David Poulin

List of Publications by Year
in descending order

27	2,199	331670 21	526287 27
papers	citations	h-index	g-index

27	27	27	1616
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Density functionals and Kohn-Sham potentials with minimal wavefunction preparations on a quantum computer. Physical Review Research, 2020, 2, .	3.6	4
2	Hardness of Decoding Quantum Stabilizer Codes. IEEE Transactions on Information Theory, 2015, 61, 5209-5223.	2.4	26
3	Tensor Networks and Quantum Error Correction. Physical Review Letters, 2014, 113, 030501.	7.8	40
4	Fault-Tolerant Conversion between the Steane and Reed-Muller Quantum Codes. Physical Review Letters, 2014, 113, 080501.	7.8	89
5	Universal topological phase of two-dimensional stabilizer codes. New Journal of Physics, 2012, 14, 073048.	2.9	73
6	Practical learning method for multi-scale entangled states. New Journal of Physics, 2012, 14, 085004.	2.9	27
7	Quantum-error-correction benchmarks for continuous weak-parity measurements. Physical Review A, 2012, 86, .	2.5	5
8	Practical Characterization of Quantum Devices without Tomography. Physical Review Letters, 2011, 107, 210404.	7.8	190
9	Information-preserving structures: A general framework for quantum zero-error information. Physical Review A, 2010, 82, .	2.5	72
10	Lieb-Robinson Bound and Locality for General Markovian Quantum Dynamics. Physical Review Letters, 2010, 104, 190401.	7.8	78
11	Efficient quantum state tomography. Nature Communications, 2010, 1, 149.	12.8	394
12	Sampling from the Thermal Quantum Gibbs State and Evaluating Partition Functions with a Quantum Computer. Physical Review Letters, 2009, 103, 220502.	7.8	108
13	Quantum Serial Turbo Codes. IEEE Transactions on Information Theory, 2009, 55, 2776-2798.	2.4	84
14	Preparing Ground States of Quantum Many-Body Systems on a Quantum Computer. Physical Review Letters, 2009, 102, 130503.	7.8	56
15	Characterizing the Structure of Preserved Information in Quantum Processes. Physical Review Letters, 2008, 100, 030501.	7.8	67
16	Quantum reference frames and deformed symmetries. Physical Review D, 2008, 77, .	4.7	20
17	Belief propagation algorithm for computing correlation functions in finite-temperature quantum many-body systems on loopy graphs. Physical Review A, 2008, 77, .	2.5	19
18	Algebraic and information-theoretic conditions for operator quantum error correction. Physical Review A, 2007, 75, .	2.5	32

#	Article	IF	Citations
19	Toy Model for a Relational Formulation of Quantum Theory. International Journal of Theoretical Physics, 2006, 45, 1189-1215.	1.2	34
20	Optimal and efficient decoding of concatenated quantum block codes. Physical Review A, 2006, 74, .	2.5	73
21	Noiseless Subsystems for Collective Rotation Channels in Quantum Information Theory. Integral Equations and Operator Theory, 2005, 51, 215-234.	0.8	8
22	Stabilizer Formalism for Operator Quantum Error Correction. Physical Review Letters, 2005, 95, 230504.	7.8	210
23	Unified and Generalized Approach to Quantum Error Correction. Physical Review Letters, 2005, 94, 180501.	7.8	193
24	Environment as a witness: Selective proliferation of information and emergence of objectivity in a quantum universe. Physical Review A, 2005, 72, .	2.5	83
25	Exponential Speedup with a Single Bit of Quantum Information: Measuring the Average Fidelity Decay. Physical Review Letters, 2004, 92, 177906.	7.8	54
26	Estimation of the local density of states on a quantum computer. Physical Review A, 2004, 69, .	2.5	11
27	Objective Properties from Subjective Quantum States: Environment as a Witness. Physical Review Letters, 2004, 93, 220401.	7.8	149