Yi-Xuan Liu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9604139/publications.pdf

Version: 2024-02-01

36 papers	3,031 citations	304743 22 h-index	361022 35 g-index
36 all docs	36 docs citations	36 times ranked	1721 citing authors

#	Article	IF	Citations
1	Temperatureâ€Insensitive (K,Na)NbO₃â€Based Leadâ€Free Piezoactuator Ceramics. Advanced Functional Materials, 2013, 23, 4079-4086.	14.9	494
2	Domain Engineering of Leadâ€Free Liâ€Modified (K,Na)NbO₃ Polycrystals with Highly Enhanced Piezoelectricity. Advanced Functional Materials, 2010, 20, 1924-1929.	14.9	384
3	High and Temperature-Insensitive Piezoelectric Strain in Alkali Niobate Lead-free Perovskite. Journal of the American Chemical Society, 2017, 139, 3889-3895.	13.7	301
4	Diffused Phase Transition Boosts Thermal Stability of Highâ€Performance Leadâ€Free Piezoelectrics. Advanced Functional Materials, 2016, 26, 1217-1224.	14.9	272
5	Analysis of crystallographic evolution in (Na,K)NbO3-based lead-free piezoceramics by x-ray diffraction. Applied Physics Letters, 2007, 91, .	3.3	224
6	Sintering of Lead-Free Piezoelectric Sodium Potassium Niobate Ceramics. Materials, 2015, 8, 8117-8146.	2.9	206
7	Requirements for the transfer of lead-free piezoceramics into application. Journal of Materiomics, 2018, 4, 13-26.	5.7	187
8	Lead-free antiferroelectric niobates AgNbO₃ and NaNbO₃ for energy storage applications. Journal of Materials Chemistry A, 2020, 8, 23724-23737.	10.3	150
9	Technology transfer of lead-free (K, Na)NbO3-based piezoelectric ceramics. Materials Today, 2019, 29, 37-48.	14.2	109
10	Practical high-performance lead-free piezoelectrics: structural flexibility beyond utilizing multiphase coexistence. National Science Review, 2020, 7, 355-365.	9.5	76
11	Shifting the phase boundary: Potassium sodium niobate derivates. MRS Bulletin, 2018, 43, 607-611.	3.5	69
12	Composition Inhomogeneity due to Alkaline Volatilization in <scp><scp>Li</scp></scp>â€Modified (<scp>K</scp>,<scp><scp>Na</scp></scp>)<scp><scp>NbO</scp></scp>₃ Leadâ€Free Piezoceramics. Journal of the American Ceramic Society, 2013, 96, 2693-2695.	3.8	56
13	Ultra-large electric fieldâ€“induced strain in potassium sodium niobate crystals. Science Advances, 2020, 6, eaay5979.	10.3	53
14	Simultaneous enhancement of piezoelectricity and temperature stability in (K,Na)NbO₃-based lead-free piezoceramics by incorporating perovskite zirconates. Journal of Materials Chemistry C, 2018, 6, 10618-10627.	5.5	50
15	Isolatedâ€Oxygenâ€Vacancy Hardening in Leadâ€Free Piezoelectrics. Advanced Materials, 2022, 34, e2202558.	21.0	40
16	The impact of chemical heterogeneity in lead-free (K, Na)NbO3 piezoelectric perovskite: Ferroelectric phase coexistence. Acta Materialia, 2019, 166, 551-559.	7.9	37
17	Intergranular Stress Induced Phase Transition in CaZrO₃ Modified KNNâ€Based Leadâ€Free Piezoelectrics. Journal of the American Ceramic Society, 2015, 98, 1372-1376.	3.8	36
18	Enhanced electric-field-induced strains in (K,Na)NbO3 piezoelectrics from heterogeneous structures. Materials Today, 2021, 46, 44-53.	14.2	36

#	Article	IF	Citations
19	Defect-mediated domain-wall motion and enhanced electric-field-induced strain in hot-pressed K0.5Na0.5NbO3 lead-free piezoelectric ceramics. Journal of Applied Physics, 2021, 129, .	2.5	30
20	Determination of crystallographic orientation of lead-free piezoelectric (K,Na)NbO₃ epitaxial thin films grown on SrTiO₃ (100) surfaces. Applied Physics Letters, 2014, 104, 102902.	3.3	29
21	(K, Na)NbO3-based lead-free piezoceramics: one more step to boost applications. National Science Review, 2022, 9, .	9.5	29
22	Hardening effect in lead-free piezoelectric ceramics. Journal of Materials Research, 2021, 36, 996-1014.	2.6	25
23	Influence of trace zirconia addition on the properties of (K,Na)NbO₃solid solutions. Journal of Materials Chemistry C, 2019, 7, 6914-6923.	5.5	22
24	Domain Engineering in Bulk Ferroelectric Ceramics via Mesoscopic Chemical Inhomogeneity. Advanced Science, 2022, 9, e2200998.	11.2	20
25	The origin of chemical inhomogeneity in lead-free potassium sodium niobate ceramic: Competitive chemical reaction during solid-state synthesis. Acta Materialia, 2021, 211, 116833.	7.9	19
26	Tuning electrical properties and phase transitions through strain engineering in lead-free ferroelectric K0.5Na0.5NbO3-LiTaO3-CaZrO3 thin films. Applied Physics Letters, 2019, 115, .	3.3	15
27	Robust Ferroelectric Properties in (K,Na)NbO₃-Based Lead-Free Films via a Self-Assembled Nanocomposite Approach. ACS Applied Materials & Interfaces, 2020, 12, 4616-4624.	8.0	14
28	Origin of high electromechanical properties in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mi) Tj ETQq0 0 0 rgBT /O -based lead-free piezoelectrics modified with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BaZr</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:m. Physical Review Materials, 2020, 4, .	2.4	13
29	All-Inorganic Flexible (K, Na)NbO₃-Based Lead-Free Piezoelectric Thin Films Spin-Coated on Metallic Foils. ACS Applied Materials & Interfaces, 2021, 13, 39633-39640.	8.0	10
30	Electrical properties and temperature stability of CeO2 and MnCO3 co-doped Pb0.95Sr0.05(Mn1/3Nb2/3)0.05(Zr0.48Ti0.52)0.95O3 piezoceramics with high mechanical quality factor. Journal of Materials Science: Materials in Electronics, 2021, 32, 2895-2905.	2.2	8
31	Fabrication of the transparent ferroelectric heterostructures based on KNN-based lead-free films. Journal Physics D: Applied Physics, 2020, 53, 415301.	2.8	7
32	Influence of growth oxygen pressure on the electrical properties and phase transformation of the epitaxial (K,Na)NbO3-based lead-free ferroelectric films. Journal of Applied Physics, 2021, 129, .	2.5	3
33	Concurrently enhanced mechanical properties and capacitive performance in all-organic dielectric polymer blend via phase separation. Journal of Applied Physics, 2022, 131, .	2.5	3
34	Distinctive Nbâ€“O hybridization at domain walls in orthorhombic KNbO3 ferroelectric perovskite. Applied Physics Letters, 2022, 120, 052902.	3.3	2
35	Thermally stable piezoelectric performance in low-temperature sintered Pb_{0.95}Ba_{0.01}Sr_{0.04}(Zr_{0.53}Ti_{0.47})O₃ ceramics with a low loss factor. Advances in Applied Ceramics, 2021, 120, 209-214.	1.1	1
36	Electrical property and phase transition analysis of KNN-based lead-free ferroelectric films. Materials Research Express, 2022, 9, 056403.	1.6	1