Bing Wang

List of Publications by Year
in descending order

43 papers	1,486 citations	411340 20 h-index	371746 37 g-index
44 all docs	44 docs citations	44 times ranked	1511 citing authors

#	Article	IF	Citations
1	Ultrahigh mechanical flexibility induced superior piezoelectricity of InSeBr-type 2D Janus materials. Physical Chemistry Chemical Physics, 2022, 24, 8371-8377.	1.3	6
2	Toward Low-Symmetry Systems: An Adaptive Differential Evolution Algorithm for Global Structure Searching. Journal of Physical Chemistry Letters, 2022, 13, 2986-2993.	2.1	0
3	A direct Z-scheme MoSi₂N₄/BlueP vdW heterostructure for photocatalytic overall water splitting. Journal Physics D: Applied Physics, 2022, 55, 215502.	1.3	29
4	A direct Z-scheme g-C₆N₆/InP van der Waals heterostructure: a promising photocatalyst for high-efficiency overall water splitting. Journal Physics D: Applied Physics, 2022, 55, 264001.	1.3	7
5	Interface robust magnetoelectric coupling effect in ferromagnetic/ferroelectric BiFeO3/KNbO3 heterostructure: First-principles calculations. Results in Physics, 2022, 37, 105538.	2.0	4
6	Ga₃Te₃I: novel 1D and 2D semiconductor materials with promising electronic and optical properties. Journal Physics D: Applied Physics, 2022, 55, 374005.	1.3	6
7	Two-dimensional transition metal triborides: Monolayers with robust intrinsic magnetism and high spin stability. Physical Review B, 2022, 105, .	1.1	15
8	Novel one- and two-dimensional InSbS3 semiconductors for photocatalytic water splitting: The role of edge electron states. International Journal of Hydrogen Energy, 2022, 47, 27481-27492.	3.8	3
9	Cr₂XTe₄ (X = Si, Ge) monolayers: a new type of two-dimensional high-T _C Ising ferromagnetic semiconductors with a large magnetic anisotropy. Journal of Physics Condensed Matter, 2022, 34, 384001.	0.7	18
10	Ni(NCS)₂ monolayer: a robust bipolar magnetic semiconductor. Nanoscale, 2021, 13, 16564-16570.	2.8	51
11	Janus 2D titanium nitride halide TiNX_{0.5}Y_{0.5} (X, Y = F, Cl, or Br, and X â‰ Y) monolayers with giant out-of-plane piezoelectricity and high carrier mobility. Physical Chemistry Chemical Physics, 2021, 23, 3637-3645.	1.3	15
12	Anisotropic correlation between the piezoelectricity and anion-polarizability difference in 2D phosphorene-type ternary GaXY (Xâ€‰=â€‰Se, Te; Yâ€‰=â€‰F, Cl, Br, I) monolayers. Journal of Materials Science, 2021, 56, 8024-8036.	1.7	9
13	Tunable magnetism in ferroelectric Î± -In2Se3 by hole-doping. Applied Physics Letters, 2021, 118, .	1.5	25
14	Anomalous layer-dependent electronic and piezoelectric properties of 2D GaInS3 nanosheets. Applied Physics Letters, 2021, 118, .	1.5	29
15	Coexistence of large out-of-plane and in-plane piezoelectricity in 2D monolayer Li-based ternary chalcogenides LiMX2. Results in Physics, 2021, 26, 104398.	2.0	14
16	B₂S₃ monolayer: a two-dimensional direct-gap semiconductor with tunable band-gap and high carrier mobility. Nanotechnology, 2021, 32, 475709.	1.3	10
17	Strain-tunable phase transition and doping-induced magnetism in iodinene. Applied Physics Letters, 2021, 119, .	1.5	18
18	A universal framework for metropolis Monte Carlo simulation of magnetic Curie temperature. Computational Materials Science, 2021, 197, 110638.	1.4	25

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19	Theoretical study on two dimensional group IV-VI ternary compounds with large in-plane spontaneous polarization. Computational Materials Science, 2021, 198, 110688.	1.4	4
20	Spin-constrained optoelectronic functionality in two-dimensional ferromagnetic semiconductor heterojunctions. Materials Horizons, 2021, 8, 1323-1333.	6.4	11
21	Theoretical simulation and design of two-dimensional ferromagnetic materials. Chinese Science Bulletin, 2021, 66, 551-562.	0.4	5
22	Ferroelectricity in novel one-dimensional P42-InSeI nanowires. Results in Physics, 2021, 31, 104960.	2.0	8
23	Prediction of a two-dimensional high-T_C f-electron ferromagnetic semiconductor. Materials Horizons, 2020, 7, 1623-1630.	6.4	141
24	Magnetic twoâ€dimensional layered crystals meet with ferromagnetic semiconductors. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 639-655.	8.5	76
25	Computational prediction of a novel 1D InSeI nanochain with high stability and promising wide-bandgap properties. Physical Chemistry Chemical Physics, 2020, 22, 27441-27449.	1.3	17
26	Auxetic B₄N Monolayer: A Promising 2D Material with in-Plane Negative Poissonâ€™s Ratio and Large Anisotropic Mechanics. ACS Applied Materials & Interfaces, 2019, 11, 33231-33237.	4.0	67
27	High Curie temperature and intrinsic ferromagnetic half-metallicity in two-dimensional Cr₃X₄ (X = S, Se, Te) nanosheets. Nanoscale Horizons, 2019, 4, 859-866.	4.1	84
28	MnX (X = P, As) monolayers: a new type of two-dimensional intrinsic room temperature ferromagnetic half-metallic material with large magnetic anisotropy. Nanoscale, 2019, 11, 4204-4209.	2.8	136
29	Ultrathin Semiconducting Bi₂Te₂S and Bi₂Te₂Se with High Electron Mobilities. Journal of Physical Chemistry Letters, 2018, 9, 487-490.	2.1	56
30	Half-metallicity and enhanced ferromagnetism in Li-adsorbed ultrathin chromium triiodide. Journal of Materials Chemistry C, 2018, 6, 5716-5720.	2.7	71
31	Bi₂OS₂: a direct-gap two-dimensional semiconductor with high carrier mobility and surface electron states. Materials Horizons, 2018, 5, 1058-1064.	6.4	45
32	Chromium sulfide halide monolayers: intrinsic ferromagnetic semiconductors with large spin polarization and high carrier mobility. Nanoscale, 2018, 10, 18036-18042.	2.8	117
33	High Curie-temperature intrinsic ferromagnetism and hole doping-induced half-metallicity in two-dimensional scandium chlorine monolayers. Nanoscale Horizons, 2018, 3, 551-555.	4.1	75
34	A new Dirac cone material: a graphene-like Be₃C₂ monolayer. Nanoscale, 2017, 9, 5577-5582.	2.8	85
35	The ground-state structure and physical properties of ReB₃ and IrB₃ predicted from first principles. RSC Advances, 2015, 5, 25919-25928.	1.7	16
36	The nitrogen vacancy and oxygen substitution of OsN2: First-principles investigation. Journal of Alloys and Compounds, 2014, 590, 27-32.	2.8	1

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37	Predicted boron-carbide compounds: A first-principles study. Journal of Chemical Physics, 2014, 140, 224704.	1.2	33
38	A new hard phase of ReB4 predicted from first principles. Journal of Alloys and Compounds, 2013, 573, 20-26.	2.8	34
39	Predicted crystal structures of molybdenum under high pressure. Journal of Alloys and Compounds, 2013, 556, 116-120.	2.8	15
40	Phase Stability and Elastic Properties of Chromium Borides with Various Stoichiometries. ChemPhysChem, 2013, 14, 1245-1255.	1.0	23
41	New Crystal Structures of IrB and IrB₂: First-Principles Calculations. Journal of Physical Chemistry C, 2012, 116, 21961-21966.	1.5	19
42	Phase Stability and Physical Properties of Manganese Borides: A First-Principles Study. Journal of Physical Chemistry C, 2011, 115, 21429-21435.	1.5	60
43	Magnetoelectric Coupling Effect of Polarization Regulation in BiFeO3/LaTiO3 Heterostructures. Chinese Physics B, 0, , .	0.7	3