Francesco Buscemi

List of Publications by Year
in descending order

66 papers	1,850 citations	304743 22 h-index	289244 40 g-index
67 all docs	67 docs citations	67 times ranked	1005 citing authors

#	Article	IF	Citations
1	Guesswork of a Quantum Ensemble. IEEE Transactions on Information Theory, 2022, 68, 3139-3143.	2.4	2
2	Thermodynamic Constraints on Quantum Information Gain and Error Correction: A Triple Trade-Off. PRX Quantum, 2022, 3, .	9.2	4
3	Fluctuation theorems from Bayesian retrodiction. Physical Review E, 2021, 103, 052111.	2.1	20
4	Fluctuation theorems with retrodiction rather than reverse processes. AVS Quantum Science, 2021, 3, .	4.9	15
5	Thermodynamic reverse bounds for general open quantum processes. Physical Review A, 2020, 102, .	2.5	6
6	Type-Independent Characterization of Spacelike Separated Resources. Physical Review Letters, 2020, 125, 210402.	7.8	16
7	Unified approach to witness non-entanglement-breaking quantum channels. Physical Review A, 2020, 101, .	2.5	2
8	Complete Resource Theory of Quantum Incompatibility as Quantum Programmability. Physical Review Letters, 2020, 124, 120401.	7.8	33
9	General state transitions with exact resource morphisms: a unified resource-theoretic approach. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 445303.	2.1	10
10	Coherence manipulation with dephasing-covariant operations. Physical Review Research, 2020, 2, .	3.6	15
11	Data-driven inference, reconstruction, and observational completeness of quantum devices. Physical Review A, 2020, 102, .	2.5	2
12	Explicit Construction of Optimal Witnesses for Input-Output Correlations Attainable by Quantum Channels. Open Systems and Information Dynamics, 2020, 27, 2050017.	1.2	1
13	Experimental semi-device-independent tests of quantum channels. Quantum Science and Technology, 2019, 4, 035004.	5.8	6
14	Tradeoff Relations Between Accessible Information, Informational Power, and Purity. IEEE Transactions on Information Theory, 2019, 65, 2614-2622.	2.4	1
15	Data-driven inference of physical devices: theory and implementation. New Journal of Physics, 2019, 21, 113029.	2.9	4
16	Quantum majorization and a complete set of entropic conditions for quantum thermodynamics. Nature Communications, 2018, 9, 5352.	12.8	87
17	Resource Theory of Quantum Memories and Their Faithful Verification with Minimal Assumptions. Physical Review X, 2018, 8, .	8.9	67
18	Reverse Data-Processing Theorems and Computational Second Laws. Springer Proceedings in Mathematics and Statistics, 2018, , 135-159.	0.2	4

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19	Quantum relative Lorenz curves. Physical Review A, 2017, 95, .	2.5	41
20	Device-independent tests of quantum channels. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160721.	2.1	20
21	No-Hypersignaling Principle. Physical Review Letters, 2017, 119, 020401.	7.8	22
22	Device-Independent Tests of Quantum Measurements. Physical Review Letters, 2017, 118, 250501.	7.8	19
23	Comparison of noisy channels and reverse data-processing theorems. , 2017, , .		4
24	Equivalence between divisibility and monotonic decrease of information in classical and quantum stochastic processes. Physical Review A, 2016, 93, .	2.5	64
25	Approximate reversibility in the context of entropy gain, information gain, and complete positivity. Physical Review A, 2016, 93, .	2.5	41
26	Degradable channels, less noisy channels, and quantum statistical morphisms: An equivalence relation. Problems of Information Transmission, 2016, 52, 201-213.	0.5	28
27	Experimental Test of Entropic Noise-Disturbance Uncertainty Relations for Spin-$1/2$ Measurements. Physical Review Letters, 2015, 115, 030401.	7.8	38
28	Universal optimal quantum correlator. International Journal of Quantum Information, 2014, 12, 1560002.	1.1	8
29	Game-theoretic characterization of antidegradable channels. Journal of Mathematical Physics, 2014, 55, .	1.1	17
30	Tight bounds on accessible information and informational power. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 235302.	2.1	14
31	Noise and Disturbance in Quantum Measurements: An Information-Theoretic Approach. Physical Review Letters, 2014, 112, 050401.	7.8	111
32	Complete Positivity, Markovianity, and the Quantum Data-Processing Inequality, in the Presence of Initial System-Environment Correlations. Physical Review Letters, 2014, 113, 140502.	7.8	80
33	General Theory of Environment-Assisted Entanglement Distillation. IEEE Transactions on Information Theory, 2013, 59, 1940-1954.	2.4	16
34	The information-theoretic costs of simulating quantum measurements. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 453001.	2.1	44
35	All Entangled Quantum States Are Nonlocal. Physical Review Letters, 2012, 108, 200401.	7.8	155
36	Comparison of Quantum Statistical Models: Equivalent Conditions for Sufficiency. Communications in Mathematical Physics, 2012, 310, 625-647.	2.2	48

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37	Entanglement Cost in Practical Scenarios. Physical Review Letters, 2011, 106, 130503.	7.8	35
38	The Quantum Capacity of Channels With Arbitrarily Correlated Noise. IEEE Transactions on Information Theory, 2010, 56, 1447-1460.	2.4	124
39	Distilling entanglement from arbitrary resources. Journal of Mathematical Physics, 2010, 51, .	1.1	40
40	Towards a Unified Approach to Information-Disturbance Tradeoffs in Quantum Measurements. Open Systems and Information Dynamics, 2009, 16, 29-48.	1.2	23
41	Private quantum decoupling and secure disposal of information. New Journal of Physics, 2009, 11, 123002.	2.9	8
42	Proposal of an eavesdropping experiment for BB84 QKD protocol with 1â†'3 phase-covariant quantum doner. , 2009, , .		1
43	Polygamy of distributed entanglement. Physical Review A, 2009, 80, .	2.5	53
44	INFORMATION EXTRACTION VERSUS IRREVERSIBILITY IN QUANTUM MEASUREMENT PROCESSES. International Journal of Quantum Information, 2008, 06, 613-619.	1.1	0
45	Entanglement measures and approximate quantum error correction. Physical Review A, 2008, 77, .	2.5	9
46	Global Information Balance in Quantum Measurements. Physical Review Letters, 2008, 100, 210504.	7.8	76
47	Irreversibility of Entanglement Loss. Lecture Notes in Computer Science, 2008, , 16-28.	1.3	0
48	Superbroadcasting and classical information. Physical Review A, 2007, 75, .	2.5	2
49	Channel Correction via Quantum Erasure. Physical Review Letters, 2007, 99, 180501.	7.8	19
50	Economical realization of phase-covariant devices in arbitrary dimensions (Invited). Journal of the Optical Society of America B: Optical Physics, 2007, 24, 363.	2.1	3
51	Quantum Erasure of Decoherence. Open Systems and Information Dynamics, 2007, 14, 53-61.	1.2	6
52	A Minimum-Disturbing Quantum State Discriminator. Open Systems and Information Dynamics, 2007, 14, 17-24.	1.2	1
53	On the minimum number of unitaries needed to describe a random-unitary channel. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 360, 256-258.	2.1	21
54	Information-disturbance trade-off in quantum-state discrimination. Physical Review A, 2006, 74, .	2.5	26

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55	Universal and phase-covariant superbroadcasting for mixed qubit states. Physical Review A, 2006, 74, .	2.5	11
56	Economical phase-covariant cloning of qudits. Physical Review A, 2005, 71, .	2.5	84
57	Optimal time reversal of multiphase equatorial states. Physical Review A, 2005, 72, .	2.5	5
58	Inverting Quantum Decoherence by Classical Feedback from the Environment. Physical Review Letters, 2005, 95, 090501.	7.8	60
59	Clean positive operator valued measures. Journal of Mathematical Physics, 2005, 46, 082109.	1.1	64
60	There Exist Nonorthogonal Quantum Measurements that are Perfectly Repeatable. Physical Review Letters, 2004, 92, 070403.	7.8	7
61	Unitary realizations of the ideal phase measurement. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 312, 315-318.	2.1	2
62	Optimal realization of the transposition maps. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 314, 374-379.	2.1	22
63	Physical realizations of quantum operations. Physical Review A, 2003, 68, .	2.5	18
64	An information-theoretic treatment of quantum dichotomies. Quantum - the Open Journal for Quantum Science, 0, 3, 209.	0.0	22
65	Extension of the Alberti-Ulhmann criterion beyond qubit dichotomies. Quantum - the Open Journal for Quantum Science, 0, 4, 233.	0.0	7
66	The type-independent resource theory of local operations and shared randomness. Quantum - the Open Journal for Quantum Science, 0, 4, 262.	0.0	35