# Monica Morales-Masis

## List of Publications by Year in Descending Order

**Source:** https://exaly.com/author-pdf/7367704/monica-morales-masis-publications-by-year.pdf
**Version:** 2024-04-20



The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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

| # | Paper | IF | Citations |
|---|---|---|---|
| 54 | Sputtered transparent electrodes for optoelectronic devices: Induced damage and mitigation strategies. *Matter*, **2021**, 4, 3549-3584 | 12.7 | 8 |
| 53 | Scalable Pulsed Laser Deposition of Transparent Rear Electrode for Perovskite Solar Cells. *Advanced Materials Technologies*, **2021**, 6, 2000856 | 6.8 | 12 |
| 52 | 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 |
| 51 | Pulsed Laser Deposition of CsAgBiBr: from Mechanochemically Synthesized Powders to Dry, Single-Step Deposition. *Chemistry of Materials*, **2021**, 33, 7417-7422 | 9.6 | 8 |
| 50 | Single-Source, Solvent-Free, Room Temperature Deposition of Black CsSnI3 Films. *Advanced Materials Interfaces*, **2020**, 7, 2000162 | 4.6 | 20 |
| 49 | Origins of infrared transparency in highly conductive perovskite stannate BaSnO3. *APL Materials*, **2020**, 8, 061108 | 5.7 | 4 |
| 48 | 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 |
| 47 | Pressing challenges of halide perovskite thin film growth. *APL Materials*, **2020**, 8, 110903 | 5.7 | 19 |
| 46 | Zr-Doped Indium Oxide (IZRO) Transparent Electrodes for Perovskite-Based Tandem Solar Cells. *Advanced Functional Materials*, **2019**, 29, 1901741 | 15.6 | 83 |
| 45 | Zr-doped indium oxide electrodes: Annealing and thickness effects on microstructure and carrier transport. *Physical Review Materials*, **2019**, 3, | 3.2 | 12 |
| 44 | 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 |
| 43 | 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 | |
| 42 | Toward Annealing-Stable Molybdenum-Oxide-Based Hole-Selective Contacts For Silicon Photovoltaics. *Solar Rrl*, **2018**, 2, 1700227 | 7.1 | 31 |
| 41 | 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 |
| 40 | 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 |
| 39 | New Route for "Cold-Passivation" of Defects in Tin-Based Oxides. *Journal of Physical Chemistry C*, **2018**, 122, 17612-17620 | 3.8 | 10 |
| 38 | Crystalline Silicon Solar Cells With Coannealed Electron- and Hole-Selective SiCx Passivating Contacts. *IEEE Journal of Photovoltaics*, **2018**, 8, 1478-1485 | 3.7 | 27 |

| | | | |
|---|---|---|---|
| 37 | A passivating contact for silicon solar cells formed during a single firing thermal annealing. *Nature Energy*, **2018**, 3, 800-808 | 62.3 | 72 |
| 36 | Carrier scattering mechanisms limiting mobility in hydrogen-doped indium oxide. *Journal of Applied Physics*, **2018**, 123, 245102 | 2.5 | 8 |
| 35 | Direct Imaging of Dopant Distribution in Polycrystalline ZnO Films. *ACS Applied Materials & Interfaces*, **2017**, 9, 7241-7248 | 9.5 | 7 |
| 34 | 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 |
| 33 | High performance amorphous Zn-Sn-O: impact of composition, microstructure, and thermal treatments in the optoelectronic properties **2017**, | | 1 |
| 32 | Transparent Electrodes for Efficient Optoelectronics. *Advanced Electronic Materials*, **2017**, 3, 1600529 | 6.4 | 224 |
| 31 | Microchannel contacting of crystalline silicon solar cells. *Scientific Reports*, **2017**, 7, 9085 | 4.9 | 6 |
| 30 | 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 |
| 29 | 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 |
| 28 | 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 |
| 27 | Quantum Point Contact Conduction **2016**, 197-224 | | 7 |
| 26 | 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 | |
| 25 | 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 |
| 24 | Mechanical integrity of hybrid indium-free electrodes for flexible devices. *Organic Electronics*, **2016**, 35, 136-141 | 3.5 | 10 |
| 23 | 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 |
| 22 | The microstructure of ZnSnO and its correlation to electrical and optical properties **2016**, 368-369 | | |
| 21 | 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 |
| 20 | 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 |

| | | | |
|---|---|---|---|
| 19 | Sputtered rear electrode with broadband transparency for perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2015**, 141, 407-413 | 6.4 | 182 |
| 18 | In Situ Hall Effect Monitoring of Vacuum Annealing of In□O□:H Thin Films. *Materials*, **2015**, 8, 561-574 | 3.5 | 37 |
| 17 | Increasing Polycrystalline Zinc Oxide Grain Size by Control of Film Preferential Orientation. *Crystal Growth and Design*, **2015**, 15, 5886-5891 | 3.5 | 18 |
| 16 | APCVD of dual layer transparent conductive oxides for photovoltaic applications. *Thin Solid Films*, **2015**, 590, 260-265 | 2.2 | 5 |
| 15 | Low-Temperature High-Mobility Amorphous IZO for Silicon Heterojunction Solar Cells. *IEEE Journal of Photovoltaics*, **2015**, 5, 1340-1347 | 3.7 | 85 |
| 14 | Tuning the porosity of zinc oxide electrodes: from dense to nanopillar films. *Materials Research Express*, **2015**, 2, 075006 | 1.7 | 12 |
| 13 | Environmental stability of high-mobility indium-oxide based transparent electrodes. *APL Materials*, **2015**, 3, 116105 | 5.7 | 30 |
| 12 | 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 |
| 11 | 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 |
| 10 | 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 |
| 9 | Hydrogen plasma treatment for improved conductivity in amorphous aluminum doped zinc tin oxide thin films. *APL Materials*, **2014**, 2, 096113 | 5.7 | 25 |
| 8 | Observing □quantized□conductance steps in silver sulfide: Two parallel resistive switching mechanisms. *Journal of Applied Physics*, **2012**, 111, 014302 | 2.5 | 51 |
| 7 | Bulk and surface nucleation processes in Ag2S conductance switches. *Physical Review B*, **2011**, 84, | 3.3 | 31 |
| 6 | Towards a quantitative description of solid electrolyte conductance switches. *Nanoscale*, **2010**, 2, 2275-80 | 7.7 | 28 |
| 5 | Conductance switching in Ag(2)S devices fabricated by in situ sulfurization. *Nanotechnology*, **2009**, 20, 095710 | 3.4 | 69 |
| 4 | Determination of Vickers microhardness on porous silicon surfaces. *Thin Solid Films*, **2008**, 516, 1961-1963 | 2.2 | 3 |
| 3 | Correlation between Vickers microhardness, porous layer thickness and porosity in p-type nanostructured silicon. *Applied Surface Science*, **2007**, 253, 7188-7191 | 6.7 | 8 |
| 2 | Wafer-scale pulsed laser deposition of ITO for solar cells: reduced damage vs. interfacial resistance. *Materials Advances*, | 3.3 | 3 |

| | | | |
|---|---|---|---|
| 1 | ITO Top-Electrodes via Industrial-Scale PLD for Efficient Buffer-Layer-Free Semitransparent Perovskite Solar Cells. *Advanced Materials Technologies*,2101747 | 6.8 | 3 |