Heng Sun

List of Publications by Year
in descending order

20 papers	1,154 citations	687363 13 h-index	996975 15 g-index
20 all docs	20 docs citations	20 times ranked	1171 citing authors

#	Article	IF	Citations
1	Largeâ€Grain Spanning Monolayer Cu₂ZnSnSe₄Thinâ€Film Solar Cells Grown from Metal Precursor. Small, 2022, 18, e2105044.	10.0	25
2	11.6% Efficient Pure Sulfide Cu(In,Ga)S₂ Solar Cell through a Cu-Deficient and KCN-Free Process. ACS Applied Energy Materials, 2020, 3, 11974-11980.	5.1	8
3	Cd-Free Cu₂ZnSnS₄solar cell with an efficiency greater than 10% enabled by Al₂O₃passivation layers. Energy and Environmental Science, 2019, 12, 2751-2764.	30.8	112
4	Solution-processed ultrathin SnO2 passivation of Absorber/Buffer Heterointerface and Grain Boundaries for High Efficiency Kesterite Cu2ZnSnS4 Solar Cells. , 2019, , .		0
5	High-efficient Cd-free CZTS solar cells achieved by nanoscale atomic layer deposited aluminium oxide. , 2019, , .		0
6	Beyond 10% efficiency Cu₂ZnSnS₄ solar cells enabled by modifying the heterojunction interface chemistry. Journal of Materials Chemistry A, 2019, 7, 27289-27296.	10.3	46
7	Efficiency Enhancement of Kesterite Cu₂ZnSnS₄ Solar Cells via Solution-Processed Ultrathin Tin Oxide Intermediate Layer at Absorber/Buffer Interface. ACS Applied Energy Materials, 2018, 1, 154-160.	5.1	53
8	The effect of thermal evaporated MoO3 intermediate layer as primary back contact for kesterite Cu2ZnSnS4 solar cells. Thin Solid Films, 2018, 648, 39-45.	1.8	34
9	Boosting the kesterite Cu2ZnSnS4 solar cells performance by diode laser annealing. Solar Energy Materials and Solar Cells, 2018, 175, 71-76.	6.2	27
10	ALD ZnSnO buffer layer for enhancing heterojunction interface quality of CZTS solar cells. , 2018, , .		0
11	Boosting the efficiency of kesterite Cu2ZnSnS4 solar cells by optimizing the heterojunction interface quality. , 2018, , .		0
12	Enhanced Heterojunction Interface Quality To Achieve 9.3% Efficient Cd-Free Cu₂ZnSnS₄ Solar Cells Using Atomic Layer Deposition ZnSnO Buffer Layer. Chemistry of Materials, 2018, 30, 7860-7871.	6.7	66
13	Self-assembled Nanometer-Scale ZnS Structure at the CZTS/ZnCdS Heterointerface for High-Efficiency Wide Band Gap Cu₂ZnSnS₄ Solar Cells. Chemistry of Materials, 2018, 30, 4008-4016.	6.7	37
14	The Role of Hydrogen from ALDâ€Al₂O₃ in Kesterite Cu₂ZnSnS₄ Solar Cells: Grain Surface Passivation. Advanced Energy Materials, 2018, 8, 1701940.	19.5	68
15	Cu2ZnSnS4 solar cells with over 10% power conversion efficiency enabled by heterojunction heat treatment. Nature Energy, 2018, 3, 764-772.	39.5	623
16	Effects of Illumination on the Electrochemical Behavior of Selenium Electrodeposition on ITO Substrates. Journal of the Electrochemical Society, 2017, 164, H225-H231.	2.9	6
17	Organic solar cells with near 100% efficiency retention after initial burn-in loss and photo-degradation. Thin Solid Films, 2017, 636, 127-136.	1.8	13
18	Fabrication of Cu2ZnSnS4 thin film solar cells by annealing of reactively sputtered precursors. Journal of Alloys and Compounds, 2017, 701, 55-62.	5.5	15

#	Article	IF	Citations
19	Hybrid Ag Nanowireâ€“ITO as Transparent Conductive Electrode for Pure Sulfide Kesterite Cu₂ZnSnS₄ Solar Cells. Journal of Physical Chemistry C, 2017, 121, 20597-20604.	3.1	14
20	Defect Engineering for Efficient Cu ₂ ZnSnS ₄ Solar Cells via Moistureâ€Assisted Postâ€Deposition Annealing. Advanced Optical Materials, 0, , 2200607.	7.3	7