Sin Hang Cheung

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Suppressing Ion Migration across Perovskite Grain Boundaries by Polymer Additives. Advanced Functional Materials, 2021, 31, 2006802.	7.8	66
2	Heat transfer in photovoltaic polymers and bulkâ€heterojunctions investigated by scanning photothermal deflection technique. Nano Select, 2021, 2, 768-778.	1.9	4
3	Surface Sulfuration of NiO Boosts the Performance of Inverted Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000270.	3.1	31
4	Passivation engineering for hysteresis-free mixed perovskite solar cells. Solar Energy Materials and Solar Cells, 2020, 215, 110648.	3.0	21
5	Modulation of Defects and Interfaces through Alkylammonium Interlayer for Efficient Inverted Perovskite Solar Cells. Joule, 2020, 4, 1248-1262.	11.7	260
6	A facile and robust approach to prepare fluorinated polymer dielectrics for probing the intrinsic transport behavior of organic semiconductors. Materials Advances, 2020, 1, 891-898.	2.6	9
7	Understanding the Interplay of Binary Organic Spacer in Ruddlesdenâ€“Popper Perovskites toward Efficient and Stable Solar Cells. Advanced Functional Materials, 2020, 30, 1907759.	7.8	31
8	Understanding energetic disorder in electron-deficient-core-based non-fullerene solar cells. Science China Chemistry, 2020, 63, 1159-1168.	4.2	92
9	Impact of surface dipole in NiOx on the crystallization and photovoltaic performance of organometal halide perovskite solar cells. Nano Energy, 2019, 61, 496-504.	8.2	92
10	Charge transfer-induced photoluminescence in ZnO nanoparticles. Nanoscale, 2019, 11, 8736-8743.	2.8	48
11	Rationalizing device performance of perylenediimide derivatives as acceptors for bulk-heterojunction organic solar cells. Organic Electronics, 2019, 65, 156-161.	1.4	23
12	Strategies for high performance perovskite/crystalline silicon four-terminal tandem solar cells. Solar Energy Materials and Solar Cells, 2018, 179, 36-44.	3.0	31
13	Balanced Electric Field Dependent Mobilities: A Key to Access High Fill Factors in Organic Bulk Heterojunction Solar Cells. Solar Rrl, 2018, 2, 1700239.	3.1	49
14	Versatility of Carbon Enables All Carbon Based Perovskite Solar Cells to Achieve High Efficiency and High Stability. Advanced Materials, 2018, 30, e1706975.	11.1	95
15	Designing a ternary photovoltaic cell for indoor light harvesting with a power conversion efficiency exceeding 20%. Journal of Materials Chemistry A, 2018, 6, 8579-8585.	5.2	124
16	Stable and Efficient Organoâ€Metal Halide Hybrid Perovskite Solar Cells via Ï€â€Conjugated Lewis Base Polymer Induced Trap Passivation and Charge Extraction. Advanced Materials, 2018, 30, e1706126.	11.1	241
17	A Universal Strategy to Utilize Polymeric Semiconductors for Perovskite Solar Cells with Enhanced Efficiency and Longevity. Advanced Functional Materials, 2018, 28, 1706377.	7.8	134
18	Novel Cryo-controlled Nucleation Technique for High-efficiency Perovskite Solar Cells. , 2018, , .		0

#	Article	IF	Citations
19	Cryo-controlled Nucleation Method for High-efficiency Perovskite Solar Cells. , 2018, , .		0
20	A Cryogenic Process for Antisolventâ€Free Highâ€Performance Perovskite Solar Cells. Advanced Materials, 2018, 30, e1804402.	11.1	47
21	On the understanding of energetic disorder, charge recombination and voltage losses in all-polymer solar cells. Journal of Materials Chemistry C, 2018, 6, 7855-7863.	2.7	26
22	High performance low-bandgap perovskite solar cells based on a high-quality mixed Snâ€"Pb perovskite film prepared by vacuum-assisted thermal annealing. Journal of Materials Chemistry A, 2018, 6, 16347-16354.	5.2	44
23	Porphyrin-based thick-film bulk-heterojunction solar cells for indoor light harvesting. Journal of Materials Chemistry C, 2018, 6, 9111-9118.	2.7	67
24	Using Ultralow Dosages of Electron Acceptor to Reveal the Early Stage Donorâ€"Acceptor Electronic Interactions in Bulk Heterojunction Blends. Advanced Energy Materials, 2017, 7, 1602360.	10.2	64
25	Thickâ€Film Highâ€Performance Bulkâ€Heterojunction Solar Cells Retaining 90% PCEs of the Optimized Thin Film Cells. Advanced Electronic Materials, 2017, 3, 1700007.	2.6	33
26	Pinning Down the Anomalous Light Soaking Effect toward High-Performance and Fast-Response Perovskite Solar Cells: The Ion-Migration-Induced Charge Accumulation. Journal of Physical Chemistry Letters, 2017, 8, 5069-5076.	2.1	60
27	Boosting the photovoltaic thermal stability of fullerene bulk heterojunction solar cells through charge transfer interactions. Journal of Materials Chemistry A, 2017, 5, 23662-23670.	5.2	15
28	Investigation of high performance TiO₂nanorod array perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 15970-15980.	5.2	64
29	Probing Bulk Transport, Interfacial Disorders, and Molecular Orientations of Amorphous Semiconductors in a Thinâ€Film Transistor Configuration. Advanced Electronic Materials, 2016, 2, 1500273.	2.6	6
30	Improvement of Charge Collection and Performance Reproducibility in Inverted Organic Solar Cells by Suppression of ZnO Subgap States. ACS Applied Materials & Interfaces, 2016, 8, 14717-14724.	4.0	54
31	The detrimental effect of excess mobile ions in planar CH₃NH₃PbI₃ perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 12748-12755.	5.2	55
32	Crystal Engineering for Low Defect Density and High Efficiency Hybrid Chemical Vapor Deposition Grown Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 32805-32814.	4.0	76
33	Efficiency enhancement by defect engineering in perovskite photovoltaic cells prepared using evaporated PbI₂/CH₃NH₃I multilayers. Journal of Materials Chemistry A, 2015, 3, 9223-9231.	5.2	82
34	Hole-Transporting Spirothioxanthene Derivatives as Donor Materials for Efficient Small-Molecule-Based Organic Photovoltaic Devices. Chemistry of Materials, 2014, 26, 6585-6594.	3.2	42