X	54496
Re-S	ReS ₂	ReS ₂ ,aP24,2	$P-1$	0.6352,0.6446,1.25982,76.071,89.481,61.03	rheneite	-	7.65	X	31864
Re-Sc	ScRe ₂	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.5271,0.5271,0.8592,90,90,120	Friauf-Laves phase	-	13.41	X	1845
Re-Sc	Sc ₅ Re ₂₄	Ti ₅ Re ₂₄ ,cI58,217	$I-43m$	0.965,0.965,0.965,90,90,90	-	-	17.35	X	1845
Re-Se	ReSe ₂ hp	*hP12,*	-	0.33,0.33,2.55,90,90,120	-	-	-	N	9703
Re-Se	ReSe ₂	ReSe ₂ ,aP12,2	$P-1$	0.66065,0.67196,0.67272,91.826,104.930,118.937-	-	-	9.21	X	2455
Re-Si	ReSi ht	FeSi,cP8,198	$P2_13$	0.47744,0.47744,0.47744,90,90,90	-	-	13.08	X	64719
Re-Si	Re _{0.9} Si _{0.1}	Mg,hP2,194	$P6_3/mmc$	0.2757,0.2757,0.4439,90,90,120	close-packed structure	-	19.37	X	15084
Re-Si	Re ₂ Si	Re ₂ Si,mP24,14	$P12_1/c1$	0.64444,0.96019,0.53898,90,94.214,90	close-packed structure	-	16.00	X	24733
Re-Si	Re ₄ Si ₇	Re ₄ Si ₇ ,mS44,8	$C1m1$	2.3164,0.31367,0.8288,90,92.77,90	-	gray	10.40	X	52898
Re-Sm	SmRe ₂	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.5303,0.5303,0.8804,90,90,120	Friauf-Laves phase	-	16.20	A	2373
Re-Ta	Ta _{0.01} Re _{0.99}	Mg,hP2,194	$P6_3/mmc$	0.27554,0.27554,0.4446,90,90,120	close-packed structure	-	21.15	X	4725
Re-Ta	Ta _{0.25} Re _{0.75}	Mn,cI58,217	$I-43m$	0.965,0.965,0.965,90,90,90	-	-	19.82	A	20950
Re-Ta	Ta _{0.39} Re _{0.61} m	W,cI2,229	$Im-3m$	0.318,0.318,0.318,90,90,90	b.c.c. family	-	19.02	X	24554
Re-Ta	Ta _{0.43} Re _{0.57} ht	(Cr _{0.40} Fe _{0.51}),tP30,136	$P4_2/mnm$	0.9771,0.9771,0.5089,90,90,90	Frank-Kasper phase	-	18.86	A	8375
Re-Ta	Ta _{0.6} Re _{0.4}	W,cI2,229	$Im-3m$	0.3175,0.3175,0.3175,90,90,90	b.c.c. family	-	18.99	X	20950
Re-Tb	TbRe ₂	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.5402,0.5402,0.8819,90,90,120	Friauf-Laves phase	-	15.84	A	5413
Re-Tc	Re _{0.5} Tc _{0.5}	Mg,hP2,194	$P6_3/mmc$	0.275,0.275,0.4434,90,90,120	close-packed structure	-	16.25	X	1636
Re-Te	ReTe ₂ hp	ReS ₂ ,aP24,2	$P-1$	0.6548,0.68682,0.7512,71.363,67.55,64.66	-	-	10.58	X	9703
Re-Te	Re ₂ Te ₅	Re ₂ Te ₅ ,oP84,61	$Pbca$	1.2958,1.424,1.3034,90,90,90	Chevrel phase	gray	8.37	X	19205
Re-Th	ThRe ₂	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.5493,0.5493,0.91019,90,90,120	Friauf-Laves phase	-	16.88	A	18979
Re-Ti	TiRe	CsCl,cP2,221	$Pm-3m$	0.3118,0.3118,0.3118,90,90,90	b.c.c. family	-	12.82	X	4769
Re-Ti	Ti _{0.01} Re _{0.99}	Mg,hP2,194	$P6_3/mmc$	0.27555,0.27555,0.4446,90,90,120	close-packed structure	-	21.00	X	4725

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Re-Ti	Ti ₃ Re ₂₄	Ti ₃ Re ₂₄ , cI58,217	<i>I</i> -43 <i>m</i>	0.9609,0.9609,0.9609,90,90,90	-	-	17.63	X	683
Re-Tm	TmRe ₂	MgZn ₂ , hP12,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.5359,0.5359,0.8761,90,90,120	Friauf-Laves phase	-	16.50	A	2373
Re-U	URe ₂ ht	MgZn ₂ , hP12,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.5405,0.5405,0.8682,90,90,120	Friauf-Laves phase	-	18.46	X	1303
Re-U	URe ₂ rt	URe ₂ , oS24,63	<i>Cmcm</i>	0.5600,0.9178,0.8463,90,90,90	Friauf-Laves phase	-	18.64	X	1303
Re-V	V _{0.03} Re _{0.97}	Mg, hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.27541,0.27541,0.4442,90,90,120	close-packed structure	-	20.73	X	4725
Re-V	V _{0.24} Re _{0.76} ht	(Cr _{0.49} Fe _{0.51}), tP30,136	<i>P</i> 4 ₂ / <i>mmn</i>	0.944,0.944,0.489,90,90,90	Frank-Kasper phase	-	17.58	X	15850
Re-V	V _{0.8} Re _{0.2}	W, cI2,229	<i>Im</i> -3 <i>m</i>	0.3035,0.3035,0.3035,90,90,90	b.c.c. family	-	9.27	X	20498
Re-V	V _{1.16} Re _{2.84} ht	Cr ₃ Si, cP8,223	<i>Pm</i> -3 <i>n</i>	0.48783,0.48783,0.48783,90,90,90	Frank-Kasper phase	-	16.82	X	15850
Re-W	W _{0.25} Re _{0.75} rt	Mn, cI58,217	<i>I</i> -43 <i>m</i>	0.95987,0.95987,0.95987,90,90,90	-	-	20.22	X	58100
Re-W	W _{0.25} Re _{0.75}	Mg, hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.277,0.277,0.45207,90,90,120	close-packed structure	-	20.52	X	58100
Re-W	W _{0.5} Re _{0.5}	(Cr _{0.49} Fe _{0.51}), tP30,136	<i>P</i> 4 ₂ / <i>mmn</i>	0.96274,0.96274,0.5015,90,90,90	Frank-Kasper phase	-	19.83	X	1782
Re-W	W _{0.75} Re _{0.25}	W, cI2,229	<i>Im</i> -3 <i>m</i>	0.317,0.317,0.317,90,90,90	b.c.c. family	-	19.23	X	24554
Re-W	W ₃ Re	Cr ₃ Si, cP8,223	<i>Pm</i> -3 <i>n</i>	0.50182,0.50182,0.50182,90,90,90	Frank-Kasper phase	-	19.39	X	2683
Re-Y	YRe ₂	MgZn ₂ , hP12,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.5396,0.5396,0.8819,90,90,120	Friauf-Laves phase	-	13.78	X	1024
Re-Yb	YbRe ₂	MgZn ₂ , hP12,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.534,0.534,0.8685,90,90,120	Friauf-Laves phase	-	16.89	A	2373
Re-Zr	ZrRe ₂	MgZn ₂ , hP12,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.528,0.528,0.8643,90,90,120	Friauf-Laves phase	-	14.76	A	62742
Re-Zr	Zr _{0.01} Re _{0.99}	Mg, hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.27557,0.27557,0.44446,90,90,120	close-packed structure	-	21.05	X	4725
Re-Zr	Zr _{0.96} Re _{0.04} rt	Mg, hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.3254,0.3254,0.518,90,90,120	close-packed structure	-	6.64	X	62742
Re-Zr	Zr ₂₁ Re ₂₅	Zr ₂₁ Re ₂₅ , hR276,167	<i>R</i> -3 <i>c</i>	2.5847,2.5847,0.8771,90,90,120	-	-	12.90	X	18630
Re-Zr	Zr ₃ Re ₂₄	Ti ₃ Re ₂₄ , cI58,217	<i>I</i> -43 <i>m</i>	0.9645,0.9645,0.9645,90,90,90	-	-	18.23	A	1107
Rh-Ru	Ru _{0.4} Rh _{0.6}	Cu, cF4,225	<i>Fm</i> -3 <i>m</i>	0.3806,0.3806,0.3806,90,90,90	close-packed structure	-	12.31	X	16964
Rh-Ru	Ru _{0.5} Rh _{0.5}	Mg, hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.2712,0.2712,0.4312,90,90,120	close-packed structure	-	12.33	X	16964
Rh-S	RhS ₂	FeS ₂ , cP12,205	<i>Pa</i> -3	0.5574,0.5574,0.5574,90,90,90	pyrite-marcasite family	-	6.41	A	24
Rh-S	Rh ₁₇ S ₁₅	Pd ₃ Se ₁₅ , cP64,221	<i>Pm</i> -3 <i>m</i>	0.9911,0.9911,0.9911,90,90,90	miassite	-	7.61	X	1530
Rh-S	Rh ₂ S ₃	Rh ₂ S ₃ , oP20,60	<i>Pbcn</i>	0.8462,0.5985,0.6138,90,90,90	-	-	6.45	X	3304
Rh-S	Rh ₃ S ₄	Rh ₃ S ₄ , mS42,12	<i>C</i> 12/ <i>m</i> 1	1.029,1.067,0.6212,90,107,7.90	kingstonite	gray silver	6.70	X	38647
Rh-Sb	RhSb	FeAs, oP8,62	<i>Pnma</i>	0.59718,0.38621,0.63242,90,90,90	AlB ₂ family	-	10.23	X	10190
Rh-Sb	RhSb ₂ rt	CoSb ₂ , mP12,14	<i>P</i> 12 ₁ / <i>c</i> 1	0.66156,0.65596,0.66858,90,116.821,90	pyrite-marcasite family	-	8.89	X	5624
Rh-Sb	RhSb ₃	CoAs ₃ , cI32,204	<i>Im</i> -3	0.92322,0.92322,0.92322,90,90,90	-	-	7.90	X	7740
Rh-Sb	Rh _{0.93} Sb _{0.07}	Cu, cF4,225	<i>Fm</i> -3 <i>m</i>	0.3852,0.3852,0.3852,90,90,90	close-packed structure	-	12.11	X	1981
Rh-Sb	Rh ₂ Sb	Co ₂ Si-b, oP12,62	<i>Pnma</i>	0.5721,0.4171,0.7928,90,90,90	-	-	11.50	X	24204
Rh-Sc	ScRh ₃	Cu ₃ Au, cP4,221	<i>Pm</i> -3 <i>m</i>	0.3904,0.3904,0.3904,90,90,90	close-packed structure	gray silver	9.87	X	44388
Rh-Sc	Sc _{1.03} Rh _{0.97}	CsCl, cP2,221	<i>Pm</i> -3 <i>m</i>	0.32,0.32,0.32,90,90,90	b.c.c. family	-	7.41	X	30335
Rh-Sc	Sc ₅₇ Rh ₁₃	Sc ₅₇ Rh ₁₃ , cP140,200	<i>Pm</i> -3	1.44051,1.44051,1.44051,90,90,90	-	-	4.33	X	17634
Rh-Se	RhSe ht	NiAs, hP4,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.3642,0.3642,0.5486,90,90,120	AlB ₂ family	-	9.58	X	1091
Rh-Se	RhSe _{1.95} rt	IrSe ₂ , oP24,62	<i>Pnma</i>	2.091,0.3709,0.5951,90,90,90	pyrite-marcasite family	-	7.39	A	3413
Rh-Se	Rh _{0.74} Se rt	*, hP32, *	-	0.7296,0.7296,1.0986,90,90,120	-	-	-	N	3413
Rh-Se	Rh _{0.78} Se ht	*, hP32, *	-	0.73,0.73,1.106,90,90,120	-	-	-	N	3413
Rh-Se	Rh _{0.98} Se ₂ ht	FeS ₂ , cP12,205	<i>Pa</i> -3	0.60153,0.60153,0.60153,90,90,90	pyrite-marcasite family	-	7.90	X	11903
Rh-Se	Rh ₂ Se ₃ ht	*, o*60, *	-	0.6346,1.0992,1.6512,90,90,90	-	-	-	N	3413
Rh-Se	Rh ₂ Se ₃ rt	Rh ₂ S ₃ , oP20,60	<i>Pbcn</i>	0.8888,0.6294,0.6423,90,90,90	-	-	8.18	A	3304
Rh-Se	Rh ₃ Se ₈	Rh ₃ Se ₈ , hR33,148	<i>R</i> -3	0.84900,0.84900,1.01881,90,90,120	-	-	7.37	X	11903
Rh-Si	RhSi cub	CsCl, cP2,221	<i>Pm</i> -3 <i>m</i>	0.2963,0.2963,0.2963,90,90,90	b.c.c. family	-	8.36	X	1010
Rh-Si	RhSi ht	FeSi, cP8,198	<i>P</i> 2 ₁ 3	0.4674,0.4674,0.4674,90,90,90	-	-	8.52	X	2444
Rh-Si	RhSi m	RhSi, mP8,14	<i>P</i> 12 ₁ / <i>c</i> 1	0.45892,0.45728,0.55241,90,116.214,90	-	-	8.37	X	30195
Rh-Si	RhSi rt	FeAs, oP8,62	<i>Pnma</i>	0.5531,0.3063,0.6362,90,90,90	AlB ₂ family	-	8.07	X	13120
Rh-Si	Rh _{0.977} Si _{0.023}	Cu, cF4,225	<i>Fm</i> -3 <i>m</i>	0.3797,0.3797,0.3797,90,90,90	close-packed structure	-	12.28	X	17917
Rh-Si	Rh ₂ Si	Co ₂ Si-b, oP12,62	<i>Pnma</i>	0.5408,0.393,0.7383,90,90,90	-	-	9.90	X	1799
Rh-Si	Rh ₂₀ Si ₁₃ ht	Rh ₂₀ Si ₁₃ , hP34,176	<i>P</i> 6 ₃ / <i>m</i>	1.1851,1.1851,0.3623,90,90,120	-	-	9.13	X	2448
Rh-Si	Rh ₃ Si ₂ rt	Ni ₂ Al ₃ , hP5,164	<i>P</i> -3 <i>m</i> 1	0.3965,0.3965,0.5051,90,90,120	-	-	8.81	X	17917
Rh-Si	Rh ₃ Si ₄ rt	Rh ₃ Si ₄ , oP28,62	<i>Pnma</i>	1.8810,0.3614,0.5813,90,90,90	-	-	7.08	X	3784
Rh-Si	Rh ₄ Si ₅ rt	Rh ₄ Si ₅ , mP18,11	<i>P</i> 12 ₁ / <i>m</i> 1	0.5924,0.3508,1.2335,90,100.181,90	-	-	7.27	X	3785
Rh-Si	Rh ₅ Si ₃	Rh ₅ Ge ₃ , oP16,55	<i>Pbam</i>	0.5317,1.0131,0.3895,90,90,90	-	-	9.48	X	1799
Rh-Sm	SmRh	CsCl, cP2,221	<i>Pm</i> -3 <i>m</i>	0.3466,0.3466,0.3466,90,90,90	b.c.c. family	-	10.10	X	7679
Rh-Sm	SmRh ₂	MgCu ₂ , cF24,227	<i>Fd</i> -3 <i>m</i>	0.7522,0.7522,0.7522,90,90,90	Friauf-Laves phase	-	11.12	X	31777
Rh-Sm	SmRh ₃ rt	CeNi ₃ , hP24,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.5255,0.5255,1.746,90,90,120	Laves-CaCu ₅	-	10.96	A	7679
Rh-Sm	Sm ₃ Rh ₂	Er ₃ Ni ₂ , hR45,148	<i>R</i> -3	0.8701,0.8701,1.6526,90,90,120	-	-	9.06	X	10263
Rh-Sm	Sm _{3.2} Rh _{0.8}	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.7245,0.9675,0.6368,90,90,90	-	-	8.39	A	7679
Rh-Sm	Sm ₃ Rh ₄	Sm ₃ Ge ₄ , oP36,62	<i>Pnma</i>	0.7335,1.467,0.7557,90,90,90	-	-	9.51	A	9767
Rh-Sm	Sm ₇ Rh ₃	Th ₇ Fe ₃ , hP20,186	<i>P</i> 6 ₃ / <i>mc</i>	0.9893,0.9893,0.6245,90,90,120	-	-	8.54	A	7350
Rh-Sn	RhSn	FeSi, cP8,198	<i>P</i> 2 ₁ 3	0.5122,0.5122,0.5122,90,90,90	-	-	10.95	X	268
Rh-Sn	RhSn ₂ ht	CuAl ₂ , tI12,140	<i>I</i> 4/ <i>mcm</i>	0.641,0.641,0.5656,90,90,90	-	-	9.73	X	6603
Rh-Sn	RhSn ₂ rt	RhSn ₂ , tI26,139	<i>I</i> 4/ <i>mmm</i>	0.4487,0.4487,1.7717,90,90,90	-	-	9.51	X	805
Rh-Sn	RhSn ₃	CoSn ₃ , tI64,142	<i>I</i> 4 ₁ / <i>acd</i>	0.6324,0.6324,3.412,90,90,90	-	-	8.94	X	31993
Rh-Sn	RhSn ₄	IrGe ₄ , hP15,152	<i>P</i> 3 ₂ 1	0.6774,0.6774,0.8614,90,90,120	-	-	8.41	X	31993
Rh-Sn	Rh _{0.91} Sn _{0.09}	Cu, cF4,225	<i>Fm</i> -3 <i>m</i>	0.38447,0.38447,0.38447,90,90,90	close-packed structure	-	12.19	X	33258
Rh-Sn	Rh _{1.5} Sn	Co _{1.75} Ge, hP6,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.4331,0.4331,0.5542,90,90,120	AlB ₂ family	-	10.07	X	247
Rh-Sn	Rh ₂ Sn	Co ₂ Si-b, oP12,62	<i>Pnma</i>	0.552,0.4221,0.8209,90,90,90	-	-	11.27	X	1128
Rh-Sr	SrRh ₂	MgCu ₂ , cF24,227	<i>Fd</i> -3 <i>m</i>	0.7706,0.7706,0.7706,90,90,90	Friauf-Laves phase	-	8.52	X	909
Rh-Ta	TaRh ₂	Co ₂ Si-b, oP12,62	<i>Pnma</i>	0.5454,0.4027,0.8179,90,90,90	-	-	14.30	A	2048
Rh-Ta	TaRh ₃	Cu ₃ Au, cP4,221	<i>Pm</i> -3 <i>m</i>	0.386,0.386,0.386,90,90,90	close-packed structure	-	14.14	X	22227
Rh-Ta	Ta _{0.08} Rh _{0.92}	Cu, cF4,225	<i>Fm</i> -3 <i>m</i>	0.382,0.382,0.382,90,90,90	close-packed structure	-	13.01	X	22227
Rh-Ta	Ta _{0.7} Rh _{0.3}	(Cr _{0.49} Fe _{0.51}), tP30,136	<i>P</i> 4 ₂ / <i>mmn</i>	0.9904,0.9904,0.516,90,90,90	Frank-Kasper phase	-	15.51	A	2321
Rh-Ta	Ta _{0.8} Rh _{0.2}	TaIr, oP12,51	<i>Pnma</i>	1.3551,0.2822,0.4742,90,90,90	close-packed structure	-	14.74	X	2321
Rh-Tb	TbRh	CsCl, cP2,221	<i>Pm</i> -3 <i>m</i>	0.3417,0.3417,0.3417,90,90,90	b.c.c. family	-	10.90	X	2404
Rh-Tb	TbRh ₂	MgCu ₂ , cF24,227	<i>Fd</i> -3 <i>m</i>	0.7492,0.7492,0.7492,90,90,90	Friauf-Laves phase	-	11.52	X	7679
Rh-Tb	TbRh ₃ ht	CaCu ₅ , hP6,191	<i>P</i> 6/ <i>mmn</i>	0.5134,0.5134,0.429,90,90,120	-	-	11.42	X	7679
Rh-Tb	Tb ₃ Rh	Fe ₃ C-b, oP16,62	<i>Pnma</i>	0.7156,0.9505,0.6308,90,90,90	-	-	8.97	A	7679

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Rh-Tb	Tb ₃ Rh ₂	Y ₃ Rh ₂ , tI140, 140	<i>I4/mcm</i>	1.125, 1.125, 2.52, 90, 90, 90	-	-	9.95	A	9419
Rh-Tb	Tb ₂ Rh ₃ ht	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8176, 0.8176, 0.6385, 90, 90, 120	-	-	9.91	A	7679
Rh-Tb	Tb ₂ Rh ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	0.9789, 0.9789, 0.6158, 90, 90, 120	-	-	9.24	A	7350
Rh-Tc	Tc _{0.045} Rh _{0.955}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3806, 0.3806, 0.3806, 90, 90, 90	close-packed structure	-	12.37	X	1812
Rh-Tc	Tc _{0.5} Rh _{0.5}	Mg ₂ hP2, 194	<i>P6₃/mmc</i>	0.2727, 0.2727, 0.4328, 90, 90, 120	close-packed structure	-	11.97	X	9105
Rh-Te	RhTe rt	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.399, 0.399, 0.566, 90, 90, 120	AlB ₂ family	-	9.81	X	668
Rh-Te	RhTe ₂ ht	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.392, 0.392, 0.541, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	8.26	X	668
Rh-Te	Rh _{0.82} Te ₂ rt	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.64234, 0.64234, 0.64234, 90, 90, 90	pyrite-marcasite family	white	8.51	X	11023
Rh-Te	Rh _{0.99} Te _{0.01}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3805, 0.3805, 0.3805, 90, 90, 90	close-packed structure	-	12.44	X	23548
Rh-Te	Rh _{2.30} Te ₄ rt	Cr ₃ S ₄ , mS14, 12	<i>C12/m1</i>	1.28297, 0.39337, 0.6808, 90, 122.009, 90	-	-	8.52	X	34653
Rh-Te	Rh ₃ Te ₂ rt	Rh ₃ Te ₂ , oS20, 63	<i>Cmcm</i>	0.3697, 1.2446, 0.7694, 90, 90, 90	-	-	10.58	X	2823
Rh-Te	Rh ₃ Te ₈	Rh ₃ Se ₈ , hR33, 148	<i>R-3</i>	0.91443, 0.91443, 1.09878, 90, 90, 120	-	-	8.32	X	11023
Rh-Th	ThRh	TiI ₂ oS8, 63	<i>Cmcm</i>	0.3866, 1.124, 0.422, 90, 90, 90	CrB(TiI)-FeB	-	12.13	X	1536
Rh-Th	ThRh ₂ ht	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.4629, 0.4629, 0.5849, 90, 90, 120	AlB ₂ family	-	13.40	X	1872
Rh-Th	ThRh ₃ rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4148, 0.4148, 0.4148, 90, 90, 90	close-packed structure	-	12.58	X	1872
Rh-Th	Th ₃ Rh ₅	*t*** *	-	0.482, 0.482, 1.46, 90, 90, 90	-	-	-	N	10639
Rh-Th	Th ₂ Rh ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	1.0028, 1.0028, 0.6293, 90, 90, 120	-	-	11.71	X	1301
Rh-Ti	TiRh ht1	CuTi, tP2, 123	<i>P4/mmm</i>	0.2988, 0.2988, 0.335, 90, 90, 90	b.c.c. family	-	8.37	X	21181
Rh-Ti	TiRh ht2	CsCl, cP2, 221	<i>Pm-3m</i>	0.3126, 0.3126, 0.3126, 90, 90, 90	b.c.c. family	-	8.20	X	62350
Rh-Ti	TiRh rt	*mP4, 10	<i>P12/m1</i>	0.4178, 0.3371, 0.4185, 90, 90, 89, 90	-	-	-	N	21181
Rh-Ti	TiRh ₃ rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.382, 0.382, 0.382, 90, 90, 90	close-packed structure	-	10.62	X	3210
Rh-Ti	Ti _{0.1} Rh _{0.9}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3812, 0.3812, 0.3812, 90, 90, 90	close-packed structure	-	11.68	X	3210
Rh-Ti	Ti _{0.75} Rh _{0.25} ht	W, cI2, 229	<i>Im-3m</i>	0.3156, 0.3156, 0.3156, 90, 90, 90	b.c.c. family	-	6.51	X	3210
Rh-Ti	Ti _{0.9} Rh _{1.1} rt	*o*** *	-	0.3399, 0.4111, 0.4154, 90, 90, 90	-	-	-	N	2260
Rh-Ti	Ti ₂ Rh rt	CuZr ₂ tI6, 139	<i>I4/mmm</i>	0.3078, 0.3078, 0.9882, 90, 90, 90	close-packed structure	-	7.05	A	3171
Rh-Ti	Ti ₃ Rh ₅	Rh ₃ Ge ₅ , oP16, 55	<i>Pbam</i>	0.536, 1.042, 0.408, 90, 90, 90	-	-	9.59	X	4763
Rh-Tm	TmRh	CsCl, cP2, 221	<i>Pm-3m</i>	0.3358, 0.3358, 0.3358, 90, 90, 90	b.c.c. family	-	11.92	X	2404
Rh-Tm	TmRh ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7416, 0.7416, 0.7416, 90, 90, 90	Friauf-Laves phase	-	12.21	X	3180
Rh-Tm	Tm ₃ Rh ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8058, 0.8058, 0.6252, 90, 90, 120	-	-	10.90	A	15093
Rh-U	URh ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3988, 0.3988, 0.3988, 90, 90, 90	close-packed structure	-	14.31	X	13741
Rh-U	U ₂ Rh rt	*mP12, *	-	0.518, 0.344, 1.319, 90, 96, 1.90	-	-	-	N	26344
Rh-V	VRh rt	ViR ₂ oS8, 65	<i>Cmmm</i>	0.578, 0.665, 0.278, 90, 90, 90	b.c.c. family	-	9.56	A	10593
Rh-V	VRh ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3784, 0.3784, 0.3784, 90, 90, 90	close-packed structure	-	11.02	X	10734
Rh-V	V _{0.18} Rh _{0.82}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.3789, 0.3789, 0.3789, 90, 90, 90	close-packed structure	-	11.42	X	10593
Rh-V	V _{0.85} Rh _{0.15}	W, cI2, 229	<i>Im-3m</i>	0.3009, 0.3009, 0.3009, 90, 90, 90	b.c.c. family	-	7.16	X	10593
Rh-V	V _{0.96} Rh _{0.04}	CuAu, tP2, 123	<i>P4/mmm</i>	0.2749, 0.2749, 0.3593, 90, 90, 90	close-packed structure	-	9.54	X	10734
Rh-V	V _{1.3} Rh _{2.5}	V(V _{0.5} Rh _{0.5})Rh ₂ , oS16, 63	<i>Cmcm</i>	0.542, 0.9276, 0.432, 90, 90, 90	-	-	10.20	X	7332
Rh-V	V ₃ Rh	Cr ₂ Si ₂ , cP8, 223	<i>Pm-3n</i>	0.47852, 0.47852, 0.47852, 90, 90, 90	Frank-Kasper phase	-	7.75	X	3734
Rh-W	WRh ₃ rt	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.5453, 0.5453, 0.435, 90, 90, 120	close-packed structure	-	14.60	A	2379
Rh-W	W _{0.19} Rh _{0.81}	W, cI2, 229	<i>P6₃/mmc</i>	0.2708, 0.2708, 0.4328, 90, 90, 120	close-packed structure	-	14.29	X	786
Rh-Y	YRh	CsCl, cP2, 221	<i>Pm-3m</i>	0.3406, 0.3406, 0.3406, 90, 90, 90	b.c.c. family	-	8.06	X	29419
Rh-Y	YRh ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7492, 0.7492, 0.7492, 90, 90, 90	Friauf-Laves phase	-	9.31	X	16053
Rh-Y	YRh ₃ rt	CeNi ₃ , hP24, 194	<i>P6₃/mmc</i>	0.523, 0.523, 1.738, 90, 90, 120	Laves-CaCu ₃	-	9.62	A	7679
Rh-Y	YRh ₃ ht	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5141, 0.5141, 0.4294, 90, 90, 120	-	-	10.20	X	7679
Rh-Y	Y ₃ Rh	Fe ₂ C-b, oP16, 62	<i>Pnma</i>	0.7138, 0.9438, 0.6319, 90, 90, 90	-	-	5.77	A	6594
Rh-Y	Y ₃ Rh ₂	Y ₃ Rh ₂ , tI140, 140	<i>I4/mcm</i>	1.1232, 1.1232, 2.516, 90, 90, 90	-	-	6.92	X	9419
Rh-Y	Y ₇ Rh ₃	Th ₇ Fe ₃ , hP20, 186	<i>P6₃mc</i>	0.9775, 0.9775, 0.619, 90, 90, 120	-	-	6.04	A	6594
Rh-Yb	YbRh	CsCl, cP2, 221	<i>Pm-3m</i>	0.3347, 0.3347, 0.3347, 90, 90, 90	b.c.c. family	-	12.22	X	10008
Rh-Yb	YbRh ₂	MgCu ₂ , cF24, 227	<i>Fd-3m</i>	0.7432, 0.7432, 0.7432, 90, 90, 90	Friauf-Laves phase	-	12.26	X	10008
Rh-Zn	ZnRh	CsCl, cP2, 221	<i>Pm-3m</i>	0.29997, 0.29997, 0.29997, 90, 90, 90	b.c.c. family	-	10.35	X	39995
Rh-Zn	Zn ₁₁ Rh ₂	Cu ₅ Zn ₈ , cI52, 217	<i>I-43m</i>	0.90879, 0.90879, 0.90879, 90, 90, 90	γ-brass	-	8.19	X	39995
Rh-Zn	Zn ₁₃ Rh	Zn ₁₃ Co, mS28, 12	<i>C12/m1</i>	1.0908, 0.7537, 0.5127, 90, 101.02, 90	-	-	7.65	X	39995
Rh-Zr	ZrRh ht1	CsCl, cP2, 221	<i>Pm-3m</i>	0.3305, 0.3305, 0.3305, 90, 90, 90	b.c.c. family	-	8.93	X	21116
Rh-Zr	ZrRh rt	ZrIr, oS16, 63	<i>Cmcm</i>	0.33394, 1.959, 0.4394, 90, 90, 90	-	-	8.97	X	53432
Rh-Zr	ZrRh ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.3905, 0.3905, 0.3905, 90, 90, 90	close-packed structure	-	11.15	X	21405
Rh-Zr	Zr _{0.05} Rh _{0.95}	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.383, 0.383, 0.383, 90, 90, 90	close-packed structure	-	12.10	X	13052
Rh-Zr	Zr _{0.5} Rh _{0.5} ht2	W, cI2, 229	<i>Im-3m</i>	0.325, 0.325, 0.325, 90, 90, 90	b.c.c. family	-	9.39	X	13052
Rh-Zr	Zr _{0.915} Rh _{0.085} ht	W, cI2, 229	<i>Im-3m</i>	0.354, 0.354, 0.354, 90, 90, 90	b.c.c. family	-	6.90	X	2637
Rh-Zr	Zr _{0.97} Rh _{0.03} m	Ti ₂ hP3, 191	<i>P6/mmm</i>	0.5055, 0.5055, 0.3103, 90, 90, 120	-	-	6.64	X	2637
Rh-Zr	Zr ₂ Rh stab	Ti ₂ Ni, cF96, 227	<i>Fd-3m</i>	1.2536, 1.2536, 1.2536, 90, 90, 90	-	-	7.70	A	17840
Rh-Zr	Zr ₂ Rh	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.6496, 0.6496, 0.5605, 90, 90, 90	-	-	8.01	X	6603
Rh-Zr	Zr ₃ Rh m	Ni ₃ P, tI32, 82	<i>I-4</i>	1.0802, 1.0802, 0.5629, 90, 90, 90	-	-	7.62	A	17840
Rh-Zr	Zr ₃ Rh ₄ rt	Pu ₃ Pd ₄ , hR42, 148	<i>R-3</i>	1.25, 1.25, 0.55, 90, 90, 120	b.c.c. family	-	9.17	A	33274
Rh-Zr	Zr ₃ Rh ₅	Pu ₃ Si ₃ , oS32, 63	<i>Cmcm</i>	0.86634, 0.6986, 0.86218, 90, 90, 90	-	-	10.03	X	20780
Ru-S	RuS ₂	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.56106, 0.56106, 0.56106, 90, 90, 90	laurite	-	6.21	X	23022
Ru-Sb	RuSb	FeAs, oP8, 62	<i>Pnma</i>	0.59608, 0.37023, 0.65797, 90, 90, 90	AlB ₂ family	-	10.19	X	10190
Ru-Sb	RuSb ₂	FeAs ₂ , oP6, 58	<i>Pnmm</i>	0.59524, 0.66737, 0.31803, 90, 90, 90	pyrite-marcasite family	-	9.06	X	3786
Ru-Sb	Ru ₄ Sb _{12.6} m	LaFe ₄ P ₁₂ , cI34, 204	<i>Im-3</i>	0.9325, 0.9325, 0.9325, 90, 90, 90	-	-	7.94	X	43779
Ru-Sc	ScRu	CsCl, cP2, 221	<i>Pm-3m</i>	0.32, 0.32, 0.32, 90, 90, 90	b.c.c. family	-	7.40	X	30166
Ru-Sc	ScRu ₂	MgZn ₂ , hP12, 194	<i>P6₃/mmc</i>	0.5119, 0.5119, 0.8542, 90, 90, 120	Friauf-Laves phase	-	8.47	X	1024
Ru-Sc	Sc ₁₁ Ru ₄	Sc ₁₁ Ir ₄ , cF120, 225	<i>Fm-3m</i>	1.342, 1.342, 1.342, 90, 90, 90	-	-	4.94	A	30166
Ru-Sc	Sc ₂ Ru	Ti ₂ Ni, cF96, 227	<i>Fd-3m</i>	1.23, 1.23, 1.23, 90, 90, 90	-	-	5.45	A	30166
Ru-Sc	Sc ₄₄ Ru ₇ rt	Mg ₄₄ Rh ₇ , cF408, 216	<i>F-43m</i>	2.075, 2.075, 2.075, 90, 90, 90	-	-	3.99	A	30166
Ru-Sc	Sc ₂ Ru ₃	Mn ₃ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.803, 0.803, 0.548, 90, 90, 120	-	-	5.73	A	30166
Ru-Sc	Sc ₅₇ Ru ₁₃	Sc ₅₇ Rh ₁₃ , cP140, 200	<i>Pm-3</i>	1.438, 1.438, 1.438, 90, 90, 90	-	-	4.33	A	30166
Ru-Se	RuSe ₂	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.59336, 0.59336, 0.59336, 90, 90, 90	pyrite-marcasite family	-	8.23	X	23022
Ru-Si	RuSi Ru+	CsCl, cP2, 221	<i>Pm-3m</i>	0.29072, 0.29072, 0.29072, 90, 90, 90	b.c.c. family	-	8.73	X	33754
Ru-Si	RuSi Ru-	FeSi, cP8, 198	<i>P2₁3</i>	0.47059, 0.47059, 0.47059, 90, 90, 90	-	-	8.23	X	33754

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ru-Si	Ru ₂ Si ht	Co ₂ Si-b, oP12,62	<i>Pnma</i>	0.5279,0.4005,0.7418,90,90,90	-	-	9.75	X	1351
Ru-Si	Ru ₂ Si ₃ ht	* ₁ ** *	-	0.552,0.552,0.446,90,90,90	chimney-ladder structure	-	-	N	382
Ru-Si	Ru ₂ Si ₃ rt	Ru ₂ Ge ₃ , oP40,60	<i>Pbcn</i>	1.10613,0.89518,0.53548,90,90,90	chimney-ladder structure	-	7.18	X	33754
Ru-Si	Ru ₄ Si ₃	Ru ₄ Si ₃ , oP28,62	<i>Pnma</i>	0.51875,0.40194,1.7138,90,90,90	-	-	9.08	X	33754
Ru-Si	Ru ₅ Si ₃ ht	Rh ₅ Ge ₃ , oP16,55	<i>Pbam</i>	0.52457,0.9819,0.40236,90,90,90	-	-	9.45	A	21843
Ru-Sm	SmRu ₂ cub	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.7577,0.7577,0.7577,90,90,90	Friauf-Laves phase	-	10.77	X	25184
Ru-Sm	SmRu ₂ hex	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.5287,0.5287,0.894,90,90,120	Friauf-Laves phase	-	10.82	A	43908
Ru-Sm	Sm _{0.05} Ru _{0.95}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2719,0.2719,0.4297,90,90,120	close-packed structure	-	12.50	X	17525
Ru-Sm	Sm ₃ Ru	Fe ₂ C-b, oP16,62	<i>Pnma</i>	0.7329,0.9477,0.6355,90,90,90	-	-	8.31	A	22285
Ru-Sm	Sm ₄₄ Ru ₂₅	Y ₄₄ Ru ₂₅ , oP276,52	<i>Pnna</i>	2.276,1.509,1.5033,90,90,90	-	-	11.76	A	43908
Ru-Sm	Sm ₃ Ru ₂	Mn ₃ C ₂ , mS28,15	<i>C12/c1</i>	1.6045,0.6435,0.7298,90,96.84,90	-	-	8.47	A	22285
Ru-Sn	RuSn ht-hp	CsCl, cP2,221	<i>Pm-3m</i>	0.32053,0.32053,0.32053,90,90,90	b.c.c. family	-	11.08	X	63335
Ru-Sn	RuSn ₂ ht	CuAl ₃ , tI12,140	<i>I4/mcm</i>	0.6389,0.6389,0.5693,90,90,90	-	-	9.67	X	31911
Ru-Sn	Ru _{0.98} Sn _{0.02}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2712,0.2712,0.4284,90,90,120	close-packed structure	-	12.34	X	31911
Ru-Sn	Ru ₂ Sn ₃ rt	Ru ₂ Sn ₃ , tP20,116	<i>P-4c2</i>	0.61749,0.61749,0.99159,90,90,90	chimney-ladder structure	-	9.81	X	33754
Ru-Sn	Ru ₃ Sn ₇	Ru ₃ Sn ₇ , cI40,229	<i>Im-3m</i>	0.93532,0.93532,0.93532,90,90,90	-	gray dark	9.21	X	38854
Ru-Ta	TaRu ht1	CuTi, tP2,123	<i>P4/mmm</i>	0.31,0.31,0.334,90,90,90	b.c.c. family	-	14.59	X	23357
Ru-Ta	TaRu rt	* ₀ S4,65	<i>Cmmm</i>	0.4295,0.4386,0.3394,90,90,90	-	-	-	N	23357
Ru-Ta	Ta _{0.2} Ru _{0.8} lt	Mg,hP2,194	<i>P6₃/mmc</i>	0.2737,0.2737,0.4379,90,90,120	close-packed structure	-	13.68	X	1995
Ru-Ta	Ta _{0.21} Ru _{0.79} ht	* ₁ h** *	-	0.8766,0.8766,1.349,90,90,120	-	-	-	N	2753
Ru-Ta	Ta _{0.75} Ru _{0.25}	W, cI2,229	<i>Im-3m</i>	0.3215,0.3215,0.3215,90,90,90	b.c.c. family	-	16.09	X	1995
Ru-Ta	Ta _{1.24} Ru _{0.76} ht2	CsCl, cP2,221	<i>Pm-3m</i>	0.3195,0.3195,0.3195,90,90,90	b.c.c. family	-	15.34	X	20932
Ru-Tb	TbRu ₂	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.5265,0.5265,0.8853,90,90,120	Friauf-Laves phase	-	11.28	A	6611
Ru-Tb	Tb ₃ Ru	Fe ₂ C-b, oP16,62	<i>Pnma</i>	0.7255,0.9222,0.6271,90,90,90	-	-	9.15	A	13171
Ru-Tb	Tb ₄₄ Ru ₂₅	Y ₄₄ Ru ₂₅ , oP276,52	<i>Pnna</i>	2.8023,1.52,1.52,90,90,90	-	-	9.77	A	23428
Ru-Tb	Tb ₂ Ru ₂	Mn ₃ C ₂ , mS28,15	<i>C12/c1</i>	1.5745,0.6318,0.7279,90,97.21,90	-	-	9.22	A	12299
Ru-Tc	Tc _{0.3} Ru _{0.5}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2733,0.2733,0.434,90,90,120	close-packed structure	-	11.78	X	9105
Ru-Te	RuTe ₂ ht	FeS ₂ , cP12,205	<i>Pa-3</i>	0.6391,0.6391,0.6391,90,90,90	pyrite-marcasite family	white	9.07	X	20681
Ru-Te	RuTe ₂ rt	FeS ₂ , oP6,58	<i>Pnnm</i>	0.52812,0.63943,0.40085,90,90,90	pyrite-marcasite family	black	8.74	X	33932
Ru-Te	Ru _{0.999} Te _{0.001}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2705,0.2705,0.4282,90,90,120	close-packed structure	-	12.37	X	28989
Ru-Th	ThRu	TiI ₂ , oS8,63	<i>Cmcm</i>	0.3879,1.126,0.4069,90,90,90	CrB(TiI)-FeB	-	12.45	A	8124
Ru-Th	ThRu ₂	MgCu ₂ , cF24,227	<i>Fd-3m</i>	0.7652,0.7652,0.7652,90,90,90	Friauf-Laves phase	-	12.87	X	15096
Ru-Th	Th _{0.99} Ru _{0.01} rt	Cu, cF4,225	<i>Fm-3m</i>	0.50869,0.50869,0.50869,90,90,90	close-packed structure	-	11.64	X	1872
Ru-Th	Th ₇ Ru ₃	Th ₇ Fe ₃ , hP20,186	<i>P6₃mc</i>	0.9971,0.9971,0.6288,90,90,120	-	golden	11.82	A	8124
Ru-Ti	TiRu	CsCl, cP2,221	<i>Pm-3m</i>	0.3067,0.3067,0.3067,90,90,90	b.c.c. family	-	8.57	X	1996
Ru-Ti	Ti _{0.1} Ru _{0.9}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2714,0.2714,0.4316,90,90,120	close-packed structure	-	11.55	X	1996
Ru-Ti	Ti _{0.8} Ru _{0.2} ht	W, cI2,229	<i>Im-3m</i>	0.3161,0.3161,0.3161,90,90,90	b.c.c. family	-	6.16	X	1996
Ru-Ti	Ti _{0.99} Ru _{0.01} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.2951,0.2951,0.4685,90,90,120	close-packed structure	-	4.55	X	1996
Ru-Tm	TmRu ₂	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.523,0.523,0.874,90,90,120	Friauf-Laves phase	-	11.91	A	3180
Ru-Tm	Tm ₃ Ru	Fe ₂ C-b, oP16,62	<i>Pnma</i>	0.726,0.8986,0.6173,90,90,90	-	-	10.03	A	12299
Ru-Tm	Tm ₃ Ru ₂	Er ₃ Ru ₂ , hP10,176	<i>P6₃m</i>	0.7844,0.7844,0.3919,90,90,120	-	-	11.28	A	23428
Ru-Tm	Tm ₂ Ru ₂	Mn ₃ C ₂ , mS28,15	<i>C12/c1</i>	1.5362,0.6152,0.7229,90,97.44,90	-	-	10.26	A	12299
Ru-U	URu ₃	Cu ₃ Au, cP4,221	<i>Pm-3m</i>	0.398,0.398,0.398,90,90,90	close-packed structure	-	14.26	X	13741
Ru-U	U ₂ Ru	U ₂ Ru, mS12,12	<i>C12/m1</i>	1.3106,0.3343,0.5202,90,96.16,90	-	-	16.92	X	1313
Ru-U	U ₃ Ru ₂	* ₀ cF120,227	<i>Fd-3m</i>	1.2895,1.2895,1.2895,90,90,90	-	-	-	N	4175
Ru-V	V _{0.3} Ru _{0.7}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2701,0.2701,0.4313,90,90,120	close-packed structure	-	10.49	X	9768
Ru-V	V _{0.8} Ru _{0.2}	W, cI2,229	<i>Im-3m</i>	0.2998,0.2998,0.2998,90,90,90	b.c.c. family	-	7.51	X	9768
Ru-V	V _{1.02} Ru _{0.98} ht	CsCl, cP2,221	<i>Pm-3m</i>	0.299,0.299,0.299,90,90,90	b.c.c. family	-	9.38	X	6072
Ru-V	V _{1.02} Ru _{0.98} rt	CuTi, tP2,123	<i>P4/mmm</i>	0.2928,0.2928,0.3118,90,90,90	b.c.c. family	-	9.38	X	6072
Ru-W	W _{0.4} Ru _{0.6}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2751,0.2751,0.441,90,90,120	close-packed structure	-	15.42	X	2328
Ru-W	W _{0.6} Ru _{0.4} ht	(Cr _{0.49} Fe _{0.51}), tP30,136	<i>P4₂/mmn</i>	0.9554,0.9554,0.4972,90,90,90	Frank-Kasper phase	-	16.55	A	2328
Ru-W	W _{0.85} Ru _{0.15}	W, cI2,229	<i>Im-3m</i>	0.3157,0.3157,0.3157,90,90,90	b.c.c. family	-	18.10	X	2328
Ru-Y	YRu ₂	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.5256,0.5256,0.8792,90,90,120	Friauf-Laves phase	-	9.19	X	1024
Ru-Y	Y _{0.05} Ru _{0.95}	Mg,hP2,194	<i>P6₃/mmc</i>	0.2726,0.2726,0.4308,90,90,120	close-packed structure	-	12.03	X	17525
Ru-Y	Y ₃ Ru	Fe ₂ C-b, oP16,62	<i>Pnma</i>	0.7342,0.9214,0.6333,90,90,90	-	-	5.70	A	17525
Ru-Y	Y ₃ Ru ₂ cub	* ₀ cI40,*	-	0.9854,0.9854,0.9854,90,90,90	-	-	-	N	17525
Ru-Y	Y ₃ Ru ₂ hex	Er ₃ Ru ₂ , hP10,176	<i>P6₃m</i>	0.8004,0.8004,0.3998,90,90,120	-	-	7.02	A	23428
Ru-Y	Y ₄₄ Ru ₂₅	Y ₄₄ Ru ₂₅ , oP276,52	<i>Pnna</i>	2.808,1.5195,1.5195,90,90,90	-	-	6.60	X	22255
Ru-Y	Y ₃ Ru ₂	Mn ₃ C ₂ , mS28,15	<i>C12/c1</i>	1.577,0.634,0.732,90,97.18,90	-	-	5.92	A	17525
Ru-Yb	YbRu	CsCl, cP2,221	<i>Pm-3m</i>	0.336,0.336,0.336,90,90,90	b.c.c. family	-	12.00	X	10008
Ru-Yb	YbRu ₂	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.5221,0.5221,0.8746,90,90,120	Friauf-Laves phase	-	12.07	A	10008
Ru-Zn	Zn _{0.740} Ru _{0.260}	Mg,hP2,194	<i>P6₃/mmc</i>	0.27052,0.27052,0.4286,90,90,120	close-packed structure	-	9.13	X	47242
Ru-Zn	Zn _{127.05} Ru _{12.75}	* ₁ hP564,194	<i>P6₃/mmc</i>	1.2943,1.2943,5.7552,90,90,120	-	-	-	N	48574
Ru-Zn	Zn ₃ Ru	ZrAl ₃ , tI16,139	<i>I4/mmm</i>	0.37682,0.37682,1.55478,90,90,90	close-packed structure	gray	8.94	X	47242
Ru-Zn	Zn ₆ Ru	Zn ₆ Ru, cP252,213	<i>P4₃2</i>	1.55575,1.55575,1.55575,90,90,90	-	-	7.83	X	5769
Ru-Zr	ZrRu	CsCl, cP2,221	<i>Pm-3m</i>	0.3249,0.3249,0.3249,90,90,90	b.c.c. family	-	9.31	X	28773
Ru-Zr	ZrRu ₂ ht	MgZn ₂ , hP12,194	<i>P6₃/mmc</i>	0.511,0.511,0.844,90,90,120	Friauf-Laves phase	-	10.21	A	1996
Ru-Zr	Zr _{0.005} Ru _{0.995}	Mg,hP2,194	<i>P6₃/mmc</i>	0.27049,0.27049,0.42831,90,90,120	close-packed structure	-	12.36	X	620
Ru-Zr	Zr _{0.95} Ru _{0.05} ht	W, cI2,229	<i>Im-3m</i>	0.3557,0.3557,0.3557,90,90,90	b.c.c. family	-	6.77	X	36039
Ru-Zr	Zr _{0.99} Ru _{0.01} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.3231,0.3231,0.5149,90,90,120	close-packed structure	-	6.52	X	36039
S-Sb	Sb ₁₀ S ₁₅ m	Sb ₁₀ S ₁₅ , mS104,15	<i>C12/c1</i>	1.3393,1.17170,1.6737,90,93.763,90	-	bronze	4.30	X	17663
S-Sb	Sb ₂ S ₃	Sb ₂ S ₃ , oP20,62	<i>Pnma</i>	1.13276,0.38423,1.12484,90,90,90	stibnite	gray	4.61	X	65178
S-Se	SeS	NaCl, cF8,225	<i>Fm-3m</i>	0.5191,0.5191,0.5191,90,90,90	rocksalt family	-	3.66	X	7914
S-Se	Se _{0.68} S ht1	Sc _{0.68} S, hR12,166	<i>R-3m</i>	0.3656,0.3656,1.791,90,90,120	-	black	3.01	X	2130
S-Se	Se ₂ S ₃ rt	Se ₂ S ₃ , oF80,70	<i>Fddd</i>	0.739,1.041,2.205,90,90,90	-	yellow	2.91	X	1792
S-Se	Se ₂ S ₃ tet	* ₀ tI160,*	-	0.7348,0.7348,3.117,90,90,90	-	-	-	N	1381
S-Se	SeS	* ₀ oP64,*	-	0.96,1.352,1.453,90,90,90	-	red brick	-	N	11349
S-Se	Se _{0.25} S _{0.75} 8 γ	S, mP32,13	<i>P12/c1</i>	0.84354,1.3374,0.9392,90,122.646,90	-	orange	2.61	X	11905

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
S-Se	Se _{0.25} S _{1.75}	Se _{0.25} S _{1.75} , oP24, 58	<i>Pnnm</i>	0.4774, 0.9193, 1.468, 90, 90, 90	-	-	2.35	X	7708
S-Se	Se _{0.375} S _{0.625}	Se _{0.38} S _{0.62} , mP64, 13	<i>P12/c1</i>	0.83955, 1.332, 0.928, 90, 122.403, 90	-	red bright	3.01	A	6231
S-Se	Se _{0.44} S _{0.56} hp	(Se _{0.44} S _{0.56}), hP18, 144	<i>P3₁</i>	0.785, 0.785, 0.462, 90, 90, 120	-	-	3.19	X	5227
S-Se	Se _{0.625} S _{0.375} 8 α	Se-b, mP32, 14	<i>P12₁/c1</i>	0.8867, 0.9113, 1.43934, 90, 127.264, 90	-	red	3.52	X	11905
S-Se	Se _{0.83} S _{0.17} 6	S, hR18, 148	<i>R-3</i>	1.1243, 1.1243, 0.4374, 90, 90, 120	-	red dark	4.43	A	18699
S-Se	Se _{0.968} S _{0.032}	Se, hP3, 152	<i>P3₁21</i>	0.43878, 0.43878, 0.49287, 90, 90, 120	-	-	4.70	X	41348
S-Se	Se ₂ S ₂ rt	Se ₂ (Se _{0.62} S _{0.38}) ₅ , oP28, 19	<i>P2₁2₁2₁</i>	0.4352, 1.2924, 1.3574, 90, 90, 90	-	red dark	3.99	X	18699
S-Si	SiS ₂ hp	ZnCl ₂ , tI12, 122	<i>I-42d</i>	0.542, 0.542, 0.8718, 90, 90, 90	-	colorless	2.39	X	2715
S-Si	SiS ₂ rt	SiS ₂ , oI12, 72	<i>Ibam</i>	0.5564, 0.9545, 0.5552, 90, 90, 90	-	colorless	2.08	X	14683
S-Sm	SmS hp1	NaCl, cF8, 225	<i>Fm-3m</i>	0.5395, 0.5395, 0.5395, 90, 90, 90	rocksalt family	-	7.72	X	30291
S-Sm	SmS hp2	CaCl ₂ , cP2, 221	<i>Pm-3m</i>	0.3143, 0.3143, 0.3143, 90, 90, 90	b.c.c. family	-	9.76	X	30291
S-Sm	SmS	NaCl, cF8, 225	<i>Fm-3m</i>	0.5972, 0.5972, 0.5972, 90, 90, 90	rocksalt family	black	5.69	X	11657
S-Sm	SmS _{1.94}	*c*24,*	-	0.796, 0.796, 0.796, 90, 90, 90	-	black	-	N	1060
S-Sm	Sm ₁₀ S ₁₉	Ce ₁₀ Se ₁₉ , tP58, 86	<i>P4₂/n</i>	0.8818, 0.8818, 1.5928, 90, 90, 90	-	red dark	5.67	X	38675
S-Sm	Sm ₂ S ₃ rt	Cr ₃ C ₂ -b, oP20, 62	<i>Pnma</i>	0.7376, 0.39622, 1.5352, 90, 90, 90	-	black red	5.88	X	31458
S-Sm	Sm _{2.667} S ₄ ht	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.84471, 0.84471, 0.84471, 90, 90, 90	-	yellow cognac	5.83	X	26848
S-Sm	Sm ₃ S ₄ ht	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8523, 0.8523, 0.8523, 90, 90, 90	-	black	6.22	X	11077
S-Sm	Sm ₅ S ₇	*tI192, 142	<i>I4₁/acd</i>	1.488, 1.488, 1.976, 90, 90, 90	-	-	-	N	3888
S-Sn	SnS ht1	NaCl, cF8, 225	<i>Fm-3m</i>	0.6, 0.6, 0.6, 90, 90, 90	rocksalt family	-	4.64	X	51731
S-Sn	SnS ht2	TlI, oS8, 63	<i>Cmcm</i>	0.4136, 1.1488, 0.4172, 90, 90, 90	CrB(TlI)-FeB	-	5.05	X	19050
S-Sn	SnS rt	GeS, oP8, 62	<i>Pnma</i>	1.1143, 0.3971, 0.4336, 90, 90, 90	herzenbergite	black	5.22	X	19050
S-Sn	SnS tf	ZnS, cF8, 216	<i>F-43m</i>	0.5783, 0.5783, 0.5783, 90, 90, 90	adamantane structure	-	5.18	X	51731
S-Sn	SnS ₂ 10H	*hP15,*	-	0.366, 0.366, 2.9925, 90, 90, 120	-	-	-	N	3043
S-Sn	SnS ₂ 18R	CdI ₂ , hR27, 166	<i>R-3m</i>	0.364, 0.364, 5.3, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	4.49	A	13360
S-Sn	SnS ₂ 2H	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.3616, 0.3616, 0.568, 90, 90, 120	CdI ₂ -PbI ₂ polytype	yellow	4.72	X	11217
S-Sn	SnS ₂ 6H	Sb ₂ Te, hP9, 164	<i>P-3m1</i>	0.3643, 0.3643, 1.7683, 90, 90, 120	-	-	4.48	A	12329
S-Sn	Sn _{0.93} S _{1.83} 4H	Sn _{0.9} S _{1.8} , hP6, 156	<i>P3m1</i>	0.36470, 0.36470, 1.1811, 90, 90, 120	-	yellow	4.13	X	23112
S-Sn	Sn ₂ S ₃ rt	Sn ₂ S ₃ , oP20, 62	<i>Pnma</i>	0.8878, 0.3751, 1.4020, 90, 90, 90	ottemannite	black	4.75	X	14733
S-Sn	Sn ₃ S ₄	*tP*,*	-	0.7488, 0.7488, 3.3131, 90, 90, 90	-	-	-	N	3043
S-Sr	SrS hp	CaCl ₂ , cP2, 221	<i>Pm-3m</i>	0.3372, 0.3372, 0.3372, 90, 90, 90	b.c.c. family	-	5.18	X	18261
S-Sr	SrS	NaCl, cF8, 225	<i>Fm-3m</i>	0.6019, 0.6019, 0.6019, 90, 90, 90	rocksalt family	white	3.65	X	47119
S-Sr	SrS ₂	SrS ₂ , tI12, 140	<i>I4/mcm</i>	0.6095, 0.6095, 0.7616, 90, 90, 90	-	yellow	3.56	X	9491
S-Sr	SrS ₃ hp	BaS ₃ , tP8, 113	<i>P-42₁m</i>	0.6708, 0.6708, 0.3942, 90, 90, 90	-	yellow	3.44	A	43818
S-Sr	SrS ₃	SrS ₃ , oS16, 41	<i>Aea2</i>	0.6982, 0.8032, 0.7088, 90, 90, 90	-	-	3.07	X	8323
S-Ta	TaS	WC, hP2, 187	<i>P-6m2</i>	0.327, 0.327, 0.3125, 90, 90, 120	AlB ₂ family	-	12.22	X	17240
S-Ta	TaS ₂ 3R	MoS ₂ , hR9, 160	<i>R3m</i>	0.332, 0.332, 1.79, 90, 90, 120	-	-	7.15	X	1637
S-Ta	TaS ₂ lt hex2	TaSe ₂ , hP12, 194	<i>P6₃/mmc</i>	0.3332, 0.3332, 2.362, 90, 90, 120	-	-	7.17	A	7391
S-Ta	TaS ₂ lt rhom	*hR36,*	-	0.3335, 0.3335, 7.124, 90, 90, 120	-	-	-	N	9227
S-Ta	TaS ₂ lt trig1	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.33649, 0.33649, 0.58971, 90, 90, 120	CdI ₂ -PbI ₂ polytype	yellow	7.04	X	33804
S-Ta	TaS ₂ rt 6R	TaS ₂ , hR18, 160	<i>R3m</i>	0.3335, 0.3335, 3.585, 90, 90, 120	-	-	7.07	X	1637
S-Ta	TaS ₂ rt	NbS ₂ , hP6, 194	<i>P6₃/mmc</i>	0.3314, 0.3314, 1.2097, 90, 90, 120	-	gray	7.07	X	23006
S-Ta	TaS ₃ lt mon	NbS ₃ , mP24, 11	<i>P12₁/m1</i>	0.9515, 0.33412, 1.46933, 90, 107.495, 90	-	black	6.20	X	14192
S-Ta	TaS ₃ lt orth	*oS96, 20	<i>C222₁</i>	1.5173, 3.6804, 0.334, 90, 90, 90	-	-	-	N	2338
S-Ta	Ta _{1.01} S ₂	Nb _{1.35} S ₂ , hP8, 194	<i>P6₃/mmc</i>	0.3295, 0.3295, 1.245, 90, 90, 120	AlB ₂ family	-	7.00	A	1637
S-Ta	Ta ₂ S	Ta ₂ S, oP36, 57	<i>Pbcm</i>	0.7379, 0.5574, 1.519, 90, 90, 90	-	-	12.57	X	4278
S-Ta	Ta _{2.4} S ₄	Ta _{2.4} S ₄ , hR21, 166	<i>R-3m</i>	0.3315, 0.3315, 3.62, 90, 90, 120	-	-	8.13	X	1637
S-Ta	Ta ₃ S ₂	Ta ₃ S ₂ , oS40, 39	<i>Aem2</i>	0.74783, 1.7222, 0.56051, 90, 90, 90	-	black	11.17	X	24505
S-Ta	Ta ₆ S ht	Ta ₆ S, mS56, 15	<i>C12/c1</i>	1.41576, 0.52835, 1.47885, 90, 118.010, 90	-	-	15.20	X	4864
S-Ta	Ta ₆ S rt	Ta ₆ S, aP14, 2	<i>P-1</i>	0.5252, 0.7516, 0.7536, 113.76, 98.46, 109.15	-	-	15.25	X	21142
S-Tb	TbS rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.5518, 0.5518, 0.5518, 90, 90, 90	rocksalt family	-	7.55	X	19915
S-Tb	TbS tf	NiO, hR6, 166	<i>R-3m</i>	0.38856, 0.38856, 0.96084, 90, 90, 120	-	-	7.57	X	11891
S-Tb	TbS ₂ hp1-ht	*c**,*	-	0.7815, 0.7815, 0.7815, 90, 90, 90	-	black gray	-	N	5117
S-Tb	TbS ₂ hp2-ht	NdS ₂ , tP24, 117	<i>P-4b2</i>	0.7751, 0.7751, 0.7861, 90, 90, 90	-	black gray	6.27	A	5117
S-Tb	TbS ₂ rt	TbS ₂ , mP6, 11	<i>P12₁/m1</i>	0.38723, 0.38599, 0.78872, 90, 90, 10.90	-	-	6.28	X	16332
S-Tb	Tb ₁₀ S ₁₉	Ce ₁₀ Se ₁₉ , tP58, 86	<i>P4₂/n</i>	0.86538, 0.86538, 1.57653, 90, 90, 90	-	-	6.18	A	60350
S-Tb	Tb ₂ S ₃ rt orth1	Cr ₃ C ₂ -b, oP20, 62	<i>Pnma</i>	0.7319, 0.3898, 1.5224, 90, 90, 90	-	-	6.33	A	19915
S-Tb	Tb ₂ S ₃ rt orth2	Tb ₂ S ₃ , oP20, 62	<i>Pnma</i>	1.06787, 0.38806, 1.04907, 90, 90, 90	-	-	6.33	X	26863
S-Tb	Tb _{2.67} S ₄ ht	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.83523, 0.83523, 0.83523, 90, 90, 90	-	yellow faint	6.30	X	35438
S-Tb	Tb ₅ S ₇	Y ₅ S ₇ , mS24, 12	<i>C12/m1</i>	1.2811, 0.3835, 1.1638, 90, 104.21, 90	-	-	6.11	A	4386
S-Tb	Tb ₈ S _{14.8}	Y ₈ S _{14.8} , mS174, 5	<i>C121</i>	1.5468, 1.5844, 1.166, 90, 90, 19.90	-	red	6.09	X	59178
S-Tc	TcS ₂	TcS ₂ , aP12, 2	<i>P-1</i>	0.6371, 0.6464, 0.6654, 62.94, 76.39, 61.	-	-	5.05	X	31864
S-Te	Te _{0.125} S _{0.875} 8 β lt1	S, mP64, 14	<i>P12₁/c1</i>	1.1131, 1.1106, 1.0847, 90, 94., 90	-	red	2.62	X	11798
S-Te	Te _{0.5} S _{3.5} 8 γ	(Te _{0.18} S _{0.82}) ₃ , mP32, 13	<i>P12/c1</i>	0.8358, 1.3386, 0.9368, 90, 122.45, 90	-	red dark	2.64	X	11798
S-Te	Te ₇ S ₁₀ hp	*aP408, 1	<i>P1</i>	0.925, 3.164, 4.149, 90., 90., 90.	-	-	-	N	4145
S-Th	ThS rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.56851, 0.56851, 0.56851, 90, 90, 90	rocksalt family	gray	9.55	X	19255
S-Th	ThS ₂	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.7267, 0.4273, 0.8615, 90, 90, 90	-	brown purple	7.35	X	17562
S-Th	Th ₂ S ₃	Th ₂ S ₃ , oP20, 62	<i>Pnma</i>	1.08519, 0.3958, 1.09922, 90, 90, 90	-	-	7.88	X	296
S-Th	Th ₂ S ₅	Th ₂ S ₅ , oP28, 60	<i>Pbcn</i>	0.7623, 1.0141, 0.7677, 90, 90, 90	-	red brick	6.99	X	14764
S-Th	Th ₃ S ₁₂	Th ₃ S ₁₂ , hP20, 176	<i>P6₃/m</i>	1.1063, 1.1063, 0.3991, 90, 90, 120	-	-	7.89	X	295
S-Th	TiS ht 2H	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.3296, 0.3296, 0.6398, 90, 90, 120	AlB ₂ family	-	4.41	X	19358
S-Ti	TiS _{0.2} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2971, 0.2971, 0.48, 90, 90, 120	close-packed structure	-	4.92	F	1119
S-Ti	TiS ₂ m	Ti ₂ C, cF48, 227	<i>Fd-3m</i>	0.97389, 0.97389, 0.97389, 90, 90, 90	-	-	3.22	X	26118
S-Ti	TiS ₂ rt	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.34097, 0.34097, 0.57052, 90, 90, 120	CdI ₂ -PbI ₂ polytype	bronze	3.24	X	39401
S-Ti	TiS ₃	TiS ₃ , mP8, 11	<i>P12₁/m1</i>	0.4958, 0.34006, 0.8778, 90, 97.32, 90	-	black	3.26	X	8558
S-Ti	Ti _{0.502} S 2H	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.3407, 0.3407, 0.5695, 90, 90, 120	AlB ₂ family	-	3.25	X	20155
S-Ti	Ti _{0.508} S Ti+	Cr _{0.88} S, hP4, 164	<i>P-3m1</i>	0.34097, 0.34097, 0.57052, 90, 90, 120	-	-	3.26	X	39401
S-Ti	Ti _{0.56} S	Ti _{0.56} S, hR48, 160	<i>R3m</i>	0.341, 0.341, 6.84, 90, 90, 120	-	-	3.41	X	9384
S-Ti	Ti _{0.58} S 48R	Ti _{0.58} S, hR96, 160	<i>R3m</i>	0.343, 0.343, 13.77, 90, 90, 120	-	-	3.40	X	7393

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
S-Ti	Ti _{0.58} S 8H	Ti _{0.58} S,hP16,164	<i>P-3m1</i>	0.342,0.342,2.288,90,90,120	-	-	3.43	X	7393
S-Ti	Ti _{0.59} S 12R	Sc _{0.67} Te,hR24,166	<i>R-3m</i>	0.342,0.342,3.432,90,90,120	-	-	3.46	X	8676
S-Ti	Ti _{0.59} S 16H	Ti _{0.59} S,hP32,156	<i>P3m1</i>	0.342,0.342,4.592,90,90,120	-	-	3.45	X	11003
S-Ti	Ti _{0.59} S 18H	Ti _{0.59} S,hP36,164	<i>P-3m1</i>	0.342,0.342,5.166,90,90,120	-	-	3.45	X	11003
S-Ti	Ti _{0.6} S 10H	Ti _{0.60} S,hP20,164	<i>P-3m1</i>	0.342,0.342,2.87,90,90,120	-	-	3.47	X	7393
S-Ti	Ti _{0.615} S 4H ₁	Ti _{0.62} S,hP8,186	<i>P6₃mc</i>	0.34198,0.34198,1.1444,90,90,120	-	brass	3.53	X	5319
S-Ti	Ti _{0.625} S 12H	Ti _{0.60} S,hP24,186	<i>P6₃mc</i>	0.342,0.342,3.438,90,90,120	-	-	3.55	X	5700
S-Ti	Ti _{0.67} S 6R	Sc _{0.685} S,hR12,166	<i>R-3m</i>	0.344,0.344,1.71,90,90,120	-	-	3.65	X	12992
S-Ti	Ti _{0.685} S 4H ₂	Ti _{0.68} S,mS96,9	<i>C1c1</i>	0.59439,1.0295,2.2858,90,90,90	-	-	3.70	X	12668
S-Ti	Ti _{0.744} S 33R	Ti _{0.74} S,hR66,166	<i>R-3m</i>	0.34342,0.34342,9.461,90,90,120	-	-	3.84	X	20030
S-Ti	Ti _{0.75} S ht 4H	TiP,hP8,194	<i>P6₃/mmc</i>	0.3431,0.3431,1.144,90,90,120	-	black blue	3.87	X	801
S-Ti	Ti _{0.764} S 18H	Ti _{0.77} S,hP36,194	<i>P6₃/mmc</i>	0.34365,0.34365,5.165,90,90,120	-	-	3.88	X	20030
S-Ti	Ti _{0.785} S 21R	Ti _{0.79} S,hR42,166	<i>R-3m</i>	0.34354,0.34354,6.0431,90,90,120	-	-	3.93	X	20030
S-Ti	Ti _{0.81} S 10H	Ti _{0.81} S,hP20,194	<i>P6₃/mmc</i>	0.3439,0.3439,2.893,90,90,120	-	-	3.97	X	5360
S-Ti	Ti _{0.93} S ht 9R	TiS,hR18,166	<i>R-3m</i>	0.3425,0.3425,2.6493,90,90,120	-	gray	4.25	X	941
S-Ti	Ti _{1.25} Se _{0.63} ht	WC,hP2,187	<i>P-6m2</i>	0.3273,0.3273,0.3214,90,90,120	AlB ₂ family	-	4.46	X	1119
S-Ti	Ti ₂ S	Ta ₂ P ₂ oP36,58	<i>Pnnm</i>	1.135,1.406,0.332,90,90,90	-	-	4.81	X	3302
S-Ti	Ti ₂ S ₃ 4H ₃	Ti ₂ S ₃ ,mS40,9	<i>C1c1</i>	1.0286,0.59383,1.19345,90,106.696,90	-	-	3.65	X	12668
S-Ti	Ti ₂ S ₃ mon	Ti ₂ S ₃ ,mS44,15	<i>C12/c1</i>	0.5951,1.0313,1.156,90,90,90	-	-	3.59	X	15767
S-Ti	Ti ₃ S ₄ 2H	* ₂ m*14,*	-	0.598,0.344,1.014,90,95.67,90	-	-	-	N	1824
S-Ti	Ti ₆ S ₈	V ₅ S ₈ ,mS26,12	<i>C12/m1</i>	1.15,0.685,0.82744,90,134.02,90	-	-	3.51	A	13323
S-Ti	Ti ₈ S ₃	Ti ₈ S ₃ ,mS88,12	<i>C12/m1</i>	2.513,0.3327,1.936,90,123.1,90	-	-	4.70	X	7841
S-Ti	TiS hp1	Sc _{0.685} S,hR12,166	<i>R-3m</i>	0.3945,0.3945,2.1788,90,90,120	-	-	8.02	A	21552
S-Ti	TiS hp3	CsCl,cP2,221	<i>Pm-3m</i>	0.3202,0.3202,0.3202,90,90,90	b.c.c. family	-	11.96	X	21552
S-Ti	TiS ht	TiS,mS256,5	<i>C121</i>	1.1018,1.1039,5.912,90,90,14.90	-	-	6.99	X	27736
S-Ti	TiS lt	TiSe,tl16,140	<i>I4/mcm</i>	0.7785,0.7785,0.6802,90,90,90	-	-	7.62	X	29076
S-Ti	TiS tet2	TiS,tlP64,92	<i>P4₁2₁2</i>	0.7803,0.7803,2.955,90,90,90	-	-	6.98	X	29076
S-Ti	TiS tf	* ₂ t*176,*	-	1.724,1.724,1.525,90,90,90	-	-	-	N	18362
S-Ti	TiS ₂	* ₂ tl152,137	<i>P4₂/nmc</i>	2.317,2.317,5.476,90,90,90	-	-	-	N	5684
S-Ti	Ti ₂ S ht	* ₂ hP9,*	-	0.6142,0.6142,0.821,90,90,120	-	-	-	N	12522
S-Ti	Ti ₂ S rt	Ti ₂ S,hR81,146	<i>R3</i>	1.215,1.215,1.819,90,90,120	carlinite	black bluish	8.50	X	41208
S-Ti	Ti ₂ S tet	* ₂ t*36,*	-	0.7735,0.7735,1.947,90,90,90	-	-	7.54	N	18409
S-Ti	Ti ₂ S ₅ orth1	Ti ₂ S ₅ ,oP28,19	<i>P2₁2₁2₁</i>	0.6538,0.6660,1.670,90,90,90	-	pink	5.20	X	8601
S-Ti	Ti ₂ S ₅ orth2	* ₂ oP84,60	<i>Pbcn</i>	2.345,0.8877,1.057,90,90,90	-	black	-	N	656
S-Ti	Ti ₄ S ₃	Ti ₄ S ₃ ,mP28,14	<i>P12₁/c1</i>	0.7757,1.303,0.7972,90,103.99,90	-	black	7.76	X	7010
S-Tm	TmS	NaCl,cF8,225	<i>Fm-3m</i>	0.5417,0.5417,0.5417,90,90,90	rocksalt family	golden	8.40	X	12239
S-Tm	TmS ₂ hp1-ht	NdS ₂ ,tP24,117	<i>P-4b2</i>	0.763,0.763,0.785,90,90,90	-	black gray	6.77	A	11684
S-Tm	TmS ₂ hp2-ht	* ₂ c***,*	-	0.7745,0.7745,0.7745,90,90,90	-	black gray	-	N	5117
S-Tm	TmS ₂ rt	CeSe ₂ ,mP12,14	<i>P12₁/c1</i>	0.77771,0.38456,0.77588,90,90.067,90	-	-	6.67	A	58385
S-Tm	Tm ₁₀ S ₁₉	Ce ₁₀ Se ₁₉ ,tP58,86	<i>P4₂/n</i>	0.8531,0.8531,1.5563,90,90,90	-	-	6.74	X	60350
S-Tm	Tm ₁₅ S ₂₂	Tm ₁₅ S ₂₂ ,mS74,12	<i>C12/m1</i>	3.8395,0.38421,1.1141,90,91.02,90	-	black	6.55	X	24696
S-Tm	Tm ₂ S ₃ cub	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cl80,206	<i>Ia-3</i>	1.2475,1.2475,1.2475,90,90,90	-	-	5.94	X	23902
S-Tm	Tm ₂ S ₃ hp	Tm ₂ S ₃ ,mP20,11	<i>P12₁/m1</i>	1.0897,0.39024,1.1162,90,108.87,90	-	green yellow	6.42	X	26051
S-Tm	Tm ₂ S ₃ hp1-ht	Th ₂ S ₃ ,oP20,62	<i>Pnma</i>	1.0479,0.38031,1.036,90,90,90	-	brown red	6.98	X	34011
S-Tm	Tm ₂ S ₃ rhom	Al ₂ O ₃ ,hR30,167	<i>R-3c</i>	0.6768,0.6768,1.8236,90,90,120	-	white	5.98	X	23057
S-Tm	Tm ₂ S ₃ rt	Ho ₂ S ₃ ,mP30,11	<i>P12₁/m1</i>	1.00626,0.39675,1.7396,90,98.655,90	-	gray silver	6.30	X	51076
S-Tm	Tm ₂ Fe ₂ S ₄ hp2-ht	Th ₃ P ₄ ,cl28,220	<i>I-43d</i>	0.8223,0.8223,0.8223,90,90,90	-	amber	6.92	X	23376
S-Tm	Tm ₃ S ₇	Yb ₃ Se ₇ ,mS26,12	<i>C12/m1</i>	1.2455,0.37398,1.1268,90,105.45,90	-	-	7.02	X	28260
S-Tm	Tm ₈ S ₁₁	Tm ₈ S ₁₁ ,oS76,63	<i>Cmcm</i>	0.37486,1.26160,3.4932,90,90,90	-	black	6.85	X	23450
S-U	US lt	NiO,hR6,166	<i>R-3m</i>	0.38632,0.38632,0.95595,90,90,120	rocksalt family	-	10.89	X	47549
S-U	US rt	NaCl,cF8,225	<i>Fm-3m</i>	0.5488,0.5488,0.5488,90,90,90	rocksalt family	golden	10.85	X	19261
S-U	US ₂ m	Fe ₂ P,hP9,189	<i>P-62m</i>	0.7236,0.7236,0.4062,90,90,120	Fe ₂ P family	black	8.17	X	32280
S-U	US ₂	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.71183,0.41233,0.84869,90,90,90	-	black	8.06	X	53957
S-U	US ₃	ZrSe ₃ ,mP8,11	<i>P12₁/m1</i>	0.53738,0.39598,0.9032,90,97.258,90	-	black	5.82	X	46976
S-U	U ₂ S ₃	Th ₂ S ₃ ,oP20,62	<i>Pnma</i>	1.065,0.389,1.041,90,90,90	-	gray	8.81	X	296
S-U	U ₂ S ₅	Th ₂ S ₅ ,oP28,60	<i>Pbcn</i>	0.749,0.9931,0.749,90,90,90	-	-	7.59	A	13211
S-U	U _{2.75} S ₄ ht	U _{2.75} S ₄ ,mP32,130	<i>P4/mcc</i>	1.0293,1.0293,0.6374,90,90,90	-	black gray	8.02	X	17043
S-U	U ₃ S ₅	Yb ₃ Sb ₃ ,oP32,62	<i>Pnma</i>	1.174,0.811,0.742,90,90,90	-	black	8.22	X	6475
S-U	U ₄ S ₃	U ₄ S ₃ ,cP7,221	<i>Pm-3m</i>	0.5494,0.5494,0.5494,90,90,90	-	-	10.50	X	181
S-V	VS rt	FeAs,oP8,62	<i>Pnma</i>	0.5854,0.331,0.5825,90,90,90	AlB ₂ family	-	4.88	X	4731
S-V	VS ₂ stab	CdI ₂ ,hP3,164	<i>P-3m1</i>	0.32306,0.32306,0.57091,90,90,120	CdI ₂ -PbI ₂ polytype	-	3.70	X	64543
S-V	VS ₄	VS ₄ ,mS40,15	<i>C12/c1</i>	1.27203,1.042,0.6775,90,110.746,90	patronite	black	2.83	X	6789
S-V	V _{0.59} S ht	NiAs,hP4,194	<i>P6₃/mmc</i>	0.329,0.329,0.569,90,90,120	AlB ₂ family	-	3.87	X	18098
S-V	V _{0.87} S rt	Cr _{0.88} S,hP4,164	<i>P-3m1</i>	0.3352,0.3352,0.5797,90,90,120	-	-	4.50	X	8386
S-V	V _{0.91} S ht	NiAs,hP4,194	<i>P6₃/mmc</i>	0.334,0.334,0.58,90,90,120	AlB ₂ family	-	4.65	X	32262
S-V	V ₂ S ₃	* ₂ hP*,*	-	0.6634,0.6634,2.249,90,90,120	-	-	-	N	17160
S-V	V ₃ S ht	V ₃ S,tl32,121	<i>I-42m</i>	0.9470,0.9470,0.4589,90,90,90	-	-	5.97	X	1004
S-V	V ₃ S rt	V ₃ S,tlP32,133	<i>P4₂/nbc</i>	0.9381,0.9381,0.4663,90,90,90	-	-	5.99	X	1004
S-V	V ₃ S ₄ ht	Nb ₃ Te ₄ ,hP14,176	<i>P6₃/m</i>	0.9118,0.9118,0.33035,90,90,120	-	black	3.92	X	26884
S-V	V ₃ S ₄ rt	Cr ₃ S ₄ ,mS14,12	<i>C12/m1</i>	1.2638,0.3294,0.5878,90,115.68,90	-	gray	4.23	X	30289
S-V	V ₃ S ₄ rt	Ti ₃ Te ₄ ,tl18,87	<i>I4/m</i>	0.8981,0.8981,0.3223,90,90,90	Chevre phase	-	4.89	X	8386
S-V	V ₃ S ₈ rt	V ₃ S ₈ ,mS26,12	<i>C12/m1</i>	1.1293,0.6645,0.792,90,134.01,90	-	black	3.97	X	9026
S-V	V ₇ S ₈ rt	Fe ₇ Se ₈ ,hP45,152	<i>P3₁21</i>	0.6706,0.6706,1.7412,90,90,120	-	-	4.50	X	4731
S-W	WS ₂ 2H	MoS ₂ ,hP6,194	<i>P6₃/mmc</i>	0.31532,0.31532,1.2323,90,90,120	tungstenite 2H	black	7.76	X	20234
S-W	WS ₂ 3R	MoS ₂ ,hR9,160	<i>R3m</i>	0.3158,0.3158,1.849,90,90,120	tungstenite 3R	-	7.74	X	20234
S-W	WS ₂ m	* ₂ o***,*	-	0.6465,1.1538,1.232,90,90,90	-	-	-	N	17305
S-W	W ₁₄ S ₃	* ₂ o***,*	-	0.337,1.848,1.98,90,90,90	-	-	-	N	20195
S-W	W ₂₁ S ₈	Nb ₂₁ S ₈ ,tl58,87	<i>I4/m</i>	1.677,1.677,0.335,90,90,90	-	-	14.51	A	20195

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
S-Y	YS	NaCl,cF8,225	<i>Fm-3m</i>	0.5466,0.5466,0.5466,90,90,90	rocksalt family	red	4.92	X	18722
S-Y	YS _{1.75} hp tet	NdS ₂ ,tP24,117	<i>P-4b2</i>	0.773,0.773,0.79,90,90,90	-	black gray	4.08	A	2139
S-Y	YS ₂ hp cub	* _c *,*,*	-	0.7797,0.7797,0.7797,90,90,90	-	black gray	-	N	5117
S-Y	Y ₂ S ₃ hp1-ht	Th ₂ S ₃ ,oP20,62	<i>Pnma</i>	1.0602,0.3858,1.0436,90,90,90	-	-	4.26	A	9344
S-Y	Y ₂ S ₃	Ho ₂ S ₃ ,mP30,11	<i>P12₁/m1</i>	1.01736,0.40107,1.75234,90,98.601,90	-	colorless	3.86	X	25780
S-Y	Y _{2.67} S ₄ hp2-ht	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.834,0.834,0.834,90,90,90	-	-	4.19	A	25930
S-Y	Y ₂ S ₇	Y ₂ S ₇ ,mS24,12	<i>C12/m1</i>	1.2768,0.3803,1.1545,90,104.82,90	-	-	4.10	X	2463
S-Y	Y ₈ S _{14.8}	Y ₈ S _{14.8} ,mS174,5	<i>C121</i>	1.5386,1.5727,1.1505,90,90,21,90	-	red	4.24	X	59178
S-Yb	YbS rt	NaCl,cF8,225	<i>Fm-3m</i>	0.5687,0.5687,0.5687,90,90,90	rocksalt family	-	7.41	X	17284
S-Yb	YbS _{1.7} hp tet1	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.3842,0.3842,0.7747,90,90,90	-	-	6.61	X	9978
S-Yb	YbS _{1.7} hp tet2	NdS ₂ ,tP24,117	<i>P-4b2</i>	0.7573,0.7573,0.7764,90,90,90	-	black gray	6.79	X	9978
S-Yb	YbS ₂ hp cub	* _c *,*,*	-	0.7722,0.7722,0.7722,90,90,90	-	black gray	-	N	5117
S-Yb	YbS ₂	BaS ₂ ,mS12,15	<i>C12/c1</i>	0.9326,0.4754,0.9025,90,118.39,90	-	-	4.48	X	8514
S-Yb	Yb _{0.92} S rt	Yb _{0.9} Se,cF64,225	<i>Fm-3m</i>	1.1281,1.1281,1.1281,90,90,90	rocksalt family	-	7.08	X	28475
S-Yb	Yb ₂ S ₃ cub	(Mn _{0.5} Fe _{0.5}) ₂ O ₃ ,cI80,206	<i>Ia-3</i>	1.24683,1.24683,1.24683,90,90,90	-	orange	6.06	X	26051
S-Yb	Yb ₂ S ₃ hp1-ht	Th ₂ S ₃ ,oP20,62	<i>Pnma</i>	1.0435,0.3786,1.033,90,90,90	-	-	7.20	A	9344
S-Yb	Yb ₂ S ₃ mon	Ho ₂ S ₃ ,mP30,11	<i>P12₁/m1</i>	1.037,0.406,1.815,90,100,90	-	red	5.86	X	9977
S-Yb	Yb ₂ S ₃ orth	* _o *,*,*	-	0.3617,0.6788,0.9981,90,90,90	-	-	-	N	5848
S-Yb	Yb ₂ S ₃ rhom	Al ₂ O ₃ ,hR30,167	<i>R-3c</i>	0.67405,0.67405,1.8148,90,90,120	-	yellow	6.17	X	28364
S-Yb	Yb _{2.67} S ₄ hp2-ht	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.8358,0.8358,0.8358,90,90,90	-	-	6.72	A	25930
S-Yb	Yb _{2.9} S ₄	Yb _{2.9} S ₄ ,oP28,62	<i>Pnma</i>	1.271,0.38,1.288,90,90,90	-	-	6.73	X	3384
S-Zn	ZnS 102R	ZnS,hR204,160	<i>R3m</i>	0.382,0.382,31.926,90,90,120	adamantane structure	-	4.09	X	6282
S-Zn	ZnS 108R ₁	ZnS-a,hR216,160	<i>R3m</i>	0.382,0.382,33.804,90,90,120	adamantane structure	-	4.09	X	9788
S-Zn	ZnS 108R ₂	ZnS-c,hR216,160	<i>R3m</i>	0.382,0.382,33.804,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 108R ₃	ZnS-b,hR216,160	<i>R3m</i>	0.382,0.382,33.804,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 10H ₁	ZnS,hP20,186	<i>P6₃mc</i>	0.3824,0.3824,3.120,90,90,120	wurtzite 10H	brown	4.10	X	1051
S-Zn	ZnS 10H ₂	ZnS,hP20,156	<i>P3m1</i>	0.382,0.382,3.13,90,90,120	adamantane structure	-	4.09	X	3240
S-Zn	ZnS 10H ₃	SiC,hP20,156	<i>P3m1</i>	0.382,0.382,3.113,90,90,120	adamantane structure	-	4.11	X	4860
S-Zn	ZnS 114R ₁	ZnS-a,hR228,160	<i>R3m</i>	0.382,0.382,35.682,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 114R ₂	ZnS-d,hR228,160	<i>R3m</i>	0.382,0.382,35.682,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 114R ₃	ZnS-c,hR228,160	<i>R3m</i>	0.382,0.382,35.682,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 114R ₄	ZnS-b,hR228,160	<i>R3m</i>	0.382,0.382,35.682,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 120R ₁	ZnS-a,hR240,160	<i>R3m</i>	0.382,0.382,37.56,90,90,120	adamantane structure	-	4.09	X	6282
S-Zn	ZnS 120R ₂	ZnS-b,hR240,160	<i>R3m</i>	0.382,0.382,37.56,90,90,120	adamantane structure	-	4.09	X	6282
S-Zn	ZnS 120R ₃	ZnS-c,hR240,160	<i>R3m</i>	0.382,0.382,37.56,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 12H	ZnS,hP24,186	<i>P6₃mc</i>	0.382,0.382,3.756,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 12H ₂	ZnS-b,hP24,156	<i>P3m1</i>	0.382,0.382,3.756,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 12H ₃	ZnS-c,hP24,156	<i>P3m1</i>	0.382,0.382,3.756,90,90,120	adamantane structure	-	4.09	X	4860
S-Zn	ZnS 12R	ZnS,hR24,160	<i>R3m</i>	0.382,0.382,3.744,90,90,120	adamantane structure	brown	4.10	X	1814
S-Zn	ZnS 14H	ZnS,hP28,186	<i>P6₃mc</i>	0.382,0.382,4.382,90,90,120	adamantane structure	-	4.09	X	3260
S-Zn	ZnS 14H ₁	ZnS-a,hP28,156	<i>P3m1</i>	0.382,0.382,4.382,90,90,120	adamantane structure	-	4.09	X	3240
S-Zn	ZnS 14H ₃	ZnS-c,hP28,156	<i>P3m1</i>	0.382,0.382,4.382,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 14H ₄	ZnS-d,hP28,156	<i>P3m1</i>	0.382,0.382,4.382,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 14H ₅	ZnS-e,hP28,156	<i>P3m1</i>	0.382,0.382,4.382,90,90,120	adamantane structure	-	4.09	X	6723
S-Zn	ZnS 14H ₆	ZnS-f,hP28,156	<i>P3m1</i>	0.382,0.382,4.382,90,90,120	adamantane structure	-	4.09	X	6228
S-Zn	ZnS 14H ₇	ZnS-g,hP28,156	<i>P3m1</i>	0.382,0.382,4.382,90,90,120	adamantane structure	-	4.09	X	6228
S-Zn	ZnS 14H ₈	ZnS-h,hP28,156	<i>P3m1</i>	0.382,0.382,4.382,90,90,120	adamantane structure	-	4.09	X	6228
S-Zn	ZnS 15R	SiC,hR30,160	<i>R3m</i>	0.383,0.383,4.688,90,90,120	wurtzite 15R	brown reddish	4.08	A	325
S-Zn	ZnS 162R	ZnS,hR324,160	<i>R3m</i>	0.382,0.382,50.706,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 16H	ZnS,hP32,186	<i>P6₃mc</i>	0.382,0.382,5.008,90,90,120	adamantane structure	-	4.09	X	3261
S-Zn	ZnS 16H ₁	ZnS-a,hP32,156	<i>P3m1</i>	0.382,0.382,5.008,90,90,120	adamantane structure	-	4.09	X	3287
S-Zn	ZnS 16H ₂	ZnS-b,hP32,156	<i>P3m1</i>	0.382,0.382,5.008,90,90,120	adamantane structure	-	4.09	X	3287
S-Zn	ZnS 16H ₃	ZnS-c,hP32,156	<i>P3m1</i>	0.382,0.382,5.008,90,90,120	adamantane structure	-	4.09	X	3287
S-Zn	ZnS 18H ₁	ZnS-a,hP36,156	<i>P3m1</i>	0.382,0.382,5.634,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 18H ₂	ZnS-b,hP36,156	<i>P3m1</i>	0.382,0.382,5.634,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 18H ₃	ZnS-c,hP36,156	<i>P3m1</i>	0.382,0.382,5.634,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 18H ₄	ZnS-d,hP36,156	<i>P3m1</i>	0.382,0.382,5.634,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 18H ₅	ZnS-e,hP36,156	<i>P3m1</i>	0.382,0.382,5.634,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 18H ₆	ZnS-f,hP36,156	<i>P3m1</i>	0.382,0.382,5.634,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 18H ₇	ZnS-g,hP36,156	<i>P3m1</i>	0.382,0.382,5.634,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 18H ₈	ZnS-h,hP36,156	<i>P3m1</i>	0.382,0.382,5.634,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 18R	ZnS,hR36,160	<i>R3m</i>	0.382,0.382,5.634,90,90,120	adamantane structure	-	4.09	X	3260
S-Zn	ZnS 20H	ZnS,hP40,186	<i>P6₃mc</i>	0.382,0.382,6.26,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 20H ₁	ZnS-a,hP40,156	<i>P3m1</i>	0.382,0.382,6.26,90,90,120	adamantane structure	-	4.09	X	3261
S-Zn	ZnS 20H ₁₀	ZnS-j,hP40,156	<i>P3m1</i>	0.382,0.382,6.26,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 20H ₂	ZnS-b,hP40,156	<i>P3m1</i>	0.382,0.382,6.26,90,90,120	adamantane structure	-	4.09	X	3261
S-Zn	ZnS 20H ₃	ZnS-c,hP40,156	<i>P3m1</i>	0.382,0.382,6.26,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 20H ₄	ZnS-d,hP40,156	<i>P3m1</i>	0.382,0.382,6.26,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 20H ₅	ZnS-e,hP40,156	<i>P3m1</i>	0.382,0.382,6.26,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 20H ₇	ZnS-h,hP40,156	<i>P3m1</i>	0.382,0.382,6.26,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 20H ₈	ZnS-g,hP40,156	<i>P3m1</i>	0.382,0.382,6.26,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 20H ₉	ZnS-i,hP40,156	<i>P3m1</i>	0.382,0.382,6.26,90,90,120	adamantane structure	-	4.09	X	16878
S-Zn	ZnS 21R	ZnS,hR42,160	<i>R3m</i>	0.382,0.382,6.552,90,90,120	adamantane structure	brown	4.10	X	1814
S-Zn	ZnS 22H ₁	ZnS-a,hP44,156	<i>P3m1</i>	0.382,0.382,6.886,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 22H ₂	ZnS-b,hP44,156	<i>P3m1</i>	0.382,0.382,6.886,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 22H ₃	ZnS-c,hP44,156	<i>P3m1</i>	0.382,0.382,6.886,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 24H ₁₀	ZnS-j,hP48,156	<i>P3m1</i>	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	4303
S-Zn	ZnS 24H ₁₁	ZnS-k,hP48,156	<i>P3m1</i>	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	4303

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
S-Zn	ZnS 24H ₁₂	ZnS-l,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 24H ₁₃	ZnS-m,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 24H ₁₄	ZnS-n,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 24H ₃	ZnS-c,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	3740
S-Zn	ZnS 24H ₄	ZnS-d,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	3740
S-Zn	ZnS 24H ₅	ZnS-e,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	3740
S-Zn	ZnS 24H ₆	ZnS-f,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	3740
S-Zn	ZnS 24H ₇	ZnS-g,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	3740
S-Zn	ZnS 24H ₈	ZnS-h,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	3740
S-Zn	ZnS 24H ₉	ZnS-i,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	4303
S-Zn	ZnS 24R ₁	ZnS-a,hR48,160	$R3m$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	5084
S-Zn	ZnS 24R ₂	ZnS-b,hR48,160	$R3m$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	9788
S-Zn	ZnS 24R ₃	SiC,hR48,160	$R3m$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	3240
S-Zn	ZnS 24T ₁	ZnS-a,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	3260
S-Zn	ZnS 24T ₂	ZnS-b,hP48,156	$P3m1$	0.382,0.382,7.512,90,90,120	adamantane structure	-	4.09	X	3740
S-Zn	ZnS 26H ₁	ZnS-a,hP52,156	$P3m1$	0.382,0.382,8.138,90,90,120	adamantane structure	-	4.09	X	3240
S-Zn	ZnS 26H ₂	ZnS-b,hP52,156	$P3m1$	0.382,0.382,8.138,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 26H ₃	ZnS-c,hP52,156	$P3m1$	0.382,0.382,8.138,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 26H ₄	ZnS-d,hP52,156	$P3m1$	0.382,0.382,8.138,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 26H ₅	ZnS-e,hP52,156	$P3m1$	0.382,0.382,8.138,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 28H ₁	ZnS-a,hP56,156	$P3m1$	0.382,0.382,8.764,90,90,120	adamantane structure	-	4.09	X	3240
S-Zn	ZnS 28H ₂	ZnS-b,hP56,156	$P3m1$	0.382,0.382,8.764,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 28H ₃	ZnS-c,hP56,156	$P3m1$	0.382,0.382,8.764,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 28H ₄	ZnS-d,hP56,156	$P3m1$	0.382,0.382,8.764,90,90,120	adamantane structure	-	4.09	X	6567
S-Zn	ZnS 28H ₅	ZnS-e,hP56,156	$P3m1$	0.382,0.382,8.764,90,90,120	adamantane structure	-	4.09	X	6567
S-Zn	ZnS 28H ₆	ZnS-f,hP56,156	$P3m1$	0.382,0.382,8.764,90,90,120	adamantane structure	-	4.09	X	6567
S-Zn	ZnS 28H ₇	ZnS-g,hP56,156	$P3m1$	0.382,0.382,8.764,90,90,120	adamantane structure	-	4.09	X	6567
S-Zn	ZnS 30R ₁	ZnS-a,hR60,160	$R3m$	0.382,0.382,9.39,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 30R ₂	ZnS-b,hR60,160	$R3m$	0.382,0.382,9.39,90,90,120	adamantane structure	-	4.09	X	4860
S-Zn	ZnS 30R ₃	ZnS-c,hR60,160	$R3m$	0.382,0.382,9.39,90,90,120	adamantane structure	-	4.09	X	4860
S-Zn	ZnS 32H ₁	ZnS-a,hP64,156	$P3m1$	0.382,0.382,10.016,90,90,120	adamantane structure	-	4.09	X	9788
S-Zn	ZnS 32H ₂	ZnS-b,hP64,156	$P3m1$	0.382,0.382,10.016,90,90,120	adamantane structure	-	4.09	X	9788
S-Zn	ZnS 34H	ZnS,hP68,156	$P3m1$	0.382,0.382,10.642,90,90,120	adamantane structure	-	4.09	X	6282
S-Zn	ZnS 36H ₁	ZnS-a,hP72,156	$P3m1$	0.382,0.382,11.268,90,90,120	adamantane structure	-	4.09	X	9788
S-Zn	ZnS 36H ₂	ZnS-b,hP72,156	$P3m1$	0.382,0.382,11.268,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 36R ₁	ZnS-a,hR72,160	$R3m$	0.382,0.382,11.268,90,90,120	adamantane structure	-	4.09	X	3260
S-Zn	ZnS 36R ₂	ZnS-b,hR72,160	$R3m$	0.382,0.382,11.268,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 36R ₃	ZnS-c,hR72,160	$R3m$	0.382,0.382,11.268,90,90,120	adamantane structure	-	4.09	X	4271
S-Zn	ZnS 36R ₄	ZnS-d,hR72,160	$R3m$	0.382,0.382,11.268,90,90,120	adamantane structure	-	4.09	X	4271
S-Zn	ZnS 36R ₅	ZnS-e,hR72,160	$R3m$	0.382,0.382,11.268,90,90,120	adamantane structure	-	4.09	X	4271
S-Zn	ZnS 36R ₆	ZnS-f,hR72,160	$R3m$	0.382,0.382,11.268,90,90,120	adamantane structure	-	4.09	X	4271
S-Zn	ZnS 40H	ZnS,hP80,156	$P3m1$	0.382,0.382,12.52,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 42R ₁	ZnS-a,hR84,160	$R3m$	0.382,0.382,13.146,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 42R ₁₀	ZnS-f,hR84,160	$R3m$	0.382,0.382,13.146,90,90,120	adamantane structure	-	4.09	X	6228
S-Zn	ZnS 42R ₂	ZnS-k,hR84,160	$R3m$	0.382,0.382,13.146,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 42R ₃	ZnS-l,hR84,160	$R3m$	0.382,0.382,13.146,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 42R ₄	ZnS-h,hR84,160	$R3m$	0.382,0.382,13.146,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 42R ₅	ZnS-j,hR84,160	$R3m$	0.382,0.382,13.146,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 42R ₆	ZnS-d,hR84,160	$R3m$	0.382,0.382,13.146,90,90,120	adamantane structure	-	4.09	X	4860
S-Zn	ZnS 42R ₇	ZnS-b,hR84,160	$R3m$	0.382,0.382,13.146,90,90,120	adamantane structure	-	4.09	X	4860
S-Zn	ZnS 42R ₈	ZnS-c,hR84,160	$R3m$	0.382,0.382,13.146,90,90,120	adamantane structure	-	4.09	X	6723
S-Zn	ZnS 42R ₉	ZnS-e,hR84,160	$R3m$	0.382,0.382,13.146,90,90,120	adamantane structure	-	4.09	X	6723
S-Zn	ZnS 44H ₁	ZnS-a,hP88,156	$P3m1$	0.382,0.382,13.772,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 44H ₂	ZnS-b,hP88,156	$P3m1$	0.382,0.382,13.772,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 48R ₁	ZnS-a,hR96,160	$R3m$	0.382,0.382,15.024,90,90,120	adamantane structure	-	4.09	X	3261
S-Zn	ZnS 48R ₂	ZnS-b,hR96,160	$R3m$	0.382,0.382,15.024,90,90,120	adamantane structure	-	4.09	X	3261
S-Zn	ZnS 48R ₃	ZnS-c,hR96,160	$R3m$	0.382,0.382,15.024,90,90,120	adamantane structure	-	4.09	X	3261
S-Zn	ZnS 48R ₄	ZnS-d,hR96,160	$R3m$	0.382,0.382,15.024,90,90,120	adamantane structure	-	4.09	X	3261
S-Zn	ZnS 48R ₅	ZnS-e,hR96,160	$R3m$	0.382,0.382,15.024,90,90,120	adamantane structure	-	4.09	X	3287
S-Zn	ZnS 48R ₆	ZnS-f,hR96,160	$R3m$	0.382,0.382,15.024,90,90,120	adamantane structure	-	4.09	X	3287
S-Zn	ZnS 48R ₇	ZnS-g,hR96,160	$R3m$	0.382,0.382,15.024,90,90,120	adamantane structure	-	4.09	X	3287
S-Zn	ZnS 48R ₈	ZnS-i,hR96,160	$R3m$	0.382,0.382,15.024,90,90,120	adamantane structure	-	4.09	X	4860
S-Zn	ZnS 48R ₉	ZnS-h,hR96,160	$R3m$	0.382,0.382,15.024,90,90,120	adamantane structure	-	4.09	X	4860
S-Zn	ZnS 4H	SiC,hP8,186	$P6_3mc$	0.3822,0.3822,1.2498,90,90,120	wurtzite 4H	green pale	4.09	X	54901
S-Zn	ZnS 54R ₁	ZnS-a,hR108,160	$R3m$	0.382,0.382,16.902,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 54R ₁₀	ZnS-k,hR108,160	$R3m$	0.382,0.382,16.902,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 54R ₁₁	ZnS-l,hR108,160	$R3m$	0.382,0.382,16.902,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 54R ₂	ZnS-b,hR108,160	$R3m$	0.382,0.382,16.902,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 54R ₃	ZnS-c,hR108,160	$R3m$	0.382,0.382,16.902,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 54R ₄	ZnS-e,hR108,160	$R3m$	0.382,0.382,16.902,90,90,120	adamantane structure	-	4.09	X	4302
S-Zn	ZnS 54R ₅	ZnS-f,hR108,160	$R3m$	0.382,0.382,16.902,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 54R ₆	ZnS-g,hR108,160	$R3m$	0.382,0.382,16.902,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 54R ₇	ZnS-i,hR108,160	$R3m$	0.382,0.382,16.902,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 54R ₈	ZnS-j,hR108,160	$R3m$	0.382,0.382,16.902,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 54R ₉	ZnS-k,hR108,160	$R3m$	0.382,0.382,16.902,90,90,120	adamantane structure	-	4.09	X	15609
S-Zn	ZnS 60R ₁	ZnS-a,hR120,160	$R3m$	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	3261
S-Zn	ZnS 60R ₁₀	ZnS-j,hR120,160	$R3m$	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 60R ₁₁	ZnS-k,hR120,160	$R3m$	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4270

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
S-Zn	ZnS 60R ₁₂	ZnS-l,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 60R ₁₃	ZnS-m,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 60R ₁₄	ZnS-n,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4271
S-Zn	ZnS 60R ₁₅	ZnS-o,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4271
S-Zn	ZnS 60R ₁₆	ZnS-p,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4860
S-Zn	ZnS 60R ₁₇	ZnS-q,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4860
S-Zn	ZnS 60R ₁₈	ZnS-r,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	16878
S-Zn	ZnS 60R ₁₉	ZnS-s,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	16878
S-Zn	ZnS 60R ₂	ZnS-b,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	3261
S-Zn	ZnS 60R ₃	ZnS-c,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	3261
S-Zn	ZnS 60R ₄	ZnS-d,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 60R ₅	ZnS-f,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 60R ₆	ZnS-e,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 60R ₇	ZnS-g,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 60R ₈	ZnS-h,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 60R ₉	ZnS-i,hR120,160	<i>R3m</i>	0.382,0.382,18.78,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 64H	ZnS,hP128,156	<i>P3m1</i>	0.382,0.382,20.032,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 66R ₁	ZnS-a,hR132,160	<i>R3m</i>	0.3823,0.3823,20.648,90,90,120	adamantane structure	-	4.09	X	3138
S-Zn	ZnS 66R ₂	ZnS-b,hR132,160	<i>R3m</i>	0.382,0.382,20.658,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 66R ₃	ZnS-c,hR132,160	<i>R3m</i>	0.382,0.382,20.658,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 66R ₄	ZnS-d,hR132,160	<i>R3m</i>	0.382,0.382,20.658,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 66R ₅	ZnS-e,hR132,160	<i>R3m</i>	0.382,0.382,20.658,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 6H	SiC,hP12,186	<i>P6₃mc</i>	0.3834,0.3834,1.8757,90,90,120	wurtzite 6H	brown reddish	4.07	A	63736
S-Zn	ZnS 72R ₁	ZnS-a,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	3740
S-Zn	ZnS 72R ₁₀	ZnS-j,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	4303
S-Zn	ZnS 72R ₁₁	ZnS-k,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 72R ₁₂	ZnS-l,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 72R ₁₃	ZnS-m,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 72R ₁₄	ZnS-n,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 72R ₁₅	ZnS-o,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 72R ₁₆	ZnS-p,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 72R ₁₇	ZnS-q,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 72R ₁₈	ZnS-r,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 72R ₁₉	ZnS-s,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	5576
S-Zn	ZnS 72R ₂	ZnS-b,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	3740
S-Zn	ZnS 72R ₂₀	ZnS-t,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	6227
S-Zn	ZnS 72R ₃	ZnS-c,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	4303
S-Zn	ZnS 72R ₄	ZnS-d,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	4303
S-Zn	ZnS 72R ₅	ZnS-e,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	4303
S-Zn	ZnS 72R ₆	ZnS-f,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	4303
S-Zn	ZnS 72R ₇	ZnS-g,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	4303
S-Zn	ZnS 72R ₈	ZnS-h,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	4303
S-Zn	ZnS 72R ₉	ZnS-i,hR144,160	<i>R3m</i>	0.382,0.382,22.536,90,90,120	adamantane structure	-	4.09	X	4303
S-Zn	ZnS 78R ₁	ZnS-a,hR156,160	<i>R3m</i>	0.382,0.382,24.414,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 78R ₂	ZnS-b,hR156,160	<i>R3m</i>	0.382,0.382,24.414,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 78R ₃	ZnS-c,hR156,160	<i>R3m</i>	0.382,0.382,24.414,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 78R ₄	ZnS-d,hR156,160	<i>R3m</i>	0.382,0.382,24.414,90,90,120	adamantane structure	-	4.09	X	4259
S-Zn	ZnS 78R ₅	ZnS-f,hR156,160	<i>R3m</i>	0.382,0.382,24.414,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 78R ₆	ZnS-e,hR156,160	<i>R3m</i>	0.382,0.382,24.414,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 84R ₀	ZnS-a,hR168,160	<i>R3m</i>	0.382,0.382,26.292,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 84R ₁	ZnS-b,hR168,160	<i>R3m</i>	0.382,0.382,26.292,90,90,120	adamantane structure	-	4.09	X	4270
S-Zn	ZnS 84R ₂	ZnS-c,hR168,160	<i>R3m</i>	0.382,0.382,26.292,90,90,120	adamantane structure	-	4.09	X	6624
S-Zn	ZnS 84R ₃	ZnS-d,hR168,160	<i>R3m</i>	0.382,0.382,26.292,90,90,120	adamantane structure	-	4.09	X	6567
S-Zn	ZnS 84R ₄	ZnS-e,hR168,160	<i>R3m</i>	0.382,0.382,26.292,90,90,120	adamantane structure	-	4.09	X	6567
S-Zn	ZnS 8H	SiC,hP16,186	<i>P6₃mc</i>	0.382,0.382,2.496,90,90,120	wurtzite 8H	green pale	4.10	X	1051
S-Zn	ZnS 8H ₁	ZnS-a,hP16,156	<i>P3m1</i>	0.382,0.382,2.504,90,90,120	adamantane structure	-	4.09	X	9788
S-Zn	ZnS 8H ₂	ZnS-b,hP16,156	<i>P3m1</i>	0.382,0.382,2.504,90,90,120	adamantane structure	-	4.09	X	9788
S-Zn	ZnS 90R ₁	ZnS-a,hR180,160	<i>R3m</i>	0.382,0.382,28.17,90,90,120	adamantane structure	-	4.09	X	6282
S-Zn	ZnS 90R ₂	ZnS-b,hR180,160	<i>R3m</i>	0.382,0.382,28.17,90,90,120	adamantane structure	-	4.09	X	6282
S-Zn	ZnS 90R ₃	ZnS-c,hR180,160	<i>R3m</i>	0.382,0.382,28.17,90,90,120	adamantane structure	-	4.09	X	18642
S-Zn	ZnS 96R ₁	ZnS-a,hR192,160	<i>R3m</i>	0.382,0.382,30.048,90,90,120	adamantane structure	-	4.09	X	6282
S-Zn	ZnS 96R ₂	ZnS-b,hR192,160	<i>R3m</i>	0.382,0.382,30.048,90,90,120	adamantane structure	-	4.09	X	9788
S-Zn	ZnS 9R	ZnS,hR18,160	<i>R3m</i>	0.382,0.382,2.808,90,90,120	adamantane structure	yellow honey	4.10	X	1814
S-Zn	ZnS ht	ZnO,hP4,186	<i>P6₃mc</i>	0.38227,0.38227,0.62607,90,90,120	wurtzite	colorless	4.08	X	21926
S-Zn	ZnS rt	ZnS,cF8,216	<i>F-43m</i>	0.5417,0.5417,0.5417,90,90,90	sphalerite	white	4.07	X	33073
S-Zn	ZnS ₂	FeS ₂ ,cP12,205	<i>Pa-3</i>	0.59542,0.59542,0.59542,90,90,90	pyrite-marcasite family	-	4.07	A	3933
S-Zr	ZrS ht	NaCl,cF8,225	<i>Fm-3m</i>	0.516,0.516,0.516,90,90,90	rocksalt family	golden	5.96	X	4835
S-Zr	ZrS rt	ZrS,iP4,129	<i>P4/nmm</i>	0.355,0.355,0.631,90,90,90	b.c.c. family	-	5.15	X	588
S-Zr	ZrS _{0.67} hex	WC,hP2,187	<i>P-6m2</i>	0.3446,0.3446,0.3445,90,90,120	AlB ₂ family	-	5.28	X	18904
S-Zr	ZrS _{1.992}	CDI ₂ ,hP3,164	<i>P-3m1</i>	0.3661,0.3661,0.5827,90,90,120	CDI ₂ -PbI ₂ polytype	red	3.81	X	7913
S-Zr	ZrS ₃	ZrSe ₃ ,mP8,11	<i>P12₁/m1</i>	0.51243,0.36244,0.898,90,97,28,90	-	orange red	3.76	X	8558
S-Zr	Zr _{0.646} S cub	Zr _{0.65} S,cF64,227	<i>Fd-3m</i>	1.025,1.025,1.025,90,90,90	rocksalt family	purple red	4.49	X	5465
S-Zr	Zr _{0.72} S	Zr _{0.77} S,mS32,12	<i>C12/m1</i>	1.035,1.031,0.731,90,134,91,90	-	-	4.70	X	4835
S-Zr	Zr _{0.75} S	Sc _{0.685} S,hR12,166	<i>R-3m</i>	0.36295,0.36295,1.7885,90,90,120	-	-	4.91	X	20249
S-Zr	Zr ₂ S	Ta ₂ P ₂ ,oP36,58	<i>Pnnm</i>	1.234,1.53328,0.352,90,90,90	-	-	6.42	X	21178
S-Zr	Zr ₂ S ₈	Nb ₂₁ S ₈ ,tI58,87	<i>I4/m</i>	1.688,1.688,0.342,90,90,90	-	-	7.40	A	5781
S-Zr	Zr ₆ S ₂	Zr ₆ S ₂ ,tI88,141	<i>I4₁/amd</i>	0.9752,0.9752,1.9216,90,90,90	-	-	6.43	X	6250
Sb-Sc	ScSb hp	CsCl,cP2,221	<i>Pm-3m</i>	0.336,0.336,0.336,90,90,90	b.c.c. family	-	7.30	X	43001

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Sb-Sc	ScSb rt	NaCl,cF8,225	<i>Fm-3m</i>	0.584,0.584,0.584,90,90,90	rocksalt family	gray	5.56	X	43001
Sb-Sc	Sc ₂ Sb	Cu ₂ Sb,tP6,129	<i>P4/nmm</i>	0.4211,0.4211,0.7814,90,90,90	-	-	5.07	X	41725
Sb-Sc	Sc ₂ Sb ₃	Yb ₂ Sb ₃ ,oP32,62	<i>Pnma</i>	1.10792,0.87126,0.76272,90,90,90	-	-	5.32	A	10197
Sb-Se	Sb ₂ Se ₃ rt	Sb ₂ S ₃ ,oP20,62	<i>Pnma</i>	1.1805,0.39877,1.16623,90,90,90	antimonoselite	-	5.81	X	65178
Sb-Sm	SmSb rt	NaCl,cF8,225	<i>Fm-3m</i>	0.6268,0.6268,0.6268,90,90,90	rocksalt family	black gray	7.34	X	25877
Sb-Sm	SmSb ₂	SmSb ₂ ,oS24,64	<i>Cmce</i>	0.6171,0.6051,1.789,90,90,90	-	-	7.83	X	3440
Sb-Sm	Sm ₂ Sb	La ₂ Sb,tI12,139	<i>I4/mmm</i>	0.44733,0.44733,1.7337,90,90,90	-	-	8.09	X	58334
Sb-Sm	Sm ₂ Sb ₅	Dy ₂ Sb ₅ ,mP28,11	<i>P12₁/m1</i>	1.3242,0.42037,1.4856,90,102.574,90	-	-	7.49	A	40009
Sb-Sm	Sm ₄ Sb ₃	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.9298,0.9298,0.9298,90,90,90	-	gray	7.99	A	40754
Sb-Sm	Sm ₃ Sb ₃ ht	*,t**,*	-	0.4541,0.4541,1.846,90,90,90	-	-	-	N	25877
Sb-Sm	Sm ₃ Sb ₃ rt	Mn ₂ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.9113,0.9113,0.6381,90,90,120	-	-	8.09	A	41773
Sb-Sn	SnSb hp1	NaCl,cF8,225	<i>Fm-3m</i>	0.612,0.612,0.612,90,90,90	rocksalt family	-	6.97	X	6152
Sb-Sn	SnSb hp2	CsCl,cP2,221	<i>Pm-3m</i>	0.3502,0.3502,0.3502,90,90,90	b.c.c. family	-	9.30	X	6152
Sb-Sn	Sn _{0.126} Sb _{0.874}	As ₂ hR6,166	<i>R-3m</i>	0.42615,0.42615,1.14522,90,90,120	-	-	6.71	A	62949
Sb-Sn	Sn _{0.371} Sb _{0.629}	(Sn _{0.5} Sb _{0.5}),hR3,166	<i>R-3m</i>	0.43071,0.43071,0.53726,90,90,120	stistaite	-	6.96	X	53244
Sb-Sn	Sn _{0.8} Sb _{0.2} rt	Sn,tI4,141	<i>I4₁/amd</i>	0.58646,0.58646,0.31798,90,90,90	-	-	7.25	X	25080
Sb-Sr	SrSb ₂	CaSb ₂ ,mP6,11	<i>P12₁/m1</i>	0.4887,0.428,0.94838,90,108.627,90	-	gray	5.85	X	10153
Sb-Sr	Sr ₁₁ Sb ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	<i>I4/mmm</i>	1.2454,1.2454,1.8066,90,90,90	-	-	5.17	X	28370
Sb-Sr	Sr ₁₆ Sb ₁₁	Ca ₁₆ Sb ₁₁ ,tP56,113	<i>P-42₁m</i>	1.29341,1.29341,1.18027,90,90,90	-	-	4.61	A	33193
Sb-Sr	Sr ₂ Sb	La ₂ Sb,tI12,139	<i>I4/mmm</i>	0.5002,0.5002,1.7405,90,90,90	-	black	4.53	X	6981
Sb-Sr	Sr ₂ Sb ₃	Sr ₂ Sb ₃ ,mP40,14	<i>P12₁/c1</i>	0.6670,1.2973,1.5208,90,90,09,90	-	gray	5.46	X	12698
Sb-Sr	Sr ₅ Sb ₃ hex	Mn ₂ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.95037,0.95037,0.74095,90,90,120	-	black	4.60	X	22046
Sb-Sr	Sr ₅ Sb ₃ orth	Yb ₂ Sb ₃ ,oP32,62	<i>Pnma</i>	1.3173,1.0101,0.8734,90,90,90	-	gray	4.59	X	26897
Sb-Ta	TaSb ₂	OsGe ₂ ,mS12,12	<i>C12/m1</i>	1.02218,0.36447,0.82915,90,120.39,90	-	-	10.58	X	2457
Sb-Ta	Ta ₂ Sb	Cr ₂ Si,cP8,223	<i>Pm-3n</i>	0.5265,0.5265,0.5265,90,90,90	Frank-Kasper phase	-	15.12	X	5500
Sb-Ta	Ta ₅ Sb ₄	Ti ₅ Te ₄ ,tI18,87	<i>I4/m</i>	1.02357,1.02357,0.35425,90,90,90	Chevrel phase	gray	12.45	X	35706
Sb-Tb	TbSb lt	NiO,hR6,166	<i>R-3m</i>	0.43546,0.43546,1.06987,90,90,120	-	-	7.96	X	11891
Sb-Tb	TbSb rt	NaCl,cF8,225	<i>Fm-3m</i>	0.6179,0.6179,0.6179,90,90,90	rocksalt family	gray	7.90	X	58223
Sb-Tb	TbSb ₂ hp	HoSb ₂ ,oS6,21	<i>C222</i>	0.3282,0.5903,0.799,90,90,90	-	-	8.63	A	4513
Sb-Tb	TbSb ₂ hp-ht	SmSb ₂ ,oS24,64	<i>Cmce</i>	0.6123,0.5969,1.772,90,90,90	-	-	8.25	A	4513
Sb-Tb	Tb ₂ Sb ₅	Dy ₂ Sb ₅ ,mP28,11	<i>P12₁/m1</i>	1.31108,0.41698,1.4649,90,102.344,90	-	-	7.87	X	51324
Sb-Tb	Tb ₄ Sb ₃ rt	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.91518,0.91518,0.91518,90,90,90	-	-	8.67	X	51521
Sb-Tb	Tb ₂ Sb ₃	Mn ₂ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.89324,0.89324,0.62887,90,90,120	-	-	8.86	X	19442
Sb-Te	SbTe	BiSe,hP12,164	<i>P-3m1</i>	0.426,0.426,2.39,90,90,120	-	-	6.61	X	3556
Sb-Te	Sb _{0.4} Te _{0.6} hp3	W,cI2,229	<i>Im-3m</i>	0.3406,0.3406,0.3406,90,90,90	b.c.c. family	-	10.53	X	59530
Sb-Te	Sb _{0.4} Te _{0.5} m	As,hR6,166	<i>R-3m</i>	0.424,0.424,1.18,90,90,120	-	-	6.76	A	16833
Sb-Te	Sb _{0.87} Te _{0.13}	(Sn _{0.5} Sb _{0.5}),hR3,166	<i>R-3m</i>	0.43181,0.43181,0.57267,90,90,120	-	-	6.60	X	58696
Sb-Te	Sb ₁₀ Te ₃	Sb ₁₀ Te ₃ ,hR39,166	<i>R-3m</i>	0.4289,0.4289,7.551,90,90,120	-	gray dark	6.63	X	55370
Sb-Te	Sb ₁₆ Te ₃	Sb ₁₆ Te ₃ ,hR57,166	<i>R-3m</i>	0.42817,0.42817,10.87017,90,90,120	-	-	6.73	X	45293
Sb-Te	Sb ₂ Te	Sb ₂ Te,hP9,164	<i>P-3m1</i>	0.4272,0.4272,1.7633,90,90,120	-	-	6.63	X	24232
Sb-Te	Sb ₂ Te ₃ hp1	Bi ₂ Te ₃ ,mS20,12	<i>C12/m1</i>	1.43717,0.40138,0.87763,90,91.931,90	-	-	8.22	X	60052
Sb-Te	Sb ₂ Te ₃ hp2	Bi ₂ Te ₃ ,mS20,15	<i>C12/c1</i>	0.9706,0.6704,0.74799,90,109.744,90	-	-	9.08	X	59530
Sb-Te	Sb ₂ Te ₃ rt	Bi ₂ Te ₃ ,hR15,166	<i>R-3m</i>	0.42706,0.42706,3.04758,90,90,120	tellurantimony	black	6.48	X	64634
Sb-Te	Sb ₄ Te ₃	Sb ₄ Te ₃ ,hR42,166	<i>R-3m</i>	0.42754,0.42754,8.3564,90,90,120	-	-	6.55	X	45341
Sb-Te	Sb ₅ Te ₃	*,hR48,166	<i>R-3m</i>	0.426,0.426,9.481,90,90,120	-	-	-	N	38267
Sb-Te	Sb ₈ Te ₃	Sb ₈ Te ₃ ,hR33,166	<i>R-3m</i>	0.42712,0.42712,6.38957,90,90,120	-	-	6.70	X	45293
Sb-Te	Sb ₈ Te ₉	Bi ₈ Se ₉ ,hR51,166	<i>R-3m</i>	0.42738,0.42738,10.2689,90,90,120	-	-	6.51	X	45341
Sb-Th	ThSb hp	CsCl,cP2,221	<i>Pm-3m</i>	0.3847,0.3847,0.3847,90,90,90	b.c.c. family	-	10.32	X	20980
Sb-Th	ThSb rt	NaCl,cF8,225	<i>Fm-3m</i>	0.6318,0.6318,0.6318,90,90,90	rocksalt family	-	9.32	X	20980
Sb-Th	ThSb ₂	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.4353,0.4353,0.9172,90,90,90	-	-	9.09	X	729
Sb-Th	Th ₃ Sb ₄	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.9372,0.9372,0.9372,90,90,90	-	-	9.55	X	729
Sb-Ti	TiSb	NiAs,hP4,194	<i>P6₃/mmc</i>	0.4123,0.4123,0.6265,90,90,120	AlB ₂ family	gray	6.11	X	43944
Sb-Ti	TiSb ₂	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.666,0.666,0.5818,90,90,90	-	-	7.50	X	49398
Sb-Ti	Ti _{10.84} Sb _{7.73}	Cr ₁₁ Ge ₈ ,oP76,62	<i>Pnma</i>	1.46228,0.55972,1.7644,90,90,90	-	gray	6.72	X	42096
Sb-Ti	Ti ₂ Sb	Ti ₂ Sb,tI16,139	<i>I4/mmm</i>	0.39546,0.39546,1.4611,90,90,90	-	black	6.32	X	43882
Sb-Ti	Ti ₃ Sb cub	Cr ₂ Si,cP8,223	<i>Pm-3n</i>	0.5236,0.5236,0.5236,90,90,90	Frank-Kasper phase	gray	6.14	X	55497
Sb-Ti	Ti ₃ Sb tet	Ti ₃ Sb,tI32,140	<i>I4/mcm</i>	1.0465,1.0465,0.52639,90,90,90	-	-	6.12	X	1581
Sb-Ti	Ti _{3.2} Sb _{0.8}	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.5958,0.5958,0.4808,90,90,120	close-packed structure	-	5.63	X	380
Sb-Ti	Ti _{4.80} Sb _{3.20}	Ti ₅ Ga ₄ ,hP18,193	<i>P6₃/mcm</i>	0.7982,0.7982,0.5515,90,90,120	AlB ₂ family	-	6.88	X	40043
Sb-Ti	Ti ₅ Sb ₃	Yb ₂ Sb ₃ ,oP32,62	<i>Pnma</i>	1.02173,0.83281,0.71459,90,90,90	-	gray	6.61	X	10204
Sb-Tl	Tl _{0.9} Sb _{0.1} hp	Cu ₂ cF4,225	<i>Fm-3m</i>	0.48602,0.48602,0.48602,90,90,90	close-packed structure	-	11.35	X	1224
Sb-Tl	Tl _{0.988} Sb _{0.012} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.34622,0.34622,0.55408,90,90,120	close-packed structure	-	11.74	X	1224
Sb-Tl	Tl _{1.38} Sb _{0.62} ht	CsCl,cP2,221	<i>Pm-3m</i>	0.385,0.385,0.385,90,90,90	b.c.c. family	-	10.40	X	14
Sb-Tl	Tl ₇ Sb ₂ rt	Tl ₇ Sb ₂ ,cI54,229	<i>Im-3m</i>	1.1618,1.1618,1.1618,90,90,90	b.c.c. family	-	10.64	X	10431
Sb-Tm	TmSb rt	NaCl,cF8,225	<i>Fm-3m</i>	0.6079,0.6079,0.6079,90,90,90	rocksalt family	gray	8.60	X	30446
Sb-Tm	TmSb ₂ hp-ht	HoSb ₂ ,oS6,21	<i>C222</i>	0.3252,0.5851,0.7912,90,90,90	-	-	9.10	A	4513
Sb-Tm	Tm ₃ Sb	Ti ₃ P,tP32,86	<i>P4₂/n</i>	1.22294,1.22294,0.59852,90,90,90	-	-	9.33	X	49349
Sb-Tm	Tm ₃ Sb ₃ ht	Yb ₂ Sb ₃ ,oP32,62	<i>Pnma</i>	1.16034,0.91077,0.79841,90,90,90	-	-	9.52	X	53231
Sb-Tm	Tm ₃ Sb ₃ rt	Y ₂ Bi ₃ ,oP32,62	<i>Pnma</i>	0.79262,0.91375,1.16013,90,90,90	-	-	9.56	X	53231
Sb-U	USb hp	CsCl,cP2,221	<i>Pm-3m</i>	0.3732,0.3732,0.3732,90,90,90	b.c.c. family	-	11.49	X	23295
Sb-U	USb	NaCl,cF8,225	<i>Fm-3m</i>	0.6191,0.6191,0.6191,90,90,90	rocksalt family	-	10.07	X	13450
Sb-U	USb ₂	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.4272,0.4272,0.8741,90,90,90	-	-	10.03	X	3615
Sb-U	USb _x	Cu ₂ cF4,225	<i>Fm-3m</i>	0.489,0.489,0.489,90,90,90	close-packed structure	-	13.52	X	7140
Sb-U	U ₃ Sb ₄	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.9091,0.9091,0.9091,90,90,90	-	-	10.62	X	9114
Sb-U	U ₅ Sb ₄	Ti ₅ Ga ₄ ,hP18,193	<i>P6₃/mcm</i>	0.9237,0.9237,0.6211,90,90,120	AlB ₂ family	-	12.14	A	30202
Sb-V	VSb	NiAs,hP4,194	<i>P6₃/mmc</i>	0.4266,0.4266,0.5448,90,90,120	AlB ₂ family	-	6.68	X	49449
Sb-V	V _{0.96} Sb _{0.04} ht	CuAl ₂ ,tI12,140	<i>I4/mcm</i>	0.6562,0.6562,0.5643,90,90,90	-	-	7.99	X	49398
Sb-V	V _{1.75} Sb ht	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.429,0.429,0.5447,90,90,120	AlB ₂ family	-	7.39	X	7440

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Sb-V	V ₃ Sb	Cr ₃ Si ₄ cP8,223	<i>Pm-3n</i>	0.4912,0.4912,0.4912,90,90,90	Frank-Kasper phase	-	7.69	X	63730
Sb-V	V ₃ Sb ₂ rt	Fe ₃ Sn ₂ ,hR30,166	<i>R-3m</i>	0.5551,0.5551,2.035,90,90,120	-	-	7.27	X	10415
Sb-V	V ₃ Sb ₄	Ti ₃ Te ₄ ,tI18,87	<i>I4/m</i>	0.9581,0.9581,0.3559,90,90,90	Chevrete phase	-	7.54	X	45920
Sb-V	V _{7.5} Sb ₉	V _{7.5} Sb ₉ ,tP34,129	<i>P4/nmm</i>	0.95866,0.95866,0.70474,90,90,90	-	-	7.58	X	29741
Sb-Y	YSb hp	CaCl ₂ cP2,221	<i>Pm-3m</i>	0.353,0.353,0.353,90,90,90	b.c.c. family	-	7.95	X	43001
Sb-Y	YSb rt	NaCl,cF8,225	<i>Fm-3m</i>	0.617,0.617,0.617,90,90,90	rocksalt family	gray	5.96	X	43001
Sb-Y	YSb ₂ hp	HoSb ₂ ,oS6,21	<i>C222</i>	0.3283,0.5907,0.7981,90,90,90	-	-	7.13	A	4513
Sb-Y	Y ₃ Sb	Ti ₃ P ₄ ,tP32,86	<i>P4₂/n</i>	1.2358,1.2358,0.6176,90,90,90	-	-	5.47	A	43964
Sb-Y	Y ₄ Sb ₃ ht	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.9139,0.9139,0.9139,90,90,90	-	gray	6.27	A	5213
Sb-Y	Y ₅ Sb ₃ hex	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8878,0.8878,0.6254,90,90,120	-	-	6.30	A	42361
Sb-Y	Y ₅ Sb ₃ orth	Yb ₅ Sb ₃ ,oP32,62	<i>Pnma</i>	1.1867,0.92247,0.80977,90,90,90	-	-	6.07	A	39262
Sb-Yb	YbSb rt	NaCl,cF8,225	<i>Fm-3m</i>	0.6082,0.6082,0.6082,90,90,90	rocksalt family	gray	8.70	X	30447
Sb-Yb	YbSb ₂	ZrSi ₂ ,oS12,63	<i>Cmcm</i>	0.4536,1.663,0.4271,90,90,90	close-packed structure	-	8.59	X	2990
Sb-Yb	Yb ₁₁ Sb ₁₀ rt	Ho ₁₁ Ge ₁₀ ,tI84,139	<i>I4/mmm</i>	1.186,1.186,1.71,90,90,90	-	-	8.62	X	5125
Sb-Yb	Yb ₁₆ Sb ₁₁	Ca ₁₆ Sb ₁₁ ,tP56,113	<i>P-42₁m</i>	1.21686,1.21686,1.132,90,90,90	-	-	8.14	A	33193
Sb-Yb	Yb ₄ Sb ₃	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.932,0.932,0.932,90,90,90	-	-	8.68	X	3443
Sb-Yb	Yb ₅ Sb ₃ (H)	Yb ₅ Sb ₃ ,oP32,62	<i>Pnma</i>	1.2398,0.9562,0.8246,90,90,90	-	-	8.36	X	5801
Sb-Yb	Yb ₅ Sb ₃ ht	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.90366,0.90366,0.69044,90,90,120	-	-	8.37	X	47173
Sb-Yb	Yb ₅ Sb ₄ ht	*oP108,62	<i>Pnma</i>	0.813,1.597,2.439,90,90,90	-	-	-	N	3443
Sb-Zn	Zn _{0.40} Sb _{0.60} hp	*o*4,*	-	0.282,0.325,0.506,90,90,90	-	-	-	N	20566
Sb-Zn	Zn _{0.96} Sb	CdSb,oP16,61	<i>Pbca</i>	0.62501,0.77758,0.81188,90,90,90	-	-	6.21	X	43603
Sb-Zn	Zn _{1.077} Sb	Zn _{1.077} Sb,aP60,2	<i>P-1</i>	0.781,1.531,1.551,119.4,91.13,90.58	-	-	5.14	X	55422
Sb-Zn	Zn ₁₃ Sb ₁₀ lt1	Zn ₁₃ Sb ₁₀ ,aP92,2	<i>P-1</i>	1.0862,1.22369,1.73806,110.611,98.205,90.	-	-	6.43	X	43870
Sb-Zn	Zn ₁₃ Sb ₁₀ lt2	Zn ₁₃ Sb ₁₀ ,aP98,2	<i>P-1</i>	1.0874,1.2237,1.73522,110.316,98.445,90.	-	-	6.42	X	49187
Sb-Zn	Zn _{2.66} Sb ₂ ht2	Zn _{2.66} Sb ₂ ,oP192,56	<i>Pccn</i>	1.5398,2.506,0.7283,90,90,90	-	-	5.92	X	44002
Sb-Zn	Zn ₃ Sb ₂ ht1	*oP30,59	<i>Pmmn</i>	0.7322,0.8032,1.134,90,90,90	-	-	-	N	5163
Sb-Zn	Zn _{5.9} Sb ₃ rt	Zn _{6.67} Sb ₅ ,hR174,167	<i>R-3c</i>	1.222,1.222,1.24177,90,90,120	-	-	6.17	X	47196
Sb-Zn	Zn ₆ Sb ₅ lt1	Zn ₆ Sb ₅ ,mS68,15	<i>C12/c1</i>	1.0878,1.2225,0.8185,90,100.044,90	-	-	6.20	X	47196
Sb-Zr	ZrSb ht	FeSi,cP8,198	<i>P2₁3</i>	0.5633,0.5633,0.5633,90,90,90	-	-	7.91	A	63795
Sb-Zr	ZrSb rt	ZrSb,oS24,63	<i>Cmcm</i>	0.3827,1.0426,1.4007,90,90,90	-	-	7.59	X	21299
Sb-Zr	ZrSb	FeSi,cP8,198	<i>P2₁3</i>	0.56358,0.56358,0.56358,90,90,90	-	-	7.90	A	21298
Sb-Zr	ZrSb _{1.96} rt Zr+	PbCl ₂ ,oP12,62	<i>Pnma</i>	0.7393,0.3987,0.9581,90,90,90	-	-	7.76	X	21299
Sb-Zr	ZrSb ₂ ht	TiAs ₂ ,oP24,58	<i>Pnmm</i>	0.994,1.498,0.386,90,90,90	-	-	7.74	X	4205
Sb-Zr	Zr ₁₁ Sb ₁₈	Zr ₁₁ Sb ₁₈ ,tI116,122	<i>I-42d</i>	0.67694,0.67694,6.0073,90,90,90	-	black	7.71	X	40636
Sb-Zr	Zr ₂ Sb ht	*oP48,*	-	0.7756,0.9058,1.4652,90,90,90	-	-	-	N	21298
Sb-Zr	Zr ₂ Sb rt	La ₂ Sb ₃ ,tI12,139	<i>I4/mmm</i>	0.4117,0.4117,1.5771,90,90,90	-	-	7.56	A	63795
Sb-Zr	Zr ₂ Sb tet	*tP*,75	<i>P4</i>	0.6497,0.6497,0.7871,90,90,90	-	-	-	N	40741
Sb-Zr	Zr ₃ Sb	Ni ₃ P,tI32,82	<i>I-4</i>	1.1347,1.1347,0.5664,90,90,90	-	-	7.20	A	63709
Sb-Zr	Zr ₃ Sb ₃ ht	Y ₃ Bi ₃ ,oP32,62	<i>Pnma</i>	0.7465,0.8801,1.0865,90,90,90	-	-	7.64	X	20993
Sb-Zr	Zr ₅ Sb _{3.16} rt	Ti ₅ Ga ₄ ,hP18,193	<i>P6₃/mcm</i>	0.84267,0.84267,0.57856,90,90,120	AlB ₂ family	-	7.85	X	20993
Sb-Zr	Zr ₇ Sb ₄	(Hf _{0.86} Ti _{0.14}) ₇ Sb ₄ ,mP44,14	<i>P12₁/c1</i>	0.84905,1.11557,1.11217,90,111.443,90	-	-	7.62	X	43807
Se-Se	SeSe ht	NaCl,cF8,225	<i>Fm-3m</i>	0.5437,0.5437,0.5437,90,90,90	rocksalt family	-	5.12	X	15752
Se-Se	Se ₂ Se ₃ ht	Se ₂ Se ₃ ,oF80,70	<i>Fddd</i>	0.7668,1.0846,2.3004,90,90,90	-	brown red	4.54	X	2478
Se-Si	SeSi	TiI ₂ ,oS8,63	<i>Cmcm</i>	0.3988,0.9882,0.3659,90,90,90	CrB(TiI)-FeB	gray silver	3.36	X	2416
Se-Si	SeSi _{1.22}	*o**,*	-	0.827,0.869,0.998,90,90,90	-	-	-	N	28694
Se-Si	SeSi ₂ ht	AlB ₂ ,hP3,191	<i>P6₃/mmm</i>	0.366,0.366,0.387,90,90,120	AlB ₂ family	gray	3.74	X	19464
Se-Si	Se ₃ Si ₃	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.7861,0.7861,0.5818,90,90,120	-	-	3.30	X	1531
Se-Si	Se ₂ Si ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.678,1.311,0.703,90,90,90	-	gray dark	3.58	A	28694
Se-Sn	SeSn	CaCl ₂ cP2,221	<i>Pm-3m</i>	0.3666,0.3666,0.3666,90,90,90	b.c.c. family	-	5.52	X	29480
Se-Sn	SeSn ₂	SeSn ₂ ,tI24,141	<i>I4₁/amd</i>	0.4233,0.4233,3.1039,90,90,90	-	-	6.74	X	29774
Se-Sn	Se ₃ Sn ₃	Mn ₅ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.835,0.835,0.6055,90,90,120	-	gray	5.28	X	34067
Se-Sn	Se ₆ Sn ₅	V ₆ Si ₅ ,oI44,72	<i>Ibam</i>	0.883,1.9045,0.6057,90,90,90	-	-	5.63	A	30210
Se-Te	SeTe ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5224,0.5224,0.857,90,90,120	Friauf-Laves phase	-	7.90	A	14114
Se-Te	Se _{0.125} Te _{0.875}	Mn ₄ cI58,217	<i>I-43m</i>	0.9509,0.9509,0.9509,90,90,90	-	-	10.24	A	1443
Se-Te	SeTe hex1	NiAs,hP4,194	<i>P6₃/mmc</i>	0.4122,0.4122,0.6735,90,90,120	AlB ₂ family	-	5.78	X	15752
Se-Te	SeTe hex2	TiP,hP8,194	<i>P6₃/mmc</i>	0.40969,0.40969,1.3602,90,90,120	-	black	5.80	X	56601
Se-Te	Se _{0.67} Te	Se _{0.67} Te,hR24,166	<i>R-3m</i>	0.4109,0.4109,4.059,90,90,120	-	gray	5.30	X	2535
Se-Te	Se ₂ Te	Se ₂ Te,oP36,62	<i>Pnma</i>	2.0178,0.39186,1.0675,90,90,90	-	-	5.14	X	32968
Se-Te	Se ₂ Te ₃ cub	*cF*,*	-	0.5817,0.5817,0.5817,90,90,90	-	-	-	N	1381
Se-Te	Se ₂ Te ₃ orth	Se ₂ Te ₃ ,oF80,70	<i>Fddd</i>	0.82223,1.16292,2.46085,90,90,90	-	black	5.34	X	46916
Se-Te	Se ₃ Te ₃	Ti ₈ Si ₃ ,mS88,12	<i>C12/m1</i>	2.8842,0.38517,2.2352,90,122.51,90	-	black	4.71	X	34558
Se-Te	Se ₄ Te ₂	Se ₄ Te ₂ ,mS88,9	<i>C1c1</i>	0.77576,1.5654,1.7283,90,90,01.90	-	black	4.18	X	37592
Se-Th	Se _{0.55} Th _{0.45} rt	Cu,cF4,225	<i>Fm-3m</i>	0.4925,0.4925,0.4925,90,90,90	close-packed structure	-	7.18	X	4726
Se-Y	Y _{0.5} Sc _{0.5} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.3504,0.3504,0.5544,90,90,120	close-packed structure	-	3.77	X	1977
Se-Zn	ZnSe	CaCl ₂ cP2,221	<i>Pm-3m</i>	0.3348,0.3348,0.3348,90,90,90	b.c.c. family	-	4.88	X	33232
Se-Zn	Zn ₁₂ Se	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.8814,0.8814,0.514,90,90,90	CaCu ₂ -Zr ₄ Al ₃	-	6.90	X	3022
Se-Zn	Zn ₁₇ Se ₃	Be ₁₇ Ru ₃ ,cI160,204	<i>Im-3</i>	1.3852,1.3852,1.3852,90,90,90	-	gray	6.23	X	22741
Se-Zn	Zn ₂ Se hp	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.52509,0.52509,0.84774,90,90,120	Friauf-Laves phase	-	5.77	X	31897
Se-Zn	Zn ₃ Se	Hg ₂ U,hP3,191	<i>P6/mmm</i>	0.4365,0.4365,0.3186,90,90,120	AlB ₂ family	-	5.55	X	33232
Se-Zn	Zn ₃₈ Se ₁₃	Zn ₃₈ Gd ₁₃ ,hP142,194	<i>P6₃/mmc</i>	1.3741,1.3741,1.3632,90,90,120	-	-	6.52	A	33232
Se-Zn	Zn ₆ Se lt	*mS168,15	<i>C12/c1</i>	1.95355,1.38052,1.95207,90,90.041,90	-	-	3.31	N	61691
Se-Zn	Zn ₆ Se rt	Cd ₆ Y,cI184,204	<i>Im-3</i>	1.38311,1.38311,1.38311,90,90,90	-	-	6.59	X	43769
Se-Zr	Se _{0.9} Zr _{0.1} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.3302,0.3302,0.5235,90,90,120	close-packed structure	-	3.33	X	13449
Se-Si	SiSe ₂	SiSe ₂ ,oI12,72	<i>Ibam</i>	0.5998,0.9669,0.5851,90,90,90	-	colorless	3.64	X	14683
Se-Sm	SmSe hp1	CaCl ₂ cP2,221	<i>Pm-3m</i>	0.3303,0.3303,0.3303,90,90,90	b.c.c. family	-	10.57	X	30291
Se-Sm	SmSe tf	ZnO,hP4,186	<i>P6₃/mc</i>	0.405,0.405,0.722,90,90,120	adamantane structure	-	7.43	X	10935
Se-Sm	SmSe	NaCl,cF8,225	<i>Fm-3m</i>	0.62,0.62,0.62,90,90,90	rocksalt family	black gray	6.39	X	18279
Se-Sm	SmSe _{1.84}	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.408,0.408,0.8336,90,90,90	-	black	7.08	X	54488

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Se-Sm	SmSe ₂	CeSe ₂ ,mP12,14	$P12_1/c1$	0.8399,0.41147,0.82763,90,90,05,90	-	-	7.16	A	58385
Se-Sm	Sm ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ ,tP58,86	$P4_2/n$	0.9143,0.9143,1.6624,90,90,90	-	black	7.18	X	38719
Se-Sm	Sm ₂ Se ₃ orth	Th ₂ S ₃ ,oP20,62	$Pnma$	1.1273,0.4091,1.1032,90,90,90	-	black grayish	7.02	X	31108
Se-Sm	Sm _{2,67} Se ₄ ht	Th ₃ P ₄ ,cI28,220	$I-43d$	0.8782,0.8782,0.8782,90,90,90	-	-	7.04	A	54066
Se-Sm	Sm _{2,67} Se ₄ ht	Th ₃ P ₄ ,cI28,220	$I-43d$	0.8782,0.8782,0.8782,90,90,90	-	brown reddish	7.04	X	31108
Se-Sm	Sm ₄ Se _{4,83}	Sm ₄ Se _{4,83} ,tI128,88	$I4_1/a$	1.20,1.20,1.4075,90,90,90	-	-	6.44	X	25819
Se-Sn	SnSe ht1	TlI ₂ O ₈ ,63	$Cmcm$	0.4293,1.162,0.4282,90,90,90	CrB(TII)-FeB	-	6.15	X	19050
Se-Sn	SnSe ht2	NaCl,cF8,225	$Fm-3m$	0.6,0.6,0.6,90,90,90	rocksalt family	-	6.08	X	22749
Se-Sn	SnSe rt	GeS ₂ ,oP8,62	$Pnma$	1.1501,0.4153,0.4445,90,90,90	-	black	6.18	X	19050
Se-Sn	SnSe ₂ ht	CdI ₂ ,hR27,166	$R-3m$	0.381,0.381,5.52,90,90,120	CdI ₂ -PbI ₂ polytype	-	5.96	A	13360
Se-Sn	SnSe ₂ rt	CdI ₂ ,hP3,164	$P-3m1$	0.3807,0.3807,0.6128,90,90,120	CdI ₂ -PbI ₂ polytype	gray	5.97	A	10637
Se-Sn	Sn ₂ Se ₃	* _t ,*10,*	-	0.677,0.677,0.586,90,90,90	-	-	-	N	594
Se-Sr	SrSe	NaCl,cF8,225	$Fm-3m$	0.6245,0.6245,0.6245,90,90,90	rocksalt family	-	4.54	X	16432
Se-Ta	TaSe ₂ 1T ht	CdI ₂ ,hP3,164	$P-3m1$	0.34746,0.34746,0.62778,90,90,120	CdI ₂ -PbI ₂ polytype	-	8.57	X	60630
Se-Ta	TaSe ₂ 1T rt	TaSe ₂ ,aP39,2	$P-1$	0.86899,0.93587,1.11251,74.819,77.315,87.789	-	-	8.59	X	40124
Se-Ta	TaSe ₂ 2H lt	* _h P54,*	-	1.029,1.029,1.27,90,90,120	-	-	-	N	13444
Se-Ta	TaSe ₂ 2H rt	NbS ₂ ,hP6,194	$P6_3/mmc$	0.343,0.343,1.271,90,90,120	-	-	8.69	X	2390
Se-Ta	TaSe ₂ 3R	MoS ₂ ,hR9,160	$R3m$	0.34348,0.34348,1.9177,90,90,120	-	gray	8.62	X	3330
Se-Ta	TaSe ₂ 4H ₂ ht	TaSe ₂ ,hP12,194	$P6_3/mmc$	0.346,0.346,2.518,90,90,120	-	-	8.62	X	2390
Se-Ta	TaSe ₂ 4H ₂ rt	TaSe ₂ ,hP156,176	$P6_3/m$	1.24579,1.24579,2.51495,90,90,120	-	-	8.66	X	36726
Se-Ta	TaSe ₂ 4H ₃ rt	TaSe ₂ ,hP12,186	$P6_3mc$	0.3436,0.3436,2.5532,90,90,120	-	-	8.62	X	4582
Se-Ta	TaSe ₂ 6R	Ta ₂ S ₂ ,hR18,160	$R3m$	0.34558,0.34558,3.7826,90,90,120	-	-	8.63	X	3330
Se-Ta	TaSe ₃ hp	NbSe ₃ ,mP24,11	$P12_1/m1$	1.0019,0.348,1.54978,90,107.931,90	-	black	8.10	A	20342
Se-Ta	TaSe ₃ rt	TaSe ₃ ,mP16,11	$P12_1/m1$	0.9829,0.3495,1.0402,90,106.26,90	-	-	8.09	X	2890
Se-Ta	Ta _{1,1} Se ₂ 2H ₂	Nb _{1,1} Se ₂ ,hP8,187	$P-6m2$	0.3442,0.3442,1.262,90,90,120	-	-	9.16	X	3489
Se-Ta	Ta _{1,14} Se ₂ 3R	Nb _{1,06} S ₂ ,hR12,160	$R3m$	0.3443,0.3443,1.893,90,90,120	-	-	9.34	X	3330
Se-Ta	Ta _{1,45} Se ₂ 2H	Nb _{1,35} S ₂ ,hP8,194	$P6_3/mmc$	0.3432,0.3432,1.292,90,90,120	AlB ₂ family	-	10.50	X	3330
Se-Ta	Ta ₂ Se	Ta ₂ Se ₂ ,tP6,129	$P4/nmm$	0.3375,0.3375,0.9832,90,90,90	-	-	13.07	X	21988
Se-Ta	Ta ₂ Se ₃	Mo ₂ S ₃ ,mP10,11	$P12_1/m1$	0.6495,0.3408,0.9206,90,103.63,90	-	-	10.04	X	3714
Se-Tb	TbSe lt	NiO,hR6,166	$R-3m$	0.40418,0.40418,0.99835,90,90,120	-	-	8.39	X	11891
Se-Tb	TbSe rt	NaCl,cF8,225	$Fm-3m$	0.5746,0.5746,0.5746,90,90,90	rocksalt family	-	8.33	X	22659
Se-Tb	TbSe tf	ZnO,hP4,186	$P6_3mc$	0.4,0.4,0.695,90,90,120	adamantane structure	-	8.20	X	10935
Se-Tb	TbSe ₂ mon	CeSe ₂ ,mP12,14	$P12_1/c1$	0.82666,0.40706,0.82093,90,90.087,90	-	-	7.62	A	58385
Se-Tb	TbSe ₂ tet	NdS ₂ ,tP24,117	$P-4b2$	0.826,0.826,0.8472,90,90,90	-	-	7.28	A	19915
Se-Tb	Tb ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ ,tP58,86	$P4_2/n$	0.90333,0.90333,1.65234,90,90,90	-	-	7.61	A	60350
Se-Tb	Tb ₂ Se ₃ rt	Th ₂ S ₃ ,oP20,62	$Pnma$	1.113,0.4024,1.0951,90,90,90	-	black	7.51	X	33942
Se-Tb	Tb _{2,67} Se ₄ ht	Th ₃ P ₄ ,cI28,220	$I-43d$	0.8677,0.8677,0.8677,90,90,90	-	-	7.53	A	22659
Se-Tb	Tb ₈ Se _{14,8}	Gd ₈ Se _{14,9} ,oS150,38	$Am2$	1.2094,1.6123,1.655,90,90,90	-	gray silver	7.53	X	50586
Se-Te	Te _{0,04} Se _{0,96}	Se-b,mP32,14	$P12_1/c1$	0.9103,0.9104,1.46853,90,127.442,90	-	black	4.45	X	20978
Se-Te	Te _{0,15} Se _{0,85}	S,mP28,14	$P12_1/c1$	1.0701,0.8427,0.9516,90,102.31,90	-	black	4.78	X	20979
Se-Te	Te _{0,4} Se _{0,6}	(Te _{0,4} Se _{0,6}),mS54,8	$C1m1$	0.81643,2.78559,0.69262,90,108.03,90	-	-	5.89	X	30772
Se-Te	Te _{0,5} Se _{0,5}	Se,hP3,152	$P3_121$	0.441,0.441,0.541,90,90,120	-	-	5.65	A	48281
Se-Th	ThSe hp	CsCl,cP2,221	$Pm-3m$	0.36,0.36,0.36,90,90,90	b.c.c. family	-	11.07	X	20981
Se-Th	ThSe	NaCl,cF8,225	$Fm-3m$	0.588,0.588,0.588,90,90,90	rocksalt family	golden	10.16	X	23540
Se-Th	ThSe ₂	PbCl ₂ ,oP12,62	$Pnma$	0.761,0.442,0.9064,90,90,90	-	gray	8.50	X	500
Se-Th	ThSe ₃	ZrSe ₃ ,mP8,11	$P12_1/m1$	0.572,0.421,0.964,90,97.08,90	-	-	6.76	A	13211
Se-Th	Th ₂ Se ₃	Th ₂ S ₃ ,oP20,62	$Pnma$	1.134,0.427,1.157,90,90,90	-	black gray	8.31	A	431
Se-Th	Th ₂ Se ₃ mon	Th ₂ Se ₃ ,tP28,113	$P-42_1m$	0.79213,0.79213,1.06897,90,90,90	-	-	8.51	X	61406
Se-Th	Th ₂ Se ₃ orth	Th ₂ S ₃ ,oP28,60	$Pbcn$	0.79223,1.07155,0.79375,90,90,90	-	violet dark	8.47	X	37028
Se-Th	Th ₇ Se ₁₂	Th ₇ S ₁₂ ,hP20,176	$P6_3/m$	1.158,1.158,0.436,90,90,120	-	gray	8.43	A	431
Se-Ti	TiSe rt hex	* _h P*,*	-	0.715,0.715,1.2,90,90,120	-	black	-	N	927
Se-Ti	TiSe rt orth	FeAs ₂ ,oP8,62	$Pnma$	0.6222,0.3494,0.6462,90,90,90	AlB ₂ family	-	6.00	X	1352
Se-Ti	TiSe ₂ rt	CdI ₂ ,hP3,164	$P-3m1$	0.354,0.354,0.6008,90,90,120	CdI ₂ -PbI ₂ polytype	violet dark	5.24	X	9841
Se-Ti	Ti _{0,89} Se rt	* _h P*,186	$P6_3mc$	1.0684,1.0684,0.6248,90,90,120	-	-	-	N	6432
Se-Ti	Ti _{0,95} Se ht	NiAs ₂ ,hP4,194	$P6_3/mmc$	0.3571,0.3571,0.6301,90,90,120	AlB ₂ family	black	5.94	X	1352
Se-Ti	Ti _{1,2} Se _{0,8}	NiAs ₂ ,hP4,194	$P6_3/mmc$	0.3574,0.3574,0.6322,90,90,120	AlB ₂ family	-	5.73	X	1119
Se-Ti	Ti _{1,1} Se ₄	* _m S90,12	$C12/m1$	2.5516,0.34481,1.9201,90,117.84,90	-	-	5.62	N	32311
Se-Ti	Ti ₂ Se orth1	Ta ₂ P ₂ ,oP36,58	$Pnnm$	1.1737,1.455,0.3451,90,90,90	-	gray silver	5.91	X	32727
Se-Ti	Ti ₂ Se orth2	Sc ₂ Te ₂ ,oP36,62	$Pnma$	1.7934,0.3453,0.9526,90,90,90	-	-	5.90	X	37131
Se-Ti	Ti ₂ Se ₃ rt	Cr ₂ S ₃ ,hP20,163	$P-31c$	0.6233,0.6233,1.1984,90,90,120	-	-	5.48	A	21453
Se-Ti	Ti ₃ Se ₄ rt hex	Nb ₃ Te ₄ ,hP14,176	$P6_3/m$	0.9881,0.9881,0.35874,90,90,120	-	-	5.03	X	29475
Se-Ti	Ti ₃ Se ₄ rt mon	Cr ₃ S ₄ ,mS14,12	$C12/m1$	1.35557,0.357,0.636,90,117.499,90	-	-	5.59	A	20179
Se-Ti	Ti ₄ Se ₁₆	Ti ₄ Se ₁₆ ,mS122,12	$C12/m1$	3.6534,0.3453,1.6984,90,91.73,90	-	-	5.30	X	38751
Se-Ti	Ti ₅ Se ₄	Ti ₅ Se ₄ ,tI18,87	$I4/m$	0.96728,0.96728,0.35083,90,90,90	Chevre phase	-	5.62	X	44925
Se-Ti	Ti ₆ Se ₃	Ti ₆ S ₃ ,mS88,12	$C12/m1$	2.5562,0.3441,1.9701,90,122.25,90	-	gray silver	5.62	X	32728
Se-Ti	Ti ₆ Se ₂	Ti ₆ Se ₂ ,oP22,55	$Pbam$	0.6917,1.5505,0.3454,90,90,90	-	gray	5.28	X	32599
Se-Tl	TlSe hp	CsCl,cP2,221	$Pm-3m$	0.331,0.331,0.331,90,90,90	b.c.c. family	-	12.97	X	21552
Se-Tl	TlSe ht	* _c I8,*	-	0.6187,0.6187,0.6187,90,90,90	-	-	-	N	13912
Se-Tl	TlSe rt	TlSe,tI16,140	$I4/mcm$	0.802,0.802,0.6971,90,90,90	-	-	8.39	X	29495
Se-Tl	Tl ₂ Se ₃ rt	Tl ₂ Te ₃ ,mS20,15	$C12/c1$	1.31318,0.7182,0.8064,90,104.046,90	-	-	5.81	A	10124
Se-Tl	Tl ₃ Se ₃	Tl ₃ Se ₃ ,tP32,85	$P4/n$	0.854,0.854,1.238,90,90,90	-	-	9.26	X	13558
Se-Tm	TmSe ht2	NaCl,cF8,225	$Fm-3m$	0.5704,0.5704,0.5704,90,90,90	rocksalt family	-	8.87	X	17981
Se-Tm	TmSe ₂	UAs ₂ ,tP6,129	$P4/nmm$	0.3961,0.3961,0.8188,90,90,90	-	-	8.45	A	5145
Se-Tm	Tm _{0,76} Se	Tm _{0,76} Se,oP32,48	$Pnnn$	0.79524,0.79591,1.12513,90,90,90	-	blue deep	7.74	X	20033
Se-Tm	Tm ₁₀ Se ₁₉	Ce ₁₀ Se ₁₉ ,tP58,86	$P4_2/n$	0.88689,0.88689,1.63671,90,90,90	-	-	8.23	A	60350
Se-Tm	Tm ₂ Se ₃	Sc ₂ S ₃ ,oF80,70	$Fddd$	0.806,1.131,2.406,90,90,90	-	yellow	6.96	X	2478
Se-Tm	Tm _{2,67} Se ₄ hp	Th ₃ P ₄ ,cI28,220	$I-43d$	0.85992,0.85992,0.85992,90,90,90	-	-	8.01	A	5141
Se-U	USe lt	NiO,hR6,166	$R-3m$	0.4035,0.4035,1.00057,90,90,120	rocksalt family	-	11.19	X	47549

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Se-U	USe rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.5757, 0.5757, 0.5757, 90, 90, 90	rocksalt family	gray	11.04	X	32040
Se-U	USe ₂ hp	Fe ₂ P, hP9, 189	<i>P-62m</i>	0.76376, 0.76376, 0.41924, 90, 90, 120	Fe ₂ P family	gray dark	9.31	X	33997
Se-U	USe ₂ ht	PbCl ₂ , oP12, 62	<i>Pnma</i>	0.7455, 0.4232, 0.8964, 90, 90, 90	-	black	9.30	X	32226
Se-U	USe ₃	ZrSe ₃ , mP8, 11	<i>P12₁/m1</i>	0.5652, 0.4056, 0.95643, 90, 97.344, 90	-	black	7.25	X	16764
Se-U	USe ₄	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.488, 0.488, 0.488, 90, 90, 90	close-packed structure	-	13.60	X	7140
Se-U	U ₂ Se ₃	Th ₂ S ₃ , oP20, 62	<i>Pnma</i>	1.13, 0.406, 1.094, 90, 90, 90	-	black	9.44	A	9130
Se-U	U _{2.75} Se ₅ rt	U _{2.75} S ₅ , tP32, 130	<i>P4/ncc</i>	1.0765, 1.0765, 0.666, 90, 90, 90	-	black	9.03	X	17043
Se-U	U ₃ Se ₄ rt	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.882, 0.882, 0.882, 90, 90, 90	-	gray	9.97	X	18211
Se-U	U ₃ Se ₅	Yb ₅ Sb ₃ , oP32, 62	<i>Pnma</i>	1.243, 0.848, 0.777, 90, 90, 90	-	black	8.99	X	6263
Se-U	U ₇ Se ₁₂	Th ₇ Si ₁₂ , hP20, 176	<i>P6₃/m</i>	1.1385, 1.1385, 0.4099, 90, 90, 120	-	-	9.43	X	6655
Se-V	VSe rt	NiAs, hP4, 194	<i>P6₃/mmc</i>	0.3697, 0.3697, 0.599, 90, 90, 120	AlB ₂ family	-	6.08	X	3085
Se-V	V _{0.5} Se rt	Cr _{0.88} S, hP4, 164	<i>P-3m1</i>	0.3356, 0.3356, 0.6104, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	5.83	X	14704
Se-V	V ₂ Se ₉	V ₂ Se ₉ , mS44, 15	<i>C12/c1</i>	1.05899, 1.24127, 0.81198, 90, 94.910, 90	-	gray dark	5.08	X	16616
Se-V	V ₂₉ Se ₃₂	*hP61, *	-	0.7211, 0.7211, 2.4002, 90, 90, 120	-	-	6.15	N	3085
Se-V	V ₃ Se ₄ rt	Cr ₃ S ₄ , mS14, 12	<i>C12/m1</i>	1.32468, 0.3463, 0.6204, 90, 116.183, 90	-	-	6.09	X	16930
Se-V	V ₅ Se ₄ rt	Ti ₅ Te ₄ , tI18, 87	<i>I4/m</i>	0.9294, 0.9294, 0.3417, 90, 90, 90	Chevrel phase	-	6.42	A	2339
Se-V	V ₅ Se ₃ rt	V ₅ S ₃ , mS26, 12	<i>C12/m1</i>	1.174, 0.696, 0.82466, 90, 134.037, 90	-	-	6.08	X	2104
Se-W	WSe ₂	MoS ₂ , hP6, 194	<i>P6₃/mmc</i>	0.3282, 0.3282, 1.296, 90, 90, 120	-	gray dark	9.39	X	20234
Se-Y	YSe	NaCl, cF8, 225	<i>Fm-3m</i>	0.5704, 0.5704, 0.5704, 90, 90, 90	rocksalt family	green	6.01	X	3836
Se-Y	Y _{0.75} Se rhom	Sc _{0.685} S, hR12, 166	<i>R-3m</i>	0.40429, 0.40429, 1.97981, 90, 90, 120	-	-	5.18	A	3836
Se-Y	Y _{0.75} Se rt	Zr _{0.65} S, cF64, 227	<i>Fd-3m</i>	1.14211, 1.14211, 1.14211, 90, 90, 90	rocksalt family	-	5.19	X	21187
Se-Y	Y _{0.92} Se _{1.68}	Y _{0.92} Se _{1.68} , tP12, 129	<i>P4/nmm</i>	0.4011, 0.4011, 1.6485, 90, 90, 90	-	-	5.37	X	29901
Se-Y	Y ₂ Se ₃	Sc ₂ S ₃ , oF80, 70	<i>Fddd</i>	0.818, 1.145, 2.438, 90, 90, 90	-	brown	4.83	X	2478
Se-Y	Y _{2.67} Se ₄ hp	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.86626, 0.86626, 0.86626, 90, 90, 90	-	-	5.65	A	5141
Se-Y	Y _{4.68} Se ₇ rt	Y _{4.68} Se ₇ , mS24, 8	<i>C1m1</i>	1.3213, 0.3949, 1.2035, 90, 104.82, 90	-	blue	5.30	X	21148
Se-Y	Y ₈ Se _{14.8}	Gd ₈ Se _{14.8} , oS150, 38	<i>Amm2</i>	1.2054, 1.6072, 1.6626, 90, 90, 90	-	gray silver	5.82	X	50586
Se-Yb	YbSe tf	ZnO, hP4, 186	<i>P6₃/mc</i>	0.412, 0.412, 0.726, 90, 90, 120	adamantane structure	-	7.84	X	10935
Se-Yb	YbSe	NaCl, cF8, 225	<i>Fm-3m</i>	0.59321, 0.59321, 0.59321, 90, 90, 90	rocksalt family	black	8.02	X	27806
Se-Yb	YbSe ₂ hp	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.397, 0.397, 0.8151, 90, 90, 90	-	-	8.56	A	5145
Se-Yb	Yb _{0.75} Se ht	Sc _{0.685} S, hR12, 166	<i>R-3m</i>	0.404, 0.404, 2.042, 90, 90, 120	-	-	7.21	A	4395
Se-Yb	Yb _{0.91} Se	Yb _{0.91} Se, cF64, 225	<i>Fm-3m</i>	1.17496, 1.17496, 1.17496, 90, 90, 90	rocksalt family	-	7.75	X	27312
Se-Yb	Yb ₂ Se ₃ ht	Sc ₂ S ₃ , oF80, 70	<i>Fddd</i>	0.80183, 1.1272, 2.3961, 90, 90, 90	-	black	7.15	X	41892
Se-Yb	Yb _{2.67} Se ₄ hp	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.8615, 0.8615, 0.8615, 90, 90, 90	-	-	8.08	A	5141
Se-Yb	Yb ₃ Se ₄ rt	Yb _{2.9} S ₄ , oP28, 62	<i>Pnma</i>	1.3277, 0.3974, 1.3512, 90, 90, 90	-	black	7.78	X	20376
Se-Yb	Yb ₅ Se ₇ rt	Yb ₅ Se ₇ , mS26, 12	<i>C12/m1</i>	1.3074, 0.39435, 1.2046, 90, 104.77, 90	-	black	7.84	X	23361
Se-Zn	ZnSe hp	NaCl, cF8, 225	<i>Fm-3m</i>	0.5158, 0.5158, 0.5158, 90, 90, 90	rocksalt family	-	6.99	X	41057
Se-Zn	ZnSe ht	ZnO, hP4, 186	<i>P6₃/mc</i>	0.3975, 0.3975, 0.6503, 90, 90, 120	adamantane structure	-	5.39	A	57088
Se-Zn	ZnSe m	HgS, hP6, 152	<i>P3₂1</i>	0.3789, 0.3789, 0.8865, 90, 90, 120	-	-	6.52	A	41057
Se-Zn	ZnSe rt	ZnS, cF8, 216	<i>F-43m</i>	0.5674, 0.5674, 0.5674, 90, 90, 90	stilleite	yellow	5.25	X	33073
Se-Zn	ZnSe ₂ hp	FeS ₂ , cP12, 205	<i>Pa-3</i>	0.6293, 0.6293, 0.6293, 90, 90, 90	pyrite-marcasite family	-	5.95	A	3933
Se-Zr	ZrSe _{0.67}	WC, hP2, 187	<i>P-6m2</i>	0.3546, 0.3546, 0.3614, 90, 90, 120	AlB ₂ family	gray	6.08	X	1121
Se-Zr	ZrSe ₂ rt	CdI ₂ , hP3, 164	<i>P-3m1</i>	0.3772, 0.3772, 0.61297, 90, 90, 120	CdI ₂ -PbI ₂ polytype	bronze green	5.48	X	5286
Se-Zr	ZrSe ₃	ZrSe ₃ , mP8, 11	<i>P12₁/m1</i>	0.54109, 0.37488, 0.94444, 90, 97.48, 90	-	purple dark	5.74	X	8558
Se-Zr	Zr _{0.62} Se	Ti _{0.62} S, hP8, 186	<i>P6₃/mc</i>	0.3744, 0.3744, 1.251, 90, 90, 120	-	-	5.93	X	4140
Se-Zr	Zr _{0.63} Se	Sc _{0.685} S, hR12, 166	<i>R-3m</i>	0.3753, 0.3753, 1.8703, 90, 90, 120	-	black	5.96	X	4140
Se-Zr	Zr _{0.8} Se _{0.2} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3252, 0.3252, 0.5186, 90, 90, 120	close-packed structure	-	6.21	X	1121
Se-Zr	Zr ₂ Se	Ta ₂ P, oP36, 58	<i>Pnmm</i>	1.25985, 1.57448, 0.36126, 90, 90, 90	-	-	7.27	X	44451
Se-Zr	Zr ₄ Se ₃ (Si)	*1***, *	-	0.362, 0.362, 0.834, 90, 90, 90	-	-	-	N	18904
Si-Sm	SmSi	FeB-b, oP8, 62	<i>Pnma</i>	0.81, 0.388, 0.584, 90, 90, 90	CrB(TiI)-FeB	gray	6.46	A	17394
Si-Sm	SmSi _{1.67} rt	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.3903, 0.3903, 0.4207, 90, 90, 120	AlB ₂ family	-	5.90	X	4171
Si-Sm	SmSi ₂ ht	ThSi ₂ , tI12, 141	<i>I4₁/amd</i>	0.4049, 0.4049, 1.336, 90, 90, 90	-	-	6.26	X	443
Si-Sm	SmSi ₂ rt	GdSi _{1.4} , oI12, 74	<i>Imma</i>	0.4048, 0.4094, 1.352, 90, 90, 90	-	-	6.12	A	34763
Si-Sm	Sm ₅ Si ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.858, 0.858, 0.648, 90, 90, 120	-	-	6.72	X	4509
Si-Sm	Sm ₅ Si ₄	Gd ₅ Si ₄ , oP36, 62	<i>Pnma</i>	0.75738, 1.489, 0.78156, 90, 90, 90	-	-	6.51	X	50294
Si-Sr	SrSi orth1	TiI ₂ , oS8, 63	<i>Cmcm</i>	0.48162, 1.1303, 0.40388, 90, 90, 90	CrB(TiI)-FeB	gray silver	3.50	X	32618
Si-Sr	SrSi orth2	SrSi ₂ , oI40, 71	<i>Immm</i>	0.489, 1.298, 1.803, 90, 90, 90	-	-	3.36	X	8527
Si-Sr	SrSi _{1.693} hp-ht	ThSi ₂ , tI12, 141	<i>I4₁/amd</i>	0.4403, 0.4403, 1.3916, 90, 90, 90	-	reddish	3.33	X	43982
Si-Sr	SrSi ₂ rt	SrSi ₂ , cP12, 213	<i>P4₁32</i>	0.6515, 0.6515, 0.6515, 90, 90, 90	-	gray dark	3.45	X	6287
Si-Sr	SrSi ₆ hp	Eu(Ga _{0.33} Ge _{0.67}) ₆ , oS28, 63	<i>Cmcm</i>	0.44692, 1.0256, 1.1698, 90, 90, 90	clathrate	-	3.17	X	48721
Si-Sr	Sr _{0.028} Si _{0.972}	C ₂ cF8, 227	<i>Fd-3m</i>	0.54248, 0.54248, 0.54248, 90, 90, 90	-	-	2.48	X	59756
Si-Sr	Sr ₂ Si	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.811, 0.515, 0.954, 90, 90, 90	-	-	3.39	X	10174
Si-Sr	Sr ₃ Si ₃	Cr ₃ B ₃ , tI32, 140	<i>I4/mcm</i>	0.80966, 0.80966, 1.5703, 90, 90, 90	-	black gray	3.37	X	39601
Si-Ta	TaSi ₂	CrSi ₂ , hP9, 180	<i>P6₂22</i>	0.47839, 0.47839, 0.657, 90, 90, 120	-	-	9.07	X	39046
Si-Ta	Ta ₂ Si	CuAl ₂ , tI12, 140	<i>I4/mcm</i>	0.616, 0.616, 0.5056, 90, 90, 90	-	-	13.50	X	6603
Si-Ta	Ta ₃ Si	Ti ₃ P, tP32, 86	<i>P4₂/n</i>	1.0193, 1.0193, 0.5175, 90, 90, 90	-	-	14.11	X	2792
Si-Ta	Ta _{3.28} Si _{0.72}	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.6105, 0.6105, 0.4919, 90, 90, 120	close-packed structure	-	12.84	X	507
Si-Ta	Ta ₂ Si _{2.97} rt	Cr ₂ B ₃ , tI32, 140	<i>I4/mcm</i>	0.65246, 0.65246, 1.18853, 90, 90, 90	-	-	12.97	X	59782
Si-Ta	Ta ₂ Si ₃ ht	W ₅ Si ₃ , tI32, 140	<i>I4/mcm</i>	0.99429, 0.99429, 0.50347, 90, 90, 90	-	-	13.20	X	63700
Si-Ta	Ta ₂ Si ₃ stab	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.7474, 0.7474, 0.5226, 90, 90, 120	-	-	12.99	X	507
Si-Tb	TbSi ht	FeB-b, oP8, 62	<i>Pnma</i>	0.78895, 0.38136, 0.56813, 90, 90, 90	CrB(TiI)-FeB	gray	7.27	X	27517
Si-Tb	TbSi _{1.67} hex	AlB ₂ , hP3, 191	<i>P6/mmm</i>	0.38417, 0.38417, 0.41405, 90, 90, 120	AlB ₂ family	-	6.46	X	22325
Si-Tb	TbSi _{1.67} orth	GdSi _{1.5} , oI12, 74	<i>Imma</i>	0.40431, 0.39496, 1.3353, 90, 90, 90	-	gray	6.41	X	22325
Si-Tb	TbSi _{1.75} lt	TbSi _{1.75} , oI12, 46	<i>Ima2</i>	0.4037, 1.33743, 0.39462, 90, 90, 90	-	-	6.49	X	23426
Si-Tb	Tb ₂ Si ₃ orth	V ₂ B ₃ , oS20, 63	<i>Cmcm</i>	0.42178, 2.3912, 0.3823, 90, 90, 90	-	-	6.93	X	27506
Si-Tb	Tb ₅ Si ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8425, 0.8425, 0.6333, 90, 90, 120	-	-	7.50	X	22322
Si-Tb	Tb ₂ Si ₄	Gd ₅ Si ₄ , oP36, 62	<i>Pnma</i>	0.741, 1.458, 0.769, 90, 90, 90	-	-	7.25	A	3270
Si-Tc	TcSi	FeSi, cP8, 198	<i>P2₁3</i>	0.4755, 0.4755, 0.4755, 90, 90, 90	-	-	7.79	A	2595
Si-Tc	Tc _{0.8} Si _{0.2}	W, cI2, 229	<i>Im-3m</i>	0.3009, 0.3009, 0.3009, 90, 90, 90	b.c.c. family	-	10.24	X	2595

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Si-Tc	Tc ₁₀ Si ₃	Zn ₉ (Zn _{0.5} Fe _{0.5}) ₂ Fe ₂ cI52,217	<i>I</i> -43 <i>m</i>	0.9014,0.9014,0.9014,90,90,90	γ-brass	-	9.65	A	2595
Si-Tc	Tc ₈ Si ₇	Mn ₉ Si ₇ tP44,116	<i>P</i> -4 <i>c</i> 2	0.5737,0.5737,1.8098,90,90,90	chimney-ladder structure	-	6.56	A	2605
Si-Tc	Tc ₅ Si ₃	W ₅ Si ₃ tI32,140	<i>I4/mcm</i>	0.9403,0.9403,0.4849,90,90,90	-	-	8.90	A	2595
Si-Te	Si _{17.5} Te _{9.5}	Si ₁₂ (Si _{0.69} Te _{0.31}) ₈ Te ₇ cF432,228	<i>Fd</i> -3 <i>c</i>	2.1136,2.1136,2.1136,90,90,90	-	-	4.79	X	43040
Si-Te	Si ₁₉ Te ₈ cub	Si ₁₉ Te ₈ cP78,218	<i>P</i> -43 <i>n</i>	1.0457,1.0457,1.0457,90,90,90	clathrate	gray	4.51	X	44772
Si-Te	Si ₁₉ Te ₈ rhom	Si ₁₉ Te ₈ hR162,161	<i>R</i> 3 <i>c</i>	1.47842,1.47842,1.81638,90,90,120	clathrate	gray	4.50	X	44772
Si-Te	Si ₂ Te ₃ rt	Si ₂ Te ₃ hP40,163	<i>P</i> -31 <i>c</i>	0.7430,0.7430,1.3482,90,90,120	-	red	4.52	X	9915
Si-Th	ThSi	FeB-b,oP8,62	<i>Pnma</i>	0.78895,0.41482,0.58972,90,90,90	CrB(III)-FeB	-	8.95	X	61511
Si-Th	ThSi ₂ rt	ThSi ₂ tI12,141	<i>I</i> 4 ₁ / <i>amd</i>	0.4126,0.4126,1.4346,90,90,90	-	-	7.84	X	215
Si-Th	ThSi ₂	AlB ₂ hP3,191	<i>P6/mmm</i>	0.3985,0.3985,0.422,90,90,120	AlB ₂ family	-	8.25	X	751
Si-Th	Th ₃ Si ₂	U ₃ Si ₂ tP10,127	<i>P4/mbm</i>	0.7835,0.7835,0.4154,90,90,90	-	-	9.80	X	751
Si-Ti	TiSi ht	FeB-b,oP8,62	<i>Pnma</i>	0.65383,0.36413,0.5002,90,90,90	CrB(III)-FeB	-	4.24	A	42354
Si-Ti	TiSi rt	* _o S32,65	<i>Cmmm</i>	0.7081,1.874,0.3596,90,90,90	-	-	4.23	N	5486
Si-Ti	TiSi ₂ m	TiSi ₂ oF12,69	<i>Fmmm</i>	0.4428,0.4779,0.9078,90,90,90	-	-	3.60	X	35159
Si-Ti	TiSi ₂ orth1	TiSi ₂ oF24,70	<i>Fddd</i>	0.48000,0.82671,0.85505,90,90,90	-	-	4.07	X	10261
Si-Ti	TiSi ₂ orth2	ZrSi ₂ oS12,63	<i>Cmcm</i>	0.355,1.349,0.355,90,90,90	close-packed structure	-	4.07	A	27411
Si-Ti	Ti _{0.983} Si _{0.017} rt	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2954,0.2954,0.4672,90,90,120	close-packed structure	-	4.47	X	56095
Si-Ti	Ti ₃ Si rt	Ti ₃ P,tP32,86	<i>P4₂/n</i>	1.0159,1.0159,0.5085,90,90,90	-	-	4.35	A	43944
Si-Ti	Ti ₅ Si ₃	Mn ₅ Si ₃ hP16,193	<i>P6₃/mcm</i>	0.7461,0.7461,0.51508,90,90,120	-	-	4.33	X	19236
Si-Ti	Ti ₅ Si ₄ ht	Zr ₅ Si ₄ tP36,92	<i>P4₁2₁2</i>	0.67113,0.67113,1.218,90,90,90	-	-	4.26	A	51339
Si-Ti	Ti ₅ Si ₄ rt	Gd ₅ Si ₄ oP36,62	<i>Pnma</i>	0.64892,1.26759,0.6627,90,90,90	-	-	4.29	A	51323
Si-Tm	TmSi	TiI ₀ S8,63	<i>Cmcm</i>	0.41813,1.03406,0.37743,90,90,90	CrB(III)-FeB	gray	8.02	A	58277
Si-Tm	TmSi _{1.74}	AlB ₂ hP3,191	<i>P6/mmm</i>	0.3768,0.3768,0.40702,90,90,120	AlB ₂ family	-	7.23	X	58277
Si-Tm	Tm ₃ Si ₃	Mn ₃ Si ₃ hP16,193	<i>P6₃/mcm</i>	0.826,0.826,0.618,90,90,120	-	-	8.45	X	4509
Si-U	USi (O)	FeB-b,oP8,62	<i>Pnma</i>	0.767,0.391,0.566,90,90,90	CrB(III)-FeB	-	10.41	X	300
Si-U	USi _{0.1} stab	Cu ₂ cF4,225	<i>Fm</i> -3 <i>m</i>	0.496,0.496,0.496,90,90,90	close-packed structure	-	13.11	F	7140
Si-U	USi _{1.67}	AlB ₂ hP3,191	<i>P6/mmm</i>	0.384,0.384,0.407,90,90,120	AlB ₂ family	-	9.10	X	23530
Si-U	USi _{1.78}	GdSi _{1.4} oI12,74	<i>Imma</i>	0.3929,0.3953,1.3656,90,90,90	-	-	9.02	A	26284
Si-U	USi _{1.84} ht	ThSi ₂ tI12,141	<i>I</i> 4 ₁ / <i>amd</i>	0.3937,0.3937,1.3654,90,90,90	-	-	9.09	X	26284
Si-U	USi ₂ rt	AlB ₂ hP3,191	<i>P6/mmm</i>	0.3839,0.3839,0.472,90,90,120	AlB ₂ family	-	8.11	X	15439
Si-U	USi ₃ ht	Cu ₃ Au,cP4,221	<i>Pm</i> -3 <i>m</i>	0.40597,0.40597,0.40597,90,90,90	close-packed structure	-	8.00	X	42354
Si-U	U ₃ Si ht	Cu ₃ Au,cP4,221	<i>Pm</i> -3 <i>m</i>	0.4346,0.4346,0.4346,90,90,90	close-packed structure	-	15.01	X	2502
Si-U	U ₃ Si lt	U ₃ Si ₂ oF32,69	<i>Fmmm</i>	0.8523,0.8549,0.8654,90,90,90	close-packed structure	-	15.64	X	12858
Si-U	U ₃ Si rt	U ₃ Si ₂ tI16,140	<i>I4/mcm</i>	0.60358,0.60358,0.86925,90,90,90	close-packed structure	-	15.57	X	23748
Si-U	U ₃ Si ₂	U ₃ Si ₂ tP10,127	<i>P4/mbm</i>	0.73314,0.73314,0.39001,90,90,90	-	-	12.20	X	26284
Si-U	U ₃ Si ₂ Si+	* _o P* ₄₇	<i>Pmmm</i>	0.3892,0.4027,0.674,90,90,90	-	-	-	N	39510
Si-U	U ₃₄ Si _{34.5}	U ₃₄ Si _{34.5} tI138,139	<i>I4/mmm</i>	1.0587,1.0587,2.431,90,90,90	-	gray	11.05	X	31838
Si-U	U ₅ Si ₄	* _h P36,191	<i>P6/mmm</i>	1.0467,1.0467,0.7835,90,90,120	-	-	11.64	N	45720
Si-V	VSi ₂	CrSi ₂ hP9,180	<i>P6₂22</i>	0.45726,0.45726,0.63744,90,90,120	-	brown medium	4.62	X	39046
Si-V	V _{0.97} Si _{0.03}	W ₂ cI2,229	<i>Im</i> -3 <i>m</i>	0.30232,0.30232,0.30232,90,90,90	b.c.c. family	-	6.04	X	3619
Si-V	V ₃ Si ltI	* _t * ₈ ,*	-	0.47255,0.47255,0.4717,90,90,90	-	-	-	N	16258
Si-V	V ₃ Si rt	Cr ₃ Si,cP8,223	<i>Pm</i> -3 <i>n</i>	0.4724,0.4724,0.4724,90,90,90	Frank-Kasper phase	-	5.70	X	11768
Si-V	V ₅ Si ₃ rt	W ₅ Si ₃ tI32,140	<i>I4/mcm</i>	0.94245,0.94245,0.47575,90,90,90	-	-	5.33	X	45098
Si-V	V ₅ Si ₃ stab	Mn ₅ Si ₃ hP16,193	<i>P6₃/mcm</i>	0.715,0.715,0.483,90,90,120	-	-	5.26	A	2708
Si-V	V ₆ Si ₅ ht	V ₆ Si ₅ oI44,72	<i>Ibam</i>	0.7501,1.5966,0.4858,90,90,90	-	-	5.09	X	4996
Si-W	WSi ₂ tf	CrSi ₂ hP9,180	<i>P6₂22</i>	0.4614,0.4614,0.6414,90,90,120	-	-	10.11	A	13123
Si-W	WSi ₂	MoSi ₂ tI6,139	<i>I4/mmm</i>	0.32178,0.32178,0.78403,90,90,90	b.c.c. family	-	9.82	X	27472
Si-W	W ₃ Si tf	Cr ₃ Si,cP8,223	<i>Pm</i> -3 <i>n</i>	0.491,0.491,0.491,90,90,90	Frank-Kasper phase	-	16.26	X	1095
Si-W	W ₅ Si ₃	W ₅ Si ₃ tI32,140	<i>I4/mcm</i>	0.9645,0.9645,0.497,90,90,90	-	-	14.42	X	655
Si-Y	YSi	TiI ₀ S8,63	<i>Cmcm</i>	0.4251,1.0526,0.3826,90,90,90	CrB(III)-FeB	-	4.54	X	1020
Si-Y	YSi _{1.67} hex	AlB ₂ hP3,191	<i>P6/mmm</i>	0.3838,0.3838,0.4141,90,90,120	AlB ₂ family	gray	4.27	X	43964
Si-Y	YSi ₂ orth	GdSi _{1.4} oI12,74	<i>Imma</i>	0.3963,0.4056,1.3437,90,90,90	-	-	4.46	A	58803
Si-Y	YSi ₂ tet	ThSi ₂ tI12,141	<i>I</i> 4 ₁ / <i>amd</i>	0.404,0.404,1.342,90,90,90	-	-	4.40	A	1081
Si-Y	YSi ₃ hp	YbSi ₃ tI32,139	<i>I4/mmm</i>	0.7231,0.7231,1.0792,90,90,90	-	-	4.08	X	59325
Si-Y	Y ₂ Si _{2.67}	Ho ₂ Si _{2.67} oS24,63	<i>Cmcm</i>	0.42,2.3838,0.3819,90,90,90	-	-	4.39	A	47581
Si-Y	Y ₅ Si ₃	Mn ₅ Si ₃ hP16,193	<i>P6₃/mcm</i>	0.84096,0.84096,0.63437,90,90,120	-	-	4.52	X	47944
Si-Y	Y ₅ Si ₄ mon	Gd ₅ (Ge _{0.5} Si _{0.5}) ₄ mP36,14	<i>P12₁/c1</i>	1.4625,0.7671,0.7473,90,93.343,90	-	-	4.42	X	57199
Si-Y	Y ₅ Si ₄ orth	Gd ₅ Si ₄ oP36,62	<i>Pnma</i>	0.7499,1.4763,0.7751,90,90,90	-	-	4.31	A	47581
Si-Yb	YbSi	TiI ₀ S8,63	<i>Cmcm</i>	0.4178,1.031,0.3768,90,90,90	CrB(III)-FeB	gray	8.23	X	3505
Si-Yb	YbSi _{1.375}	YbSi _{1.375} oI38,44	<i>Im</i> 2	0.416,0.756,2.351,90,90,90	-	-	7.61	X	46675
Si-Yb	YbSi _{1.74} ht	AlB ₂ hP3,191	<i>P6/mmm</i>	0.377,0.377,0.4098,90,90,120	AlB ₂ family	-	7.31	X	42330
Si-Yb	YbSi ₂ rt	ThSi ₂ tI12,141	<i>I</i> 4 ₁ / <i>amd</i>	0.39868,0.39868,1.3542,90,90,90	-	gray	7.07	X	60362
Si-Yb	YbSi ₃ hp	YbSi ₃ tI32,139	<i>I4/mmm</i>	0.71657,0.71657,1.06581,90,90,90	-	gray	6.25	X	58392
Si-Yb	Yb ₂ Si	PbCl ₂ oP12,62	<i>Pnma</i>	0.7501,0.4781,0.8951,90,90,90	-	-	7.74	A	42330
Si-Yb	Yb ₂ Si _{2.8} rt	Ho ₂ Si _{2.67} oS24,63	<i>Cmcm</i>	0.4159,2.351,0.3775,90,90,90	-	-	7.64	X	46675
Si-Yb	Yb ₃ Si ₅	Th ₃ Pd ₅ hP8,189	<i>P</i> -62 <i>m</i>	0.65049,0.65049,0.40923,90,90,120	AlB ₂ family	gray dark	7.30	X	48652
Si-Yb	Yb ₅ Si ₃	Mn ₅ Si ₃ hP16,193	<i>P6₃/mcm</i>	0.825,0.825,0.628,90,90,120	-	-	8.52	X	4509
Si-Yb	Yb ₅ Si ₄	Gd ₅ Si ₄ oP36,62	<i>Pnma</i>	0.72695,1.47988,0.77103,90,90,90	-	gray	7.83	X	46412
Si-Zn	Zn _{0.004} Si _{0.996}	C ₂ cF8,227	<i>Fd</i> -3 <i>m</i>	0.54417,0.54417,0.54417,90,90,90	-	-	2.33	X	59756
Si-Zr	ZrSi ht	TiI ₀ S8,63	<i>Cmcm</i>	0.3764,0.9917,0.3748,90,90,90	CrB(III)-FeB	-	5.66	X	4569
Si-Zr	ZrSi rt	FeB-b,oP8,62	<i>Pnma</i>	0.6995,0.3786,0.5296,90,90,90	CrB(III)-FeB	gray steel	5.65	X	2569
Si-Zr	ZrSi ₂	ZrSi ₂ oS12,63	<i>Cmcm</i>	0.3706,1.4735,0.3672,90,90,90	close-packed structure	-	4.88	X	40849
Si-Zr	Zr ₂ Si	CuAl ₂ tI12,140	<i>I4/mcm</i>	0.6609,0.6609,0.5298,90,90,90	-	-	6.04	X	6603
Si-Zr	Zr ₃ Si	Ti ₃ P,tP32,86	<i>P4₂/n</i>	1.09883,1.09883,0.54305,90,90,90	-	-	6.11	A	30790
Si-Zr	Zr ₃ Si ₂	U ₃ Si ₂ tP10,127	<i>P4/mbm</i>	0.7087,0.7087,0.3706,90,90,90	-	-	5.89	X	63040
Si-Zr	Zr ₅ Si ₃ ht	Mn ₅ Si ₃ hP16,193	<i>P6₃/mcm</i>	0.7886,0.7886,0.5558,90,90,120	-	-	6.00	X	510
Si-Zr	Zr ₅ Si ₄ rt	Zr ₅ Si ₄ tP36,92	<i>P4₁2₁2</i>	0.7123,0.7123,1.3002,90,90,90	-	gray olive	5.72	X	3943
Sm-Sn	SmSn ₂	ZrGa ₂ oS12,65	<i>Cmmm</i>	0.44313,1.5768,0.45221,90,90,90	close-packed structure	-	8.15	X	64205

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm, °)	Family	Color	D_X	C	Ref.
Sm-Sn	SmSn ₃ rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.469, 0.469, 0.469, 90, 90, 90	close-packed structure	-	8.15	X	28961
Sm-Sn	Sm ₁₁ Sn ₁₀ ht	Ho ₁₁ Ge ₁₀ , tI84, 139	<i>I4/mmm</i>	1.176, 1.176, 1.732, 90, 90, 90	-	-	7.88	A	5517
Sm-Sn	Sm ₂ Sn ₃	Nd ₂ Sn ₃ , aP20, 2	<i>P-1</i>	0.6337, 0.8351, 1.0995, 108.38, 96.51, 99.99	-	-	8.16	X	43304
Sm-Sn	Sm ₂ Sn ₅	Ce ₂ Sn ₅ , oS28, 65	<i>Cmmm</i>	0.45379, 3.49123, 0.45861, 90, 90, 90	close-packed structure	-	8.18	A	26300
Sm-Sn	Sm ₃ Sn ₇	Tb ₃ Sn ₇ , oS28, 65	<i>Cmmm</i>	0.44468, 2.59918, 0.45229, 90, 90, 90	close-packed structure	-	8.15	A	26300
Sm-Sn	Sm ₄ Sn ₃	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.915, 0.915, 0.915, 90, 90, 90	-	-	8.30	A	5087
Sm-Sn	Sm ₅ Sn ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.9106, 0.9106, 0.6651, 90, 90, 120	-	-	7.71	A	3248
Sm-Sn	Sm ₅ Sn ₄	Sm ₃ Ge ₄ , oP36, 62	<i>Pnma</i>	0.819, 1.581, 0.819, 90, 90, 90	-	-	7.68	A	5087
Sm-Te	SmTe hp	CsCl, cP2, 221	<i>Pm-3m</i>	0.3656, 0.3656, 0.3656, 90, 90, 90	b.c.c. family	-	9.45	X	6154
Sm-Te	SmTe rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.66, 0.66, 0.66, 90, 90, 90	rocksalt family	black gray	6.42	X	18279
Sm-Te	SmTe _{1.9}	UAs ₂ , tP6, 129	<i>P4/nmm</i>	0.437, 0.437, 0.9, 90, 90, 90	-	-	7.59	A	1829
Sm-Te	SmTe ₃	NdTe ₃ , oS16, 63	<i>Cmcm</i>	0.4323, 2.5613, 0.4335, 90, 90, 90	-	black grayish	7.38	X	31976
Sm-Te	Sm ₂ Te ₃	Th ₂ Sn ₃ , oP20, 62	<i>Pnma</i>	1.186, 0.434, 1.204, 90, 90, 90	-	-	7.33	A	5845
Sm-Te	Sm ₂ Te ₃ ht	Sm ₂ Te ₃ , aP14, 1	<i>P1</i>	0.43392, 0.43483, 2.18438, 90, 95.679, 90	-	purple red	7.60	X	51490
Sm-Te	Sm _{2.67} Te ₄ ht	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.948, 0.948, 0.948, 90, 90, 90	-	gray silver	7.11	A	2010
Sm-Te	Sm ₃ Te ₄	Th ₃ P ₄ , cI28, 220	<i>I-43d</i>	0.9506, 0.9506, 0.9506, 90, 90, 90	-	-	7.44	A	1822
Sm-Te	Sm ₅ Te ₉ rt	Sm ₅ Te ₉ , tP60, 85	<i>P4/n</i>	0.97026, 0.97026, 1.80072, 90, 90, 90	-	black	7.45	X	48005
Sm-Th	Th _{0.5} Sm _{0.5} rt	Cu ₂ cF4, 225	<i>Fm-3m</i>	0.508, 0.508, 0.508, 90, 90, 90	close-packed structure	-	9.69	X	4726
Sm-Tl	TlSm lt	CuAu, tP2, 123	<i>P4/mmm</i>	0.3576, 0.3576, 0.4322, 90, 90, 90	close-packed structure	-	10.66	X	16509
Sm-Tl	TlSm rt	CsCl, cP2, 221	<i>Pm-3m</i>	0.381, 0.381, 0.381, 90, 90, 90	b.c.c. family	-	10.65	X	16509
Sm-Tl	TlSm ₂	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.544, 0.544, 0.677, 90, 90, 120	AlB ₂ family	-	9.67	X	16509
Sm-Tl	Tl ₃ Sm rt	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.47125, 0.47125, 0.47125, 90, 90, 90	close-packed structure	-	12.12	X	16509
Sm-Tl	Tl ₃ Sm ₅	W ₅ Si ₃ , tI32, 140	<i>I4/mcm</i>	1.234, 1.234, 0.616, 90, 90, 90	-	-	9.67	A	16509
Sm-Tl	Tl ₅ Sm ₃	Pu ₃ Pd ₅ , oS32, 63	<i>Cmcm</i>	1.01, 0.815, 1.043, 90, 90, 90	-	-	11.40	A	16509
Sm-Zn	ZnSm	CsCl, cP2, 221	<i>Pm-3m</i>	0.3627, 0.3627, 0.3627, 90, 90, 90	b.c.c. family	-	7.51	X	2161
Sm-Zn	Zn ₁₁ Sm ₃	La ₃ Al ₁₁ , oI28, 71	<i>Immm</i>	0.4452, 0.8838, 1.3179, 90, 90, 90	-	-	7.50	A	5221
Sm-Zn	Zn _{11.77} Sm _{1.11} ht	Zn _{11.78} Sm _{1.11} , hP42, 191	<i>P6/mmm</i>	0.8974, 0.8974, 0.8918, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	-	7.50	X	4899
Sm-Zn	Zn ₁₂ Sm rt	ThMn ₁₂ , tI26, 139	<i>I4/mmm</i>	0.893, 0.893, 0.5214, 90, 90, 90	CaCu ₂ -Zr ₄ Al ₃	-	7.47	A	3040
Sm-Zn	Zn ₁₇ Sm ₂ hex	Th ₂ Ni ₁₇ , hP38, 194	<i>P6₃/mmc</i>	0.8979, 0.8979, 0.8876, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	-	7.57	A	2559
Sm-Zn	Zn ₁₇ Sm ₂ rhom	Zn ₁₇ Th ₂ , hR57, 166	<i>R-3m</i>	0.90189, 0.90189, 1.31947, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	gray	7.57	X	19986
Sm-Zn	Zn ₂ Sm rt	KHg ₂ , oI12, 74	<i>Imma</i>	0.4552, 0.7299, 0.759, 90, 90, 90	AlB ₂ family	-	7.41	X	3227
Sm-Zn	Zn ₂₂ Sm ₃ rt	Zn ₂₂ Ce ₃ , tI100, 141	<i>I4₁/amd</i>	0.8856, 0.8856, 2.1175, 90, 90, 90	-	-	7.56	A	5221
Sm-Zn	Zn ₃ Sm	Zn ₃ Y, oP16, 62	<i>Pnma</i>	0.6725, 0.4489, 1.0199, 90, 90, 90	-	-	7.48	A	5221
Sm-Zn	Zn ₃ Sm	CaCu ₅ , hP6, 191	<i>P6/mmm</i>	0.5357, 0.5357, 0.4268, 90, 90, 120	-	-	7.47	X	7340
Sm-Zn	Zn _{59.08} Sm _{12.72}	Zn _{59.08} Sm _{12.72} , hP158, 186	<i>P6₃mc</i>	1.4374, 1.4374, 1.4052, 90, 90, 120	-	-	7.63	X	48647
Sn-Sr	SrSn rt	TlI, oS8, 63	<i>Cmcm</i>	0.5045, 1.204, 0.4494, 90, 90, 90	CrB(TlI)-FeB	-	5.02	X	14080
Sn-Sr	SrSn ₃	Mg ₃ In, hR48, 166	<i>R-3m</i>	0.694, 0.694, 3.301, 90, 90, 120	close-packed structure	gray silver	6.42	X	38526
Sn-Sr	SrSn ₄	SrSn ₄ , oS20, 63	<i>Cmcm</i>	0.4625, 1.7383, 0.707, 90, 90, 90	-	gray silver	6.57	X	44050
Sn-Sr	Sr ₂ Sn rt	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.8402, 0.5378, 1.0078, 90, 90, 90	-	-	4.29	X	14080
Sn-Sr	Sr ₃ Sn ₅	Pu ₃ Pd ₅ , oS32, 63	<i>Cmcm</i>	1.0644, 0.8588, 1.0895, 90, 90, 90	-	gray	5.71	X	39141
Sn-Sr	Sr ₅ Sn ₃	Cr ₅ B ₃ , tI32, 140	<i>I4/mcm</i>	0.854, 0.854, 1.606, 90, 90, 90	-	-	4.50	X	10954
Sn-Ta	Ta _{1.2} Sn _{1.8}	Mg ₂ Cu, oF48, 70	<i>Fddd</i>	0.5628, 0.9801, 1.9177, 90, 90, 90	-	-	10.82	X	5649
Sn-Ta	Ta ₃ Sn	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.5285, 0.5285, 0.5285, 90, 90, 90	Frank-Kasper phase	-	14.88	X	15010
Sn-Tb	TbSn ₂	ZrSi ₂ , oS12, 63	<i>Cmcm</i>	0.4387, 1.623, 0.4281, 90, 90, 90	close-packed structure	-	8.64	X	55531
Sn-Tb	TbSn ₃ hp	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.466, 0.466, 0.466, 90, 90, 90	close-packed structure	-	8.45	X	28961
Sn-Tb	TbSn ₃	GdSn _{2.75} , oS16, 38	<i>Amm2</i>	0.435, 0.439, 2.1913, 90, 90, 90	-	-	8.17	A	27386
Sn-Tb	Tb ₁₁ Sn ₁₀	Ho ₁₁ Ge ₁₀ , tI84, 139	<i>I4/mmm</i>	1.16, 1.16, 1.7, 90, 90, 90	-	-	8.52	A	5517
Sn-Tb	Tb ₃ Sn ₇ ht	Tb ₃ Sn ₇ , oP24, 47	<i>Pnmm</i>	0.43352, 0.44251, 2.67006, 90, 90, 90	-	-	8.48	X	60482
Sn-Tb	Tb ₃ Sn ₇ rt	Tb ₃ Sn ₇ , oS28, 65	<i>Cmmm</i>	0.4363, 2.6347, 0.4441, 90, 90, 90	close-packed structure	-	8.51	X	27386
Sn-Tb	Tb ₅ Sn ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8947, 0.8947, 0.6545, 90, 90, 120	-	-	8.42	X	38232
Sn-Tb	Tb ₅ Sn ₄	Sm ₅ Ge ₄ , oP36, 62	<i>Pnma</i>	0.8004, 1.5418, 0.8139, 90, 90, 90	-	-	8.39	A	23165
Sn-Tc	Tc _{0.63} Sn _{0.37}	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2736, 0.2736, 0.4396, 90, 90, 120	close-packed structure	-	12.31	X	9105
Sn-Te	SnTe hp1	FeB ₃ , oP8, 62	<i>Pnma</i>	0.786, 0.4226, 0.608, 90, 90, 90	CrB(TlI)-FeB	-	8.10	X	61896
Sn-Te	SnTe hp2	CsCl, cP2, 221	<i>Pm-3m</i>	0.3473, 0.3473, 0.3473, 90, 90, 90	b.c.c. family	-	9.76	X	61896
Sn-Te	SnTe rt	NaCl, cF8, 225	<i>Fm-3m</i>	0.625, 0.625, 0.625, 90, 90, 90	rocksalt family	gray	6.70	X	61896
Sn-Th	ThSn ₂	ZrSi ₂ , oS12, 63	<i>Cmcm</i>	0.4463, 1.7062, 0.4379, 90, 90, 90	close-packed structure	-	9.35	X	15970
Sn-Th	ThSn ₃	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4719, 0.4719, 0.4719, 90, 90, 90	close-packed structure	-	9.29	X	15970
Sn-Th	Th ₃ Sn ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.9332, 0.9332, 0.6477, 90, 90, 120	-	-	10.31	X	15970
Sn-Th	Th ₃ Sn ₄	Ti ₃ Ga ₄ , hP18, 193	<i>P6₃/mcm</i>	0.9643, 0.9643, 0.6445, 90, 90, 120	AlB ₂ family	-	10.46	X	15970
Sn-Ti	Ti _{0.992} Sn _{0.008} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.2964, 0.2964, 0.4713, 90, 90, 120	close-packed structure	-	4.49	X	56095
Sn-Ti	Ti ₂ Sn	Co _{1.75} Ge, hP6, 194	<i>P6₃/mmc</i>	0.46305, 0.46305, 0.566, 90, 90, 120	AlB ₂ family	-	6.78	X	57122
Sn-Ti	Ti ₂ Sn ₃	Ti ₂ Sn ₃ , oS40, 64	<i>Cmce</i>	0.59556, 1.9964, 0.70281, 90, 90, 90	-	gray silver	7.18	X	37374
Sn-Ti	Ti ₃ Sn hp	Cu ₃ Au, cP4, 221	<i>Pm-3m</i>	0.4176, 0.4176, 0.4176, 90, 90, 90	close-packed structure	-	5.98	X	17181
Sn-Ti	Ti ₃ Sn ht	Mg ₃ Cd, hP8, 194	<i>P6₃/mmc</i>	0.59189, 0.59189, 0.47738, 90, 90, 120	close-packed structure	-	6.02	X	57122
Sn-Ti	Ti ₃ Sn rt	Cd ₃ Er, oS16, 63	<i>Cmcm</i>	0.585, 1.034, 0.475, 90, 90, 90	close-packed structure	-	6.07	X	63690
Sn-Ti	Ti ₅ Sn ₃	Mn ₅ Si ₃ , hP16, 193	<i>P6₃/mcm</i>	0.8047, 0.8047, 0.5455, 90, 90, 120	-	-	6.47	A	60734
Sn-Ti	Ti ₆ Sn ₅ ht	Ti ₆ Sn ₅ , hP22, 194	<i>P6₃/mmc</i>	0.9248, 0.9248, 0.569, 90, 90, 120	AlB ₂ family	-	6.94	X	1934
Sn-Ti	Ti ₆ Sn ₅ rt	Ti ₆ Sn ₅ , oI44, 71	<i>Immm</i>	0.5735, 0.9144, 1.6930, 90, 90, 90	AlB ₂ family	-	6.59	X	2272
Sn-Tl	TlSn ht	CuAu, tP2, 123	<i>P4/mmm</i>	0.3615, 0.3615, 0.4375, 90, 90, 90	close-packed structure	-	9.38	X	9295
Sn-Tl	Tl _{0.05} Sn _{0.95} rt	Sn, tI4, 141	<i>I4₁/amd</i>	0.5816, 0.5816, 0.3161, 90, 90, 90	-	-	7.64	X	6778
Sn-Tl	Tl _{0.1} Sn _{0.9} m	(Hg _{0.1} Sn _{0.9}), hP1, 191	<i>P6/mmm</i>	0.3205, 0.3205, 0.3004, 90, 90, 120	-	-	7.91	X	6778
Sn-Tl	Tl _{0.275} Sn _{0.725} m	Ti, hP3, 191	<i>P6/mmm</i>	0.5389, 0.5389, 0.3199, 90, 90, 120	-	-	8.81	X	6778
Sn-Tl	Tl _{0.4} Sn _{0.6} m	In, tI2, 139	<i>I4/mmm</i>	0.3605, 0.3605, 0.4199, 90, 90, 90	close-packed structure	-	9.31	X	6778
Sn-Tl	Tl _{0.8} Sn _{0.2}	Cu, cF4, 225	<i>Fm-3m</i>	0.4807, 0.4807, 0.4807, 90, 90, 90	close-packed structure	-	11.20	X	6778
Sn-Tl	Tl _{0.9} Sn _{0.1} ht	W, cI2, 229	<i>Im-3m</i>	0.3823, 0.3823, 0.3823, 90, 90, 90	b.c.c. family	-	11.64	X	6778
Sn-Tl	Tl _{0.95} Sn _{0.05} rt	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3444, 0.3444, 0.5492, 90, 90, 120	close-packed structure	-	11.78	X	6778
Sn-Tm	TmSn ₂	ZrSi ₂ , oS12, 63	<i>Cmcm</i>	0.435, 1.593, 0.4254, 90, 90, 90	close-packed structure	-	9.13	X	55531
Sn-Tm	TmSn ₃	GdSn _{2.75} , oS16, 38	<i>Amm2</i>	0.4331, 0.4361, 2.1625, 90, 90, 90	-	-	8.54	A	27386

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Sn-Tm	Tm ₁₁ Sn ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	<i>I4/mmm</i>	1.142,1.142,1.668,90,90,90	-	-	9.30	A	5517
Sn-Tm	Tm ₂ Sn ₅	Er ₂ Ge ₅ ,oP14,59	<i>Pmmn</i>	0.4299,0.4372,1.8835,90,90,90	-	-	8.74	A	27386
Sn-Tm	Tm ₃ Sn ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8773,0.8773,0.6406,90,90,120	-	-	9.34	A	3248
Sn-U	USn	ThIn,oP24,57	<i>Pbcm</i>	1.0488,0.9552,0.6213,90,90,90	-	-	11.42	A	30217
Sn-U	USn ₂	ZrGa ₂ ,oS12,65	<i>Cmmm</i>	0.44228,1.5451,0.44683,90,90,90	close-packed structure	-	10.34	X	39352
Sn-U	USn ₃	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4626,0.4626,0.4626,90,90,90	close-packed structure	-	9.97	X	13741
Sn-U	U ₃ Sn ₇	Ce ₃ Sn ₇ ,oS20,65	<i>Cmmm</i>	0.4473,2.459,0.4498,90,90,90	close-packed structure	-	10.37	X	39352
Sn-U	U ₅ Sn ₄	Ti ₅ Ga ₄ ,hP18,193	<i>P6₃/mcm</i>	0.9327,0.9327,0.623,90,90,120	AlB ₂ family	-	11.78	A	30217
Sn-V	VSn ₂	Mg ₂ Cu,oF48,70	<i>Fddd</i>	0.5485,0.9488,1.8667,90,90,90	-	-	7.89	X	28784
Sn-V	V _{0.89} Sn _{0.11}	W,cI2,229	<i>Im-3m</i>	0.31,0.31,0.31,90,90,90	b.c.c. family	-	6.51	X	7600
Sn-V	V ₃ Sn Sn ⁺	Mg ₃ Cd,hP8,194	<i>P6₃/mmc</i>	0.5694,0.5694,0.4555,90,90,120	close-packed structure	-	7.05	X	5649
Sn-V	V ₃ Sn rt	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.4953,0.4953,0.4953,90,90,90	Frank-Kasper phase	-	7.42	X	7600
Sn-Y	YSn ₂	ZrSi ₂ ,oS12,63	<i>Cmcm</i>	0.43809,1.6296,0.43034,90,90,90	close-packed structure	gray silver	7.05	X	50130
Sn-Y	YSn ₃ hp	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4667,0.4667,0.4667,90,90,90	close-packed structure	-	7.27	X	56204
Sn-Y	YSn ₃	GdSn _{2.75} ,oS16,38	<i>Amm2</i>	0.4341,0.4398,2.1901,90,90,90	-	-	7.07	A	59082
Sn-Y	Y ₁₁ Sn ₁₀	Ho ₁₁ Ge ₁₀ ,tI84,139	<i>I4/mmm</i>	1.1532,1.1532,1.688,90,90,90	-	-	6.41	A	59082
Sn-Y	Y ₂ Sn ₅	Er ₂ Ge ₅ ,oP14,59	<i>Pmmn</i>	0.4301,0.4407,1.9071,90,90,90	-	-	7.09	A	59082
Sn-Y	Y ₃ Sn ₃	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.8902,0.8902,0.6536,90,90,120	-	-	5.93	X	2076
Sn-Y	Y ₃ Sn ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.805,1.529,0.805,90,90,90	-	-	6.16	A	3991
Sn-Yb	YbSn	CuAu,tP2,123	<i>P4/mmm</i>	0.35214,0.35214,0.442,90,90,90	close-packed structure	-	8.84	X	54235
Sn-Yb	YbSn ₃ rt	Cu,cF4,225	<i>Fm-3m</i>	0.5489,0.5489,0.5489,90,90,90	close-packed structure	-	6.95	X	55198
Sn-Yb	Yb _{0.92} Sn _{0.08}	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.4677,0.4677,0.4677,90,90,90	close-packed structure	-	8.52	X	55198
Sn-Yb	Yb ₂ Sn	Co _{1.75} Ge,hP6,194	<i>P6₃/mmc</i>	0.536,0.536,0.708,90,90,120	AlB ₂ family	-	8.76	X	55198
Sn-Yb	Yb ₃ Sn ₅	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	1.0193,0.8168,1.0375,90,90,90	-	blackish	8.56	X	58401
Sn-Yb	Yb ₃₆ Sn ₂₃	Yb ₃₆ Sn ₂₃ ,tP118,127	<i>P4/mbm</i>	1.23869,1.23869,2.2935,90,90,90	-	black	8.46	X	36024
Sn-Yb	Yb ₅ Sn ₃ ht (H)	Cr ₃ B ₃ ,tI32,140	<i>I4/mcm</i>	0.7939,0.7939,1.4686,90,90,90	-	-	8.76	A	9763
Sn-Yb	Yb ₅ Sn ₃ rt (H)	Mn ₃ Si ₃ ,hP16,193	<i>P6₃/mcm</i>	0.947,0.947,0.69,90,90,120	-	-	7.57	A	9763
Sn-Yb	Yb ₅ Sn ₄	Sm ₃ Ge ₄ ,oP36,62	<i>Pnma</i>	0.7822,1.5813,0.828,90,90,90	-	-	8.69	A	9763
Sn-Zn	Zn _{0.15} Sn _{0.85} m	(Hg _{0.15} Sn _{0.85}),hP1,191	<i>P6/mmm</i>	0.3181,0.3181,0.2963,90,90,120	-	-	7.08	X	2908
Sn-Zr	ZrSn ₂	TiSi ₂ ,oF24,70	<i>Fddd</i>	0.5644,0.9573,0.9927,90,90,90	-	-	8.14	X	508
Sn-Zr	Zr _{3.2} Sn _{0.8} rt	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.5625,0.5625,0.5625,90,90,90	Frank-Kasper phase	-	7.22	X	51024
Sn-Zr	Zr ₅ Sn _{3.18}	Ti ₅ Ga ₄ ,hP18,193	<i>P6₃/mcm</i>	0.85036,0.85036,0.582,90,90,120	AlB ₂ family	-	7.01	X	23143
Sr-Te	SrTe hp	CsCl,cP2,221	<i>Pm-3m</i>	0.3708,0.3708,0.3708,90,90,90	b.c.c. family	-	7.00	X	18242
Sr-Te	SrTe rt	NaCl,cF8,225	<i>Fm-3m</i>	0.6663,0.6663,0.6663,90,90,90	rocksalt family	yellow	4.83	X	28325
Sr-Tl	SrTl	CsCl,cP2,221	<i>Pm-3m</i>	0.4038,0.4038,0.4038,90,90,90	b.c.c. family	-	7.36	X	2919
Sr-Tl	SrTl ₂	CaIn ₃ ,hP6,194	<i>P6₃/mmc</i>	0.5074,0.5074,0.8217,90,90,120	AlB ₂ family	-	9.00	X	2343
Sr-Tl	SrTl ₃	SrPb ₃ ,tP4,123	<i>P4/mmm</i>	0.4882,0.4882,0.4843,90,90,90	close-packed structure	-	10.08	X	2919
Sr-Tl	Sr ₃ Tl	* _o P* _o *	-	0.5771,0.8073,2.3723,90,90,90	-	-	-	N	2919
Sr-Tl	Sr ₅ Tl ₅	Pu ₃ Pd ₅ ,oS32,63	<i>Cmcm</i>	1.0604,0.8675,1.0985,90,90,90	-	white silver	8.44	X	60210
Sr-Tl	Sr ₅ Tl ₃	Cr ₃ B ₃ ,tI32,140	<i>I4/mcm</i>	0.8635,0.8635,1.6389,90,90,90	-	-	5.71	A	11481
Sr-Zn	SrZn	FeB-b,oP8,62	<i>Pnma</i>	0.8724,0.4607,0.6417,90,90,90	CrB(TII)-FeB	-	3.94	X	15091
Sr-Zn	SrZn ₁₁	BaCd ₁₁ ,tI48,141	<i>I4₁/amd</i>	1.0749,1.0749,0.6899,90,90,90	-	-	6.72	X	48824
Sr-Zn	SrZn ₁₃	NaZn ₁₃ ,cF112,226	<i>Fm-3c</i>	1.2222,1.2222,1.2222,90,90,90	-	-	6.82	X	47602
Sr-Zn	SrZn ₂ orth	KHg ₂ ,oI12,74	<i>Imma</i>	0.4779,0.7795,0.782,90,90,90	AlB ₂ family	-	4.98	X	2053
Sr-Zn	SrZn ₅ ht	CaCu ₅ ,hP6,191	<i>P6/mmm</i>	0.5541,0.5541,0.4282,90,90,120	-	gray silver	6.05	X	50712
Sr-Zn	SrZn ₅ rt	SrZn ₅ ,oP24,62	<i>Pnma</i>	1.3133,0.52991,0.66972,90,90,90	-	gray silver	5.91	X	50712
T-U	UT ₃ ht	UH ₃ ,cP32,223	<i>Pm-3n</i>	0.6625,0.6625,0.6625,90,90,90	-	-	11.29	A	9810
T-U	UT ₃ rt	Cr ₃ Si,cP8,223	<i>Pm-3n</i>	0.4142,0.4142,0.4142,90,90,90	Frank-Kasper phase	-	11.55	X	9810
Ta-Te	TaTe	CsCl,cP2,221	<i>Pm-3m</i>	0.3172,0.3172,0.3172,90,90,90	b.c.c. family	-	14.51	X	1636
Ta-Te	Ta _{0.17} Ta _{0.83}	Mn,cI58,217	<i>I-43m</i>	0.9565,0.9565,0.9565,90,90,90	-	-	12.34	A	1443
Ta-Te	TaTe	* _h R* _h ,166	<i>R-3m</i>	1.0904,1.0904,2.0102,90,90,120	-	-	-	N	1647
Ta-Te	TaTe ₂ lt	TaTe ₂ ,mS54,12	<i>C12/m1</i>	1.4792,1.08829,0.93005,90,110.693,90	-	-	9.31	X	48159
Ta-Te	TaTe ₂ rt	NbTe ₂ ,mS18,12	<i>C12/m1</i>	1.4784,0.36372,0.9345,90,110.926,90	-	-	9.26	X	48159
Ta-Te	TaTe ₄ hp	* _o S20,63	<i>Cmcm</i>	0.3618,1.3272,0.8685,90,90,90	-	-	-	N	3788
Ta-Te	TaTe ₄	TaTe ₄ ,tP60,130	<i>P4/ncc</i>	0.9204,0.9204,2.0401,90,90,90	-	black	7.97	X	27476
Ta-Te	Ta ₂ Te ₃	Ta ₂ Te ₃ ,mS20,12	<i>C12/m1</i>	1.4495,0.34996,1.2237,90,123.25,90	-	-	9.53	X	26023
Ta-Te	Ta ₂₁ Te ₁₃	Ta ₂₁ Te ₁₃ ,hP136,183	<i>P6mm</i>	1.95,1.95,1.03,90,90,120	-	-	10.69	X	38227
Ta-Te	Ta ₉₇ Te ₆₀	Ta ₉₇ Te ₆₀ ,oP628,19	<i>P2₁2₁2₁</i>	2.0613,2.7627,2.7627,90,90,90	-	-	10.64	X	40441
Ta-Ti	Ti _{0.75} Ta _{0.25} m	(Cu _{0.75} Ti _{0.25}),oS4,63	<i>Cmcm</i>	0.3101,0.486,0.4624,90,90,90	close-packed structure	-	7.74	A	54077
Ta-Ti	Ti _{0.8} Ta _{0.2}	W,cI2,229	<i>Im-3m</i>	0.3282,0.3282,0.3282,90,90,90	b.c.c. family	-	7.00	X	35285
Ta-Ti	Ti _{0.9} Ta _{0.1} m	Mg,hP2,194	<i>P6₃/mmc</i>	0.2932,0.2932,0.4682,90,90,120	close-packed structure	-	5.83	X	54077
Ta-Ti	Ti _{0.96} Ta _{0.04} rt	Mg,hP2,194	<i>P6₃/mmc</i>	0.2937,0.2937,0.46,90,90,120	close-packed structure	-	5.14	X	513
Ta-V	TaV ₂ ht	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5058,0.5058,0.825,90,90,120	Friauf-Laves phase	-	10.28	A	2576
Ta-V	TaV ₂ rt	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.716,0.716,0.716,90,90,90	Friauf-Laves phase	-	10.24	X	3038
Ta-V	Ta _{0.5} V _{0.5} ht	W,cI2,229	<i>Im-3m</i>	0.3175,0.3175,0.3175,90,90,90	b.c.c. family	-	12.03	X	20906
Ta-W	Ta _{0.5} W _{0.5} ht	W,cI2,229	<i>Im-3m</i>	0.323,0.323,0.323,90,90,90	b.c.c. family	-	17.98	X	6831
Ta-Zn	Zn ₂ Ta hex1	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.507,0.507,0.821,90,90,120	Friauf-Laves phase	-	11.33	A	4026
Ta-Zn	Zn ₂ Ta hex2	MgNi ₂ ,hP24,194	<i>P6₃/mmc</i>	0.504,0.504,1.621,90,90,120	Friauf-Laves phase	-	11.61	A	4026
Ta-Zn	Zn ₇ Ta ₆	W ₆ Fe ₇ ,hR39,166	<i>R-3m</i>	0.5035,0.5035,2.7528,90,90,120	Frank-Kasper phase	-	12.72	A	4026
Ta-Zr	Zr _{0.1} Ta _{0.9}	W,cI2,229	<i>Im-3m</i>	0.3318,0.3318,0.3318,90,90,90	b.c.c. family	-	15.64	X	4479
Tb-Tc	TbTc ₂	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5375,0.5375,0.8843,90,90,120	Friauf-Laves phase	-	10.66	A	2166
Tb-Te	TbTe lt	NiO,hR6,166	<i>R-3m</i>	0.43064,0.43064,1.06017,90,90,120	-	-	8.38	X	11891
Tb-Te	TbTe rt	NaCl,cF8,225	<i>Fm-3m</i>	0.611,0.611,0.611,90,90,90	rocksalt family	gray	8.34	X	19915
Tb-Te	TbTe ₂	UAs ₂ ,tP6,129	<i>P4/nmm</i>	0.4334,0.4334,0.89,90,90,90	-	-	8.23	A	19915
Tb-Te	TbTe ₃	NdTe ₃ ,oS16,63	<i>Cmcm</i>	0.431,2.552,0.431,90,90,90	-	-	7.59	A	18291
Tb-Te	Tb _{0.5} Te _{0.5} tf	Po,cP1,221	<i>Pm-3m</i>	0.31465,0.31465,0.31465,90,90,90	-	-	7.64	X	7581
Tb-Te	Tb ₂ Te ₃ rt	Se ₂ S ₃ ,oF80,70	<i>Fddd</i>	0.8679,1.2276,2.6037,90,90,90	-	-	6.71	X	2478
Tb-Te	Tb _{2.67} Te ₄ ht	Th ₃ P ₄ ,cI28,220	<i>I-43d</i>	0.8677,0.8677,0.8677,90,90,90	-	-	9.50	A	15925

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, a, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Tb-Te	Tb ₅ Te ₉	Tb ₅ Te ₉ , tP60,75	<i>P4</i>	0.9607,0.9607,1.7875,90,90,90	-	-	7.82	X	49492
Tb-Th	Th _{0.43} Tb _{0.57} rt	Cu ₄ CF ₄ ,225	<i>Fm-3m</i>	0.5035,0.5035,0.5035,90,90,90	close-packed structure	-	9.91	X	4726
Tb-Tl	TlTb lt	CuTi ₂ tP2,123	<i>P4/mmm</i>	0.353,0.353,0.424,90,90,90	b.c.c. family	-	11.42	X	14286
Tb-Tl	TlTb rt	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.376,0.376,0.376,90,90,90	b.c.c. family	gray silver	11.35	X	2600
Tb-Tl	TlTb ₂	Co _{1.75} Ge ₂ hP6,194	<i>P6₃/mmc</i>	0.5362,0.5362,0.6663,90,90,120	AlB ₂ family	-	10.45	X	21110
Tb-Tl	Tl ₃ Tb	Cu ₃ Au ₂ cP4,221	<i>Pm-3m</i>	0.468,0.468,0.468,90,90,90	close-packed structure	-	12.51	X	3057
Tb-Tl	Tl ₃ Tb ₅ Tl+	Cr ₃ B ₃ tI32,140	<i>I4/mcm</i>	0.8073,0.8073,1.4281,90,90,90	-	-	10.05	A	21110
Tb-Tl	Tl ₃ Tb ₅ ht	Mn ₅ Si ₃ hP16,193	<i>P6₃/mcm</i>	0.8978,0.8978,0.6596,90,90,120	-	-	10.15	X	4603
Tb-Tl	Tl ₃ Tb ₅ rt	W ₅ Si ₃ tI32,140	<i>I4/mcm</i>	1.2126,1.2126,0.6135,90,90,90	-	-	10.37	A	21110
Tb-Tl	Tl ₅ Tb ₃	Pu ₃ Pd ₅ oS32,63	<i>Cmcm</i>	0.999,0.806,1.035,90,90,90	-	-	11.94	A	14115
Tb-Zn	ZnTb ltI	CuTi ₂ tP2,123	<i>P4/mmm</i>	0.3579,0.3579,0.3563,90,90,90	b.c.c. family	-	8.16	X	8337
Tb-Zn	ZnTb rt	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3577,0.3577,0.3577,90,90,90	b.c.c. family	gray silver	8.14	X	8337
Tb-Zn	Zn ₁₁ Tb ₃	La ₃ Al ₁₁ oI28,71	<i>Immm</i>	0.4408,0.8825,1.2989,90,90,90	-	-	7.86	A	5221
Tb-Zn	Zn ₁₂ Tb	ThMn ₁₂ tI26,139	<i>I4/mmm</i>	0.8856,0.8856,0.5199,90,90,90	CaCu ₂ -Zr ₄ Al ₃	-	7.68	A	2559
Tb-Zn	Zn ₁₇ Tb ₂ ht	Zn ₁₇ Tb ₂ hR57,166	<i>R-3m</i>	0.89787,0.89787,1.31482,90,90,120	CaCu ₂ -Zr ₄ Al ₃	gray	7.76	X	19986
Tb-Zn	Zn ₁₇ Tb ₂ rt	Tb ₂ Ni ₁₇ hP38,194	<i>P6₃/mmc</i>	0.8984,0.8984,0.877,90,90,120	CaCu ₂ -Zr ₄ Al ₃	-	7.74	X	2559
Tb-Zn	Zn ₂₃ Tb	KHg ₂ oI12,74	<i>Imma</i>	0.4481,0.7122,0.7576,90,90,90	AlB ₂ family	-	7.96	X	6616
Tb-Zn	Zn ₂₃ Tb ₆	Th ₆ Mn ₂₃ cF116,225	<i>Fm-3m</i>	1.269,1.269,1.269,90,90,90	-	-	7.99	A	2559
Tb-Zn	Zn ₃ Tb	Zn ₃ Y ₂ oP16,62	<i>Pnma</i>	0.669,0.4411,1.0104,90,90,90	-	-	7.91	A	5221
Tb-Zn	Zn ₅₈ Tb ₁₃	Zn ₅₈ Gd ₁₃ hP142,194	<i>P6₃/mmc</i>	1.4332,1.4332,1.4104,90,90,120	-	-	7.75	A	46725
Tb-Zn	Zn ₅₉ Tb ₁₃	Zn ₅₉ Tb ₁₃ oP288,19	<i>P2₁2₁2₁</i>	1.4008,1.4304,2.4803,90,90,90	-	-	7.92	X	48647
Tb-Zr	Tb _{0.2} Zr _{0.8} m	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.329,0.329,0.5215,90,90,120	close-packed structure	-	7.12	X	6777
Tc-Te	TcTe ₂	* ₂ mS48,15	<i>C12/c1</i>	1.2522,0.7023,1.3828,90,101.26,90	-	-	-	N	5889
Tc-Te	Tc ₂ Te ₅	Re ₂ Te ₅ oP84,61	<i>Pbca</i>	1.2917,1.4237,1.2987,90,90,90	Chevrel phase	-	6.96	X	55074
Tc-Th	ThTc ₂	MgZn ₂ hP12,194	<i>P6₃/mmc</i>	0.5394,0.5394,0.9222,90,90,120	Friauf-Laves phase	-	12.24	A	2606
Tc-Ti	TiTe rt	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.311,0.311,0.311,90,90,90	b.c.c. family	-	8.05	X	1636
Tc-Ti	Ti _{0.125} Tc _{0.875}	Mn ₂ cI58,217	<i>I-43m</i>	0.9579,0.9579,0.9579,90,90,90	-	-	10.05	A	1443
Tc-Tm	TmTc ₂	MgZn ₂ hP12,194	<i>P6₃/mmc</i>	0.5334,0.5334,0.8775,90,90,120	Friauf-Laves phase	-	11.21	A	2166
Tc-U	U ₂ Tc	* ₂ mS12,*	-	0.5213,0.3271,1.3407,90,96.38,90	-	-	-	N	2606
Tc-V	VTc	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.302,0.302,0.302,90,90,90	b.c.c. family	-	8.98	X	3999
Tc-V	V _{0.05} Tc _{0.95}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2737,0.2737,0.4405,90,90,120	close-packed structure	-	11.12	X	3999
Tc-V	V _{0.7} Tc _{0.3}	W ₂ cI2,229	<i>Im-3m</i>	0.3015,0.3015,0.3015,90,90,90	b.c.c. family	-	7.88	X	3999
Tc-W	W _{0.15} Tc _{0.85}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2753,0.2753,0.4444,90,90,120	close-packed structure	-	12.62	X	18215
Tc-W	W _{0.4} Tc _{0.6}	(Cr _{0.49} Fo _{0.51})tP30,136	<i>P4₁/nmn</i>	0.9526,0.9526,0.5,90,90,90	Frank-Kasper phase	-	14.53	A	18215
Tc-W	W _{0.5} Tc _{0.5}	W ₂ cI2,229	<i>Im-3m</i>	0.3118,0.3118,0.3118,90,90,90	b.c.c. family	-	15.44	X	18215
Tc-Y	YTc ₂	MgZn ₂ hP12,194	<i>P6₃/mmc</i>	0.5371,0.5371,0.8862,90,90,120	Friauf-Laves phase	-	8.55	A	14114
Tc-Zn	Zn ₇ Tc	CuPt ₇ cF32,225	<i>Fm-3m</i>	0.7588,0.7588,0.7588,90,90,90	close-packed structure	-	8.45	X	2179
Tc-Zr	ZrTc ₂	MgZn ₂ hP12,194	<i>P6₃/mmc</i>	0.5216,0.5216,0.86345,90,90,120	Friauf-Laves phase	-	9.38	X	55249
Tc-Zr	Zr _{0.138} Tc _{0.862}	Mn ₂ cI58,217	<i>I-43m</i>	0.96104,0.96104,0.96104,90,90,90	-	-	10.53	X	55249
Te-Th	ThTe hp	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3827,0.3827,0.3827,90,90,90	b.c.c. family	-	10.66	X	20981
Te-Th	ThTe ₂	* ₂ hP*,*	-	0.849,0.849,0.901,90,90,120	-	black	-	N	1181
Te-Th	ThTe ₃	ZrSe ₃ mP8,11	<i>P12₁/m1</i>	0.6173,0.43625,1.04161,90,97.756,90	-	black	7.35	X	64753
Te-Th	Th _{7.6} Te _{11.4}	* ₂ hP*,176	<i>P6₃/m</i>	1.249,1.249,0.4354,90,90,120	-	-	-	N	1181
Te-Ti	TiTe	NiAs ₂ hP4,194	<i>P6₃/mmc</i>	0.3834,0.3834,0.639,90,90,120	AlB ₂ family	black	7.17	X	15752
Te-Ti	TiTe ₂	Cd ₂ hP3,164	<i>P-3m1</i>	0.377,0.377,0.6492,90,90,120	Cd ₂ -Pb ₂ polytype	reddish	6.30	X	29280
Te-Ti	Ti _{0.95} Te _{0.05} ht	W ₂ cI2,229	<i>Im-3m</i>	0.33065,0.33065,0.33065,90,90,90	b.c.c. family	-	4.77	X	28813
Te-Ti	Ti _{0.995} Te _{0.005} rt	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2951,0.2951,0.4683,90,90,120	close-packed structure	-	4.54	X	23384
Te-Ti	Ti ₂ Te ₃ hex	* ₂ h**,*	-	0.3874,0.3874,1.2723,90,90,120	-	black	-	N	28813
Te-Ti	Ti ₃ Te ₄ ht	* ₂ h**,*	-	0.3887,0.3887,1.269,90,90,120	-	brown	-	N	28813
Te-Ti	Ti ₃ Te ₄ rt	Cr ₃ S ₄ mS14,12	<i>C12/m1</i>	1.43777,0.38406,0.69232,90,118.316,90	-	-	6.45	A	28813
Te-Ti	Ti ₅ Te ₄ rt	Ti ₅ Te ₄ tI18,87	<i>I4/m</i>	1.0164,1.0164,0.3772,90,90,90	Chevrel phase	gray dark	6.39	X	1344
Te-Ti	Ti ₅ Te ₈	V ₅ S ₈ mS26,12	<i>C12/m1</i>	1.26683,0.77,0.927,90,132.635,90	-	-	6.29	A	29411
Te-Ti	Ti ₃ Te	Se ₂ hP3,152	<i>P3₁21</i>	0.446,0.446,0.593,90,90,120	-	-	6.22	A	23384
Te-Tl	TlTe lt	TlTe ₂ tP64,137	<i>P4₂/nmc</i>	1.8229,1.8229,0.6157,90,90,90	-	-	8.62	X	37887
Te-Tl	TlTe rt	TlTe-b ₂ tI32,140	<i>I4/mcm</i>	1.2953,1.2953,0.6173,90,90,90	-	-	8.52	X	37887
Te-Tl	Tl ₂ Te	Tl ₂ Te ₂ mS132,15	<i>C12/c1</i>	1.56621,0.89873,3.1196,90,100.761,90	-	gray dark	9.08	X	40307
Te-Tl	Tl ₃ Te ₃	Tl ₃ Te ₃ mS20,15	<i>C12/c1</i>	1.3275,0.6562,0.7918,90,107.14,90	-	gray silver	7.98	X	36950
Te-Tl	Tl ₃ Te ₂ tf	* ₂ hR*,166	<i>R-3m</i>	0.9,0.9,2.19,90,90,120	-	-	-	N	2877
Te-Tl	Tl ₃ Te ₃	In ₅ Bi ₃ tI32,140	<i>I4/mcm</i>	0.893,0.893,1.2589,90,90,90	-	-	9.29	X	22904
Te-Tm	TmTe hp	TmTe ₂ tP2,99	<i>P4mm</i>	0.408,0.408,0.297,90,90,90	-	-	9.96	X	30341
Te-Tm	TmTe rt	NaCl ₂ cF8,225	<i>Fm-3m</i>	0.636,0.636,0.636,90,90,90	rocksalt family	gray	7.66	X	17980
Te-Tm	TmTe ₂	UAs ₂ tP6,129	<i>P4/nmm</i>	0.424,0.424,0.8831,90,90,90	-	-	8.87	A	5123
Te-Tm	TmTe ₃	NdTe ₃ oS16,63	<i>Cmcm</i>	0.427,2.534,0.427,90,90,90	-	-	7.93	A	18291
Te-Tm	Tm _{0.77} Te	NiO ₂ hR6,166	<i>R-3m</i>	0.4309,0.4309,1.0838,90,90,120	rocksalt family	blue	7.37	X	22266
Te-Tm	Tm ₂ Te ₃	Se ₂ S ₃ oS80,70	<i>Fddd</i>	0.8552,1.2096,2.5656,90,90,90	-	-	7.21	X	2478
Te-Tm	Tm ₂ Te ₅	Nd ₂ Te ₅ oS28,63	<i>Cmcm</i>	0.444,4.497,0.444,90,90,90	-	-	7.31	A	9974
Te-U	UTe hp	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3765,0.3765,0.3765,90,90,90	b.c.c. family	-	11.38	X	23295
Te-U	UTe lt	NiO ₂ hR6,166	<i>R-3m</i>	0.43197,0.43197,1.06588,90,90,120	rocksalt family	-	10.58	X	47549
Te-U	UTe rt	NaCl ₂ cF8,225	<i>Fm-3m</i>	0.6153,0.6153,0.6153,90,90,90	rocksalt family	-	10.43	X	32040
Te-U	UTe _{1.87} ht	UAs ₂ tP6,129	<i>P4/nmm</i>	0.4243,0.4243,0.8946,90,90,90	-	-	9.83	X	4591
Te-U	UTe ₂	UTe ₂ oI12,71	<i>Immm</i>	0.41622,0.61329,1.3971,90,90,90	-	black gray	9.19	X	32243
Te-U	UTe ₃	ZrSe ₃ mP8,11	<i>P12₁/m1</i>	0.6097,0.42206,1.0312,90,97.87,90	-	black	7.84	X	32519
Te-U	UTe _{3.38}	* ₂ tP*,*	-	0.8703,0.8703,1.3086,90,90,90	-	-	-	N	5950
Te-U	UTe _{3.4}	* ₂ oP*,*	-	0.6382,0.6475,1.2408,90,90,90	-	-	-	N	25920
Te-U	UTe ₅	UTe ₅ oP24,62	<i>Pnma</i>	1.7915,1.0407,0.4220,90,90,90	-	-	7.40	X	17758
Te-U	UTe ₆ stab	Cu ₄ CF ₄ ,225	<i>Fm-3m</i>	0.488,0.488,0.488,90,90,90	close-packed structure	-	13.60	X	7140
Te-U	U ₂ Te ₃	Th ₂ S ₃ oS20,62	<i>Pnma</i>	1.218,0.4377,1.1823,90,90,90	-	gray	9.05	X	34474
Te-U	U ₂ Te ₅	U ₂ Te ₅ mS28,12	<i>C12/m1</i>	3.442,0.4181,0.6074,90,95.43,90	-	black	8.50	X	33410

System	Substance	Prototype	H-M	Unit Cell Parameters $a,b,c,\alpha,\beta,\gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Te-U	U _{2.25} Te _{3.32} ht	Th ₃ P ₄ , cI28,220	<i>I</i> -43 <i>d</i>	0.94, 0.94, 0.94, 90, 90, 90	-	-	7.67	X	30203
Te-U	U ₃ Te ₅	U ₃ Te ₅ , oP32,62	<i>Pnma</i>	1.6098, 0.4210, 1.4060, 90, 90, 90	-	gray	9.43	X	35007
Te-U	U ₇ Te ₁₂	Cr ₁₂ P ₇ , hP19,174	<i>P</i> -6	1.2312, 1.2312, 0.426, 90, 90, 120	-	-	9.49	X	34533
Te-V	VTe ₂ ht	CdI ₂ , hP3,164	<i>P</i> -3 <i>m</i> 1	0.3636, 0.3636, 0.651, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	6.82	A	18922
Te-V	VTe ₂ rt	NbTe ₂ , mS18,12	<i>C</i> 12/ <i>m</i> 1	1.43409, 0.35947, 0.9069, 90, 109.57, 90	-	-	6.92	X	17077
Te-V	V _{0.86} Te ht	NiAs, hP4,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.395, 0.395, 0.617, 90, 90, 120	AlB ₂ family	-	6.83	X	15224
Te-V	V ₃ Te ₃ rt	* ₂ mP*,*	-	0.6429, 0.3831, 1.26, 90, 90, 82, 90	-	-	-	N	2354
Te-V	V ₃ Te ₄ rt	Cr ₃ S ₄ , mS14,12	<i>C</i> 12/ <i>m</i> 1	1.40999, 0.3715, 0.6687, 90, 117.003, 90	-	-	7.06	X	22787
Te-V	V _{4.64} Te ₄	Nb _{4.7} Te ₄ , mS18,12	<i>C</i> 12/ <i>m</i> 1	1.38526, 0.393, 0.939, 90, 133.864, 90	Chevrel phase	gray silver	6.73	X	34077
Te-V	V ₅ Te ₈ rt	V ₅ S ₈ , mS26,12	<i>C</i> 12/ <i>m</i> 1	1.2591, 0.7584, 0.89349, 90, 133.89, 90	-	-	6.89	A	18922
Te-W	WTe ₂	WTe ₂ , oP12,31	<i>Pmn</i> 2 ₁	0.3477, 0.6249, 1.4018, 90, 90, 90	-	-	9.57	X	25888
Te-Y	YTe	NaCl, cF8,225	<i>Fm</i> -3 <i>m</i>	0.6103, 0.6103, 0.6103, 90, 90, 90	rocksalt family	gray	6.33	X	58051
Te-Y	YTe ₂ hp	UAs ₂ , tP6,129	<i>P</i> 4/ <i>mmm</i>	0.4291, 0.4291, 0.8912, 90, 90, 90	-	-	6.96	A	5123
Te-Y	YTe ₃	NdTe ₃ , oS16,63	<i>Cmcm</i>	0.4303, 2.549, 0.4303, 90, 90, 90	-	-	6.64	A	18291
Te-Y	Y ₂ Te ₃	Sc ₂ S ₃ , oF80,70	<i>Fddd</i>	0.8645, 1.2228, 2.5935, 90, 90, 90	-	-	5.43	X	2478
Te-Y	Y ₇ Te ₂	Y ₇ Te ₂ , oP36,62	<i>Pnma</i>	2.13282, 0.40562, 1.1401, 90, 90, 90	-	-	5.91	X	50006
Te-Y	Y ₈ Te ₃	Ti ₈ S ₃ , mS88,12	<i>C</i> 12/ <i>m</i> 1	3.1153, 0.40703, 2.4375, 90, 122.8, 90	-	-	5.59	A	34558
Te-Yb	YbTe	NaCl, cF8,225	<i>Fm</i> -3 <i>m</i>	0.6345, 0.6345, 0.6345, 90, 90, 90	rocksalt family	-	7.82	X	25900
Te-Yb	YbTe ₂	UAs ₂ , tP6,129	<i>P</i> 4/ <i>mmm</i>	0.421, 0.421, 0.882, 90, 90, 90	-	-	9.10	A	18270
Te-Yb	Yb ₂ Te ₃	Sc ₂ S ₃ , oF80,70	<i>Fddd</i>	0.898, 1.27, 2.693, 90, 90, 90	-	-	6.31	A	18270
Te-Zn	ZnTe hp1	HgS, hP6,152	<i>P</i> 3 ₁ ,21	0.4092, 0.4092, 0.9376, 90, 90, 120	-	-	7.07	X	28452
Te-Zn	ZnTe hp2	ZnTe, hP6,144	<i>P</i> 3 ₁	0.4045, 0.4045, 0.9342, 90, 90, 120	-	-	7.26	X	28451
Te-Zn	ZnTe hp3	ZnTe, oS8,63	<i>Cmcm</i>	0.5379, 0.5971, 0.5010, 90, 90, 90	-	-	7.97	X	29379
Te-Zn	ZnTe hp4	NaCl, cF8,225	<i>Fm</i> -3 <i>m</i>	0.537, 0.537, 0.537, 90, 90, 90	-	-	8.28	X	27934
Te-Zn	ZnTe rhom	SiC, hR30,160	<i>R</i> 3 <i>m</i>	0.437, 0.437, 5.3, 90, 90, 120	adamantane structure	-	5.48	A	1229
Te-Zn	ZnTe rt	ZnS, cF2,16	<i>F</i> -43 <i>m</i>	0.6106, 0.6106, 0.6106, 90, 90, 90	adamantane structure	red	5.63	X	30779
Te-Zn	ZnTe tf	ZnO, hP4,186	<i>P</i> 6 ₃ / <i>mc</i>	0.4303, 0.4303, 0.7088, 90, 90, 120	adamantane structure	-	5.64	A	45635
Te-Zn	ZnTe ₂	CdI ₂ , hP3,164	<i>P</i> -3 <i>m</i> 1	0.398, 0.398, 0.525, 90, 90, 120	CdI ₂ -PbI ₂ polytype	-	7.39	X	26243
Te-Zr	ZrTe ht2	WC, hP2,187	<i>P</i> -6 <i>m</i> 2	0.37706, 0.37706, 0.38605, 90, 90, 120	AlB ₂ family	gray silver	7.64	X	37101
Te-Zr	ZrTe ht3	FeAs, oP8,62	<i>Pnma</i>	0.73915, 0.37723, 0.69434, 90, 90, 90	AlB ₂ family	-	7.51	X	39174
Te-Zr	ZrTe ₃ rt	ZrSe ₃ , mP8,11	<i>P</i> 12/ <i>m</i> 1	0.5898, 0.39269, 1.0103, 90, 97.81, 90	-	black	6.79	X	34976
Te-Zr	ZrTe ₅ mon1	* ₂ mP12,11	<i>P</i> 12/ <i>m</i> 1	0.412, 1.37, 0.71468, 90, 101.56, 90	-	-	-	N	20147
Te-Zr	ZrTe ₅ mon2	* ₂ mS*,*	-	1.459, 0.398, 3.129, 90, 96.7, 90	-	-	-	N	18400
Te-Zr	ZrTe ₅ rt	HfTe ₅ , oS24,63	<i>Cmcm</i>	0.39875, 1.453, 1.3724, 90, 90, 90	-	-	6.09	X	19448
Te-Zr	Zr _{0.65} Te 4H	Ti _{0.62} S ₃ , hP8,186	<i>P</i> 6 ₃ / <i>mc</i>	0.3984, 0.3984, 1.3366, 90, 90, 120	-	black	6.76	X	34525
Te-Zr	Zr _{0.92} Te ht1	NiAs, hP4,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.3962, 0.3962, 0.6693, 90, 90, 120	AlB ₂ family	brown gray	7.72	X	12415
Te-Zr	Zr _{0.92} Te	* ₂ o**,*	-	0.391, 0.70635, 2.03096, 90, 90, 90	-	-	-	N	33357
Te-Zr	Zr _{0.99} Te _{0.01} rt	Mg, hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.3246, 0.3246, 0.5198, 90, 90, 120	close-packed structure	-	6.41	X	5610
Te-Zr	Zr ₂ Te	Se ₂ Te, oP36,62	<i>Pnma</i>	1.995, 0.38236, 1.06563, 90, 90, 90	-	-	7.60	X	35992
Te-Zr	Zr ₃ Te	Ni ₃ P, tI32,82	<i>I</i> -4	1.1327, 1.1327, 0.56264, 90, 90, 90	-	gray silver	7.38	X	31824
Te-Zr	Zr ₅ Te ₄	Ti ₅ Te ₄ , tI18,87	<i>I</i> 4/ <i>m</i>	1.0766, 1.0766, 0.3842, 90, 90, 90	Chevrel phase	gray silver	7.21	X	37095
Te-Zr	Zr ₅ Te ₆	Zr ₅ Te ₆ , hP33,164	<i>P</i> -3 <i>m</i> 1	1.1728, 1.1728, 0.707, 90, 90, 120	-	-	7.23	X	37340
Te-Zr	Zr ₆ Te	Se, hP3,152	<i>P</i> 3 ₁ ,21	0.446, 0.446, 0.593, 90, 90, 120	-	-	6.22	A	22358
Th-Tl	TlTh	ThIn, oP24,57	<i>Pbcm</i>	1.077, 0.9932, 0.6554, 90, 90, 90	-	-	12.40	X	17968
Th-Tl	TlTh ₂	CuAl ₂ , tI12,140	<i>I</i> 4/ <i>mcm</i>	0.7708, 0.7708, 0.6212, 90, 90, 90	-	-	12.03	A	17968
Th-Tl	Tl ₃ Th	Cu ₃ Au, cP4,221	<i>Pm</i> -3 <i>m</i>	0.4751, 0.4751, 0.4751, 90, 90, 90	close-packed structure	-	13.09	X	17968
Th-Tl	Tl ₃ Th ₅	Mn ₅ Si ₃ , hP16,193	<i>P</i> 6 ₃ / <i>mcm</i>	0.9388, 0.9388, 0.642, 90, 90, 120	-	-	12.02	A	17968
Th-Tl	Tl ₄ Th ₃	Pu ₄ Pd ₃ , oS32,63	<i>Cmcm</i>	1.0249, 0.826, 1.0419, 90, 90, 90	-	-	12.94	A	17968
Th-Tm	Th _{0.805} Tm _{0.195} rt	Cu, cF4,225	<i>Fm</i> -3 <i>m</i>	0.5083, 0.5083, 0.5083, 90, 90, 90	close-packed structure	-	11.11	X	6795
Th-U	Th _{0.925} U _{0.075} rt	Cu, cF4,225	<i>Fm</i> -3 <i>m</i>	0.5154, 0.5154, 0.5154, 90, 90, 90	close-packed structure	-	11.28	X	983
Th-Y	Y _{0.47} Th _{0.53} ht	W, cI2,229	<i>Im</i> -3 <i>m</i>	0.41, 0.41, 0.41, 90, 90, 90	b.c.c. family	-	7.94	X	1273
Th-Y	Y _{0.49} Th _{0.51} rt	Cu, cF4,225	<i>Fm</i> -3 <i>m</i>	0.5078, 0.5078, 0.5078, 90, 90, 90	close-packed structure	-	8.21	X	4726
Th-Y	Y _{0.67} Th _{0.33} rt	Mg, hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.3431, 0.3431, 0.5802, 90, 90, 120	close-packed structure	-	7.64	X	1216
Th-Zn	ZnTh ₂	CuAl ₂ , tI12,140	<i>I</i> 4/ <i>mcm</i>	0.7614, 0.7614, 0.5658, 90, 90, 90	-	-	10.72	X	6603
Th-Zn	Zn ₁₇ Th ₂ hex	Th ₂ Ni ₁₇ , hP38,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.9032, 0.9032, 0.8929, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	-	8.30	A	3487
Th-Zn	Zn ₁₇ Th ₂ rhom	Zn ₁₇ Th ₂ , hR57,166	<i>R</i> -3 <i>m</i>	0.903, 0.903, 1.32, 90, 90, 120	CaCu ₂ -Zr ₄ Al ₃	-	8.42	X	778
Th-Zn	Zn ₂ Th	AlB ₂ , hP3,191	<i>P</i> 6/ <i>mmm</i>	0.42, 0.42, 0.417, 90, 90, 120	AlB ₂ family	-	9.46	X	779
Th-Zn	Zn ₄ Th	BaAl ₄ , tI10,139	<i>I</i> 4/ <i>mmm</i>	0.426, 0.426, 1.04, 90, 90, 90	BaAl ₄ family	-	8.69	X	779
Th-Zr	Th _{0.1} Zr _{0.9} rt	Mg, hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.3258, 0.3258, 0.5248, 90, 90, 120	close-packed structure	-	7.25	X	11475
Th-Zr	Th _{0.2} Zr _{0.8} m	* ₂ o**,*	-	0.3392, 0.5332, 0.5541, 90, 90, 90	-	-	-	N	11475
Th-Zr	Th _{0.3} Zr _{0.7} ht	W, cI2,229	<i>Im</i> -3 <i>m</i>	0.37272, 0.37272, 0.37272, 90, 90, 90	b.c.c. family	-	8.56	X	12286
Th-Zr	Th _{0.9} Zr _{0.1} rt	Cu, cF4,225	<i>Fm</i> -3 <i>m</i>	0.502, 0.502, 0.502, 90, 90, 90	close-packed structure	-	11.44	X	1105
Ti-Tl	Tl _{0.8} Ti _{1.2}	Cr ₃ Si, cP8,223	<i>Pm</i> -3 <i>n</i>	0.5256, 0.5256, 0.5256, 90, 90, 90	Frank-Kasper phase	-	7.25	X	3656
Ti-U	U _{0.5} Ti _{0.5} ht	W, cI2,229	<i>Im</i> -3 <i>m</i>	0.337, 0.337, 0.337, 90, 90, 90	b.c.c. family	-	12.41	X	614
Ti-U	U _{0.996} Ti _{0.004} rt	U, oS4,63	<i>Cmcm</i>	0.2861, 0.58234, 0.49736, 90, 90, 90	close-packed structure	-	19.02	X	17821
Ti-U	U ₂ Ti rt	Hg ₂ U, hP3,191	<i>P</i> 6/ <i>mmm</i>	0.48238, 0.48238, 0.28481, 90, 90, 120	AlB ₂ family	-	15.16	X	42354
Ti-V	Ti _{0.5} V _{0.5}	W, cI2,229	<i>Im</i> -3 <i>m</i>	0.3158, 0.3158, 0.3158, 90, 90, 90	b.c.c. family	-	5.21	X	20591
Ti-V	Ti _{0.84} V _{0.16} hp	(Ti _{0.95} Cr _{0.05}), hP3,164	<i>P</i> -3 <i>m</i> 1	0.45795, 0.45795, 0.27933, 90, 90, 120	-	-	4.75	X	36072
Ti-V	Ti _{0.981} V _{0.019} rt	Mg, hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.2976, 0.2976, 0.4725, 90, 90, 120	close-packed structure	-	4.39	X	56095
Ti-W	Ti _{0.91} W _{0.09} ht	W, cI2,229	<i>Im</i> -3 <i>m</i>	0.3259, 0.3259, 0.3259, 90, 90, 90	b.c.c. family	-	5.77	X	35285
Ti-Zn	ZnTi	CsCl, cP2,221	<i>Pm</i> -3 <i>m</i>	0.315, 0.315, 0.315, 90, 90, 90	b.c.c. family	-	6.02	X	1734
Ti-Zn	ZnTi ₂	CuZr ₂ , tI6,139	<i>I</i> 4/ <i>mmm</i>	0.304, 0.304, 1.068, 90, 90, 90	close-packed structure	-	5.42	A	2791
Ti-Zn	Zn ₁₆ Ti	Zn ₁₆ Ti, oS68,63	<i>Cmcm</i>	0.7699, 1.1414, 1.18, 90, 90, 90	-	gray	7.01	X	30684
Ti-Zn	Zn ₂ Ti	MgZn ₂ , hP12,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.5064, 0.5064, 0.821, 90, 90, 120	Friauf-Laves phase	-	6.51	X	624
Ti-Zn	Zn _{22.16} Ti _{2.84}	Zn ₂₂ (Zn _{0.16} Ti _{0.84})Ti ₂ , tP100,135	<i>P</i> 4 ₂ / <i>mbc</i>	1.1523, 1.1523, 1.1456, 90, 90, 90	-	gray	6.92	X	30684
Ti-Zn	Zn ₃ Ti	Cu ₃ Au, cP4,221	<i>Pm</i> -3 <i>m</i>	0.39322, 0.39322, 0.39322, 90, 90, 90	close-packed structure	-	6.67	X	624
Ti-Zr	Zr _{0.11} Ti _{0.89} ht	W, cI2,229	<i>Im</i> -3 <i>m</i>	0.3353, 0.3353, 0.3353, 90, 90, 90	b.c.c. family	-	4.64	X	59446
Ti-Zr	Zr _{0.5} Ti _{0.5} rt	Mg, hP2,194	<i>P</i> 6 ₃ / <i>mmc</i>	0.312, 0.312, 0.49, 90, 90, 120	close-packed structure	-	5.59	X	20395

System	Substance	Prototype	H-M	Unit Cell Parameters $a, b, c, \alpha, \beta, \gamma$ (nm,°)	Family	Color	D_X	C	Ref.
Ti-Zr	Zr _{0.504} Ti _{0.496} ht-hp	Ti ₃ hP3, 191	<i>P6/mmm</i>	0.45198, 0.45198, 0.27787, 90, 90, 120	-	-	7.07	X	48260
Ti-Tm	TiTm	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.3711, 0.3711, 0.3711, 90, 90, 90	b.c.c. family	gray silver	12.13	X	2600
Ti-Tm	Ti ₃ Tm	Cu ₃ Au ₂ cP4, 221	<i>Pm-3m</i>	0.4657, 0.4657, 0.4657, 90, 90, 90	close-packed structure	-	12.86	X	3057
Ti-Tm	Ti ₃ Tm ₅	Mn ₅ Si ₃ hP16, 193	<i>P6₃/mcm</i>	0.8798, 0.8798, 0.6495, 90, 90, 120	-	-	11.12	A	4603
Ti-U	Ti ₃ U	Cu ₃ Au ₂ cP4, 221	<i>Pm-3m</i>	0.4688, 0.4688, 0.4688, 90, 90, 90	close-packed structure	-	13.72	X	7586
Ti-Y	TiY ht	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.3751, 0.3751, 0.3751, 90, 90, 90	b.c.c. family	-	9.23	X	1522
Ti-Y	Ti ₃ Y	Cu ₃ Au ₂ cP4, 221	<i>Pm-3m</i>	0.4685, 0.4685, 0.4685, 90, 90, 90	close-packed structure	-	11.34	X	22274
Ti-Y	Ti ₃ Y ₅	Mn ₅ Si ₃ hP16, 193	<i>P6₃/mcm</i>	0.8935, 0.8935, 0.6594, 90, 90, 120	-	-	7.70	A	22274
Ti-Y	Ti ₃ Y ₃	Pu ₃ Pd ₅ oS32, 63	<i>Cmcm</i>	0.9965, 0.808, 1.037, 90, 90, 90	-	-	10.25	A	14115
Ti-Yb	TiYb	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.3826, 0.3826, 0.3826, 90, 90, 90	b.c.c. family	gray silver	11.19	X	2600
Ti-Yb	TiYb ₂	Co ₂ Si-b, oP12, 62	<i>Pnma</i>	0.7217, 0.527, 0.9821, 90, 90, 90	-	-	9.79	X	22273
Ti-Yb	Ti ₃ Yb	Cu ₃ Au ₂ cP4, 221	<i>Pm-3m</i>	0.4613, 0.4613, 0.4613, 90, 90, 90	close-packed structure	-	13.30	X	2343
Ti-Yb	Ti ₃ Yb ₈	Ca ₈ Ir ₃ aP22, 2	<i>P-1</i>	0.9489, 0.95569, 0.9646, 98.977, 101.3, 119.598	-	-	9.31	X	22273
Ti-Zr	Ti _{0.8} Zr _{0.2}	Cr ₃ Si, cP8, 223	<i>Pm-3n</i>	0.5626, 0.5626, 0.5626, 90, 90, 90	Frank-Kasper phase	-	8.49	X	3656
Tm-Zn	ZnTm rt	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.3514, 0.3514, 0.3514, 90, 90, 90	b.c.c. family	gray silver	8.97	X	24004
Tm-Zn	Zn ₁₂ Tm	ThMn ₁₂ tI26, 139	<i>I4/mmm</i>	0.8852, 0.8852, 0.519, 90, 90, 90	CaCu ₅ -Zr ₄ Al ₃	-	7.79	X	3487
Tm-Zn	Zn ₁₇ Tm ₂ ht	Zn ₁₇ Th ₂ hR57, 166	<i>R-3m</i>	0.89374, 0.89374, 1.31089, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	gray	7.96	X	19986
Tm-Zn	Zn ₁₇ Tm ₂ rt	Th ₂ Ni ₁₇ hP38, 194	<i>P6₃/mmc</i>	0.8939, 0.8939, 0.8736, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.96	A	2559
Tm-Zn	Zn ₂ Tm	KHg ₂ oI12, 74	<i>Imma</i>	0.4433, 0.6944, 0.7604, 90, 90, 90	AlB ₂ family	-	8.50	A	3227
Tm-Zn	Zn ₂₃ Tm ₆	Th ₆ Mn ₂₃ cF116, 225	<i>Fm-3m</i>	1.256, 1.256, 1.256, 90, 90, 90	-	-	8.44	A	3040
Tm-Zn	Zn ₃ Tm	Zn ₃ Y, oP16, 62	<i>Pnma</i>	0.6661, 0.433, 0.9997, 90, 90, 90	-	-	8.41	A	5221
Tm-Zn	Zn ₅ Tm	Zn ₅ Er, hP36, 194	<i>P6₃/mmc</i>	0.8833, 0.8833, 0.9147, 90, 90, 120	-	-	7.99	A	5898
Tm-Zn	Zn _{58.64} Tm _{12.88}	Zn _{58.82} Er _{12.89} oP312, 33	<i>Pna2₁</i>	1.3948, 2.4515, 1.4165, 90, 90, 90	-	-	8.24	X	49399
U-Zn	Zn _{11.76} U _{1.12} rt	Zn _{11.74} U _{1.13} hP45, 191	<i>P6/mmm</i>	0.895, 0.895, 0.8902, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.35	X	5546
U-Zn	Zn ₁₇ U ₂ ht	Zn ₁₇ U ₂ hP72, 194	<i>P6₃/mmc</i>	0.90304, 0.90304, 0.8817, 90, 90, 120	-	gray silver	8.47	X	60736
U-Zn	Zn ₁₇ U ₂ rt	Zn ₁₇ Th ₂ hR57, 166	<i>R-3m</i>	0.89812, 0.89812, 1.31625, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	8.60	X	19986
U-Zr	U _{0.5} Zr _{0.5} ht	W, cI2, 229	<i>Im-3m</i>	0.3546, 0.3546, 0.3546, 90, 90, 90	b.c.c. family	-	12.26	X	18216
U-Zr	U _{0.87} Zr _{0.13} rt	Hg ₂ U, hP3, 191	<i>P6/mmm</i>	0.50317, 0.50317, 0.30888, 90, 90, 120	AlB ₂ family	-	9.84	X	30392
V-W	V _{0.7} W _{0.3}	W, cI2, 229	<i>Im-3m</i>	0.306, 0.306, 0.306, 90, 90, 90	b.c.c. family	-	10.53	X	3653
V-Zn	Zn ₃ V	Cu ₃ Au ₂ cP4, 221	<i>Pm-3m</i>	0.3848, 0.3848, 0.3848, 90, 90, 90	close-packed structure	-	7.20	X	1974
V-Zn	Zn ₆ V ₄	Zn ₅ V ₄ tI18, 139	<i>I4/mmm</i>	0.891, 0.891, 0.3224, 90, 90, 90	b.c.c. family	-	6.89	X	2365
V-Zr	ZrV ₂ ht	MgZn ₂ hP12, 194	<i>P6₃/mmc</i>	0.5277, 0.5277, 0.8647, 90, 90, 120	Friauf-Laves phase	-	6.15	A	212
V-Zr	ZrV ₂ rt	MgCu ₂ cF24, 227	<i>Fd-3m</i>	0.7482, 0.7482, 0.7482, 90, 90, 90	Friauf-Laves phase	-	6.12	X	36206
V-Zr	Zr _{0.013} V _{0.987}	W, cI2, 229	<i>Im-3m</i>	0.3025, 0.3025, 0.3025, 90, 90, 90	b.c.c. family	-	6.17	X	18267
V-Zr	Zr _{0.33} V _{0.67} m	Cu, cF4, 225	<i>Fm-3m</i>	0.4232, 0.4232, 0.4232, 90, 90, 90	close-packed structure	-	5.63	X	52110
V-Zr	Zr ₂ V stab	Ti ₂ Ni, cF96, 227	<i>Fd-3m</i>	1.2153, 1.2153, 1.2153, 90, 90, 90	-	-	6.91	A	3654
W-Zr	ZrW ₂	MgCu ₂ cF24, 227	<i>Fd-3m</i>	0.7613, 0.7613, 0.7613, 90, 90, 90	Friauf-Laves phase	-	13.82	X	15968
W-Zr	Zr _{0.035} W _{0.965}	W, cI2, 229	<i>Im-3m</i>	0.3171, 0.3171, 0.3171, 90, 90, 90	b.c.c. family	-	18.81	X	4585
W-Zr	Zr _{0.33} W _{0.67} ht	W, cI2, 229	<i>Im-3m</i>	0.3172, 0.3172, 0.3172, 90, 90, 90	b.c.c. family	-	15.95	X	15968
W-Zr	Zr _{0.65} W _{0.35} ht	W, cI2, 229	<i>Im-3m</i>	0.331, 0.331, 0.331, 90, 90, 90	b.c.c. family	-	11.32	X	5210
W-Zr	Zr ₃ W ₅ stab	W ₅ Si ₃ tI32, 140	<i>I4/mcm</i>	0.95, 0.95, 0.485, 90, 90, 90	-	-	18.10	A	1361
Y-Yb	Y _{0.2} Yb _{0.8} hp	Cu, cF4, 225	<i>Fm-3m</i>	0.5358, 0.5358, 0.5358, 90, 90, 90	close-packed structure	-	6.75	X	22277
Y-Yb	Y _{0.3} Yb _{0.7} hp	Nd, hP4, 194	<i>P6₃/mmc</i>	0.3758, 0.3758, 1.2192, 90, 90, 120	close-packed structure	-	6.58	X	22277
Y-Yb	Y _{0.5} Yb _{0.5} hp	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3686, 0.3686, 0.5967, 90, 90, 120	close-packed structure	-	6.20	X	22277
Y-Zn	ZnY lt	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.35769, 0.35769, 0.35769, 90, 90, 90	b.c.c. family	-	5.60	X	5863
Y-Zn	Zn ₁₁ Y ₃	La ₃ Al ₁₁ oI28, 71	<i>Immm</i>	0.4388, 0.8871, 1.2929, 90, 90, 90	-	-	6.51	A	5221
Y-Zn	Zn ₁₂ Y	ThMn ₁₂ tI26, 139	<i>I4/mmm</i>	0.8861, 0.8861, 0.5205, 90, 90, 90	CaCu ₅ -Zr ₄ Al ₃	-	7.10	A	2559
Y-Zn	Zn ₁₇ Y ₂ hex	Th ₂ Ni ₁₇ hP38, 194	<i>P6₃/mmc</i>	0.8991, 0.8991, 0.8764, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	6.98	A	2559
Y-Zn	Zn ₁₇ Y ₂ ht	Zn ₁₇ Th ₂ hR57, 166	<i>R-3m</i>	0.89719, 0.89719, 1.31414, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.01	X	19986
Y-Zn	Zn ₂₅ Y ₆	Th ₆ Mn ₂₃ cF116, 225	<i>Fm-3m</i>	1.269, 1.269, 1.269, 90, 90, 90	-	-	6.62	A	2559
Y-Zn	Zn ₃ Y	Zn ₃ Y, oP16, 62	<i>Pnma</i>	0.6690, 0.4405, 1.0111, 90, 90, 90	-	-	6.35	X	3720
Y-Zn	Zn ₅ Y	Zn ₅ Er, hP36, 194	<i>P6₃/mmc</i>	0.8885, 0.8885, 0.9207, 90, 90, 120	-	-	6.58	A	5898
Y-Zn	Zn _{58.7} Y _{12.65}	Zn _{58.7} Y _{12.65} hP146, 194	<i>P6₃/mmc</i>	1.424, 1.424, 1.400, 90, 90, 120	-	-	6.70	X	6235
Y-Zr	Y _{0.6} Zr _{0.4} m	Mg, hP2, 194	<i>P6₃/mmc</i>	0.3477, 0.3477, 0.5495, 90, 90, 120	close-packed structure	-	5.19	X	6777
Yb-Zn	ZnYb	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.3629, 0.3629, 0.3629, 90, 90, 90	b.c.c. family	gray silver	8.28	X	2600
Yb-Zn	Zn ₁₁ Yb	BaCd ₁₁ tI48, 141	<i>I4₁/amd</i>	1.0643, 1.0643, 0.68079, 90, 90, 90	-	-	7.69	X	54351
Yb-Zn	Zn ₁₁ Yb ₃	La ₃ Al ₁₁ oI28, 71	<i>Immm</i>	0.4421, 0.8889, 1.3122, 90, 90, 90	-	-	7.98	A	5221
Yb-Zn	Zn ₁₃ Yb	NaZn ₁₃ cF112, 226	<i>Fm-3c</i>	1.215, 1.215, 1.215, 90, 90, 90	-	-	7.58	A	3040
Yb-Zn	Zn ₁₇ Yb ₂ hex	Th ₂ Ni ₁₇ hP38, 194	<i>P6₃/mmc</i>	0.9022, 0.9022, 0.8798, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	-	7.81	A	3040
Yb-Zn	Zn ₁₇ Yb ₂ rhom	Zn ₁₇ Th ₂ hR57, 166	<i>R-3m</i>	0.90336, 0.90336, 1.32135, 90, 90, 120	CaCu ₅ -Zr ₄ Al ₃	gray	7.78	X	19986
Yb-Zn	Zn ₂ Yb rt orth	KHg ₂ oI12, 74	<i>Imma</i>	0.4573, 0.7325, 0.7569, 90, 90, 90	AlB ₂ family	-	7.96	X	2435
Yb-Zn	Zn ₅₈ Yb ₁₃	Zn ₅₈ Gd ₁₃ hP142, 194	<i>P6₃/mmc</i>	1.4317, 1.4317, 1.4173, 90, 90, 120	-	-	7.98	A	55203
Yb-Zn	Zn _{73.42} Yb _{12.52}	Zn _{6.95} (Zn ₉₄ Al _{0.06}) ₆₆ Yb _{12.70} cI194, 204	<i>Im-3</i>	1.4298, 1.4298, 1.4298, 90, 90, 90	-	-	7.92	X	52591
Zn-Zr	ZnZr	CsCl ₂ cP2, 221	<i>Pm-3m</i>	0.3336, 0.3336, 0.3336, 90, 90, 90	b.c.c. family	-	7.00	X	4747
Zn-Zr	ZnZr ₂	CuZr ₂ tI6, 139	<i>I4/mmm</i>	0.3303, 0.3303, 1.126, 90, 90, 90	close-packed structure	-	6.70	A	42349
Zn-Zr	Zn ₂ Zr	MgCu ₂ cF24, 227	<i>Fd-3m</i>	0.73927, 0.73927, 0.73927, 90, 90, 90	Friauf-Laves phase	-	7.30	X	16249
Zn-Zr	Zn ₂ Zr ₃	Zr ₃ Al ₂ tP20, 136	<i>P4₂/mmn</i>	0.7633, 0.7633, 0.6965, 90, 90, 90	-	-	6.62	A	1320
Zn-Zr	Zn _{21.80} Zr	Zn ₂₂ Zr, cF184, 227	<i>Fd-3m</i>	1.4105, 1.4105, 1.4105, 90, 90, 90	-	gray	7.18	X	32111
Zn-Zr	Zn ₂ Zr (C)	*c**	-	1.27, 1.27, 1.27, 90, 90, 90	-	-	-	N	1112
Zn-Zr	Zn ₃ Zr rt	*tI64, *	-	0.816, 0.816, 1.623, 90, 90, 90	-	-	-	N	2791
Zn-Zr	Zn _{38.92} Zr ₅	Zn ₃₉ Zr ₅ mS88, 12	<i>C12/m1</i>	1.7855, 0.8596, 1.2546, 90, 134, 40, 90	-	gray	7.24	X	32111

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm, $^\circ$)	Family	Color	D_X	C	Ref.
Ac-Br-O	AcBrO	PbClF,tP6,129	$P4/nmm$	0.428,0.428,0.741,90,90,90	-	-	7.90	A	298
Ac-Cl-O	AcClO	PbClF,tP6,129	$P4/nmm$	0.425,0.425,0.708,90,90,90	-	-	7.23	A	298
Ac-F-O	AcOF	CaF ₂ ,cF12,225	$Fm-3m$	0.5943,0.5943,0.5943,90,90,90	fluorite family	-	8.29	X	354
Ag-Al-Ba	BaAg _{0.3} Al _{1.7}	CeAl ₂ Ga ₂ ,tI10,139	$I4/mmm$	0.4528,0.4528,1.1453,90,90,90	BaAl ₄ family	-	3.81	X	23449
Ag-Al-Ba	BaAg _{2.4} Al _{12.6}	BaAg ₂ (Ag _{0.4} Al _{0.6})Al ₂ ,oS24,63	$Cmcm$	1.1026,0.8723,0.552,90,90,90	-	gray silver	5.83	X	24724
Ag-Al-Ba	BaAg _{4.87} Al _{12.13}	BaAg ₄ (Ag _{0.4} Al _{0.6}) ₂ Al,hP24,189	$P-62m$	0.8913,0.8913,0.7278,90,90,120	-	gray silver	7.16	X	24724
Ag-Al-Ba	BaAg _{5.59} Al _{7.41}	NaZn ₁₃ ,cF112,226	$Fm-3c$	1.2677,1.2677,1.2677,90,90,90	-	-	6.13	A	36013
Ag-Al-Ba	Ba ₈ Ag _{3.5} Al _{13.5}	Ba ₈ (Ag _{0.4} Al _{0.6}) ₈ Al ₉ ,mP50,14	$P12_1/c1$	0.6182,2.0041,1.22625,90,120,174,90	-	-	4.65	X	24724
Ag-Al-Ca	CaAgAl	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.5698,0.5698,0.9177,90,90,120	Friauf-Laves phase	gray	4.50	X	50631
Ag-Al-Ca	CaAg _{0.4} Al _{1.6}	MgNi ₂ ,hP24,194	$P6_3/mmc$	0.5698,0.5698,1.8418,90,90,120	Friauf-Laves phase	-	3.24	X	50631
Ag-Al-Ca	CaAg _{0.7} Al _{1.3}	CeAl ₂ Ga ₂ ,tI10,139	$I4/mmm$	0.4193,0.4193,1.1794,90,90,90	BaAl ₄ family	-	3.28	X	23449
Ag-Al-Ca	CaAg _{1.3} Al _{1.7}	CeNi ₃ ,hP24,194	$P6_3/mmc$	0.5597,0.5597,1.8002,90,90,120	Laves-CaCu ₅	gray	4.61	X	24707
Ag-Al-Ca	CaAg _{2.2} Al _{2.8}	PrNi ₂ Al ₃ ,hP6,191	$P6/mmm$	0.5521,0.5521,0.443,90,90,120	-	gray silver	5.01	X	27270
Ag-Al-Ca	Ca ₃ Ag ₁₂ Al ₂₁	Ca ₃ Ag(Ag _{0.35} Al _{0.65}) ₃₂ ,cP36,221	$Pm-3m$	0.8685,0.8685,0.8685,90,90,90	-	-	5.02	X	17903
Ag-Al-Ca	Ca ₃ Ag _{2.1} Al _{6.9}	Ca ₃ Cu ₂ Al ₇ ,hR36,166	$R-3m$	0.5614,0.5614,2.6788,90,90,120	Laves-CaCu ₅	gray	3.63	X	24707
Ag-Al-Ce	AgCeAl	KHg ₂ ,oI12,74	$Imma$	0.4706,0.7516,0.7942,90,90,120	AlB ₂ family	-	6.50	A	51689
Ag-Al-Ce	AgCeAl ₃	BaAl ₄ ,tI10,139	$I4/mmm$	0.432,0.432,1.1043,90,90,90	BaAl ₄ family	-	5.30	A	53207
Ag-Al-Ce	Ag _{0.6} CeAl _{3.4}	CeAl ₂ Ga ₂ ,tI10,139	$I4/mmm$	0.4322,0.4322,1.1052,90,90,90	BaAl ₄ family	-	4.77	X	23449
Ag-Al-Ce	Ag _{0.87} CeAl _{2.13}	PuNi ₃ ,hR36,166	$R-3m$	0.5637,0.5637,2.6913,90,90,120	Laves-CaCu ₅	-	5.88	A	21243
Ag-Al-Ce	Ag _{2.7} Ce ₃ Al _{6.3}	Ca ₃ Cu ₂ Al ₇ ,hR36,166	$R-3m$	0.5637,0.5637,2.6913,90,90,120	Laves-CaCu ₅	gray	5.93	X	24707
Ag-Al-Ce	Ag ₃ CeAl ₂	PrNi ₂ Al ₃ ,hP6,191	$P6/mmm$	0.5565,0.5565,0.4521,90,90,120	-	gray silver	7.09	X	27270
Ag-Al-Ce	Ag _{3.1} CeAl _{7.9}	BaHg ₁₁ ,cP36,221	$Pm-3m$	0.8653,0.8653,0.8653,90,90,90	-	-	5.29	A	21243
Ag-Al-Ce	Ag _{6.39} CeAl _{4.61}	BaCd ₁₁ ,tI48,141	$I4_1/amd$	1.10466,1.10466,0.71101,90,90,90	-	-	7.30	X	29043
Ag-Al-Ce	Ag _{6.5} Ce _{1.8} Al _{10.5}	Th ₂ Ni ₁₇ ,hP38,194	$P6_3/mmc$	0.9332,0.9332,0.9129,90,90,120	CaCu ₅ -Zr ₄ Al ₃	gray silver	5.97	X	26008
Ag-Al-Ce	Ag _{7.32} Ce _{1.61} Al _{9.86}	Ag ₂₀ (Ag _{0.46} Al _{0.54}) ₁₇ Dy _{1.7} ,hP42,194	$P6_3/mmc$	0.93742,0.93742,0.91525,90,90,120	-	-	6.11	X	29043
Ag-Al-Ce	Ag _{8.8} Ce ₂ Al _{8.2}	Zn ₁₇ Th ₂ ,hR57,166	$R-3m$	0.9403,0.9403,1.3687,90,90,120	CaCu ₅ -Zr ₄ Al ₃	gray silver	6.90	X	26008
Ag-Al-Cu	Ag _{0.005} Cu _{0.004} Al _{0.991}	Cu,cF4,225	$Fm-3m$	0.40472,0.40472,0.40472,90,90,90	close-packed structure	-	2.76	X	968
Ag-Al-Dy	AgDyAl	KHg ₂ ,oI12,74	$Imma$	0.4576,0.7125,0.7859,90,90,90	AlB ₂ family	-	7.71	A	37476
Ag-Al-Dy	Ag _{0.55} DyAl _{3.45}	Ce(Ni _{0.59} Sb _{0.41}) ₄ ,oI10,71	$Immm$	0.4296,0.4179,0.9995,90,90,90	BaAl ₄ family	-	5.83	X	23920
Ag-Al-Dy	Ag _{2.3} Dy ₃ Al _{8.7}	La ₃ Al ₁₁ ,oI28,71	$Immm$	0.4302,0.9981,1.253,90,90,90	-	-	5.99	X	37720
Ag-Al-Dy	Ag _{2.4} DyAl _{2.6}	Ag ₂₀ (Ag _{0.55} Al _{0.45}) ₄ ...,hP42,194	$P6_3/mmc$	0.9132,0.9132,0.9414,90,90,120	-	-	7.20	X	26612
Ag-Al-Dy	Ag _{5.6} DyAl _{6.4}	ThMn ₁₂ ,tI26,139	$I4/mmm$	0.9143,0.9143,0.5434,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	6.87	X	26573
Ag-Al-Dy	Ag _{8.4} Dy _{1.75} Al _{9.2}	Ag ₂₀ (Ag _{0.46} Al _{0.54}) ₁₇ Dy _{1.7} ,hP42,194	$P6_3/mmc$	0.9285,0.9285,0.9098,90,90,120	-	-	6.88	X	24452
Ag-Al-Dy	Ag _{8.5} Dy ₄ Al _{24.5}	(Cu _{0.65} Al _{0.35}) ₁₃ Yb ₄ Al ₂₀ ,tI74,139	$I4/mmm$	0.8793,0.8793,1.68,90,90,90	-	-	5.70	X	26573
Ag-Al-Er	AgErAl	KHg ₂ ,oI12,74	$Imma$	0.455,0.703,0.786,90,90,90	AlB ₂ family	-	7.98	A	45981
Ag-Al-Er	Ag _{2.5} ErAl _{2.5}	Ag ₂₀ (Ag _{0.55} Al _{0.45}) ₄ ...,hP42,194	$P6_3/mmc$	0.913,0.913,0.9336,90,90,120	-	-	7.46	A	28008
Ag-Al-Er	Ag _{8.5} Er ₄ Al _{24.5}	(Cu _{0.65} Al _{0.35}) ₁₃ Yb ₄ Al ₂₀ ,tI74,139	$I4/mmm$	0.8772,0.8772,1.6691,90,90,90	-	-	5.81	A	26573
Ag-Al-Eu	Ag _{0.4} EuAl _{1.6}	MgCu ₂ ,cF24,227	$Fd-3m$	0.8136,0.8136,0.8136,90,90,90	Friauf-Laves phase	-	5.88	X	61137
Ag-Al-Eu	Ag _{0.5} EuAl _{1.5}	BaAl ₄ ,tI10,139	$I4/mmm$	0.43186,0.43186,1.14396,90,90,90	BaAl ₄ family	-	4.68	A	61137
Ag-Al-Eu	Ag _{0.77} EuAl _{2.23}	PuNi ₃ ,hR36,166	$R-3m$	0.56982,0.56982,2.709,90,90,120	Laves-CaCu ₅	-	5.79	X	61137
Ag-Al-Eu	Ag _{0.91} EuAl _{1.09}	MgZn ₂ ,hP12,194	$P6_3/mmc$	0.58404,0.58404,0.92178,90,90,120	Friauf-Laves phase	-	6.82	X	61137
Ag-Al-Eu	Ag _{1.24} EuAl _{1.76}	CeNi ₃ ,hP24,194	$P6_3/mmc$	0.57159,0.57159,1.8087,90,90,120	Laves-CaCu ₅	-	6.49	X	61137
Ag-Al-Eu	Ag _{1.76} EuAl _{0.24}	KHg ₂ ,oI12,74	$Imma$	0.47818,0.7573,0.81784,90,90,90	AlB ₂ family	-	7.81	A	61137
Ag-Al-Eu	Ag _{13.08} Eu ₂ Al _{3.92}	Zn ₁₇ Th ₂ ,hR57,166	$R-3m$	0.95133,0.95133,1.38406,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	8.36	X	61137
Ag-Al-Eu	Ag _{2.5} EuAl _{2.5}	PrNi ₂ Al ₃ ,hP6,191	$P6/mmm$	0.5577,0.5577,0.4464,90,90,120	-	-	6.75	X	28008
Ag-Al-Eu	Ag _{3.5} EuAl _{7.5}	BaHg ₁₁ ,cP36,221	$Pm-3m$	0.87208,0.87208,0.87208,90,90,90	-	-	5.50	X	54920
Ag-Al-Eu	Ag _{4.33} EuAl _{2.67}	BaAg ₄ (Ag _{0.4} Al _{0.6}) ₂ Al,hP24,189	$P-62m$	0.87254,0.87254,0.71549,90,90,120	-	-	7.30	X	61137
Ag-Al-Eu	Ag ₅ EuAl ₁₂	Th ₂ Ni ₁₇ ,hP38,194	$P6_3/mmc$	0.94241,0.94241,0.91264,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	4.80	A	61137
Ag-Al-Eu	Ag _{5.07} EuAl _{5.93}	BaCd ₁₁ ,tI48,141	$I4_1/amd$	1.10613,1.10613,0.71302,90,90,90	-	-	6.54	X	52958
Ag-Al-Eu	Ag ₆ EuAl ₇	CaCu(Cu _{0.48} Al _{0.52}) ₁₂ ,cF112,226	$Fm-3c$	1.25057,1.25057,1.25057,90,90,90	-	-	6.71	X	61137
Ag-Al-Eu	Ag _{7.29} EuAl _{5.71}	NaZn ₁₃ ,cF112,226	$Fm-3c$	1.26952,1.26952,1.26952,90,90,90	-	-	7.09	X	61137
Ag-Al-F	AgAlF ₄	RbFeF ₄ ,oP24,18	$P2_12_12$	0.7108,0.7111,0.5568,90,90,90	-	white	4.98	A	12707
Ag-Al-F	Ag ₃ AlF ₆ ht	[NH ₄] ₃ FeF ₆ ,cF40,225	$Fm-3m$	0.8101,0.8101,0.8101,90,90,90	perovskite family	-	5.80	A	21706
Ag-Al-F	Ag ₃ AlF ₆ rt	Rb ₃ TiF ₆ ,tI20,139	$I4/mmm$	0.5745,0.5745,0.805,90,90,90	-	colorless	5.81	A	12723
Ag-Al-Gd	Ag _{0.36} GdAl _{1.64}	MgCu ₂ ,cF24,227	$Fd-3m$	0.79096,0.79096,0.79096,90,90,90	Friauf-Laves phase	-	6.45	X	43897
Ag-Al-Gd	Ag _{0.7} GdAl _{0.3}	CsCl,cP2,221	$Pm-3m$	0.3634,0.3634,0.3634,90,90,90	b.c.c. family	-	8.33	X	43897
Ag-Al-Gd	Ag _{0.8} GdAl _{1.2}	KHg ₂ ,oI12,74	$Imma$	0.45899,0.72479,0.7889,90,90,90	AlB ₂ family	-	6.98	X	43897
Ag-Al-Gd	Ag _{1.6} Gd ₄ Al ₂₃	(Cu _{0.65} Al _{0.35}) ₁₃ Yb ₄ Al ₂₀ ,tI74,139	$I4/mmm$	0.88177,0.88177,1.68624,90,90,90	-	-	5.90	X	43897
Ag-Al-Gd	Ag ₂ Gd ₃ Al ₇	Ca ₃ Cu ₂ Al ₇ ,hR36,166	$R-3m$	0.55668,0.55668,2.6382,90,90,120	Laves-CaCu ₅	-	6.17	X	43897
Ag-Al-Gd	Ag _{2.3} GdAl _{2.7}	Ag ₂₀ (Ag _{0.55} Al _{0.45}) ₄ ...,hP42,194	$P6_3/mmc$	0.92305,0.92305,0.94111,90,90,120	-	-	6.86	X	43897
Ag-Al-Gd	Ag _{2.55} Gd ₃ Al _{8.45}	La ₃ Al ₁₁ ,oI28,71	$Immm$	0.43306,1.00145,1.26706,90,90,90	-	-	5.89	X	43897
Ag-Al-Gd	Ag _{3.5} GdAl _{1.5}	(Ag _{0.73} Al _{0.27}) ₅ Sm,hP12,189	$P-62m$	0.54,0.54,0.9268,90,90,120	-	-	8.16	A	43897
Ag-Al-Gd	Ag _{5.2} GdAl _{6.8} ht	ThMn ₁₂ ,tI26,139	$I4/mmm$	0.91555,0.91555,0.54318,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	6.58	X	38509
Ag-Al-Gd	Ag _{0.3} Gd _{1.85} Al _{7.7}	ThNi ₃ ,hP38,194	$P6_3/mmc$	0.93026,0.93026,0.90991,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	7.31	X	43897
Ag-Al-Hf	Ag _{0.43} HfAl _{1.57}	MgCu ₂ ,cF24,227	$Fd-3m$	0.74631,0.74631,0.74631,90,90,90	Friauf-Laves phase	-	8.54	X	42921
Ag-Al-Hf	Ag _{1.09} Hf ₆ Al _{5.91}	W ₆ Fe ₇ ,hR39,166	$R-3m$	0.5337,0.5337,2.911,90,90,120	Frank-Kasper phase	-	9.35	X	50502
Ag-Al-Hf	Ag _{1.1} Hf ₄ Al _{1.9}	(Ag _{0.37} Al _{0.63}) ₃ Hf ₆ ,hP7,174	$P-6$	0.5332,0.5332,0.54279,90,90,120	-	-	10.98	X	42921
Ag-Al-Ho	Ag _{0.12} HoAl _{2.88}	Cu ₃ Au,cP4,221	$Pm-3m$	0.42364,0.42364,0.42364,90,90,90	close-packed structure	-	5.58	X	55154
Ag-Al-Ho	Ag _{0.8} HoAl _{1.2}	KHg ₂ ,oI12,74	$Imma$	0.4551,0.7065,0.78572,90,90,90	AlB ₂ family	-	7.46	A	55154
Ag-Al-Ho	Ag _{0.8} HoAl _{2.2}	PuNi ₃ ,hR36,166	$R-3m$	0.55195,0.55195,2.616,90,90,120	Laves-CaCu ₅	-	6.73	A	55154
Ag-Al-Ho	Ag _{2.1} Ho ₃ Al _{8.9}	La ₃ Al ₁₁ ,oI28,71	$Immm$	0.42983,0.99721,1.25215,90,90,90	-	-	5.95	X	37720
Ag-Al-Ho	Ag _{2.5} HoAl _{2.5}	Ag ₂₀ (Ag _{0.55} Al _{0.45}) ₄ ...,hP42,194	$P6_3/mmc$	0.9146,0.9146,0.935,90,90,120	-	-	7.39	A	28008
Ag-Al-Ho	Ag _{5.6} HoAl _{6.4}	ThMn ₁₂ ,tI26,139	$I4/mmm$	0.913,0.913,0.5432,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	6.91	A	26573
Ag-Al-Ho	Ag _{8.5} Ho ₄ Al _{24.5}	(Cu _{0.65} Al _{0.35}) ₁₃ Yb ₄ Al ₂₀ ,tI74,139	$I4/mmm$	0.8774,0.8774,1.6705,90,90,90	-	-	5.78	A	26573
Ag-Al-La	AgLaAl	KHg ₂ ,oI12,74	$Imma$	0.473,0.764,0.798,90,90,90	AlB ₂ family	-	6.31	A	45981
Ag-Al-La	Ag _{1.2} La ₂ Al _{6.8}	(Ag _{0.4} Al _{0.6}) ₃ La ₂ Al ₅ ,tP20,129	$P4/nmm$	0.618,0.618,1.1051,90,90,90	-	-	4.65	X	34065
Ag-Al-La	Ag								

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Ag-Al-La	Ag _{6.5} La _{1.8} Al _{10.5}	Th ₂ Ni ₁₇ ,hP38,194	$P6_3/mmc$	0.9404,0.9404,0.9153,90,90,120	CaCu ₅ -Zr ₄ Al ₃	gray silver	5.85	X	26008
Ag-Al-La	Ag _{7.55} La _{1.6} Al _{9.55}	Ag _{0.3} (Ag _{0.46} Al _{0.54}) ₁₇ Dy _{1.7} ,hP42,194	$P6_3/mmc$	0.9408,0.9408,0.9144,90,90,120	-	-	6.14	A	29043
Ag-Al-La	Ag _{9.7} La _{1.7} Al _{7.3}	Zn ₁₇ Th ₂ hR57,166	$R-3m$	0.9451,0.9451,1.3726,90,90,120	CaCu ₅ -Zr ₄ Al ₃	gray silver	7.14	X	26008
Ag-Al-Li	LiAg _{0.062} Al _{0.938}	NaTi ₂ cF16,227	$Fd-3m$	0.6364,0.6364,0.6364,90,90,90	b.c.c. family	-	2.01	X	14327
Ag-Al-Li	LiAg ₂ Al	Li ₂ AgSb,cF16,216	$F-43m$	0.63124,0.63124,0.63124,90,90,90	b.c.c. family	-	6.59	X	44760
Ag-Al-Li	Li _{1.745} Ag _{0.218} Al _{1.034}	MgAgAs,cF12,216	$F-43m$	0.6344,0.6344,0.6344,90,90,90	-	-	1.65	X	44760
Ag-Al-Li	Li ₂ AgAl	Li ₂ AgSb,cF16,216	$F-43m$	0.635,0.635,0.635,90,90,90	b.c.c. family	pink	3.86	X	4207
Ag-Al-Lu	Ag _{2.5} LuAl _{2.5}	Ag _{0.2} (Ag _{0.55} Al _{0.45}) ₄ ...,hP42,194	$P6_3/mmc$	0.9063,0.9063,0.9344,90,90,120	-	-	7.68	A	28008
Ag-Al-Mg	Mg _{0.067} Ag _{0.003} Al _{0.930}	Cu ₂ cF4,225	$Fm-3m$	0.4076,0.4076,0.4076,90,90,90	close-packed structure	-	2.65	X	870
Ag-Al-Mg	Mg _{0.95} Ag _{0.01} Al _{0.04}	Mg ₂ hP2,194	$P6_3/mmc$	0.3182,0.3182,0.5171,90,90,120	close-packed structure	-	1.85	X	242
Ag-Al-Mg	Mg ₃₀ Ag ₁₉ Al ₂₄	Mg ₃₀ Ag ₁₉ Al ₂₄ ,cP146,200	$Pm-3$	1.45,1.45,1.45,90,90,90	-	-	3.73	X	33393
Ag-Al-Mg	Mg ₃₂ Ag ₁₃ Al ₃₆	Mg ₃₂ Ag ₁₃ Al ₃₆ ,cI162,204	$Im-3$	1.45,1.45,1.45,90,90,90	-	-	3.43	X	33393
Ag-Al-Mg	Mg ₃₂ Ag ₈ Al ₄₁	Mg ₃₂ (Zn _{0.65} Al _{0.35}) ₄₉ ,cI162,204	$Im-3$	1.452,1.452,1.452,90,90,90	Frank-Kasper phase	-	2.98	A	2866
Ag-Al-Mn	Ag ₂ Mn ₁₁ Al _{0.9}	CuAu ₂ P2,123	$P4/mmm$	0.2786,0.2786,0.358,90,90,90	close-packed structure	-	5.06	X	6791
Ag-Al-Nd	AgNdAl	KHg ₂ ,oI12,74	$Imma$	0.466,0.741,0.79,90,90,90	AlB ₂ family	-	6.80	A	45981
Ag-Al-Nd	Ag _{0.6} NdAl _{3.4}	BaAl ₄ ,tI10,139	$I4/mmm$	0.42744,0.42744,1.1126,90,90,90	BaAl ₄ family	-	4.91	X	29477
Ag-Al-Nd	Ag _{2.5} NdAl _{2.5}	Ag _{0.2} (Ag _{0.55} Al _{0.45}) ₄ ...,hP42,194	$P6_3/mmc$	0.93,0.93,0.9515,90,90,120	-	-	6.73	A	28008
Ag-Al-Nd	Ag _{0.50} NdAl _{1.50}	(Ag _{0.73} Al _{0.27}) ₂ Sm,hP12,189	$P-62m$	0.5436,0.5436,0.9303,90,90,120	-	-	7.84	A	36143
Ag-Al-Nd	Ag _{7.55} Nd _{1.61} Al _{9.55}	Ag _{0.3} (Ag _{0.46} Al _{0.54}) ₁₇ Dy _{1.7} ,hP42,194	$P6_3/mmc$	0.9344,0.9344,0.913,90,90,120	-	-	6.27	A	29043
Ag-Al-O	AgAlO ₂ hex	AgFeO ₂ ,hP8,194	$P6_3/mmc$	0.2896,0.2896,1.2219,90,90,120	-	yellow pale	6.24	X	13944
Ag-Al-O	AgAlO ₂ orth	NaFeO ₂ ,cP16,33	$Pna2_1$	0.54306,0.69802,0.53751,90,90,90	adamantane structure	-	5.44	X	44415
Ag-Al-O	AgAl ₁₁ O ₁₇	AgAl ₁₁ O ₁₇ ,hP68,194	$P6_3/mmc$	0.55913,0.55913,2.25293,90,90,120	β-alumina	brown	3.68	X	23469
Ag-Al-Pr	Ag _{0.3} PrAl _{1.7}	MgCu ₂ ,cF24,227	$Fd-3m$	0.817,0.817,0.817,90,90,90	Friauf-Laves phase	-	5.34	X	3503
Ag-Al-Pr	Ag _{0.52} PrAl _{1.48}	AlB ₂ ,hP3,191	$P6/mmm$	0.4216,0.4216,0.42128,90,90,120	AlB ₂ family	-	6.07	X	36169
Ag-Al-Pr	Ag _{0.60} PrAl _{0.40}	CsCl,cP2,221	$Pm-3m$	0.3738,0.3738,0.3738,90,90,90	b.c.c. family	-	6.88	X	36169
Ag-Al-Pr	Ag _{0.7} PrAl _{1.3}	CeAl ₃ Ga ₂ ,tI10,139	$I4/mmm$	0.4303,0.4303,1.1067,90,90,90	BaAl ₄ family	-	4.95	X	23449
Ag-Al-Pr	Ag _{1.4} PrAl _{0.6}	KHg ₂ ,oI12,74	$Imma$	0.467,0.7448,0.7899,90,90,90	AlB ₂ family	-	7.45	A	56341
Ag-Al-Pr	Ag _{1.43} Pr ₃ Al _{0.57}	La ₃ Al ₁₁ ,oI28,71	$Immm$	0.4296,1.0137,1.3074,90,90,90	-	-	4.87	A	36169
Ag-Al-Pr	Ag ₁₀ Pr ₂ Al ₇	Zn ₁₇ Th ₂ hR57,166	$R-3m$	0.9417,0.9417,1.3673,90,90,120	CaCu ₅ -Zr ₄ Al ₃	gray silver	7.35	X	26008
Ag-Al-Pr	Ag ₁₃ Pr ₆ Al ₁₀	Th ₆ Mn ₂₃ ,cF116,225	$Fm-3m$	1.3271,1.3271,1.3271,90,90,90	-	-	7.15	A	21243
Ag-Al-Pr	Ag _{2.4} PrAl _{2.58}	CaCu ₂ ,hP6,191	$P6/mmm$	0.5506,0.5506,0.4417,90,90,120	-	gray silver	6.75	X	36169
Ag-Al-Pr	Ag ₃ PrAl ₂	Ag _{0.2} (Ag _{0.55} Al _{0.45}) ₄ ...,hP42,194	$P6_3/mmc$	0.9321,0.9321,0.9582,90,90,120	-	-	7.17	A	36169
Ag-Al-Pr	Ag _{13.5} Pr ₃ Al _{5.85}	Ca ₃ Cu ₂ ,hR36,166	$R-3m$	0.5632,0.5632,2.7045,90,90,120	Laves-CaCu ₅	gray	6.17	X	24707
Ag-Al-Pr	Ag _{3.5} PrAl _{1.5}	(Ag _{0.73} Al _{0.27}) ₂ Sm,hP12,189	$P-62m$	0.54498,0.54498,0.9332,90,90,120	-	-	7.73	A	36169
Ag-Al-Pr	Ag _{5.9} PrAl _{5.1}	BaCd ₁₁ ,tI48,141	$I4_1/amd$	1.10262,1.10262,0.70979,90,90,90	-	-	7.04	X	36169
Ag-Al-Pr	Ag _{8.85} Pr _{1.65} Al _{8.85}	Th ₂ Ni ₁₇ ,hP38,194	$P6_3/mmc$	0.93484,0.93484,0.91033,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	6.87	X	36169
Ag-Al-Pt	Ag _{0.5} PtAl _{0.5}	NiAs,hP4,194	$P6_3/mmc$	0.4096,0.4096,0.544,90,90,120	AlB ₂ family	-	11.03	X	6205
Ag-Al-S	AgAlS ₂ hp	CuScS ₂ ,hP4,156	$P3m1$	0.35,0.35,0.684,90,90,120	-	-	4.55	X	8517
Ag-Al-S	AgAlS ₂	CuFeS ₂ ,tI16,122	$I-42d$	0.5695,0.5695,1.026,90,90,90	adamantane structure	brown	3.97	X	519
Ag-Al-S	Ag _{0.5} Al _{2.5} S ₄	MgAl ₂ O ₄ ,cF56,227	$Fd-3m$	1.0052,1.0052,1.0052,90,90,90	spinel family	-	3.27	X	1368
Ag-Al-S	Ag _{0.9} AlS ₆ ht	Ag _{0.9} AlS ₆ ,cF208,216	$F-43m$	1.0739,1.0739,1.0739,90,90,90	-	black	6.38	X	48685
Ag-Al-S	Ag _{0.9} AlS ₆ rt	* ₀ ***	-	0.7365,0.7654,1.0604,90,90,90	-	black	-	N	13334
Ag-Al-Sc	Ag ₂ ScAl	Cu ₂ MnAl,cF16,225	$Fm-3m$	0.6564,0.6564,0.6564,90,90,90	b.c.c. family	gray	6.76	X	19984
Ag-Al-Se	AgAlSe ₂	CuFeS ₂ ,tI16,122	$I-42d$	0.5956,0.5956,1.075,90,90,90	adamantane structure	brown	5.10	X	519
Ag-Al-Se	Ag _{0.9} AlSe ₆ rt	Ag _{0.9} AlSe ₆ ,cF244,216	$F-43m$	1.10947,1.10947,1.10947,90,90,90	-	black	7.16	X	40117
Ag-Al-Si	Ag _{0.75} Al _{0.25} Si _{0.05} rt	Mn ₂ cP20,213	$P4_32$	0.708,0.708,0.708,90,90,90	-	-	8.21	A	10464
Ag-Al-Sm	Ag _{0.78} SmAl _{1.22}	MgCu ₂ ,cF24,227	$Fd-3m$	0.79542,0.79542,0.79542,90,90,90	Friauf-Laves phase	-	7.06	X	31817
Ag-Al-Sm	Ag _{0.9} SmAl _{0.1}	CsCl,cP2,221	$Pm-3m$	0.368,0.368,0.368,90,90,90	b.c.c. family	-	8.34	X	31817
Ag-Al-Sm	Ag _{1.15} SmAl _{1.85}	PuNi ₃ ,hR36,166	$R-3m$	0.55903,0.55903,2.656,90,90,120	Laves-CaCu ₅	-	6.74	X	31817
Ag-Al-Sm	Ag _{1.46} SmAl _{1.54}	KHg ₂ ,oI12,74	$Imma$	0.4656,0.7237,0.7951,90,90,90	AlB ₂ family	-	7.99	X	31817
Ag-Al-Sm	Ag _{10.9} Sm ₂ Al _{6.1}	Zn ₁₇ Th ₂ hR57,166	$R-3m$	0.937,0.937,1.3641,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	7.88	X	31817
Ag-Al-Sm	Ag _{2.43} Sm ₃ Al _{8.57}	La ₃ Al ₁₁ ,oI28,71	$Immm$	0.4326,1.0079,1.2747,90,90,90	-	-	5.64	A	31817
Ag-Al-Sm	Ag _{2.6} SmAl _{2.5}	Ag _{0.2} (Ag _{0.55} Al _{0.45}) ₄ ...,hP42,194	$P6_3/mmc$	0.92272,0.92272,0.94821,90,90,120	-	-	7.10	X	28008
Ag-Al-Sm	Ag _{0.65} SmAl _{1.35}	(Ag _{0.73} Al _{0.27}) ₂ Sm,hP12,189	$P-62m$	0.54081,0.54081,0.92583,90,90,120	-	-	8.22	X	36143
Ag-Al-Sm	Ag _{7.5} Sm _{1.6} Al _{9.5}	Ag _{0.3} (Ag _{0.46} Al _{0.54}) ₁₇ Dy _{1.7} ,hP42,194	$P6_3/mmc$	0.9318,0.9318,0.9111,90,90,120	-	-	6.33	A	29043
Ag-Al-Sr	SrAg _{0.8} Al _{3.2}	CeAl ₂ Ga ₂ ,tI10,139	$I4/mmm$	0.4343,0.4343,1.161,90,90,90	BaAl ₄ family	-	3.95	X	23449
Ag-Al-Sr	SrAg _{2.5} Al _{2.5}	PrNi ₂ Al ₃ ,hP6,191	$P6/mmm$	0.5633,0.5633,0.4479,90,90,120	-	gray silver	5.73	X	27270
Ag-Al-Sr	SrAg _{7.36} Al _{5.64}	NaZn ₁₃ ,cF112,226	$Fm-3c$	1.2543,1.2543,1.2543,90,90,90	-	black	6.96	X	17903
Ag-Al-Tb	AgTbAl ₃	Ce(Ni _{0.59} Sb _{0.41}) ₄ ,oI10,71	$Immm$	0.4189,0.4304,1.0003,90,90,90	BaAl ₄ family	-	6.40	A	23920
Ag-Al-Tb	Ag _{0.24} TbAl _{1.76}	MgCu ₂ ,cF24,227	$Fd-3m$	0.78676,0.78676,0.78676,90,90,90	Friauf-Laves phase	-	6.34	X	39287
Ag-Al-Tb	Ag _{0.5} TbAl _{0.5}	CsCl,cP2,221	$Pm-3m$	0.3607,0.3607,0.3607,90,90,90	b.c.c. family	-	8.01	X	39287
Ag-Al-Tb	Ag _{0.9} TbAl _{2.1}	PuNi ₃ ,hR36,166	$R-3m$	0.55461,0.55461,2.6286,90,90,120	Laves-CaCu ₅	-	6.67	X	39287
Ag-Al-Tb	Ag _{1.1} TbAl _{0.9}	KHg ₂ ,oI12,74	$Imma$	0.45866,0.71666,0.78652,90,90,90	AlB ₂ family	-	7.76	X	39287
Ag-Al-Tb	Ag _{10.55} Tb ₄ Al _{22.45}	(Cu _{0.65} Al _{0.35}) ₁₃ Yb ₄ Al ₂₀ ,tI74,139	$I4/mmm$	0.88099,0.88099,1.6771,90,90,90	-	-	6.07	X	39287
Ag-Al-Tb	Ag _{2.5} Tb ₃ Al _{8.5}	La ₃ Al ₁₁ ,oI28,71	$Immm$	0.43026,1.0016,1.25972,90,90,90	-	-	5.97	X	39287
Ag-Al-Tb	Ag _{2.7} TbAl _{2.5}	Ag _{0.2} (Ag _{0.55} Al _{0.45}) ₄ ...,hP42,194	$P6_3/mmc$	0.91739,0.91739,0.94151,90,90,120	-	-	7.52	X	39287
Ag-Al-Tb	Ag _{5.5} TbAl _{6.5}	ThMn ₁₂ ,tI26,139	$I4/mmm$	0.91442,0.91442,0.54461,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	6.77	X	38509
Ag-Al-Tb	Ag _{8.6} Tb _{1.8} Al _{8.4}	Th ₂ Ni ₁₇ ,hP38,194	$P6_3/mmc$	0.92815,0.92815,0.90715,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	7.07	X	39287
Ag-Al-Te	AgAlTe ₂	CuFeS ₂ ,tI16,122	$I-42d$	0.6296,0.6296,1.183,90,90,90	adamantane structure	brown	5.52	X	519
Ag-Al-Th	Ag _{0.5} ThAl _{0.5}	CuAl ₂ ,tI12,140	$I4/mcm$	0.768,0.768,0.575,90,90,90	-	-	10.41	A	6603
Ag-Al-Ti	Ag _{0.32} Ti _{1.04} Al _{2.64}	Cu ₃ Au,cP4,221	$Pm-3m$	0.39882,0.39882,0.39882,90,90,90	close-packed structure	-	4.07	X	26580
Ag-Al-Tm	Ag _{2.5} TmAl _{2.5}	Ag _{0.2} (Ag _{0.55} Al _{0.45}) ₄ ...,hP42,194	$P6_3/mmc$	0.9085,0.9085,0.9348,90,90,120	-	-	7.55	A	28008
Ag-Al-Tm	Ag _{8.5} Tm ₄ Al _{24.5}	(Cu _{0.65} Al _{0.35}) ₁₃ Yb ₄ Al ₂₀ ,tI74,139	$I4/mmm$	0.8768,0.8768,1.6599,90,90,90	-	-	5.87	A	26573
Ag-Al-Y	AgYAl ₃	Ce(Ni _{0.59} Sb _{0.41}) ₄ ,oI10,71	$Immm$	0.4184,0.4295,1.0039,90,90,90	BaAl ₄ family	-	5.11	A	23920
Ag-Al-Y	Ag _{0.11} YAl _{1.89}	MgCu ₂ ,cF24,227	$Fd-3m$	0.78609,0.78609,0.78609,90,90,90	Friauf-Laves phase	-	4.15	X	37654
Ag-Al-Y	Ag _{0.4} YAl _{0.6}	CsCl,cP2,221	$Pm-3m$	0.36145,0.36145,0.36145,90,90,90	b.c.c. family	-	5.21	X	37654
Ag-Al-Y	Ag _{0.6} YAl _{1.4}	KHg ₂ ,oI12,74	$Imma$	0.45399,0.71551,0.78712,90,90,90	AlB ₂ family	-	4.97	X	37654
Ag-Al-Y	Ag _{1.5}								

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm, $^\circ$)	Family	Color	D_X	C	Ref.
Ag-Al-Y	Ag ₂ Y ₃ Al ₇	Ca ₃ Cu ₂ Al ₇ ,hR36,166	<i>R-3m</i>	0.55422,0.55422,2.6259,90,90,120	Laves-CaCu ₅	-	4.79	X	37654
Ag-Al-Y	Ag _{2,5} YAl _{2,7}	Ag _{20,4} (Ag _{0,55} Al _{0,45}) _{4,...} ,hP42,194	<i>P6₃/mmc</i>	0.91523,0.91523,0.94167,90,90,120	-	-	6.29	X	37631
Ag-Al-Y	Ag _{3,8} YAl _{1,2}	*,h*,*	-	0.5362,0.5362,0.9198,90,90,120	-	-	-	N	37654
Ag-Al-Y	Ag _{3,2} YAl _{6,8}	ThMn ₁₂ ,tI26,139	<i>I4/mmm</i>	0.91303,0.91303,0.54645,90,90,90	CaCu ₅ -Zr ₄ Al ₃	-	6.08	X	37631
Ag-Al-Y	Ag _{8,3} Y _{1,8} Al _{8,7}	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.92852,0.92852,0.90702,90,90,120	CaCu ₅ -Zr ₄ Al ₃	-	6.33	X	37631
Ag-Al-Y	Ag _{9,7} Y ₄ Al _{23,3}	(Cu _{0,65} Al _{0,35}) ₁₃ Yb ₄ Al ₂₀ ,tI74,139	<i>I4/mmm</i>	0.88277,0.88277,1.66994,90,90,90	-	-	5.18	X	37631
Ag-Al-Yb	AgYbAl	MgZn ₂ ,hP12,194	<i>P6₃/mmc</i>	0.5663,0.5663,0.9087,90,90,120	Friauf-Laves phase	-	8.10	X	37476
Ag-Al-Yb	Ag _{0,3} YbAl _{1,7}	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.7915,0.7915,0.7915,90,90,90	Friauf-Laves phase	gray	6.73	X	24707
Ag-Al-Yb	Ag _{1,3} YbAl _{1,7}	CeNi ₃ ,hP24,194	<i>P6₃/mmc</i>	0.559,0.559,1.7908,90,90,120	Laves-CaCu ₅	gray	7.38	X	24707
Ag-Al-Yb	Ag _{2,1} Yb ₃ Al _{6,9}	Ca ₃ Cu ₂ Al ₇ ,hR36,166	<i>R-3m</i>	0.5555,0.5555,2.6384,90,90,120	Laves-CaCu ₅	gray	6.58	X	24707
Ag-Al-Yb	Ag _{2,5} YbAl _{2,5}	Ag _{20,4} (Ag _{0,55} Al _{0,45}) _{4,...} ,hP42,194	<i>P6₃/mmc</i>	0.936,0.936,0.9418,90,90,120	-	-	7.11	A	28008
Ag-Al-Yb	Ag ₇ Yb _{1,8} Al ₁₀	Th ₂ Ni ₁₇ ,hP38,194	<i>P6₃/mmc</i>	0.935,0.935,0.9111,90,90,120	CaCu ₅ -Zr ₄ Al ₃	gray silver	6.43	X	26008
Ag-Al-Yb	Ag ₉ Yb ₂ Al ₈	Zn ₁₇ Th ₂ ,hR57,166	<i>R-3m</i>	0.94,0.94,1.3661,90,90,120	CaCu ₅ -Zr ₄ Al ₃	gray silver	7.30	X	26008
Ag-Al-Yb	Ag _{9,25} Yb ₁ Al _{23,75}	(Cu _{0,65} Al _{0,35}) ₁₃ Yb ₄ Al ₂₀ ,tI74,139	<i>I4/mmm</i>	0.8898,0.8898,1.6612,90,90,90	-	-	5.89	X	49774
Ag-Al-Zn	Ag _{0,04} Zn _{0,02} Al _{0,94} cub	Cu ₂ cF4,225	<i>Fm-3m</i>	0.40488,0.40488,0.40488,90,90,90	close-packed structure	-	3.10	X	54497
Ag-Al-Zn	Ag _{0,04} Zn _{0,02} Al _{0,94} hex	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.2872,0.2872,0.4553,90,90,120	close-packed structure	-	3.16	X	54497
Ag-Al-Zr	AgZr ₆ Al ₆	W ₂ Fe ₇ ,hR39,166	<i>R-3m</i>	0.5393,0.5393,2.9092,90,90,120	Frank-Kasper phase	-	5.56	X	42921
Ag-Al-Zr	Ag _{0,16} ZrAl _{1,84}	MgCu ₂ ,cF24,227	<i>Fd-3m</i>	0.75147,0.75147,0.75147,90,90,90	Friauf-Laves phase	-	4.95	X	38510
Ag-Al-Zr	Ag _{0,32} ZrAl _{2,68}	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.41016,0.41016,0.41016,90,90,90	close-packed structure	-	4.77	X	38510
Ag-As-Ba	BaAgAs	BeZrSi ₃ ,hP6,194	<i>P6₃/mmc</i>	0.4613,0.4613,0.8896,90,90,120	AlB ₂ family	gray	6.49	X	12709
Ag-As-Ba	BaAg ₂ As ₂	CeAl ₂ Ga ₂ ,tI10,139	<i>I4/mmm</i>	0.46025,0.46025,1.08672,90,90,90	BaAl ₄ family	-	7.26	X	59837
Ag-As-Ca	CaAgAs	ZrNiAl ₃ ,hP9,189	<i>P-62m</i>	0.7204,0.7204,0.427,90,90,120	Fe ₂ P family	gray	5.79	X	12710
Ag-As-Ce	AgCeAs ₂ orth	AgCeAs ₂ ,oP32,57	<i>Pbcm</i>	0.57852,2.1066,0.57586,90,90,90	-	black	7.53	X	44931
Ag-As-Ce	AgCeAs ₂ tet	CuHfSi ₂ ,tP8,129	<i>P4/nmm</i>	0.40845,0.40845,1.0482,90,90,90	-	gray	7.56	X	43302
Ag-As-Cu	Ag ₆ Cu ₁₄ As ₇	Ag ₆ Cu ₁₄ As ₇ ,cP116,221	<i>Pm-3m</i>	1.17808,1.17808,1.17808,90,90,90	kutinaite	-	8.37	X	40422
Ag-As-Dy	AgDyAs ₂	*,oP8,59	<i>Pmmn</i>	0.39452,0.39573,1.0378,90,90,90	-	-	-	N	39201
Ag-As-Eu	AgEuAs	BeZrSi ₃ ,hP6,194	<i>P6₃/mmc</i>	0.4516,0.4516,0.8107,90,90,120	AlB ₂ family	blue gray	7.76	X	14612
Ag-As-Eu	Ag ₄ EuAs ₂	SrAg ₄ As ₂ ,hR48,166	<i>R-3m</i>	0.45352,0.45352,2.37221,90,90,120	-	-	8.65	X	59823
Ag-As-F	AgAsF ₆	AgPF ₆ ,cF80,225	<i>Fm-3m</i>	0.77548,0.77548,0.77548,90,90,90	-	colorless	4.23	X	38477
Ag-As-F	AgAsF ₇	AgAsF ₇ ,oP36,62	<i>Pnma</i>	0.7575,0.697,0.9792,90,90,90	-	blue	4.06	X	26262
Ag-As-F	Ag _{1,5} As _{0,5} F ₆	Ag(Ag _{0,5} As _{0,5})F ₆ ,mP18,13	<i>P12/c1</i>	0.56045,0.52567,0.78061,90,96.594,90	-	black	4.55	X	36009
Ag-As-Gd	AgGdAs ₂ orth1	*,oP8,59	<i>Pmmn</i>	0.397,0.39886,1.042,90,90,90	-	-	-	N	39201
Ag-As-Gd	AgGdAs ₂ orth2	SrZnSb ₂ ,oP16,62	<i>Pnma</i>	2.0842,0.3973,0.3976,90,90,90	-	black	8.37	X	55956
Ag-As-K	K ₂ AgAs	K ₂ AgAs,oS16,20	<i>C22₂</i>	0.792,1.002,0.602,90,90,90	-	red dark	3.63	X	10982
Ag-As-K	K ₃ Ag ₃ As ₂	K ₃ Cu ₃ P ₂ ,hR24,166	<i>R-3m</i>	0.599,0.599,2.135,90,90,120	-	-	4.44	X	12692
Ag-As-La	AgLaAs ₂ orth	AgCeAs ₂ ,oP32,57	<i>Pbcm</i>	0.5814,2.1219,0.5801,90,90,90	-	black	7.36	X	55956
Ag-As-La	AgLaAs ₂ tet1	AgLaAs ₂ ,tI28,139	<i>I4/mmm</i>	0.4134,0.4134,2.1131,90,90,90	-	-	7.30	X	40579
Ag-As-La	AgLaAs ₂ tet2	CuHfSi ₂ ,tP8,129	<i>P4/nmm</i>	0.41089,0.41089,1.0614,90,90,90	-	gray	7.35	A	39201
Ag-As-Mg	MgAgAs	MgAgAs,cF12,216	<i>F-43m</i>	0.621,0.621,0.621,90,90,90	-	-	5.74	X	1234
Ag-As-Na	Na ₂ AgAs	K ₂ AgAs,oS16,20	<i>C22₂</i>	0.736,0.879,0.559,90,90,90	-	gray silver	4.20	X	11881
Ag-As-Nd	AgNdAs ₂ orth1	CuGd(As _{0,58} P _{0,42}) ₂ ,oP8,59	<i>Pmmn</i>	0.40516,0.40121,1.05012,90,90,90	-	-	7.82	X	39201
Ag-As-Nd	AgNdAs ₂ orth2	SrZnSb ₂ ,oP16,62	<i>Pnma</i>	2.0977,0.4032,0.4032,90,90,90	-	black	7.83	X	55956
Ag-As-O	AgAsO ₃	AgAsO ₃ ,oP120,29	<i>Pca2₁</i>	1.9488,0.66,1.2661,90,90,90	-	-	5.65	X	44921
Ag-As-O	Ag ₃ [AsO ₄]	Ag ₃ [PO ₄],cP22,218	<i>P-43n</i>	0.61391,0.61391,0.61391,90,90,90	-	brown	6.64	X	43290
Ag-As-Pd	Ag _{0,5} Pd ₃ As _{0,5}	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.3975,0.3975,0.3975,90,90,90	close-packed structure	-	10.86	X	5487
Ag-As-Pr	AgPrAs ₂ orth1	*,oP8,59	<i>Pmmn</i>	0.40268,0.4072,1.05364,90,90,90	-	-	-	N	39201
Ag-As-Pr	AgPrAs ₂ orth2	SrZnSb ₂ ,oP16,62	<i>Pnma</i>	2.1027,0.4017,0.4062,90,90,90	-	black	7.72	X	55956
Ag-As-S	AgAsS	CuAsS,oP12,62	<i>Pnma</i>	1.22,0.377,0.547,90,90,90	-	-	5.67	A	5821
Ag-As-S	AgAsS ₂ ht	AgAsS ₂ ,mS96,15	<i>C12/c1</i>	1.519,0.778,1.723,90,101,2.90	smithite	-	4.93	X	2261
Ag-As-S	AgAsS ₂ rt	AgAsS ₂ ,hR72,148	<i>R-3</i>	1.398,1.398,0.912,90,90,120	trechmannite	-	4.78	X	4825
Ag-As-S	Ag ₂ AsS ₂	Ag ₂ AsS ₂ ,mP40,7	<i>P1c1</i>	0.96155,1.29331,0.68616,90,99.352,90	-	gray dark	5.60	X	62237
Ag-As-S	Ag ₃ AsS ₃ pro lt	Ag ₃ AsS ₃ ,mS28,9	<i>C1c1</i>	0.8388,1.0705,0.69908,90,111.976,90	-	-	5.64	X	18218
Ag-As-S	Ag ₃ AsS ₃ pro rt	Ag ₃ AsS ₃ ,hR42,161	<i>R3c</i>	1.07789,1.07789,0.8708,90,90,120	proustite	red	5.63	X	63354
Ag-As-S	Ag ₃ AsS ₃ xan	Ag ₃ AsS ₃ ,mS56,15	<i>C12/c1</i>	1.202,0.6262,1.70801,90,110.9,90	xanthoconite	yellow	5.47	X	27774
Ag-As-S	Ag ₃ AsS ₄	Cu ₃ AsS ₄ ,oP16,31	<i>Pmm2₁</i>	0.7801,0.6973,0.6567,90,90,90	adamantane structure	red dark	4.90	X	27825
Ag-As-S	Ag ₇ AsS ₆ ht	*,cF*,216	<i>F-43m</i>	1.055,1.055,1.055,90,90,90	-	-	-	N	13693
Ag-As-S	Ag ₇ AsS ₆ rt	Ag ₇ AsS ₆ ,cP56,198	<i>P2₁3</i>	1.0475,1.0475,1.0475,90,90,90	billingsleyite	white silver	5.91	X	29122
Ag-As-Se	AgAsSe	CuAsS,oP12,62	<i>Pnma</i>	1.184,0.346,0.556,90,90,90	-	-	7.63	A	3410
Ag-As-Se	AgAsSe ₂ m	NaFeO ₂ ,hR12,166	<i>R-3m</i>	0.391,0.391,2.037,90,90,120	rocksalt family	-	6.29	X	17820
Ag-As-Se	AgAsSe ₂	*,tP72,*	-	1.2548,1.2548,1.114,90,90,90	-	-	-	N	10035
Ag-As-Se	AgAs ₃ Se ₅	(Ag _{0,5} As _{0,5}) ₂ As ₂ Se ₃ ,hR27,166	<i>R-3m</i>	0.38195,0.38195,5.0082,90,90,120	-	-	5.73	X	51070
Ag-As-Se	Ag ₃ AsSe ₃ orth	Ag ₃ AsSe ₃ ,oP84,62	<i>Pnma</i>	0.8111,1.1344,2.0728,90,90,90	-	black	6.64	X	32241
Ag-As-Se	Ag ₃ AsSe ₃ rhom	Ag ₃ AsS ₃ ,hR42,161	<i>R3c</i>	1.1299,1.1299,0.8759,90,90,120	-	-	6.54	X	19586
Ag-As-Se	Ag ₇ AsSe ₆ ht	Ag ₈ GeTe ₆ ,cF220,216	<i>F-43m</i>	1.092,1.092,1.092,90,90,90	-	-	6.65	A	12440
Ag-As-Se	Ag ₇ AsSe ₆ rt	Ag ₇ AsS ₆ ,cP56,198	<i>P2₁3</i>	1.0876,1.0876,1.0876,90,90,90	-	-	6.73	A	12440
Ag-As-Sm	AgSmAs ₂ orth1	*,oP8,59	<i>Pmmn</i>	0.39854,0.40185,1.0448,90,90,90	-	-	-	N	39201
Ag-As-Sm	AgSmAs ₂ orth2	SrZnSb ₂ ,oP16,62	<i>Pnma</i>	2.0782,0.3995,0.4013,90,90,90	-	black	8.14	X	55956
Ag-As-Sr	SrAgAs	BeZrSi ₃ ,hP6,194	<i>P6₃/mmc</i>	0.4529,0.4529,0.8291,90,90,120	AlB ₂ family	red ruby	6.10	X	11890
Ag-As-Sr	SrAg ₄ As ₂	SrAg ₄ As ₂ ,hR48,166	<i>R-3m</i>	0.45555,0.45555,2.4041,90,90,120	-	-	7.71	X	59823
Ag-As-Tb	AgTbAs ₂ orth1	*,oP8,59	<i>Pmmn</i>	0.39621,0.39745,1.0432,90,90,90	-	-	-	N	39201
Ag-As-Tb	AgTbAs ₂ orth2	SrZnSb ₂ ,oP16,62	<i>Pnma</i>	2.0841,0.3956,0.3955,90,90,90	-	black	8.49	X	55956
Ag-As-Zn	AgZnAs	MgAgAs,cF12,216	<i>F-43m</i>	0.5912,0.5912,0.5912,90,90,90	-	blue gray	7.98	X	381
Ag-Au-Cl	AgAuCd ₂	Cu ₂ MnAl ₃ ,cF16,225	<i>Fm-3m</i>	0.66462,0.66462,0.66462,90,90,90	b.c.c. family	-	11.98	X	2832
Ag-Au-Cl	AgAuCl ₄	AgAuCl ₄ ,mS24,15	<i>C12/c1</i>	1.2612,0.4101,1.3089,90,118.106,90	-	-	4.97	X	10981
Ag-Au-Cu	Ag _{0,04} CuAu _{0,96} orth rt	CuAu,oI40,74	<i>Imma</i>	0.36775,0.39551,3.965,90,90,90	close-packed structure	-	14.80	A	165
Ag-Au-Cu	Ag _{0,04} CuAu _{0,96} tet rt	CuAu,tP2,123	<i>P4/mmm</i>	0.27966,0.27966,0.3685,90,90,90	close-packed structure	-	14.81	X	16226
Ag-Au-Cu	Ag _{0,06} Cu _{2,94} Au rt	Cu ₃ Au,cP4,221	<i>Pm-3m</i>	0.375,0.375,0.375,90,90,90	close-packed structure	-	12.29	X	17844
Ag-Au-Cu	Ag _{0,25} Cu _{0,25} Au _{0,5} ht	Cu ₂ cF4,225	<i>Fm-3m</i>	0.3983,0.3983,0.3983,90,90,90	close-packed structure	-	14.86	X	17844

System	Substance	Prototype	H-M	Unit Cell Parameters a,b,c,a,β,γ (nm,°)	Family	Color	D_X	C	Ref.
Ag-Au-F	AgAuF ₄	KBrF ₄ -b,tI24,140	<i>I4/mcm</i>	0.57911,0.57911,1.08168,90,90,90	-	yellow	6.97	X	37509
Ag-Au-F	AgAuF ₅	*aP7,2	<i>P-1</i>	0.3933,0.4769,0.5906,90.75,99.46,107.01	-	-	-	N	26262
Ag-Au-F	AgAuF ₇	AgAsF ₇ ,oP36,62	<i>Pnma</i>	0.76167,0.71706,1.01361,90,90,90	-	green	5.25	X	57567
Ag-Au-F	AgAu ₂ F ₈	Au ₂ PdF ₈ ,mP22,14	<i>P12₁/c1</i>	0.5223,1.1013,0.72521,90,130.867,90	-	green	6.88	X	33941
Ag-Au-F	Ag _{1.5} Au _{0.5} F ₆	Ag(Ag _{0.5} As _{0.5})F ₆ ,mP18,13	<i>P12/c1</i>	0.566,0.524,0.779,90,97.5,90	-	-	5.43	A	36009
Ag-Au-Gd	Ag _{0.5} Au _{0.5} Gd	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3622,0.3622,0.3622,90,90,90	b.c.c. family	-	10.82	X	3105
Ag-Au-Pd	Ag _{0.125} Au _{0.125} Pd _{0.75}	Cu ₂ cF4,225	<i>Fm-3m</i>	0.39331,0.39331,0.39331,90,90,90	close-packed structure	-	12.87	X	18902
Ag-Au-S	AgAuS rhom	AgAuS ₂ hR72,166	<i>R-3m</i>	1.34236,1.34236,0.90872,90,90,120	petrovskite	-	9.47	X	63146
Ag-Au-S	Ag _{1.5} Au _{0.5} S ht	Ag _{1.4} Au _{0.6} S ₂ cP42,224	<i>Pn-3m</i>	0.495,0.495,0.495,90,90,90	-	-	8.01	X	9770
Ag-Au-S	Ag _{1.8} Au _{0.2} S ht1	Ag _{1.8} Au _{0.2} S ₂ cI52,229	<i>Im-3m</i>	0.4905,0.4905,0.4905,90,90,90	-	-	7.48	X	9770
Ag-Au-S	Ag ₃ AuS ₂ cub	Ag ₃ AuS ₂ cP48,213	<i>P4₁32</i>	0.972,0.972,0.972,90,90,90	uytenbogaardite	-	8.46	X	2932
Ag-Au-S	Ag ₃ AuS ₂ trig	Ag ₃ AuS ₂ hR180,167	<i>R-3c</i>	1.37104,1.37104,1.7117,90,90,120	-	-	8.36	X	56820
Ag-Au-Sb	Ag _{2.6} Au _{0.8} Sb _{0.6}	Cu ₃ Ti ₂ oP8,59	<i>Pmmn</i>	0.4811,0.5928,0.5127,90,90,90	close-packed structure	-	11.61	A	1127
Ag-Au-Se	Ag ₃ AuSe ₂ ht	Ag ₃ AuTe ₂ cI48,214	<i>I4₁32</i>	0.9965,0.9965,0.9965,90,90,90	fischesserite	white silver	9.11	X	43542
Ag-Au-Sn	Ag _{0.513} Au _{0.35} Sn _{0.137}	Mg ₂ hP2,194	<i>P6₃/mmc</i>	0.29242,0.29242,0.47775,90,90,120	close-packed structure	-	13.19	X	4955
Ag-Au-Sn	Ag _{2.6} Au _{0.4} Sn	Cu ₃ Ti ₂ oP8,59	<i>Pmmn</i>	0.4801,0.6042,0.5175,90,90,90	close-packed structure	-	10.57	A	1127
Ag-Au-Te	AgAuTe ₂ lt	AgAuTe ₂ mP8,10	<i>P12/m1</i>	0.5124,0.4419,0.7437,90,90,04,90	muthmannite	black	11.05	X	43474
Ag-Au-Te	AgAuTe ₄	AgAuTe ₄ mP12,13	<i>P12/c1</i>	0.88636,0.4478,1.01778,90,124.444,90	sylvanite	-	8.13	X	17382
Ag-Au-Te	Ag _{0.05} Au _{0.95} Te ₂	(Ag _{0.05} Au _{0.95})Te ₂ mS10,12	<i>C12/m1</i>	0.72115,0.44123,0.50912,90,90.028,90	calaverite	yellow	9.18	X	52794
Ag-Au-Te	Ag _{0.5} Au _{1.5} Te ₄	(Ag _{0.33} Au _{0.67})AuTe ₄ ,oP24,28	<i>Pma2</i>	1.659,0.8867,0.44886,90,90,90	krennerite	-	8.65	X	58714
Ag-Au-Te	Ag ₃ AuTe ₂ ht2	*cI*,*	-	0.526,0.526,0.526,90,90,90	-	-	-	N	5317
Ag-Au-Te	Ag ₃ AuTe ₂ rt	Ag ₃ AuTe ₂ cI48,214	<i>I4₁32</i>	1.0385,1.0385,1.0385,90,90,90	petzite	white	9.20	X	11736
Ag-Au-U	Ag ₉ Au ₄₂ U ₁₄	Ag ₃ (Gd _{1.4} hP68,175	<i>P6/m</i>	1.2668,1.2668,0.9125,90,90,120	-	-	16.47	A	21160
Ag-Au-Zn	AgAuZn ₂ rt	Cu ₃ MnAl ₂ cF16,225	<i>Fm-3m</i>	0.62956,0.62956,0.62956,90,90,90	b.c.c. family	-	11.60	X	3053
Ag-Au-Zn	Ag _{0.5} Au _{0.5} Zn ht	CsCl ₂ cP2,221	<i>Pm-3m</i>	0.3272,0.3272,0.3272,90,90,90	b.c.c. family	-	10.32	X	3053
Ag-B-Cl	AgB ₃ Cl ₆	AgB ₃ Cl ₆ cP104,205	<i>Pa-3</i>	1.23832,1.23832,1.23832,90,90,90	-	colorless	2.70	X	43191
Ag-B-F	Ag[BF ₄]	Ba[SO ₄],oP24,62	<i>Pnma</i>	0.8089,0.5312,0.6752,90,90,90	-	-	4.46	X	46509
Ag-B-F	Ag[BF ₄]F	Ag[BF ₄]F,tP14,85	<i>P4/n</i>	0.67,0.67,0.40113,90,90,90	-	violet	3.94	X	26262
Ag-B-Mg	Mg _{0.99} Ag _{0.01} B ₂	AlB ₂ hP3,191	<i>P6₃/mmm</i>	0.3085,0.3085,0.3522,90,90,120	AlB ₂ family	-	2.67	X	56232
Ag-B-O	AgBO ₂	AgBO ₂ ,oP128,60	<i>Pbcn</i>	0.8441,0.868,1.9741,90,90,90	-	yellow	5.54	X	14530
Ag-B-O	Ag ₂ B ₃ O ₁₃ ht	(Na _{0.4} Ag _{0.6}) ₂ B ₃ O ₁₃ ,mP92,14	<i>P12₁/c1</i>	0.655,0.8671,1.7511,90,90.3,90	-	-	3.41	A	2400
Ag-B-O	Ag ₂ B ₃ O ₁₃ rt	Na ₂ B ₃ O ₁₃ ,mP100,14	<i>P12₁/c1</i>	1.1936,0.7801,1.0558,90,99.846,90	-	-	3.50	X	43078
Ag-B-O	Ag ₃ B ₅ O ₉	Ag ₃ B ₅ O ₉ ,oP68,19	<i>P2₁2₁2₁</i>	0.67473,0.94352,1.1035,90,90,90	-	pink pale	4.93	X	65133
Ag-B-O	Ag ₃ [BO ₃] rhom1	Ag ₃ [BO ₃],hR21,155	<i>R32</i>	0.9873,0.9873,0.3381,90,90,120	-	yellow	6.67	X	14529
Ag-B-O	Ag ₃ [BO ₃] rhom2	Ag ₃ [BO ₃],hR84,167	<i>R-3c</i>	0.9878,0.9878,1.3512,90,90,120	-	-	6.67	X	15468
Ag-B-S	Ag ₃ B ₅ S ₉	Ag ₃ B ₅ S ₉ ,mS356,15	<i>C12/c1</i>	2.1663,2.1639,1.6572,90,129.4,90	-	orange	2.95	X	17458
Ag-B-S	Ag ₃ BS ₄	*cF60,227	<i>Fd-3m</i>	1.056,1.056,1.056,90,90,90	-	-	-	N	3403
Ag-Ba-Bi	BaAgBi	BeZrSi ₂ hP6,194	<i>P6₃/mmc</i>	0.49423,0.49423,0.91251,90,90,120	AlB ₂ family	gray	7.81	X	40340
Ag-Ba-Bi	BaAg _{1.837} Bi ₂	UCo _{1.41} Sn _{1.85} tP12,129	<i>P4/nmm</i>	0.49202,0.49202,1.1628,90,90,90	-	gray	8.89	X	49532
Ag-Ba-Ga	BaAg _{0.4} Ga _{3.6}	CeAl ₂ Ga ₂ tI10,139	<i>I4/mmm</i>	0.4617,0.4617,1.0755,90,90,90	BaAl ₄ family	-	6.25	X	23449
Ag-Ba-Ga	BaAg ₆ Ga ₇	NaZn ₁₃ cF112,226	<i>Fm-3c</i>	1.2757,1.2757,1.2757,90,90,90	-	-	8.14	A	36013
Ag-Ba-Ge	BaAg _{0.5} Ge _{1.5}	AlB ₂ hP3,191	<i>P6₃/mmm</i>	0.4427,0.4427,0.4882,90,90,120	AlB ₂ family	-	6.02	X	56584
Ag-Ba-Ge	BaAg _{1.8} Ge _{2.2}	CeAl ₂ Ga ₂ tI10,139	<i>I4/mmm</i>	0.461,0.461,1.0697,90,90,90	BaAl ₄ family	-	7.18	X	56584
Ag-Ba-Ge	BaAg _{4.76} Ge _{0.24}	CaCu ₅ hP6,191	<i>P6₃/mmm</i>	0.5819,0.5819,0.4599,90,90,120	-	-	8.23	X	56584
Ag-Ba-Ge	Ba ₄ Ag ₅ Ge ₂₀	Na ₄ Si ₂₃ cP54,223	<i>Pm-3n</i>	1.08472,1.08472,1.08472,90,90,90	clathrate	gray	6.05	X	56223
Ag-Ba-Ge	Ba ₆ Ag _{0.47} Ge _{24.53}	K ₆ Sn ₂₃ cP124,213	<i>P4₁32</i>	1.4561,1.4561,1.4561,90,90,90	clathrate	-	5.71	A	56584
Ag-Ba-In	BaAg ₆ In ₇	NaZn ₁₃ cF112,226	<i>Fm-3c</i>	1.3442,1.3442,1.3442,90,90,90	-	black	8.69	A	36013
Ag-Ba-O	BaAg ₆ O ₄	SrAg ₆ O ₄ ,oP44,52	<i>Pnna</i>	0.663,1.27,0.909,90,90,90	-	red ruby	7.36	X	7704
Ag-Ba-P	BaAgP	BeZrSi ₂ hP6,194	<i>P6₃/mmc</i>	0.4496,0.4496,0.8828,90,90,120	AlB ₂ family	gray	5.94	X	12709
Ag-Ba-Pb	BaAgPb	KHg ₂ oI12,74	<i>Imma</i>	0.5119,0.8223,0.8744,90,90,90	AlB ₂ family	-	8.16	A	31754
Ag-Ba-S	BaAg ₂ S ₂	Ce ₂ SO ₄ hP5,164	<i>P-3m1</i>	0.4386,0.4386,0.7194,90,90,120	-	red dark	5.78	X	33912
Ag-Ba-S	BaAg ₆ S ₅	BaAg ₆ S ₅ ,mP56,11	<i>P12₁/m1</i>	0.7672,1.7666,0.8937,90,107.89,90	-	black	6.69	X	36438
Ag-Ba-S	Ba ₂ Ag ₁₀ S ₇	*mS38,12	<i>C12/m1</i>	1.446,0.4295,1.3467,90,103.88,90	-	black	6.45	N	35641
Ag-Ba-S	Ba ₂ Ag ₈ S ₇	Ba ₂ Ag ₈ S ₇ ,oP38,59	<i>Pmmn</i>	0.4407,1.5643,1.0869,90,90,90	-	orange red	6.04	X	35641
Ag-Ba-Sb	BaAgSb	BeZrSi ₂ hP6,194	<i>P6₃/mmc</i>	0.4837,0.4837,0.9177,90,90,120	AlB ₂ family	-	6.55	X	23453
Ag-Ba-Se	Ba ₂ Ag ₄ Se ₅	Ba ₂ Ag ₄ Se ₅ ,mS26,12	<i>C12/m1</i>	1.6189,0.45528,0.925,90,124.572,90	-	-	6.51	X	49439
Ag-Ba-Si	Ba ₄ Ag _{1.9} Si _{21.1}	Na ₄ Si ₂₃ cP54,223	<i>Pm-3n</i>	1.0478,1.0478,1.0478,90,90,90	clathrate	gray	3.89	X	24705
Ag-Ba-Si	Ba ₈ Ag _{5.5} Si _{7.5}	Ba ₈ Ag _{5.5} Si _{7.5} ,oS96,21	<i>C222₁</i>	0.8612,1.4917,1.9633,90,90,90	-	-	5.01	X	31754
Ag-Ba-Sn	BaAgSn	KHg ₂ oI12,74	<i>Imma</i>	0.5056,0.8067,0.8653,90,90,90	AlB ₂ family	-	6.85	A	31754
Ag-Ba-Sn	BaAg ₂ Sn ₂	CeAl ₂ Ga ₂ tI10,139	<i>I4/mmm</i>	0.481,0.481,1.135,90,90,90	BaAl ₄ family	-	7.47	X	6937
Ag-Ba-Sr	Ba _{0.77} Sr _{0.23} Ag	FeB-b,oP8,62	<i>Pnma</i>	0.85542,0.49205,0.65794,90,90,90	CrB(TlI)-FeB	gray silver	5.61	X	52477
Ag-Ba-Te	BaAg ₂ Te ₂	BaCu ₂ S ₂ ,oP20,62	<i>Pnma</i>	1.08897,0.46084,1.18134,90,90,90	-	-	6.82	X	51873
Ag-Bi-Br	Ag ₃ Bi ₁₄ Br ₂₁	Ag ₃ Bi ₁₄ Br ₂₁ ,mP78,11	<i>P12₁/m1</i>	1.27778,1.46687,1.34262,90,108.47,90	-	black	6.86	X	52494
Ag-Bi-Ca	CaAgBi	LiGaGe,hP6,186	<i>P6₃/mc</i>	0.48113,0.48113,0.78273,90,90,120	AlB ₂ family	gray	7.55	X	49532
Ag-Bi-Ce	AgCeBi ₂	CuHfSi ₂ tP8,129	<i>P4/nmm</i>	0.45417,0.45417,1.0542,90,90,90	-	-	10.17	A	32461
Ag-Bi-Cu	Ag _{0.75} Cu _{0.15} Bi _{0.10} m	Cu ₂ cF4,225	<i>Fm-3m</i>	0.4087,0.4087,0.4087,90,90,90	close-packed structure	-	10.83	X	9776
Ag-Bi-Eu	AgEuBi	BeZrSi ₂ hP6,194	<i>P6₃/mmc</i>	0.4877,0.4877,0.8139,90,90,120	AlB ₂ family	blue gray	9.29	X	14612
Ag-Bi-F	AgBiF ₆	*t**,*	-	0.5065,0.5065,0.9548,90,90,90	-	-	-	N	30083
Ag-Bi-F	AgBi ₂ F ₁₂	AgSb ₂ F ₁₂ ,aP15,2	<i>P-1</i>	0.5218,0.5579,0.8934,76.08,88.93,65.08	-	-	5.49	X	30083
Ag-Bi-I	AgBi _{0.33} I ₂	NaFeO ₂ hR12,166	<i>R-3m</i>	0.43537,0.43537,2.081,90,90,120	rocksalt family	black gray	6.28	X	46681
Ag-Bi-I	Ag _{0.5} Bi _{0.5} I ₂	Ti ₂ C ₂ cF48,227	<i>Fd-3m</i>	1.2223,1.2223,1.2223,90,90,90	-	black gray	6.00	X	46681
Ag-Bi-K	K ₂ AgBi	K ₂ AgAs,oS16,20	<i>C222₁</i>	0.838,1.056,0.633,90,90,90	-	gray silver	4.68	X	10982
Ag-Bi-La	AgLaBi ₂	CuHfSi ₂ tP8,129	<i>P4/nmm</i>	0.45715,0.45715,1.0621,90,90,90	-	-	9.95	A	32461
Ag-Bi-Li	Li ₂ AgBi	Li ₂ AgSb,cF16,216	<i>F-43m</i>	0.6736,0.6736,0.6736,90,90,90	b.c.c. family	gray	7.19	X	4207
Ag-Bi-O	AgBiO ₃ cub	AgSbO ₃ cI80,204	<i>Im-3</i>	0.97852,0.97852,0.97852,90,90,90	-	-	7.76	X	43727
Ag-Bi-O	AgBiO ₃ rhom	TiFeO ₃ hR30,148	<i>R-3</i>	0.5641,0.5641,1.6118,90,90,120	-	black	8.18	X	36806
Ag-Bi-O	Ag ₁₈ Bi ₄ O ₁₂	Ag ₁₈ Bi ₄ O ₁₂ ,oS136,63	<i>Cmcm</i>	1.063,1.4229,2.391,90,90,90	-	yellow	5.45	X	18737
Ag-Bi-O	Ag ₂ BiO ₃ lt	Ag ₂ BiO ₃ ,mP24,7	<i>P1c1</i>	0.59549,0.631,1.10595,90,120.062,90	-	black	8.73	X	48457