# Catherine A Mccammon

List of Publications by Year
in descending order



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|---|---|---|---|
| 258 papers | 11,758 citations | 26630<br>56 h-index | 38395<br>95 g-index |
| 267 all docs | 267 docs citations | 267 times ranked | 6596 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The Redox State of Earth's Mantle. Annual Review of Earth and Planetary Sciences, 2008, 36, 389-420. | 11.0 | 856 |
| 2 | Experimental evidence for the existence of iron-rich metal in the Earth's lower mantle. Nature, 2004, 428, 409-412. | 27.8 | 500 |
| 3 | The oxidation state of the mantle and the extraction of carbon from Earthâ€™s interior. Nature, 2013, 493, 84-88. | 27.8 | 371 |
| 4 | Perovskite as a possible sink for ferric iron in the lower mantle. Nature, 1997, 387, 694-696. | 27.8 | 300 |
| 5 | <i>MossA</i>: a program for analyzing energy-domain MÃ¶ssbauer spectra from conventional and synchrotron sources. Journal of Applied Crystallography, 2012, 45, 329-331. | 4.5 | 219 |
| 6 | Systematic iron isotope variations in mantle rocks and minerals: The effects of partial melting and oxygen fugacity. Earth and Planetary Science Letters, 2005, 235, 435-452. | 4.4 | 206 |
| 7 | Iron Partitioning and Density Changes of Pyrolite in Earthâ€™s Lower Mantle. Science, 2010, 327, 193-195. | 12.6 | 197 |
| 8 | Iron Isotope Fractionation and the Oxygen Fugacity of the Mantle. Science, 2004, 304, 1656-1659. | 12.6 | 173 |
| 9 | The<sup>57</sup>Fe Synchrotron MÃ¶ssbauer Source at the ESRF. Journal of Synchrotron Radiation, 2012, 19, 559-569. | 2.4 | 171 |
| 10 | Structural complexity of simple Fe2O3 at high pressures and temperatures. Nature Communications, 2016, 7, 10661. | 12.8 | 161 |
| 11 | GEOCHEMISTRY: The Paradox of Mantle Redox. Science, 2005, 308, 807-808. | 12.6 | 156 |
| 12 | Fe-N system at high pressure reveals a compound featuring polymeric nitrogen chains. Nature Communications, 2018, 9, 2756. | 12.8 | 153 |
| 13 | The effect of water activity on the oxidation and structural state of Fe in a ferro-basaltic melt. Geochimica Et Cosmochimica Acta, 2005, 69, 5071-5085. | 3.9 | 151 |
| 14 | Stable intermediate-spin ferrous iron in lower-mantle perovskite. Nature Geoscience, 2008, 1, 684-687. | 12.9 | 150 |
| 15 | Structure and elasticity of single-crystal (Mg,Fe)O and a new method of generating shear waves for gigahertz ultrasonic interferometry. Journal of Geophysical Research, 2002, 107, ECV 4-1. | 3.3 | 149 |
| 16 | Oxygen fugacity, temperature reproducibility, and H2O contents of nominally anhydrous piston-cylinder experiments using graphite capsules. American Mineralogist, 2008, 93, 1838-1844. | 1.9 | 148 |
| 17 | A redox profile of the Slave mantle and oxygen fugacity control in the cratonic mantle. Contributions To Mineralogy and Petrology, 2004, 148, 55-68. | 3.1 | 146 |
| 18 | MÃ¶ssbauer Spectroscopy of Minerals. AGU Reference Shelf, 0, , 332-347. | 0.6 | 142 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Intermediate-spin ferrous iron in lowermost mantle post-perovskite and perovskite. Nature Geoscience, 2008, 1, 688-691. | 12.9 | 131 |
| 20 | The Effect of Alumina on the Electrical Conductivity of Silicate Perovskite. , 1998, 282, 922-924. | | 126 |
| 21 | Oxidation of the Kaapvaal lithospheric mantle driven by metasomatism. Contributions To Mineralogy and Petrology, 2009, 157, 491-504. | 3.1 | 122 |
| 22 | Ferric Iron Content of Mineral Inclusions in Diamonds from São Luiz: A View into the Lower Mantle. Science, 1997, 278, 434-436. | 12.6 | 113 |
| 23 | High Poisson's ratio of Earth's inner core explained by carbon alloying. Nature Geoscience, 2015, 8, 220-223. | 12.9 | 113 |
| 24 | Structural systematics of hydrous ringwoodite and water in Earthâ€™s interior. American Mineralogist, 2003, 88, 1402-1407. | 1.9 | 110 |
| 25 | Fractionation of oxygen and iron isotopes by partial melting processes: Implications for the interpretation of stable isotope signatures in mafic rocks. Earth and Planetary Science Letters, 2009, 283, 156-166. | 4.4 | 110 |
| 26 | Electrical conductivity of orthopyroxene and plagioclase in the lower crust. Contributions To Mineralogy and Petrology, 2012, 163, 33-48. | 3.1 | 106 |
| 27 | 9. Insights into Phase Transformations from MÃ¶ssbauer Spectroscopy. , 2000, , 241-264. | | 105 |
| 28 | Lattice thermal conductivity of lower mantle minerals and heat flux from Earthâ€™s core. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17901-17904. | 7.1 | 103 |
| 29 | Hydrogen solubility and speciation in natural, gem-quality chromian diopside. American Mineralogist, 2004, 89, 941-949. | 1.9 | 101 |
| 30 | Deep magma ocean formation set the oxidation state of Earthâ€™s mantle. Science, 2019, 365, 903-906. | 12.6 | 99 |
| 31 | Sulfur solubility in reduced mafic silicate melts: Implications for the speciation and distribution of sulfur on Mercury. Earth and Planetary Science Letters, 2016, 448, 102-114. | 4.4 | 98 |
| 32 | The oxygen fugacity at which graphite or diamond forms from carbonate-bearing melts in eclogitic rocks. Contributions To Mineralogy and Petrology, 2015, 169, 1. | 3.1 | 96 |
| 33 | Tibetan chromitites: Excavating the slab graveyard. Geology, 2015, 43, 179-182. | 4.4 | 94 |
| 34 | Mantle plumes are oxidised. Earth and Planetary Science Letters, 2019, 527, 115798. | 4.4 | 85 |
| 35 | Stability of iron-bearing carbonates in the deep Earthâ€™s interior. Nature Communications, 2017, 8, 15960. | 12.8 | 84 |
| 36 | Effect of water on the electrical conductivity of lower crustal clinopyroxene. Journal of Geophysical Research, 2011, 116, . | 3.3 | 82 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Precise Moessbauer milliprobe determination of ferric iron in rock-forming minerals and limitations of electron microprobe analysis. American Mineralogist, 1999, 84, 78-85. | 1.9 | 81 |
| 38 | Pressure dependence of H solubility in magnesiowÃ¼stite up to 25 GPa: Implications for the storage of water in the Earth's lower mantle. Geophysical Research Letters, 2002, 29, 89-1-89-4. | 4.0 | 79 |
| 39 | X-ray diffraction and MÃ¶ssbauer spectroscopy study of fcc iron hydride FeH at high pressures and implications for the composition of the Earth's core. Earth and Planetary Science Letters, 2011, 307, 409-414. | 4.4 | 78 |
| 40 | Pitfalls in geothermobarometry of eclogites: Fe 3+ and changes in the mineral chemistry of omphacite at ultrahigh pressures. Contributions To Mineralogy and Petrology, 2004, 147, 305-318. | 3.1 | 77 |
| 41 | Melting processes and mantle sources of lavas on Mercury. Earth and Planetary Science Letters, 2016, 439, 117-128. | 4.4 | 77 |
| 42 | GEOPHYSICS: Deep Diamond Mysteries. Science, 2001, 293, 813-814. | 12.6 | 75 |
| 43 | High-pressure behavior of iron carbide (Fe<sub>7</sub>C<sub>3</sub>) at inner core conditions. Journal of Geophysical Research, 2011, 116, . | 3.3 | 75 |
| 44 | Magnetic exchange bias of more than 1 Tesla in a natural mineral intergrowth. Nature Nanotechnology, 2007, 2, 631-634. | 31.5 | 74 |
| 45 | Rate of hydrogenâ€"iron redox exchange in silicate melts and glasses. Geochimica Et Cosmochimica Acta, 2003, 67, 2427-2441. | 3.9 | 73 |
| 46 | Electrical conductivities of pyrope-almandine garnets up to 19 GPa and 1700 ÂC. American Mineralogist, 2006, 91, 1371-1377. | 1.9 | 73 |
| 47 | Oxygen vacancy ordering in CaTiO<sub>3</sub>â€"CaFeO<sub>2.5</sub> perovskites: From isolated defects to infinite sheets. Phase Transitions, 1999, 69, 133-146. | 1.3 | 71 |
| 48 | The compositional variability of eudialyte-group minerals. Mineralogical Magazine, 2011, 75, 87-115. | 1.4 | 69 |
| 49 | A MÃ¶ssbauer milliprobe: Practical considerations. Hyperfine Interactions, 1994, 92, 1235-1239. | 0.5 | 68 |
| 50 | The stability of magnesite in the transition zone and the lower mantle as function of oxygen fugacity. Geophysical Research Letters, 2011, 38, n/a-n/a. | 4.0 | 67 |
| 51 | A biogeochemicalâ€"hydrological framework for the role of redox-active compounds in aquatic systems. Nature Geoscience, 2021, 14, 264-272. | 12.9 | 67 |
| 52 | The structure of the metallic high-pressure Fe3O4polymorph: experimental and theoretical study. Journal of Physics Condensed Matter, 2003, 15, 7697-7706. | 1.8 | 65 |
| 53 | Arrested kinetic Li isotope fractionation at the margin of the IlÃmaussaq complex, South Greenland: Evidence for open-system processes during final cooling of peralkaline igneous rocks. Chemical Geology, 2007, 246, 207-230. | 3.3 | 62 |
| 54 | Portable laser-heating system for diamond anvil cells. Journal of Synchrotron Radiation, 2009, 16, 737-741. | 2.4 | 61 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Changes in tourmaline composition during magmatic and hydrothermal processes leading to tin-ore deposition: The Cornubian Batholith, SW England. Ore Geology Reviews, 2017, 83, 215-234. | 2.7 | 61 |
| 56 | Effect of iron oxidation state on the electrical conductivity of the Earthâ€™s lower mantle. Nature Communications, 2013, 4, 1427. | 12.8 | 60 |
| 57 | Electronic spin states of ferric and ferrous iron in the lower-mantle silicate perovskite. American Mineralogist, 2012, 97, 592-597. | 1.9 | 58 |
| 58 | Importance of Correlation Effects in hcp Iron Revealed by a Pressure-Induced Electronic Topological Transition. Physical Review Letters, 2013, 110, 117206. | 7.8 | 58 |
| 59 | High-pressure spectroscopic study of siderite (FeCO<sub>3</sub>) with a focus on spin crossover. American Mineralogist, 2015, 100, 2670-2681. | 1.9 | 57 |
| 60 | Evidence for H2O-bearing fluids in the lower mantle from diamond inclusion. Lithos, 2016, 265, 237-243. | 1.4 | 57 |
| 61 | Pressure-Induced Magnetization in FeO: Evidence from Elasticity and MÃ¶ssbauer Spectroscopy. Physical Review Letters, 2004, 93, 215502. | 7.8 | 55 |
| 62 | Charge-ordering transition in iron oxide Fe4O5 involving competing dimer and trimer formation. Nature Chemistry, 2016, 8, 501-508. | 13.6 | 54 |
| 63 | Shock-induced metallic iron nanoparticles in olivine-rich Martian meteorites. Earth and Planetary Science Letters, 2007, 262, 37-49. | 4.4 | 53 |
| 64 | Effect of Pressure on the Composition of the Lower Mantle End Member FexO. Science, 1993, 259, 66-68. | 12.6 | 51 |
| 65 | Low ferric iron content of (Mg,Fe)O at high pressures and temperatures. Geophysical Research Letters, 1998, 25, 1589-1592. | 4.0 | 51 |
| 66 | Effect of hydration on the single-crystal elasticity of Fe-bearing wadsleyite to 12 GPa. American Mineralogist, 2011, 96, 1606-1612. | 1.9 | 51 |
| 67 | Structure and density of molten fayalite at high pressure. Geochimica Et Cosmochimica Acta, 2013, 118, 118-128. | 3.9 | 51 |
| 68 | Portable double-sided laser-heating system for MÃ¶ssbauer spectroscopy and X-ray diffraction experiments at synchrotron facilities with diamond anvil cells. Review of Scientific Instruments, 2012, 83, 124501. | 1.3 | 50 |
| 69 | Discovery of Fe7O9: a new iron oxide with a complex monoclinic structure. Scientific Reports, 2016, 6, 32852. | 3.3 | 50 |
| 70 | Fe3+-rich augite and high electrical conductivity in the deep lithosphere. Geology, 2012, 40, 131-134. | 4.4 | 49 |
| 71 | Multidisciplinary Constraints on the Abundance of Diamond and Eclogite in the Cratonic Lithosphere. Geochemistry, Geophysics, Geosystems, 2018, 19, 2062-2086. | 2.5 | 49 |
| 72 | Oxidized iron in garnets from the mantle transition zone. Nature Geoscience, 2018, 11, 144-147. | 12.9 | 48 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Effects of the Iron Content and Redox State on the Structure of Sodium Borosilicate Glasses: A <scp>R</scp>aman, <scp>M</scp>Ã¶ssbauer and Boron Kâ€Edge <scp>XANES</scp> Spectroscopy Study. Journal of the American Ceramic Society, 2012, 95, 962-971. | 3.8 | 47 |
| 74 | Solubility of hydrogen and ferric iron in rutile and TiO2(II): Implications for phase assemblages during ultrahigh-pressure metamorphism and for the stability of silica polymorphs in the lower mantle. Geophysical Research Letters, 2004, 31, . | 4.0 | 45 |
| 75 | Cooling history of lunar Mg-suite gabbronorite 76255, troctolite 76535 and Stillwater pyroxenite SC-936: The record in exsolution and ordering in pyroxenes. Geochimica Et Cosmochimica Acta, 2006, 70, 6068-6078. | 3.9 | 45 |
| 76 | Acoustic velocities of pure and ironâ€bearing magnesium silicate perovskite measured to 25 GPa and 1200 K. Geophysical Research Letters, 2012, 39, . | 4.0 | 45 |
| 77 | Coupled Interactions between Volatile Activity and Fe Oxidation State during Arc Crustal Processes. Journal of Petrology, 2015, 56, 795-814. | 2.8 | 45 |
| 78 | Evidence for ionic conductivity in lower mantle (Mg,Fe)(Si,Al)O3perovskite. Journal of Geophysical Research, 2002, 107, ECV 11-1-ECV 11-7. | 3.3 | 44 |
| 79 | Effect of non-hydrostatic conditions on the elastic behaviour of magnetite: an in situ single-crystal X-ray diffraction study. Physics and Chemistry of Minerals, 2007, 34, 627-635. | 0.8 | 44 |
| 80 | Short-range order and Fe clustering in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Mg</mml:mtext></mml:mrow><mml:mrow><mml:mn>1</mml:m high pressure. Physical Review B, 2009, 80, . | 3.2 | 41 |
| 81 | Low-spin Fe2+ in silicate perovskite and a possible layer at the base of the lower mantle. Physics of the Earth and Planetary Interiors, 2010, 180, 215-221. | 1.9 | 44 |
| 82 | Crystal chemistry of the tsumcorite-group minerals. New data on ferrilotharmeyerite, tsumcorite, thometzekite, mounanaite, helmutwinklerite, and a redefinition of gartrellite. European Journal of Mineralogy, 1998, 10, 179-206. | 1.3 | 44 |
| 83 | Highâ€Pressure NiAsâ€Type Modification of FeN. Angewandte Chemie - International Edition, 2017, 56, 7302-7306. | 13.8 | 43 |
| 84 | Effect of redox on Feâ€"Mgâ€"Mn exchange between olivine and melt and an oxybarometer for basalts. Contributions To Mineralogy and Petrology, 2020, 175, 1. | 3.1 | 42 |
| 85 | Iron-rich perovskite in the Earth's lower mantle. Earth and Planetary Science Letters, 2011, 309, 179-184. | 4.4 | 41 |
| 86 | Structurally hidden magnetic transitions in Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>C at high pressures. Physical Review B, 2012, 85, . | 3.2 | 41 |
| 87 | Lower mantle electrical conductivity based on measurements of Al,â€‰Fe-bearing perovskite under lower mantle conditions. Earth and Planetary Science Letters, 2014, 393, 165-172. | 4.4 | 41 |
| 88 | Oxidation potential in the Earth's lower mantle as recorded by ferropericlase inclusions in diamond. Earth and Planetary Science Letters, 2015, 417, 49-56. | 4.4 | 40 |
| 89 | Seismically invisible water in Earth's transition zone?. Earth and Planetary Science Letters, 2018, 498, 9-16. | 4.4 | 40 |
| 90 | Magnesium silicate perovskite and effect of iron oxidation state on its bulk sound velocity at the conditions of the lower mantle. Earth and Planetary Science Letters, 2014, 393, 182-186. | 4.4 | 39 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Structural properties of ferromagnesian cordierites. American Mineralogist, 2001, 86, 66-79. | 1.9 | 38 |
| 92 | Comparison of two electron probe microanalysis techniques to determine ferric iron in synthetic wÃ¼stite samples. European Journal of Mineralogy, 2000, 12, 63-71. | 1.3 | 37 |
| 93 | MÃ¶ssbauer spectroscopic determination of Fe3+/Fe2+ in synthetic basaltic glass: a test of empirical fO2 equations under superliquidus and subliquidus conditions. Contributions To Mineralogy and Petrology, 2004, 147, 565-580. | 3.1 | 37 |
| 94 | A MÃ¶ssbauer study of oxygen vacancy and cation distribution in 6H-BaTi1â^'xFexO3â^'x/2. Journal of Solid State Chemistry, 2004, 177, 262-267. | 2.9 | 37 |
| 95 | The magnesiowï¿½stite: iron equilibrium and its implications for the activity-composition relations of (Mg,Fe)2SiO4 olivine solid solutions. Contributions To Mineralogy and Petrology, 2003, 146, 308-325. | 3.1 | 36 |
| 96 | Metamorphic Na- and OH-rich disordered dravite with tetrahedral boron, associated with omphacite, from Syros, Greece: chemistry and structure. European Journal of Mineralogy, 2004, 16, 817-823. | 1.3 | 35 |
| 97 | Local Oxygen-Vacancy Ordering and Twinned Octahedral Tilting Pattern in the Bi<sub>0.81</sub>Pb<sub>0.19</sub>FeO<sub>2.905</sub> Cubic Perovskite. Chemistry of Materials, 2012, 24, 1378-1385. | 6.7 | 35 |
| 98 | Magnetism in cold subducting slabs at mantle transition zone depths. Nature, 2019, 570, 102-106. | 27.8 | 33 |
| 99 | Ferric/ferrous iron ratios in sodic amphiboles: Mï¿½ssbauer analysis, stoichiometry-based model calculations and the high-resolution microanalytical flank method. Contributions To Mineralogy and Petrology, 2000, 140, 135-147. | 3.1 | 32 |
| 100 | The effect of silica on ferric/ferrous ratio in silicate melts: An experimental study using Mossbauer spectroscopy. American Mineralogist, 2010, 95, 545-555. | 1.9 | 31 |
| 101 | Effect of high pressure on the crystal structure and electronic properties of magnetite below 25 GPa. American Mineralogist, 2012, 97, 128-133. | 1.9 | 31 |
| 102 | Stability of Fe,Al-bearing bridgmanite in the lower mantle and synthesis of pure Fe-bridgmanite. Science Advances, 2016, 2, e1600427. | 10.3 | 31 |
| 103 | The transition from short-range to long-range ordering of oxygen vacancies in CaFexTi1-xO3-x/2 perovskites. Physical Chemistry Chemical Physics, 2000, 2, 3933-3941. | 2.8 | 30 |
| 104 | Oxidation state of the lower mantle: In situ observations of the iron electronic configuration in bridgmanite at extreme conditions. Earth and Planetary Science Letters, 2015, 423, 78-86. | 4.4 | 30 |
| 105 | Petrogenesis of the Rifted Southern Victoria Land Lithospheric Mantle, Antarctica, Inferred from Petrography, Geochemistry, Thermobarometry and Oxybarometry of Peridotite and Pyroxenite Xenoliths from the Mount Morning Eruptive Centre. Journal of Petrology, 2015, 56, 193-226. | 2.8 | 30 |
| 106 | Spin transition of ferric iron in the NAL phase: Implications for the seismic heterogeneities of subducted slabs in the lower mantle. Earth and Planetary Science Letters, 2016, 434, 91-100. | 4.4 | 30 |
| 107 | Hydrogenation of C60 at 2GPa pressure and high temperature. Chemical Physics, 2006, 325, 445-451. | 1.9 | 29 |
| 108 | Iron oxidation state of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>FeTiO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:m high pressure. Physical Review B, 2009, 79, . | 3.2 | 29 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | The behaviour of ferric iron during partial melting of peridotite. Geochimica Et Cosmochimica Acta, 2018, 239, 235-254. | 3.9 | 29 |
| 110 | Microscopic properties to macroscopic behaviour: The influence of iron electronic state. Journal of Mineralogical and Petrological Sciences, 2006, 101, 130-144. | 0.9 | 28 |
| 111 | XANES study of the oxidation state of Cr in lower mantle phases: Periclase and magnesium silicate perovskite. American Mineralogist, 2007, 92, 966-972. | 1.9 | 28 |
| 112 | Moldavites from the Cheb Basin, Czech Republic. Geochimica Et Cosmochimica Acta, 2009, 73, 1145-1179. | 3.9 | 27 |
| 113 | High-pressure experimental and computational XANES studies of(Mg,Fe)(Si,Al)O3perovskite and (Mg,Fe)O ferropericlase as in the Earthâ€™s lower mantle. Physical Review B, 2009, 79, . | 3.2 | 27 |
| 114 | Tetrahedral occupancy of ferric iron in (Mg,Fe)O: Implications for point defects in the Earth's lower mantle. Physics of the Earth and Planetary Interiors, 2010, 180, 179-188. | 1.9 | 27 |
| 115 | Iron spin state in silicate perovskite at conditions of the Earth's deep interior. High Pressure Research, 2013, 33, 663-672. | 1.2 | 27 |
| 116 | Abnormal Elasticity of Feâ€Bearing Bridgmanite in the Earth's Lower Mantle. Geophysical Research Letters, 2018, 45, 4725-4732. | 4.0 | 27 |
| 117 | Structure, ordering and cation interactions in Ca-free P2 1 /c clinopyroxenes. Physics and Chemistry of Minerals, 1998, 25, 249-258. | 0.8 | 26 |
| 118 | Ferric iron content of ferropericlase as a function of composition, oxygen fugacity, temperature and pressure: Implications for redox conditions during diamond formation in the lower mantle. Earth and Planetary Science Letters, 2013, 365, 7-16. | 4.4 | 26 |
| 119 | Tidal charts of the Indian Ocean north of 15Â°S. Journal of Geophysical Research, 1977, 82, 5993-5998. | 3.3 | 25 |
| 120 | Comparative compressibility of hydrous wadsleyite and ringwoodite: Effect of H<sub>2</sub>O and implications for detecting water in the transition zone. Journal of Geophysical Research: Solid Earth, 2015, 120, 8259-8280. | 3.4 | 25 |
| 121 | Redox-induced lower mantle density contrast and effect on mantle structure and primitive oxygen. Nature Geoscience, 2016, 9, 723-727. | 12.9 | 25 |
| 122 | Diamond destruction and growth during mantle metasomatism: An experimental study of diamond resorption features. Earth and Planetary Science Letters, 2019, 506, 493-506. | 4.4 | 25 |
| 123 | Pressure-induced phase transition in Mg0.8Fe0.2O ferropericlase. Physics and Chemistry of Minerals, 2006, 33, 35-44. | 0.8 | 24 |
| 124 | Microstructural investigations on strongly stained olivines of the chassignite NWA 2737 and implications for its shock history. Earth and Planetary Science Letters, 2010, 300, 255-263. | 4.4 | 24 |
| 125 | Ferric iron and water incorporation in wadsleyite under hydrous and oxidizing conditions: A XANES, Mossbauer, and SIMS study. American Mineralogist, 2012, 97, 1483-1493. | 1.9 | 24 |
| 126 | Portable double-sided pulsed laser heating system for time-resolved geoscience and materials science applications. Review of Scientific Instruments, 2017, 88, 084501. | 1.3 | 24 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Crystal chemistry of iron-containing perovskites. Phase Transitions, 1996, 58, 1-26. | 1.3 | 23 |
| 128 | High-Pressure Behavior of Perovskite:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>FeTiO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>Dissociation into<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mo | | |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Orderâ€“disorderâ€“reorder process in thermally treated dolomite samples: a combined powder and single-crystal X-ray diffraction study. Physics and Chemistry of Minerals, 2012, 39, 319-328. | 0.8 | 19 |
| 146 | Electronic spin state of Fe,Al-containing MgSiO3 perovskite at lower mantle conditions. Lithos, 2014, 189, 167-172. | 1.4 | 19 |
| 147 | Water, iron, redox environment: effects on the wadsleyiteâ€“ringwoodite phase transition. Contributions To Mineralogy and Petrology, 2015, 170, 1. | 3.1 | 19 |
| 148 | Intersite partitioning of Mg and Fe in Ca-free high-pressure C2/c clinopyroxene. American Mineralogist, 1997, 82, 923-930. | 1.9 | 18 |
| 149 | Displacive phase transitions and spontaneous strains in oxygen deficient CaFexTi1-xO3-x/2perovskites (0lexle0.40). Journal of Physics Condensed Matter, 2000, 12, 3661-3670. | 1.8 | 18 |
| 150 | POLYAKOVITE-(Ce), (REE,Ca)4 (Mg,Fe2+) (Cr3+,Fe3+)2 (Ti,Nb)2 Si4 O22, A NEW METAMICT MINERAL SPECIES FROM THE ILMEN MOUNTAINS, SOUTHERN URALS, RUSSIA: MINERAL DESCRIPTION AND CRYSTAL CHEMISTRY. Canadian Mineralogist, 2001, 39, 1095-1104. | 1.0 | 18 |
| 151 | Incorporation of Fe and Al in MgSiO3 perovskite: An investigation by 27Al and 29Si NMR spectroscopy. American Mineralogist, 2012, 97, 1955-1964. | 1.9 | 18 |
| 152 | Single crystal synthesis of Î´-(Al,Fe)OOH. American Mineralogist, 2017, 102, 1953-1956. | 1.9 | 18 |
| 153 | Saline aqueous fluid circulation in mantle wedge inferred from olivine wetting properties. Nature Communications, 2019, 10, 5557. | 12.8 | 18 |
| 154 | Effects of Temperature and Pressure on the MÃ¶ssbauer Spectra of Models for the [4Fe-4S]2+ Clusters of Ironâˆ’Sulfur Proteins and the Structure of [PPh4]2[Fe4S4(SCH2CO2C2H5)4]. Inorganic Chemistry, 1999, 38, 4256-4261. | 4.0 | 17 |
| 155 | FeO and MnO high-pressure phase diagrams: relations between structural and magnetic properties. Phase Transitions, 2007, 80, 1151-1163. | 1.3 | 17 |
| 156 | Synchrotron MÃ¶ssbauer Source technique for in situ measurement of iron-bearing inclusions in natural diamonds. Lithos, 2016, 265, 328-333. | 1.4 | 17 |
| 157 | Comparative study of the influence of pulsed and continuous wave laser heating on the mobilization of carbon and its chemical reaction with iron in a diamond anvil cell. Journal of Applied Physics, 2019, 125, . | 2.5 | 17 |
| 158 | FERRIAN WINCHITE FROM THE ILMEN MOUNTAINS, SOUTHERN URALS, RUSSIA, AND SOME PROBLEMS WITH THE CURRENT SCHEME FOR AMPHIBOLE NOMENCLATURE. Canadian Mineralogist, 2001, 39, 171-177. | 1.0 | 16 |
| 159 | A simultaneous deformation and diffusion experiment: Quantifying the role of deformation in enhancing metamorphic reactions. Earth and Planetary Science Letters, 2009, 278, 386-394. | 4.4 | 16 |
| 160 | Mott transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">CaFe</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math>at around 50 GPa. Physical Review B, 2013, 88, . | 3.2 | 16 |
| 161 | Crystal chemistry of Fe3+-bearing (Mg, Fe)SiO3 perovskite: a single-crystal X-ray diffraction study. Physics and Chemistry of Minerals, 2014, 41, 409-417. | 0.8 | 16 |
| 162 | Iron spin state in silicate glass at high pressure: Implications for melts in the EarthÊ¼s lower mantle. Earth and Planetary Science Letters, 2014, 385, 130-136. | 4.4 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Fe3+ partitioning systematics between orthopyroxene and garnet in mantle peridotite xenoliths and implications for thermobarometry of oxidized and reduced mantle rocks. Contributions To Mineralogy and Petrology, 2015, 169, 1. | 3.1 | 16 |
| 164 | The composition and redox state of bridgmanite in the lower mantle as a function of oxygen fugacity. Geochimica Et Cosmochimica Acta, 2021, 303, 110-136. | 3.9 | 16 |
| 165 | Chemical Stability of FeOOH at High Pressure and Temperature, and Oxygen Recycling in Early Earth History**. European Journal of Inorganic Chemistry, 2021, 2021, 3048-3053. | 2.0 | 16 |
| 166 | The magnetic structure of bernalite, Fe(OH)3. Journal of Magnetism and Magnetic Materials, 1996, 152, 33-39. | 2.3 | 15 |
| 167 | Ironâ€“magnesium alloying at high pressures and temperatures. Journal of Physics Condensed Matter, 2004, 16, S1143-S1150. | 1.8 | 15 |
| 168 | Effect of Lone-Electron-Pair Cations on the Orientation of Crystallographic Shear Planes in Anion-Deficient Perovskites. Inorganic Chemistry, 2013, 52, 10009-10020. | 4.0 | 15 |
| 169 | Stability and Solubility of the FeAlO<sub>3</sub> Component in Bridgmanite at Uppermost Lower Mantle Conditions. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018447. | 3.4 | 15 |
| 170 | Serpentinization-Driven H2 Production From Continental Break-Up to Mid-Ocean Ridge Spreading: Unexpected High Rates at the West Iberia Margin. Frontiers in Earth Science, 2021, 9, . | 1.8 | 15 |
| 171 | A MÃ¶ssbauer effect investigation of the magnetic behaviour of (Fe, Co)S1 + x solid solutions. Journal of Physics and Chemistry of Solids, 1982, 43, 431-437. | 4.0 | 14 |
| 172 | Description and crystal structure of a new mineral â€“ plimerite, ZnFe3+4(PO4)3(OH)5 â€“ the Zn-analogue of rockbridgeite and frondelite, from Broken Hill, New South Wales, Australia. Mineralogical Magazine, 2009, 73, 131-148. | 1.4 | 14 |
| 173 | Angular, spectral, and temporal properties of nuclear radiation from a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>57</mml:mn></mml:msup></mml:math>Fe synchrotron MÃ¶ssbauer source. Physical Review A, 2012, 86, . | 2.5 | 14 |
| 174 | Fe-rich and As-bearing vesuvianite and wiluite from Kozlov, Czech Republic. American Mineralogist, 2013, 98, 1330-1337. | 1.9 | 14 |
| 175 | Quantification of water in majoritic garnet. American Mineralogist, 2015, 100, 1084-1092. | 1.9 | 14 |
| 176 | Highâ€Pressure Phase Transition of Iron: A Combined Magnetic Remanence and MÃ¶ssbauer Study. Geochemistry, Geophysics, Geosystems, 2017, 18, 4646-4654. | 2.5 | 14 |
| 177 | Bridgmanite is nearly dry at the top of the lower mantle. Earth and Planetary Science Letters, 2021, 570, 117088. | 4.4 | 14 |
| 178 | Effect of MgO, Y2O3, and Fe2O3 on silicothermal synthesis and sintering of X-sialon. An XRD, multinuclear MAS NMR and 57Fe MÃ¶ssbauer study. Journal of the European Ceramic Society, 2000, 20, 1975-1985. | 5.7 | 13 |
| 179 | Cation partitioning in an unusual strontian potassicrichterite from Siberia: Rietveld structure refinement and MÃ¶ssbauer spectroscopy. Mineralogical Magazine, 2000, 64, 19-23. | 1.4 | 13 |
| 180 | Magnetic properties of synthetic<i>P</i>2<sub>1</sub>/<i>c</i>(Mg-Fe)SiO<sub>3</sub>clinopyroxenes as observed from their low-temperature MÃ¶ssbauer spectra and from SQUID magnetization measurements. American Mineralogist, 2001, 86, 957-964. | 1.9 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | High-pressure behavior of FeOCl. Physical Review B, 2013, 88, . | 3.2 | 13 |
| 182 | Probing nonequivalent sites in iron phosphide Fe2P and its mechanism of phase transition. European Physical Journal B, 2013, 86, 1. | 1.5 | 13 |
| 183 | Water in Transition Zone and Lower Mantle Minerals. Geophysical Monograph Series, 0, , 57-68. | 0.1 | 13 |
| 184 | Time differentiated nuclear resonance spectroscopy coupled with pulsed laser heating in diamond anvil cells. Review of Scientific Instruments, 2015, 86, 114501. | 1.3 | 13 |
| 185 | Experimental constraint on grain-scale fluid connectivity in subduction zones. Earth and Planetary Science Letters, 2020, 552, 116610. | 4.4 | 13 |
| 186 | Equation of state, bonding character, and phase transition of cubanite, CuFe<sub>2</sub>S<sub>3</sub>, studied from 0 to 5 GPa. American Mineralogist, 1995, 80, 1-8. | 1.9 | 13 |
| 187 | Pressure-induced structural phase transition of the iron end-member of ringwoodite (Â-Fe2SiO4) investigated by X-ray diffraction and Mossbauer spectroscopy. American Mineralogist, 2011, 96, 833-840. | 1.9 | 12 |
| 188 | Twoâ€stage spin transition of iron in FeAlâ€bearing phase D at lower mantle. Journal of Geophysical Research: Solid Earth, 2016, 121, 6411-6420. | 3.4 | 12 |
| 189 | Decomposition of ferropericlase (Mg0.80Fe0.20)O at high pressures and temperatures. Journal of Alloys and Compounds, 2005, 390, 41-45. | 5.5 | 11 |
| 190 | The equation of state of wadsleyite solid solutions: Constraining the effects of anisotropy and crystal chemistry. American Mineralogist, 2017, 102, 2494-2504. | 1.9 | 11 |
| 191 | Experimental investigation of FeCO3 (siderite) stability in Earth's lower mantle using XANES spectroscopy. American Mineralogist, 2019, 104, 1083-1091. | 1.9 | 11 |
| 192 | MÃ¶ssbauer spectroscopy of quenched high-pressure phases: Investigating the Earth's interior. Hyperfine Interactions, 1994, 90, 89-105. | 0.5 | 10 |
| 193 | Monoclinic FeO at high pressures. Zeitschrift Fur Kristallographie - Crystalline Materials, 2008, 223, 461-464. | 0.8 | 10 |
| 194 | Identification of Mackinawite and Constraints on Its Electronic Configuration Using MÃ¶ssbauer Spectroscopy. Minerals (Basel, Switzerland), 2020, 10, 1090. | 2.0 | 10 |
| 195 | Electronic transitions of iron in almandine-composition glass to 91 GPa. American Mineralogist, 2016, 101, 1659-1667. | 1.9 | 9 |
| 196 | The high-pressure behavior of spherocobaltite (CoCO3): a single crystal Raman spectroscopy and XRD study. Physics and Chemistry of Minerals, 2018, 45, 59-68. | 0.8 | 9 |
| 197 | Transport of melt and volatiles in magmas inferred from kinetic experiments on the partial melting of granitic rocks. Lithos, 2018, 318-319, 434-447. | 1.4 | 9 |
| 198 | Seismic detectability of carbonates in the deep Earth: A nuclear inelastic scattering study. American Mineralogist, 2020, 105, 325-332. | 1.9 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | THE CRYSTAL CHEMISTRY OF POTASSIC-FERRISADANAGAITE. Canadian Mineralogist, 2000, 38, 669-674. | 1.0 | 9 |
| 200 | Brendelite, (Bi,Pb)2Fe3+,2+O2(OH)(PO4), a new mineral from Schneeberg, Germany: Description and crystal structure. Mineralogy and Petrology, 1998, 63, 263-277. | 1.1 | 8 |
| 201 | Critical behavior of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">M</mml:mi><mml:msub><mml:mi mathvariant="normal">g</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â€“</mml:mo><mml:mi>x</mml:mi></mml:mrow> mathvariant="normal">F</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:mi mathvariant="normal">O | 3.2 | 8 |
| 202 | Ferrorhodonite, CaMn3Fe[Si5O15], a new mineral species from Broken Hill, New South Wales, Australia. Physics and Chemistry of Minerals, 2017, 44, 323-334. | 0.8 | 8 |
| 203 | Sound velocities of skiagiteâ€“ironâ€“majorite solid solution to 56ÂGPa probed by nuclear inelastic scattering. Physics and Chemistry of Minerals, 2018, 45, 397-404. | 0.8 | 8 |
| 204 | Effect of Fe 3+ on Phase Relations in the Lower Mantle: Implications for Redox Melting in Stagnant Slabs. Journal of Geophysical Research: Solid Earth, 2019, 124, 12484-12497. | 3.4 | 8 |
| 205 | Oxygen Vacancy Substitution Linked to Ferric Iron in Bridgmanite at 27ÂGPa. Geophysical Research Letters, 2020, 47, e2019GL086296. | 4.0 | 8 |
| 206 | The CaGeO3â€“Ca3Fe2Ge3O12 garnet join: an experimental study. Physics and Chemistry of Minerals, 2005, 32, 197-207. | 0.8 | 7 |
| 207 | Mechanochemical activation of mixtures of wolframite (FeWO4) with carbon, studied by 57Fe MÃ¶ssbauer spectroscopy. Journal of the European Ceramic Society, 2006, 26, 2581-2585. | 5.7 | 7 |
| 208 | The influence of solid solution on elastic wave velocity determination in (Mg,Fe)O using nuclear inelastic scattering. Physics of the Earth and Planetary Interiors, 2014, 229, 16-23. | 1.9 | 7 |
| 209 | Spin transition of ferric iron in the calciumâ€ferrite type aluminous phase. Journal of Geophysical Research: Solid Earth, 2017, 122, 5935-5944. | 3.4 | 7 |
| 210 | Single-crystal elasticity of iron-bearing phase E and seismic detection of water in Earth's upper mantle. American Mineralogist, 2019, 104, 1526-1529. | 1.9 | 7 |
| 211 | A new (Mg0.5Fe0.53+)(Si0.5Al0.53+)O3 LiNbO3-type phase synthesized at lower mantle conditions. American Mineralogist, 2019, 104, 1213-1216. | 1.9 | 7 |
| 212 | Carbon-Bearing Phases throughout Earthâ€™s Interior. , 2019, , 66-88. | | 7 |
| 213 | Effects of composition and pressure on electronic states of iron in bridgmanite. American Mineralogist, 2020, 105, 1030-1039. | 1.9 | 7 |
| 214 | Spin state and electronic environment of iron in basaltic glass in the lower mantle. American Mineralogist, 2017, 102, 2106-2112. | 1.9 | 7 |
| 215 | The crystal structures of Fe-bearing MgCO<sub>3</sub><i>sp</i><sup>2</sup>-and<i>sp</i><sup>3</sup>-carbonates at 98â€…GPa from single-crystal X-ray diffraction using synchrotron radiation. Acta Crystallographica Section E: Crystallographic Communications, 2020, 76, 715-719. | 0.5 | 7 |
| 216 | Crystal field and charge transfer spectrum of (Mg, Fe)SiO3 majorite. Physics and Chemistry of Minerals, 1996, 23, 94. | 0.8 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | Title is missing!. , 2000, 126, 241-245. | | 6 |
| 218 | Crystal-structure refinement of Na-bearing clinopyroxenes from mantle-derived eclogite xenoliths. American Mineralogist, 2007, 92, 1242-1245. | 1.9 | 6 |
| 219 | High-temperature Mossbauer spectroscopy: A probe for the relaxation time of Fe species in silicate melts and glasses. American Mineralogist, 2010, 95, 1701-1707. | 1.9 | 6 |
| 220 | Local environment and valence state of iron in microinclusions in fibrous diamonds: X-ray absorption and MÃ¶ssbauer data. Russian Geology and Geophysics, 2010, 51, 1262-1266. | 0.7 | 6 |
| 221 | Nuclear forward scattering by the 68.7 keV state of <sup>73</sup> Ge in CaGeO <sub>3</sub> and GeO <sub>2</sub>. Europhysics Letters, 2013, 104, 17006. | 2.0 | 6 |
| 222 | High-pressure synthesis of skiagite-majorite garnet and investigation of its crystal structure. American Mineralogist, 2015, 100, 2650-2654. | 1.9 | 6 |
| 223 | Coupled substitution of Fe3+and H+for Si in wadsleyite: A study by polarized infrared and MÃ¶ssbauer spectroscopies and single-crystal X-ray diffraction. American Mineralogist, 2016, 101, 1236-1239. | 1.9 | 6 |
| 224 | Sound velocities of bridgmanite from density of states determined by nuclear inelastic scattering and first-principles calculations. Progress in Earth and Planetary Science, 2016, 3, . | 3.0 | 6 |
| 225 | Evidence for a pressure-induced spin transition in olivine-type LiFePO4 triphylite. Physical Review B, 2018, 97, . | 3.2 | 6 |
| 226 | Fate of Hydrocarbons in Iron-Bearing Mineral Environments during Subduction. Minerals (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 | 2.0 | 6 |
| 227 | Discovery of Elgoresyite, (Mg,Fe)5Si2O9: Implications for Novel Iron-Magnesium Silicates in Rocky Planetary Interiors. ACS Earth and Space Chemistry, 2021, 5, 2124-2130. | 2.7 | 6 |
| 228 | The Effect of Feâ€Al Substitution on the Crystal Structure of MgSiO<sub>3</sub> Bridgmanite. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021936. | 3.4 | 6 |
| 229 | How to stop a molecular rotator. MÃ¶ssbauer spectroscopic studies on (Î·-benzene)(Î·-cyclopentadienyl)iron(II) hexafluorophosphate in the presence and absence of high pressure. Chemical Communications, 1996, , 11-12. | 4.1 | 5 |
| 230 | A MÃ¶ssbauer study of the color of Roman pottery from the Leptiminus archaeological site, Tunisia. Geoarchaeology - an International Journal, 2002, 17, 863-874. | 1.5 | 5 |
| 231 | Deep Earth carbon reactions through time and space. American Mineralogist, 2020, 105, 22-27. | 1.9 | 5 |
| 232 | Pressure Destabilizes Oxygen Vacancies in Bridgmanite. Journal of Geophysical Research: Solid Earth, 2021, 126, . | 3.4 | 5 |
| 233 | Anisotropic mean-squared-displacement tensor in cubic almandine garnet: a single crystal 57Fe MÃ¶ssbauer study. Physics and Chemistry of Minerals, 2012, 39, 561-575. | 0.8 | 4 |
| 234 | Effect of composition on compressibility of skiagite-Fe-majorite garnet. American Mineralogist, 2017, 102, 184-191. | 1.9 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 235 | Local Structure of Ferroic Iron Formates at Low Temperature and High Pressure Studied by MÃ¶ssbauer Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 21676-21684. | 3.1 | 4 |
| 236 | THE CRYSTAL STRUCTURE OF GLADIUSITE, (Fe2+,Mg)4Fe3+2 (PO4)(OH)11(H2O). Canadian Mineralogist, 2001, 39, 1121-1130. | 1.0 | 4 |
| 237 | Structural evolution in a pyrolitic magma ocean under mantle conditions. Earth and Planetary Science Letters, 2022, 584, 117473. | 4.4 | 4 |
| 238 | Response. Science, 1993, 261, 924-925. | 12.6 | 3 |
| 239 | Magnetic defect structure of iron-rich Fe x O. Hyperfine Interactions, 1994, 94, 1989-1993. | 0.5 | 3 |
| 240 | High-pressure in situ investigation of cubanite (CuFe2S3): Electronic structure. Hyperfine Interactions, 1994, 93, 1511-1514. | 0.5 | 3 |
| 241 | Trigonal distortion of ferropericlase (Mg0.8Fe0.2)O at high pressures. Doklady Physics, 2005, 50, 343-345. | 0.7 | 3 |
| 242 | Structural studies of New Zealand pounamu using MÃ¶ssbauer spectroscopy and electron paramagnetic resonance. Journal of the Royal Society of New Zealand, 2005, 35, 385-398. | 1.9 | 3 |
| 243 | Thermal equation of state of synthetic orthoferrosilite at lunar pressures and temperatures. Physics and Chemistry of Minerals, 2013, 40, 691-703. | 0.8 | 3 |
| 244 | Annealing of metamict gadolinite-(Y): X-ray diffraction, Raman, IR, and MÃ¶ssbauer spectroscopy. Zeitschrift Fur Kristallographie - Crystalline Materials, 2019, 234, 587-593. | 0.8 | 3 |
| 245 | Cramping a Molecular Rollerball. Investigation of the Effect of Pressure on the MÃ¶ssbauer Spectra of Three Cyclopentadienyl(arene)iron(II) Salts. Inorganic Chemistry, 1997, 36, 4017-4023. | 4.0 | 2 |
| 246 | MÃ¶ssbauer Spectroscopy in the Geosciences: Highlights and Perspectives. Hyperfine Interactions, 2002, 144/145, 289-296. | 0.5 | 2 |
| 247 | Reply to â€œComments on â€˜Spin crossover in (Mg,Fe)O: A MÃ¶ssbauer effect study with an alternative interpretation of x-ray emission spectroscopy dataâ€™ â€. Physical Review B, 2007, 75, . | 3.2 | 2 |
| 248 | Titanium-Rich Magnesio-Hastingsite Macrocrysts In A Camptonite Dike, Lafarge Quarry, Montreal Island, QuÃ©bec: Early Crystallization In A Pseudo-Unary System. Canadian Mineralogist, 2016, 54, 65-78. | 1.0 | 2 |
| 249 | Ferri-kaersutite, NaCa<sub>2</sub>(Mg<sub>3</sub>TiFe<sup>3+</sup>)(Si<sub>6</sub>Al<sub>2</sub>)O<sub>22</sub>O<sub>2</sub>, a new oxo-amphibole from Harrow Peaks, Northern Victoria Land, Antarctica. American Mineralogist, 2016, 101, 461-468. | 1.9 | 2 |
| 250 | The Effect of Pulsed Laser Heating on the Stability of Ferropericlase at High Pressures. Minerals (Basel, Switzerland), 2020, 10, 542. | 2.0 | 2 |
| 251 | MÃ¶ssbauer Spectroscopy with High Spatial Resolution: Spotlight on Geoscience. Topics in Applied Physics, 2021, , 221-266. | 0.8 | 2 |
| 252 | Eine NiAsâ€artige Hochdruckmodifikation von FeN. Angewandte Chemie, 2017, 129, 7408-7412. | 2.0 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 253 | A reversed redox gradient in Earth's mantle transition zone. Earth and Planetary Science Letters, 2021, 575, 117181. | 4.4 | 1 |
| 254 | Oxygen Vacancies in Perovskite and Related Structures: Implications for the Lower Mantle. Materials Research Society Symposia Proceedings, 2002, 718, 1. | 0.1 | 1 |
| 255 | XANES study of spin crossover in Fe-bearing silicate perovskite. Phase Transitions, 2009, 82, 336-343. | 1.3 | 0 |
| 256 | Vancomycin Use in Patients Discharged from the Emergency Department. Annals of Emergency Medicine, 2013, 62, S63-S64. | 0.6 | 0 |
| 257 | Sustainable oxygen evolution catalysis â€“ electrochemical generation of mÃ¶ssbauerite <i>via</i> corrosion engineering of steel. Materials Advances, 2021, 2, 5650-5656. | 5.4 | 0 |
| 258 | MÃ¶ssbauer Spectroscopy in the Geosciences: Highlights and Perspectives. , 2003, , 289-296. | | 0 |