Xiaoming

List of Publications by Year
in descending order

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	High-order one-dimensional (1D) fermion in ferromagnetic RbFeF3. Computational Materials Science, 2022, 201, 110944.	3.0	1
2	Theoretical realization of hybrid Weyl state and associated high catalytic performance for hydrogen evolution in NiSi. IScience, 2022, 25, 103543.	4.1	24
3	Phononic higher-order nodal point in two dimensions. Physical Review B, 2022, 105, .	3.2	20
4	Phononic linear and quadratic nodal points in monolayer XH (X=Si, Ge, Sn). Journal of Physics Condensed Matter, 2022, 34, 155703.	1.8	6
5	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
6	Investigation of nodal line spin-gapless semiconductors using first-principles calculations. Journal of Materials Chemistry C, 2022, 10, 6530-6545.	5.5	12
7	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
8	Spin-polarized sextuple excitations in ferromagnetic materials. Physical Review B, 2022, 105, .	3.2	3
9	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
10	Pentagonal B₂C monolayer with extremely high theoretical capacity for Li-/Na-ion batteries. Physical Chemistry Chemical Physics, 2021, 23, 6278-6285.	2.8	30
11	Two-dimensional metallic carbon allotrope with multiple rings for ion batteries. Physical Chemistry Chemical Physics, 2021, 23, 18770-18776.	2.8	17
12	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
13	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
14	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
15	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
16	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
17	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><mm (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>X</mml:mi></mml:math> =) Tj ETQq1 1 0.784314 rgBT /	3.2	42
18	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

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19	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
20	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:m mathvariant="normal">C</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review B, 2021, 104, .	3.2	12
21	Triple degenerate point in three dimensions: Theory and realization. Physical Review B, 2021, 104, .	3.2	8
22	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
23	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
24	Novel topological states of nodal points and nodal rings in 2D planar octagon TiB4. Nanoscale, 2021, 13, 3194-3200.	5.6	10
25	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
26	Two-dimensional [CaCl]⁺Â·e^{âˆ’} 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
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	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
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></mml Physical Review B, 2020, 102, .	3.2	31
30	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
31	Spinâ€"Orbit Coupling-Determined Topological Phase: Topological Insulator and Quadratic Dirac Semimetals. Journal of Physical Chemistry Letters, 2020, 11, 10340-10347.	4.6	17
32	Ti₂P monolayer as a high performance 2-D electrode material for ion batteries. Physical Chemistry Chemical Physics, 2020, 22, 18480-18487.	2.8	11
33	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
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	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
36	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></mml:m 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

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37	Weyl Fermions in VI3 Monolayer. Frontiers in Chemistry, 2020, 8, 722.	3.6	10
38	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
39	Ferromagnetic hybrid nodal loop and switchable type-I and type-II Weyl fermions in two dimensions. Physical Review B, 2020, 102, .	3.2	75
40	Possibility of fully spin-polarized nodal chain state in several spinel half metals. Physical Review B, 2020, 102, .	3.2	24
41	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
42	Multiple fermionic states with clear nontrivial surface signature in CsCl-type compound ErAs. Computational Materials Science, 2020, 183, 109815.	3.0	8
43	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
44	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
45	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
46	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
47	Lorentz-violating type-II Dirac fermions in full-Heusler compounds XMg₂Ag (X = Pr, Nd,) Tj ETQq1 1 0.784314 rgBT /Overlo	2.9	12
48	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
49	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
50	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
51	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></m with a centrosymmetric crystal structure. Physical Review B, 2019, 100, .	3.2	29
52	Topological nodal line state in superconducting NaAlSi compound. Journal of Materials Chemistry C, 2019, 7, 10694-10699.	5.5	60
53	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
54	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

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55	Mn2C Monolayer: Hydrogenation/Oxygenation-Induced Strong Ferromagnetism and Potential Applications. Journal of Physical Chemistry C, 2019, 123, 16388-16392.	3.1	13
56	Topological nodal lines and nodal points in the antiferromagnetic material Î²-Fe₂PO₅. Journal of Materials Chemistry C, 2019, 7, 12657-12663.	5.5	50
57	Intermetallic Ca₃Pb: a topological zero-dimensional electride material. Journal of Materials Chemistry C, 2018, 6, 575-581.	5.5	36
58	Hybrid nodal loop metal: Unconventional magnetoresponse and material realization. Physical Review B, 2018, 97, .	3.2	75
59	Highly anisotropic type-II nodal line state in pure titanium metal. Applied Physics Letters, 2018, 112, .	3.3	30
60	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
61	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
62	Topological phase with a critical-type nodal line state in intermetallic CaPd. Physical Review B, 2018, 98, .	3.2	35
63	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>2</mml:mn></mml: family of materials. Physical Review B, 2018, 97, .	3.2	115
64	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
65	Type-II nodal loops: Theory and material realization. Physical Review B, 2017, 96, .	3.2	158
66	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
67	Coexistence of four-band nodal rings and triply degenerate nodal points in centrosymmetric metal diborides. Physical Review B, 2017, 95, .	3.2	138
68	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
69	NMR Evidence for the Topologically Nontrivial Nature in a Family of Half-Heusler Compounds. Scientific Reports, 2016, 6, 23172.	3.3	41
70	Borophene as an extremely high capacity electrode material for Li-ion and Na-ion batteries. Nanoscale, 2016, 8, 15340-15347.	5.6	396
71	Anomalous magnetoresistance in the spinel superconductor LiTi2O4. Nature Communications, 2015, 6, 7183.	12.8	54
72	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

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73	Large Linear Magnetoresistance and Shubnikov-de Hass Oscillations in Single Crystals of YPdBi Heusler Topological Insulators. Scientific Reports, 2013, 3, 2181.	3.3	90
74	Type-II Weyl fermion induced hydrogen adsorption in two-dimensional electride [Ca₂N]⁺Â·e⁻. Journal of Materials Chemistry A, 0, , .	10.3	5