Fan Fu

List of Publications by Year
in descending order

48 papers	4,659 citations	159585 30 h-index	289244 40 g-index
50 all docs	50 docs citations	50 times ranked	5771 citing authors

#	Article	IF	Citations
1	Planar perovskite solar cells with long-term stability using ionic liquid additives. Nature, 2019, 571, 245-250.	27.8	1,103
2	Vapor-assisted deposition of highly efficient, stable black-phase FAPbI ₃ perovskite solar cells. Science, 2020, 370, .	12.6	530
3	Low-temperature-processed efficient semi-transparent planar perovskite solar cells for bifacial and tandem applications. Nature Communications, 2015, 6, 8932.	12.8	398
4	Self-propagating high-temperature synthesis for compound thermoelectrics and new criterion for combustion processing. Nature Communications, 2014, 5, 4908.	12.8	302
5	High-efficiency inverted semi-transparent planar perovskite solar cells in substrate configuration. Nature Energy, 2017, 2, .	39.5	247
6	High-Efficiency Polycrystalline Thin Film Tandem Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 2676-2681.	4.6	166
7	I₂ vapor-induced degradation of formamidinium lead iodide based perovskite solar cells under heatâ€“light soaking conditions. Energy and Environmental Science, 2019, 12, 3074-3088.	30.8	131
8	Interfacial Passivation Engineering of Perovskite Solar Cells with Fill Factor over 82% and Outstanding Operational Stability on n-i-p Architecture. ACS Energy Letters, 2021, 6, 3916-3923.	17.4	115
9	Wide-bandgap organicâ€“inorganic hybrid and all-inorganic perovskite solar cells and their application in all-perovskite tandem solar cells. Energy and Environmental Science, 2021, 14, 5723-5759.	30.8	114
10	Unveiling Roles of Tin Fluoride Additives in Highâ€Efficiency Lowâ€Bandgap Mixed Tinâ€Lead Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2101045.	19.5	101
11	Monolithic Perovskiteâ€Silicon Tandem Solar Cells: From the Lab to Fab?. Advanced Materials, 2022, 34, e2106540.	21.0	92
12	Decoupling the effects of defects on efficiency and stability through phosphonates in stable halide perovskite solar cells. Joule, 2021, 5, 1246-1266.	24.0	91
13	Perovskite/Perovskite/Silicon Monolithic Triple-Junction Solar Cells with a Fully Textured Design. ACS Energy Letters, 2018, 3, 2052-2058.	17.4	87
14	Improved Thermoelectric Properties of Al-Doped Higher Manganese Silicide Prepared by a Rapid Solidification Method. Journal of Electronic Materials, 2011, 40, 1233-1237.	2.2	84
15	Instability of pâ€“iâ€“n perovskite solar cells under reverse bias. Journal of Materials Chemistry A, 2020, 8, 242-250.	10.3	76
16	Efficiency Improvement of Nearâ€Stoichiometric CuInSe₂ Solar Cells for Application in Tandem Devices. Advanced Energy Materials, 2019, 9, 1901428.	19.5	69
17	Mitigation of Vacuum and Illumination-Induced Degradation in Perovskite Solar Cells by Structure Engineering. Joule, 2020, 4, 1087-1103.	24.0	69
18	Nanoscale interfacial engineering enables highly stable and efficient perovskite photovoltaics. Energy and Environmental Science, 2021, 14, 5552-5562.	30.8	69

#	Article	IF	Citations
19	Flexible NIR-transparent perovskite solar cells for all-thin-film tandem photovoltaic devices. Journal of Materials Chemistry A, 2017, 5, 13639-13647.	10.3	68
20	Compositionally Graded Absorber for Efficient and Stable Nearâ€Infraredâ€Transparent Perovskite Solar Cells. Advanced Science, 2018, 5, 1700675.	11.2	65
21	Controlled growth of PbI₂ nanoplates for rapid preparation of CH₃NH₃PbI₃ in planar perovskite solar cells. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2708-2717.	1.8	63
22	Nearâ€Infraredâ€Transparent Perovskite Solar Cells and Perovskiteâ€Based Tandem Photovoltaics. Small Methods, 2020, 4, 2000395.	8.6	63
23	Bandgap of thin film solar cell absorbers: A comparison of various determination methods. Thin Solid Films, 2019, 669, 482-486.	1.8	56
24	Mitigating Plasmonic Absorption Losses at Rear Electrodes in Highâ€Efficiency Silicon Solar Cells Using Dopantâ€Free Contact Stacks. Advanced Functional Materials, 2020, 30, 1907840.	14.9	55
25	High-Mobility In₂O₃:H Electrodes for Four-Terminal Perovskite/CuInSe₂ Tandem Solar Cells. ACS Nano, 2020, 14, 7502-7512.	14.6	54
26	Degradation and self-repairing in perovskite light-emitting diodes. Matter, 2021, 4, 3710-3724.	10.0	51
27	Enhanced Thermoelectric Performance and Thermal Stability in Î²-Zn4Sb3 by Slight Pb-Doping. Journal of Electronic Materials, 2012, 41, 1091-1099.	2.2	39
28	CNT-based bifacial perovskite solar cells toward highly efficient 4-terminal tandem photovoltaics. Energy and Environmental Science, 2022, 15, 1536-1544.	30.8	39
29	Tailored lead iodide growth for efficient flexible perovskite solar cells and thin-film tandem devices. NPG Asia Materials, 2018, 10, 1076-1085.	7.9	35
30	RbF post deposition treatment for narrow bandgap Cu(In,Ga)Se2 solar cells. Thin Solid Films, 2019, 670, 34-40.	1.8	33
31	Impact of interlayer application on band bending for improved electron extraction for efficient flexible perovskite mini-modules. Nano Energy, 2018, 49, 300-307.	16.0	32
32	Optimizing thermoelectric performance of Cd-doped Î²-Zn4Sb3 through self-adjusting carrier concentration. Intermetallics, 2011, 19, 1823-1830.	3.9	31
33	Thermal-induced interface degradation in perovskite light-emitting diodes. Journal of Materials Chemistry C, 2020, 8, 15079-15085.	5.5	30
34	Multimodal Microscale Imaging of Textured Perovskiteâ€"Silicon Tandem Solar Cells. ACS Energy Letters, 2021, 6, 2293-2304.	17.4	25
35	Revealing the perovskite formation kinetics during chemical vapour deposition. Journal of Materials Chemistry A, 2020, 8, 21973-21982.	10.3	24
36	Voids and compositional inhomogeneities in Cu(In,Ga)Se₂ thin films: evolution during growth and impact on solar cell performance. Science and Technology of Advanced Materials, 2018, 19, 871-882.	6.1	23

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37	Triple-cation perovskite solar cells fabricated by a hybrid PVD/blade coating process using green solvents. Journal of Materials Chemistry A, 2021, 9, 26680-26687.	10.3	17
38	Laser Patterned Flexible 4T Perovskiteâ€Cu(In,Ga)Se₂ Tandem Miniâ€module with Over 18% Efficiency. Solar Rrl, 2022, 6, .	5.8	6
39	IZO or IOH Window Layers Combined with Zn(O,S) and CdS Buffers for Cu(In,Ga)Se₂ Solar Cells. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700688.	1.8	3
40	Hybrid sequential deposition process for fully textured perovskite/silicon tandem solar cells. , 2018, , .		2
41	Nanoscale interfacial engineering enables highly stable and efficient perovskite photovoltaics. , 0, , .		0
42	Nanoscale interfacial engineering enables highly stable and efficient perovskite photovoltaics. , 2021, , .		0
43	Hybrid Fabrication Method for High Efficiency Monolithic Perovskite/Silicon Tandem Solar Cells. , 0, , .		0
44	Photoinduced Halide Segregation and Diffusion in Mixed-halide Perovskite Solar Cells. , 0, , .		0
45	Stability of perovskite and two terminal Si/perovskite tandem solar cells under reverse bias. , 0, , .		0
46	A nanometric view on performance-loss mechanisms in perovskite/c-Si multi-junction solar cells. , 0, , .		0
47	Triple-cation perovskite solar cells fabricated by a hybrid PVD/blade coating process using green solvents. , 0, , .		0
48	Perovskite-based Flexible Thin-film Tandem Solar Cells. , 0, , .		0