Jian Wang

List of Publications by Year in descending order

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79	3,463	136950	144013
papers	citations	32 h-index	57 g-index

79	79	79	4274
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-Chern-number and high-temperature quantum Hall effect without Landau levels. National Science Review, 2020, 7, 1280-1287.	9.5	251
2	Evidence for electron-electron interaction in topological insulator thin films. Physical Review B, 2011, 83, .	3.2	244
3	Direct Observation of High-Temperature Superconductivity in One-Unit-Cell FeSe Films. Chinese Physics Letters, 2014, 31, 017401.	3.3	222
4	Observation of superconductivity induced by a point contact on 3D Dirac semimetal Cd3As2Âcrystals. Nature Materials, 2016, 15, 38-42.	27.5	209
5	Anisotropic magnetotransport and exotic longitudinal linear magnetoresistance inWTe2crystals. Physical Review B, 2015, 92, .	3.2	156
6	Ising Superconductivity and Quantum Phase Transition in Macro-Size Monolayer NbSe₂. Nano Letters, 2017, 17, 6802-6807.	9.1	155
7	Quantum Griffiths singularity of superconductor-metal transition in Ga thin films. Science, 2015, 350, 542-545.	12.6	151
8	Anisotropic Fermi Surface and Quantum Limit Transport in High Mobility Three-Dimensional Dirac Semimetal<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Cd</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mr Physical Review X, 2015, 5, .	8.9	118
9	High temperature superconducting FeSe films on SrTiO3 substrates. Scientific Reports, 2014, 4, 6040.	3.3	109
10	Intermediate bosonic metallic state in the superconductor-insulator transition. Science, 2019, 366, 1505-1509.	12.6	88
11	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.	7.8	81
12	Atomic line defects and zero-energy end states in monolayer Fe(Te,Se) high-temperature superconductors. Nature Physics, 2020, 16, 536-540.	16.7	78
13	Vertical 1Tâ€TaS₂ Synthesis on Nanoporous Gold for Highâ€Performance Electrocatalytic Applications. Advanced Materials, 2018, 30, e1705916.	21.0	75
14	Anomalous anisotropic magnetoresistance in topological insulator films. Nano Research, 2012, 5, 739-746.	10.4	71
15	Discovery of tip induced unconventional superconductivity on Weyl semimetal. Science Bulletin, 2017, 62, 425-430.	9.0	68
16	Nontrivial superconductivity in topological MoTe2â”xSx crystals. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9503-9508.	7.1	65
17	Chemical Vapor Deposition Grown Waferâ€Scale 2D Tantalum Diselenide with Robust Chargeâ€Densityâ€Wave Order. Advanced Materials, 2018, 30, e1804616.	21.0	63
18	Discovery of log-periodic oscillations in ultraquantum topological materials. Science Advances, 2018, 4, eaau5096.	10.3	54

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19	Recent progress in the controlled synthesis of 2D metallic transition metal dichalcogenides. Nanotechnology, 2019, 30, 182002.	2.6	54
20	Chiral anomaly and ultrahigh mobility in crystalline<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>HfT</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>5</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2016, 93, .	3.2	53
21	Crossover between Weak Antilocalization and Weak Localization of Bulk States in Ultrathin Bi2Se3 Films. Scientific Reports, 2014, 4, 5817.	3.3	52
22	Superconductivity in topologically nontrivial material Au2Pb. Npj Quantum Materials, 2016, 1, .	5.2	52
23	High-temperature superconductivity in one-unit-cell FeSe films. Journal of Physics Condensed Matter, 2017, 29, 153001.	1.8	50
24	Physical properties and potential applications of two-dimensional metallic transition metal dichalcogenides. Coordination Chemistry Reviews, 2018, 376, 1-19.	18.8	49
25	Interplay between topological insulators and superconductors. Physical Review B, 2012, 85, .	3.2	47
26	Intrinsic magnetic topological insulators. Innovation(China), 2021, 2, 100098.	9.1	47
27	Type-II Ising Superconductivity and Anomalous Metallic State in Macro-Size Ambient-Stable Ultrathin Crystalline Films. Nano Letters, 2020, 20, 5728-5734.	9.1	43
28	Magnetic Moments Induced by Atomic Vacancies in Transition Metal Dichalcogenide Flakes. Advanced Materials, 2021, 33, e2005465.	21.0	40
29	Observation of quantum Griffiths singularity and ferromagnetism at the superconducting <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>LaAl</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mrow><mml:mo>/</mml:mo><mml:mi>SrTi</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mrow><mml:mo>(</mml:mo><mml:mn>110</mml:mn></mml:mi> interface. Physical Review B, 2016, 94, .	3.2	39
30	Surface superconductivity in the type II Weyl semimetal TaIrTe4. National Science Review, 2020, 7, 579-587.	9.5	39
31	Thickness dependence of superconductivity and superconductorâ€“insulator transition in ultrathin FeSe films on SrTiO ₃ (001) substrate. 2D Materials, 2015, 2, 044012.	4.4	37
32	Interface-Induced Zeeman-Protected Superconductivity in Ultrathin Crystalline Lead Films. Physical Review X, 2018, 8, .	8.9	36
33	Electron transport in Dirac and Weyl semimetals. Chinese Physics B, 2018, 27, 107402.	1.4	27
34	Signatures of a strange metal in a bosonic system. Nature, 2022, 601, 205-210.	27.8	27
35	Tip-induced or enhanced superconductivity: a way to detect topological superconductivity. Science Bulletin, 2018, 63, 1141-1158.	9.0	26
36	Zero-energy bound states in the high-temperature superconductors at the two-dimensional limit. Science Advances, 2020, 6, eaax7547.	10.3	25

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37	Superconductivity and Fermi Surface Anisotropy in Transition Metal Dichalcogenide NbTe ₂. Chinese Physics Letters, 2019, 36, 057402.	3.3	22
38	Anomalous quantum Griffiths singularity in ultrathin crystalline lead films. Nature Communications, 2019, 10, 3633.	12.8	21
39	Superconductivity in single crystalline Pb nanowires contacted by normal metal electrodes. Physical Review B, 2012, 86, .	3.2	20
40	Eightfold fermionic excitation in a charge density wave compound. Physical Review B, 2020, 102, .	3.2	20
41	Detection of Bosonic Mode as a Signature of Magnetic Excitation in One-Unit-Cell FeSe on SrTiO₃. Nano Letters, 2019, 19, 3464-3472.	9.1	19
42	Unconventional Hall effect induced by Berry curvature. National Science Review, 2020, 7, 1879-1885.	9.5	19
43	Spectroscopic Imaging of Quasiparticle Bound States Induced by Strong Nonmagnetic Scatterings in One-Unit-Cell FeSe/SrTiO3. Physical Review Letters, 2019, 123, 036801.	7.8	18
44	Extrinsic and Intrinsic Anomalous Metallic States in Transition Metal Dichalcogenide Ising Superconductors. Nano Letters, 2021, 21, 7486-7494.	9.1	18
45	Observation of In-Plane Quantum Griffiths Singularity in Two-Dimensional Crystalline Superconductors. Physical Review Letters, 2021, 127, 137001.	7.8	17
46	Detection of Magnetic Gap in Topological Surface States of MnBi₂Te₄. Chinese Physics Letters, 2021, 38, 107404.	3.3	17
47	Spin fluctuation induced linear magnetoresistance in ultrathin superconducting FeSe films. 2D Materials, 2017, 4, 034004.	4.4	16
48	Log-periodic quantum magneto-oscillations and discrete-scale invariance in topological material HfTe5. National Science Review, 2019, 6, 914-920.	9.5	15
49	Induced anomalous Hall effect of massive Dirac fermions in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Zr</mml:mi><mml:msub><mml:mi>Te</mml:mi><mml:mn and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Hf</mml:mi><mml:msub><mml:mi>Te</mml:mi><mml:mn thin flakes. Physical Review B, 2021, 103, .	3.2	15
50	Superconductivity in topological semimetals. National Science Review, 2019, 6, 199-202.	9.5	14
51	Heterostructural one-unit-cell FeSe/SrTiO₃: from high-temperature superconductivity to topological states. 2D Materials, 2020, 7, 022006.	4.4	14
52	Atomic Line Defects and Topological Superconductivity in Unconventional Superconductors. Physical Review X, 2021, 11, .	8.9	14
53	Electronic transport properties of topological insulator films and low dimensional superconductors. Frontiers of Physics, 2013, 8, 491-508.	5.0	13
54	Signature of Superconductivity in Orthorhombic CoSb Monolayer Films on SrTiO3(001). ACS Nano, 2019, 13, 10434-10439.	14.6	13

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55	Recent progress of two-dimensional metallic transition metal dichalcogenides: Syntheses, physical properties, and applications. Journal of Applied Physics, 2022, 131, .	2.5	13
56	Possible unconventional two-band superconductivity in MoTe2. Physical Review B, 2020, 102, .	3.2	12
57	Surface superconductivity on Weyl semimetal induced by nonmagnetic and ferromagnetic tips. Physical Review Materials, 2019, 3, .	2.4	12
58	Controlled Syntheses and Multifunctional Applications of Two-Dimensional Metallic Transition Metal Dichalcogenides. Accounts of Materials Research, 2021, 2, 751-763.	11.7	11
59	Growth and Electronic Transport Property of Layered BiOCl Microplates. Advanced Materials Interfaces, 2015, 2, 1500194.	3.7	10
60	Disorderâ€Induced Quantum Griffiths Singularity Revealed in an Artificial 2D Superconducting System. Advanced Science, 2020, 7, 1902849.	11.2	10
61	Quantum transport in topological insulator hybrid structuresâ€”A combination of topological insulator and superconductor. Science China: Physics, Mechanics and Astronomy, 2012, 55, 2226-2236.	5.1	9
62	Quantum phenomena in topological materials. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	5.1	9
63	Extremely large and anisotropic magnetoresistance in rare-earth tritelluride TbTe3. Journal of Applied Physics, 2020, 128, 073901.	2.5	9
64	Ferromagnetic tip induced unconventional superconductivity in Weyl semimetal. Science Bulletin, 2020, 65, 21-26.	9.0	8
65	Investigation of point-contact Andreev reflection on magnetic Weyl semimetal Co3Sn2S2. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	5.1	8
66	Magnetization-tuned topological quantum phase transition in <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></mml devices. Physical Review B, 2022, 105, .	3.2	8
67	Tunable discrete scale invariance in transition-metal pentatelluride flakes. Npj Quantum Materials, 2020, 5, .	5.2	7
68	Discovery of an unconventional charge modulation on the surface of charge-density-wave material TaTe₄. New Journal of Physics, 2020, 22, 083025.	2.9	7
69	Bosonic Mode and Impurity-Scattering in Monolayer Fe(Te,Se) High-Temperature Superconductors. Nano Letters, 2020, 20, 2056-2061.	9.1	7
70	Orbital-Selective High-Temperature Cooper Pairing Developed in the Two-Dimensional Limit. Nano Letters, 2022, , .	9.1	4
71	Novel voltage signal at proximity-induced superconducting transition temperature in gold nanowires. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	5.1	2
72	Manipulating the particle-hole symmetry of quasiparticle bound states in geometric-sizeâ€“varying Fe clusters on one-unit-cell FeSe/SrTiO3(0â€‰0â€‰1). Journal of Physics Condensed Matter, 2019, 31, 285002.	1.8	2

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73	Anomalous linear magnetoresistance in high-quality crystalline lead thin films. Physical Review B, 2020, 102, .	3.2	2
74	Systematic electrochemical etching of various metal tips for tunneling spectroscopy and scanning probe microscopy. Review of Scientific Instruments, 2021, 92, 015124.	1.3	2
75	Capping layer influence and isotropic in-plane upper critical field of the superconductivity at the FeSe/SrTiO3 interface. Physical Review Materials, 2021, 5, .	2.4	2
76	Log-periodic quantum oscillations in topological or Dirac materials. Frontiers of Physics, 2019, 14, 1.	5.0	1
77	Equally Spaced Quantum States in van der Waals Epitaxy-Grown Nanoislands. Nano Letters, 2021, 21, 9285-9292.	9.1	1
78	Superconductivity in topological materials. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 020301.	0.5	1
79	Engineering atomically flat rutile TiO2(100) over a centimeter scale. Surface Topography: Metrology and Properties, 2019, 7, 025002.	1.6	0