Zhencheng Lan

List of Publications by Year
in descending order

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97	2,907	159585	189892
papers	citations	30 h-index	50 g-index

99	99	99	1690
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	Space-charge relaxation and electrical conduction inÂK0.5Na0.5NbO3 at high temperatures. Applied Physics A: Materials Science and Processing, 2011, 104, 1047-1051.	2.3	119
5	Average vs. local structure and composition-property phase diagram of K0.5Na0.5NbO3-BiÂ½NaÂ½TiO3 system. Journal of the European Ceramic Society, 2017, 37, 1387-1399.	5.7	118
6	Leadâ€free Ag_{1â^'3x}La_xNbO₃ antiferroelectric ceramics with highâ€energy storage density and efficiency. Journal of the American Ceramic Society, 2019, 102, 4640-4647.	3.8	108
7	Large strain response based on relaxor-antiferroelectric coherence in Bi0.5Na0.5TiO3â€“SrTiO3â€“(K0.5Na0.5)NbO3 solid solutions. Journal of Applied Physics, 2014, 116, .	2.5	104
8	A low-firing melilite ceramic Ba2CuGe2O7 and compositional modulation on microwave dielectric properties through Mg substitution. Journal of Advanced Ceramics, 2021, 10, 108-119.	17.4	89
9	Enhanced piezoelectric and ferroelectric properties in the BaZrO3 substituted BiFeO3-PbTiO3. Applied Physics Letters, 2013, 102, .	3.3	64
10	Oxygen vacancy-related dielectric relaxation and electrical conductivity in La-doped Ba(Zr0.9Ti0.1)O3 ceramics. Journal of Materials Science: Materials in Electronics, 2014, 25, 4058-4065.	2.2	62
11	Electrostrictive and relaxor ferroelectric behavior in BiAlO3-modified BaTiO3 lead-free ceramics. Journal of Applied Physics, 2013, 113, .	2.5	59
12	Influence of interface point defect on the dielectric properties of Y doped CaCu₃Ti₄O12 ceramics. Journal of Advanced Dielectrics, 2016, 06, 1650009.	2.4	58
13	Thermal evolution of polar nanoregions identified by the relaxation time of electric modulus in the Bi _{1/2} Na _{1/2} TiO ₃ system. Europhysics Letters, 2017, 118, 47001.	2.0	54
14	Dielectric and non-Ohmic properties of CaCu3Ti4O12 ceramics modified with NiO, SnO2, SiO2, and Al2O3 additives. Journal of Materials Science, 2012, 47, 2294-2299.	3.7	53
15	Enhanced Piezoelectric Properties and Thermal Stability in the (K_{0.5}Na_{0.5})NbO₃:ZnO Leadâ€Free Piezoelectric Composites. Journal of the American Ceramic Society, 2015, 98, 3935-3941.	3.8	52
16	Structure and dielectric dispersion in cubic-like 0.5K _{0.5} Na _{0.5} NbO ₃ -0.5Na _{1/2} Bi _{1/2} TiO ₃ ceramic. Europhysics Letters, 2016, 114, 47011.	2.0	47
17	High-temperature impedance spectroscopy of BaFe0.5Nb0.5O3 ceramics doped with Bi0.5Na0.5TiO3. Applied Physics A: Materials Science and Processing, 2014, 114, 891-896.	2.3	46
18	Kinetic Control of Longâ€Range Cationic Ordering in the Synthesis of Layered Niâ€Rich Oxides. Advanced Functional Materials, 2021, 31, 2009949.	14.9	46

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19	Effect of holding time on the dielectric properties and non-ohmic behavior of CaCu3Ti4O12 capacitor-varistors. Journal of Materials Science: Materials in Electronics, 2013, 24, 1994-1999.	2.2	45
20	Revisiting the temperatureâ€dependent dielectric permittivity of Ba(Ti_{1â^'x}Zr_x)O₃. Journal of the American Ceramic Society, 2018, 101, 2408-2416.	3.8	44
21	Compositional modulation in ZnGa2O4 via Zn2+/Ge4+ co-doping to simultaneously lower sintering temperature and improve microwave dielectric properties. Journal of Advanced Ceramics, 2021, 10, 1360-1370.	17.4	42
22	Grain boundary defect compensation in Ti-doped BaFe0.5Nb0.5O3 ceramics. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	41
23	Dielectric Properties and Impedance Analysis of <scp><scp>K</scp></scp>_{0.5}<scp><scp>Na</scp></scp>_{0.5}<scp><scp>NbO</scp></scp>₃â€ Ceramics with Good Dielectric Temperature Stability. Journal of the American Ceramic Society, 2013, 96, 3489-3493.	3.8	38
24	High oxide ion conductivity in layer-structured Bi₄Ti₃O₁₂-based ferroelectric ceramics. Journal of Materials Chemistry C, 2019, 7, 8825-8835.	5.5	38
25	High piezoelectric performance in a new Bi-based perovskite of (1â^'x)Bi(Ni1/2Hf1/2)O3â^'xPbTiO3. Journal of Applied Physics, 2012, 112, .	2.5	37
26	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
27	Ultralow-Temperature Synthesis and Densification of Ag₂CaV₄O₁₂ with Improved Microwave Dielectric Performances. ACS Sustainable Chemistry and Engineering, 2021, 9, 14461-14469.	6.7	34
28	Preparation and Electric Properties of <scp><scp>Bi</scp></scp>_{0.5}<scp><scp>Na</scp></scp>_{0.5}<scp><scp>TiO</scp></scp>₃â€“ Leadâ€Free Piezoceramics. Journal of the American Ceramic Society, 2013, 96, 1171-1175.	3.8	33
29	Dielectric Properties and Defect Chemistry of WO3-Doped K0.5Na0.5NbO3 Ceramics. Journal of Electronic Materials, 2014, 43, 1055-1061.	2.2	33
30	Significantly enhanced electrical properties in CaBi2Nb2O9-based high-temperature piezoelectric ceramics. Applied Physics Letters, 2020, 117, .	3.3	32
31	Dielectric response mechanism and suppressing high-frequency dielectric loss in Y2O3 grafted CaCu3Ti4O12 ceramics. Journal of Materials Science: Materials in Electronics, 2017, 28, 17378-17387.	2.2	30
32	Large Piezoelectric Response and Polarization in Relaxor Ferroelectric <scp><scp>PbTiO</scp></scp>₃â€“<scp><scp>Bi</scp></scp>(<scp><scp>Ni</scp></scp>_{1/2}<scp><scp>Z Journal of the American Ceramic Society, 2013, 96, 1035-1038.	3.8	29
33	Reâ€entrant dipole glassâ€like behavior and lattice dynamics of 0.65Bi(Mg_{1/2}Ti_{1/2})O₃â€0.35PbTiO₃. Journal of the American Ceramic Society, 2020, 103, 2859-2867.	3.8	28
34	Ferroic properties of Fe-doped and Cu-doped K0.45Na0.49Li0.06NbO3 ceramics. Journal of Materials Science: Materials in Electronics, 2015, 26, 6592-6598.	2.2	25
35	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
36	Enhanced piezoelectric and antiferroelectric properties of high-TC perovskite of Zr-substituted Bi(Mg1/2Ti1/2)O3-PbTiO3. Journal of Applied Physics, 2012, 112, 074101.	2.5	24

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37	Dielectric properties of (K0.5Na0.5)NbO3â€“(Bi0.5Li0.5)ZrO3 lead-free ceramics as high-temperature ceramic capacitors. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	24
38	Braided bioresorbable cardiovascular stents mechanically reinforced by axial runners. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 89, 19-32.	3.1	24
39	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
40	Structure, piezoelectric, and ferroelectric properties of BaZrO3 substituted Bi(Mg1/2Ti1/2)O3-PbTiO3 perovskite. Journal of Applied Physics, 2012, 111, .	2.5	20
41	Tailoring the electrocaloric effect of Pb_{0.78}Ba_{0.2}La_{0.02}ZrO₃ relaxor thin film by GaN substrates. Journal of Materials Chemistry C, 2019, 7, 14109-14115.	5.5	20
42	Preparation and Electric Properties of <scp><scp>Bi</scp></scp>_{0.5}<scp><scp>Na</scp></scp>_{0.5}<scp><scp>TiO</scp></scp>₃â€“Leadâ€Free Piezoceramics. Journal of the American Ceramic Society, 2013, 96, 3793-3797.	3.8	19
43	Dielectric and Ferroelectric Properties of (1â^’x)BiFeO₃-xBi_{0.5}Na_{0.5}TiO₃Solid Solution. Ferroelectrics, 2015, 478, 18-25.	0.6	19
44	Enhanced Piezoelectric Properties of Tetragonal (Bi_{1/2}K_{1/2})TiO₃ Leadâ€Free Ceramics by Substitution of Pure Biâ€Based Bi(Mg_{2/3}Nb_{1/3})O₃. Journal of the American Ceramic Society, 2015, 98, 104-108.	3.8	19
45	Preparation and Electrical Properties of High-TC Piezoelectric Ceramics of Strontium-Substituted Bi(Ni1/2Ti1/2)O3-PbTiO3. Journal of the American Ceramic Society, 2012, 95, 1170-1173.	3.8	18
46	Long-Range and Short-Range Transport Dynamics of Li Ions in LiMn₂O₄. Journal of Physical Chemistry C, 2020, 124, 25254-25261.	3.1	18
47	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
48	Dielectric behavior of La2O3-modified 0.4(Ba0.8Ca0.2)TiO3â€“0.6Bi(Mg0.5Ti0.5)O3 lead-free ceramics. Journal of Materials Science: Materials in Electronics, 2016, 27, 12128-12133.	2.2	17
49	Phase evolution and thermal stability of high Curie temperature BiScO3-PbTiO3-Pb(Cd1/3Nb2/3)O3 ceramics near MPB. Journal of Applied Physics, 2019, 126, .	2.5	17
50	Charge effects in donorâ€doped perovskite ferroelectrics. Journal of the American Ceramic Society, 2020, 103, 5392-5399.	3.8	17
51	Defect engineering in rareâ€earthâ€doped BaTiO₃ ceramics: Route to highâ€temperature stability of colossal permittivity. Journal of the American Ceramic Society, 2022, 105, 5725-5737.	3.8	17
52	The high piezoelectricity and thermal stability of high-temperature piezoelectric ceramics BiFeO₃â€“0.25BaTiO₃â€“xBi_{0.5}K_{0.5}TiO₃ near the MPB. Journal of Materials Chemistry C, 2022, 10, 8301-8309.	5.5	17
53	High-Temperature Dielectric and Relaxation Behavior of Tantalum-Doped Sodium Bismuth Titanate-Barium Titanate Ceramics. Journal of Electronic Materials, 2020, 49, 6643-6655.	2.2	16
54	Tunable phase transition in (Bi0.5Na0.5)0.94Ba0.06TiO3 by B-site cations. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	16

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55	Li⁺/Na⁺ Ion Exchange in Layered Na_{2/3}(Ni_{0.25}Mn_{0.75})O₂: A Simple and Fast Way to Synthesize O3/O2-Type Layered Oxides. Chemistry of Materials, 2021, 33, 5606-5617.	6.7	16
56	Crystal structure and microwave dielectric properties of a novel rock-salt type Li3MgNbO5 ceramic. Journal of Materials Science, 2020, 55, 15643-15652.	3.7	15
57	Effect of Cu Concentration on the Selective Catalytic Reduction of NO with Ammonia for Aluminosilicate Zeolite SSZ-13 Catalysts. Journal of Physical Chemistry C, 2021, 125, 14675-14680.	3.1	15
58	Synthesis, structure, and superconductivity of B-site doped perovskite bismuth lead oxide with indium. Inorganic Chemistry Frontiers, 2020, 7, 3561-3570.	6.0	14
59	Synthesis, structure and magnetic properties of (Eu1â^'xMnx)MnO3â^'Î´. RSC Advances, 2017, 7, 2019-2024.	3.6	13
60	Composite self-expanding bioresorbable prototype stents with reinforced compression performance for congenital heart disease application: Computational and experimental investigation. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 84, 126-134.	3.1	13
61	Phase evolution and relaxor behavior of BiScO3â€“PbTiO3â€“0.05Pb(Yb1/2Nb1/2)O3 ternary ceramics. Journal of Materials Science, 2019, 54, 13467-13478.	3.7	13
62	Dielectric characteristic of nanocrystalline Na0.5K0.5NbO3 ceramic green body. Journal of Electroceramics, 2012, 28, 144-148.	2.0	12
63	Dielectric Properties of SrMnO3-doped K0.5Na0.5NbO3 Lead-Free Ceramics. Journal of Electronic Materials, 2016, 45, 4089-4099.	2.2	12
64	Dielectric Properties of (Bi0.5K0.5)ZrO3 Modified (K0.5Na0.5)NbO3 Ceramics as High-Temperature Ceramic Capacitors. Journal of Electronic Materials, 2018, 47, 7106-7113.	2.2	12
65	Structure, Raman spectra and microwave dielectric properties of novel garnet-type Ca₃MZrGe₃O₁₂ (M = Co, Zn) ceramics. Journal of Asian Ceramic Societies, 2021, 9, 424-432.	2.3	12
66	Enhancement of Ferroelectricity for Orthorhombic (Tb_{0.861}Mn_{0.121})MnO_{3â^'Î´} by Copper Doping. Inorganic Chemistry, 2017, 56, 3475-3482.	4.0	11
67	8-Layer Shifted Hexagonal Perovskite Ba₈MnNb₆O₂₄: Long-Range Ordering of High-Spin d⁵ Mn²⁺ Layers and Electronic Structure. Inorganic Chemistry, 2018, 57, 5732-5742.	4.0	10
68	Origin of ultrahigh thermal stability on dielectric permittivity and dipole glass-like behavior of 0.4Ba0.8Ca0.2TiO3-0.6Bi(Mg0.5Ti0.5)O3 based ceramics. Materials Research Bulletin, 2020, 130, 110942.	5.2	10
69	Dielectric Relaxation and Magnetic Structure of A-Site-Ordered Perovskite Oxide Semiconductor CaCu₃Fe₂Ta₂O₁₂. Inorganic Chemistry, 2021, 60, 6999-7007.	4.0	10
70	Synthesis, Characterization, and Applications of Polymer Nanocomposites. Journal of Nanomaterials, 2020, 2020, 1-2.	2.7	9
71	Dielectric and ferroelectric properties of unfilled tungsten bronze KBa3RNb10O30 ceramics. Journal of Materials Science: Materials in Electronics, 2015, 26, 515-520.	2.2	8
72	Electric and magnetic properties of Y-type Ba2Mg2Fe12O22 hexaferrites with various Co doping. Journal of Materials Science: Materials in Electronics, 2016, 27, 10516-10524.	2.2	8

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73	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
74	Superconductivity in Perovskite Ba_{1â^'x}K_xBi_{0.30}Pb_{0.70}O_{3â^'Î´}. ChemistrySelect, 2019, 4, 3135-3139.	1.5	7
75	High dielectric tunability with high thermal stability of the (111) highly oriented 0.85Pb(Mg1/3Nb2/3)-0.15PbTiO3 thin film prepared by a sol-gel method. Journal of the European Ceramic Society, 2021, 41, 6482-6489.	5.7	7
76	Quenching-induced nonergodicity in ergodic Na1/2Bi1/2TiO3â€“BaTiO3â€“AgNbO3 ceramics. Journal of Materials Science, 2021, 56, 18430-18439.	3.7	7
77	Ba₄Ln₂Fe₂Nb₈O₃₀ (Ln = Eu, Gd) Ferroelectric Ceramics. Ferroelectrics, 2010, 404, 33-38.	0.6	6
78	Phase transition and electric properties of (1Ââ^'Âx)BaTiO3â€“xSr1.9Ca0.1NaNb5O15 perovskite solid solutions. Journal of Materials Science: Materials in Electronics, 2013, 24, 2873-2879.	2.2	6
79	Improvement on ferroelectric and piezoelectric properties of (K0.5Na0.5)NbO3 ceramic with Sr0.53Ba0.47Nb2O6 addition. Journal of Materials Science: Materials in Electronics, 2013, 24, 770-775.	2.2	6
80	Dielectric and optical properties of Ba5AFe0.5Ta9.5O30 (AÂ=ÂK, Li) tungsten bronze ceramics. Journal of Materials Science: Materials in Electronics, 2013, 24, 3891-3896.	2.2	6
81	Structure and Electrical Properties of LiF Doped 0.996(0.95K_{0.5}Na_{0.5}NbO₃-0.05LiSbO₃)-0.004BiFeO₃ Piezoelectric Ceramics. Ferroelectrics, 2014, 467, 99-109.	0.6	6
82	Temperatureâ€stable unfilled tungsten bronze dielectric ceramics: Ba_{3.5}Sm_{1.5}Fe_{0.75}Nb_{9.25}O₃₀. International Journal of Applied Ceramic Technology, 2017, 14, 269-273.	2.1	6
83	Evolving Differentiated Local Polar Displacement and Relaxor Behavior in Pb(Mg_{1/3}Nb_{2/3})O₃â€“PbTiO₃ Perovskites. Chemistry of Materials, 2022, 34, 3985-3992.	6.7	6
84	Dielectric properties and high-temperature dielectric relaxation of Ba4Gd2Fe2Nb8â^'xTaxO30 ceramics. Journal of Materials Science: Materials in Electronics, 2014, 25, 87-92.	2.2	5
85	Preparation and characterization of high Curie-temperature piezoelectric ceramics in a new Bi-based perovskite of (1 â^' x)PbTiO3-xBi(Zn1/2Hf1/2)O3. Inorganic Chemistry Frontiers, 2017, 4, 1352-1355.	6.0	5
86	Investigation on the electric and magnetoelectric properties of BaSrCo2Fe11.5Ga0.5O22 ferrite. Journal of Materials Science: Materials in Electronics, 2018, 29, 17865-17871.	2.2	5
87	Structural Distortion and Dielectric Permittivities of KCoO₂-Type Layered Nitrides Ca_{1â€“x}Sr_xTiN₂. Inorganic Chemistry, 2020, 59, 9693-9698.	4.0	5
88	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
89	Preparation and electrical properties of the new lead-free (1 −) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 107 Td (x)Bi piezoelectric ceramics. Journal of the Ceramic Society of Japan, 2015, 123, 1038-1042.	1.1	4
90	Low dielectric loss and good thermal stability of Eu and Ti co-doped K0.5Na0.5NbO3 ceramics. Journal of Materials Science: Materials in Electronics, 2015, 26, 7159-7164.	2.2	4

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91	Effect of rare earth on dielectric properties of Mn contained unfilled tungsten bronze ceramics. Journal of Materials Science: Materials in Electronics, 2019, 30, 17393-17404.	2.2	4
92	Study on preparation of LSTP thin film electrolyte by RF magnetron sputtering and electrical properties. Journal of Materials Science: Materials in Electronics, 2020, 31, 542-547.	2.2	4
93	Structure and relaxor ferroelectric behavior of the novel tungsten bronze type ceramic Sr5BiTi3Nb7O30. Journal of Applied Physics, 2022, 131, .	2.5	4
94	8Hâ€“10H Stacking Periodicity Control in Twinned Hexagonal Perovskite Dielectrics. Inorganic Chemistry, 2018, 57, 4117-4124.	4.0	3
95	Niâ€Rich Oxide Cathodes: Kinetic Control of Longâ€Range Cationic Ordering in the Synthesis of Layered Niâ€Rich Oxides (Adv. Funct. Mater. 19/2021). Advanced Functional Materials, 2021, 31, 2170134.	14.9	1
96	Shape-Supervised Super-Resolution Convolutional Neural Network for Melt Droplet Images. Microgravity Science and Technology, 2021, 33, 1.	1.4	0
97	Lowered sintering temperature and improved microwave dielectric properties in a vanadium tantalate via in-situ adjusting V5+/Ta5+ molar ratio. Journal of Materials Science: Materials in Electronics, 0, , 1.	2.2	0