## Andrey Akhmatkhanov

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3737575/publications.pdf

Version: 2024-02-01

516710 526287 88 873 16 citations h-index papers

g-index 89 89 89 654 docs citations times ranked citing authors all docs

27

#	Article	IF	Citations
1	Formation of broad domain boundary during dot ion beam irradiation in SBN:Ni single crystals. Ferroelectrics, 2022, 592, 72-82.	0.6	O
2	Domain structure evolution in calcium orthovanadate crystal induced by IR laser irradiation. Ferroelectrics, 2022, 592, 83-89.	0.6	0
3	Domain growth in LiNbO <sub>3</sub> with surface layer modified by soft proton exchange. Ferroelectrics, 2022, 592, 64-71.	0.6	1
4	Analysis of Barkhausen pulse shapes in lithium niobate single crystals. Ferroelectrics, 2022, 592, 1-11.	0.6	1
5	Domain merging in LaBGeO5 single crystals. Ferroelectrics, 2021, 575, 151-157.	0.6	O
6	Magnetoelastic effect in CoNi particles caused by thermal resizing of a lithium niobate crystal substrate. Ferroelectrics, 2021, 574, 65-71.	0.6	0
7	Formation of submicron stripe domain ensembles during polarization reversal in Rb doped KTP crystal covered by dielectric layer. Ferroelectrics, 2021, 574, 101-108.	0.6	1
8	The input of Barkhausen pulses to the switching current in congruent lithium niobate. Ferroelectrics, 2021, 574, 156-163.	0.6	1
9	Second harmonic generation in periodically poled MgO:LN crystal with 2 Âμm period created by e-beam irradiation. Ferroelectrics, 2021, 576, 50-54.	0.6	1
10	Influence of Humidity on Local Polarization Reversal in a Rb:KTP Single Crystal. ACS Applied Electronic Materials, 2021, 3, 260-266.	4.3	6
11	Thermostimulated Changes in the Switching Field of Planar CoNi Microparticles Formed on a Surface of Single-Crystal Lithium Niobate. Physics of the Solid State, 2021, 63, 1337-1342.	0.6	O
12	In Situ Imaging of Domain Structure Evolution in LaBGeO5 Single Crystals. Crystals, 2020, 10, 583.	2.2	5
13	Barkhausen pulses caused by domain merging in congruent lithium niobate. Applied Physics Letters, 2020, 117, .	3.3	6
14	Dense ferroelectric-ferroelastic domain structures in rhombohedral PMN-28PT single crystals. Applied Physics Letters, 2020, 116, .	3.3	5
15	Interferometric measurements of graphene-based membranes for micromechanical applications. Ferroelectrics, 2020, 560, 95-101.	0.6	O
16	Domain splitting in lithium niobate with surface dielectric layer. Ferroelectrics, 2020, 559, 8-14.	0.6	0
17	Piezoelectric Actuation of Graphene-Coated Polar Structures. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2142-2147.	3.0	4
18	Different domain switching kinetics in tetragonal PMN-PT single crystal studied by in situ observation and current analysis. Journal of the European Ceramic Society, 2020, 40, 2922-2928.	5.7	9

#	Article	IF	CITATIONS
19	Analysis of switching current data in KTA single crystals. Ferroelectrics, 2020, 559, 1-7.	0.6	1
20	Perturbations of a dielectric tensor induced by domain walls of periodic domain structures in ferroelectric crystals: contribution to the Bragg diffraction of light waves. Laser Physics, 2020, 30, 025401.	1,2	0
21	Domain structure formation by local switching in the ion sliced lithium niobate thin films. Applied Physics Letters, 2020, $116,\ldots$	3.3	17
22	10.1063/5.0008522.1., 2020, , .		O
23	10.1063/5.0014220.1., 2020,,.		О
24	Observation of the Photoinduced Conductivity in a Regular Domain Structure with Tilted Walls in MgO:LiNbO3 at a Wavelength of 632.8 nm at Bragg Diffraction. JETP Letters, 2020, 112, 602-606.	1.4	1
25	The bulk screening field in nonstoichiometric lithium tantalate single crystals. Ferroelectrics, 2019, 541, 30-38.	0.6	1
26	Temperature and electric field treatment of the rhombohedral PMN-PT single crystals. Ferroelectrics, 2019, 541, 66-73.	0.6	1
27	Effect of ferroelectric domains on electric properties of single layer graphene. Ferroelectrics, 2019, 542, 93-101.	0.6	2
28	Electrically controllable diffraction of light on periodic domain structures in ferroelectric crystals. Ferroelectrics, 2019, 542, 58-63.	0.6	4
29	Forward domain growth in 36° Y-cut congruent lithium niobate. Ferroelectrics, 2019, 541, 115-122.	0.6	0
30	Annealing stability of the domain structure in periodically poled MgO doped lithium niobate single crystals. Ferroelectrics, 2019, 542, 45-51.	0.6	1
31	Analogy between growth of crystals and ferroelectric domains. Application of Wulff construction. Journal of Crystal Growth, 2019, 526, 125236.	1.5	8
32	Diffraction of Light on a Regular Domain Structure with Inclined Walls in MgO:LiNbO3. JETP Letters, 2019, 110, 178-182.	1.4	3
33	Periodically Poled MgO:LiNbO3, MgO:LiTaO3 and KTiOPO4 Crystals for Laser Light Frequency Conversion., 2019,,.		O
34	Direct observation of domain kinetics in rhombohedral PMN-28PT single crystals during polarization reversal. Applied Physics Letters, 2019, 115, .	3.3	9
35	Superfast domain wall motion in lithium niobate single crystals. Analogy with crystal growth. Applied Physics Letters, 2019, 114, .	3.3	13
36	Tilt control of the charged domain walls in lithium niobate. Applied Physics Letters, 2019, 114, .	3.3	39

#	Article	IF	Citations
37	Tunable LiNbO3-Based Diffraction Optical Elements for Control of Coherent Light., 2019,,.		O
38	Abnormal kinetics of domain structure in KTA single crystals. Applied Physics Letters, 2019, 115, 212901.	3.3	6
39	10.1063/1.5094688.1., 2019, , .		0
40	10.1063/1.5114885.1., 2019,,.		0
41	Domain shape instabilities and dendrite domain growth in uniaxial ferroelectrics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170204.	3.4	16
42	Analysis of the switching current peaks in KTP during superfast domain wall motion. Ferroelectrics, 2018, 525, 11-17.	0.6	5
43	As-grown domain structure in lithium tantalate with spatially nonuniform composition. Ferroelectrics, 2018, 525, 47-53.	0.6	15
44	Multiple nonlinear Bragg diffraction of femtosecond laser pulses in a ${\phi^{(2)}}\$ photonic lattice with hexagonal domains. Laser Physics Letters, 2018, 15, 045401.	1.4	2
45	Domain kinetics during polarization reversal in $36 \hat{A}^\circ$ Y-cut congruent lithium niobate. IOP Conference Series: Materials Science and Engineering, 2018, 443, 012024.	0.6	3
46	Direct observation of the domain kinetics during polarization reversal of tetragonal PMN-PT crystal. Applied Physics Letters, 2018, 113, .	3.3	17
47	Analysis of Switching Current Data during Polarization Reversal in KTP Single Crystals with Surface Dielectric Layer. Crystals, 2018, 8, 315.	2.2	3
48	Generation of the second harmonic in ridge waveguides formed in periodically poled lithium niobate. Quantum Electronics, 2018, 48, 717-719.	1.0	1
49	Second Harmonic Generation in a PPLN High-Contrast Ridge Waveguide. , 2018, , .		O
50	Switching current shape analysis in LBGO single crystals. IOP Conference Series: Materials Science and Engineering, 2018, 443, 012001.	0.6	2
51	Near-infrared second-harmonic generation versus mid-infrared optical parametric oscillation in multigrating and fan-out PPMgO:LN structures pumped by a repetitively pulsed 2-νm Tm <sup>3+</sup> :Lu <sub>2</sub> O <sub>3</sub> -ceramics laser. Journal of the Optical Society of America B: Optical Physics, 2018, 35, 1674.	2.1	7
52	10.1063/1.5046657.1., 2018,,.		0
53	Influence of the artificial surface dielectric layer on domain patterning by ion beam in MgO-doped lithium niobate single crystals. Applied Physics Letters, 2017, 110, .	3.3	12
54	Investigation of polarization reversal and analysis of switching current data in KTP single crystals. Ferroelectrics, 2017, 508, 1-8.	0.6	4

#	Article	IF	Citations
55	Linear diffraction of light waves in periodically poled lithium niobate crystal. Ferroelectrics, 2017, 508, 49-57.	0.6	5
56	Formation of self-assembled micro- and nano-domain structures in uniaxial ferroelectrics. IOP Conference Series: Materials Science and Engineering, 2017, 192, 012006.	0.6	1
57	Formation of self-organized domain structures with charged domain walls in lithium niobate with surface layer modified by proton exchange. Journal of Applied Physics, 2017, 121, 104101.	2.5	15
58	Superfast domain walls in KTP single crystals. Applied Physics Letters, 2017, 111, .	3.3	26
59	In situ visualization of domain structure evolution during field cooling in 0.67PMN-0.33PT single crystal. IOP Conference Series: Materials Science and Engineering, 2017, 256, 012025.	0.6	1
60	Linear diffraction of light waves on periodically poled domain structures in lithium niobate crystals: collinear, isotropic, and anisotropic geometries. Journal of Physics: Conference Series, 2017, 867, 012017.	0.4	0
61	The phase-field modeling of the self-organized phase growth with three-fold symmetry. IOP Conference Series: Materials Science and Engineering, 2017, 256, 012027.	0.6	0
62	Domain wall orientation and domain shape in KTiOPO4 crystals. Applied Physics Letters, 2016, 109, 132901.	3.3	10
63	Optical parametric oscillator based on the periodically poled MgO:LN crystal with $4.1\hat{A}\hat{I}$ 4m wavelength and varied pulse duration. Ferroelectrics, 2016, 496, 128-133.	0.6	1
64	Formation of self-assembled domain structures in single crystals of lithium tantalate with artificial dielectric layer. Ferroelectrics, 2016, 496, 92-101.	0.6	3
65	Periodically poled crystals of KTP family: a review. Ferroelectrics, 2016, 496, 49-69.	0.6	33
66	Periodically poled MgO doped LiNbO <inf>3</inf> and LiTaO <inf>3</inf> for coherent light frequency conversion., 2016,,.		O
67	Self-organizing formation of dendrite domain structures in lithium niobate and lithium tantalate crystals. Ferroelectrics, 2016, 500, 76-89.	0.6	16
68	Micro- and nano-domain engineering in lithium niobate. Applied Physics Reviews, 2015, 2, .	11.3	173
69	Toward Ferroelectric Control of Monolayer MoS <sub>2</sub> . Nano Letters, 2015, 15, 3364-3369.	9.1	62
70	Polarization Reversal Process in MgO Doped Congruent Lithium Tantalate Single Crystals. Ferroelectrics, 2015, 476, 57-68.	0.6	2
71	Formation of Self-Assembled Domain Structures in MgOSLT. Ferroelectrics, 2015, 476, 76-83.	0.6	2
72	Increase and Relaxation of Abnormal Conduction Current in Lithium Niobate Crystals with Charged Domain Walls. Ferroelectrics, 2015, 476, 94-104.	0.6	3

#	Article	IF	Citations
73	Domain patterning by electron beam of MgO doped lithium niobate covered by resist. Applied Physics Letters, 2015, 106, .	3.3	33
74	Nonlinear Raman–Nath diffraction of femtosecond laser pulses in a 2D nonlinear photonic crystal. Optics Letters, 2015, 40, 4002.	3.3	7
<b>7</b> 5	Self-assembled domain structures: From micro- to nanoscale. Journal of Advanced Dielectrics, 2015, 05, 1550015.	2.4	7
76	Polarization reversal and domain kinetics in magnesium doped stoichiometric lithium tantalate. Applied Physics Letters, 2014, 105, .	3.3	15
77	Nonlinear Raman–Nath diffraction of femtosecond laser pulses. Optics Letters, 2014, 39, 4231.	3.3	15
78	Time-dependent conduction current in lithium niobate crystals with charged domain walls. Applied Physics Letters, 2013, 103, .	3.3	35
79	Shape of isolated domains in lithium tantalate single crystals at elevated temperatures. Applied Physics Letters, 2013, 103, .	3.3	38
80	Polarization Reversal in Crystals of Congruent Lithium Tantalate at Elevated Temperatures. Ferroelectrics, 2012, 439, 40-46.	0.6	6
81	Electric Field Poling of Lithium Niobate Crystals after Proton-Exchanged Channel Waveguide Fabrication. Ferroelectrics, 2012, 441, 9-16.	0.6	4
82	Polarization reversal and jump-like domain wall motion in stoichiometric LiTaO3 produced by vapor transport equilibration. Journal of Applied Physics, 2012, 111, 014101.	2.5	23
83	Fatigue effect in ferroelectric crystals: Growth of the frozen domains. Journal of Applied Physics, 2012, 111, .	2.5	11
84	Domain Kinetics in Lithium Niobate Single Crystals with Photoresist Dielectric Layer. Ferroelectrics, 2012, 439, 3-12.	0.6	11
85	Fatigue Effect in Stoichiometric LiTaO <sub>3</sub> Crystals Produced by Vapor Transport Equilibration. Ferroelectrics, 2012, 426, 142-151.	0.6	8
86	Complex study of bulk screening processes in single crystals of lithium niobate and lithium tantalate family. Physics of the Solid State, 2010, 52, 2147-2153.	0.6	27
87	Investigation of Jerky Domain Wall Motion in Lithium Niobate. Ferroelectrics, 2008, 374, 136-143.	0.6	30
88	Characterization of Bulk Screening in Single Crystals of Lithium Niobate and Lithium Tantalate Family. Ferroelectrics, 2008, 374, 1-13.	0.6	16