

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

159358

30
h-index

360668

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. <i>Science</i> , 2019, 365, 473-478.	6.0	723
2	Tailoring Passivation Molecular Structures for Extremely Small Open-Circuit Voltage Loss in Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2019, 141, 5781-5787.	6.6	585
3	Thin single crystal perovskite solar cells to harvest below-bandgap light absorption. <i>Nature Communications</i> , 2017, 8, 1890.	5.8	467
4	Bilateral alkylamine for suppressing charge recombination and improving stability in blade-coated perovskite solar cells. <i>Science Advances</i> , 2019, 5, eaav8925.	4.7	388
5	Dual Functions of Crystallization Control and Defect Passivation Enabled by Sulfonic Zwitterions for Stable and Efficient Perovskite Solar Cells. <i>Advanced Materials</i> , 2018, 30, e1803428.	11.1	296
6	Low-Noise and Large-Linear-Dynamic-Range Photodetectors Based on Hybrid-Perovskite Thin-Single-Crystals. <i>Advanced Materials</i> , 2017, 29, 1703209.	11.1	281
7	Efficient sky-blue perovskite light-emitting diodes via photoluminescence enhancement. <i>Nature Communications</i> , 2019, 10, 5633.	5.8	267
8	Suppressed Ion Migration along the In-Plane Direction in Layered Perovskites. <i>ACS Energy Letters</i> , 2018, 3, 684-688.	8.8	240
9	Enhancing electron diffusion length in narrow-bandgap perovskites for efficient monolithic perovskite tandem solar cells. <i>Nature Communications</i> , 2019, 10, 4498.	5.8	234
10	Perovskite-filled membranes for flexible and large-area direct-conversion X-ray detector arrays. <i>Nature Photonics</i> , 2020, 14, 612-617.	15.6	228
11	Synthetic control over orientational degeneracy of spacer cations enhances solar cell efficiency in two-dimensional perovskites. <i>Nature Communications</i> , 2019, 10, 1276.	5.8	222
12	Defect compensation in formamidinium-caesium perovskites for highly efficient solar mini-modules with improved photostability. <i>Nature Energy</i> , 2021, 6, 633-641.	19.8	215
13	Scalable Fabrication of Efficient Perovskite Solar Modules on Flexible Glass Substrates. <i>Advanced Energy Materials</i> , 2020, 10, 1903108.	10.2	186
14	Crystallization in one-step solution deposition of perovskite films: Upward or downward?. <i>Science Advances</i> , 2021, 7, .	4.7	165
15	Iodine reduction for reproducible and high-performance perovskite solar cells and modules. <i>Science Advances</i> , 2021, 7, .	4.7	158
16	Defect engineering in wide-bandgap perovskites for efficient perovskite-silicon tandem solar cells. <i>Nature Photonics</i> , 2022, 16, 588-594.	15.6	112
17	Preventing lead leakage with built-in resin layers for sustainable perovskite solar cells. <i>Nature Sustainability</i> , 2021, 4, 636-643.	11.5	111
18	Ligand assisted growth of perovskite single crystals with low defect density. <i>Nature Communications</i> , 2021, 12, 1686.	5.8	110

#	ARTICLE	IF	CITATIONS
19	Large-area and efficient perovskite light-emitting diodes via low-temperature blade-coating. <i>Nature Communications</i> , 2021, 12, 147.	5.8	100
20	Argon Plasma Treatment to Tune Perovskite Surface Composition for High Efficiency Solar Cells and Fast Photodetectors. <i>Advanced Materials</i> , 2018, 30, 1705176.	11.1	81
21	Identifying the Soft Nature of Defective Perovskite Surface Layer and Its Removal Using a Facile Mechanical Approach. <i>Joule</i> , 2020, 4, 2661-2674.	11.7	81
22	Highly Efficient Pure-blue Light-emitting Diodes Based on Rubidium and Chlorine Alloyed Metal Halide Perovskite. <i>Advanced Materials</i> , 2021, 33, e2100783.	11.1	77
23	Heterojunction structures for reduced noise in large-area and sensitive perovskite x-ray detectors. <i>Science Advances</i> , 2021, 7, eabg6716.	4.7	77
24	Reduced Self-Doping of Perovskites Induced by Short Annealing for Efficient Solar Modules. <i>Joule</i> , 2020, 4, 1949-1960.	11.7	72
25	Lead-adsorbing ionogel-based encapsulation for impact-resistant, stable, and lead-safe perovskite modules. <i>Science Advances</i> , 2021, 7, eabi8249.	4.7	71
26	Recycling lead and transparent conductors from perovskite solar modules. <i>Nature Communications</i> , 2021, 12, 5859.	5.8	69
27	Metallic surface doping of metal halide perovskites. <i>Nature Communications</i> , 2021, 12, 7.	5.8	66
28	Gradient Doping in Sn-Pb Perovskites by Barium Ions for Efficient Single-junction and Tandem Solar Cells. <i>Advanced Materials</i> , 2022, 34, e2110351.	11.1	62
29	Benign ferroelastic twin boundaries in halide perovskites for charge carrier transport and recombination. <i>Nature Communications</i> , 2020, 11, 2215.	5.8	47
30	Ultrafast Exciton Transport with a Long Diffusion Length in Layered Perovskites with Organic Cation Functionalization. <i>Advanced Materials</i> , 2020, 32, e2004080.	11.1	34
31	Layer number dependent ferroelasticity in 2D Ruddlesden-Popper organic-inorganic hybrid perovskites. <i>Nature Communications</i> , 2021, 12, 1332.	5.8	28
32	Strain engineering in metal halide perovskite materials and devices: Influence on stability and optoelectronic properties. <i>Chemical Physics Reviews</i> , 2021, 2, .	2.6	23
33	Wireless implantable optical probe for continuous monitoring of oxygen saturation in flaps and organ grafts. <i>Nature Communications</i> , 2022, 13, .	5.8	22
34	Sustainable development of perovskite solar cells: keeping a balance between toxicity and efficiency. <i>Journal of Materials Chemistry A</i> , 2022, 10, 8159-8171.	5.2	19