# Ye-Hong Chen

## List of Publications by Year
## in descending order

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|---|---|---|---|
| 55 papers | 1,536 citations | 236925<br>25 h-index | 315739<br>38 g-index |
| 57 all docs | 57 docs citations | 57 times ranked | 423 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Efficient shortcuts to adiabatic passage for fast population transfer in multiparticle systems. Physical Review A, 2014, 89, . | 2.5 | 132 |
| 2 | Fast and noise-resistant implementation of quantum phase gates and creation of quantum entangled states. Physical Review A, 2015, 91, . | 2.5 | 124 |
| 3 | Method for constructing shortcuts to adiabaticity by a substitute of counterdiabatic driving terms. Physical Review A, 2016, 93, . | 2.5 | 93 |
| 4 | Shortcuts to Adiabaticity for the Quantum Rabi Model: Efficient Generation of Giant Entangled Cat States via Parametric Amplification. Physical Review Letters, 2021, 126, 023602. | 7.8 | 88 |
| 5 | Fast preparation of $W$ states with superconducting quantum interference devices by using dressed states. Physical Review A, 2016, 94, . | 2.5 | 77 |
| 6 | Nonadiabatic holonomic quantum computation using Rydberg blockade. Physical Review A, 2018, 97, . | 2.5 | 63 |
| 7 | Shortcuts to adiabatic passage for fast generation of Greenberger-Horne-Zeilinger states by transitionless quantum driving. Scientific Reports, 2015, 5, 15616. | 3.3 | 57 |
| 8 | Fast generation of three-atom singlet state by transitionless quantum driving. Scientific Reports, 2016, 6, 22202. | 3.3 | 44 |
| 9 | Shortcuts to adiabatic passage for multiparticles in distant cavities: applications to fast and noise-resistant quantum population transfer, entangled states' preparation and transition. Laser Physics Letters, 2014, 11, 115201. | 1.4 | 43 |
| 10 | Fast generation of W states of superconducting qubits with multiple Schrödinger dynamics. Scientific Reports, 2016, 6, 36737. | 3.3 | 43 |
| 11 | Nonadiabatic geometric quantum computation with cat-state qubits via invariant-based reverse engineering. Physical Review Research, 2022, 4, . | 3.6 | 43 |
| 12 | Reverse engineering of a Hamiltonian by designing the evolution operators. Scientific Reports, 2016, 6, 30151. | 3.3 | 42 |
| 13 | Optimal shortcut approach based on an easily obtained intermediate Hamiltonian. Physical Review A, 2017, 95, . | 2.5 | 36 |
| 14 | Fast quantum state engineering via universal SU(2) transformation. Physical Review A, 2017, 96, . | 2.5 | 34 |
| 15 | Complete Bell-state analysis for superconducting-quantum-interference-device qubits with a transitionless tracking algorithm. Physical Review A, 2017, 96, . | 2.5 | 34 |
| 16 | Invariant-based inverse engineering for fluctuation transfer between membranes in an optomechanical cavity system. Physical Review A, 2018, 97, . | 2.5 | 34 |
| 17 | Accelerated and noise-resistant generation of high-fidelity steady-state entanglement with Rydberg atoms. Physical Review A, 2018, 97, . | 2.5 | 33 |
| 18 | Improving the stimulated Raman adiabatic passage via dissipative quantum dynamics. Optics Express, 2016, 24, 22847. | 3.4 | 30 |

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|---|---------|-----|-----------|
| 19 | Quantum state transfer in spin chains via shortcuts to adiabaticity. Physical Review A, 2018, 97, . | 2.5 | 30 |
| 20 | Fast and high-fidelity generation of steady-state entanglement using pulse modulation and parametric amplification. Physical Review A, 2019, 100, . | 2.5 | 29 |
| 21 | Fast and dephasing-tolerant preparation of steady Knill-Laflamme-Milburn states via dissipative Rydberg pumping. Physical Review A, 2021, 103, . | 2.5 | 29 |
| 22 | Transitionless-based shortcuts for the fast and robust generation of W states. Optics Communications, 2016, 380, 140-147. | 2.1 | 27 |
| 23 | Pulse design for multilevel systems by utilizing Lie transforms. Physical Review A, 2018, 97, . | 2.5 | 27 |
| 24 | Fast binomial-code holonomic quantum computation with ultrastrong light-matter coupling. Physical Review Research, 2021, 3, . | 3.6 | 27 |
| 25 | Strong spin squeezing induced by weak squeezing of light inside a cavity. Nanophotonics, 2020, 9, 4853-4868. | 6.0 | 27 |
| 26 | Arbitrary quantum state engineering in three-state systems via Counterdiabatic driving. Scientific Reports, 2016, 6, 38484. | 3.3 | 25 |
| 27 | Fast generating Greenberger–Horne–Zeilinger state via iterative interaction pictures. Laser Physics Letters, 2016, 13, 105202. | 1.4 | 23 |
| 28 | Fast generation of N-atom Greenberger–Horne–Zeilinger state in separate coupled cavities via transitionless quantum driving. Quantum Information Processing, 2016, 15, 2359-2376. | 2.2 | 22 |
| 29 | Coherent control in quantum open systems: An approach for accelerating dissipation-based quantum state generation. Physical Review A, 2017, 96, . | 2.5 | 16 |
| 30 | Two-level systems with periodic $N$ -step driving fields: Exact dynamics and quantum state manipulations. Physical Review A, 2021, 104, . | 2.5 | 16 |
| 31 | Reverse engineering of a nonlossy adiabatic Hamiltonian for non-Hermitian systems. Physical Review A, 2016, 94, . | 2.5 | 15 |
| 32 | Deterministic generation of singlet states for $N$ -atoms in coupled cavities via quantum Zeno dynamics. Quantum Information Processing, 2014, 13, 1857-1877. | 2.2 | 14 |
| 33 | Generation of multi-atom entangled states in coupled cavities via transitionless quantum driving. Quantum Information Processing, 2015, 14, 4475-4492. | 2.2 | 13 |
| 34 | Fast generation of three-qubit Greenberger-Horne-Zeilinger state based on the Lewis-Riesenfeld invariants in coupled cavities. Scientific Reports, 2016, 6, 25707. | 3.3 | 12 |
| 35 | Effective protocol for generation of multiple atoms entangled states in two coupled cavities via adiabatic passage. Quantum Information Processing, 2013, 12, 3771-3783. | 2.2 | 11 |
| 36 | Accelerating Population Transfer in a Transmon Qutrit Via Shortcuts to Adiabaticity. Annalen Der Physik, 2018, 530, 1700351. | 2.4 | 11 |

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|---|---------|-----|-----------|
| 37 | Improving Shortcuts to Non‐Hermitian Adiabaticity for Fast Population Transfer in Open Quantum Systems. Annalen Der Physik, 2018, 530, 1700247. | 2.4 | 11 |
| 38 | Effective pulse reverse-engineering for strong field–matter interaction. Optics Letters, 2020, 45, 3597. | 3.3 | 11 |
| 39 | Fast controlled preparation of two-atom maximally entangled state and N-atom W state in the direct coupled cavity systems via shortcuts to adiabatic passage. European Physical Journal D, 2016, 70, 1. | 1.3 | 10 |
| 40 | Protecting Quantum State in Time‐Dependent Decoherence‐Free Subspaces Without the Rotating‐Wave Approximation. Annalen Der Physik, 2017, 529, 1700186. | 2.4 | 10 |
| 41 | Invariant‐Based Pulse Design for Three‐Level Systems Without the Rotating‐Wave Approximation. Annalen Der Physik, 2017, 529, 1700004. | 2.4 | 9 |
| 42 | 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 |
| 43 | Generation of three-qubit Greenberger–Horne–Zeilinger state of superconducting qubits via transitionless quantum driving. Laser Physics, 2017, 27, 015202. | 1.2 | 8 |
| 44 | Rapid generation of a three-dimensional entangled state for two atoms trapped in a cavity via shortcuts to adiabatic passage. Quantum Information Processing, 2017, 16, 1. | 2.2 | 8 |
| 45 | Generation of three-qubit Greenberger–Horne–Zeilinger states of superconducting qubits by using dressed states. Quantum Information Processing, 2017, 16, 1. | 2.2 | 7 |
| 46 | Deterministic Generation of a Four-Atom Entangled State in a Two-Dimensional Coupled-Cavity System. International Journal of Theoretical Physics, 2016, 55, 1192-1200. | 1.2 | 6 |
| 47 | Shortcuts to adiabatic passage for fast preparation of multipartite entanglement among atomic ensembles. European Physical Journal D, 2016, 70, 1. | 1.3 | 5 |
| 48 | One-step deterministic generation of <i>N</i>-atom Greenberger–Horne–Zeilinger states in separate coupled cavities via quantum Zeno dynamics. Journal of Modern Optics, 2015, 62, 1591-1599. | 1.3 | 4 |
| 49 | Accelerating adiabatic quantum transfer for three-level<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si48.gif" display="inline" overflow="scroll"><mml:mi>Λ</mml:mi></mml:math>-type structure systems via picture transformation. Annals of Physics, 2017, 379, 102-111. | 2.8 | 3 |
| 50 | Detecting a single atom in a cavity using the χ(2) nonlinear medium. Frontiers of Physics, 2022, 17, 1. | 5.0 | 3 |
| 51 | Fast CNOT gate via shortcuts to adiabatic passage. Journal of Modern Optics, 2016, 63, 1943-1951. | 1.3 | 2 |
| 52 | Deterministic generation of singlet state ofNatoms in coupled cavities via adiabatic passage of a dark state. Journal of Modern Optics, 2016, 63, 92-102. | 1.3 | 2 |
| 53 | Perfect quantum state engineering by the combination of the counterdiabatic driving and the reverse-engineering technique. Annals of Physics, 2017, 385, 40-56. | 2.8 | 2 |
| 54 | 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 |

| # | ARTICLE | IF | CITATIONS |
|---|---------|----|-----------|
| 55 | Efficient implementation of arbitrary quantum state engineering in four-state system by counterdiabatic driving. Laser Physics Letters, 2018, 15, 075201. | 1.4 | 1 |