Anna B Morales-Vilches

List of Publications by Citations

17 papers	1,362 citations	11 h-index	17 g-index
17 ext. papers	2,020 ext. citations	12.9 avg, IF	4.32 L-index

#	Paper	IF	Citations
17	Monolithic perovskite/silicon tandem solar cell with >29% efficiency by enhanced hole extraction. *Science*, **2020**, 370, 1300-1309	33.3	438
16	A piperidinium salt stabilizes efficient metal-halide perovskite solar cells. *Science*, **2020**, 369, 96-102	33.3	231
15	Textured interfaces in monolithic perovskite/silicon tandem solar cells: advanced light management for improved efficiency and energy yield. *Energy and Environmental Science*, **2018**, 11, 3511-3523	25.4	194
14	Infrared Light Management Using a Nanocrystalline Silicon Oxide Interlayer in Monolithic Perovskite/Silicon Heterojunction Tandem Solar Cells with Efficiency above 25%. *Advanced Energy Materials*, **2019**, 9, 1803241	21.8	161
13	Highly efficient monolithic perovskite silicon tandem solar cells: analyzing the influence of current mismatch on device performance. *Sustainable Energy and Fuels*, **2019**, 3, 1995-2005	5.8	139
12	Proton Radiation Hardness of Perovskite Tandem Photovoltaics. *Joule*, **2020**, 4, 1054-1069	27.8	53
11	Effect of front TCO on the performance of rear-junction silicon heterojunction solar cells: Insights from simulations and experiments. *Solar Energy Materials and Solar Cells*, **2019**, 195, 339-345	6.4	42
10	ITO-Free Silicon Heterojunction Solar Cells With ZnO:Al/SiO2 Front Electrodes Reaching a Conversion Efficiency of 23%. *IEEE Journal of Photovoltaics*, **2019**, 9, 34-39	3.7	28
9	27.9% Efficient Monolithic Perovskite/Silicon Tandem Solar Cells on Industry Compatible Bottom Cells. *Solar Rrl*, **2021**, 5, 2100244	7.1	22
8	Influence of Silicon Layers on the Growth of ITO and AZO in Silicon Heterojunction Solar Cells. *IEEE Journal of Photovoltaics*, **2020**, 10, 703-709	3.7	14
7	Aluminum-Doped Zinc Oxide as Front Electrode for Rear Emitter Silicon Heterojunction Solar Cells with High Efficiency. *Applied Sciences (Switzerland)*, **2019**, 9, 862	2.6	12
6	Improved Surface Passivation by Wet Texturing, Ozone-Based Cleaning, and Plasma-Enhanced Chemical Vapor Deposition Processes for High-Efficiency Silicon Heterojunction Solar Cells. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900518	1.6	11
5	ZnO:Al/a-SiOx front contact for polycrystalline-silicon-on-oxide (POLO) solar cells **2018**,		5
4	A simple method with analytical model to extract heterojunction solar cell series resistance components and to extract the A-Si:H(i/p) to transparent conductive oxide contact resistivity **2019**,		5
3	Versatility of Nanocrystalline Silicon Films: from Thin-Film to Perovskite/c-Si Tandem Solar Cell Applications. *Coatings*, **2020**, 10, 759	2.9	3
2	Tailored Nanostructures for Light Management in Silicon Heterojunction Solar Cells. *Solar Rrl*, **2020**, 4, 2000484	7.1	2
1	Imaging of Bandtail States in Silicon Heterojunction Solar Cells: Nanoscopic Current Effects on Photovoltaics. *ACS Applied Nano Materials*, **2021**, 4, 2404-2412	5.6	2