

Dongzhou Zhang

List of Publications by Year in descending order

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147
papers

2,741
citations

218662

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223791

46
g-index

150
all docs

150
docs citations

150
times ranked

3325
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Simultaneous band-gap narrowing and carrier-lifetime prolongation of organic-inorganic trihalide perovskites. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8910-8915. | 7.1 | 269 |
| 2 | Pressure-Induced Bandgap Optimization in Lead-Based Perovskites with Prolonged Carrier Lifetime and Ambient Retainability. Advanced Functional Materials, 2017, 27, 1604208. | 14.9 | 167 |
| 3 | Ice-VII inclusions in diamonds: Evidence for aqueous fluid in Earth's deep mantle. Science, 2018, 359, 1136-1139. | 12.6 | 166 |
| 4 | Green Emitting Single-Crystalline Bulk Assembly of Metal Halide Clusters with Near-Unity Photoluminescence Quantum Efficiency. ACS Energy Letters, 2019, 4, 1579-1583. | 17.4 | 117 |
| 5 | Hidden carbon in Earth's inner core revealed by shear softening in dense Fe ₇ C ₃ . Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17755-17758. | 7.1 | 96 |
| 6 | Patterning Mammalian Cells for Modeling Three Types of Naturally Occurring Cell-Cell Interactions. Angewandte Chemie - International Edition, 2009, 48, 8303-8305. | 13.8 | 90 |
| 7 | Dehydrogenation of goethite in Earth's deep lower mantle. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1498-1501. | 7.1 | 83 |
| 8 | Enhanced Photocurrent of All-Inorganic Two-Dimensional Perovskite Cs ₂ PbI ₂ Cl ₂ via Pressure-Regulated Excitonic Features. Journal of the American Chemical Society, 2021, 143, 2545-2551. | 13.7 | 79 |
| 9 | Regulating off-centering distortion maximizes photoluminescence in halide perovskites. National Science Review, 2021, 8, nwaa288. | 9.5 | 70 |
| 10 | Regulating Exciton-Phonon Coupling to Achieve a Near-Unity Photoluminescence Quantum Yield in One-Dimensional Hybrid Metal Halides. Advanced Science, 2021, 8, e2100786. | 11.2 | 61 |
| 11 | Temperature of Earth's core constrained from melting of Fe and Fe _{0.9} Ni _{0.1} at high pressures. Earth and Planetary Science Letters, 2016, 447, 72-83. | 4.4 | 55 |
| 12 | Sound velocity and density of magnesiowüstites: Implications for ultralow-velocity zone topography. Geophysical Research Letters, 2017, 44, 2148-2158. | 4.0 | 48 |
| 13 | High-Pressure Geophysical Properties of Fcc Phase FeH _X . Geochemistry, Geophysics, Geosystems, 2018, 19, 305-314. | 2.5 | 37 |
| 14 | Irreversible phase transformation in a CoCrFeMnNi high entropy alloy under hydrostatic compression. Materials Today Communications, 2018, 14, 10-14. | 1.9 | 37 |
| 15 | Metal-to-Semiconductor Transition and Electronic Dimensionality Reduction of Ca ₂ N Electride under Pressure. Advanced Science, 2018, 5, 1800666. | 11.2 | 36 |
| 16 | High Pressure Single Crystal Diffraction at PX ² . Journal of Visualized Experiments, 2017, , . | 0.3 | 35 |
| 17 | Valence and spin states of iron are invisible in Earth's lower mantle. Nature Communications, 2018, 9, 1284. | 12.8 | 35 |
| 18 | Red-emitting salicylaldehyde Schiff base with AIE behaviour and large Stokes shift. Chinese Chemical Letters, 2018, 29, 1493-1496. | 9.0 | 35 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Boron-Rich Molybdenum Boride with Unusual Short-Range Vacancy Ordering, Anisotropic Hardness, and Superconductivity. <i>Chemistry of Materials</i> , 2020, 32, 459-467. | 6.7 | 35 |
| 20 | Sodium Peroxide Dihydrate or Sodium Superoxide: The Importance of the Cell Configuration for Sodium-Oxygen Batteries. <i>Small Methods</i> , 2017, 1, 1700102. | 8.6 | 34 |
| 21 | Spin crossover equation of state and sound velocities of $(\text{Mg}_{0.65}\text{Fe}_{0.35})\text{O}$ ferropericlase to 140 GPa. <i>Journal of Geophysical Research</i> , 2012, 117, . | 3.3 | 32 |
| 22 | Superconducting and magnetic phase diagram of $\text{RbEuFe}_4\text{O}_{13}$ and $\text{CsEuFe}_4\text{O}_{13}$ at high pressure. <i>Physical Review B</i> , 2018, 98, . | 3.2 | 31 |
| 23 | From Sodium-Oxygen to Sodium-Air Battery: Enabled by Sodium Peroxide Dihydrate. <i>Nano Letters</i> , 2020, 20, 4681-4686. | 9.1 | 31 |
| 24 | Elasticity and lattice dynamics of enstatite at high pressure. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 4071-4082. | 3.4 | 29 |
| 25 | High-pressure compressibility and vibrational properties of $(\text{Ca,Mn})\text{CO}_3$. <i>American Mineralogist</i> , 2016, 101, 2723-2730. | 1.9 | 29 |
| 26 | Elasticity of single-crystal periclase at high pressure and temperature: The effect of iron on the elasticity and seismic parameters of ferropericlase in the lower mantle. <i>American Mineralogist</i> , 2019, 104, 262-275. | 1.9 | 27 |
| 27 | Universal link of magnetic exchange and structural behavior under pressure in chromium spinels. <i>Physical Review B</i> , 2018, 97, . | 3.2 | 24 |
| 28 | Thermoelastic Properties of Eclogitic Garnets and Omphacites: Implications for Deep Subduction of Oceanic Crust and Density Anomalies in the Upper Mantle. <i>Geophysical Research Letters</i> , 2019, 46, 179-188. | 4.0 | 24 |
| 29 | Equations of State and Anisotropy of Fe-Ni-Si Alloys. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 4647-4675. | 3.4 | 21 |
| 30 | Control of the morphology of micro/nanostructures of polycarbonate via electrospinning. <i>Science Bulletin</i> , 2009, 54, 2911-2917. | 1.7 | 20 |
| 31 | Phase Transitions in Orthoenstatite and Subduction Zone Dynamics: Effects of Water and Transition Metal Ions. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 2723-2737. | 3.4 | 20 |
| 32 | Pressure-stabilized divalent ozonide CaO_3 and its impact on Earth's oxygen cycles. <i>Nature Communications</i> , 2020, 11, 4702. | 12.8 | 20 |
| 33 | Fault Slip Distribution of the 1999 Mw 7.1 Hector Mine Earthquake, California, Estimated from Postearthquake Airborne LiDAR Data. <i>Bulletin of the Seismological Society of America</i> , 2015, 105, 776-790. | 2.3 | 19 |
| 34 | Compressibility and equation of state of beryl ($\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$) by using a diamond anvil cell and in situ synchrotron X-ray diffraction. <i>Physics and Chemistry of Minerals</i> , 2015, 42, 529-539. | 0.8 | 18 |
| 35 | Thermal equation of state of natural tourmaline at high pressure and temperature. <i>Physics and Chemistry of Minerals</i> , 2016, 43, 315-326. | 0.8 | 18 |
| 36 | High-Pressure $\text{CaMgSi}_2\text{O}_6$: Does Penta-Coordinated Silicon Exist in the Earth's Mantle?. <i>Geophysical Research Letters</i> , 2017, 44, 11,340. | 4.0 | 18 |

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|----|---|------|-----------|
| 37 | Ultra-incompressible High-Entropy Diborides. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 3106-3113. | 4.6 | 17 |
| 38 | Thermal equation of state of natural chromium spinel up to 26.8 GPa and 628 K. <i>Journal of Materials Science</i> , 2008, 43, 5546-5550. | 3.7 | 16 |
| 39 | High-pressure behavior of natural single-crystal epidote and clinozoisite up to 40 GPa. <i>Physics and Chemistry of Minerals</i> , 2016, 43, 649-659. | 0.8 | 16 |
| 40 | Correlation between Structural Changes and Electrical Transport Properties of Spinel ZnFe ₂ O ₄ Nanoparticles under High Pressure. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 42856-42864. | 8.0 | 16 |
| 41 | Pressure-induced magnetovolume effect in CoCrFeAl high-entropy alloy. <i>Communications Physics</i> , 2019, 2, . | 5.3 | 16 |
| 42 | Pressure-induced fluorescence enhancement of FA _{1-x} PbBr _{2+x} composite perovskites. <i>Nanoscale</i> , 2019, 11, 5868-5873. | 5.6 | 16 |
| 43 | Phase transition mechanism and bandgap engineering of Sb ₂ S ₃ at gigapascal pressures. <i>Communications Chemistry</i> , 2021, 4, . | 4.5 | 16 |
| 44 | High-Capacity Sodium Peroxide Based Na ₂ O ₂ Batteries with Low Charge Overpotential via a Nanostructured Catalytic Cathode. <i>ACS Energy Letters</i> , 2018, 3, 276-277. | 17.4 | 15 |
| 45 | Pressure Impact on the Crystal Structure, Optical, and Transport Properties in Layered Oxychalcogenides BiCu _{1-x} Ch _x O (Ch = S, Se). <i>Journal of Physical Chemistry C</i> , 2018, 122, 15929-15936. | 3.1 | 15 |
| 46 | Tunable photoluminescence and an enhanced photoelectric response of Mn ²⁺ -doped CsPbCl ₃ perovskite nanocrystals via pressure-induced structure evolution. <i>Nanoscale</i> , 2019, 11, 11660-11670. | 5.6 | 15 |
| 47 | Local structure variations observed in orthoenstatite at high pressures. <i>American Mineralogist</i> , 2011, 96, 1585-1592. | 1.9 | 14 |
| 48 | Silylation of mechanically ground kaolinite. <i>Clay Minerals</i> , 2014, 49, 559-568. | 0.6 | 14 |
| 49 | The high-pressure anisotropic thermoelastic properties of a potential inner core carbon-bearing phase, Fe ₇ C ₃ , by single-crystal X-ray diffraction. <i>American Mineralogist</i> , 2018, 103, 1568-1574. | 1.9 | 14 |
| 50 | An Isosymmetric High-Pressure Phase Transition in β -Glycylglycine: A Combined Experimental and Theoretical Study. <i>Journal of Physical Chemistry B</i> , 2020, 124, 1-10. | 2.6 | 14 |
| 51 | Elastic and magnetic properties of Fe ₃ P up to core pressures: Phosphorus in the Earth's core. <i>Earth and Planetary Science Letters</i> , 2020, 531, 115974. | 4.4 | 14 |
| 52 | The effect of nitrogen on the compressibility and conductivity of iron at high pressure. <i>Geoscience Frontiers</i> , 2021, 12, 983-989. | 8.4 | 14 |
| 53 | Pressure-induced ferroelectric-like transition creates a polar metal in defect antiperovskites Hg ₃ Te ₂ X ₂ (X = Cl, Br). <i>Nature Communications</i> , 2021, 12, 1509. | 12.8 | 14 |
| 54 | High-Pressure Single-Crystal Elasticity and Thermal Equation of State of Omphacite and Their Implications for the Seismic Properties of Eclogite in the Earth's Interior. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 2368-2377. | 3.4 | 13 |

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|----|---|------|-----------|
| 55 | Deviatoric deformation kinetics in high entropy alloy under hydrostatic compression. <i>Journal of Alloys and Compounds</i> , 2019, 792, 116-121. | 5.5 | 13 |
| 56 | Fast temperature spectrometer for samples under extreme conditions. <i>Review of Scientific Instruments</i> , 2015, 86, 013105. | 1.3 | 12 |
| 57 | Thermal Equation of State of Natural Ti-bearing Clinohumite. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 8943-8951. | 3.4 | 12 |
| 58 | Structural Phase Transition, Optical and Electrical Property Evolutions of Thiospinel AgIn_5S_8 under High Pressure. <i>Inorganic Chemistry</i> , 2019, 58, 12628-12634. | 4.0 | 12 |
| 59 | Phase Transition of Enstatite-Ferrosilite Solid Solutions at High Pressure and High Temperature: Constraints on Metastable Orthopyroxene in Cold Subduction. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087363. | 4.0 | 12 |
| 60 | Pressure-driven chemical lock-in structure and optical properties in Sillen compounds PbBiO_2X (X = Cl, Br, and I). <i>Journal of Materials Chemistry A</i> , 2020, 8, 13610-13618. | 10.3 | 12 |
| 61 | An Externally-Heated Diamond Anvil Cell for Synthesis and Single-Crystal Elasticity Determination of Ice-VII at High Pressure-Temperature Conditions. <i>Journal of Visualized Experiments</i> , 2020, . | 0.3 | 12 |
| 62 | Experimental evidence for the survival of augite to transition zone depths, and implications for subduction zone dynamics. <i>American Mineralogist</i> , 2017, 102, 1516-1524. | 1.9 | 11 |
| 63 | Isosymmetric pressure-induced bonding increase changes compression behavior of clinopyroxenes across jadeite-aegirine solid solution in subduction zones. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 142-157. | 3.4 | 11 |
| 64 | <i>In Situ</i> Formed Ir_3Li Nanoparticles as Active Cathode Material in Li-Oxygen Batteries. <i>Journal of Physical Chemistry A</i> , 2019, 123, 10047-10056. | 2.5 | 11 |
| 65 | Compressibility of synthetic Mg-Al tourmalines to 60 GPa. <i>American Mineralogist</i> , 2019, 104, 1005-1015. | 1.9 | 11 |
| 66 | P-V-T equation of state of $\text{Ca}_3\text{Cr}_2\text{Si}_3\text{O}_{12}$ uvarovite garnet by using a diamond-anvil cell and in-situ synchrotron X-ray diffraction. <i>American Mineralogist</i> , 2015, 100, 588-597. | 1.9 | 10 |
| 67 | Comparing the Pressure-Induced Structural Behavior of CuCr_2O_4 and CuCr_2Se_4 Spinels. <i>Journal of Physical Chemistry C</i> , 2017, 121, 16513-16520. | 3.1 | 10 |
| 68 | Structure-Controlled Oxygen Concentration in Fe_2O_3 and FeO_2 . <i>Inorganic Chemistry</i> , 2019, 58, 5476-5482. | 4.0 | 10 |
| 69 | The Water-Fe-Pressure dependent single-crystal elastic properties of wadsleyite: Implications for the seismic anisotropy in the upper Mantle Transition Zone. <i>Earth and Planetary Science Letters</i> , 2021, 565, 116955. | 4.4 | 10 |
| 70 | P-V-T equation of state of spessartine-almandine solid solution measured using a diamond anvil cell and in situ synchrotron X-ray diffraction. <i>Physics and Chemistry of Minerals</i> , 2015, 42, 63-72. | 0.8 | 9 |
| 71 | Compressional behavior of omphacite to 47 GPa. <i>Physics and Chemistry of Minerals</i> , 2016, 43, 707-715. | 0.8 | 9 |
| 72 | Effects of water on P-V-T equation of state of pyrope. <i>Physics of the Earth and Planetary Interiors</i> , 2017, 267, 9-18. | 1.9 | 9 |

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|----|--|------|-----------|
| 73 | Single-crystal equations of state of magnesio $\sqrt{3}$ stite at high pressures. <i>American Mineralogist</i> , 2017, 102, 1709-1717. | 1.9 | 9 |
| 74 | Elasticity of single-crystal low water content hydrous pyrope at high-pressure and high-temperature conditions. <i>American Mineralogist</i> , 2019, 104, 1022-1031. | 1.9 | 9 |
| 75 | Pressure-Induced Superconductivity and Flattened Se ₆ Rings in the Wide Band Gap Semiconductor Cu ₂ I ₂ Se ₆ . <i>Journal of the American Chemical Society</i> , 2019, 141, 15174-15182. | 13.7 | 9 |
| 76 | Pressure-Induced Selective Amorphization of CsPbBr ₃ for the Purification of Cs ₄ PbBr ₆ . <i>Journal of Physical Chemistry C</i> , 2020, 124, 22291-22297. | 3.1 | 9 |
| 77 | Fast identification of mineral inclusions in diamond at GSECARS using synchrotron X-ray microtomography, radiography and diffraction. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 1763-1768. | 2.4 | 9 |
| 78 | Drastic enhancement of magnetic critical temperature and amorphization in topological magnet EuSn ₂ P ₂ under pressure. <i>Npj Quantum Materials</i> , 2022, 7, . | 5.2 | 9 |
| 79 | High Pressure Elastic Behavior of Synthetic Mg ₃ Y ₂ (SiO ₄) ₃ Garnet up to 9 GPa. <i>Advances in Materials Science and Engineering</i> , 2013, 2013, 1-6. | 1.8 | 8 |
| 80 | Thermoelastic properties of grossular-andradite solid solution at high pressures and temperatures. <i>Physics and Chemistry of Minerals</i> , 2017, 44, 137-147. | 0.8 | 8 |
| 81 | Single-crystal X-ray diffraction of grunerite up to 25.6 GPa: a new high-pressure clinoamphibole polymorph. <i>Physics and Chemistry of Minerals</i> , 2019, 46, 215-227. | 0.8 | 8 |
| 82 | Deviatoric stress-induced quasi-reconstructive phase transition in ZnTe. <i>Journal of Materials Chemistry C</i> , 2020, 8, 3795-3799. | 5.5 | 8 |
| 83 | Topological Ordering of Memory Glass on Extended Length Scales. <i>Journal of the American Chemical Society</i> , 2022, 144, 7414-7421. | 13.7 | 8 |
| 84 | The seismically fastest chemical heterogeneity in the Earth's deep upper mantle—implications from the single-crystal thermoelastic properties of jadeite. <i>Earth and Planetary Science Letters</i> , 2020, 543, 116345. | 4.4 | 7 |
| 85 | Thermoelasticity and stability of natural epidote at high pressure and high temperature: Implications for water transport during cold slab subduction. <i>Geoscience Frontiers</i> , 2021, 12, 921-928. | 8.4 | 7 |
| 86 | From Semiconducting to Metallic: Jahn-Teller-Induced Phase Transformation in Skyrmion Host GaV ₄ S ₈ . <i>Journal of Physical Chemistry C</i> , 2021, 125, 5771-5780. | 3.1 | 7 |
| 87 | Investigation of the crystal structure of a low water content hydrous olivine to 29.9 GPa: A high-pressure single-crystal X-ray diffraction study. <i>American Mineralogist</i> , 2020, 105, 1857-1865. | 1.9 | 7 |
| 88 | Pressure-induced polymorphism and piezochromism in Mn ₂ FeSbO ₆ . <i>Applied Physics Letters</i> , 2019, 114, 162903. | 3.3 | 6 |
| 89 | Pressure-Induced Phase Transition in Mn(Ta,Nb) ₂ O ₆ : An Experimental Investigation and First-Principle Study. <i>Inorganic Chemistry</i> , 2020, 59, 18122-18130. | 4.0 | 6 |
| 90 | Coesite Formation at Low Pressure during Supersonic Microprojectile Impact of Opal. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 1291-1297. | 2.7 | 6 |

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|-----|--|------|-----------|
| 91 | Pressure-Induced Superconductivity in the Wide-Band-Gap Semiconductor Cu ₂ Br ₂ Se ₆ with a Robust Framework. <i>Chemistry of Materials</i> , 2020, 32, 6237-6246. | 6.7 | 6 |
| 92 | Compressibility of mimetite and pyromorphite at high pressure. <i>High Pressure Research</i> , 2013, 33, 27-34. | 1.2 | 5 |
| 93 | Pressure-induced photoluminescence of MgO. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 194002. | 1.8 | 5 |
| 94 | Pressure-Induced Phase Transitions of Natural Brookite. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 844-853. | 2.7 | 5 |
| 95 | Topaz, a Potential Volatile-Carrier in Cold Subduction Zone: Constraint from Synchrotron X-ray Diffraction and Raman Spectroscopy at High Temperature and High Pressure. <i>Minerals (Basel)</i> , 2021, 11, 1071. | 4.0 | 10 |
| 96 | A new hydrous iron oxide phase stable at mid-mantle pressures. <i>Earth and Planetary Science Letters</i> , 2020, 550, 116551. | 4.4 | 5 |
| 97 | Elasticity of single-crystal Fe-enriched diopside at high-pressure conditions: Implications for the origin of upper mantle low-velocity zones. <i>American Mineralogist</i> , 2020, 105, 363-374. | 1.9 | 5 |
| 98 | Constraining the density evolution during destruction of the lithospheric mantle in the eastern North China Craton. <i>Gondwana Research</i> , 2021, 91, 18-30. | 6.0 | 5 |
| 99 | Room temperature facile synthesis of olivine-Co ₂ SiO ₄ nanoparticles utilizing a mechanochemical method. <i>RSC Advances</i> , 2021, 11, 20687-20690. | 3.6 | 5 |
| 100 | Measurements of the Lamb-Mössbauer factor at simultaneous high-pressure-temperature conditions and estimates of the equilibrium isotopic fractionation of iron. <i>American Mineralogist</i> , 2022, 107, 421-431. | 1.9 | 5 |
| 101 | Microscopic phase diagram of Eu(Fe _{1-x} Ni _x)As ₂ (x = 0,0.04) under pressure. <i>Physical Review B</i> , 2021, 103, . | 3.2 | 5 |
| 102 | Self-consistent thermodynamic parameters of pyrope and almandine at high-temperature and high-pressure conditions: Implication on the adiabatic temperature gradient. <i>Physics of the Earth and Planetary Interiors</i> , 2022, 322, 106789. | 1.9 | 5 |
| 103 | High-Pressure Investigation of 2,4,6-Trinitro-3-bromoanisole (TNBA): Structural Determination and Piezochromism. <i>Journal of Physical Chemistry C</i> , 2022, 126, 1176-1187. | 3.1 | 5 |
| 104 | Super-hydration and reduction of manganese oxide minerals at shallow terrestrial depths. <i>Nature Communications</i> , 2022, 13, 1942. | 12.8 | 5 |
| 105 | Suppression of the magnetic order in CeFeAsO: Nonequivalence of hydrostatic and in-plane chemical pressure. <i>Physical Review B</i> , 2018, 98, . | 3.2 | 4 |
| 106 | High-pressure behavior of liebenbergite: The most incompressible olivine-structured silicate. <i>American Mineralogist</i> , 2019, 104, 580-587. | 1.9 | 4 |
| 107 | High-Pressure Phase Transitions in Densely Packed Nanocrystallites of TiO ₂ -II. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1197-1206. | 3.1 | 4 |
| 108 | Spin Transitions and Compressibility of Fe ₇ N ₃ and Fe ₄ N: Implications for Iron Alloys in Terrestrial Planet Cores. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2020JB020660. | 3.4 | 4 |

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|-----|--|-----|-----------|
| 109 | Partnership for eXtreme Xtallography (PX2)â€™A state-of-the-art experimental facility for extreme-conditions crystallography: A case study of pressure-induced phase transition in natural ilvaite. <i>Matter and Radiation at Extremes</i> , 2022, 7, . | 3.9 | 4 |
| 110 | Melting and phase relations of Fe-Ni-Si determined by a multi-technique approach. <i>Earth and Planetary Science Letters</i> , 2022, 584, 117358. | 4.4 | 4 |
| 111 | Tracing electron density changes in langbeinite under pressure. <i>IUCr</i> , 2022, 9, 146-162. | 2.2 | 4 |
| 112 | Experimental Evidence for Partially Dehydrogenated μ -FeOOH. <i>Crystals</i> , 2019, 9, 356. | 2.2 | 3 |
| 113 | Synthesis of Manganese Mononitride with Tetragonal Structure under Pressure. <i>Crystals</i> , 2019, 9, 511. | 2.2 | 3 |
| 114 | Enhanced Néel temperature in EuSnP under pressure. <i>Dalton Transactions</i> , 2019, 48, 5327-5334. | 3.3 | 3 |
| 115 | Crystal-Chemical Properties of Synthetic Almandine-Pyrope Solid Solution by X-Ray Single-Crystal Diffraction and Raman Spectroscopy. <i>Crystals</i> , 2019, 9, 541. | 2.2 | 3 |
| 116 | Nixonite, Na ₂ Ti ₆ O ₁₃ , a new mineral from a metasomatized mantle garnet pyroxenite from the western Rae Craton, Darby kimberlite field, Canada. <i>American Mineralogist</i> , 2019, 104, 1336-1344. | 1.9 | 3 |
| 117 | Compressional behavior of natural eclogitic zoisite by synchrotron X-ray single-crystal diffraction to 34 GPa. <i>Physics and Chemistry of Minerals</i> , 2019, 46, 333-341. | 0.8 | 3 |
| 118 | Potential Interaction of Noble Gas Atoms and Anionic Electrons in Ca ₂ N. <i>Journal of Physical Chemistry C</i> , 2020, 124, 12213-12219. | 3.1 | 3 |
| 119 | High-Pressure Phase Stability and Thermoelastic Properties of Iron Carbonitrides and Nitrogen in the Deep Earth. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB021934. | 3.4 | 3 |
| 120 | Experimental calibration of the reduced partition function ratios of tetrahedrally coordinated silicon from the Debye-Waller factors. <i>Contributions To Mineralogy and Petrology</i> , 2021, 176, 1. | 3.1 | 3 |
| 121 | Negative linear compressibility in Se at ultra-high pressure above 120 GPa. <i>IUCr</i> , 2022, 9, 253-260. | 2.2 | 3 |
| 122 | Recent developments on high-pressure single-crystal X-ray diffraction at the Partnership for eXtreme Xtallography (PX2) program. <i>Physics and Chemistry of Minerals</i> , 2022, 49, . | 0.8 | 3 |
| 123 | Coexistence of vitreous and crystalline phases of H ₂ O at ambient temperature. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, . | 7.1 | 3 |
| 124 | Origin and consequences of non-stoichiometry in iron carbide Fe ₇ C ₃ . <i>American Mineralogist</i> , 2019, 104, 325-332. | 1.9 | 2 |
| 125 | A New High-Pressure Phase Transition in Natural Gedrite. <i>Crystals</i> , 2019, 9, 521. | 2.2 | 2 |
| 126 | Structure and Behavior of the Ni End-Member Schreibersite Ni ₃ P under Compression to 50 GPa. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 306. | 2.0 | 2 |

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|-----|--|-----|-----------|
| 127 | Raman and X-ray diffraction study of pressure-induced phase transition in synthetic Mg ₂ TiO ₄ . Scientific Reports, 2020, 10, 6278. | 3.3 | 2 |
| 128 | Thermal equation of state of phase egg (AlSiO ₃ OH): implications for hydrous phases in the deep earth. Contributions To Mineralogy and Petrology, 2021, 176, 1. | 3.1 | 2 |
| 129 | A large enhancement of ionic conductivity in SrCoO _{2.5} controlled by isostructural phase transition and negative linear compressibility. Applied Physics Letters, 2021, 119, . | 3.3 | 2 |
| 130 | The role of intrinsic stacking fault in facilitating the pressure-induced phase transition in CoCrFeMnNi high entropy alloys. Materials Chemistry and Physics, 2022, 275, 125273. | 4.0 | 2 |
| 131 | Self-Consistent Thermodynamic Parameters of Diopside at High Temperatures and High Pressures: Implications for the Adiabatic Geotherm of an Eclogitic Upper Mantle. Minerals (Basel, Switzerland), 2021, 11, 1322. | 2.0 | 2 |
| 132 | Phase Transitions of Fe ²⁺ , Al ³⁺ and Ca ²⁺ -bearing Orthopyroxenes at High Pressure and High Temperature: Implications for Metastable Orthopyroxenes in Stagnant Slabs. Journal of Geophysical Research: Solid Earth, 2022, 127, . | 3.4 | 2 |
| 133 | Hydrogen Effect on the Sound Velocities of Upper Mantle Omphacite. Minerals (Basel, Switzerland), 2019, 9, 690. | 2.0 | 1 |
| 134 | Effect of structural water on the elasticity of orthopyroxene. American Mineralogist, 2021, , . | 1.9 | 1 |
| 135 | Structural and electronic phase transition in Bi ₂ Se _{2.1} Te _{0.9} under pressure. Journal of Physics and Chemistry of Solids, 2021, 156, 110123. | 4.0 | 1 |
| 136 | High-pressure crystal structure and equation of state of ferromagnesian jeffbenite: implications for stability in the transition zone and uppermost lower mantle. Contributions To Mineralogy and Petrology, 2021, 176, 1. | 3.1 | 1 |
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