Chenyi Yi

List of Publications by Year
in descending order

73 papers	17,076 citations	70961 41 h-index	85405 71 g-index
78 all docs	78 docs citations	78 times ranked	16549 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	Polymer-templated nucleation and crystal growth of perovskite films for solar cells with efficiency greater thanÂ21%. Nature Energy, 2016, 1, .	19.8	1,719
3	A vacuum flashâ€"assisted solution process for high-efficiency large-area perovskite solar cells. Science, 2016, 353, 58-62.	6.0	1,636
4	Entropic stabilization of mixed A-cation ABX₃ metal halide perovskites for high performance perovskite solar cells. Energy and Environmental Science, 2016, 9, 656-662.	15.6	1,077
5	Improved performance and stability of perovskite solar cells by crystal crosslinking with alkylphosphonic acid Ï‰-ammonium chlorides. Nature Chemistry, 2015, 7, 703-711.	6.6	1,033
6	Tris(2-(1<i>H</i>-pyrazol-1-yl)pyridine)cobalt(III) as p-Type Dopant for Organic Semiconductors and Its Application in Highly Efficient Solid-State Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2011, 133, 18042-18045.	6.6	698
7	A cobalt complex redox shuttle for dye-sensitized solar cells with high open-circuit potentials. Nature Communications, 2012, 3, 631.	5.8	554
8	Influence of the Donor Size in Dâˆ'Ï€â€"A Organic Dyes for Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2014, 136, 5722-5730.	6.6	417
9	Cyclopentadithiophene Bridged Donorâ€"Acceptor Dyes Achieve High Power Conversion Efficiencies in Dyeâ€Sensitized Solar Cells Based on the <i>tris</i>â€Cobalt Bipyridine Redox Couple. ChemSusChem, 2011, 4, 591-594.	3.6	327
10	Isomerâ€Pure Bisâ€PCBMâ€Assisted Crystal Engineering of Perovskite Solar Cells Showing Excellent Efficiency and Stability. Advanced Materials, 2017, 29, 1606806.	11.1	320
11	Over 20% PCE perovskite solar cells with superior stability achieved by novel and low-cost hole-transporting materials. Nano Energy, 2017, 41, 469-475.	8.2	232
12	Influence of the interfacial charge-transfer resistance at the counter electrode in dye-sensitized solar cells employing cobalt redox shuttles. Energy and Environmental Science, 2011, 4, 4921.	15.6	196
13	Subnanometer Ga₂O₃ Tunnelling Layer by Atomic Layer Deposition to Achieve 1.1 V Open-Circuit Potential in Dye-Sensitized Solar Cells. Nano Letters, 2012, 12, 3941-3947.	4.5	188
14	Efficient Copper-Free PdCl2(PCy3)2-Catalyzed Sonogashira Coupling of Aryl Chlorides with Terminal Alkynes. Journal of Organic Chemistry, 2006, 71, 2535-2537.	1.7	163
15	A Novel Dopantâ€Free Triphenylamine Based Molecular â€œButterflyâ€• Holeâ€Transport Material for Highly Efficient and Stable Perovskite Solar Cells. Advanced Energy Materials, 2016, 6, 1600401.	10.2	161
16	Progress of the key materials for organic solar cells. Science China Chemistry, 2020, 63, 758-765.	4.2	158
17	Comprehensive control of voltage loss enables 11.7% efficient solid-state dye-sensitized solar cells. Energy and Environmental Science, 2018, 11, 1779-1787.	15.6	148
18	Perovskite Photovoltaics with Outstanding Performance Produced by Chemical Conversion of Bilayer Mesostructured Lead Halide/TiO₂ Films. Advanced Materials, 2016, 28, 2964-2970.	11.1	144

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19	Ligandâ€Modulated Excess PbI₂ Nanosheets for Highly Efficient and Stable Perovskite Solar Cells. Advanced Materials, 2020, 32, e2000865.	11.1	136
20	Identifying Fundamental Limitations in Halide Perovskite Solar Cells. Advanced Materials, 2016, 28, 2439-2445.	11.1	129
21	Molecular Engineering of Potent Sensitizers for Very Efficient Light Harvesting in Thin-Film Solid-State Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2016, 138, 10742-10745.	6.6	119
22	Sequential vacuum-evaporated perovskite solar cells with more than 24% efficiency. Science Advances, 2022, 8, .	4.7	118
23	Regulating a Benzodifuran Single Molecule Redox Switch via Electrochemical Gating and Optimization of Molecule/Electrode Coupling. Journal of the American Chemical Society, 2014, 136, 8867-8870.	6.6	100
24	A new generation of platinum and iodine free efficient dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2012, 14, 10631.	1.3	89
25	A novel one-step synthesized and dopant-free hole transport material for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 16330-16334.	5.2	87
26	Dopantâ€Free Donor (D)â€"Ï€â€"Dâ€"Ï€â€"D Conjugated Holeâ€Transport Materials for Efficient and Stable Perovskite Solar Cells. ChemSusChem, 2016, 9, 2578-2585.	3.6	83
27	Dopant-free star-shaped hole-transport materials for efficient and stable perovskite solar cells. Dyes and Pigments, 2017, 136, 273-277.	2.0	83
28	Avoiding Diffusion Limitations in Cobalt(III/II)â€<i>Tris</i>(2,2â€²â€Bipyridine)â€Based Dyeâ€Sensitized Solar Cells by Tuning the Mesoporous TiO₂ Film Properties. ChemPhysChem, 2012, 13, 2976-2981.	1.0	75
29	Atomically Altered Hematite for Highly Efficient Perovskite Tandem Waterâ€Splitting Devices. ChemSusChem, 2017, 10, 2449-2456.	3.6	71
30	Influence of Donor Groups of Organic Dâ^'Ï€â€"A Dyes on Open-Circuit Voltage in Solid-State Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 1572-1578.	1.5	69
31	A quinoxaline-fused tetrathiafulvalene-based sensitizer for efficient dye-sensitized solar cells. Chemical Communications, 2014, 50, 6540-6542.	2.2	65
32	Over 16% efficiency from thick-film organic solar cells. Science Bulletin, 2020, 65, 1979-1982.	4.3	62
33	Extended Ï€â€Bridge in Organic Dyeâ€Sensitized Solar Cells: the Longer, the Better?. Advanced Energy Materials, 2014, 4, 1301485.	10.2	61
34	Over 24% efficient MA-free CsxFA1â^'xPbX3 perovskite solar cells. Joule, 2022, 6, 1344-1356.	11.7	58
35	Evaluating the Critical Thickness of TiO₂ Layer on Insulating Mesoporous Templates for Efficient Current Collection in Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2013, 23, 2775-2781.	7.8	56
36	2-CF3-PEAI to eliminate Pb0 traps and form a 2D perovskite layer to enhance the performance and stability of perovskite solar cells. Nano Energy, 2022, 95, 107036.	8.2	54

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37	Versatile Strategy To Access Fully Functionalized Benzodifurans: Redox-Active Chromophores for the Construction of Extended Ï€-Conjugated Materials. Journal of Organic Chemistry, 2010, 75, 3350-3357.	1.7	51
38	Benzodifuran-Based Ï€-Conjugated Copolymers for Bulk Heterojunction Solar Cells. Macromolecules, 2010, 43, 8058-8062.	2.2	51
39	Interface engineering gifts CsPbI2.25Br0.75 solar cells high performance. Science Bulletin, 2019, 64, 1743-1746.	4.3	51
40	An efficient palladium-catalyzed Heck coupling of aryl chlorides with alkenes. Tetrahedron Letters, 2006, 47, 2573-2576.	0.7	43
41	Palladiumâ€Catalyzed Efficient and Oneâ€Pot Synthesis of Diarylacetylenes from the Reaction of Aryl Chlorides with 2â€Methylâ€3â€butynâ€2â€ol. Advanced Synthesis and Catalysis, 2007, 349, 1738-1742.	2.1	42
42	Quantum-Confined ZnO Nanoshell Photoanodes for Mesoscopic Solar Cells. Nano Letters, 2014, 14, 1190-1195.	4.5	42
43	A copper-free efficient palladium (II)-catalyzed coupling of aryl bromides with terminal alkynes. Catalysis Communications, 2006, 7, 377-379.	1.6	40
44	Influence of Structural Variations in Pushâ€"Pull Zinc Porphyrins on Photovoltaic Performance of Dyeâ€Sensitized Solar Cells. ChemSusChem, 2014, 7, 1107-1113.	3.6	39
45	An Efficient and Facile Synthesis of Highly Substituted 2,6-Dicyanoanilines. Journal of Organic Chemistry, 2008, 73, 3596-3599.	1.7	31
46	Synthesis, structures, redox and photophysical properties of benzodifuran-functionalised pyrene and anthracene fluorophores. Organic and Biomolecular Chemistry, 2011, 9, 6410.	1.5	26
47	Thiadiazolo[3,4-c]pyridine Acceptor Based Blue Sensitizers for High Efficiency Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 17090-17099.	1.5	24
48	Electronic tuning effects via Ï€-linkers in tetrathiafulvalene-based dyes. New Journal of Chemistry, 2014, 38, 3269.	1.4	23
49	Bananaâ€shaped electron acceptors with an electronâ€rich core fragment and 3D packing capability. , 2023, 5, .		22
50	Alkoxythiophene and alkylthiothiophene Ï€-bridges enhance the performance of Aâ€"Dâ€"A electron acceptors. Materials Chemistry Frontiers, 2019, 3, 492-495.	3.2	21
51	Water Stable Haloplumbate Modulation for Efficient and Stable Hybrid Perovskite Photovoltaics. Advanced Energy Materials, 2021, 11, 2101082.	10.2	21
52	Efficient and selective nickel(II)-catalyzed tail-to-head dimerization of styrenes affording 1,3-diaryl-1-butenes. Catalysis Communications, 2008, 9, 85-88.	1.6	18
53	Enhancing the Stability of Porphyrin Dyeâ€Sensitized Solar Cells by Manipulation of Electrolyte Additives. ChemSusChem, 2015, 8, 255-259.	3.6	18
54	3D cubic framework of fluoride perovskite SEI inducing uniform lithium deposition for air-stable and dendrite-free lithium metal anodes. Chemical Engineering Journal, 2022, 431, 134266.	6.6	17

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55	Engineering of the alkyl chain branching point on a lactone polymer donor yields 17.81% efficiency. Journal of Materials Chemistry A, 2022, 10, 3314-3320.	5.2	17
56	Brominated PEAI as Multiâ€Functional Passivator for Highâ€Efficiency Perovskite Solar Cell. Energy and Environmental Materials, 2023, 6, .	7.3	16
57	Benzo[1,2-b:4,5-bâ€²]difuran-based sensitizers for dye-sensitized solar cells. RSC Advances, 2013, 3, 19798.	1.7	14
58	Anthanthrene dye-sensitized solar cells: influence of the number of anchoring groups and substitution motif. RSC Advances, 2015, 5, 98643-98652.	1.7	14
59	A chlorinated lactone polymer donor featuring high performance and low cost. Journal of Semiconductors, 2022, 43, 050501.	2.0	14
60	A hybrid electron donor comprising cyclopentadithiophene and dithiafulvenyl for dye-sensitized solar cells. Beilstein Journal of Organic Chemistry, 2015, 11, 1052-1059.	1.3	12
61	An efficient one-pot synthesis of strongly fluorescent (hetero)arenes polysubstituted with amino and cyano groups. Tetrahedron, 2008, 64, 9437-9441.	1.0	11
62	A Layered Red-Emitting Chromophoric Organic Salt. Crystal Growth and Design, 2008, 8, 3004-3009.	1.4	11
63	Preparation of Zwitterionic Hydroquinone-Fused [1,4]Oxazinium Derivatives via a Photoinduced Intramolecular Dehydrogenative-Coupling Reaction. Organic Letters, 2009, 11, 5530-5533.	2.4	11
64	Probing Charge Transfer in Benzodifuranâ€“C₆₀ Dumbbellâ€Type Electron Donorâ€“Acceptor Conjugates: Groundâ€•and Excitedâ€State Assays. ChemPhysChem, 2013, 14, 2910-2919.	1.0	9
65	Isolable Zwitterionic Pyridinio-semiquinone Ï€-Radicals. Mild and Efficient Single-Step Access to Stable Radicals. Organic Letters, 2009, 11, 2261-2264.	2.4	8
66	Hydrophobic Organic Ammonium Halide Modification toward Highly Efficient and Stable CsPbI_{2.25}Br_{0.75} Solar Cell. Solar Rrl, 2021, 5, 2100178.	3.1	8
67	Progress of the key materials for organic solar cells. Scientia Sinica Chimica, 2020, 50, 437-446.	0.2	8
68	Effects of N-Positions on Pyridine Carboxylic Acid-Modified Inverted Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 6903-6911.	2.5	7
69	Photovoltaic Performance of Porphyrinâ€Based Dyeâ€Sensitized Solar Cells with Binary Ionic Liquid Electrolytes. Energy Technology, 2020, 8, 2000092.	1.8	5
70	A Spectroscopic and Computational Study of a Photoinduced Crossâ€Dehydrogenative Coupling Reaction of a Stable Semiquinone Radical. Chemistry - A European Journal, 2012, 18, 13605-13608.	1.7	3
71	ADAâ€²DA small molecule acceptors with non-fully-fused core units. Materials Chemistry Frontiers, 2022, 6, 802-806.	3.2	3
72	Raman scattering obtained from laser excitation of MAPbI3 single crystal. Applied Materials Today, 2020, 19, 100571.	2.3	2

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73	High efficiency porphyrin sensitized mesoscopic solar cells. , 2014, , .		0