Aswani Yella

List of Publications by Citations

53 papers	11,460 citations	27 h-index	55 g-index
55 ext. papers	12,036 ext. citations	9.2 avg, IF	5.92 L-index

#	Paper	IF	Citations
53	Porphyrin-sensitized solar cells with cobalt (II/III)-based redox electrolyte exceed 12 percent efficiency. *Science*, **2011**, 334, 629-34	33.3	5284
52	Dye-sensitized solar cells with 13% efficiency achieved through the molecular engineering of porphyrin sensitizers. *Nature Chemistry*, **2014**, 6, 242-7	17.6	3560
51	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
50	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
49	Design and development of functionalized cyclometalated ruthenium chromophores for light-harvesting applications. *Inorganic Chemistry*, **2011**, 50, 5494-508	5.1	174
48	Sub-nanometer conformal TiO_2 blocking layer for high efficiency solid-state perovskite absorber solar cells. *Advanced Materials*, **2014**, 26, 4309-12	24	136
47	Molecular Engineering of a Fluorene Donor for Dye-Sensitized Solar Cells. *Chemistry of Materials*, **2013**, 25, 2733-2739	9.6	136
46	The molecular engineering of organic sensitizers for solar-cell applications. *Angewandte Chemie - International Edition*, **2013**, 52, 376-80	16.4	118
45	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
44	Low-temperature crystalline titanium dioxide by atomic layer deposition for dye-sensitized solar cells. *ACS Applied Materials & Interfaces*, **2013**, 5, 3487-93	9.5	70
43	Bismuth-catalyzed growth of SnS2 nanotubes and their stability. *Angewandte Chemie - International Edition*, **2009**, 48, 6426-30	16.4	68
42	Ligand Engineering for the Efficient Dye-Sensitized Solar Cells with Ruthenium Sensitizers and Cobalt Electrolytes. *Inorganic Chemistry*, **2016**, 55, 6653-9	5.1	65
41	Towards compatibility between ruthenium sensitizers and cobalt electrolytes in dye-sensitized solar cells. *Angewandte Chemie - International Edition*, **2013**, 52, 8731-5	16.4	57
40	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
39	Enzyme-Mediated Deposition of a TiO2 Coating onto Biofunctionalized WS2 Chalcogenide Nanotubes. *Advanced Functional Materials*, **2009**, 19, 285-291	15.6	48
38	Unravelling the Potential for Dithienopyrrole Sensitizers in Dye-Sensitized Solar Cells. *Chemistry of Materials*, **2013**, 25, 2642-2648	9.6	47
37	New sensitizers for dye-sensitized solar cells featuring a carbon-bridged phenylenevinylene. *Chemical Communications*, **2013**, 49, 582-4	5.8	46

36	In Situ Heating TEM Study of Onion-like WS2 and MoS2 Nanostructures Obtained via MOCVD. *Chemistry of Materials*, **2008**, 20, 65-71	9.6	46
35	Thieno[3,4-b]pyrazine as an Electron Deficient Bridge in D-A-A DSCs. *ACS Applied Materials & Interfaces*, **2016**, 8, 5376-84	9.5	45
34	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
33	A low recombination rate indolizine sensitizer for dye-sensitized solar cells. *Chemical Communications*, **2016**, 52, 8424-7	5.8	40
32	Quantum-confined ZnO nanoshell photoanodes for mesoscopic solar cells. *Nano Letters*, **2014**, 14, 1190-5	11.5	40
31	Molecular Design Principles for Near-Infrared Absorbing and Emitting Indolizine Dyes. *Chemistry - A European Journal*, **2016**, 22, 15536-15542	4.8	36
30	Near-IR photoresponse of ruthenium dipyrrinate terpyridine sensitizers in the dye-sensitized solar cells. *Inorganic Chemistry*, **2014**, 53, 5417-9	5.1	35
29	Synthesis of Fullerene- and Nanotube-Like SnS2 Nanoparticles and Sn/S/Carbon Nanocomposites. *Chemistry of Materials*, **2009**, 21, 2474-2481	9.6	35
28	Sterically demanded unsymmetrical zinc phthalocyanines for dye-sensitized solar cells. *Dyes and Pigments*, **2013**, 98, 518-529	4.6	34
27	Modulating dye E(S+/S*) with efficient heterocyclic nitrogen containing acceptors for DSCs. *Chemical Communications*, **2012**, 48, 2295-7	5.8	31
26	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
25	Reversible self-assembly of metal chalcogenide/metal oxide nanostructures based on Pearson hardness. *Angewandte Chemie - International Edition*, **2010**, 49, 7578-82	16.4	26
24	Large Scale MOCVD Synthesis of Hollow ReS2 Nanoparticles with Nested Fullerene-Like Structure. *Chemistry of Materials*, **2008**, 20, 3587-3593	9.6	25
23	High-Surface-Area Porous Platinum Electrodes for Enhanced Charge Transfer. *Advanced Energy Materials*, **2014**, 4, 1400510	21.8	22
22	Synthesis and functionalization of chalcogenide nanotubes. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 2338-2363	1.3	22
21	The Molecular Engineering of Organic Sensitizers for Solar-Cell Applications. *Angewandte Chemie*, **2013**, 125, 394-398	3.6	21
20	Acetylene-bridged dyes with high open circuit potential for dye-sensitized solar cells. *RSC Advances*, **2014**, 4, 35251	3.7	20
19	Peripherally and axially carboxylic acid substituted subphthalocyanines for dye-sensitized solar cells. *Chemistry - A European Journal*, **2014**, 20, 2016-21	4.8	19

18	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	9.6	19
17	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
16	TiO 2 colloid-based compact layers for hybrid lead halide perovskite solar cells. *Applied Materials Today*, **2017**, 7, 112-119	6.6	17
15	Diffusion-Driven Formation of MoS2Nanotube Bundles Containing MoS2Nanopods. *Chemistry of Materials*, **2011**, 23, 4716-4720	9.6	15
14	Synthesis of Hierarchically Grown ZnO@NT-WS2 Nanocomposites. *Chemistry of Materials*, **2009**, 21, 5382-5387	9.6	14
13	Mismatch strain versus dangling bonds: formation of "coin-roll nanowires" by stacking nanosheets. *Angewandte Chemie - International Edition*, **2010**, 49, 3301-5	16.4	14
12	Soluble IF-ReS2 nanoparticles by surface functionalization with terpyridine ligands. *Langmuir*, **2011**, 27, 385-91	4	13
11	Bismut-katalysiertes Wachstum von SnS2-Nanor□ren und deren Stabilit□. *Angewandte Chemie*, **2009**, 121, 6546-6551	3.6	13
10	Reversible Selbstorganisation von Metallchalkogenid-Metalloxid- Nanostrukturen basierend auf dem Pearson-Konzept. *Angewandte Chemie*, **2010**, 122, 7741-7745	3.6	13
9	Snapshots of the formation of inorganic MoS2 onion-type fullerenes: a "shrinking giant bubble" pathway. *Angewandte Chemie - International Edition*, **2010**, 49, 2575-80	16.4	13
8	IF-ReS2 with Covalently Linked Porphyrin Antennae. *Israel Journal of Chemistry*, **2010**, 50, 500-505	3.4	12
7	Unraveling the Dual Character of Sulfur Atoms on Sensitizers in Dye-Sensitized Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 26827-26833	9.5	12
6	Electron Kinetics in Dye Sensitized Solar Cells Employing Anatase with (101) and (001) Facets. *Electrochimica Acta*, **2015**, 160, 296-305	6.7	11
5	Towards Compatibility between Ruthenium Sensitizers and Cobalt Electrolytes in Dye-Sensitized Solar Cells. *Angewandte Chemie*, **2013**, 125, 8893-8897	3.6	8
4	Mechanische Spannung und Valenzabs□tigung in Konkurrenz: Nano-M□zrollen aus Stapeln nanoskaliger Schichten. *Angewandte Chemie*, **2010**, 122, 3373-3377	3.6	7
3	Organic Dyes Containing Coplanar Dihexyl-Substituted Dithienosilole Groups for Efficient Dye-Sensitised Solar Cells. *International Journal of Photoenergy*, **2017**, 2017, 1-14	2.1	6
2	Graphene-type sheets of Nb(1-x)W(x)S2: synthesis and in situ functionalization. *Dalton Transactions*, **2013**, 42, 5292-7	4.3	5
1	Snapshots of the Formation of Inorganic MoS2 Onion-Type Fullerenes: A □hrinking Giant Bubble□ Pathway. *Angewandte Chemie*, **2010**, 122, 2629-2634	3.6	4