

Markus Neuschitzer

List of Publications by Year in descending order

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41
papers

1,820
citations

304743

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docs citations

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times ranked

1777
citing authors

#	ARTICLE	IF	CITATIONS
1	Efficient Sb ₂ Se ₃ /CdS planar heterojunction solar cells in substrate configuration with (hk0) oriented Sb ₂ Se ₃ thin films. Solar Energy Materials and Solar Cells, 2020, 215, 110603.	6.2	28
2	Evaluation of AA-CVD deposited phase pure polymorphs of SnS for thin films solar cells. RSC Advances, 2019, 9, 14899-14909.	3.6	42
3	How small amounts of Ge modify the formation pathways and crystallization of kesterites. Energy and Environmental Science, 2018, 11, 582-593.	30.8	169
4	C_{sc}p>ZTS</sc>p>e solar cells developed on polymer substrates: Effects of low temperature processing. Progress in Photovoltaics: Research and Applications, 2018, 26, 55-68.	8.1	23
5	Revealing the beneficial effects of Ge doping on Cu₂ZnSnSe₄ thin film solar cells. Journal of Materials Chemistry A, 2018, 6, 11759-11772.	10.3	46
6	Chemically and morphologically distinct grain boundaries in Ge-doped Cu ₂ ZnSnSe ₄ solar cells revealed with STEM-EELS. Materials and Design, 2017, 122, 102-109.	7.0	16
7	Bifacial Kesterite Solar Cells on FTO Substrates. ACS Sustainable Chemistry and Engineering, 2017, 5, 11516-11524.	6.7	45
8	Towards In-reduced photovoltaic absorbers: Evaluation of zinc-blende CuInSe ₂ -ZnSe solid solution. Solar Energy Materials and Solar Cells, 2017, 160, 26-33.	6.2	15
9	Selenization of Cu ₂ ZnSnS ₄ thin films obtained by pneumatic spray pyrolysis. Journal of Analytical and Applied Pyrolysis, 2016, 120, 45-51.	5.5	11
10	<i>V</i>_{oc} Boosting and Grain Growth Enhancing Ge-Doping Strategy for Cu₂ZnSnSe₄ Photovoltaic Absorbers. Journal of Physical Chemistry C, 2016, 120, 9661-9670.	3.1	69
11	Cu₂ZnSnSe₄-Based Solar Cells With Efficiency Exceeding 10% by Adding a Superficial Ge Nanolayer: The Interaction Between Ge and Na. IEEE Journal of Photovoltaics, 2016, 6, 754-759.	2.5	28
12	Cu₂ZnSnSe₄solar cells with 10.6% efficiency through innovative absorber engineering with Ge superficial nanolayer. Progress in Photovoltaics: Research and Applications, 2016, 24, 1359-1367.	8.1	77
13	Bi-directional crystallization of Cu²ZnSnSe⁴ assisted with back/front Ge nanolayers., 2016, , .		1
14	The importance of back contact modification in Cu ₂ ZnSnSe ₄ solar cells: The role of a thin MoO ₂ layer. Nano Energy, 2016, 26, 708-721.	16.0	77
15	Temperature dependent electrical characterization of thin film Cu₂ZnSnSe₄solar cells. Journal Physics D: Applied Physics, 2016, 49, 085101.	2.8	21
16	Ultra-thin CdS for highly performing chalcogenides thin film based solar cells. Solar Energy Materials and Solar Cells, 2016, 158, 138-146.	6.2	31
17	Alkali doping strategies for flexible and light-weight Cu₂ZnSnSe₄ solar cells. Journal of Materials Chemistry A, 2016, 4, 1895-1907.	10.3	88
18	Impact of Na Dynamics at the Cu₂ZnSn(S,Se)₄/CdS Interface During Post Low Temperature Treatment of Absorbers. ACS Applied Materials & Interfaces, 2016, 8, 5017-5024.	8.0	72

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19	Effect of rapid thermal annealing on the Mo back contact properties for Cu ₂ ZnSnSe ₄ solar cells. Journal of Alloys and Compounds, 2016, 675, 158-162.	5.5	14
20	Towards high performance Cd-free CZTSe solar cells with a ZnS(O,OH) buffer layer: the influence of thiourea concentration on chemical bath deposition. Journal Physics D: Applied Physics, 2016, 49, 125602.	2.8	39
21	Raman scattering quantitative assessment of the anion composition ratio in Zn(O,S) layers for Cd-free chalcogenide-based solar cells. RSC Advances, 2016, 6, 24536-24542.	3.6	13
22	Systematic compositional changes and their influence on lattice and optoelectronic properties of Cu ₂ ZnSnSe ₄ kesterite solar cells. Solar Energy Materials and Solar Cells, 2016, 144, 579-585.	6.2	62
23	Efficient bifacial Cu ₂ ZnSnSe ₄ solar cells. , 2015, , .		3
24	Assessment of Chemical and Electronic Surface Properties of the Cu ₂ ZnSn(SSe) ₄ After Different Etching Procedures by Synchrotron-based Spectroscopies. Energy Procedia, 2015, 84, 8-16.	1.8	6
25	Cu ₂ ZnSnSe ₄ based solar cells prepared at high temperatures on Si/SiO ₂ sodium-free substrate. , 2015, , .		0
26	Large Efficiency Improvement in Cu ₂ ZnSnSe ₄ Solar Cells by Introducing a Superficial Ge Nanolayer. Advanced Energy Materials, 2015, 5, 1501070.	19.5	188
27	Temperature dependent electreflectance study of Cu ₂ ZnSnSe ₄ solar cells. Materials Science in Semiconductor Processing, 2015, 39, 251-254.	4.0	13
28	Large performance improvement in Cu ₂ ZnSnSe ₄ based solar cells by surface engineering with a nanometric Ge layer. , 2015, , .		4
29	1D and 2D numerical simulations of Cu ₂ ZnSnSe ₄ solar cells. , 2015, , .		3
30	Chemical bath deposition route for the synthesis of ultra-thin CuIn(S,Se) ₂ based solar cells. Thin Solid Films, 2015, 582, 74-78.	1.8	6
31	Optimization of CdS buffer layer for high-performance Cu ₂ ZnSnSe ₄ solar cells and the effects of light soaking: elimination of crossover and red kink. Progress in Photovoltaics: Research and Applications, 2015, 23, 1660-1667.	8.1	110
32	Advanced characterization of electrodeposition-based high efficiency solar cells: Non-destructive Raman scattering quantitative assessment of the anion chemical composition in Cu(In,Ga)(S,Se) ₂ absorbers. Solar Energy Materials and Solar Cells, 2015, 143, 212-217.	6.2	26
33	Complex Surface Chemistry of Kesterites: Cu/Zn Reordering after Low Temperature Postdeposition Annealing and Its Role in High Performance Devices. Chemistry of Materials, 2015, 27, 5279-5287.	6.7	99
34	Multiwavelength excitation Raman scattering analysis of bulk and two-dimensional MoS ₂ : vibrational properties of atomically thin MoS ₂ layers. 2D Materials, 2015, 2, 035006.	4.4	97
35	Zn-poor Cu ₂ ZnSnSe ₄ thin films and solar cell devices. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 109-115.	1.8	13
36	High V _{OC} ; Cu ₂ ZnSnSe ₄ /CdS:Cu based solar cell: Evidences of a metal-insulator-semiconductor (MIS) type hetero-junction. , 2014, , .		8

#	ARTICLE	IF	CITATIONS
37	Earth-abundant absorber based solar cells onto low weight stainless steel substrate. Solar Energy Materials and Solar Cells, 2014, 130, 347-353.	6.2	33
38	Impact of Sn(S,Se) Secondary Phases in Cu ₂ ZnSn(S,Se) ₄ Solar Cells: a Chemical Route for Their Selective Removal and Absorber Surface Passivation. ACS Applied Materials & Interfaces, 2014, 6, 12744-12751.	8.0	132
39	Photovoltaic properties of thin film heterojunctions with cupric oxide absorber. Journal of Renewable and Sustainable Energy, 2013, 5, .	2.0	58
40	X-ray based tools for the investigation of buried interfaces in organic electronic devices. Organic Electronics, 2013, 14, 479-487.	2.6	16
41	Grazing-incidence in-plane X-ray diffraction on ultra-thin organic films using standard laboratory equipment. Journal of Applied Crystallography, 2012, 45, 367-370.	4.5	18