Shin-Ming Huang

List of Publications by Year
in descending order

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59 papers	11,012 citations	126708 33 h-index	143772 57 g-index
59 all docs	59 docs citations	59 times ranked	6480 citing authors

#	Article	IF	Citations
1	Discovery of a Weyl fermion semimetal and topological Fermi arcs. Science, 2015, 349, 613-617.	6.0	2,753
2	A Weyl Fermion semimetal with surface Fermi arcs in the transition metal monopnictide TaAs class. Nature Communications, 2015, 6, 7373.	5.8	1,336
3	Discovery of a Weyl fermion state with Fermi arcs in niobium arsenide. Nature Physics, 2015, 11, 748-754.	6.5	817
4	Topological nodal-line fermions in spin-orbit metal PbTaSe2. Nature Communications, 2016, 7, 10556.	5.8	688
5	Signatures of the Adlerâ€“Bellâ€“Jackiw chiral anomaly in a Weyl fermion semimetal. Nature Communications, 2016, 7, 10735.	5.8	603
6	Discovery of topological Weyl fermion lines and drumhead surface states in a room temperature magnet. Science, 2019, 365, 1278-1281.	6.0	374
7	Discovery of Weyl Fermion Semimetals and Topological Fermi Arc States. Annual Review of Condensed Matter Physics, 2017, 8, 289-309.	5.2	349
8	Experimental discovery of a topological Weyl semimetal state in TaP. Science Advances, 2015, 1, e1501092.	4.7	337
9	New type of Weyl semimetal with quadratic double Weyl fermions. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1180-1185.	3.3	291
10	Unconventional Chiral Fermions and Large Topological Fermi Arcs in RhSi. Physical Review Letters, 2017, 119, 206401.	2.9	270
11	Drumhead surface states and topological nodal-line fermions in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>TlTaSe</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2016, 93, .	3.7	268
12	Topological quantum properties of chiral crystals. Nature Materials, 2018, 17, 978-985.	13.3	252
13	Prediction of an arc-tunable Weyl Fermion metallic state in MoxW1â^'xTe2. Nature Communications, 2016, 7, 10639.	5.8	249
14	Topological Hopf and Chain Link Semimetal States and Their Application to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:msub><mml:mrow><mml:mi>Co</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:r Physical Review Letters, 2017, 119, 156401.	2.9	183
15	Discovery of Lorentz-violating type II Weyl fermions in LaAlGe. Science Advances, 2017, 3, e1603266.	4.7	176
16	Discovery of a new type of topological Weyl fermion semimetal state in MoxW1â^'xTe2. Nature Communications, 2016, 7, 13643.	5.8	163
17	Type-II Symmetry-Protected Topological Dirac Semimetals. Physical Review Letters, 2017, 119, 026404.	2.9	145
18	Thickness dependent electronic properties of Pt dichalcogenides. Npj 2D Materials and Applications, 2019, 3, .	3.9	138

#	Article	IF	Citations
19	Criteria for Directly Detecting Topological Fermi Arcs in Weyl Semimetals. Physical Review Letters, 2016, 116, 066802.	2.9	134
20	Magnetic and noncentrosymmetric Weyl fermion semimetals in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="italic">R</mml:mi><mml:mi		

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37	Mirror Protected Dirac Fermions on a Weyl Semimetal NbP Surface. Physical Review Letters, 2017, 119, 196403.	2.9	20
38	Evolution of the Electronic Properties of ZrX₂ (X = S, Se, or Te) Thin Films under Varying Thickness. Journal of Physical Chemistry C, 2021, 125, 1134-1142.	1.5	19
39	Observation of a linked-loop quantum state in a topological magnet. Nature, 2022, 604, 647-652.	13.7	18
40	Band Engineering and Van Hove Singularity on HfX₂ Thin Films (X = S, Se, or Te). ACS Applied Electronic Materials, 2021, 3, 1071-1079.	2.0	17
41	Tuning topological phases and electronic properties of monolayer ternary transition metal chalcogenides (ABX4, A/B = Zr, Hf, or Ti; X = S, Se, or Te). Applied Physics Letters, 2021, 118, .	1.5	16
42	Observation of chargeâ€“transferâ€“driven antiferroelectricity in 3d-pyrochlore multiferroic Cu2OCl2. Materials Today Physics, 2019, 8, 34-42.	2.9	13
43	Topological superconductor in quasi-one-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Tl</mml:mi><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Physical Review B, 2018, 97, .	1.1	12
44	Prediction of Quantum Anomalous Hall Effect in MBi and MSb (M:Ti, Zr, and Hf) Honeycombs. Nanoscale Research Letters, 2018, 13, 43.	3.1	12
45	Tunneling spectroscopy and Majorana modes emergent from topological gapless phases in high-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>T</mml:mi><mml:mi>c</mml:mi></mml:msub></mml:math> superconductors. Physical Review B, 2015, 91, .	1.1	11
46	Theoretical prediction of topological insulators in two-dimensional ternary transition metal chalcogenides (MM'X4, MÂ=ÂTa, Nb, or V; M'= Ir, Rh, or Co; XÂ=ÂSe or Te). Chinese Journal of Physics, 2021, 73, 95-102.	2.0	11
47	Magnetically tunable Dirac and Weyl fermions in the Zintl materials family. Physical Review Materials, 2022, 6, .	0.9	9
48	Intrinsic high-temperature superconductivity in ternary iron selenides. Physical Review B, 2013, 88, .	1.1	8
49	Effective tight-binding model for the iron-vacancy-orderedAyFe1.6Se2. Physical Review B, 2011, 84, .	1.1	7
50	Aspects of symmetry and topology in the charge density wave phase of 1Tâ€“TiSe₂. New Journal of Physics, 2021, 23, 083037.	1.2	7
51	Stability of Z₂topological order in the presence of vacancy-induced impurity band. Journal of Physics Condensed Matter, 2014, 26, 255502.	0.7	5
52	Slave-rotor theory on magic-angle twisted bilayer graphene. Physical Review B, 2020, 101, .	1.1	5
53	Duality in topological superconductors and topological ferromagnetic insulators in a honeycomb lattice. Physical Review B, 2016, 93, .	1.1	4
54	Unconventional superconducting gap via spin fluctuations in iron-vacancy-orderedAyFe2â^'xSe2. Physical Review B, 2012, 85, .	1.1	3

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55	Topological theory of inversion-breaking charge-density-wave monolayer 1T-TiSe₂. New Journal of Physics, 2021, 23, 093025.	1.2	3
56	Machine learning on the electronâ€“boson mechanism in superconductors. New Journal of Physics, 2020, 22, 123014.	1.2	3
57	Understanding the correlation between orbital degree of freedom, lattice-striction and magneto-dielectric coupling in ferrimagnetic Mn_{1.5}Cr_{1.5}O₄. Journal of Physics Condensed Matter, 2021, 33, 505802.	0.7	2
58	First-principles study of the crystal and magnetic structures of multiferroic Cu2OCl2. Journal of Physics Condensed Matter, 0, , .	0.7	1
59	Topologically distinct Weyl fermion pairs. Scientific Reports, 2021, 11, 416.	1.6	0