Nan Zhao

List of Publications by Year
in descending order

41 papers	2,100 citations	394390 19 h-index	289230 40 g-index
41 all docs	41 docs citations	41 times ranked	1906 citing authors

#	Article	IF	Citations
1	Coherent control of single spins in silicon carbide at room temperature. Nature Materials, 2015, 14, 164-168.	27.5	472
2	Preserving electron spin coherence in solids by optimal dynamical decoupling. Nature, 2009, 461, 1265-1268.	27.8	314
3	Sensing single remote nuclear spins. Nature Nanotechnology, 2012, 7, 657-662.	31.5	217
4	Atomic-scale magnetometry of distant nuclear spin clusters via nitrogen-vacancy spin in diamond. Nature Nanotechnology, 2011, 6, 242-246.	31.5	149
5	Decoherence and dynamical decoupling control of nitrogen vacancy center electron spins in nuclear spin baths. Physical Review B, 2012, 85, .	3.2	149
6	Sensing and atomic-scale structure analysis of single nuclear-spin clusters in diamond. Nature Physics, 2014, 10, 21-25.	16.7	97
7	Observation of an anomalous decoherence effect in a quantum bath at room temperature. Nature Communications, 2011, 2, 570.	12.8	75
8	Electron spin decoherence in silicon carbide nuclear spin bath. Physical Review B, 2014, 90, .	3.2	70
9	Anomalous Decoherence Effect in a Quantum Bath. Physical Review Letters, 2011, 106, 217205.	7.8	65
10	Tuning a Spin Bath through the Quantum-Classical Transition. Physical Review Letters, 2012, 108, 200402.	7.8	52
11	Hybrid opto-mechanical systems with nitrogen-vacancy centers. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1-12.	5.1	48
12	Observable topological effects in molecular devices with MÃ¶bius topology. Physical Review B, 2009, 79, .	3.2	34
13	Room-temperature ultrasensitive mass spectrometer via dynamical decoupling. Physical Review A, 2014, 90, .	2.5	33
14	Uncovering many-body correlations in nanoscale nuclear spin baths by central spin decoherence. Nature Communications, 2014, 5, 4822.	12.8	32
15	Dynamical decoupling design for identifying weakly coupled nuclear spins in a bath. Physical Review A, 2014, 90, .	2.5	29
16	Optical levitation of nanodiamonds by doughnut beams in vacuum. Laser and Photonics Reviews, 2017, 11, 1600284.	8.7	29
17	Spin entanglement induced by spin-orbit interactions in coupled quantum dots. Physical Review B, 2006, 74, .	3.2	22
18	Controllable effects of quantum fluctuations on spin free-induction decay at room temperature. Scientific Reports, 2012, 2, 432.	3.3	22

#	Article	IF	Citations
19	Sensing Individual Nuclear Spins with a Single Rare-Earth Electron Spin. Physical Review Letters, 2020, 124, 170402.	7.8	20
20	Diamond quantum sensors: from physics to applications on condensed matter research. Functional Diamond, 2021, 1, 160-173.	3.8	19
21	Resolving remote nuclear spins in a noisy bath by dynamical decoupling design. Physical Review A, 2015, 92, .	2.5	17
22	Closed-Loop Nuclear Magnetic Resonance Gyroscope Based on Rb-Xe. Scientific Reports, 2020, 10, 2258.	3.3	17
23	Protection of centre spin coherence by dynamic nuclear spin polarization in diamond. Nanoscale, 2014, 6, 10134-10139.	5.6	14
24	Anomalous motion of a particle levitated by Laguerreâ€“Gaussian beams. Optics Letters, 2021, 46, 106.	3.3	14
25	Detection of a weak magnetic field via cavity-enhanced Faraday rotation. Physical Review A, 2015, 92, .	2.5	12
26	Bistability and squeezing of the librational mode of an optically trapped nanoparticle. Physical Review A, 2017, 96, .	2.5	11
27	Magnetic Noise Enabled Biocompass. Physical Review Letters, 2020, 124, 128101.	7.8	10
28	Torsional cooling of a nanodiamond via the interaction with the electron spin of the embedded nitrogen-vacancy center. Physical Review A, 2018, 98, .	2.5	8
29	Spin-polarization dependence of the Rb-Xe spin-exchange optical pumping process. Physical Review A, 2021, 104, .	2.5	8
30	Optimizations of a parametric-modulation atomic magnetometer in a nuclear magnetic resonance gyroscope. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 205001.	1.5	7
31	Quantum noise theory for quantum transport through nanostructures. New Journal of Physics, 2011, 13, 013005.	2.9	6
32	Quantum ground state cooling of translational and librational modes of an optically trapped nanoparticle coupling cavity. Quantum Engineering, 2021, 3, e62.	2.5	6
33	Sensitivity of displacement detection for a particle levitated in the doughnut beam. Optics Letters, 2018, 43, 4582.	3.3	5
34	Best of both worlds. Nature Materials, 2013, 12, 97-98.	27.5	4
35	Fine-structure splitting of exciton states in semiconductor quantum dot molecules. Journal of Physics Condensed Matter, 2008, 20, 045204.	1.8	3
36	Proposal for observing dynamic Jahnâ€“Teller effect by single solid-state defects. New Journal of Physics, 2016, 18, 103022.	2.9	3

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37	Feedback control for manipulating magnetization in spin-exchange optical pumping system. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	5.1	3
38	Detection of Magnetic Field Gradient and Single Spin Using Optically Levitated Nano-Particle in Vacuum. Communications in Theoretical Physics, 2018, 70, 097.	2.5	2
39	A rotation sensor based on alkali-metal vapor cell. Applied Physics Letters, 2018, 113, 064101.	3.3	1
40	Saturation effect of atomic magnetic resonance. AIP Advances, 2020, 10, 055013.	1.3	1
41	Precise measurement of coupling strength and high temperature quantum effect in a nonlinearly coupled qubit-oscillator system. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 043102.	2.3	0