Han Young Woo

List of Publications by Year
in descending order

321 papers	15,543 citations	16451 64 h-index	26613 107 g-index
326 all docs	326 docs citations	326 times ranked	8261 citing authors

#	Article	IF	Citations
1	Semi-crystalline photovoltaic polymers with efficiency exceeding 9% in a â¼300 nm thick conventional single-cell device. Energy and Environmental Science, 2014, 7, 3040-3051.	30.8	600
2	Ecoâ€Compatible Solventâ€Processed Organic Photovoltaic Cells with Over 16% Efficiency. Advanced Materials, 2019, 31, e1903441.	21.0	445
3	Achieving Highly Efficient Nonfullerene Organic Solar Cells with Improved Intermolecular Interaction and Openâ€Circuit Voltage. Advanced Materials, 2017, 29, 1700254.	21.0	363
4	Determining the Role of Polymer Molecular Weight for High-Performance All-Polymer Solar Cells: Its Effect on Polymer Aggregation and Phase Separation. Journal of the American Chemical Society, 2015, 137, 2359-2365.	13.7	347
5	Highly Efficient Fullereneâ€Free Polymer Solar Cells Fabricated with Polythiophene Derivative. Advanced Materials, 2016, 28, 9416-9422.	21.0	303
6	Highâ€Performance Allâ€Polymer Solar Cells Via Sideâ€Chain Engineering of the Polymer Acceptor: The Importance of the Polymer Packing Structure and the Nanoscale Blend Morphology. Advanced Materials, 2015, 27, 2466-2471.	21.0	279
7	Dopantâ€Free Smallâ€Molecule Holeâ€Transporting Material for Inverted Perovskite Solar Cells with Efficiency Exceeding 21%. Advanced Materials, 2019, 31, e1902781.	21.0	268
8	High Efficiency (15.8%) All-Polymer Solar Cells Enabled by a Regioregular Narrow Bandgap Polymer Acceptor. Journal of the American Chemical Society, 2021, 143, 2665-2670.	13.7	245
9	Morphology Control Enables Efficient Ternary Organic Solar Cells. Advanced Materials, 2018, 30, e1803045.	21.0	243
10	Approaching 18% efficiency of ternary organic photovoltaics with wide bandgap polymer donor and well compatible Y6â€‰:â€‰Y6-1O as acceptor. National Science Review, 2021, 8, nwaa305.	9.5	216
11	Recent advances in organic luminescent materials with narrowband emission. NPG Asia Materials, 2021, 13, .	7.9	209
12	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
13	A High Efficiency Nonfullerene Organic Solar Cell with Optimized Crystalline Organizations. Advanced Materials, 2016, 28, 910-916.	21.0	179
14	(Semi)ladder-Type Bithiophene Imide-Based All-Acceptor Semiconductors: Synthesis, Structureâ€“Property Correlations, and Unipolar n-Type Transistor Performance. Journal of the American Chemical Society, 2018, 140, 6095-6108.	13.7	178
15	Multiâ€Charged Conjugated Polyelectrolytes as a Versatile Work Function Modifier for Organic Electronic Devices. Advanced Functional Materials, 2014, 24, 1100-1108.	14.9	170
16	Solutionâ€Processed Organic Solar Cells with High Openâ€Circuit Voltage of 1.3 V and Low Nonâ€Radiative Voltage Loss of 0.16 V. Advanced Materials, 2020, 32, e2002122.	21.0	168
17	Benzotriazole-Containing Planar Conjugated Polymers with Noncovalent Conformational Locks for Thermally Stable and Efficient Polymer Field-Effect Transistors. Chemistry of Materials, 2014, 26, 2147-2154.	6.7	167
18	Cationic Conjugated Polyelectrolytes-Triggered Conformational Change of Molecular Beacon Aptamer for Highly Sensitive and Selective Potassium Ion Detection. Journal of the American Chemical Society, 2012, 134, 3133-3138.	13.7	162

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19	Side Chain Optimization of Naphthalenediimideâ€“Bithiopheneâ€Based Polymers to Enhance the Electron Mobility and the Performance in Allâ€Polymer Solar Cells. Advanced Functional Materials, 2016, 26, 1543-1553.	14.9	155
20	Highâ€Performance Allâ€Polymer Solar Cells Enabled by an nâ€Type Polymer Based on a Fluorinated Imideâ€Functionalized Arene. Advanced Materials, 2019, 31, e1807220.	21.0	154
21	Effects of Bithiophene Imide Fusion on the Device Performance of Organic Thinâ€Film Transistors and Allâ€Polymer Solar Cells. Angewandte Chemie - International Edition, 2017, 56, 15304-15308.	13.8	152
22	Transition metal-catalysed molecular n-doping of organic semiconductors. Nature, 2021, 599, 67-73.	27.8	152
23	Interplay of Intramolecular Noncovalent Coulomb Interactions for Semicrystalline Photovoltaic Polymers. Chemistry of Materials, 2015, 27, 5997-6007.	6.7	150
24	Eco-Friendly Polymer Solar Cells: Advances in Green-Solvent Processing and Material Design. ACS Nano, 2020, 14, 14493-14527.	14.6	150
25	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
26	Over 17% Efficiency Binary Organic Solar Cells with Photoresponses Reaching 1000 nm Enabled by Selenophene-Fused Nonfullerene Acceptors. ACS Energy Letters, 2021, 6, 9-15.	17.4	141
27	Cyano-Functionalized Bithiophene Imide-Based n-Type Polymer Semiconductors: Synthesis, Structureâ€“Property Correlations, and Thermoelectric Performance. Journal of the American Chemical Society, 2021, 143, 1539-1552.	13.7	134
28	Conjugated Polymerâ€“Assisted Grain Boundary Passivation for Efficient Inverted Planar Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1808855.	14.9	133
29	A Synergistic Strategy of Manipulating the Number of Selenophene Units and Dissymmetric Central Core of Small Molecular Acceptors Enables Polymer Solar Cells with 17.5â€‰% Efficiency. Angewandte Chemie - International Edition, 2021, 60, 19241-19252.	13.8	129
30	Recent progress in indoor organic photovoltaics. Nanoscale, 2020, 12, 5792-5804.	5.6	126
31	Multiâ€Selenopheneâ€Containing Narrow Bandgap Polymer Acceptors for Allâ€Polymer Solar Cells with over 15â€‰% Efficiency and High Reproducibility. Angewandte Chemie - International Edition, 2021, 60, 15935-15943.	13.8	125
32	Progress in Materials, Solution Processes, and Longâ€Term Stability for Largeâ€Area Organic Photovoltaics. Advanced Materials, 2020, 32, e2002217.	21.0	124
33	Rational compatibility in a ternary matrix enables all-small-molecule organic solar cells with over 16% efficiency. Energy and Environmental Science, 2021, 14, 3945-3953.	30.8	124
34	Vertically optimized phase separation with improved exciton diffusion enables efficient organic solar cells with thick active layers. Nature Communications, 2022, 13, 2369.	12.8	122
35	A high-conductivity n-type polymeric ink for printed electronics. Nature Communications, 2021, 12, 2354.	12.8	120
36	Effects of Bithiophene Imide Fusion on the Device Performance of Organic Thinâ€Film Transistors and Allâ€Polymer Solar Cells. Angewandte Chemie, 2017, 129, 15506-15510.	2.0	115

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37	Asymmetric Acceptors Enabling Organic Solar Cells to Achieve an over 17% Efficiency: Conformation Effects on Regulating Molecular Properties and Suppressing Nonradiative Energy Loss. Advanced Energy Materials, 2021, 11, 2003177.	19.5	114
38	Over 17.7% efficiency ternary-blend organic solar cells with low energy-loss and good thickness-tolerance. Chemical Engineering Journal, 2022, 428, 129276.	12.7	110
39	Highâ€Performance Allâ€Polymer Solar Cells Enabled by nâ€Type Polymers with an Ultranarrow Bandgap Down to 1.28 eV. Advanced Materials, 2020, 32, e2001476.	21.0	103
40	Ternary Organic Solar Cells with Small Nonradiative Recombination Loss. ACS Energy Letters, 2019, 4, 1196-1203.	17.4	101
41	Smart Ternary Strategy in Promoting the Performance of Polymer Solar Cells Based on Bulkâ€Heterojunction or Layerâ€Byâ€Layer Structure. Small, 2022, 18, e2104215.	10.0	100
42	Over 18% ternary polymer solar cells enabled by a terpolymer as the third component. Nano Energy, 2022, 92, 106681.	16.0	97
43	Semicrystalline Dâ€“A Copolymers with Different Chain Curvature for Applications in Polymer Optoelectronic Devices. Macromolecules, 2014, 47, 1604-1612.	4.8	95
44	Stable Organic Diradicals Based on Fused Quinoidal Oligothiophene Imides with High Electrical Conductivity. Journal of the American Chemical Society, 2020, 142, 4329-4340.	13.7	95
45	Correlation between Phase-Separated Domain Sizes of Active Layer and Photovoltaic Performances in All-Polymer Solar Cells. Macromolecules, 2016, 49, 5051-5058.	4.8	93
46	Single Component Organic Solar Cells Based on Oligothiopheneâ€Fullerene Conjugate. Advanced Functional Materials, 2017, 27, 1702474.	14.9	91
47	Subtle Polymer Donor and Molecular Acceptor Design Enable Efficient Polymer Solar Cells with a Very Small Energy Loss. Advanced Functional Materials, 2020, 30, 1907570.	14.9	89
48	A Generally Applicable Approach Using Sequential Deposition to Enable Highly Efficient Organic Solar Cells. Small Methods, 2020, 4, 2000687.	8.6	86
49	Influence of Molecular Weight on the Organic Electrochemical Transistor Performance of Ladderâ€Type Conjugated Polymers. Advanced Materials, 2022, 34, e2106235.	21.0	86
50	Investigation of Charge Carrier Behavior in High Performance Ternary Blend Polymer Solar Cells. Advanced Energy Materials, 2016, 6, 1600637.	19.5	85
51	Hot slot die coating for additive-free fabrication of high performance roll-to-roll processed polymer solar cells. Energy and Environmental Science, 2018, 11, 3248-3255.	30.8	85
52	Ionic Dopant-Free Polymer Alloy Hole Transport Materials for High-Performance Perovskite Solar Cells. Journal of the American Chemical Society, 2022, 144, 9500-9509.	13.7	85
53	High-efficiency photovoltaic cells with wide optical band gap polymers based on fluorinated phenylene-alkoxybenzothiadiazole. Energy and Environmental Science, 2017, 10, 1443-1455.	30.8	84
54	Ternary Organic Photovoltaic Cells Exhibiting 17.59% Efficiency with Two Compatible Y6 Derivations as Acceptor. Solar Rrl, 2021, 5, 2100007.	5.8	81

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55	Extension of indacenodithiophene backbone conjugation enables efficient asymmetric Aâ€“Dâ€“A type non-fullerene acceptors. Journal of Materials Chemistry A, 2018, 6, 18847-18852.	10.3	80
56	Ultra-thick semi-crystalline photoactive donor polymer for efficient indoor organic photovoltaics. Nano Energy, 2019, 58, 466-475.	16.0	79
57	A Wide Bandgap Polymer with Strong Ï€â€“Ï€ Interaction for Efficient Fullereneâ€Free Polymer Solar Cells. Advanced Energy Materials, 2016, 6, 1600742.	19.5	76
58	Isogenous Asymmetricâ€“Symmetric Acceptors Enable Efficient Ternary Organic Solar Cells with Thin and 300Ânm Thick Active Layers Simultaneously. Advanced Functional Materials, 2022, 32, .	14.9	75
59	Recent Progress in Organic Thermoelectric Materials and Devices. Macromolecular Research, 2020, 28, 531-552.	2.4	74
60	Distannylated Bithiophene Imide: Enabling Highâ€Performance nâ€Type Polymer Semiconductors with an Acceptorâ€“Acceptor Backbone. Angewandte Chemie - International Edition, 2020, 59, 14449-14457.	13.8	72
61	Intramolecular Noncovalent Interactionâ€Enabled Dopantâ€Free Holeâ€Transporting Materials for Highâ€Performance Inverted Perovskite Solar Cells. Angewandte Chemie - International Edition, 2022, 61, e202113749.	13.8	72
62	Achieving 15.81% and 15.29% efficiency of all-polymer solar cells based on layer-by-layer and bulk heterojunction structures. Journal of Materials Chemistry A, 2022, 10, 13492-13499.	10.3	70
63	Highly efficient plasmonic organic optoelectronic devices based on a conducting polymer electrode incorporated with silver nanoparticles. Energy and Environmental Science, 2013, 6, 1949.	30.8	69
64	Ultraâ€Deepâ€Blue Aggregationâ€Induced Delayed Fluorescence Emitters: Achieving Nearly 16% EQE in Solutionâ€Processed Nondoped and Doped OLEDs with CIE_yÂ< 0.1. Advanced Functional Materials, 2021, 31, 2102588.	14.9	69
65	Insertion of chlorine atoms onto Ï€-bridges of conjugated polymer enables improved photovoltaic performance. Nano Energy, 2019, 58, 220-226.	16.0	67
66	Controlling Energy Levels and Blend Morphology for All-Polymer Solar Cells via Fluorination of a Naphthalene Diimide-Based Copolymer Acceptor. Macromolecules, 2016, 49, 6374-6383.	4.8	66
67	Engineering the morphology via processing additives in multiple all-polymer solar cells for improved performance. Journal of Materials Chemistry A, 2018, 6, 10421-10432.	10.3	65
68	Improved Performance in Polymer Solar Cells Using Mixed PC₆₁BM/PC₇₁BM Acceptors. Advanced Energy Materials, 2015, 5, 1401687.	19.5	63
69	Ethanol-Processable, Highly Crystalline Conjugated Polymers for Eco-Friendly Fabrication of Organic Transistors and Solar Cells. Macromolecules, 2017, 50, 4415-4424.	4.8	63
70	Indoor Organic Photovoltaics: Optimal Cell Design Principles with Synergistic Parasitic Resistance and Optical Modulation Effect. Advanced Energy Materials, 2021, 11, 2003103.	19.5	62
71	Efficient Conventionalâ€and Invertedâ€Type Photovoltaic Cells Using a Planar Alternating Polythiophene Copolymer. Chemistry - A European Journal, 2012, 18, 2551-2558.	3.3	61
72	A New Wide Bandgap Donor Polymer for Efficient Nonfullerene Organic Solar Cells with a Large Openâ€Circuit Voltage. Advanced Science, 2019, 6, 1901773.	11.2	61

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73	Fluorobenzotriazole (FTAZ)â€Based Polymer Donor Enables Organic Solar Cells Exceeding 12% Efficiency. Advanced Functional Materials, 2019, 29, 1808828.	14.9	61
74	Fused Bithiophene Imide Dimerâ€Based nâ€Type Polymers for Highâ€Performance Organic Electrochemical Transistors. Angewandte Chemie - International Edition, 2021, 60, 24198-24205.	13.8	60
75	Measuring the competition between bimolecular charge recombination and charge transport in organic solar cells under operating conditions. Energy and Environmental Science, 2018, 11, 3019-3032.	30.8	59
76	A universal processing additive for high-performance polymer solar cells. RSC Advances, 2017, 7, 7476-7482.	3.6	58
77	Ternary organic solar cells based on two compatible PDI-based acceptors with an enhanced power conversion efficiency. Journal of Materials Chemistry A, 2019, 7, 3552-3557.	10.3	58
78	N-type conjugated polymer as efficient electron transport layer for planar inverted perovskite solar cells with power conversion efficiency of 20.86%. Nano Energy, 2020, 68, 104363.	16.0	58
79	Over 16% efficiency all-polymer solar cells by sequential deposition. Science China Chemistry, 2022, 65, 1157-1163.	8.2	58
80	Significantly Improved Morphology and Efficiency of Nonhalogenated Solventâ€Processed Solar Cells Derived from a Conjugated Donorâ€“Acceptor Block Copolymer. Advanced Science, 2020, 7, 1902470.	11.2	55
81	Multifunctional Charge Transporting Materials for Perovskite Lightâ€Emitting Diodes. Advanced Materials, 2020, 32, e2002176.	21.0	55
82	Engineering of dendritic dopant-free hole transport molecules: enabling ultrahigh fill factor in perovskite solar cells with optimized dendron construction. Science China Chemistry, 2021, 64, 41-51.	8.2	55
83	Efficient Semitransparent Layerâ€byâ€Layer Organic Photovoltaics via Optimizing Wide Bandgap and Narrow Absorption Polymer Layer Thickness. Solar Rrl, 2022, 6, .	5.8	55
84	Imideâ€Functionalized Heteroareneâ€Based nâ€Type Terpolymers Incorporating Intramolecular Noncovalent Sulfurâˆ™â‹¯â‹¯Oxygen Interactions for Additiveâ€Free Allâ€Polymer Solar Cells. Advanced Functional Materials, 2019, 29, 1903970.	14.9	53
85	Narrowâ€Bandgap Singleâ€Component Polymer Solar Cells with Approaching 9% Efficiency. Advanced Materials, 2021, 33, e2101295.	21.0	53
86	Alkoxybenzothiadiazole-Based Fullerene and Nonfullerene Polymer Solar Cells with High Shunt Resistance for Indoor Photovoltaic Applications. ACS Applied Materials & Interfaces, 2018, 10, 3885-3894.	8.0	52
87	Efficient and Airâ€Stable Aqueousâ€Processed Organic Solar Cells and Transistors: Impact of Water Addition on Processability and Thinâ€Film Morphologies of Electroactive Materials. Advanced Energy Materials, 2018, 8, 1802674.	19.5	52
88	Asymmetric selenophene-based non-fullerene acceptors for high-performance organic solar cells. Journal of Materials Chemistry A, 2019, 7, 1435-1441.	10.3	52
89	Efficient Exciton Diffusion in Organic Bilayer Heterojunctions with Nonfullerene Small Molecular Acceptors. ACS Energy Letters, 2020, 5, 1628-1635.	17.4	52
90	Enhanced Efficiency and Long-Term Stability of Perovskite Solar Cells by Synergistic Effect of Nonhygroscopic Doping in Conjugated Polymer-Based Hole-Transporting Layer. ACS Applied Materials & Interfaces, 2017, 9, 43846-43854.	8.0	51

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91	A Planar Cyclopentadithiopheneâ€“Benzothiadiazole-Based Copolymer with sp²-Hybridized Bis(alkylsulfanyl)methylene Substituents for Organic Thermoelectric Devices. Macromolecules, 2018, 51, 3360-3368.	4.8	51
92	Facile Synthesis of Polycyclic Aromatic Hydrocarbon (PAH)â€“Based Acceptors with Fineâ€Tuned Optoelectronic Properties: Toward Efficient Additiveâ€Free Nonfullerene Organic Solar Cells. Advanced Energy Materials, 2019, 9, 1803976.	19.5	51
93	Layered optimization strategy enables over 17.8% efficiency of layer-by-layer organic photovoltaics. Chemical Engineering Journal, 2022, 442, 136368.	12.7	50
94	Quinoxalineâ€“thiophene based thick photovoltaic devices with an efficiency of â¼48%. Journal of Materials Chemistry A, 2016, 4, 9967-9976.	10.3	49
95	Putting Order into PM6:Y6 Solar Cells to Reduce the Langevin Recombination in 400â€‰nm Thick Junction. Solar Rrl, 2020, 4, 2000498.	5.8	49
96	Donor engineered Deep-Blue emitters for tuning luminescence mechanism in Solution-Processed OLEDs. Chemical Engineering Journal, 2021, 416, 129185.	12.7	49
97	Photocurrent Extraction Efficiency near Unity in a Thick Polymer Bulk Heterojunction. Advanced Functional Materials, 2016, 26, 3324-3330.	14.9	48
98	New M- and V-shaped perylene diimide small molecules for high-performance nonfullerene polymer solar cells. Chemical Communications, 2016, 52, 8873-8876.	4.1	48
99	Multiply Charged Conjugated Polyelectrolytes as a Multifunctional Interlayer for Efficient and Scalable Perovskite Solar Cells. Advanced Materials, 2020, 32, e2002333.	21.0	48
100	Highly stable photomultiplication-type organic photodetectors with single polymers containing intramolecular traps as the active layer. Journal of Materials Chemistry C, 2022, 10, 7822-7830.	5.5	47
101	Excellent Long-Term Stability of Power Conversion Efficiency in Non-Fullerene-Based Polymer Solar Cells Bearing Tricyanovinylene-Functionalized n-Type Small Molecules. ACS Applied Materials & Interfaces, 2017, 9, 8838-8847.	8.0	46
102	Synthesis and characterization of indeno[1,2-b]fluorene-based low bandgap copolymers for photovoltaic cells. Journal of Materials Chemistry, 2010, 20, 1577.	6.7	45
103	Facile one-pot polymerization of a fully conjugated donorâ€“acceptor block copolymer and its application in efficient single component polymer solar cells. Journal of Materials Chemistry A, 2019, 7, 21280-21289.	10.3	45
104	Heteroatom substitution-induced asymmetric Aâ€“Dâ€“A type non-fullerene acceptor for efficient organic solar cells. Journal of Energy Chemistry, 2020, 40, 144-150.	12.9	45
105	Spectroscopically tracking charge separation in polymerâ€‰:â€‰fullerene blends with a three-phase morphology. Energy and Environmental Science, 2015, 8, 2713-2724.	30.8	44
106	Conjugated Polyelectrolytes as Multifunctional Passivating and Holeâ€Transporting Layers for Efficient Perovskite Lightâ€Emitting Diodes. Advanced Materials, 2019, 31, e1900067.	21.0	44
107	Triimideâ€Functionalized nâ€Type Polymer Semiconductors Enabling Allâ€Polymer Solar Cells with Power Conversion Efficiencies Approaching 9%. Solar Rrl, 2019, 3, 1900107.	5.8	43
108	Achieving 17.5% efficiency for polymer solar cells via a donor and acceptor layered optimization strategy. Journal of Materials Chemistry C, 2022, 10, 5489-5496.	5.5	43

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109	Aqueous-Soluble Naphthalene Diimide-Based Polymer Acceptors for Efficient and Air-Stable All-Polymer Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 45038-45047.	8.0	42
110	Fluorine Substituted Bithiophene Imideâ€Based nâ€Type Polymer Semiconductor for Highâ€Performance Organic Thinâ€Film Transistors and Allâ€Polymer Solar Cells. Solar Rrl, 2019, 3, 1800265.	5.8	42
111	Toward Efficient All-Polymer Solar Cells via Halogenation on Polymer Acceptors. ACS Applied Materials & Interfaces, 2020, 12, 33028-33038.	8.0	42
112	Boosted Efficiency Over 18.1% of Polymer Solar Cells by Employing Large Extinction Coefficients Material as the Third Component. Macromolecular Rapid Communications, 2022, 43, e2200345.	3.9	42
113	Nonâ€Fullerene Organic Solar Cells Based on Benzo[1,2â€b:4,5â€bâ€²]difuranâ€Conjugated Polymer with 14% Efficiency. Advanced Functional Materials, 2020, 30, 1906809.	14.9	41
114	Highly Efficient Ternary Allâ€Polymer Solar Cells with Enhanced Stability. Advanced Functional Materials, 2021, 31, 2008494.	14.9	41
115	A Topâ€Down Strategy to Engineer ActiveLayer Morphology for Highly Efficient and Stable Allâ€Polymer Solar Cells. Advanced Materials, 2022, 34, .	21.0	41
116	Highâ€Performance Eightâ€Membered Indacenodithiopheneâ€Based Asymmetric Aâ€Dâ€A Type Nonâ€Fullerene Acceptors. Solar Rrl, 2019, 3, 1800246.	5.8	40
117	Quinoxaline-Based Wide Band Gap Polymers for Efficient Nonfullerene Organic Solar Cells with Large Open-Circuit Voltages. ACS Applied Materials & Interfaces, 2018, 10, 23235-23246.	8.0	39
118	Recent Advances in Nonfullerene Acceptorâ€Based Layerâ€byâ€Layer Organic Solar Cells Using a Solution Process. Advanced Science, 2022, 9, .	11.2	39
119	Synthesis and characterization of cyclopentadithiopheneâ€based low bandgap copolymers containing electronâ€deficient benzoselenadiazole derivatives for photovoltaic devices. Journal of Polymer Science Part A, 2010, 48, 1423-1432.	2.3	38
120	High performance polymer light-emitting diodes with N-type metal oxide/conjugated polyelectrolyte hybrid charge transport layers. Applied Physics Letters, 2011, 99, 163305.	3.3	38
121	Improved photovoltaic performance of a nonfullerene acceptor based on a benzo[b]thiophene fused end group with extended Ï€-conjugation. Journal of Materials Chemistry A, 2019, 7, 9822-9830.	10.3	38
122	Sky-Blue-Emissive Perovskite Light-Emitting Diodes: Crystal Growth and Interfacial Control Using Conjugated Polyelectrolytes as a Hole-Transporting Layer. ACS Nano, 2020, 14, 13246-13255.	14.6	38
123	Optimization of side chains in alkylthiothiophene-substituted benzo[1,2-b:4,5-bâ€²]dithiophene-based photovoltaic polymers. Polymer Chemistry, 2015, 6, 2752-2760.	3.9	37
124	Naphthobistriazole-based wide bandgap donor polymers for efficient non-fullerene organic solar cells: Significant fine-tuning absorption and energy level by backbone fluorination. Nano Energy, 2018, 53, 258-269.	16.0	37
125	Backbone Conformation Tuning of Carboxylate-Functionalized Wide Band Gap Polymers for Efficient Non-Fullerene Organic Solar Cells. Macromolecules, 2019, 52, 341-353.	4.8	37
126	Using Two Compatible Donor Polymers Boosts the Efficiency of Ternary Organic Solar Cells to 17.7%. Chemistry of Materials, 2021, 33, 7254-7262.	6.7	35

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127	Recent advances in n-type organic thermoelectric materials, dopants, and doping strategies. Journal of Materials Chemistry C, 2022, 10, 6114-6140.	5.5	35
128	Aqueous Soluble Fullerene Acceptors for Efficient Eco-Friendly Polymer Solar Cells Processed from Benign Ethanol/Water Mixtures. Chemistry of Materials, 2018, 30, 5663-5672.	6.7	34
129	Non-Fullerene Acceptor Doped Block Copolymer for Efficient and Stable Organic Solar Cells. ACS Energy Letters, 2022, 7, 2196-2202.	17.4	34
130	Asymmetric Aâ€“Dâ€“Ĩ€â€“A-type nonfullerene small molecule acceptors for efficient organic solar cells. Journal of Materials Chemistry A, 2019, 7, 19348-19354.	10.3	33
131	Achieving a High Fill Factor and Stability in Perylene Diimideâ€“Based Polymer Solar Cells Using the Molecular Lock Effect between 4,4â€²â€Bipyridine and a Tri(8â€hydroxyquinoline)aluminum(III) Core. Advanced Functional Materials, 2019, 29, 1902079.	14.9	33
132	Photophysical pathways in efficient bilayer organic solar cells: The importance of interlayer energy transfer. Nano Energy, 2021, 84, 105924.	16.0	33
133	Bichalcogenophene Imide-Based Homopolymers: Chalcogen-Atom Effects on the Optoelectronic Property and Device Performance in Organic Thin-Film Transistors. Macromolecules, 2019, 52, 7301-7312.	4.8	32
134	Organic photovoltaic cells with high efficiencies for both indoor and outdoor applications. Materials Chemistry Frontiers, 2021, 5, 893-900.	5.9	32
135	Biofilm development of Bacillus siamensis ATKU1 on pristine short chain low-density polyethylene: A case study on microbe-microplastics interaction. Journal of Hazardous Materials, 2021, 409, 124516.	12.4	32
136	High-efficiency organic solar cells enabled by an alcohol-washable solid additive. Science China Chemistry, 2021, 64, 2161-2168.	8.2	32
137	Conjugated Polyelectrolyte and Aptamer Based Potassium Assay via Singleâ€•and Twoâ€Step Fluorescence Energy Transfer with a Tunable Dynamic Detection Range. Advanced Functional Materials, 2014, 24, 1748-1757.	14.9	31
138	High-Performance Photomultiplication Photodiode with a 70 nm-Thick Active Layer Assisted by IDIC as an Efficient Molecular Sensitizer. ACS Applied Materials & Interfaces, 2019, 11, 21211-21217.	8.0	31
139	Degenerately Doped Semiâ€Crystalline Polymers for High Performance Thermoelectrics. Advanced Functional Materials, 2021, 31, 2006900.	14.9	31
140	Thiophene-benzothiadiazole based Dâ€“A₁â€“Dâ€“A₂ type alternating copolymers for polymer solar cells. Polymer Chemistry, 2017, 8, 3622-3631.	3.9	30
141	Head-to-Head Linked Dialkylbifuran-Based Polymer Semiconductors for High-Performance Organic Thin-Film Transistors with Tunable Charge Carrier Polarity. Chemistry of Materials, 2019, 31, 1808-1817.	6.7	30
142	Straight chain Dâ€“A copolymers based on thienothiophene and benzothiadiazole for efficient polymer field effect transistors and photovoltaic cells. Polymer Chemistry, 2016, 7, 4638-4646.	3.9	29
143	Synthesis and Characterization of Water-Soluble Conjugated Oligoelectrolytes for Near-Infrared Fluorescence Biological Imaging. ACS Applied Materials & Interfaces, 2016, 8, 15937-15947.	8.0	29
144	Cyano-Substituted Head-to-Head Polythiophenes: Enabling High-Performance n-Type Organic Thin-Film Transistors. ACS Applied Materials & Interfaces, 2019, 11, 10089-10098.	8.0	29

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145	Ferroelectric Polymer Drives Performance Enhancement of Nonâ€fullerene Organic Solar Cells. Angewandte Chemie - International Edition, 2022, 61, .	13.8	29
146	Intramolecular Chloroâ€“Sulfur Interaction and Asymmetric Sideâ€Chain Isomerization to Balance Crystallinity and Miscibility in Allâ€Smallâ€Molecule Solar Cells. Angewandte Chemie - International Edition, 2022, 61, .	13.8	29
147	Novel molecular triad exhibiting aggregation-induced emission and thermally activated fluorescence for efficient non-doped organic light-emitting diodes. Chemical Communications, 2019, 55, 9475-9478.	4.1	28
148	Imide-functionalized acceptorâ€“acceptor copolymers as efficient electron transport layers for high-performance perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 13754-13762.	10.3	28
149	Simultaneously improving the photovoltaic parameters of organic solar cells via isomerization of benzo[b]benzo[4,5]thieno[2,3-d]thiophene-based octacyclic non-fullerene acceptors. Journal of Materials Chemistry A, 2020, 8, 9684-9692.	10.3	28
150	Progress in morphology control from fullerene to nonfullerene acceptors for scalable high-performance organic photovoltaics. Journal of Materials Chemistry A, 2021, 9, 24729-24758.	10.3	28
151	Regulating the Aggregation of Unfused Nonâ€Fullerene Acceptors via Molecular Engineering towards Efficient Polymer Solar Cells. ChemSusChem, 2021, 14, 3579-3589.	6.8	28
152	Homogeneously Miscible Fullerene inducing Vertical Gradient in Perovskite Thinâ€Film toward Highly Efficient Solar Cells. Advanced Energy Materials, 2022, 12, .	19.5	28
153	Measurement of the Charge Carrier Mobility Distribution in Bulk Heterojunction Solar Cells. Advanced Materials, 2015, 27, 4989-4996.	21.0	27
154	Elucidating the Role of Conjugated Polyelectrolyte Interlayers for Highâ€Efficiency Organic Photovoltaics. ChemSusChem, 2015, 8, 3062-3068.	6.8	27
155	Two Regioisomeric Ï€â€Conjugated Small Molecules: Synthesis, Photophysical, Packing, and Optoelectronic Properties. Advanced Functional Materials, 2017, 27, 1701942.	14.9	27
156	Nonfullerene/Fullerene Acceptor Blend with a Tunable Energy State for High-Performance Ternary Organic Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 25570-25579.	8.0	27
157	Rational Molecular Design of Azaacene-Based Narrowband Green-Emitting Fluorophores: Modulation of Spectral Bandwidth and Vibronic Transitions. ACS Applied Materials & Interfaces, 2021, 13, 26227-26236.	8.0	27
158	Aryl-Annulated [3,2-a] Carbazole-Based Deep-Blue Soluble Emitters for High-Efficiency Solution-Processed Thermally Activated Delayed Fluorescence Organic Light-Emitting Diodes with CIEy <0.1. ACS Applied Materials & Interfaces, 2021, 13, 61454-61462.	8.0	27
159	The crucial role of intermolecular Ï€â€“Ï€ interactions in Aâ€“Dâ€“A-type electron acceptors and their effective modulation. Journal of Materials Chemistry A, 2018, 6, 2664-2670.	10.3	26
160	Achievement of high efficiency with extremely low efficiency roll-off in solution-processed thermally activated delayed fluorescence OLEDs manufactured using xanthone-based bipolar host materials. Journal of Materials Chemistry C, 2020, 8, 6780-6787.	5.5	26
161	Block copolymer compatibilizer for efficient and stable nonfullerene organic solar cells. Chemical Engineering Journal, 2022, 438, 135543.	12.7	26
162	Acid-functionalized fullerenes used as interfacial layer materials in inverted polymer solar cells. Organic Electronics, 2013, 14, 3138-3145.	2.6	25

#	Article	IF	Citations
163	2,1,3-Benzothiadiazole-5,6-dicarboxylicimide-Based Polymer Semiconductors for Organic Thin-Film Transistors and Polymer Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 42167-42178.	8.0	25
164	Influence of backbone modification of difluoroquinoxaline-based copolymers on the interchain packing, blend morphology and photovoltaic properties of nonfullerene organic solar cells. Journal of Materials Chemistry C, 2019, 7, 1681-1689.	5.5	25
165	2-(Benzothiazol-2-yl)pyren-1-ol, a new excited state intramolecular proton transfer-based fluorescent sensor for nitroaromatic compounds. Sensors and Actuators B: Chemical, 2019, 280, 298-305.	7.8	25
166	Optimization of Thermoelectric Properties of Polymers by Incorporating Oligoethylene Glycol Side Chains and Sequential Solution Doping with Preannealing Treatment. Macromolecules, 2020, 53, 7063-7072.	4.8	25
167	Rational design of a main chain conjugated copolymer having donorâ€“acceptor heterojunctions and its application in indoor photovoltaic cells. Journal of Materials Chemistry A, 2020, 8, 20091-20100.	10.3	25
168	Distannylated Bithiophene Imide: Enabling Highâ€Performance nâ€Type Polymer Semiconductors with an Acceptorâ€“Acceptor Backbone. Angewandte Chemie, 2020, 132, 14557-14565.	2.0	25
169	Cyano-substituted benzochalcogenadiazole-based polymer semiconductors for balanced ambipolar organic thin-film transistors. Polymer Chemistry, 2018, 9, 3873-3884.	3.9	24
170	Fluorine-Substituted Dithienylbenzodiimide-Based n-Type Polymer Semiconductors for Organic Thin-Film Transistors. ACS Applied Materials & Interfaces, 2019, 11, 35924-35934.	8.0	24
171	Systematic Optical Design of Constituting Layers to Realize Highâ€Performance Redâ€Selective Thinâ€Film Organic Photodiodes. Advanced Optical Materials, 2018, 6, 1701085.	7.3	23
172	Dithienothiapyran: An Excellent Donor Block for Building High-Performance Copolymers in Nonfullerene Polymer Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 3308-3316.	8.0	23
173	Explaining the Fillâ€Factor and Photocurrent Losses of Nonfullerene Acceptorâ€Based Solar Cells by Probing the Longâ€Range Charge Carrier Diffusion and Drift Lengths. Advanced Energy Materials, 2021, 11, 2100804.	19.5	23
174	Perylene diimide isomers containing a simple sp3-core for non-fullerene-based polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 663-671.	10.3	22
175	Drastic Effects of Fluorination on Backbone Conformation of Head-to-Head Bithiophene-Based Polymer Semiconductors. ACS Macro Letters, 2018, 7, 519-524.	4.8	22
176	A High Dielectric Nâ€Type Small Molecular Acceptor Containing Oligoethyleneglycol Sideâ€Chains for Organic Solar Cells. Chinese Journal of Chemistry, 2018, 36, 199-205.	4.9	22
177	Ternary Organic Photovoltaics Prepared by Sequential Deposition of Single Donor and Binary Acceptors. ACS Applied Materials & Interfaces, 2018, 10, 27757-27763.	8.0	22
178	Regioisomeric wide-band-gap polymers with different fluorine topologies for non-fullerene organic solar cells. Polymer Chemistry, 2019, 10, 395-402.	3.9	22
179	Semitransparent FAPbI_{3â€}_xBr_x Perovskite Solar Cells Stable under Simultaneous Damp Heat (85 Â°C/85%) and 1 Sun Light Soaking. Advanced Materials Technologies, 2019, 4, 1800390.	5.8	22
180	Aqueous-Alcohol-Processable High-Mobility Semiconducting Copolymers with Engineered Oligo(ethylene glycol) Side Chains. Chemistry of Materials, 2020, 32, 1111-1119.	6.7	22

#	Article	IF	Citations
181	Two Compatible Polymer Donors Enabling Ternary Organic Solar Cells with a Small Nonradiative Energy Loss and Broad Composition Tolerance. Solar Rrl, 2020, 4, 2000396.	5.8	22
182	A Synergistic Strategy of Manipulating the Number of Selenophene Units and Dissymmetric Central Core of Small Molecular Acceptors Enables Polymer Solar Cells with 17.5â€‰% Efficiency. Angewandte Chemie, 2021, 133, 19390-19401.	2.0	22
183	NIR-Absorbing Electron Acceptor Based on a Selenium-Heterocyclic Core Attaching to Phenylalkyl Side Chains for Polymer Solar Cells with 17.3% Efficiency. ACS Applied Materials & Interfaces, 2022, 14, 7082-7092.	8.0	22
184	Grapheneâ€Based Intrinsically Stretchable 2Dâ€Contact Electrodes for Highly Efficient Organic Lightâ€Emitting Diodes. Advanced Materials, 2022, 34, .	21.0	22
185	Carbazole linked phenylquinoline-based fullerene derivatives as acceptors for bulk heterojunction polymer solar cells: effect of interfacial contacts on device performance. Journal of Materials Chemistry A, 2014, 2, 6916.	10.3	21
186	Labelâ€Free, Electrochemical Quantitation of Potassium Ions from Femtomolar Levels. Chemistry - an Asian Journal, 2015, 10, 2169-2175.	3.3	21
187	Solvent-vapor-annealed Aâ€“Dâ€“A-type semicrystalline conjugated small molecules for flexible ambipolar field-effect transistors. Journal of Materials Chemistry C, 2018, 6, 5698-5706.	5.5	21
188	Closely Packed Polypyrroles via Ionic Cross-Linking: Correlation of Molecular Structureâ€“Morphologyâ€“Thermoelectric Properties. ACS Applied Materials & Interfaces, 2020, 12, 1110-1119.	8.0	21
189	High-Performance, Solution-Processable Thermally Activated Delayed Fluorescent Organic Light-Emitting Diodes Realized via the Adjustment of the Composition of the Organoboron Acceptor Monomer in Copolymer Host Materials. ACS Applied Materials & Interfaces, 2020, 12, 35300-35310.	8.0	21
190	Rational Design of Carbazole- and Carboline-Based Polymeric Host Materials for Realizing High-Efficiency Solution-Processed Thermally Activated Delayed Fluorescence Organic Light-Emitting Diode. ACS Applied Materials & Interfaces, 2020, 12, 8485-8494.	8.0	21
191	Synergistic effect of the selenophene-containing central core and the regioisomeric monochlorinated terminals on the molecular packing, crystallinity, film morphology, and photovoltaic performance of selenophene-based nonfullerene acceptors. Journal of Materials Chemistry C, 2021, 9, 1923-1935.	5.5	21
192	Novel V-Shaped Bipolar Host Materials for Solution-Processed Thermally Activated Delayed Fluorescence OLEDs. ACS Applied Materials & Interfaces, 2021, 13, 49076-49084.	8.0	21
193	Enhanced Electron Transfer Mediated by Conjugated Polyelectrolyte and Its Application to Washing-Free DNA Detection. Journal of the American Chemical Society, 2018, 140, 2409-2412.	13.7	20
194	Fine-tuned crystallinity of polymerized non-fullerene acceptor via molecular engineering towards efficient all-polymer solar cell. Chemical Engineering Journal, 2022, 428, 131232.	12.7	20
195	Observing Ion Motion in Conjugated Polyelectrolytes with Kelvin Probe Force Microscopy. Advanced Electronic Materials, 2017, 3, 1700005.	5.1	19
196	1,4-Di(3-alkoxy-2-thienyl)-2,5-difluorophenylene: A Building Block Enabling High-Performance Polymer Semiconductors with Increased Open-Circuit Voltages. Macromolecules, 2018, 51, 5352-5363.	4.8	19
197	Quantifying Quasiâ€Fermi Level Splitting and Openâ€Circuit Voltage Losses in Highly Efficient Nonfullerene Organic Solar Cells. Solar Rrl, 2021, 5, 2000649.	5.8	19
198	Backbone Coplanarity Tuning of 1,4-Di(3-alkoxy-2-thienyl)-2,5-difluorophenylene-Based Wide Bandgap Polymers for Efficient Organic Solar Cells Processed from Nonhalogenated Solvent. ACS Applied Materials & Interfaces, 2019, 11, 31119-31128.	8.0	18

#	Article	IF	Citations
199	Realizing high-efficiency Multiple blend polymer solar cells via a unique parallel-series working mechanism. Journal of Materials Chemistry A, 2019, 7, 24937-24946.	10.3	18
200	An excellent bipolar host material exhibiting EQE of 24.0% with small efficiency roll-off in solution-processable thermally activated delayed fluorescence OLEDs. Journal of Materials Chemistry C, 2019, 7, 13930-13938.	5.5	18
201	Terminal alkyl substitution in an Aâ€“Dâ€“A-type nonfullerene acceptor: simultaneous improvements in the open-circuit voltage and short-circuit current for efficient indoor power generation. Journal of Materials Chemistry A, 2020, 8, 23894-23905.	10.3	18
202	Selenium-containing two-dimensional conjugated fused-ring electron acceptors for enhanced crystal packing, charge transport, and photovoltaic performance. Journal of Materials Chemistry A, 2021, 9, 15665-15677.	10.3	18
203	Intramolecular Noncovalent Interactionâ€Enabled Dopantâ€Free Holeâ€Transporting Materials for Highâ€Performance Inverted Perovskite Solar Cells. Angewandte Chemie, 2022, 134, .	2.0	18
204	15.28% efficiency of conventional layer-by-layer all-polymer solar cells superior to bulk heterojunction or inverted cells. Chemical Engineering Journal, 2022, 450, 138146.	12.7	18
205	Impact of Terminal End-Group of Acceptorâ€“Donorâ€“Acceptor-type Small Molecules on Molecular Packing and Photovoltaic Properties. ACS Applied Materials & Interfaces, 2018, 10, 39952-39961.	8.0	17
206	Improved Interfacial Crystallization by Synergic Effects of Precursor Solution Stoichiometry and Conjugated Polyelectrolyte Interlayer for High Open-Circuit Voltage of Perovskite Photovoltaic Diodes. ACS Applied Materials & Interfaces, 2020, 12, 12328-12336.	8.0	17
207	Fluorinated Headâ€toâ€Head Dialkoxybithiophene: A New Electronâ€Donating Building Block for Highâ€Performance Polymer Semiconductors. Advanced Electronic Materials, 2018, 4, 1700519.	5.1	16
208	Chromenopyrazole-based bipolar host materials for solution-processable thermally activated delayed fluorescence OLEDs exhibiting high efficiency and low roll-off. Chemical Communications, 2019, 55, 12952-12955.	4.1	16
209	A-D-A Type Semiconducting Small Molecules with Bis(alkylsulfanyl)methylene Substituents and Control of Charge Polarity for Organic Field-Effect Transistors. ACS Applied Materials & Interfaces, 2020, 12, 41842-41851.	8.0	16
210	Triad-type, multi-functional compatibilizers for enhancing efficiency, stability and mechanical robustness of polymer solar cells. Journal of Materials Chemistry A, 2020, 8, 13522-13531.	10.3	16
211	Interfacial Defects Change the Correlation between Photoluminescence, Ideality Factor, and Openâ€Circuit Voltage in Perovskite Solar Cells. Small, 2021, 17, e2101839.	10.0	16
212	Cationic and Anionic Conjugated Polyelectrolytes: Aggregationâ€Mediated Fluorescence Energy Transfer to Dyeâ€Labeled DNA. Macromolecular Rapid Communications, 2008, 29, 1398-1402.	3.9	15
213	Benzodithiophene-thiophene-based photovoltaic polymers with different side-chains. Journal of Polymer Science Part A, 2015, 53, 854-862.	2.3	15
214	Pyrimidine-based bipolar host materials for high efficiency solution processed green thermally activated delayed fluorescence OLEDs. Journal of Materials Chemistry C, 2020, 8, 2196-2204.	5.5	15
215	Asymmetrically Alkylâ€Substituted Wideâ€Bandgap Nonfullerene Acceptor for Organic Solar Cells. Solar Rrl, 2020, 4, 2000061.	5.8	15
216	Ratiometric Fluorescent Ion Detection in Water with High Sensitivity via Aggregationâ€Mediated Fluorescence Resonance Energy Transfer Using a Conjugated Polyelectrolyte as an Optical Platform. Macromolecular Rapid Communications, 2013, 34, 772-778.	3.9	14

#	Article	IF	Citations
217	Universal polymeric bipolar hosts for highly efficient solution-processable blue and green thermally activated delayed fluorescence OLEDs. Journal of Materials Chemistry C, 2020, 8, 16048-16056.	5.5	14
218	Green-, Red-, and Near-Infrared-Emitting Polymer Dot Probes for Simultaneous Multicolor Cell Imaging with a Single Excitation Wavelength. Chemistry of Materials, 2020, 32, 6685-6696.	6.7	14
219	Nonhalogenated Solvent-Processed High-Performance Indoor Photovoltaics Made of New Conjugated Terpolymers with Optimized Monomer Compositions. ACS Applied Materials & Interfaces, 2021, 13, 13487-13498.	8.0	14
220	Completely foldable electronics based on homojunction polymer transistors and logics. Science Advances, 2021, 7, .	10.3	14
221	Fused Bithiophene Imide Dimerâ€Based nâ€Type Polymers for Highâ€Performance Organic Electrochemical Transistors. Angewandte Chemie, 2021, 133, 24400-24407.	2.0	14
222	Synergistic Effect of Multiâ€Walled Carbon Nanotubes and Ladderâ€Type Conjugated Polymers on the Performance of Nâ€Type Organic Electrochemical Transistors. Advanced Functional Materials, 2022, 32, 2106447.	14.9	14
223	Elastomeric Indoor Organic Photovoltaics with Superb Photothermal Endurance. Advanced Functional Materials, 2022, 32, .	14.9	14
224	A Nonconventional Approach to Patterned Nanoarrays of DNA Strands for Templateâ€Assisted Assembly of Polyfluorene Nanowires. Small, 2016, 12, 4254-4263.	10.0	13
225	Difluorobenzoxadiazoleâ€Based Polymer Semiconductors for Highâ€Performance Organic Thinâ€Film Transistors with Tunable Charge Carrier Polarity. Advanced Electronic Materials, 2017, 3, 1700100.	5.1	13
226	Efficient Fusedâ€Ring Extension of Aâ€“Dâ€“Aâ€Type Nonâ€Fullerene Acceptors by a Symmetric Replicating Core Unit Strategy. Chemistry - A European Journal, 2020, 26, 12411-12417.	3.3	13
227	Synthesis and Photovoltaic Properties of Alternating Conjugated Polymers Derived from Indeno[1,2â€b]fluorene and Bithiophene or Thieno[3,2â€b]thiopheneâ€Cored Benzothiadiazole. Macromolecular Chemistry and Physics, 2011, 212, 1193-1201.	2.2	12
228	Observation of ambipolar field-effect behavior in donorâ€“acceptor conjugated copolymers. Journal of Materials Chemistry, 2012, 22, 21238.	6.7	12
229	Conjugated Polyelectrolytes Bearing Various Ion Densities: Spontaneous Dipole Generation, Polingâ€Induced Dipole Alignment, and Interfacial Energy Barrier Control for Optoelectronic Device Applications. Advanced Materials, 2018, 30, e1706034.	21.0	12
230	Dicyanodistyrylbenzene-Based Copolymers for Ambipolar Organic Field-Effect Transistors with Well-Balanced Hole and Electron Mobilities. Macromolecules, 2018, 51, 8258-8267.	4.8	12
231	Importance of device structure and interlayer design in storage stability of naphthalene diimide-based all-polymer solar cells. Journal of Materials Chemistry A, 2020, 8, 3735-3745.	10.3	12
232	Design of ultra-high luminescent polymers for organic photovoltaic cells with low energy loss. Chemical Communications, 2021, 57, 9132-9135.	4.1	12
233	Ternary polymer solar cells with iridium-based polymer PM6Ir1 as a donor and N₃:ITIC-Th as an acceptor exhibiting over 17.2% efficiency. Sustainable Energy and Fuels, 2021, 5, 5825-5832.	4.9	12
234	Backbone Configuration and Electronic Property Tuning of Imideâ€Functionalized Ladderâ€Type Heteroarenesâ€Based Polymer Acceptors for Efficient Allâ€Polymer Solar Cells. Advanced Functional Materials, 2022, 32, .	14.9	12

#	Article	IF	Citations
235	Sideâ€Chain Substituents on Benzotriazoleâ€Based Polymer Acceptors Affecting the Performance of Allâ€Polymer Solar Cells. Macromolecular Rapid Communications, 2022, 43, e2200062.	3.9	12
236	Combination of conjugated polyelectrolytes and biomolecules: A new optical platform for highly sensitive and selective chemo- and biosensors. Macromolecular Research, 2014, 22, 461-473.	2.4	11
237	Principal factors that determine the extension of detection range in molecular beacon aptamer/conjugated polyelectrolyte bioassays. Chemical Science, 2015, 6, 1887-1894.	7.4	11
238	Measuring Competing Recombination Losses in a Significantly Reduced Langevin System by Steady-State Photoinduced Absorption and Photocurrent Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 27417-27422.	3.1	11
239	A Highly Conductive Conjugated Polyelectrolyte for Flexible Organic Thermoelectrics. ACS Applied Energy Materials, 2020, 3, 8667-8675.	5.1	11
240	C₇₀-based aqueous-soluble fullerene for the water composition-tolerant performance of eco-friendly polymer solar cells. Journal of Materials Chemistry C, 2020, 8, 15224-15233.	5.5	11
241	Ultranarrow Bandgap Naphthalenediimideâ€Dialkylbifuranâ€Based Copolymers with Highâ€Performance Organic Thinâ€Film Transistors and Allâ€Polymer Solar Cells. Macromolecular Rapid Communications, 2020, 41, 2000144.	3.9	11
242	Improved Stability of All-Polymer Solar Cells Using Crosslinkable Donor and Acceptor Polymers Bearing Vinyl Moieties in the Side-Chains. ACS Applied Materials & Interfaces, 2021, 13, 16754-16765.	8.0	11
243	High-efficiency solution-processed green thermally activated delayed fluorescence OLEDs using a polymer-small molecule mixed host. Polymer Chemistry, 2022, 13, 1824-1830.	3.9	11
244	pH-responsive water soluble smart vesicles containing a bis(styryl)benzene derivative for two-photonmicroscopy imaging. Journal of Materials Chemistry, 2012, 22, 1977-1984.	6.7	10
245	High-Performance Near-Infrared-Selective Thin Film Organic Photodiode Based on a Molecular Approach Targeted to Ideal Semiconductor Junctions. Journal of Physical Chemistry Letters, 2019, 10, 5647-5653.	4.6	10
246	Synthesis, Molecular Packing, and Electrical Properties of New Regioisomeric n-type Semiconducting Molecules with Modification of Alkyl Substituents Position. ACS Applied Materials & Interfaces, 2019, 11, 47170-47181.	8.0	10
247	Effect of Fused Thiophene Bridges on the Efficiency of Non-Fullerene Polymer Solar Cells made with Conjugated Donor Copolymers Containing Alkyl Thiophene-3-Carboxylate. Macromolecular Research, 2021, 29, 435-442.	2.4	10
248	Fullerene-Based Photoactive A-D-A Triads for Single-Component Organic Solar Cells: Incorporation of Non-Fused Planar Conjugated Core. Macromolecular Research, 2021, 29, 871-881.	2.4	10
249	Synthesis and characterization of fluorene and cyclopentadithiopheneâ€based copolymers exhibiting broad absorption for photovoltaic devices. Journal of Polymer Science Part A, 2011, 49, 1248-1255.	2.3	9
250	Thienothiophene-benzotriazole-based semicrystalline linear copolymers for organic field effect transistors. Pure and Applied Chemistry, 2014, 86, 1293-1302.	1.9	9
251	Fused Bithiophene Imide Oligomer and Diketopyrrolopyrrole Copolymers for nâ€Type Thinâ€Film Transistors. Macromolecular Rapid Communications, 2019, 40, e1900394.	3.9	9
252	Modeling and implementation of tandem polymer solar cells using wideâ€bandgap front cells. , 2020, 2, 131-142.		9

#	Article	IF	Citations
253	Fine regulation of crystallisation tendency to optimize the BHJ nanostructure and performance of polymer solar cells. Nanoscale, 2020, 12, 12928-12941.	5.6	9
254	5H-Benzo[d]Benzo[4,5]Imidazo[2,1-b][1,3]Thiazine as a Novel Electron-Acceptor Cored High Triplet Energy Bipolar Host Material for Efficient Solution-Processable Thermally Activated Delayed Fluorescence Organic Light-Emitting Diodes. Frontiers in Chemistry, 2020, 8, 61.	3.6	9
255	Developing Wide Bandgap Polymers Based on Sole Benzodithiophene Units for Efficient Polymer Solar Cells. Chemistry - A European Journal, 2020, 26, 11241-11249.	3.3	9
256	Charge-Transfer Effect and Enhanced Photoresponsivity of WS₂- and MoSe₂-Based Field Effect Transistors with Ï€-Conjugated Polyelectrolyte. ACS Applied Materials & Interfaces, 2021, 13, 40880-40890.	8.0	9
257	Regioselectivity control of block copolymers for high-performance single-material organic solar cells. Journal of Materials Chemistry A, 2022, 10, 12997-13004.	10.3	9
258	Synthesis and optical properties of pH-responsive conjugated polyampholytes. Macromolecular Research, 2015, 23, 457-465.	2.4	8
259	Polymer Semiconductors: Phthalimide-Based High Mobility Polymer Semiconductors for Efficient Nonfullerene Solar Cells with Power Conversion Efficiencies over 13% (Adv. Sci. 2/2019). Advanced Science, 2019, 6, 1970012.	11.2	8
260	Organic solar cells based on chlorine functionalized benzo[1,2-b:4,5-bâ€²]difuran-benzo[1,2-c:4,5-câ€²]dithiophene-4,8-dione copolymer with efficiency exceeding 13%. Science China Chemistry, 2020, 63, 483-489.	8.2	8
261	Fullerene-Based Triads with Controlled Alkyl Spacer Length as Photoactive Materials for Single-Component Organic Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 43174-43185.	8.0	8
262	Improved Photovoltaic Performance of Ternary All-Polymer Solar Cells by Incorporating a New Y6-based Polymer Acceptor and PC61BM. Macromolecular Research, 2022, 30, 587-596.	2.4	8
263	Dithieno[3,2â€b:2â€²,3â€²â€d]pyrrole and Benzothiadiazoleâ€Based Semicrystalline Copolymer for Photovoltaic Devices with Indeneâ€C₆₀ Bisadduct. Macromolecular Chemistry and Physics, 2013, 214, 2083-2090.	2.2	7
264	An Ionic 1,4-Bis(styryl)benzene-Based Fluorescent Probe for Mercury(II) Detection in Water via Deprotection of the Thioacetal Group. Sensors, 2016, 16, 2082.	3.8	7
265	Variableâ€Temperature Resonance Raman Studies to Probe Interchain Ordering for Semiconducting Conjugated Polymers with Different Chain Curvature. Chemistry - an Asian Journal, 2019, 14, 1175-1183.	3.3	7
266	A Terpolymer Acceptor Enabling Allâ€Polymer Solar Cells with a Broad Donor:Acceptor Composition Tolerance and Enhanced Stability. Solar Rrl, 2020, 4, 2000436.	5.8	7
267	Reduced Nonradiative Recombination Energy Loss Enabled Efficient Polymer Solar Cells via Tuning Alkyl Chain Positions on Pendent Benzene Units of Polymers. ACS Applied Materials & Interfaces, 2020, 12, 24184-24191.	8.0	7
268	Fullereneâ€“non-fullerene hybrid acceptors for enhanced light absorption and electrical properties in organic solar cells. Materials Today Energy, 2021, 20, 100651.	4.7	7
269	Natural Product Betulinâ€Based Insulating Polymer Filler in Organic Solar Cells. Solar Rrl, 2022, 6, .	5.8	7
270	Suppressing charge recombination by incorporating 3,6â€carbazole into poly[9â€(heptadecanâ€9â€yl)â€9Hâ€carbazoleâ€2,7â€diylâ€altâ€(5,6â€bisâ€(octyloxy)â€4,7â€di(thiophenâ€2â€yl)benzo[1,2, Journal of Polymer Science Part A, 2014, 52, 2047-2056.	3.8	7

#	Article	IF	Citations
271	Enhanced Polarization Ratio of Electrospun Nanofibers with Increased Intrachain Order by Postsolvent Treatments. Journal of Physical Chemistry B, 2016, 120, 12981-12987.	2.6	6
272	Effect of alkyl chain topology on the structure, optoelectronic properties and solar cell performance of thienopyrroledione-cored oligothiophene chromophores. RSC Advances, 2016, 6, 77655-77665.	3.6	6
273	Synthesis and photovoltaic properties of three different types of terpolymers. Materials Chemistry Frontiers, 2017, 1, 1147-1155.	5.9	6
274	Semi-crystalline A1â€“Dâ€“A2-type copolymers for efficient polymer solar cells. Polymer Journal, 2017, 49, 141-148.	2.7	6
275	Polymer semiconductors incorporating head-to-head linked 4-alkoxy-5-(3-alkylthiophen-2-yl)thiazole. RSC Advances, 2018, 8, 35724-35734.	3.6	6
276	Multiâ€Selenopheneâ€Containing Narrow Bandgap Polymer Acceptors for Allâ€Polymer Solar Cells with over 15â€‰% Efficiency and High Reproducibility. Angewandte Chemie, 2021, 133, 16071-16079.	2.0	6
277	Spectroscopic comparison of charge dynamics in fullerene and non fullerene acceptor-based organic photovoltaic cells. Journal of Materials Chemistry C, 0, , .	5.5	6
278	Triphenylamineâ€Based Conjugated Polyelectrolyte as a Hole Transport Layer for Efficient and Scalable Perovskite Solar Cells. Small, 2022, 18, e2104933.	10.0	6
279	Revisiting the Classical Wideâ€Bandgap HOMO and Random Copolymers for Indoor Artificial Light Photovoltaics. Macromolecular Rapid Communications, 2022, 43, e2200279.	3.9	6
280	2,1,3â€benzothiadiazoleâ€5,6â€dicarboxylicimide based semicrystalline polymers for photovoltaic cells. Journal of Polymer Science Part A, 2016, 54, 3826-3834.	2.3	5
281	Control of electrostatic interaction between a molecular beacon aptamer and conjugated polyelectrolyte for detection range-tunable ATP assay. Polymer Chemistry, 2017, 8, 6329-6334.	3.9	5
282	Organic solar cells for indoor power generation. Science China Chemistry, 2020, 63, 1-2.	8.2	5
283	Anionic Conjugated Polyelectrolytes for FRETâ€based Imaging of Cellular Membrane Potential. Photochemistry and Photobiology, 2020, 96, 834-844.	2.5	5
284	Terpolymer acceptors based on bithiophene imide for all-polymer solar cells. Dyes and Pigments, 2021, 186, 109049.	3.7	5
285	New hole transport styrene polymers bearing highly Ï€-extended conjugated side-chain moieties for high-performance solution-processable thermally activated delayed fluorescence OLEDs. Polymer Chemistry, 2021, 12, 1692-1699.	3.9	5
286	Optimization of solvent swelling for efficient organic solar cells via sequential deposition. Materials Reports Energy, 2021, 1, 100063.	3.2	5
287	Density Functional Theoretical and Timeâ€dependent Density Functional Theoretical Study on Thiopheneâ€“Benzothiadiazoleâ€based Polymers. Bulletin of the Korean Chemical Society, 2015, 36, 427-430.	1.9	4
288	Thermochromism, Franckâ€“Condon Analysis and Interfacial Dynamics of a Donorâ€“Acceptor Copolymer with a Low Band Gap. Chemistry of Materials, 2015, 27, 2770-2779.	6.7	4

#	Article	IF	Citations
289	Two-Step Energy Transfer Dynamics in Conjugated Polymer and Dye-Labeled Aptamer-Based Potassium Ion Detection Assay. Polymers, 2019, 11, 1206.	4.5	4
290	Improving the Photostability of Small-Molecule-Based Organic Photovoltaics by Providing a Charge Percolation Pathway of Crystalline Conjugated Polymer. Polymers, 2020, 12, 2598.	4.5	4
291	2D Starâ€Shaped Nonâ€Fullerene Electron Acceptors with Modulation of Jâ€/Hâ€Type Aggregations: Molecular Designâ€“Morphologyâ€“Electrical Property Correlation. Advanced Materials Technologies, 2020, 5, 2000174.	5.8	4
292	Fuller-Rylenes: Paving the Way for Promising Acceptors. ACS Applied Materials & Interfaces, 2020, 12, 29513-29519.	8.0	4
293	Regioisomeric Polythiophene Derivatives: Synthesis and Structure-Property Relationships for Organic Electronic Devices. Macromolecular Research, 2020, 28, 772-781.	2.4	4
294	Efficient green-emitting perovskite light-emitting diodes using a conjugated polyelectrolyte additive. Materials Today Energy, 2021, 21, 100755.	4.7	4
295	A pHâ€Neutral Polyelectrolyte Hole Transport Layer for Improved Energy Band Structure at the Anode/PTB7 Junction and Improved Solar Cell Performance. Solar Rrl, 2021, 5, 2100521.	5.8	4
296	Exciton energy transfer and bi-exciton annihilation in the emitting layers of thermally activated delayed fluorescence-based OLEDs. Journal of Materials Chemistry C, 2021, 9, 15141-15149.	5.5	4
297	Donor-Ïƒ-Acceptor Dyad-Based Polymers for Portable Sensors: Controlling Photoinduced Electron Transfer via Tuning the Frontier Molecular Orbital Energies of Acceptors. Macromolecules, 0, , .	4.8	4
298	Synthesis and Characterization of Ï€-Conjugated Polymers Based on 2-arylbenzimidazole and 4,7-di-thiophene-2-yl-4,5,6,7-tetrahydro-benzo[1,2,5]thiadiazole. Molecular Crystals and Liquid Crystals, 2013, 581, 31-37.	0.9	3
299	Semi-crystalline photovoltaic polymers with siloxane-terminated hybrid side-chains. Science China Chemistry, 2017, 60, 528-536.	8.2	3
300	Hysteresis Behavior of the Donorâ€“Acceptor-Type Ambipolar Semiconductor for Non-Volatile Memory Applications. Micromachines, 2021, 12, 301.	2.9	3
301	Complementary absorbing ternary blend containing structural isomeric donor polymers for improving the performance of PC61BM-based indoor photovoltaics. Polymer, 2021, 221, 123606.	3.8	3
302	Ferroelectric Polymer Drives Performance Enhancement of Nonâ€fullerene Organic Solar Cells. Angewandte Chemie, 2022, 134, .	2.0	3
303	Polymer solar cells made with photocrosslinkable conjugated donorâ€“acceptor block copolymers: improvement in the thermal stability and morphology with a single-component active layer. Polymer Chemistry, 2022, 13, 3335-3342.	3.9	3
304	Intramolecular Chloroâ€“Sulfur Interaction and Asymmetric Sideâ€Chain Isomerization to Balance Crystallinity and Miscibility in Allâ€Smallâ€Molecule Solar Cells. Angewandte Chemie, 2022, 134, .	2.0	3
305	Uniform Silver Nanowire Patterned Electrode on Robust PEN Substrate Using Poly(2-hydroxyethyl) Tj ETQq1 1 0.784314 rgBT /Overlo	8.0	3
306	Modulation of Charge Density of Cationic Conjugated Polyelectrolytes for Improving the FRETâ€Induced Sensory Signal with Enhanced On/Off Ratio. Macromolecular Chemistry and Physics, 2016, 217, 459-466.	2.2	2

#	Article	IF	Citations
307	Organic Solar Cells: Facile Synthesis of Polycyclic Aromatic Hydrocarbon (PAH)â€“Based Acceptors with Fineâ€Tuned Optoelectronic Properties: Toward Efficient Additiveâ€Free Nonfullerene Organic Solar Cells (Adv. Energy Mater. 24/2019). Advanced Energy Materials, 2019, 9, 1970096.	19.5	2
308	Isomerization enabling near-infrared electron acceptors. RSC Advances, 2019, 9, 37287-37291.	3.6	2
309	Effects of the Electron-Deficient Third Components in n-Type Terpolymers on Morphology and Performance of All-Polymer Solar Cells. Organic Materials, 2020, 02, 214-222.	2.0	2
310	Fluorinated biselenophene-naphthalenediimide copolymers for efficient all-polymer solar cells. Dyes and Pigments, 2020, 183, 108721.	3.7	2
311	Polymer Solar Cells: Highâ€Performance Allâ€Polymer Solar Cells Enabled by nâ€Type Polymers with an Ultranarrow Bandgap Down to 1.28 eV (Adv. Mater. 30/2020). Advanced Materials, 2020, 32, 2070226.	21.0	2
312	Fluorination Position: A Study of the Optoelectronic Properties of Two Regioisomers Using Spectroscopic and Computational Techniques. Journal of Physical Chemistry A, 2020, 124, 7685-7691.	2.5	2
313	Effect of Extended Ï€-Conjugation of Central Cores on Photovoltaic Properties of Asymmetric Wide-Bandgap Nonfullerene Acceptors. Organic Materials, 2020, 02, 173-181.	2.0	2
314	Enhanced photomultiplication of organic photodetectors via phosphorescent material incorporation. Journal of Materials Chemistry C, 2021, 9, 16918-16924.	5.5	2
315	How Heteroatom Substitution in Donorâ€“Acceptor Copolymers Affects Excitonic and Charge Photogeneration Processes in Organic Photovoltaic Cells. Journal of Physical Chemistry C, 0, , .	3.1	2
316	Organic Electronics: Efficient and Air-Stable Aqueous-Processed Organic Solar Cells and Transistors: Impact of Water Addition on Processability and Thin-Film Morphologies of Electroactive Materials (Adv. Energy Mater. 34/2018). Advanced Energy Materials, 2018, 8, 1870149.	19.5	1
317	Optical Properties of a Two-Photon Chromophore in a Polymeric Nanostructure. Molecular Crystals and Liquid Crystals, 2012, 554, 65-71.	0.9	0
318	Solar Cells: Investigation of Charge Carrier Behavior in High Performance Ternary Blend Polymer Solar Cells (Adv. Energy Mater. 19/2016). Advanced Energy Materials, 2016, 6, .	19.5	0
319	Nanowires: A Nonconventional Approach to Patterned Nanoarrays of DNA Strands for Templateâ€Assisted Assembly of Polyfluorene Nanowires (Small 31/2016). Small, 2016, 12, 4160-4160.	10.0	0
320	Organic Electronics: Fluorinated Headâ€toâ€Head Dialkoxybithiophene: A New Electronâ€Donating Building Block for Highâ€Performance Polymer Semiconductors (Adv. Electron. Mater. 3/2018). Advanced Electronic Materials, 2018, 4, 1870019.	5.1	0
321	Regioisomeric Polymer Semiconductors Based on Cyano-Functionalized Dialkoxybithiophenes: Structureâ€“Property Relationship and Photovoltaic Performance. Transactions of Tianjin University, 0, , .	6.4	0