Tayfun Gokmen

List of Publications by Year in descending order

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27 papers	7,643 citations	279798 23 h-index	580821 25 g-index
28 all docs	28 docs citations	28 times ranked	4608 citing authors

#	Article	IF	Citations
1	Device Characteristics of CZTSSe Thinâ€Film Solar Cells with 12.6% Efficiency. Advanced Energy Materials, 2014, 4, 1301465.	19.5	2,651
2	Beyond 11% Efficiency: Characteristics of Stateâ€ofâ€theâ€Art Cu₂ZnSn(S,Se)₄ Solar Cells. Advanced Energy Materials, 2013, 3, 34-38.	19.5	922
3	Device characteristics of a 10.1% hydrazineâ€processed Cu₂ZnSn(Se,S)₄ solar cell. Progress in Photovoltaics: Research and Applications, 2012, 20, 6-11.	8.1	720
4	Band tailing and efficiency limitation in kesterite solar cells. Applied Physics Letters, 2013, 103, .	3.3	576
5	Cu₂ZnSnSe₄ Thinâ€Film Solar Cells by Thermal Coâ€evaporation with 11.6% Efficiency and Improved Minority Carrier Diffusion Length. Advanced Energy Materials, 2015, 5, 1401372.	19.5	408
6	High Efficiency Cu₂ZnSn(S,Se)₄ Solar Cells by Applying a Double In₂S₃/CdS Emitter. Advanced Materials, 2014, 26, 7427-7431.	21.0	400
7	Solutionâ€processed Cu(In,Ga)(S,Se)₂ absorber yielding a 15.2% efficient solar cell. Progress in Photovoltaics: Research and Applications, 2013, 21, 82-87.	8.1	343
8	Low band gap liquid-processed CZTSe solar cell with 10.1% efficiency. Energy and Environmental Science, 2012, 5, 7060.	30.8	303
9	Electronic properties of the Cu2ZnSn(Se,S)4 absorber layer in solar cells as revealed by admittance spectroscopy and related methods. Applied Physics Letters, 2012, 100, .	3.3	194
10	Hydrazine-Processed Ge-Substituted CZTSe Solar Cells. Chemistry of Materials, 2012, 24, 4588-4593.	6.7	165
11	Electrodeposited Cu₂ZnSnSe₄ thin film solar cell with 7% power conversion efficiency. Progress in Photovoltaics: Research and Applications, 2014, 22, 58-68.	8.1	142
12	Impact of Nanoscale Elemental Distribution in Highâ€Performance Kesterite Solar Cells. Advanced Energy Materials, 2015, 5, 1402180.	19.5	120
13	Minority carrier diffusion length extraction in Cu₂ZnSn(Se,S)₄ solar cells. Journal of Applied Physics, 2013, 114, 114511.	2.5	91
14	Suns-VOC characteristics of high performance kesterite solar cells. Journal of Applied Physics, 2014, 116, .	2.5	90
15	Photoluminescence characterization of a high-efficiency Cu2ZnSnS4 device. Journal of Applied Physics, 2013, 114, .	2.5	84
16	Semi-empirical device model for Cu2ZnSn(S,Se)4 solar cells. Applied Physics Letters, 2014, 105, .	3.3	81
17	Understanding the relationship between Cu2ZnSn(S,Se)4 material properties and device performance. MRS Communications, 2014, 4, 159-170.	1.8	59
18	Back Contact Engineering for Increased Performance in Kesterite Solar Cells. Advanced Energy Materials, 2017, 7, 1602585.	19.5	54

#	Article	IF	Citations
19	The impact of sodium on the sub-bandgap states in CZTSe and CZTS. Applied Physics Letters, 2015, 106, .	3.3	51
20	Electronically active defects in the Cu2ZnSn(Se,S)4 alloys as revealed by transient photocapacitance spectroscopy. Applied Physics Letters, 2012, 101, 142106.	3.3	48
21	Relationship between Cu2ZnSnS4 quasi donor-acceptor pair density and solar cell efficiency. Applied Physics Letters, 2013, 103, .	3.3	44
22	Industrial perspectives on earth abundant, multinary thin film photovoltaics. Semiconductor Science and Technology, 2017, 32, 033004.	2.0	31
23	Unconventional kesterites: The quest to reduce band tailing in CZTSSe. Current Opinion in Green and Sustainable Chemistry, 2017, 4, 29-36.	5.9	29
24	Nanoscale Characterization of Back Surfaces and Interfaces in Thin-Film Kesterite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 17024-17033.	8.0	18
25	Analysis of loss mechanisms in Ag2ZnSnSe4 Schottky barrier photovoltaics. Journal of Applied Physics, 2017, 121, .	2.5	12
26	Device characteristics of high performance Cu<inf>2</inf>ZnSnS<inf>4</inf> solar cell. , 2012, , .		4
27	High intensity and integrated Suns-Voc characterization of high performance kesterite solar cells. , 2015, , .		1