

**Landolt-Börnstein**  
**Group III: Condensed Matter**

**Volume 27**  
**Magnetic Properties of Non-Metallic Inorganic Compounds Based on Transition Elements**

**Subvolume I4**  
**Inosilicates**

	Introductory material	
8	Magnetic and related properties of silicates and phosphates	1
8.1	Silicates	1
8.1.4	Inosilicates	1
8.1.4.1	Pyroxenes, pyroxenoids and silicates with related compositions (Text)	1
8.1.4.1.1	Crystal structures. Lattice parameters	1
8.1.4.1.2	Neutron diffraction data	46
8.1.4.1.3	Magnetization. Magnetic susceptibility	47
8.1.4.1.4	Nuclear gamma resonance (NGR) data	52
8.1.4.1.5	Nuclear magnetic resonance (NMR) data	65
8.1.4.1.6	Electron paramagnetic resonance (EPR) data	67
8.1.4.1.7	Heat capacity	68
8.1.4.1.8	Electrical conductivity	70
8.1.4.1.9	Dielectric properties	72
8.1.4.1.10	XANES and EXAFS data	72
8.1.4.1.11	Raman and infrared spectroscopy data	73
8.1.4.1.12	Other optical properties	78
8.1.4.1	Pyroxenes, pyroxenoids and silicates with related compositions (Tables)	83
8.1.4.1	Pyroxenes, pyroxenoids and silicates with related compositions (Figures)	125
8.1.4.1	Pyroxenes, pyroxenoids and silicates with related compositions (References)	187
8.1.4.2	Carpholite, shattuckite and related silicates (Text)	209
8.1.4.2.1	Crystal structures. Lattice parameters	209
8.1.4.2.2	Nuclear gamma resonance (NGR) data	210
8.1.4.2.3	Optical properties	211
8.1.4.2	Carpholite, shattuckite and related silicates (Tables)	212
8.1.4.2	Carpholite, shattuckite and related silicates (Figures)	215

8.1.4.2	Carpholite, shattuckite and related silicates (References)	219
8.1.4.3	Amphibole group of silicates (Text)	220
8.1.4.3.1	Crystal structures. Lattice parameters	220
8.1.4.3.2	Magnetic properties	238
8.1.4.3.3	Neutron diffraction data	240
8.1.4.3.4	Nuclear gamma resonance (NGR) data	240
8.1.4.3.5	Nuclear magnetic resonance (NMR) data	245
8.1.4.3.6	Electron paramagnetic resonance (EPR) data	247
8.1.4.3.7	Heat capacity	247
8.1.4.3.8	Electrical resistivity	248
8.1.4.3.9	Infrared and Raman spectroscopy	248
8.1.4.3.10	Absorption spectra	253
8.1.4.3.11	X-ray absorption spectra	254
8.1.4.3	Amphibole group of silicates (Tables)	256
8.1.4.3	Amphibole group of silicates (Figures)	285
8.1.4.3	Amphibole group of silicates (References)	321
8.1.4.4	Aenigmatite, pectolite and umbite groups of silicates (Text)	331
8.1.4.4.1	Crystal structures. Lattice parameters	331
8.1.4.4.2	Optical properties	334
8.1.4.4	Aenigmatite, pectolite and umbite groups of silicates (Tables)	335
8.1.4.4	Aenigmatite, pectolite and umbite groups of silicates (Figures)	342
8.1.4.4	Aenigmatite, pectolite and umbite groups of silicates (References)	346
8.1.4.5	Tobermorite group of silicates (Text)	348
8.1.4.5.1	Crystal structures. Lattice parameters	348
8.1.4.5.2	Magnetic properties	353
8.1.4.5.3	Nuclear gamma resonance (NGR) data	353
8.1.4.5.4	Nuclear magnetic resonance (NMR) data	354
8.1.4.5.5	Optical properties	355
8.1.4.5	Tobermorite group of silicates (Tables)	356
8.1.4.5	Tobermorite group of silicates (Figures)	362
8.1.4.5	Tobermorite group of silicates (References)	369
8.1.4.6	Xonotlite group of silicates (Text)	371

8.1.4.6.1	Crystal structures. Lattice parameters	371
8.1.4.6.2	Nuclear magnetic resonance (NGR) data	378
8.1.4.6.3	Electrical resistivity	378
8.1.4.6.4	Optical properties	378
8.1.4.6	Xonotlite group of silicates (Tables)	379
8.1.4.6	Xonotlite group of silicates (Figures)	384
8.1.4.6	Xonotlite group of silicates (References)	391
8.1.4.7	Jimthompsonite, babingtonite, zektzerite, batisite and related silicates (Text)	394
8.1.4.7.1	Crystal structures. Lattice parameters	394
8.1.4.7.2	Magnetic properties	399
8.1.4.7.3	Nuclear gamma resonance (NGR) data	399
8.1.4.7.4	Nuclear magnetic resonance (NMR) data	399
8.1.4.7.5	Optical properties	400
8.1.4.7	Jimthompsonite, babingtonite, zektzerite, batisite and related silicates (Tables)	401
8.1.4.7	Jimthompsonite, babingtonite, zektzerite, batisite and related silicates (Figures)	408
8.1.4.7	Jimthompsonite, babingtonite, zektzerite, batisite and related silicates (References)	415
8.1.4.8	Fenaksite, deerite, haradaite and related silicates (Text)	417
8.1.4.8.1	Crystal structures. Lattice parameters	417
8.1.4.8.2	Magnetic properties	423
8.1.4.8.3	Neutron diffraction data	425
8.1.4.8.4	Nuclear gamma resonance (NGR) data	425
8.1.4.8.5	Magnetic resonance	426
8.1.4.8.6	Heat capacity	426
8.1.4.8.7	Optical properties	427
8.1.4.8	Fenaksite, deerite, haradaite and related silicates (Tables)	428
8.1.4.8	Fenaksite, deerite, haradaite and related silicates (Figures)	437
8.1.4.8	Fenaksite, deerite, haradaite and related silicates (References)	449
8.1.4.9	Neptunite, hellandite, sorensenite, astrophyllite, epididymite, bavenite, lorenzenite and related silicates (Text)	451
8.1.4.9.1	Crystal structures. Lattice parameters	451
8.1.4.9.2	Nuclear gamma resonance (NGR) data	457
8.1.4.9.3	Nuclear magnetic resonance (NMR) data	457

8.1.4.9.4	Optical properties	457
8.1.4.9	Neptunite, hellandite, sorensenite, astrophyllite, epididymite, bavenite, lorenzenite and related silicates (Tables)	459
8.1.4.9	Neptunite, hellandite, sorensenite, astrophyllite, epididymite, bavenite, lorenzenite and related silicates (Figures)	469
8.1.4.9	Neptunite, hellandite, sorensenite, astrophyllite, epididymite, bavenite, lorenzenite and related silicates (References)	477
	Index of substances for Volume III/2714	479
	Contents, editor and authors of further subvolumes of III/27	527

Inosilicates

Burzo, E.

2006, XIV, 569 p. With CD-ROM., Hardcover

ISBN: 978-3-540-29178-7