Katia Gallo

List of Publications by Year
in descending order

117	1,994	279701 23	265120 42
papers	citations	h-index	g-index

119	119	119	1883
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	All-optical diode in a periodically poled lithium niobate waveguide. Applied Physics Letters, 2001, 79, 314-316.	1.5	345
2	Non-Ising and chiral ferroelectric domain walls revealed by nonlinear optical microscopy. Nature Communications, 2017, 8, 15768.	5.8	113
3	Efficient wavelength shifting over the erbium amplifier bandwidth via cascaded second order processes in lithium niobate waveguides. Applied Physics Letters, 1997, 71, 1020-1022.	1.5	108
4	All-optical diode based on second-harmonic generation in an asymmetric waveguide. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 267.	0.9	101
5	Phase sensitive amplification based on quadratic cascading in a periodically poled lithium niobate waveguide. Optics Express, 2009, 17, 20393.	1.7	80
6	Photoreduction of SERS-Active Metallic Nanostructures on Chemically Patterned Ferroelectric Crystals. ACS Nano, 2012, 6, 7373-7380.	7.3	59
7	Bragg gratings in thin-film LiNbO_3 waveguides. Optics Express, 2017, 25, 32323.	1.7	59
8	<scp>B</scp>iocompatibility of ferroelectric lithium niobate and the influence of polarization charge on osteoblast proliferation and function. Journal of Biomedical Materials Research - Part A, 2015, 103, 2540-2548.	2.1	54
9	Harmonic generation in a two-dimensional nonlinear quasi-crystal. Optics Letters, 2005, 30, 424.	1.7	53
10	Plasmon Enhanced Raman from Ag Nanopatterns Made Using Periodically Poled Lithium Niobate and Periodically Proton Exchanged Template Methods. Journal of Physical Chemistry C, 2012, 116, 26543-26550.	1.5	50
11	Analysis of lithium niobate all-optical wavelength shifters for the third spectral window. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 741.	0.9	49
12	Field Induced Evolution of Regular and Random 2D Domain Structures and Shape of Isolated Domains in LiNbO3 and LiTaO3. Ferroelectrics, 2006, 341, 109-116.	0.3	47
13	Parametric Solitons in Two-Dimensional Lattices of Purely Nonlinear Origin. Physical Review Letters, 2008, 100, 053901.	2.9	40
14	High conversion efficiency single-pass second harmonic generation in a zinc-diffused periodically poled lithium niobate waveguide. Optics Express, 2005, 13, 4862.	1.7	34
15	Surface enhanced luminescence and Raman scattering from ferroelectrically defined Ag nanopatterned arrays. Applied Physics Letters, 2013, 103, 083105.	1.5	33
16	Ultra-broadband optical parametric generation in periodically poled stoichiometric LiTaO_3. Optics Express, 2011, 19, 4121.	1.7	31
17	Guided-wave second-harmonic generation in a LiNbO_3 nonlinear photonic crystal. Optics Letters, 2006, 31, 1232.	1.7	30
18	Tunable Ultranarrowband Grating Filters in Thin-Film Lithium Niobate. ACS Photonics, 2021, 8, 2923-2930.	3.2	30

#	Article	IF	Citations
19	Electrostatic control of the domain switching dynamics in congruent LiNbO3 via periodic proton-exchange. Applied Physics Letters, 2011, 98, .	1.5	29
20	Shapes of isolated domains and field induced evolution of regular and random 2D domain structures in LiNbO3 and LiTaO3. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 120, 109-113.	1.7	25
21	Twin-beam optical parametric generation in Ï‡(2) nonlinear photonic crystals. Applied Physics Letters, 2011, 98, 161113.	1.5	25
22	NbTiN thin films for superconducting photon detectors on photonic and two-dimensional materials. Applied Physics Letters, 2020, 116, .	1.5	25
23	Self-Organization in LiNbO3and LiTaO3: Formation of Micro- and Nano-Scale Domain Patterns. Ferroelectrics, 2004, 304, 111-116.	0.3	24
24	Shape Evolution of Isolated Micro-Domains in Lithium Niobate. Ferroelectrics, 2007, 360, 111-119.	0.3	22
25	Cascading phase shift and multivalued response in counterpropagating frequency-nondegenerate parametric amplifiers. Optics Letters, 2000, 25, 966.	1.7	21
26	Angular degrees of freedom in twin-beam parametric down-conversion. Applied Physics Letters, 2012, 101, 121114.	1.5	21
27	OTDM to WDM format conversion based on quadratic cascading in a periodically poled lithium niobate waveguide. Optics Express, 2010, 18, 10282.	1.7	20
28	Surface Chemistry Controls Anomalous Ferroelectric Behavior in Lithium Niobate. ACS Applied Materials & Interfaces, 2018, 10, 29153-29160.	4.0	20
29	Parametric fluorescence in periodically poled LiNbO3 buried waveguides. Applied Physics Letters, 2002, 80, 4492-4494.	1.5	19
30	Nanoscale Domain Effects in Ferroelectrics. Formation and Evolution of Self-Assembled Structures in LiNbO₃and LiTaO₃. Ferroelectrics, 2007, 354, 145-157.	0.3	19
31	Charge and topography patterned lithium niobate provides physical cues to fluidically isolated cortical axons. Applied Physics Letters, 2017, 110, .	1.5	19
32	Ultra-coherent signal output from an incoherent cw-pumped singly resonant optical parametric oscillator. Optics Communications, 2004, 237, 437-449.	1.0	18
33	Modal birefringence-free lithium niobate waveguides. Optics Letters, 2017, 42, 3578.	1.7	18
34	Photoinduced Enhanced Raman from Lithium Niobate on Insulator Template. ACS Applied Materials & Interfaces, 2018, 10, 30871-30878.	4.0	18
35	Thickness, humidity, and polarization dependent ferroelectric switching and conductivity in Mg doped lithium niobate. Journal of Applied Physics, 2015, 118, .	1.1	17
36	Aperiodically poled silica fibers for bandwidth control of quasi-phase-matched second-harmonic generation. Optics Letters, 2010, 35, 724.	1.7	16

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37	Tunable Wettability of Ferroelectric Lithium Niobate Surfaces: The Role of Engineered Microstructure and Tailored Metallic Nanostructures. Journal of Physical Chemistry C, 2017, 121, 6643-6649.	1.5	16
38	Biocompatible Gold Nanoparticle Arrays Photodeposited on Periodically Proton Exchanged Lithium Niobate. ACS Biomaterials Science and Engineering, 2016, 2, 1351-1356.	2.6	15
39	Two-dimensional domain engineering in LiNbO_3 via a hybrid patterning technique. Optical Materials Express, 2011, 1, 365.	1.6	14
40	Impact of longitudinal fields on second harmonic generation in lithium niobate nanopillars. APL Photonics, 2016, 1, .	3.0	13
41	Multistep quadratic cascading in broadband optical parametric generation. Optics Letters, 2012, 37, 1727.	1.7	12
42	Photoreduction of metal nanostructures on periodically proton exchanged MgO-doped lithium niobate crystals. Applied Physics Letters, 2013, 103, 182904.	1.5	12
43	Retiming of Short Pulses Using Quadratic Cascading in a Periodically Poled Lithium Niobate Waveguide. IEEE Photonics Technology Letters, 2011, 23, 94-96.	1.3	11
44	Broadband parametric processes in Ï‡^(2) nonlinear photonic crystals. Optics Letters, 2014, 39, 3457.	1.7	11
45	Single-Molecule Nonresonant Wide-Field Surface-Enhanced Raman Scattering from Ferroelectrically Defined Au Nanoparticle Microarrays. ACS Omega, 2018, 3, 3165-3172.	1.6	11
46	Bidimensional Hexagonal Poling of LiNbO3for Nonlinear Photonic Crystals and Quasi-Crystals. Ferroelectrics, 2006, 340, 69-74.	0.3	10
47	Growth mechanism of photoreduced silver nanostructures on periodically proton exchanged lithium niobate: Time and concentration dependence. Journal of Applied Physics, 2013, 113, 187212.	1.1	10
48	Interface and thickness dependent domain switching and stability in Mg doped lithium niobate. Journal of Applied Physics, 2015, 118, 224101.	1.1	10
49	Influence of annealing on the photodeposition of silver on periodically poled lithium niobate. Journal of Applied Physics, 2016, 119, .	1.1	10
50	Golden Ratio Gain Enhancement in Coherently Coupled Parametric Processes. Scientific Reports, 2018, 8, 11616.	1.6	10
51	Direct shape control of photoreduced nanostructures on proton exchanged ferroelectric templates. Applied Physics Letters, 2013, 102, .	1.5	9
52	Golden ratio entanglement in hexagonally poled nonlinear crystals. Physical Review A, 2018, 98, .	1.0	8
53	Second-harmonic generation in hexagonally-poled lithium niobate slab waveguides. Electronics Letters, 2003, 39, 75.	0.5	7
54	Spatial solitons in Ï‡^(2) planar photonic crystals. Optics Letters, 2007, 32, 3149.	1.7	7

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55	Phase-regenerative wavelength conversion in periodically poled lithium niobate waveguides. Optics Express, 2011, 19, 11705.	1.7	7
56	Nanoscale characterization of Î²-phase HxLi1â^'xNbO3 layers by piezoresponse force microscopy. Journal of Applied Physics, 2014, 116, 066815.	1.1	7
57	Charged Exciton Kinetics in Monolayer MoSe₂ near Ferroelectric Domain Walls in Periodically Poled LiNbO₃. Nano Letters, 2021, 21, 959-966.	4.5	7
58	Surface Hexagonally Poled Lithium Niobate Waveguides. Ferroelectrics, 2003, 296, 3-8.	0.3	6
59	Frequency-resolved optical gating in the 155 Âµm band via cascaded chi^(2) processes. Journal of the Optical Society of America B: Optical Physics, 2005, 22, 1985.	0.9	5
60	Frequency-resolved optical gating in a quasi-phase-matched LiNbO/sub 3/ waveguide. IEEE Photonics Technology Letters, 2005, 17, 849-851.	1.3	5
61	Ultraviolet writing of channel waveguides in proton-exchanged LiNbO3. Journal of Applied Physics, 2007, 101, 014110.	1.1	5
62	Analysis of acceptable spectral windows of quadratic cascaded nonlinear processes in a periodically poled lithium niobate waveguide. Optics Express, 2011, 19, 8327.	1.7	5
63	Purely nonlinear disorder-induced localizations and their parametric amplification. Optics Letters, 2013, 38, 5276.	1.7	4
64	OTDM to WDM Format Conversion Based on Cascaded SHG/DFG in a Single PPLN Waveguide. , 2010, , .		4
65	Coincident Fluorescenceâ€Burst Analysis of the Loading Yields of Exosomeâ€Mimetic Nanovesicles with Fluorescentlyâ€Labeled Cargo Molecules. Small, 2022, , 2106241.	5.2	4
66	Cascaded-chi(2)-interaction-based frequency-resolved optical gating in a periodically poled LiNbO3 waveguide. Optics Letters, 2006, 31, 244.	1.7	3
67	Twin-beam optical parametric generation in nonlinear photonic crystals. , 2011, , .		3
68	Lithium Niobate: The Silicon of Photonics!. NATO Science for Peace and Security Series B: Physics and Biophysics, 2013, , 421-422.	0.2	3
69	Focus issue introduction: Advanced Solid-State Lasers (ASSL) 2013. Optics Express, 2014, 22, 8813.	1.7	3
70	Focus issue introduction: Advanced Solid-State Lasers (ASSL) 2014. Optics Express, 2015, 23, 8170.	1.7	3
71	Low-loss ridge waveguides in thin film lithium niobate-on-insulator (LNOI) fabricated by reactive ion etching. , 2016, , .		3
72	Edge-enhanced optical parametric generation in periodically poled LiNbO₃. Optics Express, 2020, 28, 20879.	1.7	3

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73	Spatial Wave Dynamics in 2-D Periodically Poled LiNbO$_{3}$ Waveguides. IEEE Journal of Quantum Electronics, 2009, 45, 1415-1420.	1.0	2
74	Elimination of the chirp of optical pulses through cascaded nonlinearities in periodically poled lithium niobate waveguides. Optics Letters, 2010, 35, 3724.	1.7	2
75	Interface modulated currents in periodically proton exchanged Mg doped lithium niobate. Journal of Applied Physics, 2016, 119, 114103.	1.1	2
76	Focus issue introduction: Advanced Solid-State Lasers (ASSL) 2015. Optics Express, 2016, 24, 5674.	1.7	2
77	Protein assemblies on ferroelectrically patterned microarrays of Ag nanoparticles. Ferroelectrics, 2017, 515, 143-150.	0.3	2
78	Waveguide gratings in thin-film lithium niobate on insulator. , 2017, , .		2
79	Plane and Guided Wave Effects and Devices Via Quadratic Cascading. , 1999, , 59-87.		2
80	Ultra-narrowband Bragg grating filters in LiNbO3 on insulator photonic wires. , 2020, , .		2
81	Proton-exchanged LiNbO/sub 3/ waveguides for photonic applications. , 0, , .		1
82	Buried slab waveguides in LiNbO/sub 3/ nonlinear photonic crystals. , 0, , .		1
83	Processing Ultrafast Optical Signals in Broadband Telecom Systems by means of Cascaded Quadratic Nonlinearities. , 2006, , .		1
84	Green-pumped Parametric Downconversion in Hexagonally Poled MgO:LiTaO3. , 2014, , .		1
85	UV laser-induced poling inhibition in proton exchanged LiNbO $$_{3}$$ 3 crystals. Applied Physics B: Lasers and Optics, 2017, 123, 1.	1.1	1
86	Wide-Field Surface-Enhanced Raman Scattering from Ferroelectrically Defined Au Nanoparticle Microarrays for Optical Sensing. , 2018, , .		1
87	Piezoresponse force microscopy on proton exchanged LiNbO3 layers. , 2012, , .		1
88	Phase-Shifted Bragg Grating Resonators in Thin-Film Lithium Niobate Waveguides. , 2019, , .		1
89	Phase-Sensitive Wavelength Conversion Based on Cascaded Quadratic Processes in Periodically Poled Lithium Niobate Waveguides. , 2011, , .		1
90	Quadratic solitons in 2D nonlinear photonic crystals. , 2007, , .		0

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91	Parametric Solitons in Nonlinear Photonic Crystals. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
92	Spatial Solitons in Quadratic 2D Nonlinear Photonic Crystals. , 2007, , .		0
93	Light self-confinement via second harmonic generation in a 2D nonlinear photonic crystal waveguide. , 2007, , .		0
94	Spatial Solitons in 2D Lattices. Optics and Photonics News, 2008, 19, 28.	0.4	0
95	Nonlinear wave dynamics in 2D periodically poled waveguides. , 2009, , .		0
96	Elimination of the chirp of optical pulses through cascaded nonlinearities in periodically poled lithium niobate waveguides. , 2010, , .		0
97	Parametric frequency Downconversion devices in periodically poled mg-doped stoichiometric Lithium Tantalate. , 2010, , .		0
98	Processing of telecommunication signals using periodically poled lithium niobate waveguides. , 2010, , .		0
99	Optical parametric generation in purely nonlinear photonic crystals. , 2011, , .		0
100	Advances in quasi phase-matched optical frequency converters. , 2011, , .		0
101	Spectral and Angular Mapping of Parametric Generation in Purely Nonlinear Lattices. , 2012, , .		0
102	Cascaded up-conversion of twin-beam OPG in nonlinear photonic crystals. , 2013, , .		0
103	SERS from Ag and Au nanoarrays made using photochemical patterning. , 2013, , .		0
104	Twin-beam parametric processes in nonlinear photonic crystals. , 2014, , .		0
105	Formation of ferroelectrically defined Ag nanoarray patterns. Proceedings of SPIE, 2014, , .	0.8	0
106	Label-free cell membrane detection by Raman spectroscopy using biocompatible gold nanostructure microscale arrays on a ferroelectric template. , 2017, , .		0
107	Superresonant parametric generation in nonlinear photonic crystals. , 2017, , .		0
108	Birefringence-free lithium niobate waveguides. , 2017, , .		0

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109	All-Optical Diode in a Quasi-Phase-Matched LiNbO3 Waveguide. , 2001, , 45-49.		0
110	All optical diode via quadratic cascading in a PPLN waveguide. , 2001, , .		0
111	Spatial Soliton Dynamics in Two-Dimensional Quadratic Photonic Crystals. , 2007, , .		0
112	Two-dimensional domain engineering in LiNbO3 via a hybrid patterning technique. , 2011, , .		0
113	Quadratic Cascading Effects in Broadband Optical Parametric Generation. , 2012, , .		0
114	Broadband parametric processes in quadratic nonlinear photonic crystals. , 2014, , .		0
115	10.1063/1.4953670.1. , 2016, , .		0
116	Super-resonant parametric generation and golden ratio entanglement in hexagonally poled nonlinear crystals. , 2019, , .		0
117	Ultrabroadband second harmonic generation at telecom-wavelengths in lithium niobate waveguides. , 2020, , .		0