Wenxian Zhang

List of Publications by Year
in descending order

33 papers	1,204 citations	687363 13 h-index	434195 31 g-index
33 all docs	33 docs citations	33 times ranked	862 citing authors

#	Article	IF	Citations
1	Coherent spinor dynamics in a spin-1 BoseÂcondensate. Nature Physics, 2005, 1, 111-116.	16.7	338
2	Coherent spin mixing dynamics in a spin-1 atomic condensate. Physical Review A, 2005, 72, .	2.5	163
3	Dynamical Instability and Domain Formation in a Spin-1 Bose-Einstein Condensate. Physical Review Letters, 2005, 95, 180403.	7.8	103
4	Mean field ground state of a spin-1 condensate in a magnetic field. New Journal of Physics, 2003, 5, 77-77.	2.9	102
5	Hyperfine interaction induced decoherence of electron spins in quantum dots. Physical Review B, 2006, 74, .	3.2	73
6	Long-time electron spin storage via dynamical suppression of hyperfine-induced decoherence in a quantum dot. Physical Review B, 2008, 77, .	3.2	52
7	Dynamical control of electron spin coherence in a quantum dot: A theoretical study. Physical Review B, 2007, 75, .	3.2	49
8	Bose-Einstein condensation of trapped interacting spin-1 atoms. Physical Review A, 2004, 70, .	2.5	41
9	Encoding a qubit with Majorana modes in superconducting circuits. Scientific Reports, 2014, 4, 5535.	3.3	40
10	NMR multiple quantum coherences in quasi-one-dimensional spin systems: Comparison with ideal spin-chain dynamics. Physical Review A, 2009, 80, .	2.5	38
11	Physical mechanisms for the unique optical properties of chalcogen-hyperdoped silicon. Europhysics Letters, 2012, 99, 46005.	2.0	37
12	Heisenberg-scaled magnetometer with dipolar spin-1 condensates. Physical Review A, 2016, 93, .	2.5	23
13	Time-Domain Grating with a Periodically Driven Qutrit. Physical Review Applied, 2019, 11, .	3.8	20
14	Coherent zero-field magnetization resonance in a dipolar spin-1 Bose-Einstein condensate. Physical Review A, 2015, 92, .	2.5	13
15	Implementing a topological quantum model using a cavity lattice. Science China: Physics, Mechanics and Astronomy, 2012, 55, 1549-1556.	5.1	12
16	Efficient Generation of Many-Body Entangled States by Multilevel Oscillations. Physical Review Letters, 2019, 123, 073001.	7.8	12
17	Effective size of a trapped atomic Bose gas. Physical Review A, 2005, 72, .	2.5	11
18	Suppression of electron spin decoherence in a quantum dot. Journal of Modern Optics, 2007, 54, 2629-2640.	1.3	9

#	Article	IF	Citations
19	Efficient generation of many-body singlet states of spin-1 bosons in optical superlattices. Physical Review A, 2017, 95, .	2.5	9
20	Manipulating dipolar and spin-exchange interactions in spin-1 Bose-Einstein condensates. Physical Review A, 2012, 85, .	2.5	8
21	High-fidelity quantum memory utilizing inhomogeneous nuclear polarization in a quantum dot. Physical Review B, 2014, 90, .	3.2	8
22	Preserving coherent spin and squeezed spin states of a spin-1 Bose-Einstein condensate with rotary echoes. Physical Review A, 2016, 94, .	2.5	8
23	Magnetic-field-induced dynamical instabilities in an antiferromagnetic spin-1 Bose-Einstein condensate. Physical Review A, 2016, 93, .	2.5	7
24	Analytical double-unitary-transformation approach for strongly and periodically driven three-level systems. Physical Review A, 2020, 101, .	2.5	7
25	Uniaxial Dynamical Decoupling for an Open Quantum System. Physical Review Letters, 2019, 122, 010408.	7.8	6
26	Rebuilding of destroyed spin squeezing in noisy environments. Scientific Reports, 2017, 7, 14102.	3.3	5
27	Quantum-memory-assisted precision rotation sensing. Physical Review A, 2020, 102, .	2.5	4
28	Localizing spin dynamics in a spin-1 Bose-Einstein condensate via magnetic pulses. Physical Review A, 2015, 92, .	2.5	2
29	Generalized parametric resonance in a spin-1 Bose-Einstein condensate. Physical Review A, 2021, 104, .	2.5	2
30	Determination of the oscillation frequency in a strongly damped dipole trap by control of spin current. Applied Physics Letters, 2021, 119, 164001.	3.3	1
31	All-optical pulse switching with a periodically driven dissipative quantum system. Optics Express, 2022, 30, 7987.	3.4	1
32	Optical-plug-assisted spin vortex in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Rb</mml:mi><mml:mprescripts /><mml:none /><mml:mn>87</mml:mn></mml:mmultiscripts></mml:math> dipolar spinor Bose-Einstein condensate. Physical Review A, 2022, 105, .	2.5	0
33	Tunable quantum interference effects in Floquet two- and three-level systems. Physical Review A, 2022, 105, .	2.5	0