# Wolfram H P Pernice

List of Publications by Year
in descending order



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|---|---|---|---|
| 206 papers | 12,974 citations | 39113 52 h-index | 27587 110 g-index |
| 216 all docs | 216 docs citations | 216 times ranked | 10507 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | All-optical spiking neurosynaptic networks with self-learning capabilities. Nature, 2019, 569, 208-214. | 13.7 | 847 |
| 2 | Integrated all-photonic non-volatile multi-level memory. Nature Photonics, 2015, 9, 725-732. | 15.6 | 833 |
| 3 | Photonics for artificial intelligence and neuromorphic computing. Nature Photonics, 2021, 15, 102-114. | 15.6 | 764 |
| 4 | Parallel convolutional processing using an integrated photonic tensor core. Nature, 2021, 589, 52-58. | 13.7 | 723 |
| 5 | Harnessing optical forces in integrated photonic circuits. Nature, 2008, 456, 480-484. | 13.7 | 492 |
| 6 | Hybrid integrated quantum photonic circuits. Nature Photonics, 2020, 14, 285-298. | 15.6 | 411 |
| 7 | On-chip photonic synapse. Science Advances, 2017, 3, e1700160. | 4.7 | 399 |
| 8 | High-speed and high-efficiency travelling wave single-photon detectors embedded in nanophotonic circuits. Nature Communications, 2012, 3, 1325. | 5.8 | 366 |
| 9 | In-memory computing on a photonic platform. Science Advances, 2019, 5, eaau5759. | 4.7 | 238 |
| 10 | Tunable bipolar optical interactions between guided lightwaves. Nature Photonics, 2009, 3, 464-468. | 15.6 | 232 |
| 11 | The rise of intelligent matter. Nature, 2021, 594, 345-355. | 13.7 | 228 |
| 12 | 2022 roadmap on neuromorphic computing and engineering. Neuromorphic Computing and Engineering, 2022, 2, 022501. | 2.8 | 217 |
| 13 | Dynamic manipulation of nanomechanical resonators in the high-amplitude regime and non-volatile mechanical memory operation. Nature Nanotechnology, 2011, 6, 726-732. | 15.6 | 216 |
| 14 | Low-Loss, Silicon Integrated, Aluminum Nitride Photonic Circuits and Their Use for Electro-Optic Signal Processing. Nano Letters, 2012, 12, 3562-3568. | 4.5 | 212 |
| 15 | Carbon nanotubes as emerging quantum-light sources. Nature Materials, 2018, 17, 663-670. | 13.3 | 210 |
| 16 | Active Silicon Integrated Nanophotonics: Ferroelectric BaTiO<sub>3</sub> Devices. Nano Letters, 2014, 14, 1419-1425. | 4.5 | 208 |
| 17 | Aluminum nitride as a new material for chip-scale optomechanics and nonlinear optics. New Journal of Physics, 2012, 14, 095014. | 1.2 | 207 |
| 18 | Calculating with light using a chip-scale all-optical abacus. Nature Communications, 2017, 8, 1256. | 5.8 | 201 |

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| 19 | Fast and reliable storage using a 5â€‰â€‰bit, nonvolatile photonic memory cell. Optica, 2019, 6, 1. | 4.8 | 195 |
| 20 | Fully integrated quantum photonic circuit with an electrically driven light source. Nature Photonics, 2016, 10, 727-732. | 15.6 | 190 |
| 21 | Onâ€Chip Photonic Memory Elements Employing Phaseâ€Change Materials. Advanced Materials, 2014, 26, 1372-1377. | 11.1 | 189 |
| 22 | Integrated GaN photonic circuits on silicon (100) for second harmonic generation. Optics Express, 2011, 19, 10462. | 1.7 | 176 |
| 23 | Nonvolatile Allâ€Optical 1 Ã— 2 Switch for Chipscale Photonic Networks. Advanced Optical Materials, 2017, 5, 1600346. | 3.6 | 165 |
| 24 | Reactive Cavity Optical Force on Microdisk-Coupled Nanomechanical Beam Waveguides. Physical Review Letters, 2009, 103, 223901. | 2.9 | 164 |
| 25 | Mixed-Mode Operation of Hybrid Phase-Change Nanophotonic Circuits. Nano Letters, 2017, 17, 150-155. | 4.5 | 148 |
| 26 | Photonic non-volatile memories using phase change materials. Applied Physics Letters, 2012, 101, . | 1.5 | 139 |
| 27 | Hybrid 2Dâ€“3D optical devices for integrated optics by direct laser writing. Light: Science and Applications, 2014, 3, e175-e175. | 7.7 | 134 |
| 28 | Plasmonic nanogap enhanced phase-change devices with dual electrical-optical functionality. Science Advances, 2019, 5, eaaw2687. | 4.7 | 131 |
| 29 | Deviceâ€Level Photonic Memories and Logic Applications Using Phaseâ€Change Materials. Advanced Materials, 2018, 30, e1802435. | 11.1 | 129 |
| 30 | Cavity-enhanced light emission from electrically driven carbon nanotubes. Nature Photonics, 2016, 10, 420-427. | 15.6 | 119 |
| 31 | Broadband all-photonic transduction of nanocantilevers. Nature Nanotechnology, 2009, 4, 377-382. | 15.6 | 117 |
| 32 | Second harmonic generation in phase matched aluminum nitride waveguides and micro-ring resonators. Applied Physics Letters, 2012, 100, . | 1.5 | 116 |
| 33 | Waveguide integrated low noise NbTiN nanowire single-photon detectors with milli-Hz dark count rate. Scientific Reports, 2013, 3, 1893. | 1.6 | 116 |
| 34 | Controlled switching of phase-change materials by evanescent-field coupling in integrated photonics [Invited]. Optical Materials Express, 2018, 8, 2455. | 1.6 | 113 |
| 35 | Finite-Difference Time-Domain Methods and Material Models for the Simulation of Metallic and Plasmonic Structures. Journal of Computational and Theoretical Nanoscience, 2010, 7, 1-14. | 0.4 | 106 |
| 36 | Waveguide-integrated superconducting nanowire single-photon detectors. Nanophotonics, 2018, 7, 1725-1758. | 2.9 | 103 |

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| 37 | Waveguide integrated superconducting single-photon detectors with high internal quantum efficiency at telecom wavelengths. Scientific Reports, 2015, 5, 10941. | 1.6 | 84 |
| 38 | Thermo-optical Effect in Phase-Change Nanophotonics. ACS Photonics, 2016, 3, 828-835. | 3.2 | 81 |
| 39 | Single organic molecules for photonic quantum technologies. Nature Materials, 2021, 20, 1615-1628. | 13.3 | 79 |
| 40 | Cavity-Enhanced and Ultrafast Superconducting Single-Photon Detectors. Nano Letters, 2016, 16, 7085-7092. | 4.5 | 77 |
| 41 | Diamond-integrated optomechanical circuits. Nature Communications, 2013, 4, 1690. | 5.8 | 75 |
| 42 | NbTiN superconducting nanowire detectors for visible and telecom wavelengths single photon counting on Si3N4 photonic circuits. Applied Physics Letters, 2013, 102, . | 1.5 | 74 |
| 43 | On-Chip Waveguide Coupling of a Layered Semiconductor Single-Photon Source. Nano Letters, 2017, 17, 5446-5451. | 4.5 | 72 |
| 44 | High-Q aluminum nitride photonic crystal nanobeam cavities. Applied Physics Letters, 2012, 100, . | 1.5 | 71 |
| 45 | Theoretical investigation of the transverse optical force between a silicon nanowire waveguide and a substrate. Optics Express, 2009, 17, 1806. | 1.7 | 66 |
| 46 | High Q micro-ring resonators fabricated from polycrystalline aluminum nitride films for near infrared and visible photonics. Optics Express, 2012, 20, 12261. | 1.7 | 60 |
| 47 | Superconducting single-photon detectors integrated with diamond nanophotonic circuits. Light: Science and Applications, 2015, 4, e338-e338. | 7.7 | 60 |
| 48 | Superconducting nanowire single-photon detector implemented in a 2D photonic crystal cavity. Optica, 2018, 5, 658. | 4.8 | 58 |
| 49 | Low-loss fiber-to-chip couplers with ultrawide optical bandwidth. APL Photonics, 2019, 4, . | 3.0 | 58 |
| 50 | Experimental investigation of silicon and silicon nitride platforms for phase-change photonic in-memory computing. Optica, 2020, 7, 218. | 4.8 | 58 |
| 51 | Tunable Volatility of Ge<sub>2</sub>Sb<sub>2</sub>Te<sub>5</sub> in Integrated Photonics. Advanced Functional Materials, 2019, 29, 1807571. | 7.8 | 57 |
| 52 | Waveguideâ€Integrated Lightâ€Emitting Carbon Nanotubes. Advanced Materials, 2014, 26, 3465-3472. | 11.1 | 56 |
| 53 | Single-photon detection and cryogenic reconfigurability in lithium niobate nanophotonic circuits. Nature Communications, 2021, 12, 6847. | 5.8 | 55 |
| 54 | Integrated 256 Cell Photonic Phase-Change Memory With 512-Bit Capacity. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-7. | 1.9 | 54 |

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| 55 | Ultrahigh-frequency nano-optomechanical resonators in slot waveguide ring cavities. Applied Physics Letters, 2010, 97, 183110. | 1.5 | 52 |
| 56 | Photostable Molecules on Chip: Integrated Sources of Nonclassical Light. ACS Photonics, 2018, 5, 126-132. | 3.2 | 51 |
| 57 | Broadband out-of-plane coupling at visible wavelengths. Optics Letters, 2019, 44, 5089. | 1.7 | 51 |
| 58 | Time-domain measurement of optical transport in silicon micro-ring resonators. Optics Express, 2010, 18, 18438. | 1.7 | 50 |
| 59 | Frequency and phase noise of ultrahigh<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Q</mml:mi></mml:math>silicon nitride nanomechanical resonators. Physical Review B, 2012, 85, . | 1.1 | 50 |
| 60 | Diamond as a Platform for Integrated Quantum Photonics. Advanced Quantum Technologies, 2018, 1, 1800061. | 1.8 | 49 |
| 61 | Atomic vapor spectroscopy in integrated photonic structures. Applied Physics Letters, 2015, 107, . | 1.5 | 48 |
| 62 | High Q optomechanical resonators in silicon nitride nanophotonic circuits. Applied Physics Letters, 2010, 97, . | 1.5 | 47 |
| 63 | Diamond as a material for monolithically integrated optical and optomechanical devices. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2385-2399. | 0.8 | 47 |
| 64 | Waveguideâ€Integrated Broadband Spectrometer Based on Tailored Disorder. Advanced Optical Materials, 2020, 8, 1901602. | 3.6 | 46 |
| 65 | Tunable optical coupler controlled by optical gradient forces. Optics Express, 2011, 19, 15098. | 1.7 | 45 |
| 66 | High-quality Si_3N_4 circuits as a platform for graphene-based nanophotonic devices. Optics Express, 2013, 21, 31678. | 1.7 | 45 |
| 67 | Scalable Fabrication of Integrated Nanophotonic Circuits on Arrays of Thin Single Crystal Diamond Membrane Windows. Nano Letters, 2016, 16, 3341-3347. | 4.5 | 43 |
| 68 | GHz optomechanical resonators with high mechanical Q factor in air. Optics Express, 2011, 19, 22316. | 1.7 | 41 |
| 69 | Beaming light from a quantum emitter with a planar optical antenna. Light: Science and Applications, 2017, 6, e16245-e16245. | 7.7 | 41 |
| 70 | Aluminum nitride nanophotonic circuits operating at ultraviolet wavelengths. Applied Physics Letters, 2014, 104, 091108. | 1.5 | 39 |
| 71 | Spectrally multiplexed single-photon detection with hybrid superconducting nanophotonic circuits. Optica, 2017, 4, 557. | 4.8 | 39 |
| 72 | Waveguide-integrated single- and multi-photon detection at telecom wavelengths using superconducting nanowires. Applied Physics Letters, 2015, 106, . | 1.5 | 37 |

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| 73 | Chalcogenide phase-change devices for neuromorphic photonic computing. Journal of Applied Physics, 2021, 129, . | 1.1 | 35 |
| 74 | Plasmonically-enhanced all-optical integrated phase-change memory. Optics Express, 2019, 27, 24724. | 1.7 | 35 |
| 75 | Backaction limits on self-sustained optomechanical oscillations. Physical Review A, 2012, 86, . | 1.0 | 34 |
| 76 | Waferscale nanophotonic circuits made from diamond-on-insulator substrates. Optics Express, 2013, 21, 11031. | 1.7 | 33 |
| 77 | Coupling Thermal Atomic Vapor to Slot Waveguides. Physical Review X, 2018, 8, . | 2.8 | 32 |
| 78 | Reconfigurable Nanophotonic Cavities with Nonvolatile Response. ACS Photonics, 2018, 5, 4644-4649. | 3.2 | 32 |
| 79 | Optical time domain reflectometry with low noise waveguide-coupled superconducting nanowire single-photon detectors. Applied Physics Letters, 2013, 102, . | 1.5 | 31 |
| 80 | Cascaded Machâ€“Zehnder interferometer tunable filters. Journal of Optics (United Kingdom), 2016, 18, 064011. | 1.0 | 30 |
| 81 | Broadband Spectrometer with Single-Photon Sensitivity Exploiting Tailored Disorder. Nano Letters, 2020, 20, 2625-2631. | 4.5 | 30 |
| 82 | Coupling thermal atomic vapor to an integrated ring resonator. New Journal of Physics, 2016, 18, 103031. | 1.2 | 29 |
| 83 | Integrated phase-change photonic devices and systems. MRS Bulletin, 2019, 44, 721-727. | 1.7 | 29 |
| 84 | Efficient Coupling of an Ensemble of Nitrogen Vacancy Center to the Mode of a High-Q, Si<sub>3</sub>N<sub>4</sub> Photonic Crystal Cavity. ACS Nano, 2019, 13, 6891-6898. | 7.3 | 29 |
| 85 | Detector-integrated on-chip QKD receiver for GHz clock rates. Npj Quantum Information, 2021, 7, . | 2.8 | 29 |
| 86 | Electronically Reconfigurable Photonic Switches Incorporating Plasmonic Structures and Phase Change Materials. Advanced Science, 2022, 9, e2200383. | 5.6 | 29 |
| 87 | Interlaboratory study on Sb2S3 interplay between structure, dielectric function, and amorphous-to-crystalline phase change for photonics. IScience, 2022, 25, 104377. | 1.9 | 29 |
| 88 | An FDTD method for the simulation of dispersive metallic structures. Optical and Quantum Electronics, 2007, 38, 843-856. | 1.5 | 28 |
| 89 | Optomechanical coupling in photonic crystal supported nanomechanical waveguides. Optics Express, 2009, 17, 12424. | 1.7 | 28 |
| 90 | Broadband photonic tensor core with integrated ultra-low crosstalk wavelength multiplexers. Nanophotonics, 2022, 11, 4063-4072. | 2.9 | 28 |

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| 91 | Absorption engineering of NbN nanowires deposited on silicon nitride nanophotonic circuits. Optics Express, 2013, 21, 22683. | 1.7 | 27 |
| 92 | Optoelectromechanical phase shifter with low insertion loss and a 13Ï€ tuning range. Optics Express, 2021, 29, 5525. | 1.7 | 27 |
| 93 | Modeling of the optical force between propagating lightwaves in parallel 3D waveguides. Optics Express, 2009, 17, 16032. | 1.7 | 26 |
| 94 | A mechanical Kerr effect in deformable photonic media. Applied Physics Letters, 2009, 95, . | 1.5 | 25 |
| 95 | Design of a Silicon Integrated Electro-Optic Modulator Using Ferroelectric BaTiO<sub>3</sub> Films. IEEE Photonics Technology Letters, 2014, 26, 1344-1347. | 1.3 | 25 |
| 96 | Analysis of short range forces in opto-mechanical devices with a nanogap. Optics Express, 2010, 18, 12615. | 1.7 | 21 |
| 97 | Carrier and thermal dynamics of silicon photonic resonators at cryogenic temperatures. Optics Express, 2011, 19, 3290. | 1.7 | 21 |
| 98 | Grating-assisted coupling to nanophotonic circuits in microcrystalline diamond thin films. Beilstein Journal of Nanotechnology, 2013, 4, 300-305. | 1.5 | 21 |
| 99 | Efficient self-imaging grating couplers on a lithium-niobate-on-insulator platform at near-visible and telecom wavelengths. Optics Express, 2021, 29, 20205. | 1.7 | 21 |
| 100 | Purcell-enhanced emission from individual SiV<sup>âˆ’</sup> center in nanodiamonds coupled to a Si<sub>3</sub>N<sub>4</sub>-based, photonic crystal cavity. Nanophotonics, 2020, 9, 3655-3662. | 2.9 | 21 |
| 101 | High performance nanophotonic circuits based on partially buried horizontal slot waveguides. Optics Express, 2010, 18, 20690. | 1.7 | 20 |
| 102 | Diamond Nanophotonic Circuits Functionalized by Dipâ€pen Nanolithography. Advanced Optical Materials, 2015, 3, 328-335. | 3.6 | 20 |
| 103 | A plasmonically enhanced route to faster and more energy-efficient phase-change integrated photonic memory and computing devices. Journal of Applied Physics, 2021, 129, . | 1.1 | 20 |
| 104 | Broadband waveguide-integrated superconducting single-photon detectors with high system detection efficiency. Applied Physics Letters, 2021, 118, . | 1.5 | 20 |
| 105 | Diamond electro-optomechanical resonators integrated in nanophotonic circuits. Applied Physics Letters, 2014, 105, . | 1.5 | 19 |
| 106 | Antimony as a Programmable Element in Integrated Nanophotonics. Nano Letters, 2022, 22, 3532-3538. | 4.5 | 19 |
| 107 | A General Framework for the Finite-Difference Time-Domain Simulation of Real Metals. IEEE Transactions on Antennas and Propagation, 2007, 55, 916-923. | 3.1 | 18 |
| 108 | Broadband directional coupling in aluminum nitride nanophotonic circuits. Optics Express, 2013, 21, 7304. | 1.7 | 18 |

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| 109 | Graphene Field-Effect Transistors Employing Different Thin Oxide Films: A Comparative Study. ACS Omega, 2019, 4, 2256-2260. | 1.6 | 18 |
| 110 | Hybrid Quantum Photonics Based on Artificial Atoms Placed Inside One Hole of a Photonic Crystal Cavity. ACS Photonics, 2021, 8, 2635-2641. | 3.2 | 18 |
| 111 | Coherent characterisation of a single molecule in a photonic black box. Nature Communications, 2021, 12, 706. | 5.8 | 18 |
| 112 | Single-Photon Emission from Individual Nanophotonic-Integrated Colloidal Quantum Dots. ACS Photonics, 2022, 9, 551-558. | 3.2 | 18 |
| 113 | Behavioral modeling of integrated phase-change photonic devices for neuromorphic computing applications. APL Materials, 2019, 7, . | 2.2 | 17 |
| 114 | Femtogram dispersive L3-nanobeam optomechanical cavities: design and experimental comparison. Optics Express, 2012, 20, 26486. | 1.7 | 16 |
| 115 | High Efficiency On-Chip Single-Photon Detection for Diamond Nanophotonic Circuits. Journal of Lightwave Technology, 2016, 34, 249-255. | 2.7 | 16 |
| 116 | Performance characteristics of phase-change integrated silicon nitride photonic devices in the O and C telecommunications bands. Optical Materials Express, 2020, 10, 1778. | 1.6 | 16 |
| 117 | A Finite-Difference Time-Domain Method for the Simulation of Gain Materials With Carrier Diffusion in Photonic Crystals. Journal of Lightwave Technology, 2007, 25, 2306-2314. | 2.7 | 15 |
| 118 | Matrix of Integrated Superconducting Single-Photon Detectors With High Timing Resolution. IEEE Transactions on Applied Superconductivity, 2013, 23, 2201007-2201007. | 1.1 | 15 |
| 119 | Hot-spot relaxation time current dependence in niobium nitride waveguide-integrated superconducting nanowire single-photon detectors. Optics Express, 2017, 25, 8739. | 1.7 | 15 |
| 120 | On-chip coherent detection with quantum limited sensitivity. Scientific Reports, 2017, 7, 4812. | 1.6 | 14 |
| 121 | Design study of random spectrometers for applications at optical frequencies. Optics Letters, 2018, 43, 3180. | 1.7 | 13 |
| 122 | Monadic Pavlovian associative learning in a backpropagation-free photonic network. Optica, 2022, 9, 792. | 4.8 | 13 |
| 123 | Silicon nitride membrane photonics. Journal of Optics, 2009, 11, 114017. | 1.5 | 11 |
| 124 | Sub-Poisson-binomial light. Physical Review A, 2016, 94, . | 1.0 | 11 |
| 125 | Python based open source design framework for integrated nanophotonic and superconducting circuitry with 2D-3D-hybrid integration. OSA Continuum, 2019, 2, 3091. | 1.8 | 11 |
| 126 | Plasmonics: Enabling functionalities with novel materials. Journal of Applied Physics, 2021, 129, . | 1.1 | 11 |

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| 127 | Artificial Biphasic Synapses Based on Nonvolatile Phaseâ€Change Photonic Memory Cells. Physica Status Solidi - Rapid Research Letters, 2022, 16, . | 1.2 | 11 |
| 128 | Polycrystalline diamond photonic waveguides realized by femtosecond laser lithography. Optical Materials Express, 2019, 9, 3109. | 1.6 | 10 |
| 129 | Narrow Line Width Quantum Emitters in an Electron-Beam-Shaped Polymer. ACS Photonics, 2019, 6, 3120-3125. | 3.2 | 9 |
| 130 | On-chip Phase Change Optical Matrix Multiplication Core. , 2020, , . | | 9 |
| 131 | Numerical investigation of field enhancement by metal nano-particles using a hybrid FDTD-PSTD algorithm. Optics Express, 2007, 15, 11433. | 1.7 | 8 |
| 132 | Self-Holding Optical Actuator Based on a Mixed Ionicâ€"Electronic Conductor Material. ACS Photonics, 2019, 6, 1182-1190. | 3.2 | 8 |
| 133 | Reconfigurable Nanophotonic Circuitry Enabled by Direct-Laser-Writing. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-5. | 1.9 | 8 |
| 134 | Giant nonlinear self-phase modulation of large-amplitude spin waves in microscopic YIG waveguides. Scientific Reports, 2022, 12, 7246. | 1.6 | 8 |
| 135 | An integrated photonics engine for unsupervised correlation detection. Science Advances, 2022, 8, . | 4.7 | 8 |
| 136 | Pseudo-spectral time-domain simulation of the transmission and the group delay of photonic devices. Optical and Quantum Electronics, 2008, 40, 1-12. | 1.5 | 7 |
| 137 | Photothermal actuation in nanomechanical waveguide devices. Journal of Applied Physics, 2009, 105, 014508. | 1.1 | 7 |
| 138 | Adiabatic embedment of nanomechanical resonators in photonic microring cavities. Applied Physics Letters, 2010, 96, 263101. | 1.5 | 7 |
| 139 | Mode control and mode conversion in nonlinear aluminum nitride waveguides. Optics Express, 2013, 21, 26742. | 1.7 | 7 |
| 140 | Diamond on aluminum nitride as a platform for integrated photonic circuits. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2075-2080. | 0.8 | 7 |
| 141 | Analysis of the detection response of waveguide-integrated superconducting nanowire single-photon detectors at high count rate. Applied Physics Letters, 2019, 115, . | 1.5 | 7 |
| 142 | System-Level Simulation for Integrated Phase-Change Photonics. Journal of Lightwave Technology, 2021, 39, 6392-6402. | 2.7 | 6 |
| 143 | Integrated Photonic Circuits in Gallium Nitride and Aluminum Nitride. International Journal of High Speed Electronics and Systems, 2014, 23, 1450001. | 0.3 | 5 |
| 144 | Integrating two-photon nonlinear spectroscopy of rubidium atoms with silicon photonics. Optics Express, 2020, 28, 19593. | 1.7 | 5 |

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| 145 | Gigahertz photothermal effect in silicon waveguides. Applied Physics Letters, 2008, 93, 213106. | 1.5 | 4 |
| 146 | Protocol of Measuring Hot-Spot Correlation Length for SNSPDs With Near-Unity Detection Efficiency. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5. | 1.1 | 4 |
| 147 | Finite-difference time-domain simulation of dispersive features smaller than the grid spacing. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2007, 20, 311-326. | 1.2 | 3 |
| 148 | Photonic crystal dumbbell resonators in silicon and aluminum nitride integrated optical circuits. Journal of Nanophotonics, 2013, 7, 073095. | 0.4 | 3 |
| 149 | Circuit optomechanics: concepts and materials. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1889-1898. | 1.7 | 3 |
| 150 | Travelling-wave single-photon detectors integrated with diamond photonic circuits: operation at visible and telecom wavelengths with a timing jitter down to 23 ps. , 2016, , . | | 3 |
| 151 | Superconducting Nanowire Single Photon Detector for Coherent Detection of Weak Signals. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5. | 1.1 | 3 |
| 152 | All-optical signal processing using phase-change nanophotonics. , 2017, , . | | 3 |
| 153 | Waveguide-Integrated Superconducting Nanowire SinglePhoton Detector Array for Ultra-Fast Quantum Key Distribution. , 2020, , . | | 2 |
| 154 | Broadband fiber-to-chip coupling in different wavelength regimes realized by 3D-structures. , 2020, , . | | 2 |
| 155 | Performance characteristics of phase-change integrated silicon nitride photonic devices in the O and C telecommunications bands. Optical Materials Express, 2020, 10, 1778. | 1.6 | 2 |
| 156 | High-Index Organic Polymeric Carbon Nitride-Based Photonic Devices for Telecommunication Wavelengths. ACS Photonics, 2022, 9, 1717-1723. | 3.2 | 2 |
| 157 | Diamond components with integrated abrasion sensor for tribological applications. Diamond and Related Materials, 2007, 16, 991-995. | 1.8 | 1 |
| 158 | Numerical investigation of Littrow lasing in open resonator photonic crystal waveguides. Europhysics Letters, 2008, 82, 54001. | 0.7 | 1 |
| 159 | Superconducting single-photon detector for integrated waveguide spectrometer. EPJ Web of Conferences, 2018, 190, 04009. | 0.1 | 1 |
| 160 | Investigation on Metalâ€"Oxide Graphene Field-Effect Transistors With Clamped Geometries. IEEE Journal of the Electron Devices Society, 2019, 7, 964-968. | 1.2 | 1 |
| 161 | Integrated quantum photonic circuits made from diamond. Semiconductors and Semimetals, 2021, 104, 149-171. | 0.4 | 1 |
| 162 | Second harmonic generation in aluminum nitride waveguides on silicon substrates. , 2012, , . | | 1 |

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| 163 | Integrated Phase-change Photonics: A Strategy for Merging Communication and Computing. , 2019, , . | | 1 |
| 164 | A threeâ€dimensional mesh refinement algorithm with low boundary reflections for the finiteâ€difference timeâ€domain simulation of metallic structures. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2010, 23, 183-199. | 1.2 | 0 |
| 165 | Photonic Integration of nano-electro-mechanical systems. , 2010, , . | | 0 |
| 166 | Optical forces between a high-Q micro-disk resonator and an integrated waveguide. , 2010, , . | | 0 |
| 167 | Adiabatic embedment of nanomechanical resonators in photonic microring cavities. , 2010, , . | | 0 |
| 168 | A silicon nano-wire factorable photon pair source. , 2011, , . | | 0 |
| 169 | Phase noise of high Q silicon nitride nanomechanical resonators. , 2012, , . | | 0 |
| 170 | Observation of k<inf>B</inf>T/f frequency noise in ultrahigh Q silicon nitride nanomechanical resonators. , 2012, , . | | 0 |
| 171 | GHz Optomechanical Wheel and Disk Resonators with High Mechanical Q Factors in Air. , 2012, , . | | 0 |
| 172 | A silicon nanowire factorable photon pair source. Optical and Quantum Electronics, 2013, 45, 357-364. | 1.5 | 0 |
| 173 | Low-noise NbTiN superconducting nanowire single-photon detectors integrated with Si3N4 waveguides. , 2013, , . | | 0 |
| 174 | Integrated Photonic Circuits on Wafer-Scale Diamond-on-Insulator Substrates. , 2013, , . | | 0 |
| 175 | Integrated Optomechanical Circuits and Nonlinear Dynamics. , 2014, , 169-194. | | 0 |
| 176 | Carbon integrated optomechanical systems. , 2014, , . | | 0 |
| 177 | Nanometric surface probing through ultra-cold atoms. Proceedings of SPIE, 2014, , . | 0.8 | 0 |
| 178 | All-photonic nonvolatile memory cells using phase-change materials. , 2015, , . | | 0 |
| 179 | Direct laser writing aligned with nano-diamonds containing NV-centers as single-photon emitters. , 2015, , . | | 0 |
| 180 | Waveguide integrated superconducting single-photon detectors. , 2016, , . | | 0 |

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| 181 | NichtflÃ¼chtiger optischer Speicher in photonischen Schaltkreisen. Physik in Unserer Zeit, 2016, 47, 9-10. | 0.0 | 0 |
| 182 | Waveguide Integrated Superconducting Nanowire Single Photon Detectors on Silicon. Quantum Science and Technology, 2016, , 85-105. | 1.5 | 0 |
| 183 | Circuit Optomechanics with Diamond Integrated Optical Devices. NATO Science for Peace and Security Series B: Physics and Biophysics, 2017, , 213-221. | 0.2 | 0 |
| 184 | Integrated Quantum Photonic Circuits with Electrically Driven Light Sources. , 2017, , . | | 0 |
| 185 | Superconducting Single-Photon Detectors for Integrated Nanophotonics Circuits. , 2017, , . | | 0 |
| 186 | Photostable molecules on chip: Integrated single photon sources for quantum technologies. , 2017, , . | | 0 |
| 187 | Cavity-Enhanced Superconducting Single Photon Detectors. , 2018, , . | | 0 |
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| 190 | Coupling a Single Molecule to an Interrupted Nanophotonic Waveguide. , 2021, , . | | 0 |
| 191 | Integration of colloidal quantum dots with nanophotonic circuits. , 2021, , . | | 0 |
| 192 | Reconfigurable nanophotonic circuitry enabled by direct-laser-writing. , 2021, , . | | 0 |
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