Dongguen Shin

List of Publications by Year
in descending order

30 papers	547 citations	566801 15 h-index	642321 23 g-index
30 all docs	30 docs citations	30 times ranked	1083 citing authors

#	Article	IF	Citations
1	Introducing paired electric dipole layers for efficient and reproducible perovskite solar cells. Energy and Environmental Science, 2018, 11, 1742-1751.	15.6	76
2	Band-Tail Transport of CuSCN: Origin of Hole Extraction Enhancement in Organic Photovoltaics. Journal of Physical Chemistry Letters, 2016, 7, 2856-2861.	2.1	37
3	Rapid Formation of a Disordered Layer on Monoclinic BiVO₄: Coâ€Catalystâ€Free Photoelectrochemical Solar Water Splitting. ChemSusChem, 2018, 11, 933-940.	3.6	34
4	Electron transport mechanism of bathocuproine exciton blocking layer in organic photovoltaics. Physical Chemistry Chemical Physics, 2016, 18, 5444-5452.	1.3	32
5	Unraveling the Charge Extraction Mechanism of Perovskite Solar Cells Fabricated with Two-Step Spin Coating: Interfacial Energetics between Methylammonium Lead Iodide and C₆₀. Journal of Physical Chemistry Letters, 2017, 8, 5423-5429.	2.1	32
6	A solution-processable inorganic hole injection layer that improves the performance of quantum-dot light-emitting diodes. Current Applied Physics, 2017, 17, 442-447.	1.1	31
7	Electronic Structure of Nonionic Surfactant-Modified PEDOT:PSS and Its Application in Perovskite Solar Cells with Reduced Interface Recombination. ACS Applied Materials & Interfaces, 2019, 11, 17028-17034.	4.0	30
8	Band Alignment Engineering between Planar SnO₂ and Halide Perovskites via Two-Step Annealing. Journal of Physical Chemistry Letters, 2019, 10, 6545-6550.	2.1	28
9	The Schottkyâ€“Mott Rule Expanded for Two-Dimensional Semiconductors: Influence of Substrate Dielectric Screening. ACS Nano, 2021, 15, 14794-14803.	7.3	25
10	Phase formation and local charge transport of lead-free CH3NH3Sn(I1â^'xBrx)3 (0â€¯â‰¤â€¯xâ€¯â‰¤â€¯1) perovskite solar cells fabricated by solvent optimization. Solar Energy, 2019, 186, 136-144.	2.9	23
11	Improved Stability of Interfacial Energy-Level Alignment in Inverted Planar Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 18964-18973.	4.0	22
12	Interfacial energy level alignments between low-band-gap polymer PTB7 and indium zinc oxide anode. Applied Physics Express, 2015, 8, 095701.	1.1	19
13	Integrated advantages from perovskite photovoltaic cell and 2D MoTe2 transistor towards self-power energy harvesting and photosensing. Nano Energy, 2019, 63, 103833.	8.2	19
14	Typeâ€I Energy Level Alignment at the PTCDAâ€”Monolayer MoS₂ Interface Promotes Resonance Energy Transfer and Luminescence Enhancement. Advanced Science, 2021, 8, 2100215.	5.6	19
15	Mechanism and Timescales of Reversible pâ€Doping of Methylammonium Lead Triiodide by Oxygen. Advanced Materials, 2021, 33, e2100211.	11.1	17
16	Position-locking of volatile reaction products by atmosphere and capping layers slows down photodecomposition of methylammonium lead triiodide perovskite. RSC Advances, 2020, 10, 17534-17542.	1.7	16
17	Electronic properties of metal halide perovskites and their interfaces: the basics. Materials Horizons, 2021, , .	6.4	14
18	Temperatureâ€Dependent Electronic Groundâ€State Charge Transfer in van der Waals Heterostructures. Advanced Materials, 2021, 33, e2008677.	11.1	12

#	Article	IF	Citations
19	Photoinduced Energy-Level Realignment at Interfaces between Organic Semiconductors and Metal-Halide Perovskites. Physical Review Letters, 2021, 127, 246401.	2.9	11
20	Versatile hole injection of VO2: Energy level alignment at N,Nâ€²-di(1-naphthyl)-N,Nâ€²-diphenyl-(1,1â€²-biphenyl)-4,4â€²-diamine/VO2/fluorine-doped tin oxide. Organic Electronics, 2015, 16, 133-138.	1.4	10
21	Illuminationâ€Driven Energy Level Realignment at Buried Interfaces between Organic Charge Transport Layers and a Lead Halide Perovskite. Solar Rrl, 2022, 6, .	3.1	8
22	Unveiling the origin of performance reduction in perovskite solar cells with TiO2 electron transport layer: Conduction band minimum mismatches and chemical interactions at buried interface. Applied Surface Science, 2019, 495, 143490.	3.1	7
23	Origin of temperature-dependent performance of hole-transport-layer-free perovskite solar cells doped with CuSCN. Organic Electronics, 2020, 87, 105958.	1.4	7
24	Reversible oxygen-induced p-doping of mixed-cation halide perovskites. APL Materials, 2021, 9, 081104.	2.2	6
25	Strong interfacial dipole formation with thermal evaporation of lithium cobalt oxide for efficient electron injections. Applied Physics Letters, 2013, 102, 033302.	1.5	5
26	Enhancing the Performance of Inverted Organic Photovoltaics Using Cathode Interlayers Based on Solutionâ€Processable Tetrabutylammonium Halides. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700250.	1.2	3
27	Evidence for the changes in hole injection mechanism with a CoPc hole injection layer. Current Applied Physics, 2014, 14, 778-783.	1.1	2
28	Impact of Diethyl Ether Dripping Delay Time on the Electronic Structure of Methylammonium Lead Triiodide Perovskite Film. Journal of the Korean Physical Society, 2020, 76, 162-166.	0.3	2
29	van der Waals Heterostructures: Typeâ€I Energy Level Alignment at the PTCDAâ€”Monolayer MoS₂ Interface Promotes Resonance Energy Transfer and Luminescence Enhancement (Adv. Sci. 12/2021). Advanced Science, 2021, 8, 2170071.	5.6	0
30	Van der Waals Heterostructures: Temperatureâ€Dependent Electronic Groundâ€State Charge Transfer in van der Waals Heterostructures (Adv. Mater. 29/2021). Advanced Materials, 2021, 33, 2170229.	11.1	0