

Zengwei Zhu

List of Publications by Year in descending order

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62
papers

3,420
citations

218677

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138484

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docs citations

62
times ranked

4708
citing authors

#	ARTICLE	IF	CITATIONS
1	Anisotropic critical current density and flux pinning mechanism of Fe _{1+y} Te _{0.6} Se _{0.4} single crystals. Superconductor Science and Technology, 2022, 35, 015002.	3.5	4
2	Weyl Semimetal States Generated Extraordinary Quasi-Linear Magnetoresistance and Nernst Thermoelectric Power Factor in Polycrystalline NbP. Advanced Functional Materials, 2022, 32, .	14.9	13
3	Anisotropic Fermi Surfaces, Electrical Transport, and Two-Dimensional Fermi Liquid Behavior in Layered Ternary Boride MoAlB. Chinese Physics Letters, 2022, 39, 057102.	3.3	1
4	Thermal conductivity of bulk $\ln O_3$ single crystals. Physical Review Materials, 2021, 5, .	2.4	9
5	Unconventional quantum vortex matter state hosts quantum oscillations in the underdoped high-temperature cuprate superconductors. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	10
6	Observation of the antiferromagnetic spin Hall effect. Nature Materials, 2021, 20, 800-804.	27.5	113
7	A Monomaterial Nernst Thermopile with Hermaphroditic Legs. Advanced Materials, 2021, 33, e2100751.	21.0	16
8	Comparative study of superconducting and normal-state anisotropy in $Fe_{1-x}Sn_x$ superconductors with controlled amounts of interstitial excess Fe. Physical Review B, 2021, 103, .	7.2	8
9	Quantum oscillations, magnetic breakdown and thermal Hall effect in $Co_3Sn_2S_2$. Journal Physics D: Applied Physics, 2021, 54, 454003.	2.8	12
10	Coupling between antiferromagnetic and spin-glass orders in the quasi-one-dimensional iron telluride $TaFe_{1+x}Te_3$ ($x=0.25$). Physical Review B, 2021, 104, .	3.2	6
11	Superconductivity in $PtPb_4$ with possible nontrivial band topology. Physical Review B, 2021, 104, .	3.1	4
12	Surface superconductivity in the type II Weyl semimetal $TaIrTe_4$. National Science Review, 2020, 7, 579-587.	9.5	39
13	Eightfold fermionic excitation in a charge density wave compound. Physical Review B, 2020, 102, .	3.2	20
14	Critical point for Bose-Einstein condensation of excitons in graphite. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30215-30219.	7.1	9
15	Large magnetoresistance and quantum oscillations of a ternary boride MoAlB single crystal. Physical Review B, 2020, 102, .	3.2	6
16	Anisotropic Transport and Quantum Oscillations in the Quasi-One-Dimensional $TaNiTe_5$: Evidence for the Nontrivial Band Topology. Journal of Physical Chemistry Letters, 2020, 11, 7782-7789.	4.6	21
17	Finite-temperature violation of the anomalous transverse Wiedemann-Franz law. Science Advances, 2020, 6, eaaz3522.	10.3	50
18	Anomalous transverse response of Co_2 and universality of the room-temperature $\hat{\rho}_{\pm}$ Physical Review B, 2020, 101, .	3.2	59

#	ARTICLE	IF	CITATIONS
19	PrBi: Topology meets quadrupolar degrees of freedom. Physical Review B, 2020, 101, .	3.2	7
20	Phonon Thermal Hall Effect in Strontium Titanate. Physical Review Letters, 2020, 124, 105901.	7.8	82
21	Magnetic exchange induced Weyl state in a semimetal EuCd ₂ Sb ₂ . APL Materials, 2020, 8, .	5.1	37
22	Strong Pauli paramagnetic effect in the upper critical field of KCa ₂ Fe ₄ As ₄ F ₂ . Science China: Physics, Mechanics and Astronomy, 2020, 63, .	5.1	28
23	Bulk Fermi surface of the layered superconductor $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{TaS} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{e} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ with three-dimensional strong topological state. Physical Review B, 2020, 101, .	3.2	16
24	Anomalous Hall Effect, Robust Negative Magnetoresistance, and Memory Devices Based on a Noncollinear Antiferromagnetic Metal. ACS Nano, 2020, 14, 6242-6248.	14.6	34
25	Hard antinodal gap revealed by quantum oscillations in the pseudogap regime of underdoped high-T _c superconductors. Nature Physics, 2020, 16, 841-847.	16.7	7
26	Planar Hall effect caused by the memory of antiferromagnetic domain walls in Mn ₃ Ge. Applied Physics Letters, 2020, 117, .	3.3	7
27	Chiral domain walls of Mn ₃ Sn and their memory. Nature Communications, 2019, 10, 3021.	12.8	58
28	Unconventional Antiferromagnetic Quantum Critical Point in Ba(Fe _{0.97} Cr _{0.03}) ₂ (As _{1-x} P _x) ₂ . Physical Review Letters, 2019, 122, 037001.	7.8	4
29	Graphite in 90Å: Evidence for Strong-Coupling Excitonic Pairing. Physical Review X, 2019, 9, .	8.9	8
30	Angle-dependent magnetoresistance and its implications for Lifshitz transition in W ₂ As ₃ . Npj Quantum Materials, 2019, 4, .	5.2	11
31	Intrinsic Anomalous Nernst Effect Amplified by Disorder in a Half-Metallic Semimetal. Physical Review X, 2019, 9, .	8.9	45
32	A piezoelectric, strain-controlled antiferromagnetic memory insensitive to magnetic fields. Nature Nanotechnology, 2019, 14, 131-136.	31.5	150
33	Magnetic-field-induced metal-insulator quantum phase transition in CaFeAsF near the quantum limit. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	5.1	9
34	Quantum transport in a compensated semimetal $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{W} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{As} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ with nontrivial indices. Physical Review B, 2018, 98, .	3.2	8
35	Magnetoresistance and valley degree of freedom in bulk bismuth. Journal of Physics Condensed Matter, 2018, 30, 313001.	1.8	24
36	Fermi surface and carrier compensation of pyrite-type PtBi ₂ revealed by quantum oscillations. Physical Review B, 2018, 98, .	3.2	13

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37	Magnetoresistance of semimetals: The case of antimony. <i>Physical Review Materials</i> , 2018, 2, .	2.4	26
38	Momentum-space and real-space Berry curvatures in $Mn_{1-x}Sn_x$, 2018, 5, .		25
39	Temperature and angular dependence of the upper critical field in KCr_3As_5 . <i>Physical Review B</i> , 2017, 95, .	3.2	28
40	Two-band and pauli-limiting effects on the upper critical field of 112-type iron pnictide superconductors. <i>Scientific Reports</i> , 2017, 7, 45943.	3.3	37
41	Emptying Dirac valleys in bismuth using high magnetic fields. <i>Nature Communications</i> , 2017, 8, 15297.	12.8	34
42	Magnetic field tuning of an excitonic insulator between the weak and strong coupling regimes in quantum limit graphite. <i>Scientific Reports</i> , 2017, 7, 1733.	3.3	20
43	Anomalous Nernst and Righi-Leduc Effects in Mn_3P_2 : Berry Curvature and Entropy Flow. <i>Physical Review Letters</i> , 2017, 119, 056601.	7.8	212
44	The pulsed high magnetic field facility and scientific research at Wuhan National High Magnetic Field Center. <i>Matter and Radiation at Extremes</i> , 2017, 2, 278-286.	3.9	18
45	$PdSn_4$: A homologue of the Dirac nodal arc semimetal $PtSn_4$. <i>Physical Review B</i> , 2016, 94, 040401.	2.4	22
46	Quantum Hall effect in black phosphorus two-dimensional electron system. <i>Nature Nanotechnology</i> , 2016, 11, 593-597.	31.5	356
47	Zeeman effect of the topological surface states revealed by quantum oscillations up to 91 Tesla. <i>Physical Review B</i> , 2015, 92, .	3.2	11
48	Origin of the Large Anisotropic Factor of Holes in Bismuth. <i>Physical Review Letters</i> , 2015, 115, 216401.	7.8	34
49	Quantum Oscillations, Thermoelectric Coefficients, and the Fermi Surface of Semimetallic WTe_2 . <i>Physical Review Letters</i> , 2015, 114, 176601.	7.8	198
50	Fermi Surface of the Most Dilute Superconductor. <i>Physical Review X</i> , 2013, 3, .	8.9	91
51	Landau spectrum and twin boundaries of bismuth in the extreme quantum limit. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 14813-14818.	7.1	31
52	Field-induced polarization of Dirac valleys in bismuth. <i>Nature Physics</i> , 2012, 8, 89-94.	16.7	240
53	Nernst Response of the Landau Tubes in Graphite across the Quantum Limit. <i>Physical Review Letters</i> , 2011, 106, 246405.	7.8	13
54	Angle-resolved Landau spectrum of electrons and holes in bismuth. <i>Physical Review B</i> , 2011, 84, .	3.2	69

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55	Nernst quantum oscillations in bulk semi-metals. Journal of Physics Condensed Matter, 2011, 23, 094204.	1.8	6
56	Nernst effect and dimensionality in the quantum limit. Nature Physics, 2010, 6, 26-29.	16.7	68
57	Phase diagram of bismuth in the extreme quantum limit. Nature Communications, 2010, 1, 47.	12.8	32
58	A comparative study on the thermoelectric effect of parent oxypnictides LaTAsO (T = Fe, Ni). Journal of Physics Condensed Matter, 2010, 22, 072201.	1.8	8
59	Anisotropic inelastic scattering and its interplay with superconductivity in URu_2Si_2 . Physical Review B, 2009, 80, .	3.2	24
60	Metamagnetic transition in $EuFe_2As_2$ single crystals. New Journal of Physics, 2009, 11, 025007.	2.9	109
61	Thorium-doping induced superconductivity up to 56 K in $Gd_xTh_{1-x}FeAsO$. Europhysics Letters, 2008, 83, 67006.	2.0	576
62	Antiferromagnetic transition in $EuFe_2As_2$. A possible parent compound for superconductors. Physical Review B, 2008, 78, .	2.4	185