Gang Li

List of Publications by Citations

203 papers	56,460 citations	76 h-index	225 g-index
225 ext. papers	60,678 ext. citations	14.2 avg, IF	7.83 L-index

#	Paper	IF	Citations
203	Photovoltaics. Interface engineering of highly efficient perovskite solar cells. *Science*, **2014**, 345, 542-6	33.3	5272
202	High-efficiency solution processable polymer photovoltaic cells by self-organization of polymer blends. *Nature Materials*, **2005**, 4, 864-868	27	4965
201	Polymer solar cells. *Nature Photonics*, **2012**, 6, 153-161	33.9	3621
200	For the bright future-bulk heterojunction polymer solar cells with power conversion efficiency of 7.4%. *Advanced Materials*, **2010**, 22, E135-8	24	3299
199	Polymer solar cells with enhanced open-circuit voltage and efficiency. *Nature Photonics*, **2009**, 3, 649-653	33.9	2870
198	A polymer tandem solar cell with 10.6% power conversion efficiency. *Nature Communications*, **2013**, 4, 1446	17.4	2456
197	Planar heterojunction perovskite solar cells via vapor-assisted solution process. *Journal of the American Chemical Society*, **2014**, 136, 622-5	16.4	1921
196	Solution-processed hybrid perovskite photodetectors with high detectivity. *Nature Communications* , **2014**, 5, 5404	17.4	1749
195	Tandem polymer solar cells featuring a spectrally matched low-bandgap polymer. *Nature Photonics*, **2012**, 6, 180-185	33.9	1299
194	Highly efficient solar cell polymers developed via fine-tuning of structural and electronic properties. *Journal of the American Chemical Society*, **2009**, 131, 7792-9	16.4	1261
193	Next-generation organic photovoltaics based on non-fullerene acceptors. *Nature Photonics*, **2018**, 12, 131-142	33.9	1155
192	Recent Progress in Polymer Solar Cells: Manipulation of Polymer:Fullerene Morphology and the Formation of Efficient Inverted Polymer Solar Cells. *Advanced Materials*, **2009**, 21, 1434-1449	24	1142
191	Synthesis, characterization, and photovoltaic properties of a low band gap polymer based on silole-containing polythiophenes and 2,1,3-benzothiadiazole. *Journal of the American Chemical Society*, **2008**, 130, 16144-5	16.4	1051
190	Solvent Annealing Effect in Polymer Solar Cells Based on Poly(3-hexylthiophene) and Methanofullerenes. *Advanced Functional Materials*, **2007**, 17, 1636-1644	15.6	1036
189	On the mechanism of conductivity enhancement in poly(3,4-ethylenedioxythiophene):poly(styrene sulfonate) film through solvent treatment. *Polymer*, **2004**, 45, 8443-8450	3.9	983
188	25th anniversary article: a decade of organic/polymeric photovoltaic research. *Advanced Materials*, **2013**, 25, 6642-71	24	978
187	Transition metal oxides as the buffer layer for polymer photovoltaic cells. *Applied Physics Letters*, **2006**, 88, 073508	3.4	877

186	Low-Bandgap Near-IR Conjugated Polymers/Molecules for Organic Electronics. *Chemical Reviews*, **2015**, 115, 12633-65	68.1	863
185	Development of new semiconducting polymers for high performance solar cells. *Journal of the American Chemical Society*, **2009**, 131, 56-7	16.4	853
184	Efficient inverted polymer solar cells. *Applied Physics Letters*, **2006**, 88, 253503	3.4	684
183	Synthesis of a low band gap polymer and its application in highly efficient polymer solar cells. *Journal of the American Chemical Society*, **2009**, 131, 15586-7	16.4	673
182	Investigation of annealing effects and film thickness dependence of polymer solar cells based on poly(3-hexylthiophene). *Journal of Applied Physics*, **2005**, 98, 043704	2.5	661
181	Vertical Phase Separation in Poly(3-hexylthiophene): Fullerene Derivative Blends and its Advantage for Inverted Structure Solar Cells. *Advanced Functional Materials*, **2009**, 19, 1227-1234	15.6	628
180	Effects of Solvent Mixtures on the Nanoscale Phase Separation in Polymer Solar Cells. *Advanced Functional Materials*, **2008**, 18, 1783-1789	15.6	614
179	Moisture assisted perovskite film growth for high performance solar cells. *Applied Physics Letters*, **2014**, 105, 183902	3.4	598
178	Single Crystal Formamidinium Lead Iodide (FAPbI3): Insight into the Structural, Optical, and Electrical Properties. *Advanced Materials*, **2016**, 28, 2253-8	24	578
177	Synthesis of fluorinated polythienothiophene-co-benzodithiophenes and effect of fluorination on the photovoltaic properties. *Journal of the American Chemical Society*, **2011**, 133, 1885-94	16.4	523
176	Solution-processed small-molecule solar cells: breaking the 10% power conversion efficiency. *Scientific Reports*, **2013**, 3, 3356	4.9	511
175	Systematic investigation of benzodithiophene- and diketopyrrolopyrrole-based low-bandgap polymers designed for single junction and tandem polymer solar cells. *Journal of the American Chemical Society*, **2012**, 134, 10071-9	16.4	504
174	Accurate Measurement and Characterization of Organic Solar Cells. *Advanced Functional Materials*, **2006**, 16, 2016-2023	15.6	464
173	High-efficiency robust perovskite solar cells on ultrathin flexible substrates. *Nature Communications*, **2016**, 7, 10214	17.4	444
172	High-performance multiple-donor bulk heterojunction solar cells. *Nature Photonics*, **2015**, 9, 190-198	33.9	440
171	Visibly transparent polymer solar cells produced by solution processing. *ACS Nano*, **2012**, 6, 7185-90	16.7	434
170	Highly efficient inverted polymer solar cell by low temperature annealing of Cs2CO3 interlayer. *Applied Physics Letters*, **2008**, 92, 173303	3.4	419
169	10.2% power conversion efficiency polymer tandem solar cells consisting of two identical sub-cells. *Advanced Materials*, **2013**, 25, 3973-8	24	403

168	Achieving High-Efficiency Polymer White-Light-Emitting Devices. *Advanced Materials*, **2006**, 18, 114-117	24	384
167	Manipulating regioregular poly(3-hexylthiophene) : [6,6]-phenyl-C61-butyric acid methyl ester blends□oute towards high efficiency polymer solar cells. *Journal of Materials Chemistry*, **2007**, 17, 3126		338
166	Fused silver nanowires with metal oxide nanoparticles and organic polymers for highly transparent conductors. *ACS Nano*, **2011**, 5, 9877-82	16.7	326
165	Effect of self-organization in polymer/fullerene bulk heterojunctions on solar cell performance. *Applied Physics Letters*, **2006**, 89, 063505	3.4	306
164	Highly efficient tandem polymer photovoltaic cells. *Advanced Materials*, **2010**, 22, 380-3	24	304
163	Metal oxide nanoparticles as an electron-transport layer in high-performance and stable inverted polymer solar cells. *Advanced Materials*, **2012**, 24, 5267-72	24	299
162	A Semi-transparent Plastic Solar Cell Fabricated by a Lamination Process. *Advanced Materials*, **2008**, 20, 415-419	24	283
161	Nanoscale Joule heating and electromigration enhanced ripening of silver nanowire contacts. *ACS Nano*, **2014**, 8, 2804-11	16.7	251
160	Absorption spectra modification in poly(3-hexylthiophene):methanofullerene blend thin films. *Chemical Physics Letters*, **2005**, 411, 138-143	2.5	251
159	Effective Carrier-Concentration Tuning of SnO Quantum Dot Electron-Selective Layers for High-Performance Planar Perovskite Solar Cells. *Advanced Materials*, **2018**, 30, e1706023	24	245
158	Recent trends in polymer tandem solar cells research. *Progress in Polymer Science*, **2013**, 38, 1909-1928	29.6	232
157	Low-bandgap conjugated polymers enabling solution-processable tandem solar cells. *Nature Reviews Materials*, **2017**, 2,	73.3	229
156	Stable and Efficient Organo-Metal Halide Hybrid Perovskite Solar Cells via □Conjugated Lewis Base Polymer Induced Trap Passivation and Charge Extraction. *Advanced Materials*, **2018**, 30, e1706126	24	192
155	Control of the nanoscale crystallinity and phase separation in polymer solar cells. *Applied Physics Letters*, **2008**, 92, 103306	3.4	183
154	Efficient light harvesting in multiple-device stacked structure for polymer solar cells. *Applied Physics Letters*, **2006**, 88, 064104	3.4	182
153	Fast-Grown Interpenetrating Network in Poly(3-hexylthiophene): Methanofullerenes Solar Cells Processed with Additive. *Journal of Physical Chemistry C*, **2009**, 113, 7946-7953	3.8	169
152	Doping of the Metal Oxide Nanostructure and its Influence in Organic Electronics. *Advanced Functional Materials*, **2009**, 19, 1241-1246	15.6	156
151	High-performance semi-transparent polymer solar cells possessing tandem structures. *Energy and Environmental Science*, **2013**, 6, 2714	35.4	154

150	Surface Plasmon and Scattering-Enhanced Low-Bandgap Polymer Solar Cell by a Metal Grating Back Electrode. *Advanced Energy Materials*, **2012**, 2, 1203-1207	21.8	152
149	Combinatorial fabrication and studies of bright white organic light-emitting devices based on emission from rubrene-doped 4,4?-bis(2,2?-diphenylvinyl)-1,1?-biphenyl. *Applied Physics Letters*, **2003**, 83, 5359-5361	3.4	149
148	Pure Formamidinium-Based Perovskite Light-Emitting Diodes with High Efficiency and Low Driving Voltage. *Advanced Materials*, **2017**, 29, 1603826	24	145
147	Energy level alignment of poly(3-hexylthiophene): [6,6]-phenyl C61 butyric acid methyl ester bulk heterojunction. *Applied Physics Letters*, **2009**, 95, 013301	3.4	138
146	Transparent Polymer Photovoltaics for Solar Energy Harvesting and Beyond. *Joule*, **2018**, 2, 1039-1054	27.8	137
145	Integrated perovskite/bulk-heterojunction toward efficient solar cells. *Nano Letters*, **2015**, 15, 662-8	11.5	129
144	Perovskite/polymer monolithic hybrid tandem solar cells utilizing a low-temperature, full solution process. *Materials Horizons*, **2015**, 2, 203-211	14.4	127
143	Tuning acceptor energy level for efficient charge collection in copper-phthalocyanine-based organic solar cells. *Applied Physics Letters*, **2006**, 88, 153504	3.4	125
142	High-Performance Organic Bulk-Heterojunction Solar Cells Based on Multiple-Donor or Multiple-Acceptor Components. *Advanced Materials*, **2018**, 30, 1705706	24	124
141	Solution-processable antimony-based light-absorbing materials beyond lead halide perovskites. *Journal of Materials Chemistry A*, **2017**, 5, 20843-20850	13	118
140	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
139	Influence of composition and heat-treatment on the charge transport properties of poly(3-hexylthiophene) and [6,6]-phenyl C61-butyric acid methyl ester blends. *Applied Physics Letters*, **2005**, 87, 112105	3.4	113
138	Effective Color Tuning in Organic Light-Emitting Diodes Based on Aluminum Tris(5-aryl-8-hydroxyquinoline) Complexes. *Advanced Materials*, **2004**, 16, 2001-2003	24	112
137	High efficiency polymer solar cells with vertically modulated nanoscale morphology. *Nanotechnology*, **2009**, 20, 165202	3.4	111
136	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
135	Effects of C70 derivative in low band gap polymer photovoltaic devices: Spectral complementation and morphology optimization. *Applied Physics Letters*, **2006**, 89, 153507	3.4	103
134	Electrostatic Self-Assembly Conjugated Polyelectrolyte-Surfactant Complex as an Interlayer for High Performance Polymer Solar Cells. *Advanced Functional Materials*, **2012**, 22, 3284-3289	15.6	95
133	Solution-processed small molecules using different electron linkers for high-performance solar cells. *Advanced Materials*, **2013**, 25, 4657-62	24	92

132	Manipulating the Mixed-Perovskite Crystallization Pathway Unveiled by In Situ GIWAXS. *Advanced Materials*, **2019**, 31, e1901284	24	84
131	Photovoltaic Performance of Vapor-Assisted Solution-Processed Layer Polymorph of CsSbI. *ACS Applied Materials & Interfaces*, **2018**, 10, 2566-2573	9.5	84
130	Relating Recombination, Density of States, and Device Performance in an Efficient Polymer:Fullerene Organic Solar Cell Blend. *Advanced Energy Materials*, **2013**, 3, 1201-1209	21.8	81
129	Improving the power efficiency of white light-emitting diode by doping electron transport material. *Applied Physics Letters*, **2006**, 89, 133509	3.4	81
128	Recent progress in morphology optimization in perovskite solar cell. *Journal of Materials Chemistry A*, **2020**, 8, 21356-21386	13	76
127	Stable and low-photovoltage-loss perovskite solar cells by multifunctional passivation. *Nature Photonics*, **2021**, 15, 681-689	33.9	72
126	Delicate Morphology Control Triggers 14.7% Efficiency All-Small-Molecule Organic Solar Cells. *Advanced Energy Materials*, **2020**, 10, 2001076	21.8	70
125	The study of solvent additive effects in efficient polymer photovoltaics via impedance spectroscopy. *Solar Energy Materials and Solar Cells*, **2014**, 130, 20-26	6.4	65
124	Zwitterionic-Surfactant-Assisted Room-Temperature Coating of Efficient Perovskite Solar Cells. *Joule*, **2020**, 4, 2404-2425	27.8	65
123	Nucleation and crystal growth control for scalable solution-processed organic–inorganic hybrid perovskite solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 1578-1603	13	64
122	Ag-Doped Halide Perovskite Nanocrystals for Tunable Band Structure and Efficient Charge Transport. *ACS Energy Letters*, **2019**, 4, 534-541	20.1	63
121	A Lewis Base-Assisted Passivation Strategy Towards Highly Efficient and Stable Perovskite Solar Cells. *Solar Rrl*, **2018**, 2, 1800055	7.1	63
120	Origin of Radiation-Induced Degradation in Polymer Solar Cells. *Advanced Functional Materials*, **2010**, 20, 2729-2736	15.6	63
119	Donor Derivative Incorporation: An Effective Strategy toward High Performance All-Small-Molecule Ternary Organic Solar Cells. *Advanced Science*, **2019**, 6, 1901613	13.6	62
118	Unraveling the High Open Circuit Voltage and High Performance of Integrated Perovskite/Organic Bulk-Heterojunction Solar Cells. *Nano Letters*, **2017**, 17, 5140-5147	11.5	61
117	Additive-induced miscibility regulation and hierarchical morphology enable 17.5% binary organic solar cells. *Energy and Environmental Science*, **2021**, 14, 3044-3052	35.4	61
116	Room-Temperature Meniscus Coating of >20% Perovskite Solar Cells: A Film Formation Mechanism Investigation. *Advanced Functional Materials*, **2019**, 29, 1900092	15.6	59
115	Precise Control of Perovskite Crystallization Kinetics via Sequential A-Site Doping. *Advanced Materials*, **2020**, 32, e2004630	24	56

114	Vertical organic light emitting transistor. *Applied Physics Letters*, **2007**, 91, 092911	3.4	55
113	High-Performance Rigid and Flexible Perovskite Solar Cells with Low-Temperature Solution-Processable Binary Metal Oxide Hole-Transporting Materials. *Solar Rrl*, **2017**, 1, 1700058	7.1	54
112	A Selenophene Containing Benzodithiophene-alt-thienothiophene Polymer for Additive-Free High Performance Solar Cell. *Macromolecules*, **2015**, 48, 562-568	5.5	52
111	Printable Solar Cells from Advanced Solution-Processible Materials. *CheM*, **2016**, 1, 197-219	16.2	50
110	Recent progress of all-polymer solar cells From chemical structure and device physics to photovoltaic performance. *Materials Science and Engineering Reports*, **2020**, 140, 100542	30.9	49
109	Single phase, high hole mobility Cu2O films as an efficient and robust hole transporting layer for organic solar cells. *Journal of Materials Chemistry A*, **2017**, 5, 11055-11062	13	47
108	Elucidating double aggregation mechanisms in the morphology optimization of diketopyrrolopyrrole-based narrow bandgap polymer solar cells. *Advanced Materials*, **2014**, 26, 3142-7	24	47
107	Potassium-intercalated rubrene as a dual-functional passivation agent for high efficiency perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 1824-1834	13	46
106	Benzodithiophene-Based Small-Molecule Donors for Next-Generation All-Small-Molecule Organic Photovoltaics. *Matter*, **2020**, 3, 1403-1432	12.7	45
105	Band tail recombination in polymer:fullerene organic solar cells. *Journal of Applied Physics*, **2014**, 116, 074503	2.5	45
104	Electronic Structure and Transition Energies in Polymer Fullerene Bulk Heterojunctions. *Journal of Physical Chemistry C*, **2014**, 118, 21873-21883	3.8	44
103	Facile synthesis of composite tin oxide nanostructures for high-performance planar perovskite solar cells. *Nano Energy*, **2019**, 60, 275-284	17.1	43
102	Lead-Free Antimony-Based Light-Emitting Diodes through the Vapor-Anion-Exchange Method. *ACS Applied Materials & Interfaces*, **2019**, 11, 35088-35094	9.5	42
101	One-step, low-temperature deposited perovskite solar cell utilizing small molecule additive. *Journal of Photonics for Energy*, **2015**, 5, 057405	1.2	41
100	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
99	Abnormal Synergetic Effect of Organic and Halide Ions on the Stability and Optoelectronic Properties of a Mixed Perovskite via In Situ Characterizations. *Advanced Materials*, **2018**, 30, e1801562	24	41
98	Improving Structural Order for a High-Performance Diketopyrrolopyrrole-Based Polymer Solar Cell with a Thick Active Layer. *Advanced Energy Materials*, **2014**, 4, 1300739	21.8	39
97	The investigation of donor-acceptor compatibility in bulk-heterojunction polymer systems. *Applied Physics Letters*, **2013**, 103, 043304	3.4	39

96	A Cryogenic Process for Antisolvent-Free High-Performance Perovskite Solar Cells. *Advanced Materials*, **2018**, 30, e1804402	24	39
95	Stabilizer-assisted growth of formamdinium-based perovskites for highly efficient and stable planar solar cells with over 22% efficiency. *Nano Energy*, **2019**, 63, 103835	17.1	38
94	10.5% efficient polymer and amorphous silicon hybrid tandem photovoltaic cell. *Nature Communications*, **2015**, 6, 6391	17.4	38
93	Magnetic resonance studies of tris-(8-hydroxyquinoline) aluminum-based organic light-emitting devices. *Physical Review B*, **2004**, 69,	3.3	38
92	Intermediate Layers in Tandem Organic Solar Cells. *Green*, **2011**, 1,		37
91	A Novel Wide-Bandgap Polymer with Deep Ionization Potential Enables Exceeding 16% Efficiency in Ternary Nonfullerene Polymer Solar Cells. *Advanced Functional Materials*, **2020**, 30, 1910466	15.6	36
90	Lead Halide Perovskite Based Microdisk Lasers for On-Chip Integrated Photonic Circuits. *Advanced Optical Materials*, **2018**, 6, 1701266	8.1	36
89	Transition metal oxides as hole-transporting materials in organic semiconductor and hybrid perovskite based solar cells. *Science China Chemistry*, **2017**, 60, 472-489	7.9	34
88	Multifunctional Crosslinking-Enabled Strain-Regulating Crystallization for Stable, Efficient □FAPbI -Based Perovskite Solar Cells. *Advanced Materials*, **2021**, 33, e2008487	24	34
87	Tin oxide (SnO2) as effective electron selective layer material in hybrid organic□norganic metal halide perovskite solar cells. *Journal of Energy Chemistry*, **2018**, 27, 962-970	12	32
86	High performance low band gap polymer solar cells with a non-conventional acceptor. *Chemical Communications*, **2012**, 48, 7616-8	5.8	31
85	All-polymer solar cells with over 16% efficiency and enhanced stability enabled by compatible solvent and polymer additives. *Aggregate*,e58	22.9	31
84	Enhanced Electron Transport and Heat Transfer Boost Light Stability of Ternary Organic Photovoltaic Cells Incorporating Non-Fullerene Small Molecule and Polymer Acceptors. *Advanced Electronic Materials*, **2019**, 5, 1900497	6.4	30
83	Novel fullerene acceptors: synthesis and application in low band gap polymer solar cells. *Journal of Materials Chemistry*, **2012**, 22, 13391		30
82	Simple Is Best: A -Phenylene Bridging Methoxydiphenylamine-Substituted Carbazole Hole Transporter for High-Performance Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 30065-30071	9.5	29
81	Radiation induced damage and recovery in poly(3-hexyl thiophene) based polymer solar cells. *Nanotechnology*, **2008**, 19, 424014	3.4	28
80	Combinatorial study of exciplex formation at the interface between two wide band gap organic semiconductors. *Applied Physics Letters*, **2006**, 88, 253505	3.4	28
79	Graded bulk-heterojunction enables 17% binary organic solar cells via nonhalogenated open air coating. *Nature Communications*, **2021**, 12, 4815	17.4	28

78	Roll-to-Roll Production of Graphene Hybrid Electrodes for High-Efficiency, Flexible Organic Photoelectronics. *Advanced Materials Interfaces*, **2015**, 2, 1500445	4.6	27
77	A novel ball milling technique for room temperature processing of TiO2 nanoparticles employed as the electron transport layer in perovskite solar cells and modules. *Journal of Materials Chemistry A*, **2018**, 6, 7114-7122	13	26
76	Functional Third Components in Nonfullerene Acceptor-Based Ternary Organic Solar Cells. *Accounts of Materials Research*, **2020**, 1, 158-171	7.5	26
75	Observing electron transport and percolation in selected bulk heterojunctions bearing fullerene derivatives, non-fullerene small molecules, and polymeric acceptors. *Nano Energy*, **2019**, 64, 103950	17.1	25
74	Excited-State Symmetry-Breaking Charge Separation Dynamics in Multibranched Perylene Diimide Molecules. *Journal of Physical Chemistry Letters*, **2020**, 11, 10329-10339	6.4	25
73	Combining Fused-Ring and Unfused-Core Electron Acceptors Enables Efficient Ternary Organic Solar Cells with Enhanced Fill Factor and Broad Compositional Tolerance. *Solar Rrl*, **2019**, 3, 1900317	7.1	24
72	Vitrification Transformation of Poly(Ethylene Oxide) Activating Interface Passivation for High-Efficiency Perovskite Solar Cells. *Solar Rrl*, **2019**, 3, 1900134	7.1	24
71	Electrical transport in amorphous semiconducting AlMgB14 films. *Applied Physics Letters*, **2004**, 85, 1181-1183	3.4	24
70	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
69	Highly Crystalline Near-Infrared Acceptor Enabling Simultaneous Efficiency and Photostability Boosting in High-Performance Ternary Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 48095-48102	9.5	23
68	Design of wide-bandgap polymers with deeper ionization potential enables efficient ternary non-fullerene polymer solar cells with 13% efficiency. *Journal of Materials Chemistry A*, **2019**, 7, 14153-14162	13	21
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66	Charge carrier transport and nanomorphology control for efficient non-fullerene organic solar cells. *Materials Today Energy*, **2019**, 12, 398-407	7	20
65	Efficient Flexible Perovskite Solar Cells Using Low-Cost Cu Top and Bottom Electrodes. *ACS Applied Materials & Interfaces*, **2020**, 12, 26050-26059	9.5	20
64	ITC-2Cl: A Versatile Middle-Bandgap Nonfullerene Acceptor for High-Efficiency Panchromatic Ternary Organic Solar Cells. *Solar Rrl*, **2020**, 4, 1900377	7.1	20
63	Efficient Slantwise Aligned Dion-Jacobson Phase Perovskite Solar Cells Based on Trans-1,4-Cyclohexanediamine. *Small*, **2020**, 16, e2003098	11	20
62	Transient Magnetophotoinduced Absorption Studies of Photoexcitations in [illegible]Conjugated Donor-Acceptor Copolymers. *Physical Review Letters*, **2017**, 119, 017401	7.4	19
61	Air-Processed Efficient Organic Solar Cells from Aromatic Hydrocarbon Solvent without Solvent Additive or Post-Treatment: Insights into Solvent Effect on Morphology. *Energy and Environmental Materials*,	13	19

60	Nanomorphology in ADA type small molecular acceptors-based bulk heterojunction polymer solar cells. *Journal of Energy Chemistry*, **2019**, 35, 104-123	12	19
59	Electroluminescence-detected magnetic resonance studies of Pt octaethyl porphyrin-based phosphorescent organic light-emitting devices. *Physical Review B*, **2005**, 71,	3.3	18
58	Eutectic phase behavior induced by a simple additive contributes to efficient organic solar cells. *Nano Energy*, **2021**, 84, 105862	17.1	18
57	Non-fullerene acceptor engineering with three-dimensional thiophene/selenophene-annulated perylene diimides for high performance polymer solar cells. *Journal of Materials Chemistry C*, **2018**, 6, 12601-12607	7.1	18
56	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
55	Chlorination Strategy-Induced Abnormal Nanomorphology Tuning in High-Efficiency Organic Solar Cells: A Study of Phenyl-Substituted Benzodithiophene-Based Nonfullerene Acceptors. *Solar Rrl*, **2019**, 3, 1900262	7.1	15
54	High-Efficiency Organic Tandem Solar Cells With Effective Transition Metal Chelates Interconnecting Layer. *Solar Rrl*, **2017**, 1, 1700139	7.1	15
53	Printing High-Efficiency Perovskite Solar Cells in High-Humidity Ambient Environment-An In Situ Guided Investigation. *Advanced Science*, **2021**, 8, 2003359	13.6	15
52	Stretchable ITO-Free Organic Solar Cells with Intrinsic Anti-Reflection Substrate for High-Efficiency Outdoor and Indoor Energy Harvesting. *Advanced Functional Materials*, **2021**, 31, 2010172	15.6	15
51	Novel Oligomer Enables Green Solvent Processed 17.5% Ternary Organic Solar Cells: Synergistic Energy Loss Reduction and Morphology Fine-tuning.. *Advanced Materials*, **2022**, e2107659	24	14
50	High-efficiency solution processable polymer photovoltaic cells by self-organization of polymer blends **2010**, 80-84		13
49	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
48	Pyran-annulated perylene diimide derivatives as non-fullerene acceptors for high performance organic solar cells. *Journal of Materials Chemistry C*, **2018**, 6, 11111-11117	7.1	13
47	Fullerene C70 as a p-type donor in organic photovoltaic cells. *Applied Physics Letters*, **2014**, 105, 093301	3.4	12
46	1,1-Dicyanomethylene-3-Indanone End-Cap Engineering for Fused-Ring Electron Acceptor-Based High-Performance Organic Photovoltaics. *Cell Reports Physical Science*, **2021**, 2, 100292	6.1	12
45	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
44	Bottom-Up Quasi-Epitaxial Growth of Hybrid Perovskite from Solution Process-Achieving High-Efficiency Solar Cells via Template -Guided Crystallization. *Advanced Materials*, **2021**, 33, e2100009	24	11
43	Perovskite Quantum Wells Formation Mechanism for Stable Efficient Perovskite Photovoltaics-A Real-Time Phase-Transition Study. *Advanced Materials*, **2021**, 33, e2006238	24	11

42	Manipulating Crystallization Kinetics in High-Performance Blade-Coated Perovskite Solar Cells via Cosolvent-Assisted Phase Transition.. *Advanced Materials*, **2022**, e2200276	24	11
41	. *Journal of Display Technology*, **2005**, 1, 105-111		10
40	Room-temperature multiple ligands-tailored SnO quantum dots endow in situ dual-interface binding for upscaling efficient perovskite photovoltaics with high V. *Light: Science and Applications*, **2021**, 10, 239	16.7	10
39	Size Modulation and Heterovalent Doping Facilitated Hybrid Organic and Perovskite Quantum Dot Bulk Heterojunction Solar Cells. *ACS Applied Energy Materials*, **2020**, 3, 11359-11367	6.1	10
38	Fluorinated oligothiophene donors for high-performance nonfullerene small-molecule organic solar cells. *Sustainable Energy and Fuels*, **2020**, 4, 2680-2685	5.8	8
37	Uncovering the out-of-plane nanomorphology of organic photovoltaic bulk heterojunction by GTSAXS. *Nature Communications*, **2021**, 12, 6226	17.4	8
36	Ionizing radiation induced parametric variations in P3HT:PCBM organic photovoltaic cells. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2015**, 33, 032403	1.3	7
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