Andrea Fiore

List of Publications by Year
in descending order

81 papers	2,662 citations	172457 29 h-index	182427 51 g-index
83 all docs	83 docs citations	83 times ranked	3320 citing authors

#	Article	IF	Citations
1	Superconducting nanowire photon-number-resolving detector at telecommunication wavelengths. Nature Photonics, 2008, 2, 302-306.	31.4	351
2	Nano-opto-electro-mechanical systems. Nature Nanotechnology, 2018, 13, 11-18.	31.5	208
3	Waveguide Nanowire Superconducting Single-Photon Detectors Fabricated on GaAs and the Study of Their Optical Properties. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 1-10.	2.9	188
4	Microwave-to-optics conversion using a mechanical oscillator in its quantum ground state. Nature Physics, 2020, 16, 69-74.	16.7	182
5	GaAs integrated quantum photonics: Towards compact and multiâ€functional quantum photonic integrated circuits. Laser and Photonics Reviews, 2016, 10, 870-894.	8.7	165
6	Engineering of light confinement in strongly scattering disordered media. Nature Materials, 2014, 13, 720-725.	27.5	98
7	Differential Gain and Gain Compression in Quantum-Dot Lasers. IEEE Journal of Quantum Electronics, 2007, 43, 287-294.	1.9	86
8	Spectral tuning and near-field imaging of photonic crystal microcavities. Physical Review B, 2008, 78, .	3.2	60
9	Ultrafast non-local control of spontaneous emission. Nature Nanotechnology, 2014, 9, 886-890.	31.5	59
10	Magnetic Imaging in Photonic Crystal Microcavities. Physical Review Letters, 2010, 105, 123902.	7.8	52
11	Enhanced spontaneous emission from quantum dots in short photonic crystal waveguides. Applied Physics Letters, 2012, 100, 061122.	3.3	50
12	Integrated near-infrared spectral sensing. Nature Communications, 2022, 13, 103.	12.8	47
13	Photon-counting and analog operation of a 24-pixel photon number resolving detector based on superconducting nanowires. Optics Express, 2016, 24, 9067.	3.4	45
14	Nanoscale Optical Detector with Single-Photon and Multiphoton Sensitivity. Nano Letters, 2010, 10, 2977-2981.	9.1	43
15	Proposal for a superconducting photon number resolving detector with large dynamic range. Optics Express, 2012, 20, 5017.	3.4	43
16	Eight-band kâ‹…p calculations of the composition contrast effect on the linear polarization properties of columnar quantum dots. Journal of Applied Physics, 2010, 107, .	2.5	42
17	Integrated nano-opto-electro-mechanical sensor for spectrometry and nanometrology. Nature Communications, 2017, 8, 2216.	12.8	41
18	Near-field imaging of coupled photonic-crystal microcavities. Applied Physics Letters, 2009, 94, 151103.	3.3	40

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19	Polarization dependence study of electroluminescence and absorption from InAsâˆ•GaAs columnar quantum dots. Applied Physics Letters, 2007, 91, .	3.3	39
20	Photon-number-resolving superconducting nanowire detectors. Superconductor Science and Technology, 2015, 28, 104001.	3.5	39
21	Single-Photon Detection System for Quantum Optics Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 944-951.	2.9	37
22	Generalized Fano lineshapes reveal exceptional points in photonic molecules. Nature Communications, 2018, 9, 396.	12.8	37
23	Superconducting series nanowire detector counting up to twelve photons. Optics Express, 2014, 22, 3475.	3.4	36
24	Ultrafast gain dynamics in 1.3Î¼m InAsâˆ•GaAs quantum-dot optical amplifiers: The effect of p doping. Applied Physics Letters, 2007, 90, 201103.	3.3	33
25	Indium Phosphide Membrane Nanophotonic Integrated Circuits on Silicon. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900606.	1.8	33
26	Tuning of photonic crystal cavities by controlled removal of locally infiltrated water. Applied Physics Letters, 2009, 95, 173112.	3.3	32
27	Widely tunable, efficient on-chip single photon sources at telecommunication wavelengths. Optics Express, 2012, 20, 21758.	3.4	32
28	Dynamically controlling the emission of single excitons in photonic crystal cavities. Nature Communications, 2014, 5, 5786.	12.8	31
29	Coherent Atom-Phonon Interaction through Mode Field Coupling in Hybrid Optomechanical Systems. Physical Review Letters, 2017, 118, 133603.	7.8	31
30	Polarization-sensitive near-field investigation of photonic crystal microcavities. Applied Physics Letters, 2009, 94, 163102.	3.3	29
31	Ultra-subwavelength phase-sensitive Fano-imaging of localized photonic modes. Light: Science and Applications, 2015, 4, e326-e326.	16.6	29
32	High quality superconducting NbN thin films on GaAs. Superconductor Science and Technology, 2009, 22, 095013.	3.5	28
33	Mode tuning of photonic crystal nanocavities by photoinduced non-thermal oxidation. Applied Physics Letters, 2012, 100, 033116.	3.3	27
34	Nanofluidic control of coupled photonic crystal resonators. Applied Physics Letters, 2010, 96, 141114.	3.3	24
35	Mode hybridization in photonic crystal molecules. Applied Physics Letters, 2010, 97, 063101.	3.3	23
36	On-site illicit-drug detection with an integrated near-infrared spectral sensor: A proof of concept. Talanta, 2022, 245, 123441.	5.5	23

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37	Integrated autocorrelator based on superconducting nanowires. Optics Express, 2013, 21, 11162.	3.4	21
38	Nearâ€Field Investigation of Luminescent Hyperuniform Disordered Materials. Advanced Optical Materials, 2022, 10, .	7.3	19
39	Tailoring the Photon Hopping by Nearest-Neighbor and Next-Nearest-Neighbor Interaction in Photonic Arrays. ACS Photonics, 2015, 2, 565-571.	6.6	18
40	Integration of Single-Photon Sources and Detectors on GaAs. Photonics, 2016, 3, 55.	2.0	18
41	Experimental investigation of the detection mechanism in WSi nanowire superconducting single photon detectors. Applied Physics Letters, 2016, 109, .	3.3	18
42	Controlling the Aspect Ratio of Quantum Dots: From Columnar Dots to Quantum Rods. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 1204-1213.	2.9	17
43	Ultrasensitive<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math>-Photon Interferometric Autocorrelator. Physical Review Letters, 2013, 110, 133605.	7.8	17
44	Non-Lorentzian Local Density of States in Coupled Photonic Crystal Cavities Probed by Near- and Far-Field Emission. Physical Review Letters, 2020, 124, 123902.	7.8	17
45	Nonlinear optical tuning of photonic crystal microcavities by near-field probe. Applied Physics Letters, 2008, 93, .	3.3	16
46	Control of the electromagnetic environment of a quantum emitter by shaping the vacuum field in a coupled-cavity system. Physical Review A, 2015, 91, .	2.5	16
47	Nano-opto-electro-mechanical switch based on a four-waveguide directional coupler. Optics Express, 2017, 25, 10166.	3.4	16
48	Deep-subwavelength imaging of both electric and magnetic localized optical fields by plasmonic campanile nanoantenna. Scientific Reports, 2015, 5, 9606.	3.3	14
49	On-chip waveguide-coupled opto-electro-mechanical system for nanoscale displacement sensing. APL Photonics, 2020, 5, 026103.	5.7	12
50	Design and Optical Properties of Electromechanical Double-Membrane Photonic Crystal Cavities. IEEE Journal of Quantum Electronics, 2014, 50, 404-414.	1.9	11
51	Multimodal strong coupling of photonic crystal cavities of dissimilar size. Applied Physics Letters, 2012, 100, 081107.	3.3	8
52	Near-field speckle imaging of light localization in disordered photonic systems. Applied Physics Letters, 2017, 110, .	3.3	7
53	Modeling of gain and phase dynamics in quantum dot amplifiers. Optical and Quantum Electronics, 2008, 40, 217-226.	3.3	6
54	Mechanical and Electric Control of Photonic Modes in Random Dielectrics. Advanced Materials, 2019, 31, 1807274.	21.0	6

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55	Multimode photonic molecules for advanced force sensing. Optics Express, 2019, 27, 37579.	3.4	5
56	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
57	Control of the electromagnetic field in a cavity by an external perturbation. Proceedings of SPIE, 2017, , .	0.8	4
58	Nanomechanical control of optical field and quality factor in photonic crystal structures. Physical Review B, 2018, 97, .	3.2	4
59	Mode-field switching of nanolasers. APL Photonics, 2020, 5, .	5.7	3
60	Demonstration of atomic force microscopy imaging using an integrated opto-electro-mechanical transducer. Ultramicroscopy, 2021, 230, 113368.	1.9	3
61	Scanning near-field optical microscopy of quantum dots in photonic crystal cavities. Journal of Physics: Conference Series, 2010, 245, 012040.	0.4	2
62	Integrated Optomechanical Displacement Sensor Based on a Photonic Crystal Cavity. , 2018, , .		2
63	Coupled Photonic Crystal Nanocavities as a Tool to Tailor and Control Photon Emission. Ceramics, 2019, 2, 34-55.	2.6	2
64	Series-Nanowire Photon Number Resolving Detector Counting up to 24 Photons. , 2015, , .		2
65	Simultaneous near field imaging of electric and magnetic field in photonic crystal nanocavities. Photonics and Nanostructures - Fundamentals and Applications, 2012, 10, 251-255.	2.0	1
66	Photon counting with a 24-pixel SSPD based photon number resolving detector. , 2016, , .		1
67	Waveguide Superconducting Single- and Few-Photon Detectors on GaAs for Integrated Quantum Photonics. Quantum Science and Technology, 2016, , 61-83.	2.6	1
68	On-Chip Photocurrent Displacement Sensor Based on a Waveguide-Coupled Nanomechanical Photonic Crystal Cavity. , 2019, , .		1
69	Experimental demonstration of a novel superconducting photon number resolving detector. , 2012, , .		1
70	Electric Field Dependence of Modulation in Multilayer InAs Quantum Dot Waveguides. , 2007, , .		0
71	Linear electro-optic coefficient in multilayer self-organized InAs quantum dot structures. , 2007, , .		0
72	Linear electro-optic coefficient in multilayer self-organized InAs quantum dot structures. , 2007, , .		0

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73	Ultrafast pulse-pair amplification in InGaAs quantum-dot amplifiers. , 2009, , .		0
74	Sub-wavelength probing and modification of photonic crystal nano-cavities. Photonics and Nanostructures - Fundamentals and Applications, 2010, 8, 78-85.	2.0	0
75	Tunable homo- and hetero-atomic photonic molecules. , 2010, , .		0
76	Experimental demonstration of a novel superconducting photon-number resolving detector at telecom wavelengths. Proceedings of SPIE, 2012, , .	0.8	0
77	Towards linear optical detection with single photon sensitivity at telecom wavelengths. , 2012, , .		0
78	Ideal homoatomic and heteroatomic photonic crystal molecules. Photonics and Nanostructures - Fundamentals and Applications, 2012, 10, 271-275.	2.0	0
79	Dielectrics: Mechanical and Electric Control of Photonic Modes in Random Dielectrics (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	21.0	0
80	Counting Photons Using a Nanonetwork of Superconducting Wires. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2009, , 120-122.	0.3	0
81	Tuning and imaging random photonic modes. , 2015, , .		0