Shumpei Masuda

List of Publications by Year in descending order

38 papers	1,015 citations	516710 16 h-index	414414 32 g-index
38 all docs	38 docs citations	38 times ranked	541 citing authors

#	Article	IF	Citations
1	Acceleration and deceleration of quantum dynamics based on inter-trajectory travel with fast-forward scaling theory. Scientific Reports, 2022, 12, .	3.3	2
2	Quantum Gate for a Kerr Nonlinear Parametric Oscillator Using Effective Excited States. Physical Review Applied, 2022, 18, .	3.8	10
3	Controls of a superconducting quantum parametron under a strong pump field. Scientific Reports, 2021, 11, 11459.	3.3	17
4	Theoretical study of reflection spectroscopy for superconducting quantum parametrons. New Journal of Physics, 2021, 23, 093023.	2.9	7
5	Effects of higher levels of qubits on control of qubit protected by a Josephson quantum filter. New Journal of Physics, 2021, 23, 013006.	2.9	1
6	Fast parametric two-qubit gates with suppressed residual interaction using the second-order nonlinearity of a cubic transmon. Physical Review A, 2020, 102, .	2.5	38
7	Theoretical Study on Spin-Selective Coherent Electron Transfer in a Quantum Dot Array. Universe, 2020, 6, 2.	2.5	2
8	Calibration of cryogenic amplification chains using normal-metalâ€“insulatorâ€“superconductor junctions. Applied Physics Letters, 2019, 114, .	3.3	11
9	Nonreciprocal microwave transmission based on Gebhard-Ruckenstein hopping. Physical Review A, 2019, 99, .	2.5	2
10	Fast control of dissipation in a superconducting resonator. Applied Physics Letters, 2019, 115, 082601.	3.3	19
11	Broadband Lamb shift in an engineered quantum system. Nature Physics, 2019, 15, 533-537.	16.7	26
12	Flux-tunable heat sink for quantum electric circuits. Scientific Reports, 2018, 8, 6325.	3.3	26
13	Spin-selective electron transfer in a quantum dot array. Physical Review B, 2018, 97, .	3.2	8
14	Fast-forward scaling theory for phase imprinting on a BEC: creation of a wave packet with uniform momentum density and loading to Bloch states without disturbance. New Journal of Physics, 2018, 20, 025008.	2.9	6
15	Observation of microwave absorption and emission from incoherent electron tunneling through a normal-metalâ€“insulatorâ€“superconductor junction. Scientific Reports, 2018, 8, 3966.	3.3	13
16	Quantum-circuit refrigerator. Nature Communications, 2017, 8, 15189.	12.8	85
17	Counterdiabatic vortex pump in spinor Bose-Einstein condensates. Physical Review A, 2017, 95, .	2.5	10
18	Theory of quantum-circuit refrigeration by photon-assisted electron tunneling. Physical Review B, 2017, 96, .	3.2	27

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19	Quantum knots in Bose-Einstein condensates created by counterdiabatic control. Physical Review A, 2017, 96, .	2.5	5
20	Fast forward of the adiabatic spin dynamics of entangled states. Physical Review A, 2017, 96, .	2.5	23
21	Fast forward of adiabatic control of tunneling states. Physical Review A, 2017, 95, .	2.5	13
22	Controlling Quantum Dynamics with Assisted Adiabatic Processes. Advances in Chemical Physics, 2016, , 51-136.	0.3	5
23	Fast control of topological vortex formation in Bose-Einstein condensates by counterdiabatic driving. Physical Review A, 2016, 93, .	2.5	13
24	A model study of assisted adiabatic transfer of population in the presence of collisional dephasing. Journal of Chemical Physics, 2015, 142, 244303.	3.0	12
25	Rotation of the Orientation of the Wave Function Distribution of a Charged Particle and its Utilization. Journal of Physical Chemistry B, 2015, 119, 11079-11088.	2.6	14
26	Fast-Forward Assisted STIRAP. Journal of Physical Chemistry A, 2015, 119, 3479-3487.	2.5	61
27	Selective Vibrational Population Transfer using Combined Stimulated Raman Adiabatic Passage and Counter-Diabatic Fields. Journal of Physical Chemistry C, 2015, 119, 14513-14523.	3.1	21
28	Rapid coherent control of population transfer in lattice systems. Physical Review A, 2014, 89, .	2.5	24
29	High-Fidelity Rapid Ground-State Loading of an Ultracold Gas into an Optical Lattice. Physical Review Letters, 2014, 113, 063003.	7.8	61
30	Quantum and classical chaos of a two-spinless-fermion system in a quantum wire. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 355101.	2.1	0
31	Quantum state protection by successive translation. Physical Review A, 2013, 88, .	2.5	6
32	Acceleration of adiabatic transport of interacting particles and rapid manipulations of a dilute Bose gas in the ground state. Physical Review A, 2012, 86, .	2.5	29
33	Interference effects of helical current: Geometry-dependent spin polarization of transmitted electrons. Physical Review B, 2012, 85, .	3.2	7
34	Molecular dynamics study of size effect on surface tension of metal droplets. European Physical Journal D, 2011, 61, 637-644.	1.3	7
35	Acceleration of adiabatic quantum dynamics in electromagnetic fields. Physical Review A, 2011, 84, .	2.5	125
36	Fast-forward of adiabatic dynamics in quantum mechanics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 1135-1154.	2.1	184

#	Article	IF	Citations
37	Fast-forward problem in quantum mechanics. Physical Review A, 2008, 78, .	2.5	93
38	Mesoscopic rectification in a quantum dot with spinâ€“orbit interaction. Journal of Physics Condensed Matter, 2007, 19, 216225.	1.8	2