Ting Zheng

List of Publications by Year
in descending order

52
papers

3,722
citations

159585
30
h-index

182427
51
g-index

52
all docs

52
docs citations

52
times ranked

2035
citing authors

#	Article	IF	Citations
1	Recent development in lead-free perovskite piezoelectric bulk materials. Progress in Materials Science, 2018, 98, 552-624.	32.8	706
2	Giant Piezoelectricity in Potassiumâ€“Sodium Niobate Lead-Free Ceramics. Journal of the American Chemical Society, 2014, 136, 2905-2910.	13.7	693
3	The structural origin of enhanced piezoelectric performance and stability in lead free ceramics. Energy and Environmental Science, 2017, 10, 528-537.	30.8	386
4	Large d33 in (K,Na)(Nb,Ta,Sb)O3-(Bi,Na,K)ZrO3 lead-free ceramics. Journal of Materials Chemistry A, 2014, 2, 4122.	10.3	103
5	High strain in (K_{0.40}Na_{0.60})(Nb_{0.955}Sb_{0.045})O₃â€“Bi_{0.50}Na<sub>0… ceramics with large piezoelectricity. Journal of Materials Chemistry C, 2014, 2, 8796-8803.	5.5	97
6	Multi-scale thermal stability of niobate-based lead-free piezoceramics with large piezoelectricity. Journal of Materials Chemistry C, 2015, 3, 8780-8787.	5.5	91
7	Potassiumâ€“sodium niobate lead-free ceramics: modified strain as well as piezoelectricity. Journal of Materials Chemistry A, 2015, 3, 1868-1874.	10.3	87
8	Perovskite BiFeO₃â€“BaTiO₃ Ferroelectrics: Engineering Properties by Domain Evolution and Thermal Depolarization Modification. Advanced Electronic Materials, 2020, 6, 2000079.	5.1	87
9	Composition-Driven Phase Boundary and Piezoelectricity in Potassiumâ€“Sodium Niobate-Based Ceramics. ACS Applied Materials & Interfaces, 2015, 7, 20332-20341.	8.0	76
10	Compositionally Graded KNNâ€Based Multilayer Composite with Excellent Piezoelectric Temperature Stability. Advanced Materials, 2022, 34, e2109175.	21.0	74
11	High-performance piezoelectric-energy-harvester and self-powered mechanosensing using lead-free potassiumâ€“sodium niobate flexible piezoelectric composites. Journal of Materials Chemistry A, 2018, 6, 16439-16449.	10.3	73
12	Effects of site engineering and doped element types on piezoelectric and dielectric properties of bismuth ferrite lead-free ceramics. Journal of Materials Chemistry C, 2015, 3, 11326-11334.	5.5	69
13	High-performance potassium sodium niobate piezoceramics for ultrasonic transducer. Nano Energy, 2020, 70, 104559.	16.0	68
14	Competitive mechanism of temperature-dependent electrical properties in BiFeO3-BaTiO3 ferroelectrics controlled by domain evolution. Acta Materialia, 2021, 206, 116601.	7.9	64
15	Strong Piezoelectricity in (1 â€“ x)(K0.4Na0.6)(Nb0.96Sb0.04)O3-xBi0.5K0.5Zr1â€“ySnyO3 Lead-Free Binary System: Identification and Role of Multiphase Coexistence. ACS Applied Materials & Interfaces, 2015, 7, 5927-5937.	8.0	63
16	Enhanced piezoelectricity in (1 âˆ’) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td (x)Bi_{1.05}Fe_{1âˆ’y}A<sub>y</su… ceramics: site engineering and wide phase boundary region. Dalton Transactions, 2016, 45, 11277-11285.	3.3	62
17	New potassium-sodium niobate lead-free piezoceramic: Giant-<i>d</i>33 vs. sintering temperature. Journal of Applied Physics, 2014, 115, .	2.5	59
18	Large Electrocaloric Effect in (Bi_{0.5}Na_{0.5})TiO₃-Based Relaxor Ferroelectrics. ACS Applied Materials & Interfaces, 2020, 12, 33934-33940.	8.0	58

#	ARTICLE	IF	CITATIONS
19	Large strain of lead-free bismuth ferrite ternary ceramics at elevated temperature. Scripta Materialia, 2018, 155, 11-15.	5.2	52
20	Bi nonstoichiometry and composition engineering in (1 âˆ' x)Bi_{1+y}FeO_{3+3y/2}âˆ' xBaTiO₃ceramics. RSC Advances, 2016, 6, 90831-90839.	3.6	48
21	Enhanced piezoelectric activity in high-temperature Bi_{1âˆ'xâˆ'y}Sm_xLa_yFeO₃ lead-free ceramics. Journal of Materials Chemistry C, 2015, 3, 3684-3693.	5.5	44
22	New potassiumâ€"sodium niobate material system: a giant-d₃₃and high-T_Clead-free piezoelectric. Dalton Transactions, 2014, 43, 11759.	3.3	43
23	Characteristics of giant piezoelectricity around the rhombohedral-tetragonal phase boundary in (K,Na)NbO₃-based ceramics with different additives. Journal of Materials Chemistry A, 2015, 3, 15951-15961.	10.3	40
24	Mesoscale origin of dielectric relaxation with superior electrostrictive strain in bismuth ferrite-based ceramics. Materials Horizons, 2020, 7, 3011-3020.	12.2	39
25	Lead-Free (K,Na)NbO₃-Based Materials: Preparation Techniques and Piezoelectricity. ACS Omega, 2020, 5, 3099-3107.	3.5	37
26	Wide phase boundary zone, piezoelectric properties, and stability in 0.97(K0.4Na0.6)(Nb1âˆ'xSbx)O3â€"0.03Bi0.5Li0.5ZrO3 lead-free ceramics. Dalton Transactions, 2014, 43, 9419.	3.3	36
27	Phase structure, piezoelectric properties, and stability of new K0.48Na0.52NbO3â€"Bi0.5Ag0.5ZrO3 lead-free ceramics. Journal of Materials Science: Materials in Electronics, 2014, 25, 3219-3225.	2.2	36
28	Relationship between Poling Characteristics and Phase Boundaries of Potassiumâ€"Sodium Niobate Ceramics. ACS Applied Materials & Interfaces, 2016, 8, 9242-9246.	8.0	36
29	Large electrocaloric response with superior temperature stability in NaNbO₃-based relaxor ferroelectrics benefiting from the crossover region. Journal of Materials Chemistry A, 2021, 9, 2806-2814.	10.3	32
30	Enhanced piezoelectricity over a wide sintering temperature (400â€"1050 Â°C) range in potassium sodium niobate-based ceramics by two step sintering. Journal of Materials Chemistry A, 2015, 3, 6772-6780.	10.3	31
31	Progress on the doping and phase boundary design of potassiumâ€"sodium niobate lead-free ceramics. Journal of Advanced Dielectrics, 2018, 08, 1830003.	2.4	30
32	Symmetry of the Underlying Lattice in (K,Na)NbO₃-Based Relaxor Ferroelectrics with Large Electromechanical Response. ACS Applied Materials & Interfaces, 2021, 13, 7461-7469.	8.0	30
33	Understanding the Nature of Temperature Stability in Potassium Sodium Niobate Based Ceramics from Structure Evolution under External Field. ACS Applied Materials & Interfaces, 2020, 12, 32925-32934.	8.0	29
34	Multiscale Structure Engineering for High-Performance Pb-Free Piezoceramics. Accounts of Materials Research, 2022, 3, 461-471.	11.7	29
35	Electric field compensation effect driven strain temperature stability enhancement in potassium sodium niobate ceramics. Acta Materialia, 2020, 182, 1-9.	7.9	27
36	Balanced development of piezoelectricity, Curie temperature, and temperature stability in potassiumâ€"sodium niobhrate lead-free ceramics. Journal of Materials Chemistry C, 2016, 4, 9779-9787.	5.5	26

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37	Effects of oxide additives on structure and properties of bismuth ferrite-based ceramics. Journal of Materials Science: Materials in Electronics, 2017, 28, 11534-11542.	2.2	26
38	Composition design and electrical properties in BiFeO3â€"BaTiO3â€"Bi(Zn0.5Ti0.5)O3 lead-free ceramics. Journal of Materials Science: Materials in Electronics, 2017, 28, 13076-13083.	2.2	22
39	Defect engineering electrical properties of leadâ€free potassium sodium niobateâ€based ceramics. Journal of the American Ceramic Society, 2020, 103, 444-453.	3.8	15
40	Enhanced electrocaloric effect in compositional driven potassium sodium niobateâ€based relaxor ferroelectrics. Journal of Materials Research, 2021, 36, 1142-1152.	2.6	14
41	Decoding Thermal Depolarization Temperature in Bismuth Ferriteâ€"Barium Titanate Relaxor Ferroelectrics with Large Strain Response. ACS Applied Materials & Interfaces, 2021, 13, 37422-37432.	8.0	13
42	Multiple property enhancement in bismuth ferriteâ€based ferroelectrics by balancing nanodomain and relaxor state. Journal of the American Ceramic Society, 2022, 105, 1241-1252.	3.8	12
43	Electrocaloric refrigeration capacity in BNT-based ferroelectrics benefiting from low depolarization temperature and high breakdown electric field. Journal of Materials Chemistry A, 2021, 9, 12772-12781.	10.3	11
44	Decoding the relationship between the electrocaloric strength and phase structure in perovskite ferroelectrics towards high performance. Journal of Materials Chemistry C, 2021, 9, 2063-2072.	5.5	11
45	Defect dynamics mediated unusual field-cycling behavior in bismuth ferrite-based ceramics. Scripta Materialia, 2020, 187, 418-423.	5.2	9
46	Constructing Relaxor/Ferroelectric Pseudocomposite To Reveal the Domain Role in Electrostrain of Bismuth Ferriteâ€"Barium Titanate Based Ceramics. ACS Applied Materials & Interfaces, 2022, 14, 18713-18722.	8.0	8
47	Electric-Field-Insensitive Temperature Stability of Strain in KNN Multilayer Composite Ceramics. ACS Applied Materials & Interfaces, 2022, 14, 26949-26957.	8.0	8
48	Insights into the Correlation between Tetragonal Phase and Temperature Stability of Potassium Sodium Niobate Based Ceramics from Domain Behaviors. Advanced Electronic Materials, 2022, 8, 2100257.	5.1	7
49	High-performance potassium sodium niobate-based lead-free materials without antimony. Journal of Materials Science: Materials in Electronics, 2018, 29, 14487-14494.	2.2	2
50	An exploration for new strategy: Achieving both excellent temperature stability and good electrostrain in BiFeO3â€"BaTiO3-based relaxor ferroelectrics by domain engineering. Materials Today Physics, 2022, 27, 100747.	6.0	2
51	High-performance KNN-based ceramics: inter-granular coupling effect. Journal of Materials Science: Materials in Electronics, 2020, 31, 1065-1071.	2.2	1
52	Enhanced electrocaloric effect in compositional driven potassium sodium niobate-based relaxor ferroelectrics. Journal of Materials Research, 2021, 36, 1-11.	2.6	0