

Xun Xiao

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7090049/publications.pdf>

Version: 2024-02-01

34
papers

5,933
citations

159585

30
h-index

361022

35
g-index

36
all docs

36
docs citations

36
times ranked

5738
citing authors

#	ARTICLE	IF	CITATIONS
1	Stabilizing halide perovskite surfaces for solar cell operation with wide-bandgap lead oxysalts. Science, 2019, 365, 473-478.	12.6	723
2	Tailoring Passivation Molecular Structures for Extremely Small Open-Circuit Voltage Loss in Perovskite Solar Cells. Journal of the American Chemical Society, 2019, 141, 5781-5787.	13.7	585
3	Thin single crystal perovskite solar cells to harvest below-bandgap light absorption. Nature Communications, 2017, 8, 1890.	12.8	467
4	Bilateral alkylamine for suppressing charge recombination and improving stability in blade-coated perovskite solar cells. Science Advances, 2019, 5, eaav8925.	10.3	388
5	Dual Functions of Crystallization Control and Defect Passivation Enabled by Sulfonic Zwitterions for Stable and Efficient Perovskite Solar Cells. Advanced Materials, 2018, 30, e1803428.	21.0	296
6	Low-Noise and Large-Linear-Dynamic-Range Photodetectors Based on Hybrid-Perovskite Thin-Single-Crystals. Advanced Materials, 2017, 29, 1703209.	21.0	281
7	Efficient sky-blue perovskite light-emitting diodes via photoluminescence enhancement. Nature Communications, 2019, 10, 5633.	12.8	267
8	Suppressed Ion Migration along the In-Plane Direction in Layered Perovskites. ACS Energy Letters, 2018, 3, 684-688.	17.4	240
9	Enhancing electron diffusion length in narrow-bandgap perovskites for efficient monolithic perovskite tandem solar cells. Nature Communications, 2019, 10, 4498.	12.8	234
10	Perovskite-filled membranes for flexible and large-area direct-conversion X-ray detector arrays. Nature Photonics, 2020, 14, 612-617.	31.4	228
11	Synthetic control over orientational degeneracy of spacer cations enhances solar cell efficiency in two-dimensional perovskites. Nature Communications, 2019, 10, 1276.	12.8	222
12	Defect compensation in formamidinium-cesium perovskites for highly efficient solar mini-modules with improved photostability. Nature Energy, 2021, 6, 633-641.	39.5	215
13	Scalable Fabrication of Efficient Perovskite Solar Modules on Flexible Glass Substrates. Advanced Energy Materials, 2020, 10, 1903108.	19.5	186
14	Crystallization in one-step solution deposition of perovskite films: Upward or downward?. Science Advances, 2021, 7, .	10.3	165
15	Iodine reduction for reproducible and high-performance perovskite solar cells and modules. Science Advances, 2021, 7, .	10.3	158
16	Defect engineering in wide-bandgap perovskites for efficient perovskite-silicon tandem solar cells. Nature Photonics, 2022, 16, 588-594.	31.4	112
17	Preventing lead leakage with built-in resin layers for sustainable perovskite solar cells. Nature Sustainability, 2021, 4, 636-643.	23.7	111
18	Ligand assisted growth of perovskite single crystals with low defect density. Nature Communications, 2021, 12, 1686.	12.8	110

#	ARTICLE	IF	CITATIONS
19	Large-area and efficient perovskite light-emitting diodes via low-temperature blade-coating. Nature Communications, 2021, 12, 147.	12.8	100
20	Argon Plasma Treatment to Tune Perovskite Surface Composition for High Efficiency Solar Cells and Fast Photodetectors. Advanced Materials, 2018, 30, 1705176.	21.0	81
21	Identifying the Soft Nature of Defective Perovskite Surface Layer and Its Removal Using a Facile Mechanical Approach. Joule, 2020, 4, 2661-2674.	24.0	81
22	Highly Efficient Pure-Blue Light-Emitting Diodes Based on Rubidium and Chlorine Alloyed Metal Halide Perovskite. Advanced Materials, 2021, 33, e2100783.	21.0	77
23	Heterojunction structures for reduced noise in large-area and sensitive perovskite x-ray detectors. Science Advances, 2021, 7, eabg6716.	10.3	77
24	Reduced Self-Doping of Perovskites Induced by Short Annealing for Efficient Solar Modules. Joule, 2020, 4, 1949-1960.	24.0	72
25	Lead-adsorbing ionogel-based encapsulation for impact-resistant, stable, and lead-safe perovskite modules. Science Advances, 2021, 7, eabi8249.	10.3	71
26	Recycling lead and transparent conductors from perovskite solar modules. Nature Communications, 2021, 12, 5859.	12.8	69
27	Metallic surface doping of metal halide perovskites. Nature Communications, 2021, 12, 7.	12.8	66
28	Gradient Doping in Sn-Pb Perovskites by Barium Ions for Efficient Single-Junction and Tandem Solar Cells. Advanced Materials, 2022, 34, e2110351.	21.0	62
29	Benign ferroelastic twin boundaries in halide perovskites for charge carrier transport and recombination. Nature Communications, 2020, 11, 2215.	12.8	47
30	Ultrafast Exciton Transport with a Long Diffusion Length in Layered Perovskites with Organic Cation Functionalization. Advanced Materials, 2020, 32, e2004080.	21.0	34
31	Layer number dependent ferroelasticity in 2D Ruddlesden-Popper organic-inorganic hybrid perovskites. Nature Communications, 2021, 12, 1332.	12.8	28
32	Strain engineering in metal halide perovskite materials and devices: Influence on stability and optoelectronic properties. Chemical Physics Reviews, 2021, 2, .	5.7	23
33	Wireless implantable optical probe for continuous monitoring of oxygen saturation in flaps and organ grafts. Nature Communications, 2022, 13, .	12.8	22
34	Sustainable development of perovskite solar cells: keeping a balance between toxicity and efficiency. Journal of Materials Chemistry A, 2022, 10, 8159-8171.	10.3	19