Aswani Yella

List of Publications by Year
in descending order

29 papers	12,885 citations	331259 21 h-index	433756 31 g-index
31 all docs	31 docs citations	31 times ranked	13420 citing authors

#	Article	IF	Citations
1	All Roomâ€Temperatureâ€Processed Carbonâ€Based Flexible Perovskite Solar Cells with TiO₂ Electron Collection Layer. Energy Technology, 2022, 10, .	1.8	4
2	Enhanced charge transport in low temperature carbon-based n-i-p perovskite solar cells with NiOx-CNT hole transport material. Solar Energy Materials and Solar Cells, 2021, 230, 111241.	3.0	19
3	Synthesis of bismuth sulphoiodide thin films from single precursor solution. Solar Energy, 2021, 230, 714-720.	2.9	7
4	Mixed metalâ€“antimony oxide nanocomposites: low pH water oxidation electrocatalysts with outstanding durability at ambient and elevated temperatures. Journal of Materials Chemistry A, 2021, 9, 27468-27484.	5.2	19
5	Humidityâ€Mediated Synthesis of Highly Luminescent and Stable CsPbX₃ (Xâ€‰=â€‰Cl, Br, I) Nanocrystals. Energy Technology, 2020, 8, 1900890.	1.8	13
6	Binder-solvent effects on low temperature-processed carbon-based, hole-transport layer free perovskite solar cells. Materials Chemistry and Physics, 2020, 256, 123594.	2.0	28
7	Lattice Dynamics and Electronâ€“Phonon Coupling in Lead-Free Cs₂AgIn_{1â€“<i>x</i>}Bi_{<i>x</i>}Cl₆ Double Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2020, 11, 2113-2120.	2.1	69
8	High-Efficiency Organic Solar Cells With Solution Processable Non-Fullerene Acceptor as an Interlayer. IEEE Journal of Photovoltaics, 2019, 9, 1266-1272.	1.5	3
9	ZnX₂ mediated post-synthetic transformation of zero dimensional Cs₄PbBr₆ nanocrystals for opto-electronic applications. Nanoscale Advances, 2019, 1, 2502-2509.	2.2	8
10	Reversible Dimensionality Tuning of Hybrid Perovskites with Humidity: Visualization and Application to Stable Solar Cells. Chemistry of Materials, 2019, 31, 3111-3117.	3.2	35
11	Tunable and Stable White Light Emission in Bi³⁺-Alloyed Cs₂AgInCl₆ Double Perovskite Nanocrystals. Chemistry of Materials, 2019, 31, 10063-10070.	3.2	113
12	Interface engineering through electron transport layer modification for high efficiency organic solar cells. RSC Advances, 2018, 8, 5984-5991.	1.7	24
13	Double perovskites overtaking the single perovskites: A set of new solar harvesting materials with much higher stability and efficiency. Physical Review Materials, 2018, 2, .	0.9	60
14	Dye-sensitized solar cells using cobalt electrolytes: the influence of porosity and pore size to achieve high-efficiency. Journal of Materials Chemistry C, 2017, 5, 2833-2843.	2.7	52
15	Experimental evaluation of room temperature crystallization and phase evolution of hybrid perovskite materials. CrystEngComm, 2017, 19, 3834-3843.	1.3	43
16	Simultaneous enhancement of light absorption and improved charge collection in PTB7-Th: PC70BM organic solar cells. MRS Advances, 2017, 2, 835-840.	0.5	1
17	TiO 2 colloid-based compact layers for hybrid lead halide perovskite solar cells. Applied Materials Today, 2017, 7, 112-119.	2.3	24
18	Efficient light trapping and interface engineering for performance enhancement in PTB7-Th: PC70BM organic solar cells. Organic Electronics, 2017, 41, 280-286.	1.4	18

#	Article	IF	Citations
19	Molecularly Engineered Ru(II) Sensitizers Compatible with Cobalt(II/III) Redox Mediators for Dye-Sensitized Solar Cells. Inorganic Chemistry, 2016, 55, 7388-7395.	1.9	21
20	An Optically Transparent Iron Nickel Oxide Catalyst for Solar Water Splitting. Journal of the American Chemical Society, 2015, 137, 9927-9936.	6.6	247
21	Unravel the Impact of Anchoring Groups on the Photovoltaic Performances of Diketopyrrolopyrrole Sensitizers for Dye-Sensitized Solar Cells. ACS Sustainable Chemistry and Engineering, 2015, 3, 2389-2396.	3.2	65
22	A durable SWCNT/PET polymer foil based metal free counter electrode for flexible dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 19609-19615.	5.2	53
23	Molecular Engineering of Pushâ€“Pull Porphyrin Dyes for Highly Efficient Dyeâ€Sensitized Solar Cells: The Role of Benzene Spacers. Angewandte Chemie - International Edition, 2014, 53, 2973-2977.	7.2	458
24	Nanocrystalline Rutile Electron Extraction Layer Enables Low-Temperature Solution Processed Perovskite Photovoltaics with 13.7% Efficiency. Nano Letters, 2014, 14, 2591-2596.	4.5	397
25	Perovskite solar cells employing organic charge-transport layers. Nature Photonics, 2014, 8, 128-132.	15.6	1,320
26	Dye-sensitized solar cells with 13% efficiency achieved through the molecular engineering of porphyrin sensitizers. Nature Chemistry, 2014, 6, 242-247.	6.6	3,982
27	Acetylene-bridged dyes with high open circuit potential for dye-sensitized solar cells. RSC Advances, 2014, 4, 35251.	1.7	23
28	Thiocyanateâ€Free Ru(II) Sensitizers with a 4,4â€²â€Dicarboxyvinylâ€2,2â€²â€bipyridine Anchor for Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2013, 23, 2285-2294.	7.8	27
29	Porphyrin-Sensitized Solar Cells with Cobalt (II/III)â€“Based Redox Electrolyte Exceed 12 Percent Efficiency. Science, 2011, 334, 629-634.	6.0	5,637