Jun Hu

List of Publications by Year
in descending order

45	2,052	257101	233125
papers	citations	24 h-index	45 g-index

48	48	48	3025
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Engineering a Robust Quantum Spin Hall State in Graphene via Adatom Deposition. Physical Review X, 2011, 1, .	2.8	284
2	Giant Topological Insulator Gap in Graphene with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mn>5</mml:mn><mml:mi>d</mml:mi></mml:math>Adatoms. Physical Review Letters, 2012, 109, 266801.	2.9	186
3	Control of the Magnetism and Magnetic Anisotropy of a Single-Molecule Magnet with an Electric Field. Physical Review Letters, 2013, 110, 097202.	2.9	135
4	Giant Magnetic Anisotropy of Transition-Metal Dimers on Defected Graphene. Nano Letters, 2014, 14, 1853-1858.	4.5	128
5	Effects on Electronic Properties of Molecule Adsorption on CuO Surfaces and Nanowires. Journal of Physical Chemistry C, 2010, 114, 17120-17126.	1.5	115
6	Increasing the Band Gap of Iron Pyrite by Alloying with Oxygen. Journal of the American Chemical Society, 2012, 134, 13216-13219.	6.6	96
7	First-principles studies of the electronic properties of native and substitutional anionic defects in bulk iron pyrite. Physical Review B, 2012, 85, .	1.1	83
8	Optimizing MoS₂ Edges by Alloying Isovalent W for Robust Hydrogen Evolution Activity. ACS Catalysis, 2018, 8, 9529-9536.	5.5	83
9	Effect of surface stoichiometry on the band gap of the pyrite FeS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>(100) surface. Physical Review B, 2012, 85, .	1.1	73
10	Room-Temperature Photooxidation of CH₄ to CH₃OH with Nearly 100% Selectivity over Hetero-ZnO/Fe₂O₃ Porous Nanosheets. Journal of the American Chemical Society, 2022, 144, 12357-12366.	6.6	59
11	Electronic structures of defects in ZnO: Hybrid density functional studies. Journal of Chemical Physics, 2008, 129, 154706.	1.2	57
12	Photo-spin-voltaic effect. Nature Physics, 2016, 12, 861-866.	6.5	52
13	Pyroelectric nanoplates for reduction of CO2 toÂmethanol driven by temperature-variation. Nature Communications, 2021, 12, 318.	5.8	51
14	Chern Half Metals: A New Class of Topological Materials to Realize the Quantum Anomalous Hall Effect. Nano Letters, 2015, 15, 2074-2078.	4.5	47
15	A study of the size-dependent elastic properties of ZnO nanowires and nanotubes. Nanotechnology, 2008, 19, 285710.	1.3	44
16	Candidate Source of Flux Noise in SQUIDs: Adsorbed Oxygen Molecules. Physical Review Letters, 2015, 115, 077002.	2.9	43
17	Stationary Full Li-Ion Batteries with Interlayer-Expanded V6O13 Cathodes and Lithiated Graphite Anodes. Electrochimica Acta, 2016, 203, 171-177.	2.6	42
18	Electric field control and effect of Pd capping on magnetocrystalline anisotropy in FePd thin films: A first-principles study. Physical Review B, 2014, 89, .	1.1	41

#	Article	IF	Citations
19	Giant magnetic anisotropy of a 5d transition metal decorated two-dimensional polyphthalocyanine framework. Journal of Materials Chemistry C, 2016, 4, 2147-2154.	2.7	35
20	Pseudodielectric function and critical-point energies of iron pyrite. Physical Review B, 2012, 86, .	1.1	34
21	Ferroelectric control of single-molecule magnetism in 2D limit. Science Bulletin, 2020, 65, 1252-1259.	4.3	33
22	Localized Control of Curie Temperature in Perovskite Oxide Film by Capping-Layer-Induced Octahedral Distortion. Physical Review Letters, 2017, 119, 177203.	2.9	31
23	Engineering magnetic anisotropy in two-dimensional magnetic materials. Advances in Physics: X, 2018, 3, 1432415.	1.5	28
24	Hydrogen diffusion behavior in N doped ZnO: First-principles study. Journal of Applied Physics, 2008, 103, .	1.1	26
25	Effect of chemical order on the magnetic and electronic properties of epitaxial off-stoichiometryFexSi1â^'xthin films. Physical Review B, 2015, 91, .	1.1	24
26	Chemically Engineering Magnetic Anisotropy of 2D Metalloporphyrin. Advanced Science, 2017, 4, 1700019.	5.6	22
27	Boosting the Rate Performance of Liâ€“S Batteries via Highly Dispersed Cobalt Nanoparticles Embedded into Nitrogen-Doped Hierarchical Porous Carbon. CCS Chemistry, 2022, 4, 2829-2841.	4.6	22
28	Effect of structure on the magnetic anisotropy of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>L</mml:mi><mml:msub><mml:mn>1</mml:mn> nanoparticles. Physical Review B, 2015, 92, .	1.1	20<mml:mr
29	The optical and vibrational properties of dominant defects in undoped ZnO: A first-principles study. Journal of Applied Physics, 2009, 105, 083710.	1.1	17
30	Robust spin manipulation in 2D organometallic Kagome lattices: a first-principles study. Physical Chemistry Chemical Physics, 2020, 22, 11045-11052.	1.3	17
31	Surface Engineering on Commercial Cu Foil for Steering C₂H₄/CH₄ Ratio in CO₂ Electroreduction. Nano Letters, 2022, 22, 2988-2994.	4.5	16
32	Rudermanâ€“Kittelâ€“Kasuyaâ€“Yosida Mechanism for Magnetic Ordering of Sparse Fe Adatoms on Graphene. Journal of Physical Chemistry C, 2019, 123, 4441-4445.	1.5	14
33	Surface effect on the size- and orientation-dependent elastic properties of single-crystal ZnO nanostructures. Journal of Applied Physics, 2009, 105, 034302.	1.1	11
34	Large magnetic anisotropy in chemically engineered iridium dimer. Communications Physics, 2018, 1, .	2.0	11
35	Search for giant magnetic anisotropy in transition-metal dimers on defected hexagonal boron nitride sheet. Journal of Chemical Physics, 2016, 144, 204704.	1.2	10
36	Large Perpendicular Magnetocrystalline Anisotropy at the Fe/Pb(001) Interface. ACS Applied Materials & Interfaces, 2018, 10, 13181-13186.	4.0	10

#	Article	IF	Citations
37	Optimizing Band Gap of Inorganic Halide Perovskites by Donorâ€“Acceptor Pair Codoping. Inorganic Chemistry, 2020, 59, 6053-6059.	1.9	8
38	Magnetic Anisotropy of Small Irn Clusters (nÂ=Â2â€“5). Journal of Cluster Science, 2016, 27, 935-946.	1.7	7
39	Strong phonon-magnon coupling of an O/Fe(001) surface. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	2.0	6
40	Formation of Pd Monomers and Dimers on a Single-Crystal Pd₃Fe(111) Surface. Journal of Physical Chemistry Letters, 2010, 1, 2493-2497.	2.1	5
41	Magneto-optical Kerr effect in L1 FePdPt ternary alloys: Experiments and first-principles calculations. Journal of Applied Physics, 2014, 115, .	1.1	5
42	Tuning Dzyaloshinskiiâ€“Moriya interaction via an electric field at the Co/h-BN interface. Physical Chemistry Chemical Physics, 2021, 23, 22246-22250.	1.3	5
43	Realizing robust large-gap quantum spin Hall state in 2D HgTe monolayer on insulating substrate. 2D Materials, 2018, 5, 045012.	2.0	3
44	Theoretical Study of H Diffusion Behavior and the Vibrational Properties of Liâ^'H Complexes in ZnO. Journal of Physical Chemistry C, 2009, 113, 11381-11384.	1.5	1
45	Enhancing perpendicular magnetocrystalline anisotropy in Fe ultrathin films by non-noble transition-metal substrate. International Journal of Modern Physics C, 2020, 31, 2050134.	0.8	0