Andrew N Jordan

List of Publications by Year
in descending order

146 papers	6,290 citations	61984 43 h-index	71685 76 g-index
151 all docs	151 docs citations	151 times ranked	2596 citing authors

#	Article	IF	Citations
1	Enhanced on-chip frequency measurement using weak value amplification. Optics Express, 2022, 30, 3700.	3.4	1
2	Super-Heisenberg scaling in Hamiltonian parameter estimation in the long-range Kitaev chain. Physical Review Research, 2022, 4, .	3.6	10
3	Stochastic Path-Integral Analysis of the Continuously Monitored Quantum Harmonic Oscillator. PRX Quantum, 2022, 3, .	9.2	6
4	Variational Principle for Optimal Quantum Controls in Quantum Metrology. Physical Review Letters, 2022, 128, 160505.	7.8	16
5	Experimental demonstration of continuous quantum error correction. Nature Communications, 2022, 13, 2307.	12.8	18
6	Efficiently fueling a quantum engine with incompatible measurements. Physical Review E, 2022, 105, 044137.	2.1	18
7	Continuous measurement of a qudit using dispersively coupled radiation. Physical Review A, 2022, 105, .	2.5	4
8	Quantum system dynamics with a weakly nonlinear Josephson junction bath. Physical Review B, 2021, 103, .	3.2	1
9	Stochastic thermodynamic cycles of a mesoscopic thermoelectric engine. Physical Review B, 2021, 103, .	3.2	9
10	Confocal super-resolution microscopy based on a spatial mode sorter. Optics Express, 2021, 29, 11784.	3.4	13
11	Quantum measurement arrow of time and fluctuation relations for measuring spin of ultracold atoms. Nature Communications, 2021, 12, 1847.	12.8	13
12	Two-Qubit Engine Fueled by Entanglement and Local Measurements. Physical Review Letters, 2021, 126, 120605.	7.8	48
13	Enhanced Weak-Value Amplification via Photon Recycling. Physical Review Letters, 2021, 126, 220801.	7.8	12
14	Experimental demonstration of superresolution of partially coherent light sources using parity sorting. Optics Express, 2021, 29, 22034.	3.4	27
15	Thermal control across a chain of electronic nanocavities. Physical Review B, 2021, 104, .	3.2	1
16	Minimal two-body quantum absorption refrigerator. Physical Review B, 2021, 104, .	3.2	9
17	Entanglement of a pair of quantum emitters via continuous fluorescence measurements: a tutorial. Advances in Optics and Photonics, 2021, 13, 517.	25.5	2
18	Enhanced on-chip phase measurement by inverse weak value amplification. Nature Communications, 2021, 12, 6247.	12.8	9

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19	Diffraction-based interaction-free measurements. Quantum Studies: Mathematics and Foundations, 2020, 7, 145-153.	0.9	1
20	Quantum state tomography with time-continuous measurements: reconstruction with resource limitations. Quantum Studies: Mathematics and Foundations, 2020, 7, 23-47.	0.9	6
21	Quantum measurement engines and their relevance for quantum interpretations. Quantum Studies: Mathematics and Foundations, 2020, 7, 203-215.	0.9	25
22	Superresolution using supergrowth and intensity contrast imaging. Quantum Studies: Mathematics and Foundations, 2020, 7, 285-292.	0.9	2
23	Nonequilibrium steady state and heat transport in nonlinear open quantum systems: Stochastic influence action and functional perturbative analysis. Annals of Physics, 2020, 421, 168289.	2.8	5
24	An Interaction-Free Quantum Measurement-Driven Engine. Foundations of Physics, 2020, 50, 1294-1314.	1.3	8
25	Black holes as Andreev reflecting mirrors. Physical Review D, 2020, 102, .	4.7	6
26	Measuring fluorescence to track a quantum emitter's state: a theory review. Contemporary Physics, 2020, 61, 26-50.	1.8	11
27	Conditional teleportation of quantum-dot spin states. Nature Communications, 2020, 11, 3022.	12.8	22
28	Entanglement-preserving limit cycles from sequential quantum measurements and feedback. Physical Review A, 2020, 102, .	2.5	5
29	Autonomous quantum absorption refrigerators. Physical Review B, 2020, 102, .	3.2	12
30	Enhanced On-Chip Phase Measurement by Weak Value Amplification. , 2020, , .		0
31	Thermal transistor and thermometer based on Coulomb-coupled conductors. Physical Review B, 2019, 100, .	3.2	34
32	Optimal measurements for quantum multiparameter estimation with general states. Physical Review A, 2019, 100, .	2.5	45
33	Experimental Realization of a Quantum Dot Energy Harvester. Physical Review Letters, 2019, 123, 117701.	7.8	69
34	Gravitational sensing with weak value based optical sensors. Quantum Studies: Mathematics and Foundations, 2019, 6, 169-180.	0.9	3
35	Superconducting Quantum Refrigerator: Breaking and Rejoining Cooper Pairs with Magnetic Field Cycles. Physical Review Applied, 2019, 11, .	3.8	14
36	Time reversal symmetry of generalized quantum measurements with past and future boundary conditions. Quantum Studies: Mathematics and Foundations, 2019, 6, 241-268.	0.9	8

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37	Fluctuation theorems for continuous quantum measurements and absolute irreversibility. Physical Review A, 2019, 99, .	2.5	18
38	Spooky Work at a Distance: An Interaction-Free Quantum Measurement Driven Engine. , 2019, , .		1
39	Quantum-limited estimation of the axial separation of two incoherent point sources. Optica, 2019, 6, 534.	9.3	64
40	Superresolution using parity sorting with partially coherent light. , 2019, , .		0
41	Time dependent metrology: improving precision through coherent control. , 2019, , .		0
42	Some Like It Hot. Inference, 2019, 5, .	0.0	2
43	High Temperature Superconductivity. Inference, 2019, 5, .	0.0	0
44	Simultaneous continuous measurement of noncommuting observables: Quantum state correlations. Physical Review A, 2018, 97, .	2.5	19
45	Noise suppression in inverse weak value-based phase detection. Quantum Studies: Mathematics and Foundations, 2018, 5, 579-588.	0.9	6
46	Bosons falling into a black hole: A superfluid analogue. Physical Review D, 2018, 98, .	4.7	5
47	Efficient Quantum Measurement Engines. Physical Review Letters, 2018, 120, 260601.	7.8	81
48	Chaos in continuously monitored quantum systems: An optimal-path approach. Physical Review A, 2018, 98, .	2.5	9
49	Woitâ€™s Way. Inference, 2018, 4, .	0.0	0
50	Janus sequences of quantum measurements and the arrow of time. AIP Conference Proceedings, 2017, , .	0.4	0
51	Classical-quantum sensors keep better time. Science, 2017, 356, 802-803.	12.6	3
52	Optimal adaptive control for quantum metrology with time-dependent Hamiltonians. Nature Communications, 2017, 8, 14695.	12.8	110
53	Achieving Optimal Quantum Acceleration of Frequency Estimation Using Adaptive Coherent Control. Physical Review Letters, 2017, 119, 180801.	7.8	29
54	Prediction and characterization of multiple extremal paths in continuously monitored qubits. Physical Review A, 2017, 95, .	2.5	15

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55	Linear feedback stabilization of a dispersively monitored qubit. Physical Review A, 2017, 96, .	2.5	12
56	Rapid estimation of drifting parameters in continuously measured quantum systems. Physical Review A, 2017, 95, .	2.5	23
57	Quantum parameter estimation with the Landau-Zener transition. Physical Review A, 2017, 96, .	2.5	22
58	Andreev reflections and the quantum physics of black holes. Physical Review D, 2017, 96, .	4.7	10
59	Arrow of Time for Continuous Quantum Measurement. Physical Review Letters, 2017, 119, 220507.	7.8	29
60	Weak-value amplification and optimal parameter estimation in the presence of correlated noise. Physical Review A, 2017, 96, .	2.5	62
61	Odd Man Out. Inference, 2017, 3, .	0.0	0
62	Anatomy of fluorescence: quantum trajectory statistics from continuously measuring spontaneous emission. Quantum Studies: Mathematics and Foundations, 2016, 3, 237-263.	0.9	29
63	Quantum Trajectories and Their Statistics for Remotely Entangled Quantum Bits. Physical Review X, 2016, 6, .	8.9	32
64	Protecting weak measurements against systematic errors. Physical Review A, 2016, 94, .	2.5	36
65	Precision optical displacement measurements using biphotons. Physical Review A, 2016, 93, .	2.5	16
66	Reprint of : Effect of incoherent scattering on three-terminal quantum Hall thermoelectrics. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 82, 359-365.	2.7	1
67	Reprint of : Three-terminal heat engine and refrigerator based on superlattices. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 82, 314-324.	2.7	1
68	Weak values are quantum: you can bet on it. Quantum Studies: Mathematics and Foundations, 2016, 3, 1-4.	0.9	11
69	Effect of incoherent scattering on three-terminal quantum Hall thermoelectrics. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 75, 86-92.	2.7	12
70	Multiple Most-Likely Path Solutions for Continuously Monitored, Driven Qubits. , 2016, , .		0
71	Stochastic path-integral formalism for continuous quantum measurement. Physical Review A, 2015, 92, .	2.5	46
72	Experimentally quantifying the advantages of weak-value-based metrology. Physical Review A, 2015, 92, .	2.5	101

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73	Electrical current from quantum vacuum fluctuations in nanoengines. Physical Review B, 2015, 92, .	3.2	14
74	Three-terminal heat engine and refrigerator based on superlattices. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 74, 465-474.	2.7	25
75	Can a Dove prism change the past of a single photon?. Quantum Studies: Mathematics and Foundations, 2015, 2, 255-261.	0.9	25
76	Thermoelectric energy harvesting with quantum dots. Nanotechnology, 2015, 26, 032001.	2.6	254
77	Chiral Thermoelectrics with Quantum Hall Edge States. Physical Review Letters, 2015, 114, 146801.	7.8	79
78	Power-Recycled Weak-Value-Based Metrology. Physical Review Letters, 2015, 114, 170801.	7.8	44
79	Heisenberg scaling with weak measurement: a quantum state discrimination point of view. Quantum Studies: Mathematics and Foundations, 2015, 2, 5-15.	0.9	25
80	Heat diode and engine based on quantum Hall edge states. New Journal of Physics, 2015, 17, 075006.	2.9	61
81	Experimentally Quantifying the Advantages of Weak-Values-Based Metrology. , 2015, , .		0
82	Increasing Weak Measurement SNR with Recycling. , 2014, , .		0
83	Technical Advantages for Weak-Value Amplification: When Less Is More. Physical Review X, 2014, 4, .	8.9	181
84	Colloquium: Understanding quantum weak values: Basics and applications. Reviews of Modern Physics, 2014, 86, 307-316.	45.6	478
85	Mapping the optimal route between two quantum states. Nature, 2014, 511, 570-573.	27.8	163
86	Quantum Nernst engines. Europhysics Letters, 2014, 107, 47003.	2.0	40
87	Weak Values: The Progression from Quantum Foundations to Tool. , 2014, , 259-278.		0
88	Quantum instruments as a foundation for both states and observables. Physical Review A, 2013, 88, .	2.5	23
89	Watching the wavefunction collapse. Nature, 2013, 502, 177-178.	27.8	6
90	Action principle for continuous quantum measurement. Physical Review A, 2013, 88, .	2.5	64

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91	Powerful and efficient energy harvester with resonant-tunneling quantum dots. Physical Review B, 2013, 87, .	3.2	148
92	Powerful energy harvester based on resonant-tunneling quantum wells. New Journal of Physics, 2013, 15, 095021.	2.9	66
93	Correlations of heat and charge currents in quantum-dot thermoelectric engines. New Journal of Physics, 2013, 15, 125001.	2.9	74
94	Strengthening weak-value amplification with recycled photons. Physical Review A, 2013, 88, .	2.5	52
95	Operational approach to indirectly measuring the tunneling time. Physical Review A, 2013, 88, .	2.5	15
96	Significance of the imaginary part of the weak value. Physical Review A, 2012, 85, .	2.5	94
97	Measuring which-path information with coupled electronic Mach-Zehnder interferometers. Physical Review B, 2012, 85, .	3.2	22
98	Sufficient conditions for uniqueness of the weak value. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 015304.	2.1	17
99	Rectification of thermal fluctuations in a chaotic cavity heat engine. Physical Review B, 2012, 85, .	3.2	117
100	Weak Values are Universal in Von Neumann Measurements. Physical Review Letters, 2012, 109, 230402.	7.8	38
101	Contextual-value approach to the generalized measurement of observables. Physical Review A, 2012, 85, .	2.5	45
102	Effective thermodynamics of strongly coupled qubits. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 385003.	2.1	17
103	Contextual values as a foundation for a unique Weak Value. , 2011, , .		0
104	Experimental Violation of Two-Party Leggett-Garg Inequalities with Semiweak Measurements. Physical Review Letters, 2011, 106, 040402.	7.8	148
105	Continuous phase amplification with a Sagnac interferometer. Physical Review A, 2010, 82, .	2.5	114
106	Decay of a metastable state activated by non-Gaussian noise: A critical review of the generalized Kramers problem. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 550-554.	2.7	2
107	A Weak Value Inequality as a Test for Local Realism. , 2010, , .		0
108	Precision frequency measurements with interferometric weak values. Physical Review A, 2010, 82, .	2.5	145

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109	Interferometric weak value deflections: Quantum and classical treatments. Physical Review A, 2010, 81, .	2.5	55
110	Contextual Values of Observables in Quantum Measurements. Physical Review Letters, 2010, 104, 240401.	7.8	90
111	Uncollapsing the wavefunction by undoing quantum measurements. Contemporary Physics, 2010, 51, 125-147.	1.8	32
112	Deflection Measurements with Weak Values. , 2010, , .		0
113	Experimental Violation of a Non-Local Leggett-Garg Inequality using Non-Local Weak Measurements. , 2010, , .		0
114	Near Quantum Limited Optical Phase Measurements on a Dark Fringe. , 2010, , .		1
115	Realization of an All-Optical Zero to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Ï€</mml:mi></mml:math>Cross-Phase Modulation Jump. Physical Review Letters, 2009, 102, 013902.	7.8	13
116	Achieving the Threshold Regime with an Overscreened Josephson Junction. Physical Review Letters, 2009, 102, 086806.	7.8	2
117	Gravitational redshift and deflection of slow light. Physical Review A, 2009, 79, .	2.5	9
118	Ultrasensitive Beam Deflection Measurement via Interferometric Weak Value Amplification. Physical Review Letters, 2009, 102, 173601.	7.8	611
119	Optimizing the signal-to-noise ratio of a beam-deflection measurement with interferometric weak values. Physical Review A, 2009, 80, .	2.5	179
120	Weak Values and the Leggett-Garg Inequality in Solid-State Qubits. Physical Review Letters, 2008, 100, 026804.	7.8	234
121	Energy measurements and preparation of canonical phase states of a nano-mechanical resonator. Europhysics Letters, 2008, 82, 18003.	2.0	15
122	Entanglement genesis under continuous parity measurement. Physical Review A, 2008, 78, .	2.5	32
123	Gap theory of rectification in ballistic three-terminal conductors. Physical Review B, 2008, 77, .	3.2	14
124	Weak values and the Leggett-Garg inequality in solid-state qubits. , 2008, , .		0
125	Mesoscopic Threshold Detectors of Shot Noise. AIP Conference Proceedings, 2007, , .	0.4	0
126	Stochastic Dynamics of a Josephson Junction Threshold Detector. Physical Review Letters, 2007, 98, 136803.	7.8	50

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127	Weak-measurement theory of quantum-dot spin qubits. Physical Review B, 2007, 76, .	3.2	10
128	Conditional statistics of electron transport in interacting nanoscale conductors. Nature Physics, 2007, 3, 243-247.	16.7	94
129	Uncollapsing the wavefunction. , 2007, , .		1
130	Undoing a Weak Quantum Measurement of a Solid-State Qubit. Physical Review Letters, 2006, 97, 166805.	7.8	213
131	Parity meter for charge qubits: An efficient quantum entangler. Physical Review B, 2006, 73, .	3.2	65
132	Leggett-Garg Inequality with a Kicked Quantum Pump. Physical Review Letters, 2006, 97, 026805.	7.8	82
133	Qubit feedback and control with kicked quantum nondemolition measurements: A quantum Bayesian analysis. Physical Review B, 2006, 74, .	3.2	61
134	Fluctuation statistics of mesoscopic Bose-Einstein condensates: Reconciling the master equation with the partition function to reexamine the Uhlenbeck-Einstein dilemma. Physical Review A, 2006, 74, .	2.5	8
135	Transport statistics in bistable systems: a stochastic path integral approach (Invited Paper). , 2005, 5843, 80.		0
136	Ground state entanglement energetics. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 29, 272-282.	2.7	20
137	Mesoscopic threshold detectors: Telegraphing the size of a fluctuation. Physical Review B, 2005, 72, .	3.2	11
138	Quantum nondemolition measurement of a kicked qubit. Physical Review B, 2005, 71, .	3.2	46
139	Continuous Quantum Measurement with Independent Detector Cross Correlations. Physical Review Letters, 2005, 95, 220401.	7.8	57
140	Transport Statistics of Bistable Systems. Physical Review Letters, 2004, 93, 260604.	7.8	49
141	Fluctuation statistics in networks: A stochastic path integral approach. Journal of Mathematical Physics, 2004, 45, 4386-4417.	1.1	88
142	Entanglement energetics in the ground state. Journal of Modern Optics, 2004, 51, 2405-2414.	1.3	2
143	Entanglement Energetics at Zero Temperature. Physical Review Letters, 2004, 92, 247901.	7.8	50
144	Stochastic Path Integral Formulation of Full Counting Statistics. Physical Review Letters, 2003, 90, 206801.	7.8	146

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145	Probe-configuration-dependent dephasing in a mesoscopic interferometer. Physical Review B, 2003, 68, .	3.2	34
146	Always-On Quantum Error Tracking with Continuous Parity Measurements. Quantum - the Open Journal for Quantum Science, 0, 4, 358.	0.0	9