Fernando Gsl BrandÃ£o

List of Publications by Year
in descending order

43 papers	**7,197** citations	257450 **24** h-index	330143 **37** g-index
44 all docs	**44** docs citations	**44** times ranked	**5996** citing authors

#	Article	IF	Citations
1	Quantum supremacy using a programmable superconducting processor. Nature, 2019, 574, 505-510.	27.8	4,148
2	The second laws of quantum thermodynamics. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3275-3279.	7.1	471
3	Resource Theory of Quantum States Out of Thermal Equilibrium. Physical Review Letters, 2013, 111, 250404.	7.8	437
4	Quantum manyâ€body phenomena in coupled cavity arrays. Laser and Photonics Reviews, 2008, 2, 527-556.	8.7	399
5	Quantitative entanglement witnesses. New Journal of Physics, 2007, 9, 46-46.	2.9	176
6	Local Random Quantum Circuits are Approximate Polynomial-Designs. Communications in Mathematical Physics, 2016, 346, 397-434.	2.2	174
7	Entanglement theory and the second law of thermodynamics. Nature Physics, 2008, 4, 873-877.	16.7	141
8	An area law for entanglement from exponential decay of correlations. Nature Physics, 2013, 9, 721-726.	16.7	90
9	One-Shot Rates for Entanglement Manipulation Under Non-entangling Maps. IEEE Transactions on Information Theory, 2011, 57, 1754-1760.	2.4	84
10	Hypercontractivity, sum-of-squares proofs, and their applications. , 2012, , .		84
11	A Generalization of Quantum Steinâ€™s Lemma. Communications in Mathematical Physics, 2010, 295, 791-828.	2.2	79
12	Exponential Decay of Correlations Implies Area Law. Communications in Mathematical Physics, 2015, 333, 761-798.	2.2	71
13	Quantum Speed-Ups for Solving Semidefinite Programs. , 2017, , .		68
14	A Reversible Theory of Entanglement and its Relation to the Second Law. Communications in Mathematical Physics, 2010, 295, 829-851.	2.2	58
15	Separable Multipartite Mixed States: Operational Asymptotically Necessary and Sufficient Conditions. Physical Review Letters, 2004, 93, 220503.	7.8	57
16	Quantum Gibbs Samplers: The Commuting Case. Communications in Mathematical Physics, 2016, 344, 915-957.	2.2	52
17	Entanglement Cost of Quantum Channels. IEEE Transactions on Information Theory, 2013, 59, 6779-6795.	2.4	51
18	Models of Quantum Complexity Growth. PRX Quantum, 2021, 2, .	9.2	42

#	ARTICLE	IF	CITATIONS
19	Finite Correlation Length Implies Efficient Preparation of Quantum Thermal States. Communications in Mathematical Physics, 2019, 365, 1-16.	2.2	41
20	Thermalization and Return to Equilibrium on Finite Quantum Lattice Systems. Physical Review Letters, 2017, 118, 140601.	7.8	38
21	Efficient Quantum Pseudorandomness. Physical Review Letters, 2016, 116, 170502.	7.8	35
22	Three-Dimensional Color Code Thresholds via Statistical-Mechanical Mapping. Physical Review Letters, 2018, 120, 180501.	7.8	34
23	Clustering of Conditional Mutual Information for Quantum Gibbs States above a Threshold Temperature. Physical Review Letters, 2020, 124, 220601.	7.8	33
24	Quantum Error Correcting Codes in Eigenstates of Translation-Invariant Spin Chains. Physical Review Letters, 2019, 123, 110502.	7.8	30
25	A Smooth Entropy Approach to Quantum Hypothesis Testing and the Classical Capacity of Quantum Channels. IEEE Transactions on Information Theory, 2013, 59, 8014-8026.	2.4	28
26	Thermodynamic Capacity of Quantum Processes. Physical Review Letters, 2019, 122, 200601.	7.8	27
27	Randomness Amplification under Minimal Fundamental Assumptions on the Devices. Physical Review Letters, 2016, 117, 230501.	7.8	26
28	A quasipolynomial-time algorithm for the quantum separability problem. , 2011, , .		24
29	Quantum de finetti theorems under local measurements with applications. , 2013, , .		24
30	Quantum Approximate Markov Chains are Thermal. Communications in Mathematical Physics, 2019, 370, 117-149.	2.2	20
31	Product-state approximations to quantum ground states. , 2013, , .		19
32	Product-State Approximations to Quantum States. Communications in Mathematical Physics, 2016, 342, 47-80.	2.2	19
33	Area law for fixed points of rapidly mixing dissipative quantum systems. Journal of Mathematical Physics, 2015, 56, .	1.1	18
34	Detection of Multiparticle Entanglement: Quantifying the Search for Symmetric Extensions. Physical Review Letters, 2012, 109, 160502.	7.8	17
35	Quantum de Finetti Theorems Under Local Measurements with Applications. Communications in Mathematical Physics, 2017, 353, 469-506.	2.2	17
36	Entangled Inputs Cannot Make Imperfect Quantum Channels Perfect. Physical Review Letters, 2011, 106, 230502.	7.8	15

#	Article	IF	Citations
37	Entanglement and quantum order parameters. New Journal of Physics, 2005, 7, 254-254.	2.9	14
38	Adversarial Hypothesis Testing and a Quantum Stein's Lemma for Restricted Measurements. IEEE Transactions on Information Theory, 2020, 66, 5037-5054.	2.4	10
39	Remarks on the Equivalence of Full Additivity and Monotonicity for the Entanglement Cost. Open Systems and Information Dynamics, 2007, 14, 333-339.	1.2	8
40	Amplifying the Randomness of Weak Sources Correlated With Devices. IEEE Transactions on Information Theory, 2017, 63, 7592-7611.	2.4	7
41	Entanglement quantifiers, entanglement crossover and phase transitions. New Journal of Physics, 2006, 8, 260-260.	2.9	3
42	Strongly Interacting Polaritons in Coupled Arrays of Cavities. , 2007, , .		3
43	Adversarial hypothesis testing and a quantum stein's lemma for restricted measurements. , 2014, , .		2