Zhenghong Dai

List of Publications by Year
in descending order

21 papers	1,977 citations	516710 16 h-index	752698 20 g-index
21 all docs	21 docs citations	21 times ranked	2660 citing authors

#	Article	IF	Citations
1	Delineation and Passivation of Grainâ€Boundary Channels in Metal Halide Perovskite Thin Films for Solar Cells. Advanced Materials Interfaces, 2022, 9, .	3.7	4
2	Time-resolved vibrational-pump visible-probe spectroscopy for thermal conductivity measurement of metal-halide perovskites. Review of Scientific Instruments, 2022, 93, .	1.3	5
3	Lead-Free Flexible Perovskite Solar Cells with Interfacial Native Oxide Have >10% Efficiency and Simultaneously Enhanced Stability and Reliability. ACS Energy Letters, 2022, 7, 2256-2264.	17.4	19
4	Correlations between Electrochemical Ion Migration and Anomalous Device Behaviors in Perovskite Solar Cells. ACS Energy Letters, 2021, 6, 1003-1014.	17.4	39
5	Interpenetrating interfaces for efficient perovskite solar cells with high operational stability and mechanical robustness. Nature Communications, 2021, 12, 973.	12.8	189
6	High-performance methylammonium-free ideal-band-gap perovskite solar cells. Matter, 2021, 4, 1365-1376.	10.0	51
7	Real-Time Investigation of Sn(II) Oxidation in Pb-Free Halide Perovskites by X-ray Absorption and MÃ¶ssbauer Spectroscopy. ACS Applied Energy Materials, 2021, 4, 4327-4332.	5.1	9
8	Interfacial toughening with self-assembled monolayers enhances perovskite solar cell reliability. Science, 2021, 372, 618-622.	12.6	313
9	Flexible perovskite solar cells with simultaneously improved efficiency, operational stability, and mechanical reliability. Joule, 2021, 5, 1587-1601.	24.0	120
10	Sub-1.4eV bandgap inorganic perovskite solar cells with long-term stability. Nature Communications, 2020, 11, 151.	12.8	92
11	Arrays of Plasmonic Nanostructures for Absorption Enhancement in Perovskite Thin Films. Nanomaterials, 2020, 10, 1342.	4.1	13
12	Mechanisms of exceptional grain growth and stability in formamidinium lead triiodide thin films for perovskite solar cells. Acta Materialia, 2020, 193, 10-18.	7.9	27
13	High-Performance Lead-Free Solar Cells Based on Tin-Halide Perovskite Thin Films Functionalized by a Divalent Organic Cation. ACS Energy Letters, 2020, 5, 2223-2230.	17.4	96
14	Facile healing of cracks in organicâ€"inorganic halide perovskite thin films. Acta Materialia, 2020, 187, 112-121.	7.9	51
15	Effect of Grain Size on the Fracture Behavior of Organic-Inorganic Halide Perovskite Thin Films for Solar Cells. Scripta Materialia, 2020, 185, 47-50.	5.2	32
16	Quantum-Dot-Induced Cesium-Rich Surface Imparts Enhanced Stability to Formamidinium Lead Iodide Perovskite Solar Cells. ACS Energy Letters, 2019, 4, 1970-1975.	17.4	82
17	Lead-Free Dionâ€"Jacobson Tin Halide Perovskites for Photovoltaics. ACS Energy Letters, 2019, 4, 276-277.	17.4	101
18	Tuning Molecular Interactions for Highly Reproducible and Efficient Formamidinium Perovskite Solar Cells via Adduct Approach. Journal of the American Chemical Society, 2018, 140, 6317-6324.	13.7	338

#	Article	IF	Citations
19	The role of grain boundaries in perovskite solar cells. Materials Today Energy, 2018, 7, 149-160.	4.7	209
20	Surface Ligand Management for Stable FAPbI3 Perovskite Quantum Dot Solar Cells. Joule, 2018, 2, 1866-1878.	24.0	187
21	Fracture Behavior of Organic-Inorganic Halide Perovskite Thin Films for Solar Cells. , 0, , .		0