

# Jianshi Zhou

## List of Publications by Year in descending order

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98  
papers

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98  
docs citations

98  
times ranked

5579  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Unusual high thermal conductivity in boron arsenide bulk crystals. <i>Science</i> , 2018, 361, 582-585.   | 6.0  | 300       |
| 2  | Linear temperature dependence of resistivity and change in the Fermi surface at the pseudogap critical point of $A\text{A}^{\prime}\text{high-Tc}$ superconductor. <i>Nature Physics</i> , 2009, 5, 31-34.  | 6.5  | 185       |
| 3  | Unusual Evolution of the Magnetic Interactions versus Structural Distortions in $\text{RMnO}_3$ Perovskites. <i>Physical Review Letters</i> , 2006, 96, 247202.   | 2.9  | 184       |
| 4  | Bond-length fluctuations and the spin-state transition in $\text{LCoO}_3$ (L=La,Pr, and Nd). <i>Physical Review B</i> , 2004, 69, .   | 1.1  | 177       |
| 5  | High-pressure synthesis of the cubic perovskite $\text{BaRuO}_3$ and evolution of ferromagnetism in $\text{ARuO}_3$ (A = Ca, Sr, Ba) ruthenates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 7115-7119. | 3.3  | 171       |
| 6  | Pressure-Induced Polaronic to Itinerant Electronic Transition in $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ Crystals. <i>Physical Review Letters</i> , 1997, 79, 3234-3237.   | 2.9  | 155       |
| 7  | New forms of phase segregation. <i>Nature</i> , 1997, 386, 229-230.   | 13.7 | 153       |
| 8  | Exceptional oxygen evolution reactivities on $\text{CaCoO}_3$ and $\text{SrCoO}_3$ . <i>Science Advances</i> , 2019, 5, eaav6262.   | 4.7  | 132       |
| 9  | Thermodynamic signatures of quantum criticality in cuprate superconductors. <i>Nature</i> , 2019, 567, 218-222.   | 13.7 | 120       |
| 10 | Synthesis of clathrate cerium superhydride $\text{CeH}_9$ at 80-100 GPa with atomic hydrogen sublattice. <i>Nature Communications</i> , 2019, 10, 4453.   | 5.8  | 117       |
| 11 | Giant thermal Hall conductivity in the pseudogap phase of cuprate superconductors. <i>Nature</i> , 2019, 571, 376-380.  | 13.7 | 105       |
| 12 | Chiral phonons in the pseudogap phase of cuprates. <i>Nature Physics</i> , 2020, 16, 1108-1111.   | 6.5  | 95        |
| 13 | Thermoelectric power in single-layer copper oxides. <i>Physical Review B</i> , 1995, 51, 3104-3115.   | 1.1  | 84        |
| 14 | Transition from Curie-Weiss to enhanced Pauli paramagnetism in $\text{RNiO}_3$ (R=La,Pr, $\in$ Gd). <i>Physical Review B</i> , 2003, 67, .  | 1.1  | 84        |
| 15 | Identification of a new type of electronic state in the magnetoresistive orthomanganites. <i>Nature</i> , 1996, 381, 770-772.   | 13.7 | 81        |
| 16 | Fermi-surface transformation across the pseudogap critical point of the cuprate superconductor<br>$\text{La}_{1.6-x}\text{Ce}_x\text{CuO}_4$<br><i>Physical Review B</i> , 2017, 95, .  | 11.1 | 78        |
| 17 | Twisting phonons in complex crystals with quasi-one-dimensional substructures. <i>Nature Communications</i> , 2015, 6, 6723.  | 5.8  | 75        |
| 18 | Approaching the Minimum Thermal Conductivity in Rhenium-Substituted Higher Manganese Silicides. <i>Advanced Energy Materials</i> , 2014, 4, 1400452.  | 10.2 | 74        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Magnonic coupling between $Sm^{3+}$ and the canted spin in an antiferromagnetic $SmFeO_3$  | 1.1  | 72        |
| 20 | High-Pressure Synthesis of <i>A</i> -Site Ordered Double Perovskite $CaMnTi_2O_6$ and Ferroelectricity Driven by Coupling of <i>A</i> -Site Ordering and the Second-Order Jahn-Teller Effect. Chemistry of Materials, 2014, 26, 2601-2608. | 3.2  | 70        |
| 21 | Direct observation of magnon-phonon coupling in yttrium iron garnet. Physical Review B, 2017, 96, .  | 1.1  | 61        |
| 22 | Pseudogap phase of cuprate superconductors confined by Fermi surface topology. Nature Communications, 2017, 8, 2044.   | 5.8  | 60        |
| 23 | Unusually Strong Orbit-Lattice Interactions in the $RVO_3$ Perovskites. Physical Review Letters, 2004, 93, 235901.   | 2.9  | 57        |
| 24 | Electron scattering, charge order, and pseudogap physics in $La_{1.6-x}Nd_{0.4}Sr_xCuO_4$ : An angle-resolved photoemission spectroscopy study. Physical Review B, 2015, 92, .   | 1.1  | 56        |
| 25 | Linear-in temperature resistivity from an isotropic Planckian scattering rate. Nature, 2021, 595, 667-672.   | 13.7 | 55        |
| 26 | Transition from Orbital Liquid to Jahn-Teller Insulator in Orthorhombic Perovskites $R_3TiO_7$ . Physical Review Letters, 2008, 101, 087205.   | 2.9  | 53        |
| 27 | hexagonal phases of $R_3MnO_7$ MnO   |      |           |

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|----|---|-----|-----------|
| 37 | Thermopower across the stripe critical point of $\text{La}_{1-x}\text{Nd}_x\text{CuO}_3$ . Physical Review B, 2009, 79, .   | 1.1 | 40        |
| 38 | Large positive linear magnetoresistance in the two-dimensional $t_2g$ electron gas at the EuO/SrTiO <sub>3</sub> interface. Scientific Reports, 2018, 8, 7721.  | 1.6 | 40        |
| 39 | Charge disproportionation and the pressure-induced insulator-metal transition in cubic perovskite $\text{PbCrO}_3$ . Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1670-1674.                             | 3.3 | 37        |
| 40 | Slater Insulator in Iridate Perovskites with Strong Spin-Orbit Coupling. Physical Review Letters, 2016, 117, 176603.  | 2.9 | 36        |
| 41 | Pressure-induced phase transitions and superconductivity in a quasi-1-dimensional topological crystalline insulator $\text{Bi}_4\text{Br}_4$ . Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17696-17700. | 3.3 | 36        |
| 42 | Critical behavior of ferromagnetic perovskite ruthenates. Physical Review B, 2012, 85, .  | 1.1 | 34        |
| 43 | New Mechanism for Ferroelectricity in the Perovskite $\text{Ca}_2\text{MnTi}_2\text{O}_6$ Synthesized by Spark Plasma Sintering. Journal of the American Chemical Society, 2018, 140, 2214-2220.  | 6.6 | 32        |
| 44 | Evolution of ferromagnetism in orthorhombic perovskites $\text{Sr}_{1-x}\text{La}_x\text{Ti}_2\text{O}_6$ . Physical Review B, 2010, 81, .  | 1.1 | 28        |
| 45 | High-pressure synthesis of the $\text{BaR}_3\text{O}_3$ perovskite: A Pauli paramagnetic metal with a Fermi liquid ground state. Physical Review B, 2013, 88, .   | 1.1 | 28        |
| 46 | Varied roles of Pb in transition-metal $\text{PbM}_3\text{O}_3$ perovskites ( $M = \text{Ti, V, Cr, Mn, Fe}$ ). Physical Review B, 2018, 98, 040401.  | 2.8 | 28        |
| 47 | Thermoelectric Properties of Cold-Pressed Higher Manganese Silicides for Waste Heat Recovery. Journal of Electronic Materials, 2012, 41, 1564-1572.   | 1.0 | 27        |
| 48 | Abnormal Elastic and Vibrational Behaviors of Magnetite at High Pressures. Scientific Reports, 2014, 4, 6282.   | 1.6 | 27        |
| 49 | Dimer rattling mode induced low thermal conductivity in an excellent acoustic conductor. Nature Communications, 2020, 11, 5197.   | 5.8 | 27        |
| 50 | Probing structural inhomogeneities induced by exchange striction above $T_N$ in antiferromagnetic perovskites. Physical Review B, 2002, 66, .   | 1.1 | 26        |
| 51 | Magnetism out of antisite disorder in the $\text{La}_{1-x}\text{VO}_3$ compound. Physical Review B, 2017, 96, .   | 1.1 | 25        |
| 52 | Magnetism out of antisite disorder in the $\text{La}_{1-x}\text{Ba}_x\text{VO}_3$ compound. Physical Review B, 2017, 96, .  | 1.1 | 25        |
| 53 | Pressure dependence of thermoelectric power in $\text{La}_{1-x}\text{Nd}_x\text{CuO}_3$ . Physical Review B, 1998, 57, R2017-R2020.   | 1.1 | 23        |
| 54 | Insulating Pockets in Metallic $\text{LaNiO}_3$ . Advanced Electronic Materials, 2016, 2, 1500261.  | 2.6 | 23        |

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|----|---|-----|-----------|
| 55 | Large magnetic order in the Heisenberg pyrochlore antiferromagnets $Gd_2O_3$ . Physical Review B, 2019, 100, 104411. <a href="https://doi.org/10.1103/PhysRevB.100.104411">https://doi.org/10.1103/PhysRevB.100.104411</a>  | 1.1 | 23        |
| 56 | Thermal Expansion Coefficient and Lattice Anharmonicity of Cubic Boron Arsenide. Physical Review Applied, 2019, 11, 011001. <a href="https://doi.org/10.1103/PhysRevApplied.11.011001">https://doi.org/10.1103/PhysRevApplied.11.011001</a>   | 1.5 | 23        |
| 57 | Spin-state transition in $BaCo_2O_7$ studied with neutron powder diffraction. Physical Review B, 2021, 103, 080407. <a href="https://doi.org/10.1103/PhysRevB.103.080407">https://doi.org/10.1103/PhysRevB.103.080407</a>   | 1.1 | 22        |
| 58 | Thermal stability of $Mg_2Si_{0.4}Sn_{0.6}$ in inert gases and atomic-layer-deposited $Al_2O_3$ thin film as a protective coating. Journal of Materials Chemistry A, 2016, 4, 17726-17731. <a href="https://doi.org/10.1039/C6JM00000A">https://doi.org/10.1039/C6JM00000A</a>                        | 5.2 | 21        |
| 59 | Thermopower across the phase diagram of the cuprate $La_{1.6}Nd_{0.4}Sr_xCuO_4$ : Signatures of the pseudogap and charge density wave phases. Physical Review B, 2021, 103, 100407. <a href="https://doi.org/10.1103/PhysRevB.103.100407">https://doi.org/10.1103/PhysRevB.103.100407</a>             | 1.1 | 21        |
| 60 | Spin-state transition in $BaCo_2O_7$ studied with neutron powder diffraction. Physical Review B, 2021, 103, 080407. <a href="https://doi.org/10.1103/PhysRevB.103.080407">https://doi.org/10.1103/PhysRevB.103.080407</a>   | 1.1 | 20        |
| 61 | Fermi surface transformation at the pseudogap critical point of a cuprate superconductor. Nature Physics, 2022, 18, 558-564. <a href="https://doi.org/10.1038/s41567-022-01688-4">https://doi.org/10.1038/s41567-022-01688-4</a>  | 6.5 | 20        |
| 62 | Effects of Impurities on the Thermal and Electrical Transport Properties of Cubic Boron Arsenide. Chemistry of Materials, 2021, 33, 6974-6982. <a href="https://doi.org/10.1021/acs.chemmater.1c02000">https://doi.org/10.1021/acs.chemmater.1c02000</a>  | 3.2 | 19        |
| 63 | New Routes to Synthesizing an Ordered Perovskite $CaCu_3Fe_2Sb_2O_{12}$ and Its Magnetic Structure by Neutron Powder Diffraction. Inorganic Chemistry, 2014, 53, 4281-4283. <a href="https://doi.org/10.1021/acs.inorgchem.4b00000">https://doi.org/10.1021/acs.inorgchem.4b00000</a>                 | 1.9 | 18        |
| 64 | Multimillimeter-sized cubic boron arsenide grown by chemical vapor transport via a tellurium tetraiodide transport agent. Applied Physics Letters, 2018, 112, 261901. <a href="https://doi.org/10.1063/1.5020000">https://doi.org/10.1063/1.5020000</a>   | 1.5 | 18        |
| 65 | Wiedemann-Franz Law and Abrupt Change in Conductivity across the Pseudogap Critical Point of a Cuprate Superconductor. Physical Review X, 2018, 8, 031047. <a href="https://doi.org/10.1103/PhysRevX.8.031047">https://doi.org/10.1103/PhysRevX.8.031047</a>  | 2.8 | 16        |
| 66 | Spin-state transitions in $PrCoO_3$ studied with neutron powder diffraction. Physical Review B, 2011, 84, 080407. <a href="https://doi.org/10.1103/PhysRevB.84.080407">https://doi.org/10.1103/PhysRevB.84.080407</a>   | 1.1 | 14        |
| 67 | Spin-state transitions in $PrCoO_3$ studied with neutron powder diffraction. Physical Review B, 2011, 84, 080407. <a href="https://doi.org/10.1103/PhysRevB.84.080407">https://doi.org/10.1103/PhysRevB.84.080407</a>   | 1.1 | 14        |
| 68 | Unusual structural evolution in $KCuF_3$ at high temperatures by neutron powder diffraction. Physical Review B, 2013, 87, 080407. <a href="https://doi.org/10.1103/PhysRevB.87.080407">https://doi.org/10.1103/PhysRevB.87.080407</a>   | 1.1 | 12        |
| 69 | Evidence for spin swapping in an antiferromagnet. Nature Physics, 2022, 18, 800-805. <a href="https://doi.org/10.1038/s41567-022-01688-4">https://doi.org/10.1038/s41567-022-01688-4</a>  | 6.5 | 12        |
| 70 | Seebeck Coefficient in a Cuprate Superconductor: Particle-Hole Asymmetry in the Strange Metal Phase and Fermi Surface Transformation in the Pseudogap Phase. Physical Review X, 2022, 12, 031047. <a href="https://doi.org/10.1103/PhysRevX.12.031047">https://doi.org/10.1103/PhysRevX.12.031047</a> | 2.8 | 11        |
| 71 | Effects of grain boundaries and defects on anisotropic magnon transport in textured $Sr_{14}Cu_{24}O_{41}$ . Physical Review B, 2017, 95, 080407. <a href="https://doi.org/10.1103/PhysRevB.95.080407">https://doi.org/10.1103/PhysRevB.95.080407</a>   | 1.1 | 10        |
| 72 | Pressure dependence of the superconducting transition temperature of the filled skutterudite $YFe_4P_{12}$ . Physical Review B, 2013, 88, 080407. <a href="https://doi.org/10.1103/PhysRevB.88.080407">https://doi.org/10.1103/PhysRevB.88.080407</a>   | 1.1 | 9         |

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|----|--|-----|-----------|
| 73 | Identification of electronic state in perovskite $\text{CaCrO}_3$ by high-pressure studies. <i>Physical Review B</i> , 2015, 92, .   | 1.1 | 9         |
| 74 | Anomalous bulk modulus in vanadate spinels. <i>Physical Review B</i> , 2016, 94, .   | 1.1 | 9         |
| 75 | Coupling of Spinons with Defects and Phonons in the Spin Chain Compound $\text{CaMn}_2\text{O}_7$ . <i>Physical Review Letters</i> , 2019, 122, 185901.  | 2.9 | 9         |
| 76 | Magnetism and the spin state in cubic perovskite $\text{CaCoO}_3$ synthesized under high pressure. <i>Physical Review Materials</i> , 2017, 1, .   | 0.9 | 9         |
| 77 | Lattice and magnetic dynamics in perovskite $\text{YTiO}_3$ . <i>Physical Review B</i> , 2016, 94, .   | 1.1 | 8         |
| 78 | Contradictory nature of Co doping in ferroelectric $\text{BaTiO}_3$ . <i>Physical Review B</i> , 2016, 94, .   | 1.1 | 8         |
| 79 | Lattice distortion in the spin-orbital entangled state in $\text{RVO}_3$ perovskites. <i>Physical Review B</i> , 2019, 100, .  | 1.1 | 8         |
| 80 | Room-temperature polar metal stabilized under high pressure. <i>Physical Review B</i> , 2020, 101, .   | 1.1 | 8         |
| 81 | Valence State of Pb in Transition Metal Perovskites $\text{PbTMO}_3$ (TM = Ti, Ni) Determined From X-Ray Absorption Near-Edge Spectroscopy. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1800014. | 0.7 | 7         |
| 82 | Synthesis and Magnon Thermal Transport Properties of Spin Ladder $\text{Sr}_{14}\text{Cu}_{24}\text{O}_{41}$ Microstructures. <i>Advanced Functional Materials</i> , 2020, 30, 2001637.                            | 7.8 | 7         |
| 83 | Pressure and Isotope Effects in the Manganese-Oxide Perovskites. <i>Materials Research Society Symposia Proceedings</i> , 1997, 494, 335.  | 0.1 | 6         |
| 84 | Synthesis of monoclinic $\text{IrTe}_2$ under high pressure and its physical properties. <i>Physical Review B</i> , 2015, 92, .  | 1.1 | 6         |
| 85 | Possible Bose-Einstein condensate associated with an orbital degree of freedom in the Mott insulator $\text{CaCrO}_3$ . <i>Physical Review B</i> , 2016, 94, .   | 1.1 | 6         |
| 86 | High-field phase diagram and phase transitions in hexagonal manganite $\text{ErMnO}_3$ . <i>Physical Review B</i> , 2018, 97, .  | 1.1 | 6         |
| 87 | Emergence of a competing stripe phase near the Mott transition in Ti-doped bilayer calcium ruthenates. <i>Physical Review B</i> , 2020, 101, .   | 1.1 | 6         |
| 88 | Prediction and Synthesis of Dysprosium Hydride Phases at High Pressure. <i>Inorganic Chemistry</i> , 2020, 59, 5303-5312.  | 1.9 | 6         |
| 89 | Unraveling the Orbital Physics in a Canonical Orbital System $\text{KCuF}_3$ . <i>Physical Review Letters</i> , 2021, 126, 106401.   | 2.9 | 6         |
| 90 | High-Pressure Synthesis, Crystal Structure, and Magnetic and Transport Properties of a Six-Layered $\text{SrRhO}_3$ . <i>Inorganic Chemistry</i> , 2017, 56, 8187-8194.  | 1.9 | 5         |

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|----|--|-----|-----------|
| 91 | Charge Disproportionation and Complex Magnetism in a PbMnO <sub>3</sub> Perovskite Synthesized under High Pressure. Chemistry of Materials, 2021, 33, 92-101.  | 3.2 | 4         |
| 92 | Role of Grain Size on Magnon and Phonon Thermal Transport in the Spin Ladder Compound Ca <sub>9</sub> La <sub>5</sub> Cu <sub>24</sub> O <sub>41</sub> . ACS Applied Electronic Materials, 2022, 4, 787-794. | 2.0 | 4         |
| 93 | Effect of pressure on the pseudogap and charge density wave phases of the cuprate Nd-LSCO probed by thermopower measurements. Physical Review Research, 2021, 3, .   | 1.3 | 3         |
| 94 | Spin freezing into a disordered state in $\text{CaFeTe}_2\text{O}_6$ synthesized under high pressure. Physical Review B, 2018, 98, .   | 1.1 | 2         |
| 95 | Strongly correlated electrons in the ferroelectric metal $\text{LiOsO}_3$ . Physical Review B, 2021, 104, .  | 1.1 | 2         |
| 96 | Temperature-Pressure Phase Diagram and Possible Pressure-Driven New Electronic Phase in the Polar Metal $\text{LiOsO}_3$ . ECS Journal of Solid State Science and Technology, 2022, 11, 023008.              | 0.9 | 2         |
| 97 | Lattice and magnetic dynamics in the $\text{YVO}_3$ Mott insulator studied by neutron scattering and first-principles calculations. Physical Review B, 2022, 105, .  | 1.1 | 1         |
| 98 | Dynamics of phase transitions in $\text{YVO}_3$ investigated via inelastic neutron scattering and first-principles calculations. Neutron News, 0, , 1-3.   | 0.1 | 1         |