Peter John Rodrigo

List of Publications by Year
in descending order

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	Real-time three-dimensional optical micromanipulation of multiple particles and living cells. Optics Letters, 2004, 29, 2270.	3.3	127
2	Interactive light-driven and parallel manipulation of inhomogeneous particles. Optics Express, 2002, 10, 1550.	3.4	122
3	Actuation of microfabricated tools using multiple GPC-based counterpropagating-beam traps. Optics Express, 2005, 13, 6899.	3.4	112
4	Helico-conical optical beams: a product of helical and conical phase fronts. Optics Express, 2005, 13, 1749.	3.4	108
5	Optical microassembly platform for constructing reconfigurable microenvironments for biomedical studies. Optics Express, 2009, 17, 6578.	3.4	108
6	Four-dimensional optical manipulation of colloidal particles. Applied Physics Letters, 2005, 86, 074103.	3.3	96
7	Dynamic array of dark optical traps. Applied Physics Letters, 2004, 84, 323-325.	3.3	94
8	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
9	Real-time interactive optical micromanipulation of a mixture of high- and low-index particles. Optics Express, 2004, 12, 1417.	3.4	76
10	2D optical manipulation and assembly of shape-complementary planar microstructures. Optics Express, 2007, 15, 9009.	3.4	60
11	Real-time interactive 3D manipulation of particles viewed in two orthogonal observation planes. Optics Express, 2005, 13, 2852.	3.4	59
12	Parametric upconversion imaging and its applications. Advances in Optics and Photonics, 2019, 11, 952.	25.5	52
13	Three-dimensional forces in GPC-based counterpropagating-beam traps. Optics Express, 2006, 14, 5812.	3.4	51
14	Dynamically reconfigurable optical lattices. Optics Express, 2005, 13, 1384.	3.4	49
15	Autonomous and 3D real-time multi-beam manipulation in a microfluidic environment. Optics Express, 2006, 14, 12199.	3.4	45
16	GPC-based optical micromanipulation in 3D real-time using a single spatial light modulator. Optics Express, 2006, 14, 13107.	3.4	37
17	Shack-Hartmann multiple-beam optical tweezers. Optics Express, 2003, 11, 208.	3.4	36
18	Generalized phase contrast matched to Gaussian illumination. Optics Express, 2007, 15, 11971.	3.4	31

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19	Field performance of an all-semiconductor laser coherent Doppler lidar. Optics Letters, 2012, 37, 2277.	3.3	29
20	Dynamic formation of optically trapped microstructure arrays for biosensor applications. Biosensors and Bioelectronics, 2004, 19, 1439-1444.	10.1	27
21	Laser projection using generalized phase contrast. Optics Letters, 2007, 32, 3281.	3.3	25
22	Accurate quantitative phase imaging using generalized phase contrast. Optics Express, 2008, 16, 2740.	3.4	25
23	Eye-safe diode laser Doppler lidar with a MEMS beam-scanner. Optics Express, 2016, 24, 1934.	3.4	24
24	Upconversion detector for range-resolved DIAL measurement of atmospheric CH₄. Optics Express, 2018, 26, 3850.	3.4	24
25	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
26	Phase-only optical decryption in a planar integrated micro-optics system. Optical Engineering, 2004, 43, 2223.	1.0	20
27	Spatial light modulator-controlled alignment and spinning of birefringent particles optically trapped in an array. Applied Optics, 2003, 42, 5107.	2.1	19
28	Reduction of phase-induced intensity noise in a fiber-based coherent Doppler lidar using polarization control. Optics Express, 2010, 18, 5320.	3.4	16
29	Photon-efficient grey-level image projection by the generalized phase contrast method. New Journal of Physics, 2007, 9, 132-132.	2.9	15
30	Computer-controlled orientation of multiple optically-trapped microscopic particles. Microelectronic Engineering, 2003, 67-68, 872-878.	2.4	14
31	Computerized â€œdrag-and-dropâ€•alignment of GPC-based optical micromanipulation system. Optics Express, 2007, 15, 1923.	3.4	14
32	Optical-feedback semiconductor laser Michelson interferometer for displacement measurements with directional discrimination. Applied Optics, 2001, 40, 506.	2.1	13
33	Programmable complex field coupling to high-order guided modes of micro-structured fibres. Optics Communications, 2004, 232, 229-237.	2.1	12
34	Roomâ€Temperature, Highâ€SNR Upconversion Spectrometer in the 6â€“12ÂÂµm Region. Laser and Photonics Reviews, 2021, 15, 2000443.	8.7	12
35	High-speed phase modulation using the RPC method with a digital micromirror-array device. Optics Express, 2006, 14, 5588.	3.4	10
36	Investigation of spherical aberration effects on coherent lidar performance. Optics Express, 2013, 21, 25670.	3.4	10

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37	Diode laser lidar wind velocity sensor using a liquid-crystal retarder for non-mechanical beam-steering. Optics Express, 2014, 22, 26674.	3.4	9
38	Non-Destructive Subsurface Inspection of Marine and Protective Coatings Using Near- and Mid-Infrared Optical Coherence Tomography. Coatings, 2021, 11, 877.	2.6	9
39	Enhancing the detectivity of an upconversion single-photon detector by spatial filtering of upconverted parametric fluorescence. Optics Express, 2018, 26, 24712.	3.4	9
40	Three-dimensional intensity distribution of helico-conical optical beams. , 2007, , .		8
41	Monostatic coaxial 15 Î¼m laser Doppler velocimeter using a scanning Fabry-Perot interferometer. Optics Express, 2013, 21, 21105.	3.4	8
42	GHz-bandwidth upconversion detector using a unidirectional ring cavity to reduce multilongitudinal mode pump effects. Optics Express, 2017, 25, 14783.	3.4	8
43	Upconversion imaging using short-wave infrared picosecond pulses. Optics Letters, 2017, 42, 579.	3.3	8
44	High-resolution mid-infrared optical coherence tomography with kHz line rate. Optics Letters, 2021, 46, 4558.	3.3	8
45	Investigation of autofluorescence in zooplankton for use in classification of larval salmon lice. Applied Optics, 2019, 58, 7022.	1.8	8
46	SHG (532â€‰â€‰nm)-induced spontaneous parametric downconversion noise in 1064-nm-pumped IR upconversion detectors. Optics Letters, 2019, 44, 1670.	3.3	7
47	Optical 3D Manipulation and Observation in Real-Time. Journal of Robotics and Mechatronics, 2006, 18, 692-697.	1.0	7
48	Comment on Interferometric phase-only optical encryption system that uses a reference wave. Optics Letters, 2003, 28, 1075.	3.3	6
49	Remote wind sensing with a CW diode laser lidar beyond the coherence regime. Optics Letters, 2014, 39, 4875.	3.3	6
50	Nonlinear optical vortex coronagraph. Optics Letters, 2020, 45, 1579.	3.3	6
51	Decrypting binary phase patterns by amplitude. Optical Engineering, 2004, 43, 2250.	1.0	5
52	Time-resolved infrared photoluminescence spectroscopy using parametric three-wave mixing with angle-tuned phase matching. Optics Letters, 2018, 43, 3001.	3.3	5
53	Biophotonics. Optics and Photonics News, 2005, 16, 18.	0.5	4
54	Comparative study of the performance of semiconductor laser based coherent Doppler lidars. Proceedings of SPIE, 2012, , .	0.8	4

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55	Upconversion dark-field imaging with extended field of view at video frame rate. Applied Optics, 2020, 59, 2157.	1.8	4
56	Direction-sensitive subwavelength displacement measurements at diffraction-limited spatial resolution. Optics Letters, 2002, 27, 25.	3.3	3
57	Microscopy: Dispersion-Free Ultrahigh-Resolution Optical Coherence. Optics and Photonics News, 2003, 14, 20.	0.5	3
58	Interactive light-powered lab-on-a-chip: simultaneous actuation of microstructures by optical manipulation. , 2003, , .		2
59	Sorting particles in a microfluidic system using SLM-reconfigurable intensity patterns. , 2006, , .		2
60	Impact of primary aberrations on coherent lidar performance. , 2014, , .		2
61	Development of semiconductor laser based Doppler lidars for wind-sensing applications. , 2015, , .		2
62	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
63	Biophotonics. Optics and Photonics News, 2004, 15, 19.	0.5	1
64	Array of optical tweezers with individual beam-steering and polarization control. , 2004, , .		1
65	Optically controlled three-dimensional assembly of microfabricated building blocks. Proceedings of SPIE, 2009, , .	0.8	1
66	Investigation of mid-IR picosecond image upconversion. Proceedings of SPIE, 2017, , .	0.8	1
67	Mid-Infrared Imaging using Upconversion - Principles and Applications. , 2018, , .		1
68	Point-Spread Function Engineering in Upconversion Imaging. , 2018, , .		1
69	S/N Ratio of an Upconversion Detector Dominated by Upconverted Spontaneous Parametric Down-conversion Noise. , 2018, , .		1
70	Dual-band fluorosensor for discriminating non-eating from algae-eating zooplankton in aquatic environments. OSA Continuum, 2020, 3, 1730.	1.8	1
71	Formation and dynamic manipulation of an assembly of micro- and nano-scale particles. , 2002, , .		0
72	Controllable coupling to the second-order mode of a photonic crystal fiber. , 2003, 5260, 261.		0

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73	Vision-guided manipulation of colloidal structures. , 2003, 5106, 46.		0
74	State of the art in generalized phase-contrast-driven optical micromanipulation. , 2004, , .		0
75	Far-field technique for tunable coupling to high-order guided modes of photonic crystal fibers. , 2004, , .		0
76	Multiple doughnut beams for trapping and dynamic manipulation of low-index microstructures. , 2004, , .		0
77	Integrated miniaturized laboratories using dynamic multiple-beam optical manipulators. , 2004, 5514, 48.		0
78	Multiple dual-beam traps for three-dimensional position control of particles. , 2004, , .		0
79	Dynamic 3D particle position control in generalized phase contrast-based optical trap arrays. , 2004, , .		0
80	Optical micromanipulation of mixed yeast cell populations for analyzing growth behavior. , 2005, , .		0
81	Four-dimensional multi-beam optical manipulation based on the Generalized Phase Contrast method. Proceedings of SPIE, 2005, 5736, 30.	0.8	0
82	Optically driven microtools fabricated by UV lithography and RIE. , 2006, 6131, 77.		0
83	Manipulation of yeast cells in a microfluidic channel using the GPC-based optical trapping system. , 2006, , .		0
84	GPC-based counterpropagating-beam traps with unequally sized intensity profiles. , 2006, , .		0
85	Encoding arbitrary grey-level optical landscapes for trapping and manipulation using GPC. Proceedings of SPIE, 2007, , .	0.8	0
86	Track and trap in 3D. , 2007, , .		0
87	Single-SLM 3D interactive micromanipulation based on the generalized phase contrast (GPC) approach. , 2007, , .		0
88	Vision feedback driven automated assembly of photopolymerized structures by parallel optical trapping and manipulation. Proceedings of SPIE, 2007, , .	0.8	0
89	Doppler wind lidar using a MOPA semiconductor laser at stable single-frequency operation. , 2009, , .		0
90	Influence of laser frequency noise on scanning Fabry-Perot interferometer based laser Doppler velocimetry. Proceedings of SPIE, 2014, , .	0.8	0

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91	Intracavity upconversion for IR absorption lidar: Comparison of linear and ring cavity designs. , 2017, , .		0
92	Semiconductor Laser Lidar Wind Velocity Sensor for Turbine Control. , 2014, , .		0
93	Diode Laser Applications for Wind Energy. , 2016, , .		0
94	Upconversion Detector for Methane Atmospheric Sensor. , 2017, , .		0
95	Investigation of Optical Signatures for Discriminating Salmon Lice from Other Species of Zooplankton. , 2018, , .		0