Yi Zhang

List of Publications by Year
in descending order

59 papers	70,348 citations	147801 31 h-index	133252 59 g-index
63 all docs	63 docs citations	63 times ranked	59704 citing authors

#	Article	IF	Citations
1	Electric Field Effect in Atomically Thin Carbon Films. Science, 2004, 306, 666-669.	12.6	56,177
2	Room-Temperature Quantum Hall Effect in Graphene. Science, 2007, 315, 1379-1379.	12.6	2,662
3	Discovery of a Three-Dimensional Topological Dirac Semimetal, Na ₃ Bi. Science, 2014, 343, 864-867.	12.6	1,889
4	Giant bandgap renormalization and excitonic effects in a monolayer transition metal dichalcogenide semiconductor. Nature Materials, 2014, 13, 1091-1095.	27.5	1,470
5	A stable three-dimensional topological Dirac semimetal Cd3As2. Nature Materials, 2014, 13, 677-681.	27.5	1,242
6	Crossover of the three-dimensional topological insulator Bi2Se3 to the two-dimensional limit. Nature Physics, 2010, 6, 584-588.	16.7	1,227
7	Direct observation of the transition from indirect to direct bandgap in atomically thin epitaxial MoSe2. Nature Nanotechnology, 2014, 9, 111-115.	31.5	1,129
8	Weyl semimetal phase in the non-centrosymmetric compound TaAs. Nature Physics, 2015, 11, 728-732.	16.7	796
9	Characterization of collective ground states in single-layer NbSe2. Nature Physics, 2016, 12, 92-97.	16.7	536
10	Epitaxial growth of a 100-square-centimetre single-crystal hexagonal boron nitride monolayer on copper. Nature, 2019, 570, 91-95.	27.8	422
11	Evolution of the Fermi surface of Weyl semimetals in the transition metal pnictide family. Nature Materials, 2016, 15, 27-31.	27.5	245
12	Electron interaction-driven insulating ground state in Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>Se<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mro	3.2	226
13	Intrinsic magnetic topological insulator phases in the Sb doped MnBi2Te4 bulks and thin flakes. Nature Communications, 2019, 10, 4469.	12.8	212
14	Charge density wave order in 1D mirror twin boundaries of single-layer MoSe2. Nature Physics, 2016, 12, 751-756.	16.7	209
15	Charge density wave transition in single-layer titanium diselenide. Nature Communications, 2015, 6, 8943.	12.8	208
16	Quantum Hall effect based on Weyl orbits in Cd3As2. Nature, 2019, 565, 331-336.	27.8	194
17	Topological insulator Bi2Se3 thin films grown on double-layer graphene by molecular beam epitaxy. Applied Physics Letters, 2010, 97, .	3.3	154
18	Electronic Structure, Surface Doping, and Optical Response in Epitaxial WSe₂ Thin Films. Nano Letters, 2016, 16, 2485-2491.	9.1	147

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19	Probing the Role of Interlayer Coupling and Coulomb Interactions on Electronic Structure in Few-Layer MoSe₂ Nanostructures. Nano Letters, 2015, 15, 2594-2599.	9.1	136
20	Observation of unusual topological surface states in half-Heusler compounds LnPtBi (Ln=Lu, Y). Nature Communications, 2016, 7, 12924.	12.8	114
21	Proton-assisted growth of ultra-flat graphene films. Nature, 2020, 577, 204-208.	27.8	111
22	Observation of topologically protected states at crystalline phase boundaries in single-layer WSe2. Nature Communications, 2018, 9, 3401.	12.8	107
23	Evolution of the Valley Position in Bulk Transition-Metal Chalcogenides and Their Monolayer Limit. Nano Letters, 2016, 16, 4738-4745.	9.1	80
24	Primary Role of the Barely Occupied States in the Charge Density Wave Formation of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>NbSe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2008, 101, 226406.	7.8	57
25	Difference frequency generation in topological semimetals. Physical Review Research, 2020, 2, .	3.6	51
26	Linear and nonlinear optical responses in the chiral multifold semimetal RhSi. Npj Quantum Materials, 2020, 5, .	5.2	50
27	Band Structure Perfection and Superconductivity in Typeâ€II Dirac Semimetal Ir_{1â^'}_xPt_xTe₂. Advanced Materials, 2018, 30, e1801556.	21.0	47
28	Doping effects of Sb and Pb in epitaxial topological insulator Bi2Se3 thin films: An in situ angle-resolved photoemission spectroscopy study. Applied Physics Letters, 2010, 97, .	3.3	43
29	The discovery of dynamic chiral anomaly in a Weyl semimetal NbAs. Nature Communications, 2020, 11, 1259.	12.8	38
30	Tailoring Mo(S,Se)2 structure for high efficient Cu2ZnSn(S,Se)4 solar cells. Solar Energy Materials and Solar Cells, 2018, 176, 302-309.	6.2	37
31	Molecular beam epitaxial growth of a three-dimensional topological Dirac semimetal Na3Bi. Applied Physics Letters, 2014, 105, .	3.3	31
32	Spin-resolved photoemission study of epitaxially grown MoSe₂and WSe₂thin films. Journal of Physics Condensed Matter, 2016, 28, 454001.	1.8	30
33	Epitaxial Growth of Singleâ€Phase 1T'â€WSe₂ Monolayer with Assistance of Enhanced Interface Interaction. Advanced Materials, 2021, 33, e2004930.	21.0	28
34	Growth and Thermo-driven Crystalline Phase Transition of Metastable Monolayer 1Tâ€²-WSe2 Thin Film. Scientific Reports, 2019, 9, 2685.	3.3	19
35	Direct observation of hidden spin polarization in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:mi>H</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi mathvariant="normal">e</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2020, 101, .	3.2	18
36	Selenium capped monolayer NbSe₂ for twoâ€dimensional superconductivity studies. Physica Status Solidi (B): Basic Research, 2016, 253, 2396-2399.	1.5	17

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37	Thickness-dependent magnetotransport properties in 1T VSe₂ single crystals prepared by chemical vapor deposition. Nanotechnology, 2020, 31, 145712.	2.6	17
38	Cycling Fermi arc electrons with Weyl orbits. Nature Reviews Physics, 2021, 3, 660-670.	26.6	17
39	Electronic and magnetic properties of MoS2 monolayers with antisite defects. Journal of Physics and Chemistry of Solids, 2019, 131, 119-124.	4.0	15
40	Infrared study of the multiband low-energy excitations of the topological antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>MnBi</mml:mi><mml:mn>2</mml:mn></mr Physical Review B, 2021, 103, .	3.2	13
41	Direct Observation of Global Elastic Intervalley Scattering Induced by Impurities on Graphene. Nano Letters, 2021, 21, 8258-8265.	9.1	9
42	Charge Density Wave and Electron-Phonon Interaction in Epitaxial Monolayer NbSe₂ Films. Chinese Physics Letters, 2021, 38, 107101.	3.3	9
43	ARPES study of the epitaxially grown topological crystalline insulator SnTe(111). Journal of Electron Spectroscopy and Related Phenomena, 2017, 219, 35-40.	1.7	8
44	Band engineering in epitaxial monolayer transition metal dichalcogenides alloy MoxW1âxSe2 thin films. Applied Physics Letters, 2020, 116, .	3.3	8
45	Selfâ€Assembled Pb Nanostructures on Si(111) Surfaces: From Nanowires to Nanorings. Advanced Materials, 2009, 21, 4609-4613.	21.0	5
46	Observations of nodal lines in the topological semimetal ZrSnTe. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	5.1	5
47	Epitaxial Growth of Uniform Single-Layer and Bilayer Graphene with Assistance of Nitrogen Plasma. Nanomaterials, 2021, 11, 3217.	4.1	5
48	Formation of a monolayer h-BN nanomesh on Rh (111) studied using in-situ STM. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	5.1	4
49	Thickness-dependent structural phase transition and self-intercalation of two-dimensional ferromagnetic chromium telluride thin films. Applied Physics Letters, 2022, 120, 261602.	3.3	3
50	Selectable Growth and Electronic Structures of Monolayer 1Tâ€VSe ₂ and V ₅ Se ₈ Films on Bilayer Graphene. Physica Status Solidi - Rapid Research Letters, 0, , 2100601.	2.4	2
51	Epitaxial Growth of Monolayer SnSe₂ Films on Gd-Intercalated Quasi-Free-Standing Monolayer Graphene with Enhanced Interface Adsorption. Journal of Physical Chemistry C, 2022, 126, 5751-5758.	3.1	2
52	Studies of synthesizing behaviors and superconductivity of sol-gel YBa2Cu3O7â^'x samples in flowing oxygen atmosphere. Frontiers of Physics in China, 2008, 3, 55-60.	1.0	1
53	Atomic-Scale Study of Ge-Induced Incommensurate Phases on Si(111). Chinese Physics Letters, 2010, 27, 026802.	3.3	1
54	Band structure and Fermi surface of atomically uniform lead films. New Journal of Physics, 2010, 12, 113034.	2.9	1

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55	Locally self-consistent embedding approach for disordered electronic systems. Physical Review B, 2019, 100, .	3.2	1
56	Quantum-limit Hall effect with large carrier density in topological semimetals. Physical Review B, 2021, 103, .	3.2	1
57	Surface etching during epitaxial h-BN growth on graphene. APL Materials, 2021, 9, 071107.	5.1	1
58	Charge transfer between the epitaxial monolayer WSe2 films and graphene substrates. Applied Physics Letters, 2021, 119, .	3.3	1
59	Band-selective gap opening by a C4-symmetric order in a proximity-coupled heterostructure Sr2VO3FeAs. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2105190118.	7.1	1