M D Reid

List of Publications by Year
in descending order

110 papers	6,198 citations	101535 36 h-index	69246 77 g-index
111 all docs	111 docs citations	111 times ranked	2041 citing authors

#	Article	IF	Citations
1	Demonstration of the Einstein-Podolsky-Rosen paradox using nondegenerate parametric amplification. Physical Review A, 1989, 40, 913-923.	2.5	716
2	Colloquium: The Einstein-Podolsky-Rosen paradox: From concepts to applications. Reviews of Modern Physics, 2009, 81, 1727-1751.	45.6	518
3	Experimental criteria for steering and the Einstein-Podolsky-Rosen paradox. Physical Review A, 2009, 80, .	2.5	463
4	Quantum Correlations of Phase in Nondegenerate Parametric Oscillation. Physical Review Letters, 1988, 60, 2731-2733.	7.8	426
5	Squeezing of quantum solitons. Physical Review Letters, 1987, 58, 1841-1844.	7.8	226
6	Violations of classical inequalities in quantum optics. Physical Review A, 1986, 34, 1260-1276.	2.5	216
7	Generation of squeezed states via degenerate four-wave mixing. Physical Review A, 1985, 31, 1622-1635.	2.5	190
8	Genuine Multipartite Einstein-Podolsky-Rosen Steering. Physical Review Letters, 2013, 111, 250403.	7.8	188
9	Correlations in nondegenerate parametric oscillation. II. Below threshold results. Physical Review A, 1990, 41, 3930-3949.	2.5	158
10	Quantum cryptography with a predetermined key, using continuous-variable Einstein-Podolsky-Rosen correlations. Physical Review A, 2000, 62, .	2.5	158
11	Classifying Directional Gaussian Entanglement, Einstein-Podolsky-Rosen Steering, and Discord. Physical Review Letters, 2015, 114, 060402.	7.8	111
12	Quantum theory of nondegenerate four-wave mixing. Physical Review A, 1986, 34, 4929-4955.	2.5	109
13	Correlations in nondegenerate parametric oscillation: Squeezing in the presence of phase diffusion. Physical Review A, 1989, 40, 4493-4506.	2.5	109
14	Signifying quantum benchmarks for qubit teleportation and secure quantum communication using Einstein-Podolsky-Rosen steering inequalities. Physical Review A, 2013, 88, .	2.5	106
15	Contradiction of Quantum Mechanics with Local Hidden Variables for Quadrature Phase Amplitude Measurements. Physical Review Letters, 1998, 80, 3169-3172.	7.8	100
16	Unified criteria for multipartite quantum nonlocality. Physical Review A, 2011, 84, .	2.5	100
17	Monogamy inequalities for the Einstein-Podolsky-Rosen paradox and quantum steering. Physical Review A, 2013, 88, .	2.5	98
18	Einstein-Podolsky-Rosen paradox and quantum steering in pulsed optomechanics. Physical Review A, 2013, 88, .	2.5	79

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19	Bell Inequalities for Continuous-Variable Correlations. Physical Review Letters, 2007, 99, 210405.	7.8	78
20	Einstein-Podolsky-Rosen Entanglement Strategies in Two-Well Bose-Einstein Condensates. Physical Review Letters, 2011, 106, 120405.	7.8	73
21	Quantum analysis of intensity fluctuations in the nondegenerate parametric oscillator. Physical Review A, 1988, 38, 788-799.	2.5	71
22	Quantum theory of optical bistability without adiabatic elimination. Physical Review A, 1988, 37, 4792-4818.	2.5	67
23	Einstein-Podolsky-Rosen entanglement and steering in two-well Bose-Einstein-condensate ground states. Physical Review A, 2012, 86, .	2.5	67
24	Criteria for genuine<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>N</mml:mi></mml:math>-partite continuous-variable entanglement and Einstein-Podolsky-Rosen steering. Physical Review A, 2014, 90, .	2.5	67
25	Critical fluctuations and entanglement in the nondegenerate parametric oscillator. Physical Review A, 2004, 70, .	2.5	66
26	Squeezing via optical bistability. Physical Review A, 1985, 32, 396-401.	2.5	61
27	Scalable quantum simulation of pulsed entanglement and Einstein-Podolsky-Rosen steering in optomechanics. Physical Review A, 2014, 90, .	2.5	58
28	Planar quantum squeezing and atom interferometry. Physical Review A, 2011, 84, .	2.5	56
29	Entanglement evolution of two remote and non-identical Jaynesâ€“Cummings atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 065507.	1.5	54
30	Macroscopic quantum superposition states in nondegenerate parametric oscillation. Physical Review A, 1993, 47, 552-555.	2.5	53
31	Signatures for Generalized Macroscopic Superpositions. Physical Review Letters, 2006, 97, 170405.	7.8	49
32	Detecting faked continuous-variable entanglement using one-sided device-independent entanglement witnesses. Physical Review A, 2014, 89, .	2.5	49
33	Decoherence of Einsteinâ€“Podolskyâ€“Rosen steering. Journal of the Optical Society of America B: Optical Physics, 2015, 32, A82.	2.1	49
34	Entanglement, EPR steering, and Bell-nonlocality criteria for multipartite higher-spin systems. Physical Review A, 2011, 83, .	2.5	48
35	Contradiction of quantum mechanics with local hidden variables for quadrature phase measurements on pair-coherent states and squeezed macroscopic superpositions of coherent states. Physical Review A, 1999, 60, 4259-4271.	2.5	46
36	Squeezing of Quantum Fluctuations via Atomic Coherence Effects. Physical Review Letters, 1985, 55, 1288-1290.	7.8	44

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37	Pulsed Entanglement of Two Optomechanical Oscillators and Furryâ€™s Hypothesis. Physical Review Letters, 2017, 119, 023601.	7.8	38
38	Absorption Spectroscopy beyond the Shot-Noise Limit. Physical Review Letters, 1988, 60, 1940-1942.	7.8	35
39	Macroscopic boson states exhibiting the Greenberger-Horne-Zeilinger contradiction with local realism. Physical Review Letters, 1992, 69, 997-1001.	7.8	35
40	Violation of multiparticle Bell inequalities for low- and high-flux parametric amplification using both vacuum and entangled input states. Physical Review A, 2002, 66, .	2.5	34
41	Spin entanglement, decoherence and Bohmâ€™s EPR paradox. Optics Express, 2009, 17, 18693.	3.4	33
42	Dynamical oscillator-cavity model for quantum memories. Physical Review A, 2009, 79, .	2.5	32
43	Transient macroscopic quantum superposition states in degenerate parametric oscillation: Calculations in the large-quantum-noise limit using the positivePrepresentation. Physical Review A, 1994, 50, 4330-4338.	2.5	31
44	Squeezing in nondegenerate four-wave mixing. Physical Review A, 1986, 33, 4465-4468.	2.5	29
45	Criteria for generalized macroscopic and mesoscopic quantum coherence. Physical Review A, 2008, 77, .	2.5	29
46	Dynamical preparation of Einstein-Podolsky-Rosen entanglement in two-well Bose-Einstein condensates. Physical Review A, 2012, 86, .	2.5	29
47	Quantifying the mesoscopic quantum coherence of approximate NOON states and spin-squeezed two-mode Bose-Einstein condensates. Physical Review A, 2016, 94, .	2.5	29
48	Testing for Multipartite Quantum Nonlocality Using Functional Bell Inequalities. Physical Review Letters, 2009, 103, 180402.	7.8	27
49	Quantum entanglement for systems of identical bosons: I. General features. Physica Scripta, 2017, 92, 023004.	2.5	27
50	Nonlinear Entanglement and its Application to Generating Cat States. Physical Review Letters, 2015, 114, 100403.	7.8	26
51	Effect of bistability and superpositions on quantum statistics in degenerate parametric oscillation. Physical Review A, 1992, 46, 4131-4137.	2.5	24
52	Continuous variable tripartite entanglement and Einsteinâ€“Podolskyâ€“Rosen correlations from triple nonlinearities. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 2515-2533.	1.5	24
53	Dynamics of transient cat states in degenerate parametric oscillation with and without nonlinear Kerr interactions. Physical Review A, 2020, 101, .	2.5	24
54	Incompatibility of Macroscopic Local Realism with Quantum Mechanics in Measurements with Macroscopic Uncertainties. Physical Review Letters, 2000, 84, 2765-2769.	7.8	23

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55	Uncertainty relations for the realization of macroscopic quantum superpositions and EPR paradoxes. Journal of Modern Optics, 2007, 54, 2373-2380.	1.3	23
56	Entanglement, number fluctuations and optimized interferometric phase measurement. New Journal of Physics, 2012, 14, 093012.	2.9	23
57	Violation of Bell's Inequalities in Quantum Optics. Physical Review Letters, 1984, 53, 955-957.	7.8	22
58	Bell inequalities for continuous-variable measurements. Physical Review A, 2010, 81, .	2.5	22
59	Creation, storage, and retrieval of an optomechanical cat state. Physical Review A, 2018, 98, .	2.5	21
60	Quantum entanglement for systems of identical bosons: II. Spin squeezing and other entanglement tests. Physica Scripta, 2017, 92, 023005.	2.5	20
61	Bright continuous-variable entanglement from the quantum optical dimer. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 015501.	1.5	19
62	Laser bandwidth effects on squeezing in intracavity parametric oscillation. Physical Review A, 1988, 37, 1806-1808.	2.5	18
63	Violation of Bellâ€™s inequality by macroscopic states generated via parametric down-conversion. Physical Review A, 1993, 47, 4412-4421.	2.5	18
64	Quantum-noise reduction in intracavity four-wave mixing. Physical Review A, 1990, 42, 6767-6773.	2.5	17
65	Transient macroscopic quantum superposition states in degenerate parametric oscillation using squeezed reservoir fields. Physical Review A, 1995, 52, 2388-2391.	2.5	16
66	Probabilistic quantum phase-space simulation of Bell violations and their dynamical evolution. Physical Review A, 2014, 90, .	2.5	16
67	Quantum probabilistic sampling of multipartite 60-qubit Bell-inequality violations. Physical Review A, 2014, 90, .	2.5	14
68	Leggett-Garg tests of macrorealism for bosonic systems including double-well Bose-Einstein condensates and atom interferometers. Physical Review A, 2018, 97, .	2.5	14
69	Overcoming decoherence of SchrÃ¶dinger cat states formed in a cavity using squeezed-state inputs. Physical Review Research, 2020, 2, .	3.6	14
70	Simulating complex networks in phase space: Gaussian boson sampling. Physical Review A, 2022, 105, .	2.5	14
71	Squeezing in four-wave mixingâ€”anharmonic-oscillator model. Journal of the Optical Society of America B: Optical Physics, 1985, 2, 1682.	2.1	13
72	Violations of Bell inequalities for measurements with macroscopic uncertainties: What it means to violate macroscopic local realism. Physical Review A, 2000, 62, .	2.5	13

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73	Towards an Einsteinâ€“Podolskyâ€“Rosen paradox between two macroscopic atomic ensembles at room temperature. New Journal of Physics, 2013, 15, 063027.	2.9	13
74	Signifying the nonlocality of NOON states using Einstein-Podolsky-Rosen steering inequalities. Physical Review A, 2016, 94, .	2.5	13
75	Interpreting the macroscopic pointer by analysing the elements of reality of a SchrÃ¶dinger cat. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 41LT01.	2.1	12
76	Simulation of an optomechanical quantum memory in the nonlinear regime. Physical Review A, 2017, 96, .	2.5	12
77	Simulating Bell violations without quantum computers. Physica Scripta, 2014, T160, 014009.	2.5	11
78	Quantifying the Mesoscopic Nature of Einstein-Podolsky-Rosen Nonlocality. Physical Review Letters, 2019, 123, 120402.	7.8	11
79	Mesoscopic two-mode entangled and steerable states of 40Â000 atoms in a Bose-Einstein-condensate interferometer. Physical Review A, 2019, 100, .	2.5	11
80	Implications of the recent experimental realisation of the Einstein-Podolsky-Rosen paradox. Europhysics Letters, 1996, 36, 1-6.	2.0	10
81	Conservation rules for entanglement transfer between qubits. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 215505.	1.5	10
82	Einstein-Podolsky-Rosen steering, depth of steering, and planar spin squeezing in two-mode Bose-Einstein condensates. Physical Review A, 2018, 98, .	2.5	10
83	Macroscopic elements of reality and the Einstein - Podolsky - Rosen paradox. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1997, 9, 489-499.	0.9	9
84	Bell inequalities for falsifying mesoscopic local realism via amplification of quantum noise. Physical Review A, 2018, 97, .	2.5	9
85	Testing macroscopic local realism using local nonlinear dynamics and time settings. Physical Review A, 2020, 102, .	2.5	9
86	Weak measurements and quantum weak values for NOON states. Physical Review A, 2018, 97, .	2.5	8
87	Squeezing of intensity fluctuations in frequency summation. Physical Review A, 1994, 49, 2881-2890.	2.5	7
88	Multiparticle and higher-spin tests of quantum mechanics using parametric down-conversion. Physical Review A, 1994, 50, 3661-3681.	2.5	7
89	Criteria to detect genuine multipartite entanglement using spin measurements. Physical Review A, 2019, 100, .	2.5	7
90	Quantum noise reduction in the squeezed pump non-degenerate parametric oscillator. Journal of the European Optical Society Part B: Quantum Optics, 1992, 4, 181-187.	1.2	6

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91	Digital quantum memories with symmetric pulses. Optics Express, 2009, 17, 9662.	3.4	6
92	Criteria to detect macroscopic quantum coherence, macroscopic quantum entanglement, and an Einstein-Podolsky-Rosen paradox for macroscopic superposition states. Physical Review A, 2019, 100, .	2.5	6
93	Bell Inequalities with SchrÃ¶dinger Cats. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2001, 56, 220-223.	1.5	5
94	Macroscopic quantum SchrÃ¶dinger and Einsteinâ€“Podolskyâ€“Rosen paradoxes. Journal of Modern Optics, 2005, 52, 2245-2252.	1.3	5
95	Tests for Einstein-Podolsky-Rosen steering in two-mode systems of identical massive bosons. Physical Review A, 2020, 101, .	2.5	5
96	Bipartite Leggett-Garg and macroscopic Bell-inequality violations using cat states: Distinguishing weak and deterministic macroscopic realism. Physical Review A, 2022, 105, .	2.5	5
97	Monogamy inequalities for certifiers of continuous-variable Einstein-Podolsky-Rosen entanglement without the assumption of Gaussianity. Physical Review A, 2017, 96, .	2.5	4
98	Theory of Squeezed Light Generation. Springer Proceedings in Physics, 1986, , 31-45.	0.2	4
99	Violations of Bell's inequalities in multiparticle states generated using parametric amplification. Journal of the European Optical Society Part B: Quantum Optics, 1994, 6, 1-8.	1.2	3
100	Two-setting multisite Bell inequalities for loophole-free tests with up to 50%loss. Physical Review A, 2013, 87, .	2.5	2
101	Einstein-Podolsky-Rosen Correlations, Entanglement and Quantum Cryptography. Springer Series on Atomic, Optical, and Plasma Physics, 2004, , 337-364.	0.2	2
102	Macroscopic delayed choice and retrocausality: Quantum eraser, Leggett-Garg, and dimension witness tests with cat states. Physical Review A, 2022, 105, .	2.5	2
103	Violations of multisetting quaternion and octonion Bell inequalities. Physical Review A, 2015, 92, .	2.5	1
104	Continuous variable tripartite entanglement and Einstein-Podolsky-Rosen correlations from triple nonlinearities. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2007, 103, 187-192.	0.6	0
105	Planar quantum squeezing and atom interferometry. , 2011, , .		0
106	Einsteinâ€“Podolskyâ€“Rosen quantum simulations in nonclassical phase-space. Journal of the Optical Society of America B: Optical Physics, 2015, 32, A64.	2.1	0
107	New S-scopic and multipartite EPR and Bell inequalities. , 2008, , .		0
108	Multipartite quantum nonlocality using functional Bell inequalities. , 2009, , .		0

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109	Einstein-Podolsky-Rosen Correlations in Nondegenerate Parametric Amplification. Springer Proceedings in Physics, 1989, , 111-121.	0.2	0
110	Optical Einstein-Podolsky-Rosen Correlations. , 1990, , 981-985.		0