Young-Kwang Jung

List of Publications by Year
in descending order

28 papers	1,604 citations	516561 16 h-index	642610 23 g-index
34 all docs	34 docs citations	34 times ranked	2597 citing authors

#	Article	IF	Citations
1	Lattice strain causes non-radiative losses in halide perovskites. Energy and Environmental Science, 2019, 12, 596-606.	15.6	343
2	Performance-limiting nanoscale trap clusters at grain junctions in halide perovskites. Nature, 2020, 580, 360-366.	13.7	255
3	Accumulation of Deep Traps at Grain Boundaries in Halide Perovskites. ACS Energy Letters, 2019, 4, 1321-1327.	8.8	117
4	Stabilized tilted-octahedra halide perovskites inhibit local formation of performance-limiting phases. Science, 2021, 374, 1598-1605.	6.0	115
5	Perspective: Theory and simulation of hybrid halide perovskites. Journal of Chemical Physics, 2017, 146, 220901.	1.2	111
6	Lattice Compression Increases the Activation Barrier for Phase Segregation in Mixed-Halide Perovskites. ACS Energy Letters, 2020, 5, 3152-3158.	8.8	90
7	Influence of Rb/Cs Cation-Exchange on Inorganic Sn Halide Perovskites: From Chemical Structure to Physical Properties. Chemistry of Materials, 2017, 29, 3181-3188.	3.2	89
8	Thermodynamic Stabilization of Mixed-Halide Perovskites against Phase Segregation. Cell Reports Physical Science, 2020, 1, 100120.	2.8	56
9	Trimethylsulfonium Lead Triiodide: An Air-Stable Hybrid Halide Perovskite. Inorganic Chemistry, 2017, 56, 6302-6309.	1.9	52
10	Intrinsic doping limit and defect-assisted luminescence in Cs₄PbBr₆. Journal of Materials Chemistry A, 2019, 7, 20254-20261.	5.2	48
11	Elucidating the origin of chiroptical activity in chiral 2D perovskites through nano-confined growth. Nature Communications, 2022, 13, .	5.8	41
12	Halide Perovskite Heteroepitaxy: Bond Formation and Carrier Confinement at the PbSâ€“CsPbBr₃ Interface. Journal of Physical Chemistry C, 2017, 121, 27351-27356.	1.5	40
13	Exploring stereographic surface energy maps of cubic metals via an effective pair-potential approach. Physical Review B, 2016, 93, .	1.1	32
14	Prediction of high thermoelectric performance in the low-dimensional metal halide Cs3Cu2I5. Npj Computational Materials, 2021, 7, .	3.5	26
15	Low-dimensional formamidinium lead perovskite architectures <i>via</i> controllable solvent intercalation. Journal of Materials Chemistry C, 2019, 7, 3945-3951.	2.7	23
16	Low Barrier for Exciton Self-Trapping Enables High Photoluminescence Quantum Yield in Cs₃Cu₂I₅. Journal of Physical Chemistry Letters, 2021, 12, 8447-8452.	2.1	16
17	Asymmetric carrier transport in flexible interface-type memristor enables artificial synapses with sub-femtojoule energy consumption. Nanoscale Horizons, 2021, 6, 987-997.	4.1	16
18	Bismuth Doping Alters Structural Phase Transitions in Methylammonium Lead Tribromide Single Crystals. Journal of Physical Chemistry Letters, 2021, 12, 2749-2755.	2.1	14

#	Article	IF	Citations
19	Quick-start guide for first-principles modelling of semiconductor interfaces. JPhys Energy, 2019, 1, 016001.	2.3	12
20	Interfacial Dipole Layer Enables High-Performance Heterojunctions for Photoelectrochemical Water Splitting. ACS Energy Letters, 2022, 7, 1392-1402.	8.8	11
21	Eventual Chemical Transformation of Metals and Chalcogens into Metal Chalcogenide Nanoplates through a Surface Nucleation-Detachment-Reorganization Mechanism. Chemistry of Materials, 2017, 29, 3219-3227.	3.2	10
22	Mixedâ€Dimensional Formamidinium Bismuth Iodides Featuring Inâ€Situ Formed Typeâ€I Band Structure for Convolution Neural Networks. Advanced Science, 2022, 9, e2200168.	5.6	8
23	A density functional theory study on the interface stability between CsPbBr3 and CuI. AIP Advances, 2020, 10, .	0.6	4
24	External pressure to manipulate phase segregation in mixed-halide perovskites. , 0, , .		0
25	Nanoscale Heterogeneities Limit Optoelectronic Performance in Halide Perovskites. , 0, , .		0
26	Lattice compression increases the activation barrier for phase segregation in mixed-halide perovskites. , 0, , .		0
27	Octahedral Tilt Engineering: Atomic-Level Picture of Stabilized Î±-FAPbI3. , 0, , .		0
28	Tilted-octahedra stabilize FA rich halide perovskites. , 0, , .		0