

# Kosuke Mitarai

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6729147/publications.pdf>

Version: 2024-02-01

21  
papers

2,407  
citations

623734

14  
h-index

839539

18  
g-index

21  
all docs

21  
docs citations

21  
times ranked

1095  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Deep Variational Quantum Eigensolver: A Divide-And-Conquer Method for Solving a Larger Problem with Smaller Size Quantum Computers. PRX Quantum, 2022, 3, .                       | 9.2  | 28        |
| 2  | Calculating transition amplitudes by variational quantum deflation. Physical Review Research, 2022, 4, .  | 3.6  | 15        |
| 3  | Constructing a virtual two-qubit gate by sampling single-qubit operations. New Journal of Physics, 2021, 23, 023021.  | 2.9  | 24        |
| 4  | Learning temporal data with a variational quantum recurrent neural network. Physical Review A, 2021, 103, .   | 2.5  | 17        |
| 5  | Experimental quantum kernel trick with nuclear spins in a solid. Npj Quantum Information, 2021, 7, .  | 6.7  | 24        |
| 6  | Variational quantum algorithms. Nature Reviews Physics, 2021, 3, 625-644.   | 26.6 | 930       |
| 7  | Toward NMR Quantum Reservoir Computing. Natural Computing Series, 2021, , 451-458.  | 2.2  | 4         |
| 8  | Sampling-based quasiprobability simulation for fault-tolerant quantum error correction on the surface codes under coherent noise. Physical Review Research, 2021, 3, .            | 3.6  | 4         |
| 9  | An advanced 2D method enabling thermal conductivity measurement for various sample thicknesses: From thin films to bulk materials. Journal of Applied Physics, 2020, 128, 015102. | 2.5  | 10        |
| 10 | Theory of analytical energy derivatives for the variational quantum eigensolver. Physical Review Research, 2020, 2, .   | 3.6  | 51        |
| 11 | Orbital optimized unitary coupled cluster theory for quantum computer. Physical Review Research, 2020, 2, .   | 3.6  | 66        |
| 12 | Variational quantum algorithm for nonequilibrium steady states. Physical Review Research, 2020, 2, .  | 3.6  | 31        |
| 13 | Generalization of the Output of a Variational Quantum Eigensolver by Parameter Interpolation with a Low-depth Ansatz. Physical Review Applied, 2019, 11, .                        | 3.8  | 18        |
| 14 | Boosting Computational Power through Spatial Multiplexing in Quantum Reservoir Computing. Physical Review Applied, 2019, 11, .  | 3.8  | 77        |
| 15 | Quantum analog-digital conversion. Physical Review A, 2019, 99, .   | 2.5  | 49        |
| 16 | Methodology for replacing indirect measurements with direct measurements. Physical Review Research, 2019, 1, .  | 3.6  | 93        |
| 17 | Subspace-search variational quantum eigensolver for excited states. Physical Review Research, 2019, 1, .  | 3.6  | 178       |
| 18 | Quantum circuit learning. Physical Review A, 2018, 98, .  | 2.5  | 643       |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Overhead for simulating a non-local channel with local channels by quasiprobability sampling. Quantum - the Open Journal for Quantum Science, 0, 5, 388. | 0.0 | 16        |
| 20 | Qulacs: a fast and versatile quantum circuit simulator for research purpose. Quantum - the Open Journal for Quantum Science, 0, 5, 559.                  | 0.0 | 112       |
| 21 | Computational power of one- and two-dimensional dual-unitary quantum circuits. Quantum - the Open Journal for Quantum Science, 0, 6, 631.                | 0.0 | 17        |