

AN ANALYTICAL TEST OF VEGARD'S LAW

RIASSUNTO. — Mediante elaboratore elettronico sono stati riportati in grafico, in funzione della composizione molecolare, i valori sperimentali dei parametri reticolari (a_0 , b_0 , c_0 , V) di 518 soluzioni solide binarie; nell'ipotesi che valga la legge di Vegard si è quindi calcolata la loro migliore retta interpolatrice secondo il metodo dei minimi quadrati. Sulla base dei risultati analitici, presentati sotto forma di tabelle, si può asserire che la validità della legge di Vegard per una data soluzione solida non può essere affermata a priori, ma, al più, essere verificata sperimentalmente. E' infatti stato riscontrato un buon numero di casi in cui i punti sperimentali o non sono interpolabili con una singola retta, o hanno un andamento concavo o convesso, o non sono interpolabili affatto.

Si mette poi in evidenza una « anisotropia » della legge di Vegard nel senso che la validità di una interpolazione lineare varia con la direzione cristallografica considerata e che in numerosi casi la pendenza della retta interpolatrice cambia di segno per i diversi parametri. In base agli scarti percentuali medi tra valori calcolati e valori osservati si può affermare che, a causa forse degli errori sperimentali, la legge di Vegard non è maggiormente valida per a_0 , b_0 , c_0 che per il volume della cella elementare.

ABSTRACT. — The values of a_0 , b_0 , c_0 and V of 518 binary solid solutions have been plotted, by a computer, against the molar concentration and, presuming the validity of Vegard's law, their best least-squares straight lines have been computed. The analytical results, reported in tables, show that, even if we can verify Vegard's law experimentally in a good percentage of cases, we are not allowed to assume a priori its validity. In fact there are too many cases where more than one straight line is necessary to interpolate the experimental values, or these lie on concave or convex curves, or they are not interpolable at all.

An « anisotropy » of Vegard's law has been pointed out in the sense that the validity of a linear interpolation may vary with the crystallographic direction and in certain cases the slope of the interpolator straight line has different signs for different parameters. On the basis of the mean percent differences between the computed and the experimental values, it is possible to assert that, presumably because of experimental errors, the values of the volume are linearly interpolable as well as the values of a_0 , b_0 , c_0 .

Introduction.

Vegard [21] and Vegard and Dale [22] in their works on binary solid solutions of cubic symmetry, state that the lattice parameter a_s of the member with a molar concentration c_2 ($0 \div 1$) of component 2 is given by:

$$(1) \quad a_s = (1 - c_2) a_1 + c_2 a_2 = c_2 (a_2 - a_1) + a_1;$$

a_1 and a_2 are the unit-cell parameters of the two pure components 1 and 2.

Since then the validity of the law has also been assumed for the lattice parameters of non-cubic solid solutions. However it was found, on the basis of experimental data, that Vegard's law, in form (1), is not exactly valid and efforts were made to justify the deviations [4, 5, 7, 8, 9, 11, 13, 15, 17, 18, 23] taking into account, e.g., the strain energy due to the introduction of a solute in the solvent matrix [11], or the compressibilities of the two components [4, 5], or the short range order (in the alloys) [3, 16], or the second-order elasticity [8, 13]. Attempts were addressed to find some other physical magnitude to be correlated with the unit-cell parameters, like the interatomic bond lengths [2]; Zen [23], supposing that the molar volumes are additive, suggests that it is the volume which depends linearly on concentration. Actually it is easy to find in the literature examples where all the six unit-cell parameters (a_0 , b_0 , c_0 , α , β , γ) and also the volume (V) are linearly interpolated against the molar concentration; that was done for binary and higher order solutions.

With the aim at surveying the behaviour of the lattice parameters when plotted as linear function of the molar concentration, we have undertaken an analysis of data reported in the literature for binary solid solutions. In particular, since, as pointed out by Zen [23], it is obvious that equation (1) cannot be valid simultaneously for the volume and a_0 , b_0 , c_0 , we investigated with special care this side of the problem.

Method.

If equation (1) is valid for a given lattice parameter (including the volume), say p , necessarily the experimental values p_s found for members of a solid solution must be interpolable by the equation:

$$(2) \quad y = Ax + B$$

where the expected values for y , A , x and B should be p_s , $(p_2 - p_1)$, c_2 and p_1 . On the basis of this test we have checked the validity of Vegard's law for 518 binary solid solutions, including alloys and inter-metallic compounds, with complete or incomplete miscibility. Using a computer (IBM 360/44, University of Turin), we have plotted a_0 , b_0 , c_0 and V against c_2 and computed, in double precision, the best least-squares straight lines through the experimental points. After examination of the graphs, isolated points clearly out of the interpolator straight line were rejected on the hypothesis of trivial experimental errors; the graphs showing sharp changes of slope were divided in two or more parts and those with points randomly distributed were discarded.

Results.

The results of the least-squares analysis are reported in Table 1, for compounds of mineralogical interest, and in Table 2 for other compounds, like alloys. The contents of the two tables are as follows.

- 1st column: order number of the solid solution; if sets of data from different sources were available, they are labelled by letters.
- 2nd column: chemical formulae, in agreement with Hey [10], of the two end members (the first members are in alphabetical order).
- 3rd column: symmetry; Tr = triclinic, M = monoclinic, O = orthorhombic, T = tetragonal, R = rhomboedric, H = hexagonal, C = cubic.
- 4th column: parameters interpolated; the parameters missing on the basis of the symmetry, are not interpolable.
- 5th and 6th columns: A and B of equation (2) with, in parentheses, their estimated standard deviations (e.s.d.).
- 7th column: standard error of one observation of unit weight, defined as:

$$(3) \quad \{[\sum (p_0 - p_e)^2]/(n - 2)\}^{\frac{1}{2}};$$

the summation is over the interpolated n points; p_0 and p_e are the experimental and the calculated values of the parameter.

- 8th column: reliability index defined as:

$$(4) \quad R = \frac{\sum |p_0 - p_e|}{\sum p_0} 100.$$

- 9th column:), (and — mean concave, convex and poor graph; ? means that we do not know whether the unit-cell parameters are given in Å or in KX units (otherwise they are in Å units).
- 10th column: (number of points fitted)/(number of points given in the reference).
- 11th column: range of composition where the best least-squares straight line is valid.
- 12th column: references; P1 and P2 are for the first or the second volume by W. B. Pearson [14] (page below); SBi or SRi are for the volume *i* of *Strukturbericht* [19] or *Structure Reports* [20] (page below); figures in parentheses are for the references quoted at the end of the tables.

Before of the references the binary solid solutions whose values of the lattice parameters turned out not to be linearly interpolable are reported; in Table 3 the names with the formulae and the order numbers of the minerals reported in Table 1 (*n* = natural compound) are listed in alphabetical order.

Discussion.

The analysis of our results, particularly of the graphs (not published), shows that, for a given binary solid solution, we are not allowed to assume a priori the validity of Vegard's law; in fact only about 50% of the solutions considered have the experimental values of their lattice parameters linearly interpolable in a strict sense. There is in fact an appreciable percentage of cases where the experimental points lie on a concave or, more often, convex curve; sometimes, because of sharp changes of slope, two or more straight lines are necessary to fit all the values; finally, there are examples where the distribution of the points is completely random or, at least, without a good behaviour.

On the basis of the mean percent errors we tried to test if a linear interpolation is more valid for the volume than for a_0 , b_0 , c_0 . Let us consider, for semplicity sake, the cubic case; if the difference $p_0 - p_c$ were due only to experimental errors we must expect that the mean percent error for *V* should be three times larger than for a_0 . We must

however remember that it is impossible that a_0 and V are simultaneously linearly interpolable [23] and therefore the mean expected ratio of the two average percent errors should be ≥ 3 . From the values of all the cubic sets of data in tables 1 and 2 we have:

$$(5) \quad \frac{\sum R_V}{\sum R_{a_0}} = 3.04$$

(3.16 and 2.95 for table 1 and 2 respectively), contrarily to any theoretical expectation. We may conclude that, presumably because of the experimental errors, the values of V are linearly interpolable as well as the values of a_0 , b_0 , c_0 .

A question could rise at this point: is it possible to formulate a « Vegard's law » which includes some parameters to take into account a possible deviation from linearity? We will try to answer this question considering the various cases of non linearity.

a) *Necessity of more than one straight line in order to interpolate the data of a solid solution.*

There are more than 100 of these cases and, in general, they include solid solutions with miscibility gaps or symmetry changes (obviously here the cases are excluded where the symmetry changes involve substantial alterations of the unit-cell parameters). Since gaps of miscibility are usually related to substantial differences in the structures of the pure components (that is evident for changes of symmetry), we think that sharp variations of slope in the graphs are attributable to remarkable sudden alterations in the crystal structure (e.g. changes of bond lengths or of the orientation of atomic groups, or order-disorder phenomena). It could be interesting to check the behaviour of some physical properties, as well as to determine the crystal structures of members with different compositions.

b) *Concave or convex curves.*

There are 10 concave and 62 convex cases; we note that sometimes the non linearity is nearer to one of the end members. The causes of the non-linearity could be the same as in a), but with smoother alterations in the crystal structure.

c) *The experimental points are not interpolable.*

There are about 50 such cases and the majority of them are solid solutions for which only few data are available or the difference $p_2 - p_1$ is very small. Sometimes, however, there is perhaps a combination of cases a) and b); parameters of solid solutions of type d) (see below) are also present in this group.

d) « *Anisotropy* » of Vegard's law.

A remarkable fact pointed out by the present analysis is, in our opinion, an « anisotropy » of equation (1) (when valid) found in a good number of cases, i.e. there are binary solid solutions for which the slope of the interpolator straight line has different signs for different parameters. A similar effect is present when some parameters are satisfactorily interpolable and others are not; this is particularly evident and interesting in some trigonal compounds for which, while the parameters of one lattice (say R) are interpolable, those for the second lattice (say H) are not (see, e.g., the case As-Sb [1]).

The peculiarities described at points a), b), c) and d) show clearly that to look for linear correlations between lattice parameters and some other chemical-physical property of the solid solutions should be an over-simplified procedure. Perhaps such linear correlations exist, in a certain number of cases, in rough first approximation and they can be found experimentally, but it seems impossible, at the moment, to work out some general simple theory able to explain the above reported « anomalies » of Vegard's law. Surely the diadochic atoms do not behave like interchangeable rigid solids (in this case the unit-cell volumes should be additive); we think that the variations of the chemical bond and, in general, of all the forces contributing to the stability of a crystal structure, play an important and not straightforward role on the lattice parameters of a solid solution.

We note that, within the possibility of error indicated by the estimated standard deviations, the equations reported in Tables 1 and 2 can be usefully employed in order to determine the composition of members of the respective binary solutions. Of course, it is necessary to use equations appropriated to the range of composition and to the conditions under which the binary solid solutions have been obtained.

TABLE 1. — *Binary solid solutions with a mineralogical interest.*

For the explanation of the symbols and the figures, see the text.

1	$\text{Ag}_3\text{AsS}_3 - \text{Ag}_3\text{SbS}_3$	H	a_0	0.00235(4)	10.816(3)	0.005	0.034	13	0-100	(44)
			V	0.415(8)	881.4(5)	0.9	0.06			
2	$\text{AgBiS}_2 - \text{AgBiSe}_2$	C	a_0	0.00180(7)	5.650(4)	0.0053	0.061	5	0-100	P2 507
			V	0.178(7)	180.3(4)	0.54	0.19			
3	$\text{AgBiSe}_2 - \text{AgBiTe}_2$	C	a_0	0.00329(7)	5.831(5)	0.0065	0.08	9	0-100	SR22 39
			V	0.355(8)	197.9(5)	0.73	0.25			
4	$\text{AgBiSe}_2 - \text{AgSbTe}_2$	C	a_0	0.0025(2)	5.840(10)	0.012	0.14	5	0-100	SR22 38
			V	0.266(15)	199.1(9)	1.21	0.40			
5	$\text{AgInTe}_2 - \text{CuInTe}_2$	T	a_0	-0.00249(12)	6.398(4)	0.005	0.06	-	6	0-50
			c_0	-0.0015(2)	12.612(5)	0.007	0.04			P2 515
			V	-0.46(2)	516.1(6)	0.78	0.13			
		T	a_0	-0.0027(2)	6.44(2)	0.007	0.08	-	5	60-100
			c_0	-0.0037(5)	12.77(4)	0.02	0.08			
			V	-0.55(5)	529(4)	1.47	0.23			
a		T	a_0	-0.0019(1)	6.411(6)	0.007	0.07	4/5	0-75	P2 515a
			V	-0.37(3)	516.8(1.3)	1.51	0.21			
6	$\text{Ag}_2\text{S} - \text{Cu}_2\text{S}$	C	a_0	-0.00515(8)	6.268(4)	0.006	0.055	5	0-100	SR22 115
			V	-0.557(12)	245.6(7)	0.93	0.26			
7	$\text{AgSbSe}_2 - \text{AgBiSe}_2$	C	a_0	0.00047(3)	5.7872(15)	0.002	0.018	4	0-75	SR22 36
			V	0.047(3)	193.8(2)	0.18	0.054			
8	$\text{AgSbSe}_2 - \text{AgBiTe}_2$	C	a_0	0.00366(7)	5.790(4)	0.005	0.06	5	0-100	SR22 37
			V	0.392(5)	193.8(4)	0.47	0.13			
9	$\text{AgSbSe}_2 - \text{AgSbTe}_2$	C	a_0	0.00291(5)	5.792(3)	0.0045	0.057	6	0-100	SR22 36
			V	0.307(4)	194.1(2)	0.33	0.114			
10	$\text{AgSbTe}_2 - \text{AgBiTe}_2$	C	a_0	0.00076(1)	6.0783(9)	0.0012	0.013	6	0-94	SR22 37
			V	0.085(2)	224.56(10)	0.13	0.039			
11	$\text{Al}_2\text{O}_3 - \text{Cr}_2\text{O}_3$	C	a_0	0.00234(2)	4.7576(3)	0.0005	0.007	7	0-23	SR21 469
			V	0.161(2)	107.68(2)	0.04	0.02			
12	$3\text{Al}_2\text{O}_3, 2\text{SiO}_2 -$ $3\text{Al}_2\text{O}_3, 2\text{GeO}_2$	O	a_0	0.00107(7)	7.545(5)	0.005	0.04	4/5	12-100	
			b_0	0.00086(5)	7.687(3)	0.004	0.03	5	0-100	SR22
			c_0	0.00042(2)	2.8805(9)	0.001	0.03	5	0-100	307
			V	0.068(3)	167.0(2)	0.23	0.09	4/5	12-100	
13	$\text{AlSb} - \text{GaSb}$	C	a_0	-0.00038(2)	6.1352(12)	0.002	0.023	6	0-100	P2 565
			V	-0.042(2)	230.93(14)	0.2	0.068			
a		C	a_0	-0.00049(1)	6.1400(5)	0.0006	0.006	5/7	0-80	P2 565a
			V	-0.0553(11)	231.48(6)	0.06	0.02			
14	$\text{BaAl}_2\text{Si}_2\text{O}_8 -$ $\text{CaAl}_2\text{Si}_2\text{O}_8$ From the stable H ph.	M	a_0	-0.0019(2)	8.633(6)	0.009	0.08	-		
			b_0	-0.00058(12)	13.051(3)	0.005	0.03	-	8	0-44
			c_0	-0.00087(11)	14.413(3)	0.004	0.02	-		(11)
			V	-0.47(4)	1470.1(1.1)	1.72	0.08	-		
a	Quench, from 1500°C	M	b_0	0.0003(4)	13.017(14)	0.003	0.01	3	31-44	
b	Metastable phase	H	a_0	-0.00009(1)	5.2911(2)	0.0002	0.002	3	0-44	
15	$\text{BaAl}_2\text{Si}_2\text{O}_8 -$ $\text{SrAl}_2\text{Si}_2\text{O}_8$	M	a_0	-0.00265(7)	8.636(2)	0.003	0.024	6	0-63	(10)
			b_0	-0.00079(6)	13.046(2)	0.003	0.02			
			c_0	-0.00138(4)	14.403(2)	0.002	0.011			
			V	-0.67(2)	1469.8(7)	0.9	0.05			
		M	a_0	-0.0020(2)	8.581(14)	0.003	0.02	3	75-100	
			b_0	-0.00036(2)	13.008(2)	0.0004	0.002			
			c_0	-0.00080(5)	14.355(4)	0.0008	0.003			
			V	-0.48(4)	1454(4)	0.78	0.03			
16	$\text{BaFe}_{12}\text{O}_{19} -$ $\text{BaCr}_{12}\text{O}_{19}$	H	a_0	-0.00080(3)	5.8793(11)	0.0012	0.013	4	0-50	SR16 239
			c_0	-0.00519(15)	23.097(5)	0.006	0.015	?		
			V	-0.342(12)	691.4(4)	0.46	0.04			
17	$\text{BaFe}_{12}\text{O}_{19} -$ $\text{LaFe}_{12}\text{O}_{19}$	H	a_0	-0.00010(1)	5.88888(9)	0.0002	0.002	9/11	0-100	SR22 371
			c_0	-0.00221(4)	23.181(2)	0.004	0.011			
			V	-0.0894(13)	696.18(6)	0.12	0.012			

(Table 1 cont.d.)

18	BaFe ₁₂ O ₁₉ - NdFe ₁₂ O ₁₉	H	a _o -0.00013(2) c _o -0.0037(2) V -0.141(10)	5,8887(3) 23,180(5) 696.1(2)	0.0004 0.006 0.22	0.004 0.016 0.019	-	4	0-30	SR22 371
19	BaFe ₁₂ O ₁₉ - PrFe ₁₂ O ₁₉	H	a _o -0.00012(1) c _o -0.00299(3) V -0.119(2)	5,8889(1) 23,1812(8) 696.20(5)	0.0002 0.001 0.067	0.002 0.003 0.007	-	5	0-40	SR22 371
20	Ba ₂ NaReO ₆ - Ba ₂ LiReO ₆	C	a _o -0.00180(4) V -0.364(9)	8,295(2) 570.7(6)	0.003 0.71	0.025 0.085	-	5	0-100	SR26 418
21	Ba(NO ₃) ₂ - Ca(NO ₃) ₂	C	a _o -0.00514(3) V -0.953(9)	8,114(2) 533.0(5)	0.002 0.46	0.01 0.07	-	5	17-83	SB2 387
22	Ba(NO ₃) ₂ - Pb(NO ₃) ₂	C	a _o -0.00279(3) V -0.532(6)	8,116(2) 534.3(4)	0.003 0.58	0.03 0.086	-	11	0-100	(45)
23	Ba(NO ₃) ₂ - Sr(NO ₃) ₂	C	a _o -0.00298(1) V -0.567(4)	8,1080(7) 532.6(2)	0.0007 0.2	0.006 0.026	-	5	17-83	SB2 387
24	BaSO ₄ - PbSO ₄	O	b _o -0.00080(5) c _o -0.00193(9) V -0.283(14)	5,465(2) 7,164(4) 348.5(6)	0.004 0.008 1.24	0.06 0.08 0.23	-	8	0-100	SR23 446
25	BaTiO ₃ - LaAlO ₃	C	a _o -0.00125(5) V -0.060(2)	4,0106(7) 64,51(3)	0.0008 0.04	0.012 0.04	-	6/7	5-25	SR22 367
26	BaZrO ₃ - BaTiO ₃	C	a _o -0.00159(7) V -0.082(3)	4,183(2) 73,16(11)	0.003 0.14	0.05 0.15	)	5	0-50	SR24 356
27	Bi ₂ O ₃ - PbO	T	a _o -0.0042(7) c _o 0.0147(7) V 0.07(2)	4,26(4) 4,17(4) 77,0(1.2)	0.009 0.008 0.24	0.12 0.09 0.16	-	3/5	50-67	SB4 105
28	Bi ₂ O ₃ - SrO	T	c _o 0.029(2) V 0.46(3)	27,36(6) 431,3(1.0)	0.03 0.46	0.08 0.077	-	5	25-41	SB4 107
29	Bi ₂ Se ₃ - Sb ₂ Te ₃	H	a _o 0.00131(4) c _o 0.0183(11) V 0.56(2)	4,135(2) 28,75(6) 425,4(1.1)	0.004 0.11 0.91	0.07 0.3 0.32	)	11	0-100	P2 721
30	Bi ₂ Te ₃ - Bi ₂ Se ₃	H	a _o -0.00249(2) c _o -0.0177(3) V -0.822(8)	4,3844(13) 30,44(2) 506,1(5)	0.002 0.03 0.82	0.04 0.07 0.13	-	10/11	0-100	SR24 67
31	Bi ₂ Te ₃ - Sb ₂ Se ₃	H	a _o -0.00371(7) c _o -0.0182(8) V -1.10(2)	4,385(3) 30,53(4) 507,7(9)	0.005 0.06 1.41	0.09 0.14 0.21	-	10/12	0-70	P2 723
32	CaAl ₂ Si ₂ O ₈ - SrAl ₂ Si ₂ O ₈	Tr	a _o 0.0035(2) b _o 0.0015(3) c _o 0.0013(2) V 1,03(5)	8,181(5) 12,896(11) 14,226(7) 1344,8(1.4)	0.006 0.014 0.009 1.76	0.05 0.075 0.045 0.07	-	5	0-50	(9)
		Tr	a _o 0.0006(2) c _o 0.0003(3) V 0.28(11)	8,36(2) 14,28(2) 1385,1(8.8)	0.006 0.008 2.97	0.04 0.037 0.12	-	4	62-100	
a		Tr	a _o 0.00252(7) b _o 0.00122(5) c _o 0.00142(7) V 0.73(2)	8,179(5) 12,869(4) 14,163(5) 1339(2)	0.002 0.002 0.002 0.6	0.02 0.007 0.01 0.03	-	5	0-40	(32)
		Tr	a _o 0.00162(10) b _o 0.00102(7) V 0.55(2)	8,225(3) 12,879(2) 1347,9(6)	0.003 0.002 0.61	0.025 0.011 0.03	)	5/6	50-90	
33	Ca ₂ Al ₂ SiO ₇ - Ca ₂ B ₂ SiO ₇	T	a _o -0.00461(9) c _o -0.00260(12) V -0.485(8)	7,677(5) 5,051(7) 297,4(5)	0.007 0.010 0.6	0.066 0.16 0.16	-	8/9	0-90	(4)
34	Ca ₂ Al ₂ SiO ₇ - Ca ₂ MgSi ₂ O ₇	T	a _o 0.00150(11) c _o -0.00057(3) V 0.083(8)	7,684(7) 5,069(2) 299,3(5)	0.009 0.003 0.61	0.08 0.03 0.14	)	5	0-100	(2)

(Table 1 cont.d)

34a	$\text{Ca}_2\text{Al}_2\text{SiO}_7 - \text{Ca}_2\text{MgSi}_2\text{O}_7$	T	a_0	0.00148(3)	7.695(2)	0.003	0.023					
			c_0	-0.00059(4)	5.077(2)	0.003	0.05	9/10	0-100		SR12	
			V	0.081(5)	300.7(3)	0.4	0.09				266	
b		T	a_0	0.00156(2)	7.6830(14)	0.002	0.015				SR16	
			c_0	-0.00061(1)	5.0758(3)	0.0004	0.005	5	0-100		346	
			V	0.086(2)	299.6(1)	0.16	0.03					
35	$\text{Ca}_2\text{Al}_3\text{Si}_3\text{O}_{12}\text{OH} - \text{Ca}_2\text{FeAl}_2\text{Si}_3\text{O}_{12}\text{OH}$	M	a_0	0.00099(6)	8.861(2)	0.001	0.011	(				
			b_0	0.0014(3)	5.581(7)	0.006	0.06	-	4	8-38	(41)	
			c_0	0.00171(9)	10.137(2)	0.002	0.011					
			V	0.22(2)	452.9(6)	0.48	0.07	)				
36	$\text{Ca}_3\text{Al}_2\text{Si}_3\text{O}_{12} - \text{Y}_3\text{Fe}_2\text{Fe}_3\text{O}_{12}$	C	a_0	0.00550(14)	11.948(5)	0.004	0.02		3/4	10-50	(19)	
			V	2.42(8)	1705(3)	2.16	0.07					
		C	a_0	0.00130(12)	12.247(10)	0.002	0.007		3/4	80-100		
			V	0.60(5)	1836(5)	0.7	0.02					
37	$\text{CaCO}_3 - \text{BaCO}_3$	R	a_0	0.0056(2)	6.359(8)	0.010	0.12		6	0-55	SR16	
			V	0.237(9)	121.1(3)	0.41	0.18				325	
a		O	a_0	0.00300	4.95000	-	-		4/5	70-100	SR20	
			b_0	0.005(3)	8.3(2)	0.064	0.42	-			383	
			V	0.37(9)	260.8(7.7)	2.02	0.43	-				
38	$\text{CaCO}_3 - \text{FeCO}_3$	R	a_0	-0.0057(2)	6.365(10)	0.015	0.17		8	0-100	SR26	
			V	-0.245(9)	121.8(5)	0.76	0.55				482	
a		H	a_0	-0.00305(6)	4.989(4)	0.005	0.074		8	0-100	SR26	
			c_0	-0.0170(3)	17.06(2)	0.027	0.13				482a	
			V	-0.76(2)	366.9(1.1)	1.51	0.37					
39	$\text{CaCO}_3 - \text{MgCO}_3$	H	a_0	-0.00357(3)	4.9844(11)	0.001	0.01				SR26	
			c_0	-0.0206(5)	17.10(2)	0.018	0.08	)	8	10-50	481	
			V	-0.920(5)	367.4(2)	0.21	0.05					
a		H	a_0	-0.00351(4)	4.9823(12)	0.001	0.01				SR26	
			c_0	-0.0204(7)	17.08(2)	0.02	0.08		4	10-45	481a	
			V	-0.912(12)	366.8(4)	0.35	0.07					
b		H	a_0	-0.0038(2)	4.991(6)	0.005	0.07				SR26	
			c_0	-0.0223(6)	17.15(2)	0.01	0.07		8/10	17-44	482	
			V	-0.99(4)	369.2(1.3)	1	0.23					
c		H	a_0	-0.0045(2)	4.990(3)	0.003	0.04					
			c_0	-0.0216(6)	17.062(8)	0.006	0.02		4	5-20	(20)	
			V	-1.10(4)	367.8(6)	0.46	0.09					
40	$\text{CaCO}_3 - \text{MnCO}_3$	R	a_0	-0.00316(6)	6.337(4)	0.006	0.065	?	5	0-100	SR11	
			V	-0.101(13)	120.4(9)	1.21	0.68				494	
41	$\text{CaCO}_3 - \text{SrCO}_3$	O	a_0	0.00141(2)	4.9626(11)	0.002	0.03					
			b_0	0.00456(8)	7.954(5)	0.009	0.09		13	0-100	(21)	
			c_0	0.00289(7)	5.752(5)	0.008	0.11					
			V	0.323(5)	226.8(3)	0.55	0.16					
42	$\text{Ca}_3\text{Fe}_2\text{Si}_3\text{O}_{12} - \text{Ca}_3\text{In}_2\text{Si}_3\text{O}_{12}$	C	a_0	0.00280(13)	12.075(9)	0.007	0.04	)	4	25-100	(22)	
			V	1.26(6)	1760(4)	3.44	0.13	)				
43	$\text{Ca}_2\text{Ga}_2\text{SiO}_7 - \text{Ca}_2\text{Al}_2\text{SiO}_7$	T	a_0	-0.00100(1)	7.7900(1)	-	-		5	0-100	SR24	
			c_0	-0.00062(2)	5.1309(11)	0.0014	0.018				491	
			V	-0.1160(10)	311.35(6)	0.086	0.02					
44	$\text{CaO} - \text{CdO}$	C	a_0	-0.00070(2)	4.7940(12)	0.002	0.025		5	0-100	SB2	
			V	-0.0476(14)	110.17(9)	0.11	0.08				227	
45	$\text{CaS} - \text{SrS}$	C	a_0	0.00039(7)	5.667(2)	0.002	0.01	-	3	0-30	SB2	
			V	0.037(7)	181.95(15)	0.16	0.04	-			236	
		C	a_0	0.0050(2)	5.505(14)	0.01	0.11	-	6	40-100		
			V	0.51(2)	164.9(1.3)	0.91	0.3					
46	$\text{Ca}_2\text{SiO}_4 - \text{Fe}_2\text{SiO}_4$	O	a_0	-0.0015(2)	4.88(2)	0.01	0.15					
			b_0	-0.012(1)	11.75(8)	0.05	0.27		?	7	38-100	(47)
			c_0	-0.0078(5)	6.83(4)	0.02	0.25					
			V	-0.89(5)	396(4)	2.15	0.42					

(Table 1 cont.d.)

47	$\text{Ca}_3\text{Tl}_2\text{Fe}_2\text{SiO}_{12}$ - $\text{Ca}_3\text{Fe}_2\text{Si}_3\text{O}_{12}$	C	a_b V	-0.00216(14) -0.96(6)	12.282(8) 1853(4)	0.011 4.72	0.06 0.17	5	0-100	(23)	
48	CaWO_4 - BaWO_4	T	a_b V	0.00351(13) 0.0138(5) 0.87(4)	5.241(7) 11.33(2) 311(2)	0.01 0.04 2.91	0.12 0.2 0.51	4	0-100	SB2 453	
49	$\text{Ca}_3\text{Zr}_2\text{Fe}_2\text{SiO}_{12}$ - $\text{Ca}_3\text{Fe}_2\text{Si}_3\text{O}_{12}$	C	a_b V	-0.0056(3) -2.58(10)	12.64(2) 2018(6)	0.021 7.96	0.12 0.29	5	0-100	(23)	
50	$\text{Ca}_3\text{Zr}_2\text{Fe}_2\text{SiO}_{12}$ - $\text{Ca}_3\text{Tl}_2\text{Fe}_2\text{SiO}_{12}$	C	a_b V	-0.0036(2) -1.66(11)	12.640(15) 2019(6)	0.019 8.32	0.11 0.30	5	0-100	(23)	
51	Cd_3As_2 - Zn_3As_2 β -phase	T	a_b V	-0.0060(2) -0.0095(4) -1.98(4)	8.961(10) 12.76(2) 1022(2)	0.01 0.03 3.4	0.1 0.17 0.26	8	10-50	P2 609	
	β' -phase	T	a_b V	-0.0066(3) -0.0079(6) -1.96(8)	9.02(2) 12.54(4) 1013(5)	0.008 0.016 2.26	0.055 0.09 0.2	6	45-80		
52	CdCO_3 - CaCO_3	R	a_b	0.00153(2)	6.1792(13)	0.001	0.011	?	4	0-100	SR11 495
53	CdFe_2O_4 - ZnFe_2O_4	C	a_b V	-0.00258(4) -0.569(6)	8.698(2) 657.9(4)	0.003 0.47	0.027 0.053	5	0-100	SR11 500	
54	$\text{Cd}(\text{OH})_2$ - $\text{Ca}(\text{OH})_2$	H	a_b V	0.00044(2) 0.00040 0.01596(2)	3.4770(14) 4.81000 50.443(1)	0.002 - 0.0008	0.03 - 0.0009	5 3/5 3/5	0-100 25-75 25-75	SB2 258	
55	CdS - CdSe	H	a_b V	0.0018(2) 0.00263(13)	4.107(14) 6.738(7)	0.02 0.01	0.33 0.09	6	0-100	P2 751	
56	CdS - FeS	H	a_b V	-0.00274(8) -0.00381(12) -0.182(4)	4.140(3) 6.714(4) 99.59(11)	0.003 0.004 0.12	0.05 0.043 0.09	7	9-47	P2 739	
57	Cd_2Te_3 - In_2Te_3	C	a_b V	-0.0032(2) -0.394(2)	6.486(6) 272.8(7)	0.007 0.83	0.075 0.2	5	0-50	P2 744	
58	CdTe - ZnTe	C	a_b V	-0.00388(8) -0.46(10)	6.465(5) 269.9(6)	0.007 0.9	0.074 0.24	7	0-100	P2 759	
59	CeO_2 - Dy_2O_3	C	a_b V	-0.0043(3) -1.48(12)	11.11(3) 1365(10)	0.006 2.17	0.04 0.12	5	75-97	SR18 587	
60	CeO_2 - Gd_2O_3 Fluorite type Mn_2O_3 type	C	a_b V	0.00036(2) 0.031(2)	5.4114(6) 156.46(5)	0.0003 0.031	0.003 0.01	3	19-46	SR18 527	
61	CeO_2 - HfO_2	C	a_b V	-0.0020(2) -0.70(9)	11.02(2) 1337.0(1.1)	0.003 1.04	0.018 0.053	4/7	82-97		
		C	a_b V	-0.00277(8) -0.241(7)	5.4138(12) 156.67(11)	0.002 0.15	0.02 0.065	6/7	0-25	SB2 268	
		C	a_b V	-0.0027(2) -0.215(13)	5.39(2) 155.51(1.2)	0.002 0.15	0.02 0.07	4/6	80-95		
62	CeO_2 - Nd_2O_3 Fluorite type Mn_2O_3 type	C	a_b V	0.00124(3) 0.112(3)	5.4063(15) 157.96(13)	0.0007 0.64	0.008 0.024	4	33-67	SR18 587	
		C	a_b V	0.0028(2) 1.03(5)	10.792(12) 1255(4)	0.001 0.41	0.005 0.016	3	75-86		
63	CeO_2 - PuO_2	C	a_b V	-0.00016(1) -0.0138(6)	5.4112(4) 158.44(3)	0.0005 0.045	0.007 0.02	6/7	0-85	SR22 372	
64	CeO_2 - ThO_2	C	a_b V	0.00174(2) 0.158(2)	5.4160(12) 156.81(10)	0.002 0.13	0.02 0.05	5	0-100	SB2 268	
65	CeO_2 - Yb_2O_3	C	a_b V	-0.00095(5) -0.083(4)	5.420(2) 159.2(2)	0.002 0.17	0.025 0.07	6/7	18-67	SR18 587	

(Table 1 cont.d)

66	$\text{CeO}_2 - \text{Y}_2\text{O}_3$ Fluorite type	C	a_0	-0.00029(1)	5.4133(5)	0.0003	0.003	3	18-46	SR18 587
			V	-0.0250(12)	158.63(4)	0.024	0.008			
		C	a_0	-0.00117(14)	5.461(9)	0.002	0.02	3	57-75	
			V	-0.102(12)	162.7(8)	0.15	0.054			
	Mn_2O_3 type	C	a_0	-0.0058(2)	11.19(2)	0.0038	0.03	8	79-99	SR18 587
			V	-1.99(7)	1393(6)	1.25	0.084			
67	$\text{CoAl}_2\text{O}_4 - \text{ZnAl}_2\text{O}_4$	C	a_0	-0.00019(1)	8.1054(3)	0.0004	0.003	5	0-100	SR17 414
			V	-0.0377(9)	532.50(5)	0.07	0.009			
68	$\text{CoAs} - \text{NiAs}$	H	a_0	0.00066(4)	3.512(15)	0.001	0.023	5	15-50	P2 615
			c_0	-0.0009(2)	5.151(7)	0.006	0.08			
		V	a_0	0.011(3)	55.00(10)	0.08	0.1	5	60-100	
			c_0	0.00146(3)	3.471(3)	0.001	0.018			
69	$\text{CoCO}_3 - \text{CdCO}_3$	R	a_0	0.0038(3)	5.94(2)	0.03	0.33	5	0-100	SB4 155
			V	0.42(3)	189(2)	2.47	0.85			
		R	a_0	0.00185(5)	5.906(3)	0.004	0.04	5	0-100	SB4 155
			V	0.199(6)	185.8(4)	0.46	0.17			
71	$\text{CoCl}_2 - \text{FeCl}_2$	R	a_0	0.00104(2)	7.0524(13)	0.002	0.02	6	0-100	SB2 246
			V	0.111(2)	2.4800(12)	0.17	0.04			
72	$\text{CoHg}(\text{CNS})_4 -$ $\text{CdHg}(\text{CNS})_4$	T	a_0	0.00357(13)	11.100(9)	0.013	0.07	5	0-100	SR9 211
			c_0	-0.00166(8)	4.380(5)	0.007	0.11			
			V	0.134(4)	539.8(3)	0.39	0.05			
73	$\text{Co}(\text{NH}_3)_6\text{J}_2 -$ $\text{Co}(\text{NH}_3)_6\text{J}_3$	C	a_0	-0.00050(2)	10.9279(10)	0.001	0.009	7	0-100	(6)
			V	-0.179(6)	1305.0(4)	0.49	0.027			
74	$\text{CoO} - \text{MnO}$	C	a_0	0.0027(5)	4.22(2)	0.02	0.23	3/5	0-50	SB2 227
			V	0.15(3)	75.3(1.0)	1.06	0.73			
75	$\text{CoO} - \text{NiO}$	C	a_0	-0.00060(2)	4.2309(9)	0.001	0.02	5	0-100	SB2 227
			V	-0.0319(8)	75.73(5)	0.06	0.065			
76	$\text{CoS} - \text{FeS}$	H	a_0	0.00026(4)	3.364(2)	0.002	0.05	3/5	0-74	SR17 132
			c_0	0.0048(2)	5.124(11)	0.013	0.14			
		V	a_0	0.055(2)	50.23(9)	0.11	0.1	3/5	0-74	SR17 132
			c_0	0.00019(4)	8.442(2)	0.003	0.025			
77	$\text{Co}_2\text{TiO}_4 - \text{Mg}_2\text{TiO}_4$	C	a_0	-0.00008	8.44900	-	-	3/5	25-75	SR17 414
			V	-0.0171(1)	603.137(1)	0.00008	0.0001			
78	$\text{Co}_2\text{TiO}_4 - \text{Zn}_2\text{TiO}_4$	C	a_0	0.00019(4)	8.442(2)	0.003	0.025	5	0-100	SR17 414
			V	0.040(8)	601.6(5)	0.66	0.074			
79	$\text{CrSb} - \text{CrTe}$	H	a_0	-0.0020(4)	4.147(11)	0.008	0.11	3/4	10-50	P2 847
			c_0	0.0103(2)	5.426(8)	0.007	0.03			
		V	a_0	0.007(8)	81.83(21)	0.16	0.11	4	50-100	
			c_0	0.0070(3)	5.59(2)	0.01	0.1			
80	$\text{CrSe} - \text{CrTe}$	H	a_0	0.00304(11)	3.706(8)	0.009	0.14	6	10-100	P2 848
			c_0	0.00165(11)	6.096(8)	0.009	0.10			
		V	a_0	0.148(6)	72.4(4)	0.45	0.36	6	10-100	P2 848
			c_0	0.00178(2)	4.2848(12)	0.0015	0.02			
81	$\text{CsBr} - \text{CsCl}$	C	a_0	-0.0094(2)	78.61(10)	0.12	0.11	5	0-100	SR21 465
			V	-0.094(2)	78.61(10)	0.12	0.11			
82	$\text{Cs}_2\text{TeCl}_6 - \text{Cs}_2\text{PtCl}_6$	C	a_0	-0.00301(8)	10.448(5)	0.006	0.04	4	0-100	SB2 497
			V	-0.96(3)	1140(2)	2.3	0.13			
83	$\text{CuBr} - \text{CuCl}$	C	a_0	-0.00279(2)	5.696(2)	0.0008	0.008	3/4	50-100	SR9 270
			V	-0.2521(2)	184.14(2)	0.008	0.003			
84	$\text{CuFeSe}_{1.90} -$ $\text{CuFeS}_{1.90}$	C	a_0	0.00267(2)	5.2988(4)	0.0006	0.007	5	0-37	(5)
			V	0.229(2)	148.76(3)	0.046	0.02			

(Table 1 cont.d)

85	$\text{Cu}_2(\text{OH})_3\text{NO}_3 - \text{Co}_2(\text{OH})_3\text{NO}_3$	M	a_c	-0.0030(2)	5.583(5)	0.007	0.09	)	6	0-50	SR22 401
			b_o	0.0042(3)	6.065(9)	0.011	0.12				
			c_o	0.00064(8)	6.890(2)	0.003	0.03				
		M	a_o	0.00121(6)	5.378(5)	0.0015	0.015		3	67-100	
			b_o	-0.00121(6)	6.372(5)	0.0015	0.013				
			V	0.013(2)	235.8(2)	0.045	0.01				
86	$\text{Er}_3\text{O}_8 - \text{U}_3\text{O}_8$	C	a_o	0.00072(14)	5.289(9)	0.006	0.07		6	25-85	SR16 261
			V	0.061(12)	147.9(8)	0.55	0.2				
87	$\text{FeAs}_2 - \text{CoAs}_2$	O	a_o	-0.00175(12)	5.317(5)	0.005	0.07	)	5/6	12-63	P2 612
			b_o	-0.00073(8)	5.988(3)	0.003	0.036				
			c_o	0.00199(13)	2.866(5)	0.005	0.13				
			V	0.020(3)	91.27(10)	0.1	0.08				
		O	a_o	-0.00452(12)	5.504(10)	0.002	0.02		4/5	75-94	
			b_o	-0.00183(10)	6.051(9)	0.001	0.01				
88	$\text{FeAs}_2 - \text{NiAs}_2$	O	a_o	-0.0027(2)	5.305(5)	0.006	0.08	)	4	0-38	P2 622
			b_o	-0.00089(14)	5.982(3)	0.004	0.05				
			c_o	0.0038(2)	2.877(5)	0.006	0.15				
			V	0.0651(13)	91.23(7)	0.11	0.09				
		O	a_o	-0.0079(4)	5.55(3)	0.015	0.19	)	4	50-100	
			b_o	-0.00252(6)	6.052(4)	0.002	0.025				
89	$\text{FeCl}_2 - \text{MnCl}_2$	R	a_o	0.00046(2)	7.1526(13)	0.002	0.02		6	0-100	SB2 246
			V	0.134(2)	258.78(12)	0.17	0.04				
90	$\text{FeCr}_2\text{S}_4 - \text{CdCr}_2\text{S}_4$	C	a_o	0.00227(4)	9.983(3)	0.003	0.021		6	0-100	P2 736
			V	0.693(13)	994.6(8)	1.05	0.06				
91	$\text{FeO} - \text{MnO}$	C	a_o	0.00132(2)	4.3137(15)	0.002	0.04	(	9	0-100	SR10 167
			V	0.0761(11)	80.24(7)	0.12	0.098				
92	$\text{Fe}_2\text{O}_3 - \text{Cr}_2\text{O}_3$	H	a_o	-0.00070(2)	5.0190(12)	0.002	0.02		5	0-100	SB2 322
			c_o	-0.00128(11)	13.718(5)	0.006	0.03				
			V	-0.106(6)	299.1(4)	0.46	0.1				
a		R	a_o	-0.00116(4)	5.4134(11)	0.001	0.01		3/7	0-37	SR13 107
			V	-0.0497(13)	99.91(3)	0.03	0.02				
93	$\text{Fe}_2\text{O}_3 - \text{FeTiO}_3$	R	a_o	0.00030(1)	5.4501(2)	0.0001	0.001		3/4	33-100	SR13 407
			V	-0.039(9)	103.5(7)	0.44	0.24				
94	$\text{Fe}_2\text{O}_3 - \text{Sc}_2\text{O}_3$	C	a_o	0.00435(3)	9.410(2)	0.001	0.009		4	38-100	SR26 350
			V	1.233(6)	830.9(4)	0.3	0.02				
95	$\text{Fe}_3\text{O}_4 - \text{Fe}_2\text{TiO}_4$	C	a_o	0.0019(4)	8.37(1)	0.01	0.07	-	4/6	11-47	(3)
			V	0.42(8)	587(3)	2.12	0.21				
a		C	a_o	0.00137(1)	8.39441(7)	0.00009	0.0007	?	5	39-98	(35)
			V	0.2958(6)	591.93(2)	0.031	0.0035				
b		C	a_o	0.00121(4)	8.411(2)	0.003	0.03		7	0-100	SR13 406
			V	0.261(8)	595.1(3)	0.66	0.08				
96	$\text{Fe}_3\text{O}_4 - \text{Mn}_3\text{O}_4$	T	a_o	-0.0083(5)	8.96(4)	0.01	0.09	6/8	3	65-90	SR13 410
			c_o	0.032(2)	6.8(2)	0.016	0.097				
		T	c_o	0.0089(8)	8.57(8)	0.018	0.13		6	75-100	
a		C	a_o	0.0038(2)	8.394(6)	0.009	0.07		6/7	0-60	SR22 360
			V	0.82(4)	591.3(1.2)	1.9	0.2				
		T	a_o	-0.012(3)	9.3(3)	0.06	0.41	-	3	73-100	SR22 360
			c_o	0.017(4)	7.7(3)	0.07	0.41				
97	$\text{Fe}_2\text{O}_3\text{MnO} - \text{Ga}_2\text{O}_3\text{MnO}$	C	a_o	-0.00035(3)	8.5053(10)	0.001	0.011	-	5	0-50	SR22 352
			V	-0.076(8)	615.3(2)	0.29	0.034				
		C	a_o	-0.00134(6)	8.570(6)	0.001	0.012	)	4	70-100	
			V	-0.287(14)	629.1(1.2)	0.30	0.035				

(Table 1 contd.)

98	GeF ₃ · 3H ₂ O - AlF ₃ · 3H ₂ O	H	$\bar{a}_e$ -0.00180(5) $\bar{c}_e$ -0.00205(12) $\bar{v}$ -0.427(3)	9.359(2) 9.464(5) 717.83(11)	0.002 0.02 0.006 0.04 0.13 0.01	4/5	0-60	SR26 300
99	GaS - Ga ₂ Se ₃	C	$\bar{a}_e$ -0.00217(13) $\bar{c}_e$ -0.020(11) $\bar{v}$ -0.001(1)	5.664(8) 181.6(7) 174.9(1.3)	0.012 0.15 1.06 0.42 0.006 0.065	8	0-100	SR22 41
100	GaS - Ga ₂ Te ₃	C	$\bar{a}_e$ -0.00293(15) $\bar{c}_e$ -0.30(2) $\bar{v}$ 0.30(2)	5.601(12) 174.9(1.3) 575.1(6)	0.006 0.065 0.62 0.21 0.003 0.02	5/7	50-100	SR22 41
101	GeCo ₂ O ₄ - CoAl ₂ O ₄	C	$\bar{a}_e$ -0.00146(8) $\bar{c}_e$ -0.30(2) $\bar{v}$ -0.56(9)	8.316(3) 575.1(6) 587(7)	0.003 0.02 0.61 0.06 3.12 0.31	3	0-50	SR17 415
102	GeCo ₂ O ₄ - TiCo ₂ O ₄	C	$\bar{a}_e$ -0.00096 $\bar{c}_e$ 0.2042(3) $\bar{v}$ 0.00096	8.34900 581.85(3) 581.85(3)	- 0.01 0.0001 0.01 0.0001	3/4	50-100	SR17 415
103	Ge ₂ NiO ₄ - Fe ₂ NiO ₄	C	$\bar{a}_e$ 0.00119(5) $\bar{c}_e$ 0.245(9) $\bar{v}$ 0.245(9)	8.220(3) 555.4(6) 555.4(6)	0.0036 0.031 0.72 0.09 0.009 0.09	5	0-100	SR17 415
104	GeTe - SnTe	R	$\bar{a}_e$ 0.00345(6) $\bar{c}_e$ 0.393(7) $\bar{v}$ 0.393(7)	5.985(3) 213.9(4) 213.9(4)	0.004 0.04 0.51 0.15 0.02 0.24	7/9	0-80	P2 968
105	HgBr ₂ - HgI ₂	O	$\bar{a}_e$ 0.0034(3) $\bar{b}_e$ 0.0070(1) $\bar{c}_e$ 0.0140(7) $\bar{v}$ 1.24(3)	4.669(14) 6.841(7) 12.49(4) 398.3(1.6)	0.009 0.09 0.05 0.25 2.09 0.30 0.02 0.17	?	0-76	SR11 493
106	Hg ₂ Cl ₂ - Hg ₂ Br ₂	T	$\bar{a}_e$ 0.0042(4) $\bar{c}_e$ 0.0028(4) $\bar{v}$ 0.72(5)	6.319(14) 10.890(14) 435(2)	0.02 0.11 2.67 0.44 0.02 0.08	6	0-63	SB2 309
		T	$\bar{a}_e$ 0.0009(3) $\bar{c}_e$ 0.0028(9) $\bar{v}$ 0.25(8)	6.49(3) 10.84(8) 457(7)	0.006 0.05 1.34 0.18 0.02 0.08	3	75-100	
a		T	$\bar{a}_e$ 0.00269(10) $\bar{c}_e$ 0.00221(10) $\bar{v}$ 0.475(10)	6.330(6) 10.894(6) 436.2(6)	0.009 0.12 0.01 0.07 0.99 0.2	9	0-100	SB2 309a
107	HgS - CdS	C	$\bar{a}_e$ -0.00016(1) $\bar{c}_e$ -0.016(3) $\bar{v}$ -0.016(3)	5.8407(2) 199.24(2) 199.24(2)	0.0003 0.003 0.03 0.009 0.0001 0.001	?	0-100	SR9 282
108	HgTe - CdTe	C	$\bar{a}_e$ -0.00013(1) $\bar{c}_e$ -0.0169(6) $\bar{v}$ -0.0169(6)	6.4759(4) 271.58(5) 271.58(5)	0.0001 0.001 0.018 0.004 0.0045 0.043	5/6	60-100	P2 742
109	HgTe - HgSe	C	$\bar{a}_e$ -0.00417(10) $\bar{c}_e$ -0.498(10) $\bar{v}$ -0.36(4)	6.431(4) 265.9(4) 259.5(2.5)	0.44 0.098 0.014 0.15 1.70 0.47	4	0-60	SR20 152
110	InP - InAs	C	$\bar{a}_e$ 0.00190(9) $\bar{c}_e$ 0.198(10) $\bar{v}$ 0.198(10)	5.837(3) 198.8(3) 198.8(3)	0.003 0.034 0.31 0.11 0.008 0.072	5/6	10-50	P2 629
		C	$\bar{a}_e$ 0.0020(2) $\bar{c}_e$ 0.22(2) $\bar{v}$ 0.22(2)	5.84(2) 199(2) 199(2)	0.008 0.072 0.76 0.21 0.006 0.067	5	60-100	
a		C	$\bar{a}_e$ 0.00184(8) $\bar{c}_e$ 0.197(9) $\bar{v}$ 0.197(9)	5.876(5) 202.8(5) 202.8(5)	0.006 0.067 0.72 0.22 0.0008 0.008	5	0-100	P2 629a
111	In ₂ Se ₃ - InAs	C	$\bar{a}_e$ 0.00330(6) $\bar{c}_e$ 0.336(5) $\bar{v}$ 0.336(5)	5.664(3) 181.3(2) 181.3(2)	0.0008 0.008 0.066 0.019 0.003 0.026	3	40-60	P2 629
		C	$\bar{a}_e$ 0.0050(3) $\bar{c}_e$ 0.54(3) $\bar{v}$ 0.54(3)	5.60(2) 172.7(2.3) 172.7(2.3)	0.003 0.026 0.30 0.074 0.026 0.31	3/4	75-90	P2 630
a		C	$\bar{a}_e$ 0.0039(8) $\bar{c}_e$ 0.40(9) $\bar{v}$ 0.40(9)	5.63(5) 178(6) 178(6)	0.026 0.31 2.76 0.95 0.005 0.054	4	43-83	SR24 161
112	In ₂ Se ₃ - InP	C	$\bar{a}_e$ 0.00189(11) $\bar{c}_e$ 0.192(11) $\bar{v}$ 0.192(11)	5.680(7) 183.0(8) 183.0(8)	0.005 0.054 0.51 0.16 0.002 0.02	5/6	43-100	SR22 43
113	In ₂ Te ₃ - InAs	C	$\bar{a}_e$ -0.00139(5) $\bar{c}_e$ -0.155(5) $\bar{v}$ -0.155(5)	6.179(2) 235.8(2) 235.8(2)	0.002 0.02 0.21 0.05 0.02 0.17	4/7	25-80	

(Table 1 cont.d)

113a	$\text{In}_2\text{Te}_3 - \text{InAs}$	C	a_0	-0.00067(2)	6.1599(3)	0.0004	0.004	4	0-25	P2 631	
			V	-0.076(2)	233.74(4)	0.044	0.012				
		C	a_0	-0.00116(8)	6.161(6)	0.001	0.014	4/7	60-85		
			V	-0.128(9)	233.8(7)	0.16	0.042				
114	$\text{KAl}_3(\text{SO}_4)_2(\text{OH})_6 -$ $\text{NaAl}_3(\text{SO}_4)_2(\text{OH})_6$	H	a_0	-0.00027(5)	7.0140(6)	0.0008	0.007	(	4/7	2-25	(34)
			c_0	-0.0050(5)	17.141(8)	0.009	0.04				
			V	-0.27(2)	730.3(2)	0.3	0.026				
a	Heated at 300°C	H	c_0	-0.0064(2)	17.322(8)	0.016	0.07	7	2-99		
			V	-0.27(2)	730.5(8)	1.54	0.14				
b		H	c_0	-0.072(4)	17.38(1)	0.026	0.12	13/15	3-58		
			V	-0.32(3)	733.5(8)	1.65	0.16				
115	$\text{KAlSi}_3\text{O}_8 -$ $\text{BaAl}_2\text{Si}_2\text{O}_8$	M	V	0.242(2)	1447.3(9)	1.84	0.09	12	0-100	(18)	
116	$\text{KAlSi}_3\text{O}_8 -$ $\text{NaAlSi}_3\text{O}_8$	M	a_0	-0.0041(2)	8.619(5)	0.006	0.04	3	0-41	SR16 357	
			c_0	-0.00019(3)	7.1763(8)	0.0009	0.006				
			V	-0.40(6)	724.4(1.5)	1.61	0.12				
		M	a_0	-0.00541(5)	8.668(3)	0.001	0.009	5	41-67		
			b_0	-0.00160(11)	13.069(6)	0.002	0.012				
			c_0	-0.00057(6)	7.193(4)	0.001	0.014				
			V	-0.635(9)	733.5(5)	0.2	0.02				
		Tr	a_0	-0.0038(3)	8.55(2)	0.006	0.044	4	71-100		
			b_0	-0.00231(12)	13.11(1)	0.003	0.012				
			c_0	-0.00091(2)	7.2135(13)	0.0003	0.003				
			V	-0.44(13)	717(11)	2.81	0.24				
117	$\text{KBr} - \text{KI}$	C	a_0	0.00474(9)	6.602(6)	0.012	0.13	16	0-100	SR21 465	
			V	0.664(13)	287.1(8)	1.60	0.36				
118	$\text{KBr} - \text{NH}_4\text{Br}$	C	a_0	0.00233(7)	6.5801(15)	0.002	0.02	?	5	0-36	SR11 487
			V	0.307(9)	284.9(2)	0.26	0.06				
119	$\text{KCl} - \text{KBr}$	C	a_0	0.00160(1)	3.1353(8)	0.001	0.02	7	0-100	SB2 214	
			V	0.0496(5)	30.79(3)	0.04	0.09				
a		C	a_0	0.0160(1)	3.1359(6)	0.0008	0.02	7	0-100	SB2 214a	
			V	0.0495(4)	30.82(2)	0.03	0.07				
b		C	a_0	0.0044(4)	6.292(10)	0.013	0.14	4/6	0-50	SR9 270	
			V	0.54(4)	249.1(1.1)	1.51	0.37				
c	From melt	C	a_0	0.00308(7)	6.295(4)	0.005	0.06	5	0-100	SR11 486	
			V	0.385(6)	249.2(4)	0.46	0.13				
d	From solution	C	a_0	0.00307(3)	6.294(2)	0.003	0.03	5	0-100	SR11 486a	
			V	0.3818(10)	249.12(6)	0.07	0.01				
120	$\text{KCl} - \text{NaCl}$	C	a_0	-0.00651(10)	6.308(6)	0.010	0.14	11	0-100	SR18 575	
			V	-0.697(3)	249.6(2)	0.33	0.12				
121	$\text{KFe}_3(\text{SO}_4)_2(\text{OH})_6 -$ $\text{KAl}_3(\text{SO}_4)_2(\text{OH})_6$ Synth. at 105°C-1bar	H	a_0	-0.0034(2)	7.304(11)	0.02	0.18	8	0-100	(8)	
			c_0	0.00045(8)	17.251(5)	0.006	0.025				
			V	-0.72(5)	797(3)	3.71	0.37				
a	Synth. at 105°C-2bars	H	a_0	-0.0030(2)	7.290(7)	0.01	0.08	6/7	0-59		
			c_0	0.0010(2)	17.174(6)	0.008	0.03				
			V	-0.59(4)	790.4(1.7)	2.3	0.15				
		H	a_0	-0.0025(3)	7.22(2)	0.007	0.05	3	64-100		
			V	-0.52(7)	778(6)	1.74	0.11				
122	$\text{KMg}_3\text{AlSi}_3\text{O}_{10}(\text{OH})_2 -$ $\text{KFe}_3\text{AlSi}_3\text{O}_{10}(\text{OH})_2$	M	b_0	0.00098(5)	9.210(3)	0.004	0.03	6	0-100	(46)	
			V	0.078(13)	497.9(7)	1.06	0.14				
a		M	a_0	0.00077(9)	5.319(6)	0.007	0.096	7/8	17-100		
			b_0	0.00139(5)	9.209(3)	0.003	0.03				
			V	0.140(14)	497.6(9)	1	0.14				

(Table 1 cont.d)

123	$K_2O, Al_2O_3 - K_2O, Fe_2O_3$	C	a_o	0.00284(11)	7,670(6)	0.009	0.083	?	9	0-100	SR13 413
			V	0.52(2)	450.9(1.1)	1.64	0.24				
124	$K_2O, 11 Al_2O_3 - K_2O, 11 Fe_2O_3$	H	a_o	0.00340(12)	5,577(6)	0.011	0.16				SR13 413
			c_o	0.0101(4)	22,63(2)	0.043	0.14	-?	13	0-100	
			V	1.08(4)	608.5(2.3)	3.98	0.46				
125	$K_2OsCl_6 - K_2ReBr_6$	C	a_o	0.00592(14)	9,791(4)	0.013	0.09				(31)
			V	1.81(4)	937.7(1.4)	4	0.29	-	12	0-100	
126	$K_2PtBr_6 - K_2PtCl_6$	C	a_o	-0.00530(9)	10,222(5)	0.010	0.075				SR15 160
			V	-1.57(2)	1066.7(1.4)	2.56	0.19		13	0-100	
127	$K_2SO_4 - (NH_4)_2SO_4$	O	a_o	0.0023(2)	5,760(14)	0.02	0.25	)			
			b_o	0.0055(2)	10,035(14)	0.02	0.14				
			c_o	0.0031(4)	7,50(2)	0.03	0.3	)	7	0-100	SB2 439
			V	0.61(3)	433(2)	2.75	0.46	)			
a		O	a_o	0.0025(2)	5,705(11)	0.012	0.11				
			c_o	0.0038(1)	7,337(7)	0.008	0.06				
			V	0.67(10)	415(7)	7.21	0.87	-	3	0-100	SR17 468
128	$K_2SO_4 - Na_2SO_4$	H	a_o	-0.002	5,710	-	-				
			c_o	-0.021(2)	7,845(34)	0.034	0.23				
			V	-0.75(6)	222(1)	1.13	0.24		3	0-25	SR17 467
		H	a_o	-0.0050(3)	5,88(2)	0.009	0.10				
			c_o	-0.00040(8)	7,292(6)	0.003	0.024	-			
			V	-0.35(2)	217.8(1.6)	0.7	0.2		4	50-100	
129	$K_2SnCl_6 - K_2OsBr_6$	C	a_o	0.00342(5)	10,011(2)	0.006	0.05				(30)
			V	1.057(14)	1003.0(6)	1.69	0.135		19/24	1-89	
130	$K_2SnCl_6 - K_2ReBr_6$	C	a_o	0.00382(5)	10,015(3)	0.007	0.05	)			
			V	1.193(1)	1004.0(7)	1.81	0.12	)	20/34	3-100	(29)
131	$LaAlO_3 - LaFeO_3$	O	a_o	0.00204(12)	5,353(11)	0.002	0.025				
			b_o	0.00194(13)	5,369(12)	0.002	0.03				
			c_o	0.0025(3)	7,61(3)	0.005	0.035		5	80-100	(25)
			V	0.250(4)	218.1(4)	0.07	0.02				
132	$LaCoO_3 - LaFeO_3$	H	a_o	0.0012(2)	5,424(5)	0.006	0.08	-			
			c_o	0.0027(2)	13,068(4)	0.006	0.03				
			V	0.22(2)	332.9(6)	0.77	0.17	-	5	0-45	SR23 368
133	$LaMnO_3 - CaMnO_3$	T	a_o	-0.0040(2)	7,912(13)	0.004	0.026				
			c_o	-0.0016(4)	7,60(2)	0.007	0.05	-			
			V	-0.555(3)	474.8(2)	0.046	0.006		3/4	50-75	SR19 390
134	$LaMnO_3 - LaCrO_3$	M	a_o	-0.0083(12)	7,98(1)	0.018	0.14				
			b_o	0.0058(4)	7,696(5)	0.0065	0.05				
			c_o	-0.0083(12)	7,980(14)	0.18	0.14		4	0-20	SR21 311
			V	-0.64(13)	489.8(1.6)	1.995	0.24	-			
		M	a_o	-0.00028(1)	7,7998(9)	0.0004	0.003		3/4	40-80	
			b_o	-0.0009(2)	7,83(2)	0.01	0.03		4	40-100	
			c_o	-0.00028(1)	7,7998(9)	0.0004	0.003		3/4	40-80	
			V	-0.07853(1)	476.0(6)	0.00001	0.03		4	40-100	
135	$LaMnO_3 - LaFeO_3$	O	a_o	0.00030	5,52900	-	-				
			c_o	0.0026(1)	7,711(4)	0.005	0.033		3/4	0-50	SR21 311
136	$LaNiO_{3+\lambda} - LaMnO_{3+\lambda}$	O	a_o	0.00109(7)	5,409(5)	0.001	0.02	)			
			b_o	0.00062(8)	5,480(5)	0.002	0.02				
			c_o	0.00145(13)	7,668(9)	0.003	0.02		4/5	50-80	SR23 370
			V	0.117(7)	227.2(5)	0.16	0.04				
137	$La_2O_3 - CeO_2$	C	a_o	-0.00452(13)	5,864(12)	0.003	0.04				
			V	-0.407(11)	199.2(9)	0.26	0.1		5	70-100	SR9 278
138	$LiInO_2 - 2 MgO$	C	a_o	-0.00203(3)	4,4164(14)	0.002	0.04				
			V	-0.1130(11)	86.06(6)	0.09	0.08		6/7	3-100	(40)
139	$Li_2TiO_3 - 3 MgO$	C	a_o	0.00070(1)	4,1355(2)	0.0003	0.005				
			V	0.0366(2)	70.718(10)	0.02	0.02		7	0-100	SB3 410

140	$\text{MgAl}_2\text{O}_4 - \text{MgMn}_2\text{O}_4$	C	a_s V	0.00300(12) 0.59(3)	8.028(4) 517.4(8)	0.004 0.92	0.03 0.09	3/7	0-50	SR24 344	
141	$\text{MgAl}_2\text{O}_4 - \text{Mn}_3\text{O}_4$	C	a_s V	0.0034(3) 0.69(7)	8.10(2) 530(4)	0.01 2.63	0.1 0.30	5/6	21-69	SR24 344	
		T	c_s	0.01742(13)	7.627(11)	0.002	0.01	3	79-100		
142	$\text{MgCaSi}_2\text{O}_6 - \text{CaAl}_2\text{SiO}_6$	M	a_s b_s c_s V	-0.00153(7) -0.00278(10) 0.00071(2) -0.161(6)	9.744(2) 8.923(2) 5.251(15) 438.93(15)	0.003 0.004 0.0008 0.24	0.02 0.031 0.12 0.04	- 9	0-40	SR21 478	
143	$\text{MgCaSi}_2\text{O}_6 - \text{CaFeSi}_2\text{O}_6$	M	a_s b_s V	0.00100(5) 0.00096(2) 0.104(3)	9.754(3) 8.9268(14) 440.0(2)	0.006 0.003 0.43	0.045 0.026 0.073	- 12	0-100	(38)	
144	$\text{MgCr}_2\text{O}_4 - \text{MgAl}_2\text{O}_4$	C	a_s V	-0.00260(3) -0.526(6)	8.338(2) 579.4(4)	0.0034 0.68	0.03 0.09	11	0-100	SR18 589	
145	$\text{MgO} - \text{CoO}$	C	a_s V	0.00050(3) 0.027(2)	4.212(2) 74.72(9)	0.003 0.15	0.04 0.12	- 9	0-100	SB2 226	
146	$\text{MgO} - \text{CuO}$	C	a_s V	0.00033(4) 0.017(2)	4.2107(5) 74.66(3)	0.0007 0.037	0.012 0.037	- 6	0-22	(39)	
147	$\text{MgO} - \text{FeO}$	C	a_s V	0.00139(6) 0.075(4)	4.210(2) 74.62(10)	0.0025 0.13	0.042 0.12	))	4	0-41	SR10 167
		C	a_s V	0.00067(8) 0.037(4)	4.243(6) 76.4(4)	0.0025 0.14	0.031 0.09	- -	3	57-100	
148	$\text{MgO} - \text{MnO}$	C	a_s V	0.00040 0.02281(3)	4.34000 81.742(2)	- 0.001	- 0.0007	- -	3	25-75	SB2 228
a		C	a_s V	0.00235(7) 0.132(3)	4.217(4) 74.9(2)	0.006 0.28	0.11 0.27	- -	8	0-100	SR10 166
149	$\text{MgO} - \text{NiO}$	C	a_s V	0.00031(1) 0.0163(4)	4.1804(5) 73.03(3)	0.0006 0.03	0.01 0.03	- -	5	0-100	SB2 226
150	$\text{MgO} - \text{ZnO}$	C	a_s V	0.00081(4) 0.043(2)	4.2031(8) 74.25(4)	0.0009 0.047	0.012 0.037	- ?	4	0-33	SR10 169
151	$\text{Mg}_3\text{Sb}_2 - \text{Zn}_3\text{Sb}_2$	H	a_s c_s V	-0.00033(3) -0.00134(11) -0.21(2)	4.562(10) 7.234(4) 130.3(6)	0.01 0.005 0.8	0.2 0.05 0.4	- - -	4/5	0-60	SB3 357
152	$\text{Mg}_2\text{SiO}_4 - \text{Fe}_2\text{SiO}_4$	O	a_s c_s V	0.0009(1) 0.00094(9) 0.26(2)	4.751(4) 5.982(3) 289.7(6)	0.007 0.005 1.01	0.09 0.06 0.25	- - -	9	0-52	(15)
		O	a_s b_s V	0.0004(3) 0.00387(6) 0.201(12)	4.78(3) 10.185(5) 289.7(1.1)	0.005 0.0009 0.18	0.05 0.005 0.03	- -	3	75-96	
a	Synth. at 500 bars	O	a_s b_s c_s V	0.00064(5) 0.00286(7) 0.00106(3) 0.175(3)	4.756(3) 10.197(5) 5.982(2) 290.1(2)	0.004 0.006 0.003 0.28	0.06 0.04 0.033 0.06	- -	6	0-100	(16)
b	Synth. at 2000 bars	O	a_s b_s c_s V	0.00070(4) 0.00273(3) 0.00108(3) 0.176(4)	4.754(3) 10.197(2) 5.980(2) 289.9(2)	0.004 0.002 0.003 0.33	0.05 0.012 0.03 0.08	- -	6	0-100	
c		O	a_s b_s c_s V	0.0008(2) 0.00300(5) 0.0011(1) 0.18(2)	4.74(1) 10.192(2) 5.987(6) 289.4(9)	0.015 0.0035 0.01 1.33	0.19 0.018 0.05 0.33	- 5 5 5	4/5	2-96	SR13 368
153	$\text{Mn}_3\text{Al}_2\text{Si}_3\text{O}_{12} - \text{Y}_3\text{Fe}_2\text{Fe}_3\text{O}_{12}$	C									

(Table 1 cont.d)

155	MnCO ₃ - CdCO ₃	R	a ₀ 0.00215(1) V 0.099(8)	6.0032(2) 109.2(2)	0.0001 0.11	0.0012 0.055	? 3/4	13-33	SR11 495
		R	a ₀ 0.0016(2) V 0.107(9)	6.015(13) 107.5(7)	0.006 0.36	0.073 0.23	{ ? } { }	5	50-100
156	MnFe ₂ O ₄ - MgFe ₂ O ₄	C	a ₀ -0.00122(1) V -0.2607(12)	8.5156(4) 617.41(7)	0.0003 0.06	0.002 0.006		4	25-90 SR21 328
157	Mn ₃ Fe ₂ TiO ₈ - Ni ₃ Fe ₂ TiO ₈	C	a ₀ -0.00266(7) V -0.575(13)	8.607(3) 637.4(7)	0.005 1.05	0.05 0.13		9	0-87 SR18 454
158	MnO - CaO	C	a ₀ 0.0021(3) V 0.14(2)	4.573(7) 95.0(5)	0.009 0.6	0.13 0.4	- -	4/5	65-100 SB2 227
a		C	a ₀ 0.00366(2) V 0.235(2)	4.4433(10) 87.48(14)	0.0016 0.23	0.025 0.17		8	0-100 SR10 166
159	MnO - CdO CaO type	C	a ₀ -0.00275(14) V -0.182(10)	4.724(2) 105.43(13)	0.002 0.14	0.02 0.076		3	0-20 SB2 228
		C	a ₀ -0.00083(10) V -0.054(6)	4.686(4) 102.9(2)	0.002 0.13	0.02 0.07		3	20-50
	MnO type	C	a ₀ -0.00221(9) V -0.131(6)	4.635(8) 99.1(5)	0.002 0.10	0.02 0.06		3/5	75-100
160	MnS - CdS	C	a ₀ 0.00228(1) V 0.189(2)	5.2227(3) 142.45(5)	0.0003 0.05	0.0035 0.02		3	0-37 (14)
		H	a ₀ 0.00150(1) c ₀ 0.00255(4) V 0.10830(13)	3.9863(11) 6.461(3) 88.700(9)	0.0005 0.001 0.004	0.007 0.010 0.002		3	51-100
161	MnSe - CdSe	C	a ₀ 0.00221(1) V 0.1997(9)	5.4626(2) 163.006(13)	0.0002 0.013	0.002 0.004		3	0-19 (14)
		H	a ₀ 0.00129(1) c ₀ 0.00214(14) V 0.100(3)	4.1678(3) 6.791(10) 102.0(2)	0.0002 0.005 0.1	0.002 0.04 0.05		3	50-100
162	MnTe - GeTe	C	a ₀ 0.00093(6) V 0.097(7)	5.853(4) 200.5(4)	0.003 0.28	0.032 0.096		6	30-80 P2 976
		R	a ₀ 0.0022(4) V 0.22(4)	5.76(3) 191.6(3,4)	0.004 0.46	0.044 0.13		4	83-100
163	MnWO ₄ - FeWO ₄	M	c ₀ -0.00020(2)	4.9947(10)	0.001	0.014		4	0-66 SR21 473
164	NaBiNb ₂ O ₇ - Cd ₂ Nb ₂ O ₇	C	a ₀ -0.0014(3) V -0.47(10)	10.52(3) 1164(8)	0.004 1.45	0.023 0.07		3/4	70-90 SR22 372
165	NaCN - NaBr	C	a ₀ 0.00130 V 0.1355(9)	5.83000 198.13(6)	- 0.06	- 0.02		3	0-100 SB2 372
166	NaCN - NaCl	C	a ₀ -0.00200 V -0.1970(12)	5.83000 198.07(7)	- 0.09	- 0.04		5	0-100 SB2 372
167	NaCl - NaBr	C	a ₀ 0.00335(3) V 0.3395(15)	5.645(2) 179.56(9)	0.003 0.15	0.043 0.056		11	0-100 SR12 285
168	NaClO ₃ - NaBrO ₃	C	a ₀ -0.00162(2) V 0.214(3)	6.5583(12) 282.0(2)	0.0015 0.20	0.016 0.045	{ } { }	5	0-100 SR11 497
169	NaFeSi ₂ O ₆ - MgCaSi ₂ O ₆	M	a ₀ 0.00096(3) b ₀ 0.00138(5) c ₀ -0.00037(3) V 0.116(5)	9.651(2) 8.793(3) 5.289(2) 428.5(3)	0.003 0.005 0.003 0.50	0.025 0.042 0.045 0.08	- - - -	11	0-100 (33)
170	NaFeSi ₂ O ₆ - NaInSi ₂ O ₆	M	a ₀ 0.0021(2) b ₀ 0.0036(3) c ₀ 0.00076(11) V 0.346(13)	9.680(14) 8.77(2) 5.305(7) 429.0(9)	0.012 0.017 0.006 0.75	0.071 0.11 0.065 0.11	- - - -	4	25-100 (22)

(Table 1 cont'd)

171	$\text{NaF}_2\text{Si}_2\text{O}_6 - \text{Na}_2\text{Si}_2\text{O}_6$	M	a_b 0.00184(14) b_c 0.00296(14) c_a 0.00068(7) V 0.292(13)	9.640(9) 8.760(9) 5.300(5) 427.2(9)	0.008 0.008 0.004 0.72	0.051 0.056 0.047 0.11	4	25-100	(24)
172	$\text{Na}_2\text{SO}_4 - \text{Na}_2\text{C}_2\text{O}_4$	O	a_b 0.0023(2) b_c 0.0036(1) c_a 0.00166(1) V 0.371(15)	5.594(3) 5.927(2) 6.953(12) 342.2(3)	0.004 0.003 0.003 0.33	0.036 0.016 0.002 0.05	3	0-30	SR18 474
173	$\beta\text{-Na}_2\text{YF}_4 - \text{YF}_3$	C	a_b 0.00137(7) V 0.124(7)	5.456(2) 162.4(2)	0.003 0.30	0.044 0.14	5	1-58	SR13 404
174	$\text{Nd}_2\text{Fe}_2\text{O}_{12} - \text{Y}_2\text{Fe}_2\text{O}_{12}$	C	a_b -0.00227(3) V -1.06(2)	12.605(2) 2002.1(1.1)	0.0016 0.82	0.007 0.025	5	33-100	SR26 415
175	$\text{NH}_4\text{Al}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O} - \text{KAl}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$	C	a_b -0.00082(3) V -0.386(18)	12.237(2) 1832.6(7)	0.002 0.92	0.012 0.037	5	0-100	SR8 191
176	$\text{NH}_4\text{C}(\text{SO}_3)_2 \cdot 12\text{H}_2\text{O} - \text{KCH}(\text{SO}_3)_2 \cdot 12\text{H}_2\text{O}$	C	a_b -0.00081(3) V -0.384(13)	12.274(2) 1849.0(7)	0.002 0.97	0.012 0.036	5/6	0-90	SR8 191
177	$\text{NiAl}_2\text{O}_4 - \text{NiFe}_2\text{O}_4$	C	a_b 0.00290(6) V 0.595(1)	8.050(4) 520.5(6)	0.002 0.48	0.024 0.07	12	50-100	SR18 454
178	$\text{NiAs}_2 - \text{CoAs}_2$	O	a_b 0.0037(2) b_c 0.00076(1) c_a -0.0048(3) V -0.050(2)	4.741(10) 5.792(5) 3.560(12) 97.63(12)	0.01 0.007 0.02 0.16	0.18 0.09 0.33 0.11	6/7	0-75	P2 615
179	$\text{NiFe}_2\text{O}_4 - \text{MgFe}_2\text{O}_4$	C	a_b 0.00041(2) V 0.086(5)	8.336(14) 579.4(3)	0.002 0.38	0.016 0.05	5	0-100	SR23 380
180	$\text{NiO} - \text{CoO}$	C	a_b 0.00083(2) V 0.0445(1)	4.1795(12) 73.00(7)	0.002 0.11	0.03 0.1	9	0-100	SB2 227
181	$\text{NiO} - \text{CuO}$	C	a_b 0.00062(1) V 0.0326(6)	4.1758(2) 72.813(10)	0.0002 0.014	0.004 0.012	6	0-25	(39)
182	$\text{NiO} - \text{MnO}$	C	a_b 0.00200 V 0.1056(3)	4.17000 72.509(5)	- 0.006	- 0.004	3/4	0-25	SB2 228
183	$\text{NiO} - \text{ZnO}$	C	a_b 0.0024(2) V 0.140(10)	4.17(2) 78.2(9)	0.003 0.18	0.04 0.11	3/4	75-100	
184	$\text{Ni}(\text{OH})_2 - \text{Co}(\text{OH})_2$	H	a_b 0.00116(6) V 0.033(2)	3.074(3) 37.72(1)	0.004 0.13	0.09 0.24	6	0-100	SB2 258
185	$\text{NiSO}_4 - \text{NiAs}_2$	H	a_b -0.00365(12) b_c -0.00103(1) V -0.135(4)	3.946(6) 5.146(6) 69.3(2)	0.011 0.01 0.39	0.22 - 0.41	10/1	0-90	SR11 32
186	$\text{OsS}_2 - \text{RuS}_2$	C	a_b -0.00010(1) V -0.0096(6)	5.6197(4) 177.48(4)	0.0005 0.045	0.006 0.02	5	0-100	P2 1154
187	$\text{OsTe}_2 - \text{RuTe}_2$	C	a_b -0.00006(1) V -0.0076(6)	5.3966(3) 261.73(4)	0.0003 0.04	0.003 0.008	3/4	0-100	P2 1154
188	$\text{PbBaF}_4 - \text{BaBeF}_4$	O	a_b 0.00521(1) b_c -0.00034(1) c_a 0.00206(10) V 0.267(7)	8.433(4) 5.339(4) 6.877(4) 309.6(3)	0.005 0.005 0.004 0.31	0.03 0.03 0.03 0.05	3/4	0-61	SR26 302
189	$\text{Pb}_2\text{Fe}_2\text{Si}_2\text{O}_9 - \text{Pb}_2\text{In}_2\text{Si}_2\text{O}_9$	O	a_b 0.0007(2) b_c 0.00344(14) c_a 0.0040(2) V 0.65(4)	6.955(12) 11.050(9) 10.150(14) 780(3)	0.009 0.008 0.012 2.05	0.08 0.04 0.07 0.18	4	25-100	(22)

(Table 1 cont.d)

190	$\text{PbCl}_2 - \text{PbBr}_2$	O	a_o	0.00061(6)	4.532(2)	0.002	0.03	-	4	0-50	SR12 287
			b_o	0.00347(3)	7.6209(10)	0.001	0.011				
			c_o	0.00322(6)	9.036(2)	0.002	0.02				
			V	0.299(3)	312.06(9)	0.12	0.023				
		O	a_o	0.0032(2)	4.40(1)	0.007	0.07		4	50-100	
			b_o	0.0050(3)	7.55(3)	0.012	0.03				
			c_o	0.0065(3)	8.87(2)	0.01	0.05				
			V	0.69(1)	292.3(9)	0.43	0.09				
191	$\text{PbNb}_2\text{O}_6 - \text{BaNb}_2\text{O}_6$	O	a_o	0.0042(4)	17.685(10)	0.008	0.03	-	4	10-40	SR23 392
			b_o	0.0035(8)	17.98(2)	0.02	0.06	-			
			c_o	0.0020(3)	7.722(8)	0.006	0.05				
			V	1.71(17)	2456(5)	3.78	0.09				
192	$\text{Pb}_3\text{NiNb}_2\text{O}_9 - \text{Pb}_3\text{MgNb}_2\text{O}_9$	C	a_o	0.00013(1)	4.0250(3)	0.0004	0.007		5	0-60	SR24 363
			V	0.0063(4)	65.207(14)	0.02	0.02				
193	$\text{Pb}_{10}(\text{PO}_4)_6(\text{OH})_2 - \text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$	H	a_o	-0.0049(3)	9.88(2)	0.02	0.12		3	0-100	SR11 509
			c_o	-0.0036(2)	7.273(15)	0.016	0.13				
			V	-0.87(7)	615(4)	4.6	0.44				
194	$\text{PbS} - \text{AgBiS}_2$	C	a_o	-0.00212(14)	5.855(12)	0.005	0.07	(	5/6	50-100	SR24 232
			V	-0.207(14)	200.3(1.2)	0.55	0.21	(			
195	$\text{PbS} - \text{AgSbS}_2$	C	a_o	-0.00225(7)	5.873(5)	0.003	0.035	)	5/6	50-100	SR24 232
			V	-0.220(6)	202.1(5)	0.26	0.10	)			
196	$\text{PbS} - \text{PbSe}$	C	a_o	0.00189(3)	5.936(2)	0.002	0.03	)	6	0-100	P1 806
			V	0.206(3)	209.0(2)	0.22	0.07	)			
a		C	a_o	0.0022(1)	5.933(8)	0.017	0.20	-	20	0-94	SR23 172
			V	0.21(13)	207(7)	15.2	2.88	-			
b		C	a_o	0.00190(1)	5.9363(4)	0.0006	0.009		9	0-100	(5)
			V	0.2072(3)	209.11(2)	0.04	0.01				
197	$\text{PrO} - \text{Pr}_2\text{O}_3$	C	a_o	0.0018(2)	5.378(12)	0.005	0.05	-	7/12	51-81	SR18 585
			V	0.16(2)	155.3(1.1)	0.44	0.15	-			
198	$\text{PrO}_2 - \text{Nd}_2\text{O}_3$	C	a_o	0.00274(14)	5.398(3)	0.005	0.06	)	5/6	0-39	SR13 399
			V	0.244(12)	157.3(3)	0.41	0.16	)			
199	$\text{Pr}_2\text{O}_3 - \text{Tb}_2\text{O}_3$	C	a_o	-0.00422(2)	11.1518(12)	0.002	0.014		9	0-100	(7)
			V	-1.517(8)	1386.2(5)	0.90	0.05				
a		M	b_o	-0.00155(10)	3.693(6)	0.007	0.13		6	16-100	
			c_o	-0.00326(8)	9.037(5)	0.006	0.042				
			V	-0.46(2)	472(1)	1.1	0.17				
200	$\text{RbBr} - \text{CsBr}$	C	a_o	0.0024(2)	6.896(2)	0.002	0.01		4	0-15	(13)
			V	0.34(2)	327.9(2)	0.25	0.04				
		C	a_o	0.00339(8)	6.891(3)	0.003	0.03		6	25-65	
			V	0.505(12)	326.7(5)	0.40	0.03				
201	$\text{RbCl} - \text{CsCl}$	C	a_o	0.00366(8)	6.588(4)	0.005	0.05		7/8	0-75	(13)
			V	0.50(1)	285.7(5)	0.71	0.14				
202	$\text{RbCl} - \text{KCl}$	C	a_o	-0.00290(9)	6.577(5)	0.008	0.105		8	0-100	SR13 394
			V	-0.359(10)	284.3(6)	0.92	0.3				
203	$\text{Rb}_2\text{PtCl}_6 - \text{Cs}_2\text{PtCl}_6$	C	a_o	0.00321(7)	9.832(4)	0.006	0.03	)	5	0-100	SB2 497
			V	0.96(2)	950.0(1.2)	1.47	0.09	)			
204	$\text{Sc}_2\text{O}_3 - \text{Y}_2\text{O}_3$	C	a_o	0.0080(8)	9.82(5)	0.07	0.46	-	7	0-100	SR24 335
			V	2.5(3)	945(15)	22.9	1.43	-			
205	$\text{SiO}_2 - \text{LiAlSi}_2\text{O}_6$	T	a_o	0.00293(4)	7.4349(10)	0.0006	0.006	6/12	16-33	(42)	
			b_o	0.088(4)	8.86(1)	0.008	0.02	12			
			c_o	0.90(2)	489.2(5)	0.27	0.04	6/12			
			V	0.90(2)	489.2(5)	0.27	0.04	6/12			
206	$\text{SrAl}_2\text{Si}_2\text{O}_8 - \text{PbAl}_2\text{Si}_2\text{O}_8$	M	a_o	0.00026(3)	8.379(2)	0.003	0.03	-	8/9	4-100	(12)
			b_o	0.00080(5)	12.954(3)	0.005	0.03	-			
			c_o	0.00074(3)	14.282(2)	0.003	0.01	-			
			V	0.208(10)	1403.0(6)	1.0	0.05	-			

(Table 1 cont.d.)

207	$\text{SrCO}_3 - \text{BaCO}_3$	O	a^b 0.00143(7) b^c 0.0053(4) c^d 0.0044(4) v 0.43(1)	5.101(4) 8.373(12) 6.018(10) 257.0(4)	0.007 0.06 0.018 0.15 0.016 0.19 0.61 0.17	11 7 7 7	0-100 0-50 0-50 0-50	
		O	b^c 0.0034(4) c^d 0.0025(3) v 0.31(2)	8.47(3) 6.18(2) 265.7(1.9)	0.01 0.085 0.009 0.085 0.69 0.13	((-	62-100	
208	$\text{SrCl}_2 - \text{BaCl}_2$	C	a^b 0.0034(2) v 0.50(3)	6.970(4) 338.6(6)	0.005 0.05 0.73 0.146	5	0-28	SR22 258
209	$\text{SrCl}_2 - \text{CaCl}_2$	C	a^b -0.00216(9) v -0.313(13)	6.9708(13) 338.7(2)	0.001 0.013 0.21 0.04	5/6 1	0-20	SR22 258
210	$\text{SrCl}_2 - \text{LaCl}_3$	C	a^b 0.0012(2) v 0.17(2)	6.974(3) 339.2(4)	0.004 0.04 0.61 0.11	- 7/8	0-25	SR22 258
211	$\text{SrCl}_2 - \text{ThCl}_4$	C	a^b 0.0021(2) v 0.32(3)	6.977(3) 339.6(4)	0.004 0.05 0.65 0.15	- 11	0-20	SR22 259
212	$\text{SrCoO}_3 - \text{LaCoO}_3$	R	a^b -0.00037(1) v -0.067(2)	7.6879(12) 454.5(2)	0.0003 0.0025 0.058 0.007	3	65-100	SR19 390
213	$\text{SrF}_2 - \text{LaF}_3$	C	a^b 0.00152(10) v 0.154(11)	5.780(2) 193.1(2)	0.002 0.026 0.24 0.08	4/5	0-30	SB5 52
214	$\text{SrFe}_{12}\text{O}_{19} - \text{SrCr}_{12}\text{O}_{19}$	H	c^d -0.0063(4)	23.014(13)	0.014 0.036	? 4	0-50	SR16 239
215	$\text{Sr}_3\text{Fe}_2(\text{OH})_{12} - \text{Sr}_3\text{In}_2(\text{OH})_{12}$	C	a^b 0.0031(2) v 1.70(11)	13.209(14) 2303(7)	0.012 0.05 5.92 1.15	4	25-100	(22)
216	$\text{SrMoO}_3 - \text{SrZrO}_3$	C	a^b 0.00129(2) v 0.0631(8)	3.9743(9) 62.75(5)	0.001 0.02 0.066 0.061	5	0-100	SR24 360
217	$\text{Sr}(\text{NO}_3)_2 - \text{Ca}(\text{NO}_3)_2$	C	a^b -0.00211(1) v -0.375(2)	7.8101(4) 476.21(12)	0.0004 0.003 0.11 0.02	5	17-83	SB2 387
218	$\text{Sr}_2\text{Nb}_2\text{O}_7 - \text{Cd}_2\text{Nb}_2\text{O}_7$	C	a^b -0.0025(2) v -0.82(6)	10.62(2) 1198(6)	0.004 0.03 1.31 0.086	() 6	75-100	SR22 371
219	$\text{SrO} - \text{BaO}$	C	a^b 0.0039(2) v 0.33(2)	5.143(12) 135.8(1.0)	0.02 0.19 1.4 0.6	- 5	0-100	SB3 244
a		C	a^b 0.00380(2) v 0.324(3)	5.1404(12) 135.5(2)	0.002 0.034 0.36 0.16	11	0-100	SR20 262
220	$\text{SrTiO}_3 - \text{SrMoO}_3$	C	a^b 0.00071(2) v 0.0330(8)	3.9043(8) 59.51(4)	0.0009 0.015 0.044 0.046	4	0-75	SR24 360
221	$\text{ThO}_2 - \text{La}_2\text{O}_3$	C	a^b 0.00085(11) v 0.081(10)	5.597(6) 175.3(16)	0.003 0.03 0.31 0.093	- 3/4	33-75	SR18 587
222	$\text{ThO}_2 - \text{PuO}_2$	C	a^b -0.00204(2) v -0.185(2)	5.5968(11) 175.40(10)	0.002 0.02 0.17 0.07	8	0-100	SR22 372
223	$\text{ThS} - \text{CeS}$	C	a^b 0.00092(8) v 0.091(8)	5.680(5) 183.2(5)	0.006 0.07 0.58 0.23	() 5	0-100	SR12 139
224	$\text{ThSiO}_4 - \text{USiO}_4$	T	a^b -0.00121(4) c^d -0.00084(4) v -0.148(2)	7.114(3) 6.349(3) 319.33(15)	0.002 0.02 0.002 0.02 0.12 0.03	4/5	25-100	(17)
225	$\text{TiO}_2 - \text{NbO}_2$	T	a^b 0.00249(2) v 0.077(2)	4.5940(14) 62.64(10)	0.0027 0.045 0.196 0.21	11/13	0-90	(36)
226	$\text{TiO}_2 - \text{TaO}_2$	T	a^b 0.00197(6) c^d 0.00242(13) v 0.108(4)	4.600(2) 2.946(4) 62.28(12)	0.002 0.03 0.004 0.1 0.11 0.12	5	10-50	(36)
227	$\text{TiAl}(\text{SO}_4)_3 \cdot 12\text{H}_2\text{O} - \text{NH}_4\text{Al}(\text{SO}_4)_3 \cdot 12\text{H}_2\text{O}$	C	a^b 0.00009(1) v 0.039(4)	12.2303(5) 1829.4(2)	0.0009 0.005 0.38 0.014	- 7	0-100	SR8 191

(Table 1 cont.d)

228	$\text{TlBiTe}_2 - 2\text{PbTe}$	R	a_c	-0.00015(3)	6.4768(4)	0.0004	0.003	3	0-20	P2
		V		-0.0101(9)	271.353(11)	0.013	0.0025			714
229	$\text{TlBiTe}_2 - 2\text{SnTe}$	C	a_c	-0.00143(4)	6.463(2)	0.002	0.02	5/6	30-100	P2
		V		-0.174(5)	269.6(3)	0.29	0.07			727
230	$\text{TlBiTe}_2 - \text{TlSbTe}_2$	R	a_c	0.00039(5)	8.137(4)	0.005	0.04	-	6	0-100
		V		-0.031(3)	135.7(2)	0.29	0.15	-		724
231	$\text{TlBr} - \text{NH}_4\text{Br}$	C	a_c	0.00076(3)	3.968(2)	0.002	0.04	6/7	0-90	SR20
		V		0.037(2)	62.46(8)	0.12	0.13			237
232	$\text{TlCl} - \text{NH}_4\text{Cl}$	C	a_c	0.00038(8)	3.820(6)	0.0075	0.045	9/10	10-100	SR20
		V		0.017(2)	55.72(12)	0.15	0.14			236
233	$\text{TlSbTe}_2 - 2\text{PbTe}$	C	a_c	0.00042(4)	6.416(3)	0.002	0.02	4	30-100	P2
		V		0.053(5)	264.2(3)	0.27	0.055			1168
234	$\text{TlSbTe}_2 - 2\text{SnTe}$	R	a_c	-0.00008(1)	6.411(3)	0.003	0.024	-	3	0-30
		V		-0.075(14)	262.6(3)	0.31	0.064	-		(28)
		C	a_c	-0.00072(1)	6.3919(7)	0.0003	0.003	3	50-100	
		V		-0.0869(12)	261.11(10)	0.04	0.009			
235	$\text{UO}_2 - \text{CeO}_2$	C	a_c	-0.00058(1)	5.4688(2)	0.0004	0.006	16	0-100	SR17
		V		-0.0519(7)	163.58(4)	0.08	0.03			530
236	$\text{UO}_2 - \text{PuO}_2$	C	a_c	-0.00075(2)	5.4693(12)	0.002	0.024	8/9	0-100	SR22
		V		-0.067(2)	163.59(11)	0.16	0.07			373
237	$\text{UO}_2 - \text{ThO}_2$	C	a_c	0.00138(5)	5.455(3)	0.005	0.07	-	13	0-100
		V		0.126(4)	162.3(3)	0.50	0.21	-		SR13
a		C	a_c	0.00128(7)	5.458(4)	0.006	0.007	6	0-100	SR16
		V		0.117(3)	162.5(2)	0.25	0.02			259
b		C	a_c	0.00129(1)	5.4683(3)	0.0004	0.004	4	5-100	SR17
		V		0.1184(5)	163.49(3)	0.040	0.013			530
c		C	a_c	0.00126(1)	5.4712(7)	0.0015	0.02	14	0-100	SR17
		V		0.1156(12)	163.73(7)	0.14	0.06			535
238	$\text{UO}_{2.26} - \text{ThO}_2$	C	a_c	0.0192(3)	3.6737(8)	0.002	0.02	10/13	42-100	SR16
		V		0.177(2)	157.66(7)	0.14	0.06			259
239	$\text{UO}_2 - \text{ZrO}_2$	C	a_c	-0.00286(8)	5.457(3)	0.003	0.03	3	0-50	SR17
		V		-0.249(5)	162.5(2)	0.2	0.07			533
a		T	a_c	-0.0047(2)	5.545(13)	0.004	0.04	-	5	54-77
		V		-0.33(2)	166.9(1.2)	0.37	0.15	-		SR17
b		T	a_c	-0.0046(2)	5.532(12)	0.007	0.1	7	55-100	SR22
		C	a_c	-0.0010(2)	5.346(10)	0.003	0.04	6/7	55-76	373
		V		-0.26(2)	161.6(1.3)	0.4	0.2	6/7	55-76	
240	$\text{US} - \text{ThS}$	C	a_c	0.0020(2)	5.489(11)	0.012	0.12	3	0-100	SR12
		V		0.186(14)	165.3(9)	0.97	0.30			139
241	$\text{VO}_2 - \text{NbO}_2$	T	a_c	0.00299(8)	4.535(5)	0.008	0.1	12	5-100	
		C	a_c	0.0045(2)	2.839(4)	0.004	0.092	-	5	5-40
		V		0.167(4)	58.53(9)	0.10	0.12		5	5-40
		T	c_a	-0.00089(6)	3.080(5)	0.003	0.05	7	50-100	
		V		0.074(3)	62.7(2)	0.11	0.098			
242	$\text{WSe}_2 - \text{MoSe}_2$	H	a_c	0.00003(1)	3.2861(2)	0.0003	0.005	-	6	0-100
		C	c_a	-0.00047(1)	12.9762(7)	0.0008	0.005			P2
		V		-0.0022(2)	121.349(14)	0.02	0.01	-		1107
243	$\text{WSe}_2 - \text{TaSe}_2$	H	a_c	0.0017(1)	3.286(2)	0.005	0.01	16	0-35	
	MoS ₂ type	C	c_a	-0.0039(2)	12.946(2)	0.0065	0.04	-	14/16	P2
		V		0.084(3)	121.15(4)	0.12	0.06	16	0-35	1242
	CdCl ₂ type	H	a_c	0.0016(2)	3.285(10)	0.01	0.18			
		C	c_a	-0.00175(7)	19.270(4)	0.005	0.02	10	40-100	
		V		0.16(2)	180.0(1.1)	1.14	0.37			
244	$\text{YCa}_2\text{Zr}_2\text{Fe}_3\text{O}_{12} - \text{Y}_3\text{Fe}_2\text{Fe}_3\text{O}_{12}$	C	a_c	-0.00315(5)	12.689(3)	0.005	0.03	12	0-100	SR24
		V		-1.48(2)	2042.4(1.4)	2.24	0.08			351

(Table 1 cont.d)

245	$\text{Y}_3\text{Fe}_2\text{Fe}_3\text{O}_{12} - \text{Ca}_2\text{Fe}_2\text{Sn}_3\text{O}_{12}$	C	a_0	0.00353(5)	12.380(2)	0.004	0.025	8	0-100	SR24 350
		V		1.67(2)	1896.9(8)	1.41	0.05			
246	$\text{YNbO}_4 - \text{YTao}_4$	M	c_0	0.00036	5.29200	-	-	3	0-50	SR23 390
		V		0.0104	275.491(13)	0.01	0.003			
		M	c_0	0.00026(1)	5.2972(9)	0.0004	0.004	3	50-100	
		V		0.0036(2)	275.84(2)	0.008	0.002			
247	$3\text{Y}_2\text{O}_3 \cdot 5\text{Al}_2\text{O}_3 - 3\text{Y}_2\text{O}_3 \cdot 5\text{Fe}_2\text{O}_3$	C	a_0	0.00372(6)	12.009(5)	0.006	0.033	8	0-100	SR22 346
		V		1.66(2)	1731(2)	2.07	0.08			
248	$3\text{Y}_2\text{O}_3 \cdot 5\text{Ga}_2\text{O}_3 - 3\text{Y}_2\text{O}_3 \cdot 5\text{Fe}_2\text{O}_3$	C	a_0	0.00107(3)	12.273(2)	0.002	0.009	4/5	0-95	SR22 346
		V		0.488(13)	1848.5(9)	0.94	0.03			
249	$3\text{Y}_2\text{O}_3 \cdot 5\text{Sc}_2\text{O}_3 - 3\text{Y}_2\text{O}_3 \cdot 5\text{Fe}_2\text{O}_3$	C	a_0	-0.0041(2)	12.79(2)	0.004	0.02	4	70-95	SR22 346
		V		-1.92(10)	2088(9)	1.95	0.6			
250	$\text{YbNbO}_4 - \text{NdNbO}_4$	M	a_0	0.00228(3)	5.235(2)	0.002	0.02	5/6	0-80	(43)
		b_0	0.00430(10)	10.840(5)	0.006	0.04				
		c_0	0.00104(5)	5.042(2)	0.003	0.04				
		V		0.304(6)	285.3(3)	0.4	0.08			
251	$\text{ZnAl}_2\text{O}_4 - \text{NiAl}_2\text{O}_4$	C	a_0	-0.00049(5)	8.097(2)	0.003	0.02	4/5	25-100	SR11 500
		V		-0.095(9)	530.8(4)	0.52	0.06			
a		C	a_0	-0.00040	8.09300	-	-	3/5	25-75	SR17 414
		V		-0.07821(6)	530.056(3)	0.002	0.0002			
252	$\text{ZnCO}_3 - \text{CdCO}_3$	R	a_0	0.0040(2)	5.903(11)	0.01	0.16	5	0-100	SB4 156
		V		0.43(2)	185.7(1.0)	1.38	0.5			
253	$\text{ZnCO}_3 - \text{MnCO}_3$	R	a_0	0.00186(14)	5.907(8)	0.01	0.11	5	0-100	SB4 156
		V		0.199(13)	186.2(8)	1.02	0.31			
254	$\text{ZnFe}_2\text{O}_4 - \text{MnFe}_2\text{O}_4$	C	a_0	0.00090(1)	8.4436(2)	0.0003	0.002	5/8	0-60	(27)
		V		0.1935(15)	601.96(5)	0.07	0.007			
255	$\text{ZnFe}_2\text{O}_4 - \text{ZnMn}_2\text{O}_4$	T	a_0	-0.0040(2)	8.493(14)	0.01	0.065	4/5	40-100	SR26 409
		c_0		0.0091(4)	8.33(2)	0.02	0.11			
256	$\text{Zn}_3\text{Fe}_2\text{TiO}_8 - \text{Ni}_3\text{Fe}_2\text{TiO}_8$	C	a_0	-0.00127(4)	8.466(4)	0.0009	0.009	5	67-93	SR18 454
		V		-0.268(9)	606.6(8)	0.20	0.026			
257	$\text{ZnO} - \text{MnO}$	H	a_0	0.00158(11)	3.248(2)	0.002	0.044	3/6	0-22	SR10 169
		c_0		0.0025(2)	5.203(2)	0.003	0.04			
		V		0.070(5)	47.53(7)	0.09	0.13			
258	$\text{ZnS} - \text{CdS}$	H	a_0	0.00314(1)	3.8216(6)	0.0013	0.024	15	4-85	P2 752
		c_0		0.00456(3)	6.2578(13)	0.003	0.032			
		V		0.2004(13)	78.99(6)	0.13	0.11			
a		H	a_0	0.00330(6)	3.815(4)	0.005	0.07	5	0-100	P2 753
		c_0		0.00487(10)	6.234(6)	0.007	0.07			
		V		0.214(3)	78.3(2)	0.23	0.19			
b		H	a_0	0.00344(14)	3.786(9)	0.01	0.2	9	20-100	P2 753a
		c_0		0.0049(2)	6.219(12)	0.01	0.17			
		V		0.224(10)	76.6(7)	0.77	0.65			
c		C	a_0	0.00308(5)	3.820(4)	0.002	0.03	4	0-48	P2 753b
		V		0.140(2)	55.75(13)	0.06	0.06			
		C	a_0	0.0035(7)	3.79(1)	0.01	0.14	3	79-100	
		V		0.18(4)	52.9(5)	0.53	0.41			
259	$\text{ZnS} - \text{CoS}$	C	a_0	-0.00070(1)	5.4094(1)	0.0003	0.004	10	0-25	P2 810
		V		-0.0615(10)	158.291(12)	0.025	0.012			
260	$\text{ZnS} - \text{FeS}$	C	a_0	0.00046(1)	5.4093(1)	0.0002	0.003	19/27	0-34	P2 933
		V		0.0405(5)	158.28(9)	0.02	0.008			

(Table 1 cont.d)

260a	ZnS - FeS	H	a_0	0.00053(1)	3.8222(2)	0.0003	0.006					
			c_0	0.00086(2)	6.2571(5)	0.0007	0.008					
			V	0.0329(4)	79.164(9)	0.014	0.013	16	5-34	P2	934	
b		C	a_0	0.00052(5)	5.4118(5)	0.0008	0.01	-	6	0-22	SR24	242
			V	0.046(4)	158.50(6)	0.074	0.034	-				
261	ZnS - Ga ₂ S ₃	H	a_0	-0.00323(14)	3.828(2)	0.002	0.04					
			c_0	-0.0053(2)	6.252(3)	0.004	0.04		6	0-19	P2	955
			V	-0.197(10)	79.34(11)	0.16	0.12					
262	ZnS - HgS	C	a_0	0.0045(3)	5.395(14)	0.023	0.25	-	5	0-100	P2	1008
			V	0.42(3)	156.8(1.4)	2.15	0.74	-				
263	ZnS - MnS	C	a_0	0.00150(6)	5.4147(4)	0.0004	0.004		3	0-10	P1	745
			V	0.133(5)	158.76(3)	0.04	0.013					
		H	a_0	0.00155(1)	3.8255(3)	0.0003	0.006					
			c_0	0.00227(5)	6.246(2)	0.002	0.015	4/5	10-50			
			V	0.0952(6)	79.13(2)	0.02	0.014					
a		H	a_0	0.00164(1)	3.8228(2)	0.0005	0.01					
			c_0	0.00206(2)	6.2571(6)	0.0015	0.02	20/21	2-50	P2	1081	
			V	0.0957(5)	79.178(11)	0.031	0.03					
b		C	a_0	0.00177(4)	5.4097(2)	0.0003	0.003		10	1-8	P2	1081a
			V	0.156(3)	158.312(15)	0.023	0.01					
264	ZnS - ZnSe	C	a_0	0.00277(9)	5.407(3)	0.004	0.05	)	6	0-50		(26)
			V	0.24(17)	158.3(2)	0.3	0.11		10	0-100		
		C	a_0	0.00250(2)	5.418(2)	0.0006	0.006		4	60-100		
a		C	a_0	0.00259(1)	5.4086(5)	0.0008	0.011		9	0-100	(5)	
			V	0.238(2)	158.08(9)	0.17	0.08					
265	ZnSb - CdSb	O	a_0	0.00293(10)	6.224(3)	0.005	0.06					
			b_0	0.00582(8)	7.758(2)	0.004	0.04					
			c_0	0.00531(8)	8.138(3)	0.004	0.04	11	0-50	P2	754	
			V	0.759(9)	392.8(3)	0.48	0.09					
		O	a_0	0.0030(6)	6.21(3)	0.004	0.035					
			b_0	0.0050(6)	7.79(3)	0.004	0.03					
			c_0	0.0030(6)	8.25(3)	0.004	0.03	3	55-65			
			V	0.63(2)	398.2(1.4)	0.16	0.02					
		O	a_0	0.00200	6.27000	-	-					
			b_0	0.0027(2)	7.94(2)	0.003	0.02					
			c_0	0.0027(2)	8.27(2)	0.003	0.02	3/4	65-80			
			V	0.43(3)	411.2(1.9)	0.29	0.035					
		O	a_0	0.0028(3)	6.20(3)	0.003	0.031	-				
			b_0	0.0056(11)	7.71(10)	0.012	0.08	-				
			c_0	0.0038(10)	8.17(10)	0.012	0.09	-	4	85-100		
			V	0.71(5)	387.7(4.9)	0.58	0.08					
a		O	a_0	0.00282(8)	6.145(4)	0.008	0.09	-				
			b_0	0.0052(2)	7.70(1)	0.02	0.2	-	15	0-100	SR26	34
			c_0	0.0044(2)	7.85(1)	0.02	0.17	-				
			V	0.66(2)	371.09(10)	1.88	0.35	-				
266	ZnSe - CdS	C	a_0	0.00160(6)	5.6673(7)	0.0008	0.008	?	3	0-20	P2	752
			V	0.155(5)	152.03(7)	0.075	0.02					
		H	a_0	0.00139(11)	3.988(8)	0.007	0.14	-	8	30-100		
			V	0.090(8)	89.9(5)	0.5	0.36	-				
267	ZnSe - CdSe	C	a_0	0.00423(13)	5.656(3)	0.0034	0.034		6	0-31	P2	756
			V	0.416(13)	180.9(3)	0.34	0.104					
		H	a_0	0.00301(8)	3.9903(51)	0.005	0.07					
			c_0	0.00510(12)	6.501(8)	0.007	0.07		7	33-100		
			V	0.226(5)	89.0(3)	0.28	0.17					

(Table 1 cont.d.)

268	ZnSe - GaAs	C	a ₀ -0.00014(1) V -0.0137(11)	5,6689(7) 182.18(7)	0.0009 0.01 0.09 0.03	4	0-100	P2 626
269	ZnSe - MnSe	C	a ₀ 0.00206(2) V 0.199(2)	5,6618(5) 180.39(5)	0.0007 0.0009 0.07 0.025	6/11	0-35	P1 746
270	ZnTe - MnTe	C	a ₀ 0.00187(2) V 0.214(2)	6,1001(7) 226.93(9)	0.001 0.015 0.15 0.05	9	0-80	P1 748
271	Zn ₂ TiO ₄ - ZnFe ₂ O ₄	C	a ₀ -0.00030(1) V -0.063(3)	8,4700(9) 607.6(2)	0.0008 0.006 0.16 0.02	4/5	25-100	SR17 415
272	ZrO ₂ - CaO	C	a ₀ 0.0008(2) V 0.065(13)	5,108(3) 133.3(2)	0.002 0.033 0.19 0.098	5/7	5-24	SR16 227
273	ZrO ₂ - CeO ₂	C	a ₀ 0.0033(2) V 0.258(13)	5,065(15) 129.9(1.1)	0.002 0.02 0.15 0.07	4/6	5-20	SB2 268
		C	a ₀ 0.00330(15) V 0.286(13)	5,085(2) 130.2(2)	0.003 0.04 0.28 0.12	6/7	75-100	
a		C	a ₀ 0.00299(8) V 0.252(6)	5,111(5) 133.1(4)	0.006 0.07 0.41 0.17	7	24-100	SR13 402
b		C	a ₀ 0.00275(9) V 0.238(8)	5,133(7) 134.4(7)	0.002 0.02 0.18 0.08	4/9	70-100	SR13 402a
274	BaAl ₂ Si ₂ O ₈ — CaAl ₂ Si ₂ O ₈ At 7450°C	M	(11)					
a	About 1590°C	H	(11)					
275	CaAl ₂ Si ₂ O ₈ — NaAlSi ₃ O ₈	Tr	SR15, 303					
276	CaCO ₃ —CoCO ₃	R	SB4, 155					
277	CeO ₂ —Ce ₂ O ₃	C	SR18, 585					
278	CeO ₂ —Nd ₂ O ₃	C	SR13, 399					
279	CeO ₂ —Sm ₂ O ₃	C	SR18, 587					
280	CrSb—CrTe	H	P2, 847a					
281	CrSb—MnSb	H	P2, 829					
a		H	P2, 829a					
282	CuCl—CuI	C	SR9, 270					
283	Fe ₂ O ₃ —Ti ₂ O ₃	R	SB3, 380					
284	HgTe—CdTe	C	SR24, 83					
285	InSe—InAs	C	SR24, 160					
286	In ₂ Se ₃ —InAs	C	SR22, 43					
287	In ₂ Se ₃ —InP	C	P2, 1019					
288	In ₂ Te ₃ —InAs	C	SR24, 160					
289	KAlSi ₃ O ₈ —BaAl ₂ Si ₂ O ₈	Tr	(18)					
290	KCl—KBr	C	SB2, 213					
291	KFe ₃ (SO ₄) ₂ (OH) ₆ — KAl ₃ (SO ₄) ₂ (OH) ₆ Synth. at 150°C-6bars	H	(8)					
292	LaMnO ₃ —SrMnO ₃	C	SR26, 419					
293	LiCr ₂ O ₅ —LiFe ₂ O ₅	C	SR18, 455					
294	MgO—Al ₂ O ₃	C	SB3, 242					
295	NH ₄ H ₂ PO ₄ —KH ₂ PO ₄	T	SR15, 262					
296	NiO—MgO	C	SR24, 338					
297	PbS—CdS	C	(5)					
298	PbS—PbSe	C	SR23, 173					
299	PrO _{1.80} —UO _{2.67}	C	SR16, 261					
300	ThO ₂ —Nd ₂ O ₃	C	SR18, 587					
301	ThO ₂ —Sm ₂ O ₃	C	SR18, 587					
302	ThO ₂ —Y ₂ O ₃	C	SR18, 587					
303	TiFe ₂ O ₅ —Ti ₂ FeO ₅	O	(1)					
304	TiBiTe ₂ —2 SnTe	R	P2, 727					
305	ZnCO ₃ —CaCO ₃	R	SB4, 156					
306	ZnHg(CNS) ₄ — CoHg(CNS) ₄	T	SR9, 211					
307	ZrO ₂ —CeO ₂	C	SR13, 403					
308	ZrO ₂ —La ₂ O ₃	C	SR15, 215					

(Table 1 cont.d)

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TABLE 2. — *Alloys and intermetallic compounds.*

For the explanation of the symbols and the figures, see the text.

1	Ag - Hg	C	a_0 0.00270(4) V 0.138(2)	4.0855(7) 68.18(4)	0.0009 0.013 0.05 0.05	6	2-27	P2 519
a		C	a_0 0.00033 V 0.1010	10.02600 1007.81	- - - -	3	60-72	P2 520
b		H	a_0 0.0039(4) c_0 -0.00012(1) V 0.096(10)	2.82(2) 4.8465(5) 33.3(5)	0.002 0.057 0.0001 0.0009 0.06 0.11	5	40-48	P2 520
2	Ag - Mg	C	a_0 0.00126(5) V 0.064(3)	4.0831(10) 68.07(5)	0.001 0.025 0.07 0.08	8	0-29	P2 522
3	Ag - Mn	C	a_0 -0.00023(2) V -0.0117(7)	4.0889(4) 68.36(2)	0.0005 0.008 0.03 0.02	10/12	10-46	P1 297
4	Al - Mg	C	a_0 0.00444(4) V 0.227(2)	4.0497(8) 66.38(5)	0.0015 0.025 0.1 0.1	11	0-37	P2 572
		H	a_0 0.00395(12) c_0 0.0054(3) V 0.156(6)	2.816(10) 4.67(2) 30.9(5)	0.001 0.024 0.002 0.032 0.05 0.076	6	77-88	
5	Al - Zn	C	a_0 -0.00081(3) V -0.0398(13)	4.0491(4) 66.39(2)	0.0007 0.014 0.04 0.04	9	0-30	P2 603
6	AlLi - GaLi	C	a_0 -0.00234(10) V -0.276(11)	6.384(6) 260.1(7)	0.008 0.09 0.96 0.26	6	0-100	P2 564
7	AlNi - AlMn	C	a_0 0.0021(2) V 0.053(6)	2.862(6) 23.43(14)	0.007 0.14 0.17 0.42	4	0-38	P2 575
8	Au - Cr	C	a_0 -0.00159(3) V -0.078(2)	4.0794(8) 67.88(4)	0.002 0.034 0.084 0.09	16	1-44	P2 654
9	Au - Hg	C	a_0 0.00240(9) V 0.121(4)	4.0775(11) 67.78(6)	0.001 0.023 0.065 0.07	7	3-20	P1 430
10	Au - Ni	C	a_0 -0.00561(11) V -0.244(3)	4.109(7) 68.7(2)	0.014 0.26 0.33 0.38	16	0-100	SR16 96
a		C	a_0 -0.00476(12) V -0.224(3)	4.081(3) 67.92(9)	0.004 0.075 0.11 0.12	4	0-50	SR26 159
		C	a_0 -0.0063(2) V -0.259(6)	4.16(2) 69.7(5)	0.009 0.15 0.22 0.26	4	50-100	
11	Au - Pt	C	a_0 -0.00153(1) V -0.0731(7)	4.0665(7) 67.20(4)	0.002 0.031 0.10 0.12	19	0-100	SR15 77
a		C	a_0 -0.0015(1) V -0.071(3)	4.072(3) 67.4(1)	0.005 0.07 0.20 0.21	20/21	20-90	SR16 98
12	Au - Ta	C	a_0 0.00025(8) V 0.012(4)	4.0806(11) 67.95(6)	0.0015 0.026 0.07 0.08	7	4-27	(8)
13	Au - Zn	C	a_0 -0.00209(3) V -0.1024(15)	4.0805(7) 67.93(3)	0.0006 0.012 0.03 0.03	6	7-29	P1 445
14	Ba - Ca	C	a_0 -0.0064(2) V -0.45(2)	5.060(10) 129.0(8)	0.015 0.21 1.21 0.71	9/10	9-66	SR8 35
		C	a_0 -0.0081(4) V -0.79(4)	6.37(3) 250.9(3.3)	0.011 0.12 1.16 0.4	5	66-100	
15	Ba - Sr	C	a_0 -0.0020(3) V -0.15(2)	5.014(5) 126.0(4)	0.006 0.09 0.46 0.27	5	0-29	SR8 36
		C	a_0 -0.0019(2) V -0.142(13)	5.014(9) 125.9(7)	0.004 0.05 0.33 0.17	4/6	34-69	
		C	a_0 -0.0035(2) V -0.39(3)	6.40(2) 260.5(2.3)	0.006 0.065 0.61 0.19	5	74-100	
16	Ca - Sr	C	a_0 0.00503(7) V 0.39(8)	5.597(4) 177(5)	0.008 0.11 9.64 2.72	13	0-100	SR22 76

(Table 2 cont'd)

17	Cd - Ag	H	a_0 0.0025(3) c_0 -0.028(3) V -0.15(2)	2.9788(12) 5.625(13) 43.23(7)	0.0014 0.03 0.015 0.18 0.08 0.12	5	0-7	P2 512
18	Cd - Hg	H	a_0 -0.00359(3) V -0.0921(7)	3.1615(7) 41.67(2)	0.0005 0.01 0.01 0.02	9	18-34	
		H	a_0 -0.00037(4) c_0 0.0043(2) V 0.022(2)	2.9771(5) 5.602(3) 43.01(3)	0.0005 0.012 0.003 0.034 0.024 0.036	5/8	4-22	SR11 58
		T	a_0 -0.00103(1) c_0 0.0013(3) V 0.037(3)	3.999(6) 2.81(2) 42.6(2)	0.003 0.046 0.009 0.19 0.14 0.22	5	37-74	
a		T	a_0 0.0022(1) c_0 -0.00081(9) V 0.037(3)	3.819(5) 2.923(4) 42.6(2)	0.004 0.08 0.0036 0.09 0.14 0.22	10	31-72	SR18 181
19	Ce - La	C	a_0 0.00143(4) V 0.118(3)	5.166(2) 137.8(2)	0.004 0.05 0.26 0.13	7	0-100	P2 765
20	Ce - Pu	C	a_0 -0.00515(7) V -0.399(6)	5.1638(11) 137.62(9)	0.002 0.022 0.16 0.072	11	2-30	P2 770
21	Ce - Sc	C	a_0 -0.0019(3) V -0.155(2)	5.166(5) 137.83(4)	0.006 0.09 0.51 0.27	7	0-25	P2 772
22	Co - Mn	C	a_0 0.00075(4) V 0.0288(15)	3.5525(8) 44.83(3)	0.0008 0.016 0.03 0.05	6	8-32	P1 510
		C	a_0 0.0022(2) V 0.086(10)	3.505(12) 43.0(5)	0.005 0.07 0.19 0.26	6	34-54	
a		C	a_0 0.00084(3) V 0.032(1)	3.544(9) 44.53(3)	0.001 0.02 0.045 0.066	6	0-42	SR12 68
		C	a_0 0.0032(2) V 0.124(9)	3.45(1) 40.6(5)	0.0035 0.06 0.14 0.18	5	42-62	
		C	a_0 0.00234(9) V 0.095(4)	3.500(7) 42.5(3)	0.003 0.05 0.11 0.15	8	62-91	
23	Co - Os	H	a_0 0.0067(7) c_0 -0.0222(12) V -0.13(4)	3.11(6) 5.75(12) 63.5(3.4)	0.004 0.073 0.007 0.11 0.19 0.27	5	91-100	
		T	a_0 0.00242(6) c_0 0.00255(9) V 0.059(2)	2.497(2) 4.057(2) 21.89(4)	0.003 0.076 0.005 0.08 0.08 0.2	9	1-50	SR15 51
24	Co - V	T	a_0 0.00908(1) c_0 0.00359(2) V 1.036(5)	8.4483(6) 4.429(8) 313.6(2)	0.0002 0.001 0.0003 0.003 0.085 0.012	3	41-64	P2 817
25	CdPt - NiPt	C	a_0 -0.00027(1) V -0.0115(2)	3.7697(1) 53.568(5)	0.0001 0.001 0.004 0.004	3/4	10-30	P2 803
26	Cr - Fe	C	a_0 -0.00048(1) V -0.0203(5)	3.776(15) 53.83(2)	0.0002 0.002 0.007 0.007	3	30-50	
27	Cr - Mo	C	a_0 -0.00019(2) V -0.0048(5)	2.8848(1) 24.01(3)	0.0015 0.04 0.04 0.11	6	0-100	SR11 90
a		C	a_0 0.00261(9) V 0.071(2)	2.893(7) 24.14(4)	0.008 0.20 0.16 0.41	8	0-100	P1 542
b		C	a_0 0.00287(11) V 0.066(3)	2.890(4) 24.08(9)	0.004 0.064 0.086 0.22	5	10-50	P2 832
		C	a_0 0.00326(6) V 0.086(2)	2.884(2) 23.95(5)	0.002 0.04 0.07 0.18	6/7	0-45	SR9 48
c		C	a_0 0.00175(7) V 0.051(2)	2.971(6) 26.0(2)	0.002 0.03 0.05 0.11	4/5	66-100	
		C	a_0 0.00299(6) V 0.0801(1)	2.884(3) 23.94(5)	0.004 0.1 0.07 0.2	8/11	0-70	SR11 91

(Table 2 cont.d)

28	Cr - W	C	a_0	0.00353(6)	2.8837(12)	0.002	0.05	8	0-39	SR9 49
			V	0.092(2)	23.96(4)	0.06	0.18			
		C	a_0	0.00302(12)	2.905(7)	0.003	0.05	3/4	39-72	
			V	0.086(3)	24.27(2)	0.06	0.12			
a		C	a_0	0.00329(6)	2.881(2)	0.002	0.06	)?	6	0-50
			V	0.0865(11)	23.88(3)	0.045	0.13			
		C	a_0	0.00216(6)	2.942(4)	0.002	0.04	)?	5	60-100
			V	0.063(2)	25.21(15)	0.06	0.13			
b		C	a_0	0.00300(10)	2.863(7)	0.008	0.2	)	9/10	4-100
			V	0.081(2)	23.43(15)	0.18	0.42			
29	CrSi ₂ - TiSi ₂	H	a_0	0.0030(3)	4.405(13)	0.02	0.31		7	0-90
			c_0	0.0017(3)	6.41(2)	0.03	0.3			
		V		0.183(11)	107.6(5)	0.86	0.53			
30	Cr ₃ Si - Mo ₃ Si	C	a_0	0.0044(2)	4.559(4)	0.006	0.072		4	0-33
			V	0.28(2)	97.73(30)	0.4	0.23			
		C	a_0	0.00273(4)	4.617(3)	0.002	0.032		4	33-100
			V	0.189(2)	98.06(11)	0.08	0.05			
31	Cu - Ag	C	a_0	0.00470(12)	3.631(7)	0.011	0.23	)	9	0-100
			V	0.210(2)	47.55(15)	0.24	0.34			
32	Cu - Mn	C	a_0	0.0033(2)	3.621(4)	0.003	0.06	)	5	7-27
			V	0.135(7)	47.44(14)	0.11	0.16			
		C	a_0	0.00185(12)	3.661(5)	0.002	0.03		5/12	30-49
			V	0.077(5)	49.0(2)	0.07	0.09			
33	Cu - Ni	C	a_0	-0.00090(3)	3.616(2)	0.003	0.056	)	7	0-100
			V	-0.0343(11)	47.25(7)	0.10	0.16			
a		C	a_0	-0.00103(14)	3.607(9)	0.010	0.19	(	4/5	0-95
			V	-0.039(6)	46.9(4)	0.39	0.60			
b		C	a_0	-0.00090(2)	3.611(9)	0.002	0.04	(	14	0-100
			V	-0.0343(7)	47.08(4)	0.07	0.13			
34	Cu - Pt	C	a_0	0.00304(5)	3.627(3)	0.006	0.13	)	20/28	0-100
			V	0.1304(14)	47.55(9)	0.174	0.25			
35	Cu - Zn	C	a_0	0.00241(10)	3.613(2)	0.003	0.05		5	0-34
			V	0.096(4)	47.17(9)	0.12	0.16			
36	Cu ₃ N - Li ₃ N	H	a_0	-0.00257(7)	3.913(7)	0.0005	0.009		4/6	90-100
			c_0	0.0108(4)	2.80(4)	0.003	0.05			
		V		0.063(5)	38.5(5)	0.04	0.05			
37	Er - Gd	H	a_0	0.00076(3)	3.565(2)	0.003	0.06	)	6	0-100
			c_0	0.00192(3)	5.597(2)	0.003	0.033			
		V		0.0486(14)	61.58(9)	0.11	0.13			
38	Fe - Al	C	a_0	0.0014(2)	2.869(3)	0.004	0.12	-	8/16	0-25
			V	0.034(5)	23.62(8)	0.11	0.35			
39	Fe - Ni	C	a_0	-0.00128(4)	3.650(3)	0.0009	0.02		8	50-80
			V	-0.0490(15)	48.56(11)	0.04	0.07			
a		C	a_0	-0.00116(14)	3.64(1)	0.005	0.08		3	48-100
			V	-0.044(5)	48.2(4)	0.2	0.24			
40	Fe - Pd	C	a_0	0.0022(2)	3.693(9)	0.004	0.06		6/7	40-70
			V	0.095(7)	50.2(4)	0.16	0.18			
		C	a_0	0.00144(6)	3.744(6)	0.0006	0.01		4	70-85
			V	0.064(3)	52.4(2)	0.03	0.03			
41	Fe - Si	C	a_0	-0.00071(3)	2.8666(2)	0.0002	0.005		5	0-11
			V	-0.0174(6)	23.555(4)	0.005	0.02			
		C	a_0	-0.00212(2)	2.8798(5)	0.0005	0.01		15	13-31
			V	-0.0512(5)	26.86(1)	0.01	0.04			

(Table 2 cont.d.)

41a	Fe - Si	C	a_0	-0.00065(4)	2,8662(3)	0.0003	0.007	4	0-10	P2 836
			V	-0.0159(11)	23.547(7)	0.008	0.021			
		C	a_0	-0.0017(2)	2,874(3)	0.002	0.055	5	11-23	
			V	-0.041(5)	23.74(9)	0.052	0.17			
42	Fe - V	C	a_0	0.0023(2)	2,779(6)	0.005	0.13	10/16	62-90	P1 663
			V	0.061(5)	21.09(16)	0.14	0.4			
a		C	a_0	0.00103(1)	2,8662(1)	0.0002	0.004	5	0-30	P2 943
			V	0.0278(2)	23.546(3)	0.004	0.01			
		C	a_0	0.0028(3)	2,75(3)	0.007	0.15	(	4	70-100
			V	0.075(8)	20.21(72)	0.19	0.48			
43	Fe - Zn	C	a_0	0.00217(6)	2,8647(10)	0.002	0.055	(	13	P2 945
			V	0.0548(15)	23.50(3)	0.06	0.18			
44	Ga - Al	T	V	-0.122(14)	73.3(3)	0.16	0.15	6/8	16-30 35-70	(1)
			C	a_0	-0.00148(9)	4,157(5)	0.003	0.04		
		C	V	-0.074(4)	71.8(2)	0.14	0.13			
			a_0	-0.00223(5)	5,650(3)	0.006	0.08	11	0-100	SR18 160
			V	-0.206(5)	180.3(3)	0.6	0.28			
46	GeW ₃ - GeMo ₃	C	a_0	-0.00036(6)	4,967(5)	0.0013	0.02	-	8	P2 977
			V	-0.026(4)	122.6(4)	0.09	0.056			
47	Ge ₃ W ₅ - Ge ₃ Mo ₅	T	a_0	0.00029(2)	9,808(2)	0.0005	0.003	-	7	P2 977
			c ₀	-0.00054(9)	5,0296(80)	0.002	0.035			
48	Hf - N	H	a_0	0.00083(5)	3,2028(8)	0.0007	0.014	4/7	6-22	P2 1430
			c ₀	0.0027(1)	5,076(2)	0.002	0.02			
		C	V	0.047(2)	45.09(3)	0.025	0.03			
			a_0	-0.00268(5)	4,628(3)	0.003	0.055	5	0-80	P2 1351
			V	-0.164(4)	99.0(2)	0.26	0.2			
50	I - Br	O	a_0	-0.0059(2)	7,261(4)	0.006	0.06		6	SR13 393
			b ₀	-0.00249(10)	4,781(2)	0.003	0.052			
		C	c ₀	-0.0113(2)	9,788(5)	0.007	0.06			
			V	-0.82(2)	339.7(4)	0.56	0.11			
51	In - Pb	T	a_0	0.00219(11)	4,5936(9)	0.001	0.02	9/14	2-13	P1 696
			c ₀	0.0055(3)	4,955(2)	0.003	0.04			
		C	V	0.189(3)	104.76(4)	0.07	0.12	14	2-27	
			a_0	-0.0024(3)	4,596(2)	0.002	0.035	6	0-10	P1 699
			c ₀	0.0076(7)	4,954(4)	0.006	0.09			
52	In - Sn	T	V	0.051(5)	104.63(3)	0.04	0.026			
			a_0	0.00314(9)	3,393(2)	0.001	0.02	5	14-28	
			c ₀	-0.0066(2)	4,553(5)	0.002	0.04			
		T	V	0.00165(13)	52.46(3)	0.013	0.016			
			a_0	0.00043(1)	3,182(1)	0.0002	0.003	7	78-92	
			V	0.0108(3)	30.15(1)	0.004	0.009			
53	In - Tl	T	a_0	0.0045(5)	4,593(10)	0.011	0.18	13	0-23	SR13 122
			V	0.097(15)	104.7(3)	0.32	0.16			
		C	a_0	0.00140(7)	4,714(2)	0.002	0.023	6	23-51	
			V	0.095(4)	104.74(15)	0.10	0.07			
a		T	a_0	0.0046(4)	4,594(7)	0.007	0.09	(	4/9	SR13 125
			c ₀	-0.0052(8)	4,96(1)	0.014	0.17			
		C	V	0.097(2)	104.62(3)	0.033	0.018			
			a_0	0.00081(5)	3,8385(6)	0.0005	0.008	4	5-18	SR18 228
			V	0.036(2)	56.55(3)	0.022	0.023			
54	In - Mo	H	a_0	0.00075(13)	2,728(6)	0.005	0.13	-	5	20-67
			c ₀	0.0015(2)	4,356(8)	0.007	0.09			
		C	V	0.026(4)	28.1(2)	0.14	0.35	-		
			a_0	-0.00059(3)	3,8440(10)	0.0004	0.008	7/8	25-45	P2 1041
			V	-0.0260(11)	56.79(4)	0.02	0.024			

(Table 2 cont.d)

Ir - Ru	H	a_o	-0.00028(2)	2.7353(5)	0.0006	0.016	)	5/6	50-92	P2 1041
		c_o	-0.00087(9)	4.375(3)	0.003	0.04				
	V		-0.0112(9)	28.34(3)	0.03	0.07				
56 Ir - W	C	a_o	0.00084(8)	3.8319(13)	0.001	0.02	?	5	5-22	SR15 82
		V	0.037(4)	56.26(6)	0.05	0.05				
	H	a_o	0.00087(4)	2.7204(13)	0.001	0.031				
a		V	0.031(2)	27.78(7)	0.055	0.14	?	7/9	20-51	
	H	a_o	0.00099(7)	2.719(3)	0.001	0.026				
		c_o	0.0028(8)	4.32(3)	0.017	0.19				
57 IrNb ₃ - IrV ₃	C	a_o	-0.00346(9)	5.140(5)	0.007	0.11	)	6	0-100	P2 1039
		V	-0.255(4)	135.5(2)	0.32	0.2				
58 Li - Mg	C	a_o	-0.00033(2)	3.5035(4)	0.0003	0.004	(	3	11-32	P1 715
		V	-0.0121(7)	43.00(1)	0.01	0.013				
	C	a_o	0.00089(13)	3.454(7)	0.003	0.04				
a		V	0.033(5)	41.2(3)	0.09	0.14		4	43-70	
	H	a_o	0.0010(2)	3.109(2)	0.003	0.05				
		c_o	0.0044(5)	4.771(7)	0.007	0.08				
59 Lu - Gd		V	0.068(10)	39.65(12)	0.13	0.18		4	72-100	SR20 144
	H	a_o	0.00133(4)	3.509(2)	0.003	0.065				
		c_o	0.00227(7)	5.554(4)	0.006	0.07				
60 Lu - Tb		V	0.0716(11)	59.19(6)	0.09	0.1	)	6	0-100	P2 965
	H	a_o	0.00115(5)	3.508(2)	0.003	0.05				
		c_o	0.00148(8)	5.55(3)	0.004	0.044				
61 MgNi ₂ - MgCu ₂		V	0.0557(11)	59.17(4)	0.05	0.05		4/6	0-67	P2 1064
	H	a_o	0.00120(1)	4.80400(3)	0.00003	0.0003				
		c_o	0.00374(5)	15.766(2)	0.002	0.006				
62 Mn - Ir		V	0.2353(14)	315.10(5)	0.05	0.008		3	0-49	SR16 83
	C	a_o	0.00261(2)	6.760(2)	0.0007	0.005				
		V	0.380(4)	308.1(3)	0.13	0.019				
63 Mn - Rh	C	a_o	0.00135(7)	3.7539(14)	0.001	0.015		5	11-30	P1 702
		V	0.058(3)	52.89(6)	0.04	0.05				
	C	a_o	0.00075(10)	3.777(7)	0.004	0.06				
64 Mn - Ru		V	0.033(4)	53.2(3)	0.16	0.175		7	50-92	
	C	a_o	0.0022(3)	3.763(7)	0.005	0.08				
		V	0.093(14)	53.2(3)	0.20	0.23				
65 Mn ₄ P ₄ - Li ₄ P ₄	C	a_o	0.0086(4)	8.946(5)	0.003	0.018		3	6-16	P1 743
		V	2.11(11)	715.7(1.2)	0.76	0.056				
	C	a_o	0.00095(15)	3.748(5)	0.002	0.02		3	25-41	
66 Mn ₃ Si - Fe ₃ Si		V	0.040(6)	52.6(2)	0.07	0.07				
	T	a_o	0.0074(2)	5.334(12)	0.002	0.02	)	6/8	69-81	P2 1058
		V	0.50(4)	169.7(3)	0.45	0.17				
67 Mo - Re	C	a_o	0.0036(8)	5.65(7)	0.006	0.075		6	83-92	
		V	0.39(8)	179(7)	0.7	0.22				
	C	a_o	-0.00078(7)	2.863(2)	0.002	0.032		3	0-33	SR20 82
68 Mo - Rh		V	-0.019(2)	23.47(4)	0.042	0.098				
	C	a_o	-0.00018	2.84400	-	-				
69 Mo - Ru		V	-0.00434(1)	23.0023(3)	0.0002	0.0004		4/5	33-83	
	C	a_o	-0.00055(3)	3.1460(6)	0.0007	0.02				
		V	-0.0162(7)	31.14(2)	0.02	0.05				
70 Mo - Rh	H	a_o	-0.00109(1)	2.8088(9)	0.0006	0.016		9/10	38-81	SR24 187
		c_o	-0.0026(2)	4.552(10)	0.007	0.13				
		V	-0.0400(11)	31.04(7)	0.05	0.15				
71 Mo - Ru	C	a_o	-0.00104(2)	3.907(2)	0.0002	0.0035		5	85-100	
		V	-0.0452(7)	59.54(7)	0.008	0.01				

(Table 2 cont.d.)

68a	Mo - Rh	$\bar{a}_0$ -0.00094(11)	2.812(4)	0.005	0.13 -	6	38-89	SR18 227
		$\bar{c}_0$ -0.0018(2)	4.510(7)	0.009	0.14 -			
		$\bar{V}$ -0.031(3)	30.59(12)	0.15	0.4 -			
69	Mo - Ta	$\bar{a}_0$ 0.00143(3)	3.1449(12)	0.002	0.04	7	0-68	P1 763
		$\bar{V}$ 0.0438(11)	31.09(4)	0.06	0.13			
		$\bar{a}_0$ 0.00185(3)	3.119(3)	0.0007	0.01			
		$\bar{V}$ 0.0596(7)	30.11(6)	0.015	0.024	3	68-100	
70	Mo - Tc	$\bar{a}_0$ -0.00077(2)	3.1464(5)	0.0008	0.02	6	0-50	P2 1103
		$\bar{V}$ -0.0225(6)	31.15(2)	0.024	0.055			
71	Mo ₃ AlSi - Cr ₃ AlSi	$\bar{a}_0$ -0.00425(13)	4.925(5)	0.007	0.08	7/8	0-60	P2 546
		$\bar{V}$ -0.293(8)	119.3(3)	0.4	0.21			
72	Nb - Mo	$\bar{a}_0$ -0.00189(4)	3.3031(11)	0.001	0.03	6/8	6-40	P2 1089
		$\bar{V}$ -0.0603(14)	36.03(4)	0.046	0.08			
		$\bar{a}_0$ -0.00134(5)	3.280(4)	0.002	0.05	7	48-100	
		$\bar{V}$ -0.041(2)	35.20(12)	0.074	0.15			
a		$\bar{a}_0$ -0.00193(10)	3.307(2)	0.003	0.06	5	0-40	P2 1089a
		$\bar{V}$ -0.062(3)	36.15(6)	0.1	0.18			
		$\bar{a}_0$ -0.00142(3)	3.288(2)	0.001	0.022	6	50-100	
		$\bar{V}$ -0.0430(8)	35.43(6)	0.03	0.066			
b		$\bar{a}_0$ -0.00204(5)	3.298(4)	0.002	0.035	5	0-42	SR18 224
		$\bar{V}$ -0.065(2)	35.87(15)	0.062	0.12			
		$\bar{a}_0$ -0.00120(5)	3.264(2)	0.002	0.05	7	42-100	
		$\bar{V}$ -0.036(1)	31.42(5)	0.07	0.16			
73	Nb - Re	$\bar{a}_0$ -0.00228(9)	3.294(3)	0.0025	0.06	6	10-45	P2 1113
		$\bar{V}$ -0.071(3)	35.71(9)	0.09	0.19			
a		$\bar{a}_0$ -0.00250(2)	3.3003(5)	0.0006	0.011	4	0-40	P2 1113a
		$\bar{V}$ -0.07923(14)	35.939(4)	0.004	0.0075			
74	Nb - Ru	$\bar{a}_0$ -0.0031(2)	3.295(5)	0.005	0.09	5	8-40	(4)
		$\bar{V}$ -0.097(6)	35.7(2)	0.16	0.3			
		$\bar{a}_0$ -0.010(2)	4.86(11)	0.02	0.41			
		$\bar{b}_0$ -0.0055(9)	4.51(5)	0.01	0.2	7	48-62	
		$\bar{c}_0$ 0.005(1)	3.13(6)	0.01	0.27 -			
		$\bar{V}$ -0.13(2)	69.11(10)	0.23	0.26			
a		$\bar{a}_0$ -0.00325(13)	3.297(3)	0.004	0.08	6	0-35	P2 1115
		$\bar{V}$ -0.103(5)	35.84(11)	0.13	0.29			
b		$\bar{a}_0$ -0.00194(5)	2.901(4)	0.001	0.036			
		$\bar{c}_0$ -0.0053(5)	4.81(4)	0.014	0.22 -	7	71-100	P2 1116
		$\bar{V}$ -0.075(3)	34.6(3)	0.08	0.21			
75	Nb - Tc	$\bar{a}_0$ -0.00250(14)	3.298(5)	0.007	0.17	7	0-60	P2 1122
		$\bar{V}$ -0.078(5)	35.85(17)	0.25	0.57			
		$\bar{a}_0$ 0.00293(5)	3.303(2)	0.003	0.065	8	0-60	P2 1126
		$\bar{V}$ 0.101(2)	36.01(6)	0.13	0.26			
		$\bar{a}_0$ 0.0025(3)	3.33(2)	0.004	0.06	3	60-80	
		$\bar{V}$ 0.093(11)	36.7(8)	0.16	0.2			
a		$\bar{a}_0$ 0.00264(12)	3.319(7)	0.004	0.07)	5	20-60	P2 1126a
		$\bar{V}$ 0.093(4)	36.5(2)	0.12	0.21)			
		$\bar{a}_0$ -0.00112(5)	4.469(1)	0.001	0.02	4	0-40	P2 1369
		$\bar{V}$ -0.067(3)	89.26(8)	0.09	0.06			
		$\bar{a}_0$ -0.00099(6)	4.473(4)	0.002	0.02	3	60-100	
		$\bar{V}$ -0.057(3)	89.4(3)	0.1	0.06			
78	NbC - TiC	$\bar{a}_0$ -0.00146(5)	4.470(3)	0.004	0.06	7	0-100	P1 953
		$\bar{V}$ -0.085(3)	89.3(2)	0.23	0.18			
79	NbC - UC	$\bar{a}_0$ 0.00471(11)	4.465(6)	0.01	0.16	8	0-100	SR22 85
		$\bar{V}$ 0.313(11)	88.6(6)	1.0	0.73			

(Table 2 cont.d)

80	NbC - ZrC	C	a_0 0.0022(2) V 0.135(11)	4,462(10) 88,8(7)	0.013 0.87	0.19 0.61	5	0-100	P1 954	
81	NbC - ZrN	C	a_0 0.0013(4) V 0.08(2)	4,44(3) 87,7(1,6)	0.02 1.52	0.31 0.94	4/6	20-100	P2 1371	
82	NbSi ₂ - NbGe ₂	H	a_0 0.00149(7) c_0 -0.006(7) V 0.05(14)	4,802(4) 6,8(4) 135,4(8,3)	0.007 0.65 13,5	0.11 5.89 5.97	- 9	0-100	P2 978	
83	Nb ₃ Sn - Hf ₃ Sn	C	a_0 0.0022(3) V 0.19(3)	5,276(11) 146,8(9)	0.015 1.25	0.2 0.6	- 5	0-54	P2 996	
84	Nb ₃ Sn - Mo ₃ Al	C	a_0 -0.00344(9) V -0.271(5)	5,297(5) 148,4(3)	0.008 0.45	0.109 0.22	6	0-100	P2 579	
85	Nb ₃ Sn - Nb ₃ Si	C	a_0 -0.00056(5) V -0.047(4)	5,2894(9) 147,99(8)	0.001 0.08	0.01 0.03	3	0-27	P2 1119	
		C	a_0 -0.00052(1) V -0.0432(10)	5,2986(6) 148,75(5)	0.0002 0.02	0.002 0.007	3/4	40-67		
86	Nb ₃ Sn - Ti ₃ Sn	C	a_0 -0.00027(2) V -0.0225(13)	5,2865(7) 147,74(6)	0.0009 0.07	0.01 0.03	5/6	0-67	P2 1122	
87	Nb ₃ Sn - Zr ₃ Sn	C	a_0 0.00066(1) V 0.0556(7)	5,2841(2) 147,539(14)	0.0002 0.02	0.003 0.008	6	0-30	P2 1122	
88	Ni - Cr	C	a_0 0.00121(6) V 0.046(2)	3,5222(12) 43,69(5)	0.002 0.06	0.035 0.11	7/12	0-35	SR16 58	
a		C	a_0 0.00130(4) V 0.049(2)	3,5211(9) 43,65(3)	0.001 0.06	0.03 0.1	8	3-42	P1 553	
b		C	a_0 0.00138(4) V 0.0521(14)	3,5228(11) 43,712(43)	0.0015 0.06	0.035 0.11	14	0-42	P2 841	
89	Ni - Ga	C	a_0 0.0023(2) V 0.088(7)	3,526(3) 43,81(14)	0.004 0.16	0.08 0.25	4	0-30	P1 669	
90	Ni - Mn	C	a_0 0.00265(8) V 0.101(3)	3,5256(13) 43,80(4)	0.001 0.04	0.017 0.045	3	6-25	P1 737	
91	Ni - Pd	C	a_0 0.00435(8) V 0.172(2)	3,527(2) 43,82(5)	0.003 0.06	0.06 0.09	))	6	0-47	P2 1133
		C	a_0 0.00294(8) V 0.129(3)	3,599(6) 46,1(2)	0.002 0.08	0.048 0.11	))	5	56-100	
92	Ni - Pt	C	a_0 0.00462(14) V 0.184(4)	3,530(4) 43,92(12)	0.006 0.16	0.11 0.23	))	5	0-50	SR9 112
		C	a_0 0.00334(7) V 0.149(2)	3,591(5) 45,5(2)	0.002 0.07	0.04 0.09		6	60-100	
93	Ni - Ru	C	a_0 0.00313(6) V 0.120(2)	5,5330(10) 44,09(3)	0.0015 0.05	0.034 0.09		8	3-30	(5)
		H	a_0 0.00221(10)	2,499(7)	0.004	0.11	)	8/11	50-90	
94	Ni - V	C	a_0 0.00165(4) V 0.062(2)	3,5236(6) 43,74(2)	0.001 0.04	0.02 0.06		11/13	3-23	P1 793
		C	a_0 0.00332(11) V 0.129(4)	3,484(4) 42,17(15)	0.002 0.08	0.042 0.13		10/14	23-42	
95	Ni ₃ N - Li ₃ N	H	a_0 -0.00486(12) c_0 0.0176(6) V 0.091(9)	4,142(12) 2,11(6) 35,7(9)	0.001 0.007 0.10	0.02 0.12 0.16	- - -	6	86-100	P1 989
96	NiSi ₂ - FeSi ₂	C	a_0 -0.00025(3) V -0.022(2)	5,3842(4) 156,08(3)	0.0004 0.035	0.004 0.012		3/4	0-20	P2 923
97	Ni ₃ V - Pd ₃ V	T	a_0 0.0030(3) c_0 0.0026(4) V 0.119(12)	3,56(2) 3,64(2) 46,1(7)	0.024 0.03 0.94	0.5 0.55 1.36	)))	5	0-100	P2 1133
		C	a_0 0.0034(3) V 0.141(8)	3,571(12) 45,5(4)	0.014 0.47	0.27 0.64	))	4/5	0-75	

(Table 2 cont.d)

98	Os - Re	H	a_0	0.00044(2)	2.7231(12)	0.0008	0.015					
			c_0	0.00158(10)	4.297(5)	0.0035	0.044	3/5	25-75		SR9	
		V		0.0225(12)	31.86(7)	0.043	0.07				115	
99	Os - W	H	a_0	0.00069(7)	2.739(3)	0.002	0.04	)				
			c_0	0.0039(2)	4.295(9)	0.006	0.08	)	4	15-51	P1	
		V		0.040(2)	27.90(7)	0.05	0.13	)			799	
100	P - As	O	a_0	0.0043(5)	3.27(2)	0.022	0.42	-				
			b_0	0.0014(1)	4.382(6)	0.005	0.08				SR21	
			c_0	0.0051(4)	10.46(2)	0.02	0.09		5/7	15-69	45	
		V		0.33(2)	149.9(8)	0.71	0.31					
101	Pb - Tl	C	a_0	-0.00086(2)	4.9528(9)	0.0008	0.13	)				
		V		-0.063(2)	121.49(6)	0.06	0.04	)	6/8	11-54	P1	
											808	
		C	a_0	-0.00149(7)	4.988(5)	0.002	0.034	-				
		V		-0.107(5)	123.9(4)	0.16	0.1	-	10/11	55-88		
102	Pd - Ag	C	a_0	0.00193(4)	3.885(2)	0.004	0.075	(				
		V		0.092(2)	58.56(12)	0.22	0.28	(	14	0-100	P1	
											298	
a		C	a_0	0.00173(8)	3.889(6)	0.004	0.055					
		V		0.080(4)	58.8(3)	0.18	0.18		4	0-60	P1	
											298a	
b		C	a_0	0.00190(4)	3.884(2)	0.0016	0.028					
		V		0.091(2)	58.50(12)	0.09	0.10	(	5	25-80	P2	
											528	
103	Pd - Au	C	a_0	0.00184(2)	3.8914(14)	0.002	0.04					
		V		0.0874(11)	58.87(7)	0.10	0.12		11	0-90	P1	
											440	
a		C	a_0	0.0185(1)	3.8896(7)	0.002	0.03					
		V		0.0879(9)	58.79(5)	0.11	0.13		15	0-100	P2	
											678	
104	Pd - Cr	C	a_0	-0.0010(3)	3.89(1)	0.006	0.05	)				
		V		-0.046(5)	58.9(2)	0.10	0.14	)	6	19-47	SR18	
											116	
105	Pd - Ir	C	a_0	-0.00053(1)	3.8880(6)	0.0012	0.023					
		V		-0.0239(6)	58.77(3)	0.054	0.07		10/11	3-88	SR21	
											136	
106	Pd - Mn	T	c_0	-0.0045(5)	3.82(2)	0.009	0.18		8	33-55	P1	
											741	
107	Pd - Mo	C	a_0	0.00077(9)	3.876(3)	0.002	0.034	-				
		V		0.035(4)	58.25(12)	0.1	0.1	-	4/6	11-44	SR18	
											228	
108	Pd - Rh	C	a_0	-0.00090(1)	3.8952(6)	0.0007	0.012					
		V		-0.0400(5)	59.09(3)	0.029	0.033		6	13-76	SR23	
											203	
109	Pd - Tc	C	a_0	-0.00057(6)	3.8893(13)	0.002	0.03					
		V		-0.026(3)	58.83(6)	0.07	0.09		5	0-32	P2	
											1176	
		H	a_0	-0.00017(1)	2.7579(8)	0.0004	0.010		5/6	53-100		
110	Pd - V	C	a_0	-0.00023(3)	3.8894(3)	0.0005	0.009	-				
		V		-0.0106(14)	58.837(14)	0.02	0.03	-	7	1-19	P2	
											1179	
111	Pd - Zn	C	a_0	-0.00088(11)	3.886(2)	0.001	0.03					
		V		-0.039(5)	58.67(8)	0.065	0.08		6/7	8-23	SR15	
											112	
		C	a_0	-0.0022(3)	3.126(8)	0.001	0.025					
		V		-0.062(7)	30.5(2)	0.034	0.07		4/6	29-35		
112	Pd - Zr	C	a_0	0.00343(9)	3.8911(12)	0.002	0.04					
		V		0.159(4)	58.90(6)	0.11	0.12		16	0-23	P2	
											1181	
a		C	a_0	0.00349(4)	3.8891(5)	0.0008	0.013					
		V		0.161(2)	58.81(2)	0.035	0.04		9	1-21	P2	
											1181a	
113	Pd ₃ V - Co ₃ V	C	a_0	-0.00284(9)	3.859(5)	0.007	0.16	)				
		V		-0.117(3)	57.3(2)	0.24	0.34		7	0-100	P2	
											806	
114	Pt - Co	C	a_0	-0.0036(3)	3.944(15)	0.009	0.17					
		V		-0.151(12)	61.0(6)	0.4	0.51		6	30-73	P2	
											806	
		T	c_0	-0.0038(13)	3.90(7)	0.012	0.24					
		V		-0.12(2)	59.6(8)	0.15	0.2		5/6	44-57		
a		C	a_0	-0.00392(5)	3.948(2)	0.004	0.08					
		V		-0.162(1)	61.05(7)	0.14	0.17		12/14	20-100	SR8	
											58	

(Table 2 cont.d)

115	Pt - Cr	C	a_o	-0.00198(7)	3,923(3)	0.003	0.05		5/6	14-61	SR19
		V		-0.088(3)	60,33(12)	0.11	0.14				109
116	Pt - Ir	C	a_o	-0.00080(3)	2,9219(15)	0.002	0.04	-	11	10-90	SR20
		V		-0.0361(12)	60,31(7)	0.09	0.11	-			122
117	Pt - Mn	T	a_o	0.00345(15)	2,657(8)	0.001	0.04		7	38-49	P2
		c_o		-0.0116(5)	4,24(3)	0.005	0.1				1077
		V		-0.0193(15)	30,32(8)	0.01	0.04	-			
		T	a_o	-0.0036(2)	3,012(6)	0.003	0.08	)	10	49-68	
		c_o		0.00672(14)	3,327(6)	0.003	0.05	)			
		V		-0.023(2)	30,6(1)	0.05	0.13	)			
a		C	a_o	-0.00109(14)	3,929(8)	0.012	0.22	-	10	17-94	SR19
		V		-0.049(6)	60,6(4)	0.51	0.66	-			222
		T	V	-0.018(3)	30,3(2)	0.09	0.25	-	7	39-70	
118	Pt - Mo	T	a_o	0.00001(35)	3,905(12)	0.004	0.033	-	5	27-43	SR18
		c_o		0.0008(2)	3,907(6)	0.002	0.04				229
		V		0.012(2)	59,59(8)	0.03	0.03				
		H	a_o	0.00040(7)	2,774(4)	0.0014	0.03		3/4	47-75	
		c_o		0.00010(5)	4,493(3)	0.001	0.016	-			
		V		0.0094(13)	29,95(8)	0.03	0.06	)			
119	Pt - Tc	C	a_o	-0.00088(4)	3,9232(9)	0.001	0.015		4/5	0-38	P2
		V		-0.040(2)	60,38(4)	0.046	0.046				1189
		H	a_o	-0.00020(2)	2,762(2)	0.0005	0.012		4	66-100	
120	Pu - Np	C	a_o	-0.00138(6)	3,634(3)	0.005	0.11		8	0-87	SR26
		V		-0.053(3)	47,97(13)	0.22	0.35				230
121	Re - Tc	H	a_o	-0.00020(1)	2,7609(3)	0.0004	0.01		6	0-100	P2
		c_o		-0.00060(3)	4,4609(15)	0.002	0.03	)			1201
		V		-0.0082(2)	29,446(10)	0.015	0.03				
122	Re - WC	H	a_o	0.0027(2)	2,784(7)	0.004	0.08		4	18-38	P2
		c_o		0.0027(3)	4,465(9)	0.005	0.06				1377
		V		0.079(8)	30,0(2)	0.13	0.21				
123	Rh - Ni	C	a_o	-0.00283(11)	3,819(6)	0.009	0.19	)	8	0-100	P2
		V		-0.114(3)	55,5(2)	0.3	0.42	)			1134
124	Rh - Pt	C	a_o	0.00119(2)	3,8049(7)	0.001	0.02		8/9	6-68	P2
		V		0.0526(8)	55,07(3)	0.044	0.06				1185
125	Rh - Tc	H	a_o	0.0004(1)	2,704(1)	0.001	0.03		6	24-100	P2
		c_o		0.0016(2)	4,23(2)	0.004	0.05		3/6	66-100	1208
		V		0.0186(8)	26,76(7)	0.02	0.04		3/6	66-100	
126	Rh - W	C	a_o	0.00107(5)	3,8040(6)	0.0006	0.01		4/5	3-17	P1
		V		0.047(2)	55,04(2)	0.025	0.03				835
		H	a_o	0.00104(5)	2,702(2)	0.001	0.027		4	17-47	
		c_o		0.0026(3)	4,299(9)	0.007	0.1				
		V		0.039(3)	27,17(9)	0.07	0.16				
127	Ru - Mo	H	a_o	0.00101(1)	2,7057(2)	0.0003	0.007		5/6	0-41	P2
		c_o		0.0031(3)	4,274(7)	0.008	0.14	(			1100
		V		0.041(2)	27,09(5)	0.06	0.16	(			
128	Ru - Re	H	a_o	0.00052(6)	2,698(4)	0.005	0.12		5	0-100	P2
											1199
129	Ru - Rh	H	a_o	0.00056(5)	2,706(2)	0.005	0.03		13	0-100	P2
		c_o		0.00149(4)	4,281(2)	0.003	0.055		12/13	0-73	1204
		V		0.0213(3)	27,15(1)	0.024	0.06		12/13	0-73	
130	Ru - V	H	a_o	-0.00021(1)	2,7059(2)	0.0003	0.007		6/8	5-33	(3)
		c_o		0.00120(4)	4,2754(8)	0.001	0.016				
		V		0.0035(5)	27,110(9)	0.011	0.026	-			
		C	a_o	0.0009(2)	2,93(2)	0.004	0.10	-	5/8	68-92	

(Table 2 cont.d)

131	Sb - As	H	a ₀	-0.00555(4)	4,312(3)	0.004	0.076				
			c ₀	-0.0067(2)	11,30(2)	0.025	0.17	-	10	0-100	(9)
			V	-0.519(4)	181,3(3)	0.46	0.20				
132	Sc - Gd	H	a ₀	0.00359(5)	3,314(2)	0.003	0.06	)			
			c ₀	0.0054(2)	5,266(7)	0.011	0.15		7/9	0-75	P2
			V	0.173(4)	49,9(2)	0.27	0.36				969
133	Sc - Y	H	a ₀	0.00356(7)	3,319(4)	0.003	0.06	)			
			c ₀	0.0053(2)	5,26(1)	0.009	0.10	)	5/8	25-77	P2
			V	0.176(3)	49,8(2)	0.12	0.13				1238
134	Sc - Zr	H	a ₀	-0.00077(4)	3,3145(14)	0.002	0.04	)			
			c ₀	-0.0021(2)	5,267(7)	0.008	0.12	(	5	0-51	P2
			V	-0.043(2)	50,11(6)	0.07	0.11				1238
		H	a ₀	-0.00092(5)	3,326(4)	0.001	0.025				
			V	-0.027(3)	49,4(3)	0.09	0.11	-	4/6	66-100	
135	Si ₂ Th - Ge ₂ Th	T	a ₀	0.00061(3)	4,117(2)	0.003	0.04				P2
			V	0.076(9)	240,4(5)	0.7	0.21		5	0-100	986
a		T	a ₀	0.00051(4)	4,0969(14)	0.001	0.014				
			c ₀	0.00244(4)	14,008(2)	0.001	0.005		3/5	17-58	P2
			V	0.100(3)	235,10(13)	0.1	0.02				986a
136	Si ₂ Th ₃ - Ge ₂ Th ₃	T	a ₀	0.0013(2)	7,830(11)	0.014	0.10				P2
			V	0.097(12)	254,5(8)	0.98	0.24		4/6	0-100	986
137	Ta - H	C	a ₀	0.00284(14)	3,298(3)	0.004	0.09				P1
			V	0.096(5)	35,85(9)	0.15	0.27		?	6	0-34
											977
138	Ta - Ru	C	a ₀	-0.0031(2)	3,2925(38)	0.005	0.09				(7)
			V	-0.097(5)	35,68(13)	0.16	0.29				
		T	a ₀	-0.0120(13)	3,631(55)	0.004	0.08				
			c ₀	0.018(2)	2,47(9)	0.007	0.13				
			V	-0.063(4)	34,4(2)	0.014	0.024		3	40-45	
		H	a ₀	-0.0018(2)	2,89(2)	0.003	0.07	-	5/7	75-94	
			c ₀	-0.0056(3)	4,84(3)	0.007	0.08		6/7	75-100	
			V	-0.073(7)	34,4(6)	0.10	0.22	-	5/7	75-94	
139	Ta - Ti	C	a	-0.00043(1)	3,3041(2)	0.0002	0.003				SR16
			V	-0.0140(3)	36,070(5)	0.006	0.009		4/7	6-28	140
		C	a ₀	0.0003(2)	3,27(2)	0.003	0.01	(			
			V	0.008(1)	34,9(1)	0.05	0.03	(	5	72-90	
140	TaC - NbN	C	a ₀	-0.00079(1)	4,4554(8)	0.001	0.02				P2
			V	-0.0465(8)	88,43(5)	0.07	0.05		6	0-100	1370
141	TaC - TiC	C	a ₀	-0.00127(5)	4,452(3)	0.004	0.05				P1
			V	-0.073(3)	88,2(2)	0.23	0.16		4/5	0-100	958
142	TaC - UC	C	a ₀	0.00498(13)	4,444(8)	0.013	0.20				P2
			V	0.33(1)	87,3(7)	1.22	0.83		8	0-100	1383
143	TaC - ZrC	C	a ₀	0.00230(13)	4,447(8)	0.01	0.16				P1
			V	0.144(9)	87,9(6)	0.77	0.57	(	5	0-100	959
144	TaN - TiC	C	a ₀	0.00073(8)	4,311(3)	0.002	0.03				P2
			V	0.041(4)	80,1(2)	0.13	0.09		4/7	20-60	1382
145	TaSi ₂ - TaGe ₂	H	a ₀	0.0014(2)	4,798(11)	0.009	0.11	-			
			c ₀	0.00143(13)	6,595(9)	0.007	0.06		4/5	25-100	P2
			V	0.111(11)	131,4(8)	0.68	0.29	-			985
146	Tc - Fe	T	a ₀	-0.0060(4)	9,37(2)	0.006	0.034				
			c ₀	-0.0037(2)	4,94(2)	0.004	0.05				P2
			V	-0.83(6)	432(3)	0.8	0.11		3	40-60	941
147	Te - Se	H	c ₀	-0.0096(3)	5,930(7)	0.02	0.2				SR24
			V	-0.186(6)	102,1(2)	0.46	0.25		12	0-75	224

(Table 2 cont.d.)

148	Th - Ce	C	a_o	-0,00017(1)	5,08456(14)	0,0002	0,003	7	0-26	P2 774
			V	-0,0130(7)	131,450(11)	0,016	0,010			
		C	a_o	0,000127(6)	5,033(4)	0,0025	0,025	3	39-100	
			V	0,100(5)	127,43(32)	0,21	0,08			
		C	a_o	-0,00025(2)	5,0859(2)	0,0003	0,003	3	0-20	P2 774a
			V	-0,0190(15)	131,55(2)	0,021	0,009			
		C	a_o	0,00071(9)	5,060(4)	0,001	0,014	3	30-50	
			V	0,055(7)	129,6(3)	0,10	0,04			
		C	a_o	0,00121(7)	5,038(6)	0,002	0,03	4	60-100	
			V	0,096(6)	127,7(5)	0,19	0,10			
		C	a_o	-0,00027(2)	5,0864(2)	0,0003	0,004	6/8	1-15	SR21 82
			V	-0,021(2)	131,59(2)	0,022	0,01			
149	Th - La	C	a_o	0,00121(2)	5,0385(13)	0,001	0,015	11	43-100	
			V	0,0950(13)	127,81(10)	0,09	0,04			
		C	a_o	0,00224(4)	5,075(2)	0,004	0,05	20/21	4-100	SR24 171
			V	0,181(4)	130,5(2)	0,34	0,18			
		C	a_o	-0,00010(1)	5,0883(4)	0,0003	0,004	9/14	22-60	SR24 236
			V	-0,0077(7)	131,74(3)	0,024	0,013			
		H	a_o	0,00080(6)	6,578(5)	0,0015	0,016	11/12	69-94	
			c_o	-0,00213(11)	5,946(9)	0,003	0,036			
		C	a_o	-0,028(3)	222,9(3)	0,086	0,03			
			V							
		C	a_o	-0,0034(7)	5,080(6)	0,009	0,12	7	0-15	P2 1277
			V	-0,27(5)	131,1(4)	0,66	0,38			
150	Th - Y	C	a_o	-0,0047(2)	4,055(15)	0,015	0,23	4	0-100	P2 1277a
			V	-0,208(10)	66,6(7)	0,76	0,84			
		C	a_o	-0,0049(2)	4,093(13)	0,011	0,20	8	39-100	P2 1277b
			V	-0,207(9)	67,4(6)	0,50	0,67			
		T	a_o	-0,00130(10)	7,259(3)	0,004	0,03	3	0-50	P2 1321
			c_o	-0,00096(9)	4,112(3)	0,003	0,04			
		C	a_o	-0,0025(2)	7,31(2)	0,007	0,053	3	50-100	
			c_o	-0,00170(1)	4,1502(9)	0,0004	0,006			
		C	a_o	-0,228(12)	221,5(9)	0,42	0,11			
			V							
		C	a_o	0,00170(8)	5,171(5)	0,008	0,11	9	0-100	P2 1378
			V	0,141(7)	138,3(4)	0,64	0,33			
151	Th - Zr	H	a_o	-0,0022(1)	2,956(2)	0,003	0,08	9	0-34	P2 599
			c_o	-0,00224(12)	4,724(3)	0,004	0,07			
		C	a_o	-0,069(3)	35,75(7)	0,11	0,22	9	0-42	SR16 15
			V							
		H	a_o	-0,00165(11)	2,942(3)	0,004	0,11	9	0-42	SR16 15
			c_o	-0,00017(2)	4,684(4)	0,006	0,11			
		C	a_o	-0,051(4)	35,10(8)	0,13	0,27	10	46-68	
			V							
		T	a_o	0,0010(2)	4,020(14)	0,005	0,08	4/5	11-54	SR15 105
			c_o	-0,00196(11)	3,270(4)	0,003	0,06			
		C	a_o	-0,061(4)	34,92(12)	0,12	0,21	8/20	6-50	(6)
			V							
152	ThB ₄ - UB ₄	C	a_o	-0,00394(11)	3,259(3)	0,005	0,12	6/7	17-48	SR8 50
			V	-0,117(3)	34,56(8)	0,15	0,34			
		C	a_o	-0,00019(1)	4,3291(4)	0,0003	0,005	5	56-92	
			V	-0,0104(8)	81,13(2)	0,02	0,016			
		C	a_o	-0,00115(7)	4,377(5)	0,002	0,03	12/15	41-86	SR11 80
			V	-0,064(4)	83,8(3)	0,12	0,09			
		C	a_o	-0,00165(7)	4,395(4)	0,003	0,05	3	10-25	P1 855
			V	-0,091(4)	84,8(2)	0,17	0,16			
		H	a_o	-0,001(1)	5,123(1)	0,001	0,01	3	10-25	P1 855
			V	-0,15(3)	244,0(5)	0,3	0,07			

(Table 2 cont.d)

159	Ti ₅ Sn ₃ - Zr ₅ Sn ₃	H	a ₀ c ₀ V	0.0040(2) 0.0029(3) 0.50(3)	8,069(10) 5,47(2) 308.4(1.4)	0.02 0.03 2.5	0.15 0.39 0.54	) - 8	0-100	P2 + 1260
160	UC - Be ₂ C	C	a ₀ V	0.00134(4) 0.099(3)	4,9617(4) 122.15(3)	0.0007 0.05	0.01 0.03	9	0-20	SR19 63
		C	a ₀ V	0.00017(1) 0.0131(11)	4,9796(8) 123.47(6)	0.0004 0.03	0.004 0.01	3/4	30-70	
161	UC - ThC	C	a ₀ V	0.00749(8) 0.596(10)	4,960(2) 121.7(3)	0.004 0.52	0.06 0.30	11	0-50	P2 1378
162	USi ₃ - UGe ₃	C	a ₀ V	0.00136(2) 0.0695(12)	4,0594(13) 66.86(7)	0.002 0.1	0.03 0.1	7	0-100	P2 987
163	V - Al	C	a ₀ V	0.00130(6) 0.036(2)	3,0218(15) 27.58(4)	0.0004 0.011	0.007 0.022	3/5	20-30	P2 601
164	V - Cr	C	a ₀ V	-0.00153(6) -0.040(2)	3,025(3) 27.66(9)	0.004 0.13	0.11 0.36	8	10-90	P1 567
165	V - Mo	C	a ₀ V	0.00121(9) 0.034(3)	3,0392(14) 28.07(4)	0.002 0.05	0.03 0.09	3	0-25	P2 1107
		C	a ₀ V	0.00126(5) 0.0368(15)	3,022(4) 27.52(12)	0.002 0.05	0.04 0.11	)) 4/5	55-100	
a		C	a ₀ V	0.00115(5) 0.033(2)	3,025(4) 27.63(13)	0.002 0.082	0.043 0.15	3	34-100	P2 1107a
166	V ₃ Co - V ₃ Ir	C	a ₀ V	0.00121(6) 0.0181(4)	4,683(2) 102.70(11)	0.002 0.14	0.034 0.096	)) 4	0-50	P2 797
		C	a ₀ V	0.00033(1) 0.0226(9)	4,7533(12) 107.39(8)	0.0003 0.02	0.003 0.009	3	70-100	
167	V ₃ Fe - V ₃ Ni	C	a ₀ V	0.00018(1) 0.0121(3)	4,6855(2) 102.86(2)	0.0001 0.008	0.001 0.004	3/4	30-70	P2 923
168	V ₃ Ga - V ₃ Si	C	a ₀ V	-0.00092(3) -0.063(2)	4,818(2) 111.80(11)	0.003 0.17	0.04 0.11	)) 7	0-100	P2 957
169	V ₃ Ni - V ₃ Co	C	a ₀ V	-0.00028(3) -0.019(2)	4,709(2) 104.41(13)	0.002 0.16	0.04 0.12	- - 6	0-100	P2 804
170	V ₃ Rh - V ₃ Co	C	a ₀ V	0.00105(2) -0.0704(10)	4,7865(11) 109.64(6)	0.002 0.096	0.026 0.065	7	0-100	P2 808
171	VSi ₂ - CrSi ₂	H	a ₀ c ₀ V	-0.00145(4) -0.00010 -0.074(3)	4,562(3) 6,36500 114.7(2)	0.003 - 0.19	0.004 - 0.03	4 - 3/4 4	0-100	P2 849
172	V ₃ Si - Cr ₃ Si	C	a ₀ V	-0.00168(9) -0.108(6)	4,716(6) 104.8(4)	0.003 0.54	0.13 0.41	6	0-100	SR18 278
173	V ₃ Si - Mo ₃ Si	C	a ₀ V	0.00165(1) 0.1142(6)	4,7220(7) 105.24(4)	0.001 0.05	0.014 0.036	) 6	0-100	SR18 278
174	VSi ₂ - MoSi ₂	H	c ₀ V	0.00157(8) 0.0139(8)	7,692(7) 68.22(8)	0.0015 0.016	0.010 0.01	3	75-100	SR19 282
175	VSi ₂ - NbSi ₂	H	a ₀ c ₀ V	0.0022(1) 0.0021(2) 0.157(8)	4,570(6) 6,382(12) 115.4(5)	0.008 0.015 0.6	0.09 0.16 0.26	) (4	0-100	SR19 281
176	V ₅ Si ₃ C - Nb ₅ Si ₃ C	H	a ₀ c ₀ V	0.0040(2) 0.0040(5) 0.44(3)	7,142(15) 4,81(3) 211.9(1.7)	0.02 0.04 2.16	0.2 0.58 0.48	) (5	0-100	SR19 281
177	V ₅ Si ₃ C - Zr ₅ Si ₃ C	H	a ₀ c ₀ V	0.0078(6) 0.0071(7) 0.87(7)	7,12(4) 4,79(4) 209.0(4.1)	0.05 0.05 5.33	0.4 0.8 1.29	- (- 5	0-100	SR19 281
178	W - Ru	H	a ₀ c ₀ V	-0.00124(2) -0.0040(3) -0.051(2)	2,8264(4) 4,666(6) 32.09(4)	0.0004 0.006 0.04	0.01 0.08 0.09	4/5	64-94	P1 837

(Table 2 cont.d.)

178a W - Ru	H	a ₀ -0.0011(1) c ₀ -0.00375(10) V -0.049(2)	2,816(1) 4,635(8) 31,82(13)	0.001 0.002 0.037	0.05 0.032 0.086	5 4/5 4/5	60-100 60-90 60-90	P2 1218
179 W - Ta	C	a ₀ 0.00140(6) V 0.044(2)	3,160(4) 31,51(13)	0.005 0.18	0.12 0.40	((	6 0-100	SR13 147
180 W - Tc	C	a ₀ -0.00098(3) V -0.0291(9)	3,1648(10) 31,70(3)	0.0012 0.037	0.023 0.075		5/6 0-50	P2 1267
	T	a ₀ -0.0027(5) c ₀ -0.00088(9) V -0.34(6)	9,69(4) 5,019(6) 470,8(4,1)	0.008 0.001 0.85	0.05 0.02 0.11	)))	4 60-80	
	H	a ₀ -0.00062(8) c ₀ -0.0027(3) V -0.031(4)	2,804(7) 4,67(3) 31,7(3)	0.0009 0.004 0.04	0.023 0.06 0.1	)))	5 85-100	
181 WSi ₂ - NbSi ₂	H	a ₀ 0.0023(3) c ₀ 0.00112(9) V 0.146(13)	4,58(2) 6,466(7) 116,9(1,1)	0.005 0.002 0.25	0.06 0.01 0.11		3 71-100	P2 1120
182 Y - Ce	H	a ₀ 0.00076(4) c ₀ 0.00206(6) V 0.0517(7)	3,6524(8) 5,7361(12) 66,268(14)	0.001 0.002 0.022	0.025 0.024 0.024		8 0-35	P2 777
183 Y - La	H	a ₀ 0.00166(7) c ₀ 0.00341(10) V 0.101(3)	3,6521(13) 5,740(2) 66,30(6)	0.002 0.002 0.08	0.03 0.026 0.08		4 0-31	P2 1055
184 Zn - Ni	C	a ₀ 0.00244(3) V 0.0935(15)	3,5227(7) 43,69(3)	0.0009 0.04	0.02 0.07		9 5-33	P1 795
185 Zr - Hf	H	a ₀ -0.00035(2) c ₀ -0.00093(3) V -0.0184(7)	3,2320(10) 5,148(2) 46,57(5)	0.0015 0.003 0.07	0.03 0.043 0.09		5 0-100	P1 682
186 Zr - O	H	c ₀ 0.00117(8)	5,1576(13)	0.002	0.03		12/13 0-25	P1 1036
187 Zr ₅ Al ₃ - Zr ₅ Si ₃	H	a ₀ -0.00136(5) V -0.092(10)	8,1723(10) 327,6(2)	0.001 0.21	0.007 0.034		3 0-30	P2 596
	H	a ₀ -0.0027(3) V -0.239(9)	8,215(11) 331,9(4)	0.004 0.13	0.02 0.02		3/5 30-50	
188 ZrC - NbN	C	a ₀ -0.00316(13) V -0.195(7)	4,696(8) 103,4(5)	0.01 0.62	0.16 0.48		6 0-100	P2 1371
189 ZrC - TaN	C	a ₀ -0.0027(1) V -0.177(1)	4,685(1) 102,82(3)	0.0001 0.03	0.001 0.02		3 0-40	P2 1385
	C	a ₀ -0.0019(1) V -0.109(8)	4,57(1) 94,9(6)	0.003 0.16	0.03 0.1		3 60-90	
190 ZrC - UC	C	a ₀ 0.00262(1) V 0.1832(11)	4,6961(6) 103,44(7)	0.001 0.13	0.017 0.084		12 0-100	SR22 85
191 ZrC - WC	C	a ₀ -0.00376(14) V -0.236(10)	4,680(5) 102,4(4)	0.007 0.50	0.10 0.37		7 0-60	SR19 94
192 Au-Ag	C	SR11, 126		202 Ni-Mn	C	P1, 737a		
193 Au-Mn	C	P1, 436		203 Pd-W	C	P2, 1180		
194 Au-V	C	(2)		204 Pd-W	C	SR15, 111		
195 Co-Mn	C	P1, 510a		205 Pt-Pd	C	SR19, 182		
196 Co ₈ N-Li ₃ N	H	P1, 982		206 Ru-Pd	C	SR23, 205		
197 Cr-Mn	C	P1, 540		207 Si ₃ T ₅ -Si ₃ Mo ₅	H	P1, 761		
198 Cr ₄ Si ₃ C-W ₄ Si ₃ C	?	P2, 1337		208 TaSi ₂ -CrSi ₂	H	P1, 563		
199 HfN-TaN	C	P2, 1430		209 TiCr ₂ -NbCr ₂	C	P2, 838		
200 MgCu ₂ -MgZn ₂	C	SR16, 82		210 Ti-Sn	H	P2, 1261		
201 Nb-H	C	P1, 972						

(Table 2 cont.d)

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TABLE 3. — *Names, with the formulae and the order numbers, of the minerals reported in Table 1.*

(n = natural compound).

Acmite	$\text{NaFeSi}_2\text{O}_6$	169
Aegirine	$\text{NaFeSi}_2\text{O}_6$	170-171
Äkermanite	$\text{Ca}_2\text{MgSi}_2\text{O}_7$	34-34a-34b
Alabandite	MnS	263-263b
Albite	$\text{NaAlSi}_3\text{O}_8$	275
Altaite	PbTe	228-232
Alum	$\text{KAl}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$	175
Alunite	$\text{KAl}_3(\text{SO}_4)_2(\text{OH})_6$	114-114a-114b(n)-121-121a-291
Andradite	$\text{Ca}_3\text{Fe}_2\text{Si}_3\text{O}_{12}$	42-47-49
Anglesite	PbSO_4	24
Annite	$\text{KFe}_3\text{AlSi}_3\text{O}_{10}(\text{OH})_2$	122-122a
Anorthite	$\text{CaAl}_2\text{Si}_2\text{O}_8$	32-32a-275
Aragonite	CaCO_3	37a-41
Arcanite	K_2SO_4	127-127a
Argentite	Ag_2S	6
Baryte	BaSO_4	24
Blende	ZnS	258c-259-260-260b-262-263-263b-264-264a
Breithauptite	NiSb	185
Bunsenite	NiO	75-149-180-181-182-183-296
Calcite	CaCO_3	37-38-38a-39-39a-39b-39c-40-52-276-305
Calomel	Hg_2Cl_2	106-106a
Celsian	$\text{BaAl}_2\text{Si}_2\text{O}_8$	14-14a-14b-15-115-274
Clausthalite	PbSe	196-196a(n)-196b-298
Clinzoisite	$\text{Ca}_2\text{Al}_3\text{Si}_3\text{O}_{12}\text{OH}$	35(n)
Coffinite	USiO_4	224
Coloradoite	HgTe	108-109-284
Cotunnite	PbCl_2	190

(Table 3 cont.d.)

Diopside	$\text{MgCaSi}_2\text{O}_6$	142-143-169
Epidote	$\text{Ca}_2\text{FeAl}_2\text{Si}_3\text{O}_{12}$	35(n)
Fayalite	Fe_2SiO_4	46-152(n)-152a-152b-152c
Ferberite	FeWO_4	163
Forsterite	Mg_2SiO_4	152(n)-152a-152b-152c
Franklinite	ZnFe_2O_4	53-254-271
Gahnite	ZnAl_2O_4	67-251-251a
Galena	PbS	194-195-196-196a(n)-196b-297-298
Gehlenite	$\text{Ca}_2\text{Al}_2\text{SiO}_7$	33-34-34a-34b-43
Greenockite	CdS	55-56-160-258-258a(n)-258b
Halite	NaCl	120-166-167
Hausmannite	Mn_3O_4	96-96a
Hematite	Fe_2O_3	92-92a-93-283
Hübnerite	MnWO_4	163
Hedenbergite	$\text{CaFeSi}_2\text{O}_6$	143
Hydroxyapatite	$\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$	193
Ilmenite	FeTiO_3	93
Jacobsite	MnFe_2O_4	154-156-254
Jaipurite	CoS	76
Jarosite	$\text{KFe}_3(\text{SO}_4)_2(\text{OH})_6$	121-121a-291
Keatite	SiO_2	205
Kimzeyite	$\text{Ca}_2\text{Zr}_2\text{FeSi}_2\text{O}_{12}$	49-50
Lawrencite	FeCl_2	71-89
Löllingite	FeAs_2	88
Magnesioferrite	MgFe_2O_4	156-179
Magnesite	MgCO_3	39-39a-39b-39c
Magnetite	Fe_3O_4	95-95a-95b
Manganosite	MnO	74-91-148-148a-158-158a-159-182
Mascagnite	$(\text{NH}_4)_2\text{SO}_4$	127-127a
Melanotekite	$\text{Pb}_2\text{Fe}_2\text{Si}_2\text{O}_9$	189
Metacinnabarite	HgS	107-262
Metathenardite	Na_2SO_4	128
Mikrocline	KAlSi_3O_8	289(n)
Montepionite	CdO	44-159
Nantokite	CuCl	83
Natroalunite	$\text{NaAl}_3(\text{SO}_4)_2(\text{OH})_6$	114-114a-114b(n)
Niccolite	NIAs	68-185
Nitrobarite	$\text{Ba}(\text{NO}_3)_2$	21-22-23
Oldhamite	CaS	45
Orthoclase	KAlSi_3O_8	115-116
Otavite	CdCO_3	52-69-155-252
Periclase	MgO	138-139-145-146-147-148-148a-149-150-294-296
Phlogopite	$\text{KMg}_3\text{AlSi}_3\text{O}_{10}(\text{OH})_2$	122-122a
Picrochromite	MgCr_2O_4	144
Plenargyrite	AgBiS_2	2-194
Proustite	Ag_3AsS_3	1
Pyrargyrite	Ag_3SbS_3	1

(Table 3 cont.d)

Rammelsbergite	NiAs_2	88-178
Rhodochrosite	MnCO_3	40-70-155-253
Rutile	TiO_2	225-226
Safflorite	CoAs_2	178
Sal-ammoniac	NH_4Cl	232
Scacchite	MnCl_2	89
Scheelite	CaWO_4	48
Schorlomite	$\text{Ca}_3\text{Ti}_2\text{Fe}_3\text{SiO}_{12}$	47-50
Siderite	FeCO_3	38-38a
Smithsonite	ZnCO_3	252-253-305
Spessartine	$\text{Mn}_2\text{Al}_2\text{Si}_3\text{O}_{12}$	153
Spinel	MgAl_2O_4	140-141-144
β -Spodumene	$\text{LiAlSi}_2\text{O}_6$	205
Strontianite	SrCO_3	41-207
Sylvine	KCl	119-119a-119b-119c-119d-120-202-290
Tellurbismuth	Bi_2Te_3	30-31
Thenardite	Na_2SO_4	172
Thorianite	ThO_2	64-221-222-237-237a-237b-237c-238-300-301-302
Thorite	ThSiO_4	224
Tiemannite	HgSe	109
Transvaalite	Co(OH)_2	184
Trevorite	NiFe_2O_4	103-177-179
Tschermigite	$\text{NH}_4\text{Al(SO}_4)_3 \cdot 12\text{H}_2\text{O}$	175
Ulvospinel	Fe_2TiO_4	95-95a-95b
Uraninite	UO_2	236-237-237a-237b-237c-239
Witherite	BaCO_3	37a-207
Wurtzite	ZnS	258-258a(n)-258b-260a-261-263a
Wüstite	FeO	91-147
Zincite	ZnO	257

*Istituto di Mineralogia e Geochimica dell'Università, Via San Massimo 24,
10123 Torino. September 1970.*

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