

Luigi Amico

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6713978/publications.pdf>

Version: 2024-02-01

92
papers

7,340
citations

147801

31
h-index

53230

85
g-index

93
all docs

93
docs citations

93
times ranked

3637
citing authors

#	ARTICLE	IF	CITATIONS
1	Entanglement in many-body systems. <i>Reviews of Modern Physics</i> , 2008, 80, 517-576.	45.6	2,781
2	Scaling of entanglement close to a quantum phase transition. <i>Nature</i> , 2002, 416, 608-610.	27.8	1,577
3	Dynamics of entanglement in one-dimensional spin systems. <i>Physical Review A</i> , 2004, 69, .	2.5	253
4	Quantum Many Particle Systems in Ring-Shaped Optical Lattices. <i>Physical Review Letters</i> , 2005, 95, 063201.	7.8	192
5	Topology-Induced Anomalous Defect Production by Crossing a Quantum Critical Point. <i>Physical Review Letters</i> , 2009, 102, 135702.	7.8	143
6	Divergence of the entanglement range in low-dimensional quantum systems. <i>Physical Review A</i> , 2006, 74, .	2.5	107
7	Superfluid qubit systems with ring shaped optical lattices. <i>Scientific Reports</i> , 2014, 4, 4298.	3.3	101
8	Adiabatic Dynamics in Open Quantum Critical Many-Body Systems. <i>Physical Review Letters</i> , 2008, 101, 175701.	7.8	90
9	Focus on atomtronics-enabled quantum technologies. <i>New Journal of Physics</i> , 2017, 19, 020201.	2.9	89
10	Integrable Model for Interacting Electrons in Metallic Grains. <i>Physical Review Letters</i> , 2001, 86, 5759-5762.	7.8	88
11	Roadmap on Atomtronics: State of the art and perspective. <i>AVS Quantum Science</i> , 2021, 3, .	4.9	87
12	Dynamical Mean Field Theory of the Bose-Hubbard Model. <i>Physical Review Letters</i> , 1998, 80, 2189-2192.	7.8	84
13	Statistical mechanics of the cluster Ising model. <i>Physical Review A</i> , 2011, 84, .	2.5	84
14	Anisotropic Rabi model. <i>Physical Review X</i> , 2014, 4, .	8.9	83
15	Quantum phase transition between cluster and antiferromagnetic states. <i>Europhysics Letters</i> , 2011, 95, 50001.	2.0	74
16	Coherent superposition of current flows in an atomtronic quantum interference device. <i>New Journal of Physics</i> , 2015, 17, 045023.	2.9	70
17	Ground-state factorization and correlations with broken symmetry. <i>Europhysics Letters</i> , 2011, 96, 27002.	2.0	60
18	Adiabatic dynamics of a quantum critical system coupled to an environment: Scaling and kinetic equation approaches. <i>Physical Review B</i> , 2009, 80, .	3.2	51

#	ARTICLE	IF	CITATIONS
19	Dynamical delocalization of Majorana edge states by sweeping across a quantum critical point. <i>New Journal of Physics</i> , 2010, 12, 055014.	2.9	51
20	Time-dependent mean-field theory of the superfluid-insulator phase transition. <i>Physical Review B</i> , 2000, 62, 1224-1237.	3.2	43
21	Topological order in 1D Cluster state protected by symmetry. <i>Quantum Information Processing</i> , 2012, 11, 1961-1968.	2.2	42
22	Effective dynamics of cold atoms flowing in two ring-shaped optical potentials with tunable tunneling. <i>Physical Review A</i> , 2013, 88, .	2.5	40
23	QUANTUM DISCORD IN THE GROUND STATE OF SPIN CHAINS. <i>International Journal of Modern Physics B</i> , 2013, 27, 1345030.	2.0	39
24	Roadmap on quantum optical systems. <i>Journal of Optics (United Kingdom)</i> , 2016, 18, 093001.	2.2	37
25	Entanglement crossover close to a quantum critical point. <i>Europhysics Letters</i> , 2007, 77, 17001.	2.0	36
26	The BCS model and the off-shell Bethe ansatz for vertex models. <i>Journal of Physics A</i> , 2001, 34, 6425-6434.	1.6	35
27	Exact Correlation Functions of the BCS Model in the Canonical Ensemble. <i>Physical Review Letters</i> , 2002, 88, 127003.	7.8	35
28	Quantum instability and edge entanglement in the quasi-long-range order. <i>Physical Review A</i> , 2009, 79, .	2.5	35
29	One-dimensional XXZ model for particles obeying fractional statistics. <i>Physical Review B</i> , 1998, 58, R1703-R1706.	3.2	34
30	Separation of variables for integrable spin-1/2 boson models. <i>Nuclear Physics B</i> , 2010, 839, 604-626.	2.5	34
31	Integrable models for confined fermions: applications to metallic grains. <i>Nuclear Physics B</i> , 2001, 614, 449-466.	2.5	33
32	Electrostatic Analogy for Integrable Pairing Force Hamiltonians. <i>Annals of Physics</i> , 2002, 299, 228-250.	2.8	29
33	Bound entanglement in the XY model. <i>New Journal of Physics</i> , 2007, 9, 322-322.	2.9	25
34	Local characterization of one-dimensional topologically ordered states. <i>Physical Review B</i> , 2013, 88, .	3.2	25
35	Readout of the atomtronic quantum interference device. <i>Physical Review A</i> , 2018, 97, .	2.5	25
36	Exact solution of generalized Schulz-Shastry type models. <i>Nuclear Physics B</i> , 2000, 588, 531-551.	2.5	24

#	ARTICLE	IF	CITATIONS
37	An atomtronic flux qubit: a ring lattice of Bose-Einstein condensates interrupted by three weak links. <i>New Journal of Physics</i> , 2016, 18, 075013.	2.9	24
38	Charge-qubit-atom hybrid. <i>Physical Review A</i> , 2016, 93, .	2.5	24
39	Quasi-classical descendants of disordered vertex models with boundaries. <i>Nuclear Physics B</i> , 2002, 644, 409-432.	2.5	22
40	Entanglement in a spin system with inverse square statistical interaction. <i>New Journal of Physics</i> , 2010, 12, 025022.	2.9	22
41	Out of equilibrium correlation functions of quantum anisotropic XY models: one-particle excitations. <i>Journal of Physics A</i> , 2004, 37, 291-302.	1.6	21
42	Universality of the one-dimensional Bose gas with delta interaction. <i>Annals of Physics</i> , 2004, 314, 496-507.	2.8	21
43	Integrable spin-boson models descending from rational six-vertex models. <i>Nuclear Physics B</i> , 2007, 787, 283-300.	2.5	21
44	Superconducting resonator and Rydberg atom hybrid system in the strong coupling regime. <i>Physical Review A</i> , 2016, 94, .	2.5	21
45	Entanglement and magnetic order. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 504001.	2.1	20
46	Home infusion program with enzyme replacement therapy for Fabry disease: The experience of a large Italian collaborative group. <i>Molecular Genetics and Metabolism Reports</i> , 2017, 12, 85-91.	1.1	20
47	Local Response of Topological Order to an External Perturbation. <i>Physical Review Letters</i> , 2013, 110, 210602.	7.8	19
48	Fermionic long-range correlations realized by particles obeying deformed statistics. <i>Journal of Physics A</i> , 2000, 33, L487-L492.	1.6	18
49	Integrable spin-boson interaction in the Tavis-Cummings model from a generic boundary twist. <i>European Physical Journal B</i> , 2005, 43, 387-391.	1.5	18
50	Hidden order in bosonic gases confined in one-dimensional optical lattices. <i>New Journal of Physics</i> , 2010, 12, 013002.	2.9	18
51	Topological pumping in Aharonov-Bohm rings. <i>Communications Physics</i> , 2019, 2, .	5.3	18
52	QUANTUM DISCORD IN A SPIN SYSTEM WITH SYMMETRY BREAKING. <i>International Journal of Modern Physics B</i> , 2012, 26, 1243002.	2.0	17
53	Mesoscopic Vortex-Meissner currents in ring ladders. <i>Quantum Science and Technology</i> , 2018, 3, 035006.	5.8	17
54	Local Convertibility and the Quantum Simulation of Edge States in Many-Body Systems. <i>Physical Review X</i> , 2014, 4, .	8.9	16

#	ARTICLE	IF	CITATIONS
55	Exact analysis of the spectral properties of the anisotropic two-bosons Rabi model. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 204001.	2.1	16
56	Aharonov-Bohm effect in mesoscopic Bose-Einstein condensates. Physical Review A, 2019, 100, .	2.5	16
57	Bethe Ansatz solution of a new class of Hubbard-type models. Journal of Physics A, 2000, 33, L87-L92.	1.6	15
58	Thermalization Dynamics Close to a Quantum Phase Transition. Physical Review Letters, 2009, 102, 245701.	7.8	15
59	Quantum State Transmission in a Superconducting Charge Qubit-Atom Hybrid. Scientific Reports, 2016, 6, 38356.	3.3	15
60	Entanglement convertibility by sweeping through the quantum phases of the alternating bonds XXZ chain. Scientific Reports, 2016, 6, 26453.	3.3	15
61	Exact results for persistent currents of two bosons in a ring lattice. Physical Review A, 2020, 101, .	2.5	15
62	Optimal Correlations in Many-Body Quantum Systems. Physical Review Letters, 2012, 108, 240503.	7.8	14
63	Local reversibility and entanglement structure of many-body ground states. Quantum Science and Technology, 2017, 2, 015005.	5.8	14
64	Rise and Fall of a Bright Soliton in an Optical Lattice. Physical Review Letters, 2019, 122, 053001.	7.8	14
65	Machine-learning engineering of quantum currents. Physical Review Research, 2021, 3, .	3.6	14
66	Superconducting qubit-resonator-atom hybrid system. Quantum Science and Technology, 2017, 2, 035005.	5.8	13
67	Persistent current of SU(N) fermions. SciPost Physics, 2022, 12, .	4.9	13
68	Monitoring currents in cold-atom circuits. Physical Review A, 2019, 100, .	2.5	12
69	Topological pumping of quantum correlations. Physical Review Research, 2020, 2, .	3.6	12
70	Stabilizing Rabi oscillation of a charge qubit via the atomic clock technique. New Journal of Physics, 2018, 20, 023031.	2.9	10
71	Andreev-reflection and Aharonov-Bohm dynamics in atomtronic circuits. Quantum Science and Technology, 2019, 4, 045001.	5.8	10
72	Enhancing sensitivity to rotations with quantum solitonic currents. SciPost Physics, 2022, 12, .	4.9	10

#	ARTICLE	IF	CITATIONS
73	Bethe Ansatz approach to the pairing fluctuations in the mesoscopic regime. Annalen Der Physik, 2012, 524, 133-145.	2.4	9
74	Local convertibility of the ground state of the perturbed toric code. Physical Review B, 2014, 90, .	3.2	9
75	Scaling of geometric phase versus band structure in cluster-Ising models. Physical Review E, 2017, 96, 020106.	2.1	9
76	Control of entanglement transitions in quantum spin clusters. Physical Review B, 2017, 96, .	3.2	8
77	Coherent phase slips in coupled matter-wave circuits. Physical Review Research, 2022, 4, .	3.6	7
78	Supersolid phase in fully frustrated Josephson-junction arrays. Physical Review B, 1997, 55, 1100-1109.	3.2	6
79	ALGEBRAIC EQUIVALENCE BETWEEN CERTAIN MODELS FOR SUPERFLUID-INSULATOR TRANSITION. Modern Physics Letters B, 2000, 14, 759-766.	1.9	6
80	Multimode NOON states in driven atomtronic circuits. Physical Review Research, 2020, 2, .	3.6	6
81	The quantum solitons atomtronic interference device. Quantum Science and Technology, 2022, 7, 015015.	5.8	6
82	Title is missing!. Journal of Low Temperature Physics, 2000, 118, 23-43.	1.4	5
83	Optimal scaling of persistent currents for interacting bosons on a ring. European Physical Journal: Special Topics, 2015, 224, 519-524.	2.6	5
84	Two-dimensional network of atomtronic qubits. Physical Review A, 2018, 97, .	2.5	5
85	Nonclassical states in strongly correlated bosonic ring ladders. Physical Review A, 2019, 99, .	2.5	5
86	Superfluidity of the Bose-Hubbard model: su (1,1) linearization scheme. Physica A: Statistical Mechanics and Its Applications, 1996, 230, 300-312.	2.6	4
87	Spin wave contribution to entanglement in Heisenberg models. New Journal of Physics, 2004, 6, 124-124.	2.9	4
88	Mesoscopic BCS pairing in the repulsive one-dimensional Hubbard model. Physical Review B, 2006, 73, .	3.2	3
89	Variational quantum eigensolver for SU(N) fermions. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 265301.	2.1	2
90	<title>Scaling, entanglement, and quantum phase transitions</title>. , 2003, , .		0

#	ARTICLE	IF	CITATIONS
91	Entanglement in one-dimensional spin systems. , 2004, 5436, 150.		0
92	Mesoscopic electron transport and atomic gases, a review of Frank W. J. Hekking's scientific work. SciPost Physics, 2018, 5, .	4.9	0