Hyunbong Choi

List of Publications by Year
in descending order

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49	4,156	94433	189892
papers	citations	37 h-index	50 g-index

54	54	54	4689
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Highly Efficient and Thermally Stable Organic Sensitizers for Solventâ€Free Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2008, 47, 327-330.	13.8	370
2	Know Thy Nano Neighbor. Plasmonic versus Electron Charging Effects of Metal Nanoparticles in Dye-Sensitized Solar Cells. ACS Nano, 2012, 6, 4418-4427.	14.6	361
3	Metal-Cluster-Sensitized Solar Cells. A New Class of Thiolated Gold Sensitizers Delivering Efficiency Greater Than 2%. Journal of the American Chemical Society, 2013, 135, 8822-8825.	13.7	292
4	Efficient and stable panchromatic squaraine dyes for dye-sensitized solar cells. Chemical Communications, 2011, 47, 2874.	4.1	157
5	Novel organic dyes containing bis-dimethylfluorenyl amino benzo[b]thiophene for highly efficient dye-sensitized solar cell. Tetrahedron, 2007, 63, 3115-3121.	1.9	152
6	High Molar Extinction Coefficient Organic Sensitizers for Efficient Dyeâ€Sensitized Solar Cells. Chemistry - A European Journal, 2010, 16, 1193-1201.	3.3	140
7	Supersensitization of CdS Quantum Dots with a Near-Infrared Organic Dye: Toward the Design of Panchromatic Hybrid-Sensitized Solar Cells. ACS Nano, 2011, 5, 9238-9245.	14.6	138
8	Stepwise Cosensitization of Nanocrystalline TiO₂ Films Utilizing Al₂O₃ Layers in Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2008, 47, 8259-8263.	13.8	137
9	A polymer gel electrolyte to achieve â‰¥6% power conversion efficiency with a novel organic dye incorporating a low-band-gap chromophore. Journal of Materials Chemistry, 2008, 18, 5223.	6.7	136
10	Molecular Engineering of Organic Sensitizers Containing p-Phenylene Vinylene Unit for Dye-Sensitized Solar Cells. Journal of Organic Chemistry, 2008, 73, 7072-7079.	3.2	114
11	Oligophenylenevinylene-Functionalized Ru(II)-bipyridine Sensitizers for Efficient Dye-Sensitized Nanocrystalline TiO2 Solar Cells. Chemistry of Materials, 2006, 18, 5604-5608.	6.7	108
12	Enhanced photovoltaic performance and long-term stability of quasi-solid-state dye-sensitized solar cells via molecular engineering. Chemical Communications, 2008, , 4951.	4.1	105
13	Silole-spaced triarylamine derivatives as highly efficient organic sensitizers in dye-sensitized solar cells (DSSCs). Journal of Materials Chemistry, 2010, 20, 2391.	6.7	97
14	Novel conjugated organic dyes containing bis-dimethylfluorenyl amino phenyl thiophene for efficient solar cell. Tetrahedron, 2007, 63, 9206-9212.	1.9	93
15	Synchronized Energy and Electron Transfer Processes in Covalently Linked CdSeâ€“Squaraine Dyeâ€“TiO₂ Light Harvesting Assembly. ACS Nano, 2012, 6, 5718-5726.	14.6	89
16	An Efficient Dyeâ€Sensitized Solar Cell with an Organic Sensitizer Encapsulated in a Cyclodextrin Cavity. Angewandte Chemie - International Edition, 2009, 48, 5938-5941.	13.8	86
17	Synthesis of conjugated organic dyes containing alkyl substituted thiophene for solar cell. Tetrahedron, 2007, 63, 11436-11443.	1.9	85
18	Synthesis of new julolidine dyes having bithiophene derivatives for solar cell. Tetrahedron, 2007, 63, 1553-1559.	1.9	80

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19	Synthesis of annulated thiophene perylene bisimide analogues: their applications to bulk heterojunction organic solar cells. Chemical Communications, 2011, 47, 5509-5511.	4.1	79
20	Boosting the Photovoltage of Dye-Sensitized Solar Cells with Thiolated Gold Nanoclusters. Journal of Physical Chemistry Letters, 2015, 6, 217-223.	4.6	78
21	Photoregulated Fluorescence Switching in Axially Coordinated Tin(IV) Porphyrinic Dithienylethene. Inorganic Chemistry, 2008, 47, 2411-2415.	4.0	72
22	Molecular engineering of panchromatic unsymmetrical squaraines for dye-sensitized solar cell applications. Journal of Materials Chemistry, 2010, 20, 3280.	6.7	70
23	Size-Dependent Energy Transfer Pathways in CdSe Quantum Dotâ€“Squaraine Light-Harvesting Assemblies: FÃ¶rster versus Dexter. Journal of Physical Chemistry C, 2014, 118, 18453-18461.	3.1	70
24	Molecular Engineering of Efficient Organic Sensitizers Incorporating a Binary Ï€-Conjugated Linker Unit for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 14646-14653.	3.1	67
25	Photochromism and Electrical Transport Characteristics of a Dyad and a Polymer with Diarylethene and Quinoline Units. Journal of Organic Chemistry, 2005, 70, 8291-8297.	3.2	63
26	Molecular engineering of push-pull chromophore for efficient bulk-heterojunction morphology in solution processed small molecule organic photovoltaics. Journal of Materials Chemistry, 2011, 21, 7248.	6.7	60
27	A New Class of Cyclometalated Ruthenium Sensitizers of the Type Ä^Nì,N for Efficient Dye-Sensitized Solar Cells. Inorganic Chemistry, 2011, 50, 11340-11347.	4.0	59
28	Novel organic sensitizers containing a bulky spirobifluorene unit for solar cell. Tetrahedron, 2009, 65, 6236-6243.	1.9	57
29	Synthesis and photochromic reactivity of macromolecules incorporating four dithienylethene units. Tetrahedron, 2005, 61, 12256-12263.	1.9	56
30	Novel Amphiphilic Ruthenium Sensitizer with Hydrophobic Thiophene or Thieno(3,2-b)thiophene-Substituted 2,2â€²-Dipyridylamine Ligands for Effective Nanocrystalline Dye Sensitized Solar Cells. Chemistry of Materials, 2009, 21, 5719-5726.	6.7	51
31	Phenomenally High Molar Extinction Coefficient Sensitizer with â€œDonorâ^'Acceptorâ€•Ligands for Dye-Sensitized Solar Cell Applications. Inorganic Chemistry, 2008, 47, 2267-2273.	4.0	49
32	New Efficient Ruthenium Sensitizers with Unsymmetrical Indeno[1,2-b]thiophene or a Fused Dithiophene Ligand for Dye-Sensitized Solar Cells. Inorganic Chemistry, 2010, 49, 8351-8357.	4.0	47
33	Novel unsymmetrical pushâ€“pull squaraine chromophores for solution processed small molecule bulk heterojunction solar cells. Solar Energy Materials and Solar Cells, 2012, 98, 224-232.	6.2	46
34	Molecular engineering of hybrid sensitizers incorporating an organic antenna into ruthenium complex and their application in solar cells. New Journal of Chemistry, 2008, 32, 2233.	2.8	39
35	CdSeS Nanowires: Compositionally Controlled Band Gap and Exciton Dynamics. Journal of Physical Chemistry Letters, 2014, 5, 1103-1109.	4.6	38
36	CdS Nanowire Solar Cells: Dual Role of Squaraine Dye as a Sensitizer and a Hole Transporter. Journal of Physical Chemistry Letters, 2013, 4, 3983-3991.	4.6	37

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37	Selective photoswitching of a dyad with diarylethene and spiropyran units. Tetrahedron, 2005, 61, 3719-3723.	1.9	35
38	Sequentially Layered CdSe/CdS Nanowire Architecture for Improved Nanowire Solar Cell Performance. Journal of Physical Chemistry C, 2014, 118, 206-213.	3.1	33
39	CdSe nanowire solar cells using carbazole as a surface modifier. Journal of Materials Chemistry A, 2013, 1, 5487.	10.3	31
40	Synthesis and photochromic reactivity of diarylethene trimers bridged by ethenyl and ethynyl unit. Tetrahedron, 2006, 62, 9059-9065.	1.9	29
41	Efficiency improvement of dye-sensitized tandem solar cell by increasing the photovoltage of the back sub-cell. Electrochimica Acta, 2010, 55, 4642-4646.	5.2	26
42	New ruthenium sensitizers containing styryl and antenna fragments. Inorganica Chimica Acta, 2007, 360, 3518-3524.	2.4	18
43	A new class of organic sensitizers with fused planar triphenylamine for nanocrystalline dye sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 219, 122-131.	3.9	18
44	Molecular engineering of thia-bridged triphenylamine heterohelicenes as novel organic dyes for dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 225, 17-25.	3.9	12
45	Direct Evidence of FÃ¶rster Resonance Energy Transfer for the Enhanced Photocurrent Generation in Dye-Sensitized Solar Cell. Journal of Physical Chemistry C, 2014, 118, 16319-16327.	3.1	11
46	Stepwise cosensitization through chemically bonding organic dye to CdS quantum-dot-sensitized TiO2 electrode. Applied Physics Letters, 2010, 97, 263506.	3.3	10
47	Highly Efficient and Thermally Stable Organic Sensitizers for Solvent-Free Dye-Sensitized Solar Cells. Angewandte Chemie - International Edition, 2009, 48, 1712-1712.	13.8	5
48	Highly Efficient and Thermally Stable Organic Sensitizers for Solvent-Free Dye-Sensitized Solar Cells. Angewandte Chemie, 2009, 121, 1739-1739.	2.0	1
49	Photochromism and Electrical Transport Characteristics of a Dyad and a Polymer with Diarylethene and Quinoline Units.. ChemInform, 2006, 37, no.	0.0	0