Runnan Yu

List of Publications by Year
in descending order

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48 papers	5,765 citations	201385 27 h-index	214527 47 g-index
48 all docs	48 docs citations	48 times ranked	3833 citing authors

#	Article	IF	Citations
1	Layerâ€byâ€layered organic solar cells: Morphology optimizing strategies and processing techniques. Aggregate, 2022, 3, e107.	5.2	26
2	Recent advances of organometallic complexes in emerging photovoltaics. Journal of Polymer Science, 2022, 60, 865-916.	2.0	23
3	Revival of Insulating Polyethylenimine by Creatively Carbonizing with Perylene into Highly Crystallized Carbon Dots as the Cathode Interlayer for High-Performance Organic Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 1280-1289.	4.0	19
4	Coordinationâ€Induced Defects Elimination of SnO₂ Nanoparticles via a Small Electrolyte Molecule for Highâ€Performance Inverted Organic Solar Cells. Advanced Optical Materials, 2022, 10, .	3.6	12
5	Efficient interface modification via multi-site coordination for improved efficiency and stability in organic solar cells. Energy and Environmental Science, 2022, 15, 822-829.	15.6	49
6	Recent Progress in Semitransparent Organic and Perovskite Solar Cells. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	0.8	6
7	Improving charge transport and reducing non-radiative energy loss via a nonacyclic carbazole-based third component for over 18% efficiency polymer solar cells. Journal of Materials Chemistry A, 2022, 10, 7090-7098.	5.2	14
8	Biuret Induced Tinâ€Anchoring and Crystallizationâ€Regulating for Efficient Leadâ€Free Tin Halide Perovskite Lightâ€Emitting Diodes. Small, 2022, 18, e2200036.	5.2	24
9	Morphological Stabilization in Organic Solar Cells via a Fluorene-Based Crosslinker for Enhanced Efficiency and Thermal Stability. ACS Applied Materials & Interfaces, 2022, 14, 1187-1194.	4.0	14
10	Crosslinkable and Chelatable Organic Ligand Enables Interfaces and Grains Collaborative Passivation for Efficient and Stable Perovskite Solar Cells. Small, 2022, 18, e2201820.	5.2	15
11	Selfâ€Assembly Metal Chelate as Ultraviolet Filterable Interface Layer for Efficient Organic Solar Cells. Advanced Energy Materials, 2022, 12, .	10.2	7
12	Ternary blend strategy in benzotriazole-based organic photovoltaics for indoor application. Green Energy and Environment, 2021, 6, 920-928.	4.7	23
13	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
14	Simultaneous Improvement of Efficiency and Stability of Organic Photovoltaic Cells by using a Crossâ€Linkable Fullerene Derivative. Small, 2021, 17, e2101133.	5.2	34
15	Achieving over 10â€‰% Efficiency in Poly(3â€hexylthiophene)â€Based Organic Solar Cells via Solid Additives. ChemSusChem, 2021, 14, 3607-3613.	3.6	43
16	Efficient Organic Tandem Solar Cells Enabled by Solutionâ€Processed Interconnection Layer and Fineâ€Tuned Active Layer. Advanced Optical Materials, 2021, 9, 2101246.	3.6	3
17	18.5% Efficiency Organic Solar Cells with a Hybrid Planar/Bulk Heterojunction. Advanced Materials, 2021, 33, e2103091.	11.1	136
18	Realization of high performance for PM6:Y6 based organic photovoltaic cells. Journal of Energy Chemistry, 2021, 61, 29-46.	7.1	54

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19	Size-Controllable Metal Chelates as Both Light Scattering Centers and Electron Collection Layer for High-Performance Polymer Solar Cells. CCS Chemistry, 2021, 3, 37-49.	4.6	12
20	Highly efficient carbon dot-based room-temperature fluorescenceâ€“phosphorescence dual emitter. Journal of Materials Chemistry C, 2021, 9, 15577-15582.	2.7	15
21	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
22	Î²-Diketone Coordination Strategy for Highly Efficient and Stable Pbâ€“Sn Mixed Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2021, 12, 11772-11778.	2.1	14
23	Diverse applications of MoO₃for high performance organic photovoltaics: fundamentals, processes and optimization strategies. Journal of Materials Chemistry A, 2020, 8, 978-1009.	5.2	70
24	TCNQ as a volatilizable morphology modulator enables enhanced performance in non-fullerene organic solar cells. Journal of Materials Chemistry C, 2020, 8, 44-49.	2.7	16
25	Crosslinkable metal chelate as the electron transport layer for efficient and stable inverted polymer solar cells. Materials Chemistry Frontiers, 2020, 4, 2995-3002.	3.2	6
26	Printable SnO2 cathode interlayer with up to 500 nm thickness-tolerance for high-performance and large-area organic solar cells. Science China Chemistry, 2020, 63, 957-965.	4.2	38
27	Ecoâ€Compatible Solventâ€Processed Organic Photovoltaic Cells with Over 16% Efficiency. Advanced Materials, 2019, 31, e1903441.	11.1	445
28	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
29	Investigating the Trade-Off between Device Performance and Energy Loss in Nonfullerene Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 29124-29131.	4.0	24
30	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
31	Enhanced Ï€â€“Ï€ Interactions of Nonfullerene Acceptors by Volatilizable Solid Additives in Efficient Polymer Solar Cells. Advanced Materials, 2019, 31, e1900477.	11.1	99
32	Critical Role of Molecular Electrostatic Potential on Charge Generation in Organic Solar Cells. Chinese Journal of Chemistry, 2018, 36, 491-494.	2.6	163
33	Recent Progress in Ternary Organic Solar Cells Based on Nonfullerene Acceptors. Advanced Energy Materials, 2018, 8, 1702814.	10.2	170
34	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
35	Ternary Nonfullerene Polymer Solar Cells with 12.16% Efficiency by Introducing One Acceptor with Cascading Energy Level and Complementary Absorption. Advanced Materials, 2018, 30, 1703005.	11.1	182
36	Multi-component non-fullerene acceptors with tunable bandgap structures for efficient organic solar cells. Journal of Materials Chemistry A, 2018, 6, 23644-23649.	5.2	47

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37	Design and application of volatilizable solid additives in non-fullerene organic solar cells. Nature Communications, 2018, 9, 4645.	5.8	205
38	Enhancing the Photovoltaic Performance of Nonfullerene Acceptors via Conjugated Rotatable End Groups. Advanced Energy Materials, 2018, 8, 1802131.	10.2	24
39	Over 14% Efficiency in Organic Solar Cells Enabled by Chlorinated Nonfullerene Smallâ€Molecule Acceptors. Advanced Materials, 2018, 30, e1800613.	11.1	623
40	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
41	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
42	Two Wellâ€Miscible Acceptors Work as One for Efficient Fullereneâ€Free Organic Solar Cells. Advanced Materials, 2017, 29, 1700437.	11.1	157
43	Achieving Highly Efficient Nonfullerene Organic Solar Cells with Improved Intermolecular Interaction and Openâ€Circuit Voltage. Advanced Materials, 2017, 29, 1700254.	11.1	363
44	A Wide Bandgap Polymer with Strong Ï€â€“Ï€ Interaction for Efficient Fullereneâ€Free Polymer Solar Cells. Advanced Energy Materials, 2016, 6, 1600742.	10.2	76
45	Highly Efficient Fullereneâ€Free Polymer Solar Cells Fabricated with Polythiophene Derivative. Advanced Materials, 2016, 28, 9416-9422.	11.1	303
46	Design and Synthesis of a Low Bandgap Small Molecule Acceptor for Efficient Polymer Solar Cells. Advanced Materials, 2016, 28, 8283-8287.	11.1	421
47	Over 11% Efficiency in Tandem Polymer Solar Cells Featured by a Lowâ€Bandâ€Gap Polymer with Fineâ€Tuned Properties. Advanced Materials, 2016, 28, 5133-5138.	11.1	144
48	Waterâ€Induced Formation of Î±â€MoO 3 Microcrystals as Anode Buffer Layer for Highly Efficient Polymer Solar Cells. Energy Technology, 0, , 2100718.	1.8	1