Patrick Rebentrost

List of Publications by Year
in descending order

27 papers	6,896 citations	394286 19 h-index	552653 26 g-index
27 all docs	27 docs citations	27 times ranked	4657 citing authors

#	Article	IF	Citations
1	Quantum machine learning. Nature, 2017, 549, 195-202.	13.7	1,973
2	Quantum Support Vector Machine for Big Data Classification. Physical Review Letters, 2014, 113, 130503.	2.9	990
3	Environment-assisted quantum walks in photosynthetic energy transfer. Journal of Chemical Physics, 2008, 129, 174106.	1.2	939
4	Quantum principal component analysis. Nature Physics, 2014, 10, 631-633.	6.5	720
5	Environment-assisted quantum transport. New Journal of Physics, 2009, 11, 033003.	1.2	694
6	Role of Quantum Coherence and Environmental Fluctuations in Chromophoric Energy Transport. Journal of Physical Chemistry B, 2009, 113, 9942-9947.	1.2	300
7	Atomistic Study of the Long-Lived Quantum Coherences in the Fenna-Matthews-Olson Complex. Biophysical Journal, 2012, 102, 649-660.	0.2	188
8	Non-Markovian quantum jumps in excitonic energy transfer. Journal of Chemical Physics, 2009, 131, 184102.	1.2	120
9	Modified Scaled Hierarchical Equation of Motion Approach for the Study of Quantum Coherence in Photosynthetic Complexes. Journal of Physical Chemistry B, 2011, 115, 1531-1537.	1.2	120
10	Quantum Hopfield neural network. Physical Review A, 2018, 98, .	1.0	109
11	Robust excitons inhabit soft supramolecular nanotubes. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3367-75.	3.3	100
12	Room-Temperature Micron-Scale Exciton Migration in a Stabilized Emissive Molecular Aggregate. Nano Letters, 2016, 16, 6808-6815.	4.5	94
13	Communication: Exciton–phonon information flow in the energy transfer process of photosynthetic complexes. Journal of Chemical Physics, 2011, 134, 101103.	1.2	92
14	Enhanced energy transport in genetically engineered excitonic networks. Nature Materials, 2016, 15, 211-216.	13.3	82
15	Quantum simulator of an open quantum system using superconducting qubits: exciton transport in photosynthetic complexes. New Journal of Physics, 2012, 14, 105013.	1.2	79
16	Quantum singular-value decomposition of nonsparse low-rank matrices. Physical Review A, 2018, 97, .	1.0	74
17	Quantum machine learning for quantum anomaly detection. Physical Review A, 2018, 97, .	1.0	69
18	Quantum gradient descent and Newton's method for constrained polynomial optimization. New Journal of Physics, 2019, 21, 073023.	1.2	65

#	Article	IF	Citations
19	Bayesian deep learning on a quantum computer. Quantum Machine Intelligence, 2019, 1, 41-51.	2.7	35
20	Continuous-variable gate decomposition for the Bose-Hubbard model. Physical Review A, 2018, 97, .	1.0	13
21	FÃ¶rster Coupling in Nanoparticle Excitonic Circuits. Nano Letters, 2010, 10, 2849-2856.	4.5	12
22	Compiling basic linear algebra subroutines for quantum computers. Quantum Machine Intelligence, 2021, 3, 1.	2.7	9
23	An efficient quantum algorithm for spectral estimation. New Journal of Physics, 2017, 19, 033005.	1.2	8
24	Characterization and quantification of the role of coherence in ultrafast quantum biological experiments using quantum master equations, atomistic simulations, and quantum process tomography. Procedia Chemistry, 2011, 3, 332-346.	0.7	6
25	Smooth input preparation for quantum and quantum-inspired machine learning. Quantum Machine Intelligence, 2021, 3, 1.	2.7	4
26	Fast algorithm for quantum polar decomposition and applications. Physical Review Research, 2022, 4, .	1.3	1
27	Batched quantum state exponentiation and quantum Hebbian learning. Quantum Machine Intelligence, 2019, 1, 31-40.	2.7	0