#### Paolo Zanardi

#### List of Publications by Citations

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#	Paper	IF	Citations
107	Holonomic quantum computation. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>1999</b> , 264, 94-99	2.3	685
106	Ground state overlap and quantum phase transitions. <i>Physical Review E</i> , <b>2006</b> , 74, 031123	2.4	535
105	Quantum information processing with semiconductor macroatoms. <i>Physical Review Letters</i> , <b>2000</b> , 85, 5647-50	7.4	412
104	Quantum entanglement in fermionic lattices. <i>Physical Review A</i> , <b>2002</b> , 65,	2.6	321
103	Quantum critical scaling of the geometric tensors. <i>Physical Review Letters</i> , <b>2007</b> , 99, 095701	7.4	307
102	Information-theoretic differential geometry of quantum phase transitions. <i>Physical Review Letters</i> , <b>2007</b> , 99, 100603	7.4	300
101	Entangling power of quantum evolutions. <i>Physical Review A</i> , <b>2000</b> , 62,	2.6	243
100	Symmetrizing evolutions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>1999</b> , 258, 77-82	2.3	222
99	Non-Abelian Berry connections for quantum computation. <i>Physical Review A</i> , <b>1999</b> , 61,	2.6	212
98	Quantum entanglement and Bell inequalities in Heisenberg spin chains. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2002</b> , 301, 1-6	2.3	198
97	Bipartite entanglement and entropic boundary law in lattice spin systems. <i>Physical Review A</i> , <b>2005</b> , 71,	2.6	175
96	Ground state entanglement and geometric entropy in the Kitaev model. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2005</b> , 337, 22-28	2.3	160
95	Quantum speed limits, coherence, and asymmetry. <i>Physical Review A</i> , <b>2016</b> , 93,	2.6	155
94	Quantum adiabatic Markovian master equations. New Journal of Physics, 2012, 14, 123016	2.9	155
93	Mixed-state fidelity and quantum criticality at finite temperature. <i>Physical Review A</i> , <b>2007</b> , 75,	2.6	155
92	Quantum Information in Semiconductors: Noiseless Encoding in a Quantum-Dot Array. <i>Physical Review Letters</i> , <b>1998</b> , 81, 4752-4755	7.4	155
91	Quantum tensor product structures are observable induced. <i>Physical Review Letters</i> , <b>2004</b> , 92, 060402	7.4	154

# (2013-2001)

90	Virtual quantum subsystems. <i>Physical Review Letters</i> , <b>2001</b> , 87, 077901	7.4	141
89	Entanglement of quantum evolutions. <i>Physical Review A</i> , <b>2001</b> , 63,	2.6	140
88	Stabilizing quantum information. <i>Physical Review A</i> , <b>2000</b> , 63,	2.6	135
87	Quantum criticality as a resource for quantum estimation. <i>Physical Review A</i> , <b>2008</b> , 78,	2.6	131
86	Geometric quantum computation and multiqubit entanglement with superconducting qubits inside a cavity. <i>Physical Review Letters</i> , <b>2005</b> , 94, 100502	7.4	123
85	Quantum phase transitions and quantum fidelity in free fermion graphs. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	120
84	Error Avoiding Quantum Codes. <i>Modern Physics Letters B</i> , <b>1997</b> , 11, 1085-1093	1.6	119
83	Geometric quantum gates that are robust against stochastic control errors. <i>Physical Review A</i> , <b>2005</b> , 72,	2.6	119
82	Fermionic entanglement in itinerant systems. <i>Journal of Physics A</i> , <b>2002</b> , 35, 7947-7959		105
81	Dissipation and decoherence in a quantum register. <i>Physical Review A</i> , <b>1998</b> , 57, 3276-3284	2.6	101
80	Internal consistency of fault-tolerant quantum error correction in light of rigorous derivations of the quantum Markovian limit. <i>Physical Review A</i> , <b>2006</b> , 73,	2.6	100
79	Semiconductor-based geometrical quantum gates. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	100
78	Electro-optical properties of semiconductor quantum dots: Application to quantum information processing. <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	98
77	Sublattice entanglement and quantum phase transitions in antiferromagnetic spin chains. <i>New Journal of Physics</i> , <b>2006</b> , 8, 97-97	2.9	93
76	Robustness of non-Abelian holonomic quantum gates against parametric noise. <i>Physical Review A</i> ,	2.6	86
	<b>2004</b> , 70,	2.0	
75	Unitary equilibrations: Probability distribution of the Loschmidt echo. <i>Physical Review A</i> , <b>2010</b> , 81,	2.6	83
75 74			8 <sub>3</sub>

72	Bures metric over thermal state manifolds and quantum criticality. <i>Physical Review A</i> , <b>2007</b> , 76,	2.6	76
71	Fidelity analysis of topological quantum phase transitions. <i>Physical Review A</i> , <b>2008</b> , 78,	2.6	69
7°	Quantum algorithms for topological and geometric analysis of data. <i>Nature Communications</i> , <b>2016</b> , 7, 10138	17.4	67
69	Exact infinite-time statistics of the Loschmidt echo for a quantum quench. <i>Physical Review Letters</i> , <b>2011</b> , 107, 010403	7.4	61
68	Coherent quantum dynamics in steady-state manifolds of strongly dissipative systems. <i>Physical Review Letters</i> , <b>2014</b> , 113, 240406	7.4	60
67	Ground state fidelity and quantum phase transitions in free Fermi systems. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , <b>2007</b> , 2007, L02002-L02002	1.9	58
66	Fidelity approach to the disordered quantum XY model. <i>Physical Review Letters</i> , <b>2009</b> , 102, 057205	7.4	52
65	Storage qubits and their potential implementation through a semiconductor double quantum dot. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	51
64	Quantum information-geometry of dissipative quantum phase transitions. <i>Physical Review E</i> , <b>2014</b> , 89, 022102	2.4	50
63	Quantum entanglement in random physical states. <i>Physical Review Letters</i> , <b>2012</b> , 109, 040502	7.4	47
62	Simulation of many-body interactions by conditional geometric phases. <i>Physical Review A</i> , <b>2002</b> , 65,	2.6	47
61	Spin-based quantum-information processing with semiconductor quantum dots and cavity QED. <i>Physical Review A</i> , <b>2003</b> , 67,	2.6	46
60	Topological protection and quantum noiseless subsystems. <i>Physical Review Letters</i> , <b>2003</b> , 90, 067902	7.4	45
59	Adiabaticity in open quantum systems. <i>Physical Review A</i> , <b>2016</b> , 93,	2.6	44
58	Dissipative dynamics in a quantum register. <i>Physical Review A</i> , <b>1997</b> , 56, 4445-4451	2.6	44
57	Universal leakage elimination. <i>Physical Review A</i> , <b>2005</b> , 71,	2.6	42
56	Subdecoherent information encoding in a quantum-dot array. <i>Physical Review B</i> , <b>1999</b> , 59, 8170-8181	3.3	42
55	Holonomic quantum gates: A semiconductor-based implementation. <i>Physical Review A</i> , <b>2003</b> , 67,	2.6	40

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54	Distance bounds on quantum dynamics. Physical Review A, 2008, 78,	2.6	38
53	Nonadiabatic geometrical quantum gates in semiconductor quantum dots. <i>Physical Review A</i> , <b>2003</b> , 67,	2.6	38
52	Testing Bell inequality with ballistic electrons in semiconductors. <i>Physical Review A</i> , <b>2001</b> , 63,	2.6	38
51	Computation on an error-avoiding quantum code and symmetrization. <i>Physical Review A</i> , <b>1999</b> , 60, R72	9- <b>:R</b> 737	2 36
50	Operator fidelity susceptibility, decoherence, and quantum criticality. <i>Physical Review A</i> , <b>2008</b> , 78,	2.6	35
49	Quantum-information processing in bosonic lattices. <i>Physical Review A</i> , <b>2002</b> , 66,	2.6	32
48	Coherence-generating power of quantum unitary maps and beyond. <i>Physical Review A</i> , <b>2017</b> , 95,	2.6	31
47	Fidelity in topological quantum phases of matter. <i>Physical Review A</i> , <b>2009</b> , 79,	2.6	31
46	Dissipative universal Lindbladian simulation. <i>Physical Review A</i> , <b>2016</b> , 93,	2.6	28
45	Fidelity optimization for holonomic quantum gates in dissipative environments. <i>Physical Review A</i> , <b>2006</b> , 73,	2.6	28
44	Geometry, robustness, and emerging unitarity in dissipation-projected dynamics. <i>Physical Review A</i> , <b>2015</b> , 91,	2.6	27
43	Universality in the equilibration of quantum systems after a small quench. <i>Physical Review A</i> , <b>2010</b> , 81,	2.6	24
42	Scaling of the fidelity susceptibility in a disordered quantum spin chain. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	21
41	Gaussian equilibration. <i>Physical Review E</i> , <b>2013</b> , 87, 012106	2.4	20
40	Quantum entanglement in states generated by bilocal group algebras. <i>Physical Review A</i> , <b>2005</b> , 72,	2.6	20
39	Dynamical response theory for driven-dissipative quantum systems. <i>Physical Review A</i> , <b>2016</b> , 93,	2.6	18
38	Bipartite quantum states and random complex networks. New Journal of Physics, 2012, 14, 013011	2.9	18
37	Local response of topological order to an external perturbation. <i>Physical Review Letters</i> , <b>2013</b> , 110, 210	06,02	17

36	Relaxation versus adiabatic quantum steady-state preparation. <i>Physical Review A</i> , <b>2017</b> , 95,	2.6	17
35	Ensembles of physical states and random quantum circuits on graphs. <i>Physical Review A</i> , <b>2012</b> , 86,	2.6	17
34	Universal subleading terms in ground-state fidelity from boundary conformal field theory. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	17
33	Quantum chaos and operator fidelity metric. <i>Physical Review E</i> , <b>2010</b> , 81, 017203	2.4	16
32	Unitary equilibration after a quantum quench of a thermal state. Physical Review A, 2011, 84,	2.6	15
31	Thermal states of the Kitaev honeycomb model: Bures metric analysis. <i>Physical Review A</i> , <b>2009</b> , 79,	2.6	14
30	Refocusing schemes for holonomic quantum computation in the presence of dissipation. <i>Physical Review A</i> , <b>2004</b> , 70,	2.6	14
29	Mode entanglement and entangling power in bosonic graphs. <i>Physical Review A</i> , <b>2003</b> , 68,	2.6	14
28	Coherence-generating power of quantum dephasing processes. <i>Physical Review A</i> , <b>2018</b> , 97,	2.6	13
27	Quantum Chernoff bound metric for the XY model at finite temperature. <i>Physical Review A</i> , <b>2008</b> , 77,	2.6	12
26	Universal control of quantum subspaces and subsystems. <i>Physical Review A</i> , <b>2004</b> , 69,	2.6	12
25	Local quenches in frustrated quantum spin chains: Global versus subsystem equilibration. <i>Physical Review A</i> , <b>2010</b> , 82,	2.6	10
24	Coupling bosonic modes with a qubit: entanglement dynamics at zero and finite temperatures. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2006</b> , 360, 49-56	2.3	10
23	Simulation of entangled electronic states in semiconductor quantum wires. <i>Physica B: Condensed Matter</i> , <b>2002</b> , 314, 10-14	2.8	10
22	Quantum entangling power of adiabatically connected Hamiltonians. <i>Physical Review A</i> , <b>2004</b> , 69,	2.6	9
21	Quantum coherence generating power, maximally abelian subalgebras, and Grassmannian geometry. <i>Journal of Mathematical Physics</i> , <b>2018</b> , 59, 012203	1.2	8
20	Universal time fluctuations in near-critical out-of-equilibrium quantum dynamics. <i>Physical Review E</i> , <b>2014</b> , 89, 022101	2.4	8
19	Local convertibility of the ground state of the perturbed toric code. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	8

# (2002-2017)

18	Noise suppression via generalized-Markovian processes. <i>Physical Review A</i> , <b>2017</b> , 96,	2.6	8
17	Mode transformations and entanglement relativity in bipartite Gaussian states. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2006</b> , 354, 274-280	2.3	8
16	Information Scrambling over Bipartitions: Equilibration, Entropy Production, and Typicality. <i>Physical Review Letters</i> , <b>2021</b> , 126, 030601	7.4	8
15	Local random quantum circuits: Ensemble completely positive maps and swap algebras. <i>Journal of Mathematical Physics</i> , <b>2014</b> , 55, 082204	1.2	6
14	Modular quantum-information processing by dissipation. <i>Physical Review A</i> , <b>2016</b> , 94,	2.6	6
13	Quantum coherence and the localization transition. <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	6
12	Theory of temporal fluctuations in isolated quantum systems. <i>International Journal of Modern Physics B</i> , <b>2015</b> , 29, 1530008	1.1	5
11	Accuracy of the adiabatic-impulse approximation for closed and open quantum systems. <i>Physical Review A</i> , <b>2018</b> , 97,	2.6	4
10	Quantifying the Incompatibility of Quantum Measurements Relative to a Basis. <i>Physical Review Letters</i> , <b>2019</b> , 123, 070401	7.4	4
9	Entanglement susceptibility: area laws and beyond. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , <b>2013</b> , 2013, P04023	1.9	3
8	Transition to chaos of coupled oscillators: an operator fidelity susceptibility study. <i>Physical Review E</i> , <b>2010</b> , 82, 056204	2.4	3
7	Decoherence suppression for oscillator-assisted geometric quantum gates via symmetrization. <i>Physical Review A</i> , <b>2005</b> , 71,	2.6	3
6	Quantum coherence as a signature of chaos. <i>Physical Review Research</i> , <b>2021</b> , 3,	3.9	3
5	Localizable quantum coherence. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2021</b> , 397, 127264	2.3	2
4	Quantum measurement of excitonic states using stimulated Raman adiabatic passage. <i>Physica B: Condensed Matter</i> , <b>2002</b> , 314, 20-24	2.8	1
3	Optical quantum gates with semiconductor nanostructures. <i>International Journal of Circuit Theory and Applications</i> , <b>2001</b> , 29, 137-150	2	1
2	Quantum scrambling of observable algebras. Quantum - the Open Journal for Quantum Science,6, 666		О
1	Ultrafast quantum information processing in nanostructured semiconductors. <i>Superlattices and Microstructures</i> , <b>2002</b> , 31, 107-116	2.8	