Sai Bai

List of Publications by Year
in descending order

71 papers	11,387 citations	50276 46 h-index	91884 69 g-index
75 all docs	75 docs citations	75 times ranked	11280 citing authors

#	Article	IF	Citations
1	High-performance inorganic metal halide perovskite transistors. Nature Electronics, 2022, 5, 78-83.	26.0	121
2	Modulation of vacancy-ordered double perovskite Cs2SnI6 for air-stable thin-film transistors. Cell Reports Physical Science, 2022, 3, 100812.	5.6	17
3	High-performance hysteresis-free perovskite transistors through anion engineering. Nature Communications, 2022, 13, 1741.	12.8	51
4	Perovskite QLED with an external quantum efficiency of over 21% by modulating electronic transport. Science Bulletin, 2021, 66, 36-43.	9.0	162
5	Metal halide perovskites for light-emitting diodes. Nature Materials, 2021, 20, 10-21.	27.5	800
6	Mixed halide perovskites for spectrally stable and high-efficiency blue light-emitting diodes. Nature Communications, 2021, 12, 361.	12.8	268
7	Critical role of additive-induced molecular interaction on the operational stability of perovskite light-emitting diodes. Joule, 2021, 5, 618-630.	24.0	99
8	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
9	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
10	Manipulating crystallization dynamics through chelating molecules for bright perovskite emitters. Nature Communications, 2021, 12, 4831.	12.8	56
11	Highâ€Performance Perovskite Lightâ€Emitting Diode with Enhanced Operational Stability Using Lithium Halide Passivation. Angewandte Chemie, 2020, 132, 4128-4134.	2.0	8
12	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
13	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
14	Thermal-induced interface degradation in perovskite light-emitting diodes. Journal of Materials Chemistry C, 2020, 8, 15079-15085.	5.5	30
15	Bidirectional optical signal transmission between two identical devices using perovskite diodes. Nature Electronics, 2020, 3, 156-164.	26.0	126
16	A piperidinium salt stabilizes efficient metal-halide perovskite solar cells. Science, 2020, 369, 96-102.	12.6	461
17	Planar perovskite solar cells with long-term stability using ionic liquid additives. Nature, 2019, 571, 245-250.	27.8	1,103
18	Highâ€Quality Ruddlesdenâ€"Popper Perovskite Films Based on In Situ Formed Organic Spacer Cations. Advanced Materials, 2019, 31, e1904243.	21.0	35

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19	Thermochromic Leadâ€Free Halide Double Perovskites. Advanced Functional Materials, 2019, 29, 1807375.	14.9	120
20	Unveiling the synergistic effect of precursor stoichiometry and interfacial reactions for perovskite light-emitting diodes. Nature Communications, 2019, 10, 2818.	12.8	129
21	Spectral-Stable Blue Emission from Moisture-Treated Low-Dimensional Lead Bromide-Based Perovskite Films. ACS Photonics, 2019, 6, 1728-1735.	6.6	21
22	Surface Chlorination of ZnO for Perovskite Solar Cells with Enhanced Efficiency and Stability. Solar Rrl, 2019, 3, 1900154.	5.8	37
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	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
25	Unveiling Property of Hydrolysis-Derived DMAPbI3 for Perovskite Devices: Composition Engineering, Defect Mitigation, and Stability Optimization. IScience, 2019, 15, 165-172.	4.1	107
26	Rational molecular passivation for high-performance perovskite light-emitting diodes. Nature Photonics, 2019, 13, 418-424.	31.4	970
27	Recent progress toward perovskite light-emitting diodes with enhanced spectral and operational stability. Materials Today Nano, 2019, 5, 100028.	4.6	86
28	Spectral Response Measurements of Perovskite Solar Cells. IEEE Journal of Photovoltaics, 2019, 9, 220-226.	2.5	17
29	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
30	Perovskite/Colloidal Quantum Dot Tandem Solar Cells: Theoretical Modeling and Monolithic Structure. ACS Energy Letters, 2018, 3, 869-874.	17.4	77
31	High-efficiency perovskiteâ€“polymer bulk heterostructure light-emitting diodes. Nature Photonics, 2018, 12, 783-789.	31.4	715
32	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
33	Highâ€Quality Sequentialâ€Vaporâ€Deposited Cs₂AgBiBr₆ Thin Films for Leadâ€Free Perovskite Solar Cells. Solar Rrl, 2018, 2, 1800217.	5.8	138
34	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
35	High Performance and Stable Allâ€Inorganic Metal Halide Perovskiteâ€Based Photodetectors for Optical Communication Applications. Advanced Materials, 2018, 30, e1803422.	21.0	342
36	Aligned and Graded Typeâ€II Ruddlesdenâ€“Popper Perovskite Films for Efficient Solar Cells. Advanced Energy Materials, 2018, 8, 1800185.	19.5	247

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37	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
38	Defects engineering for high-performance perovskite solar cells. Npj Flexible Electronics, 2018, 2, .	10.7	334
39	Boosting Perovskite Light-Emitting Diode Performance via Tailoring Interfacial Contact. ACS Applied Materials & Interfaces, 2018, 10, 24320-24326.	8.0	96
40	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
41	Tailoring metal halide perovskites through metal substitution: influence on photovoltaic and material properties. Energy and Environmental Science, 2017, 10, 236-246.	30.8	230
42	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
43	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
44	Role of Microstructure in Oxygen Induced Photodegradation of Methylammonium Lead Triiodide Perovskite Films. Advanced Energy Materials, 2017, 7, 1700977.	19.5	183
45	Highly Efficient Perovskite Nanocrystal Lightâ€Emitting Diodes Enabled by a Universal Crosslinking Method. Advanced Materials, 2016, 28, 3528-3534.	21.0	782
46	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
47	Iodomethane-Mediated Organometal Halide Perovskite with Record Photoluminescence Lifetime. ACS Applied Materials & Interfaces, 2016, 8, 23181-23189.	8.0	35
48	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
49	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
50	Highâ€Efficiency Flexible Solar Cells Based on Organometal Halide Perovskites. Advanced Materials, 2016, 28, 4532-4540.	21.0	102
51	Colloidal metal halide perovskite nanocrystals: synthesis, characterization, and applications. Journal of Materials Chemistry C, 2016, 4, 3898-3904.	5.5	179
52	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
53	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
54	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

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55	Interfacial Control Toward Efficient and Lowâ€Voltage Perovskite Lightâ€Emitting Diodes. Advanced Materials, 2015, 27, 2311-2316.	21.0	631
56	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
57	Quantitative o perando visualization of the energy band depth profile in solar cells. Nature Communications, 2015, 6, 7745.	12.8	57
58	Layered bismuth selenide utilized as hole transporting layer for highly stable organic photovoltaics. Organic Electronics, 2015, 26, 327-333.	2.6	12
59	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
60	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
61	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
62	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
63	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
64	Flexible silver grid/PEDOT:PSS hybrid electrodes for large area inverted polymer solar cells. Nano Energy, 2014, 10, 259-267.	16.0	111
65	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
66	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
67	Efficient planar heterojunction perovskite solar cells employing graphene oxide as hole conductor. Nanoscale, 2014, 6, 10505-10510.	5.6	352
68	Synthesis of Unstable Colloidal Inorganic Nanocrystals through the Introduction of a Protecting Ligand. Nano Letters, 2014, 14, 3117-3123.	9.1	40
69	Ligand Exchange of Colloidal ZnO Nanocrystals from the High Temperature and Nonaqueous Approach. Nano-Micro Letters, 2013, 5, 274-280.	27.0	8
70	Inverted organic solar cells based on aqueous processed ZnO interlayers at low temperature. Applied Physics Letters, 2012, 100, 203906.	3.3	57
71	Mixed Halide Perovskites for Spectrally Stable and High-Efficiency Blue Light-Emitting Diodes. , 0, , .		0