Erjun Zhou

List of Publications by Citations

157 papers	6,888 citations	47 h-index	77 g-index
164 ext. papers	8,109 ext. citations	8.1 avg, IF	6.32 L-index

#	Paper	IF	Citations
157	All-polymer solar cells from perylene diimide based copolymers: material design and phase separation control. *Angewandte Chemie - International Edition*, **2011**, 50, 2799-803	16.4	379
156	Synthesis and Photovoltaic Properties of Diketopyrrolopyrrole-Based Donor Acceptor Copolymers. *Chemistry of Materials*, **2009**, 21, 4055-4061	9.6	273
155	Design of Diketopyrrolopyrrole (DPP)-Based Small Molecules for Organic-Solar-Cell Applications. *Advanced Materials*, **2017**, 29, 1600013	24	223
154	Synthesis and Photovoltaic Properties of a Novel Low Band Gap Polymer Based on N-Substituted Dithieno[3,2-b:2?,3?-d]pyrrole. *Macromolecules*, **2008**, 41, 8302-8305	5.5	219
153	Control of miscibility and aggregation via the material design and coating process for high-performance polymer blend solar cells. *Advanced Materials*, **2013**, 25, 6991-6	24	192
152	Benzotriazole-Based Acceptor and Donors, Coupled with Chlorination, Achieve a High VOC of 1.24 V and an Efficiency of 10.5% in Fullerene-Free Organic Solar Cells. *Chemistry of Materials*, **2019**, 31, 3941-3947	9.6	175
151	Diketopyrrolopyrrole-Based Semiconducting Polymer for Photovoltaic Device with Photocurrent Response Wavelengths up to 1.1 m. *Macromolecules*, **2010**, 43, 821-826	5.5	173
150	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		158
149	Achievement of High Voc of 1.02 V for P3HT-Based Organic Solar Cell Using a Benzotriazole-Containing Non-Fullerene Acceptor. *Advanced Energy Materials*, **2017**, 7, 1602269	21.8	157
148	Simultaneously Achieved High Open-Circuit Voltage and Efficient Charge Generation by Fine-Tuning Charge-Transfer Driving Force in Nonfullerene Polymer Solar Cells. *Advanced Functional Materials*, **2018**, 28, 1704507	15.6	147
147	Aromatic-Diimide-Based n-Type Conjugated Polymers for All-Polymer Solar Cell Applications. *Advanced Materials*, **2019**, 31, e1804699	24	138
146	Synthesis and Photovoltaic Properties of Donor Acceptor Copolymers Based on 5,8-Dithien-2-yl-2,3-diphenylquinoxaline. *Chemistry of Materials*, **2010**, 22, 4890-4895	9.6	123
145	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, 073309	3.4	120
144	Recent progress in porphyrin-based materials for organic solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 16769-16797	13	114
143	All-Polymer Solar Cell with High Near-Infrared Response Based on a Naphthodithiophene Diimide (NDTI) Copolymer. *ACS Macro Letters*, **2014**, 3, 872-875	6.6	105
142	Conjugated materials containing dithieno[3,2-b:2?,3?-d]pyrrole and its derivatives for organic and hybrid solar cell applications. *Journal of Materials Chemistry A*, **2019**, 7, 64-96	13	104
141	The Introduction of Fluorine and Sulfur Atoms into Benzotriazole-Based p-Type Polymers to Match with a Benzotriazole-Containing n-Type Small Molecule: The Same-Acceptor-Strategy to Realize High Open-Circuit Voltage. *Advanced Energy Materials*, **2018**, 8, 1801582	21.8	104

140	Introduction of a conjugated side chain as an effective approach to improving donor–acceptor photovoltaic polymers. *Energy and Environmental Science*, **2012**, 5, 9756	35.4	104
139	Synthesis of Thieno[3,4-b]pyrazine-Based and 2,1,3-Benzothiadiazole-Based Donor–Acceptor Copolymers and their Application in Photovoltaic Devices. *Macromolecules*, **2010**, 43, 2873-2879	5.5	99
138	P3HT-Based Photovoltaic Cells with a High Voc of 1.22 V by Using a Benzotriazole-Containing Nonfullerene Acceptor End-Capped with Thiazolidine-2,4-dione. *ACS Macro Letters*, **2017**, 6, 410-414	6.6	98
137	Band gap and molecular energy level control of perylene diimide-based donor–acceptor copolymers for all-polymer solar cells. *Journal of Materials Chemistry*, **2010**, 20, 2362		98
136	Solution-Processed Organic Solar Cells with High Open-Circuit Voltage of 1.3 V and Low Non-Radiative Voltage Loss of 0.16 V. *Advanced Materials*, **2020**, 32, e2002122	24	96
135	Synthesis and application of poly(fluorene-alt-naphthalene diimide) as an n-type polymer for all-polymer solar cells. *Chemical Communications*, **2012**, 48, 5283-5	5.8	90
134	Indolo[3,2-b]carbazole-based alternating donor–acceptor copolymers: synthesis, properties and photovoltaic application. *Journal of Materials Chemistry*, **2009**, 19, 7730		90
133	Sub-picosecond charge-transfer at near-zero driving force in polymer:non-fullerene acceptor blends and bilayers. *Nature Communications*, **2020**, 11, 833	17.4	80
132	Synthesis and Photovoltaic Properties of a Donor–Acceptor Double-Cable Polythiophene with High Content of C60 Pendant. *Macromolecules*, **2007**, 40, 1868-1873	5.5	80
131	A Benzoselenadiazole-Based Low Band Gap Polymer: Synthesis and Photovoltaic Application. *Macromolecules*, **2013**, 46, 763-768	5.5	76
130	Synthesis, Hole Mobility, and Photovoltaic Properties of Cross-Linked Polythiophenes with Vinylene–Terthiophene–Vinylene as Conjugated Bridge. *Macromolecules*, **2007**, 40, 1831-1837	5.5	76
129	Preparation of active layers in polymer solar cells by aerosol jet printing. *ACS Applied Materials & Interfaces*, **2011**, 3, 4053-8	9.5	72
128	Comparison among Perylene Diimide (PDI), Naphthalene Diimide (NDI), and Naphthodithiophene Diimide (NDTI) Based n-Type Polymers for All-Polymer Solar Cells Application. *Macromolecules*, **2017**, 50, 3179-3185	5.5	70
127	Effect of Energy Alignment, Electron Mobility, and Film Morphology of Perylene Diimide Based Polymers as Electron Transport Layer on the Performance of Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 10983-10991	9.5	69
126	Changing the π-bridge from thiophene to thieno[3,2-b]thiophene for the D-π-A type polymer enables high performance fullerene-free organic solar cells. *Chemical Communications*, **2019**, 55, 6708-6710	5.8	68
125	Effect of side-chain end groups on the optical, electrochemical, and photovoltaic properties of side-chain conjugated polythiophenes. *Journal of Polymer Science Part A*, **2006**, 44, 4916-4922	2.5	68
124	Effect of branched conjugation structure on the optical, electrochemical, hole mobility, and photovoltaic properties of polythiophenes. *Journal of Physical Chemistry B*, **2006**, 110, 26062-7	3.4	66
123	Introducing Fluorine and Sulfur Atoms into Quinoxaline-Based p-type Polymers To Gradually Improve the Performance of Fullerene-Free Organic Solar Cells. *ACS Macro Letters*, **2019**, 8, 743-748	6.6	65

122	Naphthodithiophene Diimide-Based Copolymers: Ambipolar Semiconductors in Field-Effect Transistors and Electron Acceptors with Near-Infrared Response in Polymer Blend Solar Cells. *Macromolecules*, **2016**, 49, 1752-1760	5.5	65
121	Performance improvement of polymer solar cells by using a solution processible titanium chelate as cathode buffer layer. *Applied Physics Letters*, **2007**, 91, 023509	3.4	62
120	Molecular Engineering of DA Copolymers Based on 4,8-Bis(4-chlorothiophen-2-yl)benzo[1,2-b:4,5-b?]dithiophene (BDT-T-Cl) for High-Performance Fullerene-Free Organic Solar Cells. *Macromolecules*, **2019**, 52, 6227-6233	5.5	61
119	Alternating copolymers of electron-rich arylamine and electron-deficient 2,1,3-benzothiadiazole: Synthesis, characterization and photovoltaic properties. *Journal of Polymer Science Part A*, **2007**, 45, 3861-3871	2.5	61
118	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	13	61
117	Fused Perylene Diimide-Based Polymeric Acceptors for Efficient All-Polymer Solar Cells. *Macromolecules*, **2017**, 50, 7559-7566	5.5	57
116	Anatomy of the energetic driving force for charge generation in organic solar cells. *Nature Communications*, **2019**, 10, 2520	17.4	57
115	Linking Polythiophene Chains Through Conjugated Bridges: A Way to Improve Charge Transport in Polymer Solar Cells. *Macromolecular Rapid Communications*, **2006**, 27, 793-798	4.8	54
114	Novel perylene diimide-based polymers with electron-deficient segments as the comonomer for efficient all-polymer solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 414-422	13	54
113	Low band gap polymers for photovoltaic device with photocurrent response wavelengths over 1000nm. *Polymer*, **2013**, 54, 6501-6509	3.9	52
112	Tuning the intermolecular interaction of A2-A1-D-A1-A2 type non-fullerene acceptors by substituent engineering for organic solar cells with ultrahigh VOC of ~1.2 V. *Science China Chemistry*, **2020**, 63, 1666-1674	7.9	52
111	Over 14% efficiency nonfullerene all-small-molecule organic solar cells enabled by improving the ordering of molecular donors via side-chain engineering. *Journal of Materials Chemistry A*, **2020**, 8, 7405-7411	13	50
110	Quinoxaline-Containing Nonfullerene Small-Molecule Acceptors with a Linear A-A-D-A-A Skeleton for Poly(3-hexylthiophene)-Based Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 10254-10261	9.5	46
109	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	35.4	46
108	Synthesis and properties of polythiophenes with conjugated side-chains containing carbonarbon double and triple bonds. *Journal of Polymer Science Part A*, **2006**, 44, 2206-2214	2.5	44
107	Low-Bandgap n-Type Polymer Based on a Fused-DAD-Type Heptacyclic Ring for All-Polymer Solar Cell Application with a Power Conversion Efficiency of 10.7%. *ACS Macro Letters*, **2020**, 9, 706-712	6.6	43
106	Recent advances in PM6:Y6-based organic solar cells. *Materials Chemistry Frontiers*, **2021**, 5, 3257-3280	7.8	40
105	Non-Fullerene Acceptors With A2 = A1-D-A1 = A2 Skeleton Containing Benzothiadiazole and Thiazolidine-2,4-Dione for High-Performance P3HT-Based Organic Solar Cells. *Solar Rrl*, **2017**, 1, 1700166	7.1	38

104	Solution-Processed Organic Field-Effect Transistors Based on Polythiophene Derivatives with Conjugated Bridges as Linking Chains. *Chemistry of Materials*, **2007**, 19, 3361-3363	9.6	37
103	A-A-D-A-A Type Non-Fullerene Acceptors with 2-(1,1-Dicyanomethylene)rhodanine as the Terminal Groups for Poly(3-hexylthiophene)-Based Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 34427-34434	9.5	37
102	High-Performance All-Polymer Solar Cells Achieved by Fused Perylenediimide-Based Conjugated Polymer Acceptors. *ACS Applied Materials & Interfaces*, **2018**, 10, 15962-15970	9.5	35
101	Side chain engineering of quinoxaline-based small molecular nonfullerene acceptors for high-performance poly(3-hexylthiophene)-based organic solar cells. *Science China Chemistry*, **2020**, 63, 254-264	7.9	35
100	First-principles theoretical designing of planar non-fullerene small molecular acceptors for organic solar cells: manipulation of noncovalent interactions. *Physical Chemistry Chemical Physics*, **2019**, 21, 2128-2139	3.6	33
99	Improved Efficiency in All-Small-Molecule Organic Solar Cells with Ternary Blend of Nonfullerene Acceptor and Chlorinated and Nonchlorinated Donors. *ACS Applied Materials & Interfaces*, **2019**, 11, 44528-44535	9.5	33
98	Synthesis, hole mobility, and photovoltaic properties of two alternating poly[3-(hex-1-enyl)thiophene-co-thiophene]s. *Journal of Polymer Science Part A*, **2007**, 45, 629-638	2.5	32
97	Conjugated Polymers Based on 1,3-Dithien-2-yl-thieno[3,4-c]pyrrole-4,6-dione: Synthesis, Characterization, and Solvent Effects on Photovoltaic Performance. *Journal of Physical Chemistry C*, **2012**, 116, 2608-2614	3.8	31
96	Introducing Four 1,1-Dicyanomethylene-3-indanone End-Capped Groups as an Alternative Strategy for the Design of Small-Molecular Nonfullerene Acceptors. *Journal of Physical Chemistry C*, **2018**, 122, 29122-29128	3.8	31
95	A comparison of n-type copolymers based on cyclopentadithiophene and naphthalene diimide/perylene diimides for all-polymer solar cell applications. *Polymer Chemistry*, **2015**, 6, 7594-7602	4.9	30
94	Synthesis and Photovoltaic Properties of Donor‐Acceptor Copolymer Based on Dithienopyrrole and Thienopyrroledione. *Macromolecular Chemistry and Physics*, **2011**, 212, 305-310	2.6	30
93	Benzothiadiazole-based non-fullerene acceptors. *Nano Energy*, **2021**, 87, 106174	17.1	30
92	Planar Benzofuran Inside-Fused Perylenediimide Dimers for High V Fullerene-Free Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 4203-4210	9.5	29
91	Effects of Oxygen Atoms Introduced at Different Positions of Non-Fullerene Acceptors in the Performance of Organic Solar Cells with Poly(3-hexylthiophene). *ACS Applied Materials & Interfaces*, **2020**, 12, 1094-1102	9.5	28
90	A2‐A1‐D‐A1‐A2 type non-fullerene acceptors based on methoxy substituted benzotriazole with three different end-capped groups for P3HT-based organic solar cells. *Journal of Materials Chemistry C*, **2018**, 6, 10902-10909	7.1	28
89	Pyrene-based aggregation-induced emission luminogens (AIEgen): structure correlated with particle size distribution and mechanochromism. *Journal of Materials Chemistry C*, **2019**, 7, 6932-6940	7.1	27
88	Incorporation of Thienylenevinylene and Triphenylamine Moieties into Polythiophene Side Chains for All-Polymer Photovoltaic Applications. *Journal of Physical Chemistry C*, **2009**, 113, 5879-5885	3.8	27
87	A perylenediimide dimer containing an asymmetric π‐bridge and its fused derivative for fullerene-free organic solar cells. *Journal of Materials Chemistry C*, **2018**, 6, 2580-2587	7.1	26

86	Efficient perovskite/organic integrated solar cells with extended photoresponse to 930 nm and enhanced near-infrared external quantum efficiency of over 50. *Nanoscale*, **2018**, 10, 3245-3253	7.7	26
85	A novel thiazole based acceptor for fullerene-free organic solar cells. *Dyes and Pigments*, **2018**, 149, 470-474	4.6	26
84	All-Polymer Solar Cells from Perylene Diimide Based Copolymers: Material Design and Phase Separation Control. *Angewandte Chemie*, **2011**, 123, 2851-2855	3.6	25
83	Polythiophene derivative with the simplest conjugated-side-chain of alkenyl: synthesis and applications in polymer solar cells and field-effect transistors. *Journal of Physical Chemistry B*, **2008**, 112, 13476-82	3.4	25
82	Electroluminescence and photovoltaic properties of poly(p-phenylene vinylene) derivatives with dendritic pendants. *Journal of Applied Polymer Science*, **2008**, 107, 514-521	2.9	25
81	Modulating the Symmetry of Benzodithiophene by Molecular Tailoring for the Application in Naphthalene Diimide-Based N-Type Photovoltaic Polymers. *Solar Rrl*, **2018**, 2, 1700230	7.1	24
80	PTB7-Th based organic solar cell with a high V oc of 1.05 V by modulating the LUMO energy level of benzotriazole-containing non-fullerene acceptor. *Science Bulletin*, **2017**, 62, 1275-1282	10.6	24
79	Crumple Durable Ultraflexible Organic Solar Cells with an Excellent Power-per-Weight Performance. *Advanced Functional Materials*, **2021**, 31, 2102694	15.6	24
78	Polymer bulk heterojunction photovoltaic devices with multilayer structures prepared by thermal lamination. *ACS Applied Materials & Interfaces*, **2009**, 1, 2703-6	9.5	23
77	Modulation of Three p-Type Polymers Containing a Fluorinated-Thiophene-Fused-Benzotriazole Unit To Pair with a Benzotriazole-Based Non-fullerene Acceptor for High VOC Organic Solar Cells. *Macromolecules*, **2019**, 52, 8625-8630	5.5	22
76	The effect of alkyl chain branching positions on the electron mobility and photovoltaic performance of naphthodithiophene diimide (NDTI)-based polymers. *Science China Chemistry*, **2019**, 62, 1649-1655	7.9	22
75	A small molecular electron acceptor based on asymmetric hexacyclic core of thieno[1,2-b]indaceno[5,6-b?]thienothiophene for efficient fullerene-free polymer solar cells. *Science Bulletin*, **2018**, 63, 845-852	10.6	22
74	Controlling the Cyano-Containing A2 Segments in A2-A1-D-A1-A2 Type Non-Fullerene Acceptors to Combine with a Benzotriazole-Based p-Type Polymer: Same-Acceptor-Strategy for High VOC Organic Solar Cells. *Solar Rrl*, **2019**, 3, 1800332	7.1	21
73	Tuning the optoelectronic properties of vinylene linked perylenediimide dimer by ring annulation at the inside or outside bay positions for fullerene-free organic solar cells. *Journal of Energy Chemistry*, **2020**, 40, 112-119	12	21
72	Design and Synthesis of a Novel n-Type Polymer Based on Asymmetric Rylene Diimide for the Application in All-Polymer Solar Cells. *Macromolecular Rapid Communications*, **2018**, 39, e1700715	4.8	20
71	Synthesis and properties of DA copolymers based on dithienopyrrole and benzothiadiazole with various numbers of thienyl units as spacers. *Polymer Chemistry*, **2014**, 5, 6797-6803	4.9	20
70	Comparison of Three n-Type Copolymers Based on Benzodithiophene and Naphthalene Diimide/Perylene Diimide/Fused Perylene Diimides for All-Polymer Solar Cells Application. *ACS Applied Materials & Interfaces*, **2018**, 10, 23263-23269	9.5	19
69	Efficient Planar Structured Perovskite Solar Cells with Enhanced Open-Circuit Voltage and Suppressed Charge Recombination Based on a Slow Grown Perovskite Layer from Lead Acetate Precursor. *ACS Applied Materials & Interfaces*, **2017**, 9, 41937-41944	9.5	19

68	A low band gap n-type polymer based on dithienosilole and naphthalene diimide for all-polymer solar cells application. *Polymer*, **2015**, 63, 164-169	3.9	18
67	Benzotriazole-Based p-Type Polymers with Thieno[3,2-b]thiophene πBridges and Fluorine Substituents To Realize High VOC. *ACS Applied Polymer Materials*, **2019**, 1, 906-913	4.3	17
66	Utilizing Benzotriazole and Indacenodithiophene Units to Construct Both Polymeric Donor and Small Molecular Acceptors to Realize Organic Solar Cells With High Open-Circuit Voltages Beyond 1.2 V. *Frontiers in Chemistry*, **2018**, 6, 147	5	17
65	An amorphous N-type polymer based on perylenediimide and selenophene for all-polymer solar cells application. *Materials Today Communications*, **2015**, 4, 16-21	2.5	16
64	Synthesis, characterization and photovoltaic properties of thiophene copolymers containing conjugated side-chain. *European Polymer Journal*, **2007**, 43, 855-861	5.2	16
63	Spatial Distribution Recast for Organic Bulk Heterojunctions for High-Performance All-Inorganic Perovskite/Organic Integrated Solar Cells. *Advanced Energy Materials*, **2020**, 10, 2000851	21.8	16
62	A-DA?D-A-Type Non-fullerene Acceptors Containing a Fused Heptacyclic Ring for Poly(3-hexylthiophene)-Based Polymer Solar Cells. *Journal of Physical Chemistry C*, **2020**, 124, 24616-24623	3.8	16
61	Indacenodithieno[3,2-b]thiophene-Based Wide Bandgap D-πA Copolymer for Nonfullerene Organic Solar Cells. *ACS Macro Letters*, **2019**, 8, 1599-1604	6.6	16
60	Expanding the Light Harvesting of CsPbIBr to Near Infrared by Integrating with Organic Bulk Heterojunction for Efficient and Stable Solar Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 37991-37998	9.5	15
59	Effects of Inserting Thiophene as a πBridge on the Properties of Naphthalene Diimide-alt-Fused Thiophene Copolymers. *ACS Applied Materials & Interfaces*, **2017**, 9, 44070-44078	9.5	15
58	The first thieno[3,4-b]pyrazine based small molecular acceptor with a linear A-A-D-A-A skeleton for fullerene-free organic solar cells with a high V of 1.05 V. *Chemical Communications*, **2018**, 54, 10770-10773	5.8	15
57	Fullerene-free organic photovoltaics based on unconventional material combination: a molecular donor and polymeric acceptors. *Journal of Materials Chemistry A*, **2015**, 3, 22325-22331	13	14
56	Fabrication of High Organic Solar Cells with a Non-Halogenated Solvent and the Effect of Substituted Groups for "Same-A-Strategy" Material Combinations. *ACS Applied Materials & Interfaces*, **2021**, 13, 21556-21564	9.5	14
55	Wide Band Gap Non-Fullerene Small Molecular Acceptors Containing Spirobifluorene and Benzotriazole with Three Different End-Capped Groups for P3HT-Based Organic Solar Cells. *Chinese Journal of Chemistry*, **2018**, 36, 392-398	4.9	13
54	Isatylidene malononitrile derived acceptors for fullerene free organic solar cells. *Dyes and Pigments*, **2018**, 151, 102-109	4.6	13
53	The effect of conjugated πbridge and fluorination on the properties of asymmetric-building-block-containing polymers (ABC polymers) based on dithienopyran donor and benzothiadiazole acceptors. *Polymer Chemistry*, **2017**, 8, 5396-5406	4.9	13
52	Gradually modulating the three parts of D-πA type polymers for high-performance organic solar cells. *Journal of Energy Chemistry*, **2021**, 62, 532-537	12	13
51	18.4% efficiency achieved by the cathode interface engineering in non-fullerene polymer solar cells. *Nano Today*, **2021**, 41, 101289	17.9	13

50	Positioned substituent effect on self-assembly behaviors of perylene diimide derivatives on graphite. *Journal of Colloid and Interface Science*, **2017**, 504, 58-67	9.3	12
49	Poly(quinoxaline vinylene) With Conjugated Phenylenevinylene Side Chain: A Potential Polymer Acceptor With Broad Absorption Band. *Macromolecular Chemistry and Physics*, **2007**, 208, 1294-1300	2.6	12
48	Utilizing an electron-deficient thieno[3,4-c]pyrrole-4,6-dione (TPD) unit as a bridge to improve the photovoltaic performance of ADA type acceptors. *Journal of Materials Chemistry C*, **2020**, 8, 15981-15984	7.1	12
47	Enhanced open circuit voltage of small molecule acceptors containing angular-shaped indacenodithiophene units for P3HT-based organic solar cells. *Journal of Materials Chemistry C*, **2018**, 6, 12347-12354	7.1	12
46	The first application of isoindigo-based polymers in non-fullerene organic solar cells. *Science China Chemistry*, **2020**, 63, 1262-1271	7.9	11
45	Effect of fluorination and symmetry on the properties of polymeric photovoltaic materials based on an asymmetric building block. *RSC Advances*, **2016**, 6, 90051-90060	3.7	11
44	Wide-Band-Gap Phthalimide-Based D-A Polymers for Nonfullerene Organic Solar Cells: The Effect of Conjugated Bridge from Thiophene to Thieno[3,2-b]thiophene. *Journal of Physical Chemistry C*, **2020**, 124, 230-236	3.8	11
43	Annealing-free efficient organic solar cells via an alkylbenzene side-chain strategy of small-molecule electron acceptors. *Journal of Materials Chemistry A*, **2020**, 8, 22155-22162	13	10
42	Gradual Fluorination on the Phenyl Side Chains for Benzodithiophene-Based Linear Polymers to Improve the Photovoltaic Performance. *ACS Applied Materials & Interfaces*, **2020**, 12, 38451-38459	9.5	10
41	Ternary blend strategy in benzotriazole-based organic photovoltaics for indoor application. *Green Energy and Environment*, **2020**,	5.7	10
40	Wide Band Gap Photovoltaic Polymer Based on Pyrrolo[3,4-f]benzotriazole-5,7-dione (TzBI) with Ultrahigh VOC Beyond 1.25 V. *Journal of Physical Chemistry C*, **2020**, 124, 19492-19498	3.8	10
39	Utilizing Benzotriazole-Fused DAD-Type Heptacyclic Ring to Construct n-Type Polymer for All-Polymer Solar Cell Application. *ACS Applied Energy Materials*, **2021**, 4, 4217-4223	6.1	10
38	Isatin-derived non-fullerene acceptors towards high open circuit voltage solar cells. *Dyes and Pigments*, **2019**, 162, 898-904	4.6	10
37	End Group Engineering on the Side Chains of Conjugated Polymers toward Efficient Non-Fullerene Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 6151-6158	9.5	9
36	A FeNi5P4/FeNi2P heterojunction electrocatalyst for highly efficient solar-to-hydrogen generation. *Journal of Materials Chemistry A*, **2021**, 9, 1221-1229	13	9
35	Inside-fused perylenediimide dimers with planar structures for high-performance fullerene-free organic solar cells. *RSC Advances*, **2017**, 7, 13749-13753	3.7	8
34	Copolymers of Thiophene and Cyano-Substituted Phenylene: Facile Tuning of Electronic Energy Levels and their Photovoltaic Application. *Macromolecular Chemistry and Physics*, **2008**, 209, 431-438	2.6	8
33	Imidazolium Ionic Liquid as Organic Spacer for Tuning the Excitonic Structure of 2D Perovskite Materials. *ACS Energy Letters*, **2020**, 5, 3617-3627	20.1	8

32	Synthesis of 1-Formyl-3-bromo-thieno[3,4-c]pyrrole-4,6-dione and the Application in A2–A1–D–A1–A2 Type Non-Fullerene Acceptor. *Journal of Physical Chemistry C*, **2020**, 124, 9795-9801	3.8	8
31	Exploring thieno[3,4-c]pyrrole-4,6-dione combined thiophene as π-bridge to construct non-fullerene acceptors with high VOC beyond 1.0 V. *Dyes and Pigments*, **2020**, 178, 108335	4.6	7
30	Ring Fusion of Thiophene–Vinylene–Thiophene (TVT) Benefits Both Fullerene and Non-Fullerene Polymer Solar Cells. *Macromolecules*, **2018**, 51, 4598-4607	5.5	7
29	A thieno[3,4-b]pyrazine-based A2–A1–D–A1–A2 type low bandgap non-fullerene acceptor with 1,1-dicyanomethylene-3-indanone (IC) as the terminal group. *Journal of Materials Chemistry C*, **2019**, 7, 8820-8824	7.1	7
28	Exploring a Fused 2-(Thiophen-2-yl)thieno[3,2-]thiophene (T-TT) Building Block to Construct n-Type Polymer for High-Performance All-Polymer Solar Cells. *ACS Applied Materials & Interfaces*, **2019** , 11, 42412-42419	9.5	7
27	Chlorination of dithienobenzodithiophene (DTBDT) based polymers to simultaneously improve the VOC, JSC and FF of non-fullerene organic solar cells. *Sustainable Energy and Fuels*, **2020**, 4, 5665-5673	5.8	7
26	Side chain engineering of copolymers based on benzotriazole (BTA) and dithieno[2,3-d;2′,3′-d′]benzo[1,2-b;4,5-b′]dithiophenes (DTBDT) enables a high PCE of 14.6. *Nanotechnology*, **2021**,	3.4	7
25	Theoretical and experimental study of electron-deficient core substitution effect of diketopyrrolopyrrole derivatives on optoelectrical and charge transport properties. *Chemical Physics*, **2018**, 500, 67-73	2.3	7
24	~1.2 V open-circuit voltage from organic solar cells. *Journal of Semiconductors*, **2021**, 42, 070202	2.3	7
23	Tricyclic or Pentacyclic D Units: Design of D–π–A-Type Copolymers for High Organic Photovoltaic Cells. *ACS Applied Materials & Interfaces*, **2021**, 13, 30756-30765	9.5	6
22	Poly(4-hexyloxythiazole): A new low band gap semiconductor for polymer electronics. *Synthetic Metals*, **2014**, 196, 139-144	3.6	5
21	Progress of Organic Photovoltaic Materials Based on Indacenodithiophene and Its Derivatives. *Chinese Journal of Organic Chemistry*, **2016**, 36, 2786	3	5
20	Fluorination of the Quinoxaline-Based p-Type Polymer and n-Type Small Molecule for High VOC Organic Solar Cells. *Journal of Physical Chemistry C*, **2021**, 125, 10876-10882	3.8	5
19	Effects of BTA2 as the third component on the charge carrier generation and recombination behavior of PTB7:PC71BM photovoltaic system. *Frontiers of Chemical Science and Engineering*, **2021**, 15, 127-137	4.5	4
18	Modulating the molecular orientation of linear benzodifuran-based isomeric polymers by exchanging the positions of chlorine and fluorine atoms. *Nano Energy*, **2022**, 99, 107413	17.1	4
17	Side-chain effect in ethenylene fused thiophene-vinylene-thiophene (ETVT) based photovoltaic polymers. *Polymer*, **2019**, 167, 31-39	3.9	3
16	Medium Bandgap D-A Type Photovoltaic Polymers Based on an Asymmetric Dithienopyran Donor and a Benzotriazole Acceptor. *Polymers*, **2017**, 9,	4.5	3
15	Effects of block length in copolymers based on regioregular oligothiophenes linked with electron-accepting units. *Macromolecular Rapid Communications*, **2012**, 33, 658-63	4.8	3

14	Study on the side chain effect of A2-A1-D-A1-A2 type non-fullerene acceptors matched with P3HT. *Dyes and Pigments*, **2022**, 197, 109949	4.6	3
13	Effects of Halogenation on the Benzotriazole Unit of Non-Fullerene Acceptors in Organic Solar Cells with High Voltages. *ACS Applied Materials & Interfaces*, **2021**,	9.5	3
12	Fluorination: An Effective Molecular Design Strategy for Efficient Photovoltaic Materials. *Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica*, **2018**, 34, 1239-1249	3.8	3
11	The optimization of □bridge for trialkylsilyl substituted D-□A photovoltaic polymers. *Dyes and Pigments*, **2021**, 194, 109609	4.6	3
10	Optimized active layer morphology via side-chain atomic substituents to achieve efficient and stable all-polymer solar cells. *Journal of Materials Chemistry C*, **2021**, 9, 9515-9523	7.1	3
9	PTB7-Th-Based Organic Photovoltaic Cells with a High of over 1.0 V Fluorination and Side Chain Engineering of Benzotriazole-Containing Nonfullerene Acceptors.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	3
8	Non-Fullerene Acceptors With A2 = A1-D-A1 = A2 Skeleton Containing Benzothiadiazole and Thiazolidine-2,4-Dione for High-Performance P3HT-Based Organic Solar Cells (Solar RRL 11□017). *Solar Rrl*, **2017**, 1, 1770142	7.1	2
7	Introducing methoxy or fluorine substitutions on the conjugated side chain to reduce the voltage loss of organic solar cells. *Journal of Materials Chemistry C*, **2021**, 9, 11163-11171	7.1	2
6	Photooxidation Analysis of Two Isomeric Nonfullerene Acceptors: A Systematic Study of Conformational, Morphological, and Environmental Factors. *Solar Rrl*, **2021**, 5, 2000704	7.1	2
5	The subtle Structure Modulation of A -A -D-A -A type Nonfullerene Acceptors Extends the Photoelectric Response for High Voltage Organic Photovoltaic Cells.. *Macromolecular Rapid Communications*, **2022**, e2100810	4.8	1
4	Gradual chlorination at different positions of D-□A copolymers based on benzodithiophene and isoindigo for organic solar cells. *Materials Reports Energy*, **2021**, 100065		1
3	Modulating the middle and end-capped units of A2-A1-D-A1-A2 type non-fullerene acceptors for high VOC organic solar cells. *Organic Electronics*, **2021**, 95, 106195	3.5	1
2	Quasi-Bilayer All-Small-Molecule Solar Cells Based on a Chlorophyll Derivative and Non-Fullerene Materials with Untraditional Energy Alignments. *Journal of Physical Chemistry C*, **2022**, 126, 4807-4814	3.8	1
1	Application of A-DA'D-A non-fullerene acceptor with Benzotriazole Core in poly(3-hexylthiophene)-based organic solar cells. *Dyes and Pigments*, **2022**, 110375	4.6	