Xiaoming Zhang

List of Publications by Year
in descending order

50 papers	2,829 citations	236612 25 h-index	189595 50 g-index
50 all docs	50 docs citations	50 times ranked	3114 citing authors

#	Article	IF	Citations
1	Phagraphene: A Low-Energy Graphene Allotrope Composed of 5â€“6â€“7 Carbon Rings with Distorted Dirac Cones. Nano Letters, 2015, 15, 6182-6186.	4.5	482
2	Borophene as an extremely high capacity electrode material for Li-ion and Na-ion batteries. Nanoscale, 2016, 8, 15340-15347.	2.8	396
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.	5.2	259
4	Strain-driven band inversion and topological aspects in Antimonene. Scientific Reports, 2015, 5, 16108.	1.6	203
5	Novel Conductive Metalâ€“Organic Framework for a High-Performance Lithiumâ€“Sulfur Battery Host: 2D Cu-Benzenehexathial (BHT). ACS Applied Materials & Interfaces, 2018, 10, 15012-15020.	4.0	105
6	Giant Topological Nontrivial Band Gaps in Chloridized Gallium Bismuthide. Nano Letters, 2015, 15, 1296-1301.	4.5	92
7	Theoretical Discovery of a Superconducting Two-Dimensional Metalâ€“Organic Framework. Nano Letters, 2017, 17, 6166-6170.	4.5	86
8	Half-metallicity of a kagome spin lattice: the case of a manganese bis-dithiolene monolayer. Nanoscale, 2013, 5, 10404.	2.8	84
9	Spin-polarization and ferromagnetism of graphitic carbon nitride materials. Journal of Materials Chemistry C, 2013, 1, 6265.	2.7	82
10	Topological insulator states in a honeycomb lattice of s-triazines. Nanoscale, 2014, 6, 11157-11162.	2.8	79
11	Spin-gapless semiconducting graphitic carbon nitrides: A theoretical design from first principles. Carbon, 2015, 84, 1-8.	5.4	72
12	Tunable C2N Membrane for High Efficient Water Desalination. Scientific Reports, 2016, 6, 29218.	1.6	67
13	Prediction of an ultrasoft graphene allotrope with Dirac cones. Carbon, 2016, 105, 323-329.	5.4	62
14	Driving a GaAs film to a large-gap topological insulator by tensile strain. Scientific Reports, 2015, 5, 8441.	1.6	55
15	Spin-polarized Dirac cones and topological nontriviality in a metalâ€“organic framework Ni₂C₂₄S₆H₁₂. Physical Chemistry Chemical Physics, 2016, 18, 8059-8064.	1.3	48
16	Dirac node lines in two-dimensional Lieb lattices. Nanoscale, 2017, 9, 8740-8746.	2.8	46
17	A promising alkali-metal ion battery anode material: 2D metallic phosphorus carbide (Î²0-PC). Electrochimica Acta, 2017, 258, 582-590.	2.6	40
18	Tunable topological states in electron-doped HTT-Pt. Physical Review B, 2016, 93, .	1.1	38

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19	Valley-selective circular dichroism and high carrier mobility of graphene-like BC₆N. Nanoscale, 2018, 10, 13179-13186.	2.8	37
20	First-principles prediction of a new Dirac-fermion material: silicon germanide monolayer. Journal of Physics Condensed Matter, 2013, 25, 395501.	0.7	35
21	Dirac cones and highly anisotropic electronic structure of super-graphyne. Carbon, 2017, 113, 40-45.	5.4	34
22	Gas Adsorption Effects on the Electronic Properties of Two-Dimensional Nickel Bis(dithiolene) Complex. Journal of Physical Chemistry C, 2016, 120, 3846-3852.	1.5	31
23	Chern Insulator and Chern Half-Metal States in the Two-Dimensional Spin-Gapless Semiconductor Mn₂C₆S₁₂. Journal of Physical Chemistry Letters, 2017, 8, 3770-3775.	2.1	30
24	Robust half-metallicity and topological aspects in two-dimensional Cu-TPyB. Scientific Reports, 2015, 5, 14098.	1.6	29
25	Prediction of quantum anomalous Hall effect on graphene nanomesh. RSC Advances, 2015, 5, 9875-9880.	1.7	26
26	Kane Fermion in a Two-Dimensional Ï€-Conjugated Bis(iminothiolato)nickel Monolayer. Journal of Physical Chemistry Letters, 2018, 9, 614-619.	2.1	25
27	Forming heterojunction: an effective strategy to enhance the photocatalytic efficiency of a new metal-free organic photocatalyst for water splitting. Scientific Reports, 2016, 6, 29327.	1.6	24
28	Two-Dimensional Metalâ€“Organic Half-metallic Antiferromagnet: CoFePz. Journal of Physical Chemistry C, 2018, 122, 1846-1851.	1.5	24
29	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:msub> (<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 332 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mr	1.1	24
30	Electronic properties of a Ï€-conjugated Cairo pentagonal lattice: Direct band gap, ultrahigh carrier mobility, and slanted Dirac cones. Physical Review B, 2018, 98, .	1.1	22
31	Binary pentagonal auxetic materials for photocatalysis and energy storage with outstanding performances. Nanoscale, 2022, 14, 2041-2051.	2.8	20
32	Zr₂Si: an antiferromagnetic Dirac MXene. Physical Chemistry Chemical Physics, 2018, 20, 3946-3952.	1.3	19
33	Electron spin-polarization and spin lattices in the boron- and nitrogen-doped organic framework COF-5. Physical Chemistry Chemical Physics, 2014, 16, 23286-23291.	1.3	17
34	Strain-induced phase transition and electron spin-polarization in graphene spirals. Scientific Reports, 2015, 4, 5699.	1.6	17
35	Prediction of intrinsic topological superconductivity in Mn-doped GeTe monolayer from first-principles. Npj Computational Materials, 2021, 7, .	3.5	15
36	Electron spin-polarization and band gap engineering in carbon-modified graphitic carbon nitrides. Journal of Materials Chemistry C, 2015, 3, 10886-10891.	2.7	13

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37	Prediction of Majorana edge states from magnetized topological surface states. Physical Review B, 2021, 103, .	1.1	12
38	Tunable broadband hyperbolic light dispersion in metal diborides. Optics Express, 2019, 27, 36911.	1.7	12
39	Investigation of nodal line spin-gapless semiconductors using first-principles calculations. Journal of Materials Chemistry C, 2022, 10, 6530-6545.	2.7	12
40	Tunable Dirac cones in two-dimensional covalent organic materials: C2N6S3 and its analogs. RSC Advances, 2017, 7, 52065-52070.	1.7	9
41	Hyperbolic dispersion and negative refraction in a metal-organic framework Cu-BHT. Physical Review Materials, 2019, 3, .	0.9	9
42	Valley polarization and ferroelectricity in a two-dimensional GaAsC₆ monolayer. Physical Chemistry Chemical Physics, 2019, 21, 3954-3959.	1.3	7
43	Strain-induced tunable negative differential resistance in triangle graphene spirals. Nanotechnology, 2018, 29, 205202.	1.3	6
44	Dirac cones in a snub trihexagonal tiling lattice with reflective symmetry breaking. Journal of Physics Condensed Matter, 2019, 31, 155001.	0.7	5
45	Enhancing superconductivity in bulk Î²â€²Bi2Pd by negative pressure induced by quantum electronic stress. Physical Review B, 2019, 100, .	1.1	4
46	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		