Nengneng Luo

List of Publications by Year
in descending order

46 papers	2,119 citations	279798 23 h-index	243625 44 g-index
46 all docs	46 docs citations	46 times ranked	953 citing authors

#	Article	IF	Citations
1	Constructing phase boundary in AgNbO3 antiferroelectrics: pathway simultaneously achieving high energy density and efficiency. Nature Communications, 2020, 11, 4824.	12.8	298
2	Aliovalent A-site engineered AgNbO₃ lead-free antiferroelectric ceramics toward superior energy storage density. Journal of Materials Chemistry A, 2019, 7, 14118-14128.	10.3	242
3	Design for high energy storage density and temperature-insensitive lead-free antiferroelectric ceramics. Journal of Materials Chemistry C, 2019, 7, 4999-5008.	5.5	160
4	Ultrahigh energy-storage density in A-/B-site co-doped AgNbO₃ lead-free antiferroelectric ceramics: insight into the origin of antiferroelectricity. Journal of Materials Chemistry A, 2019, 7, 26293-26301.	10.3	136
5	Leadâ€free Ag_{1â^'3<i>x</i>}La_{<i>x</i>}NbO₃ antiferroelectric ceramics with highâ€energy storage density and efficiency. Journal of the American Ceramic Society, 2019, 102, 4640-4647.	3.8	108
6	Structure and energy storage performance of Ba-modified AgNbO3 lead-free antiferroelectric ceramics. Ceramics International, 2019, 45, 5559-5565.	4.8	90
7	Ultrahigh Energy Storage Density and Efficiency in Bi_{0.5}Na_{0.5}TiO₃-Based Ceramics via the Domain and Bandgap Engineering. ACS Applied Materials & Interfaces, 2021, 13, 51218-51229.	8.0	83
8	Effect of Ca2+/Hf4+ modification at A/B sites on energy-storage density of Bi0.47Na0.47Ba0.06TiO3 ceramics. Chemical Engineering Journal, 2021, 420, 129861.	12.7	81
9	Realizing high low-electric-field energy storage performance in AgNbO3 ceramics by introducing relaxor behaviour. Journal of Materiomics, 2019, 5, 597-605.	5.7	80
10	New Pb(Mg_{1/3}Nb_{2/3})O₃â€"Pb(In_{1/2}Nb_{1/2})O₃â€"PbZrO<sub Quaternary Ceramics: Morphotropic Phase Boundary Design and Electrical Properties. ACS Applied Materials & Interfaces, 2016, 8, 15506-15517.	8.0	71
11	Significantly enhanced energy-storage properties of Bi0.47Na0.47Ba0.06TiO3-CaHfO3 ceramics by introducing Sr0.7Bi0.2TiO3 for pulse capacitor application. Chemical Engineering Journal, 2022, 429, 132165.	12.7	62
12	Progress in lead-based ferroelectric and antiferroelectric single crystals: composition modification, crystal growth and properties. CrystEngComm, 2012, 14, 4547.	2.6	57
13	Simultaneously optimizing both energy storage density and efficiency in a novel lead-free relaxor antiferroelectrics. Journal of the European Ceramic Society, 2020, 40, 3562-3568.	5.7	56
14	Phase structure and defect engineering in (Bi0.5Na0.5)TiO3-based relaxor antiferroelectrics toward excellent energy storage performance. Nano Energy, 2022, 100, 107484.	16.0	53
15	Enhanced energy storage performance of (1-x)(BCT-BMT)-xBFO lead-free relaxor ferroelectric ceramics in a broad temperature range. Journal of Alloys and Compounds, 2019, 789, 303-312.	5.5	34
16	Phase engineering in NaNbO3 antiferroelectrics for high energy storage density. Journal of Materiomics, 2022, 8, 753-762.	5.7	34
17	Phase Diagram, Temperature Stability, and Electrical Properties of (0.85â^'<i>x</i>)<scp><scp>Pb</scp></scp>(<scp><scp>Mg</scp></scp>_{1/3}<scp><scp>Nb</scp></scp>_{2/3} System. Journal of the American Ceramic Society, 2012, 95, 3246-3253.	3.8	32
18	PMN-PT based quaternary piezoceramics with enhanced piezoelectricity and temperature stability. Applied Physics Letters, 2014, 104, .	3.3	33

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19	Effect of Sr(Zn1/3Nb2/3)O3 modification on the energy storage performance of BaTiO3 ceramics. Ceramics International, 2021, 47, 12450-12458.	4.8	33
20	Strong tribocatalytic dye degradation by tungsten bronze Ba4Nd2Fe2Nb8O30. Ceramics International, 2021, 47, 5038-5043.	4.8	31
21	Remarkably improved electrical conductivity of ZnO ceramics by cold sintering and post-heat-treatment. Ceramics International, 2018, 44, 20570-20574.	4.8	30
22	Ferroelectricity and Self-Polarization in Ultrathin Relaxor Ferroelectric Films. Scientific Reports, 2016, 6, 19965.	3.3	29
23	Structure Evolution and Electrical Properties of Y³⁺â€Doped <scp><scp>Ba</scp></scp>_{1â^'<i>x</i>}<scp><scp>Ca</scp></scp>_{<i>x</i>}<scp><scp>Zr</scp><scp><sub Ceramics. Journal of the American Ceramic Society, 2014, 97, 2076-2081.	2.8	26
24	Tribocatalytic degradation of dyes by tungsten bronze ferroelectric Ba_{2.5}Sr_{2.5}Nb₈Ta₂O₃₀ submicron particles. RSC Advances, 2021, 11, 13386-13395.	3.6	25
25	Structure and energy storage performance of lanthanide elements doped AgNbO3 lead-free antiferroelectric ceramics. Journal of the European Ceramic Society, 2022, 42, 2204-2211.	5.7	23
26	Effect of Pb(Fe1/2Nb1/2)O3 modification on dielectric and piezoelectric properties of Pb(Mg1/3Nb2/3)O3â€"PbZr0.52Ti0.48O3 ceramics. Materials Research Bulletin, 2011, 46, 1333-1339.	5.2	21
27	Realising high comprehensive energy storage performance of BaTiO3-based perovskite ceramics via La(Zn1/2Hf1/2)O3 modification. Ceramics International, 2022, 48, 16173-16182.	4.8	21
28	Ferroelectricity and Schottky Heterojunction Engineering in AgNbO₃: A Simultaneous Way of Boosting Piezo-photocatalytic Activity. ACS Applied Materials & Interfaces, 2022, 14, 22313-22323.	8.0	21
29	Temperature-Dependent Phase Transition in Orthorhombic [011]c Pb(Mg1/3Nb2/3) O3-0.35PbTiO3 Single Crystal. Crystals, 2014, 4, 262-272.	2.2	18
30	Effect of Lu doping on the structure, electrical properties and energy storage performance of AgNbO3 antiferroelectric ceramics. Journal of Materials Science: Materials in Electronics, 2020, 31, 7731-7741.	2.2	18
31	Domain Structure Evolutions During the Poling Process for [011]â€Oriented PMNâ€"<i>x</i>PT Crystals Across the MPB Region. Journal of the American Ceramic Society, 2016, 99, 2096-2102.	3.8	16
32	Relaxor ferroelectric Bi0.5Na0.5TiO3â€"Sr0.7Nd0.2TiO3 ceramics with high energy storage density and excellent stability under a low electric field. Journal of Physics and Chemistry of Solids, 2021, 157, 110209.	4.0	15
33	Silver stoichiometry engineering: an alternative way to improve energy storage density of AgNbO3-based antiferroelectric ceramics. Journal of Materials Research, 2021, 36, 1067-1075.	2.6	13
34	Temperature and electric field induced phase transition in [110]_C-oriented 0.63Pb(Mg_{1/3}Nb_{2/3})O₃â€"0.37PbTiO₃ single crystals. CrystEngComm, 2015, 17, 8664-8670.	2.6	12
35	Temperature-dependent phase transition in orthorhombic [0 0 1] c -oriented low In 3+ doping 19PINâ€"45PMNâ€"36PT single crystals. Materials Research Bulletin, 2016, 75, 121-126.	5.2	8
36	Dynamic Behavior of Polar Nanoregions in Reâ€Entrant Relaxor 0.6Bi(Mg_{1/2}Ti_{1/2})O₃â€"0.4PbTiO₃. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	1.8	8

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37	Structure and electrical properties of cold sintered 8mol% scandia stabilized zirconia ceramics. Ceramics International, 2021, 47, 21582-21587.	4.8	7
38	M_C Type Phase Structure and Temperatureâ€Induced M_Câ€C Transition in the Asâ€Grown PMNâ€0.36PT Single Crystal. Journal of the American Ceramic Society, 2016, 99, 2706-2712.	3.8	6
39	Lead-free AgNbO₃/poly(vinylidene fluorideâ€hexafluoropropylene) antiferroelectric nanocomposite for high energy density capacitor applications. Journal Physics D: Applied Physics, 2021, 54, 405501.	2.8	6
40	Field induced O-MC phase transition and domain structure evolution in Pb(Mg1/3Nb2/3)O3-0.34PbTiO3 single crystals under radial poling. Journal of Alloys and Compounds, 2018, 762, 222-230.	5.5	5
41	Preparation and dielectric properties of co-contained unfilled tungsten bronze ceramics Ba4RCo0.5Nb9.5O30. Journal of Materials Science: Materials in Electronics, 2021, 32, 24939-24952.	2.2	5
42	Microstructure and electrical property of NaNbO3 ceramics prepared by cold sintering process assisted post-heat-treatment. Journal of Alloys and Compounds, 2021, 877, 160284.	5.5	5
43	Effects of pre-polarization on the dielectric and piezoelectric properties of 0â€“3 type PINâ€“PMNâ€“PT/PVDF composites. Journal of Materials Science: Materials in Electronics, 2015, 26, 6427-6433.	2.2	4
44	Structure, frequency dependent dielectric properties and domain configuration of PMNâ€“PFNâ€“PT single crystal. Journal of Crystal Growth, 2014, 401, 414-417.	1.5	2
45	Composition and phase dependence of dielectric activity in [111]-oriented (1−x)Pb(Mg<inf>1/3</inf>Nb<inf>2/3</inf>)O<inf>3</inf>−xPbTiO<inf>3</inf> crystals as a function of DC bias. , 2014, , .		0
46	Composition and phase dependence of dielectric activity in [111]-oriented (1−x)Pb(Mg<inf>1/3</inf>Nb<inf>2/3</inf>)O<inf>3</inf>−xPbTiO<inf> crystals as a function of DC bias. , 2014, , .		0