Federico Carollo

List of Publications by Year in descending order

46 papers	924 citations	394421 19 h-index	477307 29 g-index
46 all docs	46 docs citations	46 times ranked	484 citing authors

#	ARTICLE	IF	CITATIONS
1	Unraveling the Large Deviation Statistics of Markovian Open Quantum Systems. Physical Review Letters, 2019, 122, 130605.	7.8	97
2	Discrete Time Crystals in the Absence of Manifest Symmetries or Disorder in Open Quantum Systems. Physical Review Letters, 2019, 122, 015701.	7.8	90
3	Making rare events typical in Markovian open quantum systems. Physical Review A, 2018, 98, .	2.5	67
4	Spreading of correlations in Markovian open quantum systems. Physical Review B, 2021, 103, .	3.2	44
5	Fluctuating hydrodynamics, current fluctuations, and hyperuniformity in boundary-driven open quantum chains. Physical Review E, 2017, 96, 052118.	2.1	35
6	Critical Behavior of the Quantum Contact Process in One Dimension. Physical Review Letters, 2019, 123, 100604.	7.8	34
7	Exponentially Accelerated Approach to Stationarity in Markovian Open Quantum Systems through the Mpemba Effect. Physical Review Letters, 2021, 127, 060401.	7.8	33
8	Classical stochastic discrete time crystals. Physical Review E, 2019, 100, 060105.	2.1	32
9	Exactness of Mean-Field Equations for Open Dicke Models with an Application to Pattern Retrieval Dynamics. Physical Review Letters, 2021, 126, 230601.	7.8	29
10	Nonequilibrium Quantum Many-Body Rydberg Atom Engine. Physical Review Letters, 2020, 124, 170602.	7.8	27
11	Large Deviations at Level 2.5 for Markovian Open Quantum Systems: Quantum Jumps and Quantum State Diffusion. Journal of Statistical Physics, 2021, 184, 1.	1.2	27
12	Enhancing correlation times for edge spins through dissipation. Physical Review B, 2018, 98, .	3.2	26
13	Quantum spin chain dissipative mean-field dynamics. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 325001.	2.1	21
14	Numerical simulation of critical dissipative non-equilibrium quantum systems with an absorbing state. New Journal of Physics, 2019, 21, 093064.	2.9	21
15	Building Continuous Time Crystals from Rare Events. Physical Review Letters, 2020, 125, 160601.	7.8	21
16	Dynamical Phases and Quantum Correlations in an Emitter-Waveguide System with Feedback. Physical Review Letters, 2021, 127, 133601.	7.8	21
17	Dissipative quasiparticle picture for quadratic Markovian open quantum systems. Physical Review B, 2022, 105, .	3.2	20
18	Current fluctuations in boundary-driven quantum spin chains. Physical Review B, 2018, 98, .	3.2	19

#	Article	IF	Citations
19	Exact solution of a boundary time-crystal phase transition: Time-translation symmetry breaking and non-Markovian dynamics of correlations. Physical Review A, 2022, 105, .	2.5	19
20	Designing nonequilibrium states of quantum matter through stochastic resetting. Physical Review B, 2021, 104, .	3.2	18
21	Hydrodynamics of quantum entropies in Ising chains with linear dissipation. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 074002.	2.1	18
22	Nonequilibrium Phase Transitions in (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq0 0 0 rgBT /Overlock 10 Letters, 2020, 125, 100403.	7.8	17
23	Non-markovian mesoscopic dissipative dynamics of open quantum spin chains. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 381-389.	2.1	15
24	Strong zero modes in a class of generalized Ising spin ladders with plaquette interactions. Physical Review B, 2019, 100, .	3.2	14
25	Signatures of Associative Memory Behavior in a Multimode Dicke Model. Physical Review Letters, 2020, 125, 070604.	7.8	14
26	Nonequilibrium Many-Body Quantum Engine Driven by Time-Translation Symmetry Breaking. Physical Review Letters, 2020, 125, 240602.	7.8	14
27	Trajectory phase transitions in noninteracting spin systems. Physical Review E, 2020, 101, 042115.	2.1	14
28	Noninteracting fermionic systems with localized losses: Exact results in the hydrodynamic limit. Physical Review B, 2022, 105, .	3.2	14
29	Dissipative entanglement of quantum spin fluctuations. Journal of Mathematical Physics, 2016, 57, 062208.	1.1	13
30	Dynamical criticality in open systems: Nonperturbative physics, microscopic origin, and direct observation. Physical Review E, 2018, 98, .	2.1	11
31	Machine learning time-local generators of open quantum dynamics. Physical Review Research, 2021, 3, .	3.6	11
32	Entanglement statistics in Markovian open quantum systems: A matter of mutation and selection. Physical Review E, 2020, 102, 030104.	2.1	10
33	Dissipative dynamics of quantum fluctuations. Annalen Der Physik, 2015, 527, 639-655.	2.4	8
34	Quantum fluctuations in mesoscopic systems. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 423001.	2.1	8
35	Environment induced entanglement in many-body mesoscopic systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 1700-1703.	2.1	7
36	Numerical simulation of quantum nonequilibrium phase transitions without finite-size effects. Physical Review A, 2021, 103, .	2.5	7

#	Article	IF	Citations
37	Nonequilibrium Dark Space Phase Transition. Physical Review Letters, 2022, 128, 040603.	7.8	7
38	Dynamics of strongly coupled disordered dissipative spin-boson systems. Physical Review Research, 2020, 2, .	3.6	5
39	Quantum and Classical Temporal Correlations in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:mn>1</mml:mn><mml:mo>+</mml:mo><mml:mn>1</mml:mn><mml:mo) Tj ET Q q1 1 0 1 784314 8 Quantum Cellular Automata. Physical Review Letters, 2021, 127, 230502.	7.0	5
40	COGAS plant as possible future alternative to the diesel engine for the propulsion of large ships. , 2011, , 603-613.		4
41	Accelerating the approach of dissipative quantum spin systems towards stationarity through global spin rotations. Physical Review A, 2022, 106, .	2.5	3
42	Long-Lived Mesoscopic Entanglement Between Two Damped Infinite Harmonic Chains. Journal of Statistical Physics, 2017, 168, 620-651.	1.2	2
43	Microscopic biasing of discrete-time quantum trajectories. Quantum Science and Technology, 2021, 6, 045011.	5.8	2
44	A non-Markovian Dissipative Maryland Model. Open Systems and Information Dynamics, 2013, 20, 1340001.	1.2	0
45	Witnessing nonclassicality through large deviations in quantum optics. Physical Review Research, 2020, 2, .	3.6	0
46	Inferring Markovian quantum master equations of few-body observables in interacting spin chains. New Journal of Physics, 0, , .	2.9	0