Fang Yao

List of Publications by Year
in descending order

25 papers	1,345 citations	516710 16 h-index	580821 25 g-index
25 all docs	25 docs citations	25 times ranked	2426 citing authors

#	Article	IF	Citations
1	Effective Carrierâ€Concentration Tuning of SnO₂ Quantum Dot Electronâ€Selective Layers for Highâ€Performance Planar Perovskite Solar Cells. Advanced Materials, 2018, 30, e1706023.	21.0	333
2	Achieving a high open-circuit voltage in inverted wide-bandgap perovskite solar cells with a graded perovskite homojunction. Nano Energy, 2019, 61, 141-147.	16.0	152
3	Room-temperature liquid diffused separation induced crystallization for high-quality perovskite single crystals. Nature Communications, 2020, 11, 1194.	12.8	133
4	Enhanced performance of perovskite solar cells via anti-solvent nonfullerene Lewis base IT-4F induced trap-passivation. Journal of Materials Chemistry A, 2018, 6, 5919-5925.	10.3	127
5	Spaceâ€Confined Growth of Individual Wide Bandgap Single Crystal CsPbCl₃ Microplatelet for Nearâ€Ultraviolet Photodetection. Small, 2019, 15, e1902618.	10.0	77
6	Enhancing efficiency and stability of perovskite solar cells via a high mobility p-type PbS buffer layer. Nano Energy, 2017, 38, 1-11.	16.0	65
7	High-Performance Photodetectors Based on Single All-Inorganic CsPbBr₃ Perovskite Microwire. ACS Photonics, 2018, 5, 2113-2119.	6.6	61
8	Self-powered narrowband p-NiO/n-ZnO nanowire ultraviolet photodetector with interface modification of Al2O3. Applied Physics Letters, 2017, 110, .	3.3	49
9	Dopantâ€Free Holeâ€Transport Materials Based on Methoxytriphenylamineâ€Substituted Indacenodithienothiophene for Solutionâ€Processed Perovskite Solar Cells. ChemSusChem, 2017, 10, 2833-2838.	6.8	43
10	Ion-exchange-induced slow crystallization of 2D-3D perovskite thick junctions for X-ray detection and imaging. Matter, 2022, 5, 2251-2264.	10.0	40
11	Methylammonium, formamidinium and ethylenediamine mixed triple-cation perovskite solar cells with high efficiency and remarkable stability. Journal of Materials Chemistry A, 2018, 6, 17625-17632.	10.3	37
12	Molecular engineering of perovskite photodetectors: recent advances in materials and devices. Molecular Systems Design and Engineering, 2018, 3, 702-716.	3.4	33
13	Self-driven all-inorganic perovskite microplatelet vertical Schottky junction photodetectors with a tunable spectral response. Journal of Materials Chemistry C, 2020, 8, 6804-6812.	5.5	29
14	Directly hydrothermal growth of antimony sulfide on conductive substrate as efficient counter electrode for dye-sensitized solar cells. Electrochimica Acta, 2015, 174, 127-132.	5.2	26
15	One-step hydrothermal synthesis of ZnS-CoS microcomposite as low cost counter electrode for dye-sensitized solar cells. Applied Surface Science, 2016, 363, 459-465.	6.1	26
16	High-Rubidiumâ€“Formamidinium-Ratio Perovskites for High-Performance Photodetection with Enhanced Stability. ACS Applied Materials & Interfaces, 2019, 11, 39875-39881.	8.0	21
17	Room Temperature Formation of Semiconductor Grade Î±-FAPbI3 Films for Efficient Perovskite Solar Cells. Cell Reports Physical Science, 2020, 1, 100205.	5.6	18
18	Highly Efficient Quasiâ€2D Green Perovskite Lightâ€Emitting Diodes with Bifunctional Amino Acid. Advanced Optical Materials, 2022, 10, .	7.3	14

#	Article	IF	Citations
19	Chemical bath deposition of AgBiS2 films for visible and X-ray detection. Applied Materials Today, 2022, 26, 101262.	4.3	12
20	Semi-transparent, high-performance lead-free Cs3Bi2I9 single crystal self-driven photodetector. Applied Physics Letters, 2022, 120, .	3.3	12
21	Thick-junction perovskite X-ray detectors: processing and optoelectronic considerations. Nanoscale, 2022, 14, 9636-9647.	5.6	12
22	Revealing the Mechanism of Ï€ Aromatic Molecule as an Effective Passivator and Stabilizer in Highly Efficient Wideâ€Bandgap Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100249.	5.8	11
23	Quasiâ€Single Crystalline Cuprous Oxide Wafers via Stressâ€Assisted Thermal Oxidation for Optoelectronic Devices. Advanced Functional Materials, 2022, 32, .	14.9	8
24	Temperature-dependent performance metrics of tin-doped perovskite photodetectors. Journal of Materials Chemistry C, 2022, 10, 1625-1631.	5.5	4
25	Roomâ€Temperature Diffusionâ€Induced Extraction for Perovskite Nanocrystals with High Luminescence and Stability. Small Methods, 2021, 5, 2001292.	8.6	2