# Ilaria Cristiani

List of Publications by Year
in descending order



| 59 | 1,985 | 279798 23 | 254184 43 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 60 | 60 | 60 | 1950 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Dispersive wave generation by solitons in microstructured optical fibers. Optics Express, 2004, 12, 124. | 3.4 | 294 |
| 2 | Miniaturized all-fibre probe for three-dimensional optical trapping and manipulation. Nature Photonics, 2007, 1, 723-727. | 31.4 | 218 |
| 3 | Toluidine Blue-Mediated Photodynamic Effects on Staphylococcal Biofilms. Antimicrobial Agents and Chemotherapy, 2008, 52, 299-305. | 3.2 | 160 |
| 4 | High-efficiency grating-couplers: demonstration of a new design strategy. Scientific Reports, 2017, 7, 16670. | 3.3 | 146 |
| 5 | Optimizing polarization-diversity couplers for Si-photonics: reaching the â^'1dB coupling efficiency threshold. Optics Express, 2014, 22, 14769. | 3.4 | 111 |
| 6 | Broad parameter optimization of polarization-diversity 2D grating couplers for silicon photonics. Optics Express, 2013, 21, 21556. | 3.4 | 100 |
| 7 | Reduced photorefraction in hafnium-doped single-domain and periodically poled lithium niobate crystals. Applied Physics Letters, 2004, 84, 1880-1882. | 3.3 | 98 |
| 8 | Photorefractivity of Hafnium-doped congruent lithiumâ€“niobate crystals. Applied Physics Letters, 2005, 86, 131914. | 3.3 | 96 |
| 9 | Optimising apodized grating couplers in a pure SOI platform to â^'05 dB coupling efficiency. Optics Express, 2015, 23, 16289. | 3.4 | 92 |
| 10 | Optofluidic chip for single cell trapping and stretching fabricated by a femtosecond laser. Journal of Biophotonics, 2010, 3, 234-243. | 2.3 | 62 |
| 11 | Validation and perspectives of a femtosecond laser fabricated monolithic optical stretcher. Biomedical Optics Express, 2012, 3, 2658. | 2.9 | 49 |
| 12 | Linear and nonlinear optical properties of Hafnium-doped lithium-niobate crystals. Optics Express, 2007, 15, 14171. | 3.4 | 40 |
| 13 | All-silica microfluidic optical stretcher with acoustophoretic prefocusing. Microfluidics and Nanofluidics, 2015, 19, 837-844. | 2.2 | 37 |
| 14 | Highly reduced iron-doped lithium niobate for optoelectronic tweezers. Applied Physics B: Lasers and Optics, 2013, 113, 191-197. | 2.2 | 32 |
| 15 | Zirconium-doped lithium niobate: photorefractive and electro-optical properties as a function of dopant concentration. Optical Materials Express, 2011, 1, 270. | 3.0 | 31 |
| 16 | Tunable Q-factor silicon microring resonators for ultra-low power parametric processes. Optics Letters, 2015, 40, 1274. | 3.3 | 31 |
| 17 | Numerical and Experimental Study of Optoelectronic Trapping on Iron-Doped Lithium Niobate Substrate. Crystals, 2016, 6, 123. | 2.2 | 30 |
| 18 | Phase-matched nonlinear interactions in a holey fiber induced by infrared super-continuum generation. Optics Communications, 2003, 215, 191-197. | 2.1 | 29 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | A comprehensive strategy for the analysis of acoustic compressibility and optical deformability on single cells. Scientific Reports, 2016, 6, 23946. | 3.3 | 27 |
| 20 | Roadmap on multimode photonics. Journal of Optics (United Kingdom), 2022, 24, 083001. | 2.2 | 27 |
| 21 | Experimental and numerical optimization of a fiber Raman laser. Optics Communications, 2002, 203, 139-144. | 2.1 | 26 |
| 22 | Strongly sublinear growth of the photorefractive effect for increasing pump intensities in doped lithium-niobate crystals. Journal of Applied Physics, 2007, 101, 116105. | 2.5 | 25 |
| 23 | Optical phase conjugation in phase-modulated transmission systems: experimental comparison of different nonlinearity-compensation methods. Optics Express, 2010, 18, 18119. | 3.4 | 25 |
| 24 | Ultra-Compact Amorphous Silicon Waveguide for Wavelength Conversion. IEEE Photonics Technology Letters, 2016, 28, 410-413. | 2.5 | 21 |
| 25 | Low-Loss Micro-Resonator Filters Fabricated in Silicon by CMOS-Compatible Lithographic Techniques: Design and Characterization. Applied Sciences (Switzerland), 2017, 7, 174. | 2.5 | 21 |
| 26 | A Novel Approach to Fiber-Optic Tweezers: Numerical Analysis of the Trapping Efficiency. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 151-157. | 2.9 | 20 |
| 27 | All-Optical Wavelength Conversion of a Chaos Masked Signal. IEEE Photonics Technology Letters, 2007, 19, 1783-1785. | 2.5 | 17 |
| 28 | Newtonian to non-newtonian fluid transition of a model transient network. Soft Matter, 2018, 14, 3288-3295. | 2.7 | 17 |
| 29 | Investigation of temperature effect on cell mechanics by optofluidic microchips. Biomedical Optics Express, 2015, 6, 2991. | 2.9 | 16 |
| 30 | Nonlinear characterization and modeling of periodically poled lithium niobate waveguides for 1.5-Î¼m-band cascaded wavelength conversion. Optics Communications, 2001, 187, 263-270. | 2.1 | 14 |
| 31 | Integrated Optofluidic Chip for Oscillatory Microrheology. Scientific Reports, 2020, 10, 5831. | 3.3 | 12 |
| 32 | Group-velocity dispersion in SOI-based channel waveguides with reduced-height. Optics Express, 2017, 25, 9761. | 3.4 | 10 |
| 33 | Integrated Optofluidic Chip for Low-Volume Fluid Viscosity Measurement. Micromachines, 2017, 8, 65. | 2.9 | 9 |
| 34 | MICRORAMAN AND PHOTOREFRACTIVITY STUDY OF HAFNIUM-DOPED LITHIUM NIOBATE CRYSTALS. Journal of Nonlinear Optical Physics and Materials, 2006, 15, 9-21. | 1.8 | 8 |
| 35 | Ultrashort-pulse investigation of the propagation properties of the LP_11 mode in 155-Î¼m communication fibers. Optics Letters, 2001, 26, 1758. | 3.3 | 6 |
| 36 | Soft proton exchanged channel waveguides in congruent lithium tantalate for frequency doubling. Optics Express, 2010, 18, 25967. | 3.4 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Yield stress â€œin a flashâ€• investigation of nonlinearity and yielding in soft materials with an optofluidic microrheometer. Soft Matter, 2021, 17, 3105-3112. | 2.7 | 4 |
| 38 | Numerical study of cascaded wavelength conversion in quadratic media. Journal of Optics, 2002, 4, 457-462. | 1.5 | 3 |
| 39 | NONLINEAR PROPAGATION OF ULTRASHORT LASER PULSES IN A MICROSTRUCTURED FIBER. Journal of Nonlinear Optical Physics and Materials, 2002, 11, 409-419. | 1.8 | 2 |
| 40 | Time-domain response to ps optical pulse trigger of an all-optical flip-flop based on semiconductor ring laser. Proceedings of SPIE, 2008, , . | 0.8 | 2 |
| 41 | Real-time 100-Gb/s POLMUX RZ-DQPSK Transmission over Uncompensated 500 km of SSMF by Optical Phase Conjugation. , 2009, , . | | 2 |
| 42 | Wavelength Conversion of Real-Time 100-Gb/s POLMUX RZ-DQPSK. , 2009, , . | | 2 |
| 43 | Title is missing!. Journal of Optics, 2000, 2, 260-267. | 1.5 | 1 |
| 44 | High-photorefractive resistance of hafnium-doped, single-domain, and periodically-poled lithium niobate crystals. , 2004, , . | | 1 |
| 45 | All Optical 3-D Trapping through a Single-Fiber Tweezer. , 2007, , . | | 1 |
| 46 | Switching time and response to ps optical trigger pulse of all-optical Flip-Flop based on a monolithic semiconductor ring laser. , 2008, , . | | 1 |
| 47 | Compensation of nonlinear effects in optical communication systems through phase-conjugation. , 2009, , . | | 1 |
| 48 | Miniaturized Optical Tweezers Through Fiber-End Microfabrication. Springer Series in Surface Sciences, 2015, , 159-180. | 0.3 | 1 |
| 49 | Numerical and experimental demonstration of a single-fiber probe for optical trapping and analysis. , 2008, , . | | 0 |
| 50 | Merocyanine-540 mediated photodynamic effects on Staphylococcus epidermidis biofilms. , 2009, , . | | 0 |
| 51 | In vitro analysis of low-level laser irradiation on human osteoblast-like cells proliferation. Proceedings of SPIE, 2011, , . | 0.8 | 0 |
| 52 | Optimizing silicon-on-oxide 2D-grating couplers. , 2013, , . | | 0 |
| 53 | Femtosecond laser fabrication of optofluidic devices for single cell manipulation. MATEC Web of Conferences, 2015, 32, 02001. | 0.2 | 0 |
| 54 | Characterisation of a DNA hydrogel viscosity by an integrated optofluidic microrheometer. , 2019, , . | | 0 |

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|---|---|---|---|
| 55 | Integrated-Fiber-Probe for All Optical 3D Trapping and Manipulation. , 2007, , . | | 0 |
| 56 | Transmission of a chaos-masked signal with in-line all-optical wavelength conversion. , 2008, , . | | 0 |
| 57 | Characterization of PP-cLT Waveguides for Second-Harmonic-Generation and Wavelength-Conversion in the C + L band of Optical Communications. , 2010, , . | | 0 |
| 58 | Reflector-less Grating-Coupler with a -0.9 dB Efficiency Realized in 260-nm Silicon-On-Insulator Platform. , 2017, , . | | 0 |
| 59 | Optofluidic Devices for Mechanical Probing and Imaging of Cells by Laser Light. , 2018, , . | | 0 |