

# Halina Rubinsztein-Dunlop

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6382602/publications.pdf>

Version: 2024-02-01

321  
papers

14,116  
citations

29994

54  
h-index

24179

110  
g-index

329  
all docs

329  
docs citations

329  
times ranked

9126  
citing authors

#	ARTICLE	IF	CITATIONS
1	Turbulent Relaxation to Equilibrium in a Two-Dimensional Quantum Vortex Gas. <i>Physical Review X</i> , 2022, 12, .	2.8	9
2	Controlled transfer of transverse orbital angular momentum to optically trapped birefringent microparticles. <i>Nature Photonics</i> , 2022, 16, 346-351.	15.6	28
3	Deep learning in light-matter interactions. <i>Nanophotonics</i> , 2022, 11, 3189-3214.	2.9	10
4	Enhanced Signal-to-Noise and Fast Calibration of Optical Tweezers Using Single Trapping Events. <i>Micromachines</i> , 2021, 12, 570.	1.4	2
5	Wave characterisation and aberration correction using hybrid direct search. <i>Journal of Optics (United Kingdom)</i> , 2021, 23, 085602.	1.0	3
6	Roadmap on Atomtronics: State of the art and perspective. <i>AVS Quantum Science</i> , 2021, 3, .	1.8	87
7	Dynamic high-resolution optical trapping of ultracold atoms. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2021, , 1-101.	2.3	5
8	Orientation of swimming cells with annular beam optical tweezers. <i>Optics Communications</i> , 2020, 459, 124864.	1.0	22
9	Optical Force Measurements Illuminate Dynamics of Escherichia coli in Viscous Media. <i>Frontiers in Physics</i> , 2020, 8, .	1.0	3
10	Sound generation in zebrafish with Bio-Opto-Acoustics. <i>Nature Communications</i> , 2020, 11, 6120.	5.8	17
11	Optical Tweezers Exploring Neuroscience. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 602797.	2.0	20
12	Strong Transient Flows Generated by Thermoplasmonic Bubble Nucleation. <i>ACS Nano</i> , 2020, 14, 17468-17475.	7.3	8
13	OTSLM toolbox for Structured Light Methods. <i>Computer Physics Communications</i> , 2020, 253, 107199.	3.0	13
14	A quantum heat machine from fast optomechanics. <i>New Journal of Physics</i> , 2020, 22, 103028.	1.2	15
15	Machine learning reveals complex behaviours in optically trapped particles. <i>Machine Learning: Science and Technology</i> , 2020, 1, 045009.	2.4	17
16	Swimming force and behavior of optically trapped micro-organisms. <i>Optica</i> , 2020, 7, 989.	4.8	21
17	Ultrabroadband and sensitive cavity optomechanical magnetometry. <i>Photonics Research</i> , 2020, 8, 1064.	3.4	21
18	Controlling orbital angular momentum in microscopic and topological systems. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
19	Predicting particle properties in optical traps with machine learning. , 2020, , .		1
20	Engineering Spin Domains in a Binary BEC. , 2020, , .		0
21	Feedforward Optimisation of Optical Trapping Potentials for Ultracold Atoms. , 2020, , .		1
22	Superfluid Acoustics in a Dumbbell Helmholtz Oscillator. , 2020, , .		0
23	Optical trapping <i>in vivo</i> : theory, practice, and applications. <i>Nanophotonics</i> , 2019, 8, 1023-1040.	2.9	91
24	Giant vortex clusters in a two-dimensional quantum fluid. <i>Science</i> , 2019, 364, 1264-1267.	6.0	133
25	Microscope images of strongly scattering objects via vectorial transfer matrices: Modeling and an experimental verification. <i>Physical Review A</i> , 2019, 99, .	1.0	1
26	Machine learning wall effects of eccentric spheres for convenient computation. <i>Physical Review E</i> , 2019, 99, 043304.	0.8	3
27	Measuring local properties inside a cell-mimicking structure using rotating optical tweezers. <i>Journal of Biophotonics</i> , 2019, 12, e201900022.	1.1	13
28	Quantitative Acoustic Models for Superfluid Circuits. <i>Physical Review Letters</i> , 2019, 123, 260402.	2.9	20
29	High-speed transverse and axial optical force measurements using amplitude filter masks. <i>Optics Express</i> , 2019, 27, 10034.	1.7	9
30	Optical-trapping of particles in air using parabolic reflectors and a hollow laser beam. <i>Optics Express</i> , 2019, 27, 33061.	1.7	14
31	Impact of complex surfaces on biomicro-rheological measurements using optical tweezers. <i>Lab on A Chip</i> , 2018, 18, 315-322.	3.1	8
32	Cellular-Resolution Imaging of Vestibular Processing across the Larval Zebrafish Brain. <i>Current Biology</i> , 2018, 28, 3711-3722.e3.	1.8	85
33	Modelling of Cavity Optomechanical Magnetometers. <i>Sensors</i> , 2018, 18, 1558.	2.1	11
34	Invited Article: Scalable high-sensitivity optomechanical magnetometers on a chip. <i>APL Photonics</i> , 2018, 3, 120806.	3.0	19
35	Phase and micromotion of Bose-Einstein condensates in a time-averaged ring trap. <i>Physical Review A</i> , 2018, 98, .	1.0	9
36	Calibration of force detection for arbitrarily shaped particles in optical tweezers. <i>Scientific Reports</i> , 2018, 8, 10798.	1.6	24

#	ARTICLE	IF	CITATIONS
37	Measuring the motility and drag forces acting on biological particles using optical tweezers. , 2018, , .		0
38	Optical tweezers toolbox: full dynamics simulations for particles of all sizes. , 2018, , .		4
39	Visual guide to optical tweezers. European Journal of Physics, 2017, 38, 034009.	0.3	6
40	Theory and practice of simulation of optical tweezers. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 195, 66-75.	1.1	43
41	Optical trapping of otoliths drives vestibular behaviours in larval zebrafish. Nature Communications, 2017, 8, 630.	5.8	82
42	Active rotational and translational microrheology beyond the linear spring regime. Physical Review E, 2017, 95, 042608.	0.8	11
43	Roadmap on structured light. Journal of Optics (United Kingdom), 2017, 19, 013001.	1.0	888
44	Brownian fluctuations of an optically rotated nanorod. Optica, 2017, 4, 746.	4.8	33
45	Optical sorting and cultivation of denitrifying anaerobic methane oxidation archaea. Biomedical Optics Express, 2017, 8, 934.	1.5	18
46	Ultrasensitive rotating photonic probes for complex biological systems. Optica, 2017, 4, 1103.	4.8	21
47	Rotational control of computer generated holograms. Optics Letters, 2017, 42, 4772.	1.7	0
48	Optically driven rotating micromachines. , 2017, , 99-128.		0
49	Hypothalamic Projections to the Optic Tectum in Larval Zebrafish. Frontiers in Neuroanatomy, 2017, 11, 135.	0.9	30
50	Optimizing beams with transverse vortices. Proceedings of SPIE, 2017, , .	0.8	1
51	Towards a Scalable Ultrasensitive Optomechanical Magnetometer. , 2017, , .		0
52	Advanced Optical Trapping of Ultracold Atoms for Studying Superfluid Transport and Turbulence. , 2017, , .		0
53	Ultrasensitive and broadband magnetometry with cavity optomechanics. , 2017, , .		0
54	Near-diffraction limited direct imaging of patterned light fields for trapping (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5Q 62 Td (Pr		

#	ARTICLE	IF	CITATIONS
55	Ultrasensitive rotating photonic probes for complex biological systems: erratum. <i>Optica</i> , 2017, 4, 1372.	4.8	0
56	Direct imaging of a digital-micromirror device for configurable microscopic optical potentials. <i>Optica</i> , 2016, 3, 1136.	4.8	136
57	Bose-Einstein condensation in large time-averaged optical ring potentials. <i>New Journal of Physics</i> , 2016, 18, 035003.	1.2	67
58	A quantum optomechanical interface beyond the resolved sideband limit. <i>New Journal of Physics</i> , 2016, 18, 053030.	1.2	36
59	An interpretation and guide to single-pass beam shaping methods using SLMs and DMDs. <i>Journal of Optics (United Kingdom)</i> , 2016, 18, 065609.	1.0	17
60	Optomechanical Magnetometry with a Macroscopic Resonator. <i>Physical Review Applied</i> , 2016, 5, .	1.5	36
61	Nondestructive Profilometry of Optical Nanofibers. <i>Nano Letters</i> , 2016, 16, 7333-7337.	4.5	14
62	Optical manipulation for optogenetics: otoliths manipulation in zebrafish (Conference Presentation). , 2016, , .		0
63	Cavity Optomechanical magnetometry. , 2016, , .		0
64	Scattering of Sculpted Light in Intact Brain Tissue, with implications for Optogenetics. <i>Scientific Reports</i> , 2015, 5, 11501.	1.6	29
65	Energy, momentum and propagation of non-paraxial high-order Gaussian beams in the presence of an aperture. <i>Journal of Optics (United Kingdom)</i> , 2015, 17, 125601.	1.0	12
66	Laser Trapping of Colloidal Metal Nanoparticles. <i>ACS Nano</i> , 2015, 9, 3453-3469.	7.3	193
67	Forces due to pulsed beams in optical tweezers: linear effects. <i>Optics Express</i> , 2015, 23, 7190.	1.7	15
68	Escape forces and trajectories in optical tweezers and their effect on calibration. <i>Optics Express</i> , 2015, 23, 24317.	1.7	12
69	Theory and Practice of Computational Modeling and Simulation of Optical Tweezers. , 2015, , .		0
70	Enhanced optical trapping via structured scattering. <i>Nature Photonics</i> , 2015, 9, 669-673.	15.6	73
71	Coherent control and feedback cooling in a remotely coupled hybrid atom-optomechanical system. <i>New Journal of Physics</i> , 2014, 16, 083036.	1.2	32
72	Optical tweezers escape forces. , 2014, , .		3

#	ARTICLE	IF	CITATIONS
73	Viscoelasticity measurements inside liposomes. , 2014, , .		0
74	Optical trapping of isolated mammalian chromosomes. Proceedings of SPIE, 2014, , .	0.8	1
75	Cavity Optomechanical Magnetometry on a Chip. , 2014, , .		0
76	Driving corrugated donut rotors with Laguerre-Gauss beams. Optics Express, 2014, 22, 19692.	1.7	14
77	Note: High turn density magnetic coils with improved low pressure water cooling for use in atom optics. Review of Scientific Instruments, 2014, 85, 086103.	0.6	5
78	Optical tweezers: Theory and modelling. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 146, 59-80.	1.1	83
79	Micrometry: Ultrasensitive Optomechanical Magnetometry (Adv. Mater. 36/2014). Advanced Materials, 2014, 26, 6355-6355.	11.1	2
80	Comparison of T-matrix calculation methods for scattering by cylinders in optical tweezers. Optics Letters, 2014, 39, 4827.	1.7	13
81	Ultrasensitive Optomechanical Magnetometry. Advanced Materials, 2014, 26, 6348-6353.	11.1	88
82	Determination of motility forces on isolated chromosomes with laser tweezers. Scientific Reports, 2014, 4, 6866.	1.6	19
83	Mapping Organelle Motion Reveals a Vesicular Conveyor Belt Spatially Replenishing Secretory Vesicles in Stimulated Chromaffin Cells. PLoS ONE, 2014, 9, e87242.	1.1	29
84	Dynamical tunneling with ultracold atoms in magnetic microtraps. Physical Review A, 2013, 88, .	1.0	13
85	Optical tweezers for precise control of micro-bubble arrays: in situ temperature measurement. Proceedings of SPIE, 2013, , .	0.8	2
86	Optically trapped and driven paddle-wheel. New Journal of Physics, 2013, 15, 063016.	1.2	34
87	Kinect the dots: 3D control of optical tweezers. Journal of Optics (United Kingdom), 2013, 15, 075303.	1.0	15
88	Simultaneous rotation, orientation and displacement control of birefringent microparticles in holographic optical tweezers. Optics Express, 2013, 21, 102.	1.7	31
89	Calibration of nonspherical particles in optical tweezers using only position measurement. Optics Letters, 2013, 38, 1244.	1.7	19
90	Spatially-resolved rotational microrheology with an optically-trapped sphere. Scientific Reports, 2013, 3, .	1.6	40

#	ARTICLE	IF	CITATIONS
91	Computational modelling of optical tweezers with many degrees of freedom using dynamic simulation: cylinders, nanowires, and multiple particles. , 2012, , .		3
92	Orientation, rotation and position control of multiple birefringent microparticles with optical tweezers. , 2012, , .		0
93	Sensitivity of cavity optomechanical field sensors. , 2012, , .		2
94	Equilibrium orientations and positions of non-spherical particles in optical traps. Optics Express, 2012, 20, 12987.	1.7	45
95	Directing growth cones of optic axons growing with laser scissors and laser tweezers. , 2012, , .		1
96	Model of a microtoroidal magnetometer. Proceedings of SPIE, 2012, , .	0.8	5
97	A photon-driven micromotor can direct nerve fibre growth. Nature Photonics, 2012, 6, 62-67.	15.6	118
98	Three-dimensional complex-shaped photopolymerized microparticles at liquid crystal interfaces. Soft Matter, 2012, 8, 2432.	1.2	21
99	Cavity Optomechanical Magnetometer. Physical Review Letters, 2012, 108, 120801.	2.9	218
100	Optical tweezers toolbox: better, faster, cheaper; choose all three. , 2012, , .		3
101	Sensitivity and performance of cavity optomechanical field sensors. Photonic Sensors, 2012, 2, 259-270.	2.5	28
102	Design of Optically Driven Microrotors. , 2012, , 277-306.		2
103	Thermodynamics of optical tweezers. , 2011, , .		0
104	T-matrix method for modelling optical tweezers. Journal of Modern Optics, 2011, 58, 528-544.	0.6	74
105	Picoliter Rheology of Gaseous Media Using a Rotating Optically Trapped Birefringent Microparticle. Analytical Chemistry, 2011, 83, 8855-8858.	3.2	43
106	Optical tweezers and paradoxes in electromagnetism. Journal of Optics (United Kingdom), 2011, 13, 044017.	1.0	7
107	Phase-Transition-like Properties of Double-Beam Optical Tweezers. Physical Review Letters, 2011, 107, 248101.	2.9	28
108	Measurement of viscosity of lyotropic liquid crystals by means of rotating laser-trapped microparticles. Optics Express, 2011, 19, 25134.	1.7	21

#	ARTICLE	IF	CITATIONS
109	Growth dynamics of a Bose-Einstein condensate in a dimple trap without cooling. Physical Review A, 2011, 83, .	1.0	27
110	'Wiggler-Waggler' and 'Wiggler-Waggler'; Optical measurements of complex viscoelastic moduli. , 2011, , .		0
111	'Wiggler-Waggler': towards optical measurements of the complex shear modulus. Proceedings of SPIE, 2011, , .	0.8	0
112	Measurement of angular momentum flux in optical tweezers. Proceedings of SPIE, 2011, , .	0.8	2
113	Shack-Hartmann measurement of OAM in highly focused light beams. , 2011, , .		0
114	Stability, scaling and temperature in double-well optical tweezers. , 2011, , .		0
115	Time-averaged optical dipole traps for Bose-Einstein condensates. , 2011, , .		0
116	Use of shape induced birefringence for rotation in optical tweezers. , 2010, , .		3
117	A method for achieving super-resolved widefield CARS microscopy. Optics Express, 2010, 18, 19263.	1.7	48
118	Anomalous Power Laws of Spectral Diffusion in Quantum Dots: A Connection to Luminescence Intermittency. Physical Review Letters, 2010, 105, 167402.	2.9	34
119	Charge hopping revealed by jitter correlations in the photoluminescence spectra of single CdSe nanocrystals. Physical Review B, 2010, 81, .	1.1	24
120	Approximate and exact modeling of optical trapping. , 2010, , .		9
121	Constraining validity of the Minkowski energy-momentum tensor. Physical Review A, 2009, 79, .	1.0	17
122	Using a birefringent probe particle in variable polarisation optical tweezers to probe properties of biological materials.. , 2009, , .		0
123	Publisher's Note: Constraining validity of the Minkowski energy-momentum tensor [Phys. Rev. A, 79, 023813 (2009)]. Physical Review A, 2009, 79, .	1.0	0
124	Observation of shock waves in a large Bose-Einstein condensate. Physical Review A, 2009, 80, .	1.0	48
125	Superfluid critical velocity of a Bose-Einstein condensate in a flat potential. , 2009, , .		0
126	Optimization of optically-driven micromachines. , 2009, , .		3



#	ARTICLE	IF	CITATIONS
127	-matrix calculation via discrete dipole approximation, point matching and exploiting symmetry. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 1460-1471.	1.1	64
128	Symmetry and the generation and measurement of optical torque. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 1472-1482.	1.1	46
129	Exciton <sup>+</sup> Trion Transitions in Single CdSe/CdS Core/Shell Nanocrystals. ACS Nano, 2009, 3, 2281-2287.	7.3	131
130	High-Resolution Line Width Measurement of Single CdSe Nanocrystals at Long Time Scales. Journal of Physical Chemistry C, 2009, 113, 5345-5348.	1.5	10
131	Detection of Bright Trion States Using the Fine Structure Emission of Single CdSe/ZnS Colloidal Quantum Dots. ACS Nano, 2009, 3, 3762-3768.	7.3	50
132	Bistable Switching between Low and High Absorbance States in Oleate-Capped PbS Quantum Dots. ACS Nano, 2009, 3, 2731-2739.	7.3	9
133	Synthesis and Surface Modification of Birefringent Vaterite Microspheres. Langmuir, 2009, 25, 11672-11679.	1.6	53
134	Constant power optical tweezers with controllable torque. Optics Letters, 2009, 34, 139.	1.7	30
135	The effect of Mie resonances on trapping in optical tweezers: reply. Optics Express, 2009, 17, 2661.	1.7	3
136	Highly birefringent vaterite microspheres: production, characterization and applications for optical micromanipulation. Optics Express, 2009, 17, 21944.	1.7	74
137	Optical angular momentum transfer to microrotors fabricated by two-photon photopolymerization. New Journal of Physics, 2009, 11, 093021.	1.2	52
138	Vaterite twist: microrheology with AOM controlled optical tweezers. Proceedings of SPIE, 2009, , .	0.8	3
139	Fabrication of microstructures for optically driven micromachines using two-photon photopolymerization of UV curing resins. Journal of Optics, 2009, 11, 034001.	1.5	21
140	Effect of Dimerization on Vibrational Spectra of Eumelanin Precursors <sup>&lt;sup&gt;â€‹&lt;/sup&gt;</sup> . Photochemistry and Photobiology, 2008, 84, 613-619.	1.3	15
141	Angular momentum of a strongly focused Gaussian beam. Journal of Optics, 2008, 10, 115005.	1.5	134
142	Antireflection coating for improved optical trapping. Journal of Applied Physics, 2008, 103, 093119.	1.1	33
143	Radiating Hypersonic Flow Studies using a Super-Orbital Expansion Tube. , 2008, , .		2
144	Forces in optical tweezers with radially and azimuthally polarized trapping beams. Optics Letters, 2008, 33, 122.	1.7	160

#	ARTICLE	IF	CITATIONS
145	Versatile two-dimensional potentials for ultra-cold atoms. Optics Express, 2008, 16, 1405.	1.7	55
146	The effect of Mie resonances on trapping in optical tweezers. Optics Express, 2008, 16, 15039.	1.7	85
147	Acoustic Phonon Contributions to the Emission Spectrum of Single CdSe Nanocrystals. Journal of Physical Chemistry C, 2008, 112, 1878-1884.	1.5	71
148	Noninvasive measurement of intracellular viscoelastic properties. , 2008, , .		0
149	Improved optically driven microrotors. Proceedings of SPIE, 2008, , .	0.8	0
150	Engineering optically driven micromachines. , 2008, , .		2
151	Calibration of trap stiffness and viscoelasticity in polymer solutions. , 2008, , .		1
152	Optical Vortex Trapping and the Dynamics of Particle Rotation. , 2008, , 195-236.		6
153	Rheological and Viscometric Methods. , 2008, , 249-270.		1
154	Can Optically Driven Micromachines be Useful in Biomedicine? Optical Tweezers at Work. , 2008, , .		0
155	Tailoring Particles for Optical Trapping and Micromanipulation: An Overview. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2008, 4, 381-385.	0.4	2
156	Improving single-photon sources with Stark tuning. Physical Review A, 2007, 75, .	1.0	26
157	Collecting single molecules with conventional optical tweezers. Physical Review E, 2007, 75, 011916.	0.8	32
158	Calibration of a single-atom detector for atomic microchips. Physical Review A, 2007, 76, .	1.0	13
159	Unconventional photoluminescence upconversion from PbS quantum dots. Applied Physics Letters, 2007, 91, .	1.5	24
160	Microrheology of microlitre samples: probed with rotating optical tweezers. , 2007, , .		2
161	Optical microrotors: theory, design and fabrication. Proceedings of SPIE, 2007, , .	0.8	1
162	Integrated optomechanical microelements. Optics Express, 2007, 15, 5521.	1.7	74

#	ARTICLE	IF	CITATIONS
163	Refractometry of organosilica microspheres. <i>Applied Optics</i> , 2007, 46, 1554.	2.1	10
164	Physics of Optical Tweezers. <i>Methods in Cell Biology</i> , 2007, 82, 207-236.	0.5	69
165	Optical Torque on Microscopic Objects. <i>Methods in Cell Biology</i> , 2007, 82, 525-561.	0.5	33
166	Optical tweezers computational toolbox. <i>Journal of Optics</i> , 2007, 9, S196-S203.	1.5	317
167	Origin of the Large Homogeneous Line Widths Obtained from Strongly Quantum Confined PbS Nanocrystals at Room Temperature. <i>Journal of Physical Chemistry C</i> , 2007, 111, 4984-4989.	1.5	35
168	Picoliter viscometry using optically rotated particles. <i>Physical Review E</i> , 2007, 76, 041507.	0.8	58
169	Coherent super-resolution microscopy via laterally structured illumination. <i>Micron</i> , 2007, 38, 150-157.	1.1	32
170	FDFD/T-matrix hybrid method. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2007, 106, 274-284.	1.1	33
171	Time-Resolved and Steady-State Fluorescence Spectroscopy of Eumelanin and Indolic Polymers. <i>Photochemistry and Photobiology</i> , 2007, 83, 1449-1454.	1.3	15
172	<b>Colloquium</b> : Momentum of an electromagnetic wave in dielectric media. <i>Reviews of Modern Physics</i> , 2007, 79, 1197-1216.	16.4	360
173	Three-dimensional effects on line-of-sight visualization measurements of supersonic and hypersonic flow over cylinders. <i>Shock Waves</i> , 2007, 16, 299-307.	1.0	11
174	Optical force field mapping in microdevices. <i>Lab on A Chip</i> , 2006, 6, 1545-1547.	3.1	11
175	Measurement of action spectra of light-activated processes. <i>Journal of Biomedical Optics</i> , 2006, 11, 014008.	1.4	3
176	Mechanics of Cellular Adhesion to Artificial Artery Templates. <i>Biophysical Journal</i> , 2006, 91, 3085-3096.	0.2	22
177	Facile Synthesis of Rhodamine Esters using Acetyl Chloride in Alcohol Solution. <i>Synthetic Communications</i> , 2006, 36, 1745-1750.	1.1	11
178	Measurement of the total optical angular momentum transfer in optical tweezers. <i>Optics Express</i> , 2006, 14, 6963.	1.7	49
179	Torque transfer in optical tweezers due to orbital angular momentum. , 2006, , .		2
180	Calculation of optical trapping landscapes. , 2006, , .		4

#	ARTICLE	IF	CITATIONS
181	Optical micromanipulation of synthetic macromolecules. , 2006, 6326, 313.		1
182	Non-linear photoluminescence from purified aqueous PbS nanocrystals. Materials Letters, 2006, 60, 3332-3334.	1.3	16
183	Highly efficient luminescence from a hybrid state found in strongly quantum confined PbS nanocrystals. Nanotechnology, 2006, 17, 956-962.	1.3	71
184	Modelling optical micromachines and birefringent particles. , 2006, , .		2
185	Two controversies in classical electromagnetism. , 2006, 6326, 91.		5
186	Orientation of optically trapped nonspherical birefringent particles. Physical Review E, 2006, 73, 021911.	0.8	46
187	Fringe spacing and phase of interfering matter waves. Physical Review A, 2006, 73, .	1.0	5
188	Effect of conducting polymer molecular weight on nanocrystal growth size for photovoltaic applications. , 2006, , .		1
189	Atom counting in ultracold gases using photoionization and ion detection. Physical Review A, 2006, 74, .	1.0	12
190	Measurement of the Index of Refraction of Single Microparticles. Physical Review Letters, 2006, 97, 157402.	2.9	48
191	Quantum gate based on Stark tunable nanocrystal interactions with ultrahigh-Q $\hat{V}$ field modes in fused silica microcavities. Physical Review B, 2006, 74, .	1.1	6
192	Towards Efficient Modelling of Optical Micromanipulation of Complex Structures. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2006, 2, 442-446.	0.4	6
193	Optical microrheology of biopolymers. , 2005, , .		0
194	Towards crystallization using optical tweezers. , 2005, 6038, 62.		0
195	Two-photon polymerization process for optically driven micromachines. , 2005, 6038, 208.		4
196	A photonic quantum gate based on electrically controlled strong cavity coupling between a single nanocrystal quantum dot and an ultrahigh Q silica microcavity. , 2005, , .		0
197	Microrheology using dual-beam optical tweezers and ultrasensitive force measurements. , 2005, , .		2
198	Experiments with Bose-Einstein condensates on an atom chip. , 2005, , .		0

#	ARTICLE	IF	CITATIONS
199	Optically driven micromachines: progress and prospects. , 2005, , .		12
200	A constant torque micro-viscometer. , 2005, , .		2
201	Rotating optical tweezers. Proceedings of SPIE, 2005, , .	0.8	2
202	Growing semiconductor nanocrystals directly in a conducting polymer. Materials Letters, 2005, 59, 3033-3036.	1.3	20
203	Characterization of optically driven fluid stress fields with optical tweezers. Physical Review E, 2005, 72, 031507.	0.8	45
204	Lead sulfide nanocrystal: conducting polymer solar cells. Journal Physics D: Applied Physics, 2005, 38, 2006-2012.	1.3	147
205	Surface Morphology Dependent Photoluminescence from Colloidal Silicon Nanocrystals. Journal of Physical Chemistry B, 2005, 109, 19064-19067.	1.2	101
206	Separating fluorescent species of aqueous PbS semiconductor nanocrystals using micro-emulsions. Nanotechnology, 2005, 16, 479-483.	1.3	10
207	Linewidth reduction in a large-smile laser diode array. Applied Optics, 2005, 44, 6264.	2.1	37
208	A New Approach to the Synthesis of Nanocrystal Conjugated Polymer Composites. Synthetic Metals, 2005, 154, 57-60.	2.1	6
209	Lead sulfide nanocrystal/conducting polymer solar cells. , 2005, 6038, 276.		3
210	Energy Transfer Dynamics of Nanocrystal <sup>+</sup> Polymer Composites. Journal of Physical Chemistry B, 2005, 109, 9001-9005.	1.2	58
211	Carrier transport in PbS nanocrystal conducting polymer composites. Applied Physics Letters, 2005, 87, 253109.	1.5	45
212	Time-resolved photoluminescence spectroscopy of ligand-capped PbS nanocrystals. Nanotechnology, 2005, 16, 175-179.	1.3	142
213	An expansion tube study of high enthalpy carbon-dioxide flows. , 2005, , 107-112.		0
214	Polarized photoluminescence from surface-passivated lead sulfide nanocrystals. Nanotechnology, 2004, 15, 16-22.	1.3	17
215	Direct observation of mixed-parity excited states in surface-passivated PbS nanocrystals. Nanotechnology, 2004, 15, 1351-1355.	1.3	5
216	Analysis of dynamical tunneling experiments with a Bose-Einstein condensate. Physical Review A, 2004, 70, .	1.0	21

#	ARTICLE	IF	CITATIONS
217	Optical measurement of torque exerted on an elongated object by a noncircular laser beam. <i>Physical Review A</i> , 2004, 70, .	1.0	26
218	Evidence for energy relaxation via a radiative cascade in surface-passivated PbS quantum dots. <i>Nanotechnology</i> , 2004, 15, 1328-1337.	1.3	16
219	Investigation of the role of cadmium sulfide in the surface passivation of lead sulfide quantum dots. <i>Journal of Crystal Growth</i> , 2004, 270, 380-383.	0.7	11
220	A PbS quantum-cube: conducting polymer composite for photovoltaic applications. <i>Current Applied Physics</i> , 2004, 4, 320-322.	1.1	37
221	Absorption and fluorescence spectroscopy of rhodamine 6G in titanium dioxide nanocomposites. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2004, 60, 245-249.	2.0	73
222	Optical Microrheology Using Rotating Laser-Trapped Particles. <i>Physical Review Letters</i> , 2004, 92, 198104.	2.9	282
223	Computational modeling of optical tweezers. , 2004, , .		29
224	Foil-based atom chip for Bose-Einstein condensates. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2004, 37, 2959-2967.	0.6	17
225	Manipulation and growth of birefringent protein crystals in optical tweezers. <i>Optics Express</i> , 2004, 12, 6440.	1.7	24
226	Near-resonant holographic interferometry and absorption measurements of seeded atomic species in a flame. <i>Applied Optics</i> , 2004, 43, 3391.	2.1	4
227	OH concentration and temperature measurements by use of near-resonant holographic interferometry. <i>Applied Optics</i> , 2004, 43, 6384.	2.1	2
228	Laser frequency locking by direct measurement of detuning. <i>Optics Letters</i> , 2004, 29, 2704.	1.7	20
229	A new approach to the synthesis of conjugated polymer-nanocrystal composites for heterojunction optoelectronics. <i>Chemical Communications</i> , 2004, , 2334-2335.	2.2	53
230	Formation of an artificial blood vessel: adhesion force measurements with optical tweezers. , 2004, , .		0
231	Measurement of orbital angular momentum in optical tweezers. , 2004, , .		2
232	Optical torque and symmetry. , 2004, , .		22
233	Mesoporous Dye-Doped Titanium Dioxide for Micro-Optoelectronic Applications. <i>ChemPhysChem</i> , 2003, 4, 595-603.	1.0	85
234	Multipole expansion of strongly focussed laser beams. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2003, 79-80, 1005-1017.	1.1	92

#	ARTICLE	IF	CITATIONS
235	Calculation of the T-matrix: general considerations and application of the point-matching method. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2003, 79-80, 1019-1029.	1.1	84
236	Enhanced flow visualization with near-resonant holographic interferometry. <i>Applied Optics</i> , 2003, 42, 4445.	2.1	9
237	Condensed-phase optical refrigeration. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2003, 20, 1037.	0.9	35
238	Inorganic surface passivation of PbS nanocrystals resulting in strong photoluminescent emission. <i>Nanotechnology</i> , 2003, 14, 991-997.	1.3	54
239	Orientation of biological cells using plane-polarized gaussian beam optical tweezers. <i>Journal of Modern Optics</i> , 2003, 50, 1581-1590.	0.6	143
240	Optical application and measurement of torque on microparticles of isotropic nonabsorbing material. <i>Physical Review A</i> , 2003, 68, .	1.0	152
241	Comparison of Experimental and Numerical Studies of Ionizing Flow over a Cylinder. <i>AIAA Journal</i> , 2003, 41, 2157-2161.	1.5	16
242	Experimental tests of quantum nonlinear dynamics in atom optics. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 2003, 5, R83-R120.	1.4	33
243	Light-Driven Micromachines. <i>Optics and Photonics News</i> , 2002, 13, 22.	0.4	14
244	Dimer-to-Monomer Transformation of Rhodamine 6G in Aqueous PEO~PPO~PEO Block Copolymer Solutions. <i>Macromolecules</i> , 2002, 35, 2063-2070.	2.2	49
245	Experimental and numerical studies of ionizing flow in a super-orbital expansion tube. , 2001, , .		2
246	Optical measurement of microscopic torques. <i>Journal of Modern Optics</i> , 2001, 48, 405-413.	0.6	99
247	Distributed laser refrigeration. <i>Applied Optics</i> , 2001, 40, 5423.	2.1	13
248	Dynamical tunnelling of ultracold atoms. <i>Nature</i> , 2001, 412, 52-55.	13.7	316
249	Laser cooling of a solid from ambient temperature. <i>Journal of Modern Optics</i> , 2001, 48, 103-114.	0.6	42
250	Diagnostics of a range of highly superorbital carbon dioxide flows. , 2001, , .		1
251	Near-resonant holographic interferometry of hypersonic flow. <i>Shock Waves</i> , 2001, 11, 23-29.	1.0	6
252	Ionic strontium fluorescence as a method for flow tagging velocimetry. <i>Experiments in Fluids</i> , 2001, 30, 36-42.	1.1	17

#	ARTICLE	IF	CITATIONS
253	Micromanipulation of chloroplasts using optical tweezers. <i>Journal of Microscopy</i> , 2001, 203, 214-222.	0.8	30
254	Calculation and optical measurement of laser trapping forces on non-spherical particles. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2001, 70, 627-637.	1.1	87
255	Experimental study of the quantum driven pendulum and its classical analog in atom optics. <i>Physical Review A</i> , 2001, 64, .	1.0	20
256	Optically driven micromachine elements. <i>Applied Physics Letters</i> , 2001, 78, 547-549.	1.5	190
257	Numerical modelling of optical trapping. <i>Computer Physics Communications</i> , 2001, 142, 468-471.	3.0	85
258	Multiple bifurcations in atom optics. <i>Physical Review A</i> , 2001, 64, .	1.0	8
259	Light guiding light: Nonlinear refraction in rubidium vapor. <i>Physical Review A</i> , 2001, 63, .	1.0	26
260	Nonlinear refractive effects in rubidium vapour due to optical pumping. , 2001, , .		0
261	Flow tagging velocimetry in a superorbital expansion tube. <i>Shock Waves</i> , 2000, 10, 225-228.	1.0	9
262	Atoms in an amplitude-modulated standing wave - dynamics and pathways to quantum chaos. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 2000, 2, 659-667.	1.4	12
263	Coherent Atomic Beam Splitter Using Transients of a Chaotic System. <i>Physical Review Letters</i> , 2000, 84, 4023-4026.	2.9	9
264	Ionizing Nitrogen and Air Flows in a Superorbital Expansion Tube. <i>AIAA Journal</i> , 2000, 38, 1685-1691.	1.5	9
265	Optically Written Waveguide in an Atomic Vapor. <i>Physical Review Letters</i> , 1999, 82, 1438-1441.	2.9	90
266	Variations of relative line intensity in saturation spectroscopy due to low magnetic fields. <i>Optical and Quantum Electronics</i> , 1999, 31, 391-403.	1.5	2
267	Frequency stabilised grating feedback laser diode for atom cooling applications. <i>Optical and Quantum Electronics</i> , 1999, 31, 417-430.	1.5	5
268	Three-dimensional imaging with optical tweezers. <i>Applied Optics</i> , 1999, 38, 6597.	2.1	49
269	Optical alignment and spinning of laser-trapped microscopic particles. <i>Nature</i> , 1998, 394, 348-350.	13.7	977
270	Short-term spatial diffusion in $\vec{f} + \hat{e}_z \vec{f}$ optical molasses. <i>Optics Communications</i> , 1998, 145, 81-85.	1.0	6



#	ARTICLE	IF	CITATIONS
271	Optical torque controlled by elliptical polarization. <i>Optics Letters</i> , 1998, 23, 1.	1.7	125
272	Sensitive detection of nitric oxide using seeded parametric four-wave mixing. <i>Journal of Chemical Physics</i> , 1998, 108, 6291-6302.	1.2	4
273	Sensitive detection of sodium in a flame using parametric four-wave mixing and seeded parametric four-wave mixing. <i>Physical Review A</i> , 1998, 57, 2802-2813.	1.0	0
274	Emission and Holographic Interferometry Measurements in a Superorbital Expansion Tube. <i>AIAA Journal</i> , 1998, 36, 1049-1054.	1.5	9
275	Velocimetry and Thermometry of Supersonic Flow Around a Cylindrical Body. <i>AIAA Journal</i> , 1998, 36, 1055-1060.	1.5	19
276	Optical Trapping of Absorbing Particles. <i>Advances in Quantum Chemistry</i> , 1998, 30, 469-492.	0.4	62
277	Ionization measurements in a super-orbital expansion tube. , 1998, , .		0
278	<title>Trapping microscopic particles with singular beams</title>. , 1998, 3487, 46.		8
279	Infrared Seeded Parametric Four-Wave Mixing for Sensitive Detection of Molecules. <i>Physical Review Letters</i> , 1997, 79, 2046-2049.	2.9	8
280	Simultaneous two-wavelength holographic interferometry in a superorbital expansion tube facility. <i>Applied Optics</i> , 1997, 36, 8128.	2.1	24
281	Supersonic velocimetry in a shock tube using laser enhanced ionisation and planar laser induced fluorescence. <i>Applied Physics B: Lasers and Optics</i> , 1997, 64, 369-376.	1.1	22
282	Measurements of neutral atom diffusion and electron-ion recombination by laser enhanced ionisation and planar laser induced fluorescence in an air-acetylene flame. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 1997, 52, 459-469.	1.5	7
283	Optical angular-momentum transfer to trapped absorbing particles. <i>Physical Review A</i> , 1996, 54, 1593-1596.	1.0	432
284	Determination of the force constant of a single-beam gradient trap by measurement of backscattered light. <i>Applied Optics</i> , 1996, 35, 7112.	2.1	74
285	Visualization and analysis of bow shocks in a superorbital expansion tube. <i>AIAA Journal</i> , 1996, 34, 2200-2202.	1.5	9
286	<title>Transfer of angular momentum to absorbing particles from a laser beam with a phase singularity</title>. , 1996, 2792, 190.		2
287	Velocity measurements by flow tagging employing laser enhanced ionisation and laser induced fluorescence. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 1995, 50, 1301-1310.	1.5	24
288	Resonant degenerate four-wave mixing in $L_2$ : effect of buffer gas pressure. <i>Applied Optics</i> , 1995, 34, 3281.	2.1	2

#	ARTICLE	IF	CITATIONS
289	Optical Particle Trapping with Higher-order Doughnut Beams Produced Using High Efficiency Computer Generated Holograms. <i>Journal of Modern Optics</i> , 1995, 42, 217-223.	0.6	337
290	Direct Observation of Transfer of Angular Momentum to Absorptive Particles from a Laser Beam with a Phase Singularity. <i>Physical Review Letters</i> , 1995, 75, 826-829.	2.9	1,527
291	Measurement of the Optical Force and Trapping Range of a Single-beam Gradient Optical Trap for Micron-sized Latex Spheres. <i>Journal of Modern Optics</i> , 1994, 41, 595-601.	0.6	43
292	Detection of trace amounts of Cr by two laser-based spectroscopic techniques: laser-enhanced ionization in flames and laser-induced fluorescence in graphite furnace. <i>Applied Optics</i> , 1993, 32, 867.	2.1	18
293	Laser beams with phase singularities. <i>Optical and Quantum Electronics</i> , 1992, 24, S951-S962.	1.5	339
294	Interferometric Measurements of Phase Singularities in the Output of a Visible Laser. <i>Journal of Modern Optics</i> , 1991, 38, 2531-2541.	0.6	87
295	Reduction of Spectral Interferences from Na in Laser-Enhanced Ionization Spectrometry by Laser Pre-ionization. <i>Applied Spectroscopy</i> , 1990, 44, 1117-1123.	1.2	12
296	Investigation of Background Signals from Na as a Source of Interference in Laser-Enhanced Ionization Spectrometry in Flames. <i>Applied Spectroscopy</i> , 1990, 44, 1124-1133.	1.2	9
297	Analytical applications of laser-enhanced ionization spectrometry in flames and furnaces. <i>Mikrochimica Acta</i> , 1989, 99, 197-214.	2.5	10
298	Simultaneous measurements of laser-induced fluorescence (LIF dip) and laser-enhanced ionization (LEI) Tj ETQq0 0 0 rgBT /Overlock 10 Spectroscopy, 1989, 44, 693-712.	1.5	21
299	Laser-enhanced ionization spectrometry in flamesâ€”a powerful and versatile technique for ultra-sensitive trace element analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 1989, 44, 835-866.	1.5	44
300	Laser-enhanced ionization spectrometry in a T-furnace. <i>Analytical Chemistry</i> , 1988, 60, 1629-1631.	3.2	6
301	Detection of metallic elements by laser enhanced ionization spectrometry in flames on-line with high-pressure liquid chromatography. <i>Physica Scripta</i> , 1987, 36, 246-249.	1.2	8
302	Detection of traces in semiconductor materials by two-color laser-enhanced ionization spectrometry in flames. <i>Applied Optics</i> , 1987, 26, 3521.	2.1	19
303	Trace element analysis by two-colour laser enhanced ionization spectrometry in a graphite furnace. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 1987, 42, 713-718.	1.5	19
304	Laser-Enhanced Ionization Detection of Trace Elements in a Graphite Furnace. <i>Applied Spectroscopy</i> , 1986, 40, 968-971.	1.2	29
305	Elimination of Spectral Interference Using Two-Step Excitation Laser Enhanced Ionization. <i>Physica Scripta</i> , 1986, 33, 429-433.	1.2	27
306	Trace element determination in flames by laser enhanced ionization spectrometry. <i>Analytical Chemistry</i> , 1985, 57, 773-776.	3.2	43

#	ARTICLE	IF	CITATIONS
307	Improved theory of laser-enhanced ionization in flames: Comparison with experiment. Journal of Applied Physics, 1984, 55, 3215-3225.	1.1	46
308	THEORY OF LASER-ENHANCED IONIZATION IN FLAMES - COMPARISON WITH EXPERIMENTS. Journal De Physique Colloque, 1983, 44, C7-311-C7-317.	0.2	8
309	Atomic-beam measurements on refractory elements. Nuclear Instruments & Methods, 1974, 119, 269-274.	1.2	16
310	Seeded parametric four-wave mixing for sensitive detection of atoms and molecules. , 0, , .		0
311	Near-resonant holographic interferometry measurements in high-temperature environments. , 0, , .		0
312	Near-resonant holographic interferometry measurements in high-temperature environments. , 0, , .		0
313	Laser driven micro-machine elements. , 0, , .		0
314	Measurement of rotation speed of birefringent material and optical torque from polarisation of transmitted light. , 0, , .		0
315	A scanning microscope employing an optically trapped stylus. , 0, , .		0
316	Light guiding light: nonlinear refraction in rubidium vapour. , 0, , .		0
317	Dynamic tunneling of cold atoms. , 0, , .		0
318	Trapping and alignment of a microfibre using the discrete dipole approximation. , 0, , .		0
319	Dynamic tunneling of cold atoms. , 0, , .		0
320	Optical measurement of microscopic torques. , 0, , .		8
321	Orientation of biological cells using plane-polarized gaussian beam optical tweezers. , 0, , .		9