Matthew P Harrigan

List of Publications by Year
in descending order

18 papers	**9,065** citations	567281 **15** h-index	839539 **18** g-index
21 all docs	**21** docs citations	**21** times ranked	**9724** citing authors

#	Article	IF	Citations
1	Quantum supremacy using a programmable superconducting processor. Nature, 2019, 574, 505-510.	27.8	4,148
2	MDTraj: A Modern Open Library for the Analysis of Molecular Dynamics Trajectories. Biophysical Journal, 2015, 109, 1528-1532.	0.5	1,576
3	OpenMM 7: Rapid development of high performance algorithms for molecular dynamics. PLoS Computational Biology, 2017, 13, e1005659.	3.2	1,561
4	Hartree-Fock on a superconducting qubit quantum computer. Science, 2020, 369, 1084-1089.	12.6	453
5	Quantum approximate optimization of non-planar graph problems on a planar superconducting processor. Nature Physics, 2021, 17, 332-336.	16.7	262
6	MSMBuilder: Statistical Models for Biomolecular Dynamics. Biophysical Journal, 2017, 112, 10-15.	0.5	228
7	Realizing topologically ordered states on a quantum processor. Science, 2021, 374, 1237-1241.	12.6	186
8	Exponential suppression of bit or phase errors with cyclic error correction. Nature, 2021, 595, 383-387.	27.8	172
9	Time-crystalline eigenstate order on a quantum processor. Nature, 2022, 601, 531-536.	27.8	138
10	Information scrambling in quantum circuits. Science, 2021, 374, 1479-1483.	12.6	127
11	Accurately computing the electronic properties of a quantum ring. Nature, 2021, 594, 508-512.	27.8	47
12	Using models to improve optimizers for variational quantum algorithms. Quantum Science and Technology, 2020, 5, 044008.	5.8	46
13	Osprey: Hyperparameter Optimization for Machine Learning. Journal of Open Source Software, 2016, 1, 34.	4.6	33
14	MSMExplorer: Data Visualizations for Biomolecular Dynamics. Journal of Open Source Software, 2017, 2, 188.	4.6	18
15	Low-Depth Mechanisms for Quantum Optimization. PRX Quantum, 2021, 2, .	9.2	17
16	Markov modeling reveals novel intracellular modulation of the human TREK-2 selectivity filter. Scientific Reports, 2017, 7, 632.	3.3	15
17	Conserve Water: A Method for the Analysis of Solvent in Molecular Dynamics. Journal of Chemical Theory and Computation, 2015, 11, 1094-1101.	5.3	14
18	What the foundations of quantum computer science teach us about chemistry. Journal of Chemical Physics, 2021, 155, 150901.	3.0	9