Leonardo Midolo

List of Publications by Year
in descending order

58 papers	2,154 citations	279798 23 h-index	265206 42 g-index
61 all docs	61 docs citations	61 times ranked	2253 citing authors

#	Article	IF	Citations
1	Wafer-scale epitaxial modulation of quantum dot density. Nature Communications, 2022, 13, 1633.	12.8	9
2	A Pure and Indistinguishable Singleâ€Photon Source at Telecommunication Wavelength. Advanced Quantum Technologies, 2022, 5, .	3.9	16
3	In-plane resonant excitation of quantum dots in a dual-mode photonic-crystal waveguide with high Î²-factor. Quantum Science and Technology, 2022, 7, 025023.	5.8	6
4	Entangling a Hole Spin with a Time-Bin Photon: A Waveguide Approach for Quantum Dot Sources of Multiphoton Entanglement. Physical Review Letters, 2022, 128, .	7.8	14
5	On-Demand Source of Dual-Rail Photon Pairs Based on Chiral Interaction in a Nanophotonic Waveguide. PRX Quantum, 2022, 3, .	9.2	7
6	Single-Photon Radiative Auger Emission from a Quantum Dot. , 2021, , .		0
7	Electroabsorption in gated GaAs nanophotonic waveguides. Applied Physics Letters, 2021, 118, .	3.3	3
8	Quantum-dot-based deterministic photonâ€“emitter interfaces for scalable photonic quantum technology. Nature Nanotechnology, 2021, 16, 1308-1317.	31.5	85
9	Integrated Whispering-Gallery-Mode Resonator for Solid-State Coherent Quantum Photonics. Nano Letters, 2021, 21, 8707-8714.	9.1	7
10	Suspended Spotâ€Size Converters for Scalable Singleâ€Photon Devices. Advanced Quantum Technologies, 2020, 3, 1900076.	3.9	6
11	Near Transform-Limited Quantum Dot Linewidths in a Broadband Photonic Crystal Waveguide. ACS Photonics, 2020, 7, 2343-2349.	6.6	28
12	On-chip deterministic operation of quantum dots in dual-mode waveguides for a plug-and-play single-photon source. Nature Communications, 2020, 11, 3782.	12.8	48
13	Scalable integrated single-photon source. Science Advances, 2020, 6, .	10.3	144
14	Radiative Auger process in the single-photon limit. Nature Nanotechnology, 2020, 15, 558-562.	31.5	23
15	Onâ€Chip Nanomechanical Filtering of Quantumâ€Dot Singleâ€Photon Sources. Laser and Photonics Reviews, 2020, 14, 1900404.	8.7	9
16	Suspended Epoxy Polymer Inverted Tapers for Scalable Fibre-Coupled Single-Photon Devices. , 2019, , .		1
17	Coherent Optical Control of a Quantum-Dot Spin-Qubit in a Waveguide-Based Spin-Photon Interface. Physical Review Applied, 2019, 11, .	3.8	20
18	Suppressing phonon decoherence of high performance single-photon sources in nanophotonic waveguides. Quantum Science and Technology, 2019, 4, 015003.	5.8	9

#	Article	IF	Citations
19	Nanomechanical single-photon routing. Optica, 2019, 6, 524.	9.3	41
20	Nanomechanical control of optical field and quality factor in photonic crystal structures. Physical Review B, 2018, 97, .	3.2	4
21	Quantum Optics with Near-Lifetime-Limited Quantum-Dot Transitions in a Nanophotonic Waveguide. Nano Letters, 2018, 18, 1801-1806.	9.1	49
22	Nano-opto-electro-mechanical systems. Nature Nanotechnology, 2018, 13, 11-18.	31.5	208
23	Spinâ€“photon interface and spin-controlled photon switching in a nanobeam waveguide. Nature Nanotechnology, 2018, 13, 398-403.	31.5	85
24	High-efficiency shallow-etched grating on GaAs membranes for quantum photonic applications. Applied Physics Letters, 2018, 113, .	3.3	39
25	Carrier-mediated optomechanical forces in semiconductor nanomembranes with coupled quantum wells. Physical Review B, 2018, 98, .	3.2	6
26	Indistinguishable and efficient single photons from a quantum dot in a planar nanobeam waveguide. Physical Review B, 2017, 96, .	3.2	85
27	Narrow optical linewidths and spin pumping on charge-tunable close-to-surface self-assembled quantum dots in an ultrathin diode. Physical Review B, 2017, 96, .	3.2	29
28	Integrated nano-opto-electro-mechanical sensor for spectrometry and nanometrology. Nature Communications, 2017, 8, 2216.	12.8	41
29	Efficient fiber-coupled single-photon source based on quantum dots in a photonic-crystal waveguide. Optica, 2017, 4, 178.	9.3	87
30	Integrated spectrometer and displacement sensor based on mechanically tunable photonic crystals. , 2017, , .		0
31	Electro-optic routing of photons from a single quantum dot in photonic integrated circuits. Optics Express, 2017, 25, 33514.	3.4	21
32	Deterministic Single-Phonon Source Triggered by a Single Photon. Physical Review Letters, 2016, 116, 234301.	7.8	15
33	Active control of the vacuum field in nanomechanical photonic crystal structures. , 2016, , .		1
34	Fully integrated nano-opto-electro-mechanical wavelength and displacement sensor. , 2016, , .		1
35	Tunable Cavity-Enhanced Quantum Light Sources for Integrated Quantum Photonics. , 2016, , .		0
36	Fully-integrated nanomechanical wavelength and displacement sensor. , 2016, , .		0

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37	Reconfigurable quantum photonic circuits based on nano-electro-mechanical systems. , 2015, , .		0
38	Fully tuneable, Purcell-enhanced solid-state quantum emitters. Applied Physics Letters, 2015, 107, .	3.3	23
39	Soft-mask fabrication of gallium arsenide nanomembranes for integrated quantum photonics. Nanotechnology, 2015, 26, 484002.	2.6	39
40	Electromechanically-tunable nanophotonic cavities. , 2015, , .		0
41	Deterministic photonâ€“emitter coupling in chiral photonic circuits. Nature Nanotechnology, 2015, 10, 775-778.	31.5	466
42	Single-photon non-linear optics with a quantum dot in a waveguide. Nature Communications, 2015, 6, 8655.	12.8	196
43	Fully-tunable, Purcell-enhanced On-chip Quantum Emitters. , 2015, , .		1
44	Design and Optical Properties of Electromechanical Double-Membrane Photonic Crystal Cavities. IEEE Journal of Quantum Electronics, 2014, 50, 404-414.	1.9	11
45	Ultrafast non-local control of spontaneous emission. Nature Nanotechnology, 2014, 9, 886-890.	31.5	59
46	Spontaneous emission control of single quantum dots by electrostatic tuning of a double-slab photonic crystal cavity. , 2013, , .		0
47	Coupling of single quantum dots to photonic crystal cavities investigated by low-temperature scanning near-field optical microscopy. Physical Review B, 2013, 88, .	3.2	4
48	Efficient coupling of single photons to ridge-waveguide photonic integrated circuits. Applied Physics Letters, 2013, 102, .	3.3	26
49	Funneling single photons into ridge-waveguide photonic integrated circuits. Proceedings of SPIE, 2013, , .	0.8	0
50	Controlling the emission from single quantum dots with electro-opto-mechanical photonic crystal cavities. , 2013, , .		0
51	Electromechanical tuning of vertically-coupled photonic crystal nanobeams. Optics Express, 2012, 20, 19255.	3.4	23
52	Widely tunable, efficient on-chip single photon sources at telecommunication wavelengths. Optics Express, 2012, 20, 21758.	3.4	32
53	Optical control of the quality factor using coupled photonic crystal cavities. , 2012, , .		0
54	Quantum integrated photonics on GaAs. , 2012, , .		1

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55	Spontaneous emission control of single quantum dots by electromechanical tuning of a photonic crystal cavity. Applied Physics Letters, 2012, 101, 091106.	3.3	28
56	Enhanced spontaneous emission from quantum dots in short photonic crystal waveguides. Applied Physics Letters, 2012, 100, 061122.	3.3	50
57	Electromechanical wavelength tuning of double-membrane photonic crystal cavities. Applied Physics Letters, 2011, 98, 211120.	3.3	48
58	Electromechanically Tunable Photonic Crystal Cavities. , 2011, , .		0