Matteo Galli

List of Publications by Year in descending order

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55 papers	3,397 citations	201674 27 h-index	302126 39 g-index
56 all docs	56 docs citations	56 times ranked	4854 citing authors

#	Article	IF	Citations
1	Silicon nanostructures for photonics and photovoltaics. Nature Nanotechnology, 2014, 9, 19-32.	31.5	802
2	Nanoscale chemical mapping using three-dimensional adiabatic compression of surface plasmon polaritons. Nature Nanotechnology, 2010, 5, 67-72.	31.5	352
3	A Hybrid Plasmonicâ˜Photonic Nanodevice for Label-Free Detection of a Few Molecules. Nano Letters, 2008, 8, 2321-2327.	9.1	215
4	Micrometer-scale integrated silicon source of time-energy entangled photons. Optica, 2015, 2, 88.	9.3	212
5	Integrated sources of photon quantum states based on nonlinear optics. Light: Science and Applications, 2017, 6, e17100-e17100.	16.6	194
6	Ultra-low power generation of twin photons in a compact silicon ring resonator. Optics Express, 2012, 20, 23100.	3.4	184
7	Planar photonic crystal cavities with far-field optimization for high coupling efficiency and quality factor. Optics Express, 2010, 18, 16064.	3.4	139
8	Self-assembled monolayers of silver nanoparticles firmly grafted on glass surfaces: Low Ag+ release for an efficient antibacterial activity. Journal of Colloid and Interface Science, 2010, 350, 110-116.	9.4	130
9	Low-power continuous-wave generation of visible harmonics in silicon photonic crystal nanocavities. Optics Express, 2010, 18, 26613.	3.4	113
10	Integrated Source of Spectrally Filtered Correlated Photons for Large-Scale Quantum Photonic Systems. Physical Review X, 2014, 4, .	8.9	100
11	Strongly enhanced light trapping in a two-dimensional silicon nanowire random fractal array. Light: Science and Applications, 2016, 5, e16062-e16062.	16.6	97
12	From classical four-wave mixing to parametric fluorescence in silicon microring resonators. Optics Letters, 2012, 37, 3807.	3.3	77
13	Room temperature allâ€silicon photonic crystal nanocavity light emitting diode at subâ€bandgap wavelengths. Laser and Photonics Reviews, 2013, 7, 114-121.	8.7	67
14	Stimulated and spontaneous four-wave mixing in silicon-on-insulator coupled photonic wire nano-cavities. Applied Physics Letters, 2013, 103, .	3.3	65
15	All-optical switching in 2D silicon photonic crystals with low loss waveguides and optical cavities. Optics Express, 2008, 16, 11624.	3.4	59
16	Ultra-low threshold polariton lasing in photonic crystal cavities. Applied Physics Letters, 2011, 99, .	3.3	59
17	Spectroscopic evaluation of surface functionalization efficiency in the preparation of mercaptopropyltrimethoxysilane self-assembled monolayers on glass. Journal of Colloid and Interface Science, 2009, 332, 432-438.	9.4	53
18	Enhanced Telecom Emission from Single Group-IV Quantum Dots by Precise CMOS-Compatible Positioning in Photonic Crystal Cavities. ACS Photonics, 2017, 4, 665-673.	6.6	48

#	Article	IF	Citations
19	Coherent backscattering of Raman light. Nature Photonics, 2017, 11, 170-176.	31.4	44
20	Doubly resonant second-harmonic generation of a vortex beam from a bound state in the continuum. Optica, 2020, 7, 1126.	9.3	44
21	Silicon Nitride Photonics for the Near-Infrared. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-13.	2.9	40
22	All-optical switching in 2D silicon photonic crystals with low loss waveguides and optical cavities. Optics Express, 2008, 16, 11624-36.	3.4	40
23	Efficient continuous-wave nonlinear frequency conversion in high-Q gallium nitride photonic crystal cavities on silicon. APL Photonics, 2017, 2, .	5.7	38
24	Energy correlations of photon pairs generated by a silicon microring resonator probed by Stimulated Four Wave Mixing. Scientific Reports, 2016, 6, 23564.	3.3	37
25	Decoration of silicon nanowires with silver nanoparticles for ultrasensitive surface enhanced Raman scattering. Nanotechnology, 2016, 27, 375603.	2.6	33
26	Novel Dispersion-Adapted Photonic Crystal Cavity With Improved Disorder Stability. IEEE Journal of Quantum Electronics, 2012, 48, 1177-1183.	1.9	32
27	Demonstration of diffraction enhancement via Bloch surface waves in a-SiN:H multilayers. Applied Physics Letters, 2009, 94, .	3.3	27
28	Selective tuning of optical modes in a silicon comb-like photonic crystal cavity. Nanophotonics, 2020, 9, 205-210.	6.0	17
29	Active stabilization of a Michelson interferometer at an arbitrary phase with subnanometer resolution. Optics Letters, 2014, 39, 2530.	3.3	15
30	Electrical conduction and optical properties of doped silicon-on-insulator photonic crystals. Applied Physics Letters, 2011, 98, 203506.	3.3	12
31	Cavity-enhanced harmonic generation in silicon rich nitride photonic crystal microresonators. Applied Physics Letters, 2019, 114, 131103.	3.3	11
32	Suppression of Parasitic Nonlinear Processes in Spontaneous Four-Wave Mixing with Linearly Uncoupled Resonators. Physical Review Letters, 2021, 127, 033901.	7.8	11
33	Ultrahigh-Q photonic crystal cavities in silicon rich nitride. Optics Express, 2017, 25, 27334.	3.4	10
34	Thermo-optically induced transparency on a photonic chip. Light: Science and Applications, 2021, 10, 240.	16.6	10
35	Four-wave mixing in a silicon microring resonator using a self-pumping geometry. Applied Physics Letters, 2018, 113, 121111.	3.3	3
36	Nonlinear optics in Silicon photonic crystal cavities. , 2011, , .		1

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37	Spontaneous parametric fluorescence in SOI integrated micoresonators. Proceedings of SPIE, 2013, , .	0.8	1
38	Nonclassical light sources for silicon photonics. Photonics and Nanostructures - Fundamentals and Applications, 2017, 26, 24-34.	2.0	1
39	Nonlinear characterization of a silicon integrated Bragg waveguide filter. Optics Letters, 2018, 43, 1171.	3.3	1
40	Four-wave mixing and generation of correlated photon pairs in silicon ring resonators and photonic molecules. , 2013, , .		1
41	Electrically driven source of time-energy entangled photons based on a self-pumped silicon microring resonator. Optics Letters, 2020, 45, 2768.	3.3	1
42	Electrical and optical properties of ion implanted SOI-based photonic crystals. , 2011, , .		0
43	Nonlinear optics in silicon photonic crystal nanocavities. , 2011, , .		0
44	Light generation in silicon photonic crystal cavities. , 2011, , .		0
45	Subbandgap photoluminescence of Si photonic crystal nanocavity at room temperature. , 2011, , .		0
46	Photoluminescence spectroscopy of silicon photonic crystal nanocavities. , 2011, , .		0
47	Low-power continuous-wave frequency conversion in far-field optimized silicon photonic crystal nanocavities. , 2011, , .		0
48	Novel photonic crystal nanocavity design with high tolerance to disorder. , 2012, , .		0
49	Room temperature electrically pumped silicon nano-light source at telecommunication wavelengths. Proceedings of SPIE, 2013, , .	0.8	0
50	Generation of time-energy entangled photons on a silicon chip. , 2014, , .		0
51	Emission of time-energy entangled photon pairs from an integrated silicon ring resonator. , 2014, , .		0
52	Enhanced Light Emission from Silicon using Photonic Crystal Nanocavities. , 2011, , .		0
53	Enhancing Optical Functionalities of Silicon with Photonic Crystal Nanocavities. , 2012, , .		0
54	Emission of Time-Energy Entangled Photon Pairs by a Self-Pumped Silicon Microresonator. , 2020, , .		0

#	Article	IF	Citations
55	Doubly Resonant Second Harmonic Generation in Photonic Crystal Cavities via Bound States in the Continuum. , 2020, , .		0