

# Stephen H Simpson

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7039039/publications.pdf>

Version: 2024-02-01

20  
papers

756  
citations

471509

17  
h-index

794594

19  
g-index

20  
all docs

20  
docs citations

20  
times ranked

533  
citing authors

#	ARTICLE	IF	CITATIONS
1	Optical trapping of spheroidal particles in Gaussian beams. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2007, 24, 430.	1.5	85
2	Application of the discrete dipole approximation to optical trapping calculations of inhomogeneous and anisotropic particles. <i>Optics Express</i> , 2011, 19, 16526.	3.4	64
3	Optical Trapping, Optical Binding, and Rotational Dynamics of Silicon Nanowires in Counter-Propagating Beams. <i>Nano Letters</i> , 2019, 19, 342-352.	9.1	63
4	Optical angular momentum transfer by Laguerre-Gaussian beams. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2009, 26, 625.	1.5	58
5	Holographic optical trapping of microrods and nanowires. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2010, 27, 1255.	1.5	53
6	First-order nonconservative motion of optically trapped nonspherical particles. <i>Physical Review E</i> , 2010, 82, 031141.	2.1	46
7	Orbital motion of optically trapped particles in Laguerre-Gaussian beams. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2010, 27, 2061.	1.5	43
8	Polarization-induced torque in optical traps. <i>Physical Review A</i> , 2007, 76, .	2.5	42
9	Numerical calculation of interparticle forces arising in association with holographic assembly. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2006, 23, 1419.	1.5	39
10	Photonic Torque Microscopy of the Nonconservative Force Field for Optically Trapped Silicon Nanowires. <i>Nano Letters</i> , 2016, 16, 4181-4188.	9.1	39
11	Optical Binding of Nanowires. <i>Nano Letters</i> , 2017, 17, 3485-3492.	9.1	39
12	Rotation of absorbing spheres in Laguerre-Gaussian beams. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2009, 26, 173.	1.5	37
13	Optical lift from dielectric semicylinders. <i>Optics Letters</i> , 2012, 37, 4038.	3.3	31
14	Coherent oscillations of a levitated birefringent microsphere in vacuum driven by nonconservative rotation-translation coupling. <i>Science Advances</i> , 2020, 6, eaaz9858.	10.3	30
15	Thermal motion of a holographically trapped SPM-like probe. <i>Nanotechnology</i> , 2009, 20, 395710.	2.6	28
16	Optical trapping of microrods: variation with size and refractive index. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2011, 28, 850.	1.5	26
17	Stochastic dynamics of optically bound matter levitated in vacuum. <i>Optica</i> , 2021, 8, 220.	9.3	24
18	Stochastic Hopf bifurcations in vacuum optical tweezers. <i>Physical Review A</i> , 2021, 104, .	2.5	7

#	ARTICLE	IF	CITATIONS
19	Entropy Production in an Elementary, Light Driven Micro-Machine. <i>Frontiers in Physics</i> , 2020, 8, .	2.1	2
20	Optically bound matter levitated in vacuum. , 2021, , .		0