

Nanoscale temperature measurements using non-equilibrium levitated nanosphere

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Citation Report

#	ARTICLE	IF	CITATIONS
4	Hybrid cavity mechanics with doped systems. <i>Physical Review A</i> , 2014, 90, .	1.0	26
5	Realization of nonequilibrium thermodynamic processes using external colored noise. <i>Physical Review E</i> , 2014, 90, 032116.	0.8	28
6	Cavity cooling a trapped nanosphere in vacuum. <i>Proceedings of SPIE</i> , 2014, , .	0.8	0
7	Nano-optomechanics with optically levitated nanoparticles. <i>Contemporary Physics</i> , 2015, 56, 48-62.	0.8	39
8	Non-equilibrium nano-thermometry. <i>Nature Nanotechnology</i> , 2014, 9, 415-417.	15.6	11
9	Attonewton force detection using microspheres in a dual-beam optical trap in high vacuum. <i>Physical Review A</i> , 2015, 91, .	1.0	112
10	Work relations for a system governed by Tsallis statistics. <i>Physical Review E</i> , 2015, 92, 022143.	0.8	5
11	Cooling of levitated graphene nanoplatelets in high vacuum. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	33
12	Cooling and manipulation of a levitated nanoparticle with an optical fiber trap. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	51
13	Photothermal Superheating of Water with Ionâ€implanted Silicon Nanowires. <i>Advanced Optical Materials</i> , 2015, 3, 1362-1367.	3.6	6
14	Stochastic heating of a single Brownian particle by charge fluctuations in a radio-frequency produced plasma sheath. <i>Physical Review E</i> , 2015, 92, 043106.	0.8	20
15	Nanomechanical force transducers for biomolecular and intracellular measurements: is there room to shrink and why do it?. <i>Reports on Progress in Physics</i> , 2015, 78, 024101.	8.1	10
16	All-Optical Nanomechanical Heat Engine. <i>Physical Review Letters</i> , 2015, 114, 183602.	2.9	105
17	Cold atoms as a coolant for levitated optomechanical systems. <i>Physical Review A</i> , 2015, 91, .	1.0	25
18	Cavity Cooling a Single Charged Levitated Nanosphere. <i>Physical Review Letters</i> , 2015, 114, 123602.	2.9	228
19	Adiabatic Processes Realized with a Trapped Brownian Particle. <i>Physical Review Letters</i> , 2015, 114, 120601.	2.9	90
20	Entangling the motion of two optically trapped objects via time-modulated driving fields. <i>New Journal of Physics</i> , 2015, 17, 013056.	1.2	36
21	Measuring work and heat in ultracold quantum gases. <i>New Journal of Physics</i> , 2015, 17, 035004.	1.2	56

#	ARTICLE	IF	CITATIONS
22	Laser-refrigeration of rare-earth-doped nanocrystals in water. Proceedings of SPIE, 2015, , .	0.8	2
23	Complex rotational dynamics of multiple spheroidal particles in a circularly polarized, dual beam trap. Optics Express, 2015, 23, 7273.	1.7	42
24	Parametric Force Analysis for Measurement of Arbitrary Optical Forces on Particles Trapped in Air or Vacuum. ACS Photonics, 2015, 2, 1451-1459.	3.2	10
25	Rotational behavior of oblate golden nanoparticles in circularly polarized dual beam optical trap. , 2015, , .		0
26	Cavity-Assisted Manipulation of Freely Rotating Silicon Nanorods in High Vacuum. Nano Letters, 2015, 15, 5604-5608.	4.5	62
27	Evaluating Single-Molecule Stokes and Anti-Stokes SERS for Nanoscale Thermometry. Journal of Physical Chemistry C, 2015, 119, 21116-21124.	1.5	78
28	Multi-dimensional single-spin nano-optomechanics with a levitated nanodiamond. Nature Photonics, 2015, 9, 653-657.	15.6	119
29	Rotational cavity optomechanics. Journal of the Optical Society of America B: Optical Physics, 2015, 32, B55.	0.9	21
30	Sympathetic cooling of a membrane oscillator in a hybrid mechanicalâ€‘atomic system. Nature Nanotechnology, 2015, 10, 55-59.	15.6	105
31	Quantum model of cooling and force sensing with an optically trapped nanoparticle. Optica, 2016, 3, 318.	4.8	49
32	Optical trapping of nanoparticles by full solid-angle focusing. Optica, 2016, 3, 1181.	4.8	16
33	Instantaneous ballistic velocity of suspended Brownian nanocrystals measured by upconversion nanothermometry. Nature Nanotechnology, 2016, 11, 851-856.	15.6	292
34	Micro/Nanoscale Thermometry for Cellular Thermal Sensing. Small, 2016, 12, 4590-4610.	5.2	198
35	Electron spin control of optically levitated nanodiamonds in vacuum. Nature Communications, 2016, 7, 12250.	5.8	87
36	Experimental study of the stochastic heating of a single Brownian particle by charge fluctuations. Physics of Plasmas, 2016, 23, 083704.	0.7	5
37	Tapered Glass-Fiber Microspike: High- Q Flexural Wave Resonator and Optically Driven Knudsen Pump. Physical Review Letters, 2016, 117, 273901.	2.9	16
38	Burning and graphitization of optically levitated nanodiamonds in vacuum. Scientific Reports, 2016, 6, 21633.	1.6	66
39	Macroscopic Quantum Resonators (MAQRO): 2015 update. EPJ Quantum Technology, 2016, 3, .	2.9	77

#	ARTICLE	IF	CITATIONS
40	Search for Screened Interactions Associated with Dark Energy below the ~ 100 nm Length Scale. Physical Review Letters, 2016, 117, 101101.	2.9	116
41	Optically driven self-oscillations of a silica nanospike at low gas pressures. , 2016, , .		0
42	Cooling Mechanical Oscillators by Coherent Control. Physical Review Letters, 2016, 117, 163601.	2.9	37
43	Cooling and manipulation of nanoparticles in high vacuum. Proceedings of SPIE, 2016, , .	0.8	6
44	Feedback-induced bistability of an optically levitated nanoparticle: A Fokker-Planck treatment. Physical Review A, 2016, 94, .	1.0	8
45	Near-field levitated quantum optomechanics with nanodiamonds. Physical Review A, 2016, 94, .	1.0	17
46	Single and two-mode mechanical squeezing of an optically levitated nanodiamond via dressed-state coherence. New Journal of Physics, 2016, 18, 103002.	1.2	14
47	Rotational cavity cooling of dielectric rods and disks. Physical Review A, 2016, 94, .	1.0	48
48	Torsional Optomechanics of a Levitated Nonspherical Nanoparticle. Physical Review Letters, 2016, 117, 123604.	2.9	163
49	Nonlinear dynamics and cavity cooling of levitated nanoparticles. Proceedings of SPIE, 2016, , .	0.8	3
50	Crucial tests of macrorealist and semiclassical gravity models with freely falling mesoscopic nanospheres. Physical Review A, 2016, 93, .	1.0	14
51	Zeptonewton force sensing with nanospheres in an optical lattice. Physical Review A, 2016, 93, .	1.0	234
52	Nonlinear Dynamics and Strong Cavity Cooling of Levitated Nanoparticles. Physical Review Letters, 2016, 117, 173602.	2.9	119
53	Synthesis of optical spring potentials in optomechanical systems. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 125401.	0.6	2
54	Thermodynamics at the microscale: from effective heating to the Brownian Carnot engine. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 054003.	0.9	18
55	Optomechanics based on angular momentum exchange between light and matter. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 153001.	0.6	39
56	Self-alignment of glass fiber nanospike by optomechanical back-action in hollow-core photonic crystal fiber. Optica, 2016, 3, 277.	4.8	39
57	Perspective on quantum thermodynamics. New Journal of Physics, 2016, 18, 011002.	1.2	143

#	ARTICLE	IF	CITATIONS
58	Brownian Carnot engine. Nature Physics, 2016, 12, 67-70.	6.5	332
59	Thermometry of levitated nanoparticles in a hybrid electro-optical trap. Journal of Optics (United Kingdom), 2017, 19, 074001. doi:10.1093/optsoa/otw074	1.0	9
60	Optical levitation of nanodiamonds by doughnut beams in vacuum. Laser and Photonics Reviews, 2017, 11, 1600284.	4.4	29
61	Optically levitated nanoparticle as a model system for stochastic bistable dynamics. Nature Communications, 2017, 8, 15141.	5.8	84
62	Thermally induced micro-motion by inflection in optical potential. Scientific Reports, 2017, 7, 1697.	1.6	18
63	Direct measurement of Kramers turnover with a levitated nanoparticle. Nature Nanotechnology, 2017, 12, 1130-1133.	15.6	102
64	Laser refrigeration, alignment and rotation of levitated Yb ³⁺ :YLF nanocrystals. Nature Photonics, 2017, 11, 634-638.	15.6	89
65	Levitating the fridge. Nature Photonics, 2017, 11, 613-614.	15.6	0
66	Thermal broadening of the power spectra of laser-trapped particles in vacuum. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 245501.	0.6	8
67	Noncommutative Brownian motion. International Journal of Modern Physics A, 2017, 32, 1750146.	0.5	5
68	Diamonds levitating in a Paul trap under vacuum: Measurements of laser-induced heating via NV center thermometry. Applied Physics Letters, 2017, 111, .	1.5	38
69	Entropy production and time asymmetry in the presence of strong interactions. Physical Review E, 2017, 95, 062123.	0.8	42
70	Auxiliary-cavity-assisted ground-state cooling of an optically levitated nanosphere in the unresolved-sideband regime. Physical Review A, 2017, 96, .	1.0	22
71	Optical cryocooling of diamond. Physical Review B, 2017, 95, .	1.1	21
72	Controlling the net charge on a nanoparticle optically levitated in vacuum. Physical Review A, 2017, 95, .	1.0	69
73	Optical levitation of 10-ng spheres with nano- g acceleration sensitivity. Physical Review A, 2017, 96, .	1.0	93
74	Cavity optomechanics in a levitated helium drop. Physical Review A, 2017, 96, .	1.0	35
75	Optical trap of a nanoparticle in ultra-high vacuum towards a mixture of a nanoparticle and a laser-cooled gas. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
76	In situ tuning of whispering gallery modes of levitated silica microspheres. Journal of the Optical Society of America B: Optical Physics, 2017, 34, C20.	0.9	7
77	Full rotational control of levitated silicon nanorods. Optica, 2017, 4, 356.	4.8	105
78	Brownian fluctuations of an optically rotated nanorod. Optica, 2017, 4, 746.	4.8	33
79	Coherent control of a single nitrogen-vacancy center spin in optically levitated nanodiamond. Journal of the Optical Society of America B: Optical Physics, 2017, 34, C31.	0.9	27
80	Nanoscale Optical Trapping: A Review. Advanced Optical Materials, 2018, 6, 1800005.	3.6	99
81	Measuring the internal temperature of a levitated nanoparticle in high vacuum. Physical Review A, 2018, 97, .	1.0	49
82	Hot Brownian Motion. , 2018, , 127-145.		3
83	Optical trapping and manipulation of single particles in air: Principles, technical details, and applications. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 214, 94-119.	1.1	98
84	Calibration and energy measurement of optically levitated nanoparticle sensors. Review of Scientific Instruments, 2018, 89, 033111.	0.6	54
85	Single Particle Thermodynamics with Levitated Nanoparticles. Fundamental Theories of Physics, 2018, , 853-885.	0.1	5
86	Nuclear recoil spectroscopy of levitated particles. Physical Review A, 2018, 98, .	1.0	1
87	Precession Motion in Levitated Optomechanics. Physical Review Letters, 2018, 121, 253601.	2.9	53
88	Transverse spin forces and non-equilibrium particle dynamics in a circularly polarized vacuum optical trap. Nature Communications, 2018, 9, 5453.	5.8	66
89	Spontaneous continuous orbital motion of nanoparticles levitated in air. Physical Review A, 2018, 98, .	1.0	2
90	Cooling the motion of a silica microsphere in a magneto-gravitational trap in ultra-high vacuum. New Journal of Physics, 2018, 20, 063028.	1.2	62
91	Pure nanodiamonds for levitated optomechanics in vacuum. New Journal of Physics, 2018, 20, 043016.	1.2	42
92	Long-range optical trapping and binding of microparticles in hollow-core photonic crystal fibre. Light: Science and Applications, 2018, 7, 22.	7.7	40
93	Invited Article: Optical trapping of ultrasmooth gold nanoparticles in liquid and air. APL Photonics, 2018, 3, 070801.	3.0	9

#	ARTICLE	IF	CITATIONS
94	Optical binding of two cooled micro-gyroscopes levitated in vacuum. <i>Optica</i> , 2018, 5, 910.	4.8	49
95	Ramsey Interferences and Spin Echoes from Electron Spins Inside a Levitating Macroscopic Particle. <i>Physical Review Letters</i> , 2018, 121, 053602.	2.9	36
96	Levitated Nanoparticles for Microscopic Thermodynamics—A Review. <i>Entropy</i> , 2018, 20, 326.	1.1	65
97	Gas-induced friction and diffusion of rigid rotors. <i>Physical Review E</i> , 2018, 97, 052112.	0.8	30
98	Optically levitated nanosphere with high trapping frequency. <i>Science China: Physics, Mechanics and Astronomy</i> , 2018, 61, 1.	2.0	7
99	The Temperature of an Optically Trapped, Rotating Microparticle. <i>ACS Photonics</i> , 2018, 5, 3772-3778.	3.2	25
100	Printed-circuit-board linear Paul trap for manipulating single nano- and microparticles. <i>Review of Scientific Instruments</i> , 2018, 89, 083101.	0.6	3
101	Effects of geometry and composition of soft polymer films embedded with nanoparticles on rates for optothermal heat dissipation. <i>Nanoscale</i> , 2018, 10, 11531-11543.	2.8	9
102	Testing collapse models with levitated nanoparticles: Detection challenge. <i>Physical Review A</i> , 2019, 100, .	1.0	36
103	Theory for cavity cooling of levitated nanoparticles via coherent scattering: Master equation approach. <i>Physical Review A</i> , 2019, 100, .	1.0	44
104	Cooling of a levitated nanoparticle with digital parametric feedback. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	9
105	Online Identification Method of Induction Motor Parameters Based on Rotor Flux Linkage. <i>Journal of Physics: Conference Series</i> , 2019, 1187, 022019.	0.3	0
106	Change Detection Method based on Block Similarity Measure. <i>Journal of Physics: Conference Series</i> , 2019, 1237, 022047.	0.3	0
107	Review of optical tweezers in vacuum. <i>Frontiers of Information Technology and Electronic Engineering</i> , 2019, 20, 655-673.	1.5	14
108	Levitated electromechanics: all-electrical cooling of charged nano- and micro-particles. <i>Quantum Science and Technology</i> , 2019, 4, 024003.	2.6	35
109	Quantum bead-based fluorescence-linked immunosorbent assay for ultrasensitive detection of aflatoxin M1 in pasteurized milk, yogurt, and milk powder. <i>Journal of Dairy Science</i> , 2019, 102, 3985-3993.	1.4	21
110	Screen-Printed, Pure Carbon-Black Thermocouple Fabrication and Seebeck Coefficients. <i>Sensors</i> , 2019, 19, 403.	2.1	15
111	Magneto-mechanical trapping of micro-diamonds at low pressures. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	31

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112	Parametric feedback cooling of rigid body nanodumbbells in levitated optomechanics. <i>Physical Review A</i> , 2019, 99, .	1.0	16
113	Ultrasensitive torque detection with an optically levitated nanorotor. <i>Nature Nanotechnology</i> , 2020, 15, 89-93.	15.6	148
114	Brownian Thermometry Beyond Equilibrium. <i>ChemSystemsChem</i> , 2020, 2, e1900041.	1.1	6
115	Optomechanics with levitated particles. <i>Reports on Progress in Physics</i> , 2020, 83, 026401.	8.1	155
116	Weighing an Optically Trapped Microsphere in Thermal Equilibrium With Air. <i>Physical Review Applied</i> , 2020, 14, .	1.5	6
117	Extending Vacuum Trapping to Absorbing Objects with Hybrid Paul-Optical Traps. <i>Nano Letters</i> , 2020, 20, 6018-6023.	4.5	20
118	Displacement Detection Decoupling in Counter-Propagating Dual-Beams Optical Tweezers with Large-Sized Particle. <i>Sensors</i> , 2020, 20, 4916.	2.1	7
119	Quantum electromechanics with levitated nanoparticles. <i>Npj Quantum Information</i> , 2020, 6, .	2.8	22
120	Quantum experiments with microscale particles. <i>Contemporary Physics</i> , 2020, 61, 155-168.	0.8	33
121	Entropy production in continuously measured Gaussian quantum systems. <i>Npj Quantum Information</i> , 2020, 6, .	2.8	24
122	Statistical physics of flux-carrying Brownian particles. <i>Annals of Physics</i> , 2020, 421, 168300.	1.0	1
123	Force and acceleration sensing with optically levitated nanogram masses at microkelvin temperatures. <i>Physical Review A</i> , 2020, 101, .	1.0	87
124	Coherent oscillations of a levitated birefringent microsphere in vacuum driven by nonconservative rotation-translation coupling. <i>Science Advances</i> , 2020, 6, eaaz9858.	4.7	30
125	Robust Optical-Levitation-Based Metrology of Nanoparticle's Position and Mass. <i>Physical Review Letters</i> , 2020, 124, 223603.	2.9	50
126	Spin-cooling of the motion of a trapped diamond. <i>Nature</i> , 2020, 580, 56-59.	13.7	66
127	Thermodynamics of continuous non-Markovian feedback control. <i>Nature Communications</i> , 2020, 11, 1360.	5.8	31
128	Highly sensitive and selective detection of cancer cell with an all-optical scheme. <i>Laser Physics</i> , 2020, 30, 085601.	0.6	0
129	Microfiber Mechanical Resonator for Optomechanics. <i>ACS Photonics</i> , 2020, 7, 695-700.	3.2	1

#	ARTICLE	IF	CITATIONS
130	Characterisation of a charged particle levitated nano-oscillator. Journal Physics D: Applied Physics, 2020, 53, 175302.	1.3	21
131	Absolute pressure and gas species identification with an optically levitated rotor. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2020, 38, .	0.6	14
132	Prethermalization and Nonreciprocal Phonon Transport in a Levitated Optomechanical Array. Advanced Quantum Technologies, 2020, 3, 1900099.	1.8	16
133	Drag forces on nanoparticles in the free-molecule regime: Effect of the particle temperature. Physical Review E, 2020, 101, 013103.	0.8	7
134	Cooling of a levitated nanoparticle to the motional quantum ground state. Science, 2020, 367, 892-895.	6.0	367
135	Micro-manipulation of nanodiamonds containing NV centers for quantum applications. Diamond and Related Materials, 2020, 106, 107840.	1.8	10
136	Intracellular Thermometry at the Micro-Nanoscale and its Potential Application to Study Protein Aggregation Related to Neurodegenerative Diseases. ChemBioChem, 2021, 22, 1546-1558.	1.3	8
137	A Weldless Approach for Thermocouple Fabrication Through Direct Ink Writing Technique. IEEE Sensors Journal, 2021, 21, 1279-1286.	2.4	4
138	Optical and electrical feedback cooling of a silica nanoparticle levitated in a Paul trap. Physical Review Research, 2021, 3, .	1.3	32
139	Mechanical Dissipation Below $\frac{1}{4}$ Hz with a Cryogenic Diamagnetic Levitated Micro-Oscillator. Physical Review Applied, 2021, 15, .	1.5	21
140	Stochastic dynamics of optically bound matter levitated in vacuum. Optica, 2021, 8, 220.	4.8	24
141	Revolution of a trapped particle in counter-propagating dual-beam optical tweezers under low pressure. Optics Express, 2021, 29, 11169.	1.7	18
142	Optical tweezers – from calibration to applications: a tutorial. Advances in Optics and Photonics, 2021, 13, 74.	12.1	127
143	Quantum ground state cooling of translational and librational modes of an optically trapped nanoparticle coupling cavity. Quantum Engineering, 2021, 3, e62.	1.2	6
144	Optical trapping with structured light: a review. Advanced Photonics, 2021, 3, .	6.2	317
145	Direct measurement of thermophoretic and photophoretic force acting on hot micromotors with optical tweezers. Applied Surface Science, 2021, 549, 149319.	3.1	14
146	Thermophoresis of nanoparticles hotter/colder than the surrounding dilute gases. Particuology, 2021, 63, 95-95.	2.0	2
147	Quadratic optomechanical cooling of a cavity-levitated nanosphere. Physical Review Research, 2021, 3, .	1.3	12

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148	6â€‰GHz hyperfast rotation of an optically levitated nanoparticle in vacuum. <i>Photonics Research</i> , 2021, 9, 1344.	3.4	26
149	Lens-Free Optical Detection of Thermal Motion of a Submillimeter Sphere Diamagnetically Levitated in High Vacuum. <i>Physical Review Applied</i> , 2021, 16, .	1.5	13
150	Performance and limits of feedback cooling methods for levitated oscillators: A direct comparison. <i>Physical Review A</i> , 2021, 104, .	1.0	13
151	Meissner Levitation of a Millimeter-Size Neodymium Magnet Within a Superconducting Radio Frequency Cavity. <i>IEEE Transactions on Applied Superconductivity</i> , 2021, 31, 1-4.	1.1	7
152	Electric trapping and circuit cooling of charged nanorotors. <i>New Journal of Physics</i> , 2021, 23, 093001.	1.2	6
153	Initiating revolutions for optical manipulation: the origins and applications of rotational dynamics of trapped particles. <i>Advances in Physics: X</i> , 2021, 6, 1838322.	1.5	15
154	Chimera states in small optomechanical arrays. <i>Physical Review Research</i> , 2020, 2, .	1.3	15
155	Ultrarrow-linewidth levitated nano-oscillator for testing dissipative wave-function collapse. <i>Physical Review Research</i> , 2020, 2, .	1.3	39
156	Five-dimensional cooling and nonlinear dynamics of an optically levitated nanodumbbell. <i>Physical Review Research</i> , 2020, 2, .	1.3	39
157	Optical pulling forces and their applications. <i>Advances in Optics and Photonics</i> , 2020, 12, 288.	12.1	99
158	Effects of photon scattering torque in off-axis levitated torsional cavity optomechanics. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2017, 34, C44.	0.9	1
159	Measurement of mass by optical forced oscillation of absorbing particles trapped in air. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2017, 34, 1242.	0.9	6
160	Spectral analysis and parameter estimation in levitated optomechanics. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2019, 36, 1565.	0.9	6
161	Polarization-dependent center-of-mass motion of an optically levitated nanosphere. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2019, 36, 2369.	0.9	6
162	Coupling between axial and radial motions of microscopic particle trapped in the intracavity optical tweezers. <i>Optics Express</i> , 2019, 27, 36653.	1.7	11
163	Anomalous motion of a particle levitated by Laguerreâ€“Gaussian beams. <i>Optics Letters</i> , 2021, 46, 106.	1.7	14
164	Levitodynamics: Levitation and control of microscopic objects in vacuum. <i>Science</i> , 2021, 374, eabg3027.	6.0	142
165	Direct and Clean Loading of Nanoparticles into Optical Traps at Millibar Pressures. <i>Photonics</i> , 2021, 8, 458.	0.9	9

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166	Critical ambient pressure and critical cooling rate in optomechanics of electromagnetically levitated nanoparticles. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2021, 38, 3652.	0.9	1
167	Optical signatures of the coupled spin-mechanics of a levitated magnetic microparticle. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2021, 38, 3858.	0.9	6
168	Propulsion Mechanisms of Light-Driven Plasmonic Colloidal Micromotors. <i>Advanced Photonics Research</i> , 2022, 3, 2100189.	1.7	10
169	Demonstration of a Phonon Laser with a Nanosphere Levitated in an Optical Tweezer. , 2018, , .		0
170	Motion of optically levitated nanoparticle in nonlinear regime. , 2018, , .		0
171	Laser cooling of secular motion of a nanoparticle levitated in a Paul trap for ion-assisted optomechanics. , 2019, , .		1
172	Fabrication of large vaterite microspheres for optical trapping and rotation in high vacuum. , 2019, , .		0
173	Higher order correlations in a levitated nanoparticle phonon laser. <i>Optics Express</i> , 2020, 28, 4234.	1.7	3
174	Magnetic-tip trap system. <i>Physical Review Research</i> , 2020, 2, .	1.3	2
175	Optical trapping of nanoparticles in superfluid helium. <i>Optica</i> , 2022, 9, 139.	4.8	5
176	Capture region shrinkage and levitation instability of optical trap induced by decreased damping in vacuum. <i>Optics Communications</i> , 2022, 512, 128034.	1.0	4
177	Hot Brownian Motion of Optically Levitated Nanodiamonds. <i>ACS Photonics</i> , 2022, 9, 420-425.	3.2	8
178	Nonequilibrium Control of Thermal and Mechanical Changes in a Levitated System. <i>Physical Review Letters</i> , 2022, 128, 070601.	2.9	14
179	Self-propulsion of Janus particles in the free molecular regime. <i>Physics of Fluids</i> , 2022, 34, 033311.	1.6	2
180	Low-energy scattering of ultracold atoms by a dielectric nanosphere. <i>Physical Review Research</i> , 2021, 3, .	1.3	2
181	Optomechanics for quantum technologies. <i>Nature Physics</i> , 2022, 18, 15-24.	6.5	100
183	Quantum theory of feedback cooling of an anelastic macromechanical oscillator. <i>Physical Review A</i> , 2022, 105, .	1.0	2
184	Interference of the scattered vector light fields from two optically levitated nanoparticles. <i>Optics Express</i> , 0, , .	1.7	1

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185	Medium vacuum feasible displacement calibration of an optically levitated Duffing nonlinear oscillator. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	2
186	Coupling function from bath density of states. <i>Europhysics Letters</i> , 0, , .	0.7	2
187	Modulation of Local Cellular Activities using a Photothermal Dye-Based Subcellular-Sized Heat Spot. <i>ACS Nano</i> , 2022, 16, 9004-9018.	7.3	17
188	Designing, synthesizing, and modeling active fluids. <i>Physics of Fluids</i> , 2022, 34, .	1.6	6
189	Imaging-based feedback cooling of a levitated nanoparticle. <i>Review of Scientific Instruments</i> , 2022, 93, 075109.	0.6	2
190	Thermometry of an optically levitated nanodiamond. <i>AVS Quantum Science</i> , 2022, 4, .	1.8	4
191	Hybrid electro-optical trap for experiments with levitated particles in vacuum. <i>Review of Scientific Instruments</i> , 2022, 93, .	0.6	2
192	Two-dimensional quantum motion of a levitated nanosphere. <i>Physical Review Research</i> , 2022, 4, .	1.3	21
193	Stochastic line integrals and stream functions as metrics of irreversibility and heat transfer. <i>Physical Review E</i> , 2022, 106, .	0.8	3
194	Optical manipulation with metamaterial structures. <i>Applied Physics Reviews</i> , 2022, 9, .	5.5	57
195	Nonequilibrium thermodynamics in cavity optomechanics. <i>Fundamental Research</i> , 2023, 3, 75-86.	1.6	2
196	Event-based imaging of levitated microparticles. <i>Applied Physics Letters</i> , 2022, 121, .	1.5	3
197	Cooling of mechanical resonator in a hybrid intracavity squeezing optomechanical system. <i>Optics Express</i> , 2022, 30, 38776.	1.7	3
198	Suppressing mechanical dissipation of diamagnetically levitated oscillator via engineering conductive geometry. <i>Physical Review Research</i> , 2023, 5, .	1.3	3
199	Sympathetic cooling and squeezing of two colevitated nanoparticles. <i>Physical Review Research</i> , 2023, 5, .	1.3	9
200	Temperature-free Mass Tracking of a Levitated Nanoparticle. <i>Chinese Physics B</i> , 0, , .	0.7	0
201	Self-optimized single-nanowire photoluminescence thermometry. <i>Light: Science and Applications</i> , 2023, 12, .	7.7	15
202	Interaction between an Optically Levitated Nanoparticle and Its Thermal Image: Internal Thermometry via Displacement Sensing. <i>Physical Review Letters</i> , 2023, 130, .	2.9	3

#	ARTICLE	IF	CITATIONS
203	Simultaneous cavity cooling of all six degrees of freedom of a levitated nanoparticle. Nature Physics, 2023, 19, 1003-1008.	6.5	10
204	Hot Brownian Motion. , 2023, , 133-151.		0