

Runnan Yu

List of Publications by Year in descending order

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48
papers

5,765
citations

201385

27
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214527

47
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48
docs citations

48
times ranked

3833
citing authors

#	ARTICLE	IF	CITATIONS
1	Design, Synthesis, and Photovoltaic Characterization of a Small Molecular Acceptor with an Ultra-Narrow Band Gap. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 3045-3049.	7.2	711
2	Over 14% Efficiency in Organic Solar Cells Enabled by Chlorinated Nonfullerene Small-Molecule Acceptors. <i>Advanced Materials</i> , 2018, 30, e1800613.	11.1	623
3	Eco-Compatible Solvent-Processed Organic Photovoltaic Cells with Over 16% Efficiency. <i>Advanced Materials</i> , 2019, 31, e1903441.	11.1	445
4	Design and Synthesis of a Low Bandgap Small Molecule Acceptor for Efficient Polymer Solar Cells. <i>Advanced Materials</i> , 2016, 28, 8283-8287.	11.1	421
5	14.7% Efficiency Organic Photovoltaic Cells Enabled by Active Materials with a Large Electrostatic Potential Difference. <i>Journal of the American Chemical Society</i> , 2019, 141, 7743-7750.	6.6	379
6	Improved Charge Transport and Reduced Nonradiative Energy Loss Enable Over 16% Efficiency in Ternary Polymer Solar Cells. <i>Advanced Materials</i> , 2019, 31, e1902302.	11.1	364
7	Achieving Highly Efficient Nonfullerene Organic Solar Cells with Improved Intermolecular Interaction and Open-Circuit Voltage. <i>Advanced Materials</i> , 2017, 29, 1700254.	11.1	363
8	Highly Efficient Fullerene-Free Polymer Solar Cells Fabricated with Polythiophene Derivative. <i>Advanced Materials</i> , 2016, 28, 9416-9422.	11.1	303
9	Design and application of volatilizable solid additives in non-fullerene organic solar cells. <i>Nature Communications</i> , 2018, 9, 4645.	5.8	205
10	Ternary Nonfullerene Polymer Solar Cells with 12.16% Efficiency by Introducing One Acceptor with Cascading Energy Level and Complementary Absorption. <i>Advanced Materials</i> , 2018, 30, 1703005.	11.1	182
11	Recent Progress in Ternary Organic Solar Cells Based on Nonfullerene Acceptors. <i>Advanced Energy Materials</i> , 2018, 8, 1702814.	10.2	170
12	Critical Role of Molecular Electrostatic Potential on Charge Generation in Organic Solar Cells. <i>Chinese Journal of Chemistry</i> , 2018, 36, 491-494.	2.6	163
13	Two Well-Miscible Acceptors Work as One for Efficient Fullerene-Free Organic Solar Cells. <i>Advanced Materials</i> , 2017, 29, 1700437.	11.1	157
14	Over 11% Efficiency in Tandem Polymer Solar Cells Featured by a Low-Band-Gap Polymer with Fine-Tuned Properties. <i>Advanced Materials</i> , 2016, 28, 5133-5138.	11.1	144
15	18.5% Efficiency Organic Solar Cells with a Hybrid Planar/Bulk Heterojunction. <i>Advanced Materials</i> , 2021, 33, e2103091.	11.1	136
16	Enhanced π - π Interactions of Nonfullerene Acceptors by Volatilizable Solid Additives in Efficient Polymer Solar Cells. <i>Advanced Materials</i> , 2019, 31, e1900477.	11.1	99
17	A Wide Bandgap Polymer with Strong π - π Interaction for Efficient Fullerene-Free Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1600742.	10.2	76
18	Diverse applications of MoO ₃ for high performance organic photovoltaics: fundamentals, processes and optimization strategies. <i>Journal of Materials Chemistry A</i> , 2020, 8, 978-1009.	5.2	70

#	ARTICLE	IF	CITATIONS
19	Design, Synthesis, and Photovoltaic Characterization of a Small Molecular Acceptor with an Ultra-Narrow Band Gap. <i>Angewandte Chemie</i> , 2017, 129, 3091-3095.	1.6	61
20	Quadrupole Moment Induced Morphology Control Via a Highly Volatile Small Molecule in Efficient Organic Solar Cells. <i>Advanced Functional Materials</i> , 2021, 31, 2010535.	7.8	55
21	Realization of high performance for PM6:Y6 based organic photovoltaic cells. <i>Journal of Energy Chemistry</i> , 2021, 61, 29-46.	7.1	54
22	Multi-Functional Solid Additive Induced Favorable Vertical Phase Separation and Ordered Molecular Packing for Highly Efficient Layer-by-Layer Organic Solar Cells. <i>Small</i> , 2021, 17, e2103497.	5.2	49
23	Efficient interface modification via multi-site coordination for improved efficiency and stability in organic solar cells. <i>Energy and Environmental Science</i> , 2022, 15, 822-829.	15.6	49
24	Multi-component non-fullerene acceptors with tunable bandgap structures for efficient organic solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23644-23649.	5.2	47
25	Achieving over 10% Efficiency in Poly(3-hexylthiophene)-Based Organic Solar Cells via Solid Additives. <i>ChemSusChem</i> , 2021, 14, 3607-3613.	3.6	43
26	Printable SnO ₂ cathode interlayer with up to 500 nm thickness-tolerance for high-performance and large-area organic solar cells. <i>Science China Chemistry</i> , 2020, 63, 957-965.	4.2	38
27	Simultaneous Improvement of Efficiency and Stability of Organic Photovoltaic Cells by using a Cross-Linkable Fullerene Derivative. <i>Small</i> , 2021, 17, e2101133.	5.2	34
28	The crucial role of intermolecular π - π interactions in A-type electron acceptors and their effective modulation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2664-2670.	5.2	26
29	Layer-by-layered organic solar cells: Morphology optimizing strategies and processing techniques. <i>Aggregate</i> , 2022, 3, e107.	5.2	26
30	Enhancing the Photovoltaic Performance of Nonfullerene Acceptors via Conjugated Rotatable End Groups. <i>Advanced Energy Materials</i> , 2018, 8, 1802131.	10.2	24
31	Investigating the Trade-Off between Device Performance and Energy Loss in Nonfullerene Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 29124-29131.	4.0	24
32	Biuret Induced Tin-Anchoring and Crystallization-Regulating for Efficient Lead-Free Tin Halide Perovskite Light-Emitting Diodes. <i>Small</i> , 2022, 18, e2200036.	5.2	24
33	Ternary blend strategy in benzotriazole-based organic photovoltaics for indoor application. <i>Green Energy and Environment</i> , 2021, 6, 920-928.	4.7	23
34	Recent advances of organometallic complexes in emerging photovoltaics. <i>Journal of Polymer Science</i> , 2022, 60, 865-916.	2.0	23
35	Revival of Insulating Polyethylenimine by Creatively Carbonizing with Perylene into Highly Crystallized Carbon Dots as the Cathode Interlayer for High-Performance Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 1280-1289.	4.0	19
36	TCNQ as a volatilizable morphology modulator enables enhanced performance in non-fullerene organic solar cells. <i>Journal of Materials Chemistry C</i> , 2020, 8, 44-49.	2.7	16

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37	Highly efficient carbon dot-based room-temperature fluorescence-phosphorescence dual emitter. <i>Journal of Materials Chemistry C</i> , 2021, 9, 15577-15582.	2.7	15
38	Crosslinkable and Chelatable Organic Ligand Enables Interfaces and Grains Collaborative Passivation for Efficient and Stable Perovskite Solar Cells. <i>Small</i> , 2022, 18, e2201820.	5.2	15
39	Improving charge transport and reducing non-radiative energy loss via a nonacyclic carbazole-based third component for over 18% efficiency polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7090-7098.	5.2	14
40	Morphological Stabilization in Organic Solar Cells via a Fluorene-Based Crosslinker for Enhanced Efficiency and Thermal Stability. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 1187-1194.	4.0	14
41	$\hat{\Gamma}^2$ -Diketone Coordination Strategy for Highly Efficient and Stable Pb-Sn Mixed Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 11772-11778.	2.1	14
42	Size-Controllable Metal Chelates as Both Light Scattering Centers and Electron Collection Layer for High-Performance Polymer Solar Cells. <i>CCS Chemistry</i> , 2021, 3, 37-49.	4.6	12
43	Coordination-Induced Defects Elimination of SnO ₂ Nanoparticles via a Small Electrolyte Molecule for High-Performance Inverted Organic Solar Cells. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	12
44	Self-Assembly Metal Chelate as Ultraviolet Filterable Interface Layer for Efficient Organic Solar Cells. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	7
45	Crosslinkable metal chelate as the electron transport layer for efficient and stable inverted polymer solar cells. <i>Materials Chemistry Frontiers</i> , 2020, 4, 2995-3002.	3.2	6
46	Recent Progress in Semitransparent Organic and Perovskite Solar Cells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2022, 219, .	0.8	6
47	Efficient Organic Tandem Solar Cells Enabled by Solution-Processed Interconnection Layer and Fine-Tuned Active Layer. <i>Advanced Optical Materials</i> , 2021, 9, 2101246.	3.6	3
48	Water-Induced Formation of $\hat{\Gamma}^2$ -MoO ₃ Microcrystals as Anode Buffer Layer for Highly Efficient Polymer Solar Cells. <i>Energy Technology</i> , 0, , 2100718.	1.8	1