Alexandre M Souza

List of Publications by Year
in descending order

48	2,393	304743 22	206112 48
papers	citations	h-index	g-index

48	48	48	1799
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental Reconstruction of Work Distribution and Study of Fluctuation Relations in a Closed Quantum System. Physical Review Letters, 2014, 113, 140601.	7.8	288
2	Quantum Discord Determines the Interferometric Power of Quantum States. Physical Review Letters, 2014, 112, .	7.8	204
3	Experimental Characterization of a Spin Quantum Heat Engine. Physical Review Letters, 2019, 123, 240601.	7.8	204
4	Robust Dynamical Decoupling for Quantum Computing and Quantum Memory. Physical Review Letters, 2011, 106, 240501.	7.8	191
5	Environment-Induced Sudden Transition in Quantum Discord Dynamics. Physical Review Letters, 2011, 107, 140403.	7.8	137
6	Robust dynamical decoupling. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 4748-4769.	3.4	137
7	Experimental Rectification of Entropy Production by Maxwellâ€™s Demon in a Quantum System. Physical Review Letters, 2016, 117, 240502.	7.8	106
8	Irreversibility and the Arrow of Time in a Quenched Quantum System. Physical Review Letters, 2015, 115, 190601.	7.8	105
9	Reversing the direction of heat flow using quantum correlations. Nature Communications, 2019, 10, 2456.	12.8	97
10	Efficiency of a Quantum Otto Heat Engine Operating under a Reservoir at Effective Negative Temperatures. Physical Review Letters, 2019, 122, 240602.	7.8	90
11	Observation of Time-Invariant Coherence in a Nuclear Magnetic Resonance Quantum Simulator. Physical Review Letters, 2016, 117, 160402.	7.8	87
12	Protected Quantum Computing: Interleaving Gate Operations with Dynamical Decoupling Sequences. Physical Review Letters, 2014, 112, 050502.	7.8	79
13	Experimental determination of thermal entanglement in spin clusters using magnetic susceptibility measurements. Physical Review B, 2008, 77, .	3.2	77
14	Experimental demonstration of information to energy conversion in a quantum system at the Landauer limit. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20150813.	2.1	75
15	Observation of Environment-Induced Double Sudden Transitions in Geometric Quantum Correlations. Physical Review Letters, 2013, 111, 250401.	7.8	68
16	A scattering quantum circuit for measuring Bell's time inequality: a nuclear magnetic resonance demonstration using maximally mixed states. New Journal of Physics, 2011, 13, 053023.	2.9	64
17	Entanglement and Bellâ€™s inequality violation above room temperature in metal carboxylates. Physical Review B, 2009, 79, .	3.2	41
18	Experimental magic state distillation for fault-tolerant quantum computing. Nature Communications, 2011, 2, 169.	12.8	37

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19	High Resolution non-Markovianity in NMR. Scientific Reports, 2016, 6, 33945.	3.3	31
20	Experimental protection of quantum gates against decoherence and control errors. Physical Review A, 2012, 86, .	2.5	30
21	Entanglement temperature in molecular magnets composed of S-spin dimers. Europhysics Letters, 2009, 87, 40008.	2.0	26
22	Experimental realization of the Yang-Baxter Equation via NMR interferometry. Scientific Reports, 2016, 6, 20789.	3.3	23
23	NMR analog of Bell's inequalities violation test. New Journal of Physics, 2008, 10, 033020.	2.9	22
24	Effects of time-reversal symmetry in dynamical decoupling. Physical Review A, 2012, 85, .	2.5	20
25	Experimental implementation of a nonthermalizing quantum thermometer. Quantum Information Processing, 2015, 14, 37-46.	2.2	20
26	Experimental Validation of Fully Quantum Fluctuation Theorems Using Dynamic Bayesian Networks. Physical Review Letters, 2021, 127, 180603.	7.8	19
27	Optimizing NMR quantum information processing via generalized transitionless quantum driving. Europhysics Letters, 2020, 129, 30008.	2.0	15
28	Iterative rotation scheme for robust dynamical decoupling. Physical Review A, 2012, 85, .	2.5	13
29	Finite-size analysis of a two-dimensional Ising model within a nonextensive approach. Physical Review E, 2009, 80, 051101.	2.1	10
30	Synthesis, structures and magnetic properties of three metal-organic frameworks containing manganese(II). Transition Metal Chemistry, 2010, 35, 779-786.	1.4	9
31	Reservoir engineering for maximally efficient quantum engines. Physical Review Research, 2020, 2, .	3.6	9
32	Process tomography of robust dynamical decoupling with superconducting qubits. Quantum Information Processing, 2021, 20, 1.	2.2	8
33	High-fidelity gate operations for quantum computing beyond dephasing time limits. Physical Review A, 2015, 92, .	2.5	7
34	Normalization procedure for relaxation studies in NMR quantum information processing. Quantum Information Processing, 2010, 9, 575-589.	2.2	6
35	WRITING ELECTRONIC FERROMAGNETIC STATES IN A HIGH-TEMPERATURE PARAMAGNETIC NUCLEAR SPIN SYSTEM. International Journal of Quantum Information, 2011, 09, 1047-1056.	1.1	5
36	Multi-exponential Analysis of Water NMR Spinâ€“Spin Relaxation in Porosity/Permeability-Controlled Sintered Glass. Applied Magnetic Resonance, 2019, 50, 211-225.	1.2	5

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37	Quantum delayed-choice experiment in an environment with arbitrary white noise. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 245301.	2.1	3
38	Superstatistics model for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si16.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>T</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mr distribution in NMR experiments on porous media. Journal of Magnetic Resonance, 2014, 244, 12-17.	2.1	3
39	Intrinsic bounds of a two-qudit random evolution. Physical Review A, 2018, 97, .	2.5	3
40	Experimental implementation of an NMR NOON state thermometer. Quantum Information Processing, 2019, 18, 1.	2.2	3
41	Enhanced NMR relaxation of fluids confined to porous media: A proposed theory and experimental tests. Physical Review E, 2019, 99, 042901.	2.1	3
42	Specific heat of clustered low dimensional magnetic systems. Journal of Physics Condensed Matter, 2007, 19, 446203.	1.8	2
43	Quantum state tomography for strongly coupled nuclear spin systems. Physical Review A, 2014, 90, .	2.5	2
44	Reliability of Digitized Quantum Annealing and the Decay of Entanglement. Annalen Der Physik, 2018, 530, 1800007.	2.4	2
45	Quantum simulation of the two-site Hubbard Hamiltonian. Physics Open, 2021, 6, 100053.	1.5	2
46	PFG NMR time-dependent diffusion coefficient analysis of confined emulsion: Post drainage phase conformation. Journal of Petroleum Science and Engineering, 2021, 199, 108287.	4.2	2
47	NMR Contributions to the Study of Quantum Correlations. Quantum Science and Technology, 2017, , 517-542.	2.6	2
48	Reply to Comment on â€˜A scattering quantum circuit for measuring Bell's time inequality: a nuclear magnetic resonance demonstration using maximally mixed statesâ€™. New Journal of Physics, 2012, 14, 058002.	2.9	1