Aswani Yella

List of Publications by Year
in descending order

47 papers	12,580 citations	201385 27 h-index	168136 53 g-index
55 all docs	55 docs citations	55 times ranked	11987 citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	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
5	Design and Development of Functionalized Cyclometalated Ruthenium Chromophores for Light-Harvesting Applications. Inorganic Chemistry, 2011, 50, 5494-5508.	1.9	180
6	Molecular Engineering of a Fluorene Donor for Dye-Sensitized Solar Cells. Chemistry of Materials, 2013, 25, 2733-2739.	3.2	154
7	Subâ€Nanometer Conformal TiO₂ Blocking Layer for High Efficiency Solidâ€State Perovskite Absorber Solar Cells. Advanced Materials, 2014, 26, 4309-4312.	11.1	148
8	The Molecular Engineering of Organic Sensitizers for Solarâ€Cell Applications. Angewandte Chemie - International Edition, 2013, 52, 376-380.	7.2	145
9	Ligand Engineering for the Efficient Dye-Sensitized Solar Cells with Ruthenium Sensitizers and Cobalt Electrolytes. Inorganic Chemistry, 2016, 55, 6653-6659.	1.9	80
10	Bismuthâ€Catalyzed Growth of SnS₂ Nanotubes and Their Stability. Angewandte Chemie - International Edition, 2009, 48, 6426-6430.	7.2	70
11	Low-Temperature Crystalline Titanium Dioxide by Atomic Layer Deposition for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 3487-3493.	4.0	70
12	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
13	Towards Compatibility between Ruthenium Sensitizers and Cobalt Electrolytes in Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2013, 52, 8731-8735.	7.2	61
14	Thieno[3,4-<i>b</i>]pyrazine as an Electron Deficient Ï€-Bridge in Dâ€“Aâˆ’Ï€â€“<i>A</i> DSCs. ACS Applied Materials & Interfaces, 2016, 8, 5376-5384.	4.0	57
15	In Situ Heating TEM Study of Onion-like WS₂ and MoS₂ Nanostructures Obtained via MOCVD. Chemistry of Materials, 2008, 20, 65-71.	3.2	52
16	Enzymeâ€Mediated Deposition of a TiO₂ Coating onto Biofunctionalized WS2 Chalcogenide Nanotubes. Advanced Functional Materials, 2009, 19, 285-291.	7.8	52
17	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
18	New sensitizers for dye-sensitized solar cells featuring a carbon-bridged phenylenevinylene. Chemical Communications, 2013, 49, 582-584.	2.2	49

#	Article	IF	Citations
19	Unravelling the Potential for Dithienopyrrole Sensitizers in Dye-Sensitized Solar Cells. Chemistry of Materials, 2013, 25, 2642-2648.	3.2	49
20	A low recombination rate indolizine sensitizer for dye-sensitized solar cells. Chemical Communications, 2016, 52, 8424-8427.	2.2	45
21	Quantum-Confined ZnO Nanoshell Photoanodes for Mesoscopic Solar Cells. Nano Letters, 2014, 14, 1190-1195.	4.5	42
22	Sterically demanded unsymmetrical zinc phthalocyanines for dye-sensitized solar cells. Dyes and Pigments, 2013, 98, 518-529.	2.0	40
23	Synthesis of Fullerene- and Nanotube-Like SnS₂ Nanoparticles and Sn/S/Carbon Nanocomposites. Chemistry of Materials, 2009, 21, 2474-2481.	3.2	39
24	Molecular Design Principles for Nearâ€Infrared Absorbing and Emitting Indolizine Dyes. Chemistry - A European Journal, 2016, 22, 15536-15542.	1.7	39
25	Near-IR Photoresponse of Ruthenium Dipyrrinate Terpyridine Sensitizers in the Dye-Sensitized Solar Cells. Inorganic Chemistry, 2014, 53, 5417-5419.	1.9	37
26	Modulating dye E(S+/S*) with efficient heterocyclic nitrogen containing acceptors for DSCs. Chemical Communications, 2012, 48, 2295.	2.2	35
27	Reversible Selfâ€Assembly of Metal Chalcogenide/Metal Oxide Nanostructures Based on Pearson Hardness. Angewandte Chemie - International Edition, 2010, 49, 7578-7582.	7.2	27
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	Large Scale MOCVD Synthesis of Hollow ReS2 Nanoparticles with Nested Fullerene-Like Structure. Chemistry of Materials, 2008, 20, 3587-3593.	3.2	26
30	Highâ€Surfaceâ€Area Porous Platinum Electrodes for Enhanced Charge Transfer. Advanced Energy Materials, 2014, 4, 1400510.	10.2	26
31	Synthesis and functionalization of chalcogenide nanotubes. Physica Status Solidi (B): Basic Research, 2010, 247, 2338-2363.	0.7	25
32	TiO 2 colloid-based compact layers for hybrid lead halide perovskite solar cells. Applied Materials Today, 2017, 7, 112-119.	2.3	24
33	Peripherally and Axially Carboxylic Acid Substituted Subphthalocyanines for Dyeâ€Sensitized Solar Cells. Chemistry - A European Journal, 2014, 20, 2016-2021.	1.7	23
34	Acetylene-bridged dyes with high open circuit potential for dye-sensitized solar cells. RSC Advances, 2014, 4, 35251.	1.7	23
35	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
36	From Single Molecules to Nanoscopically Structured Materials: Self-Assembly of Metal Chalcogenide/Metal Oxide Nanostructures Based on the Degree of Pearson Hardness. Chemistry of Materials, 2011, 23, 3534-3539.	3.2	20

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37	Diffusion-Driven Formation of MoS₂ Nanotube Bundles Containing MoS₂ Nanopods. Chemistry of Materials, 2011, 23, 4716-4720.	3.2	18
38	Synthesis of Hierarchically Grown ZnO@NT-WS₂ Nanocomposites. Chemistry of Materials, 2009, 21, 5382-5387.	3.2	16
39	Unraveling the Dual Character of Sulfur Atoms on Sensitizers in Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 26827-26833.	4.0	16
40	Mismatch Strain versus Dangling Bonds: Formation of â€œCoinâ€Roll Nanowiresâ€•by Stacking Nanosheets. Angewandte Chemie - International Edition, 2010, 49, 3301-3305.	7.2	14
41	IFâ€ReS₂ with Covalently Linked Porphyrin Antennae. Israel Journal of Chemistry, 2010, 50, 500-505.	1.0	13
42	Reversible Selbstorganisation von Metallchalkogenidâ€Metalloxidâ€•Nanostrukturen basierend auf dem Pearsonâ€Konzept. Angewandte Chemie, 2010, 122, 7741-7745.	1.6	13
43	Snapshots of the Formation of Inorganic MoS₂ Onionâ€Type Fullerenes: A â€œShrinking Giant Bubbleâ€•Pathway. Angewandte Chemie - International Edition, 2010, 49, 2575-2580.	7.2	13
44	Soluble IF-ReS₂Nanoparticles by Surface Functionalization with Terpyridine Ligands. Langmuir, 2011, 27, 385-391.	1.6	13
45	Electron Kinetics in Dye Sensitized Solar Cells Employing Anatase with (101) and (001) Facets. Electrochimica Acta, 2015, 160, 296-305.	2.6	13
46	Organic Dyes Containing Coplanar Dihexyl-Substituted Dithienosilole Groups for Efficient Dye-Sensitised Solar Cells. International Journal of Photoenergy, 2017, 2017, 1-14.	1.4	8
47	Graphene-type sheets of Nb1âˆ’xWxS2: synthesis and in situ functionalization. Dalton Transactions, 2013, 42, 5292.	1.6	5