# Andrew N Jordan

List of Publications by Year
in descending order

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Version: 2024-02-01

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|---|---|---|---|
| 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 | Ultrasensitive Beam Deflection Measurement via Interferometric Weak Value Amplification. Physical Review Letters, 2009, 102, 173601. | 7.8 | 611 |
| 2 | Colloquium: Understanding quantum weak values: Basics and applications. Reviews of Modern Physics, 2014, 86, 307-316. | 45.6 | 478 |
| 3 | Thermoelectric energy harvesting with quantum dots. Nanotechnology, 2015, 26, 032001. | 2.6 | 254 |
| 4 | Weak Values and the Leggett-Garg Inequality in Solid-State Qubits. Physical Review Letters, 2008, 100, 026804. | 7.8 | 234 |
| 5 | Undoing a Weak Quantum Measurement of a Solid-State Qubit. Physical Review Letters, 2006, 97, 166805. | 7.8 | 213 |
| 6 | Technical Advantages for Weak-Value Amplification: When Less Is More. Physical Review X, 2014, 4, . | 8.9 | 181 |
| 7 | Optimizing the signal-to-noise ratio of a beam-deflection measurement with interferometric weak values. Physical Review A, 2009, 80, . | 2.5 | 179 |
| 8 | Mapping the optimal route between two quantum states. Nature, 2014, 511, 570-573. | 27.8 | 163 |
| 9 | Experimental Violation of Two-Party Leggett-Garg Inequalities with Semiweak Measurements. Physical Review Letters, 2011, 106, 040402. | 7.8 | 148 |
| 10 | Powerful and efficient energy harvester with resonant-tunneling quantum dots. Physical Review B, 2013, 87, . | 3.2 | 148 |
| 11 | Stochastic Path Integral Formulation of Full Counting Statistics. Physical Review Letters, 2003, 90, 206801. | 7.8 | 146 |
| 12 | Precision frequency measurements with interferometric weak values. Physical Review A, 2010, 82, . | 2.5 | 145 |
| 13 | Rectification of thermal fluctuations in a chaotic cavity heat engine. Physical Review B, 2012, 85, . | 3.2 | 117 |
| 14 | Continuous phase amplification with a Sagnac interferometer. Physical Review A, 2010, 82, . | 2.5 | 114 |
| 15 | Optimal adaptive control for quantum metrology with time-dependent Hamiltonians. Nature Communications, 2017, 8, 14695. | 12.8 | 110 |
| 16 | Experimentally quantifying the advantages of weak-value-based metrology. Physical Review A, 2015, 92, . | 2.5 | 101 |
| 17 | Conditional statistics of electron transport in interacting nanoscale conductors. Nature Physics, 2007, 3, 243-247. | 16.7 | 94 |
| 18 | Significance of the imaginary part of the weak value. Physical Review A, 2012, 85, . | 2.5 | 94 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Contextual Values of Observables in Quantum Measurements. Physical Review Letters, 2010, 104, 240401. | 7.8 | 90 |
| 20 | Fluctuation statistics in networks: A stochastic path integral approach. Journal of Mathematical Physics, 2004, 45, 4386-4417. | 1.1 | 88 |
| 21 | Leggett-Garg Inequality with a Kicked Quantum Pump. Physical Review Letters, 2006, 97, 026805. | 7.8 | 82 |
| 22 | Efficient Quantum Measurement Engines. Physical Review Letters, 2018, 120, 260601. | 7.8 | 81 |
| 23 | Chiral Thermoelectrics with Quantum Hall Edge States. Physical Review Letters, 2015, 114, 146801. | 7.8 | 79 |
| 24 | Correlations of heat and charge currents in quantum-dot thermoelectric engines. New Journal of Physics, 2013, 15, 125001. | 2.9 | 74 |
| 25 | Experimental Realization of a Quantum Dot Energy Harvester. Physical Review Letters, 2019, 123, 117701. | 7.8 | 69 |
| 26 | Powerful energy harvester based on resonant-tunneling quantum wells. New Journal of Physics, 2013, 15, 095021. | 2.9 | 66 |
| 27 | Parity meter for charge qubits: An efficient quantum entangler. Physical Review B, 2006, 73, . | 3.2 | 65 |
| 28 | Action principle for continuous quantum measurement. Physical Review A, 2013, 88, . | 2.5 | 64 |
| 29 | Quantum-limited estimation of the axial separation of two incoherent point sources. Optica, 2019, 6, 534. | 9.3 | 64 |
| 30 | Weak-value amplification and optimal parameter estimation in the presence of correlated noise. Physical Review A, 2017, 96, . | 2.5 | 62 |
| 31 | Qubit feedback and control with kicked quantum nondemolition measurements: A quantum Bayesian analysis. Physical Review B, 2006, 74, . | 3.2 | 61 |
| 32 | Heat diode and engine based on quantum Hall edge states. New Journal of Physics, 2015, 17, 075006. | 2.9 | 61 |
| 33 | Continuous Quantum Measurement with Independent Detector Cross Correlations. Physical Review Letters, 2005, 95, 220401. | 7.8 | 57 |
| 34 | Interferometric weak value deflections: Quantum and classical treatments. Physical Review A, 2010, 81, . | 2.5 | 55 |
| 35 | Strengthening weak-value amplification with recycled photons. Physical Review A, 2013, 88, . | 2.5 | 52 |
| 36 | Entanglement Energetics at Zero Temperature. Physical Review Letters, 2004, 92, 247901. | 7.8 | 50 |

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| 37 | Stochastic Dynamics of a Josephson Junction Threshold Detector. Physical Review Letters, 2007, 98, 136803. | 7.8 | 50 |
| 38 | Transport Statistics of Bistable Systems. Physical Review Letters, 2004, 93, 260604. | 7.8 | 49 |
| 39 | Two-Qubit Engine Fueled by Entanglement and Local Measurements. Physical Review Letters, 2021, 126, 120605. | 7.8 | 48 |
| 40 | Quantum nondemolition measurement of a kicked qubit. Physical Review B, 2005, 71, . | 3.2 | 46 |
| 41 | Stochastic path-integral formalism for continuous quantum measurement. Physical Review A, 2015, 92, . | 2.5 | 46 |
| 42 | Contextual-value approach to the generalized measurement of observables. Physical Review A, 2012, 85, . | 2.5 | 45 |
| 43 | Optimal measurements for quantum multiparameter estimation with general states. Physical Review A, 2019, 100, . | 2.5 | 45 |
| 44 | Power-Recycled Weak-Value-Based Metrology. Physical Review Letters, 2015, 114, 170801. | 7.8 | 44 |
| 45 | Quantum Nernst engines. Europhysics Letters, 2014, 107, 47003. | 2.0 | 40 |
| 46 | Weak Values are Universal in Von Neumann Measurements. Physical Review Letters, 2012, 109, 230402. | 7.8 | 38 |
| 47 | Protecting weak measurements against systematic errors. Physical Review A, 2016, 94, . | 2.5 | 36 |
| 48 | Probe-configuration-dependent dephasing in a mesoscopic interferometer. Physical Review B, 2003, 68, . | 3.2 | 34 |
| 49 | Thermal transistor and thermometer based on Coulomb-coupled conductors. Physical Review B, 2019, 100, . | 3.2 | 34 |
| 50 | Entanglement genesis under continuous parity measurement. Physical Review A, 2008, 78, . | 2.5 | 32 |
| 51 | Uncollapsing the wavefunction by undoing quantum measurements. Contemporary Physics, 2010, 51, 125-147. | 1.8 | 32 |
| 52 | Quantum Trajectories and Their Statistics for Remotely Entangled Quantum Bits. Physical Review X, 2016, 6, . | 8.9 | 32 |
| 53 | Anatomy of fluorescence: quantum trajectory statistics from continuously measuring spontaneous emission. Quantum Studies: Mathematics and Foundations, 2016, 3, 237-263. | 0.9 | 29 |
| 54 | Achieving Optimal Quantum Acceleration of Frequency Estimation Using Adaptive Coherent Control. Physical Review Letters, 2017, 119, 180801. | 7.8 | 29 |

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| 55 | Arrow of Time for Continuous Quantum Measurement. Physical Review Letters, 2017, 119, 220507. | 7.8 | 29 |
| 56 | Experimental demonstration of superresolution of partially coherent light sources using parity sorting. Optics Express, 2021, 29, 22034. | 3.4 | 27 |
| 57 | Three-terminal heat engine and refrigerator based on superlattices. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 74, 465-474. | 2.7 | 25 |
| 58 | Can a Dove prism change the past of a single photon?. Quantum Studies: Mathematics and Foundations, 2015, 2, 255-261. | 0.9 | 25 |
| 59 | Heisenberg scaling with weak measurement: a quantum state discrimination point of view. Quantum Studies: Mathematics and Foundations, 2015, 2, 5-15. | 0.9 | 25 |
| 60 | Quantum measurement engines and their relevance for quantum interpretations. Quantum Studies: Mathematics and Foundations, 2020, 7, 203-215. | 0.9 | 25 |
| 61 | Quantum instruments as a foundation for both states and observables. Physical Review A, 2013, 88, . | 2.5 | 23 |
| 62 | Rapid estimation of drifting parameters in continuously measured quantum systems. Physical Review A, 2017, 95, . | 2.5 | 23 |
| 63 | Measuring which-path information with coupled electronic Mach-Zehnder interferometers. Physical Review B, 2012, 85, . | 3.2 | 22 |
| 64 | Quantum parameter estimation with the Landau-Zener transition. Physical Review A, 2017, 96, . | 2.5 | 22 |
| 65 | Conditional teleportation of quantum-dot spin states. Nature Communications, 2020, 11, 3022. | 12.8 | 22 |
| 66 | Ground state entanglement energetics. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 29, 272-282. | 2.7 | 20 |
| 67 | Simultaneous continuous measurement of noncommuting observables: Quantum state correlations. Physical Review A, 2018, 97, . | 2.5 | 19 |
| 68 | Fluctuation theorems for continuous quantum measurements and absolute irreversibility. Physical Review A, 2019, 99, . | 2.5 | 18 |
| 69 | Experimental demonstration of continuous quantum error correction. Nature Communications, 2022, 13, 2307. | 12.8 | 18 |
| 70 | Efficiently fueling a quantum engine with incompatible measurements. Physical Review E, 2022, 105, 044137. | 2.1 | 18 |
| 71 | Effective thermodynamics of strongly coupled qubits. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 385003. | 2.1 | 17 |
| 72 | Sufficient conditions for uniqueness of the weak value. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 015304. | 2.1 | 17 |

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| 73 | Precision optical displacement measurements using biphotons. Physical Review A, 2016, 93, . | 2.5 | 16 |
| 74 | Variational Principle for Optimal Quantum Controls in Quantum Metrology. Physical Review Letters, 2022, 128, 160505. | 7.8 | 16 |
| 75 | Energy measurements and preparation of canonical phase states of a nano-mechanical resonator. Europhysics Letters, 2008, 82, 18003. | 2.0 | 15 |
| 76 | Operational approach to indirectly measuring the tunneling time. Physical Review A, 2013, 88, . | 2.5 | 15 |
| 77 | Prediction and characterization of multiple extremal paths in continuously monitored qubits. Physical Review A, 2017, 95, . | 2.5 | 15 |
| 78 | Gap theory of rectification in ballistic three-terminal conductors. Physical Review B, 2008, 77, . | 3.2 | 14 |
| 79 | Electrical current from quantum vacuum fluctuations in nanoengines. Physical Review B, 2015, 92, . | 3.2 | 14 |
| 80 | Superconducting Quantum Refrigerator: Breaking and Rejoining Cooper Pairs with Magnetic Field Cycles. Physical Review Applied, 2019, 11, . | 3.8 | 14 |
| 81 | 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 |
| 82 | Confocal super-resolution microscopy based on a spatial mode sorter. Optics Express, 2021, 29, 11784. | 3.4 | 13 |
| 83 | Quantum measurement arrow of time and fluctuation relations for measuring spin of ultracold atoms. Nature Communications, 2021, 12, 1847. | 12.8 | 13 |
| 84 | Effect of incoherent scattering on three-terminal quantum Hall thermoelectrics. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 75, 86-92. | 2.7 | 12 |
| 85 | Linear feedback stabilization of a dispersively monitored qubit. Physical Review A, 2017, 96, . | 2.5 | 12 |
| 86 | Enhanced Weak-Value Amplification via Photon Recycling. Physical Review Letters, 2021, 126, 220801. | 7.8 | 12 |
| 87 | Autonomous quantum absorption refrigerators. Physical Review B, 2020, 102, . | 3.2 | 12 |
| 88 | Mesoscopic threshold detectors: Telegraphing the size of a fluctuation. Physical Review B, 2005, 72, . | 3.2 | 11 |
| 89 | Weak values are quantum: you can bet on it. Quantum Studies: Mathematics and Foundations, 2016, 3, 1-4. | 0.9 | 11 |
| 90 | Measuring fluorescence to track a quantum emitter's state: a theory review. Contemporary Physics, 2020, 61, 26-50. | 1.8 | 11 |

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| 91 | Weak-measurement theory of quantum-dot spin qubits. Physical Review B, 2007, 76, . | 3.2 | 10 |
| 92 | Andreev reflections and the quantum physics of black holes. Physical Review D, 2017, 96, . | 4.7 | 10 |
| 93 | Super-Heisenberg scaling in Hamiltonian parameter estimation in the long-range Kitaev chain. Physical Review Research, 2022, 4, . | 3.6 | 10 |
| 94 | Gravitational redshift and deflection of slow light. Physical Review A, 2009, 79, . | 2.5 | 9 |
| 95 | Chaos in continuously monitored quantum systems: An optimal-path approach. Physical Review A, 2018, 98, . | 2.5 | 9 |
| 96 | Stochastic thermodynamic cycles of a mesoscopic thermoelectric engine. Physical Review B, 2021, 103, . | 3.2 | 9 |
| 97 | Minimal two-body quantum absorption refrigerator. Physical Review B, 2021, 104, . | 3.2 | 9 |
| 98 | Always-On Quantum Error Tracking with Continuous Parity Measurements. Quantum - the Open Journal for Quantum Science, 0, 4, 358. | 0.0 | 9 |
| 99 | Enhanced on-chip phase measurement by inverse weak value amplification. Nature Communications, 2021, 12, 6247. | 12.8 | 9 |
| 100 | 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 |
| 101 | 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 |
| 102 | An Interaction-Free Quantum Measurement-Driven Engine. Foundations of Physics, 2020, 50, 1294-1314. | 1.3 | 8 |
| 103 | Watching the wavefunction collapse. Nature, 2013, 502, 177-178. | 27.8 | 6 |
| 104 | Noise suppression in inverse weak value-based phase detection. Quantum Studies: Mathematics and Foundations, 2018, 5, 579-588. | 0.9 | 6 |
| 105 | Quantum state tomography with time-continuous measurements: reconstruction with resource limitations. Quantum Studies: Mathematics and Foundations, 2020, 7, 23-47. | 0.9 | 6 |
| 106 | Black holes as Andreev reflecting mirrors. Physical Review D, 2020, 102, . | 4.7 | 6 |
| 107 | Stochastic Path-Integral Analysis of the Continuously Monitored Quantum Harmonic Oscillator. PRX Quantum, 2022, 3, . | 9.2 | 6 |
| 108 | Bosons falling into a black hole: A superfluid analogue. Physical Review D, 2018, 98, . | 4.7 | 5 |

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| 109 | 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 |
| 110 | Entanglement-preserving limit cycles from sequential quantum measurements and feedback. Physical Review A, 2020, 102, . | 2.5 | 5 |
| 111 | Continuous measurement of a qudit using dispersively coupled radiation. Physical Review A, 2022, 105, . | 2.5 | 4 |
| 112 | Classical-quantum sensors keep better time. Science, 2017, 356, 802-803. | 12.6 | 3 |
| 113 | Gravitational sensing with weak value based optical sensors. Quantum Studies: Mathematics and Foundations, 2019, 6, 169-180. | 0.9 | 3 |
| 114 | Entanglement energetics in the ground state. Journal of Modern Optics, 2004, 51, 2405-2414. | 1.3 | 2 |
| 115 | Achieving the Threshold Regime with an Overscreened Josephson Junction. Physical Review Letters, 2009, 102, 086806. | 7.8 | 2 |
| 116 | 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 |
| 117 | Superresolution using supergrowth and intensity contrast imaging. Quantum Studies: Mathematics and Foundations, 2020, 7, 285-292. | 0.9 | 2 |
| 118 | Entanglement of a pair of quantum emitters via continuous fluorescence measurements: a tutorial. Advances in Optics and Photonics, 2021, 13, 517. | 25.5 | 2 |
| 119 | Some Like It Hot. Inference, 2019, 5, . | 0.0 | 2 |
| 120 | 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 |
| 121 | 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 |
| 122 | Diffraction-based interaction-free measurements. Quantum Studies: Mathematics and Foundations, 2020, 7, 145-153. | 0.9 | 1 |
| 123 | Quantum system dynamics with a weakly nonlinear Josephson junction bath. Physical Review B, 2021, 103, . | 3.2 | 1 |
| 124 | Thermal control across a chain of electronic nanocavities. Physical Review B, 2021, 104, . | 3.2 | 1 |
| 125 | Uncollapsing the wavefunction. , 2007, , . | | 1 |
| 126 | Spooky Work at a Distance: An Interaction-Free Quantum Measurement Driven Engine. , 2019, , . | | 1 |

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| 127 | Near Quantum Limited Optical Phase Measurements on a Dark Fringe. , 2010, , . | | 1 |
| 128 | Enhanced on-chip frequency measurement using weak value amplification. Optics Express, 2022, 30, 3700. | 3.4 | 1 |
| 129 | Transport statistics in bistable systems: a stochastic path integral approach (Invited Paper). , 2005, 5843, 80. | | 0 |
| 130 | Mesoscopic Threshold Detectors of Shot Noise. AIP Conference Proceedings, 2007, , . | 0.4 | 0 |
| 131 | A Weak Value Inequality as a Test for Local Realism. , 2010, , . | | 0 |
| 132 | Contextual values as a foundation for a unique Weak Value. , 2011, , . | | 0 |
| 133 | Increasing Weak Measurement SNR with Recycling. , 2014, , . | | 0 |
| 134 | Janus sequences of quantum measurements and the arrow of time. AIP Conference Proceedings, 2017, , . | 0.4 | 0 |
| 135 | Weak values and the Leggett-Garg inequality in solid-state qubits. , 2008, , . | | 0 |
| 136 | Deflection Measurements with Weak Values. , 2010, , . | | 0 |
| 137 | Experimental Violation of a Non-Local Leggett-Garg Inequality using Non-Local Weak Measurements. , 2010, , . | | 0 |
| 138 | Weak Values: The Progression from Quantum Foundations to Tool. , 2014, , 259-278. | | 0 |
| 139 | Experimentally Quantifying the Advantages of Weak-Values-Based Metrology. , 2015, , . | | 0 |
| 140 | Multiple Most-Likely Path Solutions for Continuously Monitored, Driven Qubits. , 2016, , . | | 0 |
| 141 | Odd Man Out. Inference, 2017, 3, . | 0.0 | 0 |
| 142 | Woitâ€™s Way. Inference, 2018, 4, . | 0.0 | 0 |
| 143 | Superresolution using parity sorting with partially coherent light. , 2019, , . | | 0 |
| 144 | Time dependent metrology: improving precision through coherent control. , 2019, , . | | 0 |

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| 145 | High Temperature Superconductivity. Inference, 2019, 5, . | 0.0 | 0 |
| 146 | Enhanced On-Chip Phase Measurement by Weak Value Amplification. , 2020, , . | | 0 |