

List of Publications by Citations

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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.

76 papers	6,103 citations	41 h-index	78 g-index
80 ext. papers	8,044 ext. citations	19.7 avg, IF	5.8 L-index

#	Paper	IF	Citations
76	Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. <i>Nature Energy</i> , 2020 , 5, 131-140	62.3	552
75	A generic interface to reduce the efficiency-stability-cost gap of perovskite solar cells. <i>Science</i> , 2017 , 358, 1192-1197	33.3	418
74	Efficient tandem solar cells with solution-processed perovskite on textured crystalline silicon. <i>Science</i> , 2020 , 367, 1135-1140	33.3	298
73	Bipolar-shell resurfacing for blue LEDs based on strongly confined perovskite quantum dots. <i>Nature Nanotechnology</i> , 2020 , 15, 668-674	28.7	281
72	High-performance semitransparent perovskite solar cells with solution-processed silver nanowires as top electrodes. <i>Nanoscale</i> , 2015 , 7, 1642-9	7.7	257
71	All-perovskite tandem solar cells with 24.2% certified efficiency and area over 1 cm ² using surface-anchoring zwitterionic antioxidant. <i>Nature Energy</i> , 2020 , 5, 870-880	62.3	233
70	Abnormal strong burn-in degradation of highly efficient polymer solar cells caused by spinodal donor-acceptor demixing. <i>Nature Communications</i> , 2017 , 8, 14541	17.4	223
69	Interface Engineering of Perovskite Hybrid Solar Cells with Solution-Processed PeryleneDiimide Heterojunctions toward High Performance. <i>Chemistry of Materials</i> , 2015 , 27, 227-234	9.6	208
68	Pervasive functional translation of noncanonical human open reading frames. <i>Science</i> , 2020 , 367, 1140-1146	33.3	168
67	Overcoming the Interface Losses in Planar Heterojunction Perovskite-Based Solar Cells. <i>Advanced Materials</i> , 2016 , 28, 5112-20	24	167
66	Regulating strain in perovskite thin films through charge-transport layers. <i>Nature Communications</i> , 2020 , 11, 1514	17.4	165
65	Towards low-cost, environmentally friendly printed chalcopyrite and kesterite solar cells. <i>Energy and Environmental Science</i> , 2014 , 7, 1829-1849	35.4	164
64	Improved High-Efficiency Perovskite Planar Heterojunction Solar Cells via Incorporation of a Polyelectrolyte Interlayer. <i>Chemistry of Materials</i> , 2014 , 26, 5190-5193	9.6	163
63	Quantum Dots Supply Bulk- and Surface-Passivation Agents for Efficient and Stable Perovskite Solar Cells. <i>Joule</i> , 2019 , 3, 1963-1976	27.8	154
62	A Universal Interface Layer Based on an Amine-Functionalized Fullerene Derivative with Dual Functionality for Efficient Solution Processed Organic and Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2015 , 5, 1401692	21.8	141
61	Reducing Defects in Halide Perovskite Nanocrystals for Light-Emitting Applications. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 2629-2640	6.4	122
60	Enhanced optical path and electron diffusion length enable high-efficiency perovskite tandems. <i>Nature Communications</i> , 2020 , 11, 1257	17.4	114

59	Bifunctional Surface Engineering on SnO ₂ Reduces Energy Loss in Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 2796-2801	20.1	104
58	Combining Efficiency and Stability in Mixed Tin-Lead Perovskite Solar Cells by Capping Grains with an Ultrathin 2D Layer. <i>Advanced Materials</i> , 2020 , 32, e1907058	24	92
57	Photoinduced degradation of methylammonium lead triiodide perovskite semiconductors. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 15896-15903	13	92
56	Suppressed Ion Migration in Reduced-Dimensional Perovskites Improves Operating Stability. <i>ACS Energy Letters</i> , 2019 , 4, 1521-1527	20.1	89
55	One-Step Synthesis of SnI ₄ (DMSO) Adducts for High-Performance Tin Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2021 , 143, 10970-10976	16.4	89
54	Pushing efficiency limits for semitransparent perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 24071-24081	13	85
53	Efficient and Stable Inverted Perovskite Solar Cells Incorporating Secondary Amines. <i>Advanced Materials</i> , 2019 , 31, e1903559	24	85
52	Coloring Semitransparent Perovskite Solar Cells via Dielectric Mirrors. <i>ACS Nano</i> , 2016 , 10, 5104-12	16.7	79
51	Efficient bifacial monolithic perovskite/silicon tandem solar cells via bandgap engineering. <i>Nature Energy</i> , 2021 , 6, 167-175	62.3	76
50	Double-Side-Passivated Perovskite Solar Cells with Ultra-low Potential Loss. <i>Solar Rrl</i> , 2019 , 3, 1800296	7.1	74
49	Inverted, Environmentally Stable Perovskite Solar Cell with a Novel Low-Cost and Water-Free PEDOT Hole-Extraction Layer. <i>Advanced Energy Materials</i> , 2015 , 5, 1500543	21.8	72
48	Chloride Insertion-Immobilization Enables Bright, Narrowband, and Stable Blue-Emitting Perovskite Diodes. <i>Journal of the American Chemical Society</i> , 2020 , 142, 5126-5134	16.4	61
47	All-Inorganic Quantum-Dot LEDs Based on a Phase-Stabilized F^-CsPbI_4 Perovskite. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 16164-16170	16.4	59
46	Exploring the Limiting Open-Circuit Voltage and the Voltage Loss Mechanism in Planar $\text{CH}_3\text{NH}_3\text{PbBr}_3$ Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2016 , 6, 1600132	21.8	59
45	Organic and perovskite solar modules innovated by adhesive top electrode and depth-resolved laser patterning. <i>Energy and Environmental Science</i> , 2016 , 9, 2302-2313	35.4	57
44	Effective Ligand Engineering of the $\text{Cu}_2\text{ZnSnS}_4$ Nanocrystal Surface for Increasing Hole Transport Efficiency in Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2016 , 26, 8300-8306	15.6	56
43	Exploring the Stability of Novel Wide Bandgap Perovskites by a Robot Based High Throughput Approach. <i>Advanced Energy Materials</i> , 2018 , 8, 1701543	21.8	55
42	Multi-cation perovskites prevent carrier reflection from grain surfaces. <i>Nature Materials</i> , 2020 , 19, 412-418	18	52

41	A Series of Pyrene-Substituted Silicon Phthalocyanines as Near-IR Sensitizers in Organic Ternary Solar Cells. <i>Advanced Energy Materials</i> , 2016 , 6, 1502355	21.8	52
40	A generic concept to overcome bandgap limitations for designing highly efficient multi-junction photovoltaic cells. <i>Nature Communications</i> , 2015 , 6, 7730	17.4	50
39	The Interplay of Contact Layers: How the Electron Transport Layer Influences Interfacial Recombination and Hole Extraction in Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 6249-6256	6.4	45
38	Suppression of Hysteresis Effects in Organohalide Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700007	4.6	44
37	Extending the environmental lifetime of unpackaged perovskite solar cells through interfacial design. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 11604-11610	13	43
36	Switching Off Hysteresis in Perovskite Solar Cells by Fine-Tuning Energy Levels of Extraction Layers. <i>Advanced Energy Materials</i> , 2018 , 8, 1703376	21.8	36
35	Quantum-size-tuned heterostructures enable efficient and stable inverted perovskite solar cells. <i>Nature Photonics</i> ,	33.9	35
34	Engineering of the Electron Transport Layer/Perovskite Interface in Solar Cells Designed on TiO ₂ Rutile Nanorods. <i>Advanced Functional Materials</i> , 2020 , 30, 1909738	15.6	30
33	Solution-processed perovskite-colloidal quantum dot tandem solar cells for photon collection beyond 1000 nm. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 26020-26028	13	30
32	Strain-activated light-induced halide segregation in mixed-halide perovskite solids. <i>Nature Communications</i> , 2020 , 11, 6328	17.4	29
31	All-Perovskite Tandem Solar Cells: A Roadmap to Uniting High Efficiency with High Stability. <i>Accounts of Materials Research</i> , 2020 , 1, 63-76	7.5	28
30	Evidence of Tailoring the Interfacial Chemical Composition in Normal Structure Hybrid Organohalide Perovskites by a Self-Assembled Monolayer. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 5511-5518	9.5	27
29	Overcoming Electrode-Induced Losses in Organic Solar Cells by Tailoring a Quasi-Ohmic Contact to Fullerenes via Solution-Processed Alkali Hydroxide Layers. <i>Advanced Energy Materials</i> , 2016 , 6, 1502195	21.8	26
28	Discovery of temperature-induced stability reversal in perovskites using high-throughput robotic learning. <i>Nature Communications</i> , 2021 , 12, 2191	17.4	26
27	Ligand-bridged charge extraction and enhanced quantum efficiency enable efficient n-i-p perovskite/silicon tandem solar cells. <i>Energy and Environmental Science</i> ,	35.4	26
26	Deciphering the Role of Impurities in Methylammonium Iodide and Their Impact on the Performance of Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600593	4.6	25
25	Resolving a Critical Instability in Perovskite Solar Cells by Designing a Scalable and Printable Carbon Based Electrode-Interface Architecture. <i>Advanced Energy Materials</i> , 2018 , 8, 1802085	21.8	25
24	Passivation of the Buried Interface via Preferential Crystallization of 2D Perovskite on Metal Oxide Transport Layers. <i>Advanced Materials</i> , 2021 , 33, e2103394	24	25

23	Visualizing and Suppressing Nonradiative Losses in High Open-Circuit Voltage n-i-p-Type CsPbI ₃ Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 271-279	20.1	24
22	Dimensional Mixing Increases the Efficiency of 2D/3D Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 5115-5119	6.4	22
21	Bright and Stable Light-Emitting Diodes Based on Perovskite Quantum Dots in Perovskite Matrix. <i>Journal of the American Chemical Society</i> , 2021 , 143, 15606-15615	16.4	22
20	Low-Temperature Solution-Processed Kesterite Solar Cell Based on in Situ Deposition of Ultrathin Absorber Layer. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 21100-6	9.5	21
19	Synthesis, Applications, and Prospects of Quantum-Dot-in-Perovskite Solids. <i>Advanced Energy Materials</i> , 2020 , 10, 2100774	21.8	19
18	Monolithic perovskite/organic tandem solar cells with 23.6% efficiency enabled by reduced voltage losses and optimized interconnecting layer. <i>Nature Energy</i> , 2021 , 6, 1-10	62.3	18
17	Scalable processing for realizing 21.7%-efficient all-perovskite tandem solar modules.. <i>Science</i> , 2022 , 376, 762-767	33.3	18
16	Ionic dipolar switching hinders charge collection in perovskite solar cells with normal and inverted hysteresis. <i>Solar Energy Materials and Solar Cells</i> , 2019 , 195, 291-298	6.4	17
15	An antibonding valence band maximum enables defect-tolerant and stable GeSe photovoltaics. <i>Nature Communications</i> , 2021 , 12, 670	17.4	16
14	Sub-bandgap photon harvesting for organic solar cells via integrating up-conversion nanophosphors. <i>Organic Electronics</i> , 2015 , 19, 113-119	3.5	12
13	Quantum Dot Self-Assembly Enables Low-Threshold Lasing. <i>Advanced Science</i> , 2021 , 8, e2101125	13.6	12
12	Single molecular precursor ink for AgBiS ₂ thin films: synthesis and characterization. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 7642-7651	7.1	11
11	Assembling Mesoscale-Structured Organic Interfaces in Perovskite Photovoltaics. <i>Advanced Materials</i> , 2019 , 31, e1806516	24	11
10	In-situ X-ray diffraction analysis of the recrystallization process in Cu ₂ ZnSnS ₄ nanoparticles synthesised by hot-injection. <i>Thin Solid Films</i> , 2015 , 582, 269-271	2.2	10
9	Stable, Bromine-Free, Tetragonal Perovskites with 1.7 eV Bandgaps via A-Site Cation Substitution. <i>ACS Energy Letters</i> , 2020 , 5, 869-872		9
8	Toward Stable Monolithic Perovskite/Silicon Tandem Photovoltaics: A Six-Month Outdoor Performance Study in a Hot and Humid Climate. <i>ACS Energy Letters</i> , 2021 , 6, 2944-2951	20.1	9
7	Heterogeneous Supersaturation in Mixed Perovskites. <i>Advanced Science</i> , 2020 , 7, 1903166	13.6	8
6	Monolithic Perovskite-silicon Tandem Solar cells: from the Lab to Fab?. <i>Advanced Materials</i> , 2022 , e2106540	54.0	6

5	Elucidating the Excited-State Properties of CuInS ₂ Nanocrystals upon Phase Transformation: Quasi-Quantum Dots Versus Bulk Behavior. <i>Advanced Electronic Materials</i> , 2015 , 1, 1500040	6.4	3
4	Band Engineering via Gradient Molecular Dopants for CsFA Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2021 , 31, 2010572	15.6	3
3	Perovskite Solar Cells: Efficient and Stable Inverted Perovskite Solar Cells Incorporating Secondary Amines (Adv. Mater. 46/2019). <i>Advanced Materials</i> , 2019 , 31, 1970330	24	1
2	All-Inorganic Quantum-Dot LEDs Based on a Phase-Stabilized δ -CsPbI ₃ Perovskite. <i>Angewandte Chemie</i> , 2021 , 133, 16300-16306	3.6	1
1	Dopant-Assisted Matrix Stabilization Enables Thermoelectric Performance Enhancement in n-Type Quantum Dot Films. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 18999-19007	9.5	0