

Shuyun Zhou

List of Publications by Year in descending order

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81
papers

9,358
citations

109264

35
h-index

60583

81
g-index

81
all docs

81
docs citations

81
times ranked

11949
citing authors

#	ARTICLE	IF	CITATIONS
1	Substrate-induced bandgap opening in epitaxial graphene. Nature Materials, 2007, 6, 770-775.	13.3	2,115
2	Experimental observation of topological Fermi arcs in type-II Weyl semimetal MoTe ₂ . Nature Physics, 2016, 12, 1105-1110.	6.5	663
3	Monolayer PtSe ₂ , a New Semiconducting Transition-Metal-Dichalcogenide, Epitaxially Grown by Direct Selenization of Pt. Nano Letters, 2015, 15, 4013-4018.	4.5	560
4	Electric-field control of tri-state phase transformation with a selective dual-ion switch. Nature, 2017, 546, 124-128.	13.7	551
5	First direct observation of Dirac fermions in graphite. Nature Physics, 2006, 2, 595-599.	6.5	466
6	Synthesis and characterization of atomically thin graphite films on a silicon carbide substrate. Journal of Physics and Chemistry of Solids, 2006, 67, 2172-2177.	1.9	423
7	Wafer-Scale Growth and Transfer of Highly-Oriented Monolayer MoS ₂ Continuous Films. ACS Nano, 2017, 11, 12001-12007.	7.3	397
8	Lorentz-violating type-II Dirac fermions in transition metal dichalcogenide PtTe ₂ . Nature Communications, 2017, 8, 257.	5.8	337
9	An unusual isotope effect in a high-transition-temperature superconductor. Nature, 2004, 430, 187-190.	13.7	277
10	Type-II Dirac fermions in the PtSe_2 class of transition metal dichalcogenides. Physical Review B, 2016, 94, .	1.1	236
11	Broadband electromagnetic response and ultrafast dynamics of few-layer epitaxial graphene. Applied Physics Letters, 2009, 94, .	1.5	199
12	Gaps induced by inversion symmetry breaking and second-generation Dirac cones in graphene/hexagonal boron nitride. Nature Physics, 2016, 12, 1111-1115.	6.5	179
13	Experimental evidence for type-II Dirac semimetal in PtSe_2 . Physical Review B, 2017, 96, .	1.1	179
14	Origin of the energy bandgap in epitaxial graphene. Nature Materials, 2008, 7, 259-260.	13.3	175
15	Quasicrystalline 30° twisted bilayer graphene as an incommensurate superlattice with strong interlayer coupling. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6928-6933.	3.3	169
16	Direct observation of spin-layer locking by local Rashba effect in monolayer semiconducting PtSe ₂ film. Nature Communications, 2017, 8, 14216.	5.8	151
17	Fully gapped topological surface states in Bi ₂ Se ₃ films induced by a d-wave high-temperature superconductor. Nature Physics, 2013, 9, 621-625.	6.5	149
18	High quality atomically thin PtSe ₂ films grown by molecular beam epitaxy. 2D Materials, 2017, 4, 045015.	2.0	142

#	ARTICLE	IF	CITATIONS
19	Anisotropic Broadband Photoresponse of Layered Type-II Weyl Semimetal MoTe ₂ . <i>Advanced Materials</i> , 2018, 30, e1707152.	11.1	139
20	Raman signatures of inversion symmetry breaking and structural phase transition in type-II Weyl semimetal MoTe ₂ . <i>Nature Communications</i> , 2016, 7, 13552.	5.8	118
21	Light-induced emergent phenomena in 2D materials and topological materials. <i>Nature Reviews Physics</i> , 2022, 4, 33-48.	11.9	94
22	Disorder-induced multifractal superconductivity in monolayer niobium dichalcogenides. <i>Nature Physics</i> , 2019, 15, 904-910.	6.5	86
23	Phase fluctuations and the absence of topological defects in a photo-excited charge-ordered nickelate. <i>Nature Communications</i> , 2012, 3, 838.	5.8	85
24	Topological Surface State Enhanced Photothermoelectric Effect in Bi ₂ Se ₃ Nanoribbons. <i>Nano Letters</i> , 2014, 14, 4389-4394.	4.5	79
25	Low energy excitations in graphite: The role of dimensionality and lattice defects. <i>Annals of Physics</i> , 2006, 321, 1730-1746.	1.0	75
26	Experimental Evidence of Chiral Symmetry Breaking in Kekulé-Ordered Graphene. <i>Physical Review Letters</i> , 2021, 126, 206804.	2.9	72
27	Elastic Properties and Fracture Behaviors of Biaxially Deformed, Polymorphic MoTe ₂ . <i>Nano Letters</i> , 2019, 19, 761-769.	4.5	67
28	Manipulate the Electronic and Magnetic States in NiCo ₂ O ₄ Films through Electric-Field-Induced Protonation at Elevated Temperature. <i>Advanced Materials</i> , 2019, 31, e1900458.	11.1	64
29	Stacking-Dependent Electronic Structure of Trilayer Graphene Resolved by Nanoscale Angle-Resolved Photoemission Spectroscopy. <i>Nano Letters</i> , 2017, 17, 1564-1568.	4.5	63
30	Type-III Weyl semimetals: $\int_{\text{BZ}} \text{Tr}[\mathbf{d}(\mathbf{k}) \cdot \mathbf{g}(\mathbf{k})]$. <i>Physical Review B</i> , 2021, 103, .		
31	Real-Time Manifestation of Strongly Coupled Spin and Charge Order Parameters in Stripe-Ordered Crystals Using Time-Resolved Resonant X-Ray Diffraction. <i>Physical Review Letters</i> , 2013, 110, 127404.	2.9	48
32	Instability of two-dimensional graphene: Breaking χ^2 with soft x rays. <i>Physical Review B</i> , 2009, 80, .	1.1	44
33	Crossover from 2D metal to 3D Dirac semimetal in metallic PtTe ₂ films with local Rashba effect. <i>Science Bulletin</i> , 2019, 64, 1044-1048.	4.3	44
34	Evidence of charge density wave with anisotropic gap in a monolayer $\sqrt{2} \times \sqrt{2}$ VTe film. <i>Physical Review B</i> , 2019, 100, .	1.1	43
35	Enhancement of superconductivity in organic-inorganic hybrid topological materials. <i>Science Bulletin</i> , 2020, 65, 188-193.	4.3	39
36	Robust charge-density wave strengthened by electron correlations in monolayer 1T-TaSe ₂ and 1T-NbSe ₂ . <i>Nature Communications</i> , 2021, 12, 5873.	5.8	39

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37	Self-doping effects in epitaxially grown graphene. Applied Physics Letters, 2008, 93, .	1.5	33
38	Robust Gapless Surface State and Rashba-Splitting Bands upon Surface Deposition of Magnetic Cr on Bi ₂ Se ₃ . Nano Letters, 2015, 15, 2031-2036.	4.5	33
39	Evidence for a Quasi-One-Dimensional Charge Density Wave in CuTe by Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2018, 121, 206402.	2.9	33
40	Conversion of Multi-layered MoTe ₂ Transistor Between P-Type and N-Type and Their Use in Inverter. Nanoscale Research Letters, 2018, 13, 291.	3.1	30
41	Ultrafast photothermoelectric effect in Dirac semimetallic Cd ₃ As ₂ revealed by terahertz emission. Nature Communications, 2022, 13, 1623.	5.8	29
42	Angle-resolved photoemission spectroscopy. Nature Reviews Methods Primers, 2022, 2, .	11.8	29
43	Emergence of Tertiary Dirac Points in Graphene Moiré Superlattices. Nano Letters, 2017, 17, 3576-3581.	4.5	28
44	Light-Tunable Surface State and Hybridization Gap in Magnetic Topological Insulator MnBi ₈ Te ₁₃ . Nano Letters, 2021, 21, 6080-6086.	4.5	27
45	Revealing Charge Density Wave Formation in the LaTe ₂ System by Angle Resolved Photoemission Spectroscopy. Physical Review Letters, 2007, 98, 166403.	2.9	26
46	Ferromagnetic Enhancement of CE-Type Spin Ordering in $TjETe_{2-x}O_{2+x}$. Physical Review Letters, 2011, 106, 186404.	2.9	26
47	Experimental progress on layered topological semimetals. 2D Materials, 2019, 6, 032001.	2.0	26
48	Growth of large scale PtTe, PtTe ₂ and PtSe ₂ films on a wide range of substrates. Nano Research, 2021, 14, 1663-1667.	5.8	26
49	Photocurrent response of type-II Dirac semimetal PtTe ₂ . 2D Materials, 2020, 7, 034003.	2.0	24
50	Extremely large magnetoresistance and electronic structure of TmSb. Physical Review B, 2018, 97, .	1.1	23
51	Revealing Fermi arcs and Weyl nodes in MoTe ₂ by quasiparticle interference mapping. Physical Review B, 2017, 95, .	1.1	21
52	Coexistence of extended flat band and Kekulé order in Li-intercalated graphene. Physical Review B, 2022, 105, .	1.1	18
53	Strong and Complex Electron-Lattice Correlation in Optimally Doped Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ . Physical Review Letters, 2006, 97, 227001.	2.9	17
54	Widely tunable band gap in a multivalley semiconductor SnSe by potassium doping. Physical Review Materials, 2018, 2, .	0.9	17

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55	Ultrafast time- and angle-resolved photoemission spectroscopy with widely tunable probe photon energy of 5.3–7.0 eV for investigating dynamics of three-dimensional materials. Review of Scientific Instruments, 2022, 93, 013902.	0.6	16
56	Three-fold diffraction symmetry in epitaxial graphene and the SiC substrate. Physical Review B, 2009, 80, .	1.1	15
57	Glass-like recovery of antiferromagnetic spin ordering in a photo-excited manganite Pr _{0.7} Ca _{0.3} MnO ₃ . Scientific Reports, 2015, 4, 4050.	1.6	15
58	Self-energy dynamics and the mode-specific phonon threshold effect in Kekulé-ordered graphene. National Science Review, 2022, 9, .	4.6	15
59	Strong influence of phonons on the electron dynamics of Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ . Journal of Physics and Chemistry of Solids, 2004, 65, 1397-1401.	1.9	14
60	Electronic structure of transferred graphene/h-BN van der Waals heterostructures with nonzero stacking angles by nano-ARPES. Journal of Physics Condensed Matter, 2016, 28, 444002.	0.7	14
61	Resolving Deep Quantum-Well States in Atomically Thin 2H-MoTe ₂ Flakes by Nanospot Angle-Resolved Photoemission Spectroscopy. Nano Letters, 2018, 18, 4664-4668.	4.5	13
62	Pressure-induced Lifshitz transition in the type II Dirac semimetal PtTe ₂ . Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	2.0	13
63	Black phosphorous for pseudospintronics. Nature Materials, 2020, 19, 263-264.	13.3	13
64	Field-Effect Chiral Anomaly Devices with Dirac Semimetal. Advanced Functional Materials, 2021, 31, 2104192.	7.8	13
65	Phonon dispersion and low-energy anomaly in CaC_6 inelastic neutron and x-ray scattering experiments. Physical Review B, 2010, 81, .	1.1	12
66	Monolayer charge-neutral graphene on platinum with extremely weak electron-phonon coupling. Physical Review B, 2015, 92, .	1.1	12
67	Barkhausen effect in the first order structural phase transition in type-II Weyl semimetal MoTe ₂ . 2D Materials, 2018, 5, 044003.	2.0	12
68	Ultrafast x-ray and optical signatures of phase competition and separation underlying the photoinduced metallic phase in Pr _{1-x} CaxMnO ₃ . Physical Review B, 2015, 92, .	1.1	10
69	Full diagnostics and optimization of time resolution for time- and angle-resolved photoemission spectroscopy. Review of Scientific Instruments, 2021, 92, 033904.	0.6	10
70	Population Inversion and Dirac Fermion Cooling in 3D Dirac Semimetal Cd ₃ As ₂ . Nano Letters, 2022, 22, 1138-1144.	4.5	9
71	Interlayer quantum transport in Dirac semimetal BaGa ₂ . Nature Communications, 2020, 11, 2370.	5.8	8
72	Circular photogalvanic effect from third-order nonlinear effect in 1T TM -MoTe ₂ . 2D Materials, 2021, 8, 025016.	2.0	8

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73	Progress on band structure engineering of twisted bilayer and two-dimensional moiré heterostructures*. Chinese Physics B, 2020, 29, 127304.	0.7	8
74	Bilayer splitting and c-axis coupling in bilayer manganites showing colossal magnetoresistance. Physical Review B, 2009, 80, .	1.1	7
75	Pronounced Photovoltaic Response from Multi-layered MoTe ₂ Phototransistor with Asymmetric Contact Form. Nanoscale Research Letters, 2017, 12, 603.	3.1	7
76	Electronic structure of molecular beam epitaxy grown 1 T Å^2 -MoTe ₂ film and strain effect*. Chinese Physics B, 2019, 28, 107307.	0.7	7
77	Induced anisotropic superconductivity in ionic liquid cation intercalated 1T-SnSe ₂ . 2D Materials, 2021, 8, 015024.	2.0	6
78	Seeded growth of high-quality transition metal dichalcogenide single crystals <i>via</i> chemical vapor transport. CrystEngComm, 2020, 22, 8017-8022.	1.3	5
79	Preface to the Special Issue on 2D-Materials-Related Physical Properties and Optoelectronic Devices. Journal of Semiconductors, 2019, 40, 060101.	2.0	4
80	Spatially-resolved electronic structure of stripe domains in IrTe ₂ through electronic structure microscopy. Communications Physics, 2021, 4, .	2.0	4
81	Experimental evidence of plasmarons and effective fine structure constant in electron-doped graphene/h-BN heterostructure. Npj Quantum Materials, 2021, 6, .	1.8	3