Jianhui Hou

List of Publications by Year
in descending order

447	70,943	435 131	677 254
papers	citations	h-index	g-index

453	453	453	19074
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Polymer solar cells with enhanced open-circuit voltage and efficiency. Nature Photonics, 2009, 3, 649-653.	31.4	3,015
2	Molecular Optimization Enables over 13% Efficiency in Organic Solar Cells. Journal of the American Chemical Society, 2017, 139, 7148-7151.	13.7	2,524
3	Organic solar cells based on non-fullerene acceptors. Nature Materials, 2018, 17, 119-128.	27.5	2,315
4	Fullereneâ€Free Polymer Solar Cells with over 11% Efficiency and Excellent Thermal Stability. Advanced Materials, 2016, 28, 4734-4739.	21.0	1,698
5	Over 16% efficiency organic photovoltaic cells enabled by a chlorinated acceptor with increased open-circuit voltages. Nature Communications, 2019, 10, 2515.	12.8	1,431
6	Singleâ€Junction Organic Photovoltaic Cells with Approaching 18% Efficiency. Advanced Materials, 2020, 32, e1908205.	21.0	1,407
7	Energyâ€Level Modulation of Smallâ€Molecule Electron Acceptors to Achieve over 12% Efficiency in Polymer Solar Cells. Advanced Materials, 2016, 28, 9423-9429.	21.0	1,307
8	Indeneâ”C₆₀Bisadduct: A New Acceptor for High-Performance Polymer Solar Cells. Journal of the American Chemical Society, 2010, 132, 1377-1382.	13.7	1,151
9	Synthesis, Characterization, and Photovoltaic Properties of a Low Band Gap Polymer Based on Silole-Containing Polythiophenes and 2,1,3-Benzothiadiazole. Journal of the American Chemical Society, 2008, 130, 16144-16145.	13.7	1,092
10	Singleâ€Junction Organic Photovoltaic Cell with 19% Efficiency. Advanced Materials, 2021, 33, e2102420.	21.0	1,072
11	Molecular Design of Benzodithiophene-Based Organic Photovoltaic Materials. Chemical Reviews, 2016, 116, 7397-7457.	47.7	998
12	Over 14% Efficiency in Polymer Solar Cells Enabled by a Chlorinated Polymer Donor. Advanced Materials, 2018, 30, e1800868.	21.0	979
13	Replacing Alkoxy Groups with Alkylthienyl Groups: A Feasible Approach To Improve the Properties of Photovoltaic Polymers. Angewandte Chemie - International Edition, 2011, 50, 9697-9702.	13.8	926
14	A Largeâ€Bandgap Conjugated Polymer for Versatile Photovoltaic Applications with High Performance. Advanced Materials, 2015, 27, 4655-4660.	21.0	882
15	Synthesis and Photovoltaic Properties of Two-Dimensional Conjugated Polythiophenes with Bi(thienylenevinylene) Side Chains. Journal of the American Chemical Society, 2006, 128, 4911-4916.	13.7	759
16	Bandgap and Molecular Energy Level Control of Conjugated Polymer Photovoltaic Materials Based on Benzo[1,2-b:4,5-bâ€²]dithiophene. Macromolecules, 2008, 41, 6012-6018.	4.8	723
17	Design, Synthesis, and Photovoltaic Characterization of a Small Molecular Acceptor with an Ultraâ€Narrow Band Gap. Angewandte Chemie - International Edition, 2017, 56, 3045-3049.	13.8	711
18	Design rules for minimizing voltage losses in high-efficiency organic solar cells. Nature Materials, 2018, 17, 703-709.	27.5	701

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19	Synthesis of a Low Band Gap Polymer and Its Application in Highly Efficient Polymer Solar Cells. Journal of the American Chemical Society, 2009, 131, 15586-15587.	13.7	688
20	Molecular Design toward Highly Efficient Photovoltaic Polymers Based on Two-Dimensional Conjugated Benzodithiophene. Accounts of Chemical Research, 2014, 47, 1595-1603.	15.6	667
21	Design, Application, and Morphology Study of a New Photovoltaic Polymer with Strong Aggregation in Solution State. Macromolecules, 2012, 45, 9611-9617.	4.8	664
22	Dual Plasmonic Nanostructures for High Performance Inverted Organic Solar Cells. Advanced Materials, 2012, 24, 3046-3052.	21.0	654
23	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.	13.7	654
24	Vertical Phase Separation in Poly(3â€hexylthiophene): Fullerene Derivative Blends and its Advantage for Inverted Structure Solar Cells. Advanced Functional Materials, 2009, 19, 1227-1234.	14.9	650
25	Effects of Solvent Mixtures on the Nanoscale Phase Separation in Polymer Solar Cells. Advanced Functional Materials, 2008, 18, 1783-1789.	14.9	645
26	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.	30.8	636
27	Over 14% Efficiency in Organic Solar Cells Enabled by Chlorinated Nonfullerene Smallâ€Molecule Acceptors. Advanced Materials, 2018, 30, e1800613.	21.0	623
28	Tandem Organic Solar Cell with 20.2% Efficiency. Joule, 2022, 6, 171-184.	24.0	584
29	Highly Efficient 2D-Conjugated Benzodithiophene-Based Photovoltaic Polymer with Linear Alkylthio Side Chain. Chemistry of Materials, 2014, 26, 3603-3605.	6.7	531
30	A Polybenzo[1,2â€b:4,5â€bâ€²]dithiophene Derivative with Deep HOMO Level and Its Application in Highâ€Performance Polymer Solar Cells. Angewandte Chemie - International Edition, 2010, 49, 1500-1503.	13.8	479
31	Bandgap and Molecular Level Control of the Low-Bandgap Polymers Based on 3,6-Dithiophen-2-yl-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione toward Highly Efficient Polymer Solar Cells. Macromolecules, 2009, 42, 6564-6571.	4.8	459
32	Small-Molecule Acceptor Based on the Heptacyclic Benzodi(cyclopentadithiophene) Unit for Highly Efficient Nonfullerene Organic Solar Cells. Journal of the American Chemical Society, 2017, 139, 4929-4934.	13.7	459
33	Ecoâ€Compatible Solventâ€Processed Organic Photovoltaic Cells with Over 16% Efficiency. Advanced Materials, 2019, 31, e1903441.	21.0	445
34	A Potential Perylene Diimide Dimerâ€Based Acceptor Material for Highly Efficient Solutionâ€Processed Nonâ€Fullerene Organic Solar Cells with 4.03% Efficiency. Advanced Materials, 2013, 25, 5791-5797.	21.0	444
35	Organic photovoltaic cell with 17% efficiency and superior processability. National Science Review, 2020, 7, 1239-1246.	9.5	443
36	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.	13.7	427

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37	Design and Synthesis of a Low Bandgap Small Molecule Acceptor for Efficient Polymer Solar Cells. Advanced Materials, 2016, 28, 8283-8287.	21.0	421
38	Reduced non-radiative charge recombination enables organic photovoltaic cell approaching 19% efficiency. Joule, 2021, 5, 2408-2419.	24.0	419
39	Wide-gap non-fullerene acceptor enabling high-performance organic photovoltaic cells for indoor applications. Nature Energy, 2019, 4, 768-775.	39.5	407
40	High efficiency polymer solar cells based on poly(3-hexylthiophene)/indene-C70 bisadduct with solvent additive. Energy and Environmental Science, 2012, 5, 7943.	30.8	400
41	A Starâ€Shaped Perylene Diimide Electron Acceptor for Highâ€Performance Organic Solar Cells. Advanced Materials, 2014, 26, 5137-5142.	21.0	390
42	Achieving Over 15% Efficiency in Organic Photovoltaic Cells via Copolymer Design. Advanced Materials, 2019, 31, e1808356.	21.0	388
43	Synergistic Effect of Fluorination on Molecular Energy Level Modulation in Highly Efficient Photovoltaic Polymers. Advanced Materials, 2014, 26, 1118-1123.	21.0	386
44	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.	13.7	379
45	Improved Charge Transport and Reduced Nonradiative Energy Loss Enable Over 16% Efficiency in Ternary Polymer Solar Cells. Advanced Materials, 2019, 31, e1902302.	21.0	364
46	Achieving Highly Efficient Nonfullerene Organic Solar Cells with Improved Intermolecular Interaction and Openâ€Circuit Voltage. Advanced Materials, 2017, 29, 1700254.	21.0	363
47	Highly Efficient Fullerene-Free Organic Solar Cells Operate at Near Zero Highest Occupied Molecular Orbital Offsets. Journal of the American Chemical Society, 2019, 141, 3073-3082.	13.7	362
48	A Highly Efficient Nonâ€Fullerene Organic Solar Cell with a Fill Factor over 0.80 Enabled by a Fineâ€Tuned Holeâ€Transporting Layer. Advanced Materials, 2018, 30, e1801801.	21.0	360
49	Silicon Atom Substitution Enhances Interchain Packing in a Thiopheneâ€Based Polymer System. Advanced Materials, 2010, 22, 371-375.	21.0	352
50	A Highâ€Efficiency Organic Solar Cell Enabled by the Strong Intramolecular Electron Pushâ€“Pull Effect of the Nonfullerene Acceptor. Advanced Materials, 2018, 30, e1707170.	21.0	351
51	Recent progress in organic solar cells (Part I material science). Science China Chemistry, 2022, 65, 224-268.	8.2	349
52	Ternary Polymer Solar Cells based on Two Acceptors and One Donor for Achieving 12.2% Efficiency. Advanced Materials, 2017, 29, 1604059.	21.0	333
53	Efficient Semitransparent Organic Solar Cells with Tunable Color enabled by an Ultralowâ€Bandgap Nonfullerene Acceptor. Advanced Materials, 2017, 29, 1703080.	21.0	325
54	Semi-transparent polymer solar cells with 6% PCE, 25% average visible transmittance and a color rendering index close to 100 for power generating window applications. Energy and Environmental Science, 2012, 5, 9551.	30.8	323

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55	Highly Efficient Tandem Polymer Photovoltaic Cells. Advanced Materials, 2010, 22, 380-383.	21.0	320
56	Optical Gaps of Organic Solar Cells as a Reference for Comparing Voltage Losses. Advanced Energy Materials, 2018, 8, 1801352.	19.5	319
57	Realizing over 10% efficiency in polymer solar cell by device optimization. Science China Chemistry, 2015, 58, 248-256.	8.2	311
58	Efficient Polymer Solar Cells Based on Benzothiadiazole and Alkylphenyl Substituted Benzodithiophene with a Power Conversion Efficiency over 8%. Advanced Materials, 2013, 25, 4944-4949.	21.0	306
59	Highâ€Performance Inverted Polymer Solar Cells with Solutionâ€Processed Titanium Chelate as Electronâ€Collecting Layer on ITO Electrode. Advanced Materials, 2012, 24, 1476-1481.	21.0	305
60	Efficient Charge Transfer and Fineâ€Tuned Energy Level Alignment in a THFâ€Processed Fullereneâ€Free Organic Solar Cell with 11.3% Efficiency. Advanced Materials, 2017, 29, 1604241.	21.0	305
61	Highly Efficient Fullereneâ€Free Polymer Solar Cells Fabricated with Polythiophene Derivative. Advanced Materials, 2016, 28, 9416-9422.	21.0	303
62	Improving the Ordering and Photovoltaic Properties by Extending Ï€â€“Conjugated Area of Electronâ€Donating Units in Polymers with Dâ€A Structure. Advanced Materials, 2012, 24, 3383-3389.	21.0	298
63	Bay-linked perylene bisimides as promising non-fullerene acceptors for organic solar cells. Chemical Communications, 2014, 50, 1024-1026.	4.1	290
64	From Binary to Ternary Solvent: Morphology Fineâ€tuning of D/A Blends in PDPP3Tâ€based Polymer Solar Cells. Advanced Materials, 2012, 24, 6335-6341.	21.0	288
65	Breaking the 10% Efficiency Barrier in Organic Photovoltaics: Morphology and Device Optimization of Wellâ€Known PBDTTT Polymers. Advanced Energy Materials, 2016, 6, 1502529.	19.5	285
66	Benzo[1,2-b:4,5-bâ€²]dithiophene-based conjugated polymers: band gap and energy level control and their application in polymer solar cells. Polymer Chemistry, 2011, 2, 2453.	3.9	272
67	Lowâ€Temperature Solutionâ€Processed Hydrogen Molybdenum and Vanadium Bronzes for an Efficient Holeâ€Transport Layer in Organic Electronics. Advanced Materials, 2013, 25, 2051-2055.	21.0	269
68	PBDB-T and its derivatives: A family of polymer donors enables over 17% efficiency in organic photovoltaics. Materials Today, 2020, 35, 115-130.	14.2	269
69	Manipulating Aggregation and Molecular Orientation in Allâ€Polymer Photovoltaic Cells. Advanced Materials, 2015, 27, 6046-6054.	21.0	264
70	New Wide Band Gap Donor for Efficient Fullerene-Free All-Small-Molecule Organic Solar Cells. Journal of the American Chemical Society, 2017, 139, 1958-1966.	13.7	260
71	Side Chain Selection for Designing Highly Efficient Photovoltaic Polymers with 2D-Conjugated Structure. Macromolecules, 2014, 47, 4653-4659.	4.8	259
72	Stable and low-photovoltage-loss perovskite solar cells by multifunctional passivation. Nature Photonics, 2021, 15, 681-689.	31.4	255

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73	Green-solvent-processable organic solar cells. Materials Today, 2016, 19, 533-543.	14.2	252
74	A Semitransparent Inorganic Perovskite Film for Overcoming Ultraviolet Light Instability of Organic Solar Cells and Achieving 14.03% Efficiency. Advanced Materials, 2018, 30, e1800855.	21.0	243
75	Efficient Polymer Solar Cells with Thin Active Layers Based on Alternating Polyfluorene Copolymer/Fullerene Bulk Heterojunctions. Advanced Materials, 2009, 21, 4238-4242.	21.0	242
76	Controlling Blend Morphology for Ultrahigh Current Density in Nonfullerene Acceptor-Based Organic Solar Cells. ACS Energy Letters, 2018, 3, 669-676.	17.4	242
77	Stable and Efficient Organoâ€Metal Halide Hybrid Perovskite Solar Cells via Ï€â€Conjugated Lewis Base Polymer Induced Trap Passivation and Charge Extraction. Advanced Materials, 2018, 30, e1706126.	21.0	241
78	A unified description of non-radiative voltage losses in organic solar cells. Nature Energy, 2021, 6, 799-806.	39.5	235
79	Highâ€Efficiency Nonfullerene Organic Solar Cells: Critical Factors that Affect Complex Multiâ€Length Scale Morphology and Device Performance. Advanced Energy Materials, 2017, 7, 1602000.	19.5	232
80	A guest-assisted molecular-organization approach for >17% efficiency organic solar cells using environmentally friendly solvents. Nature Energy, 2021, 6, 1045-1053.	39.5	230
81	Influence of D/A Ratio on Photovoltaic Performance of a Highly Efficient Polymer Solar Cell System. Advanced Materials, 2012, 24, 6536-6541.	21.0	229
82	Binary additives synergistically boost the efficiency of all-polymer solar cells up to 3.45%. Energy and Environmental Science, 2014, 7, 1351-1356.	30.8	224
83	Design of a New Smallâ€Molecule Electron Acceptor Enables Efficient Polymer Solar Cells with High Fill Factor. Advanced Materials, 2017, 29, 1704051.	21.0	224
84	Realizing Ultrahigh Mechanical Flexibility and >15% Efficiency of Flexible Organic Solar Cells via a â€œWeldingâ€•Flexible Transparent Electrode. Advanced Materials, 2020, 32, e1908478.	21.0	216
85	Remove the Residual Additives toward Enhanced Efficiency with Higher Reproducibility in Polymer Solar Cells. Journal of Physical Chemistry C, 2013, 117, 14920-14928.	3.1	210
86	A chlorinated low-bandgap small-molecule acceptor for organic solar cells with 14.1% efficiency and low energy loss. Science China Chemistry, 2018, 61, 1307-1313.	8.2	210
87	Completely non-fused electron acceptor with 3D-interpenetrated crystalline structure enables efficient and stable organic solar cell. Nature Communications, 2021, 12, 5093.	12.8	210
88	A Tandem Organic Photovoltaic Cell with 19.6% Efficiency Enabled by Light Distribution Control. Advanced Materials, 2021, 33, e2102787.	21.0	210
89	A Polythiophene Derivative with Superior Properties for Practical Application in Polymer Solar Cells. Advanced Materials, 2014, 26, 5880-5885.	21.0	205
90	Design and application of volatilizable solid additives in non-fullerene organic solar cells. Nature Communications, 2018, 9, 4645.	12.8	205

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91	Enhanced Photovoltaic Performance by Modulating Surface Composition in Bulk Heterojunction Polymer Solar Cells Based on PBDTTTâ€Câ€T/PC₇₁BM. Advanced Materials, 2014, 26, 4043-4049.	21.0	203
92	Recent Progress in Chlorinated Organic Photovoltaic Materials. Accounts of Chemical Research, 2020, 53, 822-832.	15.6	198
93	New developments in non-fullerene small molecule acceptors for polymer solar cells. Materials Chemistry Frontiers, 2017, 1, 1291-1303.	5.9	194
94	A Printable Organic Cathode Interlayer Enables over 13% Efficiency for 1-cm2 Organic Solar Cells. Joule, 2019, 3, 227-239.	24.0	193
95	PDTâ€Sâ€T: A New Polymer with Optimized Molecular Conformation for Controlled Aggregation and Ï€â€“Ï€ Stacking and Its Application in Efficient Photovoltaic Devices. Advanced Materials, 2013, 25, 3449-3455.	21.0	190
96	Interface design for high-efficiency non-fullerene polymer solar cells. Energy and Environmental Science, 2017, 10, 1784-1791.	30.8	187
97	Synthesis and Absorption Spectra of Poly(3-(phenylenevinyl)thiophene)s with Conjugated Side Chains. Macromolecules, 2006, 39, 594-603.	4.8	185
98	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.	19.5	184
99	Quenching to the Percolation Threshold in Organic Solar Cells. Joule, 2019, 3, 443-458.	24.0	183
100	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.	21.0	182
101	Molecular design of a wide-band-gap conjugated polymer for efficient fullerene-free polymer solar cells. Energy and Environmental Science, 2017, 10, 546-551.	30.8	180
102	Fluorination vs. chlorination: a case study on high performance organic photovoltaic materials. Science China Chemistry, 2018, 61, 1328-1337.	8.2	177
103	Environmentally Friendly Solventâ€Processed Organic Solar Cells that are Highly Efficient and Adaptable for the Bladeâ€Coating Method. Advanced Materials, 2018, 30, 1704837.	21.0	173
104	Heat-Insulating Multifunctional Semitransparent Polymer Solar Cells. Joule, 2018, 2, 1816-1826.	24.0	173
105	Achieving Highâ€Performance Ternary Organic Solar Cells through Tuning Acceptor Alloy. Advanced Materials, 2017, 29, 1603154.	21.0	171
106	Recent Progress in Ternary Organic Solar Cells Based on Nonfullerene Acceptors. Advanced Energy Materials, 2018, 8, 1702814.	19.5	170
107	MoOx and V2Ox as hole and electron transport layers through functionalized intercalation in normal and inverted organic optoelectronic devices. Light: Science and Applications, 2015, 4, e273-e273.	16.6	169
108	High performance polymer solar cells with as-prepared zirconium acetylacetonate film as cathode buffer layer. Scientific Reports, 2014, 4, 4691.	3.3	165

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109	Critical Role of Molecular Electrostatic Potential on Charge Generation in Organic Solar Cells. Chinese Journal of Chemistry, 2018, 36, 491-494.	4.9	163
110	PBDTTTZ: A Broad Band Gap Conjugated Polymer with High Photovoltaic Performance in Polymer Solar Cells. Macromolecules, 2011, 44, 4035-4037.	4.8	159
111	Hybrid nanocrystal/polymer solar cells based on tetrapod-shaped CdSexTe1â˜'xnanocrystals. Nanotechnology, 2006, 17, 4041-4047.	2.6	158
112	Molecular design of a non-fullerene acceptor enables a P3HT-based organic solar cell with 9.46% efficiency. Energy and Environmental Science, 2020, 13, 2864-2869.	30.8	158
113	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.	19.5	157
114	Two Wellâ€Miscible Acceptors Work as One for Efficient Fullereneâ€Free Organic Solar Cells. Advanced Materials, 2017, 29, 1700437.	21.0	157
115	Modulating Molecular Orientation Enables Efficient Nonfullerene Small-Molecule Organic Solar Cells. Chemistry of Materials, 2018, 30, 2129-2134.	6.7	157
116	Recent progress in organic solar cells (Part II device engineering). Science China Chemistry, 2022, 65, 1457-1497.	8.2	157
117	Application of Two-Dimensional Conjugated Benzo[1,2-b:4,5-bâ€²]dithiophene in Quinoxaline-Based Photovoltaic Polymers. Macromolecules, 2012, 45, 3032-3038.	4.8	154
118	Exceptionally low charge trapping enables highly efficient organic bulk heterojunction solar cells. Energy and Environmental Science, 2020, 13, 2422-2430.	30.8	152
119	Surpassing 10% Efficiency Benchmark for Nonfullerene Organic Solar Cells by Scalable Coating in Air from Single Nonhalogenated Solvent. Advanced Materials, 2018, 30, 1705485.	21.0	150
120	Reducing Voltage Losses in the A-DAâ€²D-A Acceptor-Based Organic Solar Cells. CheM, 2020, 6, 2147-2161.	11.7	150
121	A New Polymer Donor Enables Binary Allâ€Polymer Organic Photovoltaic Cells with 18% Efficiency and Excellent Mechanical Robustness. Advanced Materials, 2022, 34, .	21.0	150
122	Sulfonyl: a new application of electron-withdrawing substituent in highly efficient photovoltaic polymer. Chemical Communications, 2011, 47, 8904.	4.1	147
123	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.	21.0	144
124	Tuning the Hybridization of Local Exciton and Chargeâ€Transfer States in Highly Efficient Organic Photovoltaic Cells. Angewandte Chemie - International Edition, 2020, 59, 9004-9010.	13.8	144
125	A Fluorinated Polythiophene Derivative with Stabilized Backbone Conformation for Highly Efficient Fullerene and Non-Fullerene Polymer Solar Cells. Macromolecules, 2016, 49, 2993-3000.	4.8	141
126	Robust metal ion-chelated polymer interfacial layer for ultraflexible non-fullerene organic solar cells. Nature Communications, 2020, 11, 4508.	12.8	141

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127	1 cm² Organic Photovoltaic Cells for Indoor Application with over 20% Efficiency. Advanced Materials, 2019, 31, e1904512.	21.0	140
128	15.3% efficiency all-small-molecule organic solar cells enabled by symmetric phenyl substitution. Science China Materials, 2020, 63, 1142-1150.	6.3	140
129	Selenopheno[3,2-b]thiophene-Based Narrow-Bandgap Nonfullerene Acceptor Enabling 13.3% Efficiency for Organic Solar Cells with Thickness-Insensitive Feature. ACS Energy Letters, 2018, 3, 2967-2976.	17.4	139
130	Effect of Carbon Chain Length in the Substituent of PCBMâ€like Molecules on Their Photovoltaic Properties. Advanced Functional Materials, 2010, 20, 1480-1487.	14.9	137
131	An Easy and Effective Method to Modulate Molecular Energy Level of the Polymer Based on Benzodithiophene for the Application in Polymer Solar Cells. Advanced Materials, 2014, 26, 2089-2095.	21.0	137
132	An electron acceptor based on indacenodithiophene and 1,1-dicyanomethylene-3-indanone for fullerene-free organic solar cells. Journal of Materials Chemistry A, 2015, 3, 1910-1914.	10.3	137
133	18.5% Efficiency Organic Solar Cells with a Hybrid Planar/Bulk Heterojunction. Advanced Materials, 2021, 33, e2103091.	21.0	136
134	The performance-stability conundrum of BTP-based organic solar cells. Joule, 2021, 5, 2129-2147.	24.0	133
135	Highly Efficient Tandem Polymer Solar Cells with a Photovoltaic Response in the Visible Light Range. Advanced Materials, 2015, 27, 1189-1194.	21.0	130
136	Conjugated and Nonconjugated Substitution Effect on Photovoltaic Properties of Benzodifuran-Based Photovoltaic Polymers. Macromolecules, 2012, 45, 6923-6929.	4.8	129
137	A New Conjugated Polymer that Enables the Integration of Photovoltaic and Lightâ€Emitting Functions in One Device. Advanced Materials, 2021, 33, e2101090.	21.0	129
138	Low band gap dithieno[3,2-b:2â€²,3â€²-d]silole-containing polymers, synthesis, characterization and photovoltaic application. Chemical Communications, 2009, , 5570.	4.1	128
139	Quantification of Nanoâ€•and Mesoscale Phase Separation and Relation to Donor and Acceptor Quantum Efficiency, J_{sc}, and FF in Polymer:Fullerene Solar Cells. Advanced Materials, 2014, 26, 4234-4241.	21.0	127
140	Organic Photovoltaic Cells for Indoor Applications: Opportunities and Challenges. ACS Applied Materials & Interfaces, 2020, 12, 38815-38828.	8.0	126
141	Branched Poly(thienylene vinylene)s with Absorption Spectra Covering the Whole Visible Region. Macromolecules, 2006, 39, 4657-4662.	4.8	125
142	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.	19.5	125
143	Revealing the effects of molecular packing on the performances of polymer solar cells based on Aâ€“Dâ€“Câ€“Dâ€“A type non-fullerene acceptors. Journal of Materials Chemistry A, 2018, 6, 12132-12141.	10.3	119
144	Spiro-Fused Perylene Diimide Arrays. Journal of the American Chemical Society, 2017, 139, 15914-15920.	13.7	116

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145	Toward Efficient Polymer Solar Cells Processed by a Solutionâ€Processed Layerâ€Byâ€Layer Approach. Advanced Materials, 2018, 30, e1802499.	21.0	116
146	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.	30.8	116
147	Perylene Diimide Trimers Based Bulk Heterojunction Organic Solar Cells with Efficiency over 7%. Advanced Energy Materials, 2016, 6, 1600060.	19.5	111
148	Enhanced Efficiency in Fullerene-Free Polymer Solar Cell by Incorporating Fine-designed Donor and Acceptor Materials. ACS Applied Materials & Interfaces, 2015, 7, 9274-9280.	8.0	110
149	Tailoring and Modifying an Organic Electron Acceptor toward the Cathode Interlayer for Highly Efficient Organic Solar Cells. Advanced Materials, 2020, 32, e1906557.	21.0	109
150	Rational Anode Engineering Enables Progresses for Different Types of Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2100492.	19.5	108
151	Synthesis of a 4,8-dialkoxy-benzo[1,2-b:4,5-bâ€²]difuran unit and its application in photovoltaic polymer. Chemical Communications, 2012, 48, 3318.	4.1	105
152	Highly Efficient Photovoltaic Polymers Based on Benzodithiophene and Quinoxaline with Deeper HOMO Levels. Macromolecules, 2015, 48, 5172-5178.	4.8	104
153	Poly[4,4-bis(2-ethylhexyl)cyclopenta[2,1-b;3,4-bâ€²]dithiophene-2,6-diyl-alt-2,1,3-benzoselenadiazole-4,7-diyl], a New Low Band Gap Polymer in Polymer Solar Cells. Journal of Physical Chemistry C, 2009, 113, 1601-1605.	3.1	103
154	Enhanced Photovoltaic Performance of Diketopyrrolopyrrole (DPP)-Based Polymers with Extended Ï€ Conjugation. Journal of Physical Chemistry C, 2013, 117, 9550-9557.	3.1	103
155	A Hyperbranched Conjugated Polymer as the Cathode Interlayer for Highâ€Performance Polymer Solar Cells. Advanced Materials, 2013, 25, 6889-6894.	21.0	101
156	Thermoplastic Elastomer Tunes Phase Structure and Promotes Stretchability of Highâ€Efficiency Organic Solar Cells. Advanced Materials, 2021, 33, e2106732.	21.0	101
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