Fengling Zhang

List of Publications by Year
in descending order

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184	17,352	11639	13758
papers	citations	70	129
		h-index	g-index

186	186	186	12390
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fast charge separation in a non-fullerene organic solar cell with a small driving force. Nature Energy, 2016, 1, .	19.8	1,167
2	Consensus stability testing protocols for organic photovoltaic materials and devices. Solar Energy Materials and Solar Cells, 2011, 95, 1253-1267.	3.0	812
3	High-Performance Polymer Solar Cells of an Alternating Polyfluorene Copolymer and a Fullerene Derivative. Advanced Materials, 2003, 15, 988-991.	11.1	712
4	Design rules for minimizing voltage losses in high-efficiency organic solar cells. Nature Materials, 2018, 17, 703-709.	13.3	701
5	High-efficiency small-molecule ternary solar cells with a hierarchical morphology enabled by synergizing fullerene and non-fullerene acceptors. Nature Energy, 2018, 3, 952-959.	19.8	558
6	Polymer Photovoltaic Cells with Conducting Polymer Anodes. Advanced Materials, 2002, 14, 662-665.	11.1	455
7	Influence of Solvent Mixing on the Morphology and Performance of Solar Cells Based on Polyfluorene Copolymer/Fullerene Blends. Advanced Functional Materials, 2006, 16, 667-674.	7.8	439
8	An Easily Synthesized Blue Polymer for Highâ€Performance Polymer Solar Cells. Advanced Materials, 2010, 22, 5240-5244.	11.1	435
9	A Planar Copolymer for High Efficiency Polymer Solar Cells. Journal of the American Chemical Society, 2009, 131, 14612-14613.	6.6	407
10	An Easily Accessible Isoindigo-Based Polymer for High-Performance Polymer Solar Cells. Journal of the American Chemical Society, 2011, 133, 14244-14247.	6.6	363
11	Electroluminescence from Charge Transfer States in Polymer Solar Cells. Journal of the American Chemical Society, 2009, 131, 11819-11824.	6.6	338
12	Low-Bandgap Alternating Fluorene Copolymer/Methanofullerene Heterojunctions in Efficient Near-Infrared Polymer Solar Cells. Advanced Materials, 2006, 18, 2169-2173.	11.1	320
13	A New Donorâ€“Acceptorâ€“Donor Polyfluorene Copolymer with Balanced Electron and Hole Mobility. Advanced Functional Materials, 2007, 17, 3836-3842.	7.8	280
14	Enhancing the Photovoltage of Polymer Solar Cells by Using a Modified Cathode. Advanced Materials, 2007, 19, 1835-1838.	11.1	251
15	Asymmetric Electron Acceptors for Highâ€Efficiency and Lowâ€Energyâ€Loss Organic Photovoltaics. Advanced Materials, 2020, 32, e2001160.	11.1	246
16	Alternating Polyfluorenes Collect Solar Light in Polymer Photovoltaics. Accounts of Chemical Research, 2009, 42, 1731-1739.	7.6	237
17	Polymer Solar Cells Based on a Low-Bandgap Fluorene Copolymer and a Fullerene Derivative with Photocurrent Extended to 850â€‰nm. Advanced Functional Materials, 2005, 15, 745-750.	7.8	227
18	Infrared photocurrent spectral response from plastic solar cell with low-band-gap polyfluorene and fullerene derivative. Applied Physics Letters, 2004, 85, 5081-5083.	1.5	206

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19	A round robin study of flexible large-area roll-to-roll processed polymer solar cell modules. Solar Energy Materials and Solar Cells, 2009, 93, 1968-1977.	3.0	205
20	Highâ€Performance Ultrathin Flexible Solidâ€State Supercapacitors Based on Solution Processable Mo_{1.33}C MXene and PEDOT:PSS. Advanced Functional Materials, 2018, 28, 1703808.	7.8	196
21	Quantification of Quantum Efficiency and Energy Losses in Low Bandgap Polymer:Fullerene Solar Cells with High Openâ€Circuit Voltage. Advanced Functional Materials, 2012, 22, 3480-3490.	7.8	190
22	Low bandgap alternating polyfluorene copolymers in plastic photodiodes and solar cells. Applied Physics A: Materials Science and Processing, 2004, 79, 31-35.	1.1	174
23	Enhanced Performance of Inverted Polymer Solar Cells by Using Poly(ethylene oxide)-Modified ZnO as an Electron Transport Layer. ACS Applied Materials & Interfaces, 2013, 5, 380-385.	4.0	162
24	Ethanedithiol Treatment of Solutionâ€Processed ZnO Thin Films: Controlling the Intragap States of Electron Transporting Interlayers for Efficient and Stable Inverted Organic Photovoltaics. Advanced Energy Materials, 2015, 5, 1401606.	10.2	157
25	Synthesis and characterization of benzodithiopheneâ€“isoindigo polymers for solar cells. Journal of Materials Chemistry, 2012, 22, 2306-2314.	6.7	156
26	A Conjugated Polymer for Near Infrared Optoelectronic Applications. Advanced Materials, 2007, 19, 3308-3311.	11.1	154
27	Soluble Polythiophenes with Pendant Fullerene Groups as Double Cable Materials for Photodiodes. Advanced Materials, 2001, 13, 1871.	11.1	153
28	Inverted and transparent polymer solar cells prepared with vacuum-free processing. Solar Energy Materials and Solar Cells, 2009, 93, 497-500.	3.0	148
29	Geminate Charge Recombination in Alternating Polyfluorene Copolymer/Fullerene Blends. Journal of the American Chemical Society, 2007, 129, 8466-8472.	6.6	146
30	Investigation on polymer anode design for flexible polymer solar cells. Applied Physics Letters, 2008, 92, 233308.	1.5	142
31	High photovoltage achieved in low band gap polymer solar cells by adjusting energy levels of a polymer with the LUMOs of fullerene derivatives. Journal of Materials Chemistry, 2008, 18, 5468.	6.7	137
32	Benzothiadiazole-Based Linear and Star Molecules: Design, Synthesis, and Their Application in Bulk Heterojunction Organic Solar Cells. Chemistry of Materials, 2009, 21, 5327-5334.	3.2	137
33	An isoindigo-based low band gap polymer for efficient polymer solar cells with high photo-voltage. Chemical Communications, 2011, 47, 4908.	2.2	134
34	A Vertically Integrated Solarâ€Powered Electrochromic Window for Energy Efficient Buildings. Advanced Materials, 2014, 26, 4895-4900.	11.1	134
35	Geminate Charge Recombination in Polymer/Fullerene Bulk Heterojunction Films and Implications for Solar Cell Function. Journal of the American Chemical Society, 2010, 132, 12440-12451.	6.6	130
36	Influences of Surface Roughness of ZnO Electron Transport Layer on the Photovoltaic Performance of Organic Inverted Solar Cells. Journal of Physical Chemistry C, 2012, 116, 24462-24468.	1.5	126

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37	A fused-ring based electron acceptor for efficient non-fullerene polymer solar cells with small HOMO offset. Nano Energy, 2016, 27, 430-438.	8.2	125
38	Conducting Polymer Nanowires and Nanodots Made with Soft Lithography. Nano Letters, 2002, 2, 1373-1377.	4.5	124
39	Folded reflective tandem polymer solar cell doubles efficiency. Applied Physics Letters, 2007, 91, .	1.5	124
40	Polymer-MXene composite films formed by MXene-facilitated electrochemical polymerization for flexible solid-state microsupercapacitors. Nano Energy, 2019, 60, 734-742.	8.2	124
41	On the Dissociation Efficiency of Charge Transfer Excitons and Frenkel Excitons in Organic Solar Cells: A Luminescence Quenching Study. Journal of Physical Chemistry C, 2010, 114, 21824-21832.	1.5	122
42	Side-Chain Architectures of 2,7-Carbazole and Quinoxaline-Based Polymers for Efficient Polymer Solar Cells. Macromolecules, 2011, 44, 2067-2073.	2.2	119
43	â€œDouble-Cableâ€•Conjugated Polymers with Linear Backbone toward High Quantum Efficiencies in Single-Component Polymer Solar Cells. Journal of the American Chemical Society, 2017, 139, 18647-18656.	6.6	119
44	Synthesis, Characterization, and Devices of a Series of Alternating Copolymers for Solar Cells. Chemistry of Materials, 2009, 21, 3491-3502.	3.2	118
45	In Situ Formation of MoO₃ in PEDOT:PSS Matrix: A Facile Way to Produce a Smooth and Less Hygroscopic Hole Transport Layer for Highly Stable Polymer Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2013, 3, 349-355.	10.2	118
46	Influence of buffer layers on the performance of polymer solar cells. Applied Physics Letters, 2004, 84, 3906-3908.	1.5	113
47	Lowâ€Temperature Combustionâ€Synthesized Nickel Oxide Thin Films as Holeâ€Transport Interlayers for Solutionâ€Processed Optoelectronic Devices. Advanced Energy Materials, 2014, 4, 1301460.	10.2	110
48	Semiâ€Transparent Tandem Organic Solar Cells with 90% Internal Quantum Efficiency. Advanced Energy Materials, 2012, 2, 1467-1476.	10.2	109
49	Structureâ€“property relationships of oligothiopheneâ€“isoindigo polymers for efficient bulk-heterojunction solar cells. Energy and Environmental Science, 2014, 7, 361-369.	15.6	108
50	Photoelectron Spectroscopy of the Contact between the Cathode and the Active Layers in Plastic Solar Cells: The Role of LiF. Japanese Journal of Applied Physics, 2005, 44, 3695-3701.	0.8	106
51	Light-Up Lipid Droplets Dynamic Behaviors Using a Red-Emitting Fluorogenic Probe. Analytical Chemistry, 2020, 92, 3613-3619.	3.2	104
52	Polymer Photovoltaics with Alternating Copolymer/Fullerene Blends and Novel Device Architectures. Advanced Materials, 2010, 22, E100-16.	11.1	100
53	9-Alkylidene-9H-Fluorene-Containing Polymer for High-Efficiency Polymer Solar Cells. Macromolecules, 2011, 44, 7617-7624.	2.2	99
54	Printed Nonfullerene Organic Solar Cells with the Highest Efficiency of 9.5%. Advanced Energy Materials, 2018, 8, 1701942.	10.2	99

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55	Flexible double-cross-linked cellulose-based hydrogel and aerogel membrane for supercapacitor separator. Journal of Materials Chemistry A, 2018, 6, 24468-24478.	5.2	98
56	Unveiling structure-performance relationships from multi-scales in non-fullerene organic photovoltaics. Nature Communications, 2021, 12, 4627.	5.8	98
57	Solution-Processable Organic Molecule with Triphenylamine Core and Two Benzothiadiazole-Thiophene Arms for Photovoltaic Application. Journal of Physical Chemistry C, 2010, 114, 3701-3706.	1.5	97
58	Design, Synthesis and Properties of Low Band Gap Polyfluorenes for Photovoltaic Devices. Synthetic Metals, 2005, 154, 53-56.	2.1	90
59	Tailoring side chains of low band gap polymers for high efficiency polymer solar cells. Polymer, 2010, 51, 3031-3038.	1.8	90
60	New low band gap alternating polyfluorene copolymer-based photovoltaic cells. Solar Energy Materials and Solar Cells, 2007, 91, 1010-1018.	3.0	86
61	Solution-processed bulk heterojunction organic solar cells based on an oligothiophene derivative. Applied Physics Letters, 2010, 97, .	1.5	86
62	Conformational Disorder Enhances Solubility and Photovoltaic Performance of a Thiopheneâ€“Quinoxaline Copolymer. Advanced Energy Materials, 2013, 3, 806-814.	10.2	86
63	A New Fullereneâ€Free Bulkâ€Heterojunction System for Efficient Highâ€Voltage and Highâ€Fill Factor Solutionâ€Processed Organic Photovoltaics. Advanced Materials, 2015, 27, 1900-1907.	11.1	84
64	Small Band Gap Polymers Synthesized via a Modified Nitration of 4,7-Dibromo-2,1,3-benzothiadiazole. Organic Letters, 2010, 12, 4470-4473.	2.4	79
65	A flexible semitransparent photovoltaic supercapacitor based on water-processed MXene electrodes. Journal of Materials Chemistry A, 2020, 8, 5467-5475.	5.2	79
66	Development of polymerâ€“fullerene solar cells. National Science Review, 2016, 3, 222-239.	4.6	78
67	A polymer photodiode using vapour-phase polymerized PEDOT as an anode. Solar Energy Materials and Solar Cells, 2006, 90, 133-141.	3.0	76
68	Origin of Reduced Bimolecular Recombination in Blends of Conjugated Polymers and Fullerenes. Advanced Functional Materials, 2013, 23, 4262-4268.	7.8	76
69	A Freeâ€Standing Highâ€Output Power Density Thermoelectric Device Based on Structureâ€Ordered PEDOT:PSS. Advanced Electronic Materials, 2018, 4, 1700496.	2.6	73
70	Observation of a Charge Transfer State in Lowâ€Bandgap Polymer/Fullerene Blend Systems by Photoluminescence and Electroluminescence Studies. Advanced Functional Materials, 2009, 19, 3293-3299.	7.8	71
71	Structure-property relationships of small bandgap conjugated polymers for solar cells. Dalton Transactions, 2009, , 10032.	1.6	71
72	Revealing the Critical Role of the HOMO Alignment on Maximizing Current Extraction and Suppressing Energy Loss in Organic Solar Cells. IScience, 2019, 19, 883-893.	1.9	68

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73	Multifolded polymer solar cells on flexible substrates. Applied Physics Letters, 2008, 93, .	1.5	67
74	An alternating Dâ€“A1â€“Dâ€“A2 copolymer containing two electron-deficient moieties for efficient polymer solar cells. Journal of Materials Chemistry A, 2013, 1, 11141.	5.2	66
75	A Facile Method to Enhance Photovoltaic Performance of Benzodithopheneâ€Isoindigo Polymers by Inserting Bithiophene Spacer. Advanced Energy Materials, 2014, 4, 1301455.	10.2	66
76	Mechanism study on organic ternary photovoltaics with 18.3% certified efficiency: from molecule to device. Energy and Environmental Science, 2022, 15, 855-865.	15.6	62
77	Effect of cathode buffer layer on the stability of polymer bulk heterojunction solar cells. Solar Energy Materials and Solar Cells, 2010, 94, 1831-1834.	3.0	60
78	Charge formation and transport in bulk-heterojunction solar cells based on alternating polyfluorene copolymers blended with fullerenes. Organic Electronics, 2006, 7, 235-242.	1.4	59
79	Integrated Design of Organic Hole Transport Materials for Efficient Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2015, 5, 1401185.	10.2	59
80	The Effect of additive on performance and shelf-stability of HSX-1/PCBM photovoltaic devices. Organic Electronics, 2011, 12, 1544-1551.	1.4	58
81	Mobility and fill factor correlation in geminate recombination limited solar cells. Journal of Applied Physics, 2011, 110, .	1.1	58
82	Low bandgap polymers synthesized by FeCl3 oxidative polymerization. Solar Energy Materials and Solar Cells, 2010, 94, 1275-1281.	3.0	56
83	Polyfluorene copolymer based bulk heterojunction solar cells. Thin Solid Films, 2004, 449, 152-157.	0.8	54
84	High Thermoelectric Performance in nâ€Type Perylene Bisimide Induced by the Soret Effect. Advanced Materials, 2020, 32, e2002752.	11.1	53
85	Stoichiometry, mobility, and performance in bulk heterojunction solar cells. Applied Physics Letters, 2007, 91, 071108.	1.5	52
86	Device Performance of APFOâ€3/PCBM Solar Cells with Controlled Morphology. Advanced Materials, 2009, 21, 4398-4403.	11.1	52
87	Limitations and Perspectives on Tripletâ€Materialâ€Based Organic Photovoltaic Devices. Advanced Materials, 2019, 31, e1900690.	11.1	50
88	Lateral Phase Separation Gradients in Spinâ€Coated Thin Films of Highâ€Performance Polymer:Fullerene Photovoltaic Blends. Advanced Functional Materials, 2011, 21, 3169-3175.	7.8	49
89	Near infrared electron acceptors with a photoresponse beyond 1000 nm for highly efficient organic solar cells. Journal of Materials Chemistry A, 2020, 8, 18154-18161.	5.2	49
90	Polymer solar cells based on MEH-PPV and PCBM. Synthetic Metals, 2003, 137, 1401-1402.	2.1	47

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91	Printable Highly Conductive Conjugated Polymer Sensitized ZnO NCs as Cathode Interfacial Layer for Efficient Polymer Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 8237-8245.	4.0	46
92	Nanomorphology of Bulk Heterojunction Organic Solar Cells in 2D and 3D Correlated to Photovoltaic Performance. Macromolecules, 2009, 42, 4646-4650.	2.2	45
93	Enhance performance of organic solar cells based on an isoindigo-based copolymer by balancing absorption and miscibility of electron acceptor. Applied Physics Letters, 2011, 99, 143302.	1.5	45
94	Integration of amyloid nanowires in organic solar cells. Applied Physics Letters, 2008, 93, 023307.	1.5	44
95	Optimizing ZnO nanoparticle surface for bulk heterojunction hybrid solar cells. Solar Energy Materials and Solar Cells, 2013, 118, 43-47.	3.0	44
96	Suppressing Coâ€€rystallization of Halogenated Nonâ€Fullerene Acceptors for Thermally Stable Ternary Solar Cells. Advanced Functional Materials, 2020, 30, 2005462.	7.8	44
97	Insights into the working mechanism of cathode interlayers in polymer solar cells via [(C₈H₁₇)₄N]₄[SiW₁₂O₄₀]. Journal of Materials Chemistry A, 2016, 4, 19189-19196.	5.2	42
98	Synthesis and properties of alternating polyfluorene copolymers with redshifted absorption for use in solar cells. Synthetic Metals, 2003, 135-136, 137-138.	2.1	41
99	Improvements of fill factor in solar cells based on blends of polyfluorene copolymers as electron donors. Thin Solid Films, 2007, 515, 3126-3131.	0.8	41
100	Efficient Charge Transport Enables High Efficiency in Dilute Donor Organic Solar Cells. Journal of Physical Chemistry Letters, 2021, 12, 5039-5044.	2.1	41
101	Synthesis of Unstable Colloidal Inorganic Nanocrystals through the Introduction of a Protecting Ligand. Nano Letters, 2014, 14, 3117-3123.	4.5	40
102	Recent progress in thin film organic photodiodes. Synthetic Metals, 2001, 121, 1525-1528.	2.1	38
103	Photodiodes and solar cells based on the n-type polymer poly(pyridopyrazine vinylene) as electron acceptor. Synthetic Metals, 2003, 138, 555-560.	2.1	38
104	Molecular and Energetic Order Dominate the Photocurrent Generation Process in Organic Solar Cells with Small Energetic Offsets. ACS Energy Letters, 2020, 5, 589-596.	8.8	36
105	Enhanced performance and stability in polymer photovoltaic cells using lithium benzoate as cathode interfacial layer. Solar Energy Materials and Solar Cells, 2011, 95, 1243-1247.	3.0	35
106	Charge Carrier Dynamics in Alternating Polyfluorene Copolymer:Fullerene Blends Probed by Terahertz Spectroscopy. Journal of Physical Chemistry C, 2008, 112, 6558-6563.	1.5	34
107	On the understanding of energy loss and device fill factor trade-offs in non-fullerene organic solar cells with varied energy levels. Nano Energy, 2020, 75, 105032.	8.2	34
108	Ultrafast light-induced charge pair formation dynamics in poly[3-(2â€²-methoxy-5â€²octylphenyl)thiophene]. Physical Review B, 2004, 70, .	1.1	32

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109	Ultrafast conductivity in a low-band-gap polyphenylene and fullerene blend studied by terahertz spectroscopy. Physical Review B, 2009, 79, .	1.1	32
110	Poly(4,8â€bis(2â€ethylhexyloxy)benzo[1,2â€b:4,5â€bâ€²]dithiophene vinylene): Synthesis, optical and photovoltaic properties. Journal of Polymer Science Part A, 2010, 48, 1822-1829.	2.5	31
111	Fast Monolayer Adsorption and Slow Energy Transfer in CdSe Quantum Dot Sensitized ZnO Nanowires. Journal of Physical Chemistry A, 2013, 117, 5919-5925.	1.1	31
112	Molecular orbital energy level modulation through incorporation of selenium and fluorine into conjugated polymers for organic photovoltaic cells. Journal of Materials Chemistry A, 2013, 1, 13422.	5.2	31
113	Modulating molecular aggregation by facile heteroatom substitution of diketopyrrolopyrrole based small molecules for efficient organic solar cells. Journal of Materials Chemistry A, 2015, 3, 24349-24357.	5.2	31
114	Performance limitations in thieno[3,4-c]pyrrole-4,6-dione-based polymer:ITIC solar cells. Physical Chemistry Chemical Physics, 2017, 19, 23990-23998.	1.3	29
115	Exciton dynamics in alternating polyfluorene/fullerene blends. Chemical Physics, 2008, 350, 14-22.	0.9	28
116	Alternating copolymers of fluorene and donorâ€“acceptorâ€“donor segments designed for miscibility in bulk heterojunction photovoltaics. Journal of Materials Chemistry, 2009, 19, 5359.	6.7	28
117	Charge Transfer Dynamics and Device Performance of Environmentally Friendly Processed Nonfullerene Organic Solar Cells. ACS Applied Energy Materials, 2018, 1, 4776-4785.	2.5	28
118	Light-induced degradation of fullerenes in organic solar cells: a case study on TQ1:PC₇₁BM. Journal of Materials Chemistry A, 2018, 6, 11884-11889.	5.2	27
119	Roll-to-Roll Slot-Die-Printed Polymer Solar Cells by Self-Assembly. ACS Applied Materials & Interfaces, 2018, 10, 22485-22494.	4.0	27
120	Laminated Free Standing PEDOT:PSS Electrode for Solution Processed Integrated Photocapacitors via Hydrogenâ€Bond Interaction. Advanced Materials Interfaces, 2017, 4, 1700704.	1.9	26
121	Electric Field Facilitating Hole Transfer in Non-Fullerene Organic Solar Cells with a Negative HOMO Offset. Journal of Physical Chemistry C, 2020, 124, 15132-15139.	1.5	26
122	Synthesis and electroluminescent properties of heterocycle-containing poly(p-phenylene vinylene) derivatives. Synthetic Metals, 1999, 99, 249-252.	2.1	25
123	Inverted indium-tin-oxide-free cone-shaped polymer solar cells for light trapping. Applied Physics Letters, 2012, 100, 213901.	1.5	25
124	Dual Function of UV/Ozone Plasma-Treated Polymer in Polymer/Metal Hybrid Electrodes and Semitransparent Polymer Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 44656-44666.	4.0	25
125	Mo_{1.33}C MXene-Assisted PEDOT:PSS Hole Transport Layer for High-Performance Bulk-Heterojunction Polymer Solar Cells. ACS Applied Electronic Materials, 2020, 2, 163-169.	2.0	25
126	Fast switching polymeric electrochromics with facile processed water dispersed nanoparticles. Nano Energy, 2018, 47, 123-129.	8.2	23

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127	Enhanced performance and stability of inverted planar perovskite solar cells by incorporating 1,6-diaminohexane dihydrochloride additive. Solar Energy Materials and Solar Cells, 2018, 188, 140-148.	3.0	23
128	Bipolar transport observed through extraction currents on organic photovoltaic blend materials. Applied Physics Letters, 2006, 89, 142111.	1.5	22
129	Solution-processed bulk-heterojunction organic solar cells employing Ir complexes as electron donors. Journal of Materials Chemistry A, 2014, 2, 12390.	5.2	22
130	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.	3.2	22
131	Infrared ellipsometry characterization of conducting thin organic films. Thin Solid Films, 2004, 455-456, 295-300.	0.8	21
132	Tuning Work Function of Noble Metals As Promising Cathodes in Organic Electronic Devices. Chemistry of Materials, 2009, 21, 2798-2802.	3.2	21
133	The trade-off between electrochromic stability and contrast of a thiopheneâ€"Quinoxaline copolymer. Electrochimica Acta, 2017, 253, 530-535.	2.6	21
134	Effect of Side Groups on the Photovoltaic Performance Based on Porphyrinâ€“Perylene Bisimide Electron Acceptors. ACS Applied Materials & Interfaces, 2018, 10, 32454-32461.	4.0	21
135	A Comparative Study on Hole Transfer Inversely Correlated with Driving Force in Two Non-Fullerene Organic Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 4110-4116.	2.1	21
136	A diketopyrrolopyrrole-based macrocyclic conjugated molecule for organic electronics. Journal of Materials Chemistry C, 2019, 7, 3802-3810.	2.7	21
137	In Situ Optical Studies on Morphology Formation in Organic Photovoltaic Blends. Small Methods, 2021, 5, e2100585.	4.6	21
138	Carrier redistribution in organic/inorganic (poly(3,4-ethylenedioxy) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Td (thiophene/poly(styrene Applied Physics Letters, 2004, 84, 1311-1313.	1.5	20
139	Oneâ€Step Bladeâ€Coated Highly Efficient Nonfullerene Organic Solar Cells with a Selfâ€Assembled Interfacial Layer Enabled by Solvent Vapor Annealing. Solar Rrl, 2019, 3, 1900179.	3.1	19
140	Flexible Solidâ€State Asymmetric Supercapacitors with Enhanced Performance Enabled by Freeâ€Standing MXeneâ^'Biopolymer Nanocomposites and Hierarchical Grapheneâ^'RuO_x Paper Electrodes. Batteries and Supercaps, 2020, 3, 604-610.	2.4	19
141	Solution-Processed Highly Efficient Semitransparent Organic Solar Cells with Low Donor Contents. ACS Applied Energy Materials, 2021, 4, 14335-14341.	2.5	19
142	Rhenium oxide as the interfacial buffer layer for polymer photovoltaic cells. Optoelectronics Letters, 2010, 6, 176-178.	0.4	18
143	Synthesis and characterization of three small band gap conjugated polymers for solar cell applications. Polymer Chemistry, 2010, 1, 1272.	1.9	18
144	Synthesis and photovoltaic behaviors of benzothiadiazole- and triphenylamine-based alternating copolymers. Polymer, 2012, 53, 324-332.	1.8	17

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145	Manipulate Micrometer Surface and Nanometer Bulk Phase Separation Structures in the Active Layer of Organic Solar Cells via Synergy of Ultrasonic and High-Pressure Gas Spraying. ACS Applied Materials & Interfaces, 2019, 11, 10777-10784.	4.0	17
146	Bipolar Charge Transport in Fullerene Molecules in a Bilayer and Blend of Polyfluorene Copolymer and Fullerene. Advanced Materials, 2010, 22, 1008-1011.	11.1	16
147	Voltage-dependent recombination region movement in organic light-emitting diodes (OLEDs) based on a europium complex-doped polymer. Journal of Luminescence, 2000, 87-89, 1149-1151.	1.5	15
148	Efficient polymer bulk heterojunction solar cells with cesium acetate as the cathode interfacial layer. Renewable Energy, 2013, 50, 565-569.	4.3	14
149	Individual nanostructure optimization in donor and acceptor phases to achieve efficient quaternary organic solar cells. Nano Energy, 2019, 66, 104176.	8.2	14
150	Nonfullerene acceptors from thieno[3,2-b]thiophene-fused naphthalene donor core with six-member-ring connection for efficient organic solar cells. Dyes and Pigments, 2021, 185, 108892.	2.0	14
151	Encapsulation Effect on Performance and Stability of Organic Solar Cells. Advanced Materials Interfaces, 2020, 7, 2000293.	1.9	13
152	A triphenylamine-based four-armed molecule for solution-processed organic solar cells with high photo-voltage. Journal of Materials Chemistry A, 2013, 1, 4937.	5.2	12
153	Enhanced Performance and Stability in Polymer Photovoltaic Cells Using Ultraviolet-Treated PEDOT:PSS. Chinese Physics Letters, 2013, 30, 077201.	1.3	12
154	Macromolecular nanoelectronics. Current Applied Physics, 2002, 2, 27-31.	1.1	11
155	Black Polymers in Bulk-Heterojunction Solar Cells. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1565-1572.	1.9	11
156	Investigation on voltage loss in organic triplet photovoltaic devices based on Ir complexes. Journal of Materials Chemistry C, 2019, 7, 15049-15056.	2.7	11
157	MXene-based multifunctional smart fibers for wearable and portable electronics. Journal of Materials Chemistry A, 2022, 10, 12544-12550.	5.2	11
158	Plasmon-enhanced organic solar cells with solution-processed three-dimensional Ag nanosheets. Solar Energy Materials and Solar Cells, 2013, 109, 227-232.	3.0	10
159	Mixed solvents for reproducible photovoltaic bulk heterojunctions. Journal of Photonics for Energy, 2011, 1, 011122.	0.8	9
160	Alternating Copolymers and Alternative Device Geometries for Organic Photovoltaics. Ambio, 2012, 41, 138-142.	2.8	9
161	Conjugated polymers with polar side chains in bulk heterojunction solar cell devices. Polymer International, 2014, 63, 22-30.	1.6	9
162	Electrophoretic deposited oxide thin films as charge transporting interlayers for solution-processed optoelectronic devices: the case of ZnO nanocrystals. RSC Advances, 2015, 5, 8216-8222.	1.7	9

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163	Theoretical models and experimental results on the temperature dependence of polyfluorene solar cells. Solar Energy Materials and Solar Cells, 2006, 90, 1607-1614.	3.0	8
164	Surface states of ZnO nanoparticles effect on the performance of inverted-organic solar cells. Journal of Renewable and Sustainable Energy, 2013, 5, 053106.	0.8	8
165	An alternating copolymer of fluorene donor and quinoxaline acceptor versus a terpolymer consisting of fluorene, quinoxaline and benzothiadiazole building units: synthesis and characterization. Polymer Bulletin, 2016, 73, 1167-1183.	1.7	8
166	Fast Field-Insensitive Charge Extraction Enables High Fill Factors in Polymer Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 38460-38469.	4.0	8
167	Solution-processed solar-charging power units made of organic photovoltaic modules and asymmetric super-capacitors. Applied Physics Letters, 2021, 118, .	1.5	8
168	Submicrometre bridge electrode arrays for light emitting polymer diodes and photodiodes. Nanotechnology, 2002, 13, 205-211.	1.3	6
169	Influence of solvents and substrates on the morphology and the performance of low-bandgap polyfluorene: PCBM photovoltaic devices. , 2006, 6192, 339.		5
170	The dispersion of BEDÂ° in unintentional doped GaN crystals. Solid State Communications, 1986, 59, 599-602.	0.9	3
171	Blue light-emitting diodes based on novel polyfluorene copolymers. Journal of Luminescence, 2007, 122-123, 610-613.	1.5	3
172	Efficiency Enhancement of MEH-PPV:PCBM Solar Cells by Addition of Ditertutyl Peroxide as an Additive. Chinese Physics Letters, 2013, 30, 017202.	1.3	3
173	Random polyfluorene co-polymers designed for a better optical absorption coverage of the visible region of the electromagnetic spectrum. Bulletin of the Chemical Society of Ethiopia, 2014, 28, 121.	0.5	3
174	Tailorable Membraneâ€Penetrating Nanoplatform for Highly Efficient Organelleâ€Specific Localization. Small, 2021, 17, 2101440.	5.2	2
175	Electron injection behavior from the magnesium electrode into a family of electron-transporting amorphous molecular materials, a,ï‰-bis(dimesitylboryl)oligothiophene. , 2009, , .		1
176	Characterization and properties of a new amorphous small-molecule material containing both donor and acceptor moieties for photovoltaic application. Chemical Research in Chinese Universities, 2013, 29, 1193-1198.	1.3	1
177	Thin Films: Ethanedithiol Treatment of Solution-Processed ZnO Thin Films: Controlling the Intragap States of Electron Transporting Interlayers for Efficient and Stable Inverted Organic Photovoltaics (Adv. Energy Mater. 5/2015). Advanced Energy Materials, 2015, 5, n/a-n/a.	10.2	1
178	Polymer Solar Cells. Green Chemistry and Sustainable Technology, 2018, , 45-108.	0.4	1
179	Organic Polymer Electronics â€“ A Special Issue in Honor of Prof. Olle InganÃs. Advanced Materials, 2019, 31, 1901940.	11.1	1
180	Thermoelectric Materials: High Thermoelectric Performance in nâ€Type Perylene Bisimide Induced by the Soret Effect (Adv. Mater. 45/2020). Advanced Materials, 2020, 32, 2070335.	11.1	1

#	Article	IF	Citations
181	Using dispersion theory to interpret the polarization properties of the band-edge emission in GaN crystals. Solid State Communications, 1987, 61, 381-384.	0.9	0
182	Transient state study of the polarization properties of sideband recombination emissions in GaN crystals. Journal of Luminescence, 1988, 40-41, 491-492.	1.5	0
183	Optoelectronic Devices: Lowâ€Temperature Combustionâ€Synthesized Nickel Oxide Thin Films as Holeâ€Transport Interlayers for Solutionâ€Processed Optoelectronic Devices (Adv. Energy Mater. 6/2014). Advanced Energy Materials, 2014, 4, .	10.2	0
184	Polymer optoelectronics â€" towards nanometer dimensions. , 2003, , 65-81.		0