Dirk Bouwmeester

List of Publications by Year
in descending order

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63 papers	2,845 citations	304743 22 h-index	168389 53 g-index
65 all docs	65 docs citations	65 times ranked	2892 citing authors

#	Article	IF	Citations
1	Sub-kelvin optical cooling of a micromechanical resonator. Nature, 2006, 444, 75-78.	27.8	582
2	High-frequency single-photon source with polarization control. Nature Photonics, 2007, 1, 704-708.	31.4	344
3	CNOT and Bell-state analysis in the weak-coupling cavity QED regime. Physical Review Letters, 2010, 104, 160503.	7.8	252
4	Evidence for Rodâ€Shaped DNAâ€Stabilized Silver Nanocluster Emitters. Advanced Materials, 2013, 25, 2797-2803.	21.0	173
5	Linked and knotted beams of light. Nature Physics, 2008, 4, 716-720.	16.7	158
6	Dynamic modulation of photonic crystal nanocavities using gigahertz acoustic phonons. Nature Photonics, 2011, 5, 605-609.	31.4	140
7	Creating and verifying a quantum superposition in a micro-optomechanical system. New Journal of Physics, 2008, 10, 095020.	2.9	116
8	Strong coupling through optical positioning of a quantum dot in a photonic crystal cavity. Applied Physics Letters, 2009, 94, .	3.3	112
9	Optomechanical Superpositions via Nested Interferometry. Physical Review Letters, 2012, 109, 023601.	7.8	99
10	Optomechanical trampoline resonators. Optics Express, 2011, 19, 19708.	3.4	67
11	High Finesse Opto-Mechanical Cavity with a Movable Thirty-Micron-Size Mirror. Physical Review Letters, 2006, 96, 173901.	7.8	60
12	Strong Coupling between Single Photons in Semiconductor Microcavities. Physical Review Letters, 2006, 96, 057405.	7.8	58
13	Coherent optomechanical state transfer between disparate mechanical resonators. Nature Communications, 2017, 8, 824.	12.8	56
14	Diffraction-limited high-finesse optical cavities. Physical Review A, 2010, 81, .	2.5	48
15	Dual-Color Nanoscale Assemblies of Structurally Stable, Few-Atom Silver Clusters, As Reported by Fluorescence Resonance Energy Transfer. ACS Nano, 2013, 7, 9798-9807.	14.6	42
16	Spectral Properties of Individual DNA-Hosted Silver Nanoclusters at Low Temperatures. Journal of Physical Chemistry C, 2012, 116, 25568-25575.	3.1	35
17	Fano resonances in a multimode waveguide coupled to a high-Q silicon nitride ring resonator. Optics Express, 2014, 22, 6778.	3.4	31
18	H1 photonic crystal cavities for hybrid quantum information protocols. Optics Express, 2012, 20, 24714.	3.4	30

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19	Multidimensional Purcell effect in an ytterbium-doped ring resonator. Nature Photonics, 2016, 10, 385-388.	31.4	29
20	Classification of electromagnetic and gravitational hopfions by algebraic type. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 205202.	2.1	28
21	Vibration isolation with high thermal conductance for a cryogen-free dilution refrigerator. Review of Scientific Instruments, 2019, 90, 015112.	1.3	26
22	Tuning micropillar cavity birefringence by laser induced surface defects. Applied Physics Letters, 2009, 95, .	3.3	25
23	Resilience of multiphoton entanglement under losses. Physical Review A, 2004, 70, .	2.5	22
24	Strain tuning of quantum dot optical transitions via laser-induced surface defects. Physical Review B, 2011, 84, .	3.2	20
25	Polychromatic Photonic Quasicrystal Cavities. Physical Review Letters, 2010, 104, 243901.	7.8	18
26	Independent tuning of quantum dots in a photonic crystal cavity. Applied Physics Letters, 2009, 95, .	3.3	17
27	Permanent tuning of quantum dot transitions to degenerate microcavity resonances. Applied Physics Letters, 2011, 98, 121111.	3.3	17
28	Polarization Resolved Measurements of Individual DNAâ€Stabilized Silver Clusters. Advanced Optical Materials, 2014, 2, 765-770.	7.3	16
29	Fiber-connectorized micropillar cavities. Applied Physics Letters, 2010, 97, .	3.3	15
30	Linked and knotted gravitational radiation. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 355205.	2.1	15
31	Fluorescence-tunable Ag-DNA biosensor with tailored cytotoxicity for live-cell applications. Scientific Reports, 2016, 6, 37897.	3.3	14
32	Knotted optical vortices in exact solutions to Maxwell's equations. Physical Review A, 2017, 95, .	2.5	14
33	Constructing a class of topological solitons in magnetohydrodynamics. Physical Review E, 2014, 89, 043104.	2.1	13
34	Polarization degenerate solid-state cavity quantum electrodynamics. Physical Review B, 2015, 91, .	3.2	13
35	Homodyne detection of coherence and phase shift of a quantum dot in a cavity. Optics Letters, 2015, 40, 3173.	3.3	13
36	Stimulated Raman Adiabatic Passage in Optomechanics. Physical Review Letters, 2021, 126, 113601.	7.8	13

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37	Polarization degenerate micropillars fabricated by designing elliptical oxide apertures. Applied Physics Letters, 2014, 104, 151109.	3.3	11
38	Strong thermomechanical squeezing in a far-detuned membrane-in-the-middle system. Physical Review A, 2018, 98, .	2.5	11
39	Macroscopic superpositions via nested interferometry: finite temperature and decoherence considerations. New Journal of Physics, 2012, 14, 115025.	2.9	10
40	Optical modes in oxide-apertured micropillar cavities. Optics Letters, 2012, 37, 4678.	3.3	9
41	Electrically pumped quantum post vertical cavity surface emitting lasers. Applied Physics Letters, 2009, 94, .	3.3	8
42	Nonclassical States of Light and Mechanics. , 2014, , 25-56.		8
43	Effect of a nanoparticle on the optical properties of a photonic crystal cavity: theory and experiment. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 698.	2.1	7
44	Quantum dot nonlinearity through cavity-enhanced feedback with a charge memory. Physical Review B, 2015, 91, .	3.2	7
45	Far-field emission profiles from L3 photonic crystal cavity modes. Photonics and Nanostructures - Fundamentals and Applications, 2013, 11, 37-47.	2.0	6
46	Ideal relaxation of the Hopf fibration. Physics of Plasmas, 2017, 24, 072110.	1.9	6
47	Measuring DNA hybridization using fluorescent DNA-stabilized silver clusters to investigate mismatch effects on therapeutic oligonucleotides. Journal of Nanobiotechnology, 2018, 16, 37.	9.1	5
48	Probing interacting two-level systems with rare-earth ions. Physical Review B, 2020, 101, .	3.2	4
49	Optimal optomechanical coupling strength in multimembrane systems. Physical Review A, 2020, 101, .	2.5	4
50	Fine tuning of micropillar cavity modes through repetitive oxidations. Optics Letters, 2013, 38, 3308.	3.3	3
51	Monitoring the formation of oxide apertures in micropillar cavities. Applied Physics Letters, 2013, 102, 101109.	3.3	2
52	Sub-kelvin optical cooling of a micromechanical resonator. , 2007, , .		2
53	Realignment-free cryogenic macroscopic optical cavity coupled to an optical fiber. Review of Scientific Instruments, 2022, 93, 013103.	1.3	2
54	High quality optical cavity with a tiny mirror on an AFM cantilever. , 2006, , .		0

#	Article	IF	Citations
55	High frequency single photon sources. , 2008, , .		0
56	Acousto-mechanical tuning of photonic crystal nanocavity modes. , 2013, , .		0
57	Time domain investigation of radio frequency acousto-mechanical tuning of photonic crystal nanocavity modes. , 2013, , .		0
58	The quantum nondemolition derby. Science, 2014, 344, 1224-1226.	12.6	0
59	Experimental phase detection at the quantum limit with coherent state interferometry. , 2008, , .		0
60	Solid-state cavity-QED in polarization-degenerate micropillar cavities. , 2011, , .		0
61	Monitoring the formation of oxide apertures in micropillar cavities. , 2013, , .		0
62	Monitoring the formation of oxide apertures in micropillar cavities. , 2013, , .		0
63	Towards Macroscopic Superpositions via Single-photon Optomechanics. , 2014, , 65-85.		0