Julia Glaum

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4727780/publications.pdf

Version: 2024-02-01

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	Giant Functional Properties in Porous Electroceramics through Additive Manufacturing of Capillary Suspensions. ACS Applied Materials & Interfaces, 2022, 14, 3027-3037.	8.0	7
2	Tailoring Preferential Orientation in BaTiO 3 â€based Thin Films from Aqueous Chemical Solution Deposition. Chemistry Methods, 2022, 2, .	3.8	0
3	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
4	Barium titanate-based bilayer functional coatings on Ti alloy biomedical implants. Journal of the European Ceramic Society, 2021, 41, 2918-2922.	5.7	6
5	The Structure, Morphology, and Complex Permittivity of Epoxy Nanodielectrics with In Situ Synthesized Surface-Functionalized SiO2. Polymers, 2021, 13, 1469.	4.5	6
6	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
7	The influence of low-temperature sterilization procedures on piezoelectric ceramics for biomedical applications. Open Ceramics, 2021, 7, 100143.	2.0	2
8	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
9	Activation of ferroelectric implant ceramics by corona discharge poling. Journal of the European Ceramic Society, 2020, 40, 5402-5409.	5.7	16
10	In Vitro 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
11	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
12	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
13	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
14	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
15	Experimental setup for high-temperature in situ studies of crystallization of thin films with atmosphere control. Journal of Synchrotron Radiation, 2020, 27, 1209-1217.	2.4	7
16	Controlling Phase Purity and Texture of K0.5Na0.5NbO3 Thin Films by Aqueous Chemical Solution Deposition. Materials, 2019, 12, 2042.	2.9	13
17	Epoxyâ€Based Nanocomposites for Highâ€Voltage Insulation: A Review. Advanced Electronic Materials, 2019, 5, 1800505.	5.1	66
18	Revealing the role of local stress on the depolarization of BNT-BT-based relaxors. Physical Review Materials, 2019, 3, .	2.4	11

#	Article	IF	Citations
19	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
20	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
21	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
22	In Situ Synthesis of Hybrid Inorganicâ€“Polymer Nanocomposites. Polymers, 2018, 10, 1129.	4.5	78
23	Frequency dependent polarisation switching in h-ErMnO3. Applied Physics Letters, 2018, 112, .	3.3	26
24	High piezoelectricity by multiphase coexisting point: Barium titanate derivatives. MRS Bulletin, 2018, 43, 595-599.	3.5	42
25	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
26	Influence of Bâ€Site Disorder on the Properties of Unpoled Bi_{1/2}Na_{1/2}TiO₃â€“0.06Ba(Zr_xTi_{1â€“x})O₃ Piezoceramics. Journal of the American Ceramic Society, 2016, 99, 2801-2808.	3.8	30
27	Unipolar Fatigue Behavior of <scp>BCTZ</scp> Leadâ€Free Piezoelectric Ceramics. Journal of the American Ceramic Society, 2016, 99, 1287-1293.	3.8	30
28	Interstitial oxygen as a source of p-type conductivity in hexagonal manganites. Nature Communications, 2016, 7, 13745.	12.8	61
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	Piezoelectricity and rotostriction through polar and non-polar coupled instabilities in bismuth-based piezoceramics. Scientific Reports, 2016, 6, 28742.	3.3	23
31	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
32	Investigation of partial discharge in piezoelectric ceramics. Acta Materialia, 2016, 102, 284-291.	7.9	11
33	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
34	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
35	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
36	Partial discharge characteristics of piezoelectric ceramics under bipolar and unipolar applied voltages. , 2015, , .		0

#	Article	IF	Citations
37	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
38	Interplay of strain mechanisms in morphotropic piezoceramics. Acta Materialia, 2015, 94, 319-327.	7.9	84
39	Two-step polarization reversal in biased ferroelectrics. Journal of Applied Physics, 2014, 115, .	2.5	51
40	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
41	Investigation of Partial Discharge and Fracture Strength in Piezoelectric Ceramics. Journal of the American Ceramic Society, 2014, 97, 1905-1911.	3.8	6
42	Electric Fatigue of Leadâ€Free Piezoelectric Materials. Journal of the American Ceramic Society, 2014, 97, 665-680.	3.8	111
43	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</sc Ceramics. Journal of the American Ceramic Society, 2014, 97, 2885-2891.	3.8	54
44	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
45	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	43
46	The Effect of Electric Poling on the Performance of Leadâ€Free (1â^'x)<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	58
47	In Situ Xâ€ray Diffraction of Biased Ferroelastic Switching in Tetragonal Leadâ€free (1â^'x)<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
48	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
49	Improvement of Ferroelectric Properties of PZT Ceramics by SBT Addition. Ferroelectrics, 2013, 451, 22-29.	0.6	1
50	Domain fragmentation during cyclic fatigue in 94%(Bi1/2Na1/2)TiO3-6%BaTiO3. Journal of Applied Physics, 2012, 112, .	2.5	37
51	THE EFFECT OF TEMPERATURE ON BIPOLAR ELECTRICAL FATIGUE BEHAVIOR OF LEAD ZIRCONATE TITANATE CERAMICS. Functional Materials Letters, 2012, 05, 1250027.	1.2	8
52	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
53	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
54	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

#	Article	IF	Citations
55	Structural Description of the Macroscopic Piezo- and Ferroelectric Properties of Lead Zirconate Titanate. Physical Review Letters, 2011, 107, 077602.	7.8	139
56	Bipolar and Unipolar Fatigue of Ferroelectric BNTâ€Based Leadâ€Free Piezoceramics. Journal of the American Ceramic Society, 2011, 94, 529-535.	3.8	83
57	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
58	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
59	Temperature and driving field dependence of fatigue processes in PZT bulk ceramics. Acta Materialia, 2011, 59, 6083-6092.	7.9	58
60	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
61	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
62	Effect of bipolar electric fatigue on polarization switching in lead-zirconate-titanate ceramics. Journal of Applied Physics, 2010, 108, .	2.5	33
63	Dynamics of polarization reversal in virgin and fatigued ferroelectric ceramics by inhomogeneous field mechanism. Physical Review B, 2010, 82, .	3.2	90
64	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
65	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
66	Unipolar and sesquipolar electrical fatigue in PZT. Applications of Ferroelectrics, IEEE International Symposium on, 2007, , .	0.0	0
67	Tailoring Preferential Orientation in BaTiO 3 â€based Thin Films from Aqueous Chemical Solution Deposition. Chemistry Methods, 0, , .	3.8	2