Xiaoming

List of Publications by Year in descending order

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74 papers	3,051 citations	201674 27 h-index	168389 53 g-index
74 all docs	74 docs citations	74 times ranked	2037 citing authors

#	Article	IF	Citations
1	Borophene as an extremely high capacity electrode material for Li-ion and Na-ion batteries. Nanoscale, 2016, 8, 15340-15347.	5.6	396
2	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
3	Type-II nodal loops: Theory and material realization. Physical Review B, 2017, 96, .	3.2	158
4	Topological Type-II Nodal Line Semimetal and Dirac Semimetal State in Stable Kagome Compound Mg₃Bi₂. Journal of Physical Chemistry Letters, 2017, 8, 4814-4819.	4.6	157
5	Coexistence of four-band nodal rings and triply degenerate nodal points in centrosymmetric metal diborides. Physical Review B, 2017, 95, .	3.2	138
6	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:m family of materials. Physical Review B, 2018, 97, .	3.2	115
7	Two-Dimensional GaN: An Excellent Electrode Material Providing Fast Ion Diffusion and High Storage Capacity for Li-Ion and Na-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 38978-38984.	8.0	97
8	Large Linear Magnetoresistance and Shubnikov-de Hass Oscillations in Single Crystals of YPdBi Heusler Topological Insulators. Scientific Reports, 2013, 3, 2181.	3.3	90
9	Hybrid nodal loop metal: Unconventional magnetoresponse and material realization. Physical Review B, 2018, 97, .	3.2	75
10	Ferromagnetic hybrid nodal loop and switchable type-I and type-II Weyl fermions in two dimensions. Physical Review B, 2020, 102, .	3.2	75
11	Two-dimensional Weyl nodal-line semimetal in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mi>d</mml:mi><mml:mn>0</mml:mn></mml:msup></mm ferromagnetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">K</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">N</mml:mi></mml:math> monolayer with a high Curie temperature. Physical Review B, 2020, 102, .	3.2	73
12	Centrosymmetric Li₂NaN: a superior topological electronic material with critical-type triply degenerate nodal points. Journal of Materials Chemistry C, 2019, 7, 1316-1320.	5.5	63
13	Ternary compound HfCuP: An excellent Weyl semimetal with the coexistence of type-I and type-II Weyl nodes. Journal of Advanced Research, 2020, 24, 523-528.	9.5	62
14	Topological nodal line state in superconducting NaAlSi compound. Journal of Materials Chemistry C, 2019, 7, 10694-10699.	5.5	60
15	A record-high ion storage capacity of T-graphene as two-dimensional anode material for Li-ion and Na-ion batteries. Applied Surface Science, 2020, 527, 146849.	6.1	59
16	Anomalous magnetoresistance in the spinel superconductor LiTi2O4. Nature Communications, 2015, 6, 7183.	12.8	54
17	Mn2C monolayer: A superior anode material offering good conductivity, high storage capacity and ultrafast ion diffusion for Li-ion and Na-ion batteries. Applied Surface Science, 2020, 503, 144091.	6.1	51
18	Topological nodal lines and nodal points in the antiferromagnetic material Î²-Fe₂PO₅. Journal of Materials Chemistry C, 2019, 7, 12657-12663.	5.5	50

#	ARTICLE	IF	CITATIONS
19	Ideal Inner Nodal Chain Semimetals in Li₂XY (X = Ca, Ba; Y = Si, Ge) Materials. Journal of Physical Chemistry Letters, 2018, 9, 5358-5363.	4.6	44
20	Spin-polarized type-II nodal loop and nodal surface states in hexagonal compounds <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>X</mml:mi><mml:msub><mml:mi>TiO</mml:mi><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	42
21	NMR Evidence for the Topologically Nontrivial Nature in a Family of Half-Heusler Compounds. Scientific Reports, 2016, 6, 23172.	3.3	41
22	Intermetallic Ca₃Pb: a topological zero-dimensional electride material. Journal of Materials Chemistry C, 2018, 6, 575-581.	5.5	36
23	Topological phase with a critical-type nodal line state in intermetallic CaPd. Physical Review B, 2018, 98, .	3.2	35
24	Ferromagnetic two-dimensional metal-chlorides MCl (MÂ=ÂSc, Y, and La): Candidates for Weyl nodal line semimetals with small spin-orbit coupling gaps. Applied Surface Science, 2020, 520, 146376.	6.1	35
25	Transition from semiconducting to metallic-like conducting and weak antilocalization effect in single crystals of LuPtSb. Applied Physics Letters, 2015, 106, 102102.	3.3	34
26	Ideal fully spin-polarized type-II nodal line state in half-metals X2YZ4 (X=K, Cs, Rb, Y Cr, Cu, Z=Cl, F). Materials Today Physics, 2021, 17, 100360.	6.0	34
27	Antiferromagnetism caused by excess electrons and multiple topological electronic states in the electride <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ba</mml:mi><mml:mn>4</mml:mn></mm Physical Review B, 2021, 104, .	3.2	33
28	Topological Nodal Line Electrides: Realization of an Ideal Nodal Line State Nearly Immune from Spinâ€“Orbit Coupling. Journal of Physical Chemistry C, 2019, 123, 25871-25876.	3.1	31
29	Three-dimensional Weyl hourglass networks in the nonsymmorphic half-metal <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></m Physical Review B, 2020, 102, .	3.2	31
30	Highly anisotropic type-II nodal line state in pure titanium metal. Applied Physics Letters, 2018, 112, .	3.3	30
31	Pentagonal B₂C monolayer with extremely high theoretical capacity for Li-/Na-ion batteries. Physical Chemistry Chemical Physics, 2021, 23, 6278-6285.	2.8	30
32	A topological quantum catalyst: the case of two-dimensional traversing nodal line states associated with high catalytic performance for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2021, 9, 22453-22461.	10.3	30
33	Superconducting properties in a candidate topological nodal line semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SnTaS</mml:mi><mml:mn>2</mml:mn></mml:msub></ with a centrosymmetric crystal structure. Physical Review B, 2019, 100, .	3.2	29
34	Fully spin-polarized double-Weyl fermions with type-III dispersion in the quasi-one-dimensional materials <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>X</mml:mi><mml:mn>2</mml:mn></mml:m (<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 132 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:m	3.2	24
35	Possibility of fully spin-polarized nodal chain state in several spinel half metals. Physical Review B, 2020, 102, .	3.2	24
36	Theoretical realization of hybrid Weyl state and associated high catalytic performance for hydrogen evolution in NiSi. IScience, 2022, 25, 103543.	4.1	24

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37	Nearly flat nodal surface states in pseudo-one-dimensional molybdenum monochalcogenides X(MoS)3 (X = K, Rb, and Cs). Journal of Materials Chemistry C, 2020, 8, 9046-9054.	5.5	23
38	Two-dimensional Weyl semimetal with coexisting fully spin-polarized type-I and type-II Weyl points. Applied Surface Science, 2021, 540, 148318.	6.1	22
39	Fully spin-polarized Weyl fermions and in/out-of-plane quantum anomalous Hall effects in a two-dimensional d⁰ ferromagnet. Nanoscale, 2021, 13, 5901-5909.	5.6	22
40	From Multiple Nodal Chain to Dirac/Weyl Semimetal and Topological Insulator in Ternary Hexagonal Materials. Journal of Physical Chemistry C, 2017, 121, 28587-28593.	3.1	21
41	Phononic higher-order nodal point in two dimensions. Physical Review B, 2022, 105, .	3.2	20
42	Electronic structure, doping effect and topological signature in realistic intermetallics Li_{3â^'x}Na_xM (<i>x</i>= 3, 2, 1, 0; M = N, P, As, Sb, Bi). Physical Chemistry Chemical Physics, 2020, 22, 5847-5854.	2.8	19
43	Spinâ€"Orbit Coupling-Determined Topological Phase: Topological Insulator and Quadratic Dirac Semimetals. Journal of Physical Chemistry Letters, 2020, 11, 10340-10347.	4.6	17
44	Two-dimensional metallic carbon allotrope with multiple rings for ion batteries. Physical Chemistry Chemical Physics, 2021, 23, 18770-18776.	2.8	17
45	Multiple Weyl fermions and tunable quantum anomalous Hall effect in 2D half-metal with huge spin-related energy gap. Applied Surface Science, 2021, 551, 149390.	6.1	17
46	Crystal Structures, Electronic Structures, and Topological Signatures in Equiatomic TTâ€²X Compounds (T = Sc, Zr, Hf; Tâ€² = Co, Pt, Pd, Ir, Rh; X = Al, Ga, Sn). Journal of Physical Chemistry C, 2020, 124, 7378-7385.	3.1	16
47	Coexistence of fully spin-polarized Weyl nodal loop, nodal surface, and Dirac point in a family of quasi-one-dimensional half-metals. Physical Review B, 2021, 103, .	3.2	16
48	Potential antiferromagnetic Weyl nodal line state in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>LiTi</mml:mi></mml:mrow><mml:mn>2</m mathvariant="normal">O</mml:mi></mml:mrow><mml:mn>4</mml:mn></mml:msub></mml:math> material. Physical Review B, 2021, 104, .	3.2	14
49	Mn2C Monolayer: Hydrogenation/Oxygenation-Induced Strong Ferromagnetism and Potential Applications. Journal of Physical Chemistry C, 2019, 123, 16388-16392.	3.1	13
50	Theoretical realization of two-dimensional Dirac/Weyl line-node and traversing edge states in penta-X2Y monolayers. Applied Materials Today, 2021, 23, 101057.	4.3	13
51	Prediction of two-dimensional CP₃ as a promising electrode material with a record-high capacity for Na ions. Nanoscale Advances, 2020, 2, 5271-5279.	4.6	12
52	Lorentz-violating type-II Dirac fermions in full-Heusler compounds XMg₂Ag (X = Pr, Nd,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.9	12
53	Sixfold, fourfold, and threefold excitations in the rare-earth metal carbide <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>R</mml:mi><mml:mn>2</mml:mn></mml:msub><mml mathvariant="normal">C</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review B, 2021, 104, .	3.2	12
54	Investigation of nodal line spin-gapless semiconductors using first-principles calculations. Journal of Materials Chemistry C, 2022, 10, 6530-6545.	5.5	12

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55	Ti₂P monolayer as a high performance 2-D electrode material for ion batteries. Physical Chemistry Chemical Physics, 2020, 22, 18480-18487.	2.8	11
56	A nonsymmorphic-symmetry-protected hourglass Weyl node, hybrid Weyl node, nodal surface, and Dirac nodal line in Pd4X (X = S, Se) compounds. Physical Chemistry Chemical Physics, 2020, 22, 22399-22407.	2.8	11
57	Centrosymmetric TiS as a novel topological electronic material with coexisting type-I, type-II and hybrid nodal line states. Journal of Materials Chemistry C, 2020, 8, 14109-14116.	5.5	10
58	Weyl Fermions in VI3 Monolayer. Frontiers in Chemistry, 2020, 8, 722.	3.6	10
59	Novel topological states of nodal points and nodal rings in 2D planar octagon TiB4. Nanoscale, 2021, 13, 3194-3200.	5.6	10
60	Theoretical realization of two-dimensional half-metallicity and fully spin-polarized multiple nodal-line fermions in monolayer PrOBr. Physical Review B, 2022, 105, .	3.2	10
61	A theoretical prediction of NP monolayer as a promising electrode material for Li-/Na-ion batteries. Applied Surface Science, 2021, 547, 149209.	6.1	9
62	Two-dimensional [CaCl]⁺Â·e^{â^'} with its strippable feasibility as an applicable electride with room-temperature ferromagnetism and extremely low work function. Journal of Materials Chemistry C, 2021, 9, 15477-15487.	5.5	9
63	Multiple fermionic states with clear nontrivial surface signature in CsCl-type compound ErAs. Computational Materials Science, 2020, 183, 109815.	3.0	8
64	Intermetallic Î±-FeSi₂: Realization of Type-I, Type-II, and Hybrid Nodal Line States in a Single Material via Tunable Valleys. Journal of Physical Chemistry C, 2020, 124, 12311-12317.	3.1	8
65	Triple degenerate point in three dimensions: Theory and realization. Physical Review B, 2021, 104, .	3.2	8
66	Structure, phase stability, half-metallicity, and fully spin-polarized Weyl states in compound NaV2O4 : An example for topological spintronic material. Physical Review Materials, 2021, 5, .	2.4	7
67	Phononic linear and quadratic nodal points in monolayer XH (X=Si, Ge, Sn). Journal of Physics Condensed Matter, 2022, 34, 155703.	1.8	6
68	Type-II Weyl fermion induced hydrogen adsorption in two-dimensional electride [Ca₂N]⁺Â·e⁻. Journal of Materials Chemistry A, 0, , .	10.3	5
69	IrSi as a Superior Electronic Material with Novel Topological Properties and Nice Compatibility with Semiconductor Si. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000178.	2.4	4
70	Spin-polarized sextuple excitations in ferromagnetic materials. Physical Review B, 2022, 105, .	3.2	3
71	Palladium oxide: an excellent topological electronic material with 0-D and 1-D band crossings and definite nontrivial surface states. Physical Chemistry Chemical Physics, 2020, 22, 18447-18453.	2.8	2
72	Symmetry-protected multiple-type nodal lines in intermetallic XY (XÂ=ÂCa, Rare earth; YÂ=ÂNi, PGE, Ag, Cu). Journal of Alloys and Compounds, 2021, 873, 159773.	5.5	1

#	Article	IF	Citations
73	High-order one-dimensional (1D) fermion in ferromagnetic RbFeF3. Computational Materials Science, 2022, 201, 110944.	3.0	1
74	Theoretical study of compounds XSb (XÂ=ÂLa, Pr, Nd): Realization of inner nodal chains, nodal line frame, and Dirac points. Computational Materials Science, 2022, 206, 111231.	3.0	1