Feng Liu

List of Publications by Year
in descending order

314 papers	30,970 citations	2795 94 h-index	5101 166 g-index
314 all docs	314 docs citations	314 times ranked	15503 citing authors

#	Article	IF	Citations
1	Single-junction polymer solar cells with high efficiency and photovoltage. Nature Photonics, 2015, 9, 174-179.	15.6	1,595
2	A Series of Simple Oligomer-like Small Molecules Based on Oligothiophenes for Solution-Processed Solar Cells with High Efficiency. Journal of the American Chemical Society, 2015, 137, 3886-3893.	6.6	788
3	Small-molecule solar cells with efficiency over 9%. Nature Photonics, 2015, 9, 35-41.	15.6	769
4	High-efficiency small-molecule ternary solar cells with a hierarchical morphology enabled by synergizing fullerene and non-fullerene acceptors. Nature Energy, 2018, 3, 952-959.	19.8	558
5	Solution-processed organic tandem solar cells with power conversion efficiencies >12%. Nature Photonics, 2017, 11, 85-90.	15.6	510
6	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.	6.6	459
7	Deep Absorbing Porphyrin Small Molecule for High-Performance Organic Solar Cells with Very Low Energy Losses. Journal of the American Chemical Society, 2015, 137, 7282-7285.	6.6	436
8	Fluoroâ€Substituted nâ€Type Conjugated Polymers for Additiveâ€Free Allâ€Polymer Bulk Heterojunction Solar Cells with High Power Conversion Efficiency of 6.71%. Advanced Materials, 2015, 27, 3310-3317.	11.1	421
9	Kinetics of Ion Transport in Perovskite Active Layers and Its Implications for Active Layer Stability. Journal of the American Chemical Society, 2015, 137, 13130-13137.	6.6	394
10	High Efficiency Near-Infrared and Semitransparent Non-Fullerene Acceptor Organic Photovoltaic Cells. Journal of the American Chemical Society, 2017, 139, 17114-17119.	6.6	384
11	An Unfusedâ€Coreâ€Based Nonfullerene Acceptor Enables Highâ€Efficiency Organic Solar Cells with Excellent Morphological Stability at High Temperatures. Advanced Materials, 2018, 30, 1705208.	11.1	380
12	Dithienopicenocarbazole-Based Acceptors for Efficient Organic Solar Cells with Optoelectronic Response Over 1000 nm and an Extremely Low Energy Loss. Journal of the American Chemical Society, 2018, 140, 2054-2057.	6.6	369
13	26â€¯mAâ€¯cmâ^'2 Jsc from organic solar cells with a low-bandgap nonfullerene acceptor. Science Bulletin, 2017, 62, 1494-1496.	4.3	368
14	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.	11.1	360
15	Synergistic effect of fluorination on both donor and acceptor materials for high performance non-fullerene polymer solar cells with 13.5% efficiency. Science China Chemistry, 2018, 61, 531-537.	4.2	342
16	Allâ€Polymer Solar Cells Based on a Conjugated Polymer Containing Siloxaneâ€Functionalized Side Chains with Efficiency over 10%. Advanced Materials, 2017, 29, 1703906.	11.1	332
17	Organic Solar Cells with 18% Efficiency Enabled by an Alloy Acceptor: A Twoâ€inâ€One Strategy. Advanced Materials, 2021, 33, e2100830.	11.1	323
18	Subtle Molecular Tailoring Induces Significant Morphology Optimization Enabling over 16% Efficiency Organic Solar Cells with Efficient Charge Generation. Advanced Materials, 2020, 32, e1906324.	11.1	312

#	Article	IF	Citations
19	Efficient Polymer Solar Cells Based on Benzothiadiazole and Alkylphenyl Substituted Benzodithiophene with a Power Conversion Efficiency over 8%. Advanced Materials, 2013, 25, 4944-4949.	11.1	306
20	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.	11.1	298
21	On the morphology of polymerâ€based photovoltaics. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 1018-1044.	2.4	297
22	A generic green solvent concept boosting the power conversion efficiency of all-polymer solar cells to 11%. Energy and Environmental Science, 2019, 12, 157-163.	15.6	287
23	A Thieno[3,4-b]thiophene-Based Non-fullerene Electron Acceptor for High-Performance Bulk-Heterojunction Organic Solar Cells. Journal of the American Chemical Society, 2016, 138, 15523-15526.	6.6	286
24	Fine-tuning of the chemical structure of photoactive materials for highly efficient organic photovoltaics. Nature Energy, 2018, 3, 1051-1058.	19.8	281
25	Bulk Heterojunction Photovoltaic Active Layers via Bilayer Interdiffusion. Nano Letters, 2011, 11, 2071-2078.	4.5	274
26	Over 12% Efficiency Nonfullerene Allâ€Smallâ€Molecule Organic Solar Cells with Sequentially Evolved Multilength Scale Morphologies. Advanced Materials, 2019, 31, e1807842.	11.1	272
27	Optimized Fibril Network Morphology by Precise Sideâ€Chain Engineering to Achieve Highâ€Performance Bulkâ€Heterojunction Organic Solar Cells. Advanced Materials, 2018, 30, e1707353.	11.1	271
28	The Crystallization of PEDOT:PSS Polymeric Electrodes Probed In Situ during Printing. Advanced Materials, 2015, 27, 3391-3397.	11.1	263
29	Ternary Organic Solar Cells Based on Two Compatible Nonfullerene Acceptors with Power Conversion Efficiency >10%. Advanced Materials, 2016, 28, 10008-10015.	11.1	254
30	Fineâ€Tuning of Molecular Packing and Energy Level through Methyl Substitution Enabling Excellent Small Molecule Acceptors for Nonfullerene Polymer Solar Cells with Efficiency up to 12.54%. Advanced Materials, 2018, 30, 1706124.	11.1	253
31	Characterization of the morphology of solution-processed bulk heterojunction organic photovoltaics. Progress in Polymer Science, 2013, 38, 1990-2052.	11.8	252
32	Efficient Semitransparent Solar Cells with High NIR Responsiveness Enabled by a Smallâ€Bandgap Electron Acceptor. Advanced Materials, 2017, 29, 1606574.	11.1	252
33	Asymmetrical Ladderâ€Type Donorâ€Induced Polar Small Molecule Acceptor to Promote Fill Factors Approaching 77% for Highâ€Performance Nonfullerene Polymer Solar Cells. Advanced Materials, 2018, 30, e1800052.	11.1	252
34	Multiâ€Lengthâ€Scale Morphologies Driven by Mixed Additives in Porphyrinâ€Based Organic Photovoltaics. Advanced Materials, 2016, 28, 4727-4733.	11.1	251
35	Highâ€Efficiency Nonfullerene Polymer Solar Cells with Medium Bandgap Polymer Donor and Narrow Bandgap Organic Semiconductor Acceptor. Advanced Materials, 2016, 28, 8288-8295.	11.1	247
36	Aligned and Graded Typeâ€I Ruddlesdenâ€“Popper Perovskite Films for Efficient Solar Cells. Advanced Energy Materials, 2018, 8, 1800185.	10.2	247

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37	11% Efficient Ternary Organic Solar Cells with High Composition Tolerance via Integrated Nearâ€IR Sensitization and Interface Engineering. Advanced Materials, 2016, 28, 8184-8190.	11.1	246
38	Morphology Control Enables Efficient Ternary Organic Solar Cells. Advanced Materials, 2018, 30, e1803045.	11.1	243
39	Optimized active layer morphology toward efficient and polymer batch insensitive organic solar cells. Nature Communications, 2020, 11, 2855.	5.8	237
40	Highâ€Performance Asâ€Cast Nonfullerene Polymer Solar Cells with Thicker Active Layer and Large Area Exceeding 11% Power Conversion Efficiency. Advanced Materials, 2018, 30, 1704546.	11.1	233
41	Simplified synthetic routes for low cost and high photovoltaic performance n-type organic semiconductor acceptors. Nature Communications, 2019, 10, 519.	5.8	231
42	A Novel Naphtho[1,2â€c:5,6â€câ€²]Bis([1,2,5]Thiadiazole)â€Based Narrowâ€Bandgap Ï€â€Conjugated Polymer with Power Conversion Efficiency Over 10%. Advanced Materials, 2016, 28, 9811-9818.	11.1	230
43	Random terpolymer based on thiophene-thiazolothiazole unit enabling efficient non-fullerene organic solar cells. Nature Communications, 2020, 11, 4612.	5.8	225
44	Two-Dimensional Perovskite Solar Cells with 14.1% Power Conversion Efficiency and 0.68% External Radiative Efficiency. ACS Energy Letters, 2018, 3, 2086-2093.	8.8	224
45	Morphology Optimization via Side Chain Engineering Enables All-Polymer Solar Cells with Excellent Fill Factor and Stability. Journal of the American Chemical Society, 2018, 140, 8934-8943.	6.6	218
46	Chargeâ€Carrier Balance for Highly Efficient Inverted Planar Heterojunction Perovskite Solar Cells. Advanced Materials, 2016, 28, 10718-10724.	11.1	214
47	Fineâ€Tuning the Energy Levels of a Nonfullerene Smallâ€Molecule Acceptor to Achieve a High Shortâ€Circuit Current and a Power Conversion Efficiency over 12% in Organic Solar Cells. Advanced Materials, 2018, 30, 1704904.	11.1	214
48	Polymer semiconductor crystals. Materials Today, 2010, 13, 14-24.	8.3	210
49	Efficient Polymer Solar Cells Based on a Low Bandgap Semiâ€crystalline DPP Polymerâ€PCBM Blends. Advanced Materials, 2012, 24, 3947-3951.	11.1	209
50	Series of Multifluorine Substituted Oligomers for Organic Solar Cells with Efficiency over 9% and Fill Factor of 0.77 by Combination Thermal and Solvent Vapor Annealing. Journal of the American Chemical Society, 2016, 138, 7687-7697.	6.6	209
51	Organic Single-Crystalline pâ€'n Junction Nanoribbons. Journal of the American Chemical Society, 2010, 132, 11580-11584.	6.6	208
52	Understanding the Morphology of PTB7:PCBM Blends in Organic Photovoltaics. Advanced Energy Materials, 2014, 4, 1301377.	10.2	203
53	A Novel Thiophene-Fused Ending Group Enabling an Excellent Small Molecule Acceptor for High-Performance Fullerene-Free Polymer Solar Cells with 11.8% Efficiency. Solar Rrl, 2017, 1, 1700044.	3.1	198
54	A Twisted Thieno[3,4â€b]thiopheneâ€Based Electron Acceptor Featuring a 14â€Ï€â€Electron Indenoindene Core for Highâ€Performance Organic Photovoltaics. Advanced Materials, 2017, 29, 1704510.	11.1	196

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55	Highly Efficient Organic Solar Cells Based on S,N-Heteroacene Non-Fullerene Acceptors. Chemistry of Materials, 2018, 30, 5429-5434.	3.2	194
56	In situ dynamic observations of perovskite crystallisation and microstructure evolution intermediated from [PbI6]4â^' cage nanoparticles. Nature Communications, 2017, 8, 15688.	5.8	191
57	Design of a Highly Crystalline Low-Band Gap Fused-Ring Electron Acceptor for High-Efficiency Solar Cells with Low Energy Loss. Chemistry of Materials, 2017, 29, 8369-8376.	3.2	180
58	Highâ€Performance Inverted Planar Heterojunction Perovskite Solar Cells Based on Lead Acetate Precursor with Efficiency Exceeding 18%. Advanced Functional Materials, 2016, 26, 3508-3514.	7.8	176
59	A high mobility conjugated polymer based on dithienothiophene and diketopyrrolopyrrole for organic photovoltaics. Energy and Environmental Science, 2012, 5, 6857.	15.6	171
60	Achieving Highâ€Performance Ternary Organic Solar Cells through Tuning Acceptor Alloy. Advanced Materials, 2017, 29, 1603154.	11.1	171
61	Over 14% efficiency all-polymer solar cells enabled by a low bandgap polymer acceptor with low energy loss and efficient charge separation. Energy and Environmental Science, 2020, 13, 5017-5027.	15.6	170
62	Semi-crystalline random conjugated copolymers with panchromatic absorption for highly efficient polymer solar cells. Energy and Environmental Science, 2013, 6, 3301.	15.6	165
63	Subtle Balance Between Length Scale of Phase Separation and Domain Purification in Smallâ€Molecule Bulkâ€Heterojunction Blends under Solvent Vapor Treatment. Advanced Materials, 2015, 27, 6296-6302.	11.1	159
64	Unexpected One-Pot Method to Synthesize Spiro[fluorene-9,9â€˜-xanthene] Building Blocks for Blue-Light-Emitting Materials. Organic Letters, 2006, 8, 2787-2790.	2.4	153
65	Progress and prospects of the morphology of non-fullerene acceptor based high-efficiency organic solar cells. Energy and Environmental Science, 0, , .	15.6	149
66	Fluorene-substituted pyrenesâ€”Novel pyrene derivatives as emitters in nondoped blue OLEDs. Organic Electronics, 2006, 7, 155-162.	1.4	148
67	Ternary non-fullerene polymer solar cells with 13.51% efficiency and a record-high fill factor of 78.13%. Energy and Environmental Science, 2018, 11, 3392-3399.	15.6	143
68	Approaching 16% Efficiency in All-Small-Molecule Organic Solar Cells Based on Ternary Strategy with a Highly Crystalline Acceptor. Joule, 2020, 4, 2223-2236.	11.7	142
69	Spiro Linkage as an Alternative Strategy for Promising Nonfullerene Acceptors in Organic Solar Cells. Advanced Functional Materials, 2015, 25, 5954-5966.	7.8	140
70	An A-D-A Type Small-Molecule Electron Acceptor with End-Extended Conjugation for High Performance Organic Solar Cells. Chemistry of Materials, 2017, 29, 7908-7917.	3.2	139
71	Molecular Engineering of Copper Phthalocyanines: A Strategy in Developing Dopantâ€Free Holeâ€Transporting Materials for Efficient and Ambientâ€Stable Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1803287.	10.2	138
72	Effect of Fluorine Content in Thienothiophene-Benzodithiophene Copolymers on the Morphology and Performance of Polymer Solar Cells. Chemistry of Materials, 2014, 26, 3009-3017.	3.2	136

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73	Mesoporous PbI₂ Scaffold for Highâ€Performance Planar Heterojunction Perovskite Solar Cells. Advanced Energy Materials, 2016, 6, 1501890.	10.2	124
74	InÂsitu supramolecular polymerization-enhanced self-assembly of polymer vesicles for highly efficient photothermal therapy. Nature Communications, 2020, 11, 1724.	5.8	122
75	Relating Chemical Structure to Device Performance via Morphology Control in Diketopyrrolopyrrole-Based Low Band Gap Polymers. Journal of the American Chemical Society, 2013, 135, 19248-19259.	6.6	121
76	Conformation Locking on Fusedâ€Ring Electron Acceptor for Highâ€Performance Nonfullerene Organic Solar Cells. Advanced Functional Materials, 2018, 28, 1705095.	7.8	120
77	Fast Printing and In Situ Morphology Observation of Organic Photovoltaics Using Slotâ€Die Coating. Advanced Materials, 2015, 27, 886-891.	11.1	117
78	Efficient Organic Solar Cells with Extremely High Openâ€Circuit Voltages and Low Voltage Losses by Suppressing Nonradiative Recombination Losses. Advanced Energy Materials, 2018, 8, 1801699.	10.2	117
79	Low band gap conjugated polymers combining siloxane-terminated side chains and alkyl side chains: side-chain engineering achieving a large active layer processing window for PCE > 10% in polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 17619-17631.	5.2	116
80	An Electron Acceptor with Broad Visibleâ€“NIR Absorption and Unique Solid State Packing for Asâ€Cast High Performance Binary Organic Solar Cells. Advanced Functional Materials, 2018, 28, 1802324.	7.8	116
81	Enhancing the Performance of Organic Solar Cells by Hierarchically Supramolecular Self-Assembly of Fused-Ring Electron Acceptors. Chemistry of Materials, 2018, 30, 4307-4312.	3.2	116
82	A Rational Molecular Design of Î²-Phase Polydiarylfluorenes: Synthesis, Morphology, and Organic Lasers. Macromolecules, 2014, 47, 1001-1007.	2.2	115
83	Regioregular Bis-Pyridal[2,1,3]thiadiazole-Based Semiconducting Polymer for High-Performance Ambipolar Transistors. Journal of the American Chemical Society, 2017, 139, 17735-17738.	6.6	115
84	Nonfullerene Polymer Solar Cells Based on a Main-Chain Twisted Low-Bandgap Acceptor with Power Conversion Efficiency of 13.2%. ACS Energy Letters, 2018, 3, 1499-1507.	8.8	113
85	Fibril Network Strategy Enables Highâ€Performance Semitransparent Organic Solar Cells. Advanced Functional Materials, 2020, 30, 2002181.	7.8	113
86	A simple perylene diimide derivative with a highly twisted geometry as an electron acceptor for efficient organic solar cells. Journal of Materials Chemistry A, 2016, 4, 10659-10665.	5.2	110
87	Comparison of Two Dâ€“A Type Polymers with Each BeingÂFluorinated on D and A Unit for High Performance Solar Cells. Advanced Functional Materials, 2015, 25, 120-125.	7.8	108
88	Approaching Intraâ€•and Interchain Charge Transport of Conjugated Polymers Facilely by Topochemical Polymerized Single Crystals. Advanced Materials, 2017, 29, 1701251.	11.1	107
89	Molecular Weight Dependence of the Morphology in P3HT:PCBM Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 19876-19887.	4.0	106
90	A simple small molecule as an acceptor for fullerene-free organic solar cells with efficiency near 8%. Journal of Materials Chemistry A, 2016, 4, 10409-10413.	5.2	104

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91	Toward Practical Useful Polymers for Highly Efficient Solar Cells via a Random Copolymer Approach. Journal of the American Chemical Society, 2016, 138, 10782-10785.	6.6	101
92	Printed Nonfullerene Organic Solar Cells with the Highest Efficiency of 9.5%. Advanced Energy Materials, 2018, 8, 1701942.	10.2	99
93	A novel wide-bandgap small molecule donor for high efficiency all-small-molecule organic solar cells with small non-radiative energy losses. Energy and Environmental Science, 2020, 13, 1309-1317.	15.6	99
94	Morphology Characterization of Bulk Heterojunction Solar Cells. Small Methods, 2018, 2, 1700229.	4.6	98
95	Efficient 9-alkylphenyl-9-pyrenylfluorene substituted pyrene derivatives with improved hole injection for blue light-emitting diodes. Journal of Materials Chemistry, 2006, 16, 4074.	6.7	95
96	Synthesis, Electronic Structure, Molecular Packing/Morphology Evolution, and Carrier Mobilities of Pure Oligo-/Poly(alkylthiophenes). Journal of the American Chemical Society, 2013, 135, 844-854.	6.6	95
97	Highly oriented two-dimensional formamidinium lead iodide perovskites with a small bandgap of 1.51 eV. Materials Chemistry Frontiers, 2018, 2, 121-128.	3.2	95
98	NDIâ€Based Small Molecule as Promising Nonfullerene Acceptor for Solutionâ€Processed Organic Photovoltaics. Advanced Energy Materials, 2015, 5, 1500195.	10.2	94
99	Tuning V_{oc} for high performance organic ternary solar cells with non-fullerene acceptor alloys. Journal of Materials Chemistry A, 2017, 5, 19697-19702.	5.2	94
100	Headâ€toâ€Head Linkage Containing Bithiopheneâ€Based Polymeric Semiconductors for Highly Efficient Polymer Solar Cells. Advanced Materials, 2016, 28, 9969-9977.	11.1	93
101	Terthieno[3,2â€b]Thiophene (6T) Based Low Bandgap Fusedâ€Ring Electron Acceptor for Highly Efficient Solar Cells with a High Shortâ€Circuit Current Density and Low Openâ€Circuit Voltage Loss. Advanced Energy Materials, 2018, 8, 1702831.	10.2	93
102	Facile Synthesis of Spirocyclic Aromatic Hydrocarbon Derivatives Based on o-Halobiaryl Route and Domino Reaction for Deep-Blue Organic Semiconductors. Organic Letters, 2009, 11, 3850-3853.	2.4	92
103	Conjugated Polymeric Zwitterions as Efficient Interlayers in Organic Solar Cells. Advanced Materials, 2013, 25, 6868-6873.	11.1	92
104	Dithienosilole-Based Small-Molecule Organic Solar Cells with an Efficiency over 8%: Investigation of the Relationship between the Molecular Structure and Photovoltaic Performance. Chemistry of Materials, 2015, 27, 6077-6084.	3.2	92
105	Structured Liquids with pHâ€Triggered Reconfigurability. Advanced Materials, 2016, 28, 6612-6618.	11.1	92
106	High Efficiency Ternary Nonfullerene Polymer Solar Cells with Two Polymer Donors and an Organic Semiconductor Acceptor. Advanced Energy Materials, 2017, 7, 1602215.	10.2	92
107	Smallâ€Molecule Solar Cells with Simultaneously Enhanced Shortâ€Circuit Current and Fill Factor to Achieve 11% Efficiency. Advanced Materials, 2017, 29, 1700616.	11.1	87
108	Facile Synthesis of Complicated 9,9-Diarylfluorenes Based on BF3Â·Et2O-Mediated Friedelâ€“Crafts Reaction. Organic Letters, 2006, 8, 3701-3704.	2.4	86

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109	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
110	Recent Progress in Polymer White Lightâ€Emitting Materials and Devices. Macromolecular Chemistry and Physics, 2013, 214, 314-342.	1.1	84
111	Synthesis and Characterization of Pyreneâ€Centered Starburst Oligofluorenes. Macromolecular Rapid Communications, 2008, 29, 659-664.	2.0	83
112	Supramolecular Ï€â^'Ï€ Stacking Pyrene-Functioned Fluorenes: Toward Efficient Solution-Processable Small Molecule Blue and White Organic Light Emitting Diodes. Journal of Physical Chemistry C, 2009, 113, 4641-4647.	1.5	83
113	Medium Bandgap Conjugated Polymer for High Performance Polymer Solar Cells Exceeding 9% Power Conversion Efficiency. Advanced Materials, 2015, 27, 7462-7468.	11.1	82
114	Following the Morphology Formation In Situ in Printed Active Layers for Organic Solar Cells. Advanced Energy Materials, 2016, 6, 1501580.	10.2	82
115	Efficient Ternary Organic Solar Cells Enabled by the Integration of Nonfullerene and Fullerene Acceptors with a Broad Composition Tolerance. Advanced Functional Materials, 2019, 29, 1807006.	7.8	81
116	Resonant soft X-ray scattering for polymer materials. European Polymer Journal, 2016, 81, 555-568.	2.6	79
117	Fullerene-free small molecule organic solar cells with a high open circuit voltage of 1.15 V. Chemical Communications, 2016, 52, 465-468.	2.2	79
118	New insight of molecular interaction, crystallization and phase separation in higher performance small molecular solar cells via solvent vapor annealing. Nano Energy, 2016, 30, 639-648.	8.2	77
119	A non-fullerene electron acceptor modified by thiophene-2-carbonitrile for solution-processed organic solar cells. Journal of Materials Chemistry A, 2016, 4, 3777-3783.	5.2	77
120	Highâ€Performance Nonâ€Fullerene Organic Solar Cells Based on a Seleniumâ€Containing Polymer Donor and a Twisted Perylene Bisimide Acceptor. Advanced Science, 2016, 3, 1600117.	5.6	76
121	Tuning the Optoelectronic Properties of 4,4â€²-N,Nâ€²-Dicarbazole-biphenyl through Heteroatom Linkage: New Host Materials for Phosphorescent Organic Light-Emitting Diodes. Organic Letters, 2010, 12, 3438-3441.	2.4	71
122	Small Molecules Based on Alkyl/Alkylthio-thieno[3,2-b]thiophene-Substituted Benzo[1,2-b:4,5-bâ€²]dithiophene for Solution-Processed Solar Cells with High Performance. Chemistry of Materials, 2015, 27, 8414-8423.	3.2	71
123	Donorâ€“Acceptor Copolymers Based on Thermally Cleavable Indigo, Isoindigo, and DPP Units: Synthesis, Field Effect Transistors, and Polymer Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 9038-9051.	4.0	69
124	Highâ€Performance Polymer Solar Cells Based on a Wideâ€Bandgap Polymer Containing Pyrrolo[3,4â€²f]benzotriazoleâ€5,7â€dione with a Power Conversion Efficiency of 8.63%. Advanced Science, 2016, 3, 1600032.	5.6	69
125	A Highly Crystalline and Wide-Bandgap Polydiarylfluorene with Î²-Phase Conformation toward Stable Electroluminescence and Dual Amplified Spontaneous Emission. ACS Applied Materials & Interfaces, 2016, 8, 21648-21655.	4.0	68
126	Revealing the Critical Role of the HOMO Alignment on Maximizing Current Extraction and Suppressing Energy Loss in Organic Solar Cells. IScience, 2019, 19, 883-893.	1.9	68

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127	Synthesis of pyridine-capped diketopyrrolopyrrole and its use as a building block of low band-gap polymers for efficient polymer solar cells. Chemical Communications, 2013, 49, 8495.	2.2	67
128	Circumventing UV Light Induced Nanomorphology Disorder to Achieve Long Lifetime PTB7â€Th:PCBM Based Solar Cells. Advanced Energy Materials, 2017, 7, 1701201.	10.2	67
129	Designing an asymmetrical isomer to promote the LUMO energy level and molecular packing of a non-fullerene acceptor for polymer solar cells with 12.6% efficiency. Chemical Science, 2018, 9, 8142-8149.	3.7	67
130	A low band-gap polymer based on unsubstituted benzo[1,2-b:4,5-bâ€²]dithiophene for high performance organic photovoltaics. Chemical Communications, 2012, 48, 6933.	2.2	66
131	Topological Arrangement of Fluorenyl-Substituted Carbazole Triads and Starbursts: Synthesis and Optoelectronic Properties. Journal of Physical Chemistry C, 2011, 115, 6961-6967.	1.5	65
132	Nonhalogen Solventâ€Processed Asymmetric Wideâ€Bandgap Polymers for Nonfullerene Organic Solar Cells with Over 10% Efficiency. Advanced Functional Materials, 2018, 28, 1706517.	7.8	65
133	Nearâ€Infrared Ternary Tandem Solar Cells. Advanced Materials, 2018, 30, e1804416.	11.1	65
134	Donorâ€“Acceptor Conjugated Macrocycles: Synthesis and Hostâ€“Guest Coassembly with Fullerene toward Photovoltaic Application. ACS Nano, 2017, 11, 11701-11713.	7.3	64
135	Subtle Side-Chain Engineering of Random Terpolymers for High-Performance Organic Solar Cells. Chemistry of Materials, 2018, 30, 3294-3300.	3.2	64
136	Triisopropylsilylethynyl-functionalized dibenzo[def,mno]chrysene: a solution-processed small molecule for bulk heterojunction solar cells. Journal of Materials Chemistry, 2012, 22, 4266-4268.	6.7	62
137	Manipulating Backbone Structure to Enhance Low Band Gap Polymer Photovoltaic Performance. Advanced Energy Materials, 2013, 3, 930-937.	10.2	62
138	High efficiency organic solar cells based on amorphous electron-donating polymer and modified fullerene acceptor. Nano Energy, 2017, 39, 478-488.	8.2	62
139	New Terthiophene-Conjugated Porphyrin Donors for Highly Efficient Organic Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 30176-30183.	4.0	61
140	Insertion of double bond Ï€-bridges of Aâ€“Dâ€“A acceptors for high performance near-infrared polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 22588-22597.	5.2	61
141	Spirocyclic Aromatic Hydrocarbonâ€Based Organic Nanosheets for Ecoâ€Friendly Aqueous Processed Thinâ€Film Nonâ€Volatile Memory Devices. Advanced Materials, 2013, 25, 3664-3669.	11.1	60
142	Guided crystallization of P3HT in ternary blend solar cell based on P3HT:PCPDTBT:PCBM. Energy and Environmental Science, 2014, 7, 3782-3790.	15.6	60
143	Morphology Evolution in Highâ€Performance Polymer Solar Cells Processed from Nonhalogenated Solvent. Advanced Science, 2015, 2, 1500095.	5.6	60
144	The Role of Additive in Diketopyrrolopyrroleâ€Based Small Molecular Bulk Heterojunction Solar Cells. Advanced Materials, 2013, 25, 6519-6525.	11.1	59

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145	Chain Length Dependence of the Photovoltaic Properties of Monodisperse Donorâ€“Acceptor Oligomers as Model Compounds of Polydisperse Low Band Gap Polymers. Advanced Functional Materials, 2014, 24, 7538-7547.	7.8	58
146	Anthraceneâ€Based Medium Bandgap Conjugated Polymers for High Performance Polymer Solar Cells Exceeding 8% PCE Without Additive and Annealing Process. Advanced Energy Materials, 2015, 5, 1500065.	10.2	57
147	Multiâ€Length Scaled Silver Nanowire Grid for Application in Efficient Organic Solar Cells. Advanced Functional Materials, 2016, 26, 4822-4828.	7.8	57
148	Nonfullerene Small Molecular Acceptors with a Three-Dimensional (3D) Structure for Organic Solar Cells. Chemistry of Materials, 2016, 28, 6770-6778.	3.2	57
149	Multifaceted Regioregular Oligo(thieno[3,4-b]thiophene)s Enabled by Tunable Quinoidization and Reduced Energy Band Gap. Journal of the American Chemical Society, 2015, 137, 10357-10366.	6.6	52
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