

Baosheng Li

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1428889/publications.pdf>

Version: 2024-02-01

53
papers

1,947
citations

331670

21
h-index

243625

44
g-index

54
all docs

54
docs citations

54
times ranked

1240
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | In situ X-ray observations of the coesite-stishovite transition: reversed phase boundary and kinetics. <i>Physics and Chemistry of Minerals</i> , 1996, 23, 1. | 0.8 | 283 |
| 2 | Elasticity and rheology of iron above 220 GPa and the nature of the Earth's inner core. <i>Nature</i> , 1998, 396, 741-743. | 27.8 | 253 |
| 3 | Modern techniques in measuring elasticity of Earth materials at high pressure and high temperature using ultrasonic interferometry in conjunction with synchrotron X-radiation in multi-anvil apparatus. <i>Physics of the Earth and Planetary Interiors</i> , 2004, 143-144, 559-574. | 1.9 | 133 |
| 4 | In situ measurements of sound velocities and densities across the orthopyroxene \rightarrow high-pressure clinopyroxene transition in MgSiO ₃ at high pressure. <i>Physics of the Earth and Planetary Interiors</i> , 2004, 147, 27-44. | 1.9 | 106 |
| 5 | Pressure and temperature dependence of elastic wave velocity of MgSiO ₃ perovskite and the composition of the lower mantle. <i>Physics of the Earth and Planetary Interiors</i> , 2005, 151, 143-154. | 1.9 | 99 |
| 6 | Elasticity of stishovite at high pressure. <i>Physics of the Earth and Planetary Interiors</i> , 1996, 96, 113-127. | 1.9 | 89 |
| 7 | Pressure-volume-temperature relations in MgO: An ultrahigh pressure-temperature scale for planetary sciences applications. <i>Journal of Geophysical Research</i> , 2008, 113, . | 3.3 | 84 |
| 8 | Sound velocity measurement using transfer function method. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 11337-11342. | 1.8 | 83 |
| 9 | Indoor seismology by probing the Earth's interior by using sound velocity measurements at high pressures and temperatures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 9145-9150. | 7.1 | 68 |
| 10 | Study of the Earth's interior using measurements of sound velocities in minerals by ultrasonic interferometry. <i>Physics of the Earth and Planetary Interiors</i> , 2014, 233, 135-153. | 1.9 | 65 |
| 11 | Compressional and shear wave velocities of ringwoodite Mg_2SiO_4 to 12 GPa. <i>American Mineralogist</i> , 2004, 88, 1312-1317. | 1.9 | 60 |
| 12 | Elasticity of MgO to 11 GPa with an independent absolute pressure scale: Implications for pressure calibration. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a. | 3.3 | 50 |
| 13 | In-situ elasticity measurement for the unquenchable high-pressure clinopyroxene phase: Implication for the upper mantle. <i>Geophysical Research Letters</i> , 2005, 32, . | 4.0 | 48 |
| 14 | Sound velocities of wadsleyite $\text{Mg}_{0.88}\text{Fe}_{0.12}\text{SiO}_4$ to 10 GPa. <i>American Mineralogist</i> , 2000, 85, 292-295. | 1.9 | 44 |
| 15 | Anomalous elastic properties of coesite at high pressure and implications for the upper mantle X-discontinuity. <i>Earth and Planetary Science Letters</i> , 2015, 412, 42-51. | 4.4 | 39 |
| 16 | Simultaneous ultrasonic and synchrotron x-ray studies on pressure induced $\pm 1\%$ phase transition in zirconium. <i>Journal of Applied Physics</i> , 2008, 104, . | 2.5 | 36 |
| 17 | Elasticity of $\pm 1\%$ -phase zirconium. <i>Physical Review B</i> , 2007, 76, . | 3.2 | 34 |
| 18 | Sound velocity measurements at mantle transition zone conditions of pressure and temperature using ultrasonic interferometry in a multianvil apparatus. <i>Geophysical Monograph Series</i> , 1998, , 41-61. | 0.1 | 32 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | <i>P-V-T</i> equation of state and high-pressure behavior of CaCO ₃ aragonite. <i>American Mineralogist</i> , 2015, 100, 2323-2329. | 1.9 | 27 |
| 20 | Structural mechanisms of solid solution and cation ordering in augite-jadeite pyroxenes; II, A microscopic perspective. <i>American Mineralogist</i> , 1998, 83, 434-443. | 1.9 | 25 |
| 21 | Acoustic travel time gauges for <i>in-situ</i> determination of pressure and temperature in multi-anvil apparatus. <i>Journal of Applied Physics</i> , 2015, 118, . | 2.5 | 25 |
| 22 | Acoustic velocities and elastic properties of pyrite (FeS ₂) to 9.6 GPa. <i>Journal of Earth Science (Wuhan)</i> , 2010, 25, 1000-1004. | 3.25 | 18 |
| 23 | Thermoelasticity of $\hat{\mu}$ -FeSi to 8 GPa and 1273 K. <i>American Mineralogist</i> , 2009, 94, 1039-1044. | 1.9 | 17 |
| 24 | Experimental and theoretical studies on the elasticity of molybdenum to 12 GPa. <i>Journal of Applied Physics</i> , 2009, 106, . | 2.5 | 16 |
| 25 | Compression and structure of brucite to 31 GPa from synchrotron X-ray diffraction and infrared spectroscopy studies. <i>American Mineralogist</i> , 2013, 98, 33-40. | 1.9 | 16 |
| 26 | Tracking silica in Earth's upper mantle using new sound velocity data for coesite to 5.8 $\hat{\mu}$ GPa and 1073 $\hat{\mu}$ K. <i>Geophysical Research Letters</i> , 2017, 44, 7757-7765. | 4.0 | 16 |
| 27 | High-temperature elasticity of magnesioferrite spinel. <i>Physics and Chemistry of Minerals</i> , 2007, 34, 345-350. | 0.8 | 13 |
| 28 | Constraints from the dehydration of antigorite on high-conductivity anomalies in subduction zones. <i>Scientific Reports</i> , 2017, 7, 16893. | 3.3 | 12 |
| 29 | Lattice Dynamic Behavior of Orthoferrosilite (FeSiO ₃) toward Phase Transition under Compression. <i>Journal of Physical Chemistry C</i> , 2014, 118, 12410-12419. | 3.1 | 11 |
| 30 | Combined in situ synchrotron X-ray diffraction and ultrasonic interferometry study of $\hat{\mu}$ -FeSi at high pressure. <i>High Pressure Research</i> , 2008, 28, 385-395. | 1.2 | 10 |
| 31 | Compressional and shear wave velocities of Fe ₂ SiO ₄ spinel at high pressure and high temperature. <i>High Pressure Research</i> , 2008, 28, 405-413. | 1.2 | 10 |
| 32 | Elasticity of amorphous zirconium tungstate at high pressure. <i>Applied Physics Letters</i> , 2008, 93, 191904. | 3.3 | 10 |
| 33 | Elastic wave velocities of peridotite KLB $\hat{\mu}$ 1 at mantle pressures and implications for mantle velocity modeling. <i>Geophysical Research Letters</i> , 2015, 42, 3289-3297. | 4.0 | 10 |
| 34 | Anomalous Sound Velocities of Antigorite at High Pressure and Implications for Detecting Serpentinization at Mantle Wedges. <i>Geophysical Research Letters</i> , 2019, 46, 5153-5160. | 4.0 | 10 |
| 35 | Thermal equation of state of CaIrO ₃ post-perovskite. <i>Physics and Chemistry of Minerals</i> , 2011, 38, 407-417. | 0.8 | 9 |
| 36 | Thermal equation of state of CaGeO ₃ perovskite. <i>American Mineralogist</i> , 2008, 93, 745-750. | 1.9 | 8 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | In situ ultrasonic velocity measurements across the olivine-spinel transformation in Fe ₂ SiO ₄ . <i>American Mineralogist</i> , 2010, 95, 1000-1005. | 1.9 | 8 |
| 38 | Synthesis and characterization of polycrystalline KAlSi ₃ O ₈ hollandite [liebermannite]: Sound velocities vs. pressure to 13 GPa at room temperature. <i>Comptes Rendus - Geoscience</i> , 2019, 351, 113-120. | 1.2 | 8 |
| 39 | Enhanced visibility of subduction slabs by the formation of dense hydrous phase A. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095487. | 4.0 | 8 |
| 40 | Thermal equation of state of a natural kyanite up to 8.55 GPa and 1273 K. <i>Matter and Radiation at Extremes</i> , 2016, 1, 269-276. | 3.9 | 7 |
| 41 | Elastic Anomaly and Polyamorphic Transition in (La, Ce)-based Bulk Metallic Glass under Pressure. <i>Scientific Reports</i> , 2017, 7, 724. | 3.3 | 6 |
| 42 | Ultrasound elasticity of diamond at gigapascal pressures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 7.1 | 6 |
| 43 | Compressibility of mimetite and pyromorphite at high pressure. <i>High Pressure Research</i> , 2013, 33, 27-34. | 1.2 | 5 |
| 44 | Elasticity and phase transformation at high pressure in coesite from experiments and first-principles calculations. <i>American Mineralogist</i> , 2016, 101, 1190-1196. | 1.9 | 5 |
| 45 | Microstrain in pyrope-grossular garnet solid solution at high pressure: a case study of Py ₉₀ Gr ₁₀ and Py ₁₀ Gr ₉₀ up to 15 GPa. <i>Physics and Chemistry of Minerals</i> , 2017, 44, 377-388. | 0.8 | 5 |
| 46 | Elastic anomalies across phase transitions of praseodymium to 12 GPa. <i>Journal of Applied Physics</i> , 2018, 124, . | 2.5 | 4 |
| 47 | Implications of Sound Velocities of Natural Topaz on the Seismic Discontinuity. <i>Geophysical Research Letters</i> , 2022, 49, . | 4.0 | 4 |
| 48 | High-Pressure Research at the National Synchrotron Light Source. <i>Synchrotron Radiation News</i> , 2010, 23, 24-30. | 0.8 | 3 |
| 49 | The elasticity of natural hypersthene and the effect of Fe and Al substitution. <i>High Pressure Research</i> , 2016, 36, 63-72. | 1.2 | 2 |
| 50 | Microscopic strain in a grossular-pyrope solution anti-correlates with excess volume through local Mg-Ca cation arrangement, more strongly at high Ca/Mg ratio. <i>American Mineralogist</i> , 2017, 102, 2307-2316. | 1.9 | 2 |
| 51 | Insights into the Hydrothermal Metastability of Stishovite and Coesite. <i>ACS Omega</i> , 2018, 3, 14225-14228. | 3.5 | 2 |
| 52 | High-pressure elastic behavior of Ca ₄ La ₆ (SiO ₄) ₆ (OH) ₂ a synthetic rare-earth silicate apatite: a powder X-ray diffraction study up to 9.33 GPa. <i>Physics and Chemistry of Minerals</i> , 2014, 41, 85-90. | 0.8 | 1 |
| 53 | Sound Velocities of Iron-Nickel (Fe ₉₀ Ni ₁₀) Alloy up to 8 GPa and 773 K: The Effect of Nickel on the Elastic Properties of bcc-Iron at High P-T. <i>American Mineralogist</i> , 2021, , . | 1.9 | 1 |