

Marco Balucani

List of Publications by Year in descending order

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106
papers

715
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106
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106
docs citations

106
times ranked

591
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Design of a Tri-Axial Surface Micromachined MEMS Vibrating Gyroscope. Sensors, 2020, 20, 2822. | 2.1 | 3 |
| 2 | A New Electrodeposition Approach for Multicomponent Solder Alloys. ECS Meeting Abstracts, 2020, MA2020-01, 1232-1232. | 0.0 | 0 |
| 3 | Dynamic Liquid Drop/Meniscus: A New Route to Electrodeposition. ECS Meeting Abstracts, 2019, , . | 0.0 | 0 |
| 4 | Operational characterization of CSFH MEMS technology based hinges. Journal of Micromechanics and Microengineering, 2018, 28, 055012. | 1.5 | 32 |
| 5 | AMPERE: An European project aimed to decrease the Levelized Cost of Energy with innovative heterojunction bifacial module solution ready for the market.. , 2018, , . | | 1 |
| 6 | A Breakthrough in Pb-Free Solder Electroplating. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 7 | Electroplated Nickel/Tin Solder Pads for Rear Metallization of Solar Cells. IEEE Journal of Photovoltaics, 2016, 6, 404-411. | 1.5 | 4 |
| 8 | A new approach: Low cost masking material and efficient copper metallization for higher efficiency silicon solar cells. , 2015, , . | | 1 |
| 9 | Development of Micro-Grippers for Tissue and Cell Manipulation with Direct Morphological Comparison. Micromachines, 2015, 6, 1710-1728. | 1.4 | 61 |
| 10 | MEMS-Based Conjugate Surfaces Flexure Hinge. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, . | 1.7 | 54 |
| 11 | Electroplated contacts and porous silicon for silicon based solar cells applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2015, 194, 78-85. | 1.7 | 13 |
| 12 | Realization of 3D silicon structures using a DRIE technique. , 2015, , . | | 2 |
| 13 | Development of a MEMS technology CSFH based microgripper. , 2014, , . | | 3 |
| 14 | Localized metal plating on aluminum back side PV cells. , 2014, , . | | 2 |
| 15 | Dielectric lens optimization for conical helix THz antennas. , 2014, , . | | 1 |
| 16 | High uniformity and high speed copper pillar plating technique. , 2014, , . | | 2 |
| 17 | Terahertz Sensor for Integrated Image Detector. Procedia Engineering, 2014, 87, 1131-1134. | 1.2 | 6 |
| 18 | Porous silicon technology, a breakthrough for silicon photonics: From packaging to monolithic integration. , 2014, , . | | 2 |

| # | ARTICLE | IF | CITATIONS |
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| 19 | Electric Field Enhancement in 3-D Tapered Helix Antenna for Terahertz Applications. IEEE Transactions on Terahertz Science and Technology, 2014, 4, 360-367. | 2.0 | 12 |
| 20 | Smart flexible planar electrodes for electrochemotherapy and biosensing. , 2013, , . | | 5 |
| 21 | Comparative study of initial stages of copper immersion deposition on bulk and porous silicon. Nanoscale Research Letters, 2013, 8, 85. | 3.1 | 20 |
| 22 | Aluminum-silicon Interdiffusion in Screen Printed Metal Contacts for Silicon based Solar Cells Applications. Energy Procedia, 2013, 43, 100-110. | 1.8 | 24 |
| 23 | New Selective Processing Technique for Solar Cells. Energy Procedia, 2013, 43, 54-65. | 1.8 | 12 |
| 24 | New selective wet processing. , 2013, , . | | 5 |
| 25 | Editorial of the Special Issue of Microelectronics Journal on the IEEE International MOS-AK/GSA Workshop on Compact Modeling 2010 (MOS-AK/GSA Rome 2010). Microelectronics Journal, 2013, 44, 1-2. | 1.1 | 0 |
| 26 | Nano-klystron: New design and technology for THz source. , 2013, , . | | 1 |
| 27 | 3D Antenna for GHz application and vibration energy harvesting. , 2013, , . | | 0 |
| 28 | Design, optimization and construction of MEMS-based micro grippers for cell manipulation. , 2013, , . | | 10 |
| 29 | Electrochemically etched TSV for porous silicon interposer technologies. , 2013, , . | | 1 |
| 30 | Kinetostatic optimization of a MEMS-based compliant 3 DOF plane parallel platform. , 2013, , . | | 11 |
| 31 | MULTILAYER STRUCTURE OF DENSE ANODIC ALUMINA FILMS. , 2013, , . | | 0 |
| 32 | High density compliant contacting technology for integrated high power modules in automotive applications. , 2012, , . | | 3 |
| 33 | Characterization of Copper Nanostructures Grown on Porous Silicon by Displacement Deposition. ECS Transactions, 2012, 41, 13-22. | 0.3 | 2 |
| 34 | Optimization of Chemical Displacement Deposition of Copper on Porous Silicon. Journal of Nanoscience and Nanotechnology, 2012, 12, 8725-8731. | 0.9 | 9 |
| 35 | Performance Analysis of Compliant MEMS Parallel Robots Through Pseudo-Rigid-Body Model Synthesis. , 2012, , . | | 7 |
| 36 | Electrochemical Deposition and Characterization of Ni in Mesoporous Silicon. Journal of the Electrochemical Society, 2012, 159, D623-D627. | 1.3 | 27 |

| # | ARTICLE | IF | CITATIONS |
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| 37 | On-chip THz 3D antennas. , 2012, , . | | 15 |
| 38 | Electrochemical Deposition of Ni into Mesoporous Silicon. ECS Transactions, 2012, 41, 111-118. | 0.3 | 14 |
| 39 | Hydrogen storage materials for microthrusters: Basic performance analysis. Acta Astronautica, 2012, 80, 52-57. | 1.7 | 1 |
| 40 | Nanostructures formed by displacement of porous silicon with copper: from nanoparticles to porous membranes. Nanoscale Research Letters, 2012, 7, 477. | 3.1 | 18 |
| 41 | 60 GHz tapered-helix antenna for WPAN applications. , 2012, , . | | 1 |
| 42 | 4.55GHz phase and quadrature pulsed bias VCO in 40nm CMOS technology. , 2011, , . | | 1 |
| 43 | A novel series-parallel inverting charge pump topology in 40nm CMOS technology. , 2011, , . | | 1 |
| 44 | Electrochemical and hydrothermal deposition of ZnO on silicon: from continuous films to nanocrystals. Journal of Nanoparticle Research, 2011, 13, 5985-5997. | 0.8 | 25 |
| 45 | Electrochemical deposition of zinc oxide on a thin nickel buffer layer on silicon substrates. Electrochimica Acta, 2011, 56, 4031-4036. | 2.6 | 1 |
| 46 | Gold in Flux-less Bonding: Noble or not Noble. Materials Research Society Symposia Proceedings, 2011, 1299, 1. | 0.1 | 1 |
| 47 | A novel micromachined loudspeaker topology. , 2011, , . | | 2 |
| 48 | Technology and design of innovative flexible electrode for biomedical applications. , 2011, , . | | 5 |
| 49 | IMMERSION DISPLACEMENT DEPOSITION OF COPPER ON POROUS SILICON FOR NANOSTRUCTURE FABRICATION. , 2011, , . | | 0 |
| 50 | The development of a MEMS/NEMS-based 3 D.O.F. compliant micro robot. , 2010, , . | | 10 |
| 51 | Power Management Unit for a Ground Referenced audio amplifier for mobile phones in 65nm CMOS. , 2010, , . | | 1 |
| 52 | Transfer layer technology for the packaging of high power modules. , 2010, , . | | 2 |
| 53 | A Class-AB/D Audio Power Amplifier for Mobile Applications Integrated Into a 2.5G/3G Baseband Processor. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 1003-1016. | 3.5 | 12 |
| 54 | Cu-Si Nanocomposites Based on Porous Silicon Matrix. Solid State Phenomena, 2009, 151, 222-226. | 0.3 | 6 |

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| 55 | Visible photoluminescence of zinc oxide films electrochemically deposited on silicon substrates. Technical Physics Letters, 2009, 35, 1160-1162. | 0.2 | 2 |
| 56 | SEM AND XRD STUDY OF COPPER/POROUS SILICON NANOCOMPOSITES. , 2009, , . | | 0 |
| 57 | FEATURES OF THE NICKEL ELECTROCHEMICAL DEPOSITION INTO MESOPOROUS SILICON. , 2009, , . | | 0 |
| 58 | Mechanical strength of porous silicon and its possible applications. Superlattices and Microstructures, 2008, 44, 374-377. | 1.4 | 17 |
| 59 | Formation of composite nanostructures by corrosive deposition of copper into porous silicon. Superlattices and Microstructures, 2008, 44, 583-587. | 1.4 | 15 |
| 60 | Model of the drain current saturation in long-gate JFETs and MESFETs. Solid-State Electronics, 2005, 49, 1251-1254. | 0.8 | 1 |
| 61 | Propagation Losses in Curved Integrated Optical Waveguides Based on Oxidized Porous Silicon. Technical Physics Letters, 2005, 31, 225. | 0.2 | 0 |
| 62 | Recent progress in integrated waveguides based on oxidized porous silicon. Optical Materials, 2005, 27, 776-780. | 1.7 | 12 |
| 63 | Photoluminescence from erbium incorporated in oxidized porous silicon. Optical Materials, 2005, 27, 894-899. | 1.7 | 5 |
| 64 | Properties of zirconium silicate thin films prepared by laser ablation. Materials Science in Semiconductor Processing, 2004, 7, 209-214. | 1.9 | 12 |
| 65 | Buffer layer influence on guiding properties of oxidized porous silicon waveguides. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 16, 574-579. | 1.3 | 4 |
| 66 | Technological aspects of oxidated porous silicon waveguides. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 16, 586-590. | 1.3 | 5 |
| 67 | Fine structure of photoluminescence spectra from erbium incorporated with iron in oxidized porous silicon. Physica Status Solidi A, 2003, 197, 441-445. | 1.7 | 10 |
| 68 | COMPOSITE NANOSTRUCTURES BASED ON POROUS SILICON HOST. , 2003, , . | | 0 |
| 69 | PHOTOLUMINESCENCE EXCITATION SPECTROSCOPY OF ERBIUM INCORPORATED WITH IRON IN OXIDIZED POROUS SILICON. , 2003, , . | | 0 |
| 70 | Microthrusters in silicon for aerospace application. IEEE Aerospace and Electronic Systems Magazine, 2002, 17, 22-27. | 2.3 | 7 |
| 71 | X-ray diffractometry of Si epilayers grown on porous silicon. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 91-92, 445-448. | 1.7 | 5 |
| 72 | Properties of ZrO ₂ thin films prepared by laser ablation. Materials Science in Semiconductor Processing, 2002, 5, 253-257. | 1.9 | 12 |

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| 73 | Oxidized Porous Silicon Based SOI: Untapped Resources. , 2002, , 309-327. | | 0 |
| 74 | Gettering Technology Based on Porous Silicon. Solid State Phenomena, 2001, 82-84, 405-410. | 0.3 | 3 |
| 75 | Influence of a-Si:H buffer layers on the properties of CN x materials. , 2001, 4430, 748. | | 0 |
| 76 | Oxidized porous silicon waveguides losses. , 2001, , . | | 0 |
| 77 | Formation of intermediate SiCN interlayer during deposition of CNx on a-Si:H or a-SiC:H thin films. Applied Surface Science, 2001, 184, 96-100. | 3.1 | 9 |
| 78 | Multilayer structures induced by plasma and laser beam treatments on a-Si:H and a-SiC:H thin films. Thin Solid Films, 2001, 383, 230-234. | 0.8 | 23 |
| 79 | Er-doped oxidised porous silicon waveguides. Thin Solid Films, 2001, 396, 202-204. | 0.8 | 7 |
| 80 | Self-aligned oxidised porous silicon optical waveguides with reduced loss. Electronics Letters, 2000, 36, 722. | 0.5 | 17 |
| 81 | Porous Silicon: A Buffer Layer for PbS Heteroepitaxy. Physica Status Solidi A, 2000, 182, 195-199. | 1.7 | 14 |
| 82 | Similarity relation for $I_{\text{d}}-V$ characteristics of FETs with different channel shape. Solid-State Electronics, 2000, 44, 1865-1867. | 0.8 | 0 |
| 83 | Bending properties in oxidized porous silicon waveguides. Materials Science in Semiconductor Processing, 2000, 3, 351-355. | 1.9 | 9 |
| 84 | Investigation of Morphology of Porous Silicon Formed on N+ Type Silicon. Journal of Porous Materials, 2000, 7, 23-26. | 1.3 | 3 |
| 85 | Oxidized Porous Silicon: From Dielectric Isolation to Integrated Optical Waveguides. Journal of Porous Materials, 2000, 7, 215-222. | 1.3 | 19 |
| 86 | Formation Features of Deposits during a Cathode Treatment of Porous Silicon in Aqueous Solutions of Erbium Salts. Journal of the Electrochemical Society, 2000, 147, 655. | 1.3 | 2 |
| 87 | Optical link for digital transmissions using porous silicon light emitting diode. Journal of Non-Crystalline Solids, 2000, 266-269, 1238-1240. | 1.5 | 1 |
| 88 | High-amplitude high-frequency oscillations of temperature, electron-hole pair concentration, and current in silicon-on-insulator structures. Journal of Applied Physics, 2000, 88, 6554-6559. | 1.1 | 4 |
| 89 | A model of radiative recombination in n-type porous silicon-aluminum Schottky junction. Applied Physics Letters, 1999, 74, 1960-1962. | 1.5 | 8 |
| 90 | Multilayer structures deposited by laser ablation. Sensors and Actuators A: Physical, 1999, 74, 27-30. | 2.0 | 0 |

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| 91 | High-amplitude and high-frequency oscillations of temperature and current in SOI structure. Microelectronic Engineering, 1999, 48, 343-346. | 1.1 | 0 |
| 92 | INTEGRATED OPTICAL WAVEGUIDES BASED ON POROUS SILICON: STATE-OF-THE-ART AND OUTLOOK FOR PROGRESS. , 1999, , . | | 1 |
| 93 | Luminescence from porous silicon doped with erbium&ytterbium complexes. Journal of Luminescence, 1998, 80, 395-398. | 1.5 | 6 |
| 94 | 200 MHz optical signal modulation from a porous silicon light emitting device. Applied Physics Letters, 1998, 72, 639-640. | 1.5 | 9 |
| 95 | Characterization of integrated optical waveguides based on oxidized porous silicon. , 1998, , . | | 0 |
| 96 | Amorphous silicon photodetectors for optical integrated circuits. , 1998, , . | | 0 |
| 97 | Laser treatment of a-SiC:H thin films for optoelectronic applications. , 1998, , . | | 0 |
| 98 | Visible and IR Photoluminescence of Erbium Doped Porous Silicon Films. Solid State Phenomena, 1997, 54, 94-100. | 0.3 | 1 |
| 99 | Humidity Sensor Based on Partially Oxidized Porous Silicon. Solid State Phenomena, 1997, 54, 75-85. | 0.3 | 3 |
| 100 | Characterization of Porous Silicon Light Emitting Diodes in High Current Density Conditions. Solid State Phenomena, 1997, 54, 21-26. | 0.3 | 3 |
| 101 | Amorphous Silicon Photodetectors for Silicon Based Optical Waveguides. Solid State Phenomena, 1997, 54, 45-49. | 0.3 | 1 |
| 102 | Silicon Emitting Device Will Knock Down Communication Bottleneck?. Solid State Phenomena, 1997, 54, 8-12. | 0.3 | 5 |
| 103 | Light Emission Characterization of Al-Porous Silicon Schottky Junction. Solid State Phenomena, 1997, 54, 37-44. | 0.3 | 0 |
| 104 | Characterization of silicon LEDs integrated with oxidized porous silicon SOI. Microelectronic Engineering, 1997, 36, 115-118. | 1.1 | 5 |
| 105 | STRONG ROOM-TEMPERATURE PHOTOLUMINESCENCE OF Er-Yb COMPLEXES EMBEDDED IN POROUS SILICON. , 1997, , . | | 2 |
| 106 | ZnO Films and Crystals on Bulk Silicon and SOI Wafers: Formation, Properties and Applications. Advanced Materials Research, 0, 276, 3-19. | 0.3 | 1 |