Yong Cui

List of Publications by Year
in descending order

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73 papers	13,254 citations	66315 42 h-index	82499 72 g-index
74 all docs	74 docs citations	74 times ranked	6003 citing authors

#	Article	IF	Citations
1	Over 16% efficiency organic photovoltaic cells enabled by a chlorinated acceptor with increased open-circuit voltages. Nature Communications, 2019, 10, 2515.	5.8	1,431
2	Singleâ€Junction Organic Photovoltaic Cells with Approaching 18% Efficiency. Advanced Materials, 2020, 32, e1908205.	11.1	1,407
3	Singleâ€Junction Organic Photovoltaic Cell with 19% Efficiency. Advanced Materials, 2021, 33, e2102420.	11.1	1,072
4	Design, Synthesis, and Photovoltaic Characterization of a Small Molecular Acceptor with an Ultraâ€Narrow Band Gap. Angewandte Chemie - International Edition, 2017, 56, 3045-3049.	7.2	711
5	Over 17% efficiency ternary organic solar cells enabled by two non-fullerene acceptors working in an alloy-like model. Energy and Environmental Science, 2020, 13, 635-645.	15.6	636
6	Ecoâ€Compatible Solventâ€Processed Organic Photovoltaic Cells with Over 16% Efficiency. Advanced Materials, 2019, 31, e1903441.	11.1	445
7	Organic photovoltaic cell with 17% efficiency and superior processability. National Science Review, 2020, 7, 1239-1246.	4.6	443
8	Fine-Tuned Photoactive and Interconnection Layers for Achieving over 13% Efficiency in a Fullerene-Free Tandem Organic Solar Cell. Journal of the American Chemical Society, 2017, 139, 7302-7309.	6.6	427
9	Design and Synthesis of a Low Bandgap Small Molecule Acceptor for Efficient Polymer Solar Cells. Advanced Materials, 2016, 28, 8283-8287.	11.1	421
10	Reduced non-radiative charge recombination enables organic photovoltaic cell approaching 19% efficiency. Joule, 2021, 5, 2408-2419.	11.7	419
11	Wide-gap non-fullerene acceptor enabling high-performance organic photovoltaic cells for indoor applications. Nature Energy, 2019, 4, 768-775.	19.8	407
12	Achieving Over 15% Efficiency in Organic Photovoltaic Cells via Copolymer Design. Advanced Materials, 2019, 31, e1808356.	11.1	388
13	14.7% Efficiency Organic Photovoltaic Cells Enabled by Active Materials with a Large Electrostatic Potential Difference. Journal of the American Chemical Society, 2019, 141, 7743-7750.	6.6	379
14	Improved Charge Transport and Reduced Nonradiative Energy Loss Enable Over 16% Efficiency in Ternary Polymer Solar Cells. Advanced Materials, 2019, 31, e1902302.	11.1	364
15	Achieving Highly Efficient Nonfullerene Organic Solar Cells with Improved Intermolecular Interaction and Openâ€Circuit Voltage. Advanced Materials, 2017, 29, 1700254.	11.1	363
16	Efficient Semitransparent Organic Solar Cells with Tunable Color enabled by an Ultralowâ€Bandgap Nonfullerene Acceptor. Advanced Materials, 2017, 29, 1703080.	11.1	325
17	Optical Gaps of Organic Solar Cells as a Reference for Comparing Voltage Losses. Advanced Energy Materials, 2018, 8, 1801352.	10.2	319
18	Design and application of volatilizable solid additives in non-fullerene organic solar cells. Nature Communications, 2018, 9, 4645.	5.8	205

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19	Critical Role of Molecular Electrostatic Potential on Charge Generation in Organic Solar Cells. Chinese Journal of Chemistry, 2018, 36, 491-494.	2.6	163
20	Modulating Molecular Orientation Enables Efficient Nonfullerene Small-Molecule Organic Solar Cells. Chemistry of Materials, 2018, 30, 2129-2134.	3.2	157
21	1 cm² Organic Photovoltaic Cells for Indoor Application with over 20% Efficiency. Advanced Materials, 2019, 31, e1904512.	11.1	140
22	15.3% efficiency all-small-molecule organic solar cells enabled by symmetric phenyl substitution. Science China Materials, 2020, 63, 1142-1150.	3.5	140
23	18.5% Efficiency Organic Solar Cells with a Hybrid Planar/Bulk Heterojunction. Advanced Materials, 2021, 33, e2103091.	11.1	136
24	A New Conjugated Polymer that Enables the Integration of Photovoltaic and Lightâ€Emitting Functions in One Device. Advanced Materials, 2021, 33, e2101090.	11.1	129
25	Organic Photovoltaic Cells for Indoor Applications: Opportunities and Challenges. ACS Applied Materials & Interfaces, 2020, 12, 38815-38828.	4.0	126
26	A Thiadiazoleâ€Based Conjugated Polymer with Ultradeep HOMO Level and Strong Electroluminescence Enables 18.6% Efficiency in Organic Solar Cell. Advanced Energy Materials, 2021, 11, 2101705.	10.2	125
27	Toward Efficient Polymer Solar Cells Processed by a Solutionâ€Processed Layerâ€Byâ€Layer Approach. Advanced Materials, 2018, 30, e1802499.	11.1	116
28	17% efficiency all-small-molecule organic solar cells enabled by nanoscale phase separation with a hierarchical branched structure. Energy and Environmental Science, 2021, 14, 5903-5910.	15.6	116
29	Highly Efficient Photovoltaic Polymers Based on Benzodithiophene and Quinoxaline with Deeper HOMO Levels. Macromolecules, 2015, 48, 5172-5178.	2.2	104
30	Thermoplastic Elastomer Tunes Phase Structure and Promotes Stretchability of Highâ€Efficiency Organic Solar Cells. Advanced Materials, 2021, 33, e2106732.	11.1	101
31	Achieving 12.8% Efficiency by Simultaneously Improving Openâ€Circuit Voltage and Shortâ€Circuit Current Density in Tandem Organic Solar Cells. Advanced Materials, 2017, 29, 1606340.	11.1	100
32	Design of Nearâ€Infrared Nonfullerene Acceptor with Ultralow Nonradiative Voltage Loss for Highâ€Performance Semitransparent Ternary Organic Solar Cells. Angewandte Chemie - International Edition, 2022, 61, .	7.2	85
33	PBDT-TSR: a highly efficient conjugated polymer for polymer solar cells with a regioregular structure. Journal of Materials Chemistry A, 2016, 4, 1708-1713.	5.2	75
34	A Highâ€Performance Nonfused Wideâ€Bandgap Acceptor for Versatile Photovoltaic Applications. Advanced Materials, 2022, 34, e2108090.	11.1	71
35	A Novel pH Neutral Self-Doped Polymer for Anode Interfacial Layer in Efficient Polymer Solar Cells. Macromolecules, 2016, 49, 8126-8133.	2.2	69
36	Enhancing the Performance of the Half Tin and Half Lead Perovskite Solar Cells by Suppression of the Bulk and Interfacial Charge Recombination. Advanced Materials, 2018, 30, e1803703.	11.1	65

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37	Design, Synthesis, and Photovoltaic Characterization of a Small Molecular Acceptor with an Ultraâ€Narrow Band Gap. Angewandte Chemie, 2017, 129, 3091-3095.	1.6	61
38	Impact of Electrostatic Interaction on Bulk Morphology in Efficient Donorâ€“Acceptor Photovoltaic Blends. Angewandte Chemie - International Edition, 2021, 60, 15988-15994.	7.2	60
39	Quadrupole Moment Induced Morphology Control Via a Highly Volatile Small Molecule in Efficient Organic Solar Cells. Advanced Functional Materials, 2021, 31, 2010535.	7.8	55
40	A Universal Nonhalogenated Polymer Donor for Highâ€Performance Organic Photovoltaic Cells. Advanced Materials, 2022, 34, e2105803.	11.1	53
41	Accurate photovoltaic measurement of organic cells for indoor applications. Joule, 2021, 5, 1016-1023.	11.7	52
42	Multiâ€Functional Solid Additive Induced Favorable Vertical Phase Separation and Ordered Molecular Packing for Highly Efficient Layerâ€byâ€Layer Organic Solar Cells. Small, 2021, 17, e2103497.	5.2	49
43	Recent advances in high-efficiency organic solar cells fabricated by eco-compatible solvents at relatively large-area scale. APL Materials, 2020, 8, .	2.2	45
44	The Critical Role of Anode Work Function in Non-Fullerene Organic Solar Cells Unveiled by Counterion-Size-Controlled Self-Doping Conjugated Polymers. Chemistry of Materials, 2018, 30, 1078-1084.	3.2	44
45	Toward efficient non-fullerene polymer solar cells: Selection of donor polymers. Organic Electronics, 2015, 17, 295-303.	1.4	41
46	Molecular design toward efficient polymer solar cells processed by green solvents. Polymer Chemistry, 2015, 6, 4089-4095.	1.9	41
47	Highly efficient and stable 2Dâ€“3D perovskite solar cells fabricated by interfacial modification. Nanotechnology, 2019, 30, 275202.	1.3	40
48	Over 100â€nmâ€Thick MoO_x Films with Superior Hole Collection and Transport Properties for Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1800698.	10.2	38
49	Optimization of side chains in alkylthiothiophene-substituted benzo[1,2-b:4,5-bâ€²]dithiophene-based photovoltaic polymers. Polymer Chemistry, 2015, 6, 2752-2760.	1.9	37
50	High-performance fullerene-free polymer solar cells with solution-processed conjugated polymers as anode interfacial layer. Chinese Journal of Polymer Science (English Edition), 2017, 35, 219-229.	2.0	35
51	Investigations of the Conjugated Polymers Based on Dithienogermole (DTG) Units for Photovoltaic Applications. Macromolecules, 2014, 47, 5558-5565.	2.2	34
52	Simultaneous Improvement of Efficiency and Stability of Organic Photovoltaic Cells by using a Crossâ€Linkable Fullerene Derivative. Small, 2021, 17, e2101133.	5.2	34
53	Low-cost and high-performance poly(thienylene vinylene) derivative donor for efficient versatile organic photovoltaic cells. Nano Energy, 2022, 100, 107463.	8.2	33
54	Investigation of Conjugated Polymers Based on Naphtho[2,3-c]thiophene-4,9-dione in Fullerene-Based and Fullerene-Free Polymer Solar Cells. Macromolecules, 2017, 50, 1453-1462.	2.2	32

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55	Organic photovoltaic cells with high efficiencies for both indoor and outdoor applications. Materials Chemistry Frontiers, 2021, 5, 893-900.	3.2	32
56	The crucial role of intermolecular Ï€â€“Ï€ interactions in Aâ€“Dâ€“A-type electron acceptors and their effective modulation. Journal of Materials Chemistry A, 2018, 6, 2664-2670.	5.2	26
57	Organic photovoltaic cells for low light applications offering new scope and orientation. Organic Electronics, 2020, 85, 105798.	1.4	26
58	Bimodal polyethylene promoted by novel nickel complex. Polymer International, 2004, 53, 2155-2161.	1.6	24
59	Optimizing polymer aggregation and blend morphology for boosting the photovoltaic performance of polymer solar cells via a random terpolymerization strategy. Journal of Energy Chemistry, 2021, 59, 30-37.	7.1	20
60	Influence of Large Steric Hinderance Substituent Position on Conformation and Charge Transfer Process for Nonâ€Fused Ring Acceptors. Small Methods, 2022, 6, e2200007.	4.6	20
61	Efficient Exciton Dissociation Enabled by the End Group Modification in Non-Fullerene Acceptors. Journal of Physical Chemistry C, 2020, 124, 7691-7698.	1.5	18
62	100 cm2 Organic Photovoltaic Cells with 23% Efficiency under Indoor Illumination. Chinese Journal of Polymer Science (English Edition), 2022, 40, 979-988.	2.0	18
63	Controlled Synthesis of 2â€Acetylâ€6â€carbethoxypyridine and 2,6â€Diacetylpyridine from 2,6â€Dimethylpyridine. Synthetic Communications, 2005, 35, 2317-2324.	1.1	17
64	Design of Nearâ€Infrared Nonfullerene Acceptor with Ultralow Nonradiative Voltage Loss for Highâ€Performance Semitransparent Ternary Organic Solar Cells. Angewandte Chemie, 2022, 134, .	1.6	15
65	Elucidating End-Group Modifications of Carbazole-Based Nonfullerene Acceptors in Indoor Applications for Achieving a PCE of over 20%. ACS Applied Materials & Interfaces, 2021, 13, 26247-26255.	4.0	14
66	SYNTHESES, CRYSTAL STRUCTURES AND ELECTRONIC SPECTRA OF MIXED-LIGAND ZINC(II) COMPLEXES WITH DIIMINES AND DITHIOLATES. Journal of Coordination Chemistry, 2000, 49, 201-209.	0.8	11
67	Effectively Improving Extinction Coefficient of Benzodithiophene and Benzodithiophenedioneâ€based Photovoltaic Polymer by Grafting Alkylthio Functional Groups. Chemistry - an Asian Journal, 2016, 11, 2650-2655.	1.7	11
68	Impact of Electrostatic Interaction on Bulk Morphology in Efficient Donorâ€“Acceptor Photovoltaic Blends. Angewandte Chemie, 2021, 133, 16124-16130.	1.6	11
69	Suppressing Energetic Disorder Enables Efficient Indoor Organic Photovoltaic Cells With a PTV Derivative. Frontiers in Chemistry, 2021, 9, 684241.	1.8	9
70	The Importance of End Groups for Solutionâ€Processed Smallâ€Molecule Bulkâ€Heterojunction Photovoltaic Cells. ChemSusChem, 2016, 9, 973-980.	3.6	8
71	High efficiency and more functions bring a bright future for organic photovoltaic cells. Science Bulletin, 2022, 67, 1300-1303.	4.3	8
72	Preparation, Structure and Properties of the One-Dimensional Polymeric Complex Na2[AlW3O4(O2CEt)8]2. Journal of Coordination Chemistry, 2000, 51, 83-92.	0.8	0

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73	Solar Cells: Enhancing the Performance of the Half Tin and Half Lead Perovskite Solar Cells by Suppression of the Bulk and Interfacial Charge Recombination (Adv. Mater. 35/2018). Advanced Materials, 2018, 30, 1870263.	11.1	0