Xiaowei Zhan

List of Publications by Year
in descending order

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371 papers	49,036 citations	3731 89 h-index	1676 214 g-index
382 all docs	382 docs citations	382 times ranked	23617 citing authors

#	Article	IF	Citations
1	Aggregation-induced emission of 1-methyl-1,2,3,4,5-pentaphenylsilole. Chemical Communications, 2001, , 1740-1741.	4.1	6,387
2	An Electron Acceptor Challenging Fullerenes for Efficient Polymer Solar Cells. Advanced Materials, 2015, 27, 1170-1174.	21.0	3,365
3	Non-fullerene acceptors for organic solar cells. Nature Reviews Materials, 2018, 3, .	48.7	2,163
4	Small molecule semiconductors for high-efficiency organic photovoltaics. Chemical Society Reviews, 2012, 41, 4245.	38.1	1,601
5	Rylene and Related Diimides for Organic Electronics. Advanced Materials, 2011, 23, 268-284.	21.0	1,548
6	Next-generation organic photovoltaics based on non-fullerene acceptors. Nature Photonics, 2018, 12, 131-142.	31.4	1,535
7	A High-Mobility Electron-Transport Polymer with Broad Absorption and Its Use in Field-Effect Transistors and All-Polymer Solar Cells. Journal of the American Chemical Society, 2007, 129, 7246-7247.	13.7	1,110
8	nâ€Type Organic Semiconductors in Organic Electronics. Advanced Materials, 2010, 22, 3876-3892.	21.0	1,077
9	High-Performance Electron Acceptor with Thienyl Side Chains for Organic Photovoltaics. Journal of the American Chemical Society, 2016, 138, 4955-4961.	13.7	915
10	A Facile Planar Fused-Ring Electron Acceptor for As-Cast Polymer Solar Cells with 8.71% Efficiency. Journal of the American Chemical Society, 2016, 138, 2973-2976.	13.7	885
11	Stability of organic solar cells: challenges and strategies. Chemical Society Reviews, 2016, 45, 2544-2582.	38.1	820
12	Fused Nonacyclic Electron Acceptors for Efficient Polymer Solar Cells. Journal of the American Chemical Society, 2017, 139, 1336-1343.	13.7	813
13	Non-fullerene acceptors for organic photovoltaics: an emerging horizon. Materials Horizons, 2014, 1, 470.	12.2	694
14	Singleâ€Junction Binaryâ€Blend Nonfullerene Polymer Solar Cells with 12.1% Efficiency. Advanced Materials, 2017, 29, 1700144.	21.0	629
15	Efficient blue emission from siloles. Journal of Materials Chemistry, 2001, 11, 2974-2978.	6.7	590
16	High-performance fullerene-free polymer solar cells with 6.31% efficiency. Energy and Environmental Science, 2015, 8, 610-616.	30.8	587
17	Oligomer Molecules for Efficient Organic Photovoltaics. Accounts of Chemical Research, 2016, 49, 175-183.	15.6	560
18	Ï€â€Conjugated Lewis Base: Efficient Trapâ€Passivation and Chargeâ€Extraction for Hybrid Perovskite Solar Cells. Advanced Materials, 2017, 29, 1604545.	21.0	543

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19	Structures, Electronic States, Photoluminescence, and Carrier Transport Properties of 1,1-Disubstituted 2,3,4,5-Tetraphenylsiloles. Journal of the American Chemical Society, 2005, 127, 6335-6346.	13.7	490
20	Morphology Control in Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1703147.	19.5	424
21	Triarylamine: Versatile Platform for Organic, Dye-Sensitized, and Perovskite Solar Cells. Chemical Reviews, 2016, 116, 14675-14725.	47.7	418
22	A Starâ€Shaped Perylene Diimide Electron Acceptor for Highâ€Performance Organic Solar Cells. Advanced Materials, 2014, 26, 5137-5142.	21.0	390
23	Electron transporting semiconducting polymers in organic electronics. Chemical Society Reviews, 2011, 40, 3728.	38.1	376
24	Ultrafast and broadband photodetectors based on a perovskite/organic bulk heterojunction for large-dynamic-range imaging. Light: Science and Applications, 2020, 9, 31.	16.6	372
25	Fused Hexacyclic Nonfullerene Acceptor with Strong Nearâ€Infrared Absorption for Semitransparent Organic Solar Cells with 9.77% Efficiency. Advanced Materials, 2017, 29, 1701308.	21.0	364
26	Effect of Isomerization on High-Performance Nonfullerene Electron Acceptors. Journal of the American Chemical Society, 2018, 140, 9140-9147.	13.7	361
27	Mapping Polymer Donors toward Highâ€Efficiency Fullerene Free Organic Solar Cells. Advanced Materials, 2017, 29, 1604155.	21.0	360
28	A Solutionâ€Processable Starâ€Shaped Molecule for Highâ€Performance Organic Solar Cells. Advanced Materials, 2011, 23, 1554-1557.	21.0	348
29	Fused Tris(thienothiophene)â€Based Electron Acceptor with Strong Nearâ€Infrared Absorption for Highâ€Performance Asâ€Cast Solar Cells. Advanced Materials, 2018, 30, 1705969.	21.0	340
30	A Highly Ï€-Stacked Organic Semiconductor for Field-Effect Transistors Based on Linearly Condensed Pentathienoacene. Journal of the American Chemical Society, 2005, 127, 13281-13286.	13.7	334
31	Enhancing the Performance of Polymer Solar Cells via Core Engineering of NIRâ€Absorbing Electron Acceptors. Advanced Materials, 2018, 30, e1706571.	21.0	309
32	A planar electron acceptor for efficient polymer solar cells. Energy and Environmental Science, 2015, 8, 3215-3221.	30.8	307
33	Conjugated polymers for high-efficiency organic photovoltaics. Polymer Chemistry, 2010, 1, 409-419.	3.9	292
34	Thiazoleâ€Based Organic Semiconductors for Organic Electronics. Advanced Materials, 2012, 24, 3087-3106.	21.0	288
35	A 3D star-shaped non-fullerene acceptor for solution-processed organic solar cells with a high open-circuit voltage of 1.18 V. Chemical Communications, 2012, 48, 4773.	4.1	281
36	Efficient ternary blend polymer solar cells with indene-C60 bisadduct as an electron-cascade acceptor. Energy and Environmental Science, 2014, 7, 2005.	30.8	275

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37	Fused-Ring Electron Acceptors for Photovoltaics and Beyond. Accounts of Chemical Research, 2021, 54, 132-143.	15.6	264
38	Enhancing Performance of Nonfullerene Acceptors via Sideâ€Chain Conjugation Strategy. Advanced Materials, 2017, 29, 1702125.	21.0	249
39	New Series of Blue-Emitting and Electron-Transporting Copolymers Based on Fluorene. Macromolecules, 2002, 35, 2529-2537.	4.8	235
40	Realizing Small Energy Loss of 0.55 eV, High Openâ€Circuit Voltage >1 V and High Efficiency >10% in Fullereneâ€Free Polymer Solar Cells via Energy Driver. Advanced Materials, 2017, 29, 1605216.	21.0	230
41	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
42	Hidden Structure Ordering Along Backbone of Fusedâ€Ring Electron Acceptors Enhanced by Ternary Bulk Heterojunction. Advanced Materials, 2018, 30, e1802888.	21.0	212
43	Alloy Acceptor: Superior Alternative to PCBM toward Efficient and Stable Organic Solar Cells. Advanced Materials, 2016, 28, 8021-8028.	21.0	207
44	Extended Squaraine Dyes with Large Two-Photon Absorption Cross-Sections. Journal of the American Chemical Society, 2006, 128, 14444-14445.	13.7	205
45	Fullerene derivative anchored SnO₂ for high-performance perovskite solar cells. Energy and Environmental Science, 2018, 11, 3463-3471.	30.8	205
46	A Solutionâ€Processable Small Molecule Based on Benzodithiophene and Diketopyrrolopyrrole for Highâ€Performance Organic Solar Cells. Advanced Energy Materials, 2013, 3, 1166-1170.	19.5	203
47	Designing Efficient Nonâ€Fullerene Acceptors by Tailoring Extended Fusedâ€Rings with Electronâ€Deficient Groups. Advanced Energy Materials, 2015, 5, 1501063.	19.5	203
48	Naphthodithiopheneâ€Based Nonfullerene Acceptor for Highâ€Performance Organic Photovoltaics: Effect of Extended Conjugation. Advanced Materials, 2018, 30, 1704713.	21.0	199
49	High Exciton Diffusion Coefficients in Fused Ring Electron Acceptor Films. Journal of the American Chemical Society, 2019, 141, 6922-6929.	13.7	177
50	Balanced Partnership between Donor and Acceptor Components in Nonfullerene Organic Solar Cells with >12% Efficiency. Advanced Materials, 2018, 30, e1706363.	21.0	172
51	Versatile third components for efficient and stable organic solar cells. Materials Horizons, 2015, 2, 462-485.	12.2	168
52	Breaking 10% Efficiency in Semitransparent Solar Cells with Fused-Undecacyclic Electron Acceptor. Chemistry of Materials, 2018, 30, 239-245.	6.7	167
53	Copolymers of perylene diimide with dithienothiophene and dithienopyrrole as electron-transport materials for all-polymer solar cells and field-effect transistors. Journal of Materials Chemistry, 2009, 19, 5794.	6.7	165
54	A Solutionâ€Processable Electron Acceptor Based on Dibenzosilole and Diketopyrrolopyrrole for Organic Solar Cells. Advanced Energy Materials, 2013, 3, 724-728.	19.5	161

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55	Nonfullerene Acceptors for Semitransparent Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1800002.	19.5	160
56	Electron Affinities of 1,1-Diaryl-2,3,4,5-tetraphenylsiloles:Â Direct Measurements and Comparison with Experimental and Theoretical Estimates. Journal of the American Chemical Society, 2005, 127, 9021-9029.	13.7	155
57	Asymmetric Diketopyrrolopyrrole Conjugated Polymers for Fieldâ€Effect Transistors and Polymer Solar Cells Processed from a Nonchlorinated Solvent. Advanced Materials, 2016, 28, 943-950.	21.0	155
58	The state of organic solar cellsâ€”A meta analysis. Solar Energy Materials and Solar Cells, 2013, 119, 84-93.	6.2	154
59	Structure Evolution of Oligomer Fusedâ€Ring Electron Acceptors toward High Efficiency of Asâ€Cast Polymer Solar Cells. Advanced Energy Materials, 2016, 6, 1600854.	19.5	152
60	Nonfullerene All-Small-Molecule Organic Solar Cells. ACS Energy Letters, 2019, 4, 1241-1250.	17.4	151
61	Reducing Voltage Losses in the A-DAâ€²D-A Acceptor-Based Organic Solar Cells. CheM, 2020, 6, 2147-2161.	11.7	150
62	Substituent effects on the electronic structure of siloles. Chemical Communications, 2009, , 1948.	4.1	146
63	Porphyrinâ^Dithienothiophene Ï€-Conjugated Copolymers: Synthesis and Their Applications in Field-Effect Transistors and Solar Cells. Macromolecules, 2008, 41, 6895-6902.	4.8	144
64	Dynamic Monte Carlo Simulation for Highly Efficient Polymer Blend Photovoltaics. Journal of Physical Chemistry B, 2010, 114, 36-41.	2.6	137
65	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
66	Electronâ€Transport Materials in Perovskite Solar Cells. Small Methods, 2018, 2, 1800082.	8.6	136
67	Enhancing the Performance of a Fused-Ring Electron Acceptor by Unidirectional Extension. Journal of the American Chemical Society, 2019, 141, 19023-19031.	13.7	136
68	Acceptorâ€“Donorâ€“Acceptor Small Molecules Based on Indacenodithiophene for Efficient Organic Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 8426-8433.	8.0	135
69	Molecular Lock: A Versatile Key to Enhance Efficiency and Stability of Organic Solar Cells. Advanced Materials, 2016, 28, 5822-5829.	21.0	134
70	Unraveling Sunlight by Transparent Organic Semiconductors toward Photovoltaic and Photosynthesis. ACS Nano, 2019, 13, 1071-1077.	14.6	134
71	Achieving Balanced Crystallinity of Donor and Acceptor by Combining Bladeâ€Coating and Ternary Strategies in Organic Solar Cells. Advanced Materials, 2018, 30, e1805041.	21.0	131
72	A Twisted Dimeric Perylene Diimide Electron Acceptor for Efficient Organic Solar Cells. Advanced Energy Materials, 2014, 4, 1400420.	19.5	126

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73	Efficient all-polymer solar cells based on blend of tris(thienylenevinylene)-substituted polythiophene and poly[perylene diimide-alt-bis(dithienothiophene)]. Applied Physics Letters, 2008, 93, .	3.3	123
74	Highâ€Performance Fluorinated Fusedâ€Ring Electron Acceptor with 3D Stacking and Exciton/Charge Transport. Advanced Materials, 2020, 32, e2000645.	21.0	122
75	A Solution Processable Dâ€Aâ€D Molecule based on Thiazolothiazole for High Performance Organic Solar Cells. Advanced Energy Materials, 2012, 2, 63-67.	19.5	121
76	Advanced functional polymer materials. Materials Chemistry Frontiers, 2020, 4, 1803-1915.	5.9	117
77	Unique Energy Alignments of a Ternary Material System toward Highâ€Performance Organic Photovoltaics. Advanced Materials, 2018, 30, e1801501.	21.0	116
78	Fusedâ€Ring Electron Acceptor ITICâ€Th: A Novel Stabilizer for Halide Perovskite Precursor Solution. Advanced Energy Materials, 2018, 8, 1703399.	19.5	112
79	Suppressing photo-oxidation of non-fullerene acceptors and their blends in organic solar cells by exploring material design and employing friendly stabilizers. Journal of Materials Chemistry A, 2019, 7, 25088-25101.	10.3	107
80	Ternary System with Controlled Structure: A New Strategy toward Efficient Organic Photovoltaics. Advanced Materials, 2018, 30, 1705243.	21.0	105
81	Multiple stimuli-responsive polymeric micelles for controlled release. Soft Matter, 2013, 9, 370-373.	2.7	104
82	Nonfullerene Tandem Organic Solar Cells with High Openâ€Circuit Voltage of 1.97 V. Advanced Materials, 2016, 28, 9729-9734.	21.0	104
83	Synthesis and Photovoltaic Properties of Bithiazole-Based Donorâ^'Acceptor Copolymers. Macromolecules, 2010, 43, 5706-5712.	4.8	103
84	Effect of Core Size on Performance of Fused-Ring Electron Acceptors. Chemistry of Materials, 2018, 30, 5390-5396.	6.7	102
85	Dual-Accepting-Unit Design of Donor Material for All-Small-Molecule Organic Solar Cells with Efficiency Approaching 11%. Chemistry of Materials, 2018, 30, 8661-8668.	6.7	101
86	Ternary Organic Solar Cells with Small Nonradiative Recombination Loss. ACS Energy Letters, 2019, 4, 1196-1203.	17.4	101
87	Low bandgap Ï€â€conjugated copolymers based on fused thiophenes and benzothiadiazole: Synthesis and structureâ€property relationship study. Journal of Polymer Science Part A, 2009, 47, 5498-5508.	2.3	100
88	Layerâ€byâ€Layer Processed Organic Solar Cells. Advanced Energy Materials, 2016, 6, 1600414.	19.5	98
89	Ferrocene as a highly volatile solid additive in non-fullerene organic solar cells with enhanced photovoltaic performance. Energy and Environmental Science, 2020, 13, 5117-5125.	30.8	93
90	Highâ€Mobility Conjugated Polymers Based on Fusedâ€Thiophene Building Blocks. Macromolecular Chemistry and Physics, 2011, 212, 428-443.	2.2	92

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91	Smallâ€Molecule Solar Cells with Fill Factors up to 0.75 via a Layerâ€byâ€Layer Solution Process. Advanced Energy Materials, 2014, 4, 1300626.	19.5	90
92	Rollâ€Coated Fabrication of Fullereneâ€Free Organic Solar Cells with Improved Stability. Advanced Science, 2015, 2, 1500096.	11.2	89
93	Side Chain Engineering of Copolymers Based on Bithiazole and Benzodithiophene for Enhanced Photovoltaic Performance. Macromolecules, 2011, 44, 4230-4240.	4.8	88
94	Nonfullerene acceptors based on extended fused rings flanked with benzothiadiazolylmethylenemalononitrile for polymer solar cells. Journal of Materials Chemistry A, 2015, 3, 20758-20766.	10.3	88
95	A bipolar small molecule based on indacenodithiophene and diketopyrrolopyrrole for solution processed organic solar cells. Journal of Materials Chemistry A, 2014, 2, 778-784.	10.3	87
96	Butterfly Effects Arising from Starting Materials in Fused-Ring Electron Acceptors. Journal of the American Chemical Society, 2020, 142, 20124-20133.	13.7	87
97	Synthesis of a Conjugated Polymer with Broad Absorption and Its Application in High-Performance Phototransistors. Macromolecules, 2012, 45, 1296-1302.	4.8	86
98	Roll-coating fabrication of flexible organic solar cells: comparison of fullerene and fullerene-free systems. Journal of Materials Chemistry A, 2016, 4, 1044-1051.	10.3	84
99	Spiro[fluorene-9,9â€²-xanthene]-based hole transporting materials for efficient perovskite solar cells with enhanced stability. Materials Chemistry Frontiers, 2017, 1, 100-110.	5.9	84
100	All polymer photovoltaics: From small inverted devices to large roll-to-roll coated and printed solar cells. Solar Energy Materials and Solar Cells, 2013, 112, 157-162.	6.2	80
101	Diluting concentrated solution: a general, simple and effective approach to enhance efficiency of polymer solar cells. Energy and Environmental Science, 2015, 8, 2357-2364.	30.8	80
102	Alkoxy-Induced Near-Infrared Sensitive Electron Acceptor for High-Performance Organic Solar Cells. Chemistry of Materials, 2018, 30, 4150-4156.	6.7	79
103	Photomultiplication photodetectors with P3HT:fullerene-free material as the active layers exhibiting a broad response. Nanoscale, 2016, 8, 5578-5586.	5.6	77
104	Solution processable D-A-D molecules based on triphenylamine for efficient organic solar cells. Solar Energy Materials and Solar Cells, 2010, 94, 457-464.	6.2	76
105	Effect of Alkyl Side Chains of Conjugated Polymer Donors on the Device Performance of Non-Fullerene Solar Cells. Macromolecules, 2016, 49, 6445-6454.	4.8	76
106	Polymer Solar Cells with 90% External Quantum Efficiency Featuring an Ideal Lightâ€and Chargeâ€Manipulation Layer. Advanced Materials, 2018, 30, e1706083.	21.0	76
107	Highly Sensitive Organic Photodetectors with Tunable Spectral Response under Biâ€Directional Bias. Advanced Optical Materials, 2016, 4, 1711-1717.	7.3	75
108	Recent progress of all-polymer solar cells â€“ From chemical structure and device physics to photovoltaic performance. Materials Science and Engineering Reports, 2020, 140, 100542.	31.8	75

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109	Panchromatic Ternary Photovoltaic Cells Using a Nonfullerene Acceptor Synthesized Using Câ€“H Functionalization. Chemistry of Materials, 2018, 30, 309-313.	6.7	74
110	A fluorescent conjugated polymer for trace detection of diamines and biogenic polyamines. Journal of Materials Chemistry, 2010, 20, 9628.	6.7	72
111	Reducing Energy Disorder in Perovskite Solar Cells by Chelation. Journal of the American Chemical Society, 2022, 144, 5400-5410.	13.7	72
112	Conjugated Polymers of Rylene Diimide and Phenothiazine for n-Channel Organic Field-Effect Transistors. Macromolecules, 2012, 45, 4115-4121.	4.8	71
113	High-Performance Fused Ring Electron Acceptorâ€“Perovskite Hybrid. Journal of the American Chemical Society, 2018, 140, 14938-14944.	13.7	71
114	New Series of Blue-Emitting and Electron-Transporting Copolymers Based on Cyanostilbene. Chemistry of Materials, 2003, 15, 1963-1969.	6.7	70
115	A star-shaped oligothiophene end-capped with alkyl cyanoacetate groups for solution-processed organic solar cells. Chemical Communications, 2012, 48, 9655.	4.1	70
116	Assessing the energy offset at the electron donor/acceptor interface in organic solar cells through radiative efficiency measurements. Energy and Environmental Science, 2019, 12, 3556-3566.	30.8	69
117	An Acetylene-Containing Perylene Diimide Copolymer for High Mobility n-Channel Transistor in Air. Macromolecules, 2013, 46, 2152-2158.	4.8	66
118	Rylene Diimide Electron Acceptors for Organic Solar Cells. Trends in Chemistry, 2019, 1, 869-881.	8.5	66
119	Free charge photogeneration in a single component high photovoltaic efficiency organic semiconductor. Nature Communications, 2022, 13, .	12.8	66
120	The effect of anchoring group number on the performance of dye-sensitized solar cells. Dyes and Pigments, 2010, 87, 249-256.	3.7	65
121	Efficient Tandem Organic Photovoltaics with Tunable Rear Sub-cells. Joule, 2019, 3, 432-442.	24.0	65
122	Printing fabrication of large-area non-fullerene organic solar cells. Materials Horizons, 2022, 9, 194-219.	12.2	65
123	Synthesis of Copolymers Based on Thiazolothiazole and Their Applications in Polymer Solar Cells. Journal of Physical Chemistry C, 2010, 114, 16843-16848.	3.1	64
124	High Performance Nanocrystals of a Donorâ€“Acceptor Conjugated Polymer. Chemistry of Materials, 2013, 25, 2649-2655.	6.7	64
125	Photophysical Properties of Intramolecular Charge Transfer in Two Newly Synthesized Tribranched Donorâ^Ï€â^'Acceptor Chromophores. Journal of Physical Chemistry A, 2010, 114, 7345-7352.	2.5	63
126	Nonfullerene nâ€Type Organic Semiconductors for Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1900860.	19.5	63

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127	Multi-responsive nitrobenzene-based amphiphilic random copolymer assemblies. Chemical Communications, 2013, 49, 3516.	4.1	62
128	High-Performance Fullerene-Free Polymer Solar Cells Featuring Efficient Photocurrent Generation from Dual Pathways and Low Nonradiative Recombination Loss. ACS Energy Letters, 2019, 4, 8-16.	17.4	62
129	A Copolymer of Benzodithiophene with TIPS Side Chains for Enhanced Photovoltaic Performance. Macromolecules, 2011, 44, 9173-9179.	4.8	61
130	Color and transparency-switchable semitransparent polymer solar cells towards smart windows. Science Bulletin, 2020, 65, 217-224.	9.0	60
131	Transparent Holeâ€Transporting Frameworks: A Unique Strategy to Design Highâ€Performance Semitransparent Organic Photovoltaics. Advanced Materials, 2020, 32, e2003891.	21.0	60
132	Efficiency enhancement in small molecule bulk heterojunction organic solar cells via additive. Applied Physics Letters, 2010, 97, .	3.3	59
133	Ambient roll-to-roll fabrication of flexible solar cells based on small molecules. Journal of Materials Chemistry C, 2013, 1, 8007.	5.5	59
134	Fluorinated fused nonacyclic interfacial materials for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 21414-21421.	10.3	59
135	Narrow bandgap non-fullerene acceptor based on a thiophene-fused benzothiadiazole unit with a high short-circuit current density of over 20 mA cm^{â^'2}. Journal of Materials Chemistry A, 2018, 6, 6393-6401.	10.3	59
136	Perylene Diimide-Based Oligomers and Polymers for Organic Optoelectronics. Accounts of Materials Research, 2022, 3, 309-318.	11.7	58
137	Photoinduced Intramolecular Electron Transfer in Conjugated Perylene Bisimide-Dithienothiophene Systems: A Comparative Study of a Small Molecule and a Polymer. Journal of Physical Chemistry A, 2009, 113, 5039-5046.	2.5	57
138	Layerâ€byâ€Layer Solutionâ€Processed Lowâ€Bandgap Polymerâ€PC₆₁BM Solar Cells with High Efficiency. Advanced Energy Materials, 2014, 4, 1301349.	19.5	57
139	Synthesis and Photovoltaic Properties of a Copolymer of Benzo[1,2-b:4,5-bâ€²]dithiophene and Bithiazole. Macromolecules, 2010, 43, 8714-8717.	4.8	56
140	Highly Transparent Organic Solar Cells with Allâ€Nearâ€Infrared Photoactive Materials. Small Methods, 2019, 3, 1900424.	8.6	55
141	Towards high-efficiency non-fullerene organic solar cells: Matching small molecule/polymer donor/acceptor. Organic Electronics, 2014, 15, 2270-2276.	2.6	53
142	Efficient Quaternary Organic Solar Cells with Parallelâ€Alloy Morphology. Advanced Functional Materials, 2019, 29, 1806804.	14.9	53
143	A perylene diimide based polymer: a dual function interfacial material for efficient perovskite solar cells. Materials Chemistry Frontiers, 2017, 1, 1079-1086.	5.9	51
144	Pushing the Efficiency of High Openâ€Circuit Voltage Binary Organic Solar Cells by Vertical Morphology Tuning. Advanced Science, 2022, 9, e2200578.	11.2	51

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145	Charge transport mechanism in pressed pellets of polymer proton conductors. Solid State Ionics, 1997, 100, 217-224.	2.7	49
146	Low-Bandgap Conjugated Donorâ"Acceptor Copolymers Based on Porphyrin with Strong Two-Photon Absorption. Macromolecules, 2010, 43, 9620-9626.	4.8	49
147	Effect of the Longer Î²-Unsubstituted Oligothiophene Unit (6T and 7T) on the Organic Thin-Film Transistor Performances of Diketopyrrolopyrrole-Oligothiophene Copolymers. Chemistry of Materials, 2013, 25, 4290-4296.	6.7	49
148	Fast Response Organic Tandem Photodetector for Visible and Nearâ€Infrared Digital Optical Communications. Small, 2021, 17, e2101316.	10.0	49
149	Large Femtosecond Third-Order Nonlinear Optical Response in a Novel Donorâ"Acceptor Copolymer Consisting of Ethynylfluorene and Tetraphenyldiaminobiphenyl Units. Chemistry of Materials, 2001, 13, 1540-1544.	6.7	48
150	Efficient fullerene-free organic solar cells based on fused-ring oligomer molecules. Journal of Materials Chemistry A, 2016, 4, 1486-1494.	10.3	48
151	Enhancing performance of non-fullerene organic solar cells via side chain engineering of fused-ring electron acceptors. Dyes and Pigments, 2017, 139, 627-634.	3.7	48
152	Synthesis and electroluminescence of poly(aryleneethynylene)s based on fluorene containing holeÂtransport units. Journal of Materials Chemistry, 2001, 11, 1606-1611.	6.7	47
153	Topâ€Gate Organic Thinâ€Film Transistors Constructed by a General Lamination Approach. Advanced Materials, 2010, 22, 3537-3541.	21.0	47
154	Perylene and naphthalene diimide polymers for all-polymer solar cells: a comparative study of chemical copolymerization and physical blend. Polymer Chemistry, 2015, 6, 5254-5263.	3.9	47
155	Semitransparent, non-fullerene and flexible all-plastic solar cells. Polymer, 2016, 107, 108-112.	3.8	47
156	Enhancing the performance of non-fullerene organic solar cells via end group engineering of fused-ring electron acceptors. Journal of Materials Chemistry A, 2018, 6, 16638-16644.	10.3	47
157	A low temperature processed fused-ring electron transport material for efficient planar perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 24820-24825.	10.3	46
158	Enhancing the performance of the electron acceptor ITIC-Th via tailoring its end groups. Materials Chemistry Frontiers, 2018, 2, 537-543.	5.9	46
159	Highâ€Efficiency Perovskite Quantum Dot Hybrid Nonfullerene Organic Solar Cells with Nearâ€Zero Driving Force. Advanced Materials, 2020, 32, e2002066.	21.0	46
160	Light Harvesting at Oblique Incidence Decoupled from Transmission in Organic Solar Cells Exhibiting 9.8% Efficiency and 50% Visible Light Transparency. Advanced Energy Materials, 2020, 10, 1904196.	19.5	46
161	Evolved structure of thiazolothiazole based small molecules towards enhanced efficiency in organic solar cells. Organic Electronics, 2013, 14, 599-606.	2.6	45
162	Oligothiophene-bridged perylene diimide dimers for fullerene-free polymer solar cells: effect of bridge length. Journal of Materials Chemistry A, 2015, 3, 13000-13010.	10.3	45

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163	Efficient and stable organic solar cells via a sequential process. Journal of Materials Chemistry C, 2016, 4, 8086-8093.	5.5	45
164	Film-depth-dependent crystallinity for light transmission and charge transport in semitransparent organic solar cells. Journal of Materials Chemistry A, 2020, 8, 401-411.	10.3	45
165	A novel resistive-type humidity sensor based on poly(p-diethynylbenzene). Journal of Applied Polymer Science, 1999, 74, 2010-2015.	2.6	44
166	Fused-Ring Pyrazine Derivatives for n-Type Field-Effect Transistors. ACS Applied Materials & Interfaces, 2009, 1, 1122-1129.	8.0	44
167	Waterâ€soluble hyperbranched polyelectrolytes with high fluorescence quantum yield: Facile synthesis and selective chemosensor for Hg²⁺ and Cu²⁺ ions. Journal of Polymer Science Part A, 2010, 48, 3431-3439.	2.3	44
168	Roll-coating fabrication of flexible large area small molecule solar cells with power conversion efficiency exceeding 1%. Journal of Materials Chemistry A, 2014, 2, 19809-19814.	10.3	44
169	High-Sensitivity Visibleâ€“Near Infrared Organic Photodetectors Based on Non-Fullerene Acceptors. ACS Applied Materials & Interfaces, 2020, 12, 17769-17775.	8.0	44
170	Soluble dithienothiophene polymers: Effect of link pattern. Journal of Polymer Science Part A, 2009, 47, 2843-2852.	2.3	43
171	New X-shaped oligothiophenes for solution-processed solar cells. Journal of Materials Chemistry, 2011, 21, 9667.	6.7	43
172	Comparison of Linear- and Star-Shaped Fused-Ring Electron Acceptors. , 2019, 1, 367-374.		43
173	A diketopyrrolopyrrole molecule end-capped with a furan-2-carboxylate moiety: the planarity of molecular geometry and photovoltaic properties. Journal of Materials Chemistry A, 2014, 2, 6589.	10.3	42
174	Rhodanine flanked indacenodithiophene as non-fullerene acceptor for efficient polymer solar cells. Science China Chemistry, 2017, 60, 257-263.	8.2	42
175	High-performance organic solar cells based on polymer donor/small molecule donor/nonfullerene acceptor ternary blends. Journal of Materials Chemistry A, 2019, 7, 2268-2274.	10.3	42
176	Fluorenyl-substituted silole molecules: geometric, electronic, optical, and device properties. Journal of Materials Chemistry, 2008, 18, 3157.	6.7	41
177	One, two and three-branched triphenylamineâ€“oligothiophene hybrids for solution-processed solar cells. Journal of Materials Chemistry A, 2013, 1, 5128.	10.3	41
178	Black Phosphorous Quantum Dots Sandwiched Organic Solar Cells. Small, 2019, 15, e1903977.	10.0	41
179	Constructing Highâ€Performance Organic Photovoltaics via Emerging Nonâ€Fullerene Acceptors and Tandemâ€Junction Structure. Advanced Energy Materials, 2020, 10, 2000746.	19.5	41
180	A Low-Bandgap Conjugated Polymer Based on Squaraine with Strong Two-Photon Absorption. Macromolecules, 2011, 44, 3759-3765.	4.8	40

#	Article	IF	Citations
181	High-Performance Mid-Bandgap Fused-Pyrene Electron Acceptor. Chemistry of Materials, 2019, 31, 6484-6490.	6.7	40
182	Nanopatterning of Donor/Acceptor Hybrid Supramolecular Architectures on Highly Oriented Pyrolytic Graphite: A Scanning Tunneling Microscopy Study. Journal of the American Chemical Society, 2008, 130, 13433-13441.	13.7	38
183	A Low-Bandgap Conjugated Copolymer Based on Porphyrin and Dithienocoronene Diimide with Strong Two-Photon Absorption. Macromolecules, 2012, 45, 7823-7828.	4.8	38
184	A star-shaped electron acceptor based on 5,5â€²-bibenzothiadiazole for solution processed solar cells. Journal of Materials Chemistry A, 2013, 1, 14627.	10.3	38
185	Enhancing the performance of a fused-ring electron acceptor via extending benzene to naphthalene. Journal of Materials Chemistry C, 2018, 6, 66-71.	5.5	38
186	Synthesis and photovoltaic properties of copolymers of carbazole and thiophene with conjugated side chain containing acceptor end groups. Polymer Chemistry, 2011, 2, 1678.	3.9	37
187	An acceptorâ€acceptor conjugated copolymer based on perylene diimide for high mobility nâ€channel transistor in air. Journal of Polymer Science Part A, 2012, 50, 4266-4271.	2.3	37
188	Single crystal ribbons and transistors of a solution processed sickle-like fused-ring thienoacene. Journal of Materials Chemistry, 2010, 20, 6014.	6.7	36
189	Conjugated Polymers Based on a New Building Block: Dithienophthalimide. Macromolecules, 2011, 44, 4213-4221.	4.8	36
190	Small molecules based on bithiazole for solution-processed organic solar cells. Organic Electronics, 2012, 13, 673-680.	2.6	36
191	Comparison of additive amount used in spin-coated and roll-coated organic solar cells. Journal of Materials Chemistry A, 2014, 2, 19542-19549.	10.3	36
192	Highâ€Mobility pâ€Type Organic Semiconducting Interlayer Enhancing Efficiency and Stability of Perovskite Solar Cells. Advanced Science, 2017, 4, 1700025.	11.2	36
193	Synthesis, self-assembly, and solution-processed nanoribbon field-effect transistor of a fused-nine-ring thienoacene. Chemical Communications, 2010, 46, 2841.	4.1	35
194	Dithienocoronene diimide based conjugated polymers as electron acceptors for all-polymer solar cells. Solar Energy Materials and Solar Cells, 2013, 112, 13-19.	6.2	35
195	Polymer Nanoparticles for Controlled Release Stimulated by Visible Light and pH. Macromolecular Rapid Communications, 2014, 35, 1255-1259.	3.9	35
196	Fluorescence Detection of DNA Hybridization Based on the Aggregation-Induced Emission of a Perylene-Functionalized Polymer. ACS Applied Materials & Interfaces, 2014, 6, 11136-11141.	8.0	35
197	Low-bandgap thieno[3,4-c]pyrrole-4,6-dione-polymers for high-performance solar cells with significantly enhanced photocurrents. Journal of Materials Chemistry A, 2015, 3, 11194-11198.	10.3	35
198	Layer by layer solution processed organic solar cells based on a small molecule donor and a polymer acceptor. Journal of Materials Chemistry C, 2015, 3, 447-452.	5.5	35

#	Article	IF	Citations
199	Pyridine-bridged diketopyrrolopyrrole conjugated polymers for field-effect transistors and polymer solar cells. Polymer Chemistry, 2015, 6, 4775-4783.	3.9	34
200	Copolymers of fluorene and thiophene with conjugated side chain for polymer solar cells: Effect of pendant acceptors. Journal of Polymer Science Part A, 2011, 49, 1462-1470.	2.3	33
201	Nonfullerene Acceptor with â€œDonorâ€“Acceptor Combined Ï€-Bridgeâ€•for Organic Photovoltaics with Large Open-Circuit Voltage. ACS Applied Materials & Interfaces, 2018, 10, 18984-18992.	8.0	33
202	Photophysical pathways in efficient bilayer organic solar cells: The importance of interlayer energy transfer. Nano Energy, 2021, 84, 105924.	16.0	33
203	Femtosecond Third-Order Optical Nonlinearity of Conjugated Polymers Consisting of Fluorene and Tetraphenyldiaminobiphenyl Units:Â Structureâ^'Property Relationships. Journal of Physical Chemistry B, 2002, 106, 1884-1888.	2.6	32
204	Hierarchical Assembly of an Achiral Ï€-Conjugated Molecule into a Chiral Nanotube through the Air/Water Interface. Langmuir, 2009, 25, 6633-6636.	3.5	31
205	High-performance ternary organic solar cells with photoresponses beyond 1000 nm. Journal of Materials Chemistry A, 2018, 6, 24210-24215.	10.3	31
206	Solution-processable small molecules based on thieno[3,4-c]pyrrole-4,6-dione for high-performance solar cells. Solar Energy Materials and Solar Cells, 2012, 99, 301-307.	6.2	30
207	Side-Chain Engineering of Benzodithiophene-Bridged Dimeric Porphyrin Donors for All-Small-Molecule Organic Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 41506-41514.	8.0	30
208	Highly ordered thin films of a bis(dithienothiophene) derivative. Journal of Materials Chemistry, 2007, 17, 4972.	6.7	29
209	Synthesis and photovoltaic properties of Dâ€“A copolymers of benzodithiophene and naphtho[2,3-c]thiophene-4,9-dione. Polymer Chemistry, 2012, 3, 99-104.	3.9	29
210	ITCâ€2Cl: A Versatile Middleâ€Bandgap Nonfullerene Acceptor for Highâ€Efficiency Panchromatic Ternary Organic Solar Cells. Solar Rrl, 2020, 4, 1900377.	5.8	29
211	Photoluminescence, Electroluminescence, Nonlinear Optical, and Humidity Sensitive Properties of Poly(p-diethynylbenzene) Prepared with a Nickel Acetylide Catalyst. Advanced Materials, 2000, 12, 51-53.	21.0	28
212	Large third-order nonlinear optical response of conjugated copolymers consisting of fluorene and carbazole units. Chemical Physics Letters, 2002, 362, 165-169.	2.6	28
213	Designing a thiophene-fused DPP unit to build an Aâ€“Dâ€“A molecule for solution-processed solar cells. Journal of Materials Chemistry A, 2015, 3, 6894-6900.	10.3	28
214	Perylene diimideâ€“thienylenevinylene-based small molecule and polymer acceptors for solution-processed fullerene-free organic solarÂcells. Dyes and Pigments, 2015, 114, 283-289.	3.7	28
215	The impact of fluorination on both donor polymer and non-fullerene acceptor: The more fluorine, the merrier. Nano Research, 2019, 12, 2400-2405.	10.4	28
216	Advances in Organic Photovoltaics. Acta Chimica Sinica, 2021, 79, 257.	1.4	28

#	Article	IF	Citations
217	A DMF-assisted solution process boosts the efficiency in P3HT:PCBM solar cells up to 5.31%. Nanotechnology, 2013, 24, 484008.	2.6	27
218	Donor polymer fluorination doubles the efficiency in non-fullerene organic photovoltaics. Journal of Materials Chemistry A, 2017, 5, 22536-22541.	10.3	27
219	Highly sensitive thin film phototransistors based on a copolymer of benzodithiophene and diketopyrrolopyrrole. Journal of Materials Chemistry C, 2015, 3, 1942-1948.	5.5	26
220	An amino-substituted perylene diimide polymer for conventional perovskite solar cells. Materials Chemistry Frontiers, 2017, 1, 2078-2084.	5.9	26
221	Fused octacyclic electron acceptor isomers for organic solar cells. Journal of Materials Chemistry A, 2019, 7, 21432-21437.	10.3	26
222	Recombination between Photogenerated and Electrode-Induced Charges Dominates the Fill Factor Losses in Optimized Organic Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 3473-3480.	4.6	26
223	Modulating morphology via side-chain engineering of fused ring electron acceptors for high performance organic solar cells. Science China Chemistry, 2019, 62, 790-796.	8.2	26
224	Passivated Metal Oxide n-Type Contacts for Efficient and Stable Organic Solar Cells. ACS Applied Energy Materials, 2020, 3, 1111-1118.	5.1	26
225	Thiazolothiazoleâ€containing polythiophenes with low HOMO level and high hole mobility for polymer solar cells. Journal of Polymer Science Part A, 2011, 49, 4875-4885.	2.3	25
226	High Performance Photoswitches Based on Flexible and Amorphous Dâ€“A Polymer Nanowires. Small, 2013, 9, 294-299.	10.0	25
227	Copolymers of benzo[1,2-b:4,5-bâ€²]dithiophene and bithiazole for high-performance thin film phototransistors. Journal of Materials Chemistry C, 2014, 2, 9505-9511.	5.5	25
228	Roll-coating fabrication of ITO-free flexible solar cells based on a non-fullerene small molecule acceptor. RSC Advances, 2015, 5, 36001-36006.	3.6	25
229	Medium-Bandgap Small-Molecule Donors Compatible with Both Fullerene and Nonfullerene Acceptors. ACS Applied Materials & Interfaces, 2018, 10, 9587-9594.	8.0	25
230	NIR polymers and phototransistors. Journal of Materials Chemistry C, 2018, 6, 13049-13058.	5.5	25
231	Enabling Highâ€Performance Tandem Organic Photovoltaic Cells by Balancing the Front and Rear Subcells. Advanced Materials, 2020, 32, e2002315.	21.0	25
232	Enhancing Performance of Fused-Ring Electron Acceptor Using Pyrrole Instead of Thiophene. ACS Applied Materials & Interfaces, 2020, 12, 14029-14036.	8.0	25
233	From Perylene Diimide Polymers to <scp>Fusedâ€Ring</scp> Electron Acceptors: A <scp>15â€Year</scp> Exploration Journey of Nonfullerene Acceptors. Chinese Journal of Chemistry, 2022, 40, 1592-1607.	4.9	25
234	Synthesis of a soluble conjugated copolymer based on dialkyl-substituted dithienothiophene and its application in photovoltaic cells. Polymer, 2009, 50, 3595-3599.	3.8	24

#	Article	IF	Citations
235	Inverse Optical Cavity Design for Ultrabroadband Light Absorption Beyond the Conventional Limit in Lowâ€Bandgap Nonfullerene Acceptorâ€“Based Solar Cells. Advanced Energy Materials, 2019, 9, 1900463.	19.5	24
236	Icing on the cake: combining a dual PEG-functionalized pillararene and an A-D-A small molecule photosensitizer for multimodal phototherapy. Science China Chemistry, 2022, 65, 1134-1141.	8.2	24
237	Large third-order nonlinear optical response of a conjugated copolymer consisting of 2,5-diethynylthiophene and carbazole units. Chemical Physics Letters, 2001, 343, 493-498.	2.6	23
238	Solvent-vapor induced self-assembly of a conjugated polymer: A correlation between solvent nature and transistor performance. Organic Electronics, 2012, 13, 2372-2378.	2.6	23
239	Worldwide outdoor round robin study of organic photovoltaic devices and modules. Solar Energy Materials and Solar Cells, 2014, 130, 281-290.	6.2	23
240	Conjugated polymers with deep LUMO levels for field-effect transistors and polymerâ€“polymer solar cells. Journal of Materials Chemistry C, 2015, 3, 8255-8261.	5.5	23
241	Reducing <scp>V_{OC}</scp> loss via structure compatible and high <scp>lowest unoccupied molecular orbital</scp> nonfullerene acceptors for over 17%â€efficiency ternary organic photovoltaics. EcoMat, 2020, 2, e12061.	11.9	23
242	Uncovering the out-of-plane nanomorphology of organic photovoltaic bulk heterojunction by GTSAXS. Nature Communications, 2021, 12, 6226.	12.8	23
243	Transition metal acetylide catalysts for polymerization of alkynes. Journal of Molecular Catalysis A, 2001, 169, 27-31.	4.8	22
244	Transition metal acetylide catalysts for polymerization of alkynes. Journal of Molecular Catalysis A, 2001, 169, 63-66.	4.8	22
245	Triple stimuli-responsive crosslinked polymeric nanoparticles for controlled release. RSC Advances, 2014, 4, 35757.	3.6	22
246	Monodisperse macromolecules based on benzodithiophene and diketopyrrolopyrrole with strong NIR absorption and high mobility. Journal of Materials Chemistry C, 2016, 4, 3781-3791.	5.5	22
247	Small molecule donors based on benzodithiophene and diketopyrrolopyrrole compatible with both fullerene and non-fullerene acceptors. Journal of Materials Chemistry C, 2018, 6, 5843-5848.	5.5	22
248	Unveiling the crystalline packing of Y6 in thin films by thermally induced â€œbackbone-onâ€•orientation. Journal of Materials Chemistry A, 2021, 9, 17030-17038.	10.3	22
249	Poly(p-diethynylbenzene) Derivatives for Nonlinear Optics. Macromolecular Rapid Communications, 2001, 22, 358-362.	3.9	21
250	Enhancing Efficiency and Stability of Organic Solar Cells by UV Absorbent. Solar Rrl, 2017, 1, 1700148.	5.8	21
251	n-Type organic light-emitting transistors with high mobility and improved air stability. Journal of Materials Chemistry C, 2018, 6, 535-540.	5.5	21
252	Highâ€Performance Nonfullerene Organic Solar Cells with Unusual Inverted Structure. Solar Rrl, 2020, 4, 2000115.	5.8	21

#	Article	IF	Citations
253	Structural regulation of thiophene-fused benzotriazole as a â€œÏ€-bridgeâ€•for A-Ï€-D-Ï€-A type acceptor:P3HT-based OSCs to achieve high efficiency. Journal of Materials Chemistry A, 2021, 9, 6520-6528.	10.3	21
254	Evolved Phase Separation toward Balanced Charge Transport and High Efficiency in Polymer Solar Cells. ACS Applied Materials & Interfaces, 2011, 3, 3646-3653.	8.0	20
255	Synthesis and photovoltaic properties of copolymers based on bithiophene and bithiazole. Journal of Polymer Science Part A, 2011, 49, 2746-2754.	2.3	20
256	Enhancing the organic thin-film transistor performance of diketopyrrolopyrroleâ€“benzodithiophene copolymers via the modification of both conjugated backbone and side chain. Polymer Chemistry, 2015, 6, 5369-5375.	3.9	20
257	Comparison of conventional and inverted structures in fullerene-free organic solar cells. Journal of Energy Chemistry, 2015, 24, 744-749.	12.9	20
258	Electron-transporting third component modifying cathode for simplified inverted ternary blend solar cells. Journal of Materials Chemistry C, 2016, 4, 1051-1056.	5.5	20
259	Fine-tuning solid state packing and significantly improving photovoltaic performance of conjugated polymers through side chain engineering via random polymerization. Journal of Materials Chemistry A, 2017, 5, 5585-5593.	10.3	20
260	Highly Conjugated, Fused-Ring, Quadrupolar Organic Chromophores with Large Two-Photon Absorption Cross-Sections in the Near-Infrared. Journal of Physical Chemistry A, 2020, 124, 4367-4378.	2.5	20
261	Intrinsically inert hyperbranched interlayer for enhanced stability of organic solar cells. Science Bulletin, 2022, 67, 171-177.	9.0	20
262	Polymerization ofp-diethynylbenzene and its derivatives with nickelocene acetylide catalysts containing different phosphine and alkynyl ligands. Macromolecular Rapid Communications, 2000, 21, 1263-1266.	3.9	19
263	Polymerization of Substituted Acetylenes Carrying Non-Polar and Polar Groups with Transition Metal Acetylide Catalysts. Macromolecular Rapid Communications, 2001, 22, 530-534.	3.9	19
264	Comparative studies of the geometric and electronic properties of 1,1-disubstituted-2,3,4,5-tetraphenylsiloles and 1,1,2,2-tetramethyl-3,4,5,6-tetraphenyl-1,2-disila-3,5-cyclohexadiene. Journal of Materials Chemistry, 2006, 16, 3814-3822.	6.7	19
265	A conjugated polymer based on 5,5â€²-bibenzo[c][1,2,5]thiadiazole for high-performance solar cells. Journal of Materials Chemistry, 2012, 22, 3432.	6.7	19
266	Perylene diimide copolymers with dithienothiophene and dithienopyrrole: Use in nâ€channel and ambipolar fieldâ€effect transistors. Journal of Polymer Science Part A, 2013, 51, 1550-1558.	2.3	19
267	Constructing Dâ€“A copolymers based on thiophene-fused benzotriazole units containing different alkyl side-chains for non-fullerene polymer solar cells. Journal of Materials Chemistry C, 2017, 5, 8179-8186.	5.5	19
268	Perylene and naphthalene diimide copolymers for allâ€polymer solar cells: Effect of perylene/naphthalene ratio. Journal of Polymer Science Part A, 2017, 55, 682-689.	2.3	19
269	Facile synthesis of high-performance nonfullerene acceptor isomers via a one stone two birds strategy. Journal of Materials Chemistry A, 2019, 7, 20667-20674.	10.3	19
270	Enhancing the J_{SC} of P3HT-Based OSCs via a Thiophene-Fused Aromatic Heterocycle as a â€œÏ€-Bridgeâ€•for Aâ€²Ï€â€“Dâ€²Ï€â€“A-Type Acceptors. ACS Applied Materials & Interfaces, 2019, 11, 26005-26016.	8.0	19

#	Article	IF	Citations
271	Non-fullerene acceptors inaugurating a new era of organic photovoltaic research and technology. Materials Chemistry Frontiers, 2019, 3, 180-180.	5.9	19
272	Effect of the Energy Offset on the Charge Dynamics in Nonfullerene Organic Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 43984-43991.	8.0	19
273	Integrated Perovskite/Organic Photovoltaics with Ultrahigh Photocurrent and Photoresponse Approaching 1000â€‰nm. Solar Rrl, 2020, 4, 2000140.	5.8	19
274	A Novel Bipolar Electroluminescent Poly(arylene ethynylene) Consisting of Carbazole and Diethynylthiophene Units. Macromolecular Chemistry and Physics, 2001, 202, 2341-2345.	2.2	18
275	Large and ultrafast third-order optical nonlinearity of novel copolymers containing fluorene and tetraphenyldiaminobiphenyl units in backbones. Chemical Physics Letters, 2001, 350, 99-105.	2.6	18
276	Physicochemical, self-assembly and field-effect transistor properties of anti- and syn- thienoacene isomers. Journal of Materials Chemistry, 2011, 21, 11335.	6.7	18
277	High-mobility, air stable bottom-contact n-channel thin film transistors based on N,Nâ€²-ditridecyl perylene diimide. Applied Physics Letters, 2013, 103, .	3.3	18
278	Cracking perylene diimide backbone for fullerene-free polymer solar cells. Dyes and Pigments, 2016, 128, 226-234.	3.7	18
279	Z-Shaped Fused-Chrysene Electron Acceptors for Organic Photovoltaics. ACS Applied Materials & Interfaces, 2019, 11, 33006-33011.	8.0	18
280	High-performance NIR-sensitive fused tetrathienoacene electron acceptors. Journal of Materials Chemistry A, 2020, 8, 3011-3017.	10.3	18
281	Charge separation boosts exciton diffusion in fused ring electron acceptors. Journal of Materials Chemistry A, 2020, 8, 23304-23312.	10.3	18
282	Thermally stable light-emitting polymers of substituted polyacetylenes. Thin Solid Films, 2000, 363, 126-129.	1.8	17
283	Synthesis, Self-Assembly and Solution-Processed Field-Effect Transistors of a Liquid Crystalline Bis(dithienothiophene) Derivative. Journal of Physical Chemistry C, 2009, 113, 16232-16237.	3.1	17
284	Transition metal acetylide catalysts for polymerization of polar alkynes. Catalysis Letters, 2000, 70, 79-82.	2.6	16
285	Transition metal acetylide catalysts for polymerization of alkynes. Journal of Molecular Catalysis A, 2001, 169, 57-62.	4.8	16
286	Photo- and electroluminescence properties of fluorene-based copolymers containing electron- or hole-transporting unit. Thin Solid Films, 2003, 440, 247-254.	1.8	16
287	Spirobifluorene-based acceptors for polymer solar cells: Effect of isomers. Dyes and Pigments, 2015, 123, 16-25.	3.7	16
288	Enhancing Open-Circuit Voltage of High-Efficiency Nonfullerene Ternary Solar Cells with a Star-Shaped Acceptor. ACS Applied Materials & Interfaces, 2020, 12, 50660-50667.	8.0	16

#	Article	IF	Citations
289	Narrow blue light-emitting diodes based on a copolymer consisting of fluorene and quinoline units. Synthetic Metals, 2003, 137, 1153-1154.	3.9	15
290	Synthesis, electron mobility, and electroluminescence of a polynorbornene-supported silole. Polymer, 2009, 50, 397-403.	3.8	15
291	Selfâ€Assembled Ï€â€Extended Condensed Benzothiophene Nanoribbons for Fieldâ€Effect Transistors. Chemistry - A European Journal, 2013, 19, 9771-9774.	3.3	15
292	N-acylated isoindigo based conjugated polymers for n-channel and ambipolar organic thin-film transistors. Dyes and Pigments, 2014, 109, 200-205.	3.7	15
293	Ternary Blending Driven Molecular Reorientation of Non-Fullerene Acceptor IDIC with Backbone Order. ACS Applied Energy Materials, 2020, 3, 10814-10822.	5.1	15
294	Effect of substituents on electronic properties, thin film structure and device performance of dithienothiopheneâ€“phenylene cooligomers. Thin Solid Films, 2009, 517, 2968-2973.	1.8	14
295	The photovoltaic behaviors of PPV- and PPE-type conjugated polymers featured with diketopyrrolopyrrole (DPP) units. Synthetic Metals, 2009, 159, 1991-1995.	3.9	14
296	Influence of Thiophene Moiety on the Excited State Properties of Pushâ€“Pull Chromophores. Journal of Physical Chemistry C, 2016, 120, 13922-13930.	3.1	14
297	Ladder-type nonacyclic indacenodithieno[3,2-b]indole for highly efficient organic field-effect transistors and organic photovoltaics. Journal of Materials Chemistry C, 2017, 5, 8988-8998.	5.5	14
298	Nonfullerene acceptor with strong near-infrared absorption for polymer solar cells. Dyes and Pigments, 2017, 137, 553-559.	3.7	14
299	Utilizing Difluorinated Thiophene Units To Improve the Performance of Polymer Solar Cells. Macromolecules, 2019, 52, 6523-6532.	4.8	14
300	All-polymer solar cells based on side-chain-isolated polythiophenes and poly(perylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td (diim	6.2	13
301	Transition metal acetylide catalysts for polymerization of p-diethynylbenzene 4. Journal of Molecular Catalysis A, 2002, 184, 139-145.	4.8	12
302	An oligothiophene dye with triphenylamine as side chains for efficient dye-sensitized solar cells. Organic Electronics, 2012, 13, 2395-2400.	2.6	12
303	A Dâ€“Aâ€“D swivel-cruciform oligothiophene based on 5,5â€²-bibenzothiadiazole. Journal of Materials Chemistry C, 2013, 1, 414-417.	5.5	12
304	Polymer Dots of Peryleneimide-Functionalized Polyethyleneimine: Facile Synthesis and Effective Fluorescent Sensing of Iron (III) Ions. Macromolecular Rapid Communications, 2016, 37, 2052-2056.	3.9	12
305	Ternary Blend Organic Solar Cells Based on P3HT/TT-TTPA/PC₆₁BM. Acta Chimica Sinica, 2015, 73, 252.	1.4	12
306	Towards High-Performance Semitransparent Organic Photovoltaics: Dual-Functional p-Type Soft Interlayer. ACS Nano, 2022, 16, 1231-1238.	14.6	12

#	Article	IF	Citations
307	Efficient Inverted Organic Solar Cells Based on a Fullerene Derivative-Modified Transparent Cathode. Materials, 2017, 10, 1064.	2.9	11
308	Impact of an electron withdrawing group on the thiophene-fused benzotriazole unit on the photovoltaic performance of the derived polymer solar cells. Dyes and Pigments, 2019, 166, 381-389.	3.7	11
309	Fused-ring electron acceptors in China. Science China Chemistry, 2020, 63, 1179-1181.	8.2	11
310	An Alkoxyâ€Solubilizing Decacyclic Electron Acceptor for Efficient Ecofriendly Asâ€Cast Bladeâ€Coated Organic Solar Cells. Solar Rrl, 2020, 4, 2000108.	5.8	11
311	Enhancing organic photovoltaic performance with 3D-transport dual nonfullerene acceptors. Journal of Materials Chemistry A, 2022, 10, 1948-1955.	10.3	11
312	A round robin study of polymer solar cells and small modules across China. Solar Energy Materials and Solar Cells, 2013, 117, 382-389.	6.2	10
313	Solvent-resistant small molecule solar cells by roll-to-roll fabrication via introduction of azide cross-linkable group. Synthetic Metals, 2014, 195, 299-305.	3.9	10
314	Comparison of Fused-Ring Electron Acceptors with One- and Multidimensional Conformations. ACS Applied Materials & Interfaces, 2020, 12, 23976-23983.	8.0	10
315	A thiophene-fused benzotriazole unit as a â€œÏ€-bridgeâ€•in A-Ï€-D-Ï€-A type acceptor to achieve more balanced JSC and VOC for OSCs. Organic Electronics, 2020, 82, 105705.	2.6	10
316	Enhancing photovoltaic performance via aggregation dynamics control in fusedâ€ring electron acceptor. Aggregate, 2021, 2, e29.	9.9	10
317	A Novel, Weakly Nâ€Doped Cathodeâ€Modifying Layer in Organic Solar Cells. Energy Technology, 2021, 9, 2100281.	3.8	10
318	Polymerization of p-diethynylbenzene catalyzed by (Ï€-C5H5)(PPh3)Ni(Cî†CC6H4Cî†CH). European Polymer Journal, 2001, 37, 1649-1654.	5.4	9
319	Synthesis and fluorescence study of a pyrene-functionalized poly(4-vinylpyridine) quaternary ammonium for detection of DNA hybridization. Polymer, 2013, 54, 1289-1294.	3.8	9
320	Triple stimuli-responsive polymers based on pyrene-functionalized poly(dimethylaminoethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 T Science, 2014, 292, 2735-2744.	2.1	9
321	Pairing 1D/2D-conjugation donors/acceptors towards high-performance organic solar cells. Materials Chemistry Frontiers, 2019, 3, 276-283.	5.9	9
322	Designing a thiophene-fused quinoxaline unit to build Dâ€“A copolymers for non-fullerene organic solar cells. Dyes and Pigments, 2020, 174, 108022.	3.7	9
323	Effects of Ï€-Bridge on Fused-Ring Electron Acceptor Dimers. ACS Applied Polymer Materials, 2021, 3, 23-29.	4.4	9
324	Effects of Side Chains in Third Components on the Performance of Fused-Ring Electron-Acceptor-Based Ternary Organic Solar Cells. Energy & Fuels, 2021, 35, 19055-19060.	5.1	9

#	Article	IF	Citations
325	Revealing the Sole Impact of Acceptor's Molecular Conformation to Energy Loss and Device Performance of Organic Solar Cells through Positional Isomers. Advanced Science, 2022, 9, e2103428.	11.2	9
326	Electrical properties and spectroscopic studies of HClO4-doped poly(p-diethynylbenzene). Synthetic Metals, 1998, 94, 249-253.	3.9	8
327	A carboxylic acidâ€functionalized polyfluorene as fluorescent probe for protein sensing. Journal of Applied Polymer Science, 2011, 121, 3541-3546.	2.6	8
328	Synthesis and Fluorescence Study of a Quaternized Copolymer Containing Pyrene for DNAâ€Hybridization Detection. ChemPhysChem, 2012, 13, 4099-4104.	2.1	8
329	Hybrid molecular nanostructures with donor-acceptor chains. Science China Chemistry, 2013, 56, 124-130.	8.2	8
330	Designing a thiophene-fused benzoxadizole as an acceptor to build a narrow bandgap polymer for all-polymer solar cells. RSC Advances, 2017, 7, 19990-19995.	3.6	8
331	Effects of Fluorination Position on Fusedâ€Ring Electron Acceptors. Small Structures, 2020, 1, 2000006.	12.0	8
332	Effects of alkoxylation position on fused-ring electron acceptors. Journal of Materials Chemistry C, 2020, 8, 15128-15134.	5.5	8
333	Effects of linking units on fused-ring electron acceptor dimers. Journal of Materials Chemistry A, 2020, 8, 13735-13741.	10.3	8
334	Precise Synthesis of Fused Decacyclic Electron Acceptor Isomers for Organic Solar Cells. Solar Rrl, 2021, 5, 2100163.	5.8	8
335	Effect of Substitution of Crown Ether on the Luminescence Performances of PPV. Journal of Physical Chemistry B, 2002, 106, 10618-10621.	2.6	7
336	Vibration and X-ray photoelectron spectroscopies of FeCl3-doped poly(p-diethynylbenzene). European Polymer Journal, 2002, 38, 2057-2061.	5.4	7
337	Polymer light-emitting electrochemical cell based on a novel poly(aryleneethynylene) consisting of ethynylfluorene and tetraphenyldiaminobiphenyl units. Polymers for Advanced Technologies, 2004, 15, 70-74.	3.2	7
338	Detection of DNA hybridization by a pyrene-labeled polyelectrolyte prepared byÂATRP. Polymer, 2013, 54, 297-302.	3.8	7
339	Conformation Diversity of a Fusedâ€Ring Pyrazine Derivative on Au(111) and Highly Ordered Pyrolytic Graphite. Chemistry - an Asian Journal, 2015, 10, 1311-1317.	3.3	7
340	Synthesis of an octathienyl-fused phthalocyanine as a donor material for organic solar cells. Dyes and Pigments, 2015, 114, 124-128.	3.7	7
341	A novel hole extraction layer to enhance the performance of inverted organic solar cells. Journal of Materials Chemistry A, 2017, 5, 25385-25390.	10.3	7
342	Fluorinated Thieno[2â€²,3â€²:4,5]benzo[1,2-d][1,2,3]triazole: New Acceptor Unit To Construct Polymer Donors. ACS Omega, 2018, 3, 13894-13901.	3.5	7

#	Article	IF	Citations
343	Fused thienobenzene-thienothiophene electron acceptors for organic solar cells. Journal of Energy Chemistry, 2019, 37, 58-65.	12.9	7
344	Synthesis and characterization of processible electroluminescent poly[(2,7-diethynyl-9,9-di-2-ethylhexylfluorene)- alt - co -(2,5-thienylene)]. Synthetic Metals, 2001, 124, 323-327.	3.9	6
345	Highly efficient, thermally stable and optically transparent third-order nonlinear optical copolymers consisting of fluorene and quinoxaline/quinoline units. Applied Physics A: Materials Science and Processing, 2003, 77, 375-378.	2.3	6
346	Fluorescence study of interaction between an anionic conjugated polyelectrolyte and bovine serum albumin. Polymer Bulletin, 2011, 67, 1907-1915.	3.3	6
347	Effect of electron-withdrawing units on triphenylamine-based small molecules for solution-processed organic solar cells. Science China Chemistry, 2015, 58, 331-338.	8.2	6
348	Organic dyes based on triphenylamine for dye-sensitized solar cells: Structureâ€“property relationships. Journal of Energy Chemistry, 2016, 25, 615-620.	12.9	6
349	Bayâ€annulated indigo based nearâ€infrared sensitive polymer for organic solar cells. Journal of Polymer Science Part A, 2018, 56, 213-220.	2.3	6
350	Isomeric Effect in Unidirectionally Extended Fused-Ring Electron Acceptors. Chemistry of Materials, 2021, 33, 441-451.	6.7	6
351	Vibration and photoelectron spectroscopies of iodine-doped poly(p-diethynylbenzene). European Polymer Journal, 2002, 38, 2349-2353.	5.4	5
352	New roles of fused-ring electron acceptors in organic solar cells. Journal of Materials Chemistry A, 2019, 7, 4766-4770.	10.3	5
353	Simultaneous polymerization and formation of polyphenylacetylene film by Nd(P204)3â€“Fe(AA)3â€“Al(i-Bu)3 combined catalyst system. Journal of Polymer Science Part A, 1995, 33, 1873-1879.	2.3	4
354	A new random D-A copolymer based on two different benzotriazole units as co-acceptors for polymer solar cells. Polymer, 2018, 139, 123-129.	3.8	4
355	Molecular Tuning of Titanium Complexes with Controllable Work Function for Efficient Organic Photovoltaics. Journal of Physical Chemistry C, 2019, 123, 20800-20807.	3.1	4
356	Pyrrolo[3,2-b]pyrrole-based fused-ring electron acceptors with strong near-infrared absorption beyond 1000Ânm. Dyes and Pigments, 2021, 195, 109705.	3.7	4
357	The Impact of Benzothiadiazole on the Optoelectronic Performance of Polymer/PC ₇₁ BM Blend Films and Their Application in NIR Phototransistors. Advanced Electronic Materials, 0, , 2101297.	5.1	4
358	Solar Cells: A Starâ€Shaped Perylene Diimide Electron Acceptor for Highâ€Performance Organic Solar Cells (Adv. Mater. 30/2014). Advanced Materials, 2014, 26, 5224-5224.	21.0	3
359	A new perspective for organic solar cells: triplet nonfullerene acceptors. Science China Chemistry, 2018, 61, 637-638.	8.2	3
360	Designing an Organic Acceptor with Unsymmetrical Structure Based on Rhodanine and Thiazolidine-2, 4-dione Units to Study the Structureâ€“Property Relationship. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2019, 35, 257-267.	4.9	3

#	Article	IF	Citations
361	Effects of Terminal Groups in Third Components on Performance of Organic Solar Cells. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2019, 35, 275-283.	4.9	3
362	Effect of Molecular Symmetry on Fusedâ€Ring Electron Acceptors. Solar Rrl, 2022, 6, 2100797.	5.8	3
363	Title is missing!. Catalysis Letters, 2002, 80, 59-61.	2.6	2
364	Photoswitches: High Performance Photoswitches Based on Flexible and Amorphous Dâ€“A Polymer Nanowires (Small 2/2013). Small, 2013, 9, 166-166.	10.0	2
365	Tandem Organic Solar Cells: Nonfullerene Tandem Organic Solar Cells with High Open-Circuit Voltage of 1.97 V (Adv. Mater. 44/2016). Advanced Materials, 2016, 28, 9870-9870.	21.0	2
366	Convenient fabrication of conjugated polymer semiconductor nanotubes and their application in organic electronics. Royal Society Open Science, 2018, 5, 180868.	2.4	2
367	Transparent Solar Cells: Light Harvesting at Oblique Incidence Decoupled from Transmission in Organic Solar Cells Exhibiting 9.8% Efficiency and 50% Visible Light Transparency (Adv. Energy Mater.) Tj ETQq1 1 0.784314 rgBT /Over	19.8	1
368	Poly(p-diethynylbenzene) Derivatives for Nonlinear Optics. Macromolecular Rapid Communications, 2001, 22, 358-362.	3.9	1
369	Effects of Thieno[3,2-b]thiophene Number on Narrow-Bandgap Fused-Ring Electron Acceptors. Chinese Journal of Polymer Science (English Edition), 0, , .	3.8	1
370	Macromol. Chem. Phys. 5/2011. Macromolecular Chemistry and Physics, 2011, 212, .	2.2	0
371	Nanomaterials for Energy at Peking University. Advanced Energy Materials, 2016, 6, .	19.5	0