Biaolin

List of Publications by Year in descending order

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81 papers	2,859 citations	201674 27 h-index	182427 51 g-index
82 all docs	82 docs citations	82 times ranked	1968 citing authors

#	Article	IF	Citations
1	A Giant Electrocaloric Effect in Nanoscale Antiferroelectric and Ferroelectric Phases Coexisting in a Relaxor Pb_{0.8}Ba_{0.2}ZrO₃ Thin Film at Room Temperature. Advanced Functional Materials, 2013, 23, 2987-2992.	14.9	313
2	Giant Electric Energy Density in Epitaxial Leadâ€Free Thin Films with Coexistence of Ferroelectrics and Antiferroelectrics. Advanced Electronic Materials, 2015, 1, 1500052.	5.1	195
3	Large Energy Storage Density and High Thermal Stability in a Highly Textured (111)-Oriented Pb_{0.8}Ba_{0.2}ZrO₃ Relaxor Thin Film with the Coexistence of Antiferroelectric and Ferroelectric Phases. ACS Applied Materials & Interfaces, 2015, 7, 13512-13517.	8.0	185
4	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
5	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
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	Phase-transition induced giant negative electrocaloric effect in a lead-free relaxor ferroelectric thin film. Energy and Environmental Science, 2019, 12, 1708-1717.	30.8	93
8	Structure and energy storage performance of Ba-modified AgNbO3 lead-free antiferroelectric ceramics. Ceramics International, 2019, 45, 5559-5565.	4.8	90
9	Thermal strain induced large electrocaloric effect of relaxor thin film on LaNiO3/Pt composite electrode with the coexistence of nanoscale antiferroelectric and ferroelectric phases in a broad temperature range. Nano Energy, 2018, 47, 285-293.	16.0	78
10	High-temperature dielectric and relaxation behavior of Yb-doped Bi 0.5 Na 0.5 TiO 3 ceramics. Ceramics International, 2017, 43, 5564-5573.	4.8	76
11	Electrocaloric effect in La-doped BNT-6BT relaxor ferroelectric ceramics. Ceramics International, 2018, 44, 343-350.	4.8	70
12	A giant negative electrocaloric effect in Eu-doped PbZrO₃ thin films. Journal of Materials Chemistry C, 2016, 4, 3375-3378.	5.5	62
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 Energy Storage Properties of Ba(1â^'x)CaxZryTi(1â^'y)O3 (BCZT): A Review. Materials, 2019, 12, 3641.	2.9	52
15	Phase-transition induced optimization of electrostrain, electrocaloric refrigeration and energy storage of LiNbO3 doped BNT-BT ceramics. Ceramics International, 2020, 46, 1343-1351.	4.8	47
16	Ultrahigh piezoelectric coefficient of a lead-free K_{0.5}Na_{0.5}NbO₃-based single crystal fabricated by a simple seed-free solid-state growth method. Journal of Materials Chemistry C, 2019, 7, 14845-14854.	5.5	46
17	Giant energy storage density in lead-free dielectric thin films deposited on Si wafers with an artificial dead-layer. Nano Energy, 2020, 78, 105390.	16.0	46
18	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

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19	Grain boundary defect compensation in Ti-doped BaFe0.5Nb0.5O3 ceramics. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	41
20	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
21	High Tunability in (111)â€Oriented Relaxor <scp><scp>Pb</scp></scp>_{0.8}<scp><scp>Ba</scp></scp>_{0.2}<scp><scp>ZrO</scp></scp>₃ Thin Film with Antiferroelectric and Ferroelectric Twoâ€Phase Coexistence. Journal of the American Ceramic Society, 2013, 96, 1852-1856.	3.8	33
22	Dielectric properties and electrical conduction of La2O3-doped (Bi0.5Na0.5)0.94Ba0.06TiO3 ceramics. Applied Physics A: Materials Science and Processing, 2014, 114, 551-558.	2.3	31
23	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
24	The Contribution of the â€œExtrinsicâ€•Polarizations to the Dielectric Tunability of <scp><scp>Pb</scp></scp>(<scp><scp>Mg</scp></scp>_{1/3}<scp><scp>Nb</scp></scp>_{2/3})<sub>1â^'x Relaxor Ferroelectrics. Journal of the American Ceramic Society, 2012, 95, 1651-1655.	3.8	29
25	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
26	Large electrocaloric efficiency over a broad temperature span in lead-free BaTiO3-based ceramics near room temperature. Applied Physics Letters, 2017, 111, .	3.3	27
27	Facile Synthesis of Ultrahighâ€Surfaceâ€Area Hollow Carbon Nanospheres and their Application in Lithiumâ€Sulfur Batteries. Chemistry - A European Journal, 2018, 24, 1988-1997.	3.3	27
28	Low-temperature-poling awakened high dielectric breakdown strength and outstanding improvement of discharge energy density of (Pb,La)(Zr,Sn,Ti)O3 relaxor thin film. Nano Energy, 2020, 77, 105132.	16.0	27
29	Simultaneously achieved highâ€energy storage density and efficiency in (K,Na)NbO₃â€based leadâ€free ferroelectric films. Journal of the American Ceramic Society, 2021, 104, 4119-4130.	3.8	27
30	Dielectric and conductivity behavior of Mn-doped K0.5Na0.5NbO3 single crystal. Solid State Communications, 2017, 264, 1-5.	1.9	26
31	Realizing a High ZT of 1.6 in N-Type Mg₃Sb₂-Based Zintl Compounds through Mn and Se Codoping. ACS Applied Materials & Interfaces, 2020, 12, 21799-21807.	8.0	26
32	Ni-doped SrBi2Nb2O9 â€“ Perovskite oxides with reduced band gap and stable ferroelectricity for photovoltaic applications. Journal of Alloys and Compounds, 2017, 724, 1093-1100.	5.5	25
33	Enhancement of optical transparency in Bi2O3-modified (K0.5Na0.5)0.9Sr0.1Nb0.9Ti0.1O3 ceramics for electro-optic applications. Journal of Materials Science, 2015, 50, 7958-7966.	3.7	24
34	Large nonlinear dielectric behavior in BaTi1â^'xSnxO3. Scientific Reports, 2017, 7, 6693.	3.3	24
35	High dielectric tunability, electrostriction strain and electrocaloric strength at a tricritical point of tetragonal, rhombohedral and pseudocubic phases. Journal of Alloys and Compounds, 2015, 646, 597-602.	5.5	23
36	Large electrocaloric strength in the (100)-oriented relaxor ferroelectric Pb[(Ni1/3Nb2/3)0.6Ti0.4]O3 single crystal at near morphotropic phase boundary. Ceramics International, 2015, 41, 9344-9349.	4.8	23

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37	Enhanced temperature-stable dielectric properties in oxygen annealed 0.85(K0.5Na0.5)NbO3-0.15SrZrO3 ceramic. Materials Research Bulletin, 2018, 99, 403-408.	5.2	22
38	High-performance La-doped BCZT thin film capacitors on LaNiO3/Pt composite bottom electrodes with ultra-high efficiency and high thermal stability. Ceramics International, 2019, 45, 11749-11755.	4.8	20
39	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
40	Structure evolution and enhanced piezoelectric properties of (K0.5Na0.5)NbO3â€“0.06LiTaO3â€“SrZrO3 lead-free ceramics. Journal of Alloys and Compounds, 2015, 653, 523-527.	5.5	18
41	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
42	P-GaN-substrate sprouted giant pure negative electrocaloric effect in Mn-doped Pb(Zr0.3Ti0.7)O3 thin film with a super-broad operational temperature range. Nano Energy, 2021, 86, 106059.	16.0	18
43	Microstructure, dielectric and pyroelectric properties of CaCu3Ti4O12 ceramics fabricated by tape-casting method. Materials Research Bulletin, 2013, 48, 3278-3283.	5.2	17
44	Dielectric properties and defect mechanisms of (1-x)Ba(Fe0.5Nb0.5)O3 -xBiYbO3 ceramics. Journal of Electroceramics, 2016, 37, 137-144.	2.0	17
45	Fatigue mechanism verified using photovoltaic properties of Pb(Zr0.52Ti0.48)O3 thin films. Applied Physics Letters, 2017, 110, .	3.3	17
46	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
47	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
48	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
49	Dielectric tunability properties of the Pb[(Mg1/3Nb2/3)1â^'Zr]O3 ceramics. Journal of Alloys and Compounds, 2013, 549, 283-287.	5.5	16
50	Modulated single band red upconversion luminescence from Ho3+ doped nanoparticles with two-wavelength excitation. Journal of Alloys and Compounds, 2017, 727, 1083-1088.	5.5	16
51	Frequency dependent electrocaloric effect in Nb-doped PZST relaxor thin film with the coexistence of tetragonal antiferroelectric and rhombohedral ferroelectric phases. Ceramics International, 2020, 46, 4300-4306.	4.8	15
52	High dielectric non-linear properties of the Pb[(Mg1/3Nb2/3)0.8(Sc1/2Nb1/2)0.2]O3 ceramics. Materials Research Bulletin, 2012, 47, 2051-2055.	5.2	14
53	Electrical charge conductivity behavior of electrodeposited Cu2O/ZnO heterojunction thin films on PET flexible substrates by impedance spectroscopy analysis. Journal of Materials Science, 2013, 48, 3334-3340.	3.7	14
54	Electrical properties and high figure-of-merit of dielectric tunable (1â€“x)Ba(Zr0.25Ti0.75)O3â€“xMgO thick films prepared by tape-casting. Journal of Alloys and Compounds, 2014, 590, 215-220.	5.5	14

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55	Integration of c-axis oriented Bi3.15Nd0.85Ti2.95Hf0.05O12/La0.67Sr0.33MnO3 ferromagnetic-ferroelectric composite film on Si substrate. Scientific Reports, 2017, 7, 11341.	3.3	13
56	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
57	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
58	Tailoring and improving the strong-electric-field electrical properties of the BNT-BT ferroelectric ceramics by a functional-group-doping. Ceramics International, 2021, 47, 6584-6590.	4.8	12
59	Grain growth, densification and electrical properties of lead-free piezoelectric ceramics from nanocrystalline (Ba0.85Ca0.15)(Ti0.90Zr0.10)O3 powder by solâ€“gel technique. Journal of Materials Science: Materials in Electronics, 2014, 25, 2220-2226.	2.2	11
60	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
61	Giant electrocaloric effect in BiFeO3 and La codoped PbZr0.7Ti0.3O3 epitaxial thin films in a broad temperature range. Journal of Materiomics, 2022, 8, 156-165.	5.7	10
62	Dielectric properties investigation of Cu2O/ZnO heterojunction thin films by electrodeposition. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 496-501.	3.5	9
63	Microstructure and electrical properties of (Ba0.85Ca0.15)(Zr0.10Ti0.90)O3 lead-free piezoelectric ceramics prepared by spark plasma sintering. Journal of Materials Science: Materials in Electronics, 2015, 26, 9649-9653.	2.2	9
64	Synthesis, Characterization, and Applications of Polymer Nanocomposites. Journal of Nanomaterials, 2020, 2020, 1-2.	2.7	9
65	Temperature-dependent reversible and irreversible processes in Nb-doped PbZrO3 relaxor ferroelectric thin films. Applied Physics Letters, 2015, 107, .	3.3	8
66	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
67	Large electrocaloric effect in two-step-SPS processed Pb(Sc0.25In0.25Nb0.25Ta0.25)O3 medium-entropy ceramics. Ceramics International, 2022, 48, 15640-15646.	4.8	8
68	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
69	Large strain response in (Bi0.5Na0.5)TiO3â€“6BaTiO3-based lead-free ceramics at high temperature. Ceramics International, 2022, 48, 9051-9058.	4.8	7
70	Dielectric properties and relaxation behavior of the indium doped cadmium zinc telluride single crystal. Journal of Applied Physics, 2012, 111, 084111.	2.5	6
71	Understanding Phonon Scattering by Nanoprecipitates in Potassium-Doped Lead Chalcogenides. ACS Applied Materials & Interfaces, 2017, 9, 3686-3693.	8.0	6
72	Energy Storage and Electrocaloric Cooling Performance of Advanced Dielectrics. Molecules, 2021, 26, 481.	3.8	6

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73	Pure negative electrocaloric effect achieved by SiN/p-GaN composite substrate. Nano Energy, 2022, 97, 107195.	16.0	6
74	Effects of Land Application of Municipal Sewage Sludge on Growth, Physiology and Accumulation of Heavy Metals in Wheat (<i>Triticum aestivum </i>L.). Advanced Materials Research, 0, 878, 647-656.	0.3	4
75	Evolution of phase structure and enhancement of piezoelectric properties in (K0.5Na0.5)0.94Li0.06NbO3â€“SrZrO3 lead-free ceramics. Journal of Materials Science: Materials in Electronics, 2017, 28, 3581-3584.	2.2	4
76	Evaluation of energy storage performance of ferroelectric materials by equivalent circuit model. Ceramics International, 2021, 47, 20512-20518.	4.8	4
77	Structure and relaxor ferroelectric behavior of the novel tungsten bronze type ceramic Sr5BiTi3Nb7O30. Journal of Applied Physics, 2022, 131, .	2.5	4
78	Preparation and Field-Induced Electrical Properties of Perovskite Relaxor Ferroelectrics. Transactions on Electrical and Electronic Materials, 2015, 16, 1-4.	1.9	2
79	A co-effective strategy to improve the energy storage performance and the electrocaloric effect of ceramic: Using strain-modified calcined powders as sintering precursor. Functional Materials Letters, 2022, 15, .	1.2	2
80	Estimate bond angle dependence of superconducting transition temperature in NaFeAs with the first principle methods. Solid State Communications, 2016, 246, 12-16.	1.9	1
81	High dielectric tunability of middle entropy Pb(Sc0.25In0.25Nb0.25Ta0.25)O3 thin films with (111)-preferred orientation. Journal of Alloys and Compounds, 2022, 921, 166101.	5.5	1