Fei Guo

List of Publications by Year
in descending order

51 papers	4,033 citations	117625 34 h-index	189892 50 g-index
52 all docs	52 docs citations	52 times ranked	5393 citing authors

#	Article	IF	Citations
1	High efficiency stable inverted perovskite solar cells without current hysteresis. Energy and Environmental Science, 2015, 8, 2725-2733.	30.8	533
2	The synergistic effect of H₂O and DMF towards stable and 20% efficiency inverted perovskite solar cells. Energy and Environmental Science, 2017, 10, 808-817.	30.8	383
3	High-performance semitransparent perovskite solar cells with solution-processed silver nanowires as top electrodes. Nanoscale, 2015, 7, 1642-1649.	5.6	300
4	ITOâ€Free and Fully Solutionâ€Processed Semitransparent Organic Solar Cells with High Fill Factors. Advanced Energy Materials, 2013, 3, 1062-1067.	19.5	172
5	Surface engineering of ZnO electron transporting layer via Al doping for high efficiency planar perovskite solar cells. Nano Energy, 2016, 28, 311-318.	16.0	147
6	Defect Control for 12.5% Efficiency Cu₂ZnSnSe₄ Kesterite Thinâ€Film Solar Cells by Engineering of Local Chemical Environment. Advanced Materials, 2020, 32, e2005268.	21.0	133
7	Spontaneously Selfâ€Assembly of a 2D/3D Heterostructure Enhances the Efficiency and Stability in Printed Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 2000173.	19.5	126
8	A Method for the Preparation of Highly Oriented MAPbI₃ Crystallites for High-Efficiency Perovskite Solar Cells to Achieve an 86% Fill Factor. ACS Nano, 2018, 12, 10355-10364.	14.6	113
9	Vertically Aligned 2D/3D Pbâ€“Sn Perovskites with Enhanced Charge Extraction and Suppressed Phase Segregation for Efficient Printable Solar Cells. ACS Energy Letters, 2020, 5, 1386-1395.	17.4	111
10	The fabrication of color-tunable organic light-emitting diode displays via solution processing. Light: Science and Applications, 2017, 6, e17094-e17094.	16.6	105
11	Film Grainâ€Size Related Longâ€Term Stability of Inverted Perovskite Solar Cells. ChemSusChem, 2016, 9, 2666-2672.	6.8	102
12	A Generalized Crystallization Protocol for Scalable Deposition of Highâ€Quality Perovskite Thin Films for Photovoltaic Applications. Advanced Science, 2019, 6, 1901067.	11.2	97
13	Device Performance of Emerging Photovoltaic Materials (Version 1). Advanced Energy Materials, 2021, 11, 2002774.	19.5	93
14	Tailoring C₆₀ for Efficient Inorganic CsPbI₂Br Perovskite Solar Cells and Modules. Advanced Materials, 2020, 32, e1907361.	21.0	88
15	Fully printed organic tandem solar cells using solution-processed silver nanowires and opaque silver as charge collecting electrodes. Energy and Environmental Science, 2015, 8, 1690-1697.	30.8	83
16	Controlling the crystallization dynamics of photovoltaic perovskite layers on larger-area coatings. Energy and Environmental Science, 2020, 13, 4666-4690.	30.8	79
17	Rational Interface Design and Morphology Control for Bladeâ€Coating Efficient Flexible Perovskite Solar Cells with a Record Fill Factor of 81%. Advanced Functional Materials, 2020, 30, 2001240.	14.9	77
18	Sequential Deposition of Highâ€Quality Photovoltaic Perovskite Layers via Scalable Printing Methods. Advanced Functional Materials, 2019, 29, 1900964.	14.9	69

#	Article	IF	Citations
19	A generic concept to overcome bandgap limitations for designing highly efficient multi-junction photovoltaic cells. Nature Communications, 2015, 6, 7730.	12.8	67
20	Efficient and Stable Planar nâ€“iâ€“p Sb₂Se₃ Solar Cells Enabled by Oriented 1D Trigonal Selenium Structures. Advanced Science, 2020, 7, 2001013.	11.2	67
21	Graphene oxide modified membrane for highly efficient wastewater treatment by dynamic combination of nanofiltration and catalysis. Journal of Hazardous Materials, 2020, 397, 122774.	12.4	67
22	Cation-size mismatch and interface stabilization for efficient NiOx-based inverted perovskite solar cells with 21.9% efficiency. Nano Energy, 2021, 88, 106285.	16.0	66
23	Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials, 2021, 11, .	19.5	66
24	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. Joule, 2022, 6, 8-15.	24.0	66
25	Inorganic hole transport layers in inverted perovskite solar cells: A review. Nano Select, 2021, 2, 1081-1116.	3.7	65
26	2D-3D heterostructure enables scalable coating of efficient low-bandgap Snâ€“Pb mixed perovskite solar cells. Nano Energy, 2019, 66, 104099.	16.0	63
27	An Embedding 2D/3D Heterostructure Enables Highâ€Performance FAâ€Alloyed Flexible Perovskite Solar Cells with Efficiency over 20%. Advanced Science, 2021, 8, e2101856.	11.2	57
28	Nanowire Interconnects for Printed Largeâ€Area Semitransparent Organic Photovoltaic Modules. Advanced Energy Materials, 2015, 5, 1401779.	19.5	55
29	Efficiency Limits and Color of Semitransparent Organic Solar Cells for Application in Buildingâ€Integrated Photovoltaics. Energy Technology, 2015, 3, 1051-1058.	3.8	50
30	The fabrication of homogeneous perovskite films on non-wetting interfaces enabled by physical modification. Journal of Energy Chemistry, 2019, 38, 192-198.	12.9	48
31	Fully Solution Processed Pure Î±â€Phase Formamidinium Lead Iodide Perovskite Solar Cells for Scalable Production in Ambient Condition. Advanced Energy Materials, 2020, 10, 2001869.	19.5	46
32	Overcoming photovoltage deficitvianatural amino acid passivation for efficient perovskite solar cells and modules. Journal of Materials Chemistry A, 2021, 9, 5857-5865.	10.3	43
33	A Critical Review on Crystal Growth Techniques for Scalable Deposition of Photovoltaic Perovskite Thin Films. Materials, 2020, 13, 4851.	2.9	38
34	A novel ball milling technique for room temperature processing of TiO₂ nanoparticles employed as the electron transport layer in perovskite solar cells and modules. Journal of Materials Chemistry A, 2018, 6, 7114-7122.	10.3	35
35	Solution-Processed Parallel Tandem Polymer Solar Cells Using Silver Nanowires as Intermediate Electrode. ACS Nano, 2014, 8, 12632-12640.	14.6	34
36	Managing Phase Orientation and Crystallinity of Printed Dionâ€“Jacobson 2D Perovskite Layers via Controlling Crystallization Kinetics. Advanced Functional Materials, 2022, 32, .	14.9	33

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37	Biopolymer passivation for high-performance perovskite solar cells by blade coating. Journal of Energy Chemistry, 2021, 54, 45-52.	12.9	29
38	Semitransparent polymer solar cells. Polymer International, 2013, 62, 1408-1412.	3.1	28
39	Spiroâ€Linked Molecular Holeâ€Transport Materials for Highly Efficient Inverted Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900389.	5.8	28
40	Natural methionine-passivated MAPbI3 perovskite films for efficient and stable solar devices. Advanced Composites and Hybrid Materials, 2021, 4, 1261-1269.	21.1	27
41	Printable Dielectric Mirrors with Easily Adjustable and Wellâ€Defined Reflection Maxima for Semitransparent Organic Solar Cells. Advanced Optical Materials, 2015, 3, 1424-1430.	7.3	23
42	Polyfluorene Copolymers as Highâ€Performance Holeâ€Transport Materials for Inverted Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900384.	5.8	21
43	Vacuumâ€Assisted Preparation of Highâ€Quality Quasiâ€2D Perovskite Thin Films for Largeâ€Area Lightâ€Emitting Diodes. Advanced Functional Materials, 2022, 32, 2107644.	14.9	19
44	Improving the Photovoltage of Blade-Coated MAPbI₃ Perovskite Solar Cells via Surface and Grain Boundary Passivation with Ï€-Conjugated Phenyl Boronic Acids. ACS Applied Materials & Interfaces, 2021, 13, 46566-46576.	8.0	15
45	Reducing energy barrier of Î´-to-Î± phase transition for printed formamidinium lead iodide photovoltaic devices. Nano Energy, 2022, 91, 106658.	16.0	15
46	Suppressing growth of lithium dendrites by introducing deep eutectic solvents for stable lithium metal batteries. Journal of Materials Chemistry A, 2022, 10, 15449-15459.	10.3	14
47	Temperature-Assisted Crystal Growth of Photovoltaic Î±-Phase FAPbI₃ Thin Films by Sequential Blade Coating. ACS Applied Materials & Interfaces, 2020, 12, 55830-55837.	8.0	11
48	Synergistic Passivation of Perovskite Absorber Films for Efficient Fourâ€Terminal Perovskite/Silicon Tandem Solar Cells. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	10
49	Highly Stable FA x MA 1â€‰â^'â€‰ x PbI 3â€‰â^'â€‰ x Br x â€“2P Precursor for Crystalizing Highâ€Quality, Largeâ€Area Perovskite Film in an Ambient Atmosphere. Solar Rrl, 2020, 4, 1900402.	5.8	8
50	Interfacial engineering with carbonâ€“graphiteâ€“Cu_{Î´}Ni_{1â^'Î´}O for ambient-air stable composite-based hole-conductor-free perovskite solar cells. Nanoscale Advances, 2020, 2, 5883-5889.	4.6	8
51	Advancing the open-circuit voltage of tin halide perovskites via tailoring electron transport layer. Science Bulletin, 2021, 66, 204-205.	9.0	0