

Table of contents

Ferroelectrics and related substances

(Following the title of each chapter, the name of the author responsible for the manuscript preparation of the chapter is given)

Subvolume b: Non-oxides

SI	Introduction [T. Mitsui]	1
A	General remarks	1
B	Definition of ferroelectrics and antiferroelectrics	1
C	Remarks on some fundamental concepts and quantities	2
D	Symbols and units [E. Nakamura]	12
E	Survey of contents	20
1	Arrangement of data in each section	21
2	Common two-dimensional survey of contents for III/16b and III/28b	22
F	Publications on ferroelectrics [K. Toyoda]	46
SII	Data	
	<i>Inorganic crystals other than oxides</i>	49
14	SbSI family [I. Tatsuzaki, T. Yagi]	49
A	Pure compounds	49
B	Solid solutions	55
15	HCl family [K. Gesi]	56
A	Pure compounds	56
16	NaNO ₂ family [K. Gesi]	57
A	Pure compounds	57
17	KNO ₃ family [K. Gesi]	59
A	Pure compounds	59
B	Solid solution	62
18	PbHPO ₄ family [K. Gesi]	63
A	Pure compounds	63
19	KDP (KH ₂ PO ₄) family [E. Nakamura]	66
A	Pure compounds	66
B	Solid solutions	94
20	(NH ₄) ₂ SO ₄ family [K. Deguchi, K. Gesi]	97
A	Pure compounds	97
B	Solid solutions	134
21	NH ₄ HSO ₄ family [I. Tatsuzaki, T. Yagi]	138
A	Pure compounds	138
B	Solid solution	148
22	(NH ₄) ₃ H(SO ₄) ₂ family [K. Gesi]	148
A	Pure compounds	148

23	NH_4LiSO_4 family [I. Tatsuzaki, T. Yagi]	153
A	Pure compounds	153
24	Langbeinite-type family [T. Hikita]	167
A	Pure compounds	167
B	Solid solution	184
25	Lecontite ($\text{NaNH}_4\text{SO}_4 \cdot 2\text{H}_2\text{O}$) family [Y. Makita]	184
A	Pure compounds	184
26	Alum ($\text{NH}_4\text{Fe}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$) family [Y. Makita]	185
A	Pure compounds	185
27	GASH ($\text{C}(\text{NH}_2)_3\text{Al}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$) family [K. Gesi]	186
A	Pure compounds	186
28	$\text{LiH}_3(\text{SeO}_3)_2$ family [Y. Makita]	187
A	Pure compounds	187
30	$\text{K}_4\text{Fe}(\text{CN})_6 \cdot 3\text{H}_2\text{O}$ family [T. Ikeda]	192
A	Pure compounds	192
	<i>Organic crystals</i>	193
31	$\text{SC}(\text{NH}_2)_2$ family [Y. Shiozaki]	193
A	Pure compound	193
B	Solid solution	195
32	$\text{N}(\text{CH}_3)_4\text{HgCl}_3$ family [M. Adachi, K. Toyoda]	195
A	Pure compounds	195
34	DSP ($\text{Ca}_2\text{Sr}(\text{CH}_3\text{CH}_2\text{COO})_6$) family [E. Nakamura]	196
A	Pure compounds	196
B	Solid solution	205
35	$\text{CH}_2\text{ClCOONH}_4$ family [E. Nakamura]	205
A	Pure compounds	205
36	TGS($(\text{NH}_2\text{CH}_2\text{COOH})_3 \cdot \text{H}_2\text{SO}_4$) family [K. Deguchi]	206
A	Pure compounds	206
B	Solid solutions	214
38	$(\text{NH}_2\text{CH}_2\text{COOH})_2 \cdot \text{HNO}_3$ [K. Gesi]	214
A	Pure compound	214
40	$(\text{CH}_3\text{NHCH}_2\text{COOH})_3 \cdot \text{CaCl}_2$ [Y. Makita]	215
A	Pure compound	215
40 α	$(\text{CH}_3)_3\text{NCH}_2\text{COO} \cdot \text{H}_3\text{PO}_4$ family [K. Deguchi]	219
A	Pure compounds	219
40 β	$(\text{CH}_3)_3\text{NCH}_2\text{COO} \cdot \text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ [E. Nakamura]	225
A	Pure compound	225
41	Rochelle salt ($\text{NaKC}_4\text{H}_4\text{O}_6 \cdot 4\text{H}_2\text{O}$) family [Y. Shiozaki]	228
A	Pure compounds	228
B	Solid solution	230
42	$\text{LiNH}_4\text{C}_4\text{H}_4\text{O}_6 \cdot \text{H}_2\text{O}$ family [E. Sawaguchi, Y. Akishige]	230
A	Pure compounds	230
B	Solid solutions	232
	<i>Miscellanea</i>	233
43	Miscellaneous crystals (including oxides) and polymers [M. Adachi, Y. Akishige, K. Gesi, T. Hikita, T. Ikeda, Y. Makita, E. Nakamura, E. Sawaguchi, T. Shigenari, Y. Shiozaki, I. Tatsuzaki, K. Toyoda, T. Yagi, T. Yamada]	233
43 α	High polymer ferroelectrics [K. Yoshino]	280
44	Liquid crystals and related liquids [K. Yoshino]	281
S III	Figures	311

S IV	References	736
A	Textbooks and review articles	736
B	Research papers	749
S V	Common index of substances for subvolumes III/28a, b and III/16a, b	787
A	Pure compounds	787
B	Solid solutions	804
C	High polymers and liquid crystals	830

Subvolume a: Oxides

SI	Introduction [T. Mitsui, E. Nakamura]	1
SII	Data	
	<i>Oxides</i>	63
1	Perovskite-type oxides [M. Adachi, Y. Akishige, J. Harada, T. Ikeda, M. Okuyama, E. Sawaguchi, T. Yamada]	63
2	WO ₃ [M. Adachi, K. Toyoda]	105
3	LiNbO ₃ family [T. Yamada]	105
5	SrTeO ₃ family [T. Yamada]	115
6	Tungsten-bronze-type oxides [T. Yamada]	116
7	Pyrochlore-type oxides [T. Ikeda]	166
8	Sr ₂ Nb ₂ O ₇ family [T. Ikeda]	168
9	Layer-structure oxides [E. Sawaguchi, Y. Akishige]	173
10	BaAl ₂ O ₄ -type oxides [T. Yamada]	178
11	Pb ₅ Ge ₃ O ₁₁ family [T. Yamada]	179
11 α	LiNaGe ₄ O ₉ [T. Yamada]	185
11 β	Li ₂ Ge ₇ O ₁₅ [T. Yamada]	185
12	GMO (Gd ₂ (MoO ₄) ₃) family [T. Yamada]	188
13	Boracite-type family [T. Ikeda]	196
SIII	Figures	204
SIV	References	398
SV	Common index of substances for subvolumes III/28a and III/16a	436