

# Ángel Rivas

## List of Publications by Year in descending order

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42  
papers

3,280  
citations

331670

21  
h-index

302126

39  
g-index

43  
all docs

43  
docs citations

43  
times ranked

1977  
citing authors

#	ARTICLE	IF	CITATIONS
1	Entanglement and Non-Markovianity of Quantum Evolutions. <i>Physical Review Letters</i> , 2010, 105, 050403.	7.8	765
2	Quantum non-Markovianity: characterization, quantification and detection. <i>Reports on Progress in Physics</i> , 2014, 77, 094001.	20.1	702
3	Measures of non-Markovianity: Divisibility versus backflow of information. <i>Physical Review A</i> , 2011, 83, .	2.5	221
4	Exact mapping between system-reservoir quantum models and semi-infinite discrete chains using orthogonal polynomials. <i>Journal of Mathematical Physics</i> , 2010, 51, .	1.1	214
5	Markovian master equations: a critical study. <i>New Journal of Physics</i> , 2010, 12, 113032.	2.9	171
6	Non-Markovianity-Assisted Steady State Entanglement. <i>Physical Review Letters</i> , 2012, 108, 160402.	7.8	161
7	Uhlmann Phase as a Topological Measure for One-Dimensional Fermion Systems. <i>Physical Review Letters</i> , 2014, 112, 130401.	7.8	121
8	Precision Quantum Metrology and Nonclassicality in Linear and Nonlinear Detection Schemes. <i>Physical Review Letters</i> , 2010, 105, 010403.	7.8	92
9	Two-Dimensional Density-Matrix Topological Fermionic Phases: Topological Uhlmann Numbers. <i>Physical Review Letters</i> , 2014, 113, 076408.	7.8	81
10	Density-matrix Chern insulators: Finite-temperature generalization of topological insulators. <i>Physical Review B</i> , 2013, 88, .	3.2	76
11	Strong Coupling Thermodynamics of Open Quantum Systems. <i>Physical Review Letters</i> , 2020, 124, 160601.	7.8	61
12	Thermal instability of protected end states in a one-dimensional topological insulator. <i>Physical Review B</i> , 2012, 86, .	3.2	59
13	Observation of topological Uhlmann phases with superconducting qubits. <i>Npj Quantum Information</i> , 2018, 4, .	6.7	59
14	Vanishing quantum discord is not necessary for completely positive maps. <i>Physical Review A</i> , 2013, 87, .	2.5	54
15	Divisibility and Information Flow Notions of Quantum Markovianity for Noninvertible Dynamical Maps. <i>Physical Review Letters</i> , 2018, 121, 080407.	7.8	49
16	Sub-Heisenberg estimation of non-random phase shifts. <i>New Journal of Physics</i> , 2012, 14, 093052.	2.9	46
17	Topological Heat Transport and Symmetry-Protected Boson Currents. <i>Scientific Reports</i> , 2017, 7, 6350.	3.3	34
18	Refined weak-coupling limit: Coherence, entanglement, and non-Markovianity. <i>Physical Review A</i> , 2017, 95, .	2.5	34

#	ARTICLE	IF	CITATIONS
19	Characterization of quantum angular-momentum fluctuations via principal components. <i>Physical Review A</i> , 2008, 77, .	2.5	33
20	Symmetry-protected topological phases at finite temperature. <i>2D Materials</i> , 2015, 2, 034006.	4.4	33
21	Nonclassicality of states and measurements by breaking classical bounds on statistics. <i>Physical Review A</i> , 2009, 79, .	2.5	28
22	Probing a composite spin-boson environment. <i>New Journal of Physics</i> , 2009, 11, 063028.	2.9	20
23	Stochastic resonance phenomena in spin chains. <i>European Physical Journal B</i> , 2009, 69, 51-57.	1.5	20
24	Generalized toric codes coupled to thermal baths. <i>New Journal of Physics</i> , 2012, 14, 033044.	2.9	19
25	SU(2)-invariant depolarization of quantum states of light. <i>Physical Review A</i> , 2013, 88, .	2.5	14
26	Quantifying spatial correlations of general quantum dynamics. <i>New Journal of Physics</i> , 2015, 17, 062001.	2.9	14
27	Experimental quantification of spatial correlations in quantum dynamics. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 2, 90.	0.0	14
28	Intrinsic metrological resolution as a distance measure and nonclassical light. <i>Physical Review A</i> , 2008, 77, .	2.5	12
29	Quantum Thermodynamics in the Refined Weak Coupling Limit. <i>Entropy</i> , 2019, 21, 725.	2.2	10
30	Practical schemes for the measurement of angular-momentum covariance matrices in quantum optics. <i>Physical Review A</i> , 2008, 78, .	2.5	9
31	Iterative Phase Optimization of Elementary Quantum Error Correcting Codes. <i>Physical Review X</i> , 2016, 6, .	8.9	9
32	Nonlinear Michelson interferometer for improved quantum metrology. <i>Physical Review A</i> , 2015, 92, .	2.5	7
33	Angular-momentum nonclassicality by breaking classical bounds on statistics. <i>Physical Review A</i> , 2011, 84, .	2.5	6
34	Nonlinear fiber gyroscope for quantum metrology. <i>Physical Review A</i> , 2016, 94, .	2.5	6
35	Geometry of joint reality: Device-independent steering and operational completeness. <i>Physical Review A</i> , 2019, 100, .	2.5	6
36	On the role of joint probability distributions of incompatible observables in Bell and Kochenâ€“Specker Theorems. <i>Annals of Physics</i> , 2019, 411, 167939.	2.8	5

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37	Dynamics of thermal effects in the spin-wave theory of quantum antiferromagnets. <i>Annals of Physics</i> , 2013, 331, 9-23.	2.8	4
38	The effects of thermal and correlated noise on magnons in a quantum ferromagnet. <i>New Journal of Physics</i> , 2018, 20, 093017.	2.9	4
39	Independent nonclassical tests for states and measurements in the same experiment. <i>Physica Scripta</i> , 2011, T143, 014015.	2.5	2
40	Relaxation times do not capture logical qubit dynamics. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 6, 632.	0.0	2
41	Robust Nonequilibrium Edge Currents with and without Band Topology. <i>Physical Review Letters</i> , 2022, 128, 120403.	7.8	1
42	Information Flow Versus Divisibility for Non-invertible Dynamical Maps. <i>Springer Proceedings in Physics</i> , 2019, , 15-28.	0.2	0