Thomas Konrad

List of Publications by Year in descending order

63 papers	1,832 citations	361045 20 h-index	264894 42 g-index
63 all docs	63 docs citations	63 times ranked	1410 citing authors

#	Article	IF	Citations
1	Higher-dimensional orbital-angular-momentum-based quantum key distribution with mutually unbiased bases. Physical Review A, 2013, 88, .	1.0	264
2	Characterizing quantum channels with non-separable states of classical light. Nature Physics, 2017, 13, 397-402.	6.5	218
3	Measuring the nonseparability of vector vortex beams. Physical Review A, 2015, 92, .	1.0	146
4	Evolution equation for quantum entanglement. Nature Physics, 2008, 4, 99-102.	6.5	141
5	Engineering two-photon high-dimensional states through quantum interference. Science Advances, 2016, 2, e1501165.	4.7	104
6	Orbital-angular-momentum entanglement in turbulence. Physical Review A, 2013, 88, .	1.0	96
7	Implementing Quantum Walks Using Orbital Angular Momentum of Classical Light. Physical Review Letters, 2013, 110, 263602.	2.9	88
8	Simultaneous entanglement swapping of multiple orbital angular momentum states of light. Nature Communications, 2017, 8, 632.	5.8	73
9	Counting statistics of many-particle quantum walks. Physical Review A, 2011, 83, .	1.0	54
10	Quantum mechanics and classical light. Contemporary Physics, 2019, 60, 1-22.	0.8	53
11	A deterministic detector for vector vortex states. Scientific Reports, 2017, 7, 13882.	1.6	44
12	Quantum computation with classical light: The Deutsch Algorithm. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 1675-1680.	0.9	38
13	Qudit-Teleportation for photons with linear optics. Scientific Reports, 2014, 4, 4543.	1.6	37
14	Experimentally observed decay of high-dimensional entanglement through turbulence. Physical Review A, 2016, 94, .	1.0	30
15	The effect of turbulence on entanglement-based free-space quantum key distribution with photonic orbital angular momentum. Journal of Optics (United Kingdom), 2016, 18, 064002.	1.0	29
16	Sequence of unsharp measurements enabling a real-time visualization of a quantum oscillation. Physical Review A, 2001, 63, .	1.0	28
17	Parameter dependence in the atmospheric decoherence of modally entangled photon pairs. Physical Review A, 2014, 90, .	1.0	28
18	Teleporting photonic qudits using multimode quantum scissors. Scientific Reports, 2013, 3, 3548.	1.6	26

#	Article	IF	Citations
19	A versatile quantum walk resonator with bright classical light. PLoS ONE, 2019, 14, e0214891.	1.1	24
20	Implementation of multidimensional quantum walks using linear optics and classical light. Physical Review A, 2015, 92, .	1.0	21
21	Spatial mode detection by frequency upconversion. Optics Letters, 2019, 44, 586.	1.7	21
22	Evolution of a qubit under the influence of a succession of weak measurements with unitary feedback. Physical Review A, 2002, 66, .	1.0	20
23	Coupled Ito equations of continuous quantum state measurement and estimation. Journal of Physics A, 2006, 39, L575-L581.	1.6	17
24	Quantum computation with classical light: Implementation of the Deutschâ€“Jozsa algorithm. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 1925-1931.	0.9	17
25	Quantum-optical weak measurements can visualize photon dynamics in real time. Physical Review A, 2002, 65, .	1.0	16
26	Maintaining quantum coherence in the presence of noise through state monitoring. Physical Review A, 2012, 85, .	1.0	16
27	Structural features of non-Markovian open quantum systems using quantum chains. Physical Review A, 2013, 87, .	1.0	16
28	Monitoring the wave function by time continuous position measurement. New Journal of Physics, 2010, 12, 043038.	1.2	15
29	The first iteration of Grover's algorithm using classical light with orbital angular momentum. Journal of Modern Optics, 2018, 65, 1942-1948.	0.6	15
30	Implementation schemes for unsharp measurements with trapped ions. Physical Review A, 2013, 87, .	1.0	13
31	Unitary equivalence of quantum walks. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 100-104.	0.9	13
32	Equation of motion for entanglement. Quantum Information Processing, 2009, 8, 523-534.	1.0	11
33	Unsharp continuous measurement of a Bose-Einstein condensate: Full quantum state estimation and the transition to classicality. Physical Review A, 2012, 86, .	1.0	10
34	Process tomography via sequential measurements on a single quantum system. Physical Review A, 2015, 92, .	1.0	10
35	Quantum control through measurement feedback. Physical Review A, 2018, 97, .	1.0	10
36	Analytical linear perturbation theory for highly eccentric satellite orbits. Celestial Mechanics and Dynamical Astronomy, 1995, 61, 369-387.	0.5	8

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37	Monitoring quantum oscillations with very small disturbance. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 361, 212-217.	0.9	8
38	Amplitude damping of Laguerre-Gaussian modes. Optics Express, 2010, 18, 22789.	1.7	8
39	Estimating the postmeasurement state. Physical Review A, 2003, 68, .	1.0	7
40	Heralded single-photon generation using imperfect single-photon sources and a two-photon-absorbing medium. Physical Review A, 2006, 73, .	1.0	6
41	Production of heralded pure single photons from imperfect sources using cross-phase-modulation. Physical Review A, 2006, 74, .	1.0	6
42	A remark on Fuchsâ€™ Bayesian interpretation of quantum mechanics. Studies in History and Philosophy of Science Part B - Studies in History and Philosophy of Modern Physics, 2008, 39, 273-287.	1.4	5
43	Turbulence and the Hong-Ou-Mandel effect. Physical Review A, 2018, 97, .	1.0	5
44	The decay of the orbital angular momentum entanglement in turbulence. , 2013, , .		5
45	A necessary condition for the security of differential-phase-shift quantum key distribution. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 305302.	0.7	3
46	Parameter estimation for mixed states from a single copy. Physical Review A, 2007, 75, .	1.0	2
47	Equation of motion for estimation fidelity of monitored oscillating qubits. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 2293-2297.	0.9	2
48	Approximate Realâ€“Time Visualization of a Quantum Transition by Means of Continuous Fuzzy Measurement. General Relativity and Gravitation, 2001, 33, 1165-1180.	0.7	1
49	Tracking the Oscillations of a Single Qubit by Means of Sequential Measurements. AIP Conference Proceedings, 2004, , .	0.3	1
50	Superoscillations: a scale physics perspective. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 465202.	0.7	1
51	Real-time state estimation and feedback control of an oscillating qubit via self-fulfilling prophecy (SFP). Metrologia, 2019, 56, 014003.	0.6	1
52	Robust control of quantum systems by quantum systems. Physical Review A, 2021, 104, .	1.0	1
53	Announcing single photons from imperfect sources by means of â€œinteraction-free" measurements. European Physical Journal: Special Topics, 2008, 159, 93-99.	1.2	0
54	Parameter dependence of the decoherence of orbital angular momentum entanglement in atmospheric turbulence. , 2011, , .		0

#	Article	IF	Citations
55	The implementation of quantum walks using classical light. Proceedings of SPIE, 2014, , .	0.8	0
56	Encoding mutually unbiased bases in orbital angular momentum for quantum key distribution. Proceedings of SPIE, 2014, , .	0.8	0
57	The evolution of OAM-entanglement between two qutrits in turbulence. Proceedings of SPIE, 2014, , .	0.8	0
58	From Classical to Quantum Optics. , 2014, , 41-76.		0
59	Digital bi-photon spiral imaging. , 2014, , .		0
60	Classical entanglement of vector vortex beams. , 2015, , .		0
61	Implementation of Deutsch and Deutsch-Jozsa algorithms with classical light. Proceedings of SPIE, 2016, , .	0.8	0
62	Quantum-key distribution with vector modes. , 2017, , .		0
63	Hybrid entanglement for quantum information and communication applications. , 2017, , .		0