

LANDOLT-BÖRNSTEIN

GROUP III: Condensed Matter

VOLUME 27

Magnetic Properties of Non-Metallic Inorganic Compounds Based on Transition Elements

SUBVOLUME I2

Sorosilicates

Introductory material

8	Magnetic and related properties of silicates and phosphates	1
8.1	Silicates	1
8.1.2	Sorosilicates	1
8.1.2.1	Diorthopyrosilicates	1
8.1.2.1.1	Crystal structures. Lattice parameters	1
8.1.2.1.2	Magnetic properties	6
8.1.2.1.3	Nuclear magnetic resonance (NMR) data	7
8.1.2.1.4	Optical properties	7
	Tables and figures for 8.1.2.1	8
	References for 8.1.2.1	27
8.1.2.2	Melilites and related silicates	29
8.1.2.2.1	Crystal structures. Lattice parameters	29
8.1.2.2.2	Magnetic properties. Neutron diffraction data	43
8.1.2.2.3	Fe-57 nuclear gamma resonance (NGR) data	46
8.1.2.2.4	Perturbed angular correlation (PAC)	47
8.1.2.2.5	Nuclear magnetic resonance (NMR) data	47
8.1.2.2.6	EXAFS data	48
8.1.2.2.7	Heat capacity	48
8.1.2.2.8	Piezoelectric properties	49
8.1.2.2.9	Optical properties	50
	Tables and figures for 8.1.2.2	52
	References for 8.1.2.2	85
8.1.2.3	Ilvaite, lawsonite and related silicates	90
8.1.2.3.1	Crystal structure. Lattice parameters	90
8.1.2.3.2	Neutron diffraction data	97
8.1.2.3.3	Magnetization and magnetic susceptibilities	97
8.1.2.3.4	Nuclear gamma resonance (NGR) data	98
8.1.2.3.5	Nuclear magnetic resonance (NMR) data	100
8.1.2.3.6	Dielectric properties	101
8.1.2.3.7	Electrical resistivity	101
8.1.2.3.8	Heat capacity	102
8.1.2.3.9	Optical properties	103
	Tables and figures for 8.1.2.3	106
	References for 8.1.2.3	139

8.1.2.4	Tilleyite, hemimorphite, wöhlerite and related silicates	142
8.1.2.4.1	Crystal structures. Lattice parameters	142
8.1.2.4.2	Nuclear magnetic resonance (NMR) data	145
8.1.2.4.3	Optical properties	145
	Tables and figures for 8.1.2.4	147
	References for 8.1.2.4	158
8.1.2.5	Götzenite, labuntsovite, andremeyerite and related silicates	160
8.1.2.5.1	Crystal structure. Lattice parameters	160
8.1.2.5.2	Nuclear gamma resonance (NGR) data	164
8.1.2.5.3	Nuclear magnetic resonance (NMR) data	164
8.1.2.5.4	Optical properties	165
	Tables and figures for 8.1.2.5	166
	References for 8.1.2.5	184
8.1.2.6	Lomonosovite, inelite, kentrolite and related silicates	187
8.1.2.6.1	Crystal structure. Lattice parameters	187
8.1.2.6.2	Optical properties	191
	Tables and figures for 8.1.2.6	192
	References for 8.1.2.6	206
8.1.2.7	Epidotes, chevkinites, vesuvianite, orientite and related silicates	207
8.1.2.7.1	Crystal structure. Lattice parameters	207
8.1.2.7.2	Magnetic properties	215
8.1.2.7.3	Nuclear gamma resonance (NGR) data	215
8.1.2.7.4	Nuclear magnetic resonance (NMR) data	216
8.1.2.7.5	Electron paramagnetic resonance (EPR) data	217
8.1.2.7.6	Dielectric properties	218
8.1.2.7.7	Heat capacity	218
8.1.2.7.8	EXAFS and XANES data	218
8.1.2.7.9	Optical properties	218
	Tables and figures for 8.1.2.7	221
	References for 8.1.2.7	255
8.1.2.8	Zunyite, davreuxite, keldyshite, gageite, pumpellyite, jennite and related silicates	259
8.1.2.8.1	Crystal structures. Lattice parameters	259
8.1.2.8.2	Nuclear gamma resonance (NGR) data	264
8.1.2.8.3	Nuclear magnetic resonance (NMR) data	264
8.1.2.8.4	Optical properties	265
	Tables and figures for 8.1.2.8	266
	References for 8.1.2.8	283
	Index of substances for Volume III/27I2	285
	Contents, editor and authors of further subvolumes of III/27	311

Sorosilicates

Burzo, E.

2005, XII, 348 p. With CD-ROM., Hardcover

ISBN: 978-3-540-21076-4