Sai Bai

List of Publications by Year
in descending order

71	11,387	50276 46	91884 69
papers	citations	h-index	g-index

75	75	75	11280
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Planar perovskite solar cells with long-term stability using ionic liquid additives. Nature, 2019, 571, 245-250.	27.8	1,103
2	Rational molecular passivation for high-performance perovskite light-emitting diodes. Nature Photonics, 2019, 13, 418-424.	31.4	970
3	Metal halide perovskites for light-emitting diodes. Nature Materials, 2021, 20, 10-21.	27.5	800
4	Highly Efficient Perovskite Nanocrystal Lightâ€Emitting Diodes Enabled by a Universal Crosslinking Method. Advanced Materials, 2016, 28, 3528-3534.	21.0	782
5	High-efficiency perovskiteâ€“polymer bulk heterostructure light-emitting diodes. Nature Photonics, 2018, 12, 783-789.	31.4	715
6	Interfacial Control Toward Efficient and Lowâ€Voltage Perovskite Lightâ€Emitting Diodes. Advanced Materials, 2015, 27, 2311-2316.	21.0	631
7	A piperidinium salt stabilizes efficient metal-halide perovskite solar cells. Science, 2020, 369, 96-102.	12.6	461
8	Efficient planar heterojunction perovskite solar cells employing graphene oxide as hole conductor. Nanoscale, 2014, 6, 10505-10510.	5.6	352
9	High Performance and Stable Allâ€Inorganic Metal Halide Perovskiteâ€Based Photodetectors for Optical Communication Applications. Advanced Materials, 2018, 30, e1803422.	21.0	342
10	Defects engineering for high-performance perovskite solar cells. Npj Flexible Electronics, 2018, 2, .	10.7	334
11	Mixed halide perovskites for spectrally stable and high-efficiency blue light-emitting diodes. Nature Communications, 2021, 12, 361.	12.8	268
12	Highly Luminescent and Stable Perovskite Nanocrystals with Octylphosphonic Acid as a Ligand for Efficient Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2018, 10, 3784-3792.	8.0	255
13	Aligned and Graded Typeâ€II Ruddlesdenâ€“Popper Perovskite Films for Efficient Solar Cells. Advanced Energy Materials, 2018, 8, 1800185.	19.5	247
14	Tailoring metal halide perovskites through metal substitution: influence on photovoltaic and material properties. Energy and Environmental Science, 2017, 10, 236-246.	30.8	230
15	High-performance planar heterojunction perovskite solar cells: Preserving long charge carrier diffusion lengths and interfacial engineering. Nano Research, 2014, 7, 1749-1758.	10.4	205
16	Role of Microstructure in Oxygen Induced Photodegradation of Methylammonium Lead Triiodide Perovskite Films. Advanced Energy Materials, 2017, 7, 1700977.	19.5	183
17	Colloidal metal halide perovskite nanocrystals: synthesis, characterization, and applications. Journal of Materials Chemistry C, 2016, 4, 3898-3904.	5.5	179
18	Perovskite QLED with an external quantum efficiency of over 21% by modulating electronic transport. Science Bulletin, 2021, 66, 36-43.	9.0	162

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19	Ethanedithiol Treatment of Solutionâ€Processed ZnO Thin Films: Controlling the Intragap States of Electron Transporting Interlayers for Efficient and Stable Inverted Organic Photovoltaics. Advanced Energy Materials, 2015, 5, 1401606.	19.5	157
20	Highâ€Quality Sequentialâ€Vaporâ€Deposited Cs₂AgBiBr₆ Thin Films for Leadâ€Free Perovskite Solar Cells. Solar Rrl, 2018, 2, 1800217.	5.8	138
21	Highâ€Performance Perovskite Lightâ€Emitting Diode with Enhanced Operational Stability Using Lithium Halide Passivation. Angewandte Chemie - International Edition, 2020, 59, 4099-4105.	13.8	130
22	Unveiling the synergistic effect of precursor stoichiometry and interfacial reactions for perovskite light-emitting diodes. Nature Communications, 2019, 10, 2818.	12.8	129
23	Stable, Highâ€Sensitivity and Fastâ€Response Photodetectors Based on Leadâ€Free Cs₂AgBiBr₆ Double Perovskite Films. Advanced Optical Materials, 2019, 7, 1801732.	7.3	126
24	Bidirectional optical signal transmission between two identical devices using perovskite diodes. Nature Electronics, 2020, 3, 156-164.	26.0	126
25	High-performance inorganic metal halide perovskite transistors. Nature Electronics, 2022, 5, 78-83.	26.0	121
26	Thermochromic Leadâ€Free Halide Double Perovskites. Advanced Functional Materials, 2019, 29, 1807375.	14.9	120
27	Hotâ€Electron Injection in a Sandwiched TiO<i>_x</i>â€"Auâ€"TiO<i>_x</i> Structure for Highâ€Performance Planar Perovskite Solar Cells. Advanced Energy Materials, 2015, 5, 1500038.	19.5	119
28	Flexible silver grid/PEDOT:PSS hybrid electrodes for large area inverted polymer solar cells. Nano Energy, 2014, 10, 259-267.	16.0	111
29	Lowâ€Temperature Combustionâ€Synthesized Nickel Oxide Thin Films as Holeâ€Transport Interlayers for Solutionâ€Processed Optoelectronic Devices. Advanced Energy Materials, 2014, 4, 1301460.	19.5	110
30	Unveiling Property of Hydrolysis-Derived DMAPbI3 for Perovskite Devices: Composition Engineering, Defect Mitigation, and Stability Optimization. IScience, 2019, 15, 165-172.	4.1	107
31	Identification and Mitigation of a Critical Interfacial Instability in Perovskite Solar Cells Employing Copper Thiocyanate Holeâ€Transporter. Advanced Materials Interfaces, 2016, 3, 1600571.	3.7	105
32	Highâ€Efficiency Flexible Solar Cells Based on Organometal Halide Perovskites. Advanced Materials, 2016, 28, 4532-4540.	21.0	102
33	A Universal Deposition Protocol for Planar Heterojunction Solar Cells with High Efficiency Based on Hybrid Lead Halide Perovskite Families. Advanced Materials, 2016, 28, 10701-10709.	21.0	100
34	Colloidal metal oxide nanocrystals as charge transporting layers for solution-processed light-emitting diodes and solar cells. Chemical Society Reviews, 2017, 46, 1730-1759.	38.1	99
35	Critical role of additive-induced molecular interaction on the operational stability of perovskite light-emitting diodes. Joule, 2021, 5, 618-630.	24.0	99
36	Boosting Perovskite Light-Emitting Diode Performance via Tailoring Interfacial Contact. ACS Applied Materials & Interfaces, 2018, 10, 24320-24326.	8.0	96

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37	Recent progress toward perovskite light-emitting diodes with enhanced spectral and operational stability. Materials Today Nano, 2019, 5, 100028.	4.6	86
38	Perovskite/Colloidal Quantum Dot Tandem Solar Cells: Theoretical Modeling and Monolithic Structure. ACS Energy Letters, 2018, 3, 869-874.	17.4	77
39	Highly Luminescent and Stable CsPbI₃ Perovskite Nanocrystals with Sodium Dodecyl Sulfate Ligand Passivation for Red-Light-Emitting Diodes. Journal of Physical Chemistry Letters, 2021, 12, 2437-2443.	4.6	71
40	Colloidal Indium-Doped Zinc Oxide Nanocrystals with Tunable Work Function: Rational Synthesis and Optoelectronic Applications. Chemistry of Materials, 2014, 26, 5169-5178.	6.7	68
41	High-Brightness Perovskite Light-Emitting Diodes Based on FAPbBr₃ Nanocrystals with Rationally Designed Aromatic Ligands. ACS Energy Letters, 2021, 6, 2395-2403.	17.4	67
42	Inverted organic solar cells based on aqueous processed ZnO interlayers at low temperature. Applied Physics Letters, 2012, 100, 203906.	3.3	57
43	Quantitative o perando visualization of the energy band depth profile in solar cells. Nature Communications, 2015, 6, 7745.	12.8	57
44	Inverted all-polymer solar cells based on a quinoxalineâ€“thiophene/naphthalene-diimide polymer blend improved by annealing. Journal of Materials Chemistry A, 2016, 4, 3835-3843.	10.3	57
45	Manipulating crystallization dynamics through chelating molecules for bright perovskite emitters. Nature Communications, 2021, 12, 4831.	12.8	56
46	High-performance hysteresis-free perovskite transistors through anion engineering. Nature Communications, 2022, 13, 1741.	12.8	51
47	Synthesis of Unstable Colloidal Inorganic Nanocrystals through the Introduction of a Protecting Ligand. Nano Letters, 2014, 14, 3117-3123.	9.1	40
48	Surface Chlorination of ZnO for Perovskite Solar Cells with Enhanced Efficiency and Stability. Solar Rrl, 2019, 3, 1900154.	5.8	37
49	Approximately 800-nm-Thick Pinhole-Free Perovskite Films via Facile Solvent Retarding Process for Efficient Planar Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 34446-34454.	8.0	36
50	Iodomethane-Mediated Organometal Halide Perovskite with Record Photoluminescence Lifetime. ACS Applied Materials & Interfaces, 2016, 8, 23181-23189.	8.0	35
51	Reproducible Planar Heterojunction Solar Cells Based on One-Step Solution-Processed Methylammonium Lead Halide Perovskites. Chemistry of Materials, 2017, 29, 462-473.	6.7	35
52	Highâ€Quality Ruddlesdenâ€“Popper Perovskite Films Based on In Situ Formed Organic Spacer Cations. Advanced Materials, 2019, 31, e1904243.	21.0	35
53	Thermal-induced interface degradation in perovskite light-emitting diodes. Journal of Materials Chemistry C, 2020, 8, 15079-15085.	5.5	30
54	Metal Doping/Alloying of Cesium Lead Halide Perovskite Nanocrystals and their Applications in Lightâ€Emitting Diodes with Enhanced Efficiency and Stability. Israel Journal of Chemistry, 2019, 59, 695-707.	2.3	23

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55	Spectral-Stable Blue Emission from Moisture-Treated Low-Dimensional Lead Bromide-Based Perovskite Films. ACS Photonics, 2019, 6, 1728-1735.	6.6	21
56	Efficient and Highâ€Luminance Perovskite Lightâ€Emitting Diodes Based on CsPbBr₃ Nanocrystals Synthesized from a Dualâ€Purpose Organic Lead Source. Small, 2020, 16, e2003939.	10.0	18
57	Spectral Response Measurements of Perovskite Solar Cells. IEEE Journal of Photovoltaics, 2019, 9, 220-226.	2.5	17
58	Modulation of vacancy-ordered double perovskite Cs2SnI6 for air-stable thin-film transistors. Cell Reports Physical Science, 2022, 3, 100812.	5.6	17
59	Layered bismuth selenide utilized as hole transporting layer for highly stable organic photovoltaics. Organic Electronics, 2015, 26, 327-333.	2.6	12
60	Room-temperature film formation of metal halide perovskites on n-type metal oxides: the catalysis of ZnO on perovskite crystallization. Chemical Communications, 2018, 54, 6887-6890.	4.1	11
61	Electrophoretic deposited oxide thin films as charge transporting interlayers for solution-processed optoelectronic devices: the case of ZnO nanocrystals. RSC Advances, 2015, 5, 8216-8222.	3.6	9
62	Highâ€Quality Sequentialâ€Vaporâ€Deposited Cs₂AgBiBr₆ Thin Films for Leadâ€Free Perovskite Solar Cells (Solar RRL 12âˆ•2018). Solar Rrl, 2018, 2, 1870238.	5.8	9
63	Ligand Exchange of Colloidal ZnO Nanocrystals from the High Temperature and Nonaqueous Approach. Nano-Micro Letters, 2013, 5, 274-280.	27.0	8
64	Photodetectors: High Performance and Stable All-Inorganic Metal Halide Perovskite-Based Photodetectors for Optical Communication Applications (Adv. Mater. 38/2018). Advanced Materials, 2018, 30, 1870288.	21.0	8
65	Highâ€Performance Perovskite Lightâ€Emitting Diode with Enhanced Operational Stability Using Lithium Halide Passivation. Angewandte Chemie, 2020, 132, 4128-4134.	2.0	8
66	Effects of oxygen plasma treatment on the surface properties of Ga-doped ZnO thin films. Applied Physics A: Materials Science and Processing, 2014, 114, 509-513.	2.3	4
67	Perovskite Solar Cells: Hot-Electron Injection in a Sandwiched TiOx-Au-TiOxStructure for High-Performance Planar Perovskite Solar Cells (Adv. Energy Mater. 10/2015). Advanced Energy Materials, 2015, 5, .	19.5	3
68	Thin Films: Ethanedithiol Treatment of Solution-Processed ZnO Thin Films: Controlling the Intragap States of Electron Transporting Interlayers for Efficient and Stable Inverted Organic Photovoltaics (Adv. Energy Mater. 5/2015). Advanced Energy Materials, 2015, 5, n/a-n/a.	19.5	1
69	Solar Cells: Role of Microstructure in Oxygen Induced Photodegradation of Methylammonium Lead Triiodide Perovskite Films (Adv. Energy Mater. 20/2017). Advanced Energy Materials, 2017, 7, .	19.5	1
70	Optoelectronic Devices: Lowâ€Temperature Combustionâ€Synthesized Nickel Oxide Thin Films as Holeâ€Transport Interlayers for Solutionâ€Processed Optoelectronic Devices (Adv. Energy Mater. 6/2014). Advanced Energy Materials, 2014, 4, .	19.5	0
71	Mixed Halide Perovskites for Spectrally Stable and High-Efficiency Blue Light-Emitting Diodes. , 0, , .		0