Viviana Mulloni

List of Publications by Citations

62 papers	838 citations	16 h-index	27 g-index
70 ext. papers	954 ext. citations	2.5 avg, IF	4.23 L-index

#	Paper	IF	Citations
62	Porous silicon microcavities as optical chemical sensors. *Applied Physics Letters*, **2000**, 76, 2523-2525	3.4	172
61	All porous silicon microcavities: growth and physics. *Journal of Luminescence*, **1998**, 80, 43-52	3.8	46
60	Controlling stress and stress gradient during the release process in gold suspended micro-structures. *Sensors and Actuators A: Physical*, **2010**, 162, 93-99	3.9	43
59	A comparative study of the refractive index of silk protein thin films towards biomaterial based optical devices. *Optical Materials*, **2018**, 78, 407-414	3.3	37
58	Bulk and surface contributions to second-order susceptibility in crystalline and porous silicon by second-harmonic generation. *Surface Science*, **2001**, 481, 105-112	1.8	36
57	Chipless RFID Sensors for the Internet of Things: Challenges and Opportunities. *Sensors*, **2020**, 20,	3.8	35
56	Development of a gas chromatography silicon-based microsystem in clinical diagnostics. *Biosensors and Bioelectronics*, **2005**, 20, 1968-76	11.8	33
55	XPS and SIMS investigation on the role of nitrogen in Si nanocrystals formation. *Surface Science*, **2005**, 585, 137-143	1.8	29
54	Coupling of electrons to intermolecular phonons in molecular charge transfer dimers: A resonance Raman study. *Journal of Chemical Physics*, **1995**, 103, 2795-2809	3.9	29
53	Ultrafast electron transfer reactions initiated by excited CT states of push–pull perylenes. *Chemical Physics*, **2002**, 275, 167-183	2.3	26
52	Fabrication of Nanoscale Patternable Films of Silk Fibroin Using Benign Solvents. *Macromolecular Materials and Engineering*, **2017**, 302, 1700110	3.9	25
51	Elaboration, characterization and aging effects of porous silicon microcavities formed on lightly p-type doped substrates. *Semiconductor Science and Technology*, **1999**, 14, 1052-1059	1.8	23
50	A simple analytical method for residual stress measurement on suspended MEM structures using surface profilometry. *Journal of Micromechanics and Microengineering*, **2013**, 23, 025025	2	19
49	Porous Silicon Microcavities as Optical and Electrical Chemical Sensors. *Physica Status Solidi A*, **2000**, 182, 479-484		18
48	A flexible technology platform for the fabrication of RF-MEMS devices **2011**,		17
47	Electromechanical characterization of low actuation voltage RF MEMS capacitive switches based on DC CV measurements. *Microelectronic Engineering*, **2007**, 84, 1358-1362	2.5	17
46	Influence of temperature on the actuation voltage of RF-MEMS switches. *Microelectronics Reliability*, **2013**, 53, 706-711	1.2	14

45	RF-MEMS switch design optimization for long-term reliability. *Analog Integrated Circuits and Signal Processing*, **2014**, 78, 323-332	1.2	14
44	Porous silicon optical devices and Si/SiO2 quantum wells: Recent results. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **2000**, 80, 705-718		13
43	Precise dot inkjet printing thought multifactorial statistical optimization of the piezoelectric actuator waveform. *Flexible and Printed Electronics*, **2020**, 5, 045002	3.1	13
42	An equivalent-circuit model for shunt-connected coplanar microelectromechanical system switches for high frequency applications. *Journal of Applied Physics*, **2008**, 104, 084514	2.5	12
41	Electrochemically oxidised porous silicon microcavities. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2000**, 69-70, 59-65	3.1	12
40	Temperature as an accelerating factor for lifetime estimation of RF-MEMS switches. *Microelectronic Engineering*, **2016**, 160, 63-67	2.5	10
39	Electrical and mechanical properties of layered gold□hromium thin films for ohmic contacts in RF-MEMS switches. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2009**, 163, 199-203	3.1	10
38	Cycling reliability of RF-MEMS switches with Gold□latinum multilayers as contact material. *Microsystem Technologies*, **2017**, 23, 3843-3850	1.7	9
37	RF-MEMS packaging by using quartz caps and epoxy polymers. *Microsystem Technologies*, **2015**, 21, 1941-1948	1.7	8
36	Clear evidence of mechanical deformation in RF-MEMS switches during prolonged actuation. *Journal of Micromechanics and Microengineering*, **2014**, 24, 075003	2	8
35	Optical characterization of reverse biased porous silicon light emitting diode. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2000**, 69-70, 114-117	3.1	8
34	Reliable response of RF MEMS LTCC packaged switches after mechanical and thermal stress. *Microsystem Technologies*, **2016**, 22, 495-501	1.7	8
33	. *IEEE Transactions on Electron Devices*, **2015**, 62, 3825-3831	2.9	7
32	Gold-based thin multilayers for ohmic contacts in RF-MEMS switches. *Microsystem Technologies*, **2012**, 18, 965-971	1.7	7
31	Reliability of RF MEMS capacitive and ohmic switches for space redundancy configurations. *Microsystem Technologies*, **2015**, 21, 1903-1913	1.7	6
30	Preconditioning Procedure for the Better Estimation of the Long-Term Lifetime in Microelectromechanical Switches. *IEEE Transactions on Electron Devices*, **2016**, 63, 1274-1280	2.9	6
29	Broadband RF-MEMS Based SPDT **2006**,		6
28	Aluminum doped zinc oxide coatings at low temperature by atmospheric pressure plasma jet. *Thin Solid Films*, **2020**, 708, 138118	2.2	5

27	Continuous extraction of proteins with a miniaturized electrical split-flow cell equipped with suspended splitters fabricated by dry film lamination. *Sensors and Actuators B: Chemical*, **2018**, 273, 627-634	8.5	5
26	Light emitting diodes based on anodically oxidized silicon/porous silicon heterojunction. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2000**, 69-70, 109-113	3.1	5
25	A Preliminary Microwave Frequency Characterization of a Nafion-Based Chipless Sensor for Humidity Monitoring **2020**,		5
24	Broadband RF-MEMS Based SPDT **2006**,		4
23	Improving the Sensitivity of Chipless RFID Sensors: The Case of a Low-Humidity Sensor. *Electronics (Switzerland)*, **2021**, 10, 2861	2.6	4
22	Long-term lifetime prediction for RF-MEMS switches. *Journal of Micromechanics and Microengineering*, **2016**, 26, 074004	2	4
21	Influence of fabrication tolerances on the reliability of RF-MEMS capacitive switches **2015**,		3
20	An accelerated thermal cycling test for RF-MEMS switches. *Microsystem Technologies*, **2016**, 22, 1585-1592	1.7	3
19	Electro-thermal analysis of RF MEM capacitive switches for high-power applications **2010**,		3
18	Design and characterization of an active recovering mechanism for high-performance RF MEMS redundancy switches. *International Journal of Microwave and Wireless Technologies*, **2011**, 3, 539-546	0.8	3
17	Effects of the mixing of charge transfer and molecular excitations on the resonance Raman properties of symmetric radical dimers. *Chemical Physics Letters*, **1996**, 263, 331-337	2.5	3
16	MEMS packaging by using dry film resist **2015**,		2
15	Cycling reliability of RF-MEMS switches with gold-platinum multilayers as contact material **2015**,		2
14	Reliability of capacitive RF MEMS switches subjected to repetitive impact cycles at different temperatures **2014**,		2
13	Effect of the substrate on RF power-handling capability of micro-electromechanical capacitive switches. *Solid-State Electronics*, **2011**, 65-66, 219-225	1.7	2
12	Circuital Modelling of Shunt Capacitive RF MEMS Switches **2008**,		2
11	A dry film technology for the manufacturing of 3-D multi-layered microstructures and buried channels for lab-on-chip. *Microsystem Technologies*, **2019**, 25, 3219-3233	1.7	2
10	Terahertz microsensor for biomedical applications **2011**,		1

List of Publications

9	Design of an electrophoretic module for protein separation **2016**,		1
8	Wet release technology for bulk-silicon resonators fabrication on silicon-on-insulator substrate. *Journal of Micro/ Nanolithography, MEMS, and MOEMS*, **2013**, 12, 041206	0.7	0
7	Chipless RFID Sensing System for Precise Ethanol Determination in Alcoholic Solutions. *Electronics (Switzerland)*, **2022**, 11, 735	2.6	0
6	Instability and Drift Phenomena in Switching RF-MEMS Microsystems. *Actuators*, **2019**, 8, 15	2.4	
5	A Miniaturized SPLITT System for On-Line Protein Separation. *Proceedings (mdpi)*, **2017**, 1, 527	0.3	
4	Nitrogen Influence on the Photoluminescence Properties of Silicon Nanocrystals. *Materials Research Society Symposia Proceedings*, **2006**, 958, 1		
3	Near-field optical investigation of porous silicon samples. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **2000**, 80, 611-621		
2	DESIGN OF AN ULTRA WIDE BAND ANTENNA BASED ON A SIW RESONATOR. *Progress in Electromagnetics Research C*, **2020**, 103, 187-197	0.9	
1	A Continuous Flow Microelectrophoretic Module for Protein Separation. *Lecture Notes in Electrical Engineering*, **2018**, 107-113	0.2	