# Viviana Mulloni

List of Publications by Year
in descending order



| 69 | 1,089 | 471509 17 | 454955 30 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 70 | 70 | 70 | 1098 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Porous silicon microcavities as optical chemical sensors. Applied Physics Letters, 2000, 76, 2523-2525. | 3.3 | 197 |
| 2 | Chipless RFID Sensors for the Internet of Things: Challenges and Opportunities. Sensors, 2020, 20, 2135. | 3.8 | 75 |
| 3 | All porous silicon microcavities: growth and physics. Journal of Luminescence, 1998, 80, 43-52. | 3.1 | 54 |
| 4 | Controlling stress and stress gradient during the release process in gold suspended micro-structures. Sensors and Actuators A: Physical, 2010, 162, 93-99. | 4.1 | 49 |
| 5 | A comparative study of the refractive index of silk protein thin films towards biomaterial based optical devices. Optical Materials, 2018, 78, 407-414. | 3.6 | 47 |
| 6 | Bulk and surface contributions to second-order susceptibility in crystalline and porous silicon by second-harmonic generation. Surface Science, 2001, 481, 105-112. | 1.9 | 43 |
| 7 | Development of a gas chromatography silicon-based microsystem in clinical diagnostics. Biosensors and Bioelectronics, 2005, 20, 1968-1976. | 10.1 | 35 |
| 8 | Fabrication of Nanoscale Patternable Films of Silk Fibroin Using Benign Solvents. Macromolecular Materials and Engineering, 2017, 302, 1700110. | 3.6 | 33 |
| 9 | XPS and SIMS investigation on the role of nitrogen in Si nanocrystals formation. Surface Science, 2005, 585, 137-143. | 1.9 | 32 |
| 10 | Ultrafast electron transfer reactions initiated by excited CT states of pushâ€“pull perylenes. Chemical Physics, 2002, 275, 167-183. | 1.9 | 31 |
| 11 | Coupling of electrons to intermolecular phonons in molecular charge transfer dimers: A resonance Raman study. Journal of Chemical Physics, 1995, 103, 2795-2809. | 3.0 | 29 |
| 12 | Elaboration, characterization and aging effects of porous silicon microcavities formed on lightly p-type doped substrates. Semiconductor Science and Technology, 1999, 14, 1052-1059. | 2.0 | 28 |
| 13 | A flexible technology platform for the fabrication of RF-MEMS devices. , 2011, , . | | 26 |
| 14 | A simple analytical method for residual stress measurement on suspended MEM structures using surface profilometry. Journal of Micromechanics and Microengineering, 2013, 23, 025025. | 2.6 | 24 |
| 15 | An equivalent-circuit model for shunt-connected coplanar microelectromechanical system switches for high frequency applications. Journal of Applied Physics, 2008, 104, 084514. | 2.5 | 21 |
| 16 | Porous Silicon Microcavities as Optical and Electrical Chemical Sensors. Physica Status Solidi A, 2000, 182, 479-484. | 1.7 | 20 |
| 17 | Electromechanical characterization of low actuation voltage RF MEMS capacitive switches based on DC CV measurements. Microelectronic Engineering, 2007, 84, 1358-1362. | 2.4 | 18 |
| 18 | Influence of temperature on the actuation voltage of RF-MEMS switches. Microelectronics Reliability, 2013, 53, 706-711. | 1.7 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | RF-MEMS switch design optimization for long-term reliability. Analog Integrated Circuits and Signal Processing, 2014, 78, 323-332. | 1.4 | 17 |
| 20 | Porous silicon optical devices and Si/SiO<sub>2</sub>quantum wells: Recent results. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2000, 80, 705-718. | 0.6 | 16 |
| 21 | Precise dot inkjet printing thought multifactorial statistical optimization of the piezoelectric actuator waveform. Flexible and Printed Electronics, 2020, 5, 045002. | 2.7 | 16 |
| 22 | Broadband RF-MEMS Based SPDT. , 2006, , . | | 15 |
| 23 | Temperature as an accelerating factor for lifetime estimation of RF-MEMS switches. Microelectronic Engineering, 2016, 160, 63-67. | 2.4 | 14 |
| 24 | A Preliminary Microwave Frequency Characterization of a Nafion-Based Chipless Sensor for Humidity Monitoring. , 2020, , . | | 13 |
| 25 | Improving the Sensitivity of Chipless RFID Sensors: The Case of a Low-Humidity Sensor. Electronics (Switzerland), 2021, 10, 2861. | 3.1 | 13 |
| 26 | Electrochemically oxidised porous silicon microcavities. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 69-70, 59-65. | 3.5 | 12 |
| 27 | Reliable response of RF MEMS LTCC packaged switches after mechanical and thermal stress. Microsystem Technologies, 2016, 22, 495-501. | 2.0 | 12 |
| 28 | Cycling reliability of RF-MEMS switches with Goldâ€“Platinum multilayers as contact material. Microsystem Technologies, 2017, 23, 3843-3850. | 2.0 | 12 |
| 29 | Electrical and mechanical properties of layered goldâ€“chromium thin films for ohmic contacts in RF-MEMS switches. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 163, 199-203. | 3.5 | 10 |
| 30 | Gold-based thin multilayers for ohmic contacts in RF-MEMS switches. Microsystem Technologies, 2012, 18, 965-971. | 2.0 | 10 |
| 31 | Clear evidence of mechanical deformation in RF-MEMS switches during prolonged actuation. Journal of Micromechanics and Microengineering, 2014, 24, 075003. | 2.6 | 10 |
| 32 | Transient evolution of mechanical and electrical effects in microelectromechanical switches subjected to long-term stresses. IEEE Transactions on Electron Devices, 2015, 62, 3825-3831. | 3.0 | 10 |
| 33 | Reliability of RF MEMS capacitive and ohmic switches for space redundancy configurations. Microsystem Technologies, 2015, 21, 1903-1913. | 2.0 | 10 |
| 34 | Broadband RF-MEMS Based SPDT. , 2006, , . | | 9 |
| 35 | RF-MEMS packaging by using quartz caps and epoxy polymers. Microsystem Technologies, 2015, 21, 1941-1948. | 2.0 | 9 |
| 36 | Preconditioning Procedure for the Better Estimation of the Long-Term Lifetime in Microelectromechanical Switches. IEEE Transactions on Electron Devices, 2016, 63, 1274-1280. | 3.0 | 9 |

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|---|---|---|---|
| 37 | 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. | 3.5 | 8 |
| 38 | 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. | 3.5 | 8 |
| 39 | MEMS packaging by using dry film resist. , 2015, , . | | 7 |
| 40 | 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. | 2.0 | 7 |
| 41 | Long-term lifetime prediction for RF-MEMS switches. Journal of Micromechanics and Microengineering, 2016, 26, 074004. | 2.6 | 6 |
| 42 | Aluminum doped zinc oxide coatings at low temperature by atmospheric pressure plasma jet. Thin Solid Films, 2020, 708, 138118. | 1.8 | 6 |
| 43 | 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. | 7.8 | 5 |
| 44 | Chipless RFID Sensing System for Precise Ethanol Determination in Alcoholic Solutions. Electronics (Switzerland), 2022, 11, 735. | 3.1 | 5 |
| 45 | Electro-thermal analysis of RF MEM capacitive switches for high-power applications. , 2010, , . | | 4 |
| 46 | Effect of the substrate on RF power-handling capability of micro-electromechanical capacitive switches. Solid-State Electronics, 2011, 65-66, 219-225. | 1.4 | 4 |
| 47 | An accelerated thermal cycling test for RF-MEMS switches. Microsystem Technologies, 2016, 22, 1585-1592. | 2.0 | 4 |
| 48 | 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. | 2.6 | 3 |
| 49 | Circuital Modelling of Shunt Capacitive RF MEMS Switches. , 2008, , . | | 3 |
| 50 | 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. | 1.9 | 3 |
| 51 | Influence of fabrication tolerances on the reliability of RF-MEMS capacitive switches. , 2015, , . | | 3 |
| 52 | Cycling reliability of RF-MEMS switches with gold-platinum multilayers as contact material. , 2015, , . | | 3 |
| 53 | Terahertz microsensor for biomedical applications. , 2011, , . | | 2 |
| 54 | Reliability of capacitive RF MEMS switches subjected to repetitive impact cycles at different temperatures. , 2014, , . | | 2 |

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|---|---|---|---|
| 55 | A Miniaturized SPLITT System for On-Line Protein Separation. Proceedings (mdpi), 2017, 1, 527. | 0.2 | 2 |
| 56 | Instability and Drift Phenomena in Switching RF-MEMS Microsystems. Actuators, 2019, 8, 15. | 2.3 | 2 |
| 57 | Optimizing the number of printed layers in a PET inkjet-printed chipless RFID sensor. , 2022, , . | | 2 |
| 58 | Tecnological and Design Improvements for RF MEMS Shunt Switches. Semiconductor Conference, 2009 CAS 2009 International, 2007, , . | 0.0 | 1 |
| 59 | Wet release technology for bulk-silicon resonators fabrication on silicon-on-insulator substrate. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2013, 12, 041206. | 0.9 | 1 |
| 60 | Design of an electrophoretic module for protein separation. , 2016, , . | | 1 |
| 61 | DESIGN OF AN ULTRA WIDE BAND ANTENNA BASED ON A SIW RESONATOR. Progress in Electromagnetics Research C, 2020, 103, 187-197. | 0.9 | 1 |
| 62 | 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. | 0.6 | 0 |
| 63 | 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. | 0.6 | 0 |
| 64 | Nitrogen Influence on the Photoluminescence Properties of Silicon Nanocrystals. Materials Research Society Symposia Proceedings, 2006, 958, 1. | 0.1 | 0 |
| 65 | Gold-based thin multilayers for ohmic contacts in RF-MEMS switches. Proceedings of SPIE, 2011, , . | 0.8 | 0 |
| 66 | Thermal cycling reliability of RF-MEMS switches. Proceedings of SPIE, 2015, , . | 0.8 | 0 |
| 67 | Evidence of mechanical degradation in microelectromechanical switches subjected to long-term stresses. , 2017, , . | | 0 |
| 68 | Ultra-Wideband Antenna Array based on Orbital Angular Momentum. , 2019, , . | | 0 |
| 69 | A Continuous Flow Microelectrophoretic Module for Protein Separation. Lecture Notes in Electrical Engineering, 2018, , 107-113. | 0.4 | 0 |