# Zhi Li

List of Publications by Year
in descending order

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Version: 2024-02-01

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|---|---|---|---|
| 71 papers | 5,458 citations | 147726 31 h-index | 95218 68 g-index |
| 71 all docs | 71 docs citations | 71 times ranked | 5301 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Interface-Induced High-Temperature Superconductivity in Single Unit-Cell FeSe Films on SrTiO <sub>3</sub>. Chinese Physics Letters, 2012, 29, 037402. | 1.3 | 972 |
| 2 | Phase diagram and electronic indication of high-temperature superconductivity at 65â€‰K in single-layer FeSe films. Nature Materials, 2013, 12, 605-610. | 13.3 | 706 |
| 3 | Electronic origin of high-temperature superconductivity in single-layer FeSe superconductor. Nature Communications, 2012, 3, 931. | 5.8 | 495 |
| 4 | Direct Observation of Nodes and Twofold Symmetry in FeSe Superconductor. Science, 2011, 332, 1410-1413. | 6.0 | 360 |
| 5 | Direct Observation of High-Temperature Superconductivity in One-Unit-Cell FeSe Films. Chinese Physics Letters, 2014, 31, 017401. | 1.3 | 222 |
| 6 | Landau Quantization and the Thickness Limit of Topological Insulator Thin Films of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Sb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Te</mml:mi><mml:mn> Physical Review Letters, 2012, 108, 016401. | 2.9 | 195 |
| 7 | Fermi-Level Tuning of Epitaxial<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Sb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Te</mml:mi><mml:mn> Films on Graphene by Regulating Intrinsic Defects and Substrate Transfer Doping. Physical Review Letters, 2012, 108, 066809. | 2.9 | 152 |
| 8 | Fully gapped topological surface states in Bi2Se3 films induced by a d-wave high-temperature superconductor. Nature Physics, 2013, 9, 621-625. | 6.5 | 149 |
| 9 | Molecular-beam epitaxy and robust superconductivity of stoichiometric FeSe crystalline films on bilayer graphene. Physical Review B, 2011, 84, . | 1.1 | 146 |
| 10 | Quasi-freestanding epitaxial silicene on Ag(111) by oxygen intercalation. Science Advances, 2016, 2, e1600067. | 4.7 | 138 |
| 11 | Realization of flat band with possible nontrivial topology in electronic Kagome lattice. Science Advances, 2018, 4, eaau4511. | 4.7 | 131 |
| 12 | Interface charge doping effects on superconductivity of single-unit-cell FeSe films on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>SrTiO</mml:mtext><mml:mn>3</mml:mn> Physical Review B, 2014, 89, . | 1.1 | 128 |
| 13 | <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>KFe</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Se</mml:mi><mml:mn> the Parent Compound of K-Doped Iron Selenide Superconductors. Physical Review Letters, 2012, 109, 057003. | 2.9 | 101 |
| 14 | Blocking Ion Migration Stabilizes the High Thermoelectric Performance in Cu<sub>2</sub>Se Composites. Advanced Materials, 2020, 32, e2003730. | 11.1 | 99 |
| 15 | Atomic and electronic structures of single-layer FeSe on SrTiO<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>(001): The role of oxygen deficiency. Physical Review B, 2013, 87, . | 1.1 | 86 |
| 16 | Detection of a Superconducting Phase in a Two-Atom Layer of Hexagonal Ga Film Grown on Semiconducting GaN(0001). Physical Review Letters, 2015, 114, 107003. | 2.9 | 81 |
| 17 | Band inversion induced multiple electronic valleys for high thermoelectric performance of SnTe with strong lattice softening. Nano Energy, 2020, 69, 104395. | 8.2 | 80 |
| 18 | Cooperative Electronâ€“Phonon Coupling and Buckled Structure in Germanene on Au(111). ACS Nano, 2017, 11, 3553-3559. | 7.3 | 75 |

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|---|---|---|---|
| 19 | Honeycomb silicon: a review of silicene. Science Bulletin, 2015, 60, 1551-1562. | 4.3 | 74 |
| 20 | Structural defects and electronic properties of the Cu-doped topological insulator Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Se</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. | 1.1 | 70 |
| 21 | Interface-Enhanced Electron-Phonon Coupling and High-Temperature Superconductivity in Potassium-Coated Ultrathin FeSe Films on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:m Physical Review B, 2016, 93, . | 1.1 | 70 |
| 22 | Electronic evidence of an insulatorâ€“superconductor crossover in single-layer FeSe/SrTiO3films. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18501-18506. | 3.3 | 67 |
| 23 | Dichotomy of the electronic structure and superconductivity between single-layer and double-layer FeSe/SrTiO3 films. Nature Communications, 2014, 5, 5047. | 5.8 | 57 |
| 24 | Molecular beam epitaxy growth and post-growth annealing of FeSe films on SrTiO<sub>3</sub>: a scanning tunneling microscopy study. Journal of Physics Condensed Matter, 2014, 26, 265002. | 0.7 | 56 |
| 25 | Vacancy-Based Defect Regulation for High Thermoelectric Performance in Ge<sub>9</sub>Sb<sub>2</sub>Te<sub>12â€“x</sub> Compounds. ACS Applied Materials & Interfaces, 2020, 12, 19664-19673. | 4.0 | 47 |
| 26 | Gating the charge state of single Fe dopants in the topological insulator Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Se<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>with a scanning tunneling microscope. Physical Review B, 2012, 86, . | 1.1 | 42 |
| 27 | Spinâ€Gapless Semiconductors. Small, 2020, 16, e1905155. | 5.2 | 41 |
| 28 | Identifying the Manipulation of Individual Atomic-Scale Defects for Boosting Thermoelectric Performances in Artificially Controlled Bi<sub>2</sub>Te<sub>3</sub> Films. ACS Nano, 2021, 15, 5706-5714. | 7.3 | 38 |
| 29 | Delocalized Surface State in Epitaxial Si(111) Film with Spontaneous âˆš3â€‰Ã—â€‰âˆš3 Superstructure. Scientific Reports, 2015, 5, 13590. | 1.6 | 37 |
| 30 | Observation of van Hove Singularities in Twisted Silicene Multilayers. ACS Central Science, 2016, 2, 517-521. | 5.3 | 37 |
| 31 | Synthesis of Multilayer Silicene on Si(111)âˆš3 Ã— âˆš3-Ag. Journal of Physical Chemistry C, 2017, 121, 27182-27190. | 1.5 | 34 |
| 32 | Imaging the Electron-Boson Coupling in Superconducting FeSe Films Using a Scanning Tunneling Microscope. Physical Review Letters, 2014, 112, 057002. | 2.9 | 31 |
| 33 | Role of Cation Vacancies in Cu<sub>2</sub>SnSe<sub>3</sub> Thermoelectrics. ACS Applied Materials & Interfaces, 2019, 11, 24212-24220. | 4.0 | 30 |
| 34 | High Thermoelectric Performance in Chalcopyrite Cu<sub>1â€“x</sub>Ag<sub>x</sub>GaTe<sub>2</sub>â€“ZnTe: Nontrivial Band Structure and Dynamic Doping Effect. Journal of the American Chemical Society, 2022, 144, 9113-9125. | 6.6 | 29 |
| 35 | xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi mathvariant="normal">b</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">T</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. | 1.1 | 26 |
| 36 | Optical phonon dominated heat transport: A first-principles thermal conductivity study of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BaSnS</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2021, 104, . | 1.1 | 28 |

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| 37 | Manipulation of Dirac fermions in magnetically doped topological insulator<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi mathvariant="normal">b</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">T</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> films. | 1.1 | 22 |
| 38 | Crystal, spin, and electronic structure of the superconductor LiFeAs. Physical Review B, 2009, 80, . | 1.1 | 21 |
| 39 | Possible Excitonic Insulating Phase in Quantum-Confined Sb Nanoflakes. Nano Letters, 2019, 19, 4960-4964. | 4.5 | 20 |
| 40 | Quantum oscillations of robust topological surface states up to 50â€‰K in thick bulk-insulating topological insulator. Npj Quantum Materials, 2019, 4, . | 1.8 | 20 |
| 41 | Thickness-dependent electronic transport induced by in situ transformation of point defects in MBE-grown Bi2Te3 thin films. Applied Physics Letters, 2020, 117, . | 1.5 | 19 |
| 42 | Weak-Bonding Elements Lead to High Thermoelectric Performance in BaSnS<sub>3</sub> and SrSnS<sub>3</sub>: A First-Principles Study. Chemistry of Materials, 2022, 34, 1289-1301. | 3.2 | 19 |
| 43 | Zn-Induced Defect Complexity for the High Thermoelectric Performance of n-Type PbTe Compounds. ACS Applied Materials & Interfaces, 2021, 13, 43134-43143. | 4.0 | 16 |
| 44 | Role of Atomic Interaction in Electronic Hybridization in Two-Dimensional Ag<sub>2</sub>Ge Nanosheets. Journal of Physical Chemistry C, 2017, 121, 16754-16760. | 1.5 | 13 |
| 45 | Scanning tunneling microscopy of interface properties of Bi<sub>2</sub>Se<sub>3</sub>on FeSe. Journal of Physics Condensed Matter, 2012, 24, 475604. | 0.7 | 12 |
| 46 | Atomic mechanism of ionic confinement in the thermoelectric Cu2Se based on a low-cost electric-current method. Cell Reports Physical Science, 2021, 2, 100345. | 2.8 | 12 |
| 47 | Boosting Superconducting Properties of Fe(Se, Te) via Dual-Oscillation Phenomena Induced by Fluorine Doping. ACS Applied Materials & Interfaces, 2019, 11, 18825-18832. | 4.0 | 11 |
| 48 | Impurity states in Mo<sub>1â^'x</sub>M<sub>x</sub>Se<sub>2</sub> compounds doped with group VB elements and their electronic and thermal transport properties. Journal of Materials Chemistry C, 2020, 8, 619-629. | 2.7 | 11 |
| 49 | Scanning tunneling microscopy study of the superconducting properties of three-atomic-layer Pb films. Applied Physics Letters, 2013, 103, . | 1.5 | 10 |
| 50 | Visualizing superconductivity in FeSe nanoflakes on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math> scanning tunneling microscopy. Physical Review B, 2015, 91, . | 1.1 | 10 |
| 51 | Pauli-limited effect in the magnetic phase diagram of FeSexTe1â^'x thin films. Applied Physics Letters, 2015, 107, . | 1.5 | 9 |
| 52 | Metalâ€“silicene interaction studied by scanning tunneling microscopy. Journal of Physics Condensed Matter, 2016, 28, 034002. | 0.7 | 9 |
| 53 | Synergistically Improved Electronic and Thermal Transport Properties in Nb-Doped Nb<sub>y</sub>Mo<sub>1â€“y</sub>Se<sub>2â€“2x</sub>Te<sub>2x</sub> Solid Solutions Due to Alloy Phonon Scattering and Increased Valley Degeneracy. ACS Applied Materials & Interfaces, 2019, 11, 26069-26081. | 4.0 | 9 |
| 54 | An Atomic Force Microscopy Study of Single-Layer FeSe Superconductor. Applied Physics Express, 2013, 6, 113101. | 1.1 | 8 |

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| 55 | Visualizing the elongated vortices in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î³</mml:mi></mml:math>-Ga nanostrips. Physical Review B, 2016, 93, . | 1.1 | 8 |
| 56 | Doping Achieves High Thermoelectric Performance in SnS: A First-Principles Study. ACS Applied Materials & Interfaces, 2022, 14, 6916-6925. | 4.0 | 8 |
| 57 | Modulation of Crystal and Electronic Structures in Topological Insulators by Rare-Earth Doping. ACS Applied Electronic Materials, 2019, 1, 1929-1936. | 2.0 | 7 |
| 58 | Boosting the superconducting properties of Fe(Se, Te) through hexagonal phase manipulation. Journal of Alloys and Compounds, 2020, 816, 152683. | 2.8 | 7 |
| 59 | Atomically Thin Superconductors. Small, 2021, 17, 1904788. | 5.2 | 7 |
| 60 | Electroresistance in multipolar antiferroelectric Cu2Se semiconductor. Nature Communications, 2021, 12, 7207. | 5.8 | 7 |
| 61 | Majorana zero modes in iron-based superconductors. Matter, 2022, 5, 1734-1759. | 5.0 | 7 |
| 62 | Creating thin magnetic layers at the surface of Sb2Te3 topological insulators using a low-energy chromium ion beam. Applied Physics Letters, 2020, 116, . | 1.5 | 6 |
| 63 | Cross-over from weak localization to anti-localization in rare earth doped TRS protected topological insulators. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 385, 126953. | 0.9 | 6 |
| 64 | Homologous Alkali Metal Copper Rare-Earth Chalcogenides A<sub>2</sub>Cu<sub>2n</sub>Ln<sub>4</sub>Q<sub>7+n</sub> (n = 1, 2, 3). Chemistry of Materials, 2022, 34, 3409-3422. | 3.2 | 6 |
| 65 | Structure and Improved Thermoelectric Properties of Ag<sub>2x</sub>Cr<sub>2â€“2x</sub>Se<sub>3</sub> Compounds. Inorganic Chemistry, 2018, 57, 12125-12131. | 1.9 | 5 |
| 66 | Magneto-transport and electronic structures in MoSi2 bulks and thin films with different orientations. Journal of Alloys and Compounds, 2021, 858, 157670. | 2.8 | 4 |
| 67 | High band degeneracy and weak chemical bonds leading to enhanced thermoelectric transport properties in 2Hâ€“MoTe2. Journal of Solid State Chemistry, 2021, 300, 122227. | 1.4 | 2 |
| 68 | Nanoscale superconductivity of Î³-Ga islands grown by molecular beam epitaxy. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1. | 2.0 | 1 |
| 69 | Thermoelectric Module Temperature Stability Control for the Vehicle Engine Exhaust Heat Recovery. , 2015, , . | | 1 |
| 70 | Bonding in the â€œ111â€•Type Ferropnictide Superconductor LiFeAs. Journal of Superconductivity and Novel Magnetism, 2010, 23, 579-581. | 0.8 | 0 |
| 71 | Pushing-pulling based vehicle parking ventilation cooling characteristics analysis. , 2015, , . | | 0 |