Zhi-Ming Yu

List of Publications by Year
in descending order

77 papers	5,045 citations	117625 34 h-index	88630 70 g-index
77 all docs	77 docs citations	77 times ranked	4147 citing authors

#	Article	IF	Citations
1	Rise of silicene: A competitive 2D material. Progress in Materials Science, 2016, 83, 24-151.	32.8	713
2	Evidence for topological type-II Weyl semimetal WTe2. Nature Communications, 2017, 8, 2150.	12.8	263
3	Theoretical prediction of MoN₂ monolayer as a high capacity electrode material for metal ion batteries. Journal of Materials Chemistry A, 2016, 4, 15224-15231.	10.3	259
4	Nodal surface semimetals: Theory and material realization. Physical Review B, 2018, 97, .	3.2	248
5	Predicted Unusual Magnetoresponse in Type-II Weyl Semimetals. Physical Review Letters, 2016, 117, 077202.	7.8	211
6	Two-Dimensional Second-Order Topological Insulator in Graphdiyne. Physical Review Letters, 2019, 123, 256402.	7.8	193
7	Type-II nodal loops: Theory and material realization. Physical Review B, 2017, 96, .	3.2	158
8	Type-II Symmetry-Protected Topological Dirac Semimetals. Physical Review Letters, 2017, 119, 026404.	7.8	145
9	Coexistence of four-band nodal rings and triply degenerate nodal points in centrosymmetric metal diborides. Physical Review B, 2017, 95, .	3.2	138
10	Encyclopedia of emergent particles in three-dimensional crystals. Science Bulletin, 2022, 67, 375-380.	9.0	123
11	Artificial gravity field, astrophysical analogues, and topological phase transitions in strained topological semimetals. Npj Quantum Materials, 2017, 2, .	5.2	116
12	Nexus fermions in topological symmorphic crystalline metals. Scientific Reports, 2017, 7, 1688.	3.3	116
13	Hourglass Dirac chain metal in rhenium dioxide. Nature Communications, 2017, 8, 1844.	12.8	116
14	Nonsymmorphic-symmetry-protected hourglass Dirac loop, nodal line, and Dirac point in bulk and monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>X</mml:mi><mml:mn>3</mml:mn></mml:m… (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>X</mml:mi></mml:math> =) Tj ETQq0 0 0 rgBT /Overlock…	3.2	115
15	Nodal loop and nodal surface states in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ti</mml:mi><mml:mn>3</mml:mn></mml:… family of materials. Physical Review B, 2018, 97, .	3.2	115
16	Spin-momentum locking and spin-orbit torques in magnetic nano-heterojunctions composed of Weyl semimetal WTe2. Nature Communications, 2018, 9, 3990.	12.8	105
17	Three-dimensional Pentagon Carbon with a genesis of emergent fermions. Nature Communications, 2017, 8, 15641.	12.8	104
18	Universal Approach to Magnetic Second-Order Topological Insulator. Physical Review Letters, 2020, 125, 056402.	7.8	91

#	Article	IF	Citations
19	Quadratic and cubic nodal lines stabilized by crystalline symmetry. Physical Review B, 2019, 99, .	3.2	89
20	Hybrid nodal loop metal: Unconventional magnetoresponse and material realization. Physical Review B, 2018, 97, .	3.2	75
21	Ferromagnetic hybrid nodal loop and switchable type-I and type-II Weyl fermions in two dimensions. Physical Review B, 2020, 102, .	3.2	75
22	Two-dimensional spin-orbit Dirac point in monolayer HfGeTe. Physical Review Materials, 2017, 1, .	2.4	70
23	Valley-Layer Coupling: A New Design Principle for Valleytronics. Physical Review Letters, 2020, 124, 037701.	7.8	69
24	d Orbital Topological Insulator and Semimetal in the Antifluorite Cu₂S Family: Contrasting Spin Helicities, Nodal Box, and Hybrid Surface States. Journal of Physical Chemistry Letters, 2017, 8, 3506-3511.	4.6	65
25	From Type-II Triply Degenerate Nodal Points and Three-Band Nodal Rings to Type-II Dirac Points in Centrosymmetric Zirconium Oxide. Journal of Physical Chemistry Letters, 2017, 8, 5792-5797.	4.6	61
26	Weyl-loop half-metal in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mi>Li</mml:mi></mml:mrow><mm Physical Review B, 2019, 99, .	3.2	61
27	Ternary wurtzite CaAgBi materials family: A playground for essential and accidental, type-I and type-II Dirac fermions. Physical Review Materials, 2017, 1, .	2.4	59
28	Quadratic contact point semimetal: Theory and material realization. Physical Review B, 2018, 98, .	3.2	57
29	Higher-order Dirac fermions in three dimensions. Physical Review B, 2020, 101, .	3.2	56
30	Two-dimensional nodal-loop half-metal in monolayer MnN. Physical Review Materials, 2019, 3, .	2.4	55
31	Circumventing the no-go theorem: A single Weyl point without surface Fermi arcs. Physical Review B, 2019, 100, .	3.2	50
32	Charge-two Weyl phonons with type-III dispersion. Physical Review B, 2022, 105, .	3.2	47
33	Hourglass Weyl loops in two dimensions: Theory and material realization in monolayer GaTeI family. Physical Review Materials, 2019, 3, .	2.4	44
34	Electric field controlled spin- and valley-polarized edge states in silicene with extrinsic Rashba effect. Physical Review B, 2015, 92, .	3.2	39
35	Symmetry-enforced ideal lanternlike phonons in the ternary nitride <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Li</mml:mi><mml:mn>6</mml:mn></mm Physical Review B, 2021, 104, .	3.2	38
36	Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mg</mml:mi><mml:mn>2</mml:mn></mml mathvariant="normal">C</mml:mi></mml:mrow></mml:math> : Negative Poisson's ratio and unconventional two-dimensional emergent fermions. Physical Review Materials, 2018, 2, .	2.4	36

#	ARTICLE	IF	CITATIONS
37	Charge-four Weyl point: Minimum lattice model and chirality-dependent properties. Physical Review B, 2021, 104, .	3.2	35
38	Magnetic higher-order nodal lines. Physical Review B, 2021, 103, .	3.2	32
39	MagneticTB: A package for tight-binding model of magnetic and non-magnetic materials. Computer Physics Communications, 2022, 270, 108153.	7.5	32
40	Almost ideal nodal-loop semimetal in monoclinic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="bold">CuTeO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math> material. Physical Review B, 2018, 97, .	3.2	30
41	Quantized Circulation of Anomalous Shift in Interface Reflection. Physical Review Letters, 2020, 125, 076801.	7.8	30
42	SpaceGroupIrep: A package for irreducible representations of space group. Computer Physics Communications, 2021, 265, 107993.	7.5	30
43	Graphyne as a second-order and real Chern topological insulator in two dimensions. Physical Review B, 2021, 104, .	3.2	30
44	Coexistence of zero-, one-, and two-dimensional degeneracy in tetragonal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SnO</mml:mi><mml:mn>2</mml:mn></mml:msub></mm phonons. Physical Review B, 2021, 104, .	3.2	28
45	Coexistence of symmetry-enforced phononic Dirac nodal-line net and three-nodal surfaces phonons in solid-state materials: Theory and materials realization. Physical Review Materials, 2021, 5, .	2.4	27
46	Systematic investigation of emergent particles in type-III magnetic space groups. Physical Review B, 2022, 105, .	3.2	25
47	Encyclopedia of emergent particles in type-IV magnetic space groups. Physical Review B, 2022, 105, .	3.2	25
48	Mirror protected multiple nodal line semimetals and material realization. Physical Review B, 2018, 98, .	3.2	24
49	Transverse shift in Andreev reflection. Physical Review B, 2017, 96, .	3.2	22
50	Two-dimensional antiferromagnetic Dirac fermions in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>TaCoTe</mml:mi><mml:mn>2</mml:mn></mml:msub></ Physical Review B, 2019, 100, .	3.2	22
51	Double Dirac nodal line semimetal with a torus surface state. Physical Review B, 2021, 103, .	3.2	21
52	Realistic cesium fluogermanate: An ideal platform to realize the topologically nodal-box and nodal-chain phonons. Physical Review B, 2021, 104, .	3.2	21
53	Perovskite-type <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>YRh</mml:mi></mml:mrow><mml:mn>3< mathvariant="normal">B</mml:mi></mml:math> with multiple types of nodal point and nodal line states. Physical Review B, 2021, 103, .	3.2	20
54	Room temperature ferromagnetism and antiferromagnetism in two-dimensional iron arsenides. Nanoscale, 2019, 11, 16508-16514.	5.6	18

#	Article	IF	Citations
55	Type-II topological metals. Frontiers of Physics, 2020, 15, 1.	5.0	18
56	Pure spin current and perfect valley filter by designed separation of the chiral states in two-dimensional honeycomb lattices. Physical Review B, 2016, 94, .	3.2	17
57	Weyl Monoloop Semi-Half-Metal and Tunable Anomalous Hall Effect. Nano Letters, 2021, 21, 8749-8755.	9.1	16
58	Super-Andreev reflection and longitudinal shift of pseudospin-1 fermions. Physical Review B, 2020, 101, .	3.2	15
59	Composite Dirac semimetals. Physical Review B, 2019, 100, .	3.2	14
60	Anomalous spatial shifts in interface electronic scattering. Frontiers of Physics, 2019, 14, 1.	5.0	13
61	Unconventional Pairing Induced Anomalous Transverse Shift in Andreev Reflection. Physical Review Letters, 2018, 121, 176602.	7.8	12
62	Valley current and spin-valley filter in topological domain wall. Journal of Applied Physics, 2019, 125, 123904.	2.5	12
63	Multiple magnetism-controlled topological states in EuAgAs. Physical Review B, 2021, 104, .	3.2	12
64	Transverse shift in crossed Andreev reflection. Physical Review B, 2018, 98, .	3.2	11
65	Goos-HÃnchen-like shifts at a metal/superconductor interface. Physical Review B, 2018, 98, .	3.2	9
66	Trigonal warping induced unusual spin texture and strong spin polarization in graphene with the Rashba effect. Physical Review B, 2018, 97, .	3.2	7
67	Triply degenerate point in three-dimensional spinless systems. Physical Review B, 2021, 104, .	3.2	7
68	Double reflection and tunneling resonance in a topological insulator: Towards the quantification of warping strength by transport. Physical Review B, 2017, 96, .	3.2	6
69	Topological hybrid nanocavity for coupling phase transition. Journal of Optics (United Kingdom), 2021, 23, 124002.	2.2	6
70	From atomic semimetal to topological nontrivial insulator. Physical Review B, 2022, 105, .	3.2	5
71	First-principles study of bulk and two-dimensional structures of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>A</mml:mi><mml:mi mathvariant="normal">MnBi</mml:mi></mml:math> family of materials <mml:math		

#	Article	IF	Citations
73	Two-dimensional Dirac semiconductor and its material realization. Physical Review B, 2022, 105, .	3.2	4
74	THE ELECTRONIC CORRELATION EFFECT FROM WEAK TO STRONG IN THE THREE DIMENSIONAL ELECTRON GAS. International Journal of Modern Physics B, 2012, 26, 1250065.	2.0	2
75	The anisotropic effect of hexagonal warping on the transport. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 237-242.	2.1	2
76	New Method to Deal with Three-Dimensional Electron Gas with a Strong Correlation Effect. Chinese Physics Letters, 2012, 29, 127101.	3.3	1
77	A New Perspective to Study the Correlation Effect of the Three-Dimensional Electron Gas. Chinese Physics Letters, 2014, 31, 017103.	3.3	1