

Katalin Polgár

List of Publications by Year in descending order

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304743

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44
all docs

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docs citations

44
times ranked

772
citing authors

#	ARTICLE	IF	CITATIONS
1	Growth of stoichiometric LiNbO ₃ single crystals by top seeded solution growth method. Journal of Crystal Growth, 1997, 177, 211-216.	1.5	205
2	Temperature dependence of the absorption and refraction of Mg-doped congruent and stoichiometric LiNbO ₃ in the THz range. Journal of Applied Physics, 2005, 97, 123505.	2.5	196
3	Composition dependence of the ultraviolet absorption edge in lithium niobate. Applied Physics Letters, 1997, 70, 2801-2803.	3.3	162
4	Infrared absorption study of the OH vibrational band in LiNbO ₃ crystals. Journal of Physics and Chemistry of Solids, 1991, 52, 797-803.	4.0	119
5	A simple method to determine the real composition of LiNbO ₃ crystals. Crystal Research and Technology, 1984, 19, 1659-1661.	1.3	104
6	Growth, defect structure, and THz application of stoichiometric lithium niobate. Applied Physics Reviews, 2015, 2, 040601.	11.3	91
7	Spectroscopic and electrical conductivity investigation of Mg doped LiNbO ₃ single crystals. Solid State Communications, 1986, 59, 375-379.	1.9	77
8	Electron spin resonance and electron-nuclear double-resonance investigation of a new Cr ³⁺ -defect on an Nb site in LiNbO ₃ :Mg:Cr. Journal of Physics Condensed Matter, 1991, 3, 1901-1908.	1.8	68
9	Threshold concentration of MgO in near-stoichiometric LiNbO ₃ crystals. Journal of Crystal Growth, 2005, 284, 149-155.	1.5	59
10	Nonlinear refraction and absorption of Mg doped stoichiometric and congruent LiNbO ₃ . Journal of Applied Physics, 2004, 95, 902-908.	2.5	58
11	On the lattice site of trivalent dopants and the structure of Mg ²⁺ -OH-M ³⁺ -defects in LiNbO ₃ :Mg crystals. Journal of Physics Condensed Matter, 1993, 5, 781-794.	1.8	57
12	Ferroelectric domain imaging by defect-luminescence microscopy. Journal of Applied Physics, 2003, 93, 2295-2297.	2.5	44
13	Mn ²⁺ -defects in LiNbO ₃ : an electron nuclear double resonance (ENDOR) investigation of the Mn ²⁺ -site and the local disorder. Journal of Physics Condensed Matter, 1990, 2, 6603-6618.	1.8	35
14	An infrared absorption band caused by OH [•] ions in a LiNbO ₃ :Mg, Cr crystal. Physics Letters, Section A: General, Atomic and Solid State Physics, 1988, 133, 433-437.	2.1	34
15	Crystal growth and stoichiometry of LiNbO ₃ prepared by the flux method. Optical Materials, 2002, 19, 7-11.	3.6	31
16	UV and IR absorption studies in LiNbO ₃ :Mg crystals below and above the photorefractive threshold. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 171-174.	0.8	30
17	Measurement of laser-induced refractive index changes of Mg-doped congruent and stoichiometric LiNbO ₃ . Applied Physics Letters, 2002, 80, 2245-2247.	3.3	29
18	Density Measurements on LiNbO ₃ Crystals Confirming Nb Substitution for Li. Crystal Research and Technology, 1986, 21, K101-K104.	1.3	28

#	ARTICLE	IF	CITATIONS
19	The effect of stoichiometry and Mg doping on the Raman spectra of LiNbO ₃ :Mg crystals. Applied Physics B: Lasers and Optics, 2007, 87, 317-322.	2.2	28
20	Ti ³⁺ on Nb site: A paramagnetic Jahn-Teller center in vacuum-reduced LiNbO ₃ :Mg:Ti single crystals. Physical Review B, 1998, 58, 8329-8337.	3.2	25
21	Influence of Mg doping on the behaviour of polaronic light-induced absorption in LiNbO ₃ . Physica Status Solidi - Rapid Research Letters, 2008, 2, 284-286.	2.4	25
22	Diffusion of Hydrogen Isotopes in Pure and Mg-Doped LiNbO ₃ Crystals. Physica Status Solidi A, 1990, 120, 97-104.	1.7	24
23	Transient absorption and luminescence of LiNbO ₃ and KNbO ₃ . Integrated Ferroelectrics, 2001, 35, 137-149.	0.7	22
24	Recombination luminescence of Cu and/or Ag doped lithium tetraborate single crystals. Journal of Luminescence, 2016, 177, 9-16.	3.1	20
25	Optically induced gratings in Fe ²⁺ and Mn ²⁺ doped Bi ₄ Ge ₃ O ₁₂ single crystals. Journal of Applied Physics, 1993, 73, 2114-2121.	2.5	19
26	Ternary system Li ₂ O-K ₂ O-Nb ₂ O ₅ . Journal of Alloys and Compounds, 2005, 386, 238-245.	5.5	13
27	Raman and infrared spectroscopic characterization of LiNbO ₃ crystals grown from alkali metal oxide solvents. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1313-1316.	0.8	13
28	Gap levels of Ti ³⁺ on Nb or Li sites in LiNbO ₃ :(Mg):Ti crystals and their effect on charge transfer processes. Applied Physics B: Lasers and Optics, 2004, 78, 607-614.	2.2	12
29	The effect of Mg doping on the Raman spectra of LiNbO ₃ crystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 847-850.	0.8	11
30	EPR of Cu ²⁺ in lithium tetraborate single crystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1276-1279.	0.8	11
31	Waveguides in LTB (Li ₂ B ₄ O ₇) by He ⁺ implantation. Physica Status Solidi A, 1996, 153, 553-557.	1.7	10
32	Ternary system Li ₂ O-K ₂ O-Nb ₂ O ₅ . Journal of Alloys and Compounds, 2005, 386, 246-252.	5.5	10
33	Alkali metal oxide solvents in the growth of stoichiometric LiNbO ₃ single crystal. Journal of Crystal Growth, 2006, 286, 334-337.	1.5	8
34	Induced optical absorption and ITS relaxation in LiNbO ₃ . Radiation Effects and Defects in Solids, 1999, 150, 193-198.	1.2	7
35	Phase relations in the growth of stoichiometric lithium niobate. Physica Status Solidi A, 2004, 201, 284-288.	1.7	7
36	Endor for characterizing transition metal centres in LiNbO ₃ . Radiation Effects and Defects in Solids, 1991, 119-121, 583-588.	1.2	6

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37	Relaxation of electronic excitations in LiNbO ₃ crystals. <i>Ferroelectrics</i> , 2001, 257, 281-292.	0.6	6
38	Rearrangement of Rare Earth Defects Under Domain Inversion in LiNbO ₃ . <i>Radiation Effects and Defects in Solids</i> , 2003, 158, 247-250.	1.2	6
39	Multiplicity of europium centers in doped stoichiometric crystals of lithium niobate. <i>Technical Physics Letters</i> , 2007, 33, 337-339.	0.7	6
40	Thermal kinetics of OH ⁻ ions in LiNbO ₃ :Mg crystals above the photorefractive threshold. <i>Applied Physics Letters</i> , 2010, 96, 191907.	3.3	5
41	High temperature top seeded solution growth of stoichiometric lithium niobate LiNbO ₃ (sLN) with planar interface. <i>Journal of Crystal Growth</i> , 2012, 360, 181-184.	1.5	5
42	Stark effect on f ² Spectra of LiNbO ₃ : Er ³⁺ , Mg crystals. <i>Radiation Effects and Defects in Solids</i> , 1999, 150, 287-291.	1.2	3
43	Bipolarons localised by Ti dopants in reduced LiNbO ₃ crystals double-doped by Ti and Mg. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 132-135.	0.8	2
44	Activation Energy of Proton Migration in Mn- and Fe-Doped Lithium Niobate Obtained by Holographic Methods. <i>Radiation Effects and Defects in Solids</i> , 2003, 158, 173-179.	1.2	1