

# Gabriel C Spalding

## List of Publications by Year in descending order

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Version: 2024-02-01

70  
papers

3,768  
citations

279798

23  
h-index

214800

47  
g-index

73  
all docs

73  
docs citations

73  
times ranked

3308  
citing authors

#	ARTICLE	IF	CITATIONS
1	Detachment of <i>Dunaliella tertiolecta</i> Microalgae from a Glass Surface by a Near-Infrared Optical Trap. <i>Sensors</i> , 2020, 20, 5656.	3.8	2
2	Twisting waves increase the visibility of nonlinear behaviour. <i>New Journal of Physics</i> , 2020, 22, 063021.	2.9	1
3	Light sheet microscopy with acoustic sample confinement. <i>Nature Communications</i> , 2019, 10, 669.	12.8	25
4	Motility assessment of green biflagellated microalgae in an optical trap using back focal plane interferometry. , 2019, , .		0
5	Reversal of orbital angular momentum arising from an extreme Doppler shift. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 3800-3803.	7.1	35
6	Experimental Limits of Ghost Diffraction: Popper's Thought Experiment. <i>Scientific Reports</i> , 2018, 8, 13183.	3.3	14
7	Resolution limits of quantum ghost imaging. <i>Optics Express</i> , 2018, 26, 7528.	3.4	51
8	Studies of biflagellated microalgae adhesion using an optical trap system. , 2018, , .		2
9	Rotational dynamics and heating of trapped nanovaterite particles. , 2017, , .		1
10	Notice of Removal: A few twists regarding the momentum of shaped beams. , 2017, , .		0
11	Observation of image pair creation and annihilation from superluminal scattering sources. <i>Science Advances</i> , 2016, 2, e1501691.	10.3	17
12	Video recording true single-photon double-slit interference. <i>American Journal of Physics</i> , 2016, 84, 671-677.	0.7	42
13	Rotational Dynamics and Heating of Trapped Nanovaterite Particles. <i>ACS Nano</i> , 2016, 10, 11505-11510.	14.6	39
14	Real-time 3D video utilizing a compressed sensing time-of-flight single-pixel camera. , 2016, , .		8
15	Rotational dynamics and heating of trapped nanovaterite particles (Conference Presentation). , 2016, , .		1
16	First-Photon 3D Imaging with a Single-Pixel Camera. , 2016, , .		1
17	Ghost Imaging. <i>Optics and Photonics News</i> , 2016, 27, 38.	0.5	17
18	Letters: optically transparent piezoelectric transducer for ultrasonic particle manipulation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014, 61, 389-391.	3.0	43

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19	Hybrid optical and acoustic force based sorting. , 2014, , .		4
20	Acoustic Tractor Beam. Physical Review Letters, 2014, 112, 174302.	7.8	74
21	Mapping out tractor beams: topological angular momentum and reduced axial flux; gradient versus non-conservative forces. , 2013, , .		0
22	Acoustic Bessel beam with combined optical trapping. , 2012, , .		1
23	Mechanical Evidence of the Orbital Angular Momentum to Energy Ratio of Vortex Beams. Physical Review Letters, 2012, 108, 194301.	7.8	143
24	A sonic screwdriver: Acoustic angular momentum transfer for ultrasonic manipulation. , 2011, , .		3
25	Fast localized wavefront correction using area-mapped phase-shift interferometry. Optics Letters, 2011, 36, 2892.	3.3	3
26	The sonic screwdriver: a model system for study of wave angular momentum. , 2011, , .		1
27	Enhanced particle transport in an oscillating sinusoidal optical potential. New Journal of Physics, 2009, 11, 103017.	2.9	9
28	Force measurement on microspheres in an optical standing wave. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 763.	2.1	16
29	Holographic Optical Tweezers. , 2008, , 139-168.		13
30	Force measurement and optical assisted particle separation in an optical standing wave. , 2007, , .		1
31	Colloidal sorting in dynamic optical lattices. Journal of Optics, 2007, 9, S134-S138.	1.5	43
32	Colloidal traffic in static and dynamic optical lattices. , 2006, , .		0
33	Optical separation of particles based on a dynamic interferometer. , 2006, 6326, 275.		1
34	Dynamic control of defects in a two-dimensional optically assisted assembly. New Journal of Physics, 2006, 8, 70-70.	2.9	8
35	Sorting via injection of particle streams into an optical lattice. , 2005, , .		1
36	Near-field optical manipulation by using evanescent waves and surface plasmon polaritons. , 2005, 5930, 342.		4

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37	Optically Anisotropic Colloids of Controllable Shape. <i>Advanced Materials</i> , 2005, 17, 680-684.	21.0	76
38	Extended-area optically induced organization of microparticles on a surface. <i>Applied Physics Letters</i> , 2005, 86, 031106.	3.3	98
39	The reconstruction of optical angular momentum after distortion in amplitude, phase and polarization. <i>Journal of Optics</i> , 2004, 6, S235-S238.	1.5	33
40	Microfluidic optical sorting: particle selection in an optical lattice. , 2004, , .		3
41	Manipulation and filtration of low index particles with holographic Laguerre-Gaussian optical trap arrays. <i>Optics Express</i> , 2004, 12, 593.	3.4	117
42	Biophotonics. <i>Optics and Photonics News</i> , 2004, 15, 19.	0.5	1
43	Tailored optical landscapes for biological and colloidal sciences. , 2004, , .		0
44	Defect-free optical assembly of polystyrene spheres. , 2004, , .		2
45	Guiding and trapping microparticles in an extended surface field. , 2004, , .		2
46	Numerical analysis of waveguide-enhanced optical bistability. <i>Optical and Quantum Electronics</i> , 2003, 35, 1357-1366.	3.3	1
47	Three-dimensional arrays of optical bottle beams. <i>Optics Communications</i> , 2003, 225, 215-222.	2.1	119
48	Microfluidic sorting in an optical lattice. <i>Nature</i> , 2003, 426, 421-424.	27.8	1,279
49	Applications of spatial light modulators in atom optics. <i>Optics Express</i> , 2003, 11, 158.	3.4	175
50	Optical trapping of three-dimensional structures using dynamic holograms. <i>Optics Express</i> , 2003, 11, 3562.	3.4	118
51	Evolution of a colloidal critical state in an optical pinning potential landscape. <i>Physical Review B</i> , 2002, 66, .	3.2	92
52	Optical tweezers: the next generation. <i>Physics World</i> , 2002, 15, 31-35.	0.0	140
53	Nanofabrication with holographic optical tweezers. <i>Review of Scientific Instruments</i> , 2002, 73, 1956-1957.	1.3	61
54	Computer-generated holographic optical tweezer arrays. <i>Review of Scientific Instruments</i> , 2001, 72, 1810.	1.3	390

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55	Range of interactions: An experiment in atomic and magnetic force microscopy. <i>American Journal of Physics</i> , 1999, 67, 905-908.	0.7	8
56	Temperature Dependence of the Penetration Depth of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Films near $T_c$ . <i>Europhysics Letters</i> , 1995, 32, 573-578.	2.0	29
57	New method for fabricating ultra-narrow metallic wires. <i>Applied Physics Letters</i> , 1994, 65, 2740-2742.	3.3	9
58	Pair Breaking by Spin-Disorder Scattering at the Antiferromagnetic Transition of the $\text{Dy}^{3+}$ Sublattice of $\text{DyBa}_2\text{Cu}_3\text{O}_7$ Films. <i>Physical Review Letters</i> , 1994, 73, 2752-2755.	7.8	5
59	Compound geometric resonances in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_x$ single crystals. <i>Physica B: Condensed Matter</i> , 1994, 194-196, 2233-2234.	2.7	1
60	Classes of superconductor-insulator transitions in high- $T_c$ films. <i>Physica B: Condensed Matter</i> , 1994, 194-196, 2321-2322.	2.7	2
61	Amorphous Ge substrates: Active or passive participants in electrical transport in ultrathin metal films?. <i>Physica B: Condensed Matter</i> , 1994, 194-196, 2347-2348.	2.7	6
62	The interplay between antiferromagnetism and superconductivity in disordered ultrathin high- $T_c$ films. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1993, 200, 287-295.	2.6	0
63	Anomalous magnetoresistance of ultrathin films of $\text{DyBa}_2\text{Cu}_3\text{O}_7$ near the superconductor-insulator transition. <i>Physical Review B</i> , 1993, 47, 11619-11622.	3.2	10
64	The High- $T_c$ Superconductor $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_x$ As a Superconducting Superlattice. <i>Europhysics Letters</i> , 1992, 20, 721-726.	2.0	7
65	Phase separation of photogenerated carriers and photoinduced superconductivity in high- $T_c$ materials. <i>Physical Review B</i> , 1992, 45, 4964-4977.	3.2	86
66	Fabrication of high- $T_c$ superconductors using ozone-assisted molecular beam epitaxy. <i>Thin Solid Films</i> , 1992, 216, 14-20.	1.8	23
67	Natural buffer layer in $\text{DyBa}_2\text{Cu}_3\text{O}_7$ films grown on Si by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 1991, 70, 5697-5699.	2.5	3
68	Quantum magnetoresistance fluctuations in an amorphous metal. <i>Physical Review B</i> , 1991, 43, 12267-12280.	3.2	2
69	Barrier technology for $\text{DyBa}_2/\text{Cu}_3/\text{O}_7$ junctions and related structures. <i>IEEE Transactions on Magnetics</i> , 1991, 27, 3090-3093.	2.1	5
70	Critical-state model for harmonic generation in high-temperature superconductors. <i>Physical Review B</i> , 1989, 40, 10936-10945.	3.2	241