He Yan

List of Publications by Year in Descending Order

267 papers	31,033 citations	78 h-index	173 g-index
279 ext. papers	36,815 ext. citations	16.6 avg, IF	7.54 L-index

#	Paper	IF	Citations
267	Influence of Fluorine Substitution on the Photovoltaic Performance of Wide Band Gap Polymer Donors for Polymer Solar Cells.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	3
266	Achieving high efficiency and well-kept ductility in ternary all-polymer organic photovoltaic blends thanks to two well miscible donors. *Matter*, **2022**,	12.7	29
265	Ester side chains engineered quinoxaline based D-A copolymers for high-efficiency all-polymer solar cells. *Chemical Engineering Journal*, **2022**, 429, 132551	14.7	1
264	Branched Alkoxy Side Chain Enables High-Performance Non-Fullerene Acceptors with High Open-Circuit Voltage and Highly Ordered Molecular Packing. *Chemistry of Materials*, **2022**, 34, 2059-2068	9.6	6
263	Pushing the Efficiency of High Open-Circuit Voltage Binary Organic Solar Cells by Vertical Morphology Tuning.. *Advanced Science*, **2022**, e2200578	13.6	9
262	A Vinylene-Linker-Based Polymer Acceptor Featuring Co-planar and Rigid Molecular Conformation Enables High-Performance All-Polymer Solar Cells.. *Advanced Materials*, **2022**, e2200361	24	22
261	Simultaneously Enhanced Efficiency and Mechanical Durability in Ternary Solar Cells Enabled by Low-Cost Incompletely Separated Fullerenes.. *Macromolecular Rapid Communications*, **2022**, e2200139	4.8	2
260	Side-chain engineering with chalcogen-containing heterocycles on non-fullerene acceptors for efficient organic solar cells. *Chemical Engineering Journal*, **2022**, 441, 135998	14.7	1
259	Optimizing Spectral and Morphological Match of Nonfullerene Acceptors toward Efficient Indoor Organic Photovoltaics with Enhanced Light Source Adaptability. *Nano Energy*, **2022**, 107281	17.1	2
258	Enhancing the Photovoltaic Performance of Chlorobenzene-Cored UnFused Electron Acceptors by Introducing S⋯O Noncovalent Interaction. *Chemical Engineering Journal*, **2022**, 137375	14.7	1
257	Heavy-Atom-Free Room-Temperature Phosphorescent Rylene Imide for High-Performing Organic Photovoltaics. *Advanced Science*, **2021**, e2103975	13.6	3
256	Boosting the Efficiency of Non-fullerene Organic Solar Cells via a Simple Cathode Modification Method. *ACS Applied Materials & Interfaces*, **2021**, 13, 51078-51085	9.5	4
255	Beyond Conformational Control: Effects of Noncovalent Interactions on Molecular Electronic Properties of Conjugated Polymers.. *Jacs Au*, **2021**, 1, 2182-2187		2
254	Alkyl-Chain Branching of Non-Fullerene Acceptors Flanking Conjugated Side Groups toward Highly Efficient Organic Solar Cells. *Advanced Energy Materials*, **2021**, 11, 2102596	21.8	19
253	Approaching 18% efficiency of ternary organic photovoltaics with wide bandgap polymer donor and well compatible Y6 : Y6-1O as acceptor. *National Science Review*, **2021**, 8, nwaa305	10.8	119
252	Regio-Regular Polymer Acceptors Enabled by Determined Fluorination on End Groups for All-Polymer Solar Cells with 15.2 % Efficiency. *Angewandte Chemie*, **2021**, 133, 10225-10234	3.6	4
251	Regio-Regular Polymer Acceptors Enabled by Determined Fluorination on End Groups for All-Polymer Solar Cells with 15.2 % Efficiency. *Angewandte Chemie - International Edition*, **2021**, 60, 10137-10146	16.4	53

250	16% efficiency all-polymer organic solar cells enabled by a finely tuned morphology via the design of ternary blend. *Joule*, **2021**, 5, 914-930	27.8	110
249	Vinylene □bridge: A simple building block for ultra-narrow bandgap nonfullerene acceptors enable 14.2% efficiency in binary organic solar cells. *Dyes and Pigments*, **2021**, 188, 109171	4.6	7
248	Side-Chain Engineering on Y-Series Acceptors with Chlorinated End Groups Enables High-Performance Organic Solar Cells. *Advanced Energy Materials*, **2021**, 11, 2003777	21.8	26
247	Non-fullerene acceptors with branched side chains and improved molecular packing to exceed 18% efficiency in organic solar cells. *Nature Energy*, **2021**, 6, 605-613	62.3	457
246	Factors That Prevent Spin-Triplet Recombination in Non-fullerene Organic Photovoltaics. *Journal of Physical Chemistry Letters*, **2021**, 12, 5045-5051	6.4	6
245	A Difluoro-Monobromo End Group Enables High-Performance Polymer Acceptor and Efficient All-Polymer Solar Cells Processable with Green Solvent under Ambient Condition. *Advanced Functional Materials*, **2021**, 31, 2100791	15.6	28
244	A highly crystalline non-fullerene acceptor enabling efficient indoor organic photovoltaics with high EQE and fill factor. *Joule*, **2021**, 5, 1231-1245	27.8	25
243	Accurate photovoltaic measurement of organic cells for indoor applications. *Joule*, **2021**, 5, 1016-1023	27.8	16
242	Rational Anode Engineering Enables Progresses for Different Types of Organic Solar Cells. *Advanced Energy Materials*, **2021**, 11, 2100492	21.8	48
241	A Cost-Effective D-A-D Type Hole-Transport Material Enabling 20% Efficiency Inverted Perovskite Solar Cells□ *Chinese Journal of Chemistry*, **2021**, 39, 1545-1552	4.9	1
240	High-performance all-polymer solar cells enabled by a novel low bandgap non-fully conjugated polymer acceptor. *Science China Chemistry*, **2021**, 64, 1380-1388	7.9	16
239	A Chlorinated Donor Polymer Achieving High-Performance Organic Solar Cells with a Wide Range of Polymer Molecular Weight. *Advanced Functional Materials*, **2021**, 31, 2102413	15.6	17
238	Achieving over 17% efficiency of ternary all-polymer solar cells with two well-compatible polymer acceptors. *Joule*, **2021**, 5, 1548-1565	27.8	118
237	Temperature Induced Aggregation of Organic Semiconductors. *Chemistry - A European Journal*, **2021**, 27, 2908-2919	4.8	14
236	A Pyrrole-Fused Asymmetrical Electron Acceptor for Polymer Solar Cells with Approaching 16% Efficiency. *Small Structures*, **2021**, 2, 2000052	8.7	8
235	Asymmetric Alkoxy and Alkyl Substitution on Nonfullerene Acceptors Enabling High-Performance Organic Solar Cells. *Advanced Energy Materials*, **2021**, 11, 2003141	21.8	74
234	Solution-Processed All-Ceramic Plasmonic Metamaterials for Efficient Solar-Thermal Conversion over 100-727 °C. *Advanced Materials*, **2021**, 33, e2005074	24	26
233	Fluorinated End Group Enables High-Performance All-Polymer Solar Cells with Near-Infrared Absorption and Enhanced Device Efficiency over 14%. *Advanced Energy Materials*, **2021**, 11, 2003171	21.8	39

232	Synergy strategy to the flexible alkyl and chloride side-chain engineered quinoxaline-based D-A conjugated polymers for efficient non-fullerene polymer solar cells. *Materials Chemistry Frontiers*, **2021**, 5, 1906-1916	7.8	5
231	Optically Probing Field-Dependent Charge Dynamics in Non-Fullerene Organic Photovoltaics with Small Interfacial Energy Offsets. *Journal of Physical Chemistry C*, **2021**, 125, 1714-1722	3.8	1
230	Achieving ultra-narrow bandgap non-halogenated non-fullerene acceptors via vinylene-bridges for efficient organic solar cells. *Materials Advances*, **2021**, 2, 2132-2140	3.3	9
229	Fine-tuning of side-chain orientations on nonfullerene acceptors enables organic solar cells with 17.7% efficiency. *Energy and Environmental Science*, **2021**, 14, 3469-3479	35.4	62
228	Achieving 16.68% efficiency ternary as-cast organic solar cells. *Science China Chemistry*, **2021**, 64, 581-589	7.9	63
227	A MoSe2 quantum dot modified hole extraction layer enables binary organic solar cells with improved efficiency and stability. *Journal of Materials Chemistry A*, **2021**, 9, 16500-16509	13	4
226	Pseudo-bilayer architecture enables high-performance organic solar cells with enhanced exciton diffusion length. *Nature Communications*, **2021**, 12, 468	17.4	61
225	Indoor Organic Photovoltaics: Optimal Cell Design Principles with Synergistic Parasitic Resistance and Optical Modulation Effect. *Advanced Energy Materials*, **2021**, 11, 2003103	21.8	29
224	Unraveling the Temperature Dependence of Exciton Dissociation and Free Charge Generation in Nonfullerene Organic Solar Cells. *Solar Rrl*, **2021**, 5, 2000789	7.1	6
223	Achieving Efficient Ternary Organic Solar Cells Using Structurally Similar Non-Fullerene Acceptors with Varying Flanking Side Chains. *Advanced Energy Materials*, **2021**, 11, 2100079	21.8	32
222	Significantly Boosting Efficiency of Polymer Solar Cells by Employing a Nontoxic Halogen-Free Additive. *ACS Applied Materials & Interfaces*, **2021**, 13, 11117-11124	9.5	27
221	Boosting Highly Efficient Hydrocarbon Solvent-Processed All-Polymer-Based Organic Solar Cells by Modulating Thin-Film Morphology. *ACS Applied Materials & Interfaces*, **2021**, 13, 34301-34307	9.5	5
220	Symmetry-Induced Orderly Assembly Achieving High-Performance Perylene Diimide-Based Nonfullerene Organic Solar Cells. *CCS Chemistry*, **2021**, 3, 78-84	7.2	18
219	Highly crystalline acceptor materials based on benzodithiophene with different amount of fluorine substitution on alkoxyphenyl conjugated side chains for organic photovoltaics. *Materials Reports Energy*, **2021**, 1, 100059		0
218	High-Efficiency All-Polymer Solar Cells with Poly-Small-Molecule Acceptors Having Extended Units with Broad Near-IR Absorption. *ACS Energy Letters*, **2021**, 6, 728-738	20.1	35
217	Alkoxy substitution on IDT-Series and Y-Series non-fullerene acceptors yielding highly efficient organic solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 7481-7490	13	14
216	Long-lived and disorder-free charge transfer states enable endothermic charge separation in efficient non-fullerene organic solar cells. *Nature Communications*, **2020**, 11, 5617	17.4	38
215	Reducing VOC loss via structure compatible and high lowest unoccupied molecular orbital nonfullerene acceptors for over 17%-efficiency ternary organic photovoltaics. *EcoMat*, **2020**, 2, e12061	9.4	15

214	The Role of Demixing and Crystallization Kinetics on the Stability of Non-Fullerene Organic Solar Cells. *Advanced Materials*, **2020**, 32, e2005348	24	30
213	Dopamine Semiquinone Radical Doped PEDOT:PSS: Enhanced Conductivity, Work Function and Performance in Organic Solar Cells. *Advanced Energy Materials*, **2020**, 10, 2000743	21.8	52
212	Concurrent improvement in JSC and VOC in high-efficiency ternary organic solar cells enabled by a red-absorbing small-molecule acceptor with a high LUMO level. *Energy and Environmental Science*, **2020**, 13, 2115-2123	35.4	115
211	High Open-circuit Voltage and Low Voltage Loss in All-polymer Solar Cell with a Poly(coronenediimide-vinylene) Acceptor. *Chinese Journal of Polymer Science (English Edition)*, **2020**, 38, 1157-1163	3.5	3
210	Fine-Tuning Energy Levels via Asymmetric End Groups Enables Polymer Solar Cells with Efficiencies over 17%. *Joule*, **2020**, 4, 1236-1247	27.8	237
209	Roles of Acceptor Guests in Tuning the Organic Solar Cell Property Based on an Efficient Binary Material System with a Nearly Zero Hole-Transfer Driving Force. *Chemistry of Materials*, **2020**, 32, 5182-5191	9.6	16
208	Wide Band-gap Two-dimension Conjugated Polymer Donors with Different Amounts of Chlorine Substitution on Alkoxyphenyl Conjugated Side Chains for Non-fullerene Polymer Solar Cells. *Chinese Journal of Polymer Science (English Edition)*, **2020**, 38, 797-805	3.5	8
207	15.34% efficiency all-small-molecule organic solar cells with an improved fill factor enabled by a fullerene additive. *Energy and Environmental Science*, **2020**, 13, 2134-2141	35.4	139
206	Tetrabromination versus Tetrachlorination: A Molecular Terminal Engineering of Nonfluorinated Acceptors to Control Aggregation for Highly Efficient Polymer Solar Cells with Increased Voc and Higher Jsc Simultaneously. *Solar Rrl*, **2020**, 4, 2000212	7.1	3
205	Understanding the Effect of End Group Halogenation in Tuning Miscibility and Morphology of High-Performance Small Molecular Acceptors. *Solar Rrl*, **2020**, 4, 2000250	7.1	45
204	Improved organic solar cell efficiency based on the regulation of an alkyl chain on chlorinated non-fullerene acceptors. *Materials Chemistry Frontiers*, **2020**, 4, 2428-2434	7.8	18
203	Synergy of Liquid-Crystalline Small-Molecule and Polymeric Donors Delivers Uncommon Morphology Evolution and 16.6% Efficiency Organic Photovoltaics. *Advanced Science*, **2020**, 7, 2000149	13.6	41
202	High-Efficiency Indoor Organic Photovoltaics with a Band-Aligned Interlayer. *Joule*, **2020**, 4, 1486-1500	27.8	80
201	Fluorinated pyrazine-based D-A conjugated polymers for efficient non-fullerene polymer solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 7083-7089	13	6
200	Over 15% Efficiency Polymer Solar Cells Enabled by Conformation Tuning of Newly Designed Asymmetric Small-Molecule Acceptors. *Advanced Functional Materials*, **2020**, 30, 2000383	15.6	41
199	Efficient modulation of end groups for the asymmetric small molecule acceptors enabling organic solar cells with over 15% efficiency. *Journal of Materials Chemistry A*, **2020**, 8, 5927-5935	13	23
198	Conformation-Tuning Effect of Asymmetric Small Molecule Acceptors on Molecular Packing, Interaction, and Photovoltaic Performance. *Small*, **2020**, 16, e2001942	11	30
197	Highly Efficient All-Polymer Solar Cells Enabled by p-Doping of the Polymer Donor. *ACS Energy Letters*, **2020**, 5, 2434-2443	20.1	29

196	Transannularly conjugated tetrameric perylene diimide acceptors containing [2.2]paracyclophane for non-fullerene organic solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 6501-6509	13	26
195	Near-infrared electron acceptors with fused nonacyclic molecular backbones for nonfullerene organic solar cells. *Materials Chemistry Frontiers*, **2020**, 4, 1729-1738	7.8	12
194	Improving open-circuit voltage by a chlorinated polymer donor endows binary organic solar cells efficiencies over 17%. *Science China Chemistry*, **2020**, 63, 325-330	7.9	213
193	Mechanically Robust All-Polymer Solar Cells from Narrow Band Gap Acceptors with Hetero-Bridging Atoms. *Joule*, **2020**, 4, 658-672	27.8	189
192	Dopant-Free Organic Hole-Transporting Material for Efficient and Stable Inverted All-Inorganic and Hybrid Perovskite Solar Cells. *Advanced Materials*, **2020**, 32, e1908011	24	120
191	A 16.4% efficiency organic photovoltaic cell enabled using two donor polymers with their side-chains oriented differently by a ternary strategy. *Journal of Materials Chemistry A*, **2020**, 8, 3676-3685	13	37
190	Weak Makes It Powerful: The Role of Cognate Small Molecules as an Alloy Donor in 2D/1A Ternary Fullerene Solar Cells for Finely Tuned Hierarchical Morphology in Thick Active Layers. *Small Methods*, **2020**, 4, 1900766	12.8	14
189	Dithieno[3,2-:2Q3Q]pyrrol-Fused Asymmetrical Electron Acceptors: A Study into the Effects of Nitrogen-Functionalization on Reducing Nonradiative Recombination Loss and Dipole Moment on Morphology. *Advanced Science*, **2020**, 7, 1902657	13.6	37
188	Asymmetric Acceptors with Fluorine and Chlorine Substitution for Organic Solar Cells toward 16.83% Efficiency. *Advanced Functional Materials*, **2020**, 30, 2000456	15.6	117
187	Versatile nature of anthanthrone based polymers as active multifunctional semiconductors for various organic electronic devices. *Materials Advances*, **2020**, 1, 3428-3438	3.3	3
186	Controlling the Microstructure of Conjugated Polymers in High-Mobility Monolayer Transistors via the Dissolution Temperature. *Angewandte Chemie - International Edition*, **2020**, 59, 846-852	16.4	32
185	Controlling the Microstructure of Conjugated Polymers in High-Mobility Monolayer Transistors via the Dissolution Temperature. *Angewandte Chemie*, **2020**, 132, 856-862	3.6	10
184	Polymer Pre-Aggregation Enables Optimal Morphology and High Performance in All-Polymer Solar Cells. *Solar Rrl*, **2020**, 4, 1900385	7.1	25
183	Improving the performance of near infrared binary polymer solar cells by adding a second non-fullerene intermediate band-gap acceptor. *Journal of Materials Chemistry C*, **2020**, 8, 909-915	7.1	39
182	Chalcogen-Fused Perylene Diimides-Based Nonfullerene Acceptors for High-Performance Organic Solar Cells: Insight into the Effect of O, S, and Se. *Solar Rrl*, **2020**, 4, 1900453	7.1	13
181	Altering the Positions of Chlorine and Bromine Substitution on the End Group Enables High-Performance Acceptor and Efficient Organic Solar Cells. *Advanced Energy Materials*, **2020**, 10, 2002649	21.8	59
180	Incorporation of alkylthio side chains on benzothiadiazole-based non-fullerene acceptors enables high-performance organic solar cells with over 16% efficiency. *Journal of Materials Chemistry A*, **2020**, 8, 23239-23247	13	21
179	Deciphering the Role of Chalcogen-Containing Heterocycles in Nonfullerene Acceptors for Organic Solar Cells. *ACS Energy Letters*, **2020**, 5, 3415-3425	20.1	39

178	Effect of the chlorine substitution position of the end-group on intermolecular interactions and photovoltaic performance of small molecule acceptors. *Energy and Environmental Science*, **2020**, 13, 5028-5038	35.4	29
177	Tailoring non-fullerene acceptors using selenium-incorporated heterocycles for organic solar cells with over 16% efficiency. *Journal of Materials Chemistry A*, **2020**, 8, 23756-23765	13	42
176	A Non-Conjugated Polymer Acceptor for Efficient and Thermally Stable All-Polymer Solar Cells. *Angewandte Chemie*, **2020**, 132, 20007-20012	3.6	9
175	Selective Hole and Electron Transport in Efficient Quaternary Blend Organic Solar Cells. *Joule*, **2020**, 4, 1790-1805	27.8	79
174	A Non-Conjugated Polymer Acceptor for Efficient and Thermally Stable All-Polymer Solar Cells. *Angewandte Chemie - International Edition*, **2020**, 59, 19835-19840	16.4	55
173	Random Polymerization Strategy Leads to a Family of Donor Polymers Enabling Well-Controlled Morphology and Multiple Cases of High-Performance Organic Solar Cells. *Advanced Materials*, **2020**, 32, e2003500	24	24
172	Fine-tuning HOMO energy levels between PM6 and PBDB-T polymer donors via ternary copolymerization. *Science China Chemistry*, **2020**, 63, 1256-1261	7.9	20
171	Delocalization of exciton and electron wavefunction in non-fullerene acceptor molecules enables efficient organic solar cells. *Nature Communications*, **2020**, 11, 3943	17.4	222
170	Thick-Film Low Driving-Force Indoor Light Harvesters. *Solar Rrl*, **2020**, 4, 2000291	7.1	16
169	All-Polymer Solar Cells with over 12% Efficiency and a Small Voltage Loss Enabled by a Polymer Acceptor Based on an Extended Fused Ring Core. *Advanced Energy Materials*, **2020**, 10, 2001408	21.8	40
168	Highly efficient non-fullerene organic solar cells enabled by a delayed processing method using a non-halogenated solvent. *Energy and Environmental Science*, **2020**, 13, 4381-4388	35.4	95
167	Reducing energy loss via tuning energy levels of polymer acceptors for efficient all-polymer solar cells. *Science China Chemistry*, **2020**, 63, 1785-1792	7.9	23
166	Adding a Third Component with Reduced Miscibility and Higher LUMO Level Enables Efficient Ternary Organic Solar Cells. *ACS Energy Letters*, **2020**, 5, 2711-2720	20.1	137
165	A compatible polymer acceptor enables efficient and stable organic solar cells as a solid additive. *Journal of Materials Chemistry A*, **2020**, 8, 17706-17712	13	28
164	Efficient Organic Ternary Solar Cells Employing Narrow Band Gap Diketopyrrolopyrrole Polymers and Nonfullerene Acceptors. *Chemistry of Materials*, **2020**, 32, 7309-7317	9.6	14
163	Precisely Controlling the Position of Bromine on the End Group Enables Well-Regular Polymer Acceptors for All-Polymer Solar Cells with Efficiencies over 15. *Advanced Materials*, **2020**, 32, e2005942	24	144
162	Ternary Blending Driven Molecular Reorientation of Non-Fullerene Acceptor IDIC with Backbone Order. *ACS Applied Energy Materials*, **2020**, 3, 10814-10822	6.1	10
161	A Narrow-Bandgap n-Type Polymer with an Acceptor-Acceptor Backbone Enabling Efficient All-Polymer Solar Cells. *Advanced Materials*, **2020**, 32, e2004183	24	114

160	Effect of main and side chain chlorination on the photovoltaic properties of benzodithiophene-alt-benzotriazole polymers. *Journal of Materials Chemistry C*, **2020**, 8, 15426-15435	7.1	7
159	Modulating Energy Level on an A-D-A?-D-A-Type Unfused Acceptor by a Benzothiadiazole Core Enables Organic Solar Cells with Simple Procedure and High Performance. *Solar Rrl*, **2020**, 4, 2000421	7.1	25
158	Random terpolymer based on thiophene-thiazolothiazole unit enabling efficient non-fullerene organic solar cells. *Nature Communications*, **2020**, 11, 4612	17.4	119
157	Isomerization Strategy of Nonfullerene Small-Molecule Acceptors for Organic Solar Cells. *Advanced Functional Materials*, **2020**, 30, 2004477	15.6	31
156	Rationally pairing photoactive materials for high-performance polymer solar cells with efficiency of 16.53%. *Science China Chemistry*, **2020**, 63, 265-271	7.9	104
155	A Nonfullerene Acceptor with Alkylthio- and Dimethoxy-Thiophene-Groups Yielding High-Performance Ternary Organic Solar Cells. *Solar Rrl*, **2020**, 4, 1900353	7.1	20
154	ITC-2Cl: A Versatile Middle-Bandgap Nonfullerene Acceptor for High-Efficiency Panchromatic Ternary Organic Solar Cells. *Solar Rrl*, **2020**, 4, 1900377	7.1	20
153	10.13% Efficiency All-Polymer Solar Cells Enabled by Improving the Optical Absorption of Polymer Acceptors. *Solar Rrl*, **2020**, 4, 2000142	7.1	35
152	Unusual light-driven amplification through unexpected regioselective photogeneration of five-membered azaheterocyclic AIEgen. *Chemical Science*, **2020**, 12, 709-717	9.4	8
151	8.78% Efficient All-Polymer Solar Cells Enabled by Polymer Acceptors Based on a B<-N Embedded Electron-Deficient Unit. *Advanced Materials*, **2019**, 31, e1904585	24	74
150	A monothiophene unit incorporating both fluoro and ester substitution enabling high-performance donor polymers for non-fullerene solar cells with 16.4% efficiency. *Energy and Environmental Science*, **2019**, 12, 3328-3337	35.4	273
149	Inverted planar perovskite solar cells based on CsI-doped PEDOT:PSS with efficiency beyond 20% and small energy loss. *Journal of Materials Chemistry A*, **2019**, 7, 21662-21667	13	40
148	Efficient inverted perovskite solar cells with truxene-bridged PDI trimers as electron transporting materials. *Materials Chemistry Frontiers*, **2019**, 3, 2137-2142	7.8	13
147	Significantly improving the performance of polymer solar cells by the isomeric ending-group based small molecular acceptors: Insight into the isomerization. *Nano Energy*, **2019**, 66, 104146	17.1	36
146	A Trialkylsilylthienyl Chain-Substituted Small-Molecule Acceptor with Higher LUMO Level and Reduced Band Gap for Over 16% Efficiency Fullerene-Free Ternary Solar Cells. *Chemistry of Materials*, **2019**, 31, 8908-8917	9.6	41
145	Isomerization of Perylene Diimide Based Acceptors Enabling High-Performance Nonfullerene Organic Solar Cells with Excellent Fill Factor. *Advanced Science*, **2019**, 6, 1802065	13.6	56
144	Tweaking the Molecular Geometry of a Tetraperylenediimide Acceptor. *ACS Applied Materials & Interfaces*, **2019**, 11, 6970-6977	9.5	15
143	Achieving Balanced Charge Transport and Favorable Blend Morphology in Non-Fullerene Solar Cells via Acceptor End Group Modification. *Chemistry of Materials*, **2019**, 31, 1752-1760	9.6	36

142	Multifunctional asymmetrical molecules for high-performance perovskite and organic solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 2412-2420	13	11
141	Chlorinated Thiophene End Groups for Highly Crystalline Alkylated Non-Fullerene Acceptors toward Efficient Organic Solar Cells. *Chemistry of Materials*, **2019**, 31, 6672-6676	9.6	32
140	Temperature-Dependent Aggregation Donor Polymers Enable Highly Efficient Sequentially Processed Organic Photovoltaics Without the Need of Orthogonal Solvents. *Advanced Functional Materials*, **2019**, 29, 1902478	15.6	23
139	A nonfullerene acceptor with a 1000 nm absorption edge enables ternary organic solar cells with improved optical and morphological properties and efficiencies over 15%. *Energy and Environmental Science*, **2019**, 12, 2529-2536	35.4	188
138	Overcoming the energy loss in asymmetrical non-fullerene acceptor-based polymer solar cells by halogenation of polymer donors. *Journal of Materials Chemistry A*, **2019**, 7, 15404-15410	13	32
137	Stable large area organic solar cells realized by using random terpolymers donors combined with a ternary blend. *Journal of Materials Chemistry A*, **2019**, 7, 14199-14208	13	35
136	Unconjugated Side-Chain Engineering Enables Small Molecular Acceptors for Highly Efficient Non-Fullerene Organic Solar Cells: Insights into the Fine-Tuning of Acceptor Properties and Micromorphology. *Advanced Functional Materials*, **2019**, 29, 1902155	15.6	86
135	Intramolecular π-stacked perylene-diimide acceptors for non-fullerene organic solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 8136-8143	13	22
134	Achieving high efficiency and low voltage loss simultaneously for non-fullerene organic solar cells. *Science China Chemistry*, **2019**, 62, 405-406	7.9	1
133	A High-Performance Non-Fullerene Acceptor Compatible with Polymers with Different Bandgaps for Efficient Organic Solar Cells. *Solar Rrl*, **2019**, 3, 1800376	7.1	34
132	Efficient Perovskite Solar Cells Based on Dopant-Free Spiro-OMeTAD Processed With Halogen-Free Green Solvent. *Solar Rrl*, **2019**, 3, 1900061	7.1	25
131	Reduced Energy Loss Enabled by a Chlorinated Thiophene-Fused Ending-Group Small Molecular Acceptor for Efficient Nonfullerene Organic Solar Cells with 13.6% Efficiency. *Advanced Energy Materials*, **2019**, 9, 1900041	21.8	117
130	Multi-scale ordering in highly stretchable polymer semiconducting films. *Nature Materials*, **2019**, 18, 594-601	27	146
129	Simultaneously increasing open-circuit voltage and short-circuit current to minimize the energy loss in organic solar cells via designing asymmetrical non-fullerene acceptor. *Journal of Materials Chemistry A*, **2019**, 7, 11053-11061	13	25
128	Methane-perylene diimide-based small molecule acceptors for high efficiency non-fullerene organic solar cells. *Journal of Materials Chemistry C*, **2019**, 7, 10901-10907	7.1	11
127	Thioether Bond Modification Enables Boosted Photovoltaic Performance of Nonfullerene Polymer Solar Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 32218-32224	9.5	15
126	14%-efficiency fullerene-free ternary solar cell enabled by designing a short side-chain substituted small-molecule acceptor. *Nano Energy*, **2019**, 64, 103934	17.1	34
125	The synergy of host–guest nonfullerene acceptors enables 16%-efficiency polymer solar cells with increased open-circuit voltage and fill-factor. *Materials Horizons*, **2019**, 6, 2094-2102	14.4	64

124	Donor Polymer Can Assist Electron Transport in Bulk Heterojunction Blends with Small Energetic Offsets. *Advanced Materials*, **2019**, 31, e1903998	24	34
123	A 0D/3D Heterostructured All-Inorganic Halide Perovskite Solar Cell with High Performance and Enhanced Phase Stability. *Advanced Materials*, **2019**, 31, e1904735	24	77
122	Alkyl Chain Tuning of Small Molecule Acceptors for Efficient Organic Solar Cells. *Joule*, **2019**, 3, 3020-3033	37.8	504
121	Regulating exciton bonding energy and bulk heterojunction morphology in organic solar cells via methyl-functionalized non-fullerene acceptors. *Journal of Materials Chemistry A*, **2019**, 7, 6809-6817	13	18
120	Introducing an identical benzodithiophene donor unit for polymer donors and small-molecule acceptors to unveil the relationship between the molecular structure and photovoltaic performance of non-fullerene organic solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 26351-26357	13	14
119	Functionalizing tetraphenylpyrazine with perylene diimides (PDIs) as high-performance nonfullerene acceptors. *Journal of Materials Chemistry C*, **2019**, 7, 14563-14570	7.1	6
118	High-Performance Large-Area Organic Solar Cells Enabled by Sequential Bilayer Processing via Nonhalogenated Solvents. *Advanced Energy Materials*, **2019**, 9, 1802832	21.8	100
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