

# Zhi-Cheng Shi

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

793  
citations

516710

16  
h-index

552781

26  
g-index

49  
all docs

49  
docs citations

49  
times ranked

238  
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimized nonadiabatic holonomic quantum computation based on FÅrster resonance in Rydberg atoms. <i>Frontiers of Physics</i> , 2022, 17, 1.	5.0	19
2	Composite pulses for high fidelity population transfer in three-level systems. <i>New Journal of Physics</i> , 2022, 24, 023014.	2.9	12
3	Detecting a single atom in a cavity using the Ĩ(2) nonlinear medium. <i>Frontiers of Physics</i> , 2022, 17, 1.	5.0	3
4	Robust population inversion in three-level systems by composite pulses. <i>Physical Review A</i> , 2022, 105, .	2.5	10
5	Generation of $\langle i \rangle N \langle /i \rangle$ particle $\langle i \rangle W \langle /i \rangle$ State with Trapped $\hat{b} \langle /i \rangle$ Type Ions by Transitionless Quantum Driving. <i>Annalen Der Physik</i> , 2021, 533, 2000526.	2.4	7
6	Generation of Three-Atom Singlet State with High-Fidelity by Lyapunov Control. <i>International Journal of Theoretical Physics</i> , 2021, 60, 1416-1424.	1.2	0
7	Robust single-qubit gates by composite pulses in three-level systems. <i>Physical Review A</i> , 2021, 103, .	2.5	20
8	Generation of nonclassical states in nonlinear oscillators via Lyapunov control. <i>Physical Review A</i> , 2020, 102, .	2.5	12
9	Robust Generation of Logical Qubit Singlet States with Reverse Engineering and Optimal Control with Spin Qubits. <i>Advanced Quantum Technologies</i> , 2020, 3, 2000113.	3.9	7
10	Heralded atomic nonadiabatic holonomic quantum computation with Rydberg blockade. <i>Physical Review A</i> , 2020, 102, .	2.5	33
11	Accelerated and Robust Generation of $\langle i \rangle W \langle /i \rangle$ State by Parametric Amplification and Inverse Hamiltonian Engineering. <i>Annalen Der Physik</i> , 2020, 532, 2000002.	2.4	9
12	Flexible scheme for the implementation of nonadiabatic geometric quantum computation. <i>Physical Review A</i> , 2020, 101, .	2.5	42
13	Deterministic interconversions between the Greenberger-Horne-Zeilinger states and the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \rangle W \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ states by invariant-based pulse design. <i>Physical Review A</i> , 2020, 101, .	2.5	34
14	Pulse reverse engineering for controlling two-level quantum systems. <i>Physical Review A</i> , 2020, 101, .	2.5	17
15	Implementation of universal quantum gates by periodic two-step modulation in a weakly nonlinear qubit. <i>Physical Review A</i> , 2020, 101, .	2.5	9
16	Efficient Generation of Atomic Singlet State with Rydberg Blockade and Lie-Transform-Based Pulse Design. <i>Annalen Der Physik</i> , 2020, 532, 2000093.	2.4	1
17	Effective pulse reverse-engineering for strong field-matter interaction. <i>Optics Letters</i> , 2020, 45, 3597.	3.3	11
18	Deterministic conversions between Greenberger-Horne-Zeilinger states and $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \rangle W \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ states of spin qubits via Lie-transform-based inverse Hamiltonian engineering. <i>Physical Review A</i> , 2019, 100, .	2.5	22

#	ARTICLE	IF	CITATIONS
19	Manipulation of Multi-Level Quantum Systems via Unsharp Measurements and Feedback Operations. Annalen Der Physik, 2019, 531, 1900063.	2.4	0
20	Coherent State Control to Recover Quantum Entanglement and Coherence. Entropy, 2019, 21, 917.	2.2	7
21	Shortcuts to adiabatic for implementing controlled phase gate with Cooper-pair box qubits in circuit quantum electrodynamics system. Quantum Information Processing, 2019, 18, 1.	2.2	8
22	Implementation of Controlled NOT Gate by Lyapunov Control. Annalen Der Physik, 2019, 531, 1900086.	2.4	3
23	Accelerated and Noise-Resistant Protocol of Dissipation-Based Knill "Laflamme" Milburn State Generation with Lyapunov Control. Annalen Der Physik, 2019, 531, 1900006.	2.4	15
24	One-Step Implementation of N-Qubit Nonadiabatic Holonomic Quantum Gates with Superconducting Qubits via Inverse Hamiltonian Engineering. Annalen Der Physik, 2019, 531, 1800427.	2.4	9
25	Complete and Nondestructive Atomic Greenberger "Horne" Zeilinger State Analysis Assisted by Invariant-Based Inverse Engineering. Annalen Der Physik, 2019, 531, 1800447.	2.4	9
26	Invariant-based inverse engineering for fluctuation transfer between membranes in an optomechanical cavity system. Physical Review A, 2018, 97, .	2.5	34
27	Nonadiabatic holonomic quantum computation using Rydberg blockade. Physical Review A, 2018, 97, .	2.5	63
28	Accelerating Population Transfer in a Transmon Qutrit Via Shortcuts to Adiabaticity. Annalen Der Physik, 2018, 530, 1700351.	2.4	11
29	Quantum state transfer in spin chains via shortcuts to adiabaticity. Physical Review A, 2018, 97, .	2.5	30
30	Accelerated and noise-resistant generation of high-fidelity steady-state entanglement with Rydberg atoms. Physical Review A, 2018, 97, .	2.5	33
31	Pulse design for multilevel systems by utilizing Lie transforms. Physical Review A, 2018, 97, .	2.5	27
32	High-fidelity generating multi-qubit W state via dressed states in the system of multiple resonators coupled with a superconducting qubit. Canadian Journal of Physics, 2018, 96, 81-89.	1.1	1
33	Shortcut Scheme for One-Step Implementation of a Three-Qubit Nonadiabatic Holonomic Gate. Annalen Der Physik, 2018, 530, 1800179.	2.4	12
34	Shortcuts to adiabatic for implementing controlled-not gate with superconducting quantum interference device qubits. Quantum Information Processing, 2018, 17, 1.	2.2	9
35	High fidelity Dicke-state generation with Lyapunov control in circuit QED system. Annals of Physics, 2018, 396, 44-55.	2.8	6
36	Complete and Nondestructive Atomic Bell State Analysis Assisted by Inverse Engineering. Annalen Der Physik, 2018, 530, 1800133.	2.4	9

#	ARTICLE	IF	CITATIONS
37	Quantum state engineering by periodical two-step modulation in an atomic system. Optics Express, 2018, 26, 34789.	3.4	6
38	Speeding up adiabatic passage by adding Lyapunov control. Physical Review A, 2017, 96, .	2.5	22
39	Protecting Quantum State in Time-Dependent Decoherence-Free Subspaces Without the Rotating-Wave Approximation. Annalen Der Physik, 2017, 529, 1700186.	2.4	10
40	Fast and Robust Quantum Information Transfer in Annular and Radial Superconducting Networks. Annalen Der Physik, 2017, 529, 1700154.	2.4	14
41	Complete Bell-state analysis for superconducting-quantum-interference-device qubits with a transitionless tracking algorithm. Physical Review A, 2017, 96, .	2.5	34
42	Generation of three-qubit Greenberger-Horne-Zeilinger states of superconducting qubits by using dressed states. Quantum Information Processing, 2017, 16, 1.	2.2	7
43	Optimal shortcut approach based on an easily obtained intermediate Hamiltonian. Physical Review A, 2017, 95, .	2.5	36
44	Coherent control in quantum open systems: An approach for accelerating dissipation-based quantum state generation. Physical Review A, 2017, 96, .	2.5	16
45	Fast preparation of $W$ states with superconducting quantum interference devices by using dressed states. Physical Review A, 2016, 94, .	2.5	77
46	Emergence of multipartite optomechanical entanglement in microdisk cavities coupled to nanostring waveguide. Quantum Information Processing, 2013, 12, 3179-3190.	2.2	1
47	Effective scheme for enhancing entanglement in distant optomechanical system by injecting the atomic medium. Canadian Journal of Physics, 2013, 91, 146-152.	1.1	0
48	Generation of three-atom singlet state in a bimodal cavity via quantum Zeno dynamics. Quantum Information Processing, 2013, 12, 411-424.	2.2	16