

Yang Yang

List of Publications by Year in Descending Order

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Version: 2024-04-26

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

198
papers

57,478
citations

91
h-index

204
g-index

204
ext. papers

63,377
ext. citations

17.7
avg. IF

7.99
L-index

#	Paper	IF	Citations
198	Core-shell structured nanoparticles for photodynamic therapy-based cancer treatment and related imaging. <i>Coordination Chemistry Reviews</i> , 2022 , 458, 214427	23.2	2
197	The design of quinoxaline based unfused non-fullerene acceptors for high performance and stable organic solar cells. <i>Chemical Engineering Journal</i> , 2022 , 427, 131473	14.7	5
196	Rethinking the A cation in halide perovskites.. <i>Science</i> , 2022 , 375, eabj1186	33.3	29
195	Stability-limiting heterointerfaces of perovskite photovoltaics.. <i>Nature</i> , 2022 ,	50.4	31
194	Terminal alkyl chain tuning of small molecule donor enables optimized morphology and efficient all-small-molecule organic solar cells. <i>Dyes and Pigments</i> , 2022 , 200, 110147	4.6	1
193	Light-induced trap emptying revealed by intensity-dependent quantum efficiency of organic solar cells. <i>Journal of Applied Physics</i> , 2022 , 131, 135501	2.5	0
192	Toward High-Performance Semitransparent Organic Photovoltaics with Narrow-Bandgap Donors and Non-Fullerene Acceptors. <i>Advanced Energy Materials</i> , 2022 , 12, 2102908	21.8	7
191	Performance-limiting formation dynamics in mixed-halide perovskites. <i>Science Advances</i> , 2021 , 7, eabj1792	24.3	9
190	The Original Design Principles of the Y-Series Nonfullerene Acceptors, from Y1 to Y6. <i>ACS Nano</i> , 2021 ,	16.7	12
189	Near-infrared Materials: The Turning Point of Organic Photovoltaics. <i>Advanced Materials</i> , 2021 , e2107330	30.4	13
188	Surface Reconstruction of Halide Perovskites During Post-treatment. <i>Journal of the American Chemical Society</i> , 2021 , 143, 6781-6786	16.4	39
187	Prospects for metal halide perovskite-based tandem solar cells. <i>Nature Photonics</i> , 2021 , 15, 411-425	33.9	52
186	High-Performance Organic Solar Cells Featuring Double Bulk Heterojunction Structures with Vertical-Gradient Selenium Heterocyclic Nonfullerene Acceptor Concentrations. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 27227-27236	9.5	12
185	Tailored Key Parameters of Perovskite for High-Performance Photovoltaics. <i>Accounts of Materials Research</i> , 2021 , 2, 447-457	7.5	1
184	Triplet exciton formation for non-radiative voltage loss in high-efficiency nonfullerene organic solar cells. <i>Joule</i> , 2021 , 5, 1832-1844	27.8	30
183	Stable and Efficient Methylammonium-, Cesium-, and Bromide-Free Perovskite Solar Cells by In-Situ Interlayer Formation. <i>Advanced Functional Materials</i> , 2021 , 31, 2007520	15.6	19
182	Sequential Deposition of Donor and Acceptor Provides High-Performance Semitransparent Organic Photovoltaics Having a Pseudo p ₁ n Active Layer Structure. <i>Advanced Energy Materials</i> , 2021 , 11, 2003576	21.8	23

181	Twisted-graphene-like perylene diimide with dangling functional chromophores as tunable small-molecule acceptors in binary-blend active layers of organic photovoltaics. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 20510-20517	13	8
180	High-Performance Organic Photovoltaics Incorporating an Active Layer with a Few Nanometer-Thick Third-Component Layer on a Binary Blend Layer. <i>Nano Letters</i> , 2021 , 21, 2207-2215	11.5	21
179	Chlorinated Spiroconjugated Fused Extended Aromatics for Multifunctional Organic Electronics. <i>Advanced Materials</i> , 2021 , 33, e2006120	24	9
178	Reconfiguring the band-edge states of photovoltaic perovskites by conjugated organic cations. <i>Science</i> , 2021 , 371, 636-640	33.3	69
177	Single-Layered MXene Nanosheets Doping TiO for Efficient and Stable Double Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2021 , 143, 2593-2600	16.4	51
176	1934 cm ² large-area quaternary organic photovoltaic module with 1236% certified efficiency. <i>Photonics Research</i> , 2021 , 9, 324	6	7
175	High-Performance All-Polymer Solar Cells with a Pseudo-Bilayer Configuration Enabled by a Stepwise Optimization Strategy. <i>Advanced Functional Materials</i> , 2021 , 31, 2010411	15.6	46
174	Unraveling the surface state of photovoltaic perovskite thin film. <i>Matter</i> , 2021 , 4, 2417-2428	12.7	9
173	Stable and low-photovoltage-loss perovskite solar cells by multifunctional passivation. <i>Nature Photonics</i> , 2021 , 15, 681-689	33.9	72
172	Graded bulk-heterojunction enables 17% binary organic solar cells via nonhalogenated open air coating. <i>Nature Communications</i> , 2021 , 12, 4815	17.4	28
171	Material, Phase, and Interface Stability of Photovoltaic Perovskite: A Perspective. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 19088-19096	3.8	1
170	A review on semitransparent solar cells for agricultural application. <i>Materials Today Energy</i> , 2021 , 22, 100852	7	4
169	Blending isomers of fluorine-substituted sulfonyldibenzene as hole transport materials to achieve high efficiency beyond 21% in perovskite solar cells. <i>Chemical Engineering Journal</i> , 2021 , 424, 130396	14.7	7
168	Wide-Gap Perovskite via Synergetic Surface Passivation and Its Application toward Efficient Stacked Tandem Photovoltaics. <i>Small</i> , 2021 , e2103887	11	1
167	Towards High-Performance Semitransparent Organic Photovoltaics: Dual-Functional -Type Soft Interlayer.. <i>ACS Nano</i> , 2021 ,	16.7	1
166	Narrowing the Band Gap: The Key to High-Performance Organic Photovoltaics. <i>Accounts of Chemical Research</i> , 2020 , 53, 1218-1228	24.3	93
165	Efficient Flexible Inorganic Perovskite Light-Emitting Diodes Fabricated with CsPbBr Emitters Prepared via Low-Temperature in Situ Dynamic Thermal Crystallization. <i>Nano Letters</i> , 2020 , 20, 4673-4680	11.5	25
164	A Polymerization-Assisted Grain Growth Strategy for Efficient and Stable Perovskite Solar Cells. <i>Advanced Materials</i> , 2020 , 32, e1907769	24	87

163	Hybrid Integrated Photomedical Devices for Wearable Vital Sign Tracking. <i>ACS Sensors</i> , 2020 , 5, 1582-1588	8	
162	Efficient and Reproducible Monolithic Perovskite/Organic Tandem Solar Cells with Low-Loss Interconnecting Layers. <i>Joule</i> , 2020 , 4, 1594-1606	27.8	57
161	Redox-inactive samarium(III) acetylacetonate as dopant enabling cation substitution and interfacial passivation for efficient and stable CsPbI ₂ Br perovskite solar cells. <i>APL Materials</i> , 2020 , 8, 071102	5.7	8
160	High Performance Indium-Gallium-Zinc Oxide Thin Film Transistor via Interface Engineering. <i>Advanced Functional Materials</i> , 2020 , 30, 2003285	15.6	16
159	Perovskite Quantum Dots for Photovoltaic Applications. <i>Springer Series in Materials Science</i> , 2020 , 243-254	0	
158	Hysteresis-less and stable perovskite solar cells with a self-assembled monolayer. <i>Communications Materials</i> , 2020 , 1,	6	57
157	Translating local binding energy to a device effective one. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 760-771	5.8	4
156	Potassium-Presenting Zinc Oxide Surfaces Induce Vertical Phase Separation in Fullerene-Free Organic Photovoltaics. <i>Nano Letters</i> , 2020 , 20, 715-721	11.5	34
155	Atom-Variied Side Chains in Conjugated Polymers Affect Efficiencies of Photovoltaic Devices Incorporating Small Molecules. <i>ACS Applied Polymer Materials</i> , 2020 , 2, 636-646	4.3	12
154	Surface-2D/Bulk-3D Heterophased Perovskite Nanograins for Long-Term-Stable Light-Emitting Diodes. <i>Advanced Materials</i> , 2020 , 32, e1905674	24	36
153	Hermetic seal for perovskite solar cells: An improved plasma enhanced atomic layer deposition encapsulation. <i>Nano Energy</i> , 2020 , 69, 104375	17.1	56
152	Shallow Iodine Defects Accelerate the Degradation of PPhase Formamidinium Perovskite. <i>Joule</i> , 2020 , 4, 2426-2442	27.8	72
151	Molecular Interaction Regulates the Performance and Longevity of Defect Passivation for Metal Halide Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2020 , 142, 20071-20079	16.4	72
150	Incorporating Indium Selenide Nanosheets into a Polymer/Small Molecule Binary Blend Active Layer Enhances the Long-Term Stability and Performance of Its Organic Photovoltaics. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 55023-55032	9.5	4
149	Bipyrimidine core structure-based hole transport materials for efficient perovskite solar cells. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 5271-5276	5.8	5
148	Engineering the Core Units of Small-Molecule Acceptors to Enhance the Performance of Organic Photovoltaics. <i>Solar Rrl</i> , 2020 , 4, 2000253	7.1	11
147	Detecting DNA and RNA and Differentiating Single-Nucleotide Variations via Field-Effect Transistors. <i>Nano Letters</i> , 2020 , 20, 5982-5990	11.5	24
146	The surface of halide perovskites from nano to bulk. <i>Nature Reviews Materials</i> , 2020 , 5, 809-827	73.3	119

145	Denatured M13 Bacteriophage-Templated Perovskite Solar Cells Exhibiting High Efficiency. <i>Advanced Science</i> , 2020 , 7, 2000782	13.6	15
144	Quantitative Specifications to Avoid Degradation during E-Beam and Induced Current Microscopy of Halide Perovskite Devices. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 18961-18967	3.8	2
143	Solid-phase hetero epitaxial growth of β -phase formamidinium perovskite. <i>Nature Communications</i> , 2020 , 11, 5514	17.4	38
142	Hole transport materials based on a twisted molecular structure with a single aromatic heterocyclic core to boost the performance of conventional perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 13415-13421	7.1	9
141	Transparent Hole-Transporting Frameworks: A Unique Strategy to Design High-Performance Semitransparent Organic Photovoltaics. <i>Advanced Materials</i> , 2020 , 32, e2003891	24	34
140	Enabling High-Performance Tandem Organic Photovoltaic Cells by Balancing the Front and Rear Subcells. <i>Advanced Materials</i> , 2020 , 32, e2002315	24	16
139	Constructing High-Performance Organic Photovoltaics via Emerging Non-Fullerene Acceptors and Tandem-Junction Structure. <i>Advanced Energy Materials</i> , 2020 , 10, 2000746	21.8	27
138	Steric Impediment of Ion Migration Contributes to Improved Operational Stability of Perovskite Solar Cells. <i>Advanced Materials</i> , 2020 , 32, e1906995	24	76
137	Controlled Redox of Lithium-Ion Endohedral Fullerene for Efficient and Stable Metal Electrode-Free Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2019 , 141, 16553-16558	16.4	35
136	Enhancing photovoltaic performance by tuning the domain sizes of a small-molecule acceptor by side-chain-engineered polymer donors. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 3072-3082	13	46
135	Highly Efficient Semitransparent Organic Solar Cells with Color Rendering Index Approaching 100. <i>Advanced Materials</i> , 2019 , 31, e1807159	24	122
134	Perovskite-polymer composite cross-linker approach for highly-stable and efficient perovskite solar cells. <i>Nature Communications</i> , 2019 , 10, 520	17.4	262
133	Enabling low voltage losses and high photocurrent in fullerene-free organic photovoltaics. <i>Nature Communications</i> , 2019 , 10, 570	17.4	260
132	Enabling Efficient Tandem Organic Photovoltaics with High Fill Factor via Reduced Charge Recombination. <i>ACS Energy Letters</i> , 2019 , 4, 1535-1540	20.1	16
131	Polarized Ferroelectric Polymers for High-Performance Perovskite Solar Cells. <i>Advanced Materials</i> , 2019 , 31, e1902222	24	64
130	Semiconducting carbon nanotubes as crystal growth templates and grain bridges in perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 12987-12992	13	44
129	Caffeine Improves the Performance and Thermal Stability of Perovskite Solar Cells. <i>Joule</i> , 2019 , 3, 1464-1477	14.87	266
128	Stable and Reproducible 2D/3D Formamidinium Lead Iodide Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2019 , 2, 2486-2493	6.1	42

127	Verification and mitigation of ion migration in perovskite solar cells. <i>APL Materials</i> , 2019 , 7, 041111	5.7	125
126	Interface and Defect Engineering for Metal Halide Perovskite Optoelectronic Devices. <i>Advanced Materials</i> , 2019 , 31, e1803515	24	201
125	Composition Stoichiometry of CsAgBiBr Films for Highly Efficient Lead-Free Perovskite Solar Cells. <i>Nano Letters</i> , 2019 , 19, 2066-2073	11.5	148
124	Co-harvesting Light and Mechanical Energy Based on Dynamic Metal/Perovskite Schottky Junction. <i>Matter</i> , 2019 , 1, 639-649	12.7	41
123	Molecular Tuning of Titanium Complexes with Controllable Work Function for Efficient Organic Photovoltaics. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 20800-20807	3.8	2
122	Photocatalytic Chemical CO ₂ Fixation by Cu-BDC Nanosheet@Macroporous/Mesoporous-TiO ₂ under Mild Conditions. <i>ACS Catalysis</i> , 2019 , 9, 8659-8668	13.1	17
121	Crystalline Liquid-like Behavior: Surface-Induced Secondary Grain Growth of Photovoltaic Perovskite Thin Film. <i>Journal of the American Chemical Society</i> , 2019 , 141, 13948-13953	16.4	96
120	Design of a Rigid Scaffold Structure toward Efficient and Stable Organic Photovoltaics. <i>Matter</i> , 2019 , 1, 402-411	12.7	8
119	Realizing Efficient Charge/Energy Transfer and Charge Extraction in Fullerene-Free Organic Photovoltaics via a Versatile Third Component. <i>Nano Letters</i> , 2019 , 19, 5053-5061	11.5	34
118	Tailored Phase Transformation of CsPbI ₃ Films by Copper(II) Bromide for High-Performance All-Inorganic Perovskite Solar Cells. <i>Nano Letters</i> , 2019 , 19, 5176-5184	11.5	105
117	A Small-Molecule "Charge Driver" enables Perovskite Quantum Dot Solar Cells with Efficiency Approaching 13. <i>Advanced Materials</i> , 2019 , 31, e1900111	24	58
116	Core-Shell ZnO@SnO Nanoparticles for Efficient Inorganic Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2019 , 141, 17610-17616	16.4	69
115	Rational Tuning of Molecular Interaction and Energy Level Alignment Enables High-Performance Organic Photovoltaics. <i>Advanced Materials</i> , 2019 , 31, e1904215	24	108
114	A Review of Perovskites Solar Cell Stability. <i>Advanced Functional Materials</i> , 2019 , 29, 1808843	15.6	554
113	Constructive molecular configurations for surface-defect passivation of perovskite photovoltaics. <i>Science</i> , 2019 , 366, 1509-1513	33.3	434
112	Field-Dependent Mobility Enhancement and Contact Resistance in a-IGZO TFTs. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 5166-5169	2.9	11
111	Cluster Size Control toward High Performance Solution Processed InGaZnO Thin Film Transistors. <i>ACS Applied Electronic Materials</i> , 2019 , 1, 2483-2488	4	5
110	Unraveling Sunlight by Transparent Organic Semiconductors toward Photovoltaic and Photosynthesis. <i>ACS Nano</i> , 2019 , 13, 1071-1077	16.7	89

109	20% Efficient Perovskite Solar Cells with 2D Electron Transporting Layer. <i>Advanced Functional Materials</i> , 2019 , 29, 1805168	15.6	49
108	Efficient Tandem Organic Photovoltaics with Tunable Rear Sub-cells. <i>Joule</i> , 2019 , 3, 432-442	27.8	54
107	Vapor-Assisted Ex-Situ Doping of Carbon Nanotube toward Efficient and Stable Perovskite Solar Cells. <i>Nano Letters</i> , 2019 , 19, 2223-2230	11.5	43
106	Next-generation organic photovoltaics based on non-fullerene acceptors. <i>Nature Photonics</i> , 2018 , 12, 131-142	33.9	1155
105	High-Performance Organic Bulk-Heterojunction Solar Cells Based on Multiple-Donor or Multiple-Acceptor Components. <i>Advanced Materials</i> , 2018 , 30, 1705706	24	124
104	Ternary System with Controlled Structure: A New Strategy toward Efficient Organic Photovoltaics. <i>Advanced Materials</i> , 2018 , 30, 1705243	24	91
103	Tuning Molecular Interactions for Highly Reproducible and Efficient Formamidinium Perovskite Solar Cells via Adduct Approach. <i>Journal of the American Chemical Society</i> , 2018 , 140, 6317-6324	16.4	233
102	Efficient Planar Perovskite Solar Cells with Improved Fill Factor via Interface Engineering with Graphene. <i>Nano Letters</i> , 2018 , 18, 2442-2449	11.5	154
101	Achieving ordered and stable binary metal perovskite via strain engineering. <i>Nano Energy</i> , 2018 , 48, 117-127	12.7	48
100	Large-Area, Ultrathin Metal-Oxide Semiconductor Nanoribbon Arrays Fabricated by Chemical Lift-Off Lithography. <i>Nano Letters</i> , 2018 , 18, 5590-5595	11.5	15
99	2D perovskite stabilized phase-pure formamidinium perovskite solar cells. <i>Nature Communications</i> , 2018 , 9, 3021	17.4	407
98	High Mobility Indium Oxide Electron Transport Layer for an Efficient Charge Extraction and Optimized Nanomorphology in Organic Photovoltaics. <i>Nano Letters</i> , 2018 , 18, 5805-5811	11.5	22
97	Transparent Polymer Photovoltaics for Solar Energy Harvesting and Beyond. <i>Joule</i> , 2018 , 2, 1039-1054	27.8	137
96	Molecular engineering of side chain architecture of conjugated polymers enhances performance of photovoltaics by tuning ternary blend structures. <i>Nano Energy</i> , 2018 , 43, 138-148	17.1	41
95	The role of grain boundaries in perovskite solar cells. <i>Materials Today Energy</i> , 2018 , 7, 149-160	7	149
94	Tailored Phase Conversion under Conjugated Polymer Enables Thermally Stable Perovskite Solar Cells with Efficiency Exceeding 21. <i>Journal of the American Chemical Society</i> , 2018 , 140, 17255-17262	16.4	162
93	High Efficiency Non-fullerene Organic Tandem Photovoltaics Based on Ternary Blend Subcells. <i>Nano Letters</i> , 2018 , 18, 7977-7984	11.5	25
92	Achieving High Efficiency in Solution-Processed Perovskite Solar Cells Using C/C Mixed Fullerenes. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 39590-39598	9.5	45

91	Aptamer-field-effect transistors overcome Debye length limitations for small-molecule sensing. <i>Science</i> , 2018 , 362, 319-324	33.3	287
90	Surface Ligand Management for Stable FAPbI ₃ Perovskite Quantum Dot Solar Cells. <i>Joule</i> , 2018 , 2, 1866-1878	18.7	114
89	High-performance perovskite/Cu(In,Ga)Se monolithic tandem solar cells. <i>Science</i> , 2018 , 361, 904-908	33.3	228
88	Extremely stable graphene electrodes doped with macromolecular acid. <i>Nature Communications</i> , 2018 , 9, 2037	17.4	65
87	Unique Energy Alignments of a Ternary Material System toward High-Performance Organic Photovoltaics. <i>Advanced Materials</i> , 2018 , 30, e1801501	24	110
86	Influence of Fullerene Acceptor on the Performance, Microstructure, and Photophysics of Low Bandgap Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2017 , 7, 1602197	21.8	34
85	Combining Energy Transfer and Optimized Morphology for Highly Efficient Ternary Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2017 , 7, 1602552	21.8	85
84	Interface Engineering of Metal Oxide Semiconductors for Biosensing Applications. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700020	4.6	51
83	Carbon Quantum Dots/TiO ₂ Electron Transport Layer Boosts Efficiency of Planar Heterojunction Perovskite Solar Cells to 19. <i>Nano Letters</i> , 2017 , 17, 2328-2335	11.5	166
82	Quasi-Two-Dimensional Metal Oxide Semiconductors Based Ultrasensitive Potentiometric Biosensors. <i>ACS Nano</i> , 2017 , 11, 4710-4718	16.7	61
81	Halide Perovskites for Tandem Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 1999-2011	6.4	41
80	The Interplay between Trap Density and Hysteresis in Planar Heterojunction Perovskite Solar Cells. <i>Nano Letters</i> , 2017 , 17, 4270-4276	11.5	175
79	Ultra-bright and highly efficient inorganic based perovskite light-emitting diodes. <i>Nature Communications</i> , 2017 , 8, 15640	17.4	557
78	Tailoring the Interfacial Chemical Interaction for High-Efficiency Perovskite Solar Cells. <i>Nano Letters</i> , 2017 , 17, 269-275	11.5	223
77	Make perovskite solar cells stable. <i>Nature</i> , 2017 , 544, 155-156	50.4	221
76	Polymer-modified halide perovskite films for efficient and stable planar heterojunction solar cells. <i>Science Advances</i> , 2017 , 3, e1700106	14.3	443
75	Unraveling the High Open Circuit Voltage and High Performance of Integrated Perovskite/Organic Bulk-Heterojunction Solar Cells. <i>Nano Letters</i> , 2017 , 17, 5140-5147	11.5	61
74	Low-bandgap conjugated polymers enabling solution-processable tandem solar cells. <i>Nature Reviews Materials</i> , 2017 , 2,	73.3	229

73	Energy transfer within small molecule/conjugated polymer blends enhances photovoltaic efficiency. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 18053-18063	13	41
72	A Bifunctional Lewis Base Additive for Microscopic Homogeneity in Perovskite Solar Cells. <i>CheM</i> , 2017 , 3, 290-302	16.2	232
71	Pure Formamidinium-Based Perovskite Light-Emitting Diodes with High Efficiency and Low Driving Voltage. <i>Advanced Materials</i> , 2017 , 29, 1603826	24	145
70	Improved air stability of perovskite solar cells via solution-processed metal oxide transport layers. <i>Nature Nanotechnology</i> , 2016 , 11, 75-81	28.7	1614
69	Morphology Evolution of High Efficiency Perovskite Solar Cells via Vapor Induced Intermediate Phases. <i>Journal of the American Chemical Society</i> , 2016 , 138, 15710-15716	16.4	91
68	Single Crystal Formamidinium Lead Iodide (FAPbI ₃): Insight into the Structural, Optical, and Electrical Properties. <i>Advanced Materials</i> , 2016 , 28, 2253-8	24	578
67	Guanidinium: A Route to Enhanced Carrier Lifetime and Open-Circuit Voltage in Hybrid Perovskite Solar Cells. <i>Nano Letters</i> , 2016 , 16, 1009-16	11.5	400
66	High-efficiency robust perovskite solar cells on ultrathin flexible substrates. <i>Nature Communications</i> , 2016 , 7, 10214	17.4	444
65	Interfacial Degradation of Planar Lead Halide Perovskite Solar Cells. <i>ACS Nano</i> , 2016 , 10, 218-24	16.7	357
64	P-6: Aqueous Precursor Based Solution-Processed Metal Oxide Semiconductor. <i>Digest of Technical Papers SID International Symposium</i> , 2016 , 47, 1140-1142	0.5	1
63	Perovskite Solar Cells Employing Dopant-Free Organic Hole Transport Materials with Tunable Energy Levels. <i>Advanced Materials</i> , 2016 , 28, 440-6	24	217
62	Low-Temperature TiO _x Compact Layer for Planar Heterojunction Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 11076-83	9.5	91
61	Printable Solar Cells from Advanced Solution-Processible Materials. <i>CheM</i> , 2016 , 1, 197-219	16.2	50
60	Inverted Planar Structure of Perovskite Solar Cells 2016 , 307-324		1
59	10.5% efficient polymer and amorphous silicon hybrid tandem photovoltaic cell. <i>Nature Communications</i> , 2015 , 6, 6391	17.4	38
58	Multilayer Transparent Top Electrode for Solution Processed Perovskite/Cu(In,Ga)(Se,S) ₂ Four Terminal Tandem Solar Cells. <i>ACS Nano</i> , 2015 , 9, 7714-21	16.7	139
57	The optoelectronic role of chlorine in CH ₃ NH ₃ PbI ₃ (Cl)-based perovskite solar cells. <i>Nature Communications</i> , 2015 , 6, 7269	17.4	354
56	Hole selective NiO contact for efficient perovskite solar cells with carbon electrode. <i>Nano Letters</i> , 2015 , 15, 2402-8	11.5	357

55	Fabrication of High-Performance Ultrathin In ₂ O ₃ Film Field-Effect Transistors and Biosensors Using Chemical Lift-Off Lithography. <i>ACS Nano</i> , 2015 , 9, 4572-82	16.7	117
54	Printable Ultrathin Metal Oxide Semiconductor-Based Conformal Biosensors. <i>ACS Nano</i> , 2015 , 9, 12174-81	16.7	105
53	Low-Bandgap Near-IR Conjugated Polymers/Molecules for Organic Electronics. <i>Chemical Reviews</i> , 2015 , 115, 12633-65	68.1	863
52	Hexaaqua Metal Complexes for Low-Temperature Formation of Fully Metal Oxide Thin-Film Transistors. <i>Chemistry of Materials</i> , 2015 , 27, 5808-5812	9.6	68
51	Multifunctional Fullerene Derivative for Interface Engineering in Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2015 , 137, 15540-7	16.4	433
50	Integrated perovskite/bulk-heterojunction toward efficient solar cells. <i>Nano Letters</i> , 2015 , 15, 662-8	11.5	129
49	The identification and characterization of defect states in hybrid organic-inorganic perovskite photovoltaics. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 112-6	3.6	285
48	Low-Impurity High-Performance Solution-Processed Metal Oxide Semiconductors via a Facile Redox Reaction. <i>Chemistry of Materials</i> , 2015 , 27, 4713-4718	9.6	33
47	Perovskite/polymer monolithic hybrid tandem solar cells utilizing a low-temperature, full solution process. <i>Materials Horizons</i> , 2015 , 2, 203-211	14.4	127
46	Boost up mobility of solution-processed metal oxide thin-film transistors via confining structure on electron pathways. <i>Advanced Materials</i> , 2014 , 26, 4273-8	24	149
45	Planar heterojunction perovskite solar cells via vapor-assisted solution process. <i>Journal of the American Chemical Society</i> , 2014 , 136, 622-5	16.4	1921
44	Low-temperature solution-processed perovskite solar cells with high efficiency and flexibility. <i>ACS Nano</i> , 2014 , 8, 1674-80	16.7	1216
43	Solution-processed hybrid perovskite photodetectors with high detectivity. <i>Nature Communications</i> , 2014 , 5, 5404	17.4	1749
42	Direct light pattern integration of low-temperature solution-processed all-oxide flexible electronics. <i>ACS Nano</i> , 2014 , 8, 9680-6	16.7	106
41	Side-Chain Tunability via Triple Component Random Copolymerization for Better Photovoltaic Polymers. <i>Advanced Energy Materials</i> , 2014 , 4, 1300864	21.8	76
40	Photovoltaics. Interface engineering of highly efficient perovskite solar cells. <i>Science</i> , 2014 , 345, 542-6	33.3	5272
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34	25th anniversary article: a decade of organic/polymeric photovoltaic research. <i>Advanced Materials</i> , 2013 , 25, 6642-71	24	978
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- 1 Lattice strain suppresses point defect formation in halide perovskites. *Nano Research*, 10 5