

Nicola Argiolas

List of Publications by Year in descending order

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630
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of low dose high energy O ³⁺ implantation on refractive index and linear electro-optic properties in X-cut LiNbO ₃ : Planar optical waveguide formation and characterization. Journal of Applied Physics, 2002, 92, 6477-6483.	1.1	148
2	Damage effects produced in the near-surface region of x-cut LiNbO ₃ by low dose, high energy implantation of nitrogen, oxygen, and fluorine ions. Journal of Applied Physics, 2004, 96, 242-247.	1.1	94
3	Diffusion behavior of transition metals in field-assisted ion-exchanged glasses. Solid State Ionics, 2006, 177, 3151-3155.	1.3	43
4	Integrated Mach-Zehnder micro-interferometer on LiNbO ₃ . Optics and Lasers in Engineering, 2007, 45, 368-372.	2.0	36
5	On the dynamics of the damage growth in 5 MeV oxygen-implanted lithium niobate. Applied Physics Letters, 2005, 87, 072901.	1.5	33
6	Polaronic deformation at the Fe^{2+} site in Fe:LiNbO_3 . Physical Review B, 2015, 91, .	1.1	33
7	Highly reduced iron-doped lithium niobate for optoelectronic tweezers. Applied Physics B: Lasers and Optics, 2013, 113, 191-197.	1.1	32
8	Zirconium-doped lithium niobate: photorefractive and electro-optical properties as a function of dopant concentration. Optical Materials Express, 2011, 1, 270.	1.6	31
9	Structural and optical properties of zirconium doped lithium niobate crystals. Journal of Applied Physics, 2010, 108, 093508.	1.1	30
10	Modification of the structure of diamond with MeV ion implantation. Diamond and Related Materials, 2011, 20, 774-778.	1.8	25
11	Luminescence-induced photorefractive spatial solitons. Applied Physics Letters, 2010, 96, 091107.	1.5	22
12	Direct measurement and modelling of internal strains in ion-implanted diamond. Journal of Physics Condensed Matter, 2013, 25, 385403.	0.7	22
13	Quantification of Iron (Fe) in Lithium Niobate by Optical Absorption. Applied Spectroscopy, 2011, 65, 216-220.	1.2	20
14	Consistent Atomic Geometries and Electronic Structure of Five Phases of Potassium Niobate from Density-Functional Theory. Advances in Materials Science and Engineering, 2017, 2017, 1-13.	1.0	19
15	Micro-Raman analysis of Fe-diffused lithium niobate waveguides. Applied Physics B: Lasers and Optics, 2010, 101, 541-546.	1.1	15
16	Photorefractive direct laser writing. Journal Physics D: Applied Physics, 2016, 49, 125103.	1.3	15
17	Nuclear and electronic energy loss synergy in the process of damage growth in ion implanted LiNbO ₃ . Nuclear Instruments & Methods in Physics Research B, 2006, 249, 122-125.	0.6	14
18	A systematic study of the chemical etching process on periodically poled lithium niobate structures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 118, 150-154.	1.7	13

#	ARTICLE	IF	CITATIONS
19	Structural and compositional characterization of X-cut LiNbO ₃ crystals implanted with high energy oxygen and carbon ions. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 174-177.	0.6	13
20	Steering of an ultrarelativistic proton beam by a bent germanium crystal. Applied Physics Letters, 2011, 98, 234102.	1.5	13
21	Proton-exchanged waveguides in MgO-doped LiNbO ₃ : Optical and structural properties. Journal of Applied Physics, 2003, 94, 1163-1170.	1.1	12
22	Lithium niobate crystals doped with iron by thermal diffusion: Relation between lattice deformation and reduction degree. Journal of Applied Physics, 2010, 107, .	1.1	11
23	The r_{33} electro-optic coefficient of Er:LiNbO ₃ . Journal of Optics (United Kingdom), 2010, 12, 015206.	1.0	11
24	Self-confined beams in erbium-doped lithium niobate. Journal of Optics (United Kingdom), 2010, 12, 015206.	1.0	10
25	Iron doping of lithium niobate by thermal diffusion from thin film: study of the treatment effect. Applied Physics A: Materials Science and Processing, 2011, 104, 453-460.	1.1	10
26	Topographic investigation of ferroelectric domain structures in periodically-poled lithium niobate crystals by a profilometer. Materials Characterization, 2003, 51, 177-183.	1.9	9
27	On the dynamics of periodically-poled lithium niobate formation by off-center Czochralski technique. Applied Physics Letters, 2001, 79, 2163-2165.	1.5	8
28	Compositional and structural analysis of iron doped X-cut lithium niobate crystals. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 118, 155-159.	1.7	8
29	Raman frequency shift induced by photorefractive effect on Fe-doped lithium niobate. Journal of Applied Physics, 2013, 114, 163506.	1.1	8
30	Highly bent (110) Ge crystals for efficient steering of ultrarelativistic beams. Journal of Applied Physics, 2013, 114, 154902.	1.1	8
31	Nonlinear diffusion model for annealed proton-exchanged waveguides in zirconium-doped lithium niobate. Applied Optics, 2016, 55, 6559.	2.1	8
32	Modeling and Characterization of Border Domain Effects in Periodically Poled Lithium Niobate Crystals Grown by the Off-center Czochralski Technique. Optical and Quantum Electronics, 2006, 38, 177-185.	1.5	7
33	High resolution x-ray investigation of periodically poled lithium tantalate crystals with short periodicity. Journal of Applied Physics, 2009, 106, 104121.	1.1	7
34	Depth-resolved photorefractive characterization of lithium niobate doped with iron by thermal diffusion. Applied Physics B: Lasers and Optics, 2012, 108, 657-663.	1.1	7
35	Photorefractive effect at 775 nm in doped lithium niobate crystals. Applied Physics Letters, 2013, 103, 031904.	1.5	7
36	Er ³⁺ -Li ⁺ ion exchange in lithium niobate crystals: an EXAFS study. European Physical Journal B, 2003, 32, 157-161.	0.6	6

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37	A study on the periodicity of periodic poled lithium niobate crystals growth by the off-center Czochralski technique. Journal of Crystal Growth, 2003, 249, 275-282.	0.7	6
38	Model of the erbium ion exchange process in lithium niobate crystals. Physical Review B, 2004, 69, .	1.1	6
39	High Resolution X-Ray Characterization of Sub-Micron Periodic Domain Structures in Lithium Niobate Crystals. Ferroelectrics, 2007, 352, 25-34.	0.3	6
40	Quantification of nuclear damage in high energy ion implanted lithium niobate. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 597-600.	0.6	5
41	Purcell effect observation in erbium doped lithium niobate photonic crystal structures. Optics Communications, 2008, 281, 4151-4154.	1.0	5
42	Iron site location in Fe-diffused lithium niobate crystals by combined RBS-PIXE-NRA analysis. Nuclear Instruments & Methods in Physics Research B, 2012, 275, 11-15.	0.6	5
43	Integrated opto-microfluidics platforms in lithium niobate crystals for sensing applications. Proceedings of SPIE, 2015, , .	0.8	5
44	A Novel Configuration for Phase-Matched Second-Harmonic Generation in LiNbO ₃ Waveguides. IEEE Photonics Technology Letters, 2007, 19, 553-555.	1.3	3
45	Diffusion of iron in lithium niobate: a secondary ion mass spectrometry study. Applied Physics A: Materials Science and Processing, 2011, 105, 111-118.	1.1	3
46	Planar channeling steering of an ultrarelativistic proton beam through a bent germanium crystal. AIP Conference Proceedings, 2013, , .	0.3	3
47	Influence of iron doping on spatial soliton formation and fixing in lithium niobate crystals. Optical Materials, 2014, 37, 175-180.	1.7	3
48	Experimental evidence of domain wall tilting in periodically poled lithium niobate crystals grown by the Czochralski off-center technique. Applied Physics Letters, 2006, 89, 062901.	1.5	2
49	Phase-matched SHG in periodically poled LiNbO ₃ waveguides: A novel configuration. Optical and Quantum Electronics, 2007, 38, 889-901.	1.5	2
50	Periodically poled lithium niobate structures grown by the off-center Czochralski technique for backward and forward second harmonic generation. Optics and Lasers in Engineering, 2007, 45, 373-379.	2.0	2
51	Raman Investigation of Fe in "Diffused Photorefractive Waveguides on Lithium Niobate Substrates. Ferroelectrics, 2009, 390, 3-9.	0.3	2
52	Photorefractivity of zirconium-doped lithium niobate. , 2011, , .		2
53	Photoinduced reflectivity oscillation in LiNbO ₃ crystals irradiated by a KrF laser. Applied Physics Letters, 2006, 89, 111904.	1.5	1
54	Growth and characterization of Er-doped single crystal lithium niobate fibers. Journal of Applied Physics, 2008, 104, 103114.	1.1	1

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55	Optical characterization of erbium doped LiNbO ₃ poling properties. Journal of Applied Physics, 2008, 104, 014103.	1.1	1
56	Structural and compositional characterization of LiNbO ₃ crystals implanted with high energy iron ions. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 2937-2941.	0.6	1
57	Prediction of second harmonic generation efficiency in real periodically poled lithium niobate structures grown by the off-center czochralski technique. , 0, , .		0
58	Photorefractive bright soliton in erbium doped lithium niobate. , 2006, 6183, 280.		0
59	Depth Resolved Study of the Composition and Polaron Luminescence of Fe:LiNbO ₃ Diffused Crystals. Ferroelectrics, 2009, 389, 142-152.	0.3	0
60	Giant increase of photorefractive effect in lithium niobate: a new approach. , 2012, , .		0
61	Fabrication and characterization of photorefractive platforms in lithium niobate for recording of integrated holographic devices. , 2012, , .		0
62	Photorefractivity Vs. wavelength a comparative study of Mg- and Zr-doped Lithium Niobate crystals. , 2013, , .		0
63	Photorefractivity of zirconium-doped lithium niobate crystals. SPIE Newsroom, 0, , .	0.1	0