James Millen

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5722010/publications.pdf

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38	1,795	304743 22	434195 31
papers	citations	h-index	g-index

38	38	38	1310
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cavity Cooling a Single Charged Levitated Nanosphere. Physical Review Letters, 2015, 114, 123602.	7.8	228
2	Nanoscale temperature measurements using non-equilibrium Brownian dynamics of a levitated nanosphere. Nature Nanotechnology, 2014, 9, 425-429.	31.5	223
3	Optomechanics with levitated particles. Reports on Progress in Physics, 2020, 83, 026401.	20.1	155
4	Perspective on quantum thermodynamics. New Journal of Physics, 2016, 18, 011002.	2.9	143
5	Nonlinear Dynamics and Strong Cavity Cooling of Levitated Nanoparticles. Physical Review Letters, 2016, 117, 173602.	7.8	119
6	Full rotational control of levitated silicon nanorods. Optica, 2017, 4, 356.	9.3	105
7	Many-body physics with alkaline-earth Rydberg lattices. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 184010.	1.5	84
8	Optically driven ultra-stable nanomechanical rotor. Nature Communications, 2017, 8, 1670.	12.8	83
9	Probing macroscopic quantum superpositions with nanorotors. New Journal of Physics, 2018, 20, 122001.	2.9	66
10	Levitated Nanoparticles for Microscopic Thermodynamicsâ€"A Review. Entropy, 2018, 20, 326.	2.2	65
11	Spectroscopy of strontium Rydberg states using electromagnetically induced transparency. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, F319-F325.	1.5	54
12	Two-Electron Excitation of an Interacting Cold Rydberg Gas. Physical Review Letters, 2010, 105, 213004.	7.8	48
13	Dynamics of levitated nanospheres: towards the strong coupling regime. New Journal of Physics, 2013, 15, 015001.	2.9	45
14	Optomechanical cooling of levitated spheres with doubly resonant fields. Physical Review A, 2012, 85, .	2.5	40
15	Silicon microcavity arrays with open access and a finesse of half a million. Light: Science and Applications, 2019, 8, 37.	16.6	40
16	Levitated electromechanics: all-electrical cooling of charged nano- and micro-particles. Quantum Science and Technology, 2019, 4, 024003.	5.8	35
17	Quantum experiments with microscale particles. Contemporary Physics, 2020, 61, 155-168.	1.8	33
18	Quantum cooling and squeezing of a levitating nanosphere via time-continuous measurements. New Journal of Physics, 2015, 17, 073019.	2.9	31

#	Article	IF	Citations
19	Quantum sensing with nanoparticles for gravimetry: when bigger is better. Advanced Optical Technologies, 2020, 9, 227-239.	1.7	30
20	Spectroscopy of a cold strontium Rydberg gas. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 184001.	1.5	28
21	Modulation-free pump-probe spectroscopy of strontium atoms. European Physical Journal D, 2010, 57, 151-154.	1.3	24
22	Quantum electromechanics with levitated nanoparticles. Npj Quantum Information, 2020, 6, .	6.7	22
23	Simultaneous cooling of coupled mechanical oscillators using whispering gallery mode resonances. Optics Express, 2016, 24, 1392.	3.4	21
24	A vapor cell based on dispensers for laser spectroscopy. Review of Scientific Instruments, 2009, 80, 013101.	1.3	19
25	Nanoparticle detection in an open-access silicon microcavity. Applied Physics Letters, 2017, 111, .	3.3	18
26	The rise of the quantum machines. Physics World, 2016, 29, 23-26.	0.0	9
27	Direct and Clean Loading of Nanoparticles into Optical Traps at Millibar Pressures. Photonics, 2021, 8, 458.	2.0	9
28	Cooling and manipulation of nanoparticles in high vacuum. Proceedings of SPIE, 2016, , .	0.8	6
29	Single Particle Thermodynamics with Levitated Nanoparticles. Fundamental Theories of Physics, 2018, , 853-885.	0.3	5
30	Cooling the centre-of-mass motion of a silica microsphere. , 2014, , .		3
31	Nonlinear dynamics and cavity cooling of levitated nanoparticles. Proceedings of SPIE, 2016, , .	0.8	3
32	Cooling optically trapped particles. Proceedings of SPIE, 2012, , .	0.8	1
33	Cavity cooling a trapped nanosphere in vacuum. Proceedings of SPIE, 2014, , .	0.8	0
34	Cooling the mechanical motion of a tapered optical fiber and a microsphere-cantilever using whispering gallery modes. Proceedings of SPIE, 2016, , .	0.8	0
35	Making space for nonlocality. Physics World, 2016, 29, 38-39.	0.0	0
36	Squeezed Environment Boosts Engine Performance. Physics Magazine, 2017, 10, .	0.1	0

#	Article	IF	Citations
37	An odd couple. Nature Physics, 2021, 17, 167-168.	16.7	0
38	Tutorial on optomechanics (Conference Presentation). , 2017, , .		0