Aurelien Dantan

List of Publications by Year
in descending order

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53	1,862	331259	253896
papers	citations	21	43
		h-index	g-index

53	53	53	1407
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Increasing Entanglement between Gaussian States by Coherent Photon Subtraction. Physical Review Letters, 2007, 98, 030502.	2.9	285
2	Strong Coupling and Long-Range Collective Interactions in Optomechanical Arrays. Physical Review Letters, 2012, 109, 223601.	2.9	199
3	Entangling movable mirrors in a double-cavity system. Europhysics Letters, 2005, 72, 747-753.	0.7	191
4	Realization of collective strong coupling with ion Coulomb crystals in an optical cavity. Nature Physics, 2009, 5, 494-498.	6.5	143
5	Continuous Variable Entanglement using Cold Atoms. Physical Review Letters, 2004, 92, 123601.	2.9	119
6	Cavity electromagnetically induced transparency and all-optical switching using ion Coulomb crystals. Nature Photonics, 2011, 5, 633-636.	15.6	107
7	Atom-membrane cooling and entanglement using cavity electromagnetically induced transparency. Physical Review A, 2011, 84, .	1.0	97
8	Reconfigurable Long-Range Phonon Dynamics in Optomechanical Arrays. Physical Review Letters, 2014, 112, 133604.	2.9	66
9	Collectively enhanced optomechanical coupling in periodic arrays of scatterers. Physical Review A, 2013, 88, .	1.0	45
10	Heat transport in harmonic oscillator systems with thermal baths: application to optomechanical arrays. New Journal of Physics, 2015, 17, 055013.	1.2	39
11	Pinning an Ion with an Intracavity Optical Lattice. Physical Review Letters, 2012, 109, 233005.	2.9	38
12	Loading of large ion Coulomb crystals into a linear Paul trap incorporating an optical cavity. Applied Physics B: Lasers and Optics, 2008, 93, 373-379.	1.1	33
13	An all-optical ion-loading technique for scalable microtrap architectures. Applied Physics B: Lasers and Optics, 2007, 88, 507-513.	1.1	32
14	Noninvasive Vibrational Mode Spectroscopy of Ion Coulomb Crystals through Resonant Collective Coupling to an Optical Cavity Field. Physical Review Letters, 2010, 105, 103001.	2.9	32
15	Positioning of the rf potential minimum line of a linear Paul trap with micrometer precision. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 154008.	0.6	31
16	Cavity Quantum Electrodynamics with Frequency-Dependent Reflectors. Physical Review Letters, 2019, 122, 243601.	2.9	30
17	All-cavity electromagnetically induced transparency and optical switching: Semiclassical theory. Physical Review A, 2012, 85, .	1.0	28
18	Long-Lived Quantum Memory with Nuclear Atomic Spins. Physical Review Letters, 2005, 95, 123002.	2.9	27

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19	Hybrid cavity mechanics with doped systems. Physical Review A, 2014, 90, .	1.0	26
20	Optomechanical characterization of silicon nitride membrane arrays. Optics Letters, 2017, 42, 1341.	1.7	24
21	Entanglement and squeezing in a two-mode system: theory and experiment. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, S532-S543.	1.4	21
22	Controlling the potential landscape and normal modes of ion Coulomb crystals by a standing-wave optical potential. Physical Review A, 2019, 99, .	1.0	21
23	Entanglement storage in atomic ensembles. Europhysics Letters, 2004, 67, 881-886.	0.7	19
24	Multimode model for projective photon-counting measurements. Physical Review A, 2009, 80, .	1.0	17
25	Enhanced optomechanical readout using optical coalescence. Physical Review A, 2013, 88, .	1.0	17
26	Cavity optomechanics with arrays of thick dielectric membranes. Physical Review A, 2016, 94, .	1.0	16
27	Universal manuscript template for OSA journals. Optics Express, 2018, 26, 29886.	1.7	16
28	Polarization squeezing in a four-level system. Journal of Optics B: Quantum and Semiclassical Optics, 2003, 5, S513-S522.	1.4	13
29	Effects of pressure on suspended micromechanical membrane arrays. Applied Physics Letters, 2017, 111, .	1.5	13
30	Optical spatial differentiation with suspended subwavelength gratings. Optics Express, 2021, 29, 6481.	1.7	13
31	Femtosecond Ti:sapphire cryogenic amplifier with high gain and MHz repetition rate. Optics Express, 2007, 15, 8864.	1.7	12
32	Interference effects in hybrid cavity optomechanics. Quantum Science and Technology, 2019, 4, 024002.	2.6	12
33	Membrane sandwich squeeze film pressure sensors. Journal of Applied Physics, 2020, 128, .	1.1	9
34	Squeezing and entangling nuclear spins in helium 3. Journal of Modern Optics, 2007, 54, 675-695.	0.6	8
35	Optically induced structural phase transitions in ion Coulomb crystals. Physical Review A, 2012, 86, .	1.0	8
36	Suspended silicon nitride thin films with enhanced and electrically tunable reflectivity. Physica Scripta, 2019, 94, 125013.	1.2	8

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37	Electromechanics in vertically coupled nanomembranes. Applied Physics Letters, 2019, 115, .	1.5	7
38	Squeeze film pressure sensors based on SiN membrane sandwiches. Sensors and Actuators A: Physical, 2019, 298, 111588.	2.0	7
39	Stress-Controlled Frequency Tuning and Parametric Amplification of the Vibrations of Coupled Nanomembranes. Applied Sciences (Switzerland), 2019, 9, 4845.	1.3	6
40	Sub-micron positioning of trapped ions with respect to the absolute center of a standing-wave cavity field. Applied Physics B: Lasers and Optics, 2014, 114, 295-301.	1.1	5
41	Profilometry and stress analysis of suspended nanostructured thin films. Journal of Applied Physics, 2021, 129, 065302.	1.1	5
42	Collimation and finite-size effects in suspended resonant guided-mode gratings. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2021, 38, 1714.	0.8	5
43	Spatial mode effects in a cavity EIT-based quantum memory with ion Coulomb crystals. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 124011.	0.6	4
44	Generation and storage of quantum states using cold atoms. Journal of Modern Optics, 2006, 53, 2235-2249.	0.6	2
45	Lightâ€“matter interactions in multi-element resonators. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 105502.	0.6	2
46	Polarization-independent optical spatial differentiation with a doubly-resonant one-dimensional guided-mode grating. Optics Express, 2022, 30, 3962.	1.7	2
47	Collective strong coupling with ion Coulomb crystals in an optical cavity. , 2009, , .		1
48	Transient dynamics in cavity electromagnetically induced transparency with ion Coulomb crystals. Journal of Modern Optics, 2018, 65, 602-612.	0.6	1
49	Generation and detection of entangled light fields with negative Wigner functions. , 2007, , .		0
50	Coherent coupling of ion Coulomb crystals to different transverse modes of an optical cavity. , 2009, , .		0
51	Cavity electromagnetically induced transparency and optical switching with ion Coulomb crystals. , 2011, , .		0
52	Optical quantum swapping in a coherent atomic medium. Europhysics Letters, 2012, 97, 34010.	0.7	0
53	Mechanical investigations of free-standing SiN membranes patterned with one-dimensional photonic crystal structures. Journal of Applied Physics, 2022, 131, 195101.	1.1	0