Darrick Chang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4993864/publications.pdf

Version: 2024-02-01

23 papers	3,830 citations	361413 20 h-index	642732 23 g-index
23 all docs	23 docs citations	23 times ranked	3022 citing authors

#	Article	IF	Citations
1	A single-photon transistor using nanoscale surface plasmons. Nature Physics, 2007, 3, 807-812.	16.7	1,074
2	Quantum nonlinear opticsÂâ€”Âphoton by photon. Nature Photonics, 2014, 8, 685-694.	31.4	539
3	Atomâ€“light interactions in photonic crystals. Nature Communications, 2014, 5, 3808.	12.8	361
4	Strong coupling of single emitters to surface plasmons. Physical Review B, 2007, 76, .	3.2	283
5	Exponential Improvement in Photon Storage Fidelities Using Subradiance and â€œSelective Radianceâ€•in Atomic Arrays. Physical Review X, 2017, 7, .	8.9	263
6	Cavity QED with atomic mirrors. New Journal of Physics, 2012, 14, 063003.	2.9	205
7	Crystallization of strongly interacting photons in a nonlinear optical fibre. Nature Physics, 2008, 4, 884-889.	16.7	170
8	Topological Quantum Optics in Two-Dimensional Atomic Arrays. Physical Review Letters, 2017, 119, 023603.	7.8	145
9	Multiphoton-scattering theory and generalized master equations. Physical Review A, 2015, 92, .	2.5	137
10	Quantum dynamics of propagating photons with strong interactions: a generalized inputâ€“output formalism. New Journal of Physics, 2015, 17, 113001.	2.9	129
11	Atom-light interactions in quasi-one-dimensional nanostructures: A Green's-function perspective. Physical Review A, 2017, 95, .	2.5	100
12	Dynamics of Many-Body Photon Bound States in Chiral Waveguide QED. Physical Review X, 2020, 10, .	8.9	71
13	Optimization of photon storage fidelity in ordered atomic arrays. New Journal of Physics, 2018, 20, 083048.	2.9	64
14	Critical open-system dynamics in a one-dimensional optical-lattice clock. Physical Review A, 2019, 99, .	2.5	64
15	Controlling dipole-dipole frequency shifts in a lattice-based optical atomic clock. Physical Review A, 2004, 69, .	2.5	59
16	Optical waveguiding by atomic entanglement in multilevel atom arrays. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 25503-25511.	7.1	37
17	Geometric Control of Collective Spontaneous Emission. Physical Review Letters, 2020, 125, 213602.	7.8	31
18	Many-body localization in waveguide quantum electrodynamics. Physical Review Research, 2021, 3, .	3.6	31

#	Article	IF	Citations
19	Quantum Nonlinear Optics Based on Two-Dimensional Rydberg Atom Arrays. Physical Review Letters, 2021, 127, 263602.	7.8	30
20	Maximum Refractive Index of an Atomic Medium. Physical Review X, 2021, 11, .	8.9	25
21	Atomic spin-wave control and spin-dependent kicks with shaped subnanosecond pulses. Physical Review Research, 2020, 2, .	3.6	10
22	Unconventional quantum correlations of light emitted by a single atom in free space. Physical Review A, 2021, 104, .	2.5	1
23	Renormalization group analysis of near-field induced dephasing of optical spin waves in an atomic medium. New Journal of Physics, 2022, 24, 013031.	2.9	1