Jin Young Kim

List of Publications by Year in Descending Order

255 papers	17,235 citations	58 h-index	127 g-index
261 ext. papers	19,640 ext. citations	10.4 avg, IF	6.65 L-index

#	Paper	IF	Citations
255	Conformal quantum dot-SnO layers as electron transporters for efficient perovskite solar cells.. *Science*, **2022**, 375, 302-306	33.3	181
254	Design and photovoltaic properties of conjugated polymers based on quinoxaline and diketopyrrolopyrrole for OSCs. *Synthetic Metals*, **2022**, 285, 117016	3.6	1
253	Hetero-tandem organic solar cells drive water electrolysis with a solar-to-hydrogen conversion efficiency up to 10%. *Applied Catalysis B: Environmental*, **2022**, 309, 121237	21.8	3
252	A recent advances of blue perovskite light emitting diodes for next generation displays. *Journal of Semiconductors*, **2021**, 42, 101608	2.3	2
251	Pseudo-halide anion engineering for □FAPbI perovskite solar cells. *Nature*, **2021**, 592, 381-385	50.4	814
250	Highly Stable Bulk Perovskite for Blue LEDs with Anion-Exchange Method. *Nano Letters*, **2021**, 21, 3473-3479	11.5	15
249	Photophysical pathways in efficient bilayer organic solar cells: The importance of interlayer energy transfer. *Nano Energy*, **2021**, 84, 105924	17.1	14
248	Inverted Polymer Solar Cells with Annealing-Free Solution-Processable NiO. *Small*, **2021**, 17, e2101729	11	5
247	Planar Organic Bilayer Heterojunctions Fabricated on Water with Ultrafast Donor-to-Acceptor Charge Transfer. *Solar Rrl*, **2021**, 5, 2100326	7.1	2
246	Flexible Organic Photovoltaics with Colorful Semi-Transparent Metal/Dielectric/Metal Top Electrode. *ECS Journal of Solid State Science and Technology*, **2021**, 10, 065007	2	2
245	Non-fullerene polymer solar cells based on quinoxaline units with fluorine atoms. *Synthetic Metals*, **2021**, 272, 116655	3.6	3
244	Importance of interface engineering between the hole transport layer and the indium-tin-oxide electrode for highly efficient polymer solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 15394-15403	13	3
243	Designing a naphthyridinedione-based conjugated polymer for thickness-tolerant high efficiency polymer solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 10846-10854	13	3
242	Machine learning-assisted development of organic photovoltaics via high-throughput in situ formulation. *Energy and Environmental Science*, **2021**, 14, 3438-3446	35.4	12
241	Exploiting Ternary Blends to Accurately Control the Coloration of Semitransparent, Non-Fullerene, Organic Solar Cells. *Solar Rrl*, **2021**, 5, 2000742	7.1	6
240	Circularly Polarized Emission from Organic-Inorganic Hybrid Perovskites Chiral Fano Resonances. *ACS Nano*, **2021**,	16.7	7
239	Fullerene-Based Triads with Controlled Alkyl Spacer Length as Photoactive Materials for Single-Component Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2021**, 13, 43174-43185	9.5	2

238	One-step formation of core/shell structure based on hydrophobic silane ligands for enhanced luminescent perovskite quantum dots. *Journal of Alloys and Compounds*, **2021**, 886, 161347	5.7	2
237	Fullerene-Based Photoactive A-D-A Triads for Single-Component Organic Solar Cells: Incorporation of Non-Fused Planar Conjugated Core. *Macromolecular Research*, **2021**, 29, 871-881	1.9	5
236	Defect-Induced Atomic Doping in Transition Metal Dichalcogenides via Liquid-Phase Synthesis toward Efficient Electrochemical Activity. *ACS Nano*, **2020**,	16.7	6
235	Effect of Interfacial Layers on the Device Lifetime of Perovskite Solar Cells. *Small Methods*, **2020**, 4, 2000065	12.8	18
234	Interface Engineering Driven Stabilization of Halide Perovskites against Moisture, Heat, and Light for Optoelectronic Applications. *Advanced Energy Materials*, **2020**, 10, 2000768	21.8	32
233	Dichroic Sb2O3/Ag/Sb2O3 Electrodes for Colorful Semitransparent Organic Solar Cells. *Solar Rrl*, **2020**, 4, 2000201	7.1	11
232	High-Resolution Filtration Patterning of Silver Nanowire Electrodes for Flexible and Transparent Optoelectronic Devices. *ACS Applied Materials & Interfaces*, **2020**, 12, 32154-32162	9.5	19
231	Efficient, stable silicon tandem cells enabled by anion-engineered wide-bandgap perovskites. *Science*, **2020**, 368, 155-160	33.3	240
230	Waterproof perovskites: high fluorescence quantum yield and stability from a methylammonium lead bromide/formate mixture in water. *Journal of Materials Chemistry C*, **2020**, 8, 5873-5881	7.1	6
229	A highly transparent thin film hematite with multi-element dopability for an efficient unassisted water splitting system. *Nano Energy*, **2020**, 76, 105089	17.1	9
228	Functionalized PFN-X (X = Cl, Br, or I) for Balanced Charge Carriers of Highly Efficient Blue Light-Emitting Diodes. *ACS Applied Materials & Interfaces*, **2020**, 12, 35740-35747	9.5	13
227	High-Performance Perovskite Light-Emitting Diodes with Surface Passivation of CsPbBrI Nanocrystals via Antisolvent-Triggered Ion-Exchange. *ACS Applied Materials & Interfaces*, **2020**, 12, 31582-31590	9.5	11
226	Dithienogermole-Based Nonfullerene Acceptors: Roles of the Side-Chains Direction and Development of Green-Tinted Efficient Semitransparent Organic Solar Cells. *ACS Applied Energy Materials*, **2020**, 3, 7689-7698	6.1	16
225	Thermally Durable Nonfullerene Acceptor with Nonplanar Conjugated Backbone for High-Performance Organic Solar Cells. *Advanced Energy Materials*, **2020**, 10, 1903585	21.8	19
224	Recent progress in indoor organic photovoltaics. *Nanoscale*, **2020**, 12, 5792-5804	7.7	72
223	Modeling and implementation of tandem polymer solar cells using wide-bandgap front cells **2020**, 2, 131-142		3
222	Molecular aggregation method for perovskite fullerene bulk heterostructure solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 1326-1334	13	12
221	Origin of the luminescence spectra width in perovskite nanocrystals with surface passivation. *Nanoscale*, **2020**, 12, 21695-21702	7.7	7

220	Elimination of Charge Transfer Energy Loss by Introducing a Small-Molecule Secondary Donor into Fullerene-Based Polymer Solar Cells. *ACS Applied Energy Materials*, **2020**, 3, 8375-8382	6.1	6
219	Roll-to-roll compatible quinoxaline-based polymers toward high performance polymer solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 25208-25216	13	7
218	Effects on Photovoltaic Characteristics by Organic Bilayer- and Bulk-Heterojunctions: Energy Losses, Carrier Recombination and Generation. *ACS Applied Materials & Interfaces*, **2020**, 12, 55945-55953	9.5	7
217	Unfolding the Influence of Metal Doping on Properties of CsPbI3 Perovskite. *Small Methods*, **2020**, 4, 2000296	12.8	9
216	Aesthetic and colorful: Dichroic polymer solar cells using high-performance Fabry-P□ot etalon electrodes with a unique Sb2O3 cavity. *Nano Energy*, **2020**, 77, 105146	17.1	14
215	Light-Emitting Transistors with High Color Purity Using Perovskite Quantum Dot Emitters. *ACS Applied Materials & Interfaces*, **2020**, 12, 35175-35180	9.5	7
214	Design and synthesis of small molecules with difluoroquinoxaline units for OSCs. *Molecular Crystals and Liquid Crystals*, **2020**, 705, 79-86	0.5	
213	High colloidal stability ZnO nanoparticles independent on solvent polarity and their application in polymer solar cells. *Scientific Reports*, **2020**, 10, 18055	4.9	8
212	Efficient Exciton Diffusion in Organic Bilayer Heterojunctions with Nonfullerene Small Molecular Acceptors. *ACS Energy Letters*, **2020**, 5, 1628-1635	20.1	29
211	A thermally stable, barium-stabilized □CsPbI3 perovskite for optoelectronic devices. *Journal of Materials Chemistry A*, **2019**, 7, 21740-21746	13	22
210	Pseudohalides in Lead-Based Perovskite Semiconductors. *Advanced Materials*, **2019**, 31, e1807029	24	21
209	Morphological and Optical Engineering for High-Performance Polymer Solar Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 4705-4711	9.5	4
208	Morphology-Dependent Hole Transfer under Negligible HOMO Difference in Non-Fullerene Acceptor-Based Ternary Polymer Solar Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 7208-7215	9.5	22
207	Ultrathin, lightweight and flexible perovskite solar cells with an excellent power-per-weight performance. *Journal of Materials Chemistry A*, **2019**, 7, 1107-1114	13	59
206	Vivid and Fully Saturated Blue Light-Emitting Diodes Based on Ligand-Modified Halide Perovskite Nanocrystals. *ACS Applied Materials & Interfaces*, **2019**, 11, 23401-23409	9.5	45
205	Reducing Burn-In Loss of Organic Photovoltaics by a Robust Electron-Transporting Layer. *Advanced Materials Interfaces*, **2019**, 6, 1900213	4.6	4
204	Synergistic combination of amorphous indium oxide with tantalum pentoxide for efficient electron transport in low-power electronics. *Journal of Materials Chemistry C*, **2019**, 7, 4559-4566	7.1	6
203	Indoloindole-based small molecule bulk heterojunction small molecule solar cells. *Dyes and Pigments*, **2019**, 161, 419-426	4.6	5

202	Slot-Die and Roll-to-Roll Processed Single Junction Organic Photovoltaic Cells with the Highest Efficiency. *Advanced Energy Materials*, **2019**, 9, 1901805	21.8	44
201	Study of Burn-In Loss in Green Solvent-Processed Ternary Blended Organic Photovoltaics Derived from UV-Crosslinkable Semiconducting Polymers and Nonfullerene Acceptors. *Advanced Energy Materials*, **2019**, 9, 1901829	21.8	28
200	Methylammonium Chloride Induces Intermediate Phase Stabilization for Efficient Perovskite Solar Cells. *Joule*, **2019**, 3, 2179-2192	27.8	780
199	Synthesis of Alkoxyacene-Based Random Copolymers and Binary Solvent Additive for High Efficiency Organic Photovoltaics. *Macromolecular Chemistry and Physics*, **2019**, 220, 1900409	2.6	
198	Regio-regular alternating diketopyrrolopyrrole-based D-A-D-A terpolymers for the enhanced performance of polymer solar cells.. *RSC Advances*, **2019**, 9, 42096-42109	3.7	2
197	The optimization of intermediate semi□bonding structure using solvent vapor annealing for high performance p-i-n structure perovskite solar cells. *Organic Electronics*, **2019**, 65, 300-304	3.5	3
196	Influence of the Crystalline Nature of Small Donors Molecules on the Efficiency and Stability of Organic Photovoltaic Devices. *Solar Rrl*, **2018**, 2, 1700235	7.1	9
195	Photovoltaic polymers based on difluoroqinoxaline units with deep HOMO levels. *Journal of Polymer Science Part A*, **2018**, 56, 1489-1497	2.5	8
194	Conjugated Polyelectrolytes Bearing Various Ion Densities: Spontaneous Dipole Generation, Poling-Induced Dipole Alignment, and Interfacial Energy Barrier Control for Optoelectronic Device Applications. *Advanced Materials*, **2018**, 30, e1706034	24	8
193	Green-solvent processable semiconducting polymers applicable in additive-free perovskite and polymer solar cells: molecular weights, photovoltaic performance, and thermal stability. *Journal of Materials Chemistry A*, **2018**, 6, 5538-5543	13	35
192	Highly efficient polymer solar cells with a thienopyrroledione and benzodithiophene containing planar random copolymer. *Polymer Chemistry*, **2018**, 9, 1216-1222	4.9	15
191	Alkoxybenzothiadiazole-Based Fullerene and Nonfullerene Polymer Solar Cells with High Shunt Resistance for Indoor Photovoltaic Applications. *ACS Applied Materials & Interfaces*, **2018**, 10, 3885-3894	9.5	41
190	Twisted Linker Effect on Naphthalene Diimide-Based Dimer Electron Acceptors for Non-fullerene Organic Solar Cells. *Macromolecular Rapid Communications*, **2018**, 39, e1800108	4.8	8
189	A new small molecule acceptor based on indaceno[2,1-b:6,5-b□]dithiophene and thiophene-fused ending group for fullerene-free organic solar cells. *Dyes and Pigments*, **2018**, 148, 263-269	4.6	16
188	Effect of Substituents of Thienylene□Vinylene□Thienylene-Based Conjugated Polymer Donors on the Performance of Fullerene and Nonfullerene Solar Cells. *Journal of Physical Chemistry C*, **2018**, 122, 16613-16623	3.8	9
187	Fast vaporizing anti-solvent for high crystalline perovskite to achieve high performance perovskite solar cells. *Thin Solid Films*, **2018**, 661, 122-127	2.2	7
186	Implementation of Low-Power Electronic Devices Using Solution-Processed Tantalum Pentoxide Dielectric. *Advanced Functional Materials*, **2018**, 28, 1704215	15.6	13
185	Hot slot die coating for additive-free fabrication of high performance roll-to-roll processed polymer solar cells. *Energy and Environmental Science*, **2018**, 11, 3248-3255	35.4	63

184	A donor–acceptor semiconducting polymer with a random configuration for efficient, green-solvent-processable flexible solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 24580-24587	13	16
183	Non-halogenated diphenyl-chalcogenide solvent processing additives for high-performance polymer bulk-heterojunction solar cells.. *RSC Advances*, **2018**, 8, 39777-39783	3.7	5
182	Silicon Nanocanyon: One-Step Bottom-Up Fabrication of Black Silicon via in-Lasing Hydrophobic Self-Clustering of Silicon Nanocrystals for Sustainable Optoelectronics. *ACS Applied Materials & Interfaces*, **2018**, 10, 36523-36530	9.5	7
181	Reversible, Full-Color Luminescence by Post-treatment of Perovskite Nanocrystals. *Joule*, **2018**, 2, 2105-2116	27.8	34
180	The introduction of a perovskite seed layer for high performance perovskite solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 20138-20144	13	4
179	Ambient-Stable Cubic-Phase Hybrid Perovskite Reaching the Shockley–Queisser Fill Factor Limit via Inorganic Additive-Assisted Process. *ACS Applied Energy Materials*, **2018**, 1, 5865-5871	6.1	10
178	Conjugated Polyelectrolytes as Efficient Hole Transport Layers in Perovskite Light-Emitting Diodes. *ACS Nano*, **2018**, 12, 5826-5833	16.7	38
177	Nanoparticle-Enhanced Silver-Nanowire Plasmonic Electrodes for High-Performance Organic Optoelectronic Devices. *Advanced Materials*, **2018**, 30, e1800659	24	41
176	Engineering the morphology via processing additives in multiple all-polymer solar cells for improved performance. *Journal of Materials Chemistry A*, **2018**, 6, 10421-10432	13	54
175	Formamidinium-based planar heterojunction perovskite solar cells with alkali carbonate-doped zinc oxide layer.. *RSC Advances*, **2018**, 8, 24110-24115	3.7	7
174	Synthesis and photovoltaic properties of three different types of terpolymers. *Materials Chemistry Frontiers*, **2017**, 1, 1147-1155	7.8	4
173	A universal processing additive for high-performance polymer solar cells. *RSC Advances*, **2017**, 7, 7476-7482	3.7	43
172	ZnO decorated germanium nanoparticles as anode materials in Li-ion batteries. *Nanotechnology*, **2017**, 28, 095402	3.4	4
171	Effect of Heterocyclic Anchoring Sequence on the Properties of Dithienogermole-Based Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 7091-7099	9.5	14
170	Semi-crystalline photovoltaic polymers with siloxane-terminated hybrid side-chains. *Science China Chemistry*, **2017**, 60, 528-536	7.9	3
169	High-Temperature-Short-Time Annealing Process for High-Performance Large-Area Perovskite Solar Cells. *ACS Nano*, **2017**, 11, 6057-6064	16.7	99
168	High-efficiency photovoltaic cells with wide optical band gap polymers based on fluorinated phenylene-alkoxybenzothiadiazole. *Energy and Environmental Science*, **2017**, 10, 1443-1455	35.4	63
167	Naphthalene diimide-based small molecule acceptors for fullerene-free organic solar cells. *Solar Energy*, **2017**, 150, 90-95	6.8	28

166	Alkyl Side-Chain Engineering in Wide-Bandgap Copolymers Leading to Power Conversion Efficiencies over 10. *Advanced Materials*, **2017**, 29, 1604251	24	199
165	Interfacial engineering for highly efficient organic solar cells. *Current Applied Physics*, **2017**, 17, 370-391	2.6	29
164	Single Component Organic Solar Cells Based on Oligothiophene-Fullerene Conjugate. *Advanced Functional Materials*, **2017**, 27, 1702474	15.6	62
163	Fluorine Functionalized Graphene Nano Platelets for Highly Stable Inverted Perovskite Solar Cells. *Nano Letters*, **2017**, 17, 6385-6390	11.5	84
162	Efficiency Exceeding 11% in Tandem Polymer Solar Cells Employing High Open-Circuit Voltage Wide-Bandgap Conjugated Polymers. *Advanced Energy Materials*, **2017**, 7, 1700782	21.8	20
161	Optically Tunable Plasmonic Two-Dimensional Ag Quantum Dot Arrays for Optimal Light Absorption in Polymer Solar Cells. *Journal of Physical Chemistry C*, **2017**, 121, 17569-17576	3.8	9
160	Peroptronic devices: perovskite-based light-emitting solar cells. *Energy and Environmental Science*, **2017**, 10, 1950-1957	35.4	35
159	Semi-crystalline A1DA2-type copolymers for efficient polymer solar cells. *Polymer Journal*, **2017**, 49, 141-148	2.7	4
158	Ternary Halide Perovskites for Highly Efficient Solution-Processed Hybrid Solar Cells. *ACS Energy Letters*, **2016**, 1, 712-718	20.1	16
157	Syntheses of PCDTBT containing tetrafluorobenzene as electron-withdrawing group with deep HOMO energy level and applications for photovoltaics. *Polymer*, **2016**, 102, 84-91	3.9	3
156	Synthesis and photovoltaic properties of benzimidazole-based copolymer with fluorine atom. *Polymer Bulletin*, **2016**, 73, 2511-2519	2.4	4
155	2,1,3-benzothiadiazole-5,6-dicarboxylicimide based semicrystalline polymers for photovoltaic cells. *Journal of Polymer Science Part A*, **2016**, 54, 3826-3834	2.5	3
154	High-efficiency, hybrid Si/C60 heterojunction solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 16410-16417	9	
153	Investigation of Charge Carrier Behavior in High Performance Ternary Blend Polymer Solar Cells. *Advanced Energy Materials*, **2016**, 6, 1600637	21.8	79
152	Clean thermal decomposition of tertiary-alkyl metal thiolates to metal sulfides: environmentally-benign, non-polar inks for solution-processed chalcopyrite solar cells. *Scientific Reports*, **2016**, 6, 36608	4.9	9
151	Photocurrent Extraction Efficiency near Unity in a Thick Polymer Bulk Heterojunction. *Advanced Functional Materials*, **2016**, 26, 3324-3330	15.6	38
150	Syntheses and Properties of Conjugated Polymer with Thiophene-Bridged BTI and Indenoindene Units for Organic Solar Cells. *Bulletin of the Korean Chemical Society*, **2016**, 37, 506-514	1.2	1
149	Straight chain DA copolymers based on thienothiophene and benzothiadiazole for efficient polymer field effect transistors and photovoltaic cells. *Polymer Chemistry*, **2016**, 7, 4638-4646	4.9	27

148	Quinoxaline-thiophene based thick photovoltaic devices with an efficiency of ~8%. *Journal of Materials Chemistry A*, **2016**, 4, 9967-9976	13	42
147	Synthesis and TFT Properties of Fluorenyl Cored Conjugated Compound for Organic Thin Film Transistors. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 2979-82	1.3	2
146	Double-Sided Junctions Enable High-Performance Colloidal-Quantum-Dot Photovoltaics. *Advanced Materials*, **2016**, 28, 4142-8	24	100
145	High-Performance Solution-Processed Non-Fullerene Organic Solar Cells Based on Selenophene-Containing Perylene Bisimide Acceptor. *Journal of the American Chemical Society*, **2016**, 138, 375-80	16.4	579
144	Medium bandgap copolymers based on carbazole and quinoxaline exceeding 1.0 V open-circuit voltages. *RSC Advances*, **2016**, 6, 17624-17631	3.7	4
143	Highly Asymmetric n(+)-p Heterojunction Quantum-Dot Solar Cells with Significantly Improved Charge-Collection Efficiencies. *Advanced Materials*, **2016**, 28, 1780-7	24	20
142	Ternary Organic Solar Cells Based on Two Highly Efficient Polymer Donors with Enhanced Power Conversion Efficiency. *Advanced Energy Materials*, **2016**, 6, 1502109	21.8	141
141	Conjugated polymers containing 6-(2-thienyl)-4H-thieno[3,2-b]indole (TTI) and isoindigo for organic photovoltaics. *Polymer*, **2016**, 95, 36-44	3.9	17
140	Solution-processed, inverted organic solar cells with bilayered inorganic/organic electron extraction layers. *RSC Advances*, **2016**, 6, 36561-36567	3.7	6
139	Influence of aromatic heterocycle of conjugated side chains on photovoltaic performance of benzodithiophene-based wide-bandgap polymers. *Polymer Chemistry*, **2016**, 7, 4036-4045	4.9	22
138	Dithieno[2,3-d:2',3'-d']benzo[1,2-b:4,5-b']dithiophene (DTBDAT)-based copolymers for high-performance organic solar cells. *Journal of Polymer Science Part A*, **2016**, 54, 3182-3192	2.5	7
137	Effect of alkyl chain topology on the structure, optoelectronic properties and solar cell performance of thienopyrroledione-cored oligothiophene chromophores. *RSC Advances*, **2016**, 6, 77655-77665	3.7	5
136	Benzodithiophene-thiophene-based photovoltaic polymers with different side-chains. *Journal of Polymer Science Part A*, **2015**, 53, 854-862	2.5	13
135	Dithienogermole-Containing Small-Molecule Solar Cells with 7.3% Efficiency: In-Depth Study on the Effects of Heteroatom Substitution of Si with Ge. *Advanced Energy Materials*, **2015**, 5, 1402044	21.8	40
134	2,7-Carbazole and thieno[3,4-c]pyrrole-4,6-dione based copolymers with deep highest occupied molecular orbital for photovoltaic cells. *Current Applied Physics*, **2015**, 15, 654-661	2.6	4
133	Plasmonic Transition via Interparticle Coupling of Core-Shell Nanostructures Sheathed in Double Hydrophilic Block Copolymer for High-Performance Polymer Solar Cell. *Chemistry of Materials*, **2015**, 27, 4789-4798	9.6	32
132	Synthesis and properties of low band gap polymers based on thienyl thienoindole as a new electron-rich unit for organic photovoltaics. *Polymer Chemistry*, **2015**, 6, 6011-6020	4.9	15
131	Single-step fabrication of quantum funnels via centrifugal colloidal casting of nanoparticle films. *Nature Communications*, **2015**, 6, 7772	17.4	57

130	Spectroscopically tracking charge separation in polymer : fullerene blends with a three-phase morphology. *Energy and Environmental Science*, **2015**, 8, 2713-2724	35.4	38
129	Syntheses and solar cell applications of conjugated copolymers containing tetrafluorophenylene units. *Polymer*, **2015**, 71, 113-121	3.9	5
128	Production of pristine, sulfur-coated and silicon-alloyed germanium nanoparticles via laser pyrolysis. *Nanotechnology*, **2015**, 26, 305703	3.4	9
127	Conjugated polyelectrolyte hole transport layer for inverted-type perovskite solar cells. *Nature Communications*, **2015**, 6, 7348	17.4	248
126	Synergistic photocurrent addition in hybrid quantum dot: Bulk heterojunction solar cells. *Nano Energy*, **2015**, 13, 491-499	17.1	14
125	Conformal fabrication of colloidal quantum dot solids for optically enhanced photovoltaics. *ACS Nano*, **2015**, 9, 5447-53	16.7	25
124	Small-bandgap polymer solar cells with unprecedented short-circuit current density and high fill factor. *Advanced Materials*, **2015**, 27, 3318-24	24	275
123	Trifluoromethyl benzimidazole-based conjugated polymers with deep HOMO levels for organic photovoltaics. *Synthetic Metals*, **2015**, 205, 112-120	3.6	12
122	Synthesis and photovoltaic properties of alkoxy-benzimidazole containing low band gap polymers. *Thin Solid Films*, **2015**, 580, 29-35	2.2	5
121	2,2-dimethyl-2H-benzimidazole based small molecules for organic solar cells. *Macromolecular Research*, **2015**, 23, 214-222	1.9	14
120	Thienoisoindigo (TIIG)-based small molecules for the understanding of structure□property□device performance correlations. *Journal of Materials Chemistry A*, **2015**, 3, 9899-9908	13	32
119	High-Efficiency Colloidal Quantum Dot Photovoltaics via Robust Self-Assembled Monolayers. *Nano Letters*, **2015**, 15, 7691-6	11.5	175
118	Capillary Printing of Highly Aligned Silver Nanowire Transparent Electrodes for High-Performance Optoelectronic Devices. *Nano Letters*, **2015**, 15, 7933-42	11.5	165
117	Interplay of Intramolecular Noncovalent Coulomb Interactions for Semicrystalline Photovoltaic Polymers. *Chemistry of Materials*, **2015**, 27, 5997-6007	9.6	132
116	Optimal top electrodes for inverted polymer solar cells. *Physical Chemistry Chemical Physics*, **2015**, 17, 2152-9	3.6	21
115	An organic surface modifier to produce a high work function transparent electrode for high performance polymer solar cells. *Advanced Materials*, **2015**, 27, 892-6	24	81
114	Improved Performance in Polymer Solar Cells Using Mixed PC61BM/PC71BM Acceptors. *Advanced Energy Materials*, **2015**, 5, 1401687	21.8	58
113	Device Architectures for Enhanced Photon Recycling in Thin-Film Multijunction Solar Cells. *Advanced Energy Materials*, **2015**, 5, 1400919	21.8	33

112	Control of Charge Dynamics via Use of Nonionic Phosphonate Chains and Their Effectiveness for Inverted Structure Solar Cells. *Advanced Energy Materials*, **2015**, 5, 1500844	21.8	27
111	Syntheses and Properties of Copolymers with N-Alkyl-2,2?-bithiophene-3,3?-dicarboximide Unit for Polymer Solar Cells. *Bulletin of the Korean Chemical Society*, **2015**, 36, 2238-2246	1.2	3
110	A roundabout approach to control morphological orientation and solar-cell performance by modulating side-chain branching position in benzodithiophene-based polymers. *ChemPhysChem*, **2015**, 16, 1305-14	3.2	15
109	Silver-Based Nanoparticles for Surface Plasmon Resonance in Organic Optoelectronics. *Particle and Particle Systems Characterization*, **2015**, 32, 164-175	3.1	79
108	Capacity retention behavior and morphology evolution of SixGe1-x nanoparticles as lithium-ion battery anode. *Nanotechnology*, **2015**, 26, 255702	3.4	11
107	Syntheses and solar cell applications of conjugated copolymers consisting of 3,3?-dicarboximide and benzodithiophene units with thiophene and bithiophene linkage. *Solar Energy Materials and Solar Cells*, **2015**, 141, 24-31	6.4	3
106	Structural and morphological tuning of dithienobenzodithiophene-core small molecules for efficient solution processed organic solar cells. *Dyes and Pigments*, **2015**, 115, 23-34	4.6	19
105	Ultrafast charge transfer in operating bulk heterojunction solar cells. *Advanced Materials*, **2015**, 27, 2036-41	24	26
104	Enhancement of Organic Photovoltaic Efficiency via Nanomorphology Control using Conjugated Polymers Incorporating Fullerene Compatible Side-Chains. *Macromolecules*, **2015**, 48, 337-345	5.5	10
103	Triple-junction hybrid tandem solar cells with amorphous silicon and polymer-fullerene blends. *Scientific Reports*, **2014**, 4, 7154	4.9	19
102	Replacing the metal oxide layer with a polymer surface modifier for high-performance inverted polymer solar cells. *RSC Advances*, **2014**, 4, 4791-4795	3.7	33
101	Synthesis of PCDTBT-based fluorinated polymers for high open-circuit voltage in organic photovoltaics: towards an understanding of relationships between polymer energy levels engineering and ideal morphology control. *ACS Applied Materials & Interfaces*, **2014**, 6, 7523-34	9.5	79
100	Cesium-doped methylammonium lead iodide perovskite light absorber for hybrid solar cells. *Nano Energy*, **2014**, 7, 80-85	17.1	381
99	Inverted colloidal quantum dot solar cells. *Advanced Materials*, **2014**, 26, 3321-7	24	57
98	Graphene oxide nanoribbon as hole extraction layer to enhance efficiency and stability of polymer solar cells. *Advanced Materials*, **2014**, 26, 786-90	24	94
97	Correlation between Polymer Structure and Polymer:Fullerene Blend Morphology and Its Implications for High Performance Polymer Solar Cells. *Journal of Physical Chemistry C*, **2014**, 118, 2237-2244	4.8	14
96	Synthesis of fluorinated analogues of a practical polymer TQ for improved open-circuit voltages in polymer solar cells. *Polymer Chemistry*, **2014**, 5, 2540	4.9	38
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