

Michael Gullans

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9083826/publications.pdf>

Version: 2024-02-01

41
papers

2,070
citations

279798

23
h-index

276875

41
g-index

42
all docs

42
docs citations

42
times ranked

1474
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamical Purification Phase Transition Induced by Quantum Measurements. <i>Physical Review X</i> , 2020, 10, .	8.9	203
2	Shuttling a single charge across a one-dimensional array of silicon quantum dots. <i>Nature Communications</i> , 2019, 10, 1063.	12.8	179
3	Critical properties of the measurement-induced transition in random quantum circuits. <i>Physical Review B</i> , 2020, 101, .	3.2	177
4	Resonant microwave-mediated interactions between distant electron spins. <i>Nature</i> , 2020, 577, 195-198.	27.8	142
5	Scalable Probes of Measurement-Induced Criticality. <i>Physical Review Letters</i> , 2020, 125, 070606.	7.8	138
6	Entanglement Phase Transitions in Measurement-Only Dynamics. <i>Physical Review X</i> , 2021, 11, .	8.9	134
7	Two-qubit silicon quantum processor with operation fidelity exceeding 99%. <i>Science Advances</i> , 2022, 8, eabn5130.	10.3	118
8	Superconductor-semiconductor hybrid-circuit quantum electrodynamics. <i>Nature Reviews Physics</i> , 2020, 2, 129-140.	26.6	110
9	Observation of three-photon bound states in a quantum nonlinear medium. <i>Science</i> , 2018, 359, 783-786.	12.6	99
10	Measurement-induced quantum phases realized in a trapped-ion quantum computer. <i>Nature Physics</i> , 2022, 18, 760-764.	16.7	87
11	Coherent transfer of quantum information in a silicon double quantum dot using resonant SWAP gates. <i>Npj Quantum Information</i> , 2019, 5, .	6.7	68
12	Entanglement and Purification Transitions in Non-Hermitian Quantum Mechanics. <i>Physical Review Letters</i> , 2021, 126, 170503.	7.8	63
13	Coulomb Bound States of Strongly Interacting Photons. <i>Physical Review Letters</i> , 2015, 115, 123601.	7.8	55
14	Operator Scaling Dimensions and Multifractality at Measurement-Induced Transitions. <i>Physical Review Letters</i> , 2022, 128, 050602.	7.8	55
15	Adiabatic preparation of many-body states in optical lattices. <i>Physical Review A</i> , 2010, 81, .	2.5	49
16	Effective Field Theory for Rydberg Polaritons. <i>Physical Review Letters</i> , 2016, 117, 113601.	7.8	35
17	Entanglement Structure of Current-Driven Diffusive Fermion Systems. <i>Physical Review X</i> , 2019, 9, .	8.9	35
18	Correlated Photon Dynamics in Dissipative Rydberg Media. <i>Physical Review Letters</i> , 2017, 119, 043602.	7.8	28

#	ARTICLE	IF	CITATIONS
19	Quantum Coding with Low-Depth Random Circuits. <i>Physical Review X</i> , 2021, 11, .	8.9	28
20	Double Quantum Dot Floquet Gain Medium. <i>Physical Review X</i> , 2016, 6, .	8.9	27
21	Protocol for a resonantly driven three-qubit Toffoli gate with silicon spin qubits. <i>Physical Review B</i> , 2019, 100, .	3.2	27
22	Threshold Dynamics of a Semiconductor Single Atom Maser. <i>Physical Review Letters</i> , 2017, 119, 097702.	7.8	25
23	Maximum Refractive Index of an Atomic Medium. <i>Physical Review X</i> , 2021, 11, .	8.9	25
24	Efimov States of Strongly Interacting Photons. <i>Physical Review Letters</i> , 2017, 119, 233601.	7.8	24
25	Photon propagation through dissipative Rydberg media at large input rates. <i>Physical Review Research</i> , 2020, 2, .	3.6	19
26	Injection locking of a semiconductor double-quantum-dot micromaser. <i>Physical Review A</i> , 2015, 92, .	2.5	18
27	Localization as an Entanglement Phase Transition in Boundary-Driven Anderson Models. <i>Physical Review Letters</i> , 2019, 123, 110601.	7.8	13
28	Coherent transport of spin by adiabatic passage in quantum dot arrays. <i>Physical Review B</i> , 2020, 102, .	3.2	13
29	Probing electron-phonon interactions in the charge-photon dynamics of cavity-coupled double quantum dots. <i>Physical Review B</i> , 2018, 97, .	3.2	12
30	Fractional Quantum Hall Phases of Bosons with Tunable Interactions: From the Laughlin Liquid to a Fractional Wigner Crystal. <i>Physical Review Letters</i> , 2018, 121, 253403.	7.8	10
31	Optical control over bulk excitations in fractional quantum Hall systems. <i>Physical Review B</i> , 2018, 98, .	3.2	10
32	Optical control of donor spin qubits in silicon. <i>Physical Review B</i> , 2015, 92, .	3.2	9
33	Cross Modulation of Two Laser Beams at the Individual-Photon Level. <i>Physical Review Letters</i> , 2014, 113, 113603.	7.8	8
34	High-order multipole radiation from quantum Hall states in Dirac materials. <i>Physical Review B</i> , 2017, 95, .	3.2	7
35	Exotic Photonic Molecules via Lennard-Jones-like Potentials. <i>Physical Review Letters</i> , 2020, 125, 093601.	7.8	4
36	Tunable Three-Body Loss in a Nonlinear Rydberg Medium. <i>Physical Review Letters</i> , 2021, 126, 173401.	7.8	4

#	ARTICLE	IF	CITATIONS
37	Theory of Bose condensation of light via laser cooling of atoms. Physical Review A, 2019, 99, .	2.5	3
38	Thermal radiation as a probe of one-dimensional electron liquids. Physical Review B, 2019, 99, .	3.2	2
39	Singularities in nearly uniform one-dimensional condensates due to quantum diffusion. Physical Review A, 2021, 104, .	2.5	1
40	Resonant enhancement of three-body loss between strongly interacting photons. Physical Review Research, 2022, 4, .	3.6	1
41	Universal scattering with general dispersion relations. Physical Review Research, 2022, 4, .	3.6	0