

# Patrick Rebentrost

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Fast algorithm for quantum polar decomposition and applications. Physical Review Research, 2022, 4, .	1.3	1
2	Smooth input preparation for quantum and quantum-inspired machine learning. Quantum Machine Intelligence, 2021, 3, 1.	2.7	4
3	Compiling basic linear algebra subroutines for quantum computers. Quantum Machine Intelligence, 2021, 3, 1.	2.7	9
4	Batched quantum state exponentiation and quantum Hebbian learning. Quantum Machine Intelligence, 2019, 1, 31-40.	2.7	0
5	Quantum gradient descent and Newton's method for constrained polynomial optimization. New Journal of Physics, 2019, 21, 073023.	1.2	65
6	Bayesian deep learning on a quantum computer. Quantum Machine Intelligence, 2019, 1, 41-51.	2.7	35
7	Quantum machine learning for quantum anomaly detection. Physical Review A, 2018, 97, .	1.0	69
8	Quantum singular-value decomposition of nonsparse low-rank matrices. Physical Review A, 2018, 97, .	1.0	74
9	Quantum Hopfield neural network. Physical Review A, 2018, 98, .	1.0	109
10	Continuous-variable gate decomposition for the Bose-Hubbard model. Physical Review A, 2018, 97, .	1.0	13
11	An efficient quantum algorithm for spectral estimation. New Journal of Physics, 2017, 19, 033005.	1.2	8
12	Quantum machine learning. Nature, 2017, 549, 195-202.	13.7	1,973
13	Room-Temperature Micron-Scale Exciton Migration in a Stabilized Emissive Molecular Aggregate. Nano Letters, 2016, 16, 6808-6815.	4.5	94
14	Enhanced energy transport in genetically engineered excitonic networks. Nature Materials, 2016, 15, 211-216.	13.3	82
15	Quantum Support Vector Machine for Big Data Classification. Physical Review Letters, 2014, 113, 130503.	2.9	990
16	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
17	Quantum principal component analysis. Nature Physics, 2014, 10, 631-633.	6.5	720
18	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

#	ARTICLE	IF	CITATIONS
19	Atomistic Study of the Long-Lived Quantum Coherences in the Fenna-Matthews-Olson Complex. <i>Biophysical Journal</i> , 2012, 102, 649-660.	0.2	188
20	Communication: Exciton-phonon information flow in the energy transfer process of photosynthetic complexes. <i>Journal of Chemical Physics</i> , 2011, 134, 101103.	1.2	92
21	Modified Scaled Hierarchical Equation of Motion Approach for the Study of Quantum Coherence in Photosynthetic Complexes. <i>Journal of Physical Chemistry B</i> , 2011, 115, 1531-1537.	1.2	120
22	Characterization and quantification of the role of coherence in ultrafast quantum biological experiments using quantum master equations, atomistic simulations, and quantum process tomography. <i>Procedia Chemistry</i> , 2011, 3, 332-346.	0.7	6
23	Förster Coupling in Nanoparticle Excitonic Circuits. <i>Nano Letters</i> , 2010, 10, 2849-2856.	4.5	12
24	Role of Quantum Coherence and Environmental Fluctuations in Chromophoric Energy Transport. <i>Journal of Physical Chemistry B</i> , 2009, 113, 9942-9947.	1.2	300
25	Non-Markovian quantum jumps in excitonic energy transfer. <i>Journal of Chemical Physics</i> , 2009, 131, 184102.	1.2	120
26	Environment-assisted quantum transport. <i>New Journal of Physics</i> , 2009, 11, 033003.	1.2	694
27	Environment-assisted quantum walks in photosynthetic energy transfer. <i>Journal of Chemical Physics</i> , 2008, 129, 174106.	1.2	939