Nathan K Langford

List of Publications by Year
in descending order

53	6,834	117625	254184
papers	citations	34 h-index	43 g-index

53	53	53	5342
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Boson Sampling on a Photonic Chip. Science, 2013, 339, 798-801.	12.6	686
2	Generation of Hyperentangled Photon Pairs. Physical Review Letters, 2005, 95, 260501.	7.8	610
3	Distance measures to compare real and ideal quantum processes. Physical Review A, 2005, 71, .	2.5	479
4	Quantum Process Tomography of a Controlled-NOT Gate. Physical Review Letters, 2004, 93, 080502.	7.8	378
5	Measuring Entangled Qutrits and Their Use for Quantum Bit Commitment. Physical Review Letters, 2004, 93, 053601.	7.8	307
6	Entangling Macroscopic Diamonds at Room Temperature. Science, 2011, 334, 1253-1256.	12.6	299
7	Towards high-speed optical quantum memories. Nature Photonics, 2010, 4, 218-221.	31.4	290
8	Linear optical controlled-NOT gate in the coincidence basis. Physical Review A, 2002, 65, .	2.5	258
9	Experimental non-classicality of an indivisible quantum system. Nature, 2011, 474, 490-493.	27.8	249
10	Demonstration of a Simple Entangling Optical Gate and Its Use in Bell-State Analysis. Physical Review Letters, 2005, 95, 210504.	7.8	222
11	Experimental Demonstration of a Compiled Version of Shorâ€™s Algorithm with Quantum Entanglement. Physical Review Letters, 2007, 99, 250505.	7.8	221
12	Loophole-free Einsteinâ€“Podolskyâ€“Rosen experiment via quantum steering. New Journal of Physics, 2012, 14, 053030.	2.9	206
13	Single-Photon-Level Quantum Memory at Room Temperature. Physical Review Letters, 2011, 107, 053603.	7.8	199
14	Violation of local realism with freedom of choice. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19708-19713.	7.1	196
15	Experimentally simulating the dynamics of quantum light and matter at deep-strong coupling. Nature Communications, 2017, 8, 1715.	12.8	155
16	Discrete Tunable Color Entanglement. Physical Review Letters, 2009, 103, 253601.	7.8	147
17	Quantum teleportation on a photonic chip. Nature Photonics, 2014, 8, 770-774.	31.4	144
18	Reducing intrinsic loss in superconducting resonators by surface treatment and deep etching of silicon substrates. Applied Physics Letters, 2015, 106, .	3.3	137

#	Article	IF	Citations
19	Manipulating Biphotonic Qutrits. Physical Review Letters, 2008, 100, 060504.	7.8	132
20	Multiphoton quantum interference in a multiport integrated photonic device. Nature Communications, 2013, 4, 1356.	12.8	128
21	Efficient quantum computing using coherent photon conversion. Nature, 2011, 478, 360-363.	27.8	122
22	Enhancing Multiphoton Rates with Quantum Memories. Physical Review Letters, 2013, 110, 133601.	7.8	118
23	Macroscopic non-classical states and terahertz quantum processing in room-temperature diamond. Nature Photonics, 2012, 6, 41-44.	31.4	112
24	Measuring two-qubit gates. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 172.	2.1	111
25	On-chip low loss heralded source of pure single photons. Optics Express, 2013, 21, 13522.	3.4	107
26	Choice of measurement sets in qubit tomography. Physical Review A, 2008, 78, .	2.5	102
27	On-chip, photon-number-resolving, telecommunication-band detectors for scalable photonic information processing. Physical Review A, 2011, 84, .	2.5	75
28	Adaptive slit beam shaping for direct laser written waveguides. Optics Letters, 2012, 37, 470.	3.3	74
29	Multipulse Addressing of a Raman Quantum Memory: Configurable Beam Splitting and Efficient Readout. Physical Review Letters, 2012, 108, 263602.	7.8	68
30	Polarization-entanglement-conserving frequency conversion of photons. Physical Review A, 2012, 85, .	2.5	66
31	Tuneable hopping and nonlinear cross-Kerr interactions in a high-coherence superconducting circuit. Npj Quantum Information, 2018, 4, .	6.7	66
32	Evolution of Nanowire Transmon Qubits and Their Coherence in a Magnetic Field. Physical Review Letters, 2018, 120, 100502.	7.8	63
33	Compact Continuous-Variable Entanglement Distillation. Physical Review Letters, 2012, 108, 060502.	7.8	54
34	Contextuality without nonlocality in a superconducting quantum system. Nature Communications, 2016, 7, 12930.	12.8	38
35	High-fidelity polarization storage in a gigahertz bandwidth quantum memory. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 124008.	1.5	35
36	Independent, extensible control of same-frequency superconducting qubits by selective broadcasting. Npj Quantum Information, 2016, 2, .	6.7	35

#	Article	IF	Citations
37	Chip-to-chip entanglement of transmon qubits using engineered measurement fields. Physical Review B, 2018, 97, .	3.2	25
38	Adaptive phase estimation is more accurate than nonadaptive phase estimation for continuous beams of light. Physical Review A, 2004, 70, .	2.5	23
39	Integrated photonic sensing. New Journal of Physics, 2011, 13, 055024.	2.9	23
40	Entanglement Generation by Fock-State Filtration. Physical Review Letters, 2007, 98, 203602.	7.8	21
41	Errors in quantum tomography: diagnosing systematic versus statistical errors. New Journal of Physics, 2013, 15, 035003.	2.9	21
42	Experimentally generating and tuning robust entanglement between photonic qubits. New Journal of Physics, 2009, 11, 013008.	2.9	16
43	Quantum memory in an optical lattice. Physical Review A, 2010, 82, .	2.5	12
44	Quantum interference of multiple on-chip heralded sources of pure single photons. , 2014, , .		2
45	Applications of Raman Scattering in Quantum Technologies. , 2010, , .		1
46	Quantum Chaos and Universal Trotterisation Performance Behaviours in Digital Quantum Simulation. , 2021, , .		1
47	The practicality of adaptive phase estimation. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq1 1 0.784314 rgBT /O	0.6	0
48	Hyper-entanglement: Generation and applications. , 2006, , .		0
49	Efficient quantum logic circuits: or, How I Learned to Stop Worrying and Love Hilbert Space. , 2007, , IFB3.		0
50	Single-photon-level memory at room temperature. , 2011, , .		0
51	Synchronizing single photons with quantum memories. , 2012, , .		0
52	Quantum memories and large-scale quantum coherence based on Raman interactions. , 2013, , .		0
53	Efficient quantum-logic circuits: or, How I Learned to Stop Worrying and Love Hilbert Space. , 2007, , .		0