# Peter John Rodrigo

List of Publications by Year
in descending order



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|---|---|---|---|
| 95 papers | 1,832 citations | 279798 23 h-index | 276875 41 g-index |
| 95 all docs | 95 docs citations | 95 times ranked | 1077 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Roomâ€Temperature, Highâ€SNR Upconversion Spectrometer in the 6â€“12ÂÂµm Region. Laser and Photonics Reviews, 2021, 15, 2000443. | 8.7 | 12 |
| 2 | Non-Destructive Subsurface Inspection of Marine and Protective Coatings Using Near- and Mid-Infrared Optical Coherence Tomography. Coatings, 2021, 11, 877. | 2.6 | 9 |
| 3 | High-resolution mid-infrared optical coherence tomography with kHz line rate. Optics Letters, 2021, 46, 4558. | 3.3 | 8 |
| 4 | CW Direct Detection Lidar with a Large Dynamic Range of Wind Speed Sensing in a Remote and Spatially Confined Volume. Remote Sensing, 2021, 13, 3716. | 4.0 | 2 |
| 5 | Upconversion dark-field imaging with extended field of view at video frame rate. Applied Optics, 2020, 59, 2157. | 1.8 | 4 |
| 6 | Nonlinear optical vortex coronagraph. Optics Letters, 2020, 45, 1579. | 3.3 | 6 |
| 7 | Dual-band fluorosensor for discriminating non-eating from algae-eating zooplankton in aquatic environments. OSA Continuum, 2020, 3, 1730. | 1.8 | 1 |
| 8 | Investigation of autofluorescence in zooplankton for use in classification of larval salmon lice. Applied Optics, 2019, 58, 7022. | 1.8 | 8 |
| 9 | Parametric upconversion imaging and its applications. Advances in Optics and Photonics, 2019, 11, 952. | 25.5 | 52 |
| 10 | SHG (532â€‰â€‰nm)-induced spontaneous parametric downconversion noise in 1064-nm-pumped IR upconversion detectors. Optics Letters, 2019, 44, 1670. | 3.3 | 7 |
| 11 | Upconversion detector for range-resolved DIAL measurement of atmospheric CH<sub>4</sub>. Optics Express, 2018, 26, 3850. | 3.4 | 24 |
| 12 | Time-resolved infrared photoluminescence spectroscopy using parametric three-wave mixing with angle-tuned phase matching. Optics Letters, 2018, 43, 3001. | 3.3 | 5 |
| 13 | Mid-Infrared Imaging using Upconversion - Principles and Applications. , 2018, , . | | 1 |
| 14 | Enhancing the detectivity of an upconversion single-photon detector by spatial filtering of upconverted parametric fluorescence. Optics Express, 2018, 26, 24712. | 3.4 | 9 |
| 15 | Point-Spread Function Engineering in Upconversion Imaging. , 2018, , . | | 1 |
| 16 | S/N Ratio of an Upconversion Detector Dominated by Upconverted Spontaneous Parametric Down-conversion Noise. , 2018, , . | | 1 |
| 17 | Investigation of Optical Signatures for Discriminating Salmon Lice from Other Species of Zooplankton. , 2018, , . | | 0 |
| 18 | Investigation of mid-IR picosecond image upconversion. Proceedings of SPIE, 2017, , . | 0.8 | 1 |

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|---|---|---|---|
| 19 | Intracavity upconversion for IR absorption lidar: Comparison of linear and ring cavity designs. , 2017, , . | | 0 |
| 20 | GHz-bandwidth upconversion detector using a unidirectional ring cavity to reduce multilongitudinal mode pump effects. Optics Express, 2017, 25, 14783. | 3.4 | 8 |
| 21 | Upconversion imaging using short-wave infrared picosecond pulses. Optics Letters, 2017, 42, 579. | 3.3 | 8 |
| 22 | Upconversion Detector for Methane Atmospheric Sensor. , 2017, , . | | 0 |
| 23 | Eye-safe diode laser Doppler lidar with a MEMS beam-scanner. Optics Express, 2016, 24, 1934. | 3.4 | 24 |
| 24 | Diode Laser Applications for Wind Energy. , 2016, , . | | 0 |
| 25 | Development of semiconductor laser based Doppler lidars for wind-sensing applications. , 2015, , . | | 2 |
| 26 | Impact of primary aberrations on coherent lidar performance. , 2014, , . | | 2 |
| 27 | Influence of laser frequency noise on scanning Fabry-Perot interferometer based laser Doppler velocimetry. Proceedings of SPIE, 2014, , . | 0.8 | 0 |
| 28 | Diode laser lidar wind velocity sensor using a liquid-crystal retarder for non-mechanical beam-steering. Optics Express, 2014, 22, 26674. | 3.4 | 9 |
| 29 | Remote wind sensing with a CW diode laser lidar beyond the coherence regime. Optics Letters, 2014, 39, 4875. | 3.3 | 6 |
| 30 | Semiconductor Laser Lidar Wind Velocity Sensor for Turbine Control. , 2014, , . | | 0 |
| 31 | Monostatic coaxial 15 Î¼m laser Doppler velocimeter using a scanning Fabry-Perot interferometer. Optics Express, 2013, 21, 21105. | 3.4 | 8 |
| 32 | Investigation of spherical aberration effects on coherent lidar performance. Optics Express, 2013, 21, 25670. | 3.4 | 10 |
| 33 | Field performance of an all-semiconductor laser coherent Doppler lidar. Optics Letters, 2012, 37, 2277. | 3.3 | 29 |
| 34 | Comparative study of the performance of semiconductor laser based coherent Doppler lidars. Proceedings of SPIE, 2012, , . | 0.8 | 4 |
| 35 | Reduction of phase-induced intensity noise in a fiber-based coherent Doppler lidar using polarization control. Optics Express, 2010, 18, 5320. | 3.4 | 16 |
| 36 | Doppler wind lidar using a MOPA semiconductor laser at stable single-frequency operation. , 2009, , . | | 0 |

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| 37 | Optical microassembly platform for constructing reconfigurable microenvironments for biomedical studies. Optics Express, 2009, 17, 6578. | 3.4 | 108 |
| 38 | Optically controlled three-dimensional assembly of microfabricated building blocks. Proceedings of SPIE, 2009, , . | 0.8 | 1 |
| 39 | Accurate quantitative phase imaging using generalized phase contrast. Optics Express, 2008, 16, 2740. | 3.4 | 25 |
| 40 | Photon-efficient grey-level image projection by the generalized phase contrast method. New Journal of Physics, 2007, 9, 132-132. | 2.9 | 15 |
| 41 | Three-dimensional intensity distribution of helico-conical optical beams. , 2007, , . | | 8 |
| 42 | Encoding arbitrary grey-level optical landscapes for trapping and manipulation using GPC. Proceedings of SPIE, 2007, , . | 0.8 | 0 |
| 43 | Track and trap in 3D. , 2007, , . | | 0 |
| 44 | Single-SLM 3D interactive micromanipulation based on the generalized phase contrast (GPC) approach. , 2007, , . | | 0 |
| 45 | Vision feedback driven automated assembly of photopolymerized structures by parallel optical trapping and manipulation. Proceedings of SPIE, 2007, , . | 0.8 | 0 |
| 46 | Laser projection using generalized phase contrast. Optics Letters, 2007, 32, 3281. | 3.3 | 25 |
| 47 | Computerized â€œdrag-and-dropâ€•alignment of GPC-based optical micromanipulation system. Optics Express, 2007, 15, 1923. | 3.4 | 14 |
| 48 | Fully automated beam-alignment and single stroke guided manual alignment of counter-propagating multi-beam based optical micromanipulation systems. Optics Express, 2007, 15, 7968. | 3.4 | 21 |
| 49 | 2D optical manipulation and assembly of shape-complementary planar microstructures. Optics Express, 2007, 15, 9009. | 3.4 | 60 |
| 50 | Generalized phase contrast matched to Gaussian illumination. Optics Express, 2007, 15, 11971. | 3.4 | 31 |
| 51 | High-speed phase modulation using the RPC method with a digital micromirror-array device. Optics Express, 2006, 14, 5588. | 3.4 | 10 |
| 52 | Three-dimensional forces in GPC-based counterpropagating-beam traps. Optics Express, 2006, 14, 5812. | 3.4 | 51 |
| 53 | Autonomous and 3D real-time multi-beam manipulation in a microfluidic environment. Optics Express, 2006, 14, 12199. | 3.4 | 45 |
| 54 | GPC-based optical micromanipulation in 3D real-time using a single spatial light modulator. Optics Express, 2006, 14, 13107. | 3.4 | 37 |

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| 55 | Optically driven microtools fabricated by UV lithography and RIE. , 2006, 6131, 77. | | 0 |
| 56 | Manipulation of yeast cells in a microfluidic channel using the GPC-based optical trapping system. , 2006, , . | | 0 |
| 57 | GPC-based counterpropagating-beam traps with unequally sized intensity profiles. , 2006, , . | | 0 |
| 58 | Sorting particles in a microfluidic system using SLM-reconfigurable intensity patterns. , 2006, , . | | 2 |
| 59 | Optical 3D Manipulation and Observation in Real-Time. Journal of Robotics and Mechatronics, 2006, 18, 692-697. | 1.0 | 7 |
| 60 | Optical micromanipulation of mixed yeast cell populations for analyzing growth behavior. , 2005, , . | | 0 |
| 61 | Four-dimensional multi-beam optical manipulation based on the Generalized Phase Contrast method. Proceedings of SPIE, 2005, 5736, 30. | 0.8 | 0 |
| 62 | Interactive optical trapping shows that confinement is a determinant of growth in a mixed yeast culture. FEMS Microbiology Letters, 2005, 245, 155-159. | 1.8 | 86 |
| 63 | Four-dimensional optical manipulation of colloidal particles. Applied Physics Letters, 2005, 86, 074103. | 3.3 | 96 |
| 64 | Dynamically reconfigurable optical lattices. Optics Express, 2005, 13, 1384. | 3.4 | 49 |
| 65 | Helico-conical optical beams: a product of helical and conical phase fronts. Optics Express, 2005, 13, 1749. | 3.4 | 108 |
| 66 | Real-time interactive 3D manipulation of particles viewed in two orthogonal observation planes. Optics Express, 2005, 13, 2852. | 3.4 | 59 |
| 67 | Actuation of microfabricated tools using multiple GPC-based counterpropagating-beam traps. Optics Express, 2005, 13, 6899. | 3.4 | 112 |
| 68 | Biophotonics. Optics and Photonics News, 2005, 16, 18. | 0.5 | 4 |
| 69 | Dynamic array of dark optical traps. Applied Physics Letters, 2004, 84, 323-325. | 3.3 | 94 |
| 70 | Phase-only optical decryption in a planar integrated micro-optics system. Optical Engineering, 2004, 43, 2223. | 1.0 | 20 |
| 71 | Decrypting binary phase patterns by amplitude. Optical Engineering, 2004, 43, 2250. | 1.0 | 5 |
| 72 | Programmable complex field coupling to high-order guided modes of micro-structured fibres. Optics Communications, 2004, 232, 229-237. | 2.1 | 12 |

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| 73 | Dynamic formation of optically trapped microstructure arrays for biosensor applications. Biosensors and Bioelectronics, 2004, 19, 1439-1444. | 10.1 | 27 |
| 74 | Real-time interactive optical micromanipulation of a mixture of high- and low-index particles. Optics Express, 2004, 12, 1417. | 3.4 | 76 |
| 75 | Real-time three-dimensional optical micromanipulation of multiple particles and living cells. Optics Letters, 2004, 29, 2270. | 3.3 | 127 |
| 76 | Biophotonics. Optics and Photonics News, 2004, 15, 19. | 0.5 | 1 |
| 77 | State of the art in generalized phase-contrast-driven optical micromanipulation. , 2004, , . | | 0 |
| 78 | Far-field technique for tunable coupling to high-order guided modes of photonic crystal fibers. , 2004, , . | | 0 |
| 79 | Multiple doughnut beams for trapping and dynamic manipulation of low-index microstructures. , 2004, , . | | 0 |
| 80 | Array of optical tweezers with individual beam-steering and polarization control. , 2004, , . | | 1 |
| 81 | Integrated miniaturized laboratories using dynamic multiple-beam optical manipulators. , 2004, 5514, 48. | | 0 |
| 82 | Multiple dual-beam traps for three-dimensional position control of particles. , 2004, , . | | 0 |
| 83 | Dynamic 3D particle position control in generalized phase contrast-based optical trap arrays. , 2004, , . | | 0 |
| 84 | Computer-controlled orientation of multiple optically-trapped microscopic particles. Microelectronic Engineering, 2003, 67-68, 872-878. | 2.4 | 14 |
| 85 | Spatial light modulator-controlled alignment and spinning of birefringent particles optically trapped in an array. Applied Optics, 2003, 42, 5107. | 2.1 | 19 |
| 86 | Comment on Interferometric phase-only optical encryption system that uses a reference wave. Optics Letters, 2003, 28, 1075. | 3.3 | 6 |
| 87 | Microscopy: Dispersion-Free Ultrahigh-Resolution Optical Coherence. Optics and Photonics News, 2003, 14, 20. | 0.5 | 3 |
| 88 | Shack-Hartmann multiple-beam optical tweezers. Optics Express, 2003, 11, 208. | 3.4 | 36 |
| 89 | Controllable coupling to the second-order mode of a photonic crystal fiber. , 2003, 5260, 261. | | 0 |
| 90 | Interactive light-powered lab-on-a-chip: simultaneous actuation of microstructures by optical manipulation. , 2003, , . | | 2 |

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| 91 | Vision-guided manipulation of colloidal structures. , 2003, 5106, 46. | | 0 |
| 92 | Formation and dynamic manipulation of an assembly of micro- and nano-scale particles. , 2002, , . | | 0 |
| 93 | Direction-sensitive subwavelength displacement measurements at diffraction-limited spatial resolution. Optics Letters, 2002, 27, 25. | 3.3 | 3 |
| 94 | Interactive light-driven and parallel manipulation of inhomogeneous particles. Optics Express, 2002, 10, 1550. | 3.4 | 122 |
| 95 | Optical-feedback semiconductor laser Michelson interferometer for displacement measurements with directional discrimination. Applied Optics, 2001, 40, 506. | 2.1 | 13 |