

# Jacob Antonio Andrade Arvizu

## List of Publications by Year in descending order

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papers

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430442

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times ranked

892  
citing authors

#	ARTICLE	IF	CITATIONS
1	Controlling the Anionic Ratio and Gradient in Kesterite Technology. ACS Applied Materials & Interfaces, 2022, 14, 1177-1186.	4.0	16
2	Towards Low Cost and Sustainable Thin Film Thermoelectric Devices Based on Quaternary Chalcogenides. Advanced Functional Materials, 2022, 32, .	7.8	26
3	High efficiency Cu <sub>2</sub> ZnSnS <sub>4</sub> solar cells over FTO substrates and their CZTS/CdS interface passivation via thermal evaporation of Al <sub>2</sub> O <sub>3</sub> . Journal of Materials Chemistry C, 2021, 9, 5356-5361.	2.7	10
4	Insights into interface and bulk defects in a high efficiency kesterite-based device. Energy and Environmental Science, 2021, 14, 507-523.	15.6	48
5	Structural and vibrational properties of $\hat{\Gamma}$ - and $\hat{Y}$ -SnS polymorphs for photovoltaic applications. Acta Materialia, 2020, 183, 1-10.	3.8	43
6	Rear Band gap Grading Strategies on Sn-Ge-Alloyed Kesterite Solar Cells. ACS Applied Energy Materials, 2020, 3, 10362-10375.	2.5	29
7	Argon vs. air atmosphere in close spaced vapor transport deposited tin sulfide thin films. Solar Energy, 2020, 208, 227-235.	2.9	8
8	Investigation on limiting factors affecting Cu <sub>2</sub> ZnGeSe <sub>4</sub> efficiency: Effect of annealing conditions and surface treatment. Solar Energy Materials and Solar Cells, 2020, 216, 110701.	3.0	17
9	Transition-Metal Oxides for Kesterite Solar Cells Developed on Transparent Substrates. ACS Applied Materials & Interfaces, 2020, 12, 33656-33669.	4.0	29
10	Sputtered ZnSnO Buffer Layers for Kesterite Solar Cells. ACS Applied Energy Materials, 2020, 3, 1883-1891.	2.5	23
11	Efficient Se-Rich Sb <sub>2</sub> Se <sub>3</sub> /CdS Planar Heterojunction Solar Cells by Sequential Processing: Control and Influence of Se Content. Solar Rrl, 2020, 4, 2000141.	3.1	23
12	Is It Possible To Develop Complex Se Graded Band Gap Profiles in Kesterite-Based Solar Cells?. ACS Applied Materials & Interfaces, 2019, 11, 32945-32956.	4.0	42
13	Study and optimization of alternative MBE-deposited metallic precursors for highly efficient kesterite CZTSe:Ge solar cells. Progress in Photovoltaics: Research and Applications, 2019, 27, 779-788.	4.4	12
14	Cu content dependence of Cu <sub>2</sub> Zn(SnGe)Se <sub>4</sub> solar cells prepared by using sequential thermal evaporation technique of Cu/Sn/Cu/Zn/Ge stacked layers. Journal of Materials Science: Materials in Electronics, 2018, 29, 15363-15368.	1.1	6
15	Processing pathways of Cu <sub>2</sub> Zn(SnGe)Se <sub>4</sub> based solar cells: The role of CdS buffer layer. Materials Science in Semiconductor Processing, 2017, 67, 14-19.	1.9	9
16	Study of CBD-CdS/CZTGe solar cells using different Cd sources: behavior of devices as a MIS structure. Journal of Materials Science: Materials in Electronics, 2017, 28, 18706-18714.	1.1	4
17	Optimization of physical properties of spray-deposited Cu <sub>2</sub> ZnSnS <sub>4</sub> thin films for solar cell applications. Materials and Design, 2017, 114, 515-520.	3.3	41
18	Towards understanding poor performances in spray-deposited Cu <sub>2</sub> ZnSnS <sub>4</sub> thin film solar cells. Solar Energy Materials and Solar Cells, 2017, 159, 151-158.	3.0	54

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19	Assisted laser ablation: silver/gold nanostructures coated with silica. Applied Nanoscience (Switzerland), 2017, 7, 597-605.	1.6	15
20	Suited growth parameters inducing type of conductivity conversions on chemical spray pyrolysis synthesized SnS thin films. Journal of Analytical and Applied Pyrolysis, 2016, 121, 347-359.	2.6	25
21	Pressure induced directional transformations on close spaced vapor transport deposited SnS thin films. Materials and Design, 2016, 110, 878-887.	3.3	21
22	The role of buffer/kesterite interface recombination and minority carrier lifetime on kesterite thin film solar cells. Materials Research Express, 2016, 3, 095501.	0.8	57
23	Open-circuit voltage enhancement in CdS/Cu <sub>2</sub> ZnSnSe <sub>4</sub> -based thin film solar cells: A metal-insulator-semiconductor (MIS) performance. Solar Energy Materials and Solar Cells, 2016, 149, 204-212.	3.0	45
24	Loss mechanisms influence on Cu <sub>2</sub> ZnSnS <sub>4</sub> /CdS-based thin film solar cell performance. Solid-State Electronics, 2015, 111, 243-250.	0.8	64
25	SnS-based thin film solar cells: perspectives over the last 25 years. Journal of Materials Science: Materials in Electronics, 2015, 26, 4541-4556.	1.1	137
26	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
27	Towards a CdS/Cu <sub>2</sub> ZnSnS <sub>4</sub> solar cell efficiency improvement: A theoretical approach. Applied Physics Letters, 2014, 105, .	1.5	60