Julen Pedernales

List of Publications by Year
in descending order

28	917	471509 17	501196 28
papers	citations	h-index	g-index

28	28	28	823
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quantum Rabi Model with Trapped Ions. Scientific Reports, 2015, 5, 15472.	3.3	124
2	Spectral collapse via two-phonon interactions in trapped ions. Physical Review A, 2015, 92, .	2.5	92
3	Digital Quantum Rabi and Dicke Models in Superconducting Circuits. Scientific Reports, 2014, 4, 7482.	3.3	90
4	Quantum Simulation of the Quantum Rabi Model in a Trapped Ion. Physical Review X, 2018, 8, .	8.9	84
5	Motional Dynamical Decoupling for Interferometry with Macroscopic Particles. Physical Review Letters, 2020, 125, 023602.	7.8	51
6	Efficient Quantum Algorithm for Computing<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>n</mml:mi></mml:math>-time Correlation Functions. Physical Review Letters, 2014, 113, 020505.	7.8	45
7	Digital-Analog Quantum Simulation of Spin Models in Trapped Ions. Scientific Reports, 2016, 6, 30534.	3.3	45
8	Nonlinear quantum Rabi model in trapped ions. Physical Review A, 2018, 97, .	2.5	39
9	Quantum simulations of relativistic quantum physics in circuit QED. New Journal of Physics, 2013, 15, 055008.	2.9	34
10	Quantum Simulation of Dissipative Processes without Reservoir Engineering. Scientific Reports, 2015, 5, 9981.	3.3	32
11	Quantum simulation of quantum channels in nuclear magnetic resonance. Physical Review A, 2017, 96, .	2.5	30
12	Enhancing Gravitational Interaction between Quantum Systems by a Massive Mediator. Physical Review Letters, 2022, 128, 110401.	7.8	30
13	Dirac Equation in (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 2 2018, 120, 160403.	7.8	29
14	On the Significance of Interferometric Revivals for the Fundamental Description of Gravity. Universe, 2022, 8, 58.	2.5	23
15	Embedding Quantum Simulators for Quantum Computation of Entanglement. Physical Review Letters, 2013, 111, 240502.	7.8	21
16	Experimental quantum simulation of fermion-antifermion scattering via boson exchange in a trapped ion. Nature Communications, 2018, 9, 195.	12.8	21
17	Pulsed dynamical decoupling for fast and robust two-qubit gates on trapped ions. Physical Review A, 2018, 97, .	2.5	20
18	Enhanced force sensitivity and entanglement in periodically driven optomechanics. Physical Review A, 2021, 103, .	2.5	17

#	Article	IF	Citations
19	Measuring Entanglement in a Photonic Embedding Quantum Simulator. Physical Review Letters, 2016, 116, 070503.	7.8	14
20	A Study on Fast Gates for Large-Scale Quantum Simulation with Trapped Ions. Scientific Reports, 2017, 7, 46197.	3.3	14
21	A Single-Ion Reservoir as a High-Sensitive Sensor of Electric Signals. Scientific Reports, 2017, 7, 8336.	3.3	13
22	Entanglement measures in embedding quantum simulators with nuclear spins. Physical Review A, 2018, 97, .	2.5	11
23	Ground-State Cooling of Levitated Magnets in Low-Frequency Traps. Physical Review Letters, 2021, 126, 193602.	7.8	11
24	Entanglement measures in ion-trap quantum simulators without full tomography. Physical Review A, 2014, 90, .	2.5	9
25	Measurement of linear response functions in Nuclear Magnetic Resonance. Scientific Reports, 2017, 7, 12797.	3.3	7
26	Decoherence-Free Rotational Degrees of Freedom for Quantum Applications. Physical Review Letters, 2020, 125, 090501.	7.8	6
27	Switchable particle statistics with an embedding quantum simulator. Physical Review A, 2017, 95, .	2.5	4
28	Robust macroscopic matter-wave interferometry with solids. Physical Review A, 2022, 105, .	2.5	1