Zhou Yang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/97547/publications.pdf

Version: 2024-02-01

83 papers	10,426 citations	71102 41 h-index	66911 78 g-index
84 all docs	84 docs citations	84 times ranked	9307 citing authors

#	Article	IF	Citations
1	Twoâ€Inchâ€Sized Perovskite CH₃NH₃PbX₃ (X = Cl, Br, I) Crystals: Growth and Characterization. Advanced Materials, 2015, 27, 5176-5183.	21.0	914
2	Surface optimization to eliminate hysteresis for record efficiency planar perovskite solar cells. Energy and Environmental Science, 2016, 9, 3071-3078.	30.8	870
3	Stable Highâ€Performance Perovskite Solar Cells via Grain Boundary Passivation. Advanced Materials, 2018, 30, e1706576.	21.0	665
4	Stable high efficiency two-dimensional perovskite solar cells via cesium doping. Energy and Environmental Science, 2017, 10, 2095-2102.	30.8	588
5	High efficiency flexible perovskite solar cells using superior low temperature TiO₂. Energy and Environmental Science, 2015, 8, 3208-3214.	30.8	519
6	Hysteresisâ€Suppressed Highâ€Efficiency Flexible Perovskite Solar Cells Using Solidâ€State Ionicâ€Liquids for Effective Electron Transport. Advanced Materials, 2016, 28, 5206-5213.	21.0	387
7	Record Efficiency Stable Flexible Perovskite Solar Cell Using Effective Additive Assistant Strategy. Advanced Materials, 2018, 30, e1801418.	21.0	377
8	20â€mmâ€Large Singleâ€Crystalline Formamidiniumâ€Perovskite Wafer for Mass Production of Integrated Photodetectors. Advanced Optical Materials, 2016, 4, 1829-1837.	7.3	316
9	Solution-Processed Nb:SnO₂ Electron Transport Layer for Efficient Planar Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 2421-2429.	8.0	315
10	Thinnessâ€•and Shapeâ€Controlled Growth for Ultrathin Singleâ€Crystalline Perovskite Wafers for Mass Production of Superior Photoelectronic Devices. Advanced Materials, 2016, 28, 9204-9209.	21.0	296
11	Nucleation-controlled growth of superior lead-free perovskite Cs3Bi2I9 single-crystals for high-performance X-ray detection. Nature Communications, 2020, 11, 2304.	12.8	286
12	Controlled nâ€Doping in Airâ€Stable CsPbI₂Br Perovskite Solar Cells with a Record Efficiency of 16.79%. Advanced Functional Materials, 2020, 30, 1909972.	14.9	282
13	Highâ€Performance Planar Perovskite Solar Cells Using Low Temperature, Solutionâ€“Combustionâ€Based Nickel Oxide Hole Transporting Layer with Efficiency Exceeding 20%. Advanced Energy Materials, 2018, 8, 1703432.	19.5	279
14	Multifunctional Enhancement for Highly Stable and Efficient Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2005776.	14.9	273
15	A 1300 mm² Ultrahighâ€Performance Digital Imaging Assembly using Highâ€Quality Perovskite Single Crystals. Advanced Materials, 2018, 30, e1707314.	21.0	246
16	Multi-inch single-crystalline perovskite membrane for high-detectivity flexible photosensors. Nature Communications, 2018, 9, 5302.	12.8	212
17	Inch-Size 0D-Structured Lead-Free Perovskite Single Crystals for Highly Sensitive Stable X-Ray Imaging. Matter, 2020, 3, 180-196.	10.0	202
18	High performance ambient-air-stable FAPbI₃ perovskite solar cells with molecule-passivated Ruddlesdenâ€“Popper/3D heterostructured film. Energy and Environmental Science, 2018, 11, 3358-3366.	30.8	196

#	Article	IF	Citations
19	Dynamical Transformation of Two-Dimensional Perovskites with Alternating Cations in the Interlayer Space for High-Performance Photovoltaics. Journal of the American Chemical Society, 2019, 141, 2684-2694.	13.7	189
20	Telluriumâ€Assisted Epitaxial Growth of Largeâ€Area, Highly Crystalline ReS₂ Atomic Layers on Mica Substrate. Advanced Materials, 2016, 28, 5019-5024.	21.0	169
21	A Novel Anion Doping for Stable CsPbI₂Br Perovskite Solar Cells with an Efficiency of 15.56% and an Open Circuit Voltage of 1.30 V. Advanced Energy Materials, 2019, 9, 1902279.	19.5	166
22	Tripleâ€Cation and Mixedâ€Halide Perovskite Single Crystal for Highâ€Performance Xâ€ray Imaging. Advanced Materials, 2021, 33, e2006010.	21.0	163
23	Halide perovskites for high-performance X-ray detector. Materials Today, 2021, 48, 155-175.	14.2	163
24	Alternating precursor layer deposition for highly stable perovskite films towards efficient solar cells using vacuum deposition. Journal of Materials Chemistry A, 2015, 3, 9401-9405.	10.3	146
25	Highâ€Quality Sequentialâ€Vaporâ€Deposited Cs₂AgBiBr₆ Thin Films for Leadâ€Free Perovskite Solar Cells. Solar Rrl, 2018, 2, 1800217.	5.8	138
26	Two-dimensional (PEA)₂PbBr₄ perovskite single crystals for a high performance UV-detector. Journal of Materials Chemistry C, 2019, 7, 1584-1591.	5.5	138
27	Perovskite CH₃NH₃Pb(Br_xI_{1â^'x})₃ single crystals with controlled composition for fine-tuned bandgap towards optimized optoelectronic applications. Journal of Materials Chemistry C, 2016, 4, 9172-9178.	5.5	120
28	120 mm single-crystalline perovskite and wafers: towards viable applications. Science China Chemistry, 2017, 60, 1367-1376.	8.2	107
29	Color-Tuned Perovskite Films Prepared for Efficient Solar Cell Applications. Journal of Physical Chemistry C, 2016, 120, 42-47.	3.1	106
30	A Sandwichâ€Like Organolead Halide Perovskite Photocathode for Efficient and Durable Photoelectrochemical Hydrogen Evolution in Water. Advanced Energy Materials, 2018, 8, 1800795.	19.5	106
31	Large and Dense Organicâ€“Inorganic Hybrid Perovskite CH₃NH₃PbI₃ Wafer Fabricated by One-Step Reactive Direct Wafer Production with High X-ray Sensitivity. ACS Applied Materials & Interfaces, 2020, 12, 16592-16600.	8.0	94
32	High-Performance, Self-Powered Photodetectors Based on Perovskite and Graphene. ACS Applied Materials & Interfaces, 2017, 9, 42779-42787.	8.0	91
33	27%â€Efficiency Fourâ€Terminal Perovskite/Silicon Tandem Solar Cells by Sandwiched Gold Nanomesh. Advanced Functional Materials, 2020, 30, 1908298.	14.9	91
34	Bifunctional Hydroxylamine Hydrochloride Incorporated Perovskite Films for Efficient and Stable Planar Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 900-909.	5.1	81
35	Inch-sized high-quality perovskite single crystals by suppressing phase segregation for light-powered integrated circuits. Science Advances, 2021, 7, .	10.3	81
36	Enhanced Planar Perovskite Solar Cell Performance via Contact Passivation of TiO₂/Perovskite Interface with NaCl Doping Approach. ACS Applied Energy Materials, 2018, 1, 3826-3834.	5.1	68

#	Article	IF	Citations
37	Metalâ€Free Halide Perovskite Single Crystals with Very Long Charge Lifetimes for Efficient Xâ€ray Imaging. Advanced Materials, 2020, 32, e2003353.	21.0	68
38	Large Leadâ€Free Perovskite Single Crystal for Highâ€Performance Coplanar Xâ€Ray Imaging Applications. Advanced Optical Materials, 2020, 8, 2000814.	7.3	67
39	Lowâ€Temperature Solutionâ€Processed ZnO Electron Transport Layer for Highly Efficient and Stable Planar Perovskite Solar Cells with Efficiency Over 20%. Solar Rrl, 2019, 3, 1900096.	5.8	66
40	Improved PEDOT:PSS/c-Si hybrid solar cell using inverted structure and effective passivation. Scientific Reports, 2016, 6, 35091.	3.3	60
41	2D Perovskite Single Crystals with Suppressed Ion Migration for Highâ€Performance Planarâ€Type Photodetectors. Small, 2020, 16, e2003145.	10.0	56
42	Halide-modulated self-assembly of metal-free perovskite single crystals for bio-friendly X-ray detection. Matter, 2021, 4, 2490-2507.	10.0	47
43	Highly Luminescent Metalâ€Free Perovskite Single Crystal for Biocompatible Xâ€Ray Detector to Attain Highest Sensitivity. Advanced Materials, 2021, 33, e2102190.	21.0	46
44	Cesium Lead Halide Nanocrystals based Flexible Xâ€Ray Imaging Screen and Visible Dose Rate Indication on Paper Substrate. Advanced Optical Materials, 2022, 10, .	7.3	39
45	Flexible, High Scintillation Yield Cu₃Cu₂I₅ Film Made of Ballâ€Milled Powder for High Spatial Resolution Xâ€Ray Imaging. Advanced Optical Materials, 2022, 10, .	7.3	37
46	Solution Coating of Superior Largeâ€Area Flexible Perovskite Thin Films with Controlled Crystal Packing. Advanced Optical Materials, 2017, 5, 1700102.	7.3	34
47	Efficient X-ray Attenuation Lead-Free AgBi₂I₇ Halide Rudorffite Alternative for Sensitive and Stable X-ray Detection. Journal of Physical Chemistry Letters, 2020, 11, 7939-7945.	4.6	34
48	Neural correlates of restrained eatersâ€™ high susceptibility to food cues: An fMRI study. Neuroscience Letters, 2016, 631, 56-62.	2.1	25
49	Effective solvent-additive enhanced crystallization and coverage of absorber layers for high efficiency formamidinium perovskite solar cells. RSC Advances, 2016, 6, 56807-56811.	3.6	25
50	In Situ Grain Boundary Modification via Two-Dimensional Nanoplates to Remarkably Improve Stability and Efficiency of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 39802-39808.	8.0	24
51	Highly efficient perovskite solar cells based on a dopant-free conjugated DPP polymer hole transport layer: influence of solvent vapor annealing. Sustainable Energy and Fuels, 2018, 2, 2154-2159.	4.9	24
52	PbTiO₃ as Electronâ€Selective Layer for Highâ€Efficiency Perovskite Solar Cells: Enhanced Electron Extraction via Tunable Ferroelectric Polarization. Advanced Functional Materials, 2019, 29, 1806427.	14.9	23
53	Centimeterâ€Sized Molecular Perovskite Crystal for Efficient Xâ€Ray Detection. Advanced Functional Materials, 2021, 31, 2100691.	14.9	22
54	Direct Growth of Pyramidâ€Textured Perovskite Single Crystals: A New Strategy for Enhanced Optoelectronic Performance. Advanced Functional Materials, 2020, 30, 2002742.	14.9	20

#	Article	IF	Citations
55	From Polymer to Monomer: Cleavage and Rearrangement of Siâ€Oâ€Si Bonds after Oxidation Yielded an Ordered Cyclic Crystallized Structure. Chemistry - A European Journal, 2015, 21, 10972-10977.	3.3	18
56	Rapid colorimetric sensing of ascorbic acid based on the excellent peroxidase-like activity of Pt deposited on ZnCo₂O₄ spheres. New Journal of Chemistry, 2020, 44, 12002-12008.	2.8	18
57	Grain and stoichiometry engineering for ultra-sensitive perovskite X-ray detectors. Journal of Materials Chemistry A, 2021, 9, 25603-25610.	10.3	18
58	Inch-size Cs₃Bi₂I₉ polycrystalline wafers with near-intrinsic properties for ultralow-detection-limit X-ray detection. Journal of Materials Chemistry C, 2022, 10, 6665-6672.	5.5	18
59	Band alignment of TiO2/FTO interface determined by X-ray photoelectron spectroscopy: Effect of annealing. AIP Advances, 2016, 6, .	1.3	17
60	Local temperature reduction induced crystallization of MASnI₃ and achieving a direct wafer production. RSC Advances, 2017, 7, 38155-38159.	3.6	17
61	Orchard Spray Study: A Prediction Model of Droplet Deposition States on Leaf Surfaces. Agronomy, 2020, 10, 747.	3.0	17
62	Room temperature H2S micro-sensors with anti-humidity properties fabricated from NiO-In2O3 composite nanofibers. Science Bulletin, 2013, 58, 821-826.	1.7	15
63	Chelate-Pb Intermediate Engineering for High-Efficiency Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 14744-14750.	8.0	15
64	Lead-free molecular one-dimensional perovskite for efficient X-ray detection. Journal of Energy Chemistry, 2022, 64, 209-213.	12.9	15
65	Ionâ€Accumulationâ€Induced Charge Tunneling for High Gain Factor in Pâ€“Iâ€“Nâ€Structured Perovskite CH₃NH₃PbI₃ Xâ€Ray Detector. Advanced Materials Technologies, 2022, 7, 2100908.	5.8	15
66	Highly stable and efficient perovskite solar cells produced via high-boiling point solvents and additive engineering synergistically. Science China Chemistry, 2020, 63, 818-826.	8.2	11
67	Optical and electrical properties of high-quality Ti2O3 epitaxial film grown on sapphire substrate. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	10
68	Highâ€Quality Sequentialâ€Vaporâ€Deposited Cs₂AgBiBr₆ Thin Films for Leadâ€Free Perovskite Solar Cells (Solar RRL 12â•2018). Solar Rrl, 2018, 2, 1870238.	5.8	9
69	Estimating litchi flower number using a multicolumn convolutional neural network based on a density map. Precision Agriculture, 2022, 23, 1226-1247.	6.0	9
70	Hierarchical ZnO Microspheres Embedded in TiO₂ Photoanode for Enhanced CdS/CdSe Sensitized Solar Cells. ACS Applied Energy Materials, 2019, 2, 1259-1265.	5.1	7
71	Synergistic enhancement of Cs and Br doping in formamidinium lead halide perovskites for high performance optoelectronics. CrystEngComm, 2018, 20, 5510-5518.	2.6	6
72	Above-Band-Gap Voltage from Oriented Bismuth Ferrite Ceramic Photovoltaic Cells. ACS Applied Energy Materials, 2021, 4, 12703-12708.	5.1	6

#	Article	IF	Citations
73	Atomic Layers: Tellurium-Assisted Epitaxial Growth of Large-Area, Highly Crystalline ReS2 Atomic Layers on Mica Substrate (Adv. Mater. 25/2016). Advanced Materials, 2016, 28, 5018-5018.	21.0	5
74	A facile template-assisted electrodeposition approach to porous Cu/Cu‹sub›2‹/sub›O nanowires. RSC Advances, 2021, 11, 30215-30221.	3.6	4
75	Electrochemically Fabricated Surface-Mesostructured CuNi Bimetallic Catalysts for Hydrogen Production in Alkaline Media. Nanomaterials, 2022, 12, 118.	4.1	4
76	Perovskite Wafers: Thinnessâ€•and Shapeâ€€Controlled Growth for Ultrathin Singleâ€€Crystalline Perovskite Wafers for Mass Production of Superior Photoelectronic Devices (Adv. Mater. 41/2016). Advanced Materials, 2016, 28, 9203-9203.	21.0	3
77	Flexible Diodes/Transistors Based on Tunable p-n-Type Semiconductivity in Graphene/Mn-Co-Ni-O Nanocomposites. Research, 2021, 2021, 9802795.	5.7	2
78	Magnetic Field Driven Larger Grain Growth for Perovskite Film with Enhanced Photovoltaic Performance. , 2018, , .		1
79	Electromagnetic Responses and Coupling Effect in Asymmetric Terahertz Metamaterials. , 2019, , .		1
80	Frontispiece: From Polymer to Monomer: Cleavage and Rearrangement of Si-O-Si Bonds after Oxidation Yielded an Ordered Cyclic Crystallized Structure. Chemistry - A European Journal, 2015, 21, n/a-n/a.	3.3	0
81	Stable high efficiency perovskite solar cells using vacuum deposition. , 2016, , .		0
82	Performance Evaluation of a Banana Pseudostem Chopper. HortTechnology, 2021, 31, 208-216.	0.9	0
83	Grapheneâ€“MCN pn-junction for ultrafast flexible ultraviolet detector. MRS Communications, 2021, 11, 862.	1.8	0