

# Matthew J Collett

## List of Publications by Year in descending order

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49  
papers

5,258  
citations

218677

26  
h-index

223800

46  
g-index

49  
all docs

49  
docs citations

49  
times ranked

2330  
citing authors

#	ARTICLE	IF	CITATIONS
1	Input and output in damped quantum systems: Quantum stochastic differential equations and the master equation. <i>Physical Review A</i> , 1985, 31, 3761-3774.	2.5	1,537
2	Squeezing of intracavity and traveling-wave light fields produced in parametric amplification. <i>Physical Review A</i> , 1984, 30, 1386-1391.	2.5	934
3	Squeezing spectra for nonlinear optical systems. <i>Physical Review A</i> , 1985, 32, 2887-2892.	2.5	355
4	Nonlocality of a single photon. <i>Physical Review Letters</i> , 1991, 66, 252-255.	7.8	302
5	Measurement-induced diffraction and interference of atoms. <i>Physical Review Letters</i> , 1992, 68, 472-475.	7.8	207
6	Quantum limits in interferometric detection of gravitational radiation. <i>Physical Review A</i> , 1993, 47, 3173-3189.	2.5	145
7	Path detection and the uncertainty principle. <i>Nature</i> , 1994, 367, 626-628.	27.8	137
8	Quantum Theory of Optical Homodyne and Heterodyne Detection. <i>Journal of Modern Optics</i> , 1987, 34, 881-902.	1.3	134
9	Atomic-position resolution by quadrature-field measurement. <i>Physical Review A</i> , 1993, 47, 405-418.	2.5	132
10	Nonideal quantum nondemolition measurements. <i>Physical Review A</i> , 1990, 42, 2995-3005.	2.5	131
11	Measurement of Atomic Motion in a Standing Light Field by Homodyne Detection. <i>Physical Review Letters</i> , 1995, 74, 351-354.	7.8	120
12	Spectrum of squeezing in resonance fluorescence. <i>Optics Communications</i> , 1984, 52, 145-149.	2.1	110
13	Bright squeezed light from a singly resonant frequency doubler. <i>Physical Review Letters</i> , 1994, 72, 3807-3810.	7.8	101
14	Representations of Squeezed States with Thermal Noise. <i>Journal of Modern Optics</i> , 1988, 35, 553-564.	1.3	100
15	An atom laser based on dark-state cooling. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1995, 202, 246-252.	2.1	99
16	Quantum-nondemolition measurement of photon number using radiation pressure. <i>Physical Review A</i> , 1994, 49, 1961-1966.	2.5	84
17	Complementarity and uncertainty. <i>Nature</i> , 1995, 375, 368-368.	27.8	68
18	Exact density-matrix calculations for simple open systems. <i>Physical Review A</i> , 1988, 38, 2233-2247.	2.5	57

#	ARTICLE	IF	CITATIONS
19	Multi-photon blockade and dressing of the dressed states. <i>Optics Communications</i> , 2010, 283, 766-772.	2.1	52
20	Contractive states of a free atom. <i>Physical Review A</i> , 1994, 49, 2322-2328.	2.5	42
21	Quantum-nondemolition-measurement scheme using a Kerr medium. <i>Physical Review A</i> , 1992, 46, 1499-1506.	2.5	41
22	Amplitude-noise reduction in lasers with intracavity nonlinear elements. <i>Physical Review A</i> , 1990, 42, 4366-4373.	2.5	34
23	Nondegenerate two-mode squeezing and quantum-nondemolition measurements using three-level atoms in a cavity. <i>Physical Review A</i> , 1992, 45, 5171-5179.	2.5	34
24	Beyond the Fokker-Planck equation: Stochastic simulation of complete Wigner representation for the optical parametric oscillator. <i>Europhysics Letters</i> , 2001, 56, 372-378.	2.0	33
25	Non-Markovian quantum trajectories for spectral detection. <i>Physical Review A</i> , 1999, 59, 2306-2321.	2.5	29
26	Two-photon-loss model of intracavity second-harmonic generation. <i>Physical Review A</i> , 1991, 43, 5068-5072.	2.5	28
27	Quantum Limits to Light Amplifiers. <i>Physical Review Letters</i> , 1988, 61, 2442-2444.	7.8	25
28	Quantum-nondemolition measurements via second-harmonic generation. <i>Physical Review Letters</i> , 1991, 66, 1115-1118.	7.8	23
29	Tan, Walls, and Collett reply. <i>Physical Review Letters</i> , 1992, 68, 895-895.	7.8	22
30	Generation of number-phase squeezed states. <i>Physical Review Letters</i> , 1993, 70, 3400-3403.	7.8	18
31	Quantum non-demolition measurements with an optical parametric amplifier. <i>Optics Communications</i> , 1993, 102, 105-110.	2.1	15
32	A non-Markovian quantum trajectory approach to radiation into structured continuum. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 1999, 1, 452-458.	1.4	12
33	Quantum Teleportation of the Temporal Fluctuations of Light. <i>Physical Review Letters</i> , 2009, 102, 230501.	7.8	12
34	Quantum noise in two- and three-level models of the laser. <i>Physical Review A</i> , 1993, 47, 5030-5036.	2.5	11
35	Second-harmonic generation inside a laser cavity with slowly decaying atoms. <i>Physical Review A</i> , 1993, 47, 2324-2332.	2.5	11
36	Mechanism for pumping lasers with squeezed light. <i>Physical Review A</i> , 1989, 39, 3211-3213.	2.5	10

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37	Quantum-nondemolition schemes to measure quadrature phases using intracavity harmonic generation. <i>Physical Review A</i> , 1993, 48, 1532-1547.	2.5	10
38	Ellipse fitting for interferometry Part 2: experimental realization. <i>Applied Optics</i> , 2014, 53, 7697.	2.1	8
39	Excess-noise-enhanced parametric down conversion. <i>Physical Review A</i> , 2001, 64, .	2.5	7
40	Phase squeezing using intracavity subharmonic generation. <i>Optics Communications</i> , 1991, 82, 171-182.	2.1	6
41	Quantum noise reduction in lasers with intracavity second-harmonic generation and injected signal. <i>Journal of the European Optical Society Part B: Quantum Optics</i> , 1990, 2, 365-385.	1.2	4
42	Squeezing of two light fields coupled by a two-photon transition in a cavity. <i>Optics Communications</i> , 1991, 84, 409-418.	2.1	4
43	Quantum noise properties and power requirements of optical transmission line taps. <i>Journal of the European Optical Society Part B: Quantum Optics</i> , 1992, 4, 19-30.	1.2	4
44	Enhanced squeezing due to the influence of two instabilities. <i>Physical Review A</i> , 1995, 51, 3318-3327.	2.5	4
45	An atom laser based on dark-state cooling: a detailed description. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1999, 32, 3669-3700.	1.5	3
46	The linewidth of a non-Markovian atom laser. <i>Optics Communications</i> , 2000, 179, 571-576.	2.1	3
47	States of the phase-damped oscillator. <i>Physical Review A</i> , 1988, 38, 4907-4909.	2.5	0
48	Precision heterodyne ellipsometry with an improved conic fitting algorithm. , 2013, , .		0
49	A dense Bose fluid at zero temperature: condensation and clusters in liquid $^4\text{He}$ . <i>European Physical Journal D</i> , 2014, 68, 1.	1.3	0