Sunsun Li

List of Publications by Year
in descending order

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49 papers	11,969 citations	117571 34 h-index	206029 48 g-index
50 all docs	50 docs citations	50 times ranked	6895 citing authors

#	Article	IF	Citations
1	Molecular Optimization Enables over 13% Efficiency in Organic Solar Cells. Journal of the American Chemical Society, 2017, 139, 7148-7151.	6.6	2,524
2	Fullereneâ€Free Polymer Solar Cells with over 11% Efficiency and Excellent Thermal Stability. Advanced Materials, 2016, 28, 4734-4739.	11.1	1,698
3	Energyâ€Level Modulation of Smallâ€Molecule Electron Acceptors to Achieve over 12% Efficiency in Polymer Solar Cells. Advanced Materials, 2016, 28, 9423-9429.	11.1	1,307
4	Molecular Design of Benzodithiophene-Based Organic Photovoltaic Materials. Chemical Reviews, 2016, 116, 7397-7457.	23.0	998
5	Design rules for minimizing voltage losses in high-efficiency organic solar cells. Nature Materials, 2018, 17, 703-709.	13.3	701
6	A Wide Band Gap Polymer with a Deep Highest Occupied Molecular Orbital Level Enables 14.2% Efficiency in Polymer Solar Cells. Journal of the American Chemical Society, 2018, 140, 7159-7167.	6.6	654
7	Design and Synthesis of a Low Bandgap Small Molecule Acceptor for Efficient Polymer Solar Cells. Advanced Materials, 2016, 28, 8283-8287.	11.1	421
8	A Highâ€Efficiency Organic Solar Cell Enabled by the Strong Intramolecular Electron Pushâ€“Pull Effect of the Nonfullerene Acceptor. Advanced Materials, 2018, 30, e1707170.	11.1	351
9	Ternary Polymer Solar Cells based on Two Acceptors and One Donor for Achieving 12.2% Efficiency. Advanced Materials, 2017, 29, 1604059.	11.1	333
10	Highâ€Efficiency Nonfullerene Organic Solar Cells: Critical Factors that Affect Complex Multiâ€Length Scale Morphology and Device Performance. Advanced Energy Materials, 2017, 7, 1602000.	10.2	232
11	Design of a New Smallâ€Molecule Electron Acceptor Enables Efficient Polymer Solar Cells with High Fill Factor. Advanced Materials, 2017, 29, 1704051.	11.1	224
12	Design and application of volatilizable solid additives in non-fullerene organic solar cells. Nature Communications, 2018, 9, 4645.	5.8	205
13	Significant Influence of the Methoxyl Substitution Position on Optoelectronic Properties and Molecular Packing of Smallâ€Molecule Electron Acceptors for Photovoltaic Cells. Advanced Energy Materials, 2017, 7, 1700183.	10.2	184
14	Quenching to the Percolation Threshold in Organic Solar Cells. Joule, 2019, 3, 443-458.	11.7	183
15	Environmentally Friendly Solventâ€Processed Organic Solar Cells that are Highly Efficient and Adaptable for the Bladeâ€Coating Method. Advanced Materials, 2018, 30, 1704837.	11.1	173
16	Greenâ€Solventâ€Processed Allâ€Polymer Solar Cells Containing a Perylene Diimideâ€Based Acceptor with an Efficiency over 6.5%. Advanced Energy Materials, 2016, 6, 1501991.	10.2	157
17	Two Wellâ€Miscible Acceptors Work as One for Efficient Fullereneâ€Free Organic Solar Cells. Advanced Materials, 2017, 29, 1700437.	11.1	157
18	Surpassing 10% Efficiency Benchmark for Nonfullerene Organic Solar Cells by Scalable Coating in Air from Single Nonhalogenated Solvent. Advanced Materials, 2018, 30, 1705485.	11.1	150

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19	15.3% efficiency all-small-molecule organic solar cells enabled by symmetric phenyl substitution. Science China Materials, 2020, 63, 1142-1150.	3.5	140
20	Precise Manipulation of Multilength Scale Morphology and Its Influence on Ecoâ€Friendly Printed Allâ€Polymer Solar Cells. Advanced Functional Materials, 2017, 27, 1702016.	7.8	99
21	High Performance Organic Solar Cells Processed by Blade Coating in Air from a Benign Food Additive Solution. Chemistry of Materials, 2016, 28, 7451-7458.	3.2	91
22	Fullerene-free polymer solar cell based on a polythiophene derivative with an unprecedented energy loss of less than 0.5 eV. Journal of Materials Chemistry A, 2016, 4, 18043-18049.	5.2	88
23	Manipulation of Domain Purity and Orientational Ordering in High Performance All-Polymer Solar Cells. Chemistry of Materials, 2016, 28, 6178-6185.	3.2	87
24	2D-Conjugated Benzodithiophene-Based Polymer Acceptor: Design, Synthesis, Nanomorphology, and Photovoltaic Performance. Macromolecules, 2015, 48, 7156-7163.	2.2	70
25	A Novel pH Neutral Self-Doped Polymer for Anode Interfacial Layer in Efficient Polymer Solar Cells. Macromolecules, 2016, 49, 8126-8133.	2.2	69
26	Subtle side-chain tuning on terminal groups of small molecule electron acceptors for efficient fullerene-free polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 15175-15182.	5.2	52
27	Tunable Electron Donating and Accepting Properties Achieved by Modulating the Steric Hindrance of Side Chains in A-D-A Small-Molecule Photovoltaic Materials. Chemistry of Materials, 2018, 30, 619-628.	3.2	49
28	Correlating Threeâ€dimensional Morphology With Function in PBDBâ€T:ITâ€M Nonâ€Fullerene Organic Solar Cells. Solar Rrl, 2018, 2, 1800114.	3.1	49
29	Potential of Nonfullerene Small Molecules with High Photovoltaic Performance. Chemistry - an Asian Journal, 2017, 12, 2160-2171.	1.7	45
30	A Selfâ€Organized Poly(vinylpyrrolidone)â€Based Cathode Interlayer in Inverted Fullereneâ€Free Organic Solar Cells. Advanced Materials, 2019, 31, e1804657.	11.1	43
31	Morphology control enables thickness-insensitive efficient nonfullerene polymer solar cells. Materials Chemistry Frontiers, 2017, 1, 2057-2064.	3.2	42
32	Perovskite-polymer hybrid solar cells with near-infrared external quantum efficiency over 40%. Science China Materials, 2015, 58, 953-960.	3.5	41
33	Role of Polymer Segregation on the Mechanical Behavior of All-Polymer Solar Cell Active Layers. ACS Applied Materials & Interfaces, 2017, 9, 43886-43892.	4.0	40
34	Measuring Temperature-Dependent Miscibility for Polymer Solar Cell Blends: An Easily Accessible Optical Method Reveals Complex Behavior. Chemistry of Materials, 2018, 30, 3943-3951.	3.2	38
35	Influence of Covalent and Noncovalent Backbone Rigidification Strategies on the Aggregation Structures of a Wide-Band-Gap Polymer for Photovoltaic Cells. Chemistry of Materials, 2020, 32, 1993-2003.	3.2	36
36	Environmentally-friendly solvent processed fullerene-free organic solar cells enabled by screening halogen-free solvent additives. Science China Materials, 2017, 60, 697-706.	3.5	33

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37	Enhanced intermolecular interactions to improve twisted polymer photovoltaic performance. Science China Chemistry, 2019, 62, 370-377.	4.2	29
38	Efficient Fullerene-Free Polymer Solar Cells Based on Alkylthio Substituted Conjugated Polymers. Journal of Physical Chemistry C, 2017, 121, 4825-4833.	1.5	28
39	p-Doped Conducting Polyelectrolyte as an Anode Interlayer Enables High Efficiency for 1 cm² Printed Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 20205-20213.	4.0	28
40	Vacuum-assisted annealing method for high efficiency printable large-area polymer solar cell modules. Journal of Materials Chemistry C, 2019, 7, 3206-3211.	2.7	27
41	Facile Modification of a Noncovalently Fused-Ring Electron Acceptor Enables Efficient Organic Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 45806-45814.	4.0	27
42	Tuning Charge Generation Process of Rylene Imide-Based Solar Cells via Chalcogen-Atom-Annulation. Chemistry of Materials, 2019, 31, 3636-3643.	3.2	22
43	Terthiophene based non-fused electron acceptors for efficient organic solar cells. Organic Electronics, 2022, 105, 106512.	1.4	17
44	Enhanced photovoltaic effect from naphtho[2,3-c]thiophene-4,9-dione-based polymers through alkyl side chain induced backbone distortion. Journal of Materials Chemistry A, 2020, 8, 14706-14712.	5.2	10
45	Reduced Nonradiative Recombination Energy Loss Enabled Efficient Polymer Solar Cells via Tuning Alkyl Chain Positions on Pendent Benzene Units of Polymers. ACS Applied Materials & Interfaces, 2020, 12, 24184-24191.	4.0	7
46	Solar Cells: Surpassing 10% Efficiency Benchmark for Nonfullerene Organic Solar Cells by Scalable Coating in Air from Single Nonhalogenated Solvent (Adv. Mater. 8/2018). Advanced Materials, 2018, 30, 1870054.	11.1	3
47	Terminal alkyl chain tuning of small molecule donor enables optimized morphology and efficient all-small-molecule organic solar cells. Dyes and Pigments, 2022, 200, 110147.	2.0	1
48	Over 13% Efficiency in Blade-coated Organic Solar Cells. , 0, , .		0
49	Optimized Charge Transport Channel Enables Thick-Film All-Small-Molecule Organic Solar Cells. Energy & Fuels, 2021, 35, 19756-19764.	2.5	0