

# Marco Barbato

## List of Publications by Year in descending order

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Version: 2024-02-01

30  
papers

385  
citations

759233

12  
h-index

839539

18  
g-index

30  
all docs

30  
docs citations

30  
times ranked

470  
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparison of high efficiency flexible CdTe solar cells on different substrates at low temperature deposition. <i>Solar Energy</i> , 2016, 139, 13-18.	6.1	39
2	Influence of Shunt Resistance on the Performance of an Illuminated String of Solar Cells: Theory, Simulation, and Experimental Analysis. <i>IEEE Transactions on Device and Materials Reliability</i> , 2014, 14, 942-950.	2.0	33
3	Demonstration of Field- and Power-Dependent ESD Failure in AlGaIn/GaN RF HEMTs. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 2830-2836.	3.0	32
4	CdTe solar cells: technology, operation and reliability. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 333002.	2.8	25
5	Inactivating SARS-CoV-2 Using 275 nm UV-C LEDs through a Spherical Irradiation Box: Design, Characterization and Validation. <i>Materials</i> , 2021, 14, 2315.	2.9	24
6	A physical-based equivalent circuit model for an organic/electrolyte interface. <i>Organic Electronics</i> , 2016, 35, 176-185.	2.6	22
7	Analysis of magnesium zinc oxide layers for high efficiency CdTe devices. <i>Thin Solid Films</i> , 2019, 672, 22-25.	1.8	19
8	Study of the actuation speed, bounces occurrences, and contact reliability of ohmic RF-MEMS switches. <i>Microelectronics Reliability</i> , 2010, 50, 1604-1608.	1.7	17
9	Local Shunting in Multicrystalline Silicon Solar Cells: Distributed Electrical Simulations and Experiments. <i>IEEE Journal of Photovoltaics</i> , 2014, 4, 40-47.	2.5	17
10	A new method for CdSexTe1-x band grading for high efficiency thin-absorber CdTe solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2021, 226, 111081.	6.2	17
11	A Combined Mechanical and Electrical Characterization Procedure for Investigating the Dynamic Behavior of RF-MEMS Switches. <i>IEEE Transactions on Device and Materials Reliability</i> , 2014, 14, 13-20.	2.0	12
12	Fast System to measure the dynamic onâ€resistance of onâ€wafer 600ÂV normally off GaN HEMTs in hardâ€switching application conditions. <i>IET Power Electronics</i> , 2020, 13, 2390-2397.	2.1	12
13	A Novel Technique to Alleviate the Stiction Phenomenon in Radio Frequency Microelectromechanical Switches. <i>IEEE Electron Device Letters</i> , 2015, 36, 177-179.	3.9	11
14	Transient evolution of mechanical and electrical effects in microelectromechanical switches subjected to long-term stresses. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 3825-3831.	3.0	10
15	Thermal and electrical investigation of the reverse bias degradation of silicon solar cells. <i>Microelectronics Reliability</i> , 2013, 53, 1809-1813.	1.7	9
16	Effects of constant voltage and constant current stress in PCBM:P3HT solar cells. <i>Microelectronics Reliability</i> , 2015, 55, 1795-1799.	1.7	9
17	Viscoelasticity Recovery Mechanism in Radio Frequency Microelectromechanical Switches. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 3620-3626.	3.0	9
18	Preconditioning Procedure for the Better Estimation of the Long-Term Lifetime in Microelectromechanical Switches. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 1274-1280.	3.0	9

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19	Reliability improvement in microstructures by reducing the impact velocity through electrostatic force modulation. <i>Microelectronics Reliability</i> , 2012, 52, 1808-1811.	1.7	8
20	A new measurement set-up to investigate the charge trapping phenomena in RF MEMS packaged switches. , 2013, , .		7
21	ESD on GaN-based LEDs: An analysis based on dynamic electroluminescence measurements and current waveforms. <i>Microelectronics Reliability</i> , 2014, 54, 2138-2141.	1.7	7
22	Investigation methods and approaches for alleviating charge trapping phenomena in ohmic RF-MEMS switches submitted to cycling test. <i>Microelectronics Reliability</i> , 2011, 51, 1887-1891.	1.7	6
23	A comprehensive study of MEMS behavior under EOS/ESD events: Breakdown characterization, dielectric charging, and realistic cures. <i>Journal of Electrostatics</i> , 2011, 69, 547-553.	1.9	6
24	Influence of CdTe solar cell properties on stability at high temperatures. <i>Microelectronics Reliability</i> , 2020, 114, 113847.	1.7	6
25	Double Control Gate Field-Effect Transistor for Area Efficient and Cost Effective Applications. <i>IEEE Electron Device Letters</i> , 2014, 35, 1073-1075.	3.9	5
26	Difluorochloromethane treated thin CdS buffer layers for improved CdTe solar cells. <i>Thin Solid Films</i> , 2019, 672, 7-13.	1.8	4
27	Thermal and electrical characterization of catastrophic degradation of silicon solar cells submitted to reverse current stress. , 2013, , .		3
28	ESD characterization of multi-chip RGB LEDs. <i>Microelectronics Reliability</i> , 2013, 53, 1510-1513.	1.7	3
29	ESD degradation and robustness of RGB LEDs and modules: An investigation based on combined electrical and optical measurements. <i>Microelectronics Reliability</i> , 2014, 54, 1143-1149.	1.7	3
30	Electrical, optical characterization and degradation of Cu(InGa)Se <sub>2</sub> devices with fluorine-doped tin oxide back contact. <i>Microelectronics Reliability</i> , 2021, 126, 114260.	1.7	1