Neill Lambert

List of Publications by Year
in descending order

51 papers	3,565 citations	186265 28 h-index	197818 49 g-index
51 all docs	51 docs citations	51 times ranked	2794 citing authors

#	Article	IF	Citations
1	Quantum biology. Nature Physics, 2013, 9, 10-18.	16.7	692
2	Entanglement and the Phase Transition in Single-Mode Superradiance. Physical Review Letters, 2004, 92, 073602.	7.8	395
3	Leggettâ€“Garg inequalities. Reports on Progress in Physics, 2014, 77, 016001.	20.1	295
4	Witnessing Quantum Coherence: from solid-state to biological systems. Scientific Reports, 2012, 2, 885.	3.3	239
5	Environmental dynamics, correlations, and the emergence of noncanonical equilibrium states in open quantum systems. Physical Review A, 2014, 90, .	2.5	150
6	Open quantum systems with local and collective incoherent processes: Efficient numerical simulations using permutational invariance. Physical Review A, 2018, 98, .	2.5	143
7	Nonequilibrium thermodynamics in the strong coupling and non-Markovian regime based on a reaction coordinate mapping. New Journal of Physics, 2016, 18, 073007.	2.9	139
8	Surface plasmons in a metal nanowire coupled to colloidal quantum dots: Scattering properties and quantum entanglement. Physical Review B, 2011, 84, .	3.2	117
9	Energy transfer in structured and unstructured environments: Master equations beyond the Born-Markov approximations. Journal of Chemical Physics, 2016, 144, 044110.	3.0	92
10	Efficient quantum simulation of photosynthetic light harvesting. Npj Quantum Information, 2018, 4, .	6.7	92
11	Quantifying Non-Markovianity with Temporal Steering. Physical Review Letters, 2016, 116, 020503.	7.8	84
12	Ground State Electroluminescence. Physical Review Letters, 2016, 116, 113601.	7.8	71
13	Distinguishing Quantum and Classical Transport through Nanostructures. Physical Review Letters, 2010, 105, 176801.	7.8	62
14	Amplified Optomechanical Transduction of Virtual Radiation Pressure. Physical Review Letters, 2017, 119, 053601.	7.8	60
15	Using non-Markovian measures to evaluate quantum master equations for photosynthesis. Scientific Reports, 2015, 5, 12753.	3.3	58
16	Modelling the ultra-strongly coupled spin-boson model with unphysical modes. Nature Communications, 2019, 10, 3721.	12.8	57
17	Temporal steering inequality. Physical Review A, 2014, 89, .	2.5	56
18	Quantum chaos and critical behavior on a chip. Physical Review B, 2009, 80, .	3.2	43

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19	Macrorealism inequality for optoelectromechanical systems. Physical Review B, 2011, 84, .	3.2	42
20	Photon-mediated electron transport in hybrid circuit-QED. Europhysics Letters, 2013, 103, 17005.	2.0	39
21	Leggett-Garg inequality violations with a large ensemble of qubits. Physical Review A, 2016, 94, .	2.5	39
22	Certifying single-system steering for quantum-information processing. Physical Review A, 2015, 92, .	2.5	38
23	Experimental test of non-macrorealistic cat states in the cloud. Npj Quantum Information, 2020, 6, .	6.7	36
24	Bistable Photon Emission from a Solid-State Single-Atom Laser. Physical Review Letters, 2015, 115, 216803.	7.8	34
25	Superradiance with an ensemble of superconducting flux qubits. Physical Review B, 2016, 94, .	3.2	34
26	Optimizing co-operative multi-environment dynamics in a dark-state-enhanced photosynthetic heat engine. Journal of Chemical Physics, 2018, 149, 084112.	3.0	31
27	Speeding up a quantum refrigerator via counterdiabatic driving. Physical Review B, 2019, 100, .	3.2	31
28	Leggett-Garg inequality in electron interferometers. Physical Review B, 2012, 86, .	3.2	28
29	Spatio-Temporal Steering for Testing Nonclassical Correlations in Quantum Networks. Scientific Reports, 2017, 7, 3728.	3.3	28
30	Shortcuts to Adiabatic Pumping in Classical Stochastic Systems. Physical Review Letters, 2020, 124, 150603.	7.8	25
31	Vibrationally mediated transport in molecular transistors. Physical Review B, 2013, 87, .	3.2	24
32	Efficient quantum simulation of open quantum dynamics at various Hamiltonians and spectral densities. Frontiers of Physics, 2021, 16, 1.	5.0	24
33	Pulse-level noisy quantum circuits with QuTiP. Quantum - the Open Journal for Quantum Science, 0, 6, 630.	0.0	24
34	Temporal steering in four dimensions with applications to coupled qubits and magnetoreception. Physical Review A, 2016, 94, .	2.5	23
35	Hierarchy in temporal quantum correlations. Physical Review A, 2018, 98, .	2.5	23
36	Securing quantum networking tasks with multipartite Einstein-Podolsky-Rosen steering. Physical Review A, 2019, 99, .	2.5	21

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37	When do perturbative approaches accurately capture the dynamics of complex quantum systems?. Scientific Reports, 2016, 6, 28204.	3.3	20
38	Amplified and tunable transverse and longitudinal spin-photon coupling in hybrid circuit-QED. Physical Review B, 2018, 97, .	3.2	18
39	Delocalized single-photon Dicke states and the Leggett-Garg inequality in solid state systems. Scientific Reports, 2012, 2, 869.	3.3	16
40	Collectively induced exceptional points of quantum emitters coupled to nanoparticle surface plasmons. Physical Review A, 2020, 101, .	2.5	16
41	Quantifying Quantumness of Channels Without Entanglement. PRX Quantum, 2022, 3, .	9.2	16
42	Unified single-photon and single-electron counting statistics: From cavity QED to electron transport. Physical Review A, 2010, 82, .	2.5	15
43	Beyond Marcus theory and the Landauerâ€“BÃ¼ttiker approach in molecular junctions. II. A self-consistent Born approach. Journal of Chemical Physics, 2020, 152, 064103.	3.0	15
44	Confidence and backaction in the quantum filter equation. Physical Review A, 2012, 86, .	2.5	13
45	Multielectron Ground State Electroluminescence. Physical Review Letters, 2019, 122, 190403.	7.8	12
46	General Bound on the Performance of Counter-Diabatic Driving Acting on Dissipative Spin Systems. Physical Review Letters, 2021, 127, 150401.	7.8	11
47	Canonical derivation of the fermionic influence superoperator. Physical Review B, 2022, 105, .	3.2	8
48	Steady-State Heat Transport and Work With a Single Artificial Atom Coupled to a Waveguide: Emission Without External Driving. PRX Quantum, 2022, 3, .	9.2	7
49	Quantum steering as a witness of quantum scrambling. Physical Review A, 2021, 104, .	2.5	6
50	Projecting an ultra-strongly-coupled system in a non-energy-eigenbasis with a driven nonlinear resonator. Scientific Reports, 2020, 10, 1751.	3.3	3
51	Hidden nonmacrorealism: Reviving the Leggett-Garg inequality with stochastic operations. Physical Review Research, 2021, 3, .	3.6	0