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Structural phase transitions in crystals. I. Database

Paweł E. Tomaszewski ^a

^a Institute of Low Temperature and Structure Research, Polish Academy of Sciences, 50-950, Wrocław, Poland

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REVIEW

Structural Phase Transitions in Crystals I. Database

PAWEŁ E. TOMASZEWSKI

*Institute of Low Temperature and Structure Research, Polish Academy of Sciences,
50-950 Wrocław, Poland*

(Received 8 September 1991)

The database on structural phase transitions is presented in the simple and easy accessible form of table. The symmetry changes and temperature for 3446 phase transitions and the references for each of 2242 registered crystalline materials with well defined stoichiometry are the main data in this table. The rules for constructing and reading the database table are also presented.

KEY WORDS: Phase transition, symmetry changes, database.

The data on structural phase transitions in crystals are scattered in the physical and chemical literature. Up and now these data have not been collected and reviewed, and the lack of any systematic and complete information has been remarked upon several times. Responding to these requirements, the work on the *Database of structural phase transitions in crystals* was started in 1985.

The source database (not to be confused with this article) at present contains information on 3446 phase transitions reported in 2242 crystalline materials (including 128 organic). Nonstoichiometric crystals, solid solutions as well as liquid crystals are out of the scope of this data-base. All recorded phase transitions are of the structural type. Magnetic and superconducting phase transitions not involving crystal structure changes are omitted.

Each entry in the source database contains—if available—information on the structural and physical properties of both phases linked by the phase transition, as well as references. The basic data are transition temperature and space groups (or in general—symmetry) of both phases. If available, further information on lattice parameters in the vicinity of the structural phase transition (numerical values and plots *vs.* temperature), as well as the type and character of phase transition are also included.

The idea of such a database and some statistical data based on its content was presented several times at different national and international conferences (*e.g.* 7th Polish-Czechoslovak Seminar on Ferroelectrics in Karpacz, 1986; CODATA Conference in Ottawa, 1986 (Tomaszewski and Łukaszewicz 1986); 12 ECM in Moscow, 1989 (Tomaszewski and Łukaszewicz, 1989), 7 EMF in Dijon, 1991 (Tomaszewski,

1991). The great interest expressed by many participants of these conferences encouraged the author to continue the collection of the phase transition data scattered in the literature. After several years of using and updating the database of structural phase transitions in crystals it was decided to present the main part of it in a more accessible way—as a simple table showing only the symmetry changes for each structural phase transition and the sequence of phase transitions for each recorded crystal. Because of the high level of activity in this field in the recent times, updating of the data base seems to be necessary and is being planned. It is also intended to prepare the full database of structural phase transitions in a computerized form in order to make it easily available.

The table presented here was prepared by using rules which are described below.

a. General remarks

The main purpose of this paper is the presentation of symmetry changes during phase transitions. The table content was, therefore, limited to the most important data: sequences and symmetry of phases and phase transition temperatures. Ferroelectric, antiferroelectric and incommensurate phases are marked by using special fonts.

b. Crystal name

The compounds are ordered alphabetically by their chemical formulae. For alkyl-ammonium ions the supplementary rule adopted here is the ordering of compounds by the growing number of the same atom. Thus, according to this rule, the sequence of compounds goes from $\text{N}(\text{CH}_3)_4 \dots$; $\text{N}(\text{C}_2\text{H}_5)_4 \dots$; \dots ; $\text{NH}(\text{CH}_3)_3 \dots$; \dots ; $\text{NH}_2(\text{CH}_3)_2 \dots$ up to $\text{NH}_4 \dots$ and $\text{N}_2\text{H}_5 \dots$ etc. A few inconsistencies may occur for organic groups with the same chemical formula but with different configurations (*e.g.*: *n*-propylamine and iso-propylamine have the same formula $\text{NH}_2\text{C}_3\text{H}_7$).

If the user finds a particular crystal missing, he should verify if the formula could be written in a slightly different way and search in a new place in the table. For example: LiKSO_4 instead of KLiSO_4 , $\text{NH}(\text{CH}_3)_3 \dots$ instead of $(\text{CH}_3)_3\text{NH} \dots$ and so on. For a few compounds their commonly used names or abbreviations (*e.g.* TGS, tanane) are included at the beginning of each letter with a reference to its chemical formula, if possible.

c. Symmetry of phases

The phases are presented from the left to right side of the table by specifying their space groups in order of increasing temperature. No statements about multiplication of the unit cells are given.

For incommensurate phases the basic space group is given or, if available, the 4-dimensional super-space group. The latter is printed as a two-line symbol (the first part corresponding to the upper line of the symbol and the second to the bottom line). If the correct space group is not known the abbreviation *inc.* is used. It should also be noted that the space group symbols are taken directly from the reference paper; thus the choice of axes may be not the same for all phases of the crystal.

In cases where only the point groups are known, they are presented instead of space groups. If only the crystal systems are known, they are marked by the following abbreviations: tricl., monocl., ortho., tetr., hex., trig. (=trigonal or rhombohedral) and cubic.

There are some confusions in the literature concerning the hexagonal or rhombohedral/trigonal symmetry (frequently the trigonal symmetry is marked as hexagonal). It was not possible to avoid such incorrectness in the table and, consequently, in the further analysis of data (see: Part II).

When the data are unknown or controversial the sign “?” is used.

The symbols of space groups, point groups or crystal systems are in some cases printed in special fonts to mark special physical properties:

italic—for incommensurate phases,

bold—for ferroelectric (or antiferroelectric) phases.

d. Transition temperature

The transition temperature is always given in kelvins (K). In general, the given temperature is to be treated as the value on heating the crystal. For several cases the temperature was not known by the author (*e.g.* some data were taken from sources not interested in transition temperatures). There is also a problem with irreversible phase transitions—this fact is not marked in the table.

e. High-pressure data

An asterisk * placed before the entry marks the existence of a corresponding entry in the *Database for phase transitions at high pressures* (which will be published separately). Note that there are also crystals undergoing phase transitions at high pressures only which are not listed in the present table.

f. References

The database presented in this paper is the result of careful inspection of several journals and a few source-books. It was, nevertheless, unavoidable that some data has escaped the author's knowledge and the references cited in the table may not be the most significant or competent papers concerning a given entry. Moreover, the lack of space in the table resulted in the limitation of references to one or exceptionally two positions.

The symbols used in this paper have been adopted from the Landolt-Boernstein source-books. This means that the first two digits mean the year of publication and the other letters are taken from the authors name(s). The references are thus ordered by years and alphabetically within each year. If there are more than three authors of a paper, only the first name is printed*.

* In view of the large number of cited sources, an exception has been made in the form of citations, namely the full titles of articles and complete lists of authors have been omitted (Editor).

It is hoped that the present table will be a helpful documentation for those working in the field of structural phase transitions. The content of the table may be used for different types of studies not only for searching for the necessary data but also for statistical analysis. The result of a few such analyses is presented and discussed in Part II of this paper.

In 1987 the compilation of a similar database was started for structural phase transitions at high pressures. Preliminary results were presented at several conferences (e.g. 12 AIRAPT at Paderborn, 1989 (Tomaszewski, 1990), XXVIII EHPRG Conference at Bordeaux, 1990) and will be the subject of a separate publication.

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Crystal	Phase 1	T1	Phase 2	T2	Phase 3	References
Adamantane - see: $C_{10}H_{16}$						
Ag_3Al	$P4_321$	720	?	878	$Im3m$	TA. 1; TA. 3
$AgAsS_2$	trig.	593	monocl.			TA. 1
Ag_3AsS_3	Cc	28	R3	43	inc.	
		67	R3c			88BaI
Ag_7AsS_6	cubic	533	cubic			TA. 1
$AgAsSe_2$	tetr.	658	$R\bar{3}m$			PH. 2
Ag_3AsSe_3	?	473	trig.			TA. 1
Ag_7AsSe_6	$P2_13$	423	$F\bar{4}3m$			TA. 1; PH. 2
$AgAuI_2$	tetr.	328	tetr.?			TA. 1
$AgAuS$	monocl.	580	$Pn\bar{3}m$			PH. 2
Ag_3AuSe_2	$I4_132$	543	cubic			PH. 2
Ag_3AuTe_2	$I4_132$	593	cubic			TA. 1
* $AgBF_4$	Pnma	494	$Fm3m$			t. 7. 11
$AgBS$	cubic	?	tetr.			TA. 1
$AgBiS_2$	$P\bar{3}m1$	448	$Fm3m$			59Ge
$AgBiSe_2$	$P\bar{3}m1$	393	$R\bar{3}m$	560	$Fm3m$	82Pr
$AgBiTe_2$	$P\bar{3}m1$?	cubic			59Ge
$AgBi(WO_4)_2$	$I2/m$?	$I4_1/a$			77K1
$AgCd$	$Pm3m$	500	hex.?	743	$Im3m$	TA. 1; TA. 3
Ag_5Cd_8	?	720	cubic			TA. 1; TA. 3
$AgCe(WO_4)_2$	$I2/m$	973	$I4_1/a$			76K1
$AgClO_4$	Cmcm	429	$Fm3m$	>770	cubic	t. 7. 11
* Ag_2CrO_4	monocl.	?	hex.?			67Pi
$AgCrS_2$	R3m	673	$R\bar{3}m$			89KaA
$AgCrSe_2$	trig.?	475	$R\bar{3}m$			TA. 1
$AgCuS$	$Cmc2_1$	366	hex.			90BaL
$AgCuSe$	tetr.	504	$Fm3m$			89Asa
$AgDySe_2$	$P2_12_12_1$	>870	$I4/mmm$			TA. 2
$AgDyTe_2$	tetr.	777	$P6_3mc$			TA. 2
$AgDy(WO_4)_2$	$I2/m$	1253	$I4_1/a$			76K1
$AgErS_2$	monocl.	?	$Fd3m$			TA. 2
$AgErSe_2$	$P2_12_12_1$	1073	$P6_3mc$			TA. 2
$AgErTe_2$	tetr.	761	$P6_3mc$			TA. 2

(continued)

AgEr(WO ₄) ₂	I2/m	1325	I4 ₁ /a		76K1
AgEu(WO ₄) ₂	I2/m	1178	I4 ₁ /a		76K1
Ag ₃ FeF ₆	P4/mnc	318	Fm3m		LB. 7a
Ag ₂ Ga	P6 ₃ /mmc	647	P3 ₁ 21		TA. 2
Ag ₉ GaS ₆	ortho.	303	cubic		TA. 2
Ag ₉ GaSe ₆	cubic	281	cubic		TA. 2
Ag ₉ GaTe ₆	hex. ?	303	hex.		TA. 2
AgGdTe ₂	tetr.	981	P6 ₃ mc		TA. 2
AgGd(WO ₄) ₂	I2/m	1233	I4 ₁ /a		76K1
* Ag ₈ GeS ₆	?	73	ortho. ?	496 cubic	75Pe; TA. 2
* Ag ₈ GeSe ₆	?	269	Pmn2 ₁	321 F43m	80Car; TA. 2
* Ag ₈ GeTe ₆	?	173	?	221 ?	
		242	F43m		76Ry; TA. 2
Ag ₂ H ₃ IO ₆	P1	227	R3		t. 7. 14
Ag ₂ HgI ₄	I4	323	cubic		t. 6. 1
AgHoSe ₂	P2 ₁ 2 ₁ 2 ₁	905	I4/mmm	1051 Fd3m	TA. 2
AgHoTe ₂	tetr.	791	P6 ₃ mc		TA. 2
AgHo(WO ₄) ₂	I2/m	1273	I4 ₁ /a		76K1
* AgI	F43m	410	P6 ₃ mc	435 Im3m	77Ca; 91Ma
Ag ₂₆ I ₁₈ W ₄ O ₁₆	C1	197	C1, C1	246 P2 ₁	
		277	C2	>280 ?	83Bo; 80Sco
Ag ₃ In	?	460	hex.	933 cubic	TA. 1
Ag ₃ InCl ₆	tetr.	608	cubic		LB. 7a
* AgInS ₂	I4/mmm	893	ortho.		TA. 2
* AgInSe ₂	I4/mmm	968	trig. ?		TA. 2
* AgIn ₅ Se ₈	tetr.	893	Fd3m		TA. 2
* AgInTe ₂	I4/mmm	800	?		TA. 2
AgIn(WO ₄) ₂	P2/c	?	?		77K1
AgLa(WO ₄) ₂	monocl.	?	I4 ₁ /a		77K1
AgLu(WO ₄) ₂	I2/m	1270	I4 ₁ /a		76K1
Ag ₂ MgZn	cubic	533	Pm3m		TA. 2
Ag ₂ MoO ₄	cubic	553	tetr.	755 ?	TA. 2
* AgNO ₃	Pbca	433	R3m		t. 7. 2
AgNa(NO ₂) ₂	Fd2d	311	Fddd		87Is
AgNbO ₃	monocl.	598	tetr.	823 cubic	72Fe
AgNd(WO ₄) ₂	I2/m	1073	I4 ₁ /a		76K1
Ag ₄ P ₂ O ₇	32	623	3m		86Ko

$\text{Ag}_2\text{Pb}_4\text{Nb}_{10}\text{O}_{30}$	ortho.	?	ortho.	750	tetr.	84F1
Ag_2Pr	ortho.	893	hex.?			TA. 1
$\text{AgPr}(\text{WO}_4)_2$	I2/m	1023	$\text{I4}_1/\text{a}$			76K1
AgS	monocl.	528	?			TA. 1
* Ag_2S	$\text{P2}_1/\text{n}$	450	Im3m	860	Fm3m	t. 6. 1
Ag_3SBr	cubic	702	?			86Ke
Ag_3SI	R3	?	Pm3m	508	Im3m	85Di
* Ag_2SO_4	Fddd	703	$\text{P6}_3/\text{mmc}$			85Kum
AgSbS_2	monocl.	653	cubic			TA. 2
Ag_3SbS_3	monocl.	466	trig.			TA. 2
$\text{AgSc}(\text{WO}_4)_2$	$\text{P2}/\text{c}$?	?			77K1
* Ag_2Se	$\text{P2}_1\text{2}_1\text{2}_1$	406	cubic			t. 6. 1
* Ag_2SeO_4	Fddd	?	?	?	hex.?	67Pi
Ag_8SiS_6	ortho.	507	cubic			TA. 2
Ag_8SiSe_6	tetr.	283	cubic	313	cubic	TA. 2
Ag_8SiTe_6	?	195	?	263	Fm3m	TA. 2
$\text{AgSm}(\text{WO}_4)_2$	I2/m	1123	$\text{I4}_1/\text{a}$			76K1
Ag_8SnS_6	cubic?	445	Fm3m	884	cubic	75Pe; TA. 2
Ag_8SnSe_6	?	295	Pmn2_1	356	$\text{F}\bar{4}3\text{m}$	75Pe; 80Car
AgTaO_3	monocl.	643	tetr.	758	cubic	LB. 16b
or:	trig.	667	monocl.	694	tetr.	
		770	cubic			81Ka
$\text{AgTb}(\text{WO}_4)_2$	I2/m	1223	$\text{I4}_1/\text{a}$			76K1
* Ag_2Te	$\text{P2}/\text{m}$	423	Fm3m	1073	cubic	85Sa; TA. 1
Ag_3Te_2	hex.	559	?	698	?	TA. 2
$\text{Ag}_5\text{Te}_2\text{Cl}$	monocl.	329	tetr.			TA. 2
Ag_2TeO_3	ortho.	573	monocl.			89Bh
Ag_3TlS_2	ortho.	558	?			TA. 2
AgTlTe	Pnma	706	?			TA. 2
AgTmS_2	monocl.	?	Fm3m			TA. 2
AgTmSe_2	ortho.	?	?			TA. 2
AgTmTe_2	tetr.	?	$\text{P6}_3\text{mc?}$			TA. 2
$\text{AgTm}(\text{WO}_4)_2$	I2/m	1320	$\text{I4}_1/\text{a}$			76K1
AgVO_3	?	443	?			76Mi
Ag_3YCl_6	?	626	?			TA. 2
AgYTe_2	tetr.	793	$\text{P6}_3\text{mc?}$			TA. 2
$\text{AgY}(\text{WO}_4)_2$	I2/m	1273	$\text{I4}_1/\text{a}$			76K1

(continued)

AgYb	Pnma	729	Pm3m		TA. 2
AgYbSe ₂	ortho.	>300	Fm3m		TA. 2
AgYb(WO ₄) ₂	I2/m	1283	I4 ₁ /a		76K1
* AgZn	P $\bar{3}$	531	Im3m		85Iv
AlF ₃	R $\bar{3}$ c	723	cubic		90Da2
AlOOH	Pbnm	?	Amam		78Zv
AlPO ₄ (cristobalite)			C222 ₁	470	F $\bar{4}$ 3m
* AlPO ₄ (quartz)			P3 ₁ 21	853	P6 ₄ 22
Al ₂ S ₃	hex.	?	trig.		TA. 1
Al ₃ Te ₂	ortho.	1498	ortho.		TA. 3
Al ₃ Zr ₅	hex.	1170	tetr.		TA. 3
Am	Fm3m	?	Im3m		76Pi
As ₂ Be	P4 ₁ 2 ₁ 2	?	P4 ₁ 2 ₁ 2		PH. 2
(As(CH ₃) ₄) ₂ CoCl ₄	P4 ₂ /mbc	338	tetr.	420	I4 ₁ /a
		546	cubic?		90Pre; 91Zu
(As(CH ₃) ₄) ₂ CoI ₄	P12 ₁ /c1	398	Pmcn		90Pre; 91PrB
(As(CH ₃) ₄) ₂ CuBr ₄	Pbc2 ₁	266	P2 ₁ /b11	406	Pmcn
(As(CH ₃) ₄) ₂ CuCl ₄	P4 ₂ /mbc	260	I4 ₁ /a	488	cubic?
(As(CH ₃) ₄) ₂ ZnCl ₄	P4 ₂ /mbc	336	I4 ₁ /a	549	cubic?
(As(CH ₃) ₄) ₂ ZnI ₄	P12 ₁ /c1	405	Pmcn		91Zu; 91PrB
AsCr ₃ N	I4/mcm	?	cubic		90Pre; 91PrB
AsMn ₃ N	I4/mcm	?	Pm3m		70Bar
As ₂ O ₅	P2 ₁ 2 ₁ 2 ₁	578	P4 ₁ 2 ₁ 2		70Bar
AsPd ₂	ortho.	?	hex.		88Re
AsS	P2 ₁ /c	?	C2/c		TA. 1
* As ₂ S ₃	P2 ₁ /n	470	monocl.		81Ke
AsSe	P2 ₁ /c	?	P2 ₁ /n		76Pi
* AuCN	P6/mmm	393	?		81Ke
AuCu ₃ - see: Cu ₃ Au					69Br
Au ₄ Mn	tetr.	371	Fm3m		89KaM

Banana - see: Ba₂NaNb₅O₁₅

BCCD - see: N(CH₃)₃CH₂COO.CaCl₂.2H₂O

Benzil - see: C₁₄H₁₀O₂

Biphenyl - see: C₁₂H₁₀

BSN - see: Ba₂NaNb₅O₁₅

(BEDT-TTF) ₂ AsF ₆	?	264	C2/c			84Ve
(BEDT-TTF) ₂ I ₃	$P(\bar{P}1)/(\bar{1})$			137	$P\bar{1}$	85Pe
(BEDT-TTF) ₂ PF ₆	tricl.	293	Pnna			84Ve
* (BEDT-TTF) ₂ SbF ₆	?	273	C2/c			84Ve
B	$R\bar{3}m$	1623	amorph.			88Dz
B ₁₂ Al	tetr.	1723	ortho.			TA. 2
BCuS	cubic	1373	tetr.			PH. 2
BIr	Cmc2 ₁	1473	$P\bar{6}m2$			PH. 2
BMo	I4 ₁ /amd	2453	Cmcm			PH. 2
* BN	$P6_3/mmc$?	$P6_3mc$	>800	amorph.	89Pi
BP	Pa $\bar{3}$	1098	$P6_3mc$			PH. 2
BPS ₄	ortho.	893	C2/m			PH. 2
BW	I4 ₁ /amd	2623	Cmcm			PH. 2
BZr	?	1073	$Fm\bar{3}m$			PH. 2
* Ba	$Im\bar{3}m$	623	cubic			PH. 2
Ba ₂ AgNb ₅ O ₁₅	ortho.	698	tetr.			LB. 16a
BaAlF ₅	?	>940	$P2_1/n$	1062	$P2_1$	90Ba2
Ba ₃ AlF ₉	?	995	?			TA. 3
Ba ₃ Al ₂ F ₁₂	ortho.	1158	C222 ₁			LB. 7a
BaAl ₂ O ₄	$P6_3$	400	?	530	?	
		660	?			89Iv1
BaB ₂ O ₄	R3c	1198	$R\bar{3}c$			88Li
Ba ₃ Bi ₂ MoO ₉	monocl.	333	monocl.	433	monocl.	
		733	cubic			71Ve
Ba ₂ BiNbO ₆	trig.	633	cubic			71Ve
BaBi ₂ Nb ₂ O ₉	ortho.	473	I4/mmm			LB. 16a; 90Rae
BaBiO ₃	P2/m	120	I2/m	400	$R\bar{3}$	89Pei
Ba ₂ BiTaO ₆	trig.	673	cubic			71Ve
BaBi ₂ Ta ₂ O ₉	ortho.	383	tetr.			LB. 16a
BaBi ₃ Ti ₂ NbO ₁₂	ortho.?	543	tetr.			LB. 16a
BaBi ₄ Ti ₄ O ₁₅	ortho.	648	I4/mmm			LB. 16a
Ba ₂ Bi ₄ Ti ₅ O ₁₈	ortho.	602	tetr.			LB. 16a
Ba ₂ BiVO ₆	monocl.	393	monocl.	593	cubic	71Ve
Ba ₃ Bi ₂ WO ₉	trig.	723	cubic			71Ve
BaC ₂	I4/mmm	423	cubic			PH. 2
* BaCO ₃	Pbnm	1073	$R\bar{3}m$	1273	cubic	76Pi
* BaCa ₂ (CH ₃ CH ₂ COO) ₆	?	204	ortho.	267	Fd3m	LB. 16b

(continued)

$\text{BaCa}_2(\text{C}_3\text{H}_7\text{COO})_6$?	217	P222 ?	315	Fd3m	88Ra
$\text{Ba}_2\text{CaTeO}_6$?	553	cubic			75Po
$\text{Ba}_2\text{CdTeO}_6$?	563	cubic			75Po
BaCl_2	Pbnm	1193	Fm3m			76P1
$\text{Ba}_2\text{CoTeO}_6$?	293	cubic			73Pol
$\text{Ba}_5\text{Cr}_3\text{F}_{19}$	tetr.	1090	tetr.?			91Co
$\text{Ba}_3\text{CuNb}_2\text{O}_9$	tetr.	653	cubic			71Ve
BaCu_4S_3	Pnma	913	Cmcm			PH. 2
$\text{Ba}_3\text{CuTa}_2\text{O}_9$	tetr.	743	cubic			71Ve
Ba_2CuWO_6	tetr.	>1470	cubic			71Ve
$\text{BaFe}(\text{CN})_5\text{NO}\cdot 3\text{H}_2\text{O}$?	118	?	131	?	
		233	Pbcm			90Na
BaFeF_5	I4	730	?			89Rav; 90Rav
$\text{Ba}_5\text{Fe}_3\text{F}_{19}$	tetr.	960	tetr.			91Co
BaFe_2S_4	I4/mcm	?	I4/m			PH. 2
$\text{Ba}_9\text{Fe}_4\text{S}_{15}$	I4 ₁ /a	1153	Pnma			PH. 2
$\text{Ba}_5\text{Ga}_3\text{F}_{19}$	tetr.	1070	tetr.?			91Co
* BaGeO_3	?	?	P2 ₁ 2 ₁ 2 ₁			62Hi
BaH_2	Pnma	823	cubic			PH. 2
$\text{Ba}_2\text{LaTaO}_6$	trig.	>570	cubic			LB. 4a
$\text{Ba}_2\text{MgTeO}_6$?	233	cubic			73Pol
* BaMnF_4	monocl.	250	A2 ₁ am			76SaR
BaMnO_3	hex.	?	hex.			LB. 4a
$\text{Ba}_2\text{MnTeO}_6$?	413	cubic			73Pol
BaMo_6O_8	P $\bar{1}$	175	R $\bar{3}$			86Jo
BaND	I4/mmm	193	Fm3m			90We
$\text{Ba}_2\text{NaNb}_5\text{O}_{15}$	P4bn	110	Ccm2 ₁	573	ortho.?	
		858	4/mmm			77Sc; 84bnn
or:	ortho.	523	ortho.	?	ortho.	
		573	tetr.			88Bar
$\text{BaNa}_2\text{Nb}_5\text{O}_{14}\text{F}$?	100	P4/mbm			LB. 16a
BaNb_2O_6	P2 ₁ /c	?	ortho.			90SiS
$\text{Ba}_4\text{Nb}_2\text{O}_9$?	120	ortho.	>470	ortho.	
		>780	hex.	>970	hex.	85Le
$\text{Ba}_2\text{NdTaO}_6$	trig.	?	cubic			LB. 4a
$\text{Ba}_2\text{PrTaO}_6$	trig.	?	cubic			LB. 4a
BaSO_4	Pnma	1363	cubic			90SaT
BaS_3Sn_2	ortho.	953	Pccn			PH. 2

Ba ₂ S ₄ Sn ₄	P2 ₁ /c	1063	Pna2 ₁		PH. 2
BaS ₃ Zr	P4/mmm	?	cubic		PH. 2
BaSiO ₃	tricl.?	?	ortho.		68St
* BaSi ₂ O ₅	Pmnb	?	C2/c		85Oz
Ba ₂ SmTaO ₆	trig.	?	cubic		LB. 4a
Ba ₅ Ti ₃ F ₁₉	tetr.	1005	tetr.?		91Co
Ba ₂ TiGe ₂ O ₈	m?	273	Cmm2	1123 P4bm	89Mar
Ba ₆ Ti ₂ Nb ₈ O ₃₀	P4bn	518	?		LB. 16a
* BaTiO ₃	R3m	183	Amm2	273 P4mm	
		403	Pm3m	1733 P6 ₃ /mmc	LB. 16a
* BaTiO ₃ -h	P2 ₁	74	C222 ₁	222 P6 ₃ /mmc	89Ak
Ba ₂ TiO ₄	P112 ₁ /n	>300	Pc2 ₁ n		84Bu
Ba ₅ V ₃ F ₁₉	tetr.	1020	tetr.?		91Co
BaZnV ₂ O ₇	P2 ₁ /n	943	Pnma		89Mu
* Be	P6 ₃ /mmc	1537	Im3m		76Pi
BeAs ₂	?	>300	P4 ₁ 2 ₁ 2 ₁		81Ke
Be ₃ Co	ortho.?	1365	?		PH. 2
BeF ₂	hex.	493	hex.	703 ortho.	
		953	cubic		LB. 7a
BeI	P4/nbm	623	ortho.		LB. 7a
BeO	P6 ₃ mc	2378	P4 ₂ /mnm		TA. 3
Bi ₂ BaNb ₂ O ₉ - see: BaBi ₂ Nb ₂ O ₉					
* BiBr ₃	P2 ₁ 3	<431	P2 ₁ 3		58Wo
BiCu ₃ S ₃	P2 ₁ 2 ₁ 2 ₁	391	Pnma	463 ortho.	PH. 2
BiDy	monocl.	11	Fm3m		PH. 2
BiFeO ₃	R3c	1083	?		84Ta
Bi ₂ GeO ₅	C2cm	>800	?		84Fir
* BiI ₃	R3	573	cubic		76Pi
BiK ₃	P6 ₃ /mmc	553	Fm3m		PH. 2
BiMn	P6 ₃ /mmc	663	P222 ₁		PH. 2
BiMnO ₃	monocl.	923	cubic		72Fe
Bi ₂ MoO ₆	Pca2 ₁	>800	P2 ₁ /c		84Ya
BiNbO ₄	tricl.	?	Pnan	633 Pna2 ₁	
		843	?		73Ke; 83Dav
Bi ₂ O ₃ on heating:	P2 ₁ /a	1003	Fm3m		
on cooling:	P2 ₁ /a	773	P4b2	923 Fm3m	90Me
5Bi ₂ O ₃ 3CdO	trig.	913	trig.		89K11

(continued)

BiRb ₃	P6 ₃ /mmc	503	Fm $\bar{3}$ m		PH. 2
BiSBr	?	103	Pnam		LB. 16a
BiSI	?	113	Pnam		LB. 16a
BiSbO ₄	monocl.	823	?		74Po
* Bi ₂ Se ₃	R $\bar{3}$ m	570	R $\bar{3}$ m	?	76Pi
Bi ₂ SiO ₅	C2cm	610	?		84Fir
Bi ₂ Sn ₂ O ₇	tetr.?	363	cubic	953	Fd3m
Bi ₂ SrTa ₂ O ₉ - see: SrBi ₂ Ta ₂ O ₉					
BiTaO ₄	tricl.	?	Pnan	633	Pna2 ₁
		843	?		73Ke; 83Dav
BiTb	trig.	17	Fm $\bar{3}$ m		PH. 2
Bi ₂ Te ₄ O ₁₁	monocl.	881	cubic		89Ast
Bi ₃ TiNbO ₉	A2 ₁ am	1213	I4/mmm		LB. 16a
Bi ₂ Ti ₄ O ₁₁	C2/c	523	C2/m	1474	?
Bi ₄ Ti ₃ O ₁₂	Pc(Ba)	948	I4/mmm		Lb. 16a; 90Rae
Bi ₄ Ti ₅ FeO ₁₅	?	853	A2 ₁ am	1023	4/mmm
Bi ₃ TiTaO ₉	Fmm2	1143	I4/mmm		LB. 16a
* BiVO ₄	?	425	I2/a	528	I4/a
					85Seg; 90Hu
Bi ₂ WO ₆	B2cb	973	Bcab	1208	C2/m
					83Ya; 90Rae
Bk ₂ O ₃	Ia $\bar{3}$	1473	monocl.	1973	hex.
					PH. 2

CPFP - see: C₂₇H₄₅OCOCF₂CF₃

CTFP - see: C₂₇H₄₅OCOCF₂CF₂H

chloranil - see: C₆Cl₄O₂

* d-camphor	tetr.?	245	hex.	374	cubic	t. 10. 4
CBr ₄	C2/c	320	Fm3m			84Hoh
C ₂ Br ₆	Pnma	450	Im3m			t. 10. 6
C(CH ₂)F ₄	?	250	?			t. 10. 1
C(CH ₂ OH) ₄	I $\bar{4}$	457	Fm3m			90Bh
C(CH ₃) ₄	hex.	140	Fm3m			t. 10. 1
C(CH ₃)Cl ₃	Pnma	225	Fm3m			t. 10. 1
C(CH ₃) ₂ Cl ₂	ortho.	188	trig.			t. 10. 1
C(CH ₃) ₃ Cl	monocl.	183	P4/nmm	220	Fm3m	t. 10. 1
C(CH ₃)COOH	?	280	Fm3m			t. 10. 1
C(CH ₃) ₂ ClNO ₂	?	214	?			t. 10. 1

$C(CH_3)_2(NO_2)_2$?	267	Fm3m		t. 10.1
$C(CH_3)_3NO_2$?	215	tricl.	260 ortho.	t. 10.1
$C(CH_3)_3SH$?	152	hex. ?	157 Im3m	
		199	Fm3m		t. 10.1
$C_2(CH_3)_6$?	152	Im3m		t. 10.6
$C_6(CH_3)_6$	P6mm	117	tricl.	383 ortho.	t. 10.3
$C_6(CH_3)_3Cl_3$	monocl.	>140	$P2_1/c$		t. 10.3
CCl_4	C2/c	226	trig.		t. 10.1; 91SaI
C_2Cl_6	Pnma	318	tricl.	345 Im3m	79Ge
$C_6Cl_2(CH_3)_4$?	162	$P2_1/a$	378 Pnnm	89EcT
$C_6Cl_4O_2$	$P2_1/n$	91	$P2_1/a$		90LeR
* CF_4	C2/c	76	tetr. ?		t. 10.1; 91SaI
C_2F_6	monocl.	104	?		t. 10.6
C_6F_{12}	?	168	Fm3m		t. 10.3
C_6F_5Cl	?	191	?	245 ?	t. 10.3
* CH_4	tetr.	9	?	21 Fm3m	t. 9.5
C_2H_2	Acam	88?	Pa3		75Ko
* C_2H_6	monocl.	89.7	?	89.8 Im3m	87Sc
C_4H_8	?	146	Im3m		t. 10.3
* C_5H_8	?	87	?	138 ?	t. 10.3
C_5H_{10}	?	122	?	138 hex.	t. 10.3
* C_6H_6	?	140	Pbca		88ThL
C_6H_{10}	?	139	?		t. 10.3
C_6H_{12}	C2/c	186	Fm3m		t. 10.3
C_7H_8	?	154	cubic		t. 10.3
C_7H_{14}	?	135	?	198 ?	
		212	?		t. 10.3
* $C_{10}H_{16}$	$P\bar{4}2_1c$	208	$F\bar{4}3m$		79Bu
$C_{12}H_{10}$	$P(Pa)/(\bar{1})$	21	inc.	38 $P2_1/a$	83Bau
$C_{14}H_{10}$	$P2_1$	333	$P2_1/a$		89Ch; 90Pe
* $C_{18}H_{14}$	$P\bar{1}$	193	$P2_1/a$		82Koh
$(CH_3)_2C(CH_2OH)_2$	$P2_1/n$	313	Fm3m		91BaF
$(CH_2CN)_2$	monocl.	233	Im3m		t. 10.6
$C_{10}H_{15}CN$	C2/m	283	Fm3m		88Gui
$(CH_3)_3CNH_3NO_3$?	412	?		89Hir
$(CH_2)_7CO$	monocl.	183	?	232 Pm3n	t. 10.3
$(C_6H_5CO)_2$ - see: $C_{14}H_{10}O_8$					

(continued)

* $C_6H_4Cl_2$	$P2_1/c$	268	$P2_1/a$	304	$P\bar{1}$	75Wh
$C_{10}H_6Cl_4Fe$	$P2_1/m$	120	hex.	132	$Im3m$	83Da
$(CH_2ClCOO)_2H.NH_4$	Cc	120	$C2/c$			LB. 16b
$CH_2ClCOONH_4$	C2	123	$C2/c$			LB. 16b
$C_6H_4F_2$?	187	?			t. 10. 3
$C_6H_2F_4$?	221	?			t. 10. 3
$C_5H_5FeC_5H_4CHO$	$P2_12_12_1$	317	$Fm3m$			81Da
* $C_3H_3N_3$	$C2/c$	200	$R\bar{3}c$			78Sm
$(CH_3)_3NCH_2COOCH_2(COOH)_2$			monocl.	194	ortho.	88Hau
$(CH_3)_2NCH_2COOH.H_3AsO_4$?	178	$P\bar{1}$	91Mu
$(CH_3)_2NCH_2COOH.H_3PO_4$?	215	$P\bar{1}$	91Mu
CH_3NH_2O (TCAA)	$P2_1$	355	monocl.	358	monocl.	90Ha
$C_9H_{16}NO_2$	Pc	195	$C2/c$			87Leb
$C_9H_{18}NO$	Fdd2	287	$I\bar{4}2d$			81Cap
only on heating:			Cm	293	$I\bar{4}2d$	
$C_4H_2O_4$	$P2_1/m$	373	$I4/m$			LB. 16b
C_4H_4O	$P4_12_12$	150	Cmca			t. 10. 3
$C_4H_6O_4$	$P2_1/a$	420	$P\bar{1}$			83PeY
* $C_6H_8O_2$	$P2_1/c$	287	$P2_1/c$			91Ka
$C_{14}H_{10}O_2$	$P2_1$	84	$P3_121$			87Mor
$C_{27}H_{45}OCOCF_2CF_3$?	128	inc.	148	$P2_1?$	85Yan
$C_{27}H_{45}OCOCF_2CF_2H$?	123	inc.	143	inc.	
		178	$P2_1?$			85Yan
C_5H_9OH	?	201	?	203	hex.	t. 10. 3
C_6H_5OH	?	287	?			t. 10. 3
$C_6H_{11}OH$?	245	?	266	?	t. 10. 3
$3C_6H_4(OH)_2.CH_3.OH$?	64	$R\bar{3}$			90Mu
$C_{14}H_{14}O_4S_2$	$Pna2_1$?	monocl.			90Hau
C_4H_4S	?	112	?	138	?	
		172	ortho.			t. 10. 3
$C_5H_{10}S$?	201	?	240	$Fm3m$	t. 10. 3
* $C_{12}H_{10}SN$	$P2_1/c$	250	$Prma$			85Na; 91Ec
$C_4H_8SO_2$?	289	?			t. 10. 3
* $(C_{10}H_{10}S_4Se_2)_2Au(CN)_2$?	180	$P\bar{1}$	89Sai
* CH_3HgBr	$P42_1m$?	$P4/nmm$			88Ad
* CH_3HgCl	$P42_1m$?	$P4/nmm$			88Ad
* CO	$P2_13$	62	$P6_3/mmc$			LB. 7b1

* $C_2O_4HNH_4 \cdot 1/2H_2O$	$P2_1/c$	145	$Pnma$			89Go
$C(SCH_3)_4$	tetr.?	296	$I4/mmm$	319	$Im3m$	t. 10.3
CW_2	$Pnma$	1323	hex.	2073	$P3_121$	TA.3
* Ca	$Fm3m$	523	hex.	723	$Im3m$	56Me
$CaAl_2B_2O_7$	$P6_322$	1103	monocl.			67Sc
$CaAlF_5$	ortho.	?	ortho.			67Ra
$Ca_8Al_{12}O_{24}(CrO_4)_2$?	432	?	453	?	
		610	cubic			88De1
$Ca_8Al_{12}O_{24}(MoO_4)_2$?	608	?	620	?	
		634	cubic			88De1
$Ca_8Al_{12}O_{24}(SO_4)_2$	tetr.?	737	cubic			88De1
$Ca_8Al_{12}O_{24}(WO_4)_2$	$Aba2$	614	$P4c2$	656	$I43m$	89Ku2
* $CaAl_2Si_2O_8$	$P\bar{1}$?	$I\bar{1}$			80Su
$Ca_2B_6O_{11} \cdot 5H_2O$	$P2_1$	266	$P2_1/a$			LB.16b
$Ca_2Ba(C_2H_5COO)_6$	- see: $BaCa_2(C_2H_5COO)_6$					
$CaBi_2Nb_2O_9$	$Fmm2$	898	$I4/mmm$			LB.16a
$CaBi_2Ta_2O_9$	$Fmm2$	848	$I4/mmm$			LB.16a
$CaBr_2$	$Pnnm$	790	$P4_2/mnm$			89Rap; 91Ha
CaC_2	$I4/mmm(P2_1/n?)$?	$Fm3m$	81Ke
* $CaCO_3$	$R\bar{3}c$	1260	$R\bar{3}m$			89Re
$CaCd(CH_3COO)_4 \cdot 6H_2O$?	128	?	146	$I4/m$	85Ch
$CaCl_2$	$Pnnm$	491	$P4_2/mnm$			91Ha
$CaGa_2O_4$	$P2_1/c$?	ortho.	?	$Pmcn?$	74Mu
$CaGaF_5$	Cc	963	$C222_1$			LB.7a
$CaHPO_4$	$P1$	270	$P\bar{1}$			80Cat
$Ca_3Mn_2GeO_{12}$	$I4_1/acd$?	$Ia3d$			79Sa
$CaMo_6S_8$	tricl.	50	trig.			83La
* Ca_3N_2	?	1000	$Ia3$	1370	?	68La
CaP_2O_6	?	?	?	?	monocl.	
		1236	?			PDF
$Ca_2P_2O_7$	$P2_1/n$	1023	tetr.	1413	ortho.	PDF
$Ca_3(PO_4)_2$	$R\bar{3}c$	1670	monocl.			PDF
$Ca_5(PO_4)_3Cl$	$P2_1/b$	470	$P6_3/m$			79Gr
$Ca_5(PO_4)_3OH$	$P2_1/b$?	$P6_3/m$			79Gr
* $CaSiO_3$	$P1$?	$P2_1/a$			68Tr
* Ca_2SiO_4	$Pbnm$	700	$P112_1/n$	943	$Pna2_1$	
		1430	$Pmnb$	1720	$P6_3mc$	90Il

(continued)

Ca_3SiO_5	tricl.	820	tricl.	1180	monocl.	
		1240	trig.			64Mi
or:	tricl.	?	trig.	1320	R3m	90I1
CaSnF_6	$\text{R}\bar{3}$?	$\text{Fm}3\text{m}$			83May
CaSrAlF_7	?	730	?	943	?	PDF
* $\text{Ca}_2\text{Sr}(\text{C}_2\text{H}_5\text{COO})_6$	monocl.	80	$\text{P}4_1$	280	$\text{P}4_12_12$	82Mi
CaTe_2O_5	2/m	1050	6/mmm			89Sad
$\text{CaThNb}_2\text{O}_8$	I2/c	1023	$\text{I}4_1/\text{a}$			77Fo
* CaTiO_3	Pcmn	1533	$\text{Pm}3\text{m}$			LB. 16a
CaTiSiO_5	$\text{P}2_1/\text{a}$	495	$\text{A}2/\text{a}$			90Gh
CaVNb_2O_8	I2/c	1123	$\text{I}4_1/\text{a}$			77Fo
Ca_3UO_6	$\text{R}\bar{3}$	1473	monocl.			83Ho
$\text{Ca}_3(\text{VO}_4)_2$	$\text{R}3\text{c}$	1380	?			LB. 16b
CaYCrO_4	Pbca	1100	Abma	1680	$\text{I}4/\text{mmm}$	87A1
CaZrO_3	ortho.	1773	cubic			72Fe
* Cd_3As_2	$\text{I}4_1\text{cd}$	503	$\text{P}4_2/\text{nbc}$	748	$\text{P}4_2/\text{nmc}$	
		868	$\text{Fm}3\text{m}$			78Iz
$\text{Cd}_3\text{B}_7\text{O}_{13}\text{Br}$	ortho.	732	cubic			LB. 16a
$\text{Cd}_3\text{B}_7\text{O}_{13}\text{Cl}$	ortho.	798	cubic			LB. 16a
$\text{Cd}_3\text{B}_7\text{O}_{13}\text{I}$	ortho.	611	cubic			LB. 16a
$[\text{Cd}(\text{CH}_3)_2\text{SO}]_6 \cdot (\text{ClO}_4)_2$			$\text{C}2/\text{c}$	246	Fdd2	89Ly
CdCrO_4	Cmcm	?	$\text{C}2/\text{m}$			69Mu
CdGeAs_2	Pbnm	?	$\text{F}\bar{4}3\text{m}$			82Pr
CdHfO_3	Pbnm	873	ortho.	993	$\bar{\text{R}}\text{c}$	LB. 16a
$\text{Cd}_2\text{Nb}_2\text{O}_7$	tricl.	19	$\text{Im}2\text{a}$	46	Pc	
	80 Pc	82	Imma	178	$\text{Ima}2$	
	196 tetr.	200	$\text{Fd}3\text{m}$	310	$\text{Fd}3\text{m}$	
	510 $\text{Fd}3\text{m}$					82Kol; 90Ku
$\text{Cd}_2\text{Nb}_2\text{O}_6\text{S}$	tetr.?	379	?	457	?	
		555	$\text{Fd}3\text{m}$			LB. 16a
Cd_2O_3	2/m	2170	$\bar{3}\text{m}$			84Bou
CdP_2	$\text{Pna}2_1$	<300	$\text{P}4_12_12$			87Mol
* CdS	$\text{F}\bar{4}3\text{m}$	800	$\text{P}6_3\text{mc}$			89Sa2
CdSe	$\text{F}\bar{4}3\text{m}$	368	$\text{P}6_3\text{mc}$			TA. 1; 91FeG
$\text{CdSiF}_6 \cdot 6\text{H}_2\text{O}$	2/m	220	$\text{R}\bar{3}$			89Tha
CdSiP_2	$\text{I}\bar{4}2\text{d}$?	$\text{F}\bar{4}3\text{m}$			76P1
CdSnAs_2	$\text{I}\bar{4}2\text{d}$?	$\text{F}\bar{4}3\text{m}$			76P1

* CdSnO ₃	ortho.	1070	cubic			72Fe
* CdTe	F $\bar{4}$ 3m	800	P6 ₃ mc			89Sa1
CdThNb ₂ O ₈	I2/c	1043	I4 ₁ /a			77Fo
* CdTiO ₃	?	50	Pc2 ₁ n	?	cubic	LB. 16a; 72Fe
CdV ₂ O ₆	?	353	C2/m			89Buz; PDF
* Ce	Fm3m	73	hex.	173	Fm3m	
		970	Im3m			86Za
* CeAg	tetr.	15	Pm3m			85Kur
Ce ₃ Al	P112 ₁ /m	115	P6 ₃ /mmc	520	cubic	90Law
CeC ₂	I4/mmm	1363	?			PH. 2
* CeCd	?	100	tetr.	210	Pm3m	85Kur
CeCo ₅	P6/mmm	737	?			85An2; PH. 2
* CeCu ₆	P2 ₁ /c	230	Pnma			80Vr
Ce ₂ Fe ₁₉	P6 ₃ /mmc	?	R $\bar{3}$ m			PH. 2
CeMg	?	190	Pm3m			85Bo
CeNbO ₄	C2/c	903	tetr.			84Ku
Ce ₂ O ₃	P $\bar{3}$ m1	2393	hex.	2443	cubic	LB. 7b1
* CeP ₅ O ₁₄	P2 ₁ /c	390	Pncm			90Ca
CeSI	Pcab	>770	?			PDF
CeSb	tetr.	20	Fm $\bar{3}$ m			PH. 2
Ce ₅ Sn ₃	I4/mcm	?	P6 ₃ /mcm			PH. 2
CeTaO ₄	monocl.	1091	ortho.			81Cav
* CeTl	tetr.	193	Pm $\bar{3}$ m			85Kur
* Cf	P6 ₃ /mmc	973	P6 ₃ /mmc			PH. 2
CfCl ₃	Cmcm	>670	P6 ₃ /m			73Bu
Cf ₂ O ₃	Ia3	1673	C2/m			LB. 7b1; PH. 2
Cl ₂ CCHC(COCH ₃) ₂ CH ₂ SCH ₃			?	155	?	89Ky
Cm	P6 ₃ /mmc	?	Fm $\bar{3}$ m			Ph. 2
Cm ₂ O ₃	Ia3	1270	C2/m	1888	P $\bar{3}$ m1	
		2273	hex.	2483	cubic	LB. 7b1
Cm ₂ S ₃	Pnma	?	tetr.			PH. 2
* Co	P6 ₃ /mmc	723	Fm3m			56Me
CoAs	Pna2 ₁	1248	P6 ₃ /mmc			PH. 3
CoAs ₂	P2 ₁ /c	870	?	930	Pnam	81Ke; PH. 3
Co ₂ As	P $\bar{6}$ 2m	725	hex.			90LiA
Co ₂ As ₂ O ₇	P1	452	C2/m			90Bu
Co ₃ B ₇ O ₁₃ Br	mm2	460	$\bar{4}$ 3m			LB. 16a

(continued)

$\text{Co}_3\text{B}_7\text{O}_{13}\text{Cl}$	trig.	468	monocl.	538	$\text{Pca}2_1$	
		623	$\text{F}\bar{4}3\text{c}$			LB. 16a
$\text{Co}_3\text{B}_7\text{O}_{13}\text{I}$	mm2	200	cubic			LB. 16a
CoBr_2	$\text{P}\bar{3}\text{m}1$	643	$\text{R}\bar{3}\text{m}$			LB. 7a
$\text{CoBr}_4 \cdot 2\text{H}_2\text{O}$	monocl.	?	$\text{C}2/\text{m}$			LB. 7a
$\text{Co}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O}$	ortho.	122	ortho.	136	ortho.	
	155 hex.	182	hex.	243	hex.	
	295 hex.	344	hex.			90No
Co_2Dy	tetr.	130	$\text{Fd}3\text{m}$			PH. 2
$\text{Co}_{17}\text{Dy}_2$	$\text{R}\bar{3}\text{m}$?	$\text{P}6_3/\text{mmc}$			PH. 2
CoGa_2Sn	$\text{I}\bar{4}$	1361	$\text{Pna}2_1$			PH. 2
Co_2Ho	tetr.	77	$\text{Fd}\bar{3}\text{m}$			PH. 2
Co_7La_2	$\text{P}6_3/\text{mmc}$?	$\text{R}\bar{3}\text{m}$			Ph. 2
CoMnGe	Pnma	480	$\text{P}6_3/\text{mmc}$			90KaN; PH. 2
CoMn_3S_4	ortho.	220	$\text{R}\bar{3}$			PH. 2
CoMnSb	$\text{Fm}3\text{m}$	1040	?			89Ot
CoMnSi	Pnma	1170	$\text{P}6_3/\text{mmc}$			89Ni
Co_2NbS_4	tetr.	100	$\text{Fm}\bar{3}\text{m}$			PH. 2
Co_2NbSn	monocl.	253	$\text{Fm}\bar{3}\text{m}$			89FuI
Co_7Nd_2	$\text{P}6_3/\text{mmc}$?	$\text{R}\bar{3}\text{m}$			PH. 2
CoO	$\text{C}2/\text{m}$	270	$\text{Fm}3\text{m}$	1223	$\text{Fd}3\text{m}$	LB. 7b1
Co_3O_4	$\text{Fd}3\text{m}$	1150	cubic			90Li
CoS_2	$\text{Pa}\bar{3}$	398	?			81Ke; PH. 2
CoSO_4	Cmcm	970	Pnma			61Re
$\text{CoSiF}_6 \cdot 6\text{D}_2\text{O}$	$\text{P}2_1/\text{c}$	268	$\text{R}\bar{3}\text{c}$			90Ch
$\text{CoSiF}_6 \cdot 6\text{H}_2\text{O}$	$\text{P}2_1/\text{c}$	230	?	246	$\text{R}\bar{3}$	90Ch
CoZrF_6	$\text{R}\bar{3}$	273	$\text{Fm}3\text{m}$			89Ro; 90RoC
$\text{Cr}_3\text{B}_7\text{O}_{13}\text{Br}$	ortho.	<10	cubic			LB. 16a
$\text{Cr}_3\text{B}_7\text{O}_{13}\text{Cl}$	$\text{m}(\text{mm}2?)$	180	$\bar{4}2\text{m}$	265	$\text{F}\bar{4}3\text{c}$	89Ye; 91YeR
$\text{Cr}_3\text{B}_7\text{O}_{13}\text{I}$	ortho.	<10	cubic			LB. 16a
Cr_2BeO_4	ortho.	28	Pbnm			LB. 16b
CrBr_3	$\text{R}\bar{3}$	420	$\text{C}2/\text{m}$			64Mo
CrCl_3	$\text{R}\bar{3}$	240	$\text{C}2/\text{m}$			64Mo
$\text{Cr}_2\text{Cu}_6\text{NiSn}_3$	$\text{P}6_3/\text{mmc}$?	$\text{Fm}\bar{3}\text{m}$			PH. 2
CrF_3	trig.	1240	$\text{Pm}3\text{m}$			85Mog
Cr_2Hf	$\text{Fd}\bar{3}\text{m}$	1473	$\text{P}6_3/\text{mmc}$	1613	$\text{P}6_3/\text{mmc}?$	PH. 2
Cr_2Nb	$\text{Fd}\bar{3}\text{m}$	1673	$\text{Fd}\bar{3}\text{m}$			PH. 2

Cr_2NiO_4	tetr.	298	$\text{Fd}\bar{3}\text{m}$		76P1
CrOOH	Pnnm	?	Pbnm		78Zv
* CrS	$\text{C2}/\text{c}$?	$\text{P6}_3/\text{mmc}$		90Ma
Cr_2S_3	$\text{R}\bar{3}$	1338	?		90Am
Cr_2Se_2	trig.	1084	hex.		80Zh
$\text{Cr}_{13}\text{Ta}_7$	$\text{Fd}\bar{3}\text{m}$	1673	$\text{Fd}\bar{3}\text{m}$		PH. 2
Cr_2Ti	$\text{Fd}\bar{3}\text{m}$	973	$\text{P6}_3/\text{mmc}$		PH. 2
Cr_2Zr	$\text{Fd}\bar{3}\text{m}$	973	$\text{P6}_3/\text{mmc}$		PH. 2
CrZrF_6	monocl.	150	tetr.	400 $\text{Fm}\bar{3}\text{m}$	83May
Cs_3AlF_6	tetr.	560	$\text{Fm}\bar{3}\text{m}$		LB. 7a
* CsBF_4	Pnma	433	$\text{Fm}\bar{3}\text{m}$	723 cubic	LB. 7a
CsBH_4	?	27	$\text{Fm}\bar{3}\text{m}$		t. 7. 11
CsBeF_3	Pnma	412	?	533 ?	68St
Cs_2BeF_4	$\text{Pna}2_1$?	Pnma		80Ar
CsBe_2F_5	ortho.	723	hex.		LB. 7a
Cs_3BiBr_6	?	723	?		91Ku
Cs_3BiCl_6	$\text{P}\bar{1}$	393	$\text{C2}/\text{c}$	683 ?	
		748	$\text{Fm}\bar{3}\text{m}$		86Dr
$\text{Cs}_3\text{Bi}_2\text{Br}_9$	$\text{P}\bar{3}\text{m}1$	625	?		91Ku
$\text{Cs}_3\text{Bi}_2\text{I}_9$	$\text{P6}_3/\text{mmc}$	605	?		88Ku
* CsCN	$\text{R}\bar{3}\text{m}$	193	$\text{Pm}\bar{3}\text{m}$		89S1
* Cs_2CdBr_4	$\text{P}\bar{1}$	130	?	158 $\text{P2}_1/\text{n}(\text{P}\bar{1}?)$	
		209	$\text{P2}_1/\text{n}$	237 $\text{P}(\text{Pnma})/(\bar{1}\text{ss})$	
		252	Pnma		84A1; 91Za
Cs_2CdCl_4	$\text{I4}/\text{mmm}$	717	?		LB. 7a
Cs_2CdI_4	from melt:		$\text{P}\bar{1}$	184 $\text{P2}_1/\text{n}$	
		260	$\text{P}(\text{Pnma})/(\bar{1}\text{ss})$		
		333	Pnma	? hex.	
	from water:		$\text{P2}_1/\text{m}$	373 Pnma	88A1
$\text{Cs}_3\text{Ce}_2(\text{NH}_2)_9$	$\text{R}\bar{3}\text{c}$?	P3		80Ja; PH. 2
CsCl	$\text{Pm}\bar{3}\text{m}$	742	$\text{Fm}\bar{3}\text{m}$		90Ey
* CsClO_4	Pnma	482	$\text{Fm}\bar{3}\text{m}$	758 cubic	t. 7. 11
$\text{Cs}_2\text{CoGe}_5\text{O}_{12}$	cubic	700	$\text{I}\bar{4}3\text{d}$		84To2
CsCoPO_4	P2_1	477	?	518 ?	84B1
CsCrCl_3	$\text{C2}/\text{m}$	170	hex.		79Cr
Cs_3CrF_6	tetr.	639	$\text{Fm}\bar{3}\text{m}$		LB. 7a
CsCrI_3	Pbcn	150	$\text{P6}_3/\text{mmc}$		80Za

(continued)

Cs_2CrO_4	?	1000	hex.			85Lo; 89Pro
* CsCuCl_3	P6_122	423	$\text{P6}_3/\text{mmc}$	511	?	
		540	?			89Na
$\text{CsCu}_4\text{Cl}_3\text{I}_2$	ortho.	414	R3?	427	P2_13	83Gel
$\text{Cs}_4\text{Cu}(\text{MoO}_4)_3$	monocl.	258	ortho.	413	$\text{P6}_3/\text{mmc}$	89K1K
* CsD_2AsO_4	Fdd2	190	$\bar{1}42d$			t. 7. 14
* CsD_2PO_4	$\text{P2}_1?$	265	$\text{P2}_1/\text{m}$			78Ge
CsDS	$\text{I4}/\text{m}$	100	$\text{P4}/\text{mbm}$	210	Pm3m	89Ja
CsDSO_4	$2/\text{m}$	250	monocl.	412	tetr.?	86Co
$\text{Cs}_3\text{D}(\text{SeO}_4)_2$	$\text{P2}_1/\text{m?}$	180	$\text{C2}/\text{m}$			91Ich
* $\text{CsDy}(\text{MoO}_4)_2$	$\text{C2}/\text{m}$	42	inc.?	59	Pccm	86Sk
$\text{CsDy}(\text{WO}_4)_2$?	670	?			70Sp
CsEr_2F_7	hex.	1353	?			82Al
$\text{CsEr}(\text{MoO}_4)_2$?	770	monocl.	1170	trig.	71Ry
or:			Pccm	1170	$\text{P}\bar{3}\text{m1}$	77K1
$\text{CsEr}(\text{WO}_4)_2$	Pccm	670	?	1270	$\text{P}\bar{3}\text{m1}$	77K1
$\text{CsEu}(\text{CrO}_4)_2$?	770	?			89PrO
Cs_3EuF_6	$\text{I4}/\text{mmm}$	420	cubic			78Ar
$\text{CsEuNaNb}_5\text{O}_{15}$	Pmc2_1	380	?	565	Pmcm?	84Di
$\text{CsEu}(\text{WO}_4)_2$	Pccm?	>670	?			70Sp
$\text{Cs}_2\text{FeCl}_5 \cdot \text{H}_2\text{O}$?	151	Cmcm			87Cha
CsFeF_4	P2_12_12	250	Pmmn	?	Pmma	
		475	$\text{P4}/\text{mmm}$			85De
Cs_3FeF_6	$\text{P4}/\text{mnc}$	633	Fm3m	1203	?	LB. 7a
Cs_2FeI_4	$\text{P12}_1/\text{c1}$	123	$\text{Pcmn}(\text{ssi})$	152	Pcmn	84Ho
CsFeS_2	tricl.	70	ortho.			89SmS
Cs_3GaF_6	?	589	Fm3m			LB. 7a
$\text{Cs}_3\text{Gd}(\text{CrO}_4)_3$?	768	?			89Pro
CsGd_2F_7	$\text{P2}_1\text{cn}$	1377	hex.			82Al
Cs_3GdF_6	$\text{I4}/\text{mmm}$	433	cubic			73Ko
$\text{CsGd}(\text{WO}_4)_2$	Pccm	670	Pcmm			70Sp
CsGeBr_3	R3m	511	cubic			87Th
CsGeCl_3	R3m	428	Pm3m			LB. 7a
CsGeI_3	R3m	550	cubic			87Th
CsH_2AsO_4	Fdd2	143	$\bar{1}42d$	433	monocl.	LB. 16b
* CsHF_2	$\text{I4}/\text{mcm}$	334	Pm3m			LB. 7a
$\text{CsH}_3\text{O}_2 (\text{CsOH} \cdot \text{H}_2\text{O})$	monocl.	229	hex.			89Ton

* CsH ₂ PO ₄	P2 ₁	159	P2 ₁ /m		78Ra
CsHS	I4/m	100	P4/mbm	210 Pm3m	89Ja
* CsHSO ₄	P2 ₁ /c	333	P2 ₁ /m	370 monocl.	
		414	tetr.		86Co; 87Me; 90It
CsHSe	tetr.	198	Pm3m		70Al
* CsHSeO ₄	?	330	P2 ₁ /c	401 I4/amd	87BaI; 90Ko
	<i>(complicated thermal history):</i>				86Co
Cs ₃ H(SeO ₄) ₂	tricl.	50	C2/m	369 P $\bar{1}$	
		456	R $\bar{3}$ m		88Me
CsH ₃ (SeO ₃) ₂	P $\bar{1}$	145	P $\bar{1}$		LB. 16b
Cs ₅ H ₃ (SeO ₄) ₄ ·H ₂ O	?	209	?	236 ?	
		285	Pbcn	346 P6 ₃ /mmc	90MeB
Cs ₂ HfW ₅ O ₁₈	?	240	?	390 ?	
		600	P6 ₃ /mcm		90St
* Cs ₂ HgBr ₄	P $\bar{1}$	85	P $\bar{1}$	167 P2 ₁ /n	
	232	<i>P(Pcmn)/(ss$\bar{1}$)</i>		245 Pnma	78Se; 84Al
Cs ₂ HgCl ₄	?	112	?	162 ?	
	165	?	172 monocl.	185 ortho.	
	195	inc.	221 Pnma		89KaI
Cs ₂ HgI ₄	?	200	inc.?	255 P2 ₁ ?	
		448	?		89Bo
CsHo(MoO ₄) ₂	?	773	Pccm	1233 P $\bar{3}$ m1	77K1
CsHo(WO ₄) ₂	Pccm	?	?	670 Pccm	77K1
* CsI	tetr.	130	Pm3m	? Fm3m	LB. 7a
CsIO ₄	?	287	inc.	291 Pnma	
		423	4/mmm		89AlS
Cs ₃ InCl ₆	P1	383	C2/c?	493 ?	
		583	Fm3m		86Dr
Cs ₃ InF ₆	tetr.	538	Fm3m		81Zai
CsIn(MoO ₄) ₂	Pcmn	743	P $\bar{3}$ m1		77K1
CsIn(WO ₄) ₂	Fd3	1258	P3m1		71Ef
CsK ₂	P6 ₃ /mmc	183	?		PH. 2
Cs ₆ K ₇	P6 ₃ /mmc	183	?		PH. 2
Cs ₂ KDyF ₆	tetr.	169	Fm3m		85Go
Cs ₂ KHoF ₆	I4/m	150	Fm3m		84Ih
Cs ₂ KInCl ₆	C2/c	373	Fm3m		88Gue
CsLa(CrO ₄) ₂	?	938	?		89Pro

(continued)

$\text{Cs}_3\text{La}(\text{CrO}_4)_3$?	793	?	863	?	89Pro
$\text{CsLa}(\text{MoO}_4)_2$	Pnnn	1223	?			77K1
$\text{CsLa}(\text{WO}_4)_2$	Pnnn	1180	?			77K1
$\text{Cs}_2\text{LiCo}(\text{CN})_6$	$\text{P2}_1/\text{n}$	183	$\text{P4}/\text{mnc}$?		84IhA
or:	?	70	$\text{Fm}3\text{m}$			69Wo
$\text{Cs}_2\text{LiCr}(\text{CN})_6$	$\text{P2}_1/\text{n}$	310	$\text{P4}/\text{mnc}$	348	$\text{Fm}3\text{m}$	84Mi
CsLiBeF_4 - see: LiCsBeF_4						
CsLiCrO_4 - see: LiCsCrO_4						
$\text{Cs}_2\text{LiCr}(\text{CN})_6$	$\text{P2}_1/\text{n}$	335	$\text{P4}/\text{mnc}$	418	$\text{Fm}3\text{m}$	84Mi
CsLiMoO_4	m	181	3m	220	$\text{F}\bar{4}3\text{m}$	88K1M
CsLiSO_4 - see: LiCsSO_4						
CsLiSeO_4 - see: LiCsSeO_4						
CsLiWO_4	m	171	3m	209	$\text{F}\bar{4}3\text{m}$	88K1M
$\text{Cs}_2\text{Ln}_2\text{F}_7$	ortho.	?	hex.			82A1
$\text{CsLu}(\text{MoO}_4)_2$?	773	Pccm	933	$\text{P}\bar{3}\text{m}1$	77K1
$\text{CsLu}(\text{WO}_4)_2$?	770	?	1090	$\text{P}\bar{3}\text{m}1$	77K1
Cs_2MgI_4	?	85	?			81Za
Cs_2MnCl_4	$\text{I4}/\text{mmn}$?	Pnma			80Ar
Cs_2MnI_4	$\text{P1}(\text{P}\bar{1})$	105	$\text{P112}_1/\text{n}$	211	$\text{P2}_1\text{cn}$	
		240	Pcmn			81Za
Cs_2MoO_4	ortho.	858	hex.			85Lo
$\text{Cs}_3\text{MoO}_3\text{F}_3$	trig.	?	cubic			
* CsN_3	$\text{I4}/\text{mcm}$	424	$\text{Pm}3\text{m}$			76P1; PH. 2
* CsNO_2	$\text{R}\bar{3}\text{m}$	209	$\text{Pm}3\text{m}$	390	?	76P1
* CsNO_3	P3_1	427	$\text{Pa}3$			LB. 16b
$\text{Cs}_2\text{NaBiCl}_6$	$\text{P4}/\text{mnc}$	100	$\text{Fm}3\text{m}$			84Mi
$\text{Cs}_2\text{NaDyBr}_6$	$\text{I4}/\text{m}$	139	$\text{Fm}3\text{m}$			87BuG
$\text{Cs}_2\text{NaDyF}_6$	tetr.	360	cubic			85Go
$\text{Cs}_2\text{NaFe}(\text{CN})_6$	$\text{P2}_1/\text{n}$	498	$\text{P4}/\text{mnc}$			84Mi
$\text{Cs}_2\text{NaHoBr}_6$	$\text{I4}/\text{m}$	126	$\text{Fm}3\text{m}$			87BuG
$\text{Cs}_2\text{NaHoCl}_6$	tetr.	0.15	$\text{Fm}3\text{m}$			90NaS
$\text{Cs}_2\text{NaLaCl}_6$	$\text{I4}/\text{m}$	208	$\text{Fm}3\text{m}$			84Mi
$\text{Cs}_2\text{NaNdCl}_6$	$\text{P4}/\text{mnc}$	138	$\text{Fm}3\text{m}$			84Mi
$\text{Cs}_2\text{NaPrCl}_6$	$\text{P4}/\text{mnc}$	153	$\text{Fm}3\text{m}$			84Mi
$\text{Cs}_2\text{NaTmBr}_4$	$\text{I4}/\text{m}$	101	$\text{Fm}3\text{m}$			87BuG
* $\text{Cs}_2\text{NaYBr}_6$	$\text{I4}/\text{m}$	140	$\text{Fm}3\text{m}$			89Us
CsNbCl_6	tetr.	563	?			89ShF

$\text{Cs}_3\text{Nd}(\text{CrO}_4)_3$?	763	?			89Pro
$\text{CsNd}(\text{WO}_4)_2$	Pccm	?	660	?		70Sp
* CsNiF_3	?	190	$P6_3/mmc$	>300	trig.	90PrJ
CsO_2	ortho.	?	ortho.?	<300	I4/mmm	
		<470	Fm3m			81Ke; PH. 2
or:	Cmcm	?	Fm3m			79Sa
CsOD	Pnmb	262	ortho.			87BaE
CsOH	Pnmb	232	Bmmb	493	cubic	84Haa; 87BaE
CsPF_6	?	89	Fm3m			t. 7. 13
CsPbBr_3	Pnma	360	P4/mbm	420	Pm3m	89Pe
CsPbCl_3	tricl.	177	monocl.	194	Pnma	
310	Cmcm	315	P4/mbm	318	Pm3m	78Fe
$\text{Cs}_2\text{PbCu}(\text{NO}_2)_6$?	250	C1 ($\bar{C}1$)	289	Fmmm	
		310	tetr.?	391	cubic	78Mo; 80Mo
CsPbF_3	tetr.	174	Pm3m			LB. 7a
CsPbI_3	Pnma	601	$P2_1/m$			LB. 7a
$\text{Cs}_3\text{Pr}(\text{CrO}_4)_3$?	743	?			89Pro
$\text{CsPr}(\text{WO}_4)_2$	$P2_1/m$	623	?			74TrR
$\text{Cs}_2\text{RbDyF}_6$	$P\bar{1}$	195	B2/m	205	I4/m	
		251	Fm3m			85Go
$\text{Cs}_2\text{RbHoF}_6$	monocl.	197	tetr.	270	Fm3m	84Ih
CsRbSeO_4	?	234	mmm			83En
Cs_2RhF_6	$P\bar{3}m1$?	$P6_3mc$			LB. 7a
CsS	Immm	>300	?			81Ke
* CsSCN	Pnma	470	cubic			87Mos
Cs_2SO_4	?	733	Pnma	927	hex.	76No
$\text{Cs}_3\text{Sb}_2\text{Br}_9$	P321	803	?			91Ku
* CsSbF_6	$R\bar{3}m$	461	?			80Be
Cs_3ScF_6	I4/mmm	375	P4/nmc	487	Fm3m	91Ch
Cs_2SeO_4	ortho.	860	hex.			62Ga
$\text{Cs}_3\text{Sm}(\text{CrO}_4)_3$?	771	?			89Pro
CsSm_2F_7	$P2_1cn$?	hex.			82Al
$\text{CsSm}(\text{WO}_4)_2$	Pccm	670	?			70Sp
CsSnBr_3	tetr.	292	Pm3m			81Zai
CsSnCl_3	tricl.	390	Pm3m			89SaK
CsSnI_3	Pnma	425	tetr.			90Ya
CsSrCl_3	Pnma	363	Cmcm	375	P4/mbm	

(continued)

		385	Pm3m		81Zai
CsTaCl ₆	hex.	569	?		78Sa
CsTb(WO ₄) ₂	Pccm	>670	?		70Sp
Cs ₂ TiW ₅ O ₁₈	?	513	?	673	?
		893	P6 ₃ /mcm		90St
CsTm(MoO ₄) ₂	?	770	Pccm	1090	P3m1
CsTm(WO ₄) ₂	?	720	?	1220	P3m1
Cs ₂ U ₂ O ₇	2/m	670	C2/m	?	P6 ₃ /mmc
Cs ₂ U ₄ O ₁₂	hex.	<930	P2 ₁	1150	Fd3m
CsVF ₄	P2 ₁ 2 ₁ 2	140	Pmmn	425	P4/nmm
		510	Pman	523	P4/mmm
Cs ₂ WO ₄	ortho.	798	hex.		86Hi
Cs ₃ WO ₃ F ₃	trig.	?	cubic		85Lo
CsY(MoO ₄) ₂	Pccm	1148	P3m1		77K1
CsY(WO ₄) ₂	Pccm	670	?	1300	P3m1
Cs ₃ YbF ₆	I4/mmm	473	Fm3m		77K1
CsYb(MoO ₄) ₂	?	770	Pccm	1010	P3m1
CsYb(WO ₄) ₂	P2 ₁ /c	770	?	1170	P3m1
Cs ₂ ZnCl ₄	?	333	?	572	?
Cs ₂ ZnGe ₅ O ₁₂	cubic	670	I43d		91On
Cs ₂ ZnI ₄	P1	96	P2 ₁ /n	108	inc.
		118	Pnma		84To2
CsZnPO ₄	P2 ₁	523	?	578	?
CuAgS - see: AgCuS					89Ale
* CuAu	Fm3m	?	?	?	Fm3m
Cu ₃ Au	Fm3m	670	Pm3m		76Pi
Cu ₃ B ₇ O ₁₃ Br	ortho.	222	cubic		89But
Cu ₃ B ₇ O ₁₃ Cl	Pca2 ₁	365	F43c		LB. 16a
Cu ₃ BiS ₃	P2 ₁ 2 ₁ 2 ₁	391	Pnma?	408	inc.
		463	Pnma?		83Mak
* CuBr	F43m	664	P6 ₃ mc	743	Im3m
CuBrTe	?	230	?	351	LB. 7a
* CuCl	F43m	680	P6 ₃ mc		91
CuCr ₂ O ₄	I42d?	860	Fd3m		LB. 7a
CuCrS ₂	R3m	675	R3m		89Ta
CuFe ₂ O ₄	I4 ₁ /amd	?	Fd3m		89KaA
Cu ₂ FeS ₄	P6 ₃ /mmc	?	Fm3m		79Sa
					PH. 2

Cu_5FeS_4	Pbca	443	$\bar{P}4_2c$	510	Fm3m	PH. 2
Cu_5Gd	$\bar{F}4_3m$	933	$P6_3/mmc$			PH. 2
Cu_3Ga	?	?	$P6_3/mmc$?	Im3m	89ChH
Cu_3Ge	Pmmn	?	$P6_3/mmc?$			TA. 1; PH. 2
Cu_2GeS_3	monocl.	943	$\bar{F}4_3m$			PH. 2
Cu_8GeS_3	trig.	330	tetr. ?			PH. 2
* Cu_8GeS_6	Im3m	365	Fm3m			89Al1
Cu_8GeSe_6	$P6_3cm$	324	$P6_3mc$			89Goe
* $\text{Cu}(\text{HCOO})_2 \cdot 4\text{H}_2\text{O}$	$P2_1?$	236	$P2_1/a$			LB. 16b
Cu_2HgI_4	$I\bar{4}2m$	343	$\bar{F}4_3m$			LB. 7a
* CuI	$\bar{F}4_3m$	646	$P6_3mc$	684	$\bar{F}4_3m$	LB. 7a
* CuInSe_2	$I\bar{4}2d$?	$\bar{F}4_3m$			76P1
CuInTe	?	281	?			91
* CuInTe_2	?	286	$I\bar{4}2d$			PH. 2; 91
CuMn_3N	tetr.	149	$Pm\bar{3}m$			70Bar; PH. 2
CuMnSb	$\bar{F}4_3m$	753	?			89Ot
Cu_2MnSn	$P6_3/mmc$?	$Fm\bar{3}m$			PH. 2
$\text{Cu}(\text{NH}_3)_2\text{Br}_2$	$C2/m$?	cubic			LB. 7a
$\text{Cu}(\text{NO}_3)_2$?	383	?			77Ch
$\text{Cu}_2\text{P}_2\text{O}_7$	$C2/c$	345	$C2/m$			67Ro
Cu_3Pd	$P4/mmn$	733	?			PH. 2
* CuS	Cmcm	55	$P6_3/mmc$			88F1
* Cu_2S	$P2_1/c$	378	$P6_3/mmc$	730	cubic	76P1
CuSCN	Pcab	?	$R3m$			PDF
CuSU	tetr.	226	cubic			PH. 2
CuSbS_2	$Pna2_1$	366	$Pnma$			75Gr
Cu_3SbS_3	$P2_1/c$	395	ortho.			PH. 2
Cu_3SbSe_4	$I\bar{4}2d$	698	$\bar{F}4_3m$			PH. 2
CuSe	$P6_3/m$	327	ortho.	393	$P6_3/mmc$	81Ke; PH. 2
* Cu_2Se	trig. ?	<100	monocl.	413	Fm3m	PH. 2; 91FrM
$\text{CuSiF}_6 \cdot 6\text{H}_2\text{O}$?	80	$P\bar{1}$	279	$R\bar{3}$	
		305	$R\bar{3}$			89Boy
Cu_2SiS_3	tetr.	1113	$P6_3/mmc?$			PH. 2
Cu_3Sn	ortho.	?	Fm3m			PH. 2
* Cu_4SnS_4	$Pnma$	232	$I\bar{4}2m$			77Ja; PH. 2
Cu_8SnS_6	?	328	?			89Al1
Cu_2Te	ortho.	463	ortho.	533	ortho.	

(continued)

	583	?	633	$P6_3/mmm$	748	cubic	89Vo
Cu_3Te_2		Pnnm	413	hex.	903	cubic	TA. 2
$Cu_{13}Te_7$		ortho.	?	monocl.			PH. 2
$CuZrF_6$?	353	hex.	383	Fm3m	83Fr
4,4'-dichlorobenzophenone							
		?	175	inc.	186	C2/c	90Wo
DCD = p-dichlorodurene							
		$P2_1/a$	161	$P2_1/a$	378	Pmnn	78Me; 90Ec
DCP = 3,5-dichloropyridine							
		?	167	?	287	$P2_1/m$	83Ro
DCPS = 4,4-dichlorodiphenyl sulfone							
				inc.	150	I2/a	90KaK
DGN - see: $(NH_2CH_2COOH)_2HNO_3$							
(DMET) $_2Au(CN)_2$ - see: $(C_{10}H_{10}S_4Se_2)_2Au(CN)_2$							
DMN = N,N,-dimethylnitramine				$P2_1/c$	107	$P2_1/m$	80Fi
DNP =				$P2_1$	31	$P2_1/n$	89ToB
DPH = 1,2-diphenylhydrazine				?	115	?	82Ma
DBr		$Bb2_1m$	94	Bbcm	120	Fm3m	t. 9. 2
DCI		$Pn2_1a$	104	Fm3m			t. 9. 2
D_2S		$P4_2$	108	Pa3	133	Fm3m	t. 9. 4
D_2Se		?	90	cubic	176	cubic	t. 9. 4
$D(UO_2AsO_4) \cdot 4D_2O$		$P\bar{1}$	290	tetr.			84Ha
$D(UO_2PO_4) \cdot 4D_2O$?	260	tetr.			84Ha
* Dy		$P6_3/mmc$	1243	?	1665	cubic	61Sp
* $DyAsO_4$		$P2_12_12_1$	2	Imma	11	$I4_1/amd$	72Go
* $DyCl_3$		Cmcm	?	C2/m			82Gar
DyF_3		Pnma	1303	$P\bar{3}c1$			LB. 7a
$Dy_2(MoO_4)_3$		Pba2	418	$P\bar{4}2_1m$			73Br
	and:	C2/c	1078	$P\bar{4}2_1m$	1303	cubic	73Br
$DyNbO_4$		C2/c	1143	tetr.			84Ku
* Dy_2O_3		Ia3	1950	C2/m	2190	$P\bar{3}m1$	
			?	hex.	2345	cubic	LB. 7b
$Dy_2Si_2O_7$		$P\bar{1}/P1$	1740	Pnam			70Fe
* $DyVO_4$		Imma	14	$I4_1/amd$			85Ta
	or:	?	230	$I4_1md$	300	$I4_1/amd$	90Hu

ErC ₂	ortho.	1423	I4/mmm	1583	Fm3m	TA. 3
ErF ₃	Pnma	1348	hex.			LB. 7a; 73So
ErMnO ₃	P6 ₃ mc	833	?			LB. 16b
ErNbO ₄	C2/c	1113	I4/a			89KoF
ErNiB ₄	?	?	I4/mmm			84Kuz
Er ₂ O ₃	Ia3	?	C2/m	2320	P3m1	
			?	hex.		LB. 7b
* ErOF	R3m	<870	Fm3m			76Pi
Er ₂ Si ₂ O ₇	P1	1323	B2/m	1673	P2 ₁ /a	73Sm
ErTi	tetr.	<300	Pm3m			85Kur
ErZrF ₆	P2 ₁	1223	cubic			73Pou
EuAlO ₃	ortho.	1603	trig.			84Co
EuAl ₃ (BO ₃) ₄	trig.	>1100	C2/c			88Be
EuF ₃	Pnma	973	P31c			73So
Eu ₂ (MoO ₄) ₃	Pba2	453	P4 ₂ 1m			
	and: C2/c	1154	P4 ₂ 1m			73Br
* EuMo ₆ S ₈	P1	110	R3			89Qu
* EuMo ₆ Se ₈	P1	110	R3			89Ku1
EuNbO ₄	C2/c	1103	tetr.	1183	?	84Ku
Eu ₃ Nb ₂ O ₇	Cmm2	210	Cmmm			85Ast
* Eu ₂ O ₃	Ia3	1050	C2/m	2040	P3m1	
		2140	hex.	2270	cubic	LB. 7b
EuP ₅ O ₁₄	P2 ₁ /c	391	Pmna			90Ca
Eu ₂ Si ₂ O ₇	P1/P1	1570	P4 ₁ 22	1690	Pnam ?	
		1750	?			70Fe
Eu ₂ TiO ₅	Pnam	?	hex.			84Su
EuVO ₄	?	230	I4 ₁ md	300	I4 ₁ /amd	90Hu
Ferrocene - see: Fe(C ₅ H ₅) ₂						
F ₂	C2/m	45	Pm3n			t. 9. 1
* Fe	Im3m	>1000	Fm3m	>1600	Im3m	79Ve
Fe ₃ B ₇ O ₁₃ Br	trig.	405	Pca2 ₁	495	F43c	LB. 16a
Fe ₃ B ₇ O ₁₃ Cl	R3c	528	m	543	Pca2 ₁	
		609	F43c			85Me
Fe ₃ B ₇ O ₁₃ I	R3c	205	Pa	218	Pca2 ₁	
		349	F43c			LB. 16a

(continued)

* $\text{Fe}(\text{C}_5\text{H}_5)_2$	tricl.	164	$\text{P2}_1/\text{a}$		t. 10. 6
and:	Pnma	250	$\text{P2}_1/\text{a}$		80Ber
$\text{Fe}_2(\text{CO})_5(\text{C}_5\text{H}_5)(\mu\text{-CO})[\mu\text{-C}(\text{C}_6\text{H}_5)\text{C}(\text{C}_6\text{H}_5)\text{H}]$	P1	163	P2	223 $\text{P2}_1/\text{n}$	89Sol
FeF_3	trig.	650	Pm3m		85Mog
FeLiO_2	?	?	Fm3m		78Zv
FeMnP	ortho.	?	monocl.		87Che
* FeMoO_4	monocl.	720	monocl.		68S1
FeMo_6S_8	tricl.	100	$\text{R}\bar{3}$	473 trig.?	84FrK
* Fe_2O_3	P2_13	?	Ia3	? $\text{R}\bar{3}\text{c}$	LB. 7b
* Fe_3O_4	Imma	119	Fd3m		LB. 7b
$\text{Fe}(\text{ptz})_6\text{BF}_4$	tricl.	130	$\text{R}\bar{3}$		87Wi
FePO_4	P3_12_1	980	P6_422		80Ko
$\text{FeRu}(\text{CO})_5(\text{C}_5\text{H}_5)(\mu\text{-CO})[\mu\text{-C}(\text{C}_6\text{H}_5)\text{C}(\text{C}_6\text{H}_5)\text{H}]$	P1	163	P2_1	223 $\text{P2}_1/\text{n}$	89Sol
* FeS	$\text{P}\bar{6}2\text{c}$	420	Pnma	600 $\text{P6}_3/\text{mmc}$	82K1
FeS_2	Pnnm	?	Pa3		81Ke
FeSe_2	Pnnm	?	Pa3		81Ke
FeSiI_2	ortho.	1255	tetr.		TA. 2
$\text{FeSiF}_6 \cdot 6\text{H}_2\text{O}$	tricl.	225	$\text{P}\bar{3}\text{m1}$		89Er
or:	$\text{P2}_1/\text{c}$	225	$\text{R}\bar{3}$		90Ch
FeTe_2	Pnnm	?	Pa3		81Ke
FeZrF_6	$\text{R}\bar{3}$	208	Fm3m		83May
GaF_3	trig.	1130	Pm3m		85Mog
GaMn_3C	I4/mcm	?	cubic		70Bar
GaMn_3N	cubic	298	Pm3m		70Bar
GaMo_4S_8	R3m	46	$\text{F}\bar{4}3\text{m}$		90Fr
GaMo_4Se_8	trig.	54	$\text{F}\bar{4}3\text{m}$		84Be
Ga_2O_3	trig.	923	monocl.		89ChH
GaPO_4	C222_1	900	$\text{F}\bar{4}3\text{m}$		80Ko
Ga_2Te_3	$\text{P}\bar{4}3\text{m}$	935	?		90BaA; PH. 3
* Gd	$\text{P6}_3/\text{mmc}$	1535	Im3m		61Sp
$\text{GdAl}_3(\text{BO}_3)_4$	R32	1315	C2		88Be
GdAlO_3	ortho.	1973	trig.		84Co
GdC_2	I4/mmm	1513	Fm3m		81Ke; TA. 3
GdCl_3	Ccmm	373	$\text{P6}_3/\text{m}$		65Ha
$\text{GdDy}(\text{MoO}_4)_3$	Pba2	428	$\text{P}\bar{4}2_1\text{m}$		
and:	C2/c	1111	$\text{P}\bar{4}2_1\text{m}$		71Br

GdF ₃	Pnma	1348	P $\bar{3}$ c1		73So
GdGe ₂	Imma	?	I4 ₁ /amd		81Ke
* Gd ₂ (MoO ₄) ₃	Pba2	432	P4 ₂ ₁ m		
and:	C2/c	1130	P4 ₂ ₁ m		71Br
GdNbO ₄	C2/c	1093	tetr.		84Ku
Gd ₃ NbO ₇	Cmm2	330	Cmmm		85Ast
Gd ₂ O ₃	Ia3	1573	C2/m	2443	P $\bar{3}$ m1
		2473	hex.	2633	cubic
* GdOF	R $\bar{3}$ m	877	Fm3m		73Ko
GdP ₅ O ₁₄	P2 ₁ /c	<440	Pncm		90Ca
Gd ₂ S ₃	ortho.	1485	cubic		90An
GdSi ₂	Imma	?	I4 ₁ /amd		81Ke
Gd ₂ Si ₂ O ₇	P $\bar{1}$ /P1	1700	Pnam/Pna2 ₁		70Fe
Gd ₃ TaO ₇	C222 ₁	1280	cubic		79Al
GdTl	tetr.	300	cubic		85Kur
GdVO ₄	?	230	I4 ₁ md	300	I4 ₁ /amd
GeF ₂	P2 ₁ 2 ₁ 2 ₁	335	tetr.		89De
GeMn ₃ C	I4/mcm	?	cubic		70Bar
* GeO ₂	P4 ₂ /mm	1320	P3 ₁ 21		LB. 7b1
* GeS ₂	Pc	?	P2 ₁ /a		87Z1
GeSe	Pcmn	930	Fm3m		87Z1
* GeSe ₂	P2 ₁ /c	?	Pmmn		87Z1
* GeTe	R3m	670	Fm3m		LB. 16b

HUAs - see: H₂UO₂AsO₄·4H₂O

HUP - see: H₂UO₂PO₄·4H₂O

hexachlorocyclopropane (HCCP) monocl. 285 ?

and: monocl. 301 ? 90Su

* 9-hydroxyphenalenone (9-HPLN)

P2₁ 255 P2₁/c 385 I2/c 84hpl

* HBr Bb2₁m 90 Bbcm 114 Pa $\bar{3}$

117 Fm $\bar{3}$ m 88Coc

H₂C₄O₄ - see: C₄H₂O₄

* HCl Bb2₁m 98 Fm3m LB. 16

HI ? 10 ? 25 Cmc2₁

70 Cmca 126 Fm3m 89Ts

H₂NCONHNH₂·HCl ? 43 ? 292 ?

(continued)

		294	$P2_1^2 2_1^2 2_1^2$			LB. 16b
* H_2O	Fm3m	70	hex.			88Si
$HOOC(CH_2)_4COOH$?	136	$P2_1/a$			880h
$H_3O_2AsO_4 \cdot 3H_2O$	- see: HUAs					
$H_3O_2PO_4 \cdot 3H_2O$	- see: HUP					
H_2S	$P4_2$	104	Pa3	126	Fm3m	t. 9. 4
H_2Se	?	82	cubic	173	cubic	t. 9. 4
$H(UO_2AsO_4) \cdot 4H_2O$?	253	Pccn?	301	$P4/ncc$	83Hal
$H(UO_2PO_4) \cdot 4H_2O$?	110	?	180	Pccn?	
		274	$P4/ncc$			89Col
* Hf	hex.	2223	Im3m			61Ta
$HfAl_3$	$I4/mmm$?	$I4/mmm$			TA. 3
$HfMo_2$	Fd3m	873	$P6_3/mmc$			61Ta
* HfO_2	$P2_1/c$	<470	$P4_2/nmc$	2970	Fm3m	LB. 7b1
HfV_2	- see: V_2Hf					
Hg_2Br_2	Cmcm	143	$I4/mmm$			81Bo
Hg_2Cl_2	Cmcm	185	$I4/mmm$			81Bo
* HgI_2	$P4_2/nmc$	399	$Cmc2_1$			LB. 7a
HgS	cubic	?	$P3_1 2_1$			
* Ho	$P6_3/mmc$	1239	?			61Sp
$HoAl_2$	ortho.	20	ortho.	31	cubic	88Ib
$HoCl_3$	Cmcm	433	$C2/m$			82Gar
HoF_3	Pnma	1343	$P\bar{3}1c$			73So
$HoMnO_3$	$P6_3mc$	873	?			LB. 16a
$Ho_2(MoO_4)_3$	Pba2	394	$P\bar{4}2_1m$			
	and: $P\bar{4}2_1m$	1126	Pnca			73Br
$HoNbO_4$	$C2/c$	1093	tetr.			84Ku
* Ho_2O_3	Ia3	2190	$C2/m$	2220	$P\bar{3}m1$	
		?	hex.			LB. 7b1
$Ho_2Si_2O_7$	$P\bar{1}/P1$	1270	$C2/m$	1540	$P2_1/a$	
		1793	Pnam			70Fe
Ho_3TaO_7	$C222_1$	1770	Fm3m			79Al
IF_7	Aba2	153	Im3m			LB. 7a
$InCl_2$	monocl.	?	Pnna			LB. 7a
InI	?	>300	?			

	and:	?	100	?		91Be
InMo_6S_8		tricl.	140	$\text{R}\bar{3}$	410 ?	PH. 1
$\text{In}_3\text{Sb}_5\text{O}_{12}$		Bm	170	$\text{R}3\text{m}$	413 $\text{R}\bar{3}\text{m}$	
			800	$\text{Im}3\text{m}$		89Gl
In_2Se_3		tetr.	148	trig.	213 ?	
			473	trig.	923 hex.	77Po
	or:	hex.	468	hex.	923 cubic	
			1023	monocl.		TA. 2
In_2Te_3		$\text{F}\bar{4}3\text{m}$	795	$\text{F}\bar{4}3\text{m}$		89Ga
InTl		tetr.	?	$\text{Pm}3\text{n}$		64Ba
IrF_6		Pnma	272	$\text{Im}3\text{m}$		LB. 7a
KAg_4I_5		?	51	hex. ?	<139 trig. ?	
			?	cubic?		90Ak
KAlF_4		$\text{P}2_1/\text{m}$	250	$\text{P}4/\text{mbm}$		85LaB
K_3AlF_6		$\text{I}4/\text{mmm}$	575	$\text{Fm}3\text{m}$		81Zai
$\text{K}_3\text{AlH}_4\text{F}_2$		ortho.	?	cubic		87BaC
* KAlSiO_4		$\text{P}6_3$	1159	$\text{P}2_12_12_1$		90PaC
KAlSi_2O_6		tetr.	878	cubic		84To1
* KAsF_6		$\text{R}\bar{3}$	363	$\text{Fm}3\text{m}$		75He
* KBF_4		Pnma	558	$\text{F}\bar{4}3\text{m}$		LB. 7a
KBH_4		$\text{F}\bar{4}3\text{m}$	77	$\text{Fm}3\text{m}$		t. 7. 11
$\text{K}_2\text{BaCo}(\text{NO}_2)_6$		ortho.	?	$\text{Fm}3\text{m}$		75Ta
$\text{K}_2\text{Ba}(\text{NO}_2)_4$?	203	Pbam	420 $\text{P}6_3/\text{mmm}$	78Iv; 90P1
$\text{K}_2\text{Ba}_4\text{Nb}_{10}\text{O}_{30}$		$\text{P}4\text{bn}$	665	?		89Bun
K_2BeF_4		$\text{Pn}2_1\text{a}$	968	Pnma		65Mu
KBiF_4		hex.	588	cubic		83Mat
KBiF_6		$\text{Ia}3$?	$\text{P}\bar{4}\text{c}2$		LB. 7a
$\text{KBi}(\text{MoO}_4)_2$		$\text{P}2_1/\text{c}$	650	$\text{I}4_1/\text{a}$		77K1
$\text{K}_2\text{Bi}_3(\text{PO}_4)_3\text{O}$		$\text{P}2_1\text{ca}$	745	Pnma		86De
$\text{K}_3\text{Bi}_2(\text{VO}_4)_3$?	788	?		86Dr
$\text{KBi}(\text{WO}_4)_2$		$\text{I}2/\text{c}$?	?	? ?	77K1
* KCN		Pmmn	83	Immm	168 $\text{Fm}3\text{m}$	85E1
KCaCl_3		Pnma	808	$\text{P}4/\text{mbm}$	908 $\text{Pm}3\text{m}$	79M1
KCaF_3		Pnma	551	Bbmm	565 $\text{Pm}3\text{m}$	84HiY; 91Ri
$\text{K}_2\text{Ca}_2(\text{SO}_4)_2$		tetr.	457	$\text{P}2_13$		88O1

(continued)

KCdF ₃		Pnma	471	Bmmb	485	Pm3m	89ChV
K ₂ Cd ₂ (SO ₄) ₃		P2 ₁ 2 ₁ 2 ₁	432	P2 ₁ 3			89V1
KCeF ₄		Pnma	1028	Fm3m			LB. 7a
KCe(MoO ₄) ₂		monocl.	?	I4 ₁ /a			77K1
KCe(WO ₄) ₂		I2/m	1023	I4 ₁ /a			77K1
* KClO ₃		P2 ₁ /m	520	Pnma			76P1
	or:	Pcmm	545	?			89BrS
* KClO ₄		Pnma	574	Fm3m			t. 7. 11
K ₂ CoBr ₄	[α]	P2 ₁	143	P2 ₁ /m	473	Pmcn	91Sh
	[β]	?	183	P2 ₁ cn	300	Pmcn	
			555	Pnma			90Suz; 91Sh
* K ₃ Co(CN) ₆	[1M]	?	63	P2 ₁ /c			
	[20r]	P2 ₁ /n	81	Pnca			87Sa
K ₂ CoCl ₄	[A]	P2 ₁ /c	903	Pna2 ₁			80Ar
	[B]	?	142	P2 ₁ cn	454	inc.	
			558	?			89Suz
KCoF ₃		tetr.	135	Pm3m			81Zai
K ₄ Co(MoO ₄) ₃		P $\bar{1}$	770	ortho.			89K1
KCoPO ₄		ortho.	?	P6 ₃			80Ar
K ₂ Co ₂ (SO ₄) ₃		P2 ₁ 2 ₁ 2 ₁	125	P2 ₁ 3			84Br
K ₃ Cr(CN) ₆		P2 ₁ /c	298	Pnca			87De
KCrF ₃		I4/mcn	643	Pm3m			LB. 7a
KCrF ₄		hex.	1069	P6 ₃ /m			LB. 7a
K ₂ CrF ₆		?	446	?	495	Fm3m	LB. 7a
* K ₂ CrO ₄		Pnam	960	P6 ₃ /mmc			86Ru
K ₂ Cr ₂ O ₇		P $\bar{1}$	526	P2 ₁ /c			89Hes
K ₄ Cu(MoO ₄) ₃		monocl.	593	ortho.	713	hex.	89K1k
* K ₃ Cu ₈ S ₆		inc.	153	monocl.			89Rag
K ₄ Cu(WO ₄) ₃		tricl.	803	monocl.			89K1k
KD ₂ AsO ₄		Fdd2	161	I4 $\bar{2}$ d			t. 7. 14
KD ₃ (SeO ₃) ₂		P2 ₁ /b	296	Pbcn			LB. 16b
KDy(WO ₄) ₂		C2/c	1298	?			68Sp
	or:	I2/c	?	Pcan			77K1
KEr ₂ F ₇		monocl.	?	P2 ₁ cn			80A1
K ₃ ErF ₆		P2 ₁ /n	548	?	668	?	
			723	?			79Re
KEr(WO ₄) ₂		C2/c	1213	?			68Sp
	or:	I2/c	?	Pcan			77K1

$\text{KEu}(\text{MoO}_4)_2$	$\text{P}\bar{1}$	1133	$\text{P2}_1/\text{c}$	1250	Pcan	
		>1250	Pnnn	?	?	77K1
$\text{KEu}(\text{WO}_4)_2$	$\text{C2}/\text{c}$	1283	?			68Sp
or:	$\text{I2}/\text{c}$?	Pcan	?	$\text{I4}_1/\text{a}$	77K1
$\text{K}_3\text{Fe}(\text{CN})_6$	$\text{P2}_1/\text{c}$	134	Pnca			84SaM
* $\text{K}_3\text{Fe}(\text{CN})_6 \cdot 3\text{H}_2\text{O}$	Cc	249	$\text{C2}/\text{c}$			LB. 16. b
or:	tetr.	218	$\text{C2}/\text{c}$			90KrS
KFeCl_3	ortho.	?	hex.			80V1
KFeF_3	trig.	121	Pm3m			LB. 7a
KFeF_4	$\text{Pm2}_1/\text{n}$	368	Amm	563	Amm	89Sc2; 89Hid
K_3FeF_6	$\text{P4}/\text{mnc}$	413	Fm3m			LB. 7a
$\text{K}_3\text{Fe}_5\text{F}_{15}$	Pba2	490	$4/\text{mmm}$			89RaA
$\text{KFe}(\text{MoO}_4)_2$	$\bar{1}$	139	$\text{C2}/\text{m}$	311	$\text{P}\bar{3}\text{c1}$	83Du
KGaF_4	Pnma	465	?			89CoR
KGaF_6	?	445	?	512	Fm3m	
		1283	?			LB. 7a
K_3GdF_6	?	768	?			73Ko
$\text{KGd}(\text{MoO}_4)_2$	$\text{P}\bar{1}$?	$\text{P2}_1/\text{c}$?	Pcan	
		?	Pnnn	?	?	77K1
$\text{KGd}(\text{WO}_4)_2$	$\text{C2}/\text{c}$	1278	?			68Sp
or:	$\text{I2}/\text{c}$?	Pcan	?	$\text{I4}_1/\text{a}$	77K1
* KHASO_4	Fdd2	96	$\text{I}\bar{4}2\text{d}$			t. 7. 14
KHCO_3	$\text{P2}_1/\text{a}$	318	$\text{C2}/\text{m}$			90KaY
* KHF_2	$\text{I4}/\text{mcm}$	469	Fm3m			LB. 7a
* KH_2PO_4	Fdd2	123	$\text{I}\bar{4}2\text{d}$	450	$\text{P2}_1?$	
		506	?			LB. 16b
KHS	trig.	453	Fm3m			70A1
KHSO_4	Pbca	448	?			76Pay
KHSe	trig.	>300	Fm3m			70A1
$\text{KH}_3(\text{SeO}_3)_2$	$\text{P2}_1/\text{b}$	211	Pcan			LB. 16. b
$\text{K}_3\text{H}(\text{SeO}_4)_2$?	20	$\text{A2}/\text{a}$	390	$\text{R}\bar{3}\text{m}$	85Ko
K_3HfF_7	ortho.	275	tetr.	?	cubic	89Dov
$\text{K}_2\text{HfW}_5\text{O}_{18}$?	503	?	973	P6_322	90St
* $\text{K}_2\text{Hg}(\text{CN})_4$	$\text{R}\bar{3}\text{c}$	110	$\text{Fd}\bar{3}\text{m}$			89Pow
$\text{KHo}(\text{WO}_4)_2$	$\text{C2}/\text{c}$	1298	?			68Sp
or:	$\text{I2}/\text{c}$?	Pcan			77K1
KIO_3	?	83	?	255	P1	
		343	Cm	485	R3m	LB. 16b

(continued)

* $\text{KIO}_3 \cdot \text{HIO}_3$	P2_1	223	$\text{P2}_1/\text{c}$		83PeV
K_3InCl_6	tetr.	670	tetr.		LB. 7a
$\text{KIn}(\text{WO}_4)_2$	$\text{I2}/\text{c}$	354	Pcmn	1123 $\text{P}\bar{3}\text{m1}$	77K1
$\text{KLa}(\text{MoO}_4)_2$	monocl.	?	tetr.		90MaP
$\text{KLa}(\text{WO}_4)_2$	$\text{I2}/\text{m}$	1020	$\text{I4}_1/\text{a}$		77K1
K_2LiAlF_6 - see: LiK_2AlF_6					
KLiCrO_4	$\text{P2}_1\text{nb}$	668	$\text{P2}_1/\text{n}$	700 P6_3	
		713	?		88K1
$\text{K}_4\text{LiH}_3(\text{SO}_4)_4$?	114	P4_1	472 ?	89PiB
$\text{K}_4\text{LiH}_3(\text{SeO}_4)_4$	P4_1	469	?		91Pi
KLiMoO_4	$\text{P2}_1/\text{n}$	643	P6_3	689 P1	
		701	$\text{F}\bar{4}3\text{m}$		88K1M
$\text{K}_3\text{Li}_2\text{Nb}_5\text{O}_{15}$	P4bm	703	?		LB. 16a
KLiSO_4 - see: LiKSO_4					
$\text{K}_3\text{Li}_2\text{Ta}_5\text{O}_{15}$	ortho.	7	tetr.		72Ya
KLiWO_4	$\text{P2}_1/\text{n}$	633	P1	688 $\text{F}\bar{4}3\text{m}$	88K1M
$\text{KLu}(\text{MoO}_4)_2$	Pcan	1098	?		68K1
$\text{K}_3\text{Lu}(\text{PO}_4)_2$	$\text{P}\bar{3}$?	44	$\text{P2}_1/\text{m}$	159 Cc	
		241	$\text{P}\bar{3}$		88Ro
$\text{K}_3\text{Lu}(\text{WO}_4)_2$	$\text{I2}/\text{c}$?	Pcan	1330 $\text{P}\bar{3}\text{m1}$	77K1
KMgCl_3	monocl.	415	Pnma	485 Cmcm	
		497	$\text{P4}/\text{mbm}$	569 Pm3m	79Mi
KMgH_2F	tetr. ?	328	?	450 ?	90Bou
$\text{K}_2\text{Mg}_2(\text{SO}_4)_3$?	51	?	55 ?	
		64	?		90Boe
KMnCl_3	cubic	100	tetr.	731 cubic	78Fe
KMnF_3	monocl.	?	Pnmb	88 tetr.	
		186	cubic		89Le
* $\text{K}_2\text{Mn}_2(\text{SO}_4)_3$	$\text{P2}_12_12_1$	201	P2_13		LB. 16b
K_2MoO_4	$\text{C2}/\text{m}$	593	Ccmn	733 hex. ?	83Tu, 70Ak
$\text{K}_3\text{MoO}_3\text{F}_3$?	453	3	528 $\text{m}\bar{3}\text{m}$	91Ye
* KNO_2	monocl.	223	$\text{P2}_1/\text{c}$	264 $\text{R}\bar{3}\text{m}$	
		315	Fm3m		89ScR
* KNO_3	Pnma	401	$\text{R}\bar{3}\text{m}$		LB. 16b
(on cooling):	Pnma	388	R3m	398 $\text{R}\bar{3}\text{m}$	LB. 16b
$\text{K}_3\text{Na}(\text{CrO}_4)_2$	$2/\text{m}$	239	$\bar{3}$		90Kra
K_2NaDyF_6	tetr.	480	cubic		85Go

KNbCl ₆	cubic	429	hex.	572	Fm3m	
		607	?			87Po, 78Sa
KNbO ₃	R3m	263	Bmm2	498	P4mm	
		708	Pm3m			LB. 16a
KNbW ₂ O ₉	?	523	?	545	?	
	593	?	655	P6 ₃	835	P6 ₃ 22
KNd(MoO ₄) ₂	P2 ₁ /c	?	I4 ₁ /a			77Yb
KNd(WO ₄) ₂	C2/m	1090	I4 ₁ /a			77K1
KNiCl ₃	P6 ₃ mc	560	hex.	753	hex.	80V1
* KO ₂	P1	?	C2/c	?	inc.	
		?	I4/mmm	>273	Fm3m	81Ke
K ₂ O·Al ₂ O ₃ ·4SiO ₂	I4 ₁ /a	897	cubic			85KoN
KOH	P2 ₁ /a	233	P2 ₁ /m	493	Fm3m	84Haa; 87BaE
K ₂ OsCl ₆	tetr.	43	cubic			85Ra
* KPF ₆	?	259	trig.	274	Fm3m	74He
KPO ₃	P2 ₁ /a	524	P2 ₁ /a	722	Pbnm	
		923	Bbmm			85Sch
K ₂ PbCl ₆	P2 ₁ /n	333	Fm3m			LB. 7a
K ₂ PbCu(NO ₂) ₆	P1	273	Fmmm	281	Fm3m	81Pa
K ₂ Pb ₄ Nb ₁₀ O ₃₀	ortho.	735	tetr.			84Mo
K ₃ PdH ₃	P4 ₂ /mnm	5000	Pm3m			90BrA
KPr(MoO ₄) ₂	monocl.	?	I4 ₁ /a			77K1
KPr(WO ₄) ₂	I2/m	1070	I4 ₁ /a			75K1
K ₂ PtBr ₆	?	<195	Fm3m			81Ab
K ₂ PtD ₄	P4 ₂ /mnm	195	Fm3m			90BrJ
K ₂ ReBr ₆	?	269	Fm3m			89Ku
K ₂ ReCl ₆	Pn3	76	monocl.	103	tetr.	
		111	Fm3m			81Ab
K ₂ ReI ₆	P.cn	474	Fm3m			79Ku
K ₄ Ru(CN) ₆ ·3H ₂ O	?	259	C2/c			76Mi
* KSCN	Pbcm	412	I4/mcm			87Ya
KSH - see: KHS						
* K ₂ SO ₄	?	56	Pmcn	855	P6 ₃ /mmc	81Ar; 82GeT
* KSbF ₆	I23	289	P4 ₂ /mcm			76He
KSbO ₃	?	?	I2/m			90Sc
KSbOSiO ₄	ortho.	625	ortho.			91Ra
KSc(MoO ₄) ₂	C2/c	181	C2/m	258	P3m1	85Za

(continued)

KSc(WO ₄) ₂	P $\bar{1}$	288	C2/c	306	P $\bar{3}m1$	90Za
K ₅ Se ₃	C2/m	470	I4/m			88Sc; 91Sch
K ₂ SeBr ₆	P2 ₁ /n	162	C2/c	221	P4/mnc	
		235	Fm3m			80No
K ₂ SeO ₄	?	56	Pna2 ₁	93	P(Pnam)/($\bar{1}ss$)	
		130	Pnam	745	P6 ₃ /mmc	LB. 16b; 89PeM
K ₄ Si ₈ O ₁₈	P $\bar{1}$	869	B2/m11			74Sc
KSm(MoO ₄) ₂	P2 ₁ /c	?	Pcan	?	I4 ₁ /a	77K1
KSm(WO ₄) ₂	C2/c	?	Pbcn	?	I4/a	75K1
K ₂ SnBr ₆	P42 ₁ 2	126	Fm3m			LB. 7a
K ₂ SnCl ₆	P2 ₁ /n	255	C2/c	261	P4/mnc	
		262	Fm3m			84IhA
KSnI ₃	?	342	?			90Ya
KTaCl ₆	hex.	138	?	311	?	
		373	?			78Sa
* KTaO ₃	trig.	280?	Pm3m			71Ab
K ₃ TbF ₆	ortho.	588	tetr.	698	cubic	81Zai
KTb(MoO ₄) ₂	P $\bar{1}$?	Pcan			77K1
KTb(WO ₄) ₂	I2/c	1025	Pcan	?	I4 ₁ /a	77K1
K ₂ TeBr ₆	P2 ₁ /n	410	P4/mnc	445	Fm3m	84Zai
KTiF ₄	ortho.	490	Amma ?			89Sc2
KTiOAsO ₄	Pna2 ₁	1153	?			91MoK
* KTiOPO ₄	Pna2 ₁	1205	Pnam			89MaB
KTm(MoO ₄) ₂	Pcan	788	?	913	?	68K1
KTm(WO ₄) ₂	I2/c	1030	Pcan			77K1
KUO ₂ PO ₄ ·3H ₂ O	?	>100	?	230	P4/ncc	85Ph
KVF ₄	ortho.	530	Amma ?			89Sc2
K ₂ VF ₆	P $\bar{3}m1$?	P6 ₃ mc			LB. 7a
K ₂ WO ₄	C2/m	643	Pnma	707	hex. ?	70Ak; 83Tu
K ₃ WO ₃ F ₃	trig.	?	cubic			
KY(WO ₄) ₂	I2/c	?	Pcan			77K1
KYb(MoO ₄) ₂	Pcan	1148	?			68K1
KYb(WO ₄) ₂	I2/c	1030	Pcan	?	P $\bar{3}m1$	77K1
K ₂ ZnBr ₄ [α]	P2 ₁	155	P2 ₁ /m	473	Pmcn	90Sh; 91Sh
[β]	?	190	?	290	Pmcn	
		560	Pmcn			91Sh
* K ₂ ZnCl ₄	?	90	A1a1	145	Pna2 ₁	

	403	$P(\text{Pnam})/(\bar{1}ss)$	553	Pnam	89Ty; 90Sh
$\text{K}_4\text{Zn}(\text{MoO}_4)_2$		monocl. ? $\text{P2}_12_12_1$	638	hex.	89K1K
KZnPO_4		ortho. ? P6_3			80Sa
* $\text{K}_2\text{Zn}_2(\text{SO}_4)_3$		$\text{P2}_12_12_1$ 87 P1 ?	?	P2_1 ?	
		137 P2_13			80Hi
K_3ZrF_7		ortho. 300? tetr.	?	cubic ?	89Dov
$\text{K}_2\text{ZrSi}_2\text{O}_7$		$\text{P2}_1/b$? $\text{C2}/m$?	$\text{R}\bar{3}m$	73Vo
$\text{K}_2\text{ZrW}_5\text{O}_{18}$? 498 ?	1053	P6_322	90St

LAT - see: $\text{LiNH}_4\text{C}_4\text{H}_4\text{O}_6 \cdot \text{H}_2\text{O}$

* La	Fm3m	583	$\text{P6}_3/\text{mmc}$	609	Fm3m	
		1138	Im3m			86Ol; 89Lu
LaAlO_3	$\text{R}\bar{3}m$	795	Pm3m			72Fe; 91BeV2
LaAs_2	$\text{P2}_1/c$	1023	(Cc)B2/b			81Ke; PH. 3
LaC_2	$\text{I4}/\text{mmm}$	1333	Fm3m			68Bo
* LaCd	tetr.	50	cubic			81Pe
LaCrO_3	ortho.	553	trig.	1303	cubic	72Fe
LaCu_6	$\text{P2}_1/c$	480	Pnma			89Vr
La_2CuO_4	ortho.	>450	$4/\text{mmm}$			90ScC
LaF_3	?	210	?	>260	$\text{P}\bar{3}c1$	
		380	?			89AlA
LaFeO_3	monocl.	1253	cubic			72Fe
LaGaO_3	Pbnm	418	trig.			72Fe
LaIr_2Si_2	$\text{I4}/\text{mmm}$	2003	$\text{P4}/\text{mmm}$			83Br
$\text{LaMn}_3\text{Mn}_4\text{O}_{12}$	monocl.	690	cubic			90Tr
$\text{La}_2(\text{MoO}_4)_2$	$\text{C2}/c$	1121	$\text{I4}_1/a$			73Br
LaNbO_4	$\text{C2}/c$	793	$\text{I4}/a$			89KoF
La_2NiO_4	$\text{P4}_2/\text{ncm}$	80	ortho.	240	$\text{I4}/\text{mmm}$	89Sae
or:	$\text{P4}_2/\text{ncm}$	80	Bmab	770	$\text{I4}/\text{mmm}$	90KrM; 91Fe
La_2O_3	Ia3	770	$\text{P}\bar{3}m1$	2313	hex.	
		2383	cubic			LB. 7b1
* LaOF	$\text{R}\bar{3}m$	>670	Fm3m			76Pi
* $\text{LaP}_5\text{O}_{14}$	$\text{P2}_1/c$	399	Pncm			90Ca
LaS_2	tricl.?	>300	Pnma			81Ke
La_3S_4	cubic?	100	tetr.?			81Ei

(continued)

$\text{La}_3\text{Sb}_5\text{O}_{12}$	<i>inc.</i>	400	$\bar{I}43m$			89G1
La_3Se_4	cubic ?	65	tetr. ?			81Ei
$\text{La}_2\text{Si}_2\text{O}_7$	$P4_1$	1623	$P2_1/c$			90OB
LaTaO_4	$P2_1/c$	448	$A2_1am$			81Cav
La_3TaO_7	Cmcm	1270	cubic			79A1
$\text{La}_2\text{Ti}_2\text{O}_7$	$P2_1$	1770	?			LB. 16a
LaYbO_3	ortho.	?	cubic			LB. 4a
* Li	hex.	80	$Im3m$			86Be
LiAgSO_4	?	690	$\bar{I}43m$	847	?	tab. 6. 1
Li_3AlF_6	$Pna2_1$	483	$C2/c$	788	$P2_13$	
		877	$Ia3d$	978	cubic	LB. 7a; 68Bu
* LiAlO_2	tetr.	?	$P3_221$			82Pr
LiAlSiO_4	$P6_222$	650	<i>inc.</i>	720	$P6_222$	84Hau
* LiBH_4	$Pnma$	382	$I4_1 ?$			t. 7. 11
$\text{Li}_2\text{B}_4\text{O}_7$?	95	?	118	?	
			?	$I4_1cd$		89Zar
LiBaPO_4	?	903	?	1243	?	
		1323	?			88Amm
Li_2BeF_4	$R\bar{3}$	449	?	563	trig.	
		635	cubic			LB. 7a
LiCdBO_3	$I\bar{1}$	1030	$P3/m$			85Bu
or:	monocl.	960	$P\bar{6}$			90WeL
Li_2CdCl_4	$Fd3m$	620	$Fm3m$			88KaT
LiCdPO_4	$Pna2_1$	1129	?	1163	?	88Amm
$\text{LiCe(WO}_4)_2$	$P\bar{1}$	988	$I4_1/a$			79K1
Li_2CoCl_4	$Imma$	581	$Fd3m$			87Ka
Li_6CoCl_8	$Fm3m$	623	cubic?			87Ka
Li_2CrCl_4	$C2/c$	495	$Imma$?	673	$Fm3m$	88KaT
* Li_2CrO_4	$R\bar{3}$	713	?			67Pi
LiCsBeF_4	$P2_1/n$	346	$Pc2_1n$			72ChT
LiCsCrO_4	?	170	$P2_1/b$	427	$Pnma$	
		573	cubic			87K1; 87Mou
LiCsSO_4	$P112_1/n$	203	$Pmcn$			81Pi
LiCsSeO_4	?	120	ortho. ?			87Mou
$\text{LiDy(WO}_4)_2$	$P2/c$?	$P2/n$	1120	$I4_1/a$	74Tr
$\text{LiEr(WO}_4)_2$	$P2/c$	1140	$P2/n$	1230	$I4_1/a$	74Tr
$\text{LiEu(WO}_4)_2$	$P2/c$	1000	$I4_1/a$			74Tr

Li ₂ FeCl ₄	Imma	399	cubic			88Kan	
LiFeGe ₂ O ₆	P2 ₁ /n	20	P2 ₁ /c	?	C2/c	90Be	
LiFeO ₂	I4 ₁ amd	?	I4 ₁ amd	?	Fm3m	80Ha	
Li ₃ Fe ₂ (PO ₄) ₃	P2 ₁ /n	508	P2 ₁ /n	533	Pcan	90By	
LiFeSi ₂ O ₆	P2 ₁ /c	228	C2/c			90Be	
Li ₃ GaF ₆	Pna2 ₁	798	C2/c			LB. 7a	
LiGd(WO ₄) ₂	P2/c	1020	I4 ₁ /a			74Tr	
Li ₂ Ge ₇ O ₁₅	?	135	Pbc2 ₁	280	Pbcn	89SaT	
LiHS	?	228	P4 ₂ /mmc			89Ja1	
* LiH ₃ (SeO ₃) ₂	?	353	amorphous			89It	
LiHo(WO ₄) ₂	P2/c	1123	P2/n	1143	I4 ₁ /a	74Tr	
LiIO ₃	P6 ₃	520	Pna2 ₁	560	P4 ₂ /n	86Bou	
Li ₃ InF ₆	?	688	?	778	?	70Gr	
LiIn(MoO ₄) ₂	C2/c	?	?			77K1	
Li ₃ In ₂ (PO ₄) ₃	monocl.	380	R $\bar{3}$?	420	?	87Ge; 90PrS	
LiK ₂ AlF ₆	R $\bar{3}$ m	743	P3m1			LB. 7a	
LiKCrO ₄ - see: KLiCrO ₄							
Li ₄ K ₆ Nb ₁₀ O ₃₀	tetr.	743	tetr. ?			73Iz	
* LiKS ₄ slow cooling:			?	38	?		
		56	P2 ₁	140	Cc		
	190	P31c	245	P6 ₃	711	ortho.	85BhT; 85CaT;
	948	P6 ₃ /mmc					86BhT; 91BhT
LiKSeO ₄	monocl.	498	P6 ₃	565	P6 ₃	78G1	
LiLa(MoO ₄) ₂	Pcab	1003	I4 ₁ /a			73K1	
* LiLa(WO ₄) ₂	P $\bar{1}$	993	I4 ₁ /a			79K1	
LiLu(WO ₄) ₂	P2/c	1113	P2/n	1270	I4 ₁ /a	74Tr	
Li ₂ MgCl ₄	Fd3m	791	Fm3m			88KaT	
Li ₂ MnBr ₄	ortho.	545	Fd $\bar{3}$ m	758	Fm $\bar{3}$ m	90Lu1	
Li ₂ MnCl ₄	Fd3m	900	Fm3m			88KaT	
LiMnFeF ₆	P321	833	P321			81Co	
Li ₂ MoO ₃	monocl.	?	cubic			88St	
Li(NH ₃) ₄	?	82	?			84Hs	
LiNH ₄ C ₄ H ₄ O ₆ ·H ₂ O (LAT)			P12 ₁	106	P2 ₁ 2 ₁ 2	LB. 16b	
LiNH ₄ SO ₄ [α]	?	255	Pmc2 ₁	350	β(P2 ₁ cn)	91HiP	
* [β]	Cc	27	P2 ₁ /c	284	P2 ₁ cn		
		460	Pmcn			88To	
LiNH ₄ SeO ₄ [α]	?	200	Pca2 ₁	350	β	91Hi	

(continued)

	[β]	?	>375	?			91Hi
		?	113	Pcca			90Vok
		ortho.	542	?	674	ortho.	88LiX
		P31c	794	Im3m			86Lu
		R3c	1480	R $\bar{3}$ c			LB. 16a
*		P $\bar{1}$	998	I4 $_1$ /a			79K1
		P4 $_2$ /ncm	70	Abma			90Ri
		P6 $_3$ /mmc	?	tetr. ?			81Ke
		?	670	?	1440	?	86To
		Pna2 $_1$	733	?	1179	?	88Amm
*		P $\bar{1}$	970	I4 $_1$ /a			79K1
		P6 $_3$	710	Pc2 $_1$ n			70Ro; 72Ch
		P31c	550	P6 $_3$	606	Pcmn	
			843	P6 $_3$ /mmc			91MaV; 91Kr
		- see: Rb $_4$ LiH $_3$ (SO $_4$) $_4$					
		P112 $_1$ /n	439	P11n	458	P2 $_1$ /c11	
		475	P2 $_1$ cn	?	inc.	477	Pmcn
		?	430	?	520	?	89Gan
		P2 $_1$ /c	848	cubic			91Pi
		P2 $_1$ /n	460	P2 $_1$ /n	518	Pcan	67Pi
		R $\bar{3}$	926	?			90By
		P $\bar{1}$	943	I4 $_1$ /a			67Pi
		P $\bar{3}$ 1m	783	P2 $_1$ /c			79K1
		monocl.	?	hex.			LB. 7a
		?	773	?	923	?	88St
		1063	?	1203	?	1288	?
		R3	895	R $\bar{3}$			88Amm
		C2/c	?	P2			87Vo
		?	933	?			83Zo
		I4 $_1$ /a	3	?			88KaA
		P2/c	?	P2/n	1047	I4 $_1$ /a	85Do
		Fd3m	848	Fm3m			74Tr
		monocl.	10	P2 $_1$ 2 $_1$ 2			87MeS
		Pnnm	?	I4 $_1$ /amd	?	Fm3m	LB. 16b
		P2/c	1133	P2/n	1270	I4 $_1$ /a	76Pi
		cubic	?	cubic			74Tr
		Pna2 $_1$	583	C2/c	838	?	87Ka
							LB. 7a

* Li_2WO_4	$\text{I4}_1/\text{amd}$	573	$\text{R}\bar{3}$			76P1
$\text{LiY}(\text{WO}_4)_2$	$\text{P2}/\text{c}$	988	$\text{P2}/\text{n}$	1177	$\text{I4}_1/\text{a}$	74Tr
$\text{LiYb}(\text{WO}_4)_2$	$\text{P2}/\text{c}$	1120	$\text{P2}/\text{n}$	1270	$\text{I4}_1/\text{a}$	74Tr
Li_2ZnCl_4	$\text{Fd}3\text{m}$	488	Pbnm			88Lu
LiZnPO_4	monocl.	728	?	995	?	88Amm
$\text{Li}_4\text{Zn}(\text{PO}_4)_2$	C222_1	718	ortho.	1357	?	86To
$\text{LiZr}_2(\text{PO}_4)_3$ (1170K)			$\text{P2}_1/\text{n}$	573	Pcan	
(1470K)			Cc	303	$\text{R}\bar{3}\text{c}$	89Su
* $\text{LnP}_5\text{O}_{14}$	$\text{C2}/\text{c}$?	ortho.			78Sc
Lu	hex.	1680	?			61Sp
LuC_2	$\text{I4}/\text{mmm}$	1773	$\text{Fm}\bar{3}\text{m}$			PH. 2
LuF_3	Pnma	1118	$\text{C}\bar{3}\text{m1}$			73So
LuMnO_3	$\text{P6}_3\text{cm}$	573	?			LB. 16a
LuNbO_4	$\text{C2}/\text{c}$	1088	tetr.			84Ku
LuZrF_6	P2_1	1023	cubic			73Pou
* $\text{MEM}-(\text{TCNQ})_2$	tricl.?	335	tricl.			85B1V
$\text{Mg}_3\text{B}_7\text{O}_{13}\text{Br}$	ortho.	292	cubic			LB. 16a
$\text{Mg}_3\text{B}_7\text{O}_{13}\text{Cl}$	Pca2_1	538	$\text{F}\bar{4}3\text{c}$			LB. 16a
Mg_3Bi_2	$\text{P}\bar{3}\text{m1}$	976	?			TA. 3
$\text{Mg}_7\text{Cl}_2\text{B}_{16}\text{O}_{30}$	ortho.	538	cubic			
MgCrO_4	$\text{C2}/\text{m}$?	Cmcm			69Mu
MgGa_2O_4	?	770	cubic			85Ta
* Mg_2GeO_4	$\text{Fd}\bar{3}\text{m}$	1080	Pbnm			87Ros
* Mg_2NiH_4	ortho.	507	cubic			84Se
$\text{Mg}_2\text{P}_2\text{O}_7$	$\text{B2}_1/\text{c}$	341	$\text{C2}/\text{m}$			65Ca
MgSO_4	Cmcm	?	Pnma			58Re; 62Co
Mg_3Sb_2	$\text{P}\bar{3}\text{m1}$	1023	cubic			TA. 2
$\text{MgSiF}_6 \cdot 6\text{H}_2\text{O}$	$\text{P2}_1/\text{c}$	298	$\text{R}\bar{3}\text{m}$	336	$\text{R}\bar{3}$	89Hr
MgSiO_3	$\text{P2}_1/\text{c}$?	Pbca	1270	Pbcn	85Sc
Mg_2TiO_4	$\text{Fd}3\text{m}$	>700?	P4_122			84We
Mn	I43m	1000	P4_13	1367	$\text{Fm}3\text{m}$	
		1408	$\text{Im}3\text{m}$			59Ro
* MnAs	$\text{P6}_3/\text{mmc}$	318	ortho.	398	$\text{P6}_3/\text{mmc}$	82Su
$\text{Mn}_3\text{B}_7\text{O}_{13}\text{Br}$	Pca2_1	548	$\text{F}\bar{4}3\text{c}$			84Ca
$\text{Mn}_3\text{B}_7\text{O}_{13}\text{Cl}$	Pca2_1	680	$\text{F}\bar{4}3\text{c}$			84Ca
$\text{Mn}_3\text{B}_7\text{O}_{13}\text{I}$	Pca2_1	404	$\text{F}\bar{4}3\text{c}$			84Ca
MnF_2	$\text{P4}_2/\text{mnm}$	970	cubic			79Ve

(continued)

MnNi	P4/mmm	973	Pm3m		89Vin
* MnO	trig.	118	Fm3m		88ShF
Mn ₂ O ₃	Pbca	302	Ia3		LB.7b1
Mn ₃ O ₄	I4 ₁ /amd	1443	Fd3m		LB.7b1
MnOOH	Pbnm	?	$\bar{3}2m$		68G1
MnPd	P4/mmm	?	Pm3m		78Pe
MnRh	P4/mmm	?	Pm3m		78Pe
MnS	trig.	162	Fm3m		90Ma
MnSb ₂ O ₄	ortho.?	115	P4 ₂ /mbc		83Ga
MnSiF ₆ ·6D ₂ O	P2 ₁ /c	244	P $\bar{3}$		91Che
MnTiF ₆ ·6H ₂ O	tricl.	250	R $\bar{3}$		88Ch
Mo ₂ C	ortho.	1493	ortho.	1713	P3 ₁ 21 TA.3
MoF ₆	Pnma	264	Im3m		LB.7a
MoGe ₂	?	?	tetr.		81Ke
* Mo ₄ O ₁₁ (γ)	?	100	ortho.		85Gu
(η)	inc.	30	monocl.	109	monocl. 85Gu
MoOPO ₄	P4/n	?	P2 ₁ /c		90Bar
MoTe ₂	Pn2 ₁ m	253	P2 ₁ /m	?	6/mmm
		?	hex.		79Ma
* N ₂	Pa3	36	P6 ₃ /mmc		t.9.1
NC(CH ₂) ₂ CN	?	233	Im3m		90De
* [N(CD ₃) ₄] ₂ CuBr ₄	?	237	?	242	inc.
		271	Pmcn		83Ges
[N(CD ₃) ₄] ₂ ZnCl ₄	?	275	inc.	284	inc.
		298	Pmcn		83
N(CH ₂ CH ₂) ₃ N	P6 ₃ /m	351	Fm3m		76Ni
N(CH ₃) ₃ CH ₂ COO·(CH ₂) ₂ (COOH) ₂		?		194	Pnma
N(CH ₃) ₃ CH ₂ COO·1,4-CH ₃ (C ₆ H ₄)SO ₄ H		?		140	P2 ₁ /c
* N(CH ₃) ₃ CH ₂ COO·CaCl ₂ ·2H ₂ O (BCCD)					88Pe
	P11a	43	Pn2 ₁ a	47	P2 ₁ ca
	51	P2 ₁ 2 ₁ 2 ₁	75	P2 ₁ ca	116
	125	Pn2 ₁ a	127	P(Pnma)/(1s $\bar{1}$)	164
					Pnma 90Sch
N(CH ₃) ₃ CH ₂ COO·D ₃ AsO ₄					
	?	172	?	411	?
N(CH ₃) ₃ CH ₂ COO·D ₃ PO ₄ (DBP)			?	139	?
		155	P2 ₁ /c	365	?
N(CH ₃) ₃ CH ₂ COO·H ₃ AsO ₄ (BA)			Pc	119	P12 ₁ /n1
					85Fr

$N(CH_3)_3CH_2COO.H_3BO_3$			$P2_1/c$	143	Pmcn	89Zo
$N(CH_3)_3CH_2COO.H_3PO_3$ (BPI)			?	177	?	
	216	$P2_1/c$	355	?		90Sch
$N(CH_3)_3CH_2COO.H_3PO_4$ (BP)			?	81	?	
	86	$P2_1/c$	365	$P2_1/m$		85Fr; 90Sch
$N(CH_3)_3CH_2COO.H_3SO_4$?	233	Pbca	90Sch
* $N(CH_3)_3CH_2COO.H_3PO_4.H_2O$?	254	$P2_1/a$	90Sch
$N(CH_3)_3CH_2COO.KBr.2H_2O$			Pbmn	335	?	90Sch
$N(CH_3)_4Ca(N_3)_3$ tetr.	296	tetr.				91Ma
$N(CH_3)_4CdBr_3$ trig.	163	$P6_3/m$	183	?		
	390	?				90Ge; 90Va
$[N(CH_3)_4]_2CdBr_4$ $P112_1/a$	273	Pnma				91Va
* $N(CH_3)_4CdCl_3$ $P2_1/b$	104	$P2_1/m$	118	$P6_3/m$		
	400	$P6_3/mmc$				89Br
$[N(CH_3)_4]_2CdCl_4$?	105	?	120	?		89Kah
$[N(CH_3)_4]_2CdI_4$ $Pbc2_1$	240	Pmcn				88We
$N(CH_3)_2Cd(N_3)_3$ monocl.	255	ortho.	313	cubic		91Ma
* $N(CH_3)_4Cl$?	76	tetr.	185	$P4/nmm$		
	413	$R3m$	536	$Fm3m$		t. 7. 9
$N(CH_3)_4ClO_4$?	232	?	256	$P4/nmm$		
	613	?				77Ts; 91My
$[N(CH_3)_4]_2CoBr_4$ $P2_1/c11$	288	Pcmn				84Has
* $[N(CH_3)_4]_2CoCl_4$ $P2_12_12_1$	122	$P12_1/c1$	192	$P112_1/n$		
	276	$P(Pmcn)/(s\bar{1}\bar{1})$	278	$P2_1cn$		
	280	$P(Pmcn)/(s\bar{1}\bar{1})$	293	Pmcn		85Fj; 91PrB
* $[N(CH_3)_4]_2CuBr_4$ $P12_1/c1$	238	$Pbc2_1$	242	$P(Pmcn)/(s\bar{1}\bar{1})$		
	272	Pmcn				89Lo; 89Mad
$N(CH_3)_4CuCl_3$?	195	$P2_1$	319	?		
	373	?				89V11
* $[N(CH_3)_4]_2CuCl_4$?	127	$P112_1/n$	263	$P12_1/c1$		
	292	$P(Pmcn)/(ss\bar{1})$	298	Pnam		85Re; 91PrB
$[N(CH_3)_4]_2FeBr_4$ $Pmc2_1$	340	?	414	tetr. ?		89CzC
* $[N(CH_3)_4]_2FeCl_4$ $P2_1/c11$	240	$P112_1/n$	266	$Pc2_1n$		
	267	$P2_12_12_1$	271	$P(Pmcn)/(s\bar{1}\bar{1})$		
	282	Pmcn				82Mat; 89Kas
$N(CH_3)_4$ (HCTMCP) tricl.	364	tricl.				84Ab
$N(CH_3)_4HSO_4$ $P12_11$	202	$Pn2_1a(00\gamma)000$				

(continued)

		232	$Pna2_1$	396	?	90Sp
$[N(CH_3)_4]_2HgCl_4$	monocl.	280	$Pmcn$			89Ge
$N(CH_3)_4MnBr_3$	monocl.	144	hex.			89Vi1
* $[N(CH_3)_4]_2MnBr_4$	$P12_1/c1$	277	$Pmcn$			83Ge2; 91PrB
* $N(CH_3)_4MnCl_3$	$P2_1/b$	40	$P2_1/m$	126	$P6_3/m$	
		389	$P6_3/mmc$			90Bra
* $[N(CH_3)_4]_2MnCl_4$	$P2_1^2_12_1$	90	$P12_1/c1$	171	$P112_1/n$	
268	$P2_1/c11$	291	$P(Pmcn)/(\cdot)$	292	$Pmcn$	89Mas; 90MaR
$N(CH_3)_4NO_3$?	292	?	300	$P4/nmm$	88My
$[N(CH_3)_4]_2NiCl_4$	$P12_1/c1$	221	$P2_1/c11$	275	$P(Pmcn)/(si\bar{1})$	
		284	$Pmcn$			90KaM; 91PrB
$N(CH_3)_4SCN$?	240	?	455	?	89Tan
$[N(CH_3)_4]_3Sb_2Cl_9$?	156	?	223	?	88JaS
$[N(CH_3)_4]_2SnCl_6$	tetr.	158	cubic			83Ta
$[N(CH_3)_4]_2ZnBr_4$	$P12_1/c1$	288	$Pmcn$			88As
* $[N(CH_3)_4]_2ZnCl_4$	$P2_1^2_12_1$	159	$P12_1/c1$	171	$P112_1/n$	
277	$P2_1cn$	281	$P(Pmcn)/(si\bar{1})$			
297	$Pmcn$					87Ma
* $[N(CH_3)_4]_2ZnI_4$	$Pbc2_1$	210	$P12_1/c1$	254	$Pmcn$	90PiL
$[N(CH_3)_4]_2ZrCl_6$?	163	$Fm3m$			91Mo
$[N(C_2H_5)_4]_3Bi_2Br_9$?	245	?	265	$P6_322$?	89Zal
$[N(C_2H_5)_4]_2CdBr_4$?	150	?	185	?	
		196	?	230	?	89Kah
$[N(C_2H_5)_4]_2CdCl_4$?	160	?	200	?	
		220	?	240	?	
		250	?	264	?	89Kah
$[N(C_2H_5)_4]_2CoBr_4$?	235	$P4_2/nmc$			91Koh
$[N(C_2H_5)_4]_2CoCl_4$?	227	$Pnma$?			90KaS
$[N(C_2H_5)_4]_2CuBr_4$?	260	$P4_2/nmc$			91Koh
$[N(C_2H_5)_4]_2CuCl_4$	$P2_1/c$	257	$P4_2/nmc$	263	$Pnma?$	90KaS; 90Wi
$[N(C_2H_5)_4]_2FeI_4$	$Pnmm$?	$I\bar{4}m2$			86Sa
$N(C_2H_5)_4LiHg(CN)_4$	$I\bar{4}$	242	$F\bar{4}3m$			86Th
$[N(C_2H_5)_4]_2MnBr_4$	on heat.:	?		235	$P4_2/nmc$	
on cool.:	?	257	?	261	$P4_2/nmc$	91Koh
$[N(C_2H_5)_4]_2MnCl_4$?	218	?	226	$Pnma?$	90KaS
$N(C_2H_5)_4NaHg(CN)_4$	trig.	259	$F\bar{4}3m$			86Th
$[N(C_2H_5)_4]_3Sb_2Br_9$?	256	$P6_322$			89Zal; 91MiJ

$N(C_2H_5)_4SbF_6$	monocl.	272	Fm3m		81Be
$[N(C_2H_5)_4]_2ZnBr_4$?	230	$P4_2/nmc$		91Koh
$[N(C_2H_5)_4]_2ZnCl_4$?	229	?	258 ?	
		265	$Pnma?$		90KaS
$N(C_3H_7)_4KHg(CN)_4$	$I\bar{4}$	440	$F\bar{4}3m$		86Th
$N(C_3H_7)_4NaHg(CN)_4$	$I\bar{4}$	438	$F\bar{4}3m$		86Th
$[N(C_4H_9)_4]_3Mo(CN)_8$	tetr.	260	tetr.	294 $P4/nnc$	88Cz
$[N(C_4H_9)_4]_3W(CN)_8$?	280	?	340 tetr.	88Cz
$N(C_5H_{11})_4SCN$?	315	?		t. 7. 9
$NC_9H_{13}SO_3$	$Pnc2$	335	$Pbma$	385 $P4/nmm$	90ShD
ND_4Br	$P\bar{4}3m$	167	$P4/nmm$	215 $Pm3m$	
		391	$Fm3m$		LB. 7a
* $(ND_3CD_3)_2MnCl_4$	$P12_1/a1$?	$P4_2/nmc$?	Bmab
		>300	$I4/mmm$		90Co
$(ND_3CD_3)_2SnCl_6$	$R\bar{3}$	155	$R\bar{3}m$		89Da
$ND_3CH_3NO_3$?	245	$Pmcn$	355 ?	87My
ND_4Cl	$P\bar{4}3m$	250	$Pm3m$	422 $Fm3m$	LB. 7a
$ND_4D_2AsO_4$	$P2_12_12_1$	299	$I\bar{4}2d$		t. 7. 14
ND_4I	$P4/nmm$	224	$Pm3m$	254 $Fm3m$	t. 7. 3
ND_4PF_6	?	133	?	194 ?	t. 7. 13
$(ND_4)_2TeCl_6$?	28	?	50 $R\bar{3}$	
		85	$Fm3m$		91Bo
* $(NHCH_3CH_2COOH)_3CaCl_2$ (TSCC)			$Pn2_1a$	131 $Pnma$	85RoS
$NH(CH_3)_3CdCl_3$	$P2_1/m$	335	$P6_3/m$		83Fu
or: $Pbnm$		340	$Pbnm$	372 $P6_3/m$	
		413	?		85KaS
$NH(CH_3)_3Cl$	monocl.	308	$P2_1/m$		t. 7. 9
$NH(CH_3)_3NO_3$	$P2_1/c$	359	?	407 ?	88My2
$[NH(CH_3)_3]_3Sb_2Cl_9$?	203	Pc	364 ?	
		367	$P2/c$		87To
$[NH(CH_3)_3]_4ZnCl_4$	$Pna2_1$	353	?		90W1
$(NHC_5H_5)Ag_5I_6$?	180	?	230 $P6_3/mcc$	t. 6. 1;
		320	?		77Hi; 79Co
$NHC_5H_5BF_4$	monocl.	202	?	229 $R\bar{3}m$	89Wa
NHC_5H_5Br	monocl.	270	$R\bar{3}m$		89Wa
NHC_5H_5I	monocl.	247	$R\bar{3}m$		89Wa
$(NHC_5H_5)ICl_2$?	282	$R\bar{3}m$	373 ?	89WaA

(continued)

$(\text{NHC}_5\text{H}_5)_2\text{PbCl}_6$	$\text{P}\bar{1}$	320	$\text{B2}/\text{m}$		87BaW
$(\text{NHC}_5\text{H}_5)_2\text{PtCl}_6$	$\text{P}\bar{1}$	291	$\text{B2}/\text{m}$		87BaW
$(\text{NHC}_5\text{H}_5)_2\text{SnBr}_6$	$\text{P}\bar{1}$	285	$\text{B2}/\text{m}$		89Ta
$(\text{NHC}_5\text{H}_5)_2\text{SnCl}_6$?	287	$\text{P}\bar{1}$	320 $\text{B2}/\text{m}$	87BaW
$(\text{NHC}_5\text{H}_5)_2\text{TeCl}_6$	$\text{P}\bar{1}$?	272	$\text{B2}/\text{m}$		87BaW
* $\text{NH}_2\text{CH}_2\text{COOH} \cdot \text{AgNO}_3$?	218	$\text{P2}_1/\text{a}$		LB. 16b
* $(\text{NH}_2\text{CH}_2\text{COOH})_3 \cdot \text{H}_2\text{BeF}_4$			P2_1	348 $\text{P2}_1/\text{m}$	LB. 16b
$(\text{NH}_2\text{CH}_2\text{COOH})_2 \cdot \text{HNO}_3$			Pa	206 $\text{P2}_1/\text{a}$	LB. 16b
* $(\text{NH}_2\text{CH}_2\text{COOH})_3 \cdot \text{H}_2\text{SO}_4$?	40 ?	
		80	P2_1	332 $\text{P2}_1/\text{m}$	LB. 16b
* $(\text{NH}_2\text{CH}_2\text{COOH})_3 \cdot \text{H}_2\text{SeO}_4$			P2_1	295 $\text{P2}_1/\text{m}$	LB. 16b
$\text{NH}_2(\text{CH}_3)_2\text{Al}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$			m	150 $\text{P2}_1/\text{b}$	89K1
$[\text{NH}_2(\text{CH}_3)_2]_3\text{Bi}_2\text{I}_9$?	173	ortho.	303 hex. ?	90ToW
$[\text{NH}_2(\text{CH}_3)_2]_2\text{CdCl}_4$?	131	Pmna		86Bob
$[\text{NH}_2(\text{CH}_3)_2]_5\text{Cd}_3\text{Cl}_{11}$?	127 ?	
		180	?	260 Cmcm	89CzD
$\text{NH}_2(\text{CH}_3)_2\text{Cl}$?	260	ortho.	313 hex. ?	t. 7. 9
$[\text{NH}_2(\text{CH}_3)_2]_2\text{CoCl}_4$	$\text{P2}_1/\text{n}$	235	$\text{P2}_1/\text{n}$	310 ?	90W1
$[\text{NH}_2(\text{CH}_3)_2]_2\text{CuCl}_4$?	253	?	279 ?	86Bob
$[\text{NH}_2(\text{CH}_3)_2]_2\text{HgBr}_4$	$\text{P2}_1/\text{n}$	274	?	333 ?	90PaB
$\text{NH}_2(\text{CH}_3)_2\text{NO}_3$	$\text{P2}_1/\text{m}$	297	?		88My1
$[\text{NH}_2(\text{CH}_3)_2]_3\text{Sb}_2\text{Br}_9$?	164	?	228 $\text{P2}_1/\text{a}$	89EcM
$[\text{NH}_2(\text{CH}_3)_2]_3\text{Sb}_2\text{Cl}_9$?	242	$\text{P2}_1/\text{a}$		86Ja1
$[\text{NH}_2(\text{CH}_3)_2]_2\text{SnBr}_6$?	253	Pnnm		83D1
$[\text{NH}_2(\text{CH}_3)_2]_2\text{SnCl}_6$?	100	Pnnm		85HoI
$[\text{NH}_2(\text{CH}_3)_2]_2\text{TeCl}_6$?	98	?	169 Pnnm	85HoI
$[\text{NH}_2(\text{CH}_3)_2]_2\text{ZnCl}_4$?	201	?	250 ?	
		272	$\text{P2}_1/\text{n}$	310 ?	8901e
$[\text{NH}_2(\text{C}_2\text{H}_5)_2]_2\text{CuCl}_4$			monocl.	329 monocl.	81B1
$[\text{NH}_2(\text{C}_2\text{H}_5)_2]_2\text{ZnCl}_4$			Pn	333 $\text{P2}_1\text{nm}$	81B1
$\text{NH}_3(\text{CH}_2)_5\text{NH}_3\text{CdCl}_4$	Pnma	337	Imma	407 monocl.	87Ne
$\text{NH}_3\text{CH}_3\text{AlCl}_4$?	100 I4	89PaV
* $\text{NH}_3\text{CH}_3\text{Al}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$			Pca2_1	177 Pa3	87G1
* $\text{NH}_3\text{CH}_3\text{Al}(\text{SeO}_4)_2 \cdot 12\text{H}_2\text{O}$?	217 ?	78Kr
* $(\text{NH}_3\text{CH}_3)_3\text{Bi}_2\text{Br}_9$?	102	?	140 ?	
		188	$\text{P}\bar{3}\text{m1}$		89Koz
$(\text{NH}_3\text{CH}_3)_5\text{Bi}_2\text{Br}_{11}$	P11c	77	Pca2_1	312 Pcmn	89Mr

$(\text{NH}_3\text{CH}_3)_3\text{Bi}_2\text{Cl}_9$	Pmcn	385	?			88JaT
$(\text{NH}_3\text{CH}_3)_5\text{Bi}_2\text{Cl}_{11}$?	170	Pca2 ₁	308	Pcab	89JaL; 91LeC
$\text{NH}_3\text{CH}_3\text{Br}$?	282	P4/nmm	387	?	80Is; 81Ra
<i>after rapid cooling:</i>						
	?	196	?	282	etc.	
$\text{NH}_3\text{CH}_3\text{CdBr}_3$	C222 ₁	171	P6 ₃ mc	?		81Ba
$(\text{NH}_3\text{CH}_3)_2\text{CdBr}_4$?	167	?	400	?	81Ra
* $(\text{NH}_3\text{CH}_3)_2\text{CdCl}_4$	P2 ₁ /a	173	P4 ₂ /ncm	283	Cmca	
		484	I4/mmm			89Pr
$\text{NH}_3\text{CH}_3\text{Cl}$?	220	?	264	P4/nmm	81Ra
$\text{NH}_3\text{CH}_3\text{Cr}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$			Pca2 ₁	164	Pa3	LB.16b
$(\text{NH}_3\text{CH}_3)_2\text{CuCl}_4$	monocl.	>200	P2 ₁ /c	348	tetr.	89Jah
$(\text{NH}_3\text{CH}_3)_2\text{FeCl}_4$	P2 ₁ /a	96	P4 ₂ /ncm	233	Cmca	
		334	I4/mmm			85Yo
$\text{NH}_3\text{CH}_3\text{Fe}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$?		169	cubic	LB.16b
$\text{NH}_3\text{CH}_3\text{Ga}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$?		171	cubic	LB.16b
$\text{NH}_3\text{CH}_3\text{HgBr}_3$?	127	?	184	?	
		243	Cmcm	338	?	90TeO
$\text{NH}_3\text{CH}_3\text{HgCl}_3$?	28	P1	120	P3 ₂	
		333	C2			90PaF
$\text{NH}_3\text{CH}_3\text{HgI}_3$	P2 ₁ /n	328	?			90TeO
$\text{NH}_3\text{CH}_3\text{I}$?	167	P4/nmm	414	Pm3m	82Is
$\text{NH}_3\text{CH}_3\text{In}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$?		164	cubic	LB.16b
$(\text{NH}_3\text{CH}_3)_2\text{MnBr}_4$?	263	?	385	?	
		428	?			81Ra
* $(\text{NH}_3\text{CH}_3)_2\text{MnCl}_4$	P2 ₁ /a	92	P4 ₂ ncm	257	Abma	
		398	I4/mmm			77Co
$\text{NH}_3(\text{CH}_3)_3\text{NH}_3\text{SnCl}_6$?		287	Pnma	90BoW
$\text{NH}_3\text{CH}_3\text{Na}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$?		139	6mm	89M11
$\text{NH}_3\text{CH}_3\text{Na}(\text{SeO}_4)_2 \cdot 6\text{H}_2\text{O}$?		137	6mm	89M12
$\text{NH}_3\text{CH}_3\text{PbBr}_3$	Pna2 ₁	149	P4/mmm	154	I4/mcm	
		236	cubic			89Fur; 90On
$\text{NH}_3\text{CH}_3\text{PbCl}_3$	P222 ₁	171	P4/mmm	177	Pm3m	89Fur
$(\text{NH}_3\text{CH}_3)_2\text{PbCl}_6$	trig.?	163	R3m			79Ku
$\text{NH}_3\text{CH}_3\text{PbI}_3$	Pna2 ₁	162	I4/mcm	327	Pm3m	90On
$(\text{NH}_3\text{CH}_3)_2\text{PdBr}_6$	trig.?	108	R3m			79Ku
$(\text{NH}_3\text{CH}_3)_2\text{PdCl}_6$	trig.?	112	R3m			79Ku

(continued)

$(\text{NH}_3\text{CH}_3)_2\text{PtBr}_6$	trig.?	118	$\text{R}\bar{3}\text{m}$		79Ku
$(\text{NH}_3\text{CH}_3)_2\text{PtCl}_6$	trig.?	125	$\text{R}\bar{3}\text{m}$		79Ku
$(\text{NH}_3\text{CH}_3)_2\text{PtI}_6$	trig.?	132	$\text{R}\bar{3}\text{m}$		79Ku
* $(\text{NH}_3\text{CH}_3)_3\text{Sb}_2\text{Br}_9$?	131	?	168 $\text{P}\bar{3}\text{m1}$	88Ja1
$(\text{NH}_3\text{CH}_3)_3\text{Sb}_2\text{Cl}_9$?	208	Pmcn ?		86Ja2
$(\text{NH}_3\text{CH}_3)_3\text{Sb}_2\text{I}_9$?	111	?	147 $\text{P6}_3/\text{mmc}$	90ZaJ
$(\text{NH}_3\text{CH}_3)_2\text{SeBr}_6$	trig.?	111	$\text{R}\bar{3}\text{m}$		79Ku
$(\text{NH}_3\text{CH}_3)_2\text{SeCl}_6$	trig.?	103	$\text{R}\bar{3}\text{m}$		79Ku
$(\text{NH}_3\text{CH}_3)_2\text{SnBr}_6$	trig.?	149	$\text{R}\bar{3}\text{m}$		79Ku
$(\text{NH}_3\text{CH}_3)_2\text{SnCl}_6$	trig.?	156	$\text{R}\bar{3}\text{m}$		79Ku
$\text{NH}_3\text{CH}_3\text{SnI}_3$	cubic	425	?		90Ya
$\text{NH}_3\text{CH}_3\text{TeBr}_6$?	129	?	164 ?	
		289	cubic		86On
$\text{NH}_3\text{CH}_3\text{TeCl}_6$	$\text{R}\bar{3}\text{m}$	137	?	235 $\text{P}\bar{3}\text{m1}$	
		439	cubic		81Fu; 86On
$\text{NH}_3\text{CH}_3\text{TeI}_6$?	66	?	116 cubic	86On
$\text{NH}_3\text{CH}_3\text{V}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$?	157 cubic	LB. 16b
$(\text{NH}_3\text{CH}_3)_2\text{ZnCl}_4$	$\text{P2}_1/\text{a}$	426	Pnma	484 ?	81PeM
$\text{NH}_3\text{C}_2\text{H}_5\text{Br}$?	236	$\text{P2}_1/\text{m}$	363 ?	81Ra
$(\text{NH}_3\text{C}_2\text{H}_5)_2\text{CdCl}_4$	monocl.	113	Pcab	216 Bmab	81Ra
$\text{NH}_3\text{C}_2\text{H}_5\text{Cl}$?	221	$\text{P2}_1/\text{m}$	345 ?	81Ra
* $(\text{NH}_3\text{C}_2\text{H}_5)_2\text{CuCl}_4$	Pbca	356	$\text{P2}_1/\text{c}$	364 Bbcm	89Jah
$(\text{NH}_3\text{C}_2\text{H}_5)_2\text{FeCl}_4$	$\text{P2}_1/\text{a}$	134	Pbca	204 Cmca	
		379	$\text{I4}/\text{mmm}$		85Yo
$\text{NH}_3\text{C}_2\text{H}_5\text{I}$	monocl.	328	?		58Je
$(\text{NH}_3\text{C}_2\text{H}_5)_2\text{MnBr}_4$?	364	?		81Ra
$(\text{NH}_3\text{C}_2\text{H}_5)_2\text{MnCl}_4$	Pbca	225	Abma	424 $\text{I4}/\text{mmm}$	81Ra
$(\text{NH}_3\text{C}_2\text{H}_5)_2\text{SnCl}_6$	monocl.	128	$\text{P}\bar{3}\text{m1}$		83Ta
$(\text{NH}_3\text{C}_2\text{H}_5)_2\text{TeCl}_6$?	204	$\text{P}\bar{3}\text{m1}$		90BoW
$(\text{NH}_3\text{C}_3\text{H}_7)_2\text{CdCl}_4$	monocl.	110	Pbca	158 $\text{P}(\text{Abma})/(\text{sit})$	91RiK;
		180	Abma	535 tetr.	88Do; 89Kus
$\text{NH}_3\text{C}_3\text{H}_7\text{Cl}$	$\text{B2}/\text{m}$	188	$\text{P4}/\text{mmm}$		90PrB
$(\text{NH}_3\text{C}_3\text{H}_7)_2\text{CuCl}_4$?	132	?	180 Pbca	
		378	$\text{Pbca}(\text{ss0})(\alpha 00)$		
		423	Pbca	436 Bbcm	88Et; 89Jah
* $(\text{NH}_3\text{C}_3\text{H}_7)_2\text{MnCl}_4$	Pbca ?	110	$\text{P}(\text{Abma})/(\text{sit})$		
		165	Abma	340 Abma	
		388	Abma	441 $\text{I4}/\text{mmm}$	79De; 88Et

$(\text{NH}_3\text{C}_3\text{H}_7)_2\text{PbCl}_4$	Pnma	339	$\text{P2}_1/\text{c}$		89Zan
$(\text{NH}_3\text{C}_3\text{H}_7)_2\text{ZnCl}_4$	$\text{P2}_1/\text{m}$	310	Pmna		82Zn
$(\text{NH}_3\text{C}_4\text{H}_9)_2\text{MnCl}_4$	Abma	382	?		79De
$(\text{NH}_3\text{C}_4\text{H}_9)_2\text{PbI}_4$	$\text{Pbc2}_1?$	250	Pbca		90IsT
$\text{NH}_3\text{C}_5\text{H}_{11}\text{Cl}$?	221	?	246 ?	t. 7. 9
$(\text{NH}_3\text{C}_5\text{H}_{11})_2\text{MnCl}_4$	Abma	382	?		79De
$(\text{NH}_3\text{C}_5\text{H}_{11})_2\text{ZnCl}_4$?	141	?	148 $\text{P2}_1\text{2}_1\text{2}_1$	
		250	Pnma	349 ?	84Go2
$\text{NH}_3\text{C}_6\text{H}_5\text{Br}$	$\text{P2}_1/\text{a}$	300	Pnaa		81Fe
$(\text{NH}_3\text{C}_6\text{H}_{13})_2\text{MnCl}_4$	Abma ?	375	?		79De
$(\text{NH}_3\text{C}_7\text{H}_{15})_2\text{CdCl}_4$?	250	?	317 ?	84Wh
$(\text{NH}_3\text{C}_7\text{H}_{15})_2\text{MnCl}_4$?	248	?	314 ?	83Wh
$(\text{NH}_3\text{C}_8\text{H}_{17})_2\text{CdCl}_4$?	268	?	307 ?	84Wh
$(\text{NH}_3\text{C}_8\text{H}_{17})_2\text{MnCl}_4$	Abma ?	360	?		79De
$(\text{NH}_3\text{C}_8\text{H}_{17})_2\text{PbI}_4$	$\text{Pbc2}_1?$	235	Pbca		90IsT
$(\text{NH}_3\text{C}_9\text{H}_{19})_2\text{MnCl}_4$	Abma ?	356	?		79De
$(\text{NH}_3\text{C}_9\text{H}_{19})_2\text{PbI}_4$	Pbc2_1	240	Pbca		90IsT
$(\text{NH}_3\text{C}_{10}\text{H}_{21})_2\text{CdCl}_4$	$\text{P2}_1/\text{n}$	303	Pmnn	313 Amaa	79Ki
$\text{NH}_3\text{C}_{10}\text{H}_{21}\text{Cl}$	P2_1	312	ortho.	314 ?	
		316	$\text{P4}/\text{mmm}$		
and:	tricl.	302	ortho.	...	89Sch
$(\text{NH}_3\text{C}_{10}\text{H}_{21})_2\text{MnCl}_4$	$\text{P2}_1/\text{a}$	308	?		84Wh
$(\text{NH}_3\text{C}_{10}\text{H}_{21})_2\text{PbI}_4$	$\text{Pbc2}_1?$	261	?	275 Pbca	91Xu
		338	?		89Is; 90IsT
$(\text{NH}_3\text{C}_{12}\text{H}_{25})_2\text{CdCl}_4$	$\text{P2}_1/\text{n}$	326	ortho.	330 Amca	
		345	tetr.		85Cha
$(\text{NH}_3\text{C}_{12}\text{H}_{25})_2\text{CuCl}_4$?	330	?	338 ?	76Sal
$(\text{NH}_3\text{C}_{12}\text{H}_{25})_2\text{MnCl}_4$?	332	?	336 ?	76Sal
$(\text{NH}_3\text{C}_{12}\text{H}_{25})_2\text{PbI}_4$	Pbc2_1	310	Pbca		90IsT
$(\text{NH}_3\text{C}_{14}\text{H}_{29})_2\text{CdCl}_4$?	345	?	351 ?	84Wh
$(\text{NH}_3\text{C}_{14}\text{H}_{29})_2\text{CuCl}_4$?	334	?	356 ?	76Sal
$(\text{NH}_3\text{C}_{14}\text{H}_{29})_2\text{MnCl}_4$?	345	?	357 ?	76Sal
$(\text{NH}_3\text{C}_{16}\text{H}_{33})_2\text{CdCl}_4$	$\text{P2}_1/\text{n}$	345	ortho.	352 ortho.	
		356	tetr.		89Cha
$(\text{NH}_3\text{C}_{18}\text{H}_{37})_2\text{CdCl}_4$	monocl.	350	?	356 ?	
		360	?	366 ortho. ?	84Wh
$\text{NH}_4\text{Ag}_4\text{I}_5$?	>110	?		87Ak

(continued)

NH_4AlF_4	$\text{P4}_2/\text{mbc}$	150	$\text{I4}/\text{mcm}$		89Bu
$(\text{NH}_4)_3\text{AlF}_6$	$\text{P2}_1/\text{n}$	224	Fm3m		LB. 7a
or:	tricl.	224	Fm3m		86Tr
NH_4AuCl_4	?	29	?		90Is
* NH_4BF_4	Pnma	83	Pnma	462 Fm3m	
		>733	cubic?		LB. 7a
NH_4BeF_3	P1 ?	>245	Pn	344 $\text{P2}_1\text{2}_1\text{2}_1$	
		347	Pmnb	536 ortho.	83Lu
* $(\text{NH}_4)_2\text{BeF}_4$	$\text{P2}_1\text{cn}$	177	$P(\text{P}112_1)/(\text{I}1\bar{1})$		
		183	Pcmn		LB. 16b
* NH_4Br	$\text{P}\bar{4}3\text{m}$	107	$\text{P4}/\text{mmm}$	235 Pm3m	
		411	Fm3m		t. 7. 3
$\text{NH}_4\text{CH}_3\text{AlCl}_4$?	100	I4		85Cz
$(\text{NH}_4)_2\text{C}_4\text{H}_4\text{O}_6 \cdot \text{H}_2\text{O}$	P2_1	335	?	365 ?	91
NH_4CN	$\text{P4}/\text{mmm}$?	Pm3m		79Sa
NH_4CdF_3	Pnma	331	Pm3m		90Ba1
$(\text{NH}_4)_2\text{Cd}_2(\text{SO}_4)_3$	P2_1	90	$\text{P2}_1\text{3}$		LB. 16b
$\text{NH}_4\text{Ce}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$?	149	?	163 ?	
		251	$\text{P2}_1/\text{c}$		80Ma; 90Mi
* NH_4Cl	$\text{P}\bar{4}3\text{m}$	242	Pm3m	458 Fm3m	t. 7. 3
* NH_4ClO_4	$\text{Pna2}_1?$	511	Fm3m		t. 7. 3
* $(\text{NH}_4)_2\text{CoCl}_4$	$\text{Pc2}_1\text{n}$	150	$\text{P2}_1\text{cn}$	323 Pcnn	84Bro
NH_4CoF_3	P4bm ?	?	Pm3m		89PaB
$(\text{NH}_4)_3\text{CrF}_6$?	140	tricl.	270 Fm3m	86Tr
$\text{NH}_4\text{Cr}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$?	85	$\text{Pa}\bar{3}$		91Su
$(\text{NH}_4)_2\text{CuCl}_4 \cdot 2\text{H}_2\text{O}$	$\text{P}\bar{4}2_1\text{m}$?	$\text{P4}_2/\text{mmm}$		89Hem
$\text{NH}_4\text{D}_2\text{PO}_4$	$\text{P2}_1\text{2}_1\text{2}_1$	238	$\text{I}\bar{4}2\text{d}$		LB. 16b
$(\text{NH}_4)_3\text{FeF}_6$?	267	$\text{P4}/\text{mnc}$	540 Fm3m	LB. 7a
or:			tricl.	540 Fm3m	86Tr
$\text{NH}_4\text{Fe}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$?	88	cubic		LB. 16b
$(\text{NH}_4)_3\text{GaF}_6$	tricl.	246	Fm3m		86Tr
$\text{NH}_4\text{H}_2\text{AsO}_4$	$\text{P2}_1\text{2}_1\text{2}_1$	216	$\text{I}\bar{4}2\text{d}$		LB. 16b
$\text{NH}_4\text{HC}_2\text{O}_4 \cdot 1/2\text{H}_2\text{O}$	$\text{P2}_1/\text{n}$	145	Pmnb		89Fu
$\text{NH}_4\text{H}(\text{ClCH}_2\text{COO})_2$	Cc	120	$\text{C2}/\text{c}$		91BaI
$(\text{NH}_4)_2\text{H}_3\text{IO}_6$	R3 ?	>246	$\text{R}\bar{3}$		t. 7. 14
* $\text{NH}_4\text{H}_2\text{PO}_4$	$\text{P2}_1\text{2}_1\text{2}_1$	148	$\text{I}\bar{4}2\text{d}$		LB. 16b
NH_4HSO_4	P1	154	Pc	270 $\text{P2}_1/\text{c}$	LB. 16b

* $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$?	23	?	78	?	
		133	?	136	monocl.	
		265	A2/a	413	$\bar{R}3m$	80Ge
NH_4HSeO_4	?	110	P1	250	$\text{P}2_12_12_1(\text{inc.})$	
		262	B2	416	$\text{P}2_1/b$	89Al
* $(\text{NH}_4)_3\text{H}(\text{SeO}_4)_2$	monocl.	181	monocl.	275	A2/a	
		302	$\bar{R}3m$	328	trig.	840s; 91
or:	279	?	305	A2/a	
		332	$\bar{R}3m$			90Ze
* NH_4I	P4/nmm	231	Pm3m	257	Fm3m	LB. 7a
$\text{N}_2\text{H}_7\text{I}$?	143	ortho.	203	P4/mmm	
		230	Pm3m			90Lu2
$\text{N}_2\text{D}_7\text{I}$?	147	ortho.	237	Pm3m	90Lu2
NH_4IO_3	?	103	$\text{Pc}2_1n$	355	ortho.	
		388	cubic			LB. 16b
* $\text{NH}_4\text{IO}_3 \cdot 2\text{HIO}_3$	$\bar{P}1$	213	$\bar{P}1$			90BaB
$(\text{NH}_4)_3\text{InF}_6$	P4/mnc	355	Fm3m			LB. 7a
$(\text{NH}_4)_3\text{In}(\text{SO}_4)_3$	2/m	?	$\bar{3}$?	3m	
		?	$\bar{3}m$			86Dr
$\text{NH}_4\text{In}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$?	127	cubic			LB. 16b
$(\text{NH}_4)_4\text{LiH}_3(\text{SO}_4)_4$	$\text{P}2_1$	232	$\text{P}4_1$?	?	91Pi
$(\text{NH}_4)_4\text{LiH}_3(\text{SeO}_4)_4$	$\text{P}2_1$	267	$\text{P}4_1$?	?	91Pi
NH_4MgF_3	P4bm ?	108	Pm3m			89PaB
NH_4MnCl_3	Pbnm	110	P4bm	258	Pm3m	LB. 7a
NH_4MnF_3	P4bm	182	Pm3m			90Fa
* NH_4NO_3	$\text{P}4_2$	256	Pmmn	305	Pbmn	
		357	P4bm	399	cubic	
and:	$\text{P}4_2$	315	?	318	P4bm ...	
and: ...	Pmmn	324	P4bm	...		t. 7. 8
$\text{NH}_4\text{Nd}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$	$\text{P}2_1/c$?	tetr.			90Mi
NH_4PF_6	?	131	?	192	cubic	t. 7. 6
$\text{NH}_4\text{PF}_6 \cdot \text{NH}_4\text{F}$	ortho.	172	ortho.	228	C4/nmm	LB. 16b
$(\text{NH}_4)_2\text{PbCl}_6$	$\bar{R}3$	80	Fm3m			89Di; 91Bo
$(\text{NH}_4)_2\text{PdCl}_4$	$\text{P}\bar{4}2m$	149	P4/mmm			91VaH
$\text{NH}_4\text{Pr}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$?	266	?	296	$\text{P}2_1/c$	90Mi
$(\text{NH}_4)_2\text{PtI}_6$	$\text{P}2_1/n$?	77	P4/mnc	172	Fm3m	84IhA
NH_4SCN	$\text{P}2_1/c$	359	Pbcm	390	I4/mcm	90Ham

(continued)

NH_4SO_4	?	154	?	270	$\text{P2}_1/\text{c}$	t. 7. 6
* $(\text{NH}_4)_2\text{SO}_4$	Pna2_1	223	Pnam			LB. 16. b
$(\text{NH}_4)_2\text{S}_2\text{O}_3$	C1	80	C2	402	ortho.	84TeF
$(\text{NH}_4)_2\text{SbBr}_6$?	212	?	236	$\text{I4}_1\text{amd}$	t. 7. 13
$(\text{NH}_4)_2\text{SbF}_5$	$\text{P1}(\text{P}\bar{1})$	138	monocl.	165	monocl.	
		257	Cc ?	294	Cmcm	89WaC
$(\text{NH}_4)_6\text{Sb}_4(\text{SO}_4)_3\text{F}_{12}$?	95	P3			88Wa
$(\text{NH}_4)_3\text{ScF}_6$	P4/mnc	320	Fm3m			91Ch
or:	$\text{P2}_1/\text{n}$	291	tetr.	330	cubic	86Tr
$(\text{NH}_4)_2\text{Se}_2\text{O}_5$	$\text{P2}_12_12_1$	312	$\text{P2}_12_12_1$			90MaM
$(\text{NH}_4)_2\text{SeO}_4$	C2/m	?	hex.			62Ga
$(\text{NH}_4)_2\text{SiF}_6$?	39	$\text{P}\bar{3}\text{m1}$	278	Fm3m	LB. 7a; t. 7. 6
$\text{NH}_4\text{Sm}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$?	?	$\text{P2}_1/\text{c}$			90Mi
$(\text{NH}_4)_2\text{SnBr}_6$?	145	?			t. 7. 6
NH_4SnI_3	?	416	?			90Ya
$(\text{NH}_4)_2\text{TeBr}_6$	P4/mnc	221	Fm3m			84AbI
$(\text{NH}_4)_2\text{TeCl}_6$	$\text{R}\bar{3}$	85	Fm3m			89Di; 91Bo
$(\text{NH}_4)_2\text{VF}_6$	tricl.	280	Fm3m			86Tr
$\text{NH}_4\text{V}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$?	116	cubic			LB. 16b
$(\text{NH}_4)_2\text{ZnBr}_4$	$\text{Pc2}_1\text{n}$	216	$\text{P2}_1\text{cn}$	395	inc.	
		432	Pcmn			83Sa
$(\text{NH}_4)_2\text{ZnCl}_4$ [A]	$\text{P2}_1\text{an}$	266	inc.	271	Pman	
		406	Pman			90KoP
[B]	$\text{Pc2}_1\text{n}$	266	?	269	?	
		271	P1c1	319	$\text{P2}_1\text{cn}$	
		364	ortho.	406	Pcmn	84Man
* NH_4ZnF_3	P4bn ?	115	Pm3m			89PaB
$(\text{NH}_4)_2\text{ZrF}_6$	ortho.	318	hex.			90Pu
$\text{N}_2\text{H}_5\text{Al}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$?	163	Pa3			90Os
$\text{N}_2\text{H}_6\text{SO}_4$?	233	$\text{P2}_12_12_1$			89Su
NOAsF_6	?	275	cubic			82Gr
$(\text{NO})_2\text{TiCl}_6$	Pn	203	P4/mnc			90He
* Na	$\text{P6}_3/\text{mmc}$	30	cubic			89Va
NaAgMoO_4	Fd3m	728	Pbn2_1	796	?	
		807	?			88Ru
* Na_3AlF_6	$\text{P2}_1/\text{n}$	834	Fm3m			75Pi

$\text{Na}_5\text{Al}_3\text{F}_{14}$	$\text{P2}_1/\text{n}$	150	$\text{P4}/\text{mnc}$		88Go
Na_3AlH_6	?	453	$\text{P2}_1/\text{n}$	525 cubic	89Bur
$\text{NaAl}(\text{MoO}_4)_2$	$\text{P}\bar{1}$	703	$\text{C2}/\text{c}$		78Ot
NaAlO_2	$\text{R}\bar{3}\text{m}$?	$\text{Pn2}_1\text{a}$? $\text{P4}_1\text{2}_1\text{2}$	74We; 78Zv
$\text{Na}_8(\text{Al}_6\text{Si}_6\text{O}_{24})(\text{OH})_2 \cdot 6\text{H}_2\text{O}$?		153 $\text{P}\bar{4}3\text{n}$	731v
$\text{Na}_8(\text{AlSiO}_4)_6(\text{NO}_3)_2$?	?	?	90Bul
NaAsF_6	$\text{R}\bar{3}$	328	?		t. 7. 13
Na_3AsO_4	Pmn2_1	625	Pmna	683 cubic	
on cooling:	Pmn2_1	570	cubic		71Pa
* NaBF_4	Cmcm	525	trig.		80Am
NaBH_4	$\text{I}\bar{4}\text{m2}$	190	Fm3m		t. 7. 11
Na_2BeF_4	Pnma	448	Pnma	599 $\text{P}\bar{3}\text{m1}$	
and:	Pnma	326	$\text{P2}_1/\text{n}$	366 $\text{Pnma} \dots$	LB. 7a
Na_3BeF_5	C1	397	?	509 ?	
		534	?	? R3m	LB. 7a
$\text{Na}_3\text{Bi}(\text{PO}_4)_2$	Cm2a	848	Pna2_1	1093 $\text{P}\bar{3}\text{m1}$	
		1178	$\text{P}\bar{3}\text{m1}$		88Di
* NaCN	Pmmn	180	Immm	280 Fmcm	85E1
Na_2CO_3	$\text{P2}/\text{c}$	120	$\text{P}(\text{C2}/\text{m})/(\bar{1}\text{s})$		
		620	$\text{C2}/\text{m}$	763 $\text{P6}_3/\text{mmc}$	79Pa; 84Me
NaCaAsO_4	Cmcm	?	?		PDF
$\text{NaCa}_2\text{Cu}_2\text{V}_3\text{O}_{12}$	$\text{I4}_1/\text{acd}$?	Ia3d		79Sa
NaCaPO_4	Pnam	530	?		PDF
$\text{Na}_2\text{Cd}(\text{SO}_4)_2$?	739	?	833 ?	PDF
* NaClO_4	Cmcm	581	Fm3m		t. 7. 11
Na_3CrF_6	monocl.	923	?		69Ko
* Na_2CrO_4	Cmcm	694	$\text{P6}_3\text{mc} / \text{P}\bar{3}\text{m1} ?/$		81Ni
$\text{Na}_3\text{Cr}_2(\text{PO}_4)_3$	$\text{P2}_1/\text{n}$	348	monocl.	411 trig.	
		439	?		85Va
$\text{NaD}_3(\text{SeO}_3)_2$	Pm	270	$\text{P2}_1/\text{n}$		t. 7. 14
NaDyF_4	$\text{P}\bar{6}$?	Fm3m		LB. 7a
$\text{Na}_3\text{Eu}(\text{C}_4\text{H}_4\text{O}_5)_3 \cdot 2\text{NaClO}_4 \cdot 6\text{H}_2\text{O}$			$\text{P3}_1\text{21}$? R32	81Ban
NaEuF_4	$\text{P}\bar{6}$?	Fm3m		LB. 7a
* Na_3FeF_6	$\text{P2}_1/\text{n}$	900	Fm3m		LB. 7a
$\text{Na}_5\text{Fe}_3\text{F}_{14}$	$\text{A2}/\text{m}$?	$\text{P4}_2\text{2}_1\text{2}$		LB. 7a
$\text{NaFe}(\text{MoO}_4)_2$	$\text{C2}/\text{c}$	>100	$\text{P}\bar{3}\text{m1}$		86Fo
NaFeO_2	$\text{R}\bar{3}\text{m}$	1033	$\text{Pn2}_1\text{a}$	1273 $\text{P4}_1\text{2}_1\text{2}$	90GrH

(continued)

NaFeP_2O_7	monocl.	1023	$P2_1/c$			82Gab
$\text{Na}_3\text{Fe}_2(\text{PO}_4)_3$	monocl.	368	trig.	418	?	84Tk
Na_3GaF_6	$P2_1/n$	878	?			LB. 7a
Na_3GdCl_6	$R\bar{3}$	478	$P2_1/n$			86Me
NaGdF_4	$P\bar{6}$?	$\text{Fm}3m$			LB. 7a
NaHCOO	<i>on heating:</i>		monocl.	500	?	
	<i>on cooling:</i>		monocl.	?	?	91He
$(\text{Na}_2 \cdot 4\text{H}_2\text{O})\text{B}_{12}\text{H}_{12}$	$P4_22_12$	255	$P4_2/\text{ncm}$			89Pon
NaHS	?	113	trig.	358	$\text{Fm}3m$	39Te; 70Al
NaHSe	trig.	>290	cubic			70Al
$\text{NaH}_3(\text{SeO}_3)_2$	$\bar{1}$	111	$P1$	195	$P2_1/n$	84So
$\text{Na}_5\text{Ho}_9\text{F}_{32}$	Cmmm	1040	$\text{Fm}3m$			LB. 7a
Na_3InF_6	$P2/m$	978	$\text{Fm}3n$			75P1
$\text{NH}_3\text{In}_2(\text{PO}_4)_3$	$C2$	328	?	503	?	91Si
* $\text{NaKC}_4\text{H}_2\text{D}_2\text{O}_6 \cdot 4\text{D}_2\text{O}$	$P2_12_12$	251	$P2_1$	308	$P2_12_12$	LB. 16b
* $\text{NaKC}_4\text{H}_4\text{O}_6 \cdot 4\text{H}_2\text{O}$	$P2_12_12$	255	$P2_1$	297	$P2_12_12$	LB. 16b
$\text{NaK}_3(\text{CrO}_4)_2$	$2/m$	239	$\bar{3}m$			89Kr
$\text{Na}_2\text{LiAlF}_6$	monocl.	?	cubic			LB. 7a
$\text{Na}_3\text{Ln}(\text{C}_4\text{H}_4\text{O}_5)_3 \cdot 2\text{NaClO}_4 \cdot 6\text{H}_2\text{O}$			$P3_121$	<120	$R32$	81ScB
NaMgF_3	Pbnm	1033	tetr.	1173	$\text{Pm}3m$	LB. 7a
* Na_2MoO_4	$\text{Fd}3m$	734	$\text{Pbn}2_1$	866	Fddd	
		915	$P6_3/\text{mmc}$			75Bo
$\text{Na}_3\text{MoO}_3\text{F}_3$	$P2_1$	403	$P2_1$	803	$\text{Fm}3m$	86Ch
NaN_3	$C2/m$	293	$R\bar{3}m$			84Ag
$\text{NaNH}_4\text{C}_4\text{H}_4\text{O}_6 \cdot 4\text{H}_2\text{O}$	$P2_1$	109	$P2_12_12$			LB. 16b
$\text{NaNH}_4\text{SO}_4 \cdot 2\text{H}_2\text{O}$	$P2_1$	101	$P2_12_12_1$			LB. 16b
$\text{NaNH}_4\text{SeO}_4 \cdot 2\text{H}_2\text{O}$	$P2_1$	180	$P2_12_12_1$			LB. 16b
* NaN_3I	monocl.	<300	trig.?			76P1
NaNO_2	?	178	$\text{Im}2m$	437	$P(I2mm)/(ss1)$	
		438	Immm			LB. 16b; 85Kuc
* NaNO_3	$R\bar{3}c$	548	$R\bar{3}m$			t. 7. 2
Na_3NO_3	$P4_21m$	150	$I4cm$	220	$\text{Pm}3m$	86Kr
NaNbCl_6	tetr.	518	?	572	?	78Sa
NaNbO_3	$R3c$	73	Pbma	638	Pmnm	
		753	Pnmm	793	Cmmm	
		845	$P4/\text{mbm}$	916	$\text{Pm}3m$	LB. 16a
$\text{Na}_{13}\text{Nb}_{35}\text{O}_{94}$	$\text{Pba}2$	320	?			89Ab

NaNF ₄	P $\bar{6}$?	Fm3m			LB. 7a
NaO ₂	?	?	Pnnm	?	Pa3	
		?	Pa3			81Ke
Na ₂ O ₂	P $\bar{6}$ 2m	?	tetr.?			81Ke
* NaOH	Bmmb	513	P2 ₁ /m			LB. 7b1
* NaPF ₆	?	228	R $\bar{3}$	286	Fm3m	t. 7. 13
Na ₃ PO ₄	P $\bar{4}$ 2 ₁ c	603	cubic			88Di
NaPmF ₄	P $\bar{6}$?	Fm3m			LB. 7a
Na ₃ Pr(C ₄ H ₄ O ₅) ₃ · 2NaClO ₄ · 6H ₂ O			P3 ₁ 21	<300	R32	80ScB
NaPrF ₄	P $\bar{6}$	1083	Fm3m			LB. 7a
Na ₂ PtO ₃	ortho.?	?	monocl.?			88St
NaS	P $\bar{6}$ 2m	>300	P6 ₃ /mmc			81Ke
NaSH - see: NaHS						
* Na ₂ SO ₄	Fddd	480	Cmcm	521	hex.	
		843	?			77Am
NaSbF ₆	?	233	Fm3m			56Te
Na ₃ ScF ₆	P2 ₁ /n	953	Fm3m			75Pi; 91Ch
NaSc(MoO ₄) ₂	?	763	trig.			70Ba1
Na ₃ Sc ₂ (PO ₄) ₃ -alpha	Bb	323	R $\bar{3}$ c	420	R $\bar{3}$ c	88Co1
* Na ₂ SeO ₄	Fddd	579	hex.			67Pi1
NaSmF ₄	P6 ₃ /m	?	Fm3m			LB. 7a
NaSn ₂ (PO ₄) ₂	trig.	848	trig.			91Ro
NaTaCl ₆	?	498	?			78Sa
NaTaO ₃	Pc2 ₁ n	753	ortho.	823	tetr.	
		903	cubic			LB. 16a
NaTbF ₄	P $\bar{6}$?	Fm3m			LB. 7a
Na ₃ TlF ₆	P2 ₁ /n	884	Fm3m			75Pi
Na ₅ Ti ₃ O ₃ F ₁₁	?	120	?	260	monocl.	
		770	tetr.			87Gr
Na ₄ TiP ₂ O ₉	P2/c	538	Ibam			90K1
NaTlF ₄	P3 ₁ 12	?	Fm3m			LB. 7a
Na ₃ TlF ₆	P2 ₁ /n	893	Fm3m			75Pi
Na ₄ UO ₂ (SO ₄) ₃	?	598	?			88Gu
* Na ₃ VF ₆	P2 ₁ /n	912	Fm3m			75Pi
NaVO ₃	Cc	653	C2/c			90Sha
* Na ₂ WO ₄	Fd3m	861	Pbn2 ₁	863	Fddd	75Bo
Na ₅ W ₃ O ₉ F ₁₅	?	190	monocl.	530	ortho.	

(continued)

		800	cubic		79Ra
$\text{Na}_5\text{WTi}_2\text{O}_5\text{F}_9$	monocl.	562	tetr.		87Gr
$\text{Na}_3\text{Y}(\text{C}_4\text{H}_4\text{O}_5)_3 \cdot 2\text{NaClO}_4 \cdot 6\text{H}_2\text{O}$			P3_121	? R32	83Ban
NaYF_4	?	943	?	964 $\text{P6}_3/\text{m}$	
		978	Fm3m		LB. 7a
NaZnF_3	Pnma	953	?		90Wal
Nb_3Al	$\text{P4}_2/\text{mmc}$?	Pm3n		79Sa
NbO_2	$\text{I4}_1/\text{a}$	1068	$\text{P4}_2/\text{mm}$		LB. 7b1
Nb_2O_5	?	?	Pna2_1	1073 $\text{I4}/\text{mmm}$	
		1373	P2		LB. 7b1
NbOPO_4	$\text{P4}/\text{nbm}$?	$\text{P2}_1/\text{c}$		90Bar
$\text{NbSe}_2 - 2\text{H}$	$\text{P6}_3/\text{mmc}$	1	inc.	32 $\text{P6}_3/\text{mmc}$	81Pet
NbSe_3	inc.	60	inc.	150 monocl.	90Mo; PH. 3
$(\text{NbSe}_4)_3\text{I}$	$\text{P}\bar{4}2_1\text{c}$	274	$\text{P4}/\text{mnc}$		85GrG
Nb_5Si_3	?	?	$\text{I4}/\text{mcm}$		81Ke
Nb_3Sn	$\text{P4}_2/\text{mmc}$	45	Pm3n		73V1
NbTe_2	$\text{C2}/\text{m}$	300	$6/\text{mmm}$		84Bou
NbTe_4	tetr. ?	50	tetr.		
		200	$\text{W}(\text{P4}/\text{mcc})/(\text{i}\bar{1}\bar{1}\bar{1})$		81Ke; 90Pro
* Nd	hex.	1141	Im3m		61Sp
$\text{NdAl}_3(\text{BO}_3)_4$	R32	1150	$\text{C2}/\text{c}$		88Be
NdAlO_3	trig.	1823	cubic		84Co
NdCu_6	$\text{P2}_1/\text{c}$	155	Pnma		90Vr
$\text{Nd}_2\text{Fe}_{14}\text{B}$	$\text{P4}_2/\text{mm}$	600	?		85An1
NdGaO_3	ortho.	1223	trig.		91BeV1
$\text{Nd}_2(\text{MoO}_4)_3$	Pba2	498	$\text{P}\bar{4}2_1\text{m}$		
and:	$\text{C2}/\text{c}$	1234	$\text{P}\bar{4}2_1\text{m}$		73Br
NdNbO_4	$\text{C2}/\text{c}$	1013	$\text{I4}/\text{a}$		89KoF
Nd_2NiO_4	?	70	$\text{P4}_2/\text{ncm}$	130 Bmab	90Ro
Nd_2O_3	$2/\text{m}$	873	$\bar{3}\text{m}$		84Bo
or:	Ia3	873	$\text{P6}_3/\text{mmc}$	2373 hex.	
		2473	cubic		LB. 7b1
* $\text{NdP}_5\text{O}_{14}$	$\text{P2}_1/\text{c}$	413	Pncm		80As
$\text{Nd}_2\text{Si}_2\text{O}_7$	P4_122	1750	$\text{P2}_1/\text{n}$		70Fe
NdTaO_4	$\text{I2}/\text{a}$	1601	tetr.		83Der
Nd_3TaO_7	C222_1	1280	cubic		79Al
$\text{Nd}_2\text{Ti}_2\text{O}_7$	P2_1	1770	?		LB. 16a

NiAl ₂ O ₄	?	400	Fd3m ?		85Ta
NiAs ₂	Pbca	?	Pnnm		81Ke
Ni ₂ As ₂ O ₇	P1	691	C2/m		90Bu
Ni ₃ B ₇ O ₁₃ Br	Pca2 ₁	398	cubic		81Wo
Ni ₃ B ₇ O ₁₃ Cl	ortho.	610	cubic		LB. 16a
Ni ₃ B ₇ O ₁₃ I	Pca2 ₁	64	F43c		LB. 16a
Ni(C ₅ H ₅) ₂	P2 ₁ /a	>170	P2 ₁ /a		t. 10. 6
Ni(C ₃ H ₁₀) ₂ N ₃ ClO ₄	P2 ₁	285	Pn2n		90Sol
Ni(C ₃ H ₁₀) ₂ NO ₂ ClO ₄	P2 ₁	?	Pbn2 ₁	327 Pnma	90Sol; 91
Ni(ClO ₄) ₂ ·6H ₂ O	?	126	?	180 ?	
	225 ortho.	305	?	324 ?	89No
* NiF ₂	ortho.	73	P4 ₂ /mnm		LB. 7a
* Ni ₂ MnGa	tetr.	202	Fm3m		89FuI
* NiMnGe	Pnma	470	P6 ₃ /mmc		78An; PH. 3
* Ni(ND ₃) ₆ (NO ₃) ₂	monocl.	?	P2 ₁ 2 ₁ 2 ₁	? Pa3	
		?	Fm3m		86An
* Ni(NH ₃) ₆ (BF ₄) ₂	?	80	P2 ₁ /n	115 P2 ₁ /n	
		140	Fm3m		86Jan
Ni(NH ₃) ₆ Br ₂	?	?	Fm3m		90Ho
* Ni(NH ₃) ₆ (ClO ₄) ₂	monocl.	143	P2 ₁ /n	173 Fm3m	77Ho
Ni(NH ₃) ₆ I ₂	trig.	20	Fm3m		80Fc
* Ni(NH ₃) ₆ (NO ₃) ₂	Pmm2	80	Pmmn	197 Pa3	
		247	Fm3m		86Ga
NiO	trig.	473	Fm3m		LB. 7b1
Ni ₈ P ₃	R3c	1298	hex.		87I1
* NiS	R3m	200	P6 ₃ /mmc		76Pi
NiSb ₂	Pbca	?	Pnnm		81Ke
Ni ₅ Sb ₂	?	813	hex.		90Al; PH. 3
NiSe	R3m	?	P6 ₃ /mmc		81Ke
NiTlO ₃	R3	1530	R3c		91La
NiZn	P4/mmm	?	Pm3m		78Pe
* Np	Pnma	553	P4 ₂ 2	850 Im3m	79Ve
* O ₂	C2/m	24	R3m	44 Pm3n	t. 9. 1
O ₂ AsF ₆	tricl. ?	191	monocl.	270 Fm3m	82Gr
OH ₃ AsF ₆	?	271	Fm3m		84Ch

(continued)

OH_3SbF_6	$\text{I}2_13$	293	?	322	?	
		361	$\text{I}a\bar{3}d$			84Ch
OsCl_4	$\text{P}4_132$?	ortho.			LB. 7a
OsF_6	Pnma	274	$\text{I}m3m$			LB. 7a
OsTe_2	Pnmm	<300	$\text{Pa}3$			81Ke

Phenathrene - see: $\text{C}_{14}\text{H}_{10}$

Phenothiazine - see: $\text{C}_{12}\text{H}_{10}\text{SN}$

$[\text{P}(\text{CH}_3)_4]_2\text{CoBr}_4$	$\text{P}12_1/c1$	367	Pmcn			90Pre; 91PrB
$[\text{P}(\text{CH}_3)_4]_2\text{CoI}_4$	$\text{P}12_1/c1$	376	Pmcn			90Pre; 91PrB
$[\text{P}(\text{CH}_3)_4]_2\text{CuBr}_4$	$\text{P}2_1/n11$	102	$\text{P}12_1/c1$	406	inc.	
		409	Pnma			90Pre; 91A1
$[\text{P}(\text{CH}_3)_4]_2\text{CuCl}_4$	$\text{P}12_1/c1$	346	$\text{P}(\text{Pmcn})/(\text{ss}\bar{1})$	381	Pmcn	90Pre
$[\text{P}(\text{CH}_3)_4]_2\text{ZnI}_4$	$\text{P}12_1/c1$	378	Pmcn			90Pre; 91PrB
P_4S_3	Pnmb	314	tetr.			t. 10. 6; PH. 3
P_4S_4	$\text{P}2_1/c$?	?			81Ke
P_4S_5	$\text{P}2_1$?	$\text{P}2_1/m$			81Ke
P_4S_7	$\text{P}2_1/c$?	Pbcn			81Ke
PSe	ortho.	573	ortho.			81Ke; PH. 3
P_4Se_3	Pmnb	355	cubic	465	cubic	81Ke; PH. 3
$\text{Pb}_5\text{Al}_3\text{F}_{19}$	tetr.	290	tetr.			91Au; 91Co
$\text{Pb}_3(\text{AsO}_4)_2$	$\text{P}2_1$	100	$\text{P}2_1/c$	327	$\text{C}2/c$	
		601	$\text{R}\bar{3}m$			89Ab
PbAs_2S_4	$\text{P}2_1/n$?	$\text{P}2_12_12_1$?	$\text{I}\bar{4}3m$	
		?	$\text{P}31c?$			74Mu
$\text{Pb}_2\text{BiNbO}_6$	monocl.	748	cubic			65Vi
$\text{PbBi}_2\text{Nb}_2\text{O}_9$	ortho.	800	tetr.			LB. 16a
$\text{Pb}_5\text{Bi}_8\text{O}_{17}$	monocl.	868	tetr.			85Br
$\text{Pb}_2\text{BiTaO}_6$	tetr.	693	cubic			65Vi
$\text{PbBi}_2\text{Ta}_2\text{O}_9$	ortho.	703	tetr.			LB. 16a
$\text{PbBi}_3\text{Ti}_2\text{NbO}_{12}$	ortho.?	563	tetr.			LB. 16a
$\text{PbBi}_4\text{Ti}_4\text{O}_{15}$	ortho.?	843	tetr.			LB. 16a
$\text{Pb}_2\text{Bi}_4\text{Ti}_5\text{O}_{18}$	ortho.?	583	tetr.			LB. 16a
* $\text{PbCa}_2(\text{C}_2\text{H}_5\text{COO})_6$?	190	$\text{P}4_1$	332	$\text{P}4_22_12$	LB. 16b
$\text{Pb}_2\text{CaTeO}_6$	tricl.	568	cubic			73Pol

$\text{Pb}_2\text{CdTeO}_6$	tricl.	570	cubic			73Pol
$\text{Pb}_2\text{CoTeO}_6$?	213	?	363	cubic	73Pol
Pb_2CoWO_6	ortho.	235	$P(C2/m)/(\bar{1}1)$	298	$\text{Fm}\bar{3}\text{m}$	89Sc1
$\text{Pb}_5\text{Cr}_3\text{F}_{19}$	I4cm	555	4/m			89AlR; 91Co
PbCrO_4	$P2_1/n$	964	?	1056	?	62Pi
Pb_2CrO_5	C2/m	453	monocl.			78Ti
* PbF_2	Pnma	648	$\text{Fm}\bar{3}\text{m}$			LB. 7a
$\text{Pb}_3(\text{FeF}_6)_2$ - see: $\text{Pb}_5\text{Fe}_3\text{F}_{19}$						
$\text{Pb}_5\text{Fe}_3\text{F}_{19}$	I4cm	564	4/m			90Al; 91Co
$\text{Pb}_3(\text{GaF}_6)_2$ (?)	tetr.	645	tetr.?			84Ab1; 91Co
* $\text{Pb}_5\text{Ge}_3\text{O}_{11}$	P3	450	$\text{P}\bar{6}$	571	?	77Ma
* PbHAsO_4	Pc	313	monocl.			LB. 16b
* PbHPO_4	Pc	310	$P2/c$			LB. 16b
* PbHfO_3	Pba2	380	$P222_1$?	$\text{Pm}\bar{3}\text{m}$	85Ba
* PbI_2	$\text{P}\bar{3}\text{m}1$	423	hex.?			89SoT
$\text{Pb}_2\text{KNb}_5\text{O}_{15}$	Cm2m	723	$P4/\text{mbm}$			LB. 16a; 91Ga
$\text{Pb}_2\text{LiNb}_5\text{O}_{15}$	$\text{Pn}2_1\text{m}$	770	Pnam	1010	$P4/\text{mbn}$	91Ga
$\text{Pb}_2\text{LuNbO}_6$	ortho.	553	cubic			LB. 4a
$\text{Pb}_2\text{LuTaO}_3$	ortho.	>550	cubic			LB. 4a
$\text{Pb}_2\text{MgTeO}_6$?	193	cubic			73Pou
$\text{Pb}_2\text{MnTeO}_6$?	443	cubic			73Pou
Pb_2MnWO_6	monocl.	423	cubic			71Ve
PbMo_6S_8	tricl.	14	trig.			89Ku1
$\text{Pb}_2\text{NaNb}_5\text{O}_{15}$	Cm2m	795	$P4/\text{mbm}$			91Ga
PbNb_2O_6	$\text{Bb}2_1\text{m}$	833	$P4/\text{mbm}$			LB. 16a
$\text{PbNb}_4\text{O}_{11}$	Bm2m	813	?			LB. 16a
$\text{Pb}_2\text{NiTeO}_6$?	243	cubic			73Pou
PbO	$P(C2\text{mb})/(\bar{1}11)$			208	$P4/\text{mmm}$	
		765	Pbma	1023	?	89Mo; 90Ge
Pb_3O_4	Pbam	170	$P4_2/\text{mbc}$			82Gav
$\text{Pb}_2\text{P}_2\text{O}_7$	$\text{P}\bar{1}$	943	$P2_1/n$			90Br
* $\text{Pb}_3(\text{PO}_4)_2$	C2/c	453	$\text{R}\bar{3}\text{m}$			84Bou
$\text{Pb}_5\text{S}_2\text{I}_6$	monocl.	563	?			89Pop
$\text{Pb}_2\text{Sb}_2\text{O}_7$	I2cm	510	Imcm			90Iv
$\text{Pb}_2\text{ScNbO}_6$?	1483	?			84Bok
$\text{Pb}_2\text{ScTaO}_6$	$\text{Fm}\bar{3}\text{m}$	1773	?			84Bok
PbSeO_4	$P2_1/n$	918	Pnma			LB. 7b

(continued)

Pb_4SiO_6	?	428	?			76M1
PbSnF_4	P2/c	353	P4/nmm	623	Fm3m	89Ca; 91Ca
PbSnO_3	monocl.	400	cubic			LB. 4a
PbTa_2O_6	ortho.	538	ortho.			LB. 16a
$\text{Pb}_3(\text{TiF}_6)_2$ (?)	tetr.	695	tetr.?			84Ab1; 91Co
* PbTiO_3	P4mm	763	Pm3m			LB. 16a
$\text{Pb}_3(\text{VF}_6)_2$ (?)	tetr.	635	tetr.?			84Ab1; 91Co
$\text{Pb}_3(\text{VO}_4)_2$	Im3m	283	monocl.	371	hex.	
		377	$\bar{R}3m$			
or:	P2 ₁	283	hex.			88Am
$\text{Pb}_8\text{V}_2\text{O}_{13}$	monocl.	426	P222 ₁	>523	C222 ₁	84Ba
$\text{Pb}_5\text{W}_3\text{O}_{9F}_{10}$	I4	785	?			87Ab
$\text{Pb}_2\text{YbNbO}_6$	ortho.	>553	cubic			LB. 4a
$\text{Pb}_2\text{ZnTeO}_6$?	328	cubic			73Pou
* PbZrO_3	Pba2 ?	503	Pm3m			LB. 16a
PbBi	P2 ₁	470	P2 ₁	485	P2 ₁	
		509	P2 ₁ ?			89Io
PbBi_2	C2/m	?	?			81Ke
PdAl	cubic	?	trig.	?	Pn3m	TA. 1
PdCl_2	ortho.	669	?			TA. 1
PdDySn	tetr.	50	Fm3m			85Um
PdI	P2 ₁ /c	833	Pnmn			LB. 7a
Pd_3Mn	tetr.	800	cubic			TA. 2
$\text{Pd(en)}_2\text{Pt(en)}_2\text{Cl}_2(\text{ClO}_4)_4$ [en=NH ₂ CH ₂ CH ₂ NH ₂]	monocl.	290	ortho.			91Sa
$\text{Pd(NH}_3)_2\text{Cl}_2$	monocl.	211	Pbca			89K12
Pd_3V_2	?	1318	?			TA. 2
Pm_2O_3	Ia3	1073	C2/m	2013	$\bar{P}3m1$	
		2408	hex.	2498	cubic	LB. 7b1
Po	Pm3m	<70	R3m			PH. 3
* Pr	P6 ₃ /mmc	860	cubic	1069	Im3m	90Kh
$\text{PrAl}_3(\text{BO}_3)_4$	R32	1150	C2/c?			88Be
PrAlO_3	I $\bar{1}$	151	I112/m	205	cubic?	
		1603	cubic			70Bu
PrC_2	I4/mmn	1408	?			PH. 2
PrCu_2	Imma	7	hex.			85Gr
PrCu_6	P2 ₁ /c	212	Pnma			90Vr

PrGaO ₃	ortho.	1093	trig.			91BeV1
Pr ₂ (MoO ₄) ₃	Pba2	508	P4 ₂ ,m			
and:	C2/c	1260	P4 ₂ ,m			71Br
PrNbO ₄	C2/c	953	tetr.			84Ku
PrNiO ₃	Pbnm	773	R3c			91Hu
Pr ₂ NiO ₄	P4 ₂ /ncm	115	Bmab	1500	I4/mmm	91Fe
Pr ₂ O ₃	Ia3	?	C2/m	?	P3m1	
		2223	hex	2423	cubic	LB. 7b1
* PrP ₅ O ₁₄	P2 ₁ /c	411	Pncm			89ReK
Pr ₃ Sb ₅ O ₁₂	inc.	415	I43m			89G1
Pr ₂ Si ₂ O ₇	P4 ₁ 22	? 1600	P2 ₁ /n			70Fe
PrTaO ₄	monocl.	1573	ortho.			81Ca
Pt(en) ₂ Pt(en) ₂ Br ₂ (ClO ₄) ₄ [en=NH ₂ CH ₂ CH ₂ NH ₂]	monocl.	?	ortho.			91Sa; 91Bu
Pt(en) ₂ Pt(en) ₂ Cl ₂ (ClO ₄) ₄ [en=NH ₂ CH ₂ CH ₂ NH ₂]	monocl.	292	ortho.			91Sa; 91Bu
Pt(en) ₂ Pt(en) ₂ I ₂ (ClO ₄) ₄ [en=NH ₂ CH ₂ CH ₂ NH ₂]	monocl.	?	ortho.			91Sa; 91Bu
PtBi ₂	Pbca	?	Pa3			81Ke
PtF ₆	Pnma	276	Im3m			LB. 7a
PtO ₂	hex.	800	ortho.			89ChH
* Pu	Pmm	60	P2 ₁ /m	393	I2/m	
		483	Fddd	593	Fm3m	
		723	I4/mmm	753	Im3m	79Ve; 89Sa
PuBr ₃	?	373	?			65Ha
PuC ₂	P2 ₁ /n	?	Fm3m			81Ke
Quartz - see: SiO ₂						
Quaterphenyl	P1	<270	P2 ₁ /a			78Ba
RbAg ₄ I ₅	?	43	hex.	122	trig.	
		209	P4 ₁ 32			87Ak; 88Br
RbAlF ₄	Pmmn	282	P4/mbm	553	P4/mmm	82Bo
Rb ₃ AlF ₆	tetr.	680	Fm3m			LB. 7a
Rb ₂ As	Fm3m	970	Pnma			62Qu
* RbBF ₄	Pnma	515	Fm3m			LB. 7a
RbBH ₄	?	44	Fm3m			t. 7. 11

(continued)

RbBaPO ₄	Pnma	1333	?			88Amm
Rb ₂ BeF ₄	Pn2 ₁ a	?	Pnma	801	?	
		965	?			80Ar
RbBe ₂ F ₅	ortho.	353	P1	574	?	LB. 7a
Rb ₃ BiBr ₆	?	706	?			80Cy
Rb ₃ BiCl ₆	?	714	?			80Cy
RbBi(MoO ₄) ₂	P2 ₁ /c	?	P2 ₁ /c	?	Pcan	
		?	I4 ₁ /a			77K1
RbC ₆ H ₂ O ₇	P2 ₁ /a	308	P2 ₁ /n			87Ho
* RbCN	Bb	110	Fm3m			83St
RbCaCl ₃	Pnma	?	P4/mbm	?	Pm3m	79M1
RbCaF ₃	Pmmn	41	I4/mcm	193	Pm3m	85H1
RbCdCl ₃	Pnma	341	Cmcm	363	P4/mbm	
		388	Pm3m			LB. 7a
Rb ₂ CdCl ₄	C2/a	133	I4/mmm			85A1
Rb ₃ Cd ₂ Cl ₇	P4 ₂ /mnm	172	Bbmm	214	I4/mmm	88Alk
Rb ₄ Cd ₃ Cl ₁₀	B12 ₁ /c1	136	P4 ₂ /ncm	194	Bcmb	
		237	I4/mmm			90Bo
RbCdF ₃	I4/mcm	124	Pm3m			75Ro
Rb ₂ Cd ₂ (MoO ₄) ₃	P2 ₁ 2 ₁ 2 ₁	463	P2 ₁ 3			86Mu
RbCdPO ₄	Pna2 ₁	633	?	1023	?	88Amm
* Rb ₂ Cd ₂ (SO ₄) ₃	P2 ₁ 2 ₁ 2 ₁	68	P1	103	P2 ₁	
		129	P2 ₁ 3			LB. 16b; 88H1
RbCe(MoO ₄) ₂	P2 ₁ /c	?	?	?	?	77K1
RbCe(WO ₄) ₂	I2/c	?	Pcan	?	Pnnn	
		?	?			77K1
* RbClO ₄	Pnma	548	Fm3m			t. 7. 11
* Rb ₂ CoBr ₄	?	65	?	95	ortho.	
		193	ortho.	333	?	85Ge
Rb ₂ CoCl ₄	A11a	66	Pn2 ₁ a	192	ortho.	
		295	Pnma			89To
RbCoF ₃	tetr.	101	Pm3m			LB. 7a
RbCrCl ₃	C2	201	C2/m	470	P6 ₃ /mmc	79Cr
Rb ₂ CrCl ₄	?	52	ortho.?			85Ts
Rb ₃ CrF ₆	tetr.	683	Fm3m			LB. 7a
RbCrI ₃	C2 ₁	?	C2 ₁ /m	?	P6 ₃ /mmc	88Za
Rb ₂ CrO ₄	Pmcn	975	hex.			77Du; 85Lo

RbCuCl ₃	C2	260	P6cn	339	P6 ₃ /mmc	90Gr
RbCu ₄ Cl ₃ I ₂	ortho.	350	P4 ₁ 32			83Gel
Rb ₄ Cu(MoO ₄) ₃	monocl.	433	ortho.	573	P6 ₃ /mmc	89K1
RbD ₂ AsO ₄	?	173	tetr.			LB. 16b
Rb ₃ D(SeO ₄) ₂	monocl.	92	monocl.			90Ich
RbDy(MoO ₄) ₂	Pccm	?	Pcan			77K1
RbDy(WO ₄) ₂	I2/c	?	P2 ₁ /c	?	Pcan	77K1
Rb ₃ ErF ₆	I4 ₁ /amd	818	Fm3m			75AlG
RbEr(MoO ₄) ₂	Pccm	773	Pcan	1173	P ₃ m1	77K1
RbEr(WO ₄) ₂	I2/c	?	P2 ₁ /c	?	Pcan	77K1
Rb ₅ Eu(CrO ₄) ₄	?	533	?			89Pol
RbEu ₂ F ₇	P6 ₃ 22	991	?			78Ar
Rb ₃ EuF ₆	?	433	I4/mmm	1143	Fm3m	81Zai
RbEu(MoO ₄) ₂	Pcan	?773	Pnnn	1170	?	77K1
RbEu(WO ₄) ₂	I2/c	1090	Pcan			77K1
RbFeF ₃	monocl.	45	ortho.	86	tetr.	
		101	Pm3m			LB. 7a
RbFeF ₄	Pca2 ₁	923	P4/mmm			LB. 7a
or:	P2 ₁ 2 ₁ 2 ₁	?	Pmma	923	P4/mmm	79Hi
Rb ₃ FeF ₆	P4/mnc	633	Fm3m			LB. 7a
RbFeS ₂	C2/c	770	Immm			89SmS
Rb ₃ GaF ₆	?	365	?	379	?	
		658	Fm3m			LB. 7a
Rb ₃ GdF ₆	I4 ₁ /amd	?	I4/mmm	1153	Fm3m	81Zai
RbGd(MoO ₄) ₂	Pccm	?	Pcan	?	Pnnn	
		?	?			77K1
RbGd(WO ₄) ₂	I2/c	1090	Pcan			77K1
RbGeBr ₃	Pn2 ₁ a	366	R3m	503	Pm3m	88Th
RbGeI ₃	P2 ₁ 2 ₁ 2 ₁	454	Pn2 ₁ a	494	R3m	
		517	Pm3m			89ThR
RbH ₂ AsO ₄	Fdd2	110	I ₄ 2d			t. 7. 14
RbHF ₂	I4/mcm	449	Fm3m			LB. 7a
RbH ₂ PO ₄	Fdd2	147	I ₄ 2d	359	P2 ₁	
		553	?			LB. 16b
RbHS	?	123	trig.	403	Fm3m	70A1
RbHSO ₄	Pc	266	P2 ₁ /c			LB. 16b
Rb ₃ H(SO ₄) ₂	A2/a	339	R ₃ m	>400	?	87Bar; 89Fo

(continued)

RbHSe	trig.	>300	Fm3m			70A1
* RbHSeO ₄	I1	371	I2 ₁	446	?	78Wa
or:	P1	370	B2			90Mak
RbH ₃ (SeO ₃) ₂	P2 ₁	153	P2 ₁ 2 ₁ 2 ₁			LB. 16b
Rb ₃ H(SeO ₄) ₂	C2/c	337	A2/a	449	R3m	
		606	?			87Bar; 90Ze
Rb ₂ HfW ₅ O ₁₈	?	493	?	953	P6 ₃ 22	90St
Rb ₂ Hg(CN) ₄	R3c	398	Fd3m			81W1; PH. 2
Rb ₃ HoF ₆	I4/mmm	1203	Fm3m			81Za1
RbHo(MoO ₄) ₂	Pccm	?	Pcan	?	?	77K1
RbHo(SO ₄) ₂	C2/c	?	Pnna			84Sa
RbHo(WO ₄) ₂	I2/c	1073	P2 ₁ /c	?	Pcan	77K1
Rb ₃ InF ₆	?	438	P4/mnc	493	Fm3m	81Za1
RbIn(MoO ₄) ₂	tricl.	98	inc.	163	Pnam	
		1073	P3m1			89Zap
RbIn(WO ₄) ₂	1	90	Fd3	723	Pnam	
		1098	P3m1			71Ef
Rb ₂ KBIF ₆	P2 ₁ /n	340	cubic			88Kh; 91F1
Rb ₂ KCrF ₆	tetr.	153	Fm3m			88Kh; 91F1
Rb ₂ KDyF ₆	P2 ₁ /n	381	Fm3m			84Mi; 91F1
Rb ₂ KFeF ₆	tetr.	170	Fm3m			88Kh; 91F1
Rb ₂ KGaF ₆	tetr.	129	cubic			91F1
Rb ₂ KHoF ₆	P2 ₁ /n	392	Fm3n			91F1
Rb ₂ KMoO ₃ F ₃	R3	328	Fm3m			84IhA
Rb ₂ KScF ₆	P2 ₁ /n	223	I4/m	252	Fm3m	91F1
Rb ₂ KTbF ₆	P12 ₁ /n1	410	Fm3m			91F1
Rb ₂ KYF ₆	P2 ₁ /n	398	Fm3m			88Kh; 91F1
Rb ₅ La(CrO ₄) ₄	?	570	?			89Pol
RbLa(MoO ₄) ₂	P2 ₁ /c	1003	tetr.	?	?	77K1
RbLa(WO ₄) ₂ [A]	C2/c	1088	Pnnn			
[B]	C2/m	953	C2/c	1063	Pnnn	
[C]	Pbcn	853	C2/m	938	C2/c	
		1053	Pnnn			76K1K
RbLiCrO ₄ - see: LiRbCrO ₄						
Rb ₄ LiH ₃ (SO ₄) ₄	P2 ₁	131	P4 ₁	455	?	90Pi
Rb ₄ LiH ₃ (SeO ₄) ₄	P2 ₁	101	P4 ₁	465	?	90Pi
RbLiMoO ₄	m	393	mm2	406	3m	
		423	F43m			88K1M

RbLiWO ₄	m	378	mm2	403	cubic	
		418	F $\bar{4}$ 3m			89Me
RbLu(MoO ₄) ₂	Pccm	773	Pcan	983	P $\bar{3}$ m1	77K1
RbLu(WO ₄) ₂	P2 ₁ /c	1140	Pcan	1180	P $\bar{3}$ m1	77K1
Rb ₂ MgCl ₄	I4/mmm	?	Pnma			80Ar
RbMgF ₃	Pm3m	?	P6 ₃ /mmc			LB. 7a
Rb ₂ MgGe ₅ O ₁₂	cubic	733	I $\bar{4}$ 3d			84To2
RbMnCl ₃	C2/m	274	P6 ₃ /mmc			84Go1
Rb ₂ MnF ₆	P6 ₃ mc	?	Fm3m			LB. 7a
Rb ₂ MnI ₄	P2 ₁ /m	?	Pnma			80Ar
Rb ₂ Mn ₂ (MoO ₄)	P2 ₁ 2 ₁ 2 ₁	285	P2 ₁ 3			86Mu
Rb ₂ MoO ₄	C2/m	503	Pmcn	593	ortho.	89K; 85Lo; 70Ak
Rb ₃ MoO ₃ F ₃	tetr.	423	tetr.	538	cubic	LB. 16b
* RbN ₃	tetr.	?	Pm3m			76Pi
RbNO ₂	monocl.	<273	Fm3m			t. 7.2
RbNO ₃	trig.	437	cubic	492	trig.	
		558	cubic			85Ka
or:	P3	437	Pa3	492	R $\bar{3}$ m ?	88ShL
		558	Fm3m			LB. 16b
Rb ₂ NaDyF ₆	I4/m	173	Fm3m			84Mi
Rb ₂ NaHoF ₆	I4/m	173	Fm3m			81Ih
Rb ₂ NaNiF ₆	tetr.	152	cubic			88Kh
Rb ₂ NaPdF ₆	tetr.	388	cubic			88Kh
Rb ₂ NaTmF ₆	I4/mmm	?	Fm3m			84IhA
RbNbCl ₆	?	578	?			89Shf
Rb ₃ Nb ₂ O ₇ F ₁₁	?	563	?			88KaA
RbNbWO ₆	tetr.	370	Fd3m			87Vy
RbNbW ₂ O ₉	?	573	?	593	Cmm2	
623	ortho.	653	P6 ₃ 22	>750	hex.	80K1
Rb ₃ NdF ₆	?	463	tetr.	1103	Fm3m	81Zai
RbNd(MoO ₄) ₂	Pcan	773	Pnnn	993	tetr. ?	77K1
RbNd(WO ₄) ₂	I2/c	1123	Pcan			77K1
RbO ₂	monocl.	179?	inc.	?	I4/mmm	
		404	Fm3m			73Du; 81Ke
Rb ₂ O. Al ₂ O ₃ . 4SiO ₄	I4 ₁ /a	673	cubic			85KoN
RbOH	Cmc2 ₁	?	P2 ₁ /n	?	monocl.	
		508	Fm3m			87Ja
RbPF ₆	?	207	Fm3m			t. 7. 13

(continued)

$\text{Rb}_2\text{PbCu}(\text{NO}_2)_6$	P1	275	<i>Fmmm</i>	312	<i>Fm3m</i>	81Pet
$\text{Rb}_2\text{Pb}_4\text{Nb}_{10}\text{O}_{30}$	ortho.	685	tetr.			84Mo
Rb_3PrF_6	?	503	<i>I4/mmm</i>	1093	<i>Fm3m</i>	81Zai
$\text{RbPr}(\text{MoO}_4)_2$	$\bar{P}1$	723	<i>Pcan</i>	953	<i>Pnnn</i>	
		?	?			77K1
$\text{RbPr}(\text{WO}_4)_2$	<i>I2/c</i>	1020	<i>Pcan</i>	1230	<i>Pnnn</i>	77K1
Rb_2S_5	$\text{P}2_1^2, 2_1^2, 2_1^2$	>300	?			81Ke
* RbSCN	<i>Pbcm</i>	440	tetr.			91Sa
<i>RbSH - see: RbHS</i>						
Rb_2SO_4	<i>Pnam</i>	922	$\bar{P}3m1$			74No
Rb_2SbBr_6	?	220	?	230	?	t. 7. 13
Rb_3ScF_6	<i>I4/mmm</i>	230	<i>P4/nmc</i>	475	<i>Fm3m</i>	91Ch
Rb_2SeO_4	ortho.	825	hex. ?			62Ga
$\text{Rb}_5\text{Sm}(\text{CrO}_4)_4$?	573	?			89Pol
Rb_3SmF_6	?	463	<i>I4/mmm</i>	1133	<i>Fm3m</i>	81Zai
$\text{RbSm}(\text{MoO}_4)_2$	<i>Pcan</i>	<770	<i>Pnnn</i>	1120	?	77K1
$\text{RbSm}(\text{WO}_4)_2$	<i>I2/c</i>	1098	<i>Pcan</i>			77K1
RbSrPO_4	?	883	?	1123	?	
		1613	?			88Amm
RbTaCl_6	hex.	586	?			89ShF
RbTaO_3	?	520	?			76M1
$\text{RbTb}(\text{MoO}_4)_2$	<i>Pccm</i>	?	<i>Pcan</i>			77K1
$\text{RbTb}(\text{WO}_4)_2$	<i>I2/c</i>	1080	<i>Pcan</i>			77K1
Rb_2TeBr_6	<i>I4/m</i>	45	<i>Fm3m</i>			84IhA
Rb_2TeI_6	<i>P4/mnc</i>	340	<i>Fm3m</i>			84IhA
RbTiOPO_4	$\text{Pna}2_1$	1068	<i>Pnam</i>			89MaB
$\text{RbTm}(\text{MoO}_4)_2$	<i>Pccm</i>	<770	<i>Pcan</i>	1070	$\bar{P}3m1$	77K1
$\text{RbTm}(\text{WO}_4)_2$	<i>I2/c</i>	?	$\text{P}2_1^2/\text{c}$	<770	<i>Pcan</i>	
		1070	$\bar{P}3m1$			77K1
RbVF_4	$\text{P}2_1^2, 2_1^2$	184	$\text{P}2_1^2, 2_1^2, 2_1^2$	413	<i>Pmmn</i>	
		483	<i>P4/mbm</i>	?	<i>P4/mmm</i>	84Hi
Rb_3VF_6	?	403	?	531	?	
		618	<i>Fm3m</i>			LB. 7a
Rb_2WO_4	<i>C2/m</i>	543	<i>Pcmm</i>	651	<i>Ccmm</i>	
		740	$\text{P}6_3/\text{mmc}$	950	?	83Tu; 70Ak; 69Be
$\text{Rb}_3\text{WO}_3\text{F}_3$	trig.	?	cubic			69Be
$\text{RbY}(\text{MoO}_4)_2$	<i>Pccm</i>	?	<i>Pcan</i>	?	$\bar{P}3m1$	77K1

RbY(WO ₄) ₂	[A]	monocl.	?	?			
	[B]	I2/c	?	?	?	Pcan	77K1
RbYb(MoO ₄) ₂		Pccm	770	Pcan	1000	P $\bar{3}$ m1	77K1
RbYb(WO ₄) ₂		I2/c	1150	P2 ₁ /c	?	Pcan	
			1203	P $\bar{3}$ m1			77K1
* Rb ₂ ZnBr ₄		Pc	50	P2cm	80	P2 ₁ cn	
	108	P2 ₁ cn	200	P(Pmcn)/(ss $\bar{1}$)			
	374	Pmcn					82Ue; 86Ho
* Rb ₂ ZnCl ₄		Pna2 ₁	74	Pna2 ₁	189	P(Pcmn)/(ss $\bar{1}$)	
			302	Pnma	?	(P6 ₃ /mma)?	83Qu
RbZnF ₃		tetr.	?	P6 ₃ /mmc	770	Pm3m	81Zai
Rb ₂ ZnGe ₅ O ₁₂		tetr.	?	I $\bar{4}$ 3d			84To2
Rb ₂ ZnI ₄		?	33	inc.?	62	monocl.	89Zag
RbZnPO ₄		P2 ₁	753	?	1143	?	88Amm
ReF ₆		Pnma	270	Im3m			LB.7a
ReO ₂		P2 ₁ /c	573	P4 ₂ /mnm	?		81Ke; 89ChH
Re ₂ O ₇		ortho.	413	?			89ChH
ReSe ₂		2/m	?	6/mmm			84Bou
RhBi ₂		P2 ₁ /c	?	monocl.			81Ke
RhF ₆		Pnma	?	Im3m			LB.7a
RhSe ₂		Pbnm	?	Pa3			81Ke
RhTi		Cmmm	?	P4/mmm	?	Pm3m	88Yi
RuF ₆		Pnma	275	Im3m			LB.7a
Ru ₂ Ge ₃		Pbcn	?	P $\bar{4}$ c2			81Ke
Ru ₂ Si ₃		Pbcn	?	P $\bar{4}$ c2			81Ke

Squaric acid - see: C₄H₂O₄

* S		Fddd	368	P2 ₁ /a			76Pi
* SC(NH ₂) ₂		Pb2 ₁ m	169	inc.	176	P(P2 ₁ ma)/($\bar{1}\bar{1}\bar{1}$)	89Zu
	180	P(Pnma)/(s $\bar{1}$ l)			202	Pbnm	LB.16b; 87Co
SF ₆		?	?	Im3m			t.10.6
SbF ₆ (H ₃ O)		I2 ₁ 3	?	?	373	Ia $\bar{3}$ d	91Car
SbMn ₃ N		tetr.	?	Pm3m			70Bar
SbNbO ₄		Pna2 ₁	678	?	878	?	LB.16b
Sb ₂ O ₃		Fd3m	846	Pccn			LB.7b1

(continued)

Sb_2O_4		monocl.	?	ortho.		73Ke
Sb_5O_{71}	[A]	$\text{P}2_1/\text{c}$	481	$\text{P}6_3/\text{m}$		79Fr
	[B]	Pc	438	$\text{P}\bar{6}$		79Fr
Sb_2S_3		?	300	$\text{Pbn}2_1$	450	Pbnm LB. 16b
SbSBr		?	21	Pnam		LB. 16b
* SbSI		$\text{Pna}2_1$	293	Pnam		LB. 16b
SbTaO_4		$\text{Pna}2_1$	668	?	873	? LB. 16b
SbTiTaO_6		$\text{mm}2$	553	?		90Po
* Sc		$\text{P}6_3/\text{mma}$	1282	?	1608	$\text{Fm}3\text{m}$ 59Ro
$\text{Sc}_3\text{Sb}_5\text{O}_{12}$		$\text{R}3\text{m}$	392	$\text{I}\bar{4}3\text{m}$?	84Po
SiC		cubic	2270	$\text{P}6_3/\text{mc}$		
$\text{Si}_2(\text{CH}_3)_6$?	222	$\text{Im}3\text{m}$		t. 10. 6
* SiO_2		<i>quartz</i> ($\text{P}3_21$)	1143	<i>tridym.</i> ($\text{P}6_3/\text{mmc}$)	1743	<i>cristobalite</i> ($\text{Fd}3\text{m}$)
<i>quartz:</i>		$\text{P}3_221$	848	<i>inc.</i>	849. 4	<i>inc.</i>
			846	$\text{P}6_222$		84Bou; 91Do
<i>tridymite:</i>		Cc	378	$\text{P}2_12_12_1$	453	ortho.
			653	$\text{P}6_3/\text{mmc}$		78Ki
<i>cristobalite:</i>		$\text{P}4_12_12$	500	$\text{Fd}3\text{m}$		
* SiP_2		Pbam	?	$\text{Pa}3$		81Ke
* Sm		$\text{R}\bar{3}\text{m}$	1190	$\text{Im}3\text{m}$		61Sp
$\text{SmAl}_3(\text{BO}_3)_4$		trig.	1100	$\text{C}2/\text{c}$		88Be
SmAlO_3		ortho.	1043	trig.	2223	cubic 84Co
SmBO_3		?	1123	?		89LyS
* Sm_4Bi_3		?	94	?	234	$\text{I}\bar{4}3\text{d}$ 85Ts; PH. 3
SmC_2		$\text{I}4/\text{mmm}$	1443	?		PH. 2
SmCu_6		monocl.	64	ortho.		87En
SmF_3		Pnma	828	$\text{P}\bar{3}1\text{c}$		73So
$\text{Sm}_2\text{Fe}_{14}\text{B}$		$\text{P}4_2/\text{mnm}$	620	?		85An1
$\text{SmGd}(\text{MoO}_4)_3$		$\text{Pba}2$	453	$\text{P}\bar{4}2_1\text{m}$		
<i>and:</i>		$\text{C}2/\text{c}$	1158	$\text{P}\bar{4}2_1\text{m}$		71Br
SmMn_2Ge_2		?	153	$\text{I}4/\text{mmm}$	341	?
$\text{Sm}_2(\text{MoO}_4)_3$		$\text{Pba}2$	470	$\text{P}\bar{4}2_1\text{m}$		89Bu1; PH. 3
<i>and:</i>		$\text{C}2/\text{c}$	1183	$\text{P}\bar{4}2_1\text{m}$		71Br
SmNbO_4		$\text{C}2/\text{c}$	1113	tetr.		84Ku
Sm_3NbO_7		$\text{Cmm}2$	160	Cmmm		85Ast
* Sm_2O_3		$\text{Ia}3$	1123	$\text{C}2/\text{m}$	2203	$\text{P}\bar{3}\text{m}1$
			2433	hex.	2553	cubic LB. 7b1

* SmOF	$R\bar{3}m$	>770	Fm3m			76Pi
* SmP_5O_{14}	$P2_1/c$	482	Pncm			90Ca
$SmRh_3B_2$?	200	$P6/mmm$			90Ab
Sm_2S_3	ortho.	1380	?			89An
$Sm_3Sb_4S_9$	Pnma	850	?			90SaS; PH. 3
$Sm_2Si_2O_7$	$P4_1$?	1770	$P2_1/n$	1860	P1	70Fe
* Sn	cubic	286	$I4/amd$?	?	89Ol
$SnCl_2 \cdot 2H_2O$	$P2_1/c$	218	$P2_1/c$			LB. 16b
SnF_2	$C2/c$	423	$P4_12_12$			
	and:	$P2_12_12_1$	339	$P4_12_12$		89De
SnF_6	?	475	cubic			86Fou
Sn_3F_8	monocl.	*619	?			86Fou
$SnMn_3N$	tetr.	?	cubic			70Bar
* $Sn_2P_2S_6$	Pc	339	$P2_1/c$			LB. 16b
$Sn_2P_2Se_6$?	176	?	192	inc.	
		218	$P2_1/c$			88Vo
SnS	Pbnm	878	Cmcm			81ScW
Sn_2S	$P3_121$	964	hex.			TA. 2
Sn_2S_3	ortho.	940	ortho.	988	ortho.	
		1026	ortho.			TA. 2
SnSe	Pbnm	807	Cmcm			81ScW
* SnTe	trig.	75	cubic			79Wi
	or:	ortho.	22	trig.	90	tetr.
		160	cubic			84Or
	or:	ortho.	90	trig.	160	cubic
						84Or
* Sr	Fm3m	>300	$P6_3/mmc$	>850	Im3m	56Me
$SrAlF_5$	tetr.	695	?			67Ra; 89Rav
$Sr_8Al_{12}O_{24}(CrO_4)_2$	[A]		ortho.	?	$Im\bar{3}m?$	
	[B]	mm2	289	4/mmm	299	$Im\bar{3}m$
						88De1; 89Ku2
$Sr_8Al_{12}O_{24}(MoO_4)_2$			tetr.	571	$I\bar{4}3m$	88De; 88De1
$Sr_8Al_{12}O_{24}(SO_4)_2$			tetr.?	520	cubic	88De1
$Sr_8Al_{12}O_{24}(WO_4)_2$			$I4_1/acd$	609	cubic	88De1
$SrBi_2Nb_2O_9$	$A2_1am$	693	tetr.			LB. 16a; 90Rae
$SrBi_2Ta_2O_9$	$A2_1am$	583	tetr.			LB. 16a; 90Rae
$SrBi_4Ti_4O_{15}$	ortho.	803	tetr.			LB. 16a
$Sr_2Bi_4Ti_5O_{18}$	ortho.	558	tetr.			LB. 16a
SrC_2	$I4/mmm$	643	Fm3m			81Ke; PH. 2

(continued)

* SrCO_3	Pbnm	1170	$R\bar{3}m$		76Pi
$\text{SrCa}_2(\text{CH}_3\text{CH}_2\text{CO}_2)_6$	- see: $\text{Ca}_2\text{Sr}(\text{C}_2\text{H}_5\text{COO})_6$				
SrCl_2	cubic	1000	?		TA. 1
$\text{Sr}_2\text{Co}_2\text{O}_5$?	>800	?	1020 inc.	
		1155	cubic		87Rod
$\text{Sr}_2\text{CoTeO}_6$	tetr.	670	cubic		75Po
Sr_2CoWO_6	tetr.	>670	cubic		LB. 4a
SrCrF_5	?	495	?		89Rav
$\text{Sr}_5\text{Cr}_3\text{F}_{19}$	tetr.	953	tetr.?		91Co
$\text{Sr}_2\text{Cu}(\text{BO}_3)_2$	$P2_1/c$	1073	Pnma		89SmK
$\text{Sr}_3\text{CuNb}_2\text{O}_9$	tetr.	663	cubic		71Ve
$\text{Sr}_3\text{CuTa}_2\text{O}_9$	tetr.	1523	cubic		71Ve
Sr_2CuWO_6	tetr.	1193	cubic		71Ve
$\text{Sr}_5\text{Fe}_3\text{F}_{19}$	$I4_1$	720	tetr.?		84Ab1; 91Co
$\text{Sr}_2\text{FeNbO}_6$	tetr.	523	cubic		LB. 4a
$\text{Sr}_5\text{Ga}_3\text{F}_{19}$	tetr.	893	tetr.?		91Co
SrHfO_3	ortho.	?	tetr.	? tetr.	
		?	cubic		88Re
$\text{Sr}_2\text{KNb}_5\text{O}_{15}$	$P4bm$	429	$4/mmm$		LB. 16a
$\text{Sr}_2\text{MnNbO}_6$	trig.	473	cubic		LB. 4a
SrMo_6S_8	$P\bar{1}$	125	$R\bar{3}$		90KuY
$\text{Sr}_2\text{NaNb}_5\text{O}_{15}$?	173	?	457 ortho.	
		547	$4/mmm$		84bnn
$\text{Sr}_2\text{Nb}_2\text{O}_7$	$Pbn2_1$	117	inc.	488 $\text{Cmc}2_1$	
		1615	Cmcm		81Ak
Sr_2NiWO_6	tetr.	>570	cubic		LB. 4a
SrOOH	Pbnm	?	Cmcm		82Pr
$\text{Sr}_2\text{P}_2\text{O}_7$	Pnma	1531	?		91Be
SrPbO_3	monocl.	1120	cubic		70Sh
$\text{Sr}_2\text{RbNb}_5\text{O}_{15}$	tetr.	412	?		LB. 16a
Sr_2SiO_4	$P112_1/n$	358	$Pcmn$	773 Pmnb	83Ca; 91PhK
$\text{Sr}_2\text{Ta}_2\text{O}_7$?	117	$\text{Cmc}2_1$	161 Cmcm	
		443	$2/m$		81Ak
SrTeO_3 [A]	Cc	585	C2	1260 ?	
[B]	tricl.	648	monocl.	733 monocl.	84Bu
SrTe_2O_5	$2/m$	890	$6/mmm$		89Sad
$\text{SrThNb}_2\text{O}_8$	$I2/c$	808	$I4_1/a$		77Fo

$\text{Sr}_5\text{Ti}_3\text{F}_{19}$	tetr.	755	tetr.?	91Co
* SrTiO_3	I4/mcm	105	Pm3m	85Sat
$\text{Sr}_5\text{V}_3\text{F}_{19}$	tetr.	735	tetr.?	91Co
Sr_2YNbO_6	trig.	903	cubic	LB. 4a
$\text{Sr}_2\text{YbNbO}_6$?	813	cubic	LB. 4a
Sr_2ZnWO_6	tetr.	>703	cubic	LB. 4a
SrZrO_3	ortho.	1003	tetr. 1133	tetr.
		1443	cubic	67Ca

TAAP - see: $[\text{Te}(\text{OH})_6] \cdot 2(\text{NH}_4\text{H}_2\text{PO}_4) \cdot [(\text{NH}_4)_2\text{HPO}_4]$

TANANE - see: $\text{C}_9\text{H}_{18}\text{NO}$

TANO-n-heptane - see: $\text{C}_9\text{H}_{16}\text{NO}_2$

TCAA - see: $\text{CH}_3\text{NH}_2\text{O}$

p-TERPHENYL see: $\text{C}_{18}\text{H}_{14}$

TGFB - see: $(\text{NH}_2\text{CH}_2\text{COOH})_3 \cdot \text{H}_2\text{BeF}_4$

TGS - see: $(\text{NH}_2\text{CH}_2\text{COOH})_3 \cdot \text{H}_2\text{SO}_4$

TGSe - see: $(\text{NH}_2\text{CH}_2\text{COOH})_3 \cdot \text{H}_2\text{SeO}_4$

Thiourea - see: $\text{SC}(\text{NH}_2)_2$

s-triazine - see: $\text{C}_3\text{H}_3\text{N}_3$

TSCC - see: $(\text{NHCH}_3\text{CH}_2\text{COOH})_3\text{CaCl}_2$

$(\text{TMTSF})_2\text{BF}_4$	$\text{F}\bar{1}$	38	?	84Le
* $(\text{TMTSF})_2\text{ClO}_4$	$\text{P}\bar{1}$	24	$\text{P}\bar{1}$	85Mor
$(\text{TMTSF})_2\text{FSO}_3$	$\text{F}\bar{1}$	88	?	84Le
$(\text{TMTSF})_2\text{NO}_3$	$\text{P}\bar{1}$	41	?	84Le
* $(\text{TMTSF})_2\text{ReO}_4$	$\text{P}\bar{1}$	177	$\text{P}\bar{1}$	82Ri
* $(\text{TMTTF})_2\text{BF}_4$	tricl.	200	tricl.	84Mu
* $(\text{TMTTF})_2\text{SCN}$	$\text{P}\bar{1}$	160	$\text{P}\bar{1}$	85Mor
TTF(Au)BDT	$\text{P}\bar{1}$	200	$\text{P}\bar{1}$	85Er
TTF(Cu)BDT	$\text{P}\bar{1}$	240	$\text{P}\bar{1}$	85Er
TTF-chloranil	Pn ?	80	$\text{P}2_1/\text{n}$	89ToB
* TTF-TCNQ ($\text{C}_6\text{H}_4\text{S}-\text{C}_{12}\text{H}_4\text{N}_4$)	$\text{P}(\text{P}2_1/\text{c})/(\text{Cmm})$	38	inc.	
		49	inc.	
		53	inc.	
		150	$\text{P}2_1/\text{c}$	81Pet; 90So
TaFeO_4	$\text{P}4_2/\text{mnm}$	1023	Pbcn	89Pou
Ta_3Ge	$\text{P}4_2/\text{n}$?	$\text{I}\bar{4}$	81Ke
Ta_2O_5	hex.	?	hex.?	80Kh

(continued)

* TaS ₂ -IT	P $\bar{1}$	190	tricl.	353	inc.	
		448	P $\bar{3}m1$			81Pet; 89Min
* TaS ₃	[A]	?	<300	C222 ₁		81Ka
	[B]	?	<300	P2 ₁ /m		
* TaSe ₂	2H	?	<60	Cmcm	90	inc.
			112	hex.	120	P6 ₃ /mmc 81Wa
	or:	P6 ₃ /mmc	95	inc.	122	P6 ₃ /mmc 81Pet
	IT	P $\bar{1}$	473	inc.	>600	P $\bar{3}m1$ 81Pet
(TaSe ₄) ₂ I	?	245	inc.	263	I422	85Se
Ta ₅ Si ₃	?	?	I4/mcm			81Ke
* TaTe ₄			P(P4/ncc)/($\bar{1}\bar{1}\bar{1}\bar{1}$)($\infty\infty$)	450	tetr.	89Bu; 90Pro
	or:	P4/ncc	450	P4/ncc	550	inc. 89ChW; 91BeB
* Tb		ortho.	220	P6 ₃ /mmc	1300	?
TbC ₂		I4/mmm	1558	Fm3m		PH.2
TbCl ₃		Cmcm	808	C2/m		82Gar
TbF ₃		Pnma	1213	P $\bar{3}c1$		72Bac
* Tb ₂ (MoO ₄) ₃		C2/c	1108	P4 ₂ ₁ m		
	and:	Pba2	433	P4 ₂ ₁ m		71Br
TbNi		P2 ₁ /m	?	Pnma		76Par
* Tb ₂ O ₃	[A]	C2/m	2175	P $\bar{3}m1$	2175	hex.
			2340	cubic		
	[B]	Ia3	1500	C2/m	2160	hex. LB. 7b1
TbPO ₄		monocl.	2	I4 ₁ /amd		80Na
* TbP ₅ O ₁₄		P2 ₁ /c	447	Pncm		89ReK
Tb ₃ Sb ₅ O ₁₂		inc.	385	I4 ₃ m		89G1
Tb ₂ Si ₂ O ₇		P1/P $\bar{1}$	1770	Pnam		70Fe
* TbVO ₄		Fddd	33	I4 ₁ /amd		89H1k
TcF ₆		Pnma	268	Im3m		LB. 7a
Te(OH) ₆ ·2NH ₄ H ₂ PO ₄ ·(NH ₄) ₂ HPO ₄				Pn	321	2/m 84GuG
TeVO ₄		P2 ₁ /c	923	P2 ₁ /c		72Me
ThBr ₄		inc.	95	I4 ₁ /amd	603	ortho.
			693	tetr.		88Ke
Th		cubic	1673	Im3m		
ThC ₂		C2/c	?	Fm3m		81Ke
	or:	C2/c	1700	P4 ₂ /mmc	1754	Pa $\bar{3}$ PH.2
ThCN		P $\bar{3}1m$	1398	C2/m?		PH.2
ThCl ₄		inc.	70	I4 ₁ /amd	593	ortho. 81Hu

$\text{Th}_2\text{Fe}_{14}\text{B}$	$\text{P4}_2/\text{mm}$	450	$\text{P4}_2/\text{mm}$		90An
* Ti	$\text{P6}_3/\text{mmc}$	1153	Im3m		79Ve
TiCl_3	?	9	?	220 ?	90Sn
TiF_3	trig.	335	Pm3m		85Mog
TiO	$\text{A2}/\text{m}$	1263	tetr.	1523 Fm3m	LB. 7b1
* Ti_3O_5 [A]	$\text{C2}/\text{m}$	450	$\text{C2}/\text{m}$		
[B]	$\text{P2}_1/\text{a}$	236	$\text{I2}/\text{c}$		89AsG
Ti_4O_7	$\text{A}\bar{1}$	125	$\text{A}\bar{1}$	150 $\text{A}\bar{1}$	76Pi
Ti_6O_{11}	$\text{P}\bar{1}$	147	$\text{I}\bar{1}$		83Pa
TiS_2	?	50	$\text{P}\bar{3}\text{m1}$		90Las; PH. 3
TiSe_2	?	200	$\text{P}\bar{3}\text{m1}$		84Fr
* Ti	$\text{P6}_3/\text{mmc}$	535	Im3m		79Ve
* TiAlF_4	$\text{I2}/\text{a}$	435	$\text{I4}/\text{mcm}$	514 $\text{P4}/\text{mmm}$	87Bu
* TiBF_4	Pnma	475	Fm3m	735 cubic	t. 7. 11
$\text{TiBi}(\text{MoO}_4)_2$	$\text{P2}_1/\text{c}$?	$\text{P2}_1/\text{c}$? $\text{I4}_1/\text{a}$	77K1
TiCdF_3	$\text{I4}/\text{mcm}$	191	Pm3m		75Ro
* $\text{Ti}_2\text{Cd}_2(\text{SO}_4)_3$	$\text{P2}_12_12_1$	93	P1	123 P2_1	
		128	P2_13		LB. 16. b
$\text{TiCe}(\text{MoO}_4)_2$	Pcan	?	Pnnn		77K1
* TiClO_4	Pnma	541	Fm3m		t. 7. 11
Ti_2CoBr_4	$\text{P2}_1/\text{m}$?	Pnma		80Ar
Ti_3CrF_6	ortho.	485	Fm3m		LB. 7a
$\text{TiDy}(\text{MoO}_4)_2$	Pcan	?	Pnnn	? ?	77K1
$\text{TiEr}(\text{MoO}_4)_2$	monocl.	?	Pccm	? Pcan	77K1
$\text{TiEu}(\text{MoO}_4)_2$	Pcan	?	Pnnn	? ?	77K1
* TiF	ortho.	355	$\text{I4}/\text{mmm}$		LB. 7a
TiFeTe_2	?	222	?	691 ?	89Ald
TiGaS_2	?	202	inc.	214 Cc ?	90Gr; PH. 3
* TiGaSe_2	monocl.	110	monocl.	120 Cc	90Mc
$\text{TiGd}(\text{MoO}_4)_2$	Pcan	?	Pnnn	? ?	77K1
* TiH_2PO_4	monocl.	230	$\text{P2}_1/\text{a}$	357 ortho.	90Ar
$\text{TiH}_3(\text{SeO}_3)_2$	P2_1	52	inc.	56 $\text{P2}_12_12_1$	85Sh
$\text{TiHo}(\text{MoO}_4)_2$	Pcan	?	Pnnn	? ?	77K1
* TiI	Cmcm	448	Pm3m		LB. 7a
TiInCl_4	monocl.	698	ortho.		LB. 7a
Ti_3InF_6	tetr.	403	Fm3m		81Zai
* TiInS_2	?	170	inc.	200 monocl.	

(continued)

		216	C2/c	788	$R\bar{3}m$	78Mu; 84Va
TlLa(MoO ₄) ₂	monocl.	?	I4 ₁ /a			77K1
TlLu(MoO ₄) ₂	monocl.	?	Pccm	?	Pcmn	77K1
TlMnCl ₃	monocl.	235	ortho.	276	tetr.	
		296	Pm3m			75A1
Tl ₂ MoO ₄	Pna2 ₁	311	?	673	?	
		776	?			LB. 16b
* TlN ₃	?	?	Cccm	240	I4/mcm	
		?	Pm3m			85A1K
* TlNO ₃	Pnma	352	P31m	416	cubic	t. 7. 2
TlNbWO ₆	tetr.	330	Fd3m			87Vy
TlNd(MoO ₄) ₂	Pcan	?	Pnnn	?	?	77K1
Tl ₃ PbCl ₅	P2 ₁ 2 ₁ 2 ₁	428	P4 ₁			83Ke
Tl ₂ PbCu(NO ₂) ₆	P1	249	Fmmm	291	Fm3m	81Pet
TlPr(MoO ₄) ₂	Pcan	?	Pnnn	?	?	77K1
Tl ₂ S ₅	P2 ₁ 2 ₁ 2 ₁	?	Pnca			81Ke
TlSCN	Pbcm	367	tetr.			91SaB; PH. 2
TlSbSe ₂	monocl.	?	Cmcm?			
	ortho.	653	Cmcm?			89Was
Tl ₃ ScF ₆	I4/mmm	358	P4/nmc	370	Fm3m	91Ch
TlSc(MoO ₄) ₂	Pcmn	?	P $\bar{3}$ m1			77K1
TlSe	I4/mmm	460	cubic			TA. 2
Tl ₂ SeO ₄	P2 ₁ 2 ₁ 2 ₁	72	Pnma			83Gr
TlSm(MoO ₄) ₂	Pcan	?	Pnnn	?	?	77K1
TlTb(MoO ₄) ₂	Pcan	?	Pnnn	?	?	77K1
TlTiOPO ₄	Pna2 ₁	852	Pnam			89MaB
Tl ₂ TlOH(SO ₄) ₂	Cc	377	C2/c			83Ab
TlTm(MoO ₄) ₂	monocl.	?	Pccm	?	Pcmn	77K1
Tl ₂ WO ₄	?	284	hex.	310	?	
		835	?			LB. 16b
TlY(MoO ₄) ₂	Pcan	?	?			77K1
TlYb(MoO ₄) ₂	monocl.	?	Pccm	?	Pcmn	77K1
Tl ₂ ZnI ₄	?	160	P2 ₁	212	P2 ₁ /m	85Ge1
TmAsO ₄	ortho.	?	tetr.			73Lu
Tm ₂ BaNiO ₅	Pnma	1550	Immm			91
TmCd	tetr.	3	Pm3m			73Lu
TmF ₃	Pnma	1303	C $\bar{3}$ m1			73So

TmGa ₃	?	4	cubic		89Dou
TmMnO ₃	P6 ₃ cm	573	?		LB. 16a
* Tm ₂ O ₃	Ia3	2553	hex		LB. 7b1
TmVO ₄	ortho.	2	tetr.		86Ka
TmZrF ₆	P2 ₁	1123	cubic		73Pou
U	inc.	22	monocl.	37	Pmcm(1/2βγ)
		43	Cmca	935	P4 ₂ /mnm
		1045	Im3m	1405	?
					87aa; 90Mar
UB ₂ C	Pmma	1950	R3m		91Ro
UC ₂	I4/mmm	2073	Fm3m		81Ke; PH. 2
U(C ₅ H ₅)Cl	monocl.	78	monocl.	230	P12 ₁ /n1
UMn ₂	Imma	220	Fd3d		85La
UMn ₂ Ge ₂	?	150	I4/mmm?	390	?
UMn ₂ Si ₂	?	80	I4/mmm?	377	?
* UO ₂	?	30	Fm3m		81Sa
U ₄ O ₉	trig.	338	I43d		89La
UO ₂ (OH) ₂	Cmca	278	Pbca		72Ta
UPd ₃	?	6	P6 ₃ /mmc		90Si; PH. 3
VF ₃	R3c	773	Pm3m		90Da1
V ₃ Ga	tetr.	1910	cubic		76Iz
V ₅ Ge ₃	P6 ₃ /mcm	?	I4/mcm		81Ke
V ₂ Hf	Imm2	120	cubic	520	?
VO ₂	P2 ₁ /c	340	P4/mnm		84Bou
* V ₂ O ₃	I2/a	398	R3c		84Bou
* V ₃ O ₅	P2/c	423	I2/c		85As
V ₄ O ₇	?	250	A1		76Pi
V ₅ O ₉	P1	130	B1		81Ke; 91LaP
V ₆ O ₁₁	?	170	P1		81Ke; PH. 1
V ₆ O ₁₃	monocl.	173	C2/m		LB. 7b1
V ₈ O ₁₅	?	70	?		81Ke
VOPO ₄	P4/n	?	ortho.		90Bar
VRu	tetr.	>110	cubic		76Iz
VS	Pcmn	?	P6 ₃ /mmc		PH. 3

(continued)

* V_3Si	$P4_2/mmc$	21	$Pm3n$		880t
V_5Si_3	?	?	$I4/mcm$		81Ke
V_3Te_4	$I2/m$	1000	$P\bar{3}m1$		890h
V_2Zr - see: ZrV_2					
W	$Pm3n$?	$Im3m$		PH. 3
W_2C	$P\bar{3}m1$	2753	$P6_3/mmc$		PH. 2
WF_6	$Pnma$	265	$Im3m$		LB. 7a
WO_3	Pc	233	$P\bar{1}$	290 $P2_1/n$	
		603	$Pnmb$	1013 $P4/nmm$	
		1183	tetr.	1503 tetr.	LB. 16a
WP_2	$C2/m$?	$Cmc2_1$		81Ke
XeF_6	$P2_1/b$	254	$Pnma$	292 $P2_1/m$	LB. 7a
* Y	$P6_3/mmc$	1728	$Im3m$		61Sp
YAl_3	$P6_3/mmc$	913	$R\bar{3}m$	1223 $Pm3m$	67Ba; 89Xu
YC	$R\bar{3}m$	1173	$Fm3m$		PH. 2
YC_2	$I4/mmm$?	$Fm3m$		81Ke
YF_3	$Pnma$	1325	$C\bar{3}m1$		73So
$Y_2Fe_{14}B$	$P4_2/mnm$	580	tetr.		85An1
$Y_6Mn_{23}D_{23}$	$P4/mmm$	175	$Fm3m$		84
* $YMnO_3$	$P6_3cm$	913	$P6_3/mcm$		LB. 16a
$YNbO_4$	$C2/c$	1093	$4/m$		84Ku
YSi_2	$Imma$?	$I4_1/amd$		81Ke
$YTao_4$	$P2/a$?	$I4_1/a$		67Wo
Y_3TaO_7	$C222_1$	1873	cubic		79Al
Y_2WO_6	$P2/c$	1753	$P2_12_12_1$	1870 $P\bar{4}2_1m$	89TyE
* Yb on heating:	$Fm3m$	1071	$Im3m$		
on cooling:	$Fm3m$	533	$P6_3/mmc$	973 $Im3m$	61Sp
YbF_3	$Pnma$	1258	$C\bar{3}m1$		73So
$YbMnO_3$	$P6_3cm$	993	?		LB. 16a
$YbNbO_4$	$C2/c$	1098	$4/m$		84Ku
$YbZrF_6$	$P2_1$	1073	cubic		73Pou

* Zn_3As_2	$\text{I4}_1\text{cd}$	457	$\text{P4}_2/\text{nbc}$	945	Fm3m	78Iz
$\text{Zn}_3\text{B}_7\text{O}_{13}\text{Br}$	ortho.	585	cubic			LB. 16a
$\text{Zn}_3\text{B}_7\text{O}_{13}\text{Cl}$	trig.	480	monocl.	567	Pca2_1	
		786	$\text{F}\bar{4}3\text{c}$			LB. 16a
$\text{Zn}_3\text{B}_7\text{O}_{13}\text{I}$	ortho.	690	cubic			LB. 16a
ZnCl_2	monocl.	390	tetr.			TA. 1
ZnGeAs_2	$\text{I}\bar{4}2\text{d}$?	$\bar{4}3\text{m}$			76Pi
ZnGeP_2	$\text{I}\bar{4}2\text{d}$?	$\bar{4}3\text{m}$			76Pi
ZnMn_3C	$\text{P4}/\text{mmm}$	233	$\text{Pm}\bar{3}\text{m}$			72Bar; PH. 2
$\text{Zn}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$	tricl.	?	$\text{I4}_1/\text{and}$			
	tricl.	>107	monocl.	>123	monocl.	
		292	Pnma			89Ho
ZnP_2	P4_12_12	310	$\text{P2}_1/\text{c}$	370	monocl.	90Zu
* Zn_3P_2	$\text{P4}_2/\text{nmc}$	1053	Fm3m			78Iz
$\text{Zn}_2\text{P}_2\text{O}_7$	Ic	405	monocl.	428	$\text{C2}/\text{m}$	65Ca
$\text{Zn}_3(\text{PO}_4)_2$	$\text{C2}/\text{c}$	1215	?			86To
* ZnS	$\text{F}\bar{4}3\text{m}$	1297	$\text{P6}_3\text{mc}$			PDF
ZnSnAs_2	$\text{I}\bar{4}2\text{d}$?	$\text{F}\bar{4}3\text{m}$			76Pi
ZnSnP_2	$\text{I}\bar{4}2\text{d}$?	$\text{F}\bar{4}3\text{m}$			76Pi
$\text{ZnTiF}_6 \cdot 6\text{H}_2\text{O}$	$\text{P2}_1/\text{c}$	186	$\text{R}\bar{3}$			88Ch
ZnZrF_6	$\text{R}\bar{3}$	300	Fm3m			89Ro
* Zr	$\text{P6}_3/\text{mmc}$	1140	Im3m			56Me
ZrAl_3	Pm3m	783	$\text{I4}/\text{mmm}$			89Xu
ZrF_4	$\text{P2}_1/\text{m}$	738	$\text{C2}/\text{c}$	958	?	LB. 7a
$\text{Zr}(\text{MoO}_4)_2$	$\text{C2}/\text{c}$	913	$\text{P}\bar{3}1\text{c}$			88K1G
* ZrO_2	$\text{P2}_1/\text{c}$	1273	$\text{P4}_2/\text{nmc}$	2573	Fm3m	89Ne
$\text{Zr}(\text{SO}_4)_2 \cdot \text{H}_2\text{O}$	$\text{P}\bar{1}$	>320	$\text{P2}_1/\text{c}$			70Bae
ZrSi	?	?	Cmcm			81Ke
* ZrV_2	$\text{R}\bar{3}$	120	Fd3m			85Yar; PH. 3

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- 89PaB Palacios, E., J. Bartolome *et al.* (1989). *J. Phys.: Condensed Matter* **1**, 1119.
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- 89Sad Sadovskaya, L. Yu. *et al.* (1989). *Izv. Akad. Nauk SSSR: Ser. Fiz.* **53**, 1342.
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- 89Sch Schenk, K. J. *et al.* (1989). *J. Phys. Chem.* **93**, 5040.
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89Us Usachev, A. E., V. A. Schustov and Yu. V. Yablokov (1989). *Izv. Akad. Nauk SSSR: Ser. Fiz.* **53**, 1296.
89Va Vaks, V. G. *et al.* (1989). *J. Phys.: Condensed Matter* **1**, 5319.
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89Vl Vlokh, R. O. and Ye. I. Shopa (1989). *Kristallografiya* **34**, 252.
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89WaA Watanabe, R., T. Asaji *et al.* (1989). *Z. Naturforsch.* **44a**, 1111.
89WaC Waśkowska, A. and Z. Czapla (1989). *Cryst. Res. Technol.* **24**, 1259.
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 90Pre Presspich, M. R., M. R. Bond and R. D. Willet (1990). *Acta Crystallogr.* **A46**, C396.
 90PrJ Primeau, N., S. Jandl *et al.* (1990). *Solid State Commun.* **75**, 121.
 90Pro Prodan, A. *et al.* (1990). *Acta Crystallogr.* **B46**, 587.
 90PrS Pronin, I. S., S. E. Sigarov and A. A. Vashman (1990). *Solid State Ionics* **38**, 9.
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 90Re Reison, P. *et al.* (1990). *Acta Crystallogr.* **A46**, C347.
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 90RoC Rodriguez, V., M. Couzi *et al.* (1990). *Ferroelectrics* **109**, 39.
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 90TeO Terao, H. and T. Okuda (1990). *Z. Naturforsch.* **45a**, 343.
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 90Zu Zuev, A. V. *et al.* (1990). *Ukr. Fiz. Zh.* **35**, 346.
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 91An Andriampianina, V. *et al.* (1991). 7 EMF Abstracts, 135.
 91BaF Barrio, M., J. Font *et al.* (1991). *J. Phys. Chem. Solids* **52**, 665.
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 91Be Belghiti, A. A., A. Boukhari and E. M. Holt (1991). *Acta Crystallogr.* **C47**, 473.
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 91BcV1 Berkstresser, G. W., A. J. Valentino and C. D. Brandle (1991). *J. Cryst. Growth* **109**, 457.
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 91BhT Bhakay-Tamhane, S., A. Sequeira and R. Chidambaram (1991). *Ferroelectrics* (in press).

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 91Ec Ecolivet, C. *et al.* (1991). 7 EMF Abstracts, 173.
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 91FeG Fedorov, V. A., V. A. Gaushin and Yu. N. Korkisko (1991). *Phys. Status Solidi (a)* **126**, K5.
 91Fl Flerov, I. N. *et al.* (1991). 7 EMF Abstracts, 139.
 91FRM Frangis, N., C. Manolikas and S. Amelinckx (1991). *Phys. Status Solidi (a)* **126**, 9.
 91Ga Gagarina, E. S. *et al.* (1991). 7 EMF Abstracts, 82.
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 91Ka Katrusiak, A. (1991). *Acta Crystallogr.* **B47**, 398.
 91Koh Kohrizi, M. *et al.* (1991). *Solid State Commun.* **77**, 99.
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 91Kr Kruglik, A. I. *et al.* (1991). 7 EMF Abstracts, 162.
 91Ku Kun, S. V. *et al.* (1991). *Izv. Akad. Nauk SSSR: Neorg. Mater.* **27**, 611.
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 91MaV Makarova, I. P., I. A. Verin *et al.* (1991). 7 EMF Abstracts, 85.
 91MiJ Miniewicz, A., R. Jakubas and J. Zaleski (1991). *Ferroelectrics* **118**, 23.
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 91On Onodera, A. *et al.* (1991). 7 EMF Abstracts, 206.
 91PhK Phillips, B. L., R. J. Kirkpatrick and J. G. Thompson (1991). *Phys. Rev.* **B43**, 13280.
 91Pi Pietraszko, A., M. Połomska and A. Pawłowski (1991). *Izv. Akad. Nauk SSSR: Ser. Fiz.* **55**, 529.
 91Pie Pietraszko, A. (1991). private information.
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 91Ra Ravey, J. *et al.* (1991). 7 EMF Abstracts, 153.
 91Ri Ridou *et al.* (1991). 7 EMF Abstracts, 136.
 91RiK Rivera, J. P., W. J. Kusto and H. Schmidt (1991). 7 EMF Abstracts, 219.
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 91RoA Rodic, A., P.-J. Ahlzen *et al.* (1991). *Solid State Commun.* **78**, 767.
 91Sa Sakai, M. *et al.* (1991). *J. Phys. Soc. Jpn.* **60**, 1619.
 91SaB Sathaiak, S. and H. D. Bist (1991). *Phys. Status Solidi (b)* **164**, 95.
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 91Sat Sathaiak, S. and H. D. Bist (1991). *Z. Phys.* **B84**, 423.
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 91Su Simita, M. *et al.* (1991). *J. Phys. Soc. Jpn.* **60**, 1430.
 91Va Vanek, P., M. Havrankova and F. Smutny (1991). *Solid State Commun.* **77**, 169.
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 91Xu Xu, Chang-qing *et al.* (1991). *Solid State Ionics* **77**, 923.
 91Ye Ye, Z. G. *et al.* (1991). 7 EMF Abstracts, 134.
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