

Xin Wang

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8603805/xin-wang-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

50
papers

1,173
citations

19
h-index

33
g-index

52
ext. papers

1,450
ext. citations

3.9
avg, IF

4.68
L-index

#	Paper	IF	Citations
50	Composite pulses for robust universal control of singlet-triplet qubits. <i>Nature Communications</i> , 2012 , 3, 997	17.4	112
49	Dynamical mean-field theory of nickelate superlattices. <i>Physical Review Letters</i> , 2011 , 107, 206804	7.4	85
48	Local order and the gapped phase of the Hubbard model: A plaquette dynamical mean-field investigation. <i>Europhysics Letters</i> , 2008 , 84, 37009	1.6	83
47	Plug-and-Play Approach to Nonadiabatic Geometric Quantum Gates. <i>Physical Review Letters</i> , 2019 , 123, 100501	7.4	65
46	Noise-resistant control for a spin qubit array. <i>Physical Review Letters</i> , 2013 , 110, 140502	7.4	62
45	Covalency, double-counting, and the metal-insulator phase diagram in transition metal oxides. <i>Physical Review B</i> , 2012 , 86,	3.3	59
44	Robust quantum gates for singlet-triplet spin qubits using composite pulses. <i>Physical Review A</i> , 2014 , 89,	2.6	57
43	Antiferromagnetism and the gap of a Mott insulator: Results from analytic continuation of the self-energy. <i>Physical Review B</i> , 2009 , 80,	3.3	57
42	Electronic correlation in nanoscale junctions: Comparison of the GW approximation to a numerically exact solution of the single-impurity Anderson model. <i>Physical Review B</i> , 2008 , 77,	3.3	48
41	Correlation strength, gaps, and particle-hole asymmetry in high-Tc cuprates: A dynamical mean field study of the three-band copper-oxide model. <i>Physical Review B</i> , 2009 , 80,	3.3	44
40	Generic Hubbard model description of semiconductor quantum-dot spin qubits. <i>Physical Review B</i> , 2011 , 83,	3.3	39
39	Generalizable control for quantum parameter estimation through reinforcement learning. <i>Npj Quantum Information</i> , 2019 , 5,	8.6	33
38	Robust quantum control using smooth pulses and topological winding. <i>Scientific Reports</i> , 2015 , 5, 12685	4.9	30
37	When does reinforcement learning stand out in quantum control? A comparative study on state preparation. <i>Npj Quantum Information</i> , 2019 , 5,	8.6	29
36	Automatic spin-chain learning to explore the quantum speed limit. <i>Physical Review A</i> , 2018 , 97,	2.6	24
35	Hubbard model description of silicon spin qubits: Charge stability diagram and tunnel coupling in Si double quantum dots. <i>Physical Review B</i> , 2011 , 83,	3.3	23
34	Randomized Benchmarking of Barrier versus Tilt Control of a Singlet-Triplet Qubit. <i>Physical Review Letters</i> , 2017 , 118, 216802	7.4	22

33	Dynamically corrected gates for an exchange-only qubit. <i>Physical Review B</i> , 2013 , 88,	3.3	20
32	Neural-network-designed pulse sequences for robust control of singlet-triplet qubits. <i>Physical Review A</i> , 2018 , 97,	2.6	19
31	Theory of oxygen K edge x-ray absorption spectra of cuprates. <i>Physical Review B</i> , 2010 , 81,	3.3	19
30	Role of oxygen-oxygen hopping in the three-band copper-oxide model: Quasiparticle weight, metal insulator and magnetic phase boundaries, gap values, and optical conductivity. <i>Physical Review B</i> , 2011 , 83,	3.3	19
29	$d_{3z^2-r^2}$ orbital in high- T_c cuprates: Excitonic spectrum, metal-insulator phase diagram, optical conductivity, and orbital character of doped holes. <i>Physical Review B</i> , 2011 , 84,	3.3	19
28	Robust two-qubit gates for exchange-coupled qubits. <i>Physical Review B</i> , 2014 , 89,	3.3	17
27	Improving the gate fidelity of capacitively coupled spin qubits. <i>Npj Quantum Information</i> , 2015 , 1,	8.6	16
26	Noise-compensating pulses for electrostatically controlled silicon spin qubits. <i>Physical Review B</i> , 2014 , 90,	3.3	16
25	Noise filtering of composite pulses for singlet-triplet qubits. <i>Scientific Reports</i> , 2016 , 6, 28996	4.9	15
24	High-frequency asymptotic behavior of self-energies in quantum impurity models. <i>Physical Review B</i> , 2011 , 84,	3.3	15
23	Quantum theory of the charge-stability diagram of semiconductor double-quantum-dot systems. <i>Physical Review B</i> , 2011 , 84,	3.3	13
22	Fast pulse sequences for dynamically corrected gates in singlet-triplet qubits. <i>Physical Review B</i> , 2017 , 96,	3.3	12
21	Diagrammatic quantum Monte Carlo solution of the two-dimensional cooperon-fermion model. <i>Physical Review B</i> , 2011 , 83,	3.3	11
20	Fast control of semiconductor qubits beyond the rotating-wave approximation. <i>Physical Review A</i> , 2016 , 94,	2.6	11
19	High-fidelity geometric gate for silicon-based spin qubits. <i>Physical Review A</i> , 2020 , 101,	2.6	10
18	Suppression of charge noise using barrier control of a singlet-triplet qubit. <i>Physical Review A</i> , 2017 , 96,	2.6	9
17	Leakage and sweet spots in triple-quantum-dot spin qubits: A molecular-orbital study. <i>Physical Review A</i> , 2018 , 97,	2.6	9
16	Quantum criticality and non-Fermi-liquid behavior in a two-level two-lead quantum dot. <i>Physical Review B</i> , 2010 , 81,	3.3	8

15	Ferromagnetic response of a high-temperature quantum antiferromagnet. <i>Physical Review B</i> , 2014 , 89,	3.3	7
14	Benchmarking of dynamically corrected gates for the exchange-only spin qubit in a $1/f$ noise environment. <i>Physical Review A</i> , 2016 , 94,	2.6	5
13	Energy spectrum, exchange interaction, and gate crosstalk in a system with a pair of double quantum dots: A molecular-orbital calculation. <i>Physical Review A</i> , 2017 , 95,	2.6	4
12	Suppression of Leakage for a Charge Qubit in Triangular Triple Quantum Dots. <i>Advanced Quantum Technologies</i> , 2019 , 2, 1900072	4.3	4
11	Tunable charge qubit based on barrier-controlled triple quantum dots. <i>Physical Review A</i> , 2018 , 98,	2.6	4
10	Quantum information scrambling through a high-complexity operator mapping. <i>Physical Review A</i> , 2019 , 100,	2.6	3
9	Magic angle for barrier-controlled double quantum dots. <i>Physical Review A</i> , 2018 , 97,	2.6	3
8	Mott-insulating phases and magnetism of fermions in a double-well optical lattice. <i>Physical Review A</i> , 2011 , 84,	2.6	2
7	Additive Temporal Coloured Noise Induced Eckhaus Instability in Complex Ginzburg-Landau Equation System. <i>Chinese Physics Letters</i> , 2004 , 21, 2365-2368	1.8	2
6	Generalizable control for multiparameter quantum metrology. <i>Physical Review A</i> , 2021 , 103,	2.6	2
5	Minimal nonorthogonal gate decomposition for qubits with limited control. <i>Physical Review A</i> , 2019 , 99,	2.6	1
4	Spin-qubit noise spectroscopy from randomized benchmarking by supervised learning. <i>Physical Review A</i> , 2019 , 99,	2.6	1
3	Generic detection-based error mitigation using quantum autoencoders. <i>Physical Review A</i> , 2021 , 103,	2.6	1
2	Implementation of Geometric Quantum Gates on Microwave-Driven Semiconductor Charge Qubits. <i>Advanced Quantum Technologies</i> , 2021 , 4, 2100011	4.3	1
1	On the validity of microscopic calculations of double-quantum-dot spin qubits based on Fock-Darwin states. <i>Science China: Physics, Mechanics and Astronomy</i> , 2018 , 61, 1	3.6	1