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List of Publications by Year
in descending order

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67 papers	2,372 citations	172457 29 h-index	206112 48 g-index
69 all docs	69 docs citations	69 times ranked	2233 citing authors

#	Article	IF	Citations
1	Mechanisms of aging and fatigue in ferroelectrics. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2015, 192, 52-82.	3.5	278
2	Structural Description of the Macroscopic Piezo- and Ferroelectric Properties of Lead Zirconate Titanate. Physical Review Letters, 2011, 107, 077602.	7.8	139
3	Electric Fatigue of Leadâ€Free Piezoelectric Materials. Journal of the American Ceramic Society, 2014, 97, 665-680.	3.8	111
4	Dynamics of polarization reversal in virgin and fatigued ferroelectric ceramics by inhomogeneous field mechanism. Physical Review B, 2010, 82, .	3.2	90
5	Interplay of strain mechanisms in morphotropic piezoceramics. Acta Materialia, 2015, 94, 319-327.	7.9	84
6	Bipolar and Unipolar Fatigue of Ferroelectric BNTâ€Based Leadâ€Free Piezoceramics. Journal of the American Ceramic Society, 2011, 94, 529-535.	3.8	83
7	Effect of Ferroelectric Longâ€Range Order on the Unipolar and Bipolar Electric Fatigue in <scp>Bi_{1/2}Na_{1/2}TiO₃</scp>â€Based Leadâ€Free Piezoceramics. Journal of the American Ceramic Society, 2011, 94, 3927-3933.	3.8	82
8	In Situ Synthesis of Hybrid Inorganicâ€“Polymer Nanocomposites. Polymers, 2018, 10, 1129.	4.5	78
9	Effect of Nb-donor and Fe-acceptor dopants in (Bi1/2Na1/2)TiO3â€“BaTiO3â€“(K0.5Na0.5)NbO3 lead-free piezoceramics. Journal of Applied Physics, 2010, 108, .	2.5	75
10	Epoxyâ€Based Nanocomposites for Highâ€Voltage Insulation: A Review. Advanced Electronic Materials, 2019, 5, 1800505.	5.1	66
11	Interstitial oxygen as a source of p-type conductivity in hexagonal manganites. Nature Communications, 2016, 7, 13745.	12.8	61
12	Fatigue-free unipolar strain behavior in CaZrO3 and MnO2 co-modified (K,Na)NbO3-based lead-free piezoceramics. Applied Physics Letters, 2013, 103, .	3.3	60
13	Temperature and driving field dependence of fatigue processes in PZT bulk ceramics. Acta Materialia, 2011, 59, 6083-6092.	7.9	58
14	Origin of large recoverable strain in 0.94(Bi0.5Na0.5)TiO3-0.06BaTiO3 near the ferroelectric-relaxor transition. Applied Physics Letters, 2013, 102, .	3.3	58
15	Aging of poled ferroelectric ceramics due to relaxation of random depolarization fields by space-charge accumulation near grain boundaries. Physical Review B, 2009, 80, .	3.2	57
16	Correlation Between Piezoelectric Properties and Phase Coexistence in (<scp><scp>Ba</scp></scp>,<scp><scp>Ca</scp></scp>)(<scp><scp>Ti</scp></scp>,<scp><scp>Zr</scp></scp>)<scp><scp>O</scp Ceramics. Journal of the American Ceramic Society, 2014, 97, 2885-2891.	3.8	54
17	Stabilization of the Fatigue-Resistant Phase by CuO Addition in (Bi1/2Na1/2)TiO3-BaTiO3. Journal of the American Ceramic Society, 2011, 94, 2473-2478.	3.8	53
18	Two-step polarization reversal in biased ferroelectrics. Journal of Applied Physics, 2014, 115, .	2.5	51

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19	De-aging of Fe-doped lead-zirconate-titanate ceramics by electric field cycling: 180Â°- vs. non-180Â° domain wall processes. Journal of Applied Physics, 2012, 112, .	2.5	49
20	Tailoring the Piezoelectric and Relaxor Properties of (<scp><scp>Bi</scp></scp>_{1/2}<scp><scp>Na</scp></scp>_{1/2})<scp><scp>TiO</scp></scp>₃â€ via Zirconium Doping. Journal of the American Ceramic Society, 2013, 96, 2881-2886.	3.8	46
21	Reduction of the piezoelectric performance in lead-free (1-x)Ba(Zr0.2Ti0.8)O3-x(Ba0.7Ca0.3)TiO3 piezoceramics under uniaxial compressive stress. Journal of Applied Physics, 2012, 112, .	2.5	45
22	<i>In Situ</i> Xâ€ray Diffraction of Biased Ferroelastic Switching in Tetragonal Leadâ€free (1â˜<i>x</i>)<scp><scp>Ba</scp></scp>(<scp><scp>Zr</scp></scp>_{0.2}<scp><scp>Ti</scp></scp>_{0.8})<scp Piezoelectrics. Journal of the American Ceramic Society, 2013, 96, 2913-2920.	3.8	42
23	High piezoelectricity by multiphase coexisting point: Barium titanate derivatives. MRS Bulletin, 2018, 43, 595-599.	3.5	42
24	Barrier heights, polarization switching, and electrical fatigue in Pb(Zr,Ti)O3 ceramics with different electrodes. Journal of Applied Physics, 2010, 108, .	2.5	39
25	Domain fragmentation during cyclic fatigue in 94%(Bi1/2Na1/2)TiO3-6%BaTiO3. Journal of Applied Physics, 2012, 112, .	2.5	37
26	The Effect of Electric Poling on the Performance of Leadâ€Free (1â˜<i>x</i>)<scp><scp>Ba</scp></scp>(<scp><scp>Zr</scp></scp>_{0.2}<scp><scp>Ti</scp></scp>_{0.8})<scp Piezoceramics. Journal of the American Ceramic Society, 2013, 96, 3805-3811.	3.8	36
27	Effect of porosity on the ferroelectric and piezoelectric properties of (Ba0.85Ca0.15)(Zr0.1Ti0.9)O3 piezoelectric ceramics. Scripta Materialia, 2018, 145, 122-125.	5.2	34
28	Effect of bipolar electric fatigue on polarization switching in lead-zirconate-titanate ceramics. Journal of Applied Physics, 2010, 108, .	2.5	33
29	High Bipolar Fatigue Resistance of BCTZ Leadâ€Free Piezoelectric Ceramics. Journal of the American Ceramic Society, 2016, 99, 174-182.	3.8	31
30	Unipolar Fatigue Behavior of <scp>BCTZ</scp> Leadâ€Free Piezoelectric Ceramics. Journal of the American Ceramic Society, 2016, 99, 1287-1293.	3.8	30
31	Biocompatibility of (Ba,Ca)(Zr,Ti)O₃ piezoelectric ceramics for bone replacement materials. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 1295-1303.	3.4	29
32	Evaluation of domain wall motion in bipolar fatigued lead-zirconate-titanate: A study on reversible and irreversible contributions. Journal of Applied Physics, 2010, 107, 104119.	2.5	28
33	Frequency dependent polarisation switching in h-ErMnO3. Applied Physics Letters, 2018, 112, .	3.3	26
34	Piezoelectricity and rotostriction through polar and non-polar coupled instabilities in bismuth-based piezoceramics. Scientific Reports, 2016, 6, 28742.	3.3	23
35	Electrical Fatigueâ€Induced Cracking in Lead Zirconate Titanate Piezoelectric Ceramic and Its Influence Quantitatively Analyzed by Refatigue Method. Journal of the American Ceramic Society, 2012, 95, 2593-2600.	3.8	21
36	Electric-field-induced phase transitions in co-doped Pb(Zr_{1â˜x}Ti_x)O₃at the morphotropic phase boundary. Science and Technology of Advanced Materials, 2014, 15, 015010.	6.1	21

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37	Temperature dependent polarization reversal mechanism in 0.94(Bi1/2Na1/2)TiO3-0.06Ba(Zr0.02Ti0.98)O3 relaxor ceramics. Applied Physics Letters, 2015, 107, .	3.3	17
38	Activation of ferroelectric implant ceramics by corona discharge poling. Journal of the European Ceramic Society, 2020, 40, 5402-5409.	5.7	16
39	<i>In Vitro</i> Biocompatibility of Piezoelectric K_{0.5}Na_{0.5}NbO₃ Thin Films on Platinized Silicon Substrates. ACS Applied Bio Materials, 2020, 3, 8714-8721.	4.6	16
40	Controlling Phase Purity and Texture of K0.5Na0.5NbO3 Thin Films by Aqueous Chemical Solution Deposition. Materials, 2019, 12, 2042.	2.9	13
41	Investigation of partial discharge in piezoelectric ceramics. Acta Materialia, 2016, 102, 284-291.	7.9	11
42	Ferroelectric and dielectric properties of Ca²⁺-doped and Ca²⁺â€“Ti⁴⁺co-doped K_{0.5}Na_{0.5}NbO₃thin films. Journal of Materials Chemistry C, 2020, 8, 5102-5111.	5.5	11
43	Revealing the role of local stress on the depolarization of BNT-BT-based relaxors. Physical Review Materials, 2019, 3, .	2.4	11
44	The ageing and de-ageing behaviour of (Ba0.85Ca0.15)(Ti0.9Zr0.1)O3 lead-free piezoelectric ceramics. Journal of Applied Physics, 2015, 118, .	2.5	10
45	Influence of Bâ€Site Disorder on the Properties of Unpoled Bi_{1/2}Na_{1/2}TiO₃â€0.06Ba(Zr_{<i>x</i>}Ti_{1â€<i>x</i>})O₃ Piezoceramics. Journal of the American Ceramic Society, 2016, 99, 2801-2808.	3.8	10
46	Effect of mechanical depoling on piezoelectric properties of Na0.5Bi0.5TiO3â€“xBaTiO3 in the morphotropic phase boundary region. Journal of Materials Science, 2018, 53, 1672-1679.	3.7	10
47	Anisotropic in-plane dielectric and ferroelectric properties of tensile-strained BaTiO3 films with three different crystallographic orientations. AIP Advances, 2021, 11, 025016.	1.3	10
48	Mechanisms for texture in BaTiO3 thin films from aqueous chemical solution deposition. Journal of Sol-Gel Science and Technology, 2020, 95, 562-572.	2.4	9
49	THE EFFECT OF TEMPERATURE ON BIPOLAR ELECTRICAL FATIGUE BEHAVIOR OF LEAD ZIRCONATE TITANATE CERAMICS. Functional Materials Letters, 2012, 05, 1250027.	1.2	8
50	On the formation mechanism of Ba0.85Ca0.15Zr0.1Ti0.9O3 thin films by aqueous chemical solution deposition. Journal of the European Ceramic Society, 2020, 40, 5376-5383.	5.7	8
51	Uniaxial compressive stress and temperature dependent mechanical behavior of (1- x)BiFeO 3 - x BaTiO 3 lead-free piezoelectric ceramics. Ceramics International, 2017, 43, 9092-9098.	4.8	7
52	In situ synthesis of epoxy nanocomposites with hierarchical surface-modified SiO2 clusters. Journal of Sol-Gel Science and Technology, 2020, 95, 783-794.	2.4	7
53	Experimental setup for high-temperature <i>in situ</i> studies of crystallization of thin films with atmosphere control. Journal of Synchrotron Radiation, 2020, 27, 1209-1217.	2.4	7
54	Giant Functional Properties in Porous Electroceramics through Additive Manufacturing of Capillary Suspensions. ACS Applied Materials & Interfaces, 2022, 14, 3027-3037.	8.0	7

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55	Investigation of Partial Discharge and Fracture Strength in Piezoelectric Ceramics. Journal of the American Ceramic Society, 2014, 97, 1905-1911.	3.8	6
56	Orthorhombic-tetragonal phase transition induced by Ta isovalent doping and its effect on the fatigue characteristics of KNL-NST ceramics. Ceramics International, 2018, 44, 1526-1533.	4.8	6
57	Barium titanate-based bilayer functional coatings on Ti alloy biomedical implants. Journal of the European Ceramic Society, 2021, 41, 2918-2922.	5.7	6
58	The Structure, Morphology, and Complex Permittivity of Epoxy Nanodielectrics with In Situ Synthesized Surface-Functionalized SiO2. Polymers, 2021, 13, 1469.	4.5	6
59	Dielectric properties, electric-field-induced polarization and strain behavior of Lead Zirconate Titanate-Strontium bismuth Niobate ceramics. Journal of Electroceramics, 2016, 36, 70-75.	2.0	2
60	The influence of low-temperature sterilization procedures on piezoelectric ceramics for biomedical applications. Open Ceramics, 2021, 7, 100143.	2.0	2
61	Tailoring Preferential Orientation in BaTiO 3 â€based Thin Films from Aqueous Chemical Solution Deposition. Chemistry Methods, 0, , .	3.8	2
62	Improvement of Ferroelectric Properties of PZT Ceramics by SBT Addition. Ferroelectrics, 2013, 451, 22-29.	0.6	1
63	Dielectric, Polarization and Strain Response of Enhanced Complex Ceramics: The Study through Pb(Zr0.52Ti0.48)O3-SrBi2Ta2O9. Ferroelectrics, 2015, 488, 79-88.	0.6	1
64	In situ X-ray diffraction studies of the crystallization of K0.5Na0.5NbO3 powders and thin films from an aqueous synthesis route. Open Ceramics, 2021, 7, 100147.	2.0	1
65	Unipolar and sesquipolar electrical fatigue in PZT. Applications of Ferroelectrics, IEEE International Symposium on, 2007, , .	0.0	0
66	Partial discharge characteristics of piezoelectric ceramics under bipolar and unipolar applied voltages. , 2015, , .		0
67	Tailoring Preferential Orientation in BaTiO 3 â€based Thin Films from Aqueous Chemical Solution Deposition. Chemistry Methods, 2022, 2, .	3.8	0