Fang-Zhou Yao

List of Publications by Year
in descending order

33 papers	3,731 citations	24 h-index	33 g-index
		257101	395343

33 all docs	33 docs citations	33 times ranked	2282 citing authors

#	Article	IF	Citations
1	(<scp><scp>K</scp></scp>,<scp><scp>Na</scp></scp>)<scp><scp>NbO</scp></scp>₃â€Based Leadâ€Free Piezoceramics: Fundamental Aspects, Processing Technologies, and Remaining Challenges. Journal of the American Ceramic Society, 2013, 96, 3677-3696.	1.9	737
2	High-Temperature Dielectric Materials for Electrical Energy Storage. Annual Review of Materials Research, 2018, 48, 219-243.	4.3	540
3	Temperatureâ€Insensitive (K,Na)NbO₃â€Based Leadâ€Free Piezoactuator Ceramics. Advanced Functional Materials, 2013, 23, 4079-4086.	7.8	494
4	Simultaneously achieved temperature-insensitive high energy density and efficiency in domain engineered BaTiO3-Bi(Mg0.5Zr0.5)O3 lead-free relaxor ferroelectrics. Nano Energy, 2018, 52, 203-210.	8.2	410
5	Diffused Phase Transition Boosts Thermal Stability of Highâ€Performance Leadâ€Free Piezoelectrics. Advanced Functional Materials, 2016, 26, 1217-1224.	7.8	272
6	Multiscale structural engineering of dielectric ceramics for energy storage applications: from bulk to thin films. Nanoscale, 2020, 12, 17165-17184.	2.8	131
7	Multi-scale thermal stability of niobate-based lead-free piezoceramics with large piezoelectricity. Journal of Materials Chemistry C, 2015, 3, 8780-8787.	2.7	91
8	Nanoscale ferroelectric/relaxor composites: Origin of large strain in leadâ€“free Biâ€“based incipient piezoelectric ceramics. Journal of the European Ceramic Society, 2016, 36, 3401-3407.	2.8	89
9	Bioinspired Hierarchically Structured Allâ€Inorganic Nanocomposites with Significantly Improved Capacitive Performance. Advanced Functional Materials, 2020, 30, 2000191.	7.8	88
10	Ferroelectric domain morphology and temperature-dependent piezoelectricity of (K,Na,Li)(Nb,Ta,Sb)O₃ lead-free piezoceramics. RSC Advances, 2014, 4, 20062-20068.	1.7	80
11	Phase transition and high piezoelectricity in (Ba,Ca)(Ti1âˆ’<i>x</i>Sn<i>x</i>)O3 lead-free ceramics. Applied Physics Letters, 2013, 103, .	1.5	79
12	Enhanced bipolar fatigue resistance in CaZrO3-modified (K,Na)NbO3 lead-free piezoceramics. Applied Physics Letters, 2014, 104, .	1.5	77
13	Poling engineering of (K,Na)NbO₃-based lead-free piezoceramics with orthorhombicâ€“tetragonal coexisting phases. Journal of Materials Chemistry C, 2017, 5, 549-556.	2.7	69
14	Fatigue-free unipolar strain behavior in CaZrO3 and MnO2 co-modified (K,Na)NbO3-based lead-free piezoceramics. Applied Physics Letters, 2013, 103, .	1.5	60
15	Nanodomain Engineered (K, Na)NbO₃ Leadâ€Free Piezoceramics: Enhanced Thermal and Cycling Reliabilities. Journal of the American Ceramic Society, 2015, 98, 448-454.	1.9	57
16	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.	1.9	56
17	Effect of poling temperature on piezoelectricity of CaZrO3-modified (K, Na)NbO3-based lead-free ceramics. Journal of Applied Physics, 2014, 116, .	1.1	51
18	Deciphering the phase transition-induced ultrahigh piezoresponse in (K,Na)NbO3-based piezoceramics. Nature Communications, 2022, 13, .	5.8	39

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19	Intergranular Stress Induced Phase Transition in CaZrO₃ Modified KNNâ€Based Leadâ€Free Piezoelectrics. Journal of the American Ceramic Society, 2015, 98, 1372-1376.	1.9	36
20	Refreshing Piezoelectrics: Distinctive Role of Manganese in Lead-Free Perovskites. ACS Applied Materials & Interfaces, 2018, 10, 37298-37306.	4.0	36
21	Comprehensive investigation of elastic and electrical properties of Li/Ta-modified (K,Na)NbO3 lead-free piezoceramics. Journal of Applied Physics, 2013, 113, .	1.1	34
22	(K, Na)NbO3-based lead-free piezoceramics: one more step to boost applications. National Science Review, 2022, 9, .	4.6	29
23	Electromechanical properties of CaZrO₃ modified (K,Na)NbO₃â€based leadâ€free piezoceramics under uniaxial stress conditions. Journal of the American Ceramic Society, 2017, 100, 2116-2122.	1.9	27
24	Identifying phase transition behavior in Bi1/2Na1/2TiO3-BaTiO3 single crystals by piezoresponse force microscopy. Journal of Applied Physics, 2017, 121, .	1.1	26
25	Improving fatigue properties, temperature stability and piezoelectric properties of KNN-based ceramics via sintering in reducing atmosphere. Journal of the European Ceramic Society, 2021, 41, 4462-4472.	2.8	26
26	Evolution of electromechanical properties in Fe-doped (Pb,Sr)(Zr,Ti)O3 piezoceramics. Journal of Advanced Ceramics, 2021, 10, 587-595.	8.9	20
27	Robust CaZrO3-modified (K, Na)NbO3-based lead-free piezoceramics: High fatigue resistance insensitive to temperature and electric field. Journal of Applied Physics, 2015, 118, .	1.1	19
28	Grain size effect on microwave dielectric properties of Na2WO4 ceramics prepared by cold sintering process. Ceramics International, 2020, 46, 27193-27198.	2.3	18
29	Piezoelectric properties of (K0.5Na0.5)NbO₃-BaTiO₃ lead-free ceramics prepared by spark plasma sintering. Journal of Advanced Dielectrics, 2016, 06, 1650013.	1.5	16
30	Ferroelectric and piezoelectric properties of 0.95(Na0.49K0.49Li0.02)(Nb0.8Ta0.2)O3â€"0.05CaZrO3 lead-free ceramics prepared by spark plasma sintering. Journal of Materials Science: Materials in Electronics, 2015, 26, 9329-9335.	1.1	12
31	Cold Sintering of Na2WO4 Ceramics using a Na2WO4-2H2O Chemistry. Journal of the European Ceramic Society, 2021, 41, 6029-6034.	2.8	6
32	Heterogeneous multilayer dielectric ceramics enabled by ultralowâ€temperature selfâ€constrained sintering. Journal of the American Ceramic Society, 2020, 103, 249-257.	1.9	5
33	Allâ€Inorganic Nanocomposites: Bioinspired Hierarchically Structured Allâ€Inorganic Nanocomposites with Significantly Improved Capacitive Performance (Adv. Funct. Mater. 23/2020). Advanced Functional Materials, 2020, 30, 2070149.	7.8	1