Ashok Ajoy

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8732832/publications.pdf

Version: 2024-02-01

38	1,030	361388	414395
papers	citations	20	32
		h-index	g-index

38	38	38	1022
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Stable three-axis nuclear-spin gyroscope in diamond. Physical Review A, 2012, 86, .	2.5	107
2	Orientation-independent room temperature optical ¹³ C hyperpolarization in powdered diamond. Science Advances, 2018, 4, eaar5492.	10.3	91
3	Optimal pulse spacing for dynamical decoupling in the presence of a purely dephasing spin bath. Physical Review A, 2011, 83, .	2.5	86
4	Performance comparison of dynamical decoupling sequences for a qubit in a rapidly fluctuating spin bath. Physical Review A, 2010, 82, .	2.5	80
5	Atomic-Scale Nuclear Spin Imaging Using Quantum-Assisted Sensors in Diamond. Physical Review X, 2015, 5, .	8.9	57
6	Quantum Simulation via Filtered Hamiltonian Engineering: Application to Perfect Quantum Transport in Spin Networks. Physical Review Letters, 2013, 110, 220503.	7.8	48
7	Enhanced dynamic nuclear polarization via swept microwave frequency combs. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10576-10581.	7.1	45
8	Multispin-assisted optical pumping of bulk <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">C</mml:mi><mml:mprescripts /><mml:none /><mml:mn>13</mml:mn></mml:mmultiscripts></mml:math> nuclear spin polarization in diamond. Physical Review B, 2018, 97, .	3.2	42
9	Svetlichnyâ€™s inequality and genuine tripartite nonlocality in three-qubit pure states. Physical Review A, 2010, 81, .	2.5	38
10	Bright nanowire single photon source based on SiV centers in diamond. Optics Express, 2018, 26, 80.	3.4	37
11	Hyperpolarized relaxometry based nuclear T1 noise spectroscopy in diamond. Nature Communications, 2019, 10, 5160.	12.8	31
12	Nanoscale Vector dc Magnetometry via Ancilla-Assisted Frequency Up-Conversion. Physical Review Letters, 2019, 122, 100501.	7.8	30
13	Dynamics of frequency-swept nuclear spin optical pumping in powdered diamond at low magnetic fields. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2512-2520.	7.1	28
14	Quantum interpolation for high-resolution sensing. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2149-2153.	7.1	25
15	Floquet Prethermalization with Lifetime Exceeding 90Âs in a Bulk Hyperpolarized Solid. Physical Review Letters, 2021, 127, 170603.	7.8	25
16	Decay of spin coherences in one-dimensional spin systems. New Journal of Physics, 2013, 15, 093035.	2.9	24
17	Room temperature â€œoptical nanodiamond hyperpolarizerâ€ Physics, design, and operation. Review of Scientific Instruments, 2020, 91, 023106.	1.3	24
18	Evolution-Free Hamiltonian Parameter Estimation through Zeeman Markers. Physical Review Letters, 2017, 119, 030402.	7.8	22

#	Article	IF	Citations
19	Cross-Sensor Feedback Stabilization of an Emulated Quantum Spin Gyroscope. Physical Review Applied, 2019, 11, .	3.8	22
20	Carbon-13 dynamic nuclear polarization in diamond via a microwave-free integrated cross effect. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18334-18340.	7.1	20
21	Optically pumped spin polarization as a probe of many-body thermalization. Science Advances, 2020, 6, .	10.3	18
22	Perfect quantum transport in arbitrary spin networks. Physical Review B, 2013, 87, .	3.2	16
23	Mixed-state quantum transport in correlated spin networks. Physical Review A, 2012, 85, .	2.5	15
24	Two-Electron-Spin Ratchets as a Platform for Microwave-Free Dynamic Nuclear Polarization of Arbitrary Material Targets. Nano Letters, 2019, 19, 2389-2396.	9.1	14
25	Background-free dual-mode optical and¹³C magnetic resonance imaging in diamond particles. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	13
26	Dynamical Hamiltonian engineering of 2D rectangular lattices in a one-dimensional ion chain. Npj Quantum Information, 2019, 5, .	6.7	12
27	Algorithmic approach to simulate Hamiltonian dynamics and an NMR simulation of quantum state transfer. Physical Review A, 2012, 85, .	2.5	11
28	Wide dynamic range magnetic field cycler: Harnessing quantum control at low and high fields. Review of Scientific Instruments, 2019, 90, 013112.	1.3	11
29	Selective Decoupling and Hamiltonian Engineering in Dipolar Spin Networks. Physical Review Letters, 2019, 122, 013205.	7.8	8
30	Enhanced Optical 13 C Hyperpolarization in Diamond Treated by Highâ€Temperature Rapid Thermal Annealing. Advanced Quantum Technologies, 2020, 3, 2000050.	3.9	8
31	High-fidelity Trotter formulas for digital quantum simulation. Physical Review A, 2020, 102, .	2.5	6
32	Magnetic field induced delocalization in hybrid electron-nuclear spin ensembles. Physical Review B, 2021, 103, .	3.2	6
33	Beauty beyond the Eye: Color Centers in Diamond Particles for Imaging and Quantum Sensing Applications. Reviews and Advances in Chemistry, 2022, 12, 1-21.	0.5	4
34	Nuclear spin temperature reversal via continuous radio-frequency driving. Physical Review B, 2021, 103, .	3.2	3
35	Low-field microwave-mediated optical hyperpolarization in optically pumped diamond. Journal of Magnetic Resonance, 2021, 331, 107021.	2.1	2
36	Imaging Sequences for Hyperpolarized Solids. Molecules, 2021, 26, 133.	3.8	1

#	Article	IF	Citations
37	G N Ramachandranâ€™s contributions to medical imaging. Resonance, 2016, 21, 741-747.	0.3	0
38	10.1063/1.5131655.1. , 2020, , .		0