

Charge Generation Pathways in Organic Solar Cells: Ass Electron Acceptor

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Thiophene dendrimer-based low donor content solar cells. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	14
2	Non-fullerene small molecule acceptors based on perylene diimides. <i>Journal of Materials Chemistry A</i> , 2016, 4, 17604-17622.	5.2	281
3	Realizing Small Energy Loss of 0.55 eV, High Open-Circuit Voltage >1 V and High Efficiency >10% in Fullerene-Free Polymer Solar Cells via Energy Driver. <i>Advanced Materials</i> , 2017, 29, 1605216.	11.1	230
4	Nanocarbons as Electron Donors and Acceptors in Photoinduced Electron-Transfer Reactions. <i>ECS Journal of Solid State Science and Technology</i> , 2017, 6, M3055-M3061.	0.9	17
5	Self-restricted oxazolone GFP chromophore for construction of reaction-based fluorescent probe toward dopamine. <i>Materials Today Chemistry</i> , 2017, 3, 73-81.	1.7	6
6	Halogenated conjugated molecules for ambipolar field-effect transistors and non-fullerene organic solar cells. <i>Materials Chemistry Frontiers</i> , 2017, 1, 1389-1395.	3.2	173
7	Elucidating the Spatial Arrangement of Emitter Molecules in Organic Light-Emitting Diode Films. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 8402-8406.	7.2	40
8	New donor polymer with tetrafluorinated blocks for enhanced performance in perylene diimide-based solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5351-5361.	5.2	26
9	Elucidating the Spatial Arrangement of Emitter Molecules in Organic Light-Emitting Diode Films. <i>Angewandte Chemie</i> , 2017, 129, 8522-8526.	1.6	1
10	A novel small molecule based on dithienophosphole oxide for bulk heterojunction solar cells without pre- or post-treatments. <i>Dyes and Pigments</i> , 2017, 142, 516-523.	2.0	11
11	Polyacetylene-based polyelectrolyte as a universal interfacial layer for efficient inverted polymer solar cells. <i>Organic Electronics</i> , 2017, 48, 61-67.	1.4	36
12	pH-Directed Aggregation to Control Photoconductivity in Self-Assembled Perylene Bisimides. <i>CheM</i> , 2017, 2, 716-731.	5.8	53
13	Donor-acceptor polymers with tunable infrared photoresponse. <i>Polymer Chemistry</i> , 2017, 8, 2922-2930.	1.9	70
14	Fullerene-free polymer solar cells processed from non-halogenated solvents in air with PCE of 4.8%. <i>Chemical Communications</i> , 2017, 53, 1164-1167.	2.2	57
15	New Charge-Transfer Complexes with 1,2,5-Thiadiazoles as Both Electron Acceptors and Donors Featuring an Unprecedented Addition Reaction. <i>Chemistry - A European Journal</i> , 2017, 23, 852-864.	1.7	25
16	Photochemistry and Photophysics in Silica-Based Materials: Ultrafast and Single Molecule Spectroscopy Observation. <i>Chemical Reviews</i> , 2017, 117, 13639-13720.	23.0	98
17	Tunable Heck-Mizoroki Reaction of Dibromonaphthalene Diimide with Aryl Ethylenes: Design, Synthesis, and Characterization of Coplanar NDI-Based Conjugated Molecules. <i>Journal of Organic Chemistry</i> , 2017, 82, 12806-12812.	1.7	8
18	Charge Generation in Non-Fullerene Donor-Acceptor Blends for Organic Solar Cells. <i>Journal of Physical Chemistry C</i> , 2017, 121, 18412-18422.	1.5	7

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19	Real-time fluorescence quenching-based detection of nitro-containing explosive vapours: what are the key processes?. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 29714-29730.	1.3	49
20	Modulating the Molecular Packing and Nanophase Blending via a Random Terpolymerization Strategy toward 11% Efficiency Nonfullerene Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2017, 7, 1701125.	10.2	98
21	Precise Manipulation of Multilength Scale Morphology and Its Influence on Eco-Friendly Printed All-Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2017, 27, 1702016.	7.8	99
22	Performance limitations in thieno[3,4-c]pyrrole-4,6-dione-based polymer:ITIC solar cells. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 23990-23998.	1.3	29
23	Thickness Effect of Bulk Heterojunction Layers on the Performance and Stability of Polymer:Fullerene Solar Cells with Alkylthiophene-Containing Polymer. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 9263-9270.	3.2	10
24	A thermally and mechanically stable solar cell made of a small-molecule donor and a polymer acceptor. <i>Journal of Materials Chemistry A</i> , 2017, 5, 15923-15931.	5.2	20
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26	Next-generation organic photovoltaics based on non-fullerene acceptors. <i>Nature Photonics</i> , 2018, 12, 131-142.	15.6	1,535
27	Intra-molecular Charge Transfer and Electron Delocalization in Non-fullerene Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 10043-10052.	4.0	24
28	Carrier Transport and Recombination in Efficient Small-Molecule Solar Cells with the Nonfullerene Acceptor IDTBR. <i>Advanced Energy Materials</i> , 2018, 8, 1800264.	10.2	63
29	A narrow-bandgap donor polymer for highly efficient as-cast non-fullerene polymer solar cells with a high open circuit voltage. <i>Organic Electronics</i> , 2018, 58, 82-87.	1.4	22
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34	A Thieno[2,3-b]pyridine-Flanked Diketopyrrolopyrrole Polymer as an n-Type Polymer Semiconductor for All-Polymer Solar Cells and Organic Field-Effect Transistors. <i>Macromolecules</i> , 2018, 51, 71-79.	2.2	58
35	Fine-Tuning the Quasi-3D Geometry: Enabling Efficient Nonfullerene Organic Solar Cells Based on Perylene Diimides. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 762-768.	4.0	65
36	High-Performance Organic Bulk-Heterojunction Solar Cells Based on Multiple Donor or Multiple Acceptor Components. <i>Advanced Materials</i> , 2018, 30, 1705706.	11.1	161

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37	Photoactive Blend Morphology Engineering through Systematically Tuning Aggregation in All-Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2018, 8, 1702173.	10.2	57
38	Surpassing 10% Efficiency Benchmark for Nonfullerene Organic Solar Cells by Scalable Coating in Air from Single Nonhalogenated Solvent. <i>Advanced Materials</i> , 2018, 30, 1705485.	11.1	150
39	Combining Facile Synthetic Methods with Greener Processing for Efficient Polymer-Perylene Diimide Based Organic Solar Cells. <i>Small Methods</i> , 2018, 2, 1800081.	4.6	54
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44	High-Performance As-Cast Nonfullerene Polymer Solar Cells with Thicker Active Layer and Large Area Exceeding 11% Power Conversion Efficiency. <i>Advanced Materials</i> , 2018, 30, 1704546.	11.1	233
45	Improved photocurrent and efficiency of non-fullerene organic solar cells despite higher charge recombination. <i>Journal of Materials Chemistry A</i> , 2018, 6, 957-962.	5.2	15
46	Non-fullerene small molecule electron acceptors for high-performance organic solar cells. <i>Journal of Energy Chemistry</i> , 2018, 27, 990-1016.	7.1	12
47	Optimum driving energy for achieving balanced open-circuit voltage and short-circuit current density in organic bulk heterojunction solar cells. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 29866-29875.	1.3	12
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56	Unconventional anode interlayer universally improving solar cell efficiency. Journal Physics D: Applied Physics, 2018, 51, 314002.	1.3	2
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67	Radical Anions, RadicalAnion Salts, and Anionic Complexes of 2,1,3-Benzochalcogenadiazoles. Chemistry - A European Journal, 2019, 25, 806-816.	1.7	24
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75	Sunlight Control of Interfacial Magnetism for Solar Driven Spintronic Applications. <i>Advanced Science</i> , 2019, 6, 1901994.	5.6	16
76	13.9% Efficiency Ternary Nonfullerene Organic Solar Cells Featuring Low-Structural Order. <i>ACS Energy Letters</i> , 2019, 4, 2378-2385.	8.8	51
77	Molecular origin of efficient hole transfer from non-fullerene acceptors: insights from first-principles calculations. <i>Journal of Materials Chemistry C</i> , 2019, 7, 12180-12193.	2.7	28
78	Enhanced Photoinduced Electron Transfer and Stability of Diradicals in Neutral Extended Pyridine <i>N</i> -Oxides. <i>Journal of Physical Chemistry C</i> , 2019, 123, 24670-24675.	1.5	13
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110	Charge generation mechanism tuned <i>via</i> film morphology in small molecule bulk-heterojunction photovoltaic materials. <i>Journal of Materials Chemistry C</i> , 2020, 8, 15234-15252.	2.7	8
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139	An Organic-Inorganic Hybrid Electrolyte as a Cathode Interlayer for Efficient Organic Solar Cells. <i>Angewandte Chemie</i> , 2021, 133, 8607-8612.	1.6	16
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146	Improving solar control of magnetism in ternary organic photovoltaic system with enhanced photo-induced electrons doping. <i>Nano Research</i> , 2022, 15, 2626-2633.	5.8	3
147	Fabrication of PCDTBT Conductive Network via Phase Separation. <i>Materials</i> , 2021, 14, 5071.	1.3	2
148	The role of balanced dual charge generation pathways in ternary organic solar cells. <i>Journal of Materials Chemistry C</i> , 0, , .	2.7	3
149	Emerging dynamic structure of electrocatalysts unveiled by <i>in situ</i> X-ray diffraction/absorption spectroscopy. <i>Energy and Environmental Science</i> , 2021, 14, 1928-1958.	15.6	179
150	Kinetic model for photoluminescence quenching by selective excitation of D/A blends: implications for charge separation in fullerene and non-fullerene organic solar cells. <i>Journal of Materials Chemistry C</i> , 2020, 8, 8755-8769.	2.7	16
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152	Axially chiral bay-tetraarylated perylene bisimide dyes as non-fullerene acceptors in organic solar cells. <i>Journal of Materials Chemistry C</i> , 2022, 10, 2581-2591.	2.7	19
153	Quantitative Analysis of Charge Dissociation by Selectively Characterizing Exciton Splitting Efficiencies in Single Component Materials. <i>Israel Journal of Chemistry</i> , 0, , .	1.0	0
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158	V OC variation with different molecular weight fractions in highly efficient organic photovoltaic bulk heterojunctions. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 035106.	1.3	0
159	Contractions of 1,4-Diazepines to Pyrroles Triggered by Valence Tautomerization: A One-Pot Approach and Mechanism. <i>Organic Letters</i> , 2021, 23, 9006-9011.	2.4	9
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162	Recent progress in organic solar cells based on non-fullerene acceptors: materials to devices. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3255-3295.	5.2	105

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164	Copolymers Containing 1-Methyl-2-phenyl-imidazole Moieties as Permanent Dipole Generating Units: Synthesis, Spectroscopic, Electrochemical, and Photovoltaic Properties. <i>Molecules</i> , 2022, 27, 915.	1.7	0
165	Thermally Activated Reverse Electron Transfer Limits Carrier Generation Efficiency in PM6:Y6 Non-Fullerene Organic Solar Cells. <i>Solar Rrl</i> , 2022, 6, .	3.1	9
167	Solvent effects on excited-state relaxation dynamics of paddle-wheel BODIPY-Hexaoxatriphenylene conjugates: Insights from non-adiabatic dynamics simulations. <i>Chinese Journal of Chemical Physics</i> , 2022, 35, 117-128.	0.6	0
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176	Interplay between charge separation and hole back transfer determines the efficiency of non-fullerene organic solar cells with low energy level offset. <i>Organic Electronics</i> , 2022, 108, 106601.	1.4	4
177	A review on organic photovoltaic cell. <i>International Journal of Energy Research</i> , 2022, 46, 17813-17828.	2.2	19
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179	Machine learning the frontier orbital energies of SubPc based triads. <i>Journal of Molecular Modeling</i> , 2022, 28, .	0.8	3
180	Direct Observation of Increased Free Carrier Generation Owing to Reduced Exciton Binding Energies in Polymerized Small-Molecule Acceptors. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 8816-8824.	2.1	13
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184	A 2.20 eV Bandgap Polymer Donor for Efficient Colorful Semitransparent Organic Solar Cells. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	20
185	Y-type Nonfullerene Acceptors with Outer Branched Side Chains and Inner Cyclohexane Side Chains for 19.36% Efficiency Polymer Solar Cells. <i>Advanced Materials</i> , 2023, 35, .	11.1	69
186	The Dynamics of Delocalized Excitations in Organic Solar Cells with Nonfullerene Acceptors. <i>Journal of Physical Chemistry Letters</i> , 2023, 14, 3031-3038.	2.1	5
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