Monica Morales-Masis

List of Publications by Citations

54 papers	1,622 citations	21 h-index	39 g-index
61 ext. papers	1,929 ext. citations	6.2 avg, IF	4.77 L-index

#	Paper	IF	Citations
54	Transparent Electrodes for Efficient Optoelectronics. *Advanced Electronic Materials*, **2017**, 3, 1600529	6.4	224
53	Sputtered rear electrode with broadband transparency for perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2015**, 141, 407-413	6.4	182
52	Low-Temperature High-Mobility Amorphous IZO for Silicon Heterojunction Solar Cells. *IEEE Journal of Photovoltaics*, **2015**, 5, 1340-1347	3.7	85
51	Zr-Doped Indium Oxide (IZRO) Transparent Electrodes for Perovskite-Based Tandem Solar Cells. *Advanced Functional Materials*, **2019**, 29, 1901741	15.6	83
50	An Indium-Free Anode for Large-Area Flexible OLEDs: Defect-Free Transparent Conductive Zinc Tin Oxide. *Advanced Functional Materials*, **2016**, 26, 384-392	15.6	76
49	Zinc tin oxide as high-temperature stable recombination layer for mesoscopic perovskite/silicon monolithic tandem solar cells. *Applied Physics Letters*, **2016**, 109, 233902	3.4	74
48	A passivating contact for silicon solar cells formed during a single firing thermal annealing. *Nature Energy*, **2018**, 3, 800-808	62.3	72
47	Conductance switching in Ag(2)S devices fabricated by in situ sulfurization. *Nanotechnology*, **2009**, 20, 095710	3.4	69
46	Interplay of annealing temperature and doping in hole selective rear contacts based on silicon-rich silicon-carbide thin films. *Solar Energy Materials and Solar Cells*, **2017**, 173, 18-24	6.4	62
45	Parasitic Absorption Reduction in Metal Oxide-Based Transparent Electrodes: Application in Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 17260-7	9.5	60
44	Observing □quantized□conductance steps in silver sulfide: Two parallel resistive switching mechanisms. *Journal of Applied Physics*, **2012**, 111, 014302	2.5	51
43	In Situ Hall Effect Monitoring of Vacuum Annealing of In□□H Thin Films. *Materials*, **2015**, 8, 561-574	3.5	37
42	c-texture versus a-texture low pressure metalorganic chemical vapor deposition ZnO films: Lower resistivity despite smaller grain size. *Thin Solid Films*, **2014**, 565, 1-6	2.2	34
41	Toward Annealing-Stable Molybdenum-Oxide-Based Hole-Selective Contacts For Silicon Photovoltaics. *Solar Rrl*, **2018**, 2, 1700227	7.1	31
40	Bulk and surface nucleation processes in Ag2S conductance switches. *Physical Review B*, **2011**, 84,	3.3	31
39	Highly Conductive and Broadband Transparent Zr-Doped In2O3 as Front Electrode for Solar Cells. *IEEE Journal of Photovoltaics*, **2018**, 8, 1202-1207	3.7	30
38	Environmental stability of high-mobility indium-oxide based transparent electrodes. *APL Materials*, **2015**, 3, 116105	5.7	30

37	Towards a quantitative description of solid electrolyte conductance switches. *Nanoscale*, **2010**, 2, 2275-80	7.7	28
36	Crystalline Silicon Solar Cells With Coannealed Electron- and Hole-Selective SiCx Passivating Contacts. *IEEE Journal of Photovoltaics*, **2018**, 8, 1478-1485	3.7	27
35	Hydrogen plasma treatment for improved conductivity in amorphous aluminum doped zinc tin oxide thin films. *APL Materials*, **2014**, 2, 096113	5.7	25
34	Enhancing the optoelectronic properties of amorphous zinc tin oxide by subgap defect passivation: A theoretical and experimental demonstration. *Physical Review B*, **2017**, 95,	3.3	23
33	Single-Source, Solvent-Free, Room Temperature Deposition of Black CsSnI3 Films. *Advanced Materials Interfaces*, **2020**, 7, 2000162	4.6	20
32	Metallization of Si heterojunction solar cells by nanosecond laser ablation and Ni-Cu plating. *Solar Energy Materials and Solar Cells*, **2017**, 159, 243-250	6.4	19
31	Pressing challenges of halide perovskite thin film growth. *APL Materials*, **2020**, 8, 110903	5.7	19
30	Increasing Polycrystalline Zinc Oxide Grain Size by Control of Film Preferential Orientation. *Crystal Growth and Design*, **2015**, 15, 5886-5891	3.5	18
29	Copper and Transparent-Conductor Reflectarray Elements on Thin-Film Solar Cell Panels. *IEEE Transactions on Antennas and Propagation*, **2014**, 62, 3813-3818	4.9	18
28	Tuning the Optoelectronic Properties of ZnO:Al by Addition of Silica for Light Trapping in High-Efficiency Crystalline Si Solar Cells. *Advanced Materials Interfaces*, **2016**, 3, 1500462	4.6	13
27	Tuning the porosity of zinc oxide electrodes: from dense to nanopillar films. *Materials Research Express*, **2015**, 2, 075006	1.7	12
26	Zr-doped indium oxide electrodes: Annealing and thickness effects on microstructure and carrier transport. *Physical Review Materials*, **2019**, 3,	3.2	12
25	Exploring co-sputtering of ZnO:Al and SiO2 for efficient electron-selective contacts on silicon solar cells. *Solar Energy Materials and Solar Cells*, **2019**, 194, 67-73	6.4	12
24	Scalable Pulsed Laser Deposition of Transparent Rear Electrode for Perovskite Solar Cells. *Advanced Materials Technologies*, **2021**, 6, 2000856	6.8	12
23	Tailoring the surface morphology of zinc oxide films for high-performance micromorph solar cells. *Solar Energy Materials and Solar Cells*, **2014**, 128, 378-385	6.4	11
22	Mechanical integrity of hybrid indium-free electrodes for flexible devices. *Organic Electronics*, **2016**, 35, 136-141	3.5	10
21	New Route for "Cold-Passivation" of Defects in Tin-Based Oxides. *Journal of Physical Chemistry C*, **2018**, 122, 17612-17620	3.8	10
20	Bridging the p-type transparent conductive materials gap: synthesis approaches for disperse valence band materials. *Journal of Photonics for Energy*, **2020**, 10, 1	1.2	10

19	Amorphous gallium oxide grown by low-temperature PECVD. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2018**, 36, 021518	2.9	8
18	Correlation between Vickers microhardness, porous layer thickness and porosity in p-type nanostructured silicon. *Applied Surface Science*, **2007**, 253, 7188-7191	6.7	8
17	Sputtered transparent electrodes for optoelectronic devices: Induced damage and mitigation strategies. *Matter*, **2021**, 4, 3549-3584	12.7	8
16	Carrier scattering mechanisms limiting mobility in hydrogen-doped indium oxide. *Journal of Applied Physics*, **2018**, 123, 245102	2.5	8
15	Pulsed Laser Deposition of CsAgBiBr: from Mechanochemically Synthesized Powders to Dry, Single-Step Deposition. *Chemistry of Materials*, **2021**, 33, 7417-7422	9.6	8
14	Direct Imaging of Dopant Distribution in Polycrystalline ZnO Films. *ACS Applied Materials & Interfaces*, **2017**, 9, 7241-7248	9.5	7
13	Quantum Point Contact Conduction **2016**, 197-224		7
12	Microchannel contacting of crystalline silicon solar cells. *Scientific Reports*, **2017**, 7, 9085	4.9	6
11	APCVD of dual layer transparent conductive oxides for photovoltaic applications. *Thin Solid Films*, **2015**, 590, 260-265	2.2	5
10	Origins of infrared transparency in highly conductive perovskite stannate BaSnO3. *APL Materials*, **2020**, 8, 061108	5.7	4
9	Determination of Vickers microhardness on porous silicon surfaces. *Thin Solid Films*, **2008**, 516, 1961-1963	2.2	3
8	Color Tuning of Electrochromic TiO Nanofibrous Layers Loaded with Metal and Metal Oxide Nanoparticles for Smart Colored Windows. *ACS Applied Nano Materials*, **2021**, 4, 8600-8610	5.6	3
7	Wafer-scale pulsed laser deposition of ITO for solar cells: reduced damage vs. interfacial resistance. *Materials Advances*,	3.3	3
6	ITO Top-Electrodes via Industrial-Scale PLD for Efficient Buffer-Layer-Free Semitransparent Perovskite Solar Cells. *Advanced Materials Technologies*,2101747	6.8	3
5	Optical Evaluation of the Rear Contacts of Crystalline Silicon Solar Cells by Coupled Electromagnetic and Statistical Ray-Optics Modeling. *IEEE Journal of Photovoltaics*, **2017**, 7, 718-726	3.7	2
4	High performance amorphous Zn-Sn-O: impact of composition, microstructure, and thermal treatments in the optoelectronic properties **2017**,		1
3	High Temperature Stability of Amorphous Zn-Sn-O Transparent Conductive Oxides Investigated by In Situ TEM and X-ray Diffraction. *Microscopy and Microanalysis*, **2016**, 22, 1582-1583	0.5	
2	The microstructure of ZnSnO and its correlation to electrical and optical properties **2016**, 368-369		

1	Corrections to Highly Conductive and Broadband Transparent Zr-Doped In2O3 as Front Electrode for Solar Cells *IEEE Journal of Photovoltaics*, **2019**, 9, 1155-1155	3.7