

Zhi Tan

List of Publications by Year in descending order

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Version: 2024-02-01

49
papers

1,050
citations

361296

20
h-index

454834

30
g-index

49
all docs

49
docs citations

49
times ranked

497
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Realizing High Comprehensive Energy Storage and Ultrahigh Hardness in Lead-Free Ceramics. ACS Applied Materials & Interfaces, 2021, 13, 28472-28483. | 4.0 | 78 |
| 2 | Study of the relationships among the crystal structure, phase transition behavior and macroscopic properties of modified (K,Na)NbO ₃ -based lead-free piezoceramics. Journal of the European Ceramic Society, 2018, 38, 2335-2343. | 2.8 | 66 |
| 3 | Realizing excellent energy storage properties in Na _{0.5} Bi _{0.5} TiO ₃ -based lead-free relaxor ferroelectrics. Journal of the European Ceramic Society, 2022, 42, 2221-2229. | 2.8 | 57 |
| 4 | Energy Storage Behavior in ErBiO ₃ -Doped (K,Na)NbO ₃ Lead-Free Piezoelectric Ceramics. ACS Applied Electronic Materials, 2020, 2, 3717-3727. | 2.0 | 51 |
| 5 | Phase structure and piezoelectric properties of (1-x)K _{0.48} Na _{0.52} Nb _{0.95} Sb _{0.05} O _{3-x} (Bi _{0.5} Na _{0.5}) _{0.9} (Li _{0.5} Ce _{0.5}) _{0.1} ZrO ₃ lead-free piezoelectric ceramics. Journal of Applied Physics, 2016, 119, . | 1.1 | 46 |
| 6 | High piezoelectricity in (K,Na)(Nb,Sb)O ₃ -(Bi,La,Na,Li)ZrO ₃ lead-free ceramics. Journal of Materials Science, 2016, 51, 4963-4972. | 1.7 | 46 |
| 7 | High performance BiFe _{0.9} Co _{0.1} O ₃ doped KNN-based lead-free ceramics for acoustic energy harvesting. Nano Energy, 2021, 84, 105900. | 8.2 | 41 |
| 8 | Electrical properties and thermal stability of Ce-modified Ca _{0.80} (Li _{0.5} Bi _{0.5}) _{0.20} Bi ₂ Nb ₂ O ₉ ceramics. Journal of Alloys and Compounds, 2017, 697, 380-387. | 2.8 | 37 |
| 9 | (1-x)[0.90NN-0.10Bi(Mg _{2/3} Nb _{1/3})O ₃]-x(Bi _{0.5} Na _{0.5}) _{0.7} Sr _{0.3} TiO ₃ ceramics with core-shell structures: A pathway for simultaneously achieving high polarization and breakdown strength. Nano Energy, 2022, 101, 107577. | 8.2 | 33 |
| 10 | Properties and structures of nonstoichiometric (K, Na)NbO ₃ -based lead-free ceramics. Journal of the American Ceramic Society, 2018, 101, 1632-1645. | 1.9 | 32 |
| 11 | Ion Doping Effects on the Lattice Distortion and Interlayer Mismatch of Aurivillius-Type Bismuth Titanate Compounds. Materials, 2018, 11, 821. | 1.3 | 29 |
| 12 | Structure refinements and the influences of A-site vacancies on properties of Na _{0.5} Bi _{2.5} Nb ₂ O ₉ -based high temperature piezoceramics. Journal of Applied Physics, 2016, 120, . | 1.1 | 26 |
| 13 | Structure and electrical properties of (0.965 - x)Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 267 Td (x)(K _{0.48} Na _{0.52}) _{1-x} Bi _{0.5} TiO ₃ piezoelectric ceramics. RSC Advances, 2016, 6, 57210-57216. | 1.7 | 25 |
| 14 | Oxygen octahedron tilting, electrical properties and mechanical behaviors in alkali niobate-based lead-free piezoelectric ceramics. Journal of Materiomics, 2019, 5, 372-384. | 2.8 | 25 |
| 15 | Rietveld Analysis and Electrical Properties of BiInO ₃ -Doped KNN-Based Ceramics. Inorganic Chemistry, 2019, 58, 428-438. | 1.9 | 25 |
| 16 | Enhancement of energy storage and hardness of (Na _{0.5} Bi _{0.5}) _{0.7} Sr _{0.3} TiO ₃ -based relaxor ferroelectrics via introducing Ba(Mg _{1/3} Nb _{2/3})O ₃ . Chemical Engineering Journal, 2022, 431, 133441. | 6.6 | 25 |
| 17 | Phase transition and piezoelectric properties of Nd ³⁺ doped nonstoichiometric (K,Na)NbO ₃ -based lead free ceramics. Applied Physics Letters, 2017, 110, . | 1.5 | 22 |
| 18 | Flexural fracture mechanisms and fatigue behaviors of Bi ₄ Ti ₃ O ₁₂ -based high-temperature piezoceramics sintered at different temperatures. Ceramics International, 2018, 44, 16758-16765. | 2.3 | 22 |

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|----|--|-----|-----------|
| 19 | Comprehensive investigation of structural and electrical properties of (Bi, Na) CoZrO ₃ -doped KNN ceramics. <i>Journal of Alloys and Compounds</i> , 2018, 758, 14-24. | 2.8 | 21 |
| 20 | Effects of Mo _{2/3} Bi _{1/3} doping on the phase structure, microstructure, and piezoelectric properties of KNNS-BNZ ceramics. <i>Ceramics International</i> , 2015, 41, 14610-14614. | 2.3 | 20 |
| 21 | Effect of (LiCe) doping in (NaBi) _{0.48} [_{0.04} Bi ₂ Nb _{1.97} W _{0.03} O ₉] high-temperature ceramics. <i>Journal of Alloys and Compounds</i> , 2015, 625, 113-117. | 2.8 | 20 |
| 22 | Simultaneous enhancement of electrical and mechanical properties in CaBi ₂ Nb ₂ O ₉ -based ceramics. <i>Journal of the European Ceramic Society</i> , 2022, 42, 4196-4211. | 2.8 | 19 |
| 23 | Intrinsic origin of enhanced piezoelectricity in alkali niobate-based lead-free ceramics. <i>Journal of the American Ceramic Society</i> , 2019, 102, 5262-5270. | 1.9 | 18 |
| 24 | Potassium sodium niobate based lead-free ceramic for high-frequency ultrasound transducer applications. <i>Journal of Materiomics</i> , 2020, 6, 513-522. | 2.8 | 18 |
| 25 | Dielectric and piezoelectric properties of cerium-doped (NaBi) _{0.49} [_{0.02} Bi ₂ Nb _{1.98} Ta _{0.02} O ₉] based piezoceramics. <i>Ceramics International</i> , 2014, 40, 14159-14163. | 2.3 | 17 |
| 26 | Investigation of new lead free (1-x)KNNS-xBKZH piezo-ceramics with R ₀ T phase boundary. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 8803-8809. | 1.1 | 17 |
| 27 | Indentation Behavior and Mechanical Properties of Tungsten/Chromium co-Doped Bismuth Titanate Ceramics Sintered at Different Temperatures. <i>Materials</i> , 2018, 11, 503. | 1.3 | 17 |
| 28 | New potassium-sodium niobate ternary system with large piezoelectric coefficient and high Curie temperature. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 9812-9820. | 1.1 | 16 |
| 29 | The piezoelectric and dielectric properties of sodium-potassium niobate ceramics with new multiphase boundary. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 18090-18098. | 1.1 | 16 |
| 30 | High mechanical quality factor and piezoelectricity in potassium sodium niobate ceramics. <i>Ceramics International</i> , 2022, 48, 6565-6573. | 2.3 | 16 |
| 31 | Ferroelastic properties and compressive stress-strain response of bismuth titanate based ferroelectrics. <i>Ceramics International</i> , 2020, 46, 1183-1188. | 2.3 | 13 |
| 32 | Critical Role of Order-Disorder Behavior in Perovskite Ferroelectric KNbO ₃ . <i>Inorganic Chemistry</i> , 2021, 60, 7961-7973. | 1.9 | 13 |
| 33 | The tunable ferroelectricity and piezoelectricity of the KNN piezoceramics by Na concentrations: First-principles calculations. <i>Journal of the European Ceramic Society</i> , 2019, 39, 5252-5259. | 2.8 | 12 |
| 34 | Research progress of high piezoelectric activity of potassium sodium niobate based lead-free ceramics. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2020, 69, 127707. | 0.2 | 12 |
| 35 | Microstructure, electrical properties and temperature stability in Bi _{0.5} Na _{0.5} Zr _{0.95} Ce _{0.05} O ₃ modified R ₀ T phase boundary of potassium-sodium niobium lead-free ceramics. <i>RSC Advances</i> , 2016, 6, 6983-6989. | 1.7 | 11 |
| 36 | Influence of acceptor-donor codoping on the structure, electrical properties, and hardness of CaBi ₂ Nb ₂ O ₉ -based ceramics. <i>Journal of Alloys and Compounds</i> , 2022, 910, 164853. | 2.8 | 11 |

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|----|--|-----|-----------|
| 37 | Poling effect and sintering temperature dependence on fracture strength and fatigue properties of bismuth titanate based piezoceramics. <i>Ceramics International</i> , 2018, 44, 20432-20440. | 2.3 | 10 |
| 38 | Potassium Sodium Niobate-Based Lead-Free High-Frequency Ultrasonic Transducers for Multifunctional Acoustic Tweezers. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 30979-30990. | 4.0 | 10 |
| 39 | Polarization rotation boosts strong piezoelectric response in the lead-free perovskite ferroelectric $K_{0.5}Na_{0.5}Bi_{1-x}Bi_x$. <i>Physical Review B</i> , 2021, 104, . | 1.1 | 9 |
| 40 | Ga ₂ O ₃ doping and vacancy effect in KNN δ LT lead-free piezoceramics. <i>Frontiers of Materials Science</i> , 2017, 11, 344-352. | 1.1 | 8 |
| 41 | Novel rhombohedral and tetragonal phase boundary with high T _C in alkali niobate ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 12851-12857. | 1.1 | 8 |
| 42 | Sintering behavior, phase structure and electric properties of KNNTS-BKNZ ceramics with excessive alkali metals. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 5337-5348. | 1.1 | 7 |
| 43 | Realization of densified microstructure and large piezoelectricity in KNN ceramics via the addition of oxide additives. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 20211-20224. | 1.1 | 7 |
| 44 | Understanding the piezoelectric origin of bismuth layer-structured ferroelectric polycrystal using first-principle method. <i>Journal of the European Ceramic Society</i> , 2022, 42, 3865-3876. | 2.8 | 7 |
| 45 | Realizing enhanced energy storage performances in (Bi _{0.5} Na _{0.5}) _{0.7} Sr _{0.3} TiO ₃ -based relaxor ferroelectrics via components regulation. <i>Ceramics International</i> , 2022, 48, 28704-28711. | 2.3 | 5 |
| 46 | Origin of high piezoelectricity in CBT-based Aurivillius ferroelectrics: Glide of (Bi ₂ O ₂) ²⁺ blocks and suppressed internal bias field. <i>Acta Materialia</i> , 2022, 237, 118146. | 3.8 | 4 |
| 47 | Investigation of nonstoichiometric Fe on the ferroelectric properties of BiFeO ₃ -based piezoelectric ceramics. <i>Journal of Solid State Chemistry</i> , 2021, 304, 122614. | 1.4 | 1 |
| 48 | The roles of Sn ⁴⁺ in affecting performance of Potassium Sodium Niobate ceramics. <i>Journal of Alloys and Compounds</i> , 2022, 899, 163290. | 2.8 | 1 |
| 49 | Curvature-induced bandgap reduction in TiO ₂ double-walled nanotubes. <i>Journal of Applied Physics</i> , 2021, 129, 024303. | 1.1 | 0 |