Aswani Yella

List of Publications by Citations

31 papers	11,559 citations	18 h-index	31 g-index
31 ext. papers	12,244 ext. citations	8.9 avg, IF	6.05 L-index

#	Paper	IF	Citations
31	Porphyrin-sensitized solar cells with cobalt (II/III)-based redox electrolyte exceed 12 percent efficiency. *Science*, **2011**, 334, 629-34	33.3	5284
30	Dye-sensitized solar cells with 13% efficiency achieved through the molecular engineering of porphyrin sensitizers. *Nature Chemistry*, **2014**, 6, 242-7	17.6	3560
29	Perovskite solar cells employing organic charge-transport layers. *Nature Photonics*, **2014**, 8, 128-132	33.9	1196
28	Molecular engineering of push-pull porphyrin dyes for highly efficient dye-sensitized solar cells: the role of benzene spacers. *Angewandte Chemie - International Edition*, **2014**, 53, 2973-7	16.4	369
27	Nanocrystalline rutile electron extraction layer enables low-temperature solution processed perovskite photovoltaics with 13.7% efficiency. *Nano Letters*, **2014**, 14, 2591-6	11.5	352
26	An Optically Transparent Iron Nickel Oxide Catalyst for Solar Water Splitting. *Journal of the American Chemical Society*, **2015**, 137, 9927-36	16.4	212
25	Molecular Engineering of Push–Pull Porphyrin Dyes for Highly Efficient Dye-Sensitized Solar Cells: The Role of Benzene Spacers. *Angewandte Chemie*, **2014**, 126, 3017-3021	3.6	95
24	Tunable and Stable White Light Emission in Bi3+-Alloyed Cs2AgInCl6 Double Perovskite Nanocrystals. *Chemistry of Materials*, **2019**, 31, 10063-10070	9.6	63
23	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	8.3	56
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	13	52
21	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	7.1	42
20	Double perovskites overtaking the single perovskites: A set of new solar harvesting materials with much higher stability and efficiency. *Physical Review Materials*, **2018**, 2,	3.2	35
19	Lattice Dynamics and Electron-Phonon Coupling in Lead-Free CsAgInBiCl Double Perovskite Nanocrystals. *Journal of Physical Chemistry Letters*, **2020**, 11, 2113-2120	6.4	30
18	Experimental evaluation of room temperature crystallization and phase evolution of hybrid perovskite materials. *CrystEngComm*, **2017**, 19, 3834-3843	3.3	29
17	Thiocyanate-Free Ru(II) Sensitizers with a 4,4?-Dicarboxyvinyl-2,2?-bipyridine Anchor for Dye-Sensitized Solar Cells. *Advanced Functional Materials*, **2013**, 23, 2285-2294	15.6	26
16	Interface engineering through electron transport layer modification for high efficiency organic solar cells.. *RSC Advances*, **2018**, 8, 5984-5991	3.7	21
15	Reversible Dimensionality Tuning of Hybrid Perovskites with Humidity: Visualization and Application to Stable Solar Cells. *Chemistry of Materials*, **2019**, 31, 3111-3117	9.6	20

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14	Acetylene-bridged dyes with high open circuit potential for dye-sensitized solar cells. *RSC Advances*, **2014**, 4, 35251	3.7	20
13	Molecularly Engineered Ru(II) Sensitizers Compatible with Cobalt(II/III) Redox Mediators for Dye-Sensitized Solar Cells. *Inorganic Chemistry*, **2016**, 55, 7388-95	5.1	18
12	TiO 2 colloid-based compact layers for hybrid lead halide perovskite solar cells. *Applied Materials Today*, **2017**, 7, 112-119	6.6	17
11	Efficient light trapping and interface engineering for performance enhancement in PTB7-Th: PC70BM organic solar cells. *Organic Electronics*, **2017**, 41, 280-286	3.5	17
10	Binder-solvent effects on low temperature-processed carbon-based, hole-transport layer free perovskite solar cells. *Materials Chemistry and Physics*, **2020**, 256, 123594	4.4	11
9	Towards Compatibility between Ruthenium Sensitizers and Cobalt Electrolytes in Dye-Sensitized Solar Cells. *Angewandte Chemie*, **2013**, 125, 8893-8897	3.6	8
8	Humidity-Mediated Synthesis of Highly Luminescent and Stable CsPbX3 (X = Cl, Br, I) Nanocrystals. *Energy Technology*, **2020**, 8, 1900890	3.5	7
7	Mixed metal□ntimony oxide nanocomposites: low pH water oxidation electrocatalysts with outstanding durability at ambient and elevated temperatures. *Journal of Materials Chemistry A*, **2021**, 9, 27468-27484	13	6
6	ZnX2 mediated post-synthetic transformation of zero dimensional Cs4PbBr6 nanocrystals for opto-electronic applications. *Nanoscale Advances*, **2019**, 1, 2502-2509	5.1	4
5	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	6.4	4
4	. *IEEE Journal of Photovoltaics*, **2019**, 9, 1266-1272	3.7	3
3	Simultaneous enhancement of light absorption and improved charge collection in PTB7-Th: PC70BM organic solar cells. *MRS Advances*, **2017**, 2, 835-840	0.7	1
2	Synthesis of bismuth sulphoiodide thin films from single precursor solution. *Solar Energy*, **2021**, 230, 714-720	6.8	1
1	All Room-Temperature-Processed Carbon-Based Flexible Perovskite Solar Cells with TiO 2 Electron Collection Layer. *Energy Technology*,2200282	3.5	0