Jonathan P Dowling

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/11662228/publications.pdf

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216 papers 14,441 citations

³⁸⁷⁴² 50 h-index

19749 117 g-index

219 all docs

219 docs citations

times ranked

219

7904 citing authors

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Linear optical quantum computing with photonic qubits. Reviews of Modern Physics, 2007, 79, 135-174. | 45.6 | 2,076 |
| 2 | Quantum Interferometric Optical Lithography: Exploiting Entanglement to Beat the Diffraction Limit. Physical Review Letters, 2000, 85, 2733-2736. | 7.8 | 1,308 |
| 3 | Quantum optical metrology–Âthe lowdown on high-N00N states. Contemporary Physics, 2008, 49, 125-143. | 1.8 | 655 |
| 4 | The photonic band edge laser: A new approach to gain enhancement. Journal of Applied Physics, 1994, 75, 1896-1899. | 2.5 | 609 |
| 5 | Quantum technology: the second quantum revolution. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 1655-1674. | 3.4 | 594 |
| 6 | Optical Limiting and Switching of Ultrashort Pulses in Nonlinear Photonic Band Gap Materials. Physical Review Letters, 1994, 73, 1368-1371. | 7.8 | 556 |
| 7 | Analytic expressions for the electromagnetic mode density in finite, one-dimensional, photonic band-gap structures. Physical Review E, 1996, 53, 4107-4121. | 2.1 | 486 |
| 8 | A quantum Rosetta stone for interferometry. Journal of Modern Optics, 2002, 49, 2325-2338. | 1.3 | 393 |
| 9 | Quantum Metrology with Two-Mode Squeezed Vacuum: Parity Detection Beats the Heisenberg Limit. Physical Review Letters, 2010, 104, 103602. | 7.8 | 334 |
| 10 | Thinâ€film nonlinear optical diode. Applied Physics Letters, 1995, 66, 2324-2326. | 3.3 | 270 |
| 11 | Correlated input-port, matter-wave interferometer: Quantum-noise limits to the atom-laser gyroscope. Physical Review A, 1998, 57, 4736-4746. | 2.5 | 269 |
| 12 | Quantum Clock Synchronization Based on Shared Prior Entanglement. Physical Review Letters, 2000, 85, 2010-2013. | 7.8 | 263 |
| 13 | The photonic band edge optical diode. Journal of Applied Physics, 1994, 76, 2023-2026. | 2.5 | 254 |
| 14 | Creation of large-photon-number path entanglement conditioned on photodetection. Physical Review A, 2002, 65, . | 2.5 | 240 |
| 15 | Wigner distribution of a general angular-momentum state: Applications to a collection of two-level atoms. Physical Review A, 1994, 49, 4101-4109. | 2.5 | 205 |
| 16 | Entangled Fock states for robust quantum optical metrology, imaging, and sensing. Physical Review A, 2008, 78, . | 2.5 | 204 |
| 17 | Photonic Band Calculations for Woodpile Structures. Journal of Modern Optics, 1994, 41, 231-239. | 1.3 | 195 |
| 18 | Near–dipole-dipole effects in dense media: Generalized Maxwell-Bloch equations. Physical Review A, 1993, 47, 1247-1251. | 2.5 | 178 |

| # | Article | IF | Citations |
|----|--|-----|-----------|
| 19 | Modification of Planck blackbody radiation by photonic band-gap structures. Physical Review A, 1999, 59, 4736-4746. | 2.5 | 161 |
| 20 | Single-photon quantum-nondemolition detectors constructed with linear optics and projective measurements. Physical Review A, 2002, 66, . | 2.5 | 156 |
| 21 | Atomic emission rates in inhomogeneous media with applications to photonic band structures. Physical Review A, 1992, 46, 612-622. | 2.5 | 151 |
| 22 | Anomalous Index of Refraction in Photonic Bandgap Materials. Journal of Modern Optics, 1994, 41, 345-351. | 1.3 | 150 |
| 23 | Vortex Phase Qubit: Generating Arbitrary, Counterrotating, Coherent Superpositions in Bose-Einstein Condensates via Optical Angular Momentum Beams. Physical Review Letters, 2005, 95, 173601. | 7.8 | 141 |
| 24 | Evanescent Light-Wave Atom Mirrors, Resonators, Waveguides, and Traps. Advances in Atomic, Molecular and Optical Physics, 1996, , 1-94. | 2.3 | 134 |
| 25 | Measurement of spontaneous-emission enhancement near the one-dimensional photonic band edge of semiconductor heterostructures. Physical Review A, 1996, 53, 2799-2803. | 2.5 | 128 |
| 26 | Coherent-light-boosted, sub-shot noise, quantum interferometry. New Journal of Physics, 2010, 12, 083014. | 2.9 | 127 |
| 27 | Linear optics and projective measurements alone suffice to create large-photon-number path entanglement. Physical Review A, 2002, 65, . | 2.5 | 110 |
| 28 | Quantum Optical Technologies for Metrology, Sensing, and Imaging. Journal of Lightwave Technology, 2015, 33, 2359-2370. | 4.6 | 106 |
| 29 | Quantum-interferometric optical lithography: $\hat{a} \in f$ Towards arbitrary two-dimensional patterns. Physical Review A, 2001, 63, . | 2.5 | 104 |
| 30 | Near dipole-dipole effects in lasing without inversion: An enhancement of gain and absorptionless index of refraction. Physical Review Letters, 1993, 70, 1421-1424. | 7.8 | 102 |
| 31 | Linear Optical Quantum Metrology with Single Photons: Exploiting Spontaneously Generated Entanglement to Beat the Shot-Noise Limit. Physical Review Letters, 2015, 114, 170802. | 7.8 | 98 |
| 32 | Scalable Boson Sampling with Time-Bin Encoding Using a Loop-Based Architecture. Physical Review Letters, 2014, 113, 120501. | 7.8 | 94 |
| 33 | Improving solar cell efficiency using photonic band-gap materials. Solar Energy Materials and Solar Cells, 2007, 91, 1599-1610. | 6.2 | 92 |
| 34 | Efficient Generation of Large Number-Path Entanglement Using Only Linear Optics and Feed-Forward. Physical Review Letters, 2007, 99, 163604. | 7.8 | 81 |
| 35 | Parity detection achieves the Heisenberg limit in interferometry with coherent mixed with squeezed vacuum light. New Journal of Physics, 2011, 13, 083026. | 2.9 | 77 |
| 36 | Quantum-noise limits to matter-wave interferometry. Physical Review A, 1993, 48, 3186-3190. | 2.5 | 76 |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Local and Global Distinguishability in Quantum Interferometry. Physical Review Letters, 2007, 99, 070801. | 7.8 | 76 |
| 38 | Optimization of quantum interferometric metrological sensors in the presence of photon loss. Physical Review A, 2009, 80, . | 2.5 | 74 |
| 39 | Phase estimation at the quantum Cramér-Rao bound via parity detection. Physical Review A, 2013, 87, . | 2.5 | 72 |
| 40 | Phase sensitivity at the Heisenberg limit in an $SU(1,1)$ interferometer via parity detection. Physical Review A, 2016, 94, . | 2.5 | 70 |
| 41 | Quantum lithography, entanglement and Heisenberg-limited parameter estimation. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, S811-S815. | 1.4 | 68 |
| 42 | Sonic band structure in fluids with periodic density variations. Journal of the Acoustical Society of America, 1992, 91, 2539-2543. | 1.1 | 67 |
| 43 | Parity detection in quantum optical metrology without number-resolving detectors. New Journal of Physics, 2010, 12, 113025. | 2.9 | 67 |
| 44 | Quantum-enhanced magnetometer with low-frequency squeezing. Physical Review A, 2012, 86, . | 2.5 | 63 |
| 45 | Factoring integers with Young'sN-slit interferometer. Physical Review A, 1996, 53, 4587-4590. | 2.5 | 61 |
| 46 | Radiation pattern of a classical dipole in a cavity. Optics Communications, 1991, 82, 415-419. | 2.1 | 59 |
| 47 | Piezophotonic Switching Due to Local Field Effects in a Coherently Prepared Medium of Three-Level Atoms. Physical Review Letters, 1994, 73, 1789-1792. | 7.8 | 58 |
| 48 | Super-resolution at the shot-noise limit with coherent states and photon-number-resolving detectors. Journal of the Optical Society of America B: Optical Physics, 2010, 27, A170. | 2.1 | 58 |
| 49 | Multiphoton Interference in Quantum Fourier Transform Circuits and Applications to Quantum Metrology. Physical Review Letters, 2017, 119, 080502. | 7.8 | 57 |
| 50 | Practical figures of merit and thresholds for entanglement distribution in quantum networks. Physical Review Research, 2019, 1, . | 3.6 | 56 |
| 51 | Strong violations of Bell-type inequalities for path-entangled number states. Physical Review A, 2007, 76, . | 2.5 | 52 |
| 52 | Fundamental precision limit of a Mach-Zehnder interferometric sensor when one of the inputs is the vacuum. Physical Review A, 2017, 96, . | 2.5 | 52 |
| 53 | Experimental Gaussian Boson sampling. Science Bulletin, 2019, 64, 511-515. | 9.0 | 51 |
| 54 | Spontaneous emission and nonlinear effects in photonic bandgap materials. Journal of Optics, 1998, 7, 393-407. | 0.5 | 50 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Construction of a quantum repeater with linear optics. Physical Review A, 2003, 68, . | 2.5 | 47 |
| 56 | Super-resolving quantum radar: Coherent-state sources with homodyne detection suffice to beat the diffraction limit. Journal of Applied Physics, 2013, 114, 193102. | 2.5 | 47 |
| 57 | Thermal radiation in photonic crystals. Physical Review B, 2007, 75, . | 3.2 | 46 |
| 58 | All Linear Optical Quantum Memory Based on Quantum Error Correction. Physical Review Letters, 2003, 91, 217901. | 7.8 | 43 |
| 59 | Spontaneous emission in cavities: How much more classical can you get?. Foundations of Physics, 1993, 23, 895-905. | 1.3 | 42 |
| 60 | Bootstrapping Approach for Generating Maximally Path-Entangled Photon States. Physical Review Letters, 2007, 99, 053602. | 7.8 | 42 |
| 61 | Arbitrary coherent superpositions of quantized vortices in Bose-Einstein condensates via orbital angular momentum of light. Physical Review A, 2008, 77, . | 2.5 | 42 |
| 62 | Remote quantum clock synchronization without synchronized clocks. Npj Quantum Information, 2018, 4, . | 6.7 | 41 |
| 63 | Maximal success probabilities of linear-optical quantum gates. Physical Review A, 2009, 79, . | 2.5 | 40 |
| 64 | Robust quantum network architectures and topologies for entanglement distribution. Physical Review A, 2018, 97, . | 2.5 | 40 |
| 65 | Lorentz-invariant look at quantum clock-synchronization protocols based on distributed entanglement. Physical Review A, 2002, 65, . | 2.5 | 39 |
| 66 | Resolution and sensitivity of a Fabry-Perot interferometer with a photon-number-resolving detector. Physical Review A, 2009, 80, . | 2.5 | 39 |
| 67 | Entanglement-enhanced optical gyroscope. New Journal of Physics, 2019, 21, 053010. | 2.9 | 39 |
| 68 | Sampling arbitrary photon-added or photon-subtracted squeezed states is in the same complexity class as boson sampling. Physical Review A, 2015, 91, . | 2.5 | 38 |
| 69 | Nearly optimal measurement schemes in a noisy Mach-Zehnder interferometer with coherent and squeezed vacuum. EPJ Quantum Technology, 2017, 4, . | 6.3 | 37 |
| 70 | Towards photostatistics from photon-number discriminating detectors. Journal of Modern Optics, 2004, 51, 1517-1528. | 1.3 | 36 |
| 71 | Adaptive phase estimation with two-mode squeezed vacuum and parity measurement. Physical Review A, 2017, 95, . | 2.5 | 36 |
| 72 | Spooky action at a global distance: analysis of space-based entanglement distribution for the quantum internet. Npj Quantum Information, $2021, 7, \dots$ | 6.7 | 34 |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | General linear-optical quantum state generation scheme: Applications to maximally path-entangled states. Physical Review A, 2007, 76, . | 2.5 | 32 |
| 74 | Strategies for choosing path-entangled number states for optimal robust quantum-optical metrology in the presence of loss. Physical Review A, 2012 , 86 , . | 2.5 | 32 |
| 75 | Boson sampling with displaced single-photon Fock states versus single-photon-added coherent states: The quantum-classical divide and computational-complexity transitions in linear optics. Physical Review A, 2015, 91, . | 2.5 | 32 |
| 76 | Gaussian-beam-propagation theory for nonlinear optics involving an analytical treatment of orbital-angular-momentum transfer. Physical Review A, 2017, 96, . | 2.5 | 32 |
| 77 | Thresholded Quantum LIDAR: Exploiting Photon-Number-Resolving Detection. Physical Review Letters, 2019, 123, 203601. | 7.8 | 32 |
| 78 | Self-field quantum electrodynamics: The two-level atom. Physical Review A, 1990, 41, 2284-2294. | 2.5 | 31 |
| 79 | Conditional linear-optical measurement schemes generate effective photon nonlinearities. Physical Review A, 2003, 68, . | 2.5 | 31 |
| 80 | Experimental sub-Rayleigh resolution by an unseeded high-gain optical parametric amplifier for quantum lithography. Physical Review A, 2008, 77, . | 2.5 | 31 |
| 81 | Spontaneous parametric down-conversion photon sources are scalable in the asymptotic limit for boson sampling. Physical Review A, 2013, 88, . | 2.5 | 31 |
| 82 | Non-Gaussian entangled states and quantum teleportation of Schrödinger-cat states. Physica Scripta, 2015, 90, 074029. | 2.5 | 31 |
| 83 | Entanglement-seeded, dual, optical parametric amplification: Applications to quantum imaging and metrology. Physical Review A, 2008, 78, . | 2.5 | 30 |
| 84 | Sagnac interferometry with coherent vortex superposition states in exciton-polariton condensates. Physical Review A, 2016, 93, . | 2.5 | 30 |
| 85 | Emulating Quantum Teleportation of a Majorana Zero Mode Qubit. Physical Review Letters, 2021, 126, 090502. | 7.8 | 30 |
| 86 | Exponential decrease in phase uncertainty. Physical Review A, 1991, 44, 3365-3368. | 2.5 | 29 |
| 87 | Quantum lithography: status of the field. Quantum Information Processing, 2012, 11, 891-901. | 2.2 | 29 |
| 88 | Optimized aperiodic highly directional narrowband infrared emitters. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 1316. | 2.1 | 28 |
| 89 | Linear optical quantum metrology with single photons: Experimental errors, resource counting, and quantum Cramér-Rao bounds. Physical Review A, 2017, 96, . | 2.5 | 28 |
| 90 | Multiparameter estimation with single photonsâ€"linearly-optically generated quantum entanglement beats the shotnoise limit. Journal of Optics (United Kingdom), 2017, 19, 124002. | 2.2 | 28 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 91 | Pulse propagation near highly reflective surfaces: Applications to photonic band-gap structures and the question of superluminal tunneling times. Physical Review A, 1995, 52, 726-734. | 2.5 | 27 |
| 92 | Conclusive precision bounds for $SU(1,1)$ interferometers. Physical Review A, 2019, 99, . | 2.5 | 27 |
| 93 | Effects of phase fluctuations on phase sensitivity and visibility of path-entangled photon Fock states. Physical Review A, 2013, 88, . | 2.5 | 25 |
| 94 | Optimized aperiodic multilayer structures for use as narrow-angular absorbers. Journal of Applied Physics, 2014, 116, . | 2.5 | 25 |
| 95 | Ultra-stable matter–wave gyroscopy with counter-rotating vortex superpositions in Bose–Einstein condensates. Journal of Modern Optics, 2012, 59, 1180-1185. | 1.3 | 22 |
| 96 | Evidence for the conjecture that sampling generalized cat states with linear optics is hard. Physical Review A, 2015, 91, . | 2.5 | 22 |
| 97 | Efficient recycling strategies for preparing large Fock states from single-photon sources: Applications to quantum metrology. Physical Review A, 2016, 94, . | 2.5 | 22 |
| 98 | Generating entangled photons from the vacuum by accelerated measurements: Quantum-information theory and the Unruh-Davies effect. Physical Review A, 2008, 78, . | 2.5 | 21 |
| 99 | Absolute calibration of single-photon and multiplexed photon-number-resolving detectors. Physical Review A, 2018, 98, . | 2.5 | 20 |
| 100 | Sub-shot-noise-limited phase estimation via $SU(1,1)$ interferometer with thermal states. Optics Express, 2018, 26, 18492. | 3.4 | 20 |
| 101 | Optical angular momentum manipulations in a four-wave mixing process. Optics Letters, 2019, 44, 739. | 3.3 | 20 |
| 102 | An Introduction to Boson-Sampling. , 2015, , 167-192. | | 19 |
| 103 | Quantum electrodynamics based on self-fields, without second quantization: A nonrelativistic calculation ofg-2. Physical Review A, 1988, 38, 4405-4412. | 2.5 | 18 |
| 104 | Quantum states of light produced by a high-gain optical parametric amplifier for use in quantum lithography. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 270. | 2.1 | 18 |
| 105 | Implementing BosonSampling with time-bin encoding: Analysis of loss, mode mismatch, and time jitter. Physical Review A, 2015, 92, . | 2.5 | 18 |
| 106 | Phase estimation in an $SU(1,1)$ interferometer with displaced squeezed states. OSA Continuum, 2018, 1, 438. | 1.8 | 18 |
| 107 | Demonstration of topologically path-independent anyonic braiding in a nine-qubit planar code. Optica, 2019, 6, 264. | 9.3 | 18 |
| 108 | Beat radiation from dipoles near a photonic band edge. Journal of the Optical Society of America B: Optical Physics, 1993, 10, 353. | 2.1 | 17 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Inefficiency of classically simulating linear optical quantum computing with Fock-state inputs. Physical Review A, 2014, 89, . | 2.5 | 17 |
| 110 | Quantum-enhanced spectroscopy with entangled multiphoton states. Physical Review A, 2016, 93, . | 2.5 | 16 |
| 111 | Optimized mid-infrared thermal emitters for applications in aircraft countermeasures. AIP Advances, 2017, 7, . | 1.3 | 16 |
| 112 | Quantum teleportation of photonic qudits using linear optics. Physical Review A, 2019, 100, . | 2.5 | 16 |
| 113 | Quantum electrodynamics based on self-fields: On the origin of thermal radiation detected by an accelerating observer. Physical Review A, 1990, 41, 2277-2283. | 2.5 | 15 |
| 114 | High-fidelity linear optical quantum computing with polarization encoding. Physical Review A, 2006, 73, . | 2.5 | 15 |
| 115 | Spatial multimode structure of atom-generated squeezed light. Physical Review A, 2016, 93, . | 2.5 | 15 |
| 116 | QED Based on Self-Fields: A Relativistic Calculation of g-2. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1989, 44, 1051-1056. | 1.5 | 14 |
| 117 | A quantum state of ultra-low phase noise. Optics Communications, 1991, 86, 119-122. | 2.1 | 14 |
| 118 | Dipole radiators in a cavity: A radio frequency analog for the modification of atomic spontaneous emission rates between mirrors. American Journal of Physics, 1993, 61, 545-550. | 0.7 | 14 |
| 119 | Band structure for neutral magnetic dipoles in a periodic magnetic field: A simple spin polarizer. Physical Review Letters, 1992, 68, 3571-3574. | 7.8 | 13 |
| 120 | Quantum information transmission. Quantum Information Processing, 2013, 12, 899-906. | 2.2 | 13 |
| 121 | Quantum random walks with multiphoton interference and high-order correlation functions. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 1538. | 2.1 | 12 |
| 122 | Optimized aperiodic broadband visible absorbers. Journal of Optics (United Kingdom), 2017, 19, 105003. | 2.2 | 12 |
| 123 | Towards classification of experimental Laguerre–Gaussian modes using convolutional neural networks. Optical Engineering, 2020, 59, 1. | 1.0 | 12 |
| 124 | Quantum electrodynamics based on self-fields, without second quantization: Apparatus dependent contributions tog-2. Physical Review A, 1989, 39, 2796-2805. | 2.5 | 11 |
| 125 | Dynamical decoupling in optical fibers: Preserving polarization qubits from birefringent dephasing. Physical Review A, 2012, 85, . | 2.5 | 11 |
| 126 | Schrödinger modal structure of cubical, pyramidal, and conical, evanescent light-wave gravitational atom traps. Physical Review A, 1995, 52, 3997-4003. | 2.5 | 10 |

| # | Article | IF | CITATIONS |
|-----|--|------|-----------|
| 127 | To compute or not to compute?. Nature, 2006, 439, 919-920. | 27.8 | 10 |
| 128 | Phase-controlled entanglement in a quantum-beat laser: application to quantum lithography. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 225504. | 1.5 | 10 |
| 129 | Orbital-angular-momentum-enhanced estimation of sub-Heisenberg-limited angular displacement with two-mode squeezed vacuum and parity detection. Optics Express, 2018, 26, 16524. | 3.4 | 10 |
| 130 | Error suppression in adiabatic quantum computing with qubit ensembles. Npj Quantum Information, $2021, 7, .$ | 6.7 | 10 |
| 131 | Quantum lithography: AÂnon-computing application of quantum information. Computer Science - Research and Development, 2006, 21, 73-82. | 0.9 | 9 |
| 132 | Why a hole is like a beam splitter: A general diffraction theory for multimode quantum states of light. Physical Review A, 2017, 96, . | 2.5 | 9 |
| 133 | Efficient Simulation of Loop Quantum Gravity: A Scalable Linear-Optical Approach. Physical Review Letters, 2021, 126, 020501. | 7.8 | 9 |
| 134 | Suitability versus fidelity for rating single-photon guns. Physical Review A, 2003, 67, . | 2.5 | 8 |
| 135 | Exploiting the Quantum Zeno effect to beat photon loss in linear optical quantum information processors. Optics Communications, 2005, 254, 374-379. | 2.1 | 8 |
| 136 | Multipass configuration for improved squeezed vacuum generation in hot Rb vapor. Physical Review A, 2017, 96, . | 2.5 | 8 |
| 137 | Finding broken gates in quantum circuits: exploiting hybrid machine learning. Quantum Information Processing, 2020, 19, 1. | 2.2 | 8 |
| 138 | Quantum-Limited Squeezed Light Detection with a Camera. Physical Review Letters, 2020, 125, 113602. | 7.8 | 8 |
| 139 | Two-photon processes in faint biphoton fields. Journal of Modern Optics, 2002, 49, 2349-2364. | 1.3 | 7 |
| 140 | From linear optical quantum computing to Heisenberg-limited interferometry. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, S796-S800. | 1.4 | 7 |
| 141 | Optimizing the multiphoton absorption properties of maximally path-entangled number states. Physical Review A, 2009, 80, . | 2.5 | 7 |
| 142 | Optimal digital dynamical decoupling for general decoherence via Walsh modulation. Quantum Information Processing, 2017, 16, 1. | 2.2 | 7 |
| 143 | Deterministic generation of hybrid high- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"> <mml:mi>N</mml:mi></mml:math> NOON states with Rydberg atoms trapped in microwave cavities. Physical Review A, 2020, 101, . | 2.5 | 7 |
| 144 | POPPER'S THOUGHT EXPERIMENT REINVESTIGATED. International Journal of Quantum Information, 2012, 10, 1250033. | 1,1 | 6 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 145 | Preserving photon qubits in an unknown quantum state with Knill dynamical decoupling: Towards an all optical quantum memory. Physical Review A, 2015, 91, . | 2.5 | 6 |
| 146 | Direct characterization of linear and quadratically nonlinear optical systems. Physical Review A, 2018, 98, . | 2.5 | 6 |
| 147 | Quantum interferometric sensors. , 2007, , . | | 5 |
| 148 | An optical parametric oscillator as a high-flux source of two-mode light for quantum lithography. New Journal of Physics, 2009, 11, 113055. | 2.9 | 5 |
| 149 | An invisible quantum tripwire. New Journal of Physics, 2010, 12, 083012. | 2.9 | 5 |
| 150 | Quantum Hall effect with small numbers of vortices in Bose-Einstein condensates. Physical Review A, $2015, 92, .$ | 2.5 | 5 |
| 151 | Quantized nonlinear Gaussian-beam dynamics: Tailoring multimode squeezed-light generation. Physical Review A, 2018, 98, . | 2.5 | 5 |
| 152 | Optimized Multilayer Structures With Ultrabroadband Near-Perfect Absorption. IEEE Photonics Journal, 2020, 12, 1-10. | 2.0 | 5 |
| 153 | Photonic quantum data locking. Quantum - the Open Journal for Quantum Science, 0, 5, 447. | 0.0 | 5 |
| 154 | Optomechanical entanglement at room temperature: A simulation study with realistic conditions. Physical Review A, 2020, 102, . | 2.5 | 5 |
| 155 | The on-ramp to the all-optical quantum information processing highway. Science, 2015, 349, 696-696. | 12.6 | 4 |
| 156 | Quantum gates for Majoranas zero modes in topological superconductors in one-dimensional geometry. Physical Review B, 2021, 103, . | 3.2 | 4 |
| 157 | Towards photostatistics from photon-number discriminating detectors. Journal of Modern Optics, 2004, 51, 1517-1528. | 1.3 | 4 |
| 158 | Nonlinear tuning of 3D photonic band-gap structures for single-photon on demand sources. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 32, 484-487. | 2.7 | 3 |
| 159 | Room-temperature photon-number-resolved detection using a two-mode squeezer. Physical Review A, 2017, 96, . | 2.5 | 3 |
| 160 | Relativistic corrections to photonic entangled states for the space-based quantum network. Physical Review A, 2020, 101, . | 2.5 | 3 |
| 161 | Relativity of quantum states in entanglement swapping. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126301. | 2.1 | 3 |
| 162 | The specular reflection of light off light. American Journal of Physics, 1992, 60, 28-34. | 0.7 | 2 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 163 | Heisenberg-limited measurements with superconducting circuits. Physical Review A, 2006, 73, . | 2.5 | 2 |
| 164 | Kittens catch phase. Nature, 2007, 450, 362-363. | 27.8 | 2 |
| 165 | Dynamical decoupling with tailored wave plates for long-distance communication using polarization qubits. Physical Review A, 2013, 88, . | 2.5 | 2 |
| 166 | Super-resolving single-photon number-path-entangled state and its generation. Physical Review A, $2014, 89, .$ | 2.5 | 2 |
| 167 | Reducing the number of ancilla qubits and the gate count required for creating large controlled operations. Quantum Information Processing, 2015, 14, 891-899. | 2.2 | 2 |
| 168 | Quantum phase representation of Heisenberg limits and a minimally resourced quantum phase estimator. Physical Review A, 2016, 93, . | 2.5 | 2 |
| 169 | Limits to atom-vapor-based room-temperature photon-number-resolving detection. Physical Review A, 2018, 98, . | 2.5 | 2 |
| 170 | Enhanced phase estimation with coherently boosted two-mode squeezed beams and its application to optical gyroscopes. Physical Review A, 2020, 102, . | 2.5 | 2 |
| 171 | Entanglement-based quantum clock synchronization. AIP Conference Proceedings, 2020, , . | 0.4 | 2 |
| 172 | A Bootstrapping Approach for Generating Maximally Path-Entangled Photon States., 2007,,. | | 2 |
| 173 | Coulomb scattering near mirrors: Quantum corrections to the Rutherford formula. Physical Review A, 1992, 45, 3121-3125. | 2.5 | 1 |
| 174 | ALTERNATE SCHEME FOR OPTICAL CLUSTER-STATE GENERATION WITHOUT NUMBER-RESOLVING PHOTON DETECTORS. International Journal of Quantum Information, 2007, 05, 617-626. | 1.1 | 1 |
| 175 | Quantum Sensors, Computing, Metrology, and Imaging. , 2011, , . | | 1 |
| 176 | Single and biphoton imaging and high dimensional quantum communication. Quantum Information Processing, 2012, 11, 925-948. | 2.2 | 1 |
| 177 | On the uncertainty of the ordering of nonlocal wavefunction collapse when relativity is considered. Quantum Studies: Mathematics and Foundations, 2014, 1, 57-64. | 0.9 | 1 |
| 178 | On the connection between quantum nonlocality and phase sensitivity of two-mode entangled Fock state superpositions. Quantum Information Processing, 2016, 15, 1025-1042. | 2.2 | 1 |
| 179 | Modeling the atomtronic analog of an optical polarizing beam splitter, a half-wave plate, and a quarter-wave plate for phonons of the motional state of two trapped atoms. Physical Review A, 2017, 96, . | 2.5 | 1 |
| 180 | Enhanced Hanbury Brown and Twiss interferometry using parametric amplification. EPJ Quantum Technology, 2020, 7, . | 6.3 | 1 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 181 | Quantum Lithography. , 2002, , 391-397. | | О |
| 182 | Three-Dimensional Photonic Band-Gap Structures For Single-Photon on Demand Sources., 2006,,. | | 0 |
| 183 | Engineering Quantum States of Light on Demand via Projective Measurements. , 2007, , JTuB3. | | 0 |
| 184 | Novel Matter-wave Gyroscope via Vortex Superposition in BEC., 2009, , . | | 0 |
| 185 | Quantum Mie scattering and metrology with a Fabry-Perot interferometer and quantum states of light. , 2009, , . | | 0 |
| 186 | Two-Mode Squeezed Vacuum: Phase Estimation and Parity Detection. , 2011, , . | | 0 |
| 187 | Enhancing the efficiency of photovoltaic solar cells with photonic nanostructures. , 2012, , . | | 0 |
| 188 | Super-resolving single-photon number-path-entangled state and its generation. , 2014, , . | | 0 |
| 189 | Optimized aperiodic highly directional narrowband infrared emitters. Proceedings of SPIE, 2014, , . | 0.8 | 0 |
| 190 | Near Total Resonant Light Absorption in a Graphene Monolayer at Multiple Tunable Wavelengths with Aperiodic Multilayer Structures. , $2015, , .$ | | 0 |
| 191 | Sagnac effect in vortex superposition states of Bose-Einstein condensates. , 2007, , . | | 0 |
| 192 | Linear Optical Quantum Information Processing, Imaging, and Sensing., 2007,,. | | 0 |
| 193 | Sagnac effect in superposition of vortex states in Bose-Einstein condensates. , 2007, , . | | 0 |
| 194 | Linear Optical Quantum Information Processing, Imaging, and Sensing., 2007,,. | | 0 |
| 195 | A General Linear-Optical Quantum State Generator. , 2007, , . | | 0 |
| 196 | A Study of the Absorption Properties of Maximally Path Entangled Number States. , 2008, , . | | 0 |
| 197 | A Toolkit for Analyzing Quantum Imaging Systems. , 2008, , . | | 0 |
| 198 | Parity Detection for Heisenberg-limited Metrology with Coherent and Squeezed Vacuum Light. , $2011, \ldots$ | | 0 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Bayesian Analysis of Parity Based Detection Scheme. , 2011, , . | | O |
| 200 | Coherently generated of vortex superpositions in Bose-Einstein Condensates and their applications. , 2013, , . | | 0 |
| 201 | Path-Symmetric States and Parity Detection in Quantum Optical Interferometry. , 2013, , . | | 0 |
| 202 | Classical Computers Can Not Efficiently Simulate Multimode Linear Optical Interferometers with Arbitrary Fock-State Inputs. , 2013 , , . | | 0 |
| 203 | Super-Resolving Quantum Radar: Coherent-State Sources with Homodyne Detection Suffice to Beat the Diffraction Limit. , 2013 , , . | | 0 |
| 204 | Effects of Phase Fluctuations on the Sensitivity of NOON State in a Noisy Environment., 2013,,. | | 0 |
| 205 | Classical Computers Can Not Efficiently Simulate Multimode Linear Optical Interferometers with Arbitrary Fock-State Inputs. , 2013 , , . | | 0 |
| 206 | Spontaneous Emission and Nonlinear Effects in Photonic Band Gap Materials. , 1996, , 237-248. | | 0 |
| 207 | Local Field Effects in Nonlinear and Quantum Optics. , 1996, , 271-280. | | 0 |
| 208 | The Classical Lamb Shift: Why Jackson Is Wrong!. NATO ASI Series Series B: Physics, 1997, , 307-312. | 0.2 | 0 |
| 209 | Multiwavelength Resonant Absorption Enhancement and Highly Directional Absorption with Aperiodic Multilayer Structures. , 2015, , . | | 0 |
| 210 | Linear Optical Quantum Metrology with Single Photons. , 2015, , . | | 0 |
| 211 | Optimal Architectures for Single Photon Metrology. , 2016, , . | | 0 |
| 212 | Optimized Mid-Infrared Thermal Emitters for Applications in Aircraft Countermeasures., 2016,,. | | 0 |
| 213 | Room-Temperature Photon-Number-Resolved Detection Using A Two-Mode Squeezer. , 2018, , . | | 0 |
| 214 | Optimized Ultrabroadband Absorbing Multilayer Thin Film Structure. , 2018, , . | | 0 |
| 215 | Optical Gyroscope with Coherent-Boosted Two-Mode Squeezed Beams. , 2020, , . | | 0 |
| 216 | Quantum Enhancement of Optical Measurements using Four-wave Mixing in Rb vapor., 2020,,. | | 0 |