Alexander R Uhl

List of Publications by Year
in descending order

20 papers	4,151 citations	430442 18 h-index	713013 21 g-index
22 all docs	22 docs citations	22 times ranked	5756 citing authors

#	Article	IF	Citations
1	Potassium-induced surface modification of Cu(In,Ga)Se2 thin films for high-efficiency solar cells. Nature Materials, 2013, 12, 1107-1111.	13.3	1,161
2	Highly efficient Cu(In,Ga)Se2 solar cells grown on flexible polymer films. Nature Materials, 2011, 10, 857-861.	13.3	796
3	Ultrahydrophobic 3D/2D fluoroarene bilayer-based water-resistant perovskite solar cells with efficiencies exceeding 22%. Science Advances, 2019, 5, eaaw2543.	4.7	524
4	New-generation integrated devices based on dye-sensitized and perovskite solar cells. Energy and Environmental Science, 2018, 11, 476-526.	15.6	364
5	Atomic-level passivation mechanism of ammonium salts enabling highly efficient perovskite solar cells. Nature Communications, 2019, 10, 3008.	5.8	268
6	Sodium Assisted Sintering of Chalcogenides and Its Application to Solution Processed Cu₂ZnSn(S,Se)₄ Thin Film Solar Cells. Chemistry of Materials, 2014, 26, 1420-1425.	3.2	189
7	Current-Induced Phase Segregation in Mixed Halide Hybrid Perovskites and its Impact on Two-Terminal Tandem Solar Cell Design. ACS Energy Letters, 2017, 2, 1841-1847.	8.8	161
8	Highly Transparent and Conductive ZnO: Al Thin Films from a Low Temperature Aqueous Solution Approach. Advanced Materials, 2014, 26, 632-636.	11.1	152
9	All Solutionâ€Processed Chalcogenide Solar Cells â€“ from Single Functional Layers Towards a 13.8% Efficient CIGS Device. Advanced Functional Materials, 2015, 25, 12-27.	7.8	84
10	Nonâ€vacuum deposition of Cu(In,Ga)Se₂ absorber layers from binder free, alcohol solutions. Progress in Photovoltaics: Research and Applications, 2012, 20, 526-533.	4.4	75
11	Cu₂ZnSnSe₄ absorbers processed from solution deposited metal salt precursors under different selenization conditions. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 1043-1048.	0.8	64
12	Present Status of Solutionâ€Processing Routes for Cu(In,Ga)(S,Se)₂ Solar Cell Absorbers. Advanced Energy Materials, 2021, 11, 2003743.	10.2	57
13	Solutionâ€Processed Lowâ€Bandgap CuIn(S,Se)₂ Absorbers for Highâ€Efficiency Singleâ€Junction and Monolithic Chalcopyriteâ€Perovskite Tandem Solar Cells. Advanced Energy Materials, 2018, 8, 1801254.	10.2	56
14	Formation mechanism of Cu2ZnSnSe4 absorber layers during selenization of solution deposited metal precursors. Journal of Alloys and Compounds, 2013, 567, 102-106.	2.8	44
15	Evolution of Morphology and Composition during Annealing and Selenization in Solution-Processed Cu₂ZnSn(S,Se)₄. Chemistry of Materials, 2017, 29, 9328-9339.	3.2	36
16	Liquidâ€seleniumâ€enhanced grain growth of nanoparticle precursor layers for CuInSe₂ solar cell absorbers. Progress in Photovoltaics: Research and Applications, 2015, 23, 1110-1119.	4.4	34
17	Thin film Cu(In,Ga)Se2 solar cells processed from solution pastes with polymethyl methacrylate binder. Thin Solid Films, 2011, 519, 7259-7263.	0.8	32
18	Solution-processed chalcopyriteâ€“perovskite tandem solar cells in bandgap-matched two- and four-terminal architectures. Journal of Materials Chemistry A, 2017, 5, 3214-3220.	5.2	23

#	Article	IF	Citations
19	Extrinsic Doping of Inkâ€Based Cu(In,Ga)(S,Se)₂â€Absorbers for Photovoltaic Applications. Advanced Energy Materials, 2022, 12, .	10.2	13
20	Large-grained Cu₂ZnSnS₄layers sintered from Sn-rich solution-deposited precursors. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 121-125.	0.8	8