

AUTHOR INDEX, VOLUME 82, 1997

- Ackland, G.J., *see* Karki et al., 51
Ackland, G.J., *see*, Karki et al., 635
Adcock, C.T., *see* Papike et al., 630
Ahsbahs, H., *see* Zhang et al., 245
Alberti, A., *see* Galli et al., 423
Alietti, E., Brigatti, M.F., and Poppi, L.: Clintonite-1M: Crystal chemistry and its relationships to closely associated Al-rich phlogopites, 936
Allan, D.R., *see* Miletich et al., 697
Angel, R.J., *see* Miletich et al., 697
Angel, R.J., *see* Woodland et al., 923
Angel, R.J.: Transformation of fivefold-coordinated silicon to octahedral silicon in calcium silicate, CaSi_2O_5 , 836
Antonov, V.N., *see* Krasovska et al., 672
Aranovich, L.Y., and Berman, R.G.: A new garnet-orthopyroxene thermometer based on reversed Al_2O_3 solubility in $\text{FeO}-\text{Al}_2\text{O}_3-\text{SiO}_2$ orthopyroxene, 345
Armbruster, T., *see* Geiger and Armbruster, 740
Armbruster, T., *see* Hoffmann et al., 1014
Armbruster, T., *see* Nyfeler et al., 841
Armbruster, T., *see* Yang et al., 517
Arps, C.E.S., *see* Leake et al., 1019
Artioli, G., *see* Cruciani et al., 729
Austrheim, H., *see* Holten et al., 596
Austrheim, H., *see* Jamtveit et al., 1241
Bailey, S.W., *see* Zheng and Bailey, 1007
Ballone, P., *see* Haiber et al., 913
Banfield, J.F., *see* Gribb and Banfield, 717
Baronnet, A., *see* Wunder et al., 760
Barrón, V., Gálvez, N., Hochella, M.F. Jr., and Torrent, J.: Epitaxial overgrowth of goethite on hematite synthesized in phosphate media: A scanning force and transmission electron microscopy study, 1091
Barronet, A., *see* Beaufort et al., 109
Bartoli, C., *see* Manceau et al., 1150
Bassett, W.A., *see* Wu et al., 69
Beaubouef, R., *see* Xu et al., 1101
Beaufort, D., Baronnet, A., Lanson, B., and Meunier, A.: Corrensite: A single phase or a mixed-layered phyllosilicate in the saponite-to-chlorite conversion series? A case study of Sancerre-Couy deep drill hole (France), 109
Behrens, H., *see* Dingwell et al., 434
Belonoshko, A.B., and Dubrovinsky, L.S.: A new high-pressure silica phase obtained by molecular dynamics—Reply, 1043
Belonoshko, A.B., and Dubrovinsky, L.S.: A simulation study of induced failure and recrystallization of a perfect MgO crystal under non-hydrostatic compression: Application to melting in the diamond-anvil cell, 441
Benstock, E.J., Buseck, P.R., and Steele, I.M.: Cathodoluminescence of meteoritic and synthetic forsterite at 296 and 77 K using TEM, 310
Berman, R.G., *see* Aranovich and Berman, 345
Berry, F.J., *see* Bland et al., 1187
Birch, W.D., *see* Leake et al., 1019
Bischoff, J.L., *see* Queralt et al., 812
Bismayer, U., *see* Chrosch et al., 677
Bismayer, U., *see* Zhang et al., 30
Bland, P.A., Kelley, S.P., Berry, F.J., Cadogan, J.M., and Pillinger, C.T.: Artificial weathering of the ordinary chondrite Allegan: Implications for the presence of Cl^- as a structural component in akaganéite, 1187
Blank, J.G., *see* Carroll and Blank, 549
Bloodaxe, E.S., *see* Hughes et al., 512
Blundy, J., *see* Holten et al., 596
Bonazzi, P., *see* Cellai et al., 276
Brigatti, M.F., Galli, E., Medici, L., and Poppi, L.: Crystal structure refinement of aluminian lizardite- 2H_2 , 931
Brigatti, M.F., *see* Alietti et al., 936
Brodholt, J.: Ab initio calculations on point defects in forsterite (Mg_2SiO_4) and implications for diffusion and creep, 1049
Brown, G.E. Jr., *see* Thompson et al., 483
Buick, I.S., *see* Cartwright et al., 392
Burns, P.C.: A new uranyl oxide hydrate sheet in vandendriesscheite: Implications for mineral paragenesis and the corrosion of spent nuclear fuel, 1176
Buseck, P.R., *see* Benstock et al., 310
Buseck, P.R., *see* Xu et al., 125
Cadogan, J.M., *see* Bland et al., 1187
Carpenter, M.A., *see* Cellai et al., 276
Carpenter, M.A., *see* Xu et al., 125
Carpenter, M.A., *see* Zhang et al., 849
Carroll, M.R., and Blank, J.G.: The solubility of H_2O in phonolitic melts, 549
Cartwright, I., Buick, I.S., and Harley, S.L.: Timing and mechanisms of carbon isotope exchange in granulite-facies calc-silicate boudins, Rauer Group, East Antarctica, 392
Cellai, D., Bonazzi, P., and Carpenter, M.A.: Natural kalsilite, KAlSiO_4 , with $P31c$ symmetry: Crystal structure and twinning, 276
Champness, P.E., *see* Lennie et al., 302
Chao, G.Y., *see* Grice and Chao, 1255
Chappell, B.W., *see* Sha and Chappell, 325
Chrosch, J., Bismayer, U., and Salje, E.K.H.: Anti-phase boundaries and phase transitions in titanite: An X-ray diffraction study, 677
Clark, S.J., *see* Karki et al., 51
Clark, S.J., *see*, Karki et al., 635
Comodi, P., and Zanazzi, P.F.: The pressure behavior of clinozoisite and zoisite: An X-ray diffraction study, 61
Comodi, P., *see* Schmidt et al., 460
Comodi, P., Zanazzi, P.F., Poli, S., and Schmidt, M.W.: High-pressure behavior of kyanite: Compressibility and structural deformations, 452
Coombs, D.S., *see* Li et al., 503
Cortini, M., *see* Holten et al., 596
Crain, J., *see* Karki et al., 51
Crain, J., *see*, Karki et al., 635
Cramer, J., *see* Jenkins et al., 280
Cramer, J., *see* Sherriff et al., 405
Cruciani, G., Artioli, G., Gualtieri, A., Ståhl, K., and Hanson, J.C.: Dehydration dynamics of stilbite using synchrotron X-ray powder diffraction, 729
Cuney, M., *see* Podor and Cuney, 765
Cygani, R.T., *see* Hobbs et al., 657
Dahlgren, S., *see* Jamtveit et al., 1241
Della Ventura, G., Robert, J.L., Raudsepp, M., Hawthorne, F.C., and Welch, M.D.: Site occupancies in synthetic monoclinic amphiboles: Rietveld structure refinement and infrared spectroscopy of (nickel, magnesium, cobalt)-richterite, 291
Della Ventura, G., *see* Hawthorne et al., 708
Della Ventura, G., *see* Mottana et al., 497
Demartin, F., *see* Pilati et al., 1054
Dingwell, D.B., Holtz, F., and Behrens, H.: The solubility of H_2O in peralkaline and peraluminous granitic melts, 434
Dingwell, D.B., *see* Toplis et al., 979
Dingwell, D.B.: Acceptance of the Mineralogical Society of America Award for 1996, 831
Dixon, J.E., Degassing of alkalic basalts, 368
Dollase, W.A., *see* Xu et al., 1101
Dong, H., Peacor, D.R., and Freed, R.L.: Phase relations among smectite, R1 illite-smectite, and illite, 379
Dove, M.T., and Redfern, S.A.T.: Lattice simulation studies of the ferroelastic phase transitions in $(\text{Na}, \text{K})\text{AlSi}_3\text{O}_8$ and $(\text{Sr}, \text{Ca})\text{Al}_2\text{Si}_2\text{O}_8$ feldspar solid solutions, 8

- Dove, M.T., *see* Palmer et al., 16
 Dove, M.T.: Theory of displacive phase transitions in minerals, 213
 Dove, P.M., *see* Teng and Dove, 878
 Downs, R.T., *see* Yang et al., 467
 Drits, V.A., Lindgreen, H., and Salyn, A.L.: Determination of the content and distribution of fixed ammonium in illite-smectite by X-ray diffraction: Application to North Sea illite-smectite, 79
 Drits, V.A., *see* Manceau et al., 1150
 Drits, V.A., *see* Silvester et al., 962
 Drits, V.A., Silverster, E., Gorshkov, A.I., and Manceau, A.: Structure of monoclinic Na-rich birnessite and hexagonal birnessite: I. Results from X-ray diffraction and selected-area electron diffraction, 946
 Dubrovinsky, L.S., *see* Belonoshko and Dubrovinsky, 1043
 Dubrovinsky, L.S., *see* Belonoshko and Dubrovinsky, 441
 Duchi, G., *see* Orlandi et al., 807
 Dupree, R., *see* Kohn et al., 1133
 Dutrow, B.L. *see* Holdaway et al., 582
 Dyar, M.D., *see* Holdaway et al., 582
 Evans, B.W., and Scaillet, B.: The redox state of Pinatubo dacite and the ilmenite-hematite solvus, 625
 Evans, H.T.: Memorial of George E. Erickson, 1920–1996, 1046
 Ewing, R.C., *see* Finch and Ewing, 607
 Ewing, R.C., *see* Meldrum et al., 858
 Farges, F.: Coordination of Ti^{4+} in silicate glasses: A high-resolution XANES spectroscopy study at the Ti *K* edge, 36
 Farges, F.: Fivefold-coordinated Ti^{4+} in metamict zirconolite and titanite: A new occurrence shown by Ti *K*-edge XANES spectroscopy, 44
 Feenstra, A., *see* Geiger and Feenstra, 571
 Fei, Y., *see* Linton et al., 639
 Finch, R.J., and Ewing, R.C.: Clarkeite: New chemical and structural data, 607
 Finger, L.W., *see* Yang et al., 467
 Fitzgerald, J., *see* Kesson et al., 526
 Fleet, M.E., and Murnin, A.H.: Gold-bearing arsenian pyrite and marcasite and arsenopyrite from Carlin Trend gold deposits and laboratory synthesis, 182
 Fleet, M.E., and Pan, Y.: Site preference of rare earth elements in fluorapatite: Binary (LREE+HREE)-substituted crystals, 870
 Foord, E.E., *see* Hughes et al., 512
 Fowler, G.W., *see* Papike et al., 630
 Franzini, M., *see* Galli et al., 423
 Freed, R.L., *see* Dong et al., 379
 Fritsch, S., *see* Xirouchakis et al., 754
 Frost, B.R.: Presentation of the Roebling Medal of the Mineralogical Society of America for 1996 to Donald H. Lindsley, 824
 Frost, D.J., *see* Yang et al., 651
 Galli, E., Quartieri, S., Vezzalini, G., Alberti, A., and Franzini, M.: Terranovaite from Antarctica: A new ‘pentasil’ zeolite, 423
 Galli, E., *see* Brigatti et al., 931
 Gálvez, N., *see* Barrón et al., 1091
 Gaultier, A., *see* Cruciani et al., 729
 Geiger, C.A., and Armbruster, T.: Mn_{Al₂Si₃O₁₂} spessartine and Ca₃Al₂Si₃O₁₂ grossular garnet: Structural dynamic and thermodynamic properties, 740
 Geiger, C.A., and Feenstra, A.: Molar volumes of mixing of almandine-pyrope and almandine-spessartine garnets and the crystal chemistry and thermodynamic-mixing properties of the aluminosilicate garnets, 571
 Gessmann, C.K., Spiering, B., and Raith, M.: Experimental study of the Fe-Mg exchange between garnet and biotite: Constraints on the mixing behavior and analysis of the cation-exchange mechanisms, 1225
 Giester, G., *see* Hoffmann et al., 1014
 Gilbert, M.C., *see* Leake et al., 1019
 Giuli, G., *see* Mottana et al., 497
 Gorshkov, A.I., *see* Drits et al., 946
 Graeme-Barber, A., *see* Hovis and Graeme-Barber, 158
 Graeme-Barber, A., *see* Zhang et al., 849
 Gramaccioli, C.M., *see* Pilati et al., 1054
 Gratz, R., and Heinrich, W.: Monazite-xenotime thermobarometry: Experimental calibration of the miscibility gap in the binary system CePO₄-YPO₄, 772
 Grew, E.S., *see* Jambor et al., 820
 Gribb, A.A., and Banfield, J.F.: Particle size effects on transformation kinetics and phase stability in nanocrystalline TiO₂, 717
 Grice, J.D., and Chao, G.Y.: Lukechangite-(Ce), a new rare-earth-fluorocarbonate mineral from Mont Saint-Hilaire, Quebec, 1255
 Grice, J.D., *see* Leake et al., 1019
 Guggenheim, S., *see* Wu et al., 69
 Guggenheim, S.: Review of *Crystallography, second edition*. By W. Borchardt-Ott, 840
 Guidotti, C.V., *see* Holdaway et al., 582
 Gunter, M.E., *see* Yang et al., 517
 Hacker, B.R., *see* Jové and Hacker, 781
 Hafner, S.S., *see* Zhang et al., 245
 Haiber, M., Ballone, P., and Parrinello, M.: Structure and dynamics of protonated Mg₂SiO₄: An ab-initio molecular dynamics study, 913
 Haile, S.M., and Wuensch, B.J.: Comparison of the crystal chemistry of selected MSi₆O₁₅-based silicates, 1141
 Hanchar, J.M., *see* Hughes et al., 512
 Hanson, J.C., *see* Cruciani et al., 729
 Harley, S.L., *see* Cartwright et al., 392
 Harlow, G.E.: K in clinopyroxene at high pressure and temperature: An experimental study, 259
 Harrison, R.J., and Putnis, A.: Interaction between exsolution microstructures and magnetic properties of the magnetite-spinel solid solution, 131
 Hawthorne, F.C., Della Ventura, G., Robert, J.-L., Welch, M.D., Raudsepp, M., and Jenkins, D.M.: A Rietveld and infrared study of synthetic amphiboles along the potassium-richterite-tremolite join, 708
 Hawthorne, F.C., *see* Della Ventura et al., 291
 Hawthorne, F.C., *see* Leake et al., 1019
 Hazen, R.M., Yang, H., and Prewitt, C.T.: Crystal chemistry of superflourous phase B (Mg₁₀Si₃O₁₄F₄): Implications for the role of fluorine in the mantle, 647
 Heaney, P.J., *see* Xu and Heaney, 99
 Heinrich, W., *see* Gratz and Heinrich, 772
 Henderson, C.M.B., *see* Kohn et al., 1133
 Hervig, R.L., *see* Smyth et al., 270
 Herzberg, C., and Zhang, J.: Melting experiments on komatiite analog compositions at 5 GPa, 354
 Hess, K.-U., *see* Toplis et al., 979
 Hibberson, W., *see* Kesson et al., 526
 Hobbs, J.D., Cygan, R.T., Nagy, K.L., Schultz, P.A., and Sears, M.P.: All-atom ab initio energy minimization of the kaolinite crystal structure, 657
 Hochella, M.F. Jr., *see* Barrón et al., 1091
 Hoffman, C., Armbruster, T., and Giester, G.: Acentric structure (*P*3) of bech-ererite, Zn₇Cu(OH)₁₃[SiO(OH)₃SO₄], 1014
 Hoffman, C., *see* Nyfeler et al., 841
 Holdaway, M.J., Mukhopadhyay, B., Dyar, M.D., Guidotti, C.V., and Dutrow, B.L.: Garnet-biotite geothermometry revised: New Margules parameters and a natural specimen data set from Maine, 582
 Holdaway, M.J., *see* Mukhopadhyay et al., 165
 Holloway, J.R., *see* Smyth et al., 270
 Holten, T., Jamtveit, B., Meakin, P., Cortini, M., Blundy, J., and Austrheim, H.: Statistical characteristics and origin of oscillatory zoning in crystals, 596
 Holtz, F., *see* Dingwell et al., 434
 Horiuchi, H., Saito, A., Tachi, T., and Nagasawa, H.: Structure of synthetic Li₂(Mg, Cu)Cu₂[Si₂O₆]₂: A unique chain silicate related to pyroxene, 143
 Hoshi, T., and Tagai, T.: TEM investigations of potassium-calcium feldspar inclusions in Bøggild plagioclase, 1073
 Hovis, G.L., and Graeme-Barber, A.: Volumes of K-Na mixing for low albite-

- microcline crystalline solutions at elevated temperature: A test of regular solution thermodynamic models, 158
- Hovis, G.L.: Hydrofluoric acid solution calorimetric investigation of the effects of anorthite component on enthalpies of K-Na mixing in feldspars, 149
- Hugh-Jones, D.: Thermal expansion of $MgSiO_3$ and $FeSiO_3$ ortho- and clinopyroxenes, 689
- Hughes, J.M., Bloodaxe, E.S., Hanchar, J.M., and Foord, E.E.: Incorporation of rare earth elements in titanite: Stabilization of the $A2/a$ dimorph by creation of antiphase boundaries, 512
- Ibberson, R.M., *see* Palmer et al., 16
- Isobe, H., *see* Murakami et al., 888
- Jacobsen, S.D., *see* Smyth et al., 270
- Jäger, C., *see* Sherriff et al., 405
- Jambor, J.L., and Roberts, A.C.: New Mineral Names, 207
- Jambor, J.L., Grew, E.S., and Roberts, A.C.: New Mineral Names, 820
- Jambor, J.L., Pertsev, N.N., and Roberts, A.C.: New Mineral Names, 430
- Jambor, J.L., Pertsev, N.N., and Roberts, A.C.: New Mineral Names, 1038
- Jambor, J.L., Puziewicz, J., and Roberts, A.C.: New Mineral Names, 620
- Jambor, J.L., and Roberts, A.C.: New Mineral Names, 1261
- Jamtveit, B., Dahlgren, S., and Austrheim, H.: High-grade contact metamorphism of calcareous rocks from the Oslo Rift, Southern Norway, 1241
- Jamtveit, B., *see* Holten et al., 596
- Jenkins, D.M., *see* Hawthorne et al., 708
- Jenkins, D.M., Sherriff, B.L., Cramer, J., and Xu, Z.: Al, Si, and Mg occupancies in tetrahedrally and octahedrally coordinated sites in synthetic aluminous tremolite, 280
- Johannes, W., *see* Truckenbrodt et al., 337
- Jones, R.H., and Layne, G.D.: Minor and trace element partitioning between pyroxene and melt in rapidly cooled chondrules, 534
- Jové, C., and Hacker, B.R.: Experimental investigation of laumontite \rightarrow wairakite + H_2O : A model diagenetic reaction, 781
- Juliá, R., *see* Queralt et al., 812
- Kanzaki, M., Matsui, Y., and Matsui, M.: A new high-pressure silica phase obtained by molecular dynamics—Discussion, 1042
- Karki, B.B., Stixrude, L., Clark, S.J., Warren, M.C., Ackland, G.J., and Crain, J.: Structure and elasticity of MgO at high pressure, 51
- Karki, B.B., Stixrude, L., Clark, S.J., Warren, M.C., Ackland, G.J., and Crain, J.: Elastic properties of orthorhombic $MgSiO_3$ perovskite at lower mantle pressures, 635
- Kato, A., *see* Leake et al., 1019
- Kato, S., *see* Maekawa et al., 1125
- Kawachi, Y., *see* Li et al., 503
- Kawamoto, T., *see* Smyth et al., 270
- Kawamura, K., *see* Maekawa et al., 1125
- Kelley, S.P., *see* Bland et al., 1187
- Kesson, S., Ringwood, A.E., Hibberson, W., FitzGerald, J., and Ware, N.: Reaction between magnesiowüstite of lower mantle composition and core-forming Fe-Ni alloy at 1–40 GPa, 526
- King, H.E., *see* Jr., Smelik and King, 88
- Kisch, H.J., *see* Leake et al., 1019
- Klein, U., Sharp, T.G., and Schumacher, J.C.: Analytical electron microscopy of nano-meter-scale hornblende lamellae: Low-temperature exsolution in cummingtonite, 1079
- Kohn, S.C., Henderson, C.M.B., and Dupree, R.: Si-Al ordering in leucite group minerals and ion-exchanged analogues: An MAS NMR study, 1133
- Koster van Groos, A.F., *see* Wu et al., 69
- Koziol, A.M., *see* Mukhopadhyay et al., 165
- Krasovska, O.V., Winkler, B., Krasovskii, E.E., Yaresko, A.N., Antonov, V.N., and Langer, N.: Ab initio calculation of the pleochroism of fayalite, 672
- Krasovskii, E.E., *see* Krasovska et al., 672
- Krivovichev, V.G., *see* Leake et al., 1019
- Kroll, H., *see* Zhang et al., 849
- Kunath-Fandrei, G., *see* Sherriff et al., 405
- Kunz, M., *see* Nyfeler et al., 841
- Kunz, M., *see* Xirouchakis et al., 748
- Kutoglu, A., *see* Zhang et al., 245
- Laird, J., *see* Leake et al., 1019
- Langer, N., *see* Krasovska et al., 672
- Lanson, B., *see* Beaufort et al., 109
- Lanson, B., *see* Manceau et al., 1150
- Layne, G.D., *see* Jones and Layne, 534
- Leake, B.E., Woolley, A.R., Arps, C.E.S., Birch, W.D., Gilbert, M.C., Grice, J.D., Hawthorne, F.C., Kato, A., Kisch, H.J., Krivovichev, V.G., Linthout, K., Laird, J., Mandarino, J.A., Maresch, W.V., Nickel, E.H., Rock, N.M.S., Schumacher, J.C., Smith, D.C., Stephenson, N.C.N., Ungaretti, L., Whittaker, E.J.W., and Youzhi, G.: Nomenclature of amphiboles: Report of the Subcommittee on Amphiboles of the International Mineralogical Association, Commission on New Minerals and Mineral Names, 1019
- Lee, M.R., and Parsons, I.: Dislocation formation and albitionization in alkali feldspars from the Shap granite, 557
- Leinenweber, K., and Parise, J.: Rietveld refinement of Ca_2TiSiO_6 perovskite, 475
- Lenci, T., *see* Toplis et al., 979
- Lennie, A.R., Redfern, S.A.T., Champness, P.E., Stoddart, C.P., Schofield, P.F., and Vaughan, D.J.: Transformation of mackinawite to greigite: An in situ X-ray powder diffraction and transmission electron microscope study, 302
- Li, G., Peacock, D.R., Coombs, D.S., and Kawachi, Y.: Solid solution in the celadonite family: The new minerals ferroceladonite, $K_2Fe^{2+}Fe^{3+}Si_8O_{20}(OH)_4$, and ferroaluminoceladonite, $K_2Fe^{2+}Al_2Si_8O_{20}(OH)_4$, 503
- Libowitzky, E., *see* Nyfeler et al., 841
- Libowitzky, E., and Rossman, G.R.: An IR absorption calibration for H_2O in minerals, 1111
- Lin, C.-C., *see* Liu and Lin, 643
- Lindgreen, H., *see* Drits et al., 79
- Lindsley, D.H., *see* Xirouchakis et al., 748
- Lindsley, D.H., *see* Xirouchakis et al., 754
- Lindsley, D.H.: Acceptance of the Roebling Medal of the Mineralogical Society of America for 1996, 826
- Linthout, K., *see* Leake et al., 1019
- Linton, J.A., Fei, Y., and Navrotsky, A.: Complete Fe-Mg solid solution in lithium niobate and perovskite structures in titanates at high pressures and temperatures, 639
- Liu, L., and Lin, C.-C.: A calcite \rightarrow aragonite-type phase transition in $CdCO_3$, 643
- Luhr, J.F., *see* Peng et al., 1210
- Luth, R.W.: Experimental study of the system phlogopite-diopside from 3.5 to 17 GPa, 1198
- MacKenzie, K.J.D., and Meinhold, R.H.: MAS NMR study of pentacoordinated magnesium in grandidierite, 479
- Maekawa, H., Kato, S., Kawamura, K., and Yokokawa, T.: Cation mixing in natural $MgAl_{12}O_4$ spinel: A high temperature ^{27}Al NMR Study, 1125
- Makino, K., *see* Sato et al., 316
- Manceau, A., Drits, V.A., Silvester, E., Bartoli, C., and Lanson, B.: Structural mechanism of Co^{2+} oxidation by the phyllosilicate buserite, 1150
- Manceau, A., *see* Drits et al., 946
- Manceau, A., *see* Silvester et al., 962
- Mandarino, J.A., *see* Leake et al., 1019
- Marcelli, A., *see* Mottana et al., 497
- Maresch, W.V., *see* Leake et al., 1019
- Markl, G., and Schumacher, J.C.: Beryl stability in local hydrothermal and chemical environments in a mineralized granite, 194
- Matsui, M., *see* Kanzaki et al., 1042
- Matsui, Y., *see* Kanzaki et al., 1042
- McCammon, C., *see* Woodland et al., 923
- McDonald, A.M.: Review of *Mineralogy of Hyperalkaline Rocks*. By A.P. Khomyakov, 440
- McGee, J.J., *see* Peng et al., 1210
- McGuinn, M.D., *see* Phillips et al., 1

- Meakin, P., *see* Holten et al., 596
 Medici, L., *see* Brigatti et al., 931
 Meinhold, R.H., *see* MacKenzie and Meinhold, 479
 Meldrum, A., Wang, L.M., and Ewing, R.C.: Electron irradiation-induced phase segregation in crystalline and amorphous apatite: A TEM study, 858
 Meunier, A., *see* Beaufort et al., 109
 Miletich, R., Allan, D.R., and Angel, R.J.: The synthetic Cr²⁺ silicates BaCrSi₄O₁₀ and SrCrSi₄O₁₀: The missing links in the gillespite-type ABSi₄O₁₀ series, 697
 Mitchel, R.H.: Memorial of Henry O.A. Meyer, 1937–1995, 438
 Moore, P.B.: Review of *Franklin and Sterling Hill, New Jersey: The World's Most Magnificent Mineral Deposits*. By Pete J. Dunn, 655
 Mottana, A., Robert, J.-L., Marcelli, A., Giuli, G., Della Ventura, G., Paris, E., and Wu, Z.: Octahedral versus tetrahedral coordination of Al in synthetic micas determined by XANES, 497
 Muffler, L.J.P.: Presentation of the Distinguished Public Service Medal for 1996 to Robert I. Tilling, 833
 Mukhopadhyay, B., Holdaway, M.J., and Koziol, A.M.: A statistical model of thermodynamic mixing properties of Ca-Mg-Fe²⁺ garnets, 165
 Mukhopadhyay, B., *see* Holdaway et al., 582
 Mumin, A.H., *see* Fleet and Mumin, 182
 Murad, E.: Identification of minor amounts of anatase in kaolins by Raman spectroscopy, 203
 Murakami, T., Ohnuki, T., Isobe, H., and Sato, T.: Mobility of uranium during weathering, 888
 Nagasawa, H., *see* Horiuchi et al., 143
 Nagy, K.L., *see* Hobbs et al., 657
 Navrotsky, A., *see* Xirouchakis et al., 754
 Navrotsky, A., Putnam, R.L., Winbo, C., and Rosén, E.: Thermochemistry of double carbonates in the K₂CO₃-CaCO₃ system, 546
 Navrotsky, A., *see* Linton et al., 639
 Nesbitt, H.W., *see* Rinker et al., 900
 Nickel, E.H., *see* Leake et al., 1019
 Nyfeler, D., Hoffman, C., Armbruster, T., Kunz, M., and Libowitzky, E.: Orthorhombic Jahn-Teller distortion and Si-OH in mozartite, CaMn³⁺O[SiO₃OH]: A single-crystal X-ray, FTIR, and structure modeling study, 841
 Oglesby, J.V., *see* Stebbins et al., 1116
 Ohnuki, T., *see* Murakami et al., 888
 Olmi, F., *see* Orlandi et al., 807
 Orlandi, P., Pasero, M., Duchi, G., and Olmi, F.: Dessauite, (Sr,Pb)(Y,U)(Ti, Fe³⁺)₂₀O₃₈, a new mineral of the crichtonite group from Buca della Vena mine, Tuscany, Italy, 807
 Palmer, D.C., Dove, M.T., Ibberson, R.M., and Powell, B.M.: Structural behavior, crystal chemistry, and phase transitions in substituted leucite: High-resolution neutron powder diffraction studies, 16
 Pan, Y., *see* Fleet and Pan, 870
 Papike, J.J., Spilde, M.N., Adcock, C.T., Fowler, G.W., and Shearer, C.K.: Trace-elements fractionation by impact-induced volatilization: SIMS study of lunar HASP samples, 630
 Paris, E., *see* Mottana et al., 497
 Parise, J., *see* Leinenweber and Parise, 475
 Parise, J.B., *see* Xirouchakis et al., 748
 Parks, G.A., *see* Thompson et al., 483
 Parrinello, M., *see* Haiber et al., 913
 Parsons, I., *see* Lee and Parsons, 557
 Parsons, I., *see* Zhang et al., 849
 Pasero, M., *see* Orlandi et al., 807
 Patchen, A.D., Taylor, L.A., and Pokhilenko, N.: Ferrous freudenbergite in ilmenite megacrysts: A unique paragenesis from the Dalnaya kimberlite, Yakutia, 991
 Pautov, L.A., *see* Sherriff et al., 405
 Peacor, D.R., *see* Dong et al., 379
 Peacor, D.R., *see* Li et al., 503
 Peacor, D.R., *see* Xu et al., 1101
 Peng, G., Luhr, J.F., and McGee, J.J.: Factors controlling sulfur concentrations in volcanic apatite, 1210
 Pertsev, N.N., *see* Jambor et al., 1038
 Pertsev, N.N., *see* Jambor et al., 430
 Phillips, B.L., McGuinn, M.D., Redfern, S.A.T.: Si-Al order and the $\bar{I}\bar{1}-\bar{I}2/c$ structural phase transition in synthetic CaAl₂Si₂O₈-SrAl₂Si₂O₈ feldspar: A ²⁹Si MAS-NMR spectroscopic study, 1
 Pilati, T., Demartin, F., and Gramaccioli, C.M.: Lattice-dynamical evaluation of thermodynamic properties and atomic displacement parameters for beryl using a transferable empirical force field, 1054
 Pillinger, C.T., *see* Bland et al., 1187
 Plana, F., *see* Queralt et al., 812
 Podor, R., and Cuney, M.: Experimental study of Th-bearing LaPO₄ (780 °C, 200 MPa): Implications for monazite and actinide orthophosphate stability, 765
 Pokhilenko, N., *see* Patchen et al., 991
 Poli, S., *see* Comodi et al., 452
 Poli, S., *see* Schmidt et al., 460
 Popp, R.K., *see* Young et al., 790
 Poppi, L., *see* Alietti et al., 936
 Poppi, L., *see* Brigatti et al., 931
 Povondra, P.: Memorial of Frantisek Ceck, 1929–1995, 211
 Powell, B.M., *see* Palmer et al., 16
 Pratt, A.R., Rinker et al., 900
 Prewitt, C.T., *see* Hazen et al., 647
 Prewitt, C.T., *see* Yang et al., 467
 Prewitt, C.T., *see* Yang et al., 651
 Putnam, R.L., *see* Navrotsky et al., 546
 Putnam, R.L., *see* Xirouchakis et al., 754
 Putnis, A., *see* Harrison and Putnis, 131
 Puziewicz, J., *see* Jambor et al., 620
 Quartieri, S., *see* Galli et al., 423
 Queralt, I., Juliá, R., Plana, F., and Bischoff, J.L.: A hydrous Ca-bearing magnesium carbonate from playa lake sediments, Salines Lake, Spain, 812
 Raith, M., *see* Gessmann et al., 1225
 Raudsep, M., *see* Della Ventura et al., 291
 Raudsep, M., *see* Hawthorne et al., 708
 Redfern, A.T., *see* Dove and Redfern, 8
 Redfern, S.A.T., *see* Lennie et al., 302
 Redfern, S.A.T., *see* Phillips et al., 1
 Reed, S.J.B., *see* Zhang et al., 849
 Ringwood, A.E., *see* Kesson et al., 526
 Rinker, M.J., Nesbitt, H.W., and Pratt, A.R.: Marcasite oxidation in low-temperature acidic (pH 3.0) solutions: Mechanism and rate laws, 900
 Robert, J.-L., *see* Hawthorne et al., 708
 Robert, J.-L., *see* Mottana et al., 497
 Robert, J.L., *see* Della Ventura et al., 291
 Roberts, A.C., *see* Jambor and Roberts, 207
 Roberts, A.C., *see* Jambor et al., 1038
 Roberts, A.C., *see* Jambor et al., 430
 Roberts, A.C., *see* Jambor et al., 620
 Roberts, A.C., *see* Jambor et al., 820
 Rock, N.M.S., *see* Leake et al., 1019
 Rosén, E., *see* Navrotsky et al., 546
 Rosenauer, M., *see* Siewert and Rosenauer, 1063
 Ross, N.L.: The equation of state and high-pressure behavior of magnesite, 682
 Rossman, G.R., *see* Libowitzky and Rossman, 1111
 Rubin, A.E.: Sinoite (Si₂N₂O): Crystallization from EL chondrite impact melts, 1001
 Saito, A., *see* Horiuchi et al., 143
 Salje, E.K.H., *see* Chrosch et al., 677
 Salje, E., *see* Zhang et al., 30
 Salje, E.K.H., *see* Zhang et al., 849
 Salyn, A.L., *see* Drits et al., 79
 Sato, H., Yamaguchi, Y., and Makino, K.: Cl incorporation into successively zoned amphiboles from the Ramnes cauldron, Norway, 316
 Sato, T., *see* Murakami et al., 888
 Scaillet, B., *see* Evans and Scaillet, 625
 Schmidt, M.W., Poli, S., Comodi, P., and Zanazzi, P.F.: High-pressure behavior of kyanite: Decomposition of kyanite into stishovite and corundum, 460
 Schmidt, M.W., *see* Comodi et al., 452
 Schofield, P.F., *see* Lennie et al., 302
 Schreyer, W., *see* Wunder et al., 760
 Schultz, P.A., *see* Hobbs et al., 657
 Schumacher, J.C., *see* Klein et al., 1079

- Schumacher, J.C., *see* Leake et al., 1019
 Schumacher, J.C., *see* Markl and Schumacher, 194
 Sears, M.P., *see* Hobbs et al., 657
 Sha, L.K., and Chappell, B.W.: Multi-site order-disorder kinetics in crystalline solids: A generalized formulation, 325
 Sharp, T.G., *see* Klein et al., 1079
 Shearer, C.K., *see* Papike et al., 630
 Sherriff, B.L., *see* Jenkins et al., 280
 Sherriff, B.L., Sokolova, E.V., Cramer, J., Kunath-Fandrei, G., Jäger, C., and Pautov, L.A.: Changes in the crystal structure of tsaregorodtsevite $[N(CH_3)_4][Si_2(Si_{0.5}Al_{0.5})O_6]_2$ on heating, 405
 Siewert, R., and Rosenhauer, M.: Viscoelastic relaxation measurements in the system $SiO_2-NaAlSiO_4$ by photon correlation spectroscopy, 1063
 Silvester, E., Manceau, A., and Drits, V.A.: Structure of synthetic monoclinic Na-rich birnessite and hexagonal birnessite: II. Results from chemical studies and EXAFS spectroscopy, 962
 Silvester, E., *see* Drits et al., 946
 Silvester, E., *see* Manceau et al., 1150
 Smelik, E.A., and King, H.E., Jr.: Crystal-growth studies of natural gas clathrate hydrates using a pressurized optical cell, 88
 Smith, D.C., *see* Leake et al., 1019
 Smyth, J.R., Kawamoto, T., Jacobsen, S.D., Swope, R.J., Hervig, R.L., and Holloway, J.R.: Crystal structure of monoclinic hydrous wadsleyite $[\beta-(Mg,Fe)_2SiO_4]$, 270
 Sokolova, E.V., *see* Sherriff et al., 405
 Spiering, B., *see* Gessmann et al., 1225
 Spilde, M.N., *see* Papike et al., 630
 Stähli, K., *see* Cruciani et al., 729
 Stebbins, J.F., Oglesby, J.V., and Xu, Z.: Disorder among network-modifier cations in silicate glasses: New constraints from triple-quantum ^{17}O NMR, 1116
 Steele, I.M., *see* Benstock et al., 311
 Stephenson, N.C.N., *see* Leake et al., 1019
 Stixrude, L., *see* Karki et al., 51
 Stixrude, L., *see* Wentzcovitch and Stixrude, 663
 Stixrude, L., *see*, Karki et al., 635
 Stoddart, C.P., *see* Lennie et al., 302
 Stoltz, J., *see* Yang et al., 517
 Swope, R.J., *see* Smyth et al., 270
 Tachi, T., *see* Horiuchi et al., 143
 Tagai, T., *see* Hoshi and Tagai, 1073
 Taylor, L.A., *see* Patchen et al., 991
 Teng, H.H., and Dove, P.M.: Surface site-specific interactions of aspartate with calcite during dissolution: Implications for biomineralization, 878
 Thompson, H.A., Brown, G.E. Jr., and Parks, G.A.: XAFS spectroscopic study of uranyl coordination in solids and aqueous solution, 483
 Tilling, R.I.: Acceptance of the Distinguished Public Service Medal for 1996, 834
 Toplis, M.J., Dingwell, D.B., Hess, K.-U., and Lenci, T.: Viscosity, fragility, and configurational entropy of melts along the join $SiO_2-NaAlSiO_4$, 979
 Torrent, J., *see* Barrón et al., 1091
 Truckenbrodt, J., Ziegenbein, D., and Johannes, W.: Redox conditions in piston-cylinder apparatus: The different behavior of boron nitride and unfired pyrophyllite assemblies, 337
 Tsutsumi, S., *see* Uehara et al., 416
 Uehara, M., Yamazaki, A., and Tsutsumi, S.: Surite: Its Structure and Properties, 416
 Ungaratti, L., *see* Leake et al., 1019
 Van der Voo, R., *see* Xu et al., 1101
 Vaughan, D.J., *see* Lennie et al., 302
 Vezzalini, G., *see* Galli et al., 423
 Virgo, D., *see* Young et al., 790
 Virgo, D.: Presentation of the Mineralogical Society of America Award for 1996 to Donald B. Dingwell, 829
 Wang, L.M., *see* Meldrum et al., 858
 Ware, N., *see* Kesson et al., 526
 Warren, M.C., *see* Karki et al., 51
 Warren, M.C., *see*, Karki et al., 635
 Wedepohl, K.H.: Memorial of Kurt von Gehlen, 1927–1995, 1044
 Welch, M.D., *see* Della Ventura et al., 291
 Welch, M.D., *see* Hawthorne et al., 708
 Wentzcovitch, R.M., and Stixrude, L.: Crystal chemistry of forsterite: A first-principles study, 663
 Whittaker, E.J.W., *see* Leake et al., 1019
 Winbo, C., *see* Navrotsky et al., 546
 Winkler, B., *see* Krasovska et al., 672
 Woodland, A.B., McCammon, C., and Angel, R.J.: Intersite partitioning of Mg and Fe in Ca-free high-pressure $C2/c$ clinopyroxene, 923
 Woolley, A.R., *see* Leake et al., 1019
 Wu, T., Bassett, W.A., Huang, W., Guggenheim, S., and Koster van Groos, A.F.: Montmorillonite under high H_2O pressures: Stability of hydrate phases, rehydration hysteresis, and the effect of interlayer cations, 69
 Wu, Z., *see* Mottana et al., 497
 Wuensch, B.J., *see* Haile and Wuensch, 1141
 Wunder, B., Baronnet, A., and Schreyer, W.: Ab-initio synthesis and TEM confirmation of antigorite in the system $MgO-SiO_2-H_2O$, 760
 Xirouchakis, D., Fritsch, S., Putnam, R.L., Navrotsky, A., and Lindsley, D.H.: Thermochemistry and the enthalpy of formation of synthetic end-member $(CaTiSiO_5)$ titanite, 754
 Xirouchakis, D., Kunz, M., Parise, J.B., and Lindsley, D.H.: Synthesis methods and unit-cell volume of end-member titanite $(CaTiOSiO_4)$, 748
 Xu, H., and Heaney, P.J.: Memory effects of domain structures during displacive phase transitions: A high-temperature TEM study of quartz and anorthite, 99
 Xu, H., Buseck, P.R., and Carpenter, M.A.: Twinning in synthetic anorthite: A transmission electron microscopy investigation, 125
 Xu, W., Peacor, D.R., Dollase, W.A., Van der Voo, R., and Beaubouef, R.: Transformation of titanomagnetite to titanomaghemite: A slow, two-step, oxidation-ordering process in MORB, 1101
 Xu, Z., *see* Jenkins et al., 280
 Xu, Z., *see* Stebbins et al., 1116
 Yamaguchi, Y., *see* Sato et al., 316
 Yamazaki, A., *see* Uehara et al., 416
 Yang, H., *see* Hazen et al., 647
 Yang, H., Downs, R.T., Finger, L.W., Hazen, R.M., and Prewitt, C.T.: Compressibility and crystal structure of kyanite, Al_2SiO_5 , at high pressure, 467
 Yang, H., Prewitt, C.T., and Frost, D.J.: Crystal structure of the dense hydrous magnesium silicate, phase D, 651
 Yang, P., Stoltz, J., Armbruster, T., and Gunter, M.E.: Na, K, Rb, and Cs exchange in heulandite single crystals: Diffusion kinetics, 517
 Yaresko, A.N., *see* Krasovska et al., 672
 Yokokawa, T., *see* Maekawa et al., 1125
 Young, E.D., Virgo, D., and Popp, R.K.: Eliminating closure in mineral formulae with specific application to amphiboles, 790
 Youzhi, G., *see* Leake et al., 1019
 Zanazzi, P.F., *see* Comodi and Zanazzi, 61
 Zanazzi, P.F., *see* Comodi et al., 452
 Zanazzi, P.F., *see* Schmidt et al., 460
 Zhang, J., *see* Herzberg and Zhang, 354
 Zhang, L., Ahsbahs, H., Hafner, S.S., and Kutoglu, A.: Single-crystal compression and crystal structure of clinopyroxene up to 10 GPa, 245
 Zhang, M., Salje, E., and Bismayer, U.: Structural phase transition near 825 K in titanite: Evidence from infrared spectroscopic observations, 30
 Zhang, M., Salje, E.K.H., Carpenter, M.A., Parsons, I., Kroll, H., Reed, S.J.B., and Graeme-Barber, A.: Exsolution and Al-Si disorder in alkali feldspars: Their analysis by infrared spectroscopy, 849
 Zheng, H., and Bailey, S.W.: Refinement of the cookeite “ r ” structure, 1007
 Ziegenbein, D., *see* Truckenbrodt et al., 337

