Yan Sun

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5814088/publications.pdf

Version: 2024-02-01

		8755	7348
231	24,683	75	152
papers	citations	h-index	g-index

237	237	237	14757
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dirac semimetal and topological phase transitions in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>A</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>Bi (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 732 Td (display="in	3.2	1,529
2	Large-Gap Quantum Spin Hall Insulators in Tin Films. Physical Review Letters, 2013, 111, 136804.	7.8	1,140
3	Topological Materials: Weyl Semimetals. Annual Review of Condensed Matter Physics, 2017, 8, 337-354.	14.5	1,110
4	Extremely large magnetoresistance and ultrahigh mobility in the topological Weyl semimetal candidate NbP. Nature Physics, 2015, 11, 645-649.	16.7	893
5	Giant anomalous Hall effect in a ferromagnetic kagome-lattice semimetal. Nature Physics, 2018, 14, 1125-1131.	16.7	876
6	Weyl semimetal phase in the non-centrosymmetric compound TaAs. Nature Physics, 2015, 11, 728-732.	16.7	796
7	Superconductivity in Weyl semimetal candidate MoTe2. Nature Communications, 2016, 7, 11038.	12.8	611
8	Large anomalous Hall effect driven by a nonvanishing Berry curvature in the noncolinear antiferromagnet Mn ₃ Ge. Science Advances, 2016, 2, e1501870.	10.3	561
9	Magnetic Weyl semimetal phase in a KagomÃ© crystal. Science, 2019, 365, 1282-1285.	12.6	518
10	Prediction of Weyl semimetal in orthorhombic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoTe</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2015, 92, .	3.2	511
11	High electron mobility and quantum oscillations in non-encapsulated ultrathin semiconducting Bi2O2Se. Nature Nanotechnology, 2017, 12, 530-534.	31.5	507
12	Oscillatory crossover from two-dimensional to three-dimensional topological insulators. Physical Review B, 2010, 81, .	3.2	459
13	Fermi-arc diversity on surface terminations of the magnetic Weyl semimetal Co ₃ Sn ₂ S ₂. Science, 2019, 365, 1286-1291.	12.6	441
14	Negative magnetoresistance without well-defined chirality in the Weyl semimetal TaP. Nature Communications, 2016, 7, 11615.	12.8	429
15	Topological antiferromagnetic spintronics. Nature Physics, 2018, 14, 242-251.	16.7	427
16	Signature of type-II Weyl semimetal phase in MoTe2. Nature Communications, 2017, 8, 13973.	12.8	358
17	Topological materials. Reports on Progress in Physics, 2012, 75, 096501.	20.1	339
18	Topological Weyl semimetals in the chiral antiferromagnetic materials Mn₃Ge and Mn₃Sn. New Journal of Physics, 2017, 19, 015008.	2.9	277

#	Article	IF	Citations
19	Roton pair density wave in a strong-coupling kagome superconductor. Nature, 2021, 599, 222-228.	27.8	276
20	Prediction of Near-Room-Temperature Quantum Anomalous Hall Effect on Honeycomb Materials. Physical Review Letters, 2014, 113, 256401.	7.8	263
21	Heusler, Weyl and Berry. Nature Reviews Materials, 2018, 3, 244-256.	48.7	250
22	Evolution of the Fermi surface of Weyl semimetals in the transition metal pnictide family. Nature Materials, 2016, 15, 27-31.	27.5	245
23	Higher-Order Topology, Monopole Nodal Lines, and the Origin of Large Fermi Arcs in Transition Metal Dichalcogenides <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>X</mml:mi><mml:mrow><mml:msub><mml:mrow><mml:mi>Te</mml:mi></mml:mrow><mml:mrow><mml:mn		

#	Article	IF	Citations
37	Topological surface states and Fermi arcs of the noncentrosymmetric Weyl semimetals TaAs, TaP, NbAs, and NbP. Physical Review B, 2015, 92, .	3.2	163
38	Thermal and electrical signatures of a hydrodynamic electron fluid in tungsten diphosphide. Nature Communications, 2018, 9, 4093.	12.8	163
39	Topological insulators and thermoelectric materials. Physica Status Solidi - Rapid Research Letters, 2013, 7, 91-100.	2.4	162
40	Topological surface Fermi arcs in the magnetic Weyl semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>3</mml:mn></mml: mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2018, 97, .	3.2	159
41	A large-energy-gap oxide topological insulator based on the superconductor BaBiO3. Nature Physics, 2013, 9, 709-711.	16.7	152
42	Berry curvature dipole in Weyl semimetal materials: An ab initio study. Physical Review B, 2018, 97, .	3.2	150
43	Topological states on the gold surface. Nature Communications, 2015, 6, 10167.	12.8	148
44	Symmetry demanded topological nodal-line materials. Advances in Physics: X, 2018, 3, 1414631.	4.1	146
45	Axionic charge-density wave in the Weyl semimetal (TaSe4)2I. Nature, 2019, 575, 315-319.	27.8	143
46	A native oxide high-Î¹ gate dielectric for two-dimensional electronics. Nature Electronics, 2020, 3, 473-478.	26.0	141
47	Theoretical prediction of topological insulators in thallium-based III-V-VI ₂ ternary chalcogenides. Europhysics Letters, 2010, 90, 37002.	2.0	140
48	Multiple Dirac cones at the surface of the topological metal LaBi. Nature Communications, 2017, 8, 13942.	12.8	135
49	Dirac line nodes and effect of spin-orbit coupling in the nonsymmorphic critical semimetals <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>M</mml:mi><mml:mi>SiS</mml:mi><mml:mspace width="0.16em" /><mml:mo>(</mml:mo><mml:mi>M</mml:mi><mml:mo>=</mml:mo><mml:mi>Hf</mml:mi><mml:mo>,</mml:mo><mml:mspace)	3.2	131
50	Giant room temperature anomalous Hall effect and tunable topology in a ferromagnetic topological semimetal Co2MnAl. Nature Communications, 2020, 11, 3476.	12.8	127
51	Anomalous Hall effect in Weyl semimetal half-Heusler compounds RPtBi (R = Gd and Nd). Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9140-9144.	7.1	126
52	Spin fluctuation induced Weyl semimetal state in the paramagnetic phase of EuCd ₂ As ₂. Science Advances, 2019, 5, eaaw4718.	10.3	122
53	Surface states in bulk single crystal of topological semimetal Co ₃ Sn ₂ S ₂ toward water oxidation. Science Advances, 2019, 5, eaaw9867.	10.3	118
54	Graphene-Based Topological Insulator with an Intrinsic Bulk Band Gap above Room Temperature. Nano Letters, 2013, 13, 6251-6255.	9.1	116

#	Article	IF	Citations
55	Carbonâ€Tailored Semimetal MoP as an Efficient Hydrogen Evolution Electrocatalyst in Both Alkaline and Acid Media. Advanced Energy Materials, 2018, 8, 1801258.	19.5	111
56	Dirac nodal lines and induced spin Hall effect in metallic rutile oxides. Physical Review B, 2017, 95, .	3.2	110
57	Tunable Weyl and Dirac states in the nonsymmorphic compound CeSbTe. Science Advances, 2018, 4, eaar2317.	10.3	110
58	Electrically tuneable nonlinear anomalous Hall effect in two-dimensional transition-metal dichalcogenides WTe ₂ and MoTe ₂. 2D Materials, 2018, 5, 044001.	4.4	108
59	Rocksalt SnS and SnSe: Native topological crystalline insulators. Physical Review B, 2013, 88, .	3.2	104
60	New Family of Quantum Spin Hall Insulators in Two-dimensional Transition-Metal Halide with Large Nontrivial Band Gaps. Nano Letters, 2015, 15, 7867-7872.	9.1	104
61	Switchable magnetic bulk photovoltaic effect in the two-dimensional magnet CrI3. Nature Communications, 2019, 10, 3783.	12.8	96
62	Low Residual Carrier Concentration and High Mobility in 2D Semiconducting Bi₂O₂Se. Nano Letters, 2019, 19, 197-202.	9.1	95
63	Topological Insulators from a Chemistâ€™s Perspective. Angewandte Chemie - International Edition, 2012, 51, 7221-7225.	13.8	91
64	Topological Insulators in Ternary Compounds with a Honeycomb Lattice. Physical Review Letters, 2011, 106, 156402.	7.8	89
65	Robust 2D Topological Insulators in van der Waals Heterostructures. ACS Nano, 2014, 8, 10448-10454.	14.6	88
66	Prediction of Weak Topological Insulators in Layered Semiconductors. Physical Review Letters, 2012, 109, 116406.	7.8	85
67	Topological thermoelectrics. APL Materials, 2020, 8, .	5.1	84
68	Chiral Weyl Pockets and Fermi Surface Topology of the Weyl Semimetal TaAs. Physical Review Letters, 2016, 117, 146401.	7.8	83
69	Observation of pseudo-two-dimensional electron transport in the rock salt-type topological semimetal LaBi. Physical Review B, 2016, 93, .	3.2	83
70	Visualizing weakly bound surface Fermi arcs and their correspondence to bulk Weyl fermions. Science Advances, 2016, 2, e1600709.	10.3	83
71	Dirac dispersion generates unusually large Nernst effect in Weyl semimetals. Physical Review B, 2018, 97, .	3.2	83
72	Topological Engineering of Ptâ€Groupâ€Metalâ€Based Chiral Crystals toward Highâ€Efficiency Hydrogen Evolution Catalysts. Advanced Materials, 2020, 32, e1908518.	21.0	81

#	Article	IF	Citations
73	New Family of Three-Dimensional Topological Insulators with Antiperovskite Structure. Physical Review Letters, 2010, 105, 216406.	7.8	80
74	Observation of charge to spin conversion in Weyl semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>WTe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml at room temperature. Physical Review Research, 2020, 2, .	3.6	78
75	Photogalvanic effect in Weyl semimetals from first principles. Physical Review B, 2018, 97, .	3.2	77
76	A charge-density-wave topological semimetal. Nature Physics, 2021, 17, 381-387.	16.7	76
77	Prediction of Triple Point Fermions in Simple Half-Heusler Topological Insulators. Physical Review Letters, 2017, 119, 136401.	7.8	75
78	Prediction of a magnetic Weyl semimetal without spin-orbit coupling and strong anomalous Hall effect in the Heusler compensated ferrimagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ti</mml:mi><mml:mn>2</mml:mn></mml:m Physical Review B, 2018, 97, .	3.2	74
79	From Colossal to Zero: Controlling the Anomalous Hall Effect in Magnetic Heusler Compounds via Berry Curvature Design. Physical Review X, 2018, 8, .	8.9	74
80	Toward Rational Design of Catalysts Supported on a Topological Insulator Substrate. ACS Catalysis, 2015, 5, 7063-7067.	11.2	73
81	Giant anomalous Nernst signal in the antiferromagnet YbMnBi2. Nature Materials, 2022, 21, 203-209.	27.5	72
82	Chiral magnetoresistance in the Weyl semimetal NbP. Scientific Reports, 2017, 7, 43394.	3.3	71
83	Consequences of time-reversal-symmetry breaking in the light-matter interaction: Berry curvature, quantum metric, and diabatic motion. Physical Review Research, 2020, 2, .	3.6	71
84	Large spin-orbit torque efficiency enhanced by magnetic structure of collinear antiferromagnet IrMn. Science Advances, 2019, 5, eaau6696.	10.3	70
85	Synergistically creating sulfur vacancies in semimetal-supported amorphous MoS2 for efficient hydrogen evolution. Applied Catalysis B: Environmental, 2019, 254, 1-6.	20.2	69
86	Electronic, optical, and mechanical properties of superhard cold-compressed phases of carbon. Applied Physics Letters, 2011, 99, .	3.3	68
87	Half-Heusler topological insulators. MRS Bulletin, 2014, 39, 859-866.	3.5	68
88	First-principles study of the structural stability of cubic, tetragonal and hexagonal phases in Mn₃Z (Z=Ga, Sn and Ge) Heusler compounds. Journal of Physics Condensed Matter, 2013, 25, 206006.	1.8	67
89	Thickness dependence of the anomalous Hall effect in thin films of the topological semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>2</mml:mn></mml:m Physical Review B, 2019, 100, .	3.2	66
90	Spin Hall effect emerging from a noncollinear magnetic lattice without spinâ€“orbit coupling. New Journal of Physics, 2018, 20, 073028.	2.9	65

#	Article	IF	Citations
91	Magnetic Semimetals and Quantized Anomalous Hall Effect in EuB6. Physical Review Letters, 2020, 124, 076403.	7.8	65
92	Quantum oscillations and the Fermi surface topology of the Weyl semimetal NbP. Physical Review B, 2016, 93, .	3.2	64
93	Self-modulation doping effect in the high-mobility layered semiconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi>Se</mml:mi></mml:mrow></mml:math>. Physical Review B, 2018, 97, .	3.2	63
94	Dirac Nodal Arc Semimetal PtSn₄: An Ideal Platform for Understanding Surface Properties and Catalysis for Hydrogen Evolution. Angewandte Chemie - International Edition, 2019, 58, 13107-13112.	13.8	59
95	Recent Advances in Two-Dimensional Magnets: Physics and Devices towards Spintronic Applications. Research, 2020, 2020, 1768918.	5.7	58
96	Graphene-like Dirac states and quantum spin Hall insulators in square-octagonal<mml:math		

#	Article	IF	Citations
109	Intrinsic Anomalous Hall Effect in Ni-Substituted Magnetic Weyl Semimetal Co₃Sn₂S₂. Chemistry of Materials, 2020, 32, 1612-1617.	6.7	51
110	Difference frequency generation in topological semimetals. Physical Review Research, 2020, 2, .	3.6	51
111	Finite-temperature violation of the anomalous transverse Wiedemann-Franz law. Science Advances, 2020, 6, eaaz3522.	10.3	50
112	Theoretical prediction of topological insulator in ternary rare earth chalcogenides. Physical Review B, 2010, 82, .	3.2	49
113	Emerging chiral edge states from the confinement of a magnetic Weyl semimetal in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2020, 101, .	3.2	48
114	First-principles calculations for topological quantum materials. Nature Reviews Physics, 2021, 3, 283-297.	26.6	48
115	Weak topological insulators induced by the interlayer coupling: A first-principles study of stacked Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>TeI. Physical Review B, 2014, 89, .	3.2	46
116	Pressure-driven superconductivity in the transition-metal pentatelluride<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, 94, .	3.2	46
117	Observation of giant spin-split Fermi-arc with maximal Chern number in the chiral topological semimetal PtGa. Nature Communications, 2020, 11, 2033.	12.8	46
118	Descriptor for Hydrogen Evolution Catalysts Based on the Bulk Band Structure Effect. ACS Catalysis, 2020, 10, 5042-5048.	11.2	46
119	Intrinsic Anomalous Nernst Effect Amplified by Disorder in a Half-Metallic Semimetal. Physical Review X, 2019, 9, .	8.9	45
120	Topological origin of the type-II Dirac fermions in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>PtSe</mml:mi><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review Materials, 2017, 1, .	2.4	44
121	Topological Lifshitz transitions and Fermi arc manipulation in Weyl semimetal NbAs. Nature Communications, 2019, 10, 3478.	12.8	41
122	Giant c-axis nonlinear anomalous Hall effect in Td-MoTe2 and WTe2. Nature Communications, 2021, 12, 2049.	12.8	41
123	Thickness dependence of the anomalous Nernst effect and the Mott relation of Weyl semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> thin films. Physical Review B, 2020, 101, .	3.2	40
124	Surface superconductivity in the type II Weyl semimetal TaIrTe4. National Science Review, 2020, 7, 579-587.	9.5	39
125	Tuning the vertical location of helical surface states in topological insulator heterostructures via dual-proximity effects. Scientific Reports, 2013, 3, 1233.	3.3	38
126	Signatures for half-metallicity and nontrivial surface states in the kagome lattice Weyl semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2019, 99, .	3.2	38

#	Article	IF	Citations
127	Large anomalous Hall and Nernst effects from nodal line symmetry breaking in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Fe</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi>Mn</mml:mi><mml:mi>X</mml:mi></mml:math> (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>X</mml:mi></mml:math> =) Tj ETQq1 1 0.784314 rgB	3.2	38
128	Model Hamiltonian and time reversal breaking topological phases of antiferromagnetic half-Heusler materials. Physical Review B, 2017, 95, .	3.2	37
129	Characterization of topological band structures away from the Fermi level by the anomalous Nernst effect. Physical Review B, 2018, 98, .	3.2	37
130	Ground-state phase in the three-dimensional topological Dirac semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>Na</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi>Bi</mml:mi></mml:math> Physical Review B, 2014, 89, .	3.2	36
131	Berry phase and band structure analysis of the Weyl semimetal NbP. Scientific Reports, 2016, 6, 33859.	3.3	36
132	Magnetic asymmetry induced anomalous spin-orbit torque in IrMn. Physical Review B, 2020, 101, .	3.2	36
133	Signatures of Sixfold Degenerate Exotic Fermions in a Superconducting Metal PdSb₂. Advanced Materials, 2020, 32, e1906046.	21.0	36
134	Large anomalous Hall effect in the kagome ferromagnet LiMn6Sn6. Physical Review B, 2021, 103, .	3.2	35
135	Pressure-induced superconductivity and topological quantum phase transitions in a quasi-one-dimensional topological insulator: Bi4I4. Npj Quantum Materials, 2018, 3, .	5.2	34
136	Strong anomalous Nernst effect in collinear magnetic Weyl semimetals without net magnetic moments. Physical Review B, 2018, 97, .	3.2	34
137	In Situ Modification of a Delafossite-Type PdCoO₂ Bulk Single Crystal for Reversible Hydrogen Sorption and Fast Hydrogen Evolution. ACS Energy Letters, 2019, 4, 2185-2191.	17.4	34
138	Anisotropic topological Hall effect with real and momentum space Berry curvature in the antiskrymion-hosting Heusler compound <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Mn</mml:mi><mml:mrow><mml:mn>1.4</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">PtSn</mml:mi></mml:math>. Physical Review B, 2019, 99, .	3.2	34
139	Thermoelectric Properties of Novel Semimetals: A Case Study of YbMnSb₂. Advanced Materials, 2021, 33, e2003168.	21.0	34
140	Strain-driven onset of nontrivial topological insulating states in Zintl Sr<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:mi>X</mml:mi></mml:mrow></mml:math>compounds		

#	Article	IF	Citations
145	Quantum oscillations in the type-II Dirac semi-metal candidate PtSe₂. New Journal of Physics, 2018, 20, 043008.	2.9	28
146	Dirac Nodal Arc Semimetal PtSn₄: An Ideal Platform for Understanding Surface Properties and Catalysis for Hydrogen Evolution. Angewandte Chemie, 2019, 131, 13241-13246.	2.0	28
147	2Dâ€Berryâ€Curvatureâ€Driven Large Anomalous Hall Effect in Layered Topological Nodalâ€Line MnAlGe. Advanced Materials, 2021, 33, e2006301.	21.0	28
148	Field-Modulated Anomalous Hall Conductivity and Planar Hall Effect in Co₃Sn₂S₂ Nanoflakes. Nano Letters, 2020, 20, 7860-7867.	9.1	27
149	Handedness-dependent quasiparticle interference in the two enantiomers of the topological chiral semimetal PdGa. Nature Communications, 2020, 11, 3507.	12.8	27
150	Anomalous thermoelectric effects and quantum oscillations in the kagome metal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>CsV</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2022, 105, .	3.2	27
151	Topological Dirac semimetal phase in Pd and Pt oxides. Physical Review B, 2017, 95, .	3.2	26
152	Largely Suppressed Magneto-Thermal Conductivity and Enhanced Magneto-Thermoelectric Properties in PtSn ₄. Research, 2020, 2020, 4643507.	5.7	26
153	Room-temperature angular-dependent topological Hall effect in chiral antiferromagnetic Weyl semimetal Mn3Sn. Applied Physics Letters, 2019, 115, .	3.3	25
154	Anisotropic electrical and thermal magnetotransport in the magnetic semimetal GdPtBi. Physical Review B, 2020, 101, .	3.2	24
155	MoS2 on topological insulator Bi2Te3 thin films: Activation of the basal plane for hydrogen reduction. Journal of Energy Chemistry, 2021, 62, 516-522.	12.9	24
156	Electron Density Optimization and the Anisotropic Thermoelectric Properties of Ti Self-Intercalated Ti_{1+x}S₂ Compounds. ACS Applied Materials & Interfaces, 2018, 10, 32344-32354.	8.0	23
157	Visualizing coexisting surface states in the weak and crystalline topological insulator Bi2TeI. Nature Materials, 2020, 19, 610-616.	27.5	23
158	Ab initio study of quantized circular photogalvanic effect in chiral multifold semimetals. Physical Review B, 2020, 102, .	3.2	22
159	Comprehensive scan for nonmagnetic Weyl semimetals with nonlinear optical response. Npj Computational Materials, 2020, 6, .	8.7	22
160	Large linear non-saturating magnetoresistance and high mobility in ferromagnetic MnBi. Nature Communications, 2021, 12, 4576.	12.8	22
161	Ab initio study of topological surface states of strained HgTe. Europhysics Letters, 2014, 107, 57006.	2.0	21
162	Two-dimensional rectangular tantalum carbide halides TaCX (X = Cl, Br, I): novel large-gap quantum spin Hall insulators. 2D Materials, 2016, 3, 035018.	4.4	21

#	Article	IF	Citations
163	Observation of the topological surface state in the nonsymmorphic topological insulator KHgSb. Physical Review B, 2017, 96, .	3.2	21
164	Origin of the extremely large magnetoresistance in topological semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>PtS</mml:mi><mml:msub><mml:mi mathvariant="normal">n</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2018, 97, .	3.2	21
165	Quasiparticle Interference Studies of Quantum Materials. Advanced Materials, 2018, 30, e1707628.	21.0	21
166	Exchange-biased topological transverse thermoelectric effects in a Kagome ferrimagnet. Nature Communications, 2022, 13, 1091.	12.8	21
167	Eightfold fermionic excitation in a charge density wave compound. Physical Review B, 2020, 102, .	3.2	20
168	Large Anomalous Hall and Nernst Effects in High Curieâ€Temperature Ironâ€Based Heusler Compounds. Advanced Science, 2021, 8, e2100782.	11.2	20
169	Spin and Charge Interconversion in Dirac-Semimetal Thin Films. Physical Review Applied, 2021, 16, .	3.8	20
170	Anisotropic elastic properties and electronic structure of Srâ€“Pb compounds. Computational Materials Science, 2015, 98, 311-319.	3.0	19
171	Electronic properties of topological insulator candidate CaAgAs. Journal of Physics Condensed Matter, 2018, 30, 045501.	1.8	18
172	Strong spin-orbit coupling and Dirac nodal lines in the three-dimensional electronic structure of metallic rutile <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>IrO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml Physical Review B, 2019, 99, .	3.2	18
173	Strong bulk photovoltaic effect in chiral crystals in the visible spectrum. Physical Review B, 2019, 100, .	3.2	18
174	Obstructed Surface States as the Descriptor for Predicting Catalytic Active Sites in Inorganic Crystalline Materials. Advanced Materials, 2022, 34, e2201328.	21.0	18
175	Anisotropy in electronic, optical, and mechanical properties of superhard body-centered tetragonal C4 phase of carbon. Applied Physics Letters, 2010, 97, 061910.	3.3	17
176	Pressure-induced topological insulator in NaBaBi with right-handed surface spin texture. Physical Review B, 2016, 93, .	3.2	17
177	Topological Weyl semimetals in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mrow><mml:mn>1</mml alloys. Physical Review B, 2018, 97, .	3.2	17
178	Pressure tuning of the anomalous Hall effect in the chiral antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mn>3</mml:mn></mml Physical Review Materials, 2020, 4, .	2.4	17
179	Impurity screening and stability of Fermi arcs against Coulomb and magnetic scattering in a Weyl monopnictide. Physical Review B, 2017, 95, .	3.2	16
180	Direct observation of the spinâ€“orbit coupling effect in magnetic Weyl semimetal Co3Sn2S2. Npj Quantum Materials, 2022, 7, .	5.2	16

#	Article	IF	Citations
181	Giant intrinsic anomalous terahertz Faraday rotation in the magnetic Weyl semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> at room temperature. Physical Review B, 2022, 105, .	3.2	16
182	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:mi>2</mml:mi></mml:msub></mml:mrow></mml:math> 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:mi>2</mml:mi></mml:msub></mml:mrow></mml:math> thin flakes. Physical Review B, 2021, 103, .	3.2	15
183	Quasi-symmetry-protected topology in a semi-metal. Nature Physics, 2022, 18, 813-818.	16.7	15
184	Magnetically induced. Nature Materials, 2016, 15, 1149-1150.	27.5	14
185	Lifshitz Transitions Induced by Temperature and Surface Doping in Typeâ€II Weyl Semimetal Candidate T_dâ€WTe₂. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700209.	2.4	14
186	Active learning algorithm for computational physics. Physical Review Research, 2020, 2, .	3.6	14
187	Temperature dependence of quantum oscillations from non-parabolic dispersions. Nature Communications, 2021, 12, 6213.	12.8	14
188	Topological nematic phase in Dirac semimetals. Physical Review B, 2016, 93, .	3.2	13
189	Effect of magnetic field on the hydrogen evolution activity using non-magnetic Weyl semimetal catalysts. Dalton Transactions, 2020, 49, 3398-3402.	3.3	13
190	Magnetocatalysis: The Interplay between the Magnetic Field and Electrocatalysis. CCS Chemistry, 2021, 3, 2259-2267.	7.8	13
191	Weyl Semimetal States Generated Extraordinary Quasiâ€Linear Magnetoresistance and Nernst Thermoelectric Power Factor in Polycrystalline NbP. Advanced Functional Materials, 2022, 32, .	14.9	13
192	Topological Lifshitz transition of the intersurface Fermi-arc loop in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>NbIrTe</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math> Physical Review B, 2020, 102, .	3.2	12
193	Enhancement of basal plane electrocatalytic hydrogen evolution activity via joint utilization of trivial and non-trivial surface states. Applied Materials Today, 2021, 22, 100921.	4.3	12
194	Quantum oscillations, magnetic breakdown and thermal Hall effect in Co₃Sn₂S₂. Journal Physics D: Applied Physics, 2021, 54, 454003.	2.8	12
195	Transition metal on topological chiral semimetal PdGa with tailored hydrogen adsorption and reduction. Npj Computational Materials, 2021, 7, .	8.7	12
196	Spin texture and mirror Chern number in Hg-based chalcogenides. Physical Review B, 2015, 91, .	3.2	11
197	Role of Magnetic Exchange Interactions in Chiral-Type Hall Effects of Epitaxial Mn_xPtSn Films. ACS Applied Electronic Materials, 2021, 3, 1323-1333.	4.3	11
198	The giant planar Hall effect and anisotropic magnetoresistance in Dirac node arcs semimetal PtSn₄. Journal of Physics Condensed Matter, 2020, 32, 315702.	1.8	11

#	Article	IF	Citations
199	A simple and efficient criterion for ready screening of potential topological insulators. Science Bulletin, 2017, 62, 1649-1653.	9.0	10
200	Unconventional anomalous Hall effect from magnetization parallel to the electric field. Physical Review B, 2021, 103, .	3.2	10
201	Spin Nernst effect in a p-band semimetal InBi. New Journal of Physics, 2020, 22, 093003.	2.9	10
202	Topological Insulators. Springer Series in Materials Science, 2013, , 123-139.	0.6	9
203	Hidden type-II Weyl points in the Weyl semimetal NbP. Physical Review B, 2017, 96, .	3.2	9
204	Linear Response in Topological Materials. Applied Sciences (Switzerland), 2019, 9, 4832.	2.5	9
205	The Zeeman splitting of bulk 2H-MoTe2 single crystal in high magnetic field. Applied Physics Letters, 2017, 110, 102102.	3.3	8
206	Hard magnet topological semimetals in XPt3 compounds with the harmony of Berry curvature. Communications Physics, 2021, 4, .	5.3	8
207	Coexistence of Surface Superconducting and Three-Dimensional Topological Dirac States in Semimetal KZnBi. Physical Review X, 2021, 11, .	8.9	8
208	Pressure-induced superconductivity and modification of Fermi surface in type-II Weyl semimetal NbIrTe4. Npj Quantum Materials, 2021, 6, .	5.2	8
209	Topology and symmetry of circular photogalvanic effect in the chiral multifold semimetals: a review. Journal of Physics Condensed Matter, 2021, 33, 503003.	1.8	8
210	Topological Metal of NaBi with Ultralow Lattice Thermal Conductivity and Electron-phonon Superconductivity. Scientific Reports, 2015, 5, 8446.	3.3	7
211	Prediction of ideal triple degenerate points in HfIrAs and HfIrBi. Physical Review B, 2018, 98, .	3.2	7
212	Exploiting Twoâ€Ðimensional Bi₂O₂Se for Trace Oxygen Detection. Angewandte Chemie, 2020, 132, 18094-18099.	2.0	7
213	Sondheimer oscillations as a probe of non-ohmic flow in WP2 crystals. Nature Communications, 2021, 12, 4799.	12.8	7
214	Design strong anomalous Hall effect via spin canting in antiferromagnetic nodal line materials. Physical Review B, 2021, 104, .	3.2	7
215	Topological phase transition in a magnetic Weyl semimetal. Physical Review B, 2021, 104, .	3.2	7
216	Mobility spectrum analytical approach for the type-II Weyl semimetal Td-MoTe2. Applied Physics Letters, 2018, 112, .	3.3	6

#	Article	IF	Citations
217	Optical method to detect the relationship between chirality of reciprocal space chiral multifold fermions and real space chiral crystals. Physical Review B, 2020, 102, .	3.2	6
218	The Berry phase rectification tensor and the solar rectification vector. Journal Physics D: Applied Physics, 2021, 54, 404001.	2.8	6
219	Magneto-thermoelectric characterization of a HfTe5 micro-ribbon. Applied Physics Letters, 2019, 115, .	3.3	5
220	Optimization of catalytic active sites in non-collinear antiferromagnetic Mn3Pt bulk single-crystal. Materials Today Physics, 2019, 10, 100137.	6.0	5
221	Observation of Landau quantization and standing waves in HfSiS. Physical Review B, 2018, 97, .	3.2	4
222	Anisotropic Nodalâ€Lineâ€Derived Large Anomalous Hall Conductivity in ZrMnP and HfMnP. Advanced Materials, 2021, 33, 2104126.	21.0	4
223	Pressure tuning of the electrical transport properties in the Weyl semimetal TaP. Physical Review Materials, 2019, 3, .	2.4	4
224	A combined laser-based angle-resolved photoemission spectroscopy and two-photon photoemission spectroscopy study of Tdâ€“WTe₂. Journal of Physics Condensed Matter, 2020, 32, 345503.	1.8	3
225	Weyl monopoles dance with the spin waves. Science China: Physics, Mechanics and Astronomy, 2021, 64, 1.	5.1	3
226	Giant Anomalous Hall Conductivity in the Itinerant Ferromagnet LaCrSb₃ and the Effect of fâ€Electrons. Advanced Quantum Technologies, 2021, 4, 2100023.	3.9	3
227	Quantum Oscillations in Ferromagnetic (Sb, V) 2 Te 3 Topological Insulator Thin Films. Advanced Materials, 2021, 33, 2102107.	21.0	3
228	Quasi-quantized Hall response in bulk InAs. Scientific Reports, 2022, 12, 2153.	3.3	3
229	Weyl Nodes Close to the Fermi Energy in NbAs. Physica Status Solidi (B): Basic Research, 0, , 2100165.	1.5	2
230	Topological Materials in Heusler Compounds. Springer Series in Solid-state Sciences, 2018, , 199-210.	0.3	1
231	Thermoelectric Materials: Thermoelectric Properties of Novel Semimetals: A Case Study of YbMnSb₂ (Adv. Mater. 7/2021). Advanced Materials, 2021, 33, 2170051.	21.0	1