

Simone De Liberato

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4718125/publications.pdf>

Version: 2024-02-01

88
papers

5,513
citations

126907

33
h-index

76900

74
g-index

90
all docs

90
docs citations

90
times ranked

3687
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum Theory of Longitudinal-Transverse Polaritons in Nonlocal Thin Films. <i>Physical Review Applied</i> , 2022, 17, .	3.8	5
2	Polaritonic quantization in nonlocal polar materials. <i>Journal of Chemical Physics</i> , 2022, 156, 024111.	3.0	4
3	Surface phonon polaritons for infrared optoelectronics. <i>Journal of Applied Physics</i> , 2022, 131, .	2.5	18
4	Exact solution of polaritonic systems with arbitrary light and matter frequency-dependent losses. <i>Journal of Chemical Physics</i> , 2022, 156, 084106.	3.0	6
5	Anisotropy and Modal Hybridization in Infrared Nanophotonics Using Low-Symmetry Materials. <i>ACS Photonics</i> , 2022, 9, 1078-1095.	6.6	18
6	Collective Phononâ€“Polaritonic Modes in Silicon Carbide Subarrays. <i>ACS Nano</i> , 2022, 16, 963-973.	14.6	6
7	Near-field nano-spectroscopy of strong mode coupling in phonon-polaritonic crystals. <i>Applied Physics Reviews</i> , 2022, 9, .	11.3	4
8	Excitons bound by photon exchange. <i>Nature Physics</i> , 2021, 17, 31-35.	16.7	25
9	Impact of Nonlocality on Polar Nanophotonics. , 2021, , .		0
10	Bound-to-continuum Non-perturbative Regime for an Ultrastong Light-matter Coupling. , 2021, , .		0
11	Engineering the Spectral and Spatial Dispersion of Thermal Emission via Polaritonâ€“Phonon Strong Coupling. <i>Nano Letters</i> , 2021, 21, 1831-1838.	9.1	44
12	Breakdown of polaritons in ultrastrongly coupled nanophotonic systems. , 2021, , .		0
13	Theoretical proposals to measure resonator-induced modifications of the electronic ground state in doped quantum wells. <i>Physical Review A</i> , 2021, 104, .	2.5	2
14	Polaritonic nonlocality in lightâ€“matter interaction. <i>Nature Photonics</i> , 2021, 15, 690-695.	31.4	36
15	Oservation of bound excitons stabilised by the interaction with a photonic resonator. , 2021, , .		0
16	Breakdown of Polaritons in Nanophotonic Systems. , 2021, , .		0
17	Strong lightâ€“matter coupling in microcavities characterised by Rabi-splittings comparable to the Bragg stop-band widths. <i>New Journal of Physics</i> , 2021, 23, 113015.	2.9	6
18	Impact of phonon nonlocality on nanogap and nanolayer polar resonators. <i>Physical Review B</i> , 2020, 102, .	3.2	14

#	ARTICLE	IF	CITATIONS
19	Nonlocal scattering matrix description of anisotropic polar heterostructures. <i>Physical Review B</i> , 2020, 102, .	3.2	8
20	Optical Nonlocality in Polar Dielectrics. <i>Physical Review X</i> , 2020, 10, .	8.9	31
21	Near-Field Spectroscopy of Cylindrical Phonon-Polariton Antennas. <i>ACS Nano</i> , 2020, 14, 8508-8517.	14.6	11
22	Electro-optical sampling of quantum vacuum fluctuations in dispersive dielectrics. <i>Physical Review A</i> , 2019, 100, .	2.5	10
23	Multielectron Ground State Electroluminescence. <i>Physical Review Letters</i> , 2019, 122, 190403.	7.8	12
24	Strong coupling of ionizing transitions. <i>Optica</i> , 2019, 6, 354.	9.3	21
25	Hybrid longitudinal-transverse phonon polaritons. <i>Nature Communications</i> , 2019, 10, 1682.	12.8	46
26	Polaritonics: from microcavities to sub-wavelength confinement. <i>Nanophotonics</i> , 2019, 8, 641-654.	6.0	47
27	Ultrastrong coupling between light and matter. <i>Nature Reviews Physics</i> , 2019, 1, 19-40.	26.6	916
28	Lasing from dressed dots. <i>Nature Photonics</i> , 2018, 12, 4-6.	31.4	5
29	Theory of Four-Wave-Mixing in Phonon Polaritons. <i>ACS Photonics</i> , 2018, 5, 284-288.	6.6	12
30	Breakdown of gauge invariance in ultrastrong-coupling cavity QED. <i>Physical Review A</i> , 2018, 98, .	2.5	122
31	Open quantum systems with local and collective incoherent processes: Efficient numerical simulations using permutational invariance. <i>Physical Review A</i> , 2018, 98, .	2.5	143
32	Second harmonic generation from strongly coupled localized and propagating phonon-polariton modes. <i>Physical Review B</i> , 2018, 98, .	3.2	20
33	Resolution of superluminal signalling in non-perturbative cavity quantum electrodynamics. <i>Nature Communications</i> , 2018, 9, 1924.	12.8	46
34	Strong coupling in a microcavity containing \hat{I}^2 -carotene. <i>Optics Express</i> , 2018, 26, 3320.	3.4	10
35	Sub-nanometer Thin Oxide Film Sensing with Localized Surface Phonon Polaritons. <i>ACS Photonics</i> , 2018, 5, 2807-2815.	6.6	52
36	Strong Coupling of Epsilon-Near-Zero Phonon Polaritons in Polar Dielectric Heterostructures. <i>Nano Letters</i> , 2018, 18, 4285-4292.	9.1	71

#	ARTICLE	IF	CITATIONS
37	Theory of Nonlinear Polaritons: \hbar^2 Scattering on a $\hat{\Gamma}^2$ -SiC Surface. ACS Photonics, 2017, 4, 1381-1388.	6.6	18
38	Theoretical investigation of phonon polaritons in SiC micropillar resonators. Physical Review B, 2017, 95, .	3.2	42
39	Superradiance with local phase-breaking effects. Physical Review A, 2017, 96, .	2.5	45
40	Cavity QED in the Ultrastrong Coupling Regime: Photon Bunching from the Emission of Individual Dressed Qubits. ACS Photonics, 2017, 4, 2345-2351.	6.6	32
41	Collective Optomechanical Effects in Cavity Quantum Electrodynamics. Physical Review Letters, 2017, 119, 043604.	7.8	23
42	Polariton spectrum of the Dicke-Ising model. Physical Review A, 2017, 96, .	2.5	9
43	Virtual photons in the ground state of a dissipative system. Nature Communications, 2017, 8, 1465.	12.8	75
44	Excitonic spectral features in strongly coupled organic polaritons. Physical Review A, 2016, 93, .	2.5	80
45	Ground State Electroluminescence. Physical Review Letters, 2016, 116, 113601.	7.8	71
46	Strong and Coherent Coupling between Localized and Propagating Phonon Polaritons. Physical Review Letters, 2016, 116, 246402.	7.8	62
47	Real-space Hopfield diagonalization of inhomogeneous dispersive media. Physical Review B, 2016, 94, .	3.2	27
48	Perspectives for gapped bilayer graphene polaritons. Physical Review B, 2015, 92, .	3.2	8
49	Theory of intersubband resonance fluorescence. Physical Review B, 2015, 92, .	3.2	3
50	Generation of Rabi-frequency radiation using exciton-polaritons. Physical Review A, 2015, 92, .	2.5	18
51	Quantum control and long-range quantum correlations in dynamical Casimir arrays. Physical Review A, 2015, 92, .	2.5	35
52	Terahertz emission from asymmetric, doped quantum wells under resonant pumping. Journal of Physics: Conference Series, 2015, 619, 012021.	0.4	1
53	Comment on "System-environment coupling derived by Maxwell's boundary conditions from the weak to the ultrastrong light-matter-coupling regime". Physical Review A, 2014, 89, .	2.5	11
54	Light-Matter Decoupling in the Deep Strong Coupling Regime: The Breakdown of the Purcell Effect. Physical Review Letters, 2014, 112, 016401.	7.8	181

#	ARTICLE	IF	CITATIONS
55	Terahertz emission from ac Stark-split asymmetric intersubband transitions. <i>Physical Review B</i> , 2014, 89, .	3.2	15
56	Radical-pair model of magnetoreception with spin-orbit coupling. <i>New Journal of Physics</i> , 2013, 15, 083024.	2.9	18
57	Kimet-Reply. <i>Physical Review Letters</i> , 2013, 111, 188902.	7.8	8
58	Terahertz lasing from intersubband polariton-polariton scattering in asymmetric quantum wells. <i>Physical Review B</i> , 2013, 87, .	3.2	47
59	Quantum Phases of a Multimode Bosonic Field Coupled to Flat Electronic Bands. <i>Physical Review Letters</i> , 2013, 110, 133603.	7.8	14
60	Ultrastrong light-matter coupling at terahertz frequencies with split ring resonators and inter-Landau level transitions. <i>Journal of Applied Physics</i> , 2013, 113, 136510.	2.5	29
61	Inter-branch terahertz lasing in asymmetric intersubband polariton systems. , 2013, , .		0
62	Influence of resonator design on ultrastrong coupling between a two-dimensional electron gas and a THz metamaterial. <i>Proceedings of SPIE</i> , 2013, , .	0.8	2
63	Effective polariton-polariton interactions of cavity-embedded two-dimensional electron gases. <i>Physical Review B</i> , 2013, 87, .	3.2	10
64	Back-reaction effects of quantum vacuum in cavity quantum electrodynamics. <i>Physical Review A</i> , 2012, 85, .	2.5	40
65	Quantum theory of intersubband polarons. <i>Physical Review B</i> , 2012, 85, .	3.2	23
66	Ultrastrong Coupling of the Cyclotron Transition of a 2D Electron Gas to a THz Metamaterial. <i>Science</i> , 2012, 335, 1323-1326.	12.6	452
67	Quantum Szilard Engine. <i>Physical Review Letters</i> , 2011, 106, 070401.	7.8	176
68	Ultrastrong coupling of integer Landau Level Polaritons. , 2011, , .		0
69	Carnot's theorem for nonthermal stationary reservoirs. <i>Physical Review E</i> , 2011, 84, 051122.	2.1	27
70	Quantum noise in photothermal cooling. <i>Physical Review A</i> , 2011, 83, .	2.5	48
71	Switching ultrastrong light-matter coupling on a subcycle scale. <i>Journal of Applied Physics</i> , 2011, 109, 102418.	2.5	9
72	Ultrastrong Light-Matter Coupling Regime with Polariton Dots. <i>Physical Review Letters</i> , 2010, 105, 196402.	7.8	358

#	ARTICLE	IF	CITATIONS
73	Ultrastrong coupling between a cavity resonator and the cyclotron transition of a two-dimensional electron gas in the case of an integer filling factor. <i>Physical Review B</i> , 2010, 81, .	3.2	113
74	Terahertz quantum optics with solid-state systems. , 2010, , .		0
75	Publisher's Note: Quantum theory of electron tunneling into intersubband cavity polariton states [Phys. Rev. B79, 075317 (2009)]. <i>Physical Review B</i> , 2009, 79, .	3.2	1
76	Stimulated Scattering and Lasing of Intersubband Cavity Polaritons. <i>Physical Review Letters</i> , 2009, 102, 136403.	7.8	83
77	Sub-cycle switch-on of ultrastrong light-matter interaction. <i>Nature</i> , 2009, 458, 178-181.	27.8	498
78	Quantum theory of electron tunneling into intersubband cavity polariton states. <i>Physical Review B</i> , 2009, 79, .	3.2	35
79	Signatures of the ultrastrong light-matter coupling regime. <i>Physical Review B</i> , 2009, 79, .	3.2	268
80	Fermionized Photons in an Array of Driven Dissipative Nonlinear Cavities. <i>Physical Review Letters</i> , 2009, 103, 033601.	7.8	216
81	Extracavity quantum vacuum radiation from a single qubit. <i>Physical Review A</i> , 2009, 80, .	2.5	174
82	How fast electrons and photons mix: Sub-cycle switching of intersubband cavity polaritons. <i>Journal of Physics: Conference Series</i> , 2009, 193, 012060.	0.4	2
83	Optical properties of atomic Mott insulators: From slow light to dynamical Casimir effects. <i>Physical Review A</i> , 2008, 77, .	2.5	36
84	Quantum model of microcavity intersubband electroluminescent devices. <i>Physical Review B</i> , 2008, 77, .	3.2	31
85	Observing the evolution of a quantum system that does not evolve. <i>Physical Review A</i> , 2007, 76, .	2.5	4
86	Cavity polaritons from excited-subband transitions. <i>Applied Physics Letters</i> , 2007, 91, 231118.	3.3	25
87	Quantum Vacuum Radiation Spectra from a Semiconductor Microcavity with a Time-Modulated Vacuum Rabi Frequency. <i>Physical Review Letters</i> , 2007, 98, 103602.	7.8	205
88	Tunnelling dynamics of a Bose-Einstein condensate in a four-well loop-shaped system. <i>Physical Review A</i> , 2006, 73, .	2.5	16