Jennifer P Teixeira

List of Publications by Year
in descending order

38 papers	804 citations	516710 16 h-index	501196 28 g-index
39 all docs	39 docs citations	39 times ranked	978 citing authors

#	Article	IF	Citations
1	Secondary crystalline phases identification in Cu $$_2$$ 2 ZnSnSe $$_4$$ 4 thin films: contributions from Raman scattering and photoluminescence. Journal of Materials Science, 2014, 49, 7425-7436.	3.7	99
2	CdS and Zn1â^'xSnxOy buffer layers for CIGS solar cells. Solar Energy Materials and Solar Cells, 2017, 159, 272-281.	6.2	56
3	A comparison between thin film solar cells made from coâ€evaporated CuIn_{1â€x}Ga_xSe₂ using a oneâ€stage process versus a threeâ€stage process. Progress in Photovoltaics: Research and Applications, 2015, 23, 470-478.	8.1	53
4	Passivation of Interfaces in Thin Film Solar Cells: Understanding the Effects of a Nanostructured Rear Point Contact Layer. Advanced Materials Interfaces, 2018, 5, 1701101.	3.7	50
5	Radiative transitions in highly doped and compensated chalcopyrites and kesterites: The case of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi mathvariant="normal">Cu</mml:mi></mml:mrow><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mrow><mml:mi mathvariant="normal">ZnSnS</mml:mi></mml:mrow><mml:mn>4</mml:mn></mml:msub></mml:math>. Physical Review B, 2014, 90, .	3.2	48
6	Optimization of post-deposition annealing in Cu 2 ZnSnS 4 thin film solar cells and its impact on device performance. Solar Energy Materials and Solar Cells, 2017, 170, 287-294.	6.2	48
7	Growth of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0020.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>Sb</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn> thin films by selenization of RF sputtered binary precursors. Solar Energy Materials and Solar Cells, 2018, 187, 219-226.	6.2	45
8	Effect of rapid thermal processing conditions on the properties of Cu2ZnSnS4 thin films and solar cell performance. Solar Energy Materials and Solar Cells, 2014, 126, 101-106.	6.2	42
9	Insulator Materials for Interface Passivation of Cu(In,Ga)Se₂ Thin Films. IEEE Journal of Photovoltaics, 2018, 8, 1313-1319.	2.5	39
10	Comparison of fluctuating potentials and donor-acceptor pair transitions in a Cu-poor Cu2ZnSnS4 based solar cell. Applied Physics Letters, 2014, 105, .	3.3	34
11	Influence of CdS and ZnSnO Buffer Layers on the Photoluminescence of Cu(In,Ga)Se $_2$ Thin Films. IEEE Journal of Photovoltaics, 2017, 7, 670-675.	2.5	23
12	Cd and Cu Interdiffusion in Cu(In, Ga)Se₂/CdS Hetero-Interfaces. IEEE Journal of Photovoltaics, 2017, 7, 858-863.	2.5	23
13	Slow-muon study of quaternary solar-cell materials: Single layers and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>p</mml:mi><mml:mo>â^'</mml:mo><mml:mi>n</mml:mi> junctions. Physical Review Materials, 2018, 2, .	2.4	23
14	Evidence of Limiting Effects of Fluctuating Potentials on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>V</mml:mi><mml:mi>OC</mml:mi></mml:msub></mml:math> of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Cu</mml:mi><mml:mo		

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19	Exploiting the Optical Limits of Thinâ€Film Solar Cells: A Review on Light Management Strategies in Cu(In,Ga)Se₂. Advanced Photonics Research, 2022, 3, .	3.6	15
20	Fluctuating potentials in GaAs:Si nanowires: critical reduction of the influence of polytypism on the electronic structure. Nanoscale, 2018, 10, 3697-3708.	5.6	13
21	Recombination Channels in Cu(In,Ga)Se₂ Thin Films: Impact of the Ga-Profile. Journal of Physical Chemistry C, 2020, 124, 12295-12304.	3.1	11
22	On the Importance of Joint Mitigation Strategies for Front, Bulk, and Rear Recombination in Ultrathin Cu(In,Ga)Se₂ Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 27713-27725.	8.0	11
23	Will ultrathin CIGS solar cells overtake the champion thin-film cells? Updated SCAPS baseline models reveal main differences between ultrathin and standard CIGS. Solar Energy Materials and Solar Cells, 2022, 243, 111792.	6.2	11
24	Encapsulation of Nanostructures in a Dielectric Matrix Providing Optical Enhancement in Ultrathin Solar Cells. Solar Rrl, 2020, 4, 2000310.	5.8	10
25	Muonium states in Cu₂ZnSnS₄solar cell material. Journal of Physics: Conference Series, 2014, 551, 012045.	0.4	8
26	Substrate and Mg doping effects in GaAs nanowires. Beilstein Journal of Nanotechnology, 2017, 8, 2126-2138.	2.8	7
27	Synthesis and formation mechanism of CuInSe₂nanowires by one-step self-catalysed evaporation growth. CrystEngComm, 2016, 18, 7147-7153.	2.6	6
28	Silicon Nanoparticle Films Infilled with Al₂O₃ Using Atomic Layer Deposition for Photosensor, Light Emission, and Photovoltaic Applications. ACS Applied Nano Materials, 2020, 3, 5033-5044.	5.0	6
29	Optical and structural investigation of Cu₂ZnSnS₄ based solar cells. Physica Status Solidi (B): Basic Research, 2016, 253, 2129-2135.	1.5	4
30	Rapid Shutdown with Panel Level Electronics-A suitable safety measure?. , 2017, , .		4
31	CuInSe₂ quantum dots grown by molecular beam epitaxy on amorphous SiO₂ surfaces. Beilstein Journal of Nanotechnology, 2019, 10, 1103-1111.	2.8	4
32	SiO_x Patterned Based Substrates Implemented in Cu(In,Ga)Se₂ Ultrathin Solar Cells: Optimum Thickness. IEEE Journal of Photovoltaics, 2022, 12, 954-961.	2.5	4
33	Growth of CuInSe<inf>2</inf> nanowires without external catalyst by molecular beam epitaxy. , 2016, , .		2
34	Characterization of the Interfacial Defect Layer in Chalcopyrite Solar Cells by Depthâ€Resolved Muon Spin Spectroscopy. Advanced Materials Interfaces, 0, , 2200374.	3.7	2
35	Process Induced Deflection and Stress on Encapsulated Solar Cells. , 2017, , .		1
36	SiO_x patterned based substrates implemented in Cu(In, Ga)Se₂ ultrathin solar cells: optimum thickness. , 2021, , .		1

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37	Influence of CdS and Zn<inf>x</inf>Sn<inf>1âˆ’x</inf>O<inf>y</inf> buffer layers on the photoluminescence of Cu(In, Ga)Se<inf>2</inf> thin films. , 2016, , .		0
38	X-ray Photoelectron Spectroscopy for Studying Passivation Architectures of Cu(In,Ga)Se2 Cells. , 2021, , .		0