Philip H Jones

List of Publications by Year
in descending order

62 papers	2,835 citations	279798 23 h-index	265206 42 g-index
71 all docs	71 docs citations	71 times ranked	3158 citing authors

#	Article	IF	Citations
1	Optical trapping and manipulation of nanostructures. Nature Nanotechnology, 2013, 8, 807-819.	31.5	829
2	Brownian Motion of Graphene. ACS Nano, 2010, 4, 7515-7523.	14.6	194
3	Optical tweezers and their applications. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 218, 131-150.	2.3	150
4	Femtonewton Force Sensing with Optically Trapped Nanotubes. Nano Letters, 2008, 8, 3211-3216.	9.1	118
5	Rotation Detection in Light-Driven Nanorotors. ACS Nano, 2009, 3, 3077-3084.	14.6	112
6	Membrane Tension Gates ERK-Mediated Regulation of Pluripotent Cell Fate. Cell Stem Cell, 2021, 28, 273-284.e6.	11.1	104
7	Optical trapping of nanotubes with cylindrical vector beams. Optics Letters, 2012, 37, 3381.	3.3	91
8	Focusing of high order cylindrical vector beams. Journal of Optics, 2009, 11, 065204.	1.5	82
9	Trapping volume control in optical tweezers using cylindrical vector beams. Optics Letters, 2013, 38, 28.	3.3	72
10	Trapping and manipulation of microscopic bubbles with a scanning optical tweezer. Applied Physics Letters, 2006, 89, 081113.	3.3	69
11	Rectifying Fluctuations in an Optical Lattice. Physical Review Letters, 2004, 93, 073904.	7.8	67
12	Step-by-step guide to the realization of advanced optical tweezers. Journal of the Optical Society of America B: Optical Physics, 2015, 32, B84.	2.1	64
13	Directed Motion for Delta-Kicked Atoms with Broken Symmetries: Comparison between Theory and Experiment. Physical Review Letters, 2007, 98, 073002.	7.8	62
14	Sagnac interferometer method for synthesis of fractional polarization vortices. Optics Letters, 2009, 34, 2560.	3.3	57
15	Optical tweezers: theory and practice. European Physical Journal Plus, 2020, 135, 1.	2.6	57
16	Atoms in Double-Î´-Kicked Periodic Potentials: Chaos with Long-Range Correlations. Physical Review Letters, 2004, 93, 223002.	7.8	47
17	Optical trapping and optical force positioning of two-dimensional materials. Nanoscale, 2018, 10, 1245-1255.	5.6	44
18	Photonic Torque Microscopy of the Nonconservative Force Field for Optically Trapped Silicon Nanowires. Nano Letters, 2016, 16, 4181-4188.	9.1	39

#	Article	IF	Citations
19	Optical Binding of Nanowires. Nano Letters, 2017, 17, 3485-3492.	9.1	39
20	Fano-Doppler Laser Cooling of Hybrid Nanostructures. ACS Nano, 2011, 5, 7354-7361.	14.6	27
21	Parametrization of trapping forces on microbubbles in scanning optical tweezers. Journal of Optics, 2007, 9, S278-S283.	1.5	26
22	Devilâ€™s lens optical tweezers. Optics Express, 2015, 23, 8190.	3.4	26
23	Optical trapping of porous silicon nanoparticles. Nanotechnology, 2011, 22, 505704.	2.6	23
24	Chaotic quantum ratchets and filters with cold atoms in optical lattices: Analysis using Floquet states. Physical Review A, 2005, 72, .	2.5	21
25	Red blood cells in retinal vascular disorders. Blood Cells, Molecules, and Diseases, 2016, 56, 53-61.	1.4	19
26	Evanescent wave optical binding forces on spherical microparticles. Optics Letters, 2015, 40, 4042.	3.3	18
27	Trapping and deformation of microbubbles in a dual-beam fibre-optic trap. Journal of Optics (United) Tj ETQq1 1 0.784314 rgBT /Over	2.2	16
28	A microscopic Kapitza pendulum. Scientific Reports, 2018, 8, 13107.	3.3	16
29	A study of red blood cell deformability in diabetic retinopathy using optical tweezers. Proceedings of SPIE, 2015, , .	0.8	9
30	Acoustic force measurements on polymer-coated microbubbles in a microfluidic device. Journal of the Acoustical Society of America, 2017, 141, 3364-3378.	1.1	9
31	Optical manipulation using highly focused alternate radially and azimuthally polarized beams modulated by a devilâ€™s lens. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, 2501.	1.5	7
32	Optically bound colloidal lattices in evanescent optical fields. Optics Letters, 2016, 41, 4935.	3.3	6
33	Photonic Force Microscopy: From Femtonewton Force Sensing to Ultra-Sensitive Spectroscopy. Nanoscience and Technology, 2010, , 23-56.	1.5	6
34	Analysis of the Uncertainty in Microbubble Characterization. Ultrasound in Medicine and Biology, 2016, 42, 1412-1418.	1.5	5
35	Experimental characterisation of holographic optical traps for microbubbles. , 2014, , .		3
36	Multiscale manipulation of microbubbles employing simultaneous optical and acoustical trapping. Proceedings of SPIE, 2014, , .	0.8	3

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37	Plasmon-enhanced optical trapping of metal nanoparticles: force calculations and light-driven rotations of nanoaggregates. , 2010, , .		2
38	Theoretical characterisation of the radial and translational motion of coated microbubbles under acoustic excitation. Journal of Physics: Conference Series, 2013, 457, 012001.	0.4	2
39	Non-Occlusive Retinal Vascular Inflammation and Role of Red Blood Cell Deformability in Birdshot Chorioretinopathy. Ocular Immunology and Inflammation, 2019, 27, 978-986.	1.8	2
40	Microbubble trapping in inverted optical tweezers. , 2017, , .		2
41	Optical binding of nanowires in counterpropagating beams. Proceedings of SPIE, 2013, , .	0.8	1
42	Laser vibrometry characterisation of a microfluidic lab-on-a-chip device: a preliminary investigation. Journal of Physics: Conference Series, 2014, 498, 012002.	0.4	1
43	Focus issue introduction: optical cooling and trapping. Optics Express, 2015, 23, 9917.	3.4	1
44	Strongly Focused Circularly Polarized Optical Vortices Regulated by a Fractal Conical Lens. Applied Sciences (Switzerland), 2020, 10, 28.	2.5	1
45	Stretching Red Blood Cells with Optical Tweezers. , 2017, , .		1
46	Influence of slow light effect on trapping force in optical tweezers. Optics Letters, 2022, 47, 710.	3.3	1
47	A moving-mirror frequency modulator for cold atom spectroscopy. Review of Scientific Instruments, 2002, 73, 2549-2551.	1.3	0
48	Radially Polarized Optical Tweezers. , 2011, , .		0
49	Ray optics. , 0, , 19-41.		0
50	Optofluidics and lab-on-a-chip. , 0, , 409-421.		0
51	Plasmonics. , 0, , 470-483.		0
52	Nanostructures. , 0, , 484-497.		0
53	Towards the quantum regime at the mesoscale. , 0, , 524-536.		0
54	Dynamical stabilisation in optical tweezers. , 2015, , .		0

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55	Correlated fluctuations of optically trapped particles. Proceedings of SPIE, 2015, , .	0.8	0
56	Optical cooling and trapping: introduction. Journal of the Optical Society of America B: Optical Physics, 2015, 32, OCT1.	2.1	0
57	Low frequency dynamical stabilisation in optical tweezers. Proceedings of SPIE, 2015, , .	0.8	0
58	Optical Kapitza pendulum. Proceedings of SPIE, 2016, , .	0.8	0
59	Editorial for the Special Issue on Optical Trapping and Manipulation: From Fundamentals to Applications. Micromachines, 2020, 11, 417.	2.9	0
60	Micro and anoparticle Optical Trapping Using Cylindrical Vector Beams. , 2011, , .		0
61	Investigating the sensitivity of microbubble acoustic response for biosensing applications. Proceedings of Meetings on Acoustics, 2013, , .	0.3	0
62	Optical Binding and Synchronisation in Arrays of Non-Spherical Particles. , 2015, , .		0