Moises Espindola-Rodriguez

List of Publications by Year
in descending order

43 papers	1,875 citations	257101 24 h-index	360668 35 g-index
43 all docs	43 docs citations	43 times ranked	1739 citing authors

#	Article	IF	Citations
1	Enabling Roll-Processed and Flexible Organic Solar Cells Based On PffBT4T Through Temperature-Controlled Slot-Die Coating. IEEE Journal of Photovoltaics, 2022, , 1-9.	1.5	1
2	Cu2ZnSnS4 from oxide precursors grown by pulsed laser deposition for monolithic CZTS/Si tandem solar cells. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	1.1	3
3	Environmentally Friendly and Roll-Processed Flexible Organic Solar Cells Based on PM6:Y6. Frontiers in Nanotechnology, 2022, 4, .	2.4	1
4	Monolithic thin-film chalcogenideâ€"silicon tandem solar cells enabled by a diffusion barrier. Solar Energy Materials and Solar Cells, 2020, 207, 110334.	3.0	34
5	Persistent Double-Layer Formation in Kesterite Solar Cells: A Critical Review. ACS Applied Materials & Interfaces, 2020, 12, 39405-39424.	4.0	35
6	Flexible ITO-Free Roll-Processed Large-Area Nonfullerene Organic Solar Cells Based on P3HT:O-IDTBR. Physical Review Applied, 2020, 14, .	1.5	17
7	Efficient Sb2Se3/CdS planar heterojunction solar cells in substrate configuration with (hk0) oriented Sb2Se3 thin films. Solar Energy Materials and Solar Cells, 2020, 215, 110603.	3.0	28
8	Transition-Metal Oxides for Kesterite Solar Cells Developed on Transparent Substrates. ACS Applied Materials & Interfaces, 2020, 12, 33656-33669.	4.0	29
9	Nitride-Based Interfacial Layers for Monolithic Tandem Integration of New Solar Energy Materials on Si: The Case of CZTS. ACS Applied Energy Materials, 2020, 3, 4600-4609.	2.5	19
10	C<scp>ZTS</scp>e solar cells developed on polymer substrates: Effects of lowâ€temperature processing. Progress in Photovoltaics: Research and Applications, 2018, 26, 55-68.	4.4	23
11	Enhanced Heteroâ€junction Quality and Performance of Kesterite Solar Cells by Aluminum Hydroxide Nanolayers and Efficiency Limitation Revealed by Atomicâ€resolution Scanning Transmission Electron Microscopy. Solar Rrl, 2018, 3, 1800279.	3.1	6
12	Tailoring doping of efficient Sb2Se3 solar cells in substrate configuration by low temperature post deposition selenization process. , 2018, , .		2
13	Revealing the beneficial effects of Ge doping on Cu₂ZnSnSe₄ thin film solar cells. Journal of Materials Chemistry A, 2018, 6, 11759-11772.	5.2	46
14	Bifacial Kesterite Solar Cells on FTO Substrates. ACS Sustainable Chemistry and Engineering, 2017, 5, 11516-11524.	3.2	45
15	Transition Metal Oxides Nano-Layers as Efficient Back Electron Reflectors For Cu2ZnSnSe4 Solar Cells. , 2017, , .		0
16	CU2ZnSnSe4 Solar Cells onto Polyimide Substrates Fabricated at Low Temperature. , 2017, , .		0
17	CdS bi-layers for optimized CdS/Cu<inf>2</inf>ZnSnSe<inf>4</inf> solar cells. , 2016, , .		0
18	Selenization of Cu2ZnSnS4 thin films obtained by pneumatic spray pyrolysis. Journal of Analytical and Applied Pyrolysis, 2016, 120, 45-51.	2.6	11

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19	The importance of back contact modification in Cu2ZnSnSe4 solar cells: The role of a thin MoO2 layer. Nano Energy, 2016, 26, 708-721.	8.2	77
20	Alkali doping strategies for flexible and light-weight Cu₂ZnSnSe₄ solar cells. Journal of Materials Chemistry A, 2016, 4, 1895-1907.	5.2	88
21	Effect of rapid thermal annealing on the Mo back contact properties for Cu2ZnSnSe4 solar cells. Journal of Alloys and Compounds, 2016, 675, 158-162.	2.8	14
22	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.	1.3	39
23	Cu2ZnSnSe4 based solar cells prepared at high temperatures on Si/SiO2 sodium-free substrate. , 2015, , .		0
24	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.	3.2	99
25	Synthesis of CuIn(S,Se)2 quaternary alloys by screen printing and selenization-sulfurization sequential steps: Development of composition graded absorbers for low cost photovoltaic devices. Materials Chemistry and Physics, 2015, 160, 237-243.	2.0	9
26	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.	2.0	97
27	Cu₂ZnSnS₄absorber layers deposited by spray pyrolysis for advanced photovoltaic technology. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 126-134.	0.8	7
28	Electrical properties of sprayed Cu2ZnSnS4 thin films and its relation with secondary phase formation and solar cell performance. Solar Energy Materials and Solar Cells, 2015, 132, 557-562.	3.0	61
29	Route towards low cost-high efficiency second generation solar cells: current status and perspectives. Journal of Materials Science: Materials in Electronics, 2015, 26, 5562-5573.	1.1	38
30	Trap and recombination centers study in sprayed Cu2ZnSnS4 thin films. Journal of Applied Physics, 2014, 116, 134503.	1.1	25
31	Secondary phase formation in Znâ€rich Cu₂ZnSnSe₄â€based solar cells annealed in low pressure and temperature conditions. Progress in Photovoltaics: Research and Applications, 2014, 22, 479-487.	4.4	97
32	High V<inf>OC</inf> Cu<inf>2</inf>ZnSnSe<inf>4</inf>/CdS:Cu based solar cell: Evidences of a metal-insulator-semiconductor (MIS) type hetero-junction. , 2014, , .		8
33	Earth-abundant absorber based solar cells onto low weight stainless steel substrate. Solar Energy Materials and Solar Cells, 2014, 130, 347-353.	3.0	33
34	Impact of Sn(S,Se) Secondary Phases in Cu₂ZnSn(S,Se)₄ Solar Cells: a Chemical Route for Their Selective Removal and Absorber Surface Passivation. ACS Applied Materials & Interfaces, 2014, 6, 12744-12751.	4.0	132
35	ZnSe Etching of Znâ€Rich Cu₂ZnSnSe₄: An Oxidation Route for Improved Solarâ€Cell Efficiency. Chemistry - A European Journal, 2013, 19, 14814-14822.	1.7	118
36	Toward a high Cu2ZnSnS4 solar cell efficiency processed by spray pyrolysis method. Journal of Renewable and Sustainable Energy, 2013, 5, .	0.8	32

#	ARTICLE	IF	CITATIONS
37	Selective detection of secondary phases in Cu<inf>2</inf>ZnSn(S, Se)<inf>4</inf> based absorbers by pre-resonant Raman spectroscopy. , 2013, , .		12
38	Compositional optimization of photovoltaic grade Cu2ZnSnS4 films grown by pneumatic spray pyrolysis. Thin Solid Films, 2013, 535, 67-72.	0.8	66
39	On the formation mechanisms of Zn-rich Cu2ZnSnS4 films prepared by sulfurization of metallic stacks. Solar Energy Materials and Solar Cells, 2013, 112, 97-105.	3.0	200
40	Singleâ€Step Sulfoâ€Selenization Method to Synthesize Cu₂ZnSn(S_{<i>y</i>}Se_{1âˆ'<i>y</i>})₄ Absorbers from Metallic Stack Precursors. ChemPhysChem, 2013, 14, 1836-1843.	1.0	54
41	Secondary phases dependence on composition ratio in sprayed Cu2ZnSnS4 thin films and its impact on the high power conversion efficiency. Solar Energy Materials and Solar Cells, 2013, 117, 246-250.	3.0	116
42	Inhibiting the absorber/Mo-back contact decomposition reaction in Cu2ZnSnSe4 solar cells: the role of a ZnO intermediate nanolayer. Journal of Materials Chemistry A, 2013, 1, 8338.	5.2	151
43	Preparation of 4.8% efficiency Cu<inf>2</inf>ZnSnSe<inf>4</inf> based solar cell by a two step process. , 2012, , .		2