Zhi Li

List of Publications by Year
in descending order

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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	Doping Achieves High Thermoelectric Performance in SnS: A First-Principles Study. ACS Applied Materials & Interfaces, 2022, 14, 6916-6925.	4.0	8
2	Weak-Bonding Elements Lead to High Thermoelectric Performance in BaSnS₃ and SrSnS₃: A First-Principles Study. Chemistry of Materials, 2022, 34, 1289-1301.	3.2	19
3	Homologous Alkali Metal Copper Rare-Earth Chalcogenides A₂Cu₂n</sub>Ln₄Q_{7+n} (n = 1, 2, 3). Chemistry of Materials, 2022, 34, 3409-3422.	3.2	6
4	High Thermoelectric Performance in Chalcopyrite Cu_{1â€“x}Ag_xGaTe₂â€“ZnTe: Nontrivial Band Structure and Dynamic Doping Effect. Journal of the American Chemical Society, 2022, 144, 9113-9125.	6.6	29
5	Majorana zero modes in iron-based superconductors. Matter, 2022, 5, 1734-1759.	5.0	7
6	Atomically Thin Superconductors. Small, 2021, 17, 1904788.	5.2	7
7	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
8	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
9	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
10	Identifying the Manipulation of Individual Atomic-Scale Defects for Boosting Thermoelectric Performances in Artificially Controlled Bi₂Te₃ Films. ACS Nano, 2021, 15, 5706-5714.	7.3	38
11	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
12	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
13	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></mml:math> Physical Review B, 2021, 104, .	1.1	28
14	Electroresistance in multipolar antiferroelectric Cu2Se semiconductor. Nature Communications, 2021, 12, 7207.	5.8	7
15	Boosting the superconducting properties of Fe(Se, Te) through hexagonal phase manipulation. Journal of Alloys and Compounds, 2020, 816, 152683.	2.8	7
16	Impurity states in Mo_{1â”’x}M_xSe₂ 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
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	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

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19	Blocking Ion Migration Stabilizes the High Thermoelectric Performance in Cu₂Se Composites. Advanced Materials, 2020, 32, e2003730.	11.1	99
20	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
21	Spinâ€Gapless Semiconductors. Small, 2020, 16, e1905155.	5.2	41
22	Vacancy-Based Defect Regulation for High Thermoelectric Performance in Ge₉Sb₂Te_{12â€“x} Compounds. ACS Applied Materials & Interfaces, 2020, 12, 19664-19673.	4.0	47
23	Possible Excitonic Insulating Phase in Quantum-Confined Sb Nanoflakes. Nano Letters, 2019, 19, 4960-4964.	4.5	20
24	Modulation of Crystal and Electronic Structures in Topological Insulators by Rare-Earth Doping. ACS Applied Electronic Materials, 2019, 1, 1929-1936.	2.0	7
25	Role of Cation Vacancies in Cu₂SnSe₃ Thermoelectrics. ACS Applied Materials & Interfaces, 2019, 11, 24212-24220.	4.0	30
26	Synergistically Improved Electronic and Thermal Transport Properties in Nb-Doped Nb_yMo_{1â€“y}Se_{2â€“2x}Te_{2x} Solid Solutions Due to Alloy Phonon Scattering and Increased Valley Degeneracy. ACS Applied Materials & Interfaces, 2019, 11, 26069-26081.	4.0	9
27	Quantum oscillations of the 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>. Physi...	1.1	26
28	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
29	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
30	Realization of flat band with possible nontrivial topology in electronic Kagome lattice. Science Advances, 2018, 4, eaau4511.	4.7	131
31	Structure and Improved Thermoelectric Properties of Ag_{2x}Cr_{2â€“2x}Se₃ Compounds. Inorganic Chemistry, 2018, 57, 12125-12131.	1.9	5
32	Cooperative Electronâ€“Phonon Coupling and Buckled Structure in Germanene on Au(111). ACS Nano, 2017, 11, 3553-3559.	7.3	75
33	Role of Atomic Interaction in Electronic Hybridization in Two-Dimensional Ag₂Ge Nanosheets. Journal of Physical Chemistry C, 2017, 121, 16754-16760.	1.5	13
34	Synthesis of Multilayer Silicene on Si(111)âˆš3 Ã— âˆš3-Ag. Journal of Physical Chemistry C, 2017, 121, 27182-27190.	1.5	34
35	Observation of van Hove Singularities in Twisted Silicene Multilayers. ACS Central Science, 2016, 2, 517-521.	5.3	37
36	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

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37	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><m Physical Review B, 2016, 93, .	1.1	70
38	Quasi-freestanding epitaxial silicene on Ag(111) by oxygen intercalation. Science Advances, 2016, 2, e1600067.	4.7	138
39	Metalâ€“silicene interaction studied by scanning tunneling microscopy. Journal of Physics Condensed Matter, 2016, 28, 034002.	0.7	9
40	Mass acquisition 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
41	Delocalized Surface State in Epitaxial Si(111) Film with Spontaneous âˆš3â€‰Ã—â€‰âˆš3 Superstructure. Scientific Reports, 2015, 5, 13590.	1.6	37
42	Pauli-limited effect in the magnetic phase diagram of FeSexTe1â^’x thin films. Applied Physics Letters, 2015, 107, .	1.5	9
43	Nanoscale superconductivity of Î³-Ga islands grown by molecular beam epitaxy. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1.	2.0	1
44	Thermoelectric Module Temperature Stability Control for the Vehicle Engine Exhaust Heat Recovery. , 2015, , .		1
45	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><m scanning tunneling microscopy. Physical Review B, 2015, 91, .	1.1	10
46	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
47	Pushing-pulling based vehicle parking ventilation cooling characteristics analysis. , 2015, , .		0
48	Honeycomb silicon: a review of silicene. Science Bulletin, 2015, 60, 1551-1562.	4.3	74
49	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
50	Direct Observation of High-Temperature Superconductivity in One-Unit-Cell FeSe Films. Chinese Physics Letters, 2014, 31, 017401.	1.3	222
51	Imaging the Electron-Boson Coupling in Superconducting FeSe Films Using a Scanning Tunneling Microscope. Physical Review Letters, 2014, 112, 057002.	2.9	31
52	Dichotomy of the electronic structure and superconductivity between single-layer and double-layer FeSe/SrTiO3 films. Nature Communications, 2014, 5, 5047.	5.8	57
53	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></mml:msub><m Physical Review B, 2014, 89, .	1.1	128
54	Molecular beam epitaxy growth and post-growth annealing of FeSe films on SrTiO₃: a scanning tunneling microscopy study. Journal of Physics Condensed Matter, 2014, 26, 265002.	0.7	56

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55	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
56	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
57	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
58	Scanning tunneling microscopy study of the superconducting properties of three-atomic-layer Pb films. Applied Physics Letters, 2013, 103, .	1.5	10
59	An Atomic Force Microscopy Study of Single-Layer FeSe Superconductor. Applied Physics Express, 2013, 6, 113101.	1.1	8
60	Scanning tunneling microscopy of interface properties of Bi₂Se₃on FeSe. Journal of Physics Condensed Matter, 2012, 24, 475604.	0.7	12
61	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:mi> Films on Graphene by Regulating Intrinsic Defects and Substrate Transfer Doping. Physical Review Letters, 2012, 108, 066809.	2.9	152
62	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:mi> Physical Review Letters, 2012, 108, 016401.	2.9	195
63	<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: the Parent Compound of K-Doped Iron Selenide Superconductors. Physical Review Letters, 2012, 109, 057003.	2.9	101
64	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
65	Interface-Induced High-Temperature Superconductivity in Single Unit-Cell FeSe Films on SrTiO ₃. Chinese Physics Letters, 2012, 29, 037402.	1.3	972
66	Electronic origin of high-temperature superconductivity in single-layer FeSe superconductor. Nature Communications, 2012, 3, 931.	5.8	495
67	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>. Physical Review B, 2011, 84, .	1.1	70
68	Direct Observation of Nodes and Twofold Symmetry in FeSe Superconductor. Science, 2011, 332, 1410-1413.	6.0	360
69	Molecular-beam epitaxy and robust superconductivity of stoichiometric FeSe crystalline films on bilayer graphene. Physical Review B, 2011, 84, .	1.1	146
70	Bonding in the â€œ111â€•Type Ferropnictide Superconductor LiFeAs. Journal of Superconductivity and Novel Magnetism, 2010, 23, 579-581.	0.8	0
71	Crystal, spin, and electronic structure of the superconductor LiFeAs. Physical Review B, 2009, 80, .	1.1	21