Tim Freegarde

List of Publications by Citations

29 papers	294 citations	10 h-index	15 g-index
33 ext. papers	373 ext. citations	2.6 avg, IF	2.97 L-index

#	Paper	IF	Citations
29	Scattering theory of cooling and heating in optomechanical systems. *Physical Review A*, **2009**, 79,	2.6	40
28	General analysis of type I second-harmonic generation with elliptical Gaussian beams. *Journal of the Optical Society of America B: Optical Physics*, **1997**, 14, 2010	1.7	28
27	Composite pulses for interferometry in a thermal cold atom cloud. *Physical Review A*, **2014**, 90,	2.6	27
26	Cavity-enhanced optical bottle beam as a mechanical amplifier. *Physical Review A*, **2002**, 66,	2.6	20
25	OH detection by absorption of frequency-doubled diode laser radiation at 308 nm. *Chemical Physics Letters*, **2000**, 319, 125-130	2.5	19
24	Fractional adiabatic passage in two-level systems: Mirrors and beam splitters for atomic interferometry. *Physical Review A*, **2007**, 76,	2.6	17
23	Optomechanical cooling with generalized interferometers. *Physical Review Letters*, **2010**, 105, 013602	7.4	15
22	Optimal control of mirror pulses for cold-atom interferometry. *Physical Review A*, **2018**, 98,	2.6	14
21	On the design of enhancement cavities for second harmonic generation. *Optics Communications*, **2001**, 199, 435-446	2	14
20	Magneto-optical trapping and background-free imaging for atoms near nanostructured surfaces. *Optics Express*, **2009**, 17, 23003-9	3.3	13
19	Atom cooling using the dipole force of a single retroflected laser beam. *Physical Review A*, **2009**, 80,	2.6	9
18	Algorithmic cooling in a momentum state quantum computer. *Physical Review Letters*, **2003**, 91, 037904	7.4	9
17	Optimal control of Raman pulse sequences for atom interferometry. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2020**, 53, 085006	1.3	8
16	Introduction to the Physics of Waves **2012**,		8
15	Stabilized fiber-optic Mach-Zehnder interferometer for carrier-frequency rejection. *Applied Optics*, **2013**, 52, 5713-7	1.7	7
14	Stimulated Raman transitions via multiple atomic levels. *Physical Review A*, **2010**, 81,	2.6	7
13	Interferometric Laser Cooling of Atomic Rubidium. *Physical Review Letters*, **2015**, 115, 073004	7.4	6

List of Publications

12	Coherent amplification in laser cooling and trapping. *Physical Review A*, **2006**, 73,	2.6	6
11	Actively stabilized wavelength-insensitive carrier elimination from an electro-optically modulated laser beam. *Journal of the Optical Society of America B: Optical Physics*, **2012**, 29, 646	1.7	5
10	Cavity-enhanced toroidal dipole force traps for dark-field seeking species. *Optics Communications*, **2002**, 201, 99-104	2	5
9	Matterwave interferometric velocimetry of cold Rb atoms. *Journal of Modern Optics*, **2018**, 65, 657-666	1.1	4
8	Amplified optomechanics in a unidirectional ring cavity. *Journal of Modern Optics*, **2011**, 58, 1342-1348	1.1	4
7	Biselective pulses for large-area atom interferometry. *Physical Review A*, **2020**, 101,	2.6	2
6	Optical Cooling of Atoms in Microtraps by Time-Delayed Reflection. *Journal of Computational and Theoretical Nanoscience*, **2010**, 7, 1747-1753	0.3	2
5	Velocimetry of cold atoms by matter-wave interferometry. *Physical Review A*, **2019**, 99,	2.6	1
4	MIRROR-MEDIATED COOLING: A PARADIGM FOR PARTICLE COOLING VIA THE RETARDED DIPOLE FORCE. *Annual Review of Cold Atoms and Molecules*, **2013**, 351-376		1
3	Scattering theory of multilevel atoms interacting with arbitrary radiation fields. *Physica Scripta*, **2010**, T140, 014010	2.6	1
2	A simple interlocked controller for research vacuum systems. *Measurement Science and Technology*, **2001**, 12, N43-N46	2	
1	The Design of Enhancement Cavities for Second Harmonic Generation **2002**, 345-353		