Michael D Mcgehee

List of Publications by Year in descending order

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275 papers

61,293 citations

119 h-index

764

244 g-index

285 all docs

285 docs citations

times ranked

285

39536 citing authors

#	Article	IF	CITATIONS
1	Designing Modules to Prevent Reverse Bias Degradation in Perovskite Solar Cells when Partial Shading Occurs. Solar Rrl, 2022, 6, 2100239.	3.1	31
2	Perovskite Photovoltaic Devices with Carbonâ€Based Electrodes Withstanding Reverseâ€Bias Voltages up to –9 V and Surpassing IEC 61215:2016 International Standard. Solar Rrl, 2022, 6, 2100527.	3.1	35
3	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. Joule, 2022, 6, 8-15.	11.7	66
4	Countdown to perovskite space launch: Guidelines to performing relevant radiation-hardness experiments. Joule, 2022, 6, 1015-1031.	11.7	42
5	Cross-linkable carbazole-based hole transporting materials for perovskite solar cells. Chemical Communications, 2022, 58, 7495-7498.	2.2	7
6	Carrier control in Sn–Pb perovskites via 2D cation engineering for all-perovskite tandem solar cells with improved efficiency and stability. Nature Energy, 2022, 7, 642-651.	19.8	121
7	Transparent, Highâ€Charge Capacity Metal Mesh Electrode for Reversible Metal Electrodeposition Dynamic Windows with Darkâ€State Transmission <0.1%. Advanced Energy Materials, 2022, 12, .	10.2	9
8	Device Performance of Emerging Photovoltaic Materials (Version 1). Advanced Energy Materials, 2021, 11, 2002774.	10.2	93
9	Incorporating Electrochemical Halide Oxidation into Driftâ€Diffusion Models to Explain Performance Losses in Perovskite Solar Cells under Prolonged Reverse Bias. Advanced Energy Materials, 2021, 11, 2002614.	10.2	34
10	Polymer inhibitors enable >900 cm2 dynamic windows based on reversible metal electrodeposition with high solar modulation. Nature Energy, 2021, 6, 546-554.	19.8	79
11	Temperature Coefficients of Perovskite Photovoltaics for Energy Yield Calculations. ACS Energy Letters, 2021, 6, 2038-2047.	8.8	43
12	Investigation of the Selectivity of Carrier Transport Layers in Wideâ€Bandgap Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100107.	3.1	13
13	In-Operando Characterization of P-I-N Perovskite Solar Cells Under Reverse Bias., 2021,,.		3
14	Compositional heterogeneity in Cs _{<i>y</i>} Pb(Br _{<i>x</i>} I i>I i>I i>I i>I i>I i>I i>I i>I i i	/sub>	20
15	Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials, 2021, 11, .	10.2	66
16	Structural Origins of Light-Induced Phase Segregation in Organic-Inorganic Halide Perovskite Photovoltaic Materials. Matter, 2020, 2, 207-219.	5.0	128
17	Mobile Ion Concentration Measurement and Open-Access Band Diagram Simulation Platform for Halide Perovskite Solar Cells. Joule, 2020, 4, 109-127.	11.7	117
18	Learning from existing photovoltaic technologies to identify alternative perovskite module designs. Energy and Environmental Science, 2020, 13, 3393-3403.	15.6	43

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19	Choose Your Own Adventure: Fabrication of Monolithic Allâ€Perovskite Tandem Photovoltaics. Advanced Materials, 2020, 32, e2003312.	11.1	39
20	Electrolyte for Improved Durability of Dynamic Windows Based on Reversible Metal Electrodeposition. Joule, 2020, 4, 1501-1513.	11.7	52
21	The Molybdenum Oxide Interface Limits the High-Temperature Operational Stability of Unencapsulated Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 2349-2360.	8.8	49
22	Improving Low-Bandgap Tin–Lead Perovskite Solar Cells via Contact Engineering and Gas Quench Processing. ACS Energy Letters, 2020, 5, 1215-1223.	8.8	78
23	Triple-halide wide–band gap perovskites with suppressed phase segregation for efficient tandems. Science, 2020, 367, 1097-1104.	6.0	669
24	Overcoming Redox Reactions at Perovskite-Nickel Oxide Interfaces to Boost Voltages in Perovskite Solar Cells. Joule, 2020, 4, 1759-1775.	11.7	284
25	Interfacing Lowâ€Temperature Atomic Layer Deposited TiO ₂ Electron Transport Layers with Metal Electrodes. Advanced Materials Interfaces, 2020, 7, 1902054.	1.9	6
26	Cslâ€Antisolvent Adduct Formation in Allâ€Inorganic Metal Halide Perovskites. Advanced Energy Materials, 2020, 10, 1903365.	10.2	55
27	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. Nature Energy, 2020, 5, 35-49.	19.8	797
28	Enhanced Nucleation of Atomic Layer Deposited Contacts Improves Operational Stability of Perovskite Solar Cells in Air. Advanced Energy Materials, 2019, 9, 1902353.	10.2	47
29	Enabling Flexible All-Perovskite Tandem Solar Cells. Joule, 2019, 3, 2193-2204.	11.7	331
30	Solar-driven, highly sustained splitting of seawater into hydrogen and oxygen fuels. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6624-6629.	3.3	524
31	Atomic layer deposition of vanadium oxide to reduce parasitic absorption and improve stability in $n\hat{a}\in \hat{a}$ perovskite solar cells for tandems. Sustainable Energy and Fuels, 2019, 3, 1517-1525.	2.5	76
32	Series Resistance Measurements of Perovskite Solar Cells Using <i>J_{sc}</i> N _{oc} Measurements. Solar Rrl, 2019, 3, 1800378.	3.1	61
33	Hybrid dynamic windows using reversible metal electrodeposition and ion insertion. Nature Energy, 2019, 4, 223-229.	19.8	130
34	Stability of Tin-Lead Halide Perovskite Solar Cells. , 2019, , .		0
35	Triple-halide Bandgap Tuning In Top Cells For Perovskite/Si Tandems. , 2019, , .		0
36	Design of low bandgap tin–lead halide perovskite solar cells to achieve thermal, atmospheric and operational stability. Nature Energy, 2019, 4, 939-947.	19.8	235

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#	Article	IF	CITATIONS
37	Understanding Degradation Mechanisms and Improving Stability of Perovskite Photovoltaics. Chemical Reviews, 2019, 119, 3418-3451.	23.0	1,131
38	Highly Efficient and Stable Perovskite-Silicon Tandem Solar Cells. , 2019, , .		0
39	Developing a Robust Recombination Contact to Realize Monolithic Perovskite Tandems With Industrially Common p-Type Silicon Solar Cells. IEEE Journal of Photovoltaics, 2018, 8, 1023-1028.	1.5	27
40	Compositional Engineering for Efficient Wide Band Gap Perovskites with Improved Stability to Photoinduced Phase Segregation. ACS Energy Letters, 2018, 3, 428-435.	8.8	344
41	Terahertz Emission from Hybrid Perovskites Driven by Ultrafast Charge Separation and Strong Electron–Phonon Coupling. Advanced Materials, 2018, 30, 1704737.	11.1	86
42	Thermal Stability of Mixed Cation Metal Halide Perovskites in Air. ACS Applied Materials & Samp; Interfaces, 2018, 10, 5485-5491.	4.0	123
43	Controlling Thin-Film Stress and Wrinkling during Perovskite Film Formation. ACS Energy Letters, 2018, 3, 1225-1232.	8.8	148
44	Terahertz Emission: Terahertz Emission from Hybrid Perovskites Driven by Ultrafast Charge Separation and Strong Electron–Phonon Coupling (Adv. Mater. 11/2018). Advanced Materials, 2018, 30, 1870079.	11,1	2
45	Design and understanding of encapsulated perovskite solar cells to withstand temperature cycling. Energy and Environmental Science, 2018, 11, 144-150.	15.6	314
46	Effect of Cation Composition on the Mechanical Stability of Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1702116.	10.2	130
47	Reverse Bias Behavior of Halide Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1702365.	10.2	127
48	Bistable Black Electrochromic Windows Based on the Reversible Metal Electrodeposition of Bi and Cu. ACS Energy Letters, 2018, 3, 104-111.	8.8	91
49	Current-matching in two-terminal perovskite/silicon tandems employing wide-bandgap perovskites and varying light-management schemes. , $2018, , .$		4
50	Optical and Compositional Engineering of Wide Band Gap Perovskites with Improved Stability to Photoinduced Phase Segregation for Efficient Monolithic Perovskite/Silicon Tandem Solar Cells., 2018,,.		0
51	Damp Heat, Temperature Cycling and UV Stress Testing of Encapsulated Perovskite Photovoltaic Cells. , 2018, , .		7
52	Compositional engineering of tin-lead halide perovskites for efficient and stable low band gap solar cells. , 2018, , .		7
53	Impact of Surfaces on Photoinduced Halide Segregation in Mixed-Halide Perovskites. ACS Energy Letters, 2018, 3, 2694-2700.	8.8	184
54	Factors that Determine the Length Scale for Uniform Tinting in Dynamic Windows Based on Reversible Metal Electrodeposition. ACS Energy Letters, 2018, 3, 2823-2828.	8.8	50

#	ARTICLE In Situ Weasurement of Electric-Field Screening in Hysteresis-Free	IF	Citations
55	PTAA/FA _{0.83} Cs _{0.17} Pb(I _{0.83} Br _{0.17}) ₃ /C60 Perovskite Solar Cells Gives an Ion Mobility of â ¹ / ₄ 3 × 10 ^{–7} cm ² /(V s), 2 Orders of Magnitude Faster than Reported for Metal-Oxide-Contacted Perovskite Cells with Hysteresis. Journal	6.6	47
56	Challenges for commercializing perovskite solar cells. Science, 2018, 361, .	6.0	1,327
57	Engineering Stress in Perovskite Solar Cells to Improve Stability. Advanced Energy Materials, 2018, 8, 1802139.	10.2	271
58	Barrier Design to Prevent Metal-Induced Degradation and Improve Thermal Stability in Perovskite Solar Cells. ACS Energy Letters, 2018, 3, 1772-1778.	8.8	182
59	Interfacial Effects of Tin Oxide Atomic Layer Deposition in Metal Halide Perovskite Photovoltaics. Advanced Energy Materials, 2018, 8, 1800591.	10.2	62
60	Encapsulating perovskite solar cells to withstand damp heat and thermal cycling. Sustainable Energy and Fuels, 2018, 2, 2398-2406.	2.5	231
61	Tin–lead halide perovskites with improved thermal and air stability for efficient all-perovskite tandem solar cells. Sustainable Energy and Fuels, 2018, 2, 2450-2459.	2.5	167
62	Atomic Layer Deposited TiO 2 â€"IrO x Alloy as a Hole Transport Material for Perovskite Solar Cells. Advanced Materials Interfaces, 2018, 5, 1800191.	1.9	15
63	Opportunities and challenges for tandem solar cells using metal halide perovskite semiconductors. Nature Energy, 2018, 3, 828-838.	19.8	716
64	Transformation from crystalline precursor to perovskite in PbCl2-derived MAPbl3. Nature Communications, 2018, 9, 3458.	5.8	77
65	Minimizing Current and Voltage Losses to Reach 25% Efficient Monolithic Two-Terminal Perovskite–Silicon Tandem Solar Cells. ACS Energy Letters, 2018, 3, 2173-2180.	8.8	194
66	Optical modeling of wide-bandgap perovskite and perovskite/silicon tandem solar cells using complex refractive indices for arbitrary-bandgap perovskite absorbers. Optics Express, 2018, 26, 27441.	1.7	102
67	Openâ€Circuit Voltage in Organic Solar Cells: The Impacts of Donor Semicrystallinity and Coexistence of Multiple Interfacial Charge†ransfer Bands. Advanced Energy Materials, 2017, 7, 1601995.	10.2	35
68	$23.6\%\mbox{-efficient}$ monolithic perovskite/silicon tandem solar cells with improved stability. Nature Energy, 2017, 2, .	19.8	1,204
69	Towards enabling stable lead halide perovskite solar cells; interplay between structural, environmental, and thermal stability. Journal of Materials Chemistry A, 2017, 5, 11483-11500.	5.2	319
70	Progress in Understanding Degradation Mechanisms and Improving Stability in Organic Photovoltaics. Advanced Materials, 2017, 29, 1603940.	11.1	319
71	Assessing the stability of high performance solution processed small molecule solar cells. Solar Energy Materials and Solar Cells, 2017, 161, 368-376.	3.0	31
72	Interpretation of inverted photocurrent transients in organic lead halide perovskite solar cells: proof of the field screening by mobile ions and determination of the space charge layer widths. Energy and Environmental Science, 2017, 10, 192-204.	15.6	150

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73	The Potential of Multijunction Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 2506-2513.	8.8	272
74	Mechanism of Tin Oxidation and Stabilization by Lead Substitution in Tin Halide Perovskites. ACS Energy Letters, 2017, 2, 2159-2165.	8.8	351
75	Dynamic Windows with Neutral Color, High Contrast, and Excellent Durability Using Reversible Metal Electrodeposition. Joule, 2017, 1, 133-145.	11.7	177
76	Macroscopic Structural Compositions of π-Conjugated Polymers: Combined Insights from Solid-State NMR and Molecular Dynamics Simulations. Journal of Physical Chemistry Letters, 2017, 8, 4155-4160.	2.1	31
77	Band Gap Tuning via Lattice Contraction and Octahedral Tilting in Perovskite Materials for Photovoltaics. Journal of the American Chemical Society, 2017, 139, 11117-11124.	6.6	570
78	Improved light management in planar silicon and perovskite solar cells using PDMS scattering layer. Solar Energy Materials and Solar Cells, 2017, 173, 59-65.	3.0	82
79	Time†and Temperatureâ€Independent Local Carrier Mobility and Effects of Regioregularity in Polymerâ€Fullerene Organic Semiconductors. Advanced Electronic Materials, 2016, 2, 1500351.	2.6	23
80	Thermal and environmental stability of semi-transparent perovskite solar cells for tandems by a solution-processed nanoparticle buffer layer and sputtered ITO electrode., 2016,,.		2
81	Fully inorganic cesium lead halide perovskites with improved stability for tandem solar cells. , 2016, , .		4
82	Cross-linkable styrene-functionalized fullerenes as electron-selective contacts for robust and efficient perovskite solar cells. , 2016 , , .		0
83	Cross-Linkable, Solvent-Resistant Fullerene Contacts for Robust and Efficient Perovskite Solar Cells with Increased <i>J</i> _{SC} and <i>V</i> _{OC} . ACS Applied Materials & amp; Interfaces, 2016, 8, 25896-25904.	4.0	45
84	Tradeâ€Off between Trap Filling, Trap Creation, and Charge Recombination Results in Performance Increase at Ultralow Doping Levels in Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2016, 6, 1601149.	10.2	45
85	The Roles of Structural Order and Intermolecular Interactions in Determining Ionization Energies and Chargeâ€Transfer State Energies in Organic Semiconductors. Advanced Energy Materials, 2016, 6, 1601211.	10.2	45
86	Minimal Effect of the Hole-Transport Material Ionization Potential on the Open-Circuit Voltage of Perovskite Solar Cells. ACS Energy Letters, 2016, 1, 556-560.	8.8	115
87	Small Molecule Anchored to Mesoporous ITO for High-Contrast Black Electrochromics. Journal of Physical Chemistry C, 2016, 120, 26336-26341.	1.5	27
88	Light-Induced Phase Segregation in Halide-Perovskite Absorbers. ACS Energy Letters, 2016, 1, 1199-1205.	8.8	532
89	Perovskite-perovskite tandem photovoltaics with optimized band gaps. Science, 2016, 354, 861-865.	6.0	1,107
90	Mechanical integrity of solution-processed perovskite solar cells. Extreme Mechanics Letters, 2016, 9, 353-358.	2.0	150

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91	Thermal and Environmental Stability of Semiâ€Transparent Perovskite Solar Cells for Tandems Enabled by a Solutionâ€Processed Nanoparticle Buffer Layer and Sputtered ITO Electrode. Advanced Materials, 2016, 28, 3937-3943.	11.1	419
92	How the Energetic Landscape in the Mixed Phase of Organic Bulk Heterojunction Solar Cells Evolves with Fullerene Content. Journal of Physical Chemistry C, 2016, 120, 6427-6434.	1.5	19
93	Polymer–Nanoparticle Electrochromic Materials that Selectively Modulate Visible and Near-Infrared Light. Chemistry of Materials, 2016, 28, 1439-1445.	3.2	100
94	Characterizing the Polymer:Fullerene Intermolecular Interactions. Chemistry of Materials, 2016, 28, 1446-1452.	3.2	20
95	Cesium Lead Halide Perovskites with Improved Stability for Tandem Solar Cells. Journal of Physical Chemistry Letters, 2016, 7, 746-751.	2.1	966
96	Morphological and electrical control of fullerene dimerization determines organic photovoltaic stability. Energy and Environmental Science, 2016, 9, 247-256.	15.6	196
97	High-efficiency tandem perovskite solar cells. MRS Bulletin, 2015, 40, 681-686.	1.7	123
98	Disorderâ€Induced Openâ€Circuit Voltage Losses in Organic Solar Cells During Photoinduced Burnâ€In. Advanced Energy Materials, 2015, 5, 1500111.	10.2	146
99	Charge arrier Mobility Requirements for Bulk Heterojunction Solar Cells with High Fill Factor and External Quantum Efficiency >90%. Advanced Energy Materials, 2015, 5, 1500577.	10.2	214
100	Mapping Electric Fieldâ€Induced Switchable Poling and Structural Degradation in Hybrid Lead Halide Perovskite Thin Films. Advanced Energy Materials, 2015, 5, 1500962.	10.2	225
101	Transient Response of Organo-Metal-Halide Solar Cells Analyzed by Time-Resolved Current-Voltage Measurements. Photonics, 2015, 2, 1101-1115.	0.9	14
102	Influence of Intermixed Donor and Acceptor Domains on the Ultrafast Charge Generation in Bulk Heterojunction Materials. Journal of Physical Chemistry C, 2015, 119, 26889-26894.	1.5	21
103	Optical loss analysis of monolithic perovskite/Si tandem solar cell., 2015,,.		4
104	Mechanically stacked and monolithically integrated perovskite/silicon tandems and the challenges for high efficiency. , 2015 , , .		4
105	Minimal Long-Term Intrinsic Degradation Observed in a Polymer Solar Cell Illuminated in an Oxygen-Free Environment. Chemistry of Materials, 2015, 27, 404-407.	3.2	84
106	Sequential "click―functionalization of mesoporous titania for energy-relay dye enhanced dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2015, 17, 6565-6571.	1.3	10
107	Impact of Molecular Orientation and Spontaneous Interfacial Mixing on the Performance of Organic Solar Cells. Chemistry of Materials, 2015, 27, 5597-5604.	3.2	40
108	A 2-terminal perovskite/silicon multijunction solar cell enabled by a silicon tunnel junction. Applied Physics Letters, 2015, 106, .	1.5	488

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109	Beyond Langevin Recombination: How Equilibrium Between Free Carriers and Charge Transfer States Determines the Openâ€Circuit Voltage of Organic Solar Cells. Advanced Energy Materials, 2015, 5, 1500123.	10.2	354
110	The Impact of Donor–Acceptor Phase Separation on the Charge Carrier Dynamics in pBTTT:PCBM Photovoltaic Blends. Macromolecular Rapid Communications, 2015, 36, 1054-1060.	2.0	29
111	Chlorine in PbCl ₂ -Derived Hybrid-Perovskite Solar Absorbers. Chemistry of Materials, 2015, 27, 7240-7243.	3.2	91
112	Molecular Packing and Arrangement Govern the Photo-Oxidative Stability of Organic Photovoltaic Materials. Chemistry of Materials, 2015, 27, 6345-6353.	3.2	88
113	Semi-transparent perovskite solar cells for tandems with silicon and CIGS. Energy and Environmental Science, 2015, 8, 956-963.	15.6	630
114	Reversible photo-induced trap formation in mixed-halide hybrid perovskites for photovoltaics. Chemical Science, 2015, 6, 613-617.	3.7	1,682
115	Chloride in Lead Chloride-Derived Organo-Metal Halides for Perovskite-Absorber Solar Cells. Chemistry of Materials, 2014, 26, 7158-7165.	3.2	256
116	Controlling Solutionâ€Phase Polymer Aggregation with Molecular Weight and Solvent Additives to Optimize Polymerâ€Fullerene Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2014, 4, 1301733.	10.2	194
117	Electron Barrier Formation at the Organicâ€Back Contact Interface is the First Step in Thermal Degradation of Polymer Solar Cells. Advanced Functional Materials, 2014, 24, 3978-3985.	7.8	98
118	Increased Openâ€Circuit Voltage of Organic Solar Cells by Reduced Donorâ€Acceptor Interface Area. Advanced Materials, 2014, 26, 3839-3843.	11.1	181
119	How High Local Charge Carrier Mobility and an Energy Cascade in a Threeâ€Phase Bulk Heterojunction Enable >90% Quantum Efficiency. Advanced Materials, 2014, 26, 1923-1928.	11.1	247
120	Comparing the Device Physics and Morphology of Polymer Solar Cells Employing Fullerenes and Nonâ€Fullerene Acceptors. Advanced Energy Materials, 2014, 4, 1301426.	10.2	90
121	Ring Substituents Mediate the Morphology of PBDTTPD-PCBM Bulk-Heterojunction Solar Cells. Chemistry of Materials, 2014, 26, 2299-2306.	3.2	119
122	Efficient charge generation by relaxed charge-transfer states at organic interfaces. Nature Materials, 2014, 13, 63-68.	13.3	667
123	Melt-infiltration of spiro-OMeTAD and thermal instability of solid-state dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2014, 16, 4864.	1.3	77
124	A Layered Hybrid Perovskite Solarâ€Cell Absorber with Enhanced Moisture Stability. Angewandte Chemie - International Edition, 2014, 53, 11232-11235.	7.2	1,547
125	Continuing to soar. Nature Materials, 2014, 13, 845-846.	13.3	200
126	Enhancing the Hole-Conductivity of Spiro-OMeTAD without Oxygen or Lithium Salts by Using Spiro(TFSI) ₂ in Perovskite and Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2014, 136, 10996-11001.	6.6	529

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127	Characterization of the Polymer Energy Landscape in Polymer:Fullerene Bulk Heterojunctions with Pure and Mixed Phases. Journal of the American Chemical Society, 2014, 136, 14078-14088.	6.6	193
128	Hysteresis and transient behavior in current–voltage measurements of hybrid-perovskite absorber solar cells. Energy and Environmental Science, 2014, 7, 3690-3698.	15.6	1,117
129	Reducing burn-in voltage loss in polymer solar cells by increasing the polymer crystallinity. Energy and Environmental Science, 2014, 7, 2974-2980.	15.6	162
130	Importance of the Donor:Fullerene Intermolecular Arrangement for High-Efficiency Organic Photovoltaics. Journal of the American Chemical Society, 2014, 136, 9608-9618.	6.6	302
131	Metamaterial mirrors in optoelectronic devices. Nature Nanotechnology, 2014, 9, 542-547.	15.6	158
132	Ternary Bulk Heterojunction Solar Cells: Addition of Soluble NIR Dyes for Photocurrent Generation beyond 800 nm. ACS Applied Materials & Samp; Interfaces, 2014, 6, 6905-6913.	4.0	55
133	Spray Deposition of Silver Nanowire Electrodes for Semitransparent Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2013, 3, 1657-1663.	10.2	99
134	Improving the long-term stability of PBDTTPD polymer solar cells through material purification aimed at removing organic impurities. Energy and Environmental Science, 2013, 6, 2529.	15.6	98
135	Reâ€evaluating the Role of Sterics and Electronic Coupling in Determining the Openâ€Circuit Voltage of Organic Solar Cells. Advanced Materials, 2013, 25, 6076-6082.	11.1	90
136	Efficient Energy Sensitization of C ₆₀ and Application to Organic Photovoltaics. Journal of the American Chemical Society, 2013, 135, 11920-11928.	6.6	17
137	Dynamical Orientation of Large Molecules on Oxide Surfaces and its Implications for Dye-Sensitized Solar Cells. Chemistry of Materials, 2013, 25, 4354-4363.	3.2	15
138	All-back-contact ultra-thin silicon nanocone solar cells with 13.7% power conversion efficiency. Nature Communications, 2013, 4, 2950.	5.8	287
139	Fast-track solar cells. Nature, 2013, 501, 323-325.	13.7	112
140	White OLEDs: Color in the Corners: ITOâ€Free White OLEDs with Angular Color Stability (Adv. Mater.) Tj ETQq0 C))vgrlock 10 T
141	Transparent and conductive paper from nanocellulose fibers. Energy and Environmental Science, 2013, 6, 513-518.	15.6	431
142	Silicon-Naphthalo/Phthalocyanine-Hybrid Sensitizer for Efficient Red Response in Dye-Sensitized Solar Cells. Organic Letters, 2013, 15, 784-787.	2.4	67
143	Effect of Al ₂ O ₃ Recombination Barrier Layers Deposited by Atomic Layer Deposition in Solid-State CdS Quantum Dot-Sensitized Solar Cells. Journal of Physical Chemistry C, 2013, 117, 5584-5592.	1.5	108
144	Molecular Engineering of Organic Dyes for Improved Recombination Lifetime in Solid-State Dye-Sensitized Solar Cells. Chemistry of Materials, 2013, 25, 1519-1525.	3.2	66

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145	Parasitic Absorption and Internal Quantum Efficiency Measurements of Solidâ€State Dye Sensitized Solar Cells. Advanced Energy Materials, 2013, 3, 959-966.	10.2	26
146	Color in the Corners: ITOâ€Free White OLEDs with Angular Color Stability. Advanced Materials, 2013, 25, 4006-4013.	11.1	241
147	The Importance of Fullerene Percolation in the Mixed Regions of Polymer–Fullerene Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2013, 3, 364-374.	10.2	412
148	Molecular Intercalation and Cohesion of Organic Bulk Heterojunction Photovoltaic Devices. Advanced Functional Materials, 2013, 23, 2863-2871.	7.8	59
149	Highly soluble energy relay dyes for dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2013, 15, 11306.	1.3	25
150	Linear Side Chains in Benzo[1,2- <i>b</i> i>ibi>id <i i>a€²]dithiophene–Thieno[3,4-<i>c</i>]pyrrole-4,6-dione Polymers Direct Self-Assembly and Solar Cell Performance. Journal of the American Chemical Society, 2013, 135, 4656-4659.</i i>	6.6	661
151	TiO ₂ Conduction Band Modulation with In ₂ O ₃ Recombination Barrier Layers in Solid-State Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2013, 117, 24138-24149.	1.5	30
152	Semiâ€Transparent Polymer Solar Cells with Excellent Subâ€Bandgap Transmission for Third Generation Photovoltaics. Advanced Materials, 2013, 25, 7020-7026.	11.1	88
153	Recombination in Polymer:Fullerene Solar Cells with Openâ€Circuit Voltages Approaching and Exceeding 1.0 V. Advanced Energy Materials, 2013, 3, 220-230.	10.2	212
154	Solar Cells: Reâ€evaluating the Role of Sterics and Electronic Coupling in Determining the Openâ€Circuit Voltage of Organic Solar Cells (Adv. Mater. 42/2013). Advanced Materials, 2013, 25, 5990-5990.	11.1	1
155	Geometric light trapping with a V-trap for efficient organic solar cells. Optics Express, 2013, 21, A305.	1.7	21
156	Modeling low cost hybrid tandem photovoltaics with the potential for efficiencies exceeding 20%. Energy and Environmental Science, 2012, 5, 9173.	15.6	138
157	Modeling low-cost hybrid tandem photovoltaics with power conversion efficiencies exceeding 20%., 2012,,.		4
158	The importance of dye chemistry and TiCl4 surface treatment in the behavior of Al2O3 recombination barrier layers deposited by atomic layer deposition in solid-state dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2012, 14, 12130.	1,3	37
159	Free Carrier Generation in Fullerene Acceptors and Its Effect on Polymer Photovoltaics. Journal of Physical Chemistry C, 2012, 116, 26674-26678.	1.5	50
160	Impact of regioregularity on thin-film transistor and photovoltaic cell performances of pentacene-containing polymers. Journal of Materials Chemistry, 2012, 22, 4356.	6.7	14
161	Use of Xâ€Ray Diffraction, Molecular Simulations, and Spectroscopy to Determine the Molecular Packing in a Polymerâ€Fullerene Bimolecular Crystal. Advanced Materials, 2012, 24, 6071-6079.	11.1	126
162	Factors Governing Intercalation of Fullerenes and Other Small Molecules Between the Side Chains of Semiconducting Polymers Used in Solar Cells. Advanced Energy Materials, 2012, 2, 1208-1217.	10.2	97

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163	Molecular Packing and Solar Cell Performance in Blends of Polymers with a Bisadduct Fullerene. Nano Letters, 2012, 12, 1566-1570.	4.5	140
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