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List of Publications by Year in descending order

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47
papers

6,780
citations

81900

39
h-index

223800

46
g-index

47
all docs

47
docs citations

47
times ranked

6582
citing authors

#	ARTICLE	IF	CITATIONS
1	Low-Temperature Solution-Processed Tin Oxide as an Alternative Electron Transporting Layer for Efficient Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2015, 137, 6730-6733.	13.7	1,045
2	Recent progress in electron transport layers for efficient perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 3970-3990.	10.3	472
3	Review on the Application of SnO ₂ in Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2018, 28, 1802757.	14.9	448
4	Interface engineering in planar perovskite solar cells: energy level alignment, perovskite morphology control and high performance achievement. <i>Journal of Materials Chemistry A</i> , 2017, 5, 1658-1666.	10.3	364
5	Efficient hole-blocking layer-free planar halide perovskite thin-film solar cells. <i>Nature Communications</i> , 2015, 6, 6700.	12.8	358
6	Effective Carrier Concentration Tuning of SnO ₂ Quantum Dot Electron Selective Layers for High-Performance Planar Perovskite Solar Cells. <i>Advanced Materials</i> , 2018, 30, e1706023.	21.0	333
7	Blade-Coated Perovskites on Textured Silicon for 26%-Efficient Monolithic Perovskite/Silicon Tandem Solar Cells. <i>Joule</i> , 2020, 4, 850-864.	24.0	281
8	Stable and low-photovoltage-loss perovskite solar cells by multifunctional passivation. <i>Nature Photonics</i> , 2021, 15, 681-689.	31.4	255
9	Stable and Efficient Organo-Metal Halide Hybrid Perovskite Solar Cells via Conjugated Lewis Base Polymer Induced Trap Passivation and Charge Extraction. <i>Advanced Materials</i> , 2018, 30, e1706126.	21.0	241
10	Reducing Hysteresis and Enhancing Performance of Perovskite Solar Cells Using Low-Temperature Processed γ -Doped SnO ₂ Nanosheets as Electron Selective Layers. <i>Small</i> , 2017, 13, 1601769.	10.0	183
11	MgO Nanoparticle Modified Anode for Highly Efficient SnO ₂ -Based Planar Perovskite Solar Cells. <i>Advanced Science</i> , 2017, 4, 1700031.	11.2	175
12	Evolution of defects during the degradation of metal halide perovskite solar cells under reverse bias and illumination. <i>Nature Energy</i> , 2022, 7, 65-73.	39.5	158
13	Performance enhancement of high temperature SnO ₂ -based planar perovskite solar cells: electrical characterization and understanding of the mechanism. <i>Journal of Materials Chemistry A</i> , 2016, 4, 8374-8383.	10.3	156
14	Enhanced Stability of Perovskite Solar Cells with Low-Temperature Hydrothermally Grown SnO ₂ Electron Transport Layers. <i>Advanced Functional Materials</i> , 2016, 26, 6069-6075.	14.9	154
15	Achieving a high open-circuit voltage in inverted wide-bandgap perovskite solar cells with a graded perovskite homojunction. <i>Nano Energy</i> , 2019, 61, 141-147.	16.0	152
16	Fully High-Temperature-Processed SnO ₂ as Blocking Layer and Scaffold for Efficient, Stable, and Hysteresis-Free Mesoporous Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2018, 28, 1706276.	14.9	143
17	Perovskite Solar Cells Based on Low-Temperature Processed Indium Oxide Electron Selective Layers. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 8460-8466.	8.0	128
18	Manipulating the Mixed-Perovskite Crystallization Pathway Unveiled by In Situ GIWAXS. <i>Advanced Materials</i> , 2019, 31, e1901284.	21.0	127

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19	A facile molecularly engineered copper (II) phthalocyanine as hole transport material for planar perovskite solar cells with enhanced performance and stability. <i>Nano Energy</i> , 2017, 31, 322-330.	16.0	117
20	Defect engineering in wide-bandgap perovskites for efficient perovskite-silicon tandem solar cells. <i>Nature Photonics</i> , 2022, 16, 588-594.	31.4	112
21	Achieving High Open-Circuit Voltage on Planar Perovskite Solar Cells via Chlorine-Doped Tin Oxide Electron Transport Layers. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 23152-23159.	8.0	89
22	Efficient planar Sb ₂ S ₃ solar cells using a low-temperature solution-processed tin oxide electron conductor. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 16436-16443.	2.8	86
23	A Lewis Base-Assisted Passivation Strategy Towards Highly Efficient and Stable Perovskite Solar Cells. <i>Solar Rrl</i> , 2018, 2, 1800055.	5.8	83
24	Highly Efficient and Stable Planar Perovskite Solar Cells With Large-Scale Manufacture of Beam Evaporated SnO ₂ Toward Commercialization. <i>Solar Rrl</i> , 2017, 1, 1700118.	5.8	75
25	Copper-Doped Chromium Oxide Hole-Transporting Layer for Perovskite Solar Cells: Interface Engineering and Performance Improvement. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500799.	3.7	72
26	Bulk heterojunction perovskite solar cells based on room temperature deposited hole-blocking layer: Suppressed hysteresis and flexible photovoltaic application. <i>Journal of Power Sources</i> , 2017, 351, 123-129.	7.8	71
27	Lead-adsorbing ionogel-based encapsulation for impact-resistant, stable, and lead-safe perovskite modules. <i>Science Advances</i> , 2021, 7, eabi8249.	10.3	71
28	High-Performance Rigid and Flexible Perovskite Solar Cells with Low-Temperature Solution-Processable Binary Metal Oxide Hole-Transporting Materials. <i>Solar Rrl</i> , 2017, 1, 1700058.	5.8	69
29	Room-temperature synthesis of colloidal SnO ₂ quantum dot solution and ex-situ deposition on carbon nanotubes as anode materials for lithium ion batteries. <i>Journal of Alloys and Compounds</i> , 2016, 680, 109-115.	5.5	68
30	Single phase, high hole mobility Cu ₂ O films as an efficient and robust hole transporting layer for organic solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11055-11062.	10.3	65
31	Enhancing efficiency and stability of perovskite solar cells via a high mobility p-type PbS buffer layer. <i>Nano Energy</i> , 2017, 38, 1-11.	16.0	65
32	Gradient Doping in Sn-Pb Perovskites by Barium Ions for Efficient Single-Junction and Tandem Solar Cells. <i>Advanced Materials</i> , 2022, 34, e2110351.	21.0	62
33	Potassium-intercalated rubrene as a dual-functional passivation agent for high efficiency perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1824-1834.	10.3	59
34	Incorporation of High-Mobility and Room-Temperature-Deposited Cu _x S as a Hole Transport Layer for Efficient and Stable Organo-Lead Halide Perovskite Solar Cells. <i>Solar Rrl</i> , 2017, 1, 1700038.	5.8	51
35	Stabilizer-assisted growth of formamndinium-based perovskites for highly efficient and stable planar solar cells with over 22% efficiency. <i>Nano Energy</i> , 2019, 63, 103835.	16.0	51
36	Self-powered narrowband p-NiO/n-ZnO nanowire ultraviolet photodetector with interface modification of Al ₂ O ₃ . <i>Applied Physics Letters</i> , 2017, 110, .	3.3	49

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37	Room-temperature processed tin oxide thin film as effective hole blocking layer for planar perovskite solar cells. <i>Applied Surface Science</i> , 2018, 434, 1336-1343.	6.1	49
38	Octamethyl-substituted Pd(<i>scp</i>) phthalocyanine with long carrier lifetime as a dopant-free hole selective material for performance enhancement of perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24416-24424.	10.3	45
39	Perovskite solar cell based on network nanoporous layer consisted of TiO ₂ nanowires and its interface optimization. <i>Journal of Power Sources</i> , 2015, 290, 144-152.	7.8	44
40	Tin oxide (SnO ₂) as effective electron selective layer material in hybrid organic-inorganic metal halide perovskite solar cells. <i>Journal of Energy Chemistry</i> , 2018, 27, 962-970.	12.9	39
41	Metal ions diffusion at heterojunction chromium Oxide/CH ₃ NH ₃ PbI ₃ interface on the stability of perovskite solar cells. <i>Surfaces and Interfaces</i> , 2018, 10, 93-99.	3.0	31
42	Enhanced efficiency and stability of triple-cation perovskite solar cells with CsPbI ₃ Br ₃ QDs surface patches. <i>SmartMat</i> , 2022, 3, 513-521.	10.7	22
43	Improved performance in Ag ₂ S/P3HT hybrid solar cells with a solution processed SnO ₂ electron transport layer. <i>RSC Advances</i> , 2016, 6, 77701-77708.	3.6	19
44	Reconfiguration of Interfacial and Bulk Energy Band Structure for High-Performance Organic and Thermal-Stability Enhanced Perovskite Solar Cells. <i>Solar Rrl</i> , 2020, 4, 1900482.	5.8	16
45	Surface treatment via Li-bis-(trifluoromethanesulfonyl) imide to eliminate the hysteresis and enhance the efficiency of inverted perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2017, 5, 10280-10287.	5.5	15
46	Vacuum-free fabrication of high-performance semitransparent perovskite solar cells via e-glue assisted lamination process. <i>Science China Chemistry</i> , 2019, 62, 875-882.	8.2	7
47	Pathways to High Efficiency Perovskite Monolithic Solar Modules. , 2022, 1, .		5