Ji-Hui Yang

List of Publications by Year
in descending order

39 papers	4,770 citations	279701 23 h-index	315616 38 g-index
39 all docs	39 docs citations	39 times ranked	6877 citing authors

#	Article	IF	Citations
1	Semiconductor-to-metal transition from monolayer to bilayer blue phosphorous induced by extremely strong interlayer coupling: a first-principles study. Nanoscale, 2022, 14, 4082-4088.	2.8	3
2	Enhancing Hole Density and Suppressing Recombination Centers through Illumination in Kesterite Thin Film Solar Cells. Journal of Physical Chemistry Letters, 2022, 13, 2474-2478.	2.1	3
3	Computational Study of the C₂P₄ Monolayer as a Stable Two-Dimensional Material with High Carrier Mobility: Implications for Nanoelectronic Devices. ACS Applied Nano Materials, 2022, 5, 6972-6979.	2.4	4
4	Semiconducting Î±â€²-boron sheet with high mobility and low all-boron contact resistance: a first-principles study. Nanoscale, 2021, 13, 8474-8480.	2.8	15
5	Dimensionality-Inhibited Chemical Doping in Two-Dimensional Semiconductors: The Phosphorene and MoS₂ from Charge-Correction Method. Nano Letters, 2021, 21, 6711-6717.	4.5	14
6	Unusual defect properties in multivalent perovskite <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cs</mml:mi><mml:mn>2</mml:mn></mml: mathvariant="normal">I</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:mrow></mml:math> : A first-principles study. Physical Review Materials, 2021, 5, .	0.9	3
7	Unusual interlayer coupling in layered Cu-based ternary chalcogenides CuMCh₂ (M = Sb,) Tj ETQq1 1 0.784314 rgBT /Ov	2.8	7
8	Fully Boron-Sheet-Based Field Effect Transistors from First-Principles: Inverse Design of Semiconducting Boron Sheets. Journal of Physical Chemistry Letters, 2021, 12, 576-584.	2.1	14
9	Self-consistently determining structures of charged defects and defect ionization energies in low-dimensional semiconductors. Physical Review B, 2020, 102, .	1.1	9
10	Stacking induced indirect-to-direct bandgap transition in layered group-IV monochalcogenides for ideal optoelectronics. Journal of Materials Chemistry C, 2019, 7, 11858-11867.	2.7	10
11	Cu-Zn disorder in stoichiometric and non-stoichiometric Cu2ZnSnS4/Cu2ZnSnSe4. AIP Advances, 2019, 9, .	0.6	11
12	Two-Level Quantum Systems in Two-Dimensional Materials for Single Photon Emission. Nano Letters, 2019, 19, 408-414.	4.5	59
13	Unusual Negative Formation Enthalpies and Atomic Ordering in Isovalent Alloys of Transition Metal Dichalcogenide Monolayers. Chemistry of Materials, 2018, 30, 1547-1555.	3.2	20
14	Design of Lead-Free Inorganic Halide Perovskites for Solar Cells via Cation-Transmutation. Journal of the American Chemical Society, 2017, 139, 2630-2638.	6.6	714
15	Antimony Diffusion in CdTe. IEEE Journal of Photovoltaics, 2017, 7, 870-873.	1.5	11
16	Earth-Abundant and Non-Toxic SiX (X = S, Se) Monolayers as Highly Efficient Thermoelectric Materials. Journal of Physical Chemistry C, 2017, 121, 123-128.	1.5	41
17	Design of Two-Dimensional Graphene-like Dirac Materials Î²₁₂-XBeB₅ (X = H, F,) Tj ETQq1 1 0.784314 rgBT /O 4594-4599.	2.1	23
18	Carrier providers or killers: The case of Cu defects in CdTe. Applied Physics Letters, 2017, 111, 042106.	1.5	22

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19	Notice of Removal Antimony diffusion in CdTe. , 2017, , .		0
20	Fast self-diffusion of ions in CH₃NH₃PbI₃: the interstiticaly mechanism versus vacancy-assisted mechanism. Journal of Materials Chemistry A, 2016, 4, 13105-13112.	5.2	74
21	Phosphorus Diffusion Mechanisms and Deep Incorporation in Polycrystalline and Single-Crystalline CdTe. Physical Review Applied, 2016, 5, .	1.5	26
22	Review on first-principles study of defect properties of CdTe as a solar cell absorber. Semiconductor Science and Technology, 2016, 31, 083002.	1.0	109
23	Chemical Trends of Electronic Properties of Two-Dimensional Halide Perovskites and Their Potential Applications for Electronics and Optoelectronics. Journal of Physical Chemistry C, 2016, 120, 24682-24687.	1.5	41
24	Non-Radiative Carrier Recombination Enhanced by Two-Level Process: A First-Principles Study. Scientific Reports, 2016, 6, 21712.	1.6	74
25	Two-Dimensional SiS Layers with Promising Electronic and Optoelectronic Properties: Theoretical Prediction. Nano Letters, 2016, 16, 1110-1117.	4.5	149
26	Self-regulation of charged defect compensation and formation energy pinning in semiconductors. Scientific Reports, 2015, 5, 16977.	1.6	56
27	First-principles multiple-barrier diffusion theory: The case study of interstitial diffusion in CdTe. Physical Review B, 2015, 91, .	1.1	33
28	Enhanced p-type dopability of P and As in CdTe using non-equilibrium thermal processing. Journal of Applied Physics, 2015, 118, .	1.1	60
29	Halide perovskite materials for solar cells: a theoretical review. Journal of Materials Chemistry A, 2015, 3, 8926-8942.	5.2	1,114
30	Defect properties of Sb- and Bi-doped CuInSe2: The effect of the deep lone-pair s states. Applied Physics Letters, 2014, 105, .	1.5	21
31	Tuning the Fermi level beyond the equilibrium doping limit through quenching: The case of CdTe. Physical Review B, 2014, 90, .	1.1	66
32	What are grain boundary structures in graphene?. Nanoscale, 2014, 6, 4309-4315.	2.8	34
33	Predicting Two-Dimensional Boronâ€“Carbon Compounds by the Global Optimization Method. Journal of the American Chemical Society, 2011, 133, 16285-16290.	6.6	242
34	Compositional dependence of structural and electronic properties of Cu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>ZnSn(S,Se)<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:msub></mml:math>	1.1	399
35	Sn<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"		

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37	Effective band gap narrowing of anatase TiO2 by strain along a soft crystal direction. Applied Physics Letters, 2010, 96, .	1.5	185
38	Intrinsic point defects and complexes in the quaternary kesterite semiconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Cu</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu Physical Review B, 2010, 81, .	1.1	624
39	Electronic structure and phase stability of MgTe, ZnTe, CdTe, and their alloys in theB3,B4, andB8 structures. Physical Review B, 2009, 79, .	1.1	55