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	Models of Quantum Complexity Growth. PRX Quantum, 2021, 2, .	9.2	42
2	Clustering of Conditional Mutual Information for Quantum Gibbs States above a Threshold Temperature. Physical Review Letters, 2020, 124, 220601.	7.8	33
3	Adversarial Hypothesis Testing and a Quantum Stein's Lemma for Restricted Measurements. IEEE Transactions on Information Theory, 2020, 66, 5037-5054.	2.4	10
4	Quantum Error Correcting Codes in Eigenstates of Translation-Invariant Spin Chains. Physical Review Letters, 2019, 123, 110502.	7.8	30
5	Thermodynamic Capacity of Quantum Processes. Physical Review Letters, 2019, 122, 200601.	7.8	27
6	Quantum Approximate Markov Chains are Thermal. Communications in Mathematical Physics, 2019, 370, 117-149.	2.2	20
7	Quantum supremacy using a programmable superconducting processor. Nature, 2019, 574, 505-510.	27.8	4,148
8	Finite Correlation Length Implies Efficient Preparation of Quantum Thermal States. Communications in Mathematical Physics, 2019, 365, 1-16.	2.2	41
9	Three-Dimensional Color Code Thresholds via Statistical-Mechanical Mapping. Physical Review Letters, 2018, 120, 180501.	7.8	34
10	Quantum de Finetti Theorems Under Local Measurements with Applications. Communications in Mathematical Physics, 2017, 353, 469-506.	2.2	17
11	Thermalization and Return to Equilibrium on Finite Quantum Lattice Systems. Physical Review Letters, 2017, 118, 140601.	7.8	38
12	Quantum Speed-Ups for Solving Semidefinite Programs. , 2017, , .		68
13	Amplifying the Randomness of Weak Sources Correlated With Devices. IEEE Transactions on Information Theory, 2017, 63, 7592-7611.	2.4	7
14	Randomness Amplification under Minimal Fundamental Assumptions on the Devices. Physical Review Letters, 2016, 117, 230501.	7.8	26
15	Quantum Gibbs Samplers: The Commuting Case. Communications in Mathematical Physics, 2016, 344, 915-957.	2.2	52
16	Local Random Quantum Circuits are Approximate Polynomial-Designs. Communications in Mathematical Physics, 2016, 346, 397-434.	2.2	174
17	Efficient Quantum Pseudorandomness. Physical Review Letters, 2016, 116, 170502.	7.8	35
18	Product-State Approximations to Quantum States. Communications in Mathematical Physics, 2016, 342, 47-80.	2.2	19

#	Article	IF	Citations
19	Area law for fixed points of rapidly mixing dissipative quantum systems. Journal of Mathematical Physics, 2015, 56, .	1.1	18
20	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
21	Exponential Decay of Correlations Implies Area Law. Communications in Mathematical Physics, 2015, 333, 761-798.	2.2	71
22	Adversarial hypothesis testing and a quantum stein's lemma for restricted measurements. , 2014, , .		2
23	An area law for entanglement from exponential decay of correlations. Nature Physics, 2013, 9, 721-726.	16.7	90
24	Product-state approximations to quantum ground states. , 2013, , .		19
25	Entanglement Cost of Quantum Channels. IEEE Transactions on Information Theory, 2013, 59, 6779-6795.	2.4	51
26	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
27	Resource Theory of Quantum States Out of Thermal Equilibrium. Physical Review Letters, 2013, 111, 250404.	7.8	437
28	Quantum de finetti theorems under local measurements with applications. , 2013, , .		24
29	Hypercontractivity, sum-of-squares proofs, and their applications. , 2012, , .		84
30	Detection of Multiparticle Entanglement: Quantifying the Search for Symmetric Extensions. Physical Review Letters, 2012, 109, 160502.	7.8	17
31	Entangled Inputs Cannot Make Imperfect Quantum Channels Perfect. Physical Review Letters, 2011, 106, 230502.	7.8	15
32	One-Shot Rates for Entanglement Manipulation Under Non-entangling Maps. IEEE Transactions on Information Theory, 2011, 57, 1754-1760.	2.4	84
33	A quasipolynomial-time algorithm for the quantum separability problem. , 2011, , .		24
34	A Reversible Theory of Entanglement and its Relation to the Second Law. Communications in Mathematical Physics, 2010, 295, 829-851.	2.2	58
35	A Generalization of Quantum Stein's Lemma. Communications in Mathematical Physics, 2010, 295, 791-828.	2.2	79
36	Quantum many‐body phenomena in coupled cavity arrays. Laser and Photonics Reviews, 2008, 2, 527-556.	8.7	399

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37	Entanglement theory and the second law of thermodynamics. Nature Physics, 2008, 4, 873-877.	16.7	141
38	Strongly Interacting Polaritons in Coupled Arrays of Cavities. , 2007, , .		3
39	Quantitative entanglement witnesses. New Journal of Physics, 2007, 9, 46-46.	2.9	176
40	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
41	Entanglement quantifiers, entanglement crossover and phase transitions. New Journal of Physics, 2006, 8, 260-260.	2.9	3
42	Entanglement and quantum order parameters. New Journal of Physics, 2005, 7, 254-254.	2.9	14
43	Separable Multipartite Mixed States: Operational Asymptotically Necessary and Sufficient Conditions. Physical Review Letters, 2004, 93, 220503.	7.8	57