

# Jürgen Rüdiger

## List of Publications by Year in descending order

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367  
papers

26,582  
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7561

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371  
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371  
docs citations

371  
times ranked

8706  
citing authors

#	ARTICLE	IF	CITATIONS
1	Perspective on the Development of Lead-free Piezoceramics. Journal of the American Ceramic Society, 2009, 92, 1153-1177.	1.9	2,571
2	Transferring lead-free piezoelectric ceramics into application. Journal of the European Ceramic Society, 2015, 35, 1659-1681.	2.8	1,050
3	Giant electric-field-induced strains in lead-free ceramics for actuator applications – status and perspective. Journal of Electroceramics, 2012, 29, 71-93.	0.8	813
4	BaTiO <sub>3</sub> -based piezoelectrics: Fundamentals, current status, and perspectives. Applied Physics Reviews, 2017, 4, .	5.5	813
5	On the phase identity and its thermal evolution of lead free (Bi <sub>1/2</sub> Na <sub>1/2</sub> )TiO <sub>3</sub> -6%mol% BaTiO <sub>3</sub> . Journal of Applied Physics, 2011, 110, .	1.1	749
6	Giant strain in lead-free piezoceramics Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> –BaTiO <sub>3</sub> –K <sub>0.5</sub> Na <sub>0.5</sub> NbO <sub>3</sub> system. Applied Physics Letters, 2007, 91, .	1.5	731
7	Origin of the large strain response in (K <sub>0.5</sub> Na <sub>0.5</sub> )NbO <sub>3</sub> -modified (Bi <sub>0.5</sub> Na <sub>0.5</sub> )TiO <sub>3</sub> –BaTiO <sub>3</sub> lead-free piezoceramics. Journal of Applied Physics, 2009, 105, .	1.1	550
8	Temperature-insensitive (K,Na)NbO <sub>3</sub> -Based Lead-free Piezoactuator Ceramics. Advanced Functional Materials, 2013, 23, 4079-4086.	7.8	494
9	Evolving morphotropic phase boundary in lead-free (Bi <sub>1/2</sub> Na <sub>1/2</sub> )TiO <sub>3</sub> –BaTiO <sub>3</sub> piezoceramics. Journal of Applied Physics, 2011, 109, .	1.1	405
10	Sintering and Electrical Properties of Lead-Free Na <sub>0.5</sub> K <sub>0.5</sub> NbO <sub>3</sub> Piezoelectric Ceramics. Journal of the American Ceramic Society, 2006, 89, 2010-2015.	1.9	385
11	High-strain Lead-free Antiferroelectric Electrostrictors. Advanced Materials, 2009, 21, 4716-4720.	11.1	364
12	Electric-field-induced phase transformation at a lead-free morphotropic phase boundary: Case study in a 93%(Bi <sub>0.5</sub> Na <sub>0.5</sub> )TiO <sub>3</sub> –7%BaTiO <sub>3</sub> piezoelectric ceramic. Applied Physics Letters, 2009, 95, 032904.	1.5	348
13	Temperature-Dependent Properties of (Bi <sub>1/2</sub> Na <sub>1/2</sub> )TiO <sub>3</sub> –BaTiO <sub>3</sub> Lead-free Piezoceramics. Journal of the American Ceramic Society, 2012, 95, 2241-2247.	3.8	338
14	Determination of depolarization temperature of (Bi <sub>1/2</sub> Na <sub>1/2</sub> )TiO <sub>3</sub> -based lead-free piezoceramics. Journal of Applied Physics, 2011, 110, .	1.1	268
15	Lead-free piezoceramics with giant strain in the system Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> –BaTiO <sub>3</sub> –K <sub>0.5</sub> Na <sub>0.5</sub> NbO <sub>3</sub> . I. Structure and room temperature properties. Journal of Applied Physics, 2008, 103, .	1.1	264
16	Semiconductor/relaxor 0–3 type composites without thermal depolarization in Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> -based lead-free piezoceramics. Nature Communications, 2015, 6, 6615.	5.8	263
17	In Situ Measurements of Bridged Crack Interfaces in the Scanning Electron Microscope. Journal of the American Ceramic Society, 1990, 73, 3313-3318.	1.9	227
18	Nanoscale Insight Into Lead-free BNT–BT–KNN. Advanced Functional Materials, 2012, 22, 4208-4215.	7.8	225

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19	Morphotropic phase boundary in $(1-x)\text{Bi}_0.5\text{Na}_0.5\text{TiO}_3-x\text{K}_0.5\text{Na}_0.5\text{NbO}_3$ lead-free piezoceramics. Applied Physics Letters, 2008, 92, .	1.5	224
20	Preparation and enhanced electrical properties of grain-oriented $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ -based lead-free incipient piezoceramics. Journal of the European Ceramic Society, 2015, 35, 2501-2512.	2.8	219
21	Electric-field-induced phase-change behavior in $(\text{Bi}_{0.5}\text{Na}_{0.5})\text{TiO}_3-x\text{BaTiO}_3-x(\text{K}_{0.5}\text{Na}_{0.5})\text{NbO}_3$ : A combinatorial investigation. Acta Materialia, 2010, 58, 2103-2111.	3.8	210
22	Temperature-insensitive Large Strain of $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3-x(\text{Bi}_{1/2}\text{K}_{1/2})\text{TiO}_3-x(\text{K}_{0.5}\text{Na}_{0.5})\text{NbO}_3$ Lead-free Piezoceramics. Journal of the American Ceramic Society, 2010, 93, 1392-1396.	3.8	210
23	Cyclic Fatigue from Frictional Degradation at Bridging Grains in Alumina. Journal of the American Ceramic Society, 1991, 74, 1340-1348.	1.9	194
24	Lead-free piezoceramics with giant strain in the system $\text{Bi}_0.5\text{Na}_0.5\text{TiO}_3-x\text{BaTiO}_3-x\text{K}_0.5\text{Na}_0.5\text{NbO}_3$ . II. Temperature dependent properties. Journal of Applied Physics, 2008, 103, .	1.1	192
25	Requirements for the transfer of lead-free piezoceramics into application. Journal of Materiomics, 2018, 4, 13-26.	2.8	187
26	<i>In Situ</i> Transmission Electron Microscopy of Electric Field-triggered Reversible Domain Formation in $\text{Bi}$ -Based Lead-free Piezoceramics. Journal of the American Ceramic Society, 2010, 93, 2452-2455.	1.9	185
27	Two-stage processes of electrically induced-ferroelectric to relaxor transition in $0.94(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3-0.06\text{BaTiO}_3$ . Applied Physics Letters, 2013, 102, .	1.5	182
28	Lead-free piezoceramics: Status and perspectives. MRS Bulletin, 2018, 43, 576-580.	1.7	177
29	Constrained sintering: A delicate balance of scales. Journal of the European Ceramic Society, 2008, 28, 1451-1466.	2.8	176
30	Lead-free high-temperature dielectrics with wide operational range. Journal of Applied Physics, 2011, 109, .	1.1	176
31	Relationship between electromechanical properties and phase diagram in the $\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3-x(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$ lead-free piezoceramic. Acta Materialia, 2014, 80, 48-55.	3.8	174
32	Strength and fracture toughness of aluminum/alumina composites with interpenetrating networks. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 197, 19-30.	2.6	171
33	Damage evolution in ferroelectric PZT induced by bipolar electric cycling. Acta Materialia, 2000, 48, 3783-3794.	3.8	167
34	Fatigue In Bulk Lead Zirconate Titanate Actuator Materials. Advanced Engineering Materials, 2005, 7, 882-898.	1.6	161
35	High-temperature dielectrics in $\text{CaZrO}_3$ -modified $\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3$ -based lead-free ceramics. Journal of the European Ceramic Society, 2012, 32, 4327-4334.	2.8	153
36	Temperature-dependent ferroelastic switching of soft lead zirconate titanate. Acta Materialia, 2009, 57, 4614-4623.	3.8	151

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37	Relaxor/Ferroelectric Composites: A Solution in the Quest for Practically Viable Lead-Free Incipient Piezoceramics. <i>Advanced Functional Materials</i> , 2014, 24, 356-362.	7.8	148
38	Temperature- and Frequency-Dependent Properties of the $0.75\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3$ - $0.25\text{SrTiO}_3$ Lead-Free Incipient Piezoceramic. <i>Journal of the American Ceramic Society</i> , 2014, 97, 1937-1943.	1.9	144
39	Electric-field-induced strain mechanisms in lead-free $94\%(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ - $6\%\text{BaTiO}_3$ . <i>Applied Physics Letters</i> , 2011, 98, .	1.5	143
40	Impedance Spectroscopy of $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ Ceramics Modified with $\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$ . <i>Journal of the American Ceramic Society</i> , 2014, 97, 1523-1529.	1.9	139
41	Electric-field-induced volume change and room temperature phase stability of $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ - $x\%$ mol. % $\text{BaTiO}_3$ piezoceramics. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	130
42	Influence of electric fields on the depolarization temperature of Mn-doped $(1-x)\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3$ - $x\text{BaTiO}_3$ . <i>Journal of Applied Physics</i> , 2012, 111, . <a href="#">Origin of the large piezoelectric activity in <math>\text{cmmlmath}</math></a>	1.1	129
43			

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55	Fatigue of Lead Zirconate Titanate Ceramics. I: Unipolar and DC Loading. Journal of the American Ceramic Society, 2007, 90, 1081-1087.	1.9	98
56	Local structure, pseudosymmetry, and phase transitions in Na $\times$ Bi $\times$ TiO $\times$ ceramics. Physical Review B, 2013, 87, .	1.1	97
57	Anisotropic constitutive laws for sintering bodies. Acta Materialia, 2006, 54, 111-118.	3.8	96
58	Microstructural modifications of ferroelectric lead zirconate titanate ceramics due to bipolar electric fatigue. Journal of the European Ceramic Society, 2002, 22, 2133-2142.	2.8	95
59	Critical Role of Monoclinic Polarization Rotation in High-Performance Perovskite Piezoelectric Materials. Physical Review Letters, 2017, 119, 017601.	2.9	95
60	Constraint-induced crack initiation at electrode edges in piezoelectric ceramics. Acta Materialia, 2001, 49, 2751-2759.	3.8	94
61	Effect of Poling Direction on $R$ -Curve Behavior in Lead Zirconate Titanate. Journal of the American Ceramic Society, 2000, 83, 424-426.	1.9	94
62	Evolution of defect size and strength of porous alumina during sintering. Journal of the European Ceramic Society, 2000, 20, 2561-2568.	2.8	93
63	Criticality: Concept to Enhance the Piezoelectric and Electrocaloric Properties of Ferroelectrics. Advanced Functional Materials, 2016, 26, 7326-7333.	7.8	89
64	Experimental determination of sintering stresses and sintering viscosities. Acta Materialia, 2003, 51, 4563-4574.	3.8	88
65	Stress-induced anisotropy of sintering alumina: Discrete element modelling and experiments. Acta Materialia, 2007, 55, 5187-5199.	3.8	87
66	Electric-field-temperature phase diagram of the ferroelectric relaxor system $(1-x)Bi_{1/2}Na_{1/2}TiO_3-xBaTiO_3$ doped with manganese. Journal of Applied Physics, 2014, 115, .	1.1	86
67	High-temperature poling of ferroelectrics. Journal of Applied Physics, 2008, 104, .	1.1	85
68	Temperature Dependence of the Piezoelectric Coefficient in $(Bi_{1-x}Me_x)_3PbTiO_3$ ( $Me = Fe, Sc$ ) Tj ETQq 0 0 rgBT /Overlock 10 Tf 10 217 Td(	1.1	84
69	Control of polarization in bulk ferroelectrics by mechanical dislocation imprint. Science, 2021, 372, 961-964.	6.0	84
70	Ceramic/metal interfacial crack growth: Toughening by controlled microcracks and interfacial geometries. Acta Metallurgica, 1988, 36, 2083-2093.	2.1	83
71	Effect of uniaxial stress on ferroelectric behavior of $(Bi_{1/2}Na_{1/2})TiO_3$ -based lead-free piezoelectric ceramics. Journal of Applied Physics, 2009, 106, .	1.1	83
72	Temperature dependence of piezoelectric properties of high-TC $Bi(Mg_{1/2}Ti_{1/2})O_3$ - $PbTiO_3$ . Journal of Applied Physics, 2009, 106, .	1.1	83

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73	Bipolar and Unipolar Fatigue of Ferroelectric BNT-Based Lead-Free Piezoceramics. Journal of the American Ceramic Society, 2011, 94, 529-535.	1.9	83
74	Interaction between crack deflection and crack bridging. Journal of the European Ceramic Society, 1992, 10, 143-150.	2.8	82
75	Effect of Ferroelectric Long-Range Order on the Unipolar and Bipolar Electric Fatigue in $\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3$ -Based Lead-Free Piezoceramics. Journal of the American Ceramic Society, 2011, 94, 3927-3933.	1.9	82
76	$\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3$ - $\text{BaTiO}_3$ based thick-film capacitors for high-temperature applications. Journal of the European Ceramic Society, 2014, 34, 37-43.	2.8	82
77	Title is missing!. Journal of Materials Science, 2000, 35, 477-486.	1.7	81
78	Crack opening profiles of indentation cracks in normal and anomalous glasses. Acta Materialia, 2004, 52, 293-297.	3.8	77
79	Enhanced bipolar fatigue resistance in $\text{CaZrO}_3$ -modified $(\text{K},\text{Na})\text{NbO}_3$ lead-free piezoceramics. Applied Physics Letters, 2014, 104, .	1.5	77
80	High-Temperature Healing of Lithographically Introduced Cracks in Sapphire. Journal of the American Ceramic Society, 1990, 73, 592-5601.	1.9	76
81	Thermal expansion behavior and macrostrain of $\text{Al}_2\text{O}_3/\text{Al}$ composites with interpenetrating networks. Acta Materialia, 1998, 46, 2493-2499.	3.8	76
82	Evolution of Mechanical Properties of Porous Alumina during Free Sintering and Hot Pressing. Journal of the American Ceramic Society, 1999, 82, 3080-3086.	1.9	75
83	Effect of Nb-donor and Fe-acceptor dopants in $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ - $\text{BaTiO}_3$ - $(\text{K}_{0.5}\text{Na}_{0.5})\text{NbO}_3$ lead-free piezoceramics. Journal of Applied Physics, 2010, 108, .	1.1	75
84	Reliability of alumina ceramics: Effect of grain size. Journal of the European Ceramic Society, 1995, 15, 395-404.	2.8	74
85	Mechanical Properties of Monoclinic Zirconia. Journal of the American Ceramic Society, 2004, 87, 1401-1403.	1.9	74
86	Coexistence of ergodicity and nonergodicity in $\text{LaFeO}_3$ -modified $\text{Bi}_{1/2}(\text{Na}_{0.78}\text{K}_{0.22})_{1/2}\text{TiO}_3$ relaxors. Journal of Physics Condensed Matter, 2012, 24, 365901.	0.7	74
87	Impedance Spectroscopy of $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ -Based High-Temperature Dielectrics. Journal of the American Ceramic Society, 2014, 97, 2825-2831.	1.9	73
88	Reconciling Local Structure Disorder and the Relaxor State in $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ - $\text{BaTiO}_3$ . Scientific Reports, 2016, 6, 31739.	1.6	73
89	Correlation between Long and Short Crack R-curves in Alumina Using the Crack Opening Displacement and Fracture Mechanical Weight Function Approach. Journal of the American Ceramic Society, 1996, 79, 1189-1196.	1.9	72
90	$\text{CuO}$ as a sintering additive for $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ - $\text{BaTiO}_3$ - $(\text{K}_{0.5}\text{Na}_{0.5})\text{NbO}_3$ lead-free piezoceramics. Journal of the European Ceramic Society, 2011, 31, 2107-2117.	2.8	72

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91	Ergodicity reflected in macroscopic and microscopic field-dependent behavior of BNT-based relaxors. Journal of Applied Physics, 2014, 115, .	1.1	71
92	Thermal residual strains and stresses in Al <sub>2</sub> O <sub>3</sub> /Al composites with interpenetrating networks. Acta Materialia, 1999, 47, 565-577.	3.8	69
93	Anisotropic Microstructural Development During the Constrained Sintering of Dip-Coated Alumina Thin Films. Journal of the American Ceramic Society, 2007, 90, 1394-1400.	1.9	69
94	Electric-field-induced antiferroelectric to ferroelectric phase transition in mechanically confined		

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109	Lead-free ferroelectric materials: Prospective applications. Journal of Materials Research, 2021, 36, 985-995.	1.2	58
110	Residual Stress Distributions in Ceramics. Journal of the American Ceramic Society, 1999, 82, 3155-3160.	1.9	57
111	Electromechanical poling of piezoelectrics. Applied Physics Letters, 2006, 88, 252907.	1.5	57
112	Nanoscale phase quantification in lead-free $\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3$ . Physical Review B, 2014, 90, .	1.5	57
113	Dislocation-toughened ceramics. Materials Horizons, 2021, 8, 1528-1537.	6.4	56
114	Stretched exponential relaxation in perovskite ferroelectrics after cyclic loading. Journal of Applied Physics, 2004, 95, 1386-1390.	1.1	54
115	Stabilization of the Fatigue-Resistant Phase by CuO Addition in $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ -BaTiO <sub>3</sub> . Journal of the American Ceramic Society, 2011, 94, 2473-2478.	1.9	53
116	Stress, temperature and electric field effects in the lead-free $(\text{Ba,Ca})(\text{Ti,Zr})\text{O}_3$ piezoelectric system. Acta Materialia, 2014, 78, 37-45.	3.8	53
117	Cyclic electric field response of morphotropic $\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3$ -BaTiO <sub>3</sub> piezoceramics. Applied Physics Letters, 2015, 106, .	1.5	53
118	Cycling stability of lead-free $\text{BNT} \approx \text{8BT}$ and $\text{BNT} \approx \text{6BT} \approx \text{3KNN}$ multilayer actuators and bulk ceramics. Journal of the European Ceramic Society, 2014, 34, 653-661.	2.8	52
119	Fracture mechanics model for subthreshold indentation flaws. Journal of Materials Science, 1991, 26, 2157-2168.	1.7	51
120	Effect of initial grain size on sintering trajectories. Acta Materialia, 2000, 48, 1239-1246.	3.8	51
121	Heterogeneity of fatigue in bulk lead zirconate titanate. Acta Materialia, 2005, 53, 2203-2213.	3.8	51
122	Tailored Porosity Gradients via Colloidal Infiltration of Compression-Molded Sponges. Journal of the American Ceramic Society, 1998, 81, 1661-1664.	1.9	51
123	Cosintering Simulation and Experimentation: Case Study of Nanocrystalline Zirconia. Journal of the American Ceramic Society, 2001, 84, 2757-2763.	1.9	49
124	High temperature stress-induced "double loop-like" phase transitions in Bi-based perovskites. Journal of Applied Physics, 2010, 108, .	1.1	49
125	Tailoring Strain Properties of $(0.94\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3)_{1-x}(\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3)_{1-x}$ Ferroelectric/Relaxor Composites. Journal of the American Ceramic Society, 2014, 97, 1465-1470.	1.9	49
126	Influence of Oxygen Partial Pressure and Oxygen Content on the Wettability in the Copper-Oxygen-Alumina System. Journal of the American Ceramic Society, 1999, 82, 2825-2832.	1.9	48



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127	Nanofragmentation of Ferroelectric Domains During Polarization Fatigue. <i>Advanced Functional Materials</i> , 2015, 25, 270-277.	7.8	47
128	In Situ Observations of Toughening Processes in Alumina Reinforced with Silicon Carbide Whiskers. <i>Journal of the American Ceramic Society</i> , 1991, 74, 3154-3157.	1.9	46
129	Critical Evaluation of Hot Forging Experiments: Case Study in Alumina. <i>Journal of the American Ceramic Society</i> , 2003, 86, 1099-1105.	1.9	46
130	Constrained Sintering of Alumina Thin Films: Comparison Between Experiment and Modeling. <i>Journal of the American Ceramic Society</i> , 2007, 90, 1733-1737.	1.9	46
131	Precipitation Hardening in Ferroelectric Ceramics. <i>Advanced Materials</i> , 2021, 33, e2102421.	11.1	46
132	Influence of radial stress on the poling behaviour of lead zirconate titanate ceramics. <i>Acta Materialia</i> , 2007, 55, 675-680.	3.8	45
133	Influence of thickness on the constrained sintering of alumina films. <i>Journal of the European Ceramic Society</i> , 2007, 27, 2623-2627.	2.8	45
134	Correlation of small- and large-signal properties of lead zirconate titanate multilayer actuators. <i>Acta Materialia</i> , 2009, 57, 77-86.	3.8	44
135	Effect of Texture on Temperature-Dependent Properties of $(K_{0.5}Na_{0.5})NbO_3$ -based Modified $(Bi_{1/2}Na_{1/2})TiO_3$ . <i>Journal of the American Ceramic Society</i> , 2014, 97, 2557-2563.	1.9	43
136	Crack tip switching zone in ferroelectric ferroelastic materials. <i>Acta Materialia</i> , 2004, 52, 4919-4927.	3.8	42
137	Hardening behavior and highly enhanced mechanical quality factor in $(K_{0.5}Na_{0.5})NbO_3$ -based ceramics. <i>Journal of the European Ceramic Society</i> , 2017, 37, 2083-2089.	2.8	42
138	High-performance piezoelectric $(K,Na,Li)(Nb,Ta,Sb)O_3$ single crystals by oxygen annealing. <i>Acta Materialia</i> , 2018, 148, 499-507.	3.8	42
139	Interplay of conventional with inverse electrocaloric response in $(Pb,Nb)(Zr,Sn,Ti)O_3$ antiferroelectric materials. <i>Physical Review B</i> , 2018, 97, .	1.1	42
140	Propensity for spontaneous relaxor-ferroelectric transition in quenched $(Na_{1/2}Bi_{1/2})TiO_3$ - $BaTiO_3$ compositions. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	42
141	Mechanical properties of and composites with interpenetrating networks. <i>Scripta Metallurgica Et Materialia</i> , 1994, 31, 1085-1090.	1.0	41
142	Viscous Poisson's coefficient determined by discontinuous hot forging. <i>Journal of Materials Research</i> , 2003, 18, 2170-2176.	1.2	41
143	Orientation-dependent electromechanical properties of Mn-doped $(Li,Na,K)(Nb,Ta)O_3$ single crystals. <i>Applied Physics Letters</i> , 2016, 109, 152902.	1.5	41
144	Conceptual Framework for Dislocation-Modified Conductivity in Oxide Ceramics Deconvoluting Mesoscopic Structure, Core, and Space Charge Exemplified for $SrTiO_3$ . <i>ACS Nano</i> , 2021, 15, 9355-9367.	7.3	41

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145	Crack closure forces in ceramics: Characterization and formation. Journal of the European Ceramic Society, 1992, 9, 323-334.	2.8	40
146	Anisotropy of ferroelectric behavior of $(1-x)\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3-x\text{BaTiO}_3$ single crystals across the morphotropic phase boundary. Journal of Applied Physics, 2014, 116, .	1.1	40
147	Long term stability of electrocaloric response in barium zirconate titanate. Journal of the European Ceramic Society, 2018, 38, 551-556.	2.8	40
148	Stability of pinning centers in fatigued lead-zirconate-titanate. Applied Physics Letters, 2002, 80, 1049-1051.	1.5	39
149	Deciphering the phase transition-induced ultrahigh piezoresponse in (K,Na)NbO <sub>3</sub> -based piezoceramics. Nature Communications, 2022, 13, .	5.8	39
150	Wear Properties of Alumina/Aluminum Composites with Interpenetrating Networks. Journal of the American Ceramic Society, 1996, 79, 121-128.	1.9	38
151	Evolution of Young's Modulus, Strength, and Microstructure during Liquid-Phase Sintering. Journal of the American Ceramic Society, 1998, 81, 1852-1860.	1.9	38
152	<i>In situ</i> electric field induced domain evolution in $\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3-0.3(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$ ferroelectrics. Applied Physics Letters, 2014, 105, 112904.		38
153	Microcrack Evolution in Alumina Ceramics: Experiment and Simulation. Journal of the American Ceramic Society, 2005, 88, 2809-2816.	1.9	37
154	Mechanism of electric fatigue crack growth in lead zirconate titanate. Acta Materialia, 2007, 55, 301-312.	3.8	37
155	Auxetic behavior under electrical loads in an induced ferroelectric phase. Applied Physics Letters, 2009, 94, 042909.	1.5	37
156	Domain fragmentation during cyclic fatigue in 94%(Bi <sub>1/2</sub> Na <sub>1/2</sub> )TiO <sub>3</sub> -6%BaTiO <sub>3</sub> . Journal of Applied Physics, 2012, 112, .	1.1	37
157	Polarization dynamics across the morphotropic phase boundary in $\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3-x(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$ ferroelectrics. Applied Physics Letters, 2013, 103, .	1.5	37
158	Stress-dependent electromechanical properties of doped $(\text{Ba}_{1-x}\text{Ca}_x)(\text{Zr}_y\text{Ti}_{1-y})\text{O}_3$ . Journal of the European Ceramic Society, 2015, 35, 1209-1217.	2.8	37
159	Method for Measuring Short-Crack R-Curves without Calibration Parameters: Case Studies on Alumina and Alumina/Aluminum Composites. Journal of the American Ceramic Society, 1996, 79, 291-297.	1.9	36
160	Microcrack clouds in fatigued electrostrictive 9.5/65/35 PLZT. Journal of the European Ceramic Society, 2001, 21, 1421-1423.	2.8	36
161	R-curve behavior in alumina-zirconia composites with repeating graded layers. Engineering Fracture Mechanics, 2002, 69, 1647-1665.	2.0	36
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