

Lorenzo Pavesi

List of Publications by Year in descending order

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580
papers

18,009
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23879

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22488

117
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all docs

613
docs citations

613
times ranked

12385
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Microring resonators with external optical feedback for time delay reservoir computing. Optics Express, 2022, 30, 522. | 1.7 | 18 |
| 2 | Interferometric method to estimate the eigenvalues of a non-Hermitian two-level optical system. Photonics Research, 2022, 10, 1134. | 3.4 | 7 |
| 3 | Noise effects on time delay reservoir computing using silicon microring resonators. , 2022, , . | | 1 |
| 4 | A photonic complex perceptron for ultrafast data processing. Scientific Reports, 2022, 12, 4216. | 1.6 | 7 |
| 5 | Certified Quantum Random-Number Generator Based on Single-Photon Entanglement. Physical Review Applied, 2022, 17, . | 1.5 | 3 |
| 6 | Light induced memory in in-vitro neuronal cultures. , 2022, , . | | 0 |
| 7 | On the response of the Taiji microresonator against small perturbation of the counter propagating mode. , 2022, , . | | 3 |
| 8 | An integrated entangled photons source for mid-infrared ghost spectroscopy. , 2022, , . | | 0 |
| 9 | Mitigating indistinguishability issues in photon pair sources by delayed-pump intermodal four wave mixing. Optics Express, 2022, 30, 12964. | 1.7 | 5 |
| 10 | PRECISE Photonic Hybrid Electromagnetic Solver. IEEE Photonics Journal, 2022, 14, 1-10. | 1.0 | 0 |
| 11 | High extinction ratio thermo-optic based reconfigurable optical logic gates for programmable PICs. AIP Advances, 2022, 12, 055304. | 0.6 | 4 |
| 12 | A Microring as a Reservoir Computing Node: Memory/Nonlinear Tasks and Effect of Input Non-Ideality. Journal of Lightwave Technology, 2022, 40, 5917-5926. | 2.7 | 4 |
| 13 | On the modeling of thermal and free carrier nonlinearities in silicon-on-insulator microring resonators. Optics Express, 2021, 29, 4363. | 1.7 | 27 |
| 14 | Near-ideal heralded single photons in silicon. , 2021, , . | | 0 |
| 15 | Nonlinearity-Induced Reciprocity Breaking in a Single Nonmagnetic Taiji Resonator. Physical Review Applied, 2021, 15, . | 1.5 | 13 |
| 16 | A FEM Enhanced Transfer Matrix Method for Optical Grating Design. Journal of Lightwave Technology, 2021, 39, 3521-3530. | 2.7 | 4 |
| 17 | Electric Field Induced Second Harmonic Generation In Silicon Waveguides: the role of the disorder. , 2021, , . | | 0 |
| 18 | Role of the bus waveguide in the nonlinear reciprocity breaking in a Taiji microresonator. , 2021, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Influence of the bus waveguide on the linear and nonlinear response of a taiji microresonator. <i>Optics Express</i> , 2021, 29, 29615. | 1.7 | 3 |
| 20 | Reservoir computing based on a silicon microring and time multiplexing for binary and analog operations. <i>Scientific Reports</i> , 2021, 11, 15642. | 1.6 | 31 |
| 21 | Entropy certification of a realistic quantum random-number generator based on single-particle entanglement. <i>Physical Review A</i> , 2021, 104, . | 1.0 | 6 |
| 22 | Compact and Low-Insertion-Loss 1–N Power Splitter in Silicon Photonics. <i>Journal of Lightwave Technology</i> , 2021, 39, 6253-6259. | 2.7 | 20 |
| 23 | An analog electronic emulator of non-linear dynamics in optical microring resonators. <i>Chaos, Solitons and Fractals</i> , 2021, 153, 111410. | 2.5 | 7 |
| 24 | Experimental demonstration of reservoir computing with a silicon resonator and time multiplexing. , 2021, , . | | 0 |
| 25 | Thirty Years in Silicon Photonics: A Personal View. <i>Frontiers in Physics</i> , 2021, 9, . | 1.0 | 11 |
| 26 | A silicon source of heralded single photons at 2 \times λ . <i>APL Photonics</i> , 2021, 6, 126103. | 3.0 | 11 |
| 27 | On-chip heralded single photon sources. <i>AVS Quantum Science</i> , 2020, 2, . | 1.8 | 32 |
| 28 | An optical chip for self-testing quantum random number generation. <i>APL Photonics</i> , 2020, 5, . | 3.0 | 14 |
| 29 | Single-Particle Entanglement. <i>Advanced Quantum Technologies</i> , 2020, 3, 2000014. | 1.8 | 23 |
| 30 | Robust Geometries for Second-Harmonic-Generation in Microrings Exhibiting a 4-Bar Symmetry. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 9047. | 1.3 | 0 |
| 31 | Bell-inequality violation by entangled single-photon states generated from a laser, an LED, or a halogen lamp. <i>Physical Review A</i> , 2020, 102, . | 1.0 | 7 |
| 32 | Near-ideal spontaneous photon sources in silicon quantum photonics. <i>Nature Communications</i> , 2020, 11, 2505. | 5.8 | 94 |
| 33 | Structures and Methods for Fully-Integrated Quantum Random Number Generators. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2020, 26, 1-8. | 1.9 | 10 |
| 34 | Electric field-induced second harmonic generation in silicon waveguide by interdigitated contacts. , 2020, , . | | 3 |
| 35 | Second-harmonic generation in periodically poled silicon waveguides with lateral p-i-n junctions: publisher's note. <i>Optics Letters</i> , 2020, 45, 3348. | 1.7 | 1 |
| 36 | Unidirectional reflection from an integrated δ - ϵ -taiji microresonator. <i>Photonics Research</i> , 2020, 8, 1333. | 3.4 | 19 |

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|----|---|-----|-----------|
| 37 | Design of an external cavity semiconductor laser for intra-cavity beam combining. , 2020, , . | | 0 |
| 38 | Intermodal four-wave mixing for heralded single-photon sources in the MIR (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td (F | | |
| 39 | Passive coherent beam combining in an interferometric semiconductor laser cavity (Conference) Tj ETQq1 1 0.784314 rgBT /Overlock | | |
| 40 | Second-harmonic generation in periodically poled silicon waveguides with lateral p-i-n junctions. Optics Letters, 2020, 45, 3188. | 1.7 | 17 |
| 41 | Single particle entanglement as a tool for generating quantum random numbers. , 2020, , . | | 0 |
| 42 | Mid infrared heralded single photons on a silicon chip. , 2020, , . | | 0 |
| 43 | Near-optimal spontaneous photon sources on a silicon quantum photonic chip. , 2020, , . | | 2 |
| 44 | What Is the Origin of Second Harmonic Generation in Strained Silicon Waveguides?. , 2020, , . | | 0 |
| 45 | Time Response of a Microring Resonator to a Rectangular Pulse in Different Coupling Regimes. Journal of Lightwave Technology, 2019, 37, 5091-5099. | 2.7 | 8 |
| 46 | AFM1 Detection in Milk by Fabâ€™™ Functionalized Si3N4 Asymmetric Machâ€™“Zehnder Interferometric Biosensors. Toxins, 2019, 11, 409. | 1.5 | 21 |
| 47 | Field-Induced Nonlinearities in Silicon Waveguides Embedded in Lateral p-n Junctions. Frontiers in Physics, 2019, 7, . | 1.0 | 8 |
| 48 | Four Wave Mixing control in a photonic molecule made by silicon microring resonators. Scientific Reports, 2019, 9, 408. | 1.6 | 11 |
| 49 | On the origin of second harmonic generation in silicon waveguides with silicon nitride cladding. Scientific Reports, 2019, 9, 1088. | 1.6 | 38 |
| 50 | Automatic Initialization Methods for Photonic Components on a Silicon-Based Optical Switch. Applied Sciences (Switzerland), 2019, 9, 1843. | 1.3 | 8 |
| 51 | Hermitian and Non-Hermitian Mode Coupling in a Microdisk Resonator Due to Stochastic Surface Roughness Scattering. IEEE Photonics Journal, 2019, 11, 1-14. | 1.0 | 8 |
| 52 | A Compact TDC-based Quantum Random Number Generator. , 2019, , . | | 4 |
| 53 | Silicon Photonics Chip for Inter-modal Four Wave Mixing on a Broad Wavelength Range. Frontiers in Physics, 2019, 7, . | 1.0 | 10 |
| 54 | Integrated Reconfigurable Silicon Photonics Switch Matrix in IRIS Project: Technological Achievements and Experimental Results. Journal of Lightwave Technology, 2019, 37, 345-355. | 2.7 | 16 |

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| 55 | Towards MIR heralded photons via intermodal four wave mixing in silicon waveguides. , 2019, , . | | 0 |
| 56 | Second order nonlinearities in silicon waveguides: from the physics to new applications (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf | | |
| 57 | A 3D Photonic-Electronic Integrated Transponder Aggregator With \$48imes 16\$ Heater Control Cells. IEEE Photonics Technology Letters, 2018, 30, 681-684. | 1.3 | 11 |
| 58 | Thermo-optic coefficient and nonlinear refractive index of silicon oxynitride waveguides. AIP Advances, 2018, 8, . | 0.6 | 26 |
| 59 | A Robust Quantum Random Number Generator Based on an Integrated Emitter-Photodetector Structure. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-7. | 1.9 | 12 |
| 60 | Intermodal four-wave mixing in silicon waveguides. Photonics Research, 2018, 6, 805. | 3.4 | 45 |
| 61 | Tuning the strain-induced resonance shift in silicon racetrack resonators by their orientation. Optics Express, 2018, 26, 4204. | 1.7 | 7 |
| 62 | Compact Quantum Random Number Generator with Silicon Nanocrystals Light Emitting Device Coupled to a Silicon Photomultiplier. Frontiers in Physics, 2018, 6, . | 1.0 | 8 |
| 63 | A Free-Space Interferometer for Phase-Delay Measurements in Integrated Optical Devices in Degenerate Pump-and-Probe Experiments. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 2863-2871. | 2.4 | 2 |
| 64 | Fast analytical modelling of an SOI micro-ring resonator for bio-sensing application. Journal Physics D: Applied Physics, 2018, 51, 285401. | 1.3 | 17 |
| 65 | Optical Switching in Next Generation Data Centers. , 2018, , . | | 17 |
| 66 | Low crosstalk silicon arrayed waveguide gratings for on-chip optical multiplexing. , 2018, , . | | 3 |
| 67 | Are on-chip heralded single photon sources possible by intermodal four wave mixing in silicon waveguides?. , 2018, , . | | 2 |
| 68 | Integrated, scalable and reconfigurable Silicon Photonics based optical switch for colorless, directionless and contentionless operation. , 2018, , . | | 1 |
| 69 | Mid-infrared coincidence measurements based on intracavity frequency conversion. , 2018, , . | | 1 |
| 70 | Intermodal four wave mixing in silicon waveguides for on-chip wavelength conversion and generation (Conference Presentation). , 2018, , . | | 0 |
| 71 | Photonic biosensors for Fab'-AFM1 interaction study in real milk (Conference Presentation). , 2018, , . | | 0 |
| 72 | Controlling stimulated and spontaneous four wave mixing in coupled microring resonators (Conference Presentation). , 2018, , . | | 0 |

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| 73 | Automatic alignment of photonic components of massive optical switch to ITU channels (Conference) Tj ETQq1 1 0.784314 rgBT /Overl | 0.784314 | 1 |
| 74 | Robust Quantum Random Number Generation With Silicon Nanocrystals Light Source. Journal of Lightwave Technology, 2017, 35, 1588-1594. | 2.7 | 9 |
| 75 | Mid-infrared coincidence measurements on twin photons at room temperature. Nature Communications, 2017, 8, 15184. | 5.8 | 58 |
| 76 | Pump-and-probe optical transmission phase shift as a quantitative probe of the Bogoliubov dispersion relation in a nonlinear channel waveguide. European Physical Journal D, 2017, 71, 1. | 0.6 | 10 |
| 77 | Nonlinear silicon photonics. Journal of Optics (United Kingdom), 2017, 19, 093002. | 1.0 | 85 |
| 78 | A new aptamer immobilization strategy for protein recognition. Sensors and Actuators B: Chemical, 2017, 252, 222-231. | 4.0 | 9 |
| 79 | Oblique beams interference for mode selection in multimode silicon waveguides. Journal of Applied Physics, 2017, 122, 113106. | 1.1 | 1 |
| 80 | Silicon photonics for optical switching in data centers. , 2017, , . | | 0 |
| 81 | Methods for Low Crosstalk and Wavelength Tunability in Arrayed-Waveguide Grating for On-Silicon Optical Network. Journal of Lightwave Technology, 2017, 35, 5134-5141. | 2.7 | 25 |
| 82 | Aptamer- and Fabâ€™- Functionalized Microring Resonators for Aflatoxin M1 Detection. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 350-357. | 1.9 | 19 |
| 83 | Broad wavelength generation and conversion with multi modal Four Wave Mixing in silicon waveguides. , 2017, , . | | 3 |
| 84 | Complete crossing of Fano resonances in an optical microcavity via nonlinear tuning. Photonics Research, 2017, 5, 168. | 3.4 | 9 |
| 85 | From SHG to mid-infrared SPDC generation in strained silicon waveguides. , 2017, , . | | 2 |
| 86 | Use of microring resonators for biospecific interaction analysis. , 2017, , . | | 1 |
| 87 | Asymmetric Machâ€™Zehnder Interferometer Based Biosensors for Aflatoxin M1 Detection. Biosensors, 2016, 6, 1. | 2.3 | 101 |
| 88 | Microring Resonators and Silicon Photonics. MRS Advances, 2016, 1, 3281-3293. | 0.5 | 3 |
| 89 | Role of the inversion layer on the charge injection in silicon nanocrystal multilayered light emitting devices. Journal of Applied Physics, 2016, 120, . | 1.1 | 2 |
| 90 | Quantum interference in an asymmetric Mach-Zehnder interferometer. Journal of Optics (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6 | 1.0 | 10 |

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| 91 | Biosensors based on Si ₃ N ₄ asymmetric Mach-Zehnder interferometers. , 2016, , . | | 2 |
| 92 | Design and Implementation of an Integrated Reconfigurable Silicon Photonics Switch Matrix in IRIS Project. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 155-168. | 1.9 | 44 |
| 93 | One and two-photon quantum interference in a Mach-Zehnder interferometer. , 2016, , . | | 1 |
| 94 | High frequency electro-optic measurement of strained silicon racetrack resonators. , 2016, , . | | 0 |
| 95 | A scalable reduced order modelling approach for whispering-gallery mode resonators. , 2016, , . | | 0 |
| 96 | Wavelength Dependence of a Vertically Coupled Resonator-Waveguide System. Journal of Lightwave Technology, 2016, 34, 5385-5390. | 2.7 | 6 |
| 97 | Generation of high quality random numbers via an all-silicon-based approach. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 3186-3193. | 0.8 | 5 |
| 98 | Homodyne Detection of Free Carrier Induced Electro-Optic Modulation in Strained Silicon Resonators. Journal of Lightwave Technology, 2016, 34, 5657-5668. | 2.7 | 13 |
| 99 | Time resolved electro-optic measurements in strained silicon racetrack resonators. , 2016, , . | | 0 |
| 100 | Silicon photonics for switching in next generation data centers. , 2016, , . | | 2 |
| 101 | A robust approach to the generation of high-quality random numbers. , 2016, , . | | 0 |
| 102 | Modeling and validation of high-performance and athermal AWGs for the silicon photonics platform. , 2016, , . | | 0 |
| 103 | Reflectance Reduction in a Whiskered SOI Star Coupler. IEEE Photonics Technology Letters, 2016, 28, 1870-1873. | 1.3 | 10 |
| 104 | Modeling and validation of high-performance and a-thermal AWGs for the silicon photonics platform. Proceedings of SPIE, 2016, , . | 0.8 | 0 |
| 105 | Stimulated degenerate four-wave mixing in Si nanocrystal waveguides. Journal of Optics (United Tj ETQq1 1 0.784314 rgBT /Overlock 1 | 1.0 | 6 |
| 106 | A SiON Microring Resonator-Based Platform for Biosensing at 850 nm. Journal of Lightwave Technology, 2016, 34, 969-977. | 2.7 | 48 |
| 107 | Silicon nanocrystals for nonlinear optics and secure communications. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2659-2671. | 0.8 | 20 |
| 108 | Design and Optimization of SiON Ring Resonator-Based Biosensors for Aflatoxin M1 Detection. Sensors, 2015, 15, 17300-17312. | 2.1 | 44 |

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| 109 | Integrated silicon photodetector for lab-on-chip sensor platforms. Proceedings of SPIE, 2015, , . | 0.8 | 1 |
| 110 | Off-diagonal photonic Lamb shift in reactively coupled waveguide-resonator system. Proceedings of SPIE, 2015, , . | 0.8 | 0 |
| 111 | Silicon Photonics. Springer Proceedings in Physics, 2015, , 7-10. | 0.1 | 5 |
| 112 | On chip test structure for fabrication error estimation based on a sequence of coupled resonators. , 2015, , . | | 0 |
| 113 | Characterization of SION microring resonators for biosensing applications. , 2015, , . | | 2 |
| 114 | Spectral- and time-resolved electroluminescence of silicon nanocrystals based light emitting devices. Journal Physics D: Applied Physics, 2015, 48, 455103. | 1.3 | 3 |
| 115 | High-frequency electro-optic measurement of strained silicon racetrack resonators. Optics Letters, 2015, 40, 5287. | 1.7 | 40 |
| 116 | Enhancement of photoluminescence intensity of erbium doped silica containing Ge nanocrystals: distance dependent interactions. Nanotechnology, 2015, 26, 045202. | 1.3 | 14 |
| 117 | Integrated silicon photodetector for lab-on-chip sensor platform. , 2015, , . | | 6 |
| 118 | Quantum random number generator based on silicon nanocrystals LED. , 2015, , . | | 2 |
| 119 | Role of Edge Inclination in an Optical Microdisk Resonator for Label-Free Sensing. Sensors, 2015, 15, 4796-4809. | 2.1 | 19 |
| 120 | Sensitivity and Limit of detection of biosensors based on ring resonators. , 2015, , . | | 5 |
| 121 | Multi-mode interference revealed by two photon absorption in silicon rich SiO2 waveguides. Applied Physics Letters, 2015, 106, . | 1.5 | 5 |
| 122 | Ultra-high-Q thin-silicon nitride strip-loaded ring resonators. Optics Letters, 2015, 40, 3316. | 1.7 | 15 |
| 123 | Sensitivity and Limit of Detection of biosensors based on ring resonators. Sensing and Bio-Sensing Research, 2015, 6, 99-102. | 2.2 | 65 |
| 124 | Second order nonlinearity in Si by inhomogeneous strain and electric fields. Proceedings of SPIE, 2015, , . | 0.8 | 2 |
| 125 | Secondâ€Order Optical Nonlinearity in Silicon Waveguides: Inhomogeneous Stress and Interfaces. Advanced Optical Materials, 2015, 3, 129-136. | 3.6 | 53 |
| 126 | Purcell effect and luminescent downshifting in silicon nanocrystals coated back-contact solar cells. Solar Energy Materials and Solar Cells, 2015, 132, 267-274. | 3.0 | 24 |

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| 127 | Characterization of Single-Photon Time Resolution: From Single SPAD to Silicon Photomultiplier. IEEE Transactions on Nuclear Science, 2014, 61, 2678-2686. | 1.2 | 65 |
| 128 | Introduction to the Issue on Silicon Photonics. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 5-7. | 1.9 | 0 |
| 129 | Nonlinear self-polarization flipping in silicon sub-wavelength waveguides: distortion, loss, dispersion, and noise effects. Optics Express, 2014, 22, 27643. | 1.7 | 2 |
| 130 | Chaotic dynamics in coupled resonator sequences. Optics Express, 2014, 22, 14505. | 1.7 | 14 |
| 131 | Chaotic dynamics in coupled resonator sequences. , 2014, , . | | 0 |
| 132 | Silicon oxynitride waveguides as evanescent-field-based fluorescent biosensors. Journal Physics D: Applied Physics, 2014, 47, 405401. | 1.3 | 16 |
| 133 | Evanescent-field excitation and collection approach for waveguide based photonic luminescent biosensors. Applied Physics B: Lasers and Optics, 2014, 114, 537-544. | 1.1 | 7 |
| 134 | High Detection Efficiency and Time Resolution Integrated-Passive-Quenched Single-Photon Avalanche Diodes. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 268-275. | 1.9 | 18 |
| 135 | Intermode reactive coupling induced by waveguide-resonator interaction. Physical Review A, 2014, 90, . | 1.0 | 23 |
| 136 | Silicon Photonics: is there light at the end of the tunnel?. , 2014, , . | | 0 |
| 137 | Silicon-based monolithically integrated whispering-gallery mode resonators. Proceedings of SPIE, 2013, , . | 0.8 | 1 |
| 138 | Quantum effects in silicon for photovoltaic applications. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1071-1075. | 0.8 | 7 |
| 139 | Role of electron and hole transport processes in conductivity and light emission of silicon nanocrystals field-effect transistors. Proceedings of SPIE, 2013, , . | 0.8 | 0 |
| 140 | Toward a 1.54 μm Electrically Driven Erbium-Doped Silicon Slot Waveguide and Optical Amplifier. Journal of Lightwave Technology, 2013, 31, 391-397. | 2.7 | 34 |
| 141 | Oscillatory Vertical Coupling between a Whispering-Gallery Resonator and a Bus Waveguide. Physical Review Letters, 2013, 110, 163901. | 2.9 | 38 |
| 142 | Er-doped light emitting slot waveguides monolithically integrated in a silicon photonic chip. Nanotechnology, 2013, 24, 115202. | 1.3 | 24 |
| 143 | Monolithic integration of high-Q wedge resonators with vertically coupled waveguides. , 2013, , . | | 1 |
| 144 | Electrically pumped Er-doped light emitting slot waveguides for on-chip optical routing at 1.54 μm . Proceedings of SPIE, 2013, , . | 0.8 | 0 |

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| 145 | Thermo-optical bistability with Si nanocrystals in a whispering gallery mode resonator. Optics Letters, 2013, 38, 3562. | 1.7 | 21 |
| 146 | Interferometric switching in coupled resonator optical waveguides-based reconfigurable optical device. Optics Letters, 2013, 38, 217. | 1.7 | 7 |
| 147 | Infrared photoconductivity of Er-doped Si nanoclusters embedded in a slot waveguide. Applied Physics Letters, 2013, 103, 061105. | 1.5 | 1 |
| 148 | Mid-infrared difference-frequency generation in silicon waveguides strained by silicon nitride. , 2013, , . | | 1 |
| 149 | An All Optical Method for Fabrication Error Measurements in Integrated Photonic Circuits. Journal of Lightwave Technology, 2013, 31, 2340-2346. | 2.7 | 5 |
| 150 | Electroluminescent devices based on nanosilicon multilayer structures. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1525-1531. | 0.8 | 12 |
| 151 | Interferometric switching in CROW based reconfigurable optical device for routing application. , 2013, , . | | 0 |
| 152 | Nonlinear self polarization-flipping in silicon waveguides. , 2013, , . | | 0 |
| 153 | Electrical pump & probe and injected carrier losses quantification in Er doped Si slot waveguides. Optics Express, 2012, 20, 28808. | 1.7 | 3 |
| 154 | Reconfigurable optical routers based on "Coupled Resonator Induced Transparency resonances. Optics Express, 2012, 20, 23856. | 1.7 | 20 |
| 155 | Limit to the erbium ions emission in silicon-rich oxide films by erbium ion clustering. Optical Materials Express, 2012, 2, 1278. | 1.6 | 24 |
| 156 | A fully integrated high-Q Whispering-Gallery Wedge Resonator. Optics Express, 2012, 20, 22934. | 1.7 | 36 |
| 157 | Bipolar pulsed excitation of erbium-doped nanosilicon light emitting diodes. Journal of Applied Physics, 2012, 111, . | 1.1 | 12 |
| 158 | A polarimetric sensor based on nanoporous free standing membranes. , 2012, , . | | 1 |
| 159 | Erbium emission in MOS light emitting devices: from energy transfer to direct impact excitation. Nanotechnology, 2012, 23, 125203. | 1.3 | 37 |
| 160 | Opto-electrical characterization of erbium-doped slot waveguides. Proceedings of SPIE, 2012, , . | 0.8 | 0 |
| 161 | Silicon-based monolithically integrated whispering-gallery mode resonators with buried waveguides. , 2012, , . | | 1 |
| 162 | Silicon nanocluster sensitization of erbium ions under low-energy optical excitation. Journal of Applied Physics, 2012, 111, 094314. | 1.1 | 4 |

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| 163 | Photophysics of resonantly and non-resonantly excited erbium doped Ge nanowires. Nanotechnology, 2012, 23, 065702. | 1.3 | 13 |
| 164 | Cost Model Developed in European Project LIMA. Energy Procedia, 2012, 27, 646-651. | 1.8 | 2 |
| 165 | Two-dimensional micro-Raman mapping of stress and strain distributions in strained silicon waveguides. Semiconductor Science and Technology, 2012, 27, 085009. | 1.0 | 23 |
| 166 | Modeling of silicon nanocrystals based down-shifter for enhanced silicon solar cell performance. Journal of Applied Physics, 2012, 111, 034303. | 1.1 | 28 |
| 167 | Effect of the annealing treatments on the electroluminescence efficiency of SiO ₂ layers doped with Si and Er. Journal Physics D: Applied Physics, 2012, 45, 045103. | 1.3 | 8 |
| 168 | Light Combining for Interferometric Switching. International Journal of Optics, 2012, 2012, 1-17. | 0.6 | 0 |
| 169 | Second-harmonic generation in silicon waveguides strained by silicon nitride. Nature Materials, 2012, 11, 148-154. | 13.3 | 280 |
| 170 | Polarization strategies to improve the emission of Si-based light sources emitting at 1.55 μ m. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 734-738. | 1.7 | 4 |
| 171 | Optical and electrical properties of undoped and doped Ge nanocrystals. Nanoscale Research Letters, 2012, 7, 143. | 3.1 | 30 |
| 172 | Nanosilicon photonics as a platform to widen the scope of silicon photonics. , 2011, , . | | 0 |
| 173 | Power efficiency of silicon nanocrystal based LED in pulsed regime. , 2011, , . | | 0 |
| 174 | Second-order susceptibility $\chi^{(2)}$ in Si waveguides. , 2011, , . | | 0 |
| 175 | Development and Application of Er-Doped Silicon-Rich Silicon Nitrides and Er Silicates for On-Chip Light Sources. Topics in Applied Physics, 2011, , 95-130. | 0.4 | 3 |
| 176 | Photonics and Electronics Integration. Topics in Applied Physics, 2011, , 217-249. | 0.4 | 3 |
| 177 | 154 μ m Er doped light emitting devices: Role of silicon content. , 2011, , . | | 1 |
| 178 | Electroluminescence from Si nanocrystal/c-Si heterojunction light-emitting diodes. Applied Physics Letters, 2011, 99, 251113. | 1.5 | 21 |
| 179 | Silicon Photonics II. Topics in Applied Physics, 2011, , . | 0.4 | 53 |
| 180 | Graded-size Si quantum dot ensembles for efficient light-emitting diodes. Applied Physics Letters, 2011, 99, . | 1.5 | 42 |

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| 181 | Photoluminescence of hydrophilic silicon nanocrystals in aqueous solutions. <i>Nanotechnology</i> , 2011, 22, 215704. | 1.3 | 20 |
| 182 | Optical characterization of silicon-on-insulator-based single and coupled racetrack resonators. <i>Journal of Nanophotonics</i> , 2011, 5, 051705. | 0.4 | 7 |
| 183 | Cost model for LIMA device. <i>Energy Procedia</i> , 2011, 8, 443-448. | 1.8 | 2 |
| 184 | A Silicon Photonic Interferometric Router Device Based on SCISSOR Concept. <i>Journal of Lightwave Technology</i> , 2011, 29, 2747-2753. | 2.7 | 3 |
| 185 | Coupled-resonator-induced-transparency concept for wavelength routing applications. <i>Optics Express</i> , 2011, 19, 12227. | 1.7 | 31 |
| 186 | Optical characterization of a SCISSOR device. <i>Optics Express</i> , 2011, 19, 13664. | 1.7 | 23 |
| 187 | Birefringent porous silicon membranes for optical sensing. <i>Optics Express</i> , 2011, 19, 26106. | 1.7 | 39 |
| 188 | Robust design of an optical router based on a tapered side-coupled integrated spaced sequence of optical resonators. <i>Optics Letters</i> , 2011, 36, 1473. | 1.7 | 3 |
| 189 | Monolithic Whispering-Gallery Mode Resonators With Vertically Coupled Integrated Bus Waveguides. <i>IEEE Photonics Technology Letters</i> , 2011, 23, 1166-1168. | 1.3 | 42 |
| 190 | Development and optical characterization of vertical tapers in SiON waveguides using gray-scale lithography. <i>Proceedings of SPIE</i> , 2011, , . | 0.8 | 4 |
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