Junyi Y Zhu

List of Publications by Year
in descending order

39 papers	2,587 citations	567247 15 h-index	330122 37 g-index
39 all docs	39 docs citations	39 times ranked	4292 citing authors

#	Article	IF	Citations
1	Defect calculations using a combined SCAN and hybrid functional in Î³-CsPbI₃. Physical Chemistry Chemical Physics, 2022, 24, 3420-3428.	2.8	4
2	Defects properties and vacancy diffusion in Cu₂MgSnS₄. Journal of Semiconductors, 2022, 43, 022101.	3.7	3
3	Machine-Learning-Assisted Acceleration on High-Symmetry Materials Search: Space Group Predictions from Band Structures. Journal of Physical Chemistry C, 2022, 126, 12264-12273.	3.1	2
4	Diffusivity and band offset analysis of a graphene interlayer at the back contact of a copper zinc tin sulphide solar cell. Physical Chemistry Chemical Physics, 2021, 23, 3511-3518.	2.8	1
5	Determining Equilibrium Shapes of MoS₂: Modified Algorithm, Edge Reconstructions with S and O, and Temperature Effects. Journal of Physical Chemistry C, 2021, 125, 4828-4835.	3.1	3
6	Kinetic Processes and Surfactant Design of Group I Elements on the CZTS (1Ì…1Ì…2Ì…) Surface. Journal of Physical Chemistry C, 2021, 125, 376-384.	3.1	3
7	A two-dimensional ErCu₂ intermetallic compound on Cu(111) with moirÃ©-pattern-modulated electronic structures. Physical Chemistry Chemical Physics, 2020, 22, 1693-1700.	2.8	9
8	A brief review of formation energies calculation of surfaces and edges in semiconductors. Journal of Semiconductors, 2020, 41, 061101.	3.7	10
9	Carrier free long-range magnetism in Mo doped one quintuple layer Bi₂Te₃ and Sb₂Te₃. Journal of Physics Condensed Matter, 2020, 32, 065801.	1.8	0
10	Long-range magnetic order stabilized by acceptors. Physical Review B, 2019, 99, .	3.2	3
11	Manipulating the Mixedâ€Perovskite Crystallization Pathway Unveiled by In Situ GIWAXS. Advanced Materials, 2019, 31, e1901284.	21.0	127
12	Twist-driven separation of p-type and n-type dopants in single-crystalline nanowires. National Science Review, 2019, 6, 532-539.	9.5	12
13	Twist-induced preferential distribution of dopants in single-crystalline Si nanowires. Physical Review B, 2019, 100, .	3.2	6
14	New Types of CZTS Î£3 {112} Grain Boundaries: Algorithms to Passivation. Journal of Physical Chemistry C, 2018, 122, 7759-7770.	3.1	11
15	Defect properties of Na and K in Cu2ZnSnS4 from hybrid functional calculation. Journal of Applied Physics, 2018, 124, 165701.	2.5	14
16	Gate-tunable room-temperature ferromagnetism in two-dimensional Fe3GeTe2. Nature, 2018, 563, 94-99.	27.8	1,646
17	Stepping Stone Mechanism: Carrier-Free Long-Range Magnetism Mediated by Magnetized Cation States in Quintuple Layer. Chinese Physics Letters, 2018, 35, 017502.	3.3	6
18	Missing links towards understanding the equilibrium shapes of hexagonal boron nitride: algorithm, hydrogen passivation, and temperature effects. Nanoscale, 2018, 10, 17683-17690.	5.6	12

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19	Quasicrystalline 30Â° twisted bilayer graphene as an incommensurate superlattice with strong interlayer coupling. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6928-6933.	7.1	169
20	Hydrogen-surfactant-assisted coherent growth of GaN on ZnO substrate. Physical Review Materials, 2018, 2, .	2.4	14
21	Stability of wurtzite semipolar surfaces: Algorithms and practices. Physical Review Materials, 2018, 2, .	2.4	10
22	Absence of quantum anomalous Hall state in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>4</mml:mn><mml:mi>d</mml:mi></mml:mrow></mml:m transition-metal-doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">I</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">S	3.2	3
23	Controlling defects and secondary phases of CZTS by surfactant potassium. Physical Review Materials, 2017, 1, .	2.4	19
24	A brief review of co-doping. Frontiers of Physics, 2016, 11, 1.	5.0	98
25	New approaches for calculating absolute surface energies of wurtzite (0001)/(0001Â¯): A study of ZnO and GaN. Journal of Applied Physics, 2016, 119, .	2.5	39
26	Realization of stable ferromagnetic order in a topological insulator: Codoping-enhanced magnetism in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>4</mml:mn><mml:mi>f</mml:mi></mml:mrow></mml:m metal doped<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">I</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">S	3.2	14
27	Pseudo-Hydrogen Passivation: A Novel Way to Calculate Absolute Surface Energy of Zinc Blende (111)/(Ĭž1) Tj ETQq1 1 0.784314 rgBT /	3.3	28
28	Surfactant antimony enhanced indium incorporation on InGaN (<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 397 Td (xmlns:mml=" surface: A DFT study. Journal of Crystal Growth, 2016, 438, 43-48.	1.5	7
29	Strain tuning of native defect populations: The case of Cu2ZnSn(S,Se)4. APL Materials, 2014, 2, 012110.	5.1	8
30	One-Pot Shear Synthesis of Gallium, Indium, and Indiumâ€“Bismuth Nanofluids: An Experimental and Computational Study. Journal of Nanotechnology in Engineering and Medicine, 2013, 4, .	0.8	0
31	Atomically Abrupt Liquid-Oxide Interface Stabilized by Self-Regulated Interfacial Defects: The Case of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Al</mml:mi><mml:mo>/</mml:mo><mml:msub><mml:mi>Al</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="bold">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>Interfaces. Physical Review Letters, 2013, 108, 226105.	7.8	25
32	Persistent Medium-Range Order and Anomalous Liquid Properties ofAl1âˆ’xCuxAlloys. Physical Review Letters, 2012, 108, 115901.	7.8	29
33	Quantum Electronic Stress: Density-Functional-Theory Formulation and Physical Manifestation. Physical Review Letters, 2012, 109, 055501.	7.8	55
34	Tuning doping site and type by strain: Enhanced -type doping in Li doped ZnO. Solid State Communications, 2011, 151, 1437-1439.	1.9	21
35	Overcoming doping bottleneck by using surfactant and strain. Frontiers of Materials Science, 2011, 5, 335-341.	2.2	10
36	Enhanced cation-substituted p-type doping in GaP from dual surfactant effects. Journal of Crystal Growth, 2010, 312, 174-179.	1.5	16

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37	Strain-Enhanced Doping in Semiconductors: Effects of Dopant Size and Charge State. Physical Review Letters, 2010, 105, 195503.	7.8	97
38	Dual-Surfactant Effect to Enhance<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi></mml:math>-Type Doping in III-V Semiconductor Thin Films. Physical Review Letters, 2008, 101, 196103.	7.8	32
39	Coulomb Sink: A Novel Coulomb Effect on Coarsening of Metal Nanoclusters on Semiconductor Surfaces. Physical Review Letters, 2004, 93, 106102.	7.8	21