

# David Poulin

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11900880/publications.pdf>

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27  
papers

2,199  
citations

331670

21  
h-index

526287

27  
g-index

27  
all docs

27  
docs citations

27  
times ranked

1616  
citing authors

#	ARTICLE	IF	CITATIONS
1	Efficient quantum state tomography. Nature Communications, 2010, 1, 149.	12.8	394
2	Stabilizer Formalism for Operator Quantum Error Correction. Physical Review Letters, 2005, 95, 230504.	7.8	210
3	Unified and Generalized Approach to Quantum Error Correction. Physical Review Letters, 2005, 94, 180501.	7.8	193
4	Practical Characterization of Quantum Devices without Tomography. Physical Review Letters, 2011, 107, 210404.	7.8	190
5	Objective Properties from Subjective Quantum States: Environment as a Witness. Physical Review Letters, 2004, 93, 220401.	7.8	149
6	Sampling from the Thermal Quantum Gibbs State and Evaluating Partition Functions with a Quantum Computer. Physical Review Letters, 2009, 103, 220502.	7.8	108
7	Fault-Tolerant Conversion between the Steane and Reed-Muller Quantum Codes. Physical Review Letters, 2014, 113, 080501.	7.8	89
8	Quantum Serial Turbo Codes. IEEE Transactions on Information Theory, 2009, 55, 2776-2798.	2.4	84
9	Environment as a witness: Selective proliferation of information and emergence of objectivity in a quantum universe. Physical Review A, 2005, 72, .	2.5	83
10	Lieb-Robinson Bound and Locality for General Markovian Quantum Dynamics. Physical Review Letters, 2010, 104, 190401.	7.8	78
11	Optimal and efficient decoding of concatenated quantum block codes. Physical Review A, 2006, 74, .	2.5	73
12	Universal topological phase of two-dimensional stabilizer codes. New Journal of Physics, 2012, 14, 073048.	2.9	73
13	Information-preserving structures: A general framework for quantum zero-error information. Physical Review A, 2010, 82, .	2.5	72
14	Characterizing the Structure of Preserved Information in Quantum Processes. Physical Review Letters, 2008, 100, 030501.	7.8	67
15	Preparing Ground States of Quantum Many-Body Systems on a Quantum Computer. Physical Review Letters, 2009, 102, 130503.	7.8	56
16	Exponential Speedup with a Single Bit of Quantum Information: Measuring the Average Fidelity Decay. Physical Review Letters, 2004, 92, 177906.	7.8	54
17	Tensor Networks and Quantum Error Correction. Physical Review Letters, 2014, 113, 030501.	7.8	40
18	Toy Model for a Relational Formulation of Quantum Theory. International Journal of Theoretical Physics, 2006, 45, 1189-1215.	1.2	34

#	ARTICLE	IF	CITATIONS
19	Algebraic and information-theoretic conditions for operator quantum error correction. Physical Review A, 2007, 75, .	2.5	32
20	Practical learning method for multi-scale entangled states. New Journal of Physics, 2012, 14, 085004.	2.9	27
21	Hardness of Decoding Quantum Stabilizer Codes. IEEE Transactions on Information Theory, 2015, 61, 5209-5223.	2.4	26
22	Quantum reference frames and deformed symmetries. Physical Review D, 2008, 77, .	4.7	20
23	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
24	Estimation of the local density of states on a quantum computer. Physical Review A, 2004, 69, .	2.5	11
25	Noiseless Subsystems for Collective Rotation Channels in Quantum Information Theory. Integral Equations and Operator Theory, 2005, 51, 215-234.	0.8	8
26	Quantum-error-correction benchmarks for continuous weak-parity measurements. Physical Review A, 2012, 86, .	2.5	5
27	Density functionals and Kohn-Sham potentials with minimal wavefunction preparations on a quantum computer. Physical Review Research, 2020, 2, .	3.6	4