Jrgen Rdel

List of Publications by Year in Descending Order

354 papers	22,134 citations	72 h-index	136 g-index
371 ext. papers	24,378 ext. citations	5.1 avg, IF	7.01 L-index

#	Paper	IF	Citations
354	High-temperature plastic deformation of $$langle 110rangle$$-oriented BaTiO3 single crystals. *Journal of Materials Research*, **2022**, 37, 737-746	2.5	1
353	Origin of high-power drive stability in (Na1/2Bi1/2)TiO3-BaTiO3 based piezoceramics. *Acta Materialia*, **2022**, 227, 117703	8.4	3
352	Room-temperature dislocation plasticity in SrTiO3 tuned by defect chemistry. *Journal of the American Ceramic Society*, **2022**, 105, 1318	3.8	1
351	Mechanical tailoring of dislocation densities in SrTiO 3 at room temperature. *Journal of the American Ceramic Society*, **2022**, 105, 2399-2402	3.8	1
350	Ultrahigh Energy Harvesting Performance in Lead-free Piezocomposites with Intragranular Structure. *Acta Materialia*, **2021**, 117450	8.4	1
349	Conceptual Framework for Dislocation-Modified Conductivity in Oxide Ceramics Deconvoluting Mesoscopic Structure, Core, and Space Charge Exemplified for SrTiO. *ACS Nano*, **2021**, 15, 9355-9367	16.7	17
348	Revealing the mechanism of electric-field-induced phase transition in antiferroelectric NaNbO3 by in situ high-energy x-ray diffraction. *Applied Physics Letters*, **2021**, 118, 132903	3.4	7
347	Control of polarization in bulk ferroelectrics by mechanical dislocation imprint. *Science*, **2021**, 372, 961-964	3.3	24
346	Role of matrix phase and electric field gradient in Na1/2Bi1/2TiO3BaTiO3:ZnO composites. *Journal of Materiomics*, **2021**, 8, 498-498	6.7	0
345	Large plastic deformability of bulk ferroelectric KNbO3 single crystals. *Journal of the European Ceramic Society*, **2021**, 41, 4098-4107	6	6
344	Precipitation Hardening in Ferroelectric Ceramics. *Advanced Materials*, **2021**, 33, e2102421	24	9
343	Thermal depolarization and electromechanical hardening in Zn2+-doped Na1/2Bi1/2TiO3-BaTiO3. *Journal of the American Ceramic Society*, **2021**, 104, 2201-2212	3.8	11
342	Dislocation-toughened ceramics. *Materials Horizons*, **2021**, 8, 1528-1537	14.4	12
341	Polarization Rotation at Morphotropic Phase Boundary in New Lead-Free NaBiVTiO Piezoceramics. *ACS Applied Materials & Interfaces*, **2021**, 13, 5208-5215	9.5	5
340	Polarization- and Strain-Mediated Control of Negative Thermal Expansion and Ferroelasticity in BiInO3BiZn1/2Ti1/2O3. *Chemistry of Materials*, **2021**, 33, 1498-1505	9.6	1
339	Quenching-circumvented ergodicity in relaxor Na1/2Bi1/2TiO3-BaTiO3-K0.5Na0.5NbO3. *Journal of the American Ceramic Society*, **2021**, 104, 3316-3324	3.8	5
338	Correlation between enhanced lattice distortion and volume fraction of polar nanoregions in quenched Na1/2Bi1/2TiO3BaTiO3 ceramics. *Applied Physics Letters*, **2021**, 118, 072903	3.4	9

337	Lead-free ferroelectric materials: Prospective applications. *Journal of Materials Research*, **2021**, 36, 985-995	2.5	12
336	Thermal stability of the electromechanical properties in acceptor-doped and composite-hardened (Na1/2Bi1/2)TiO3BaTiO3 ferroelectrics. *Journal of Applied Physics*, **2021**, 130, 014101	2.5	2
335	Quantitative mapping of nanotwin variants in the bulk. *Scripta Materialia*, **2021**, 199, 113878	5.6	4
334	Donor and acceptor-like self-doping by mechanically induced dislocations in bulk TiO2. *Nano Energy* , **2021**, 85, 105944	17.1	8
333	NaNbO3-based antiferroelectric multilayer ceramic capacitors for energy storage applications. *Journal of the European Ceramic Society*, **2021**, 41, 5519-5525	6	3
332	Spontaneous ferroelectric order in lead-free relaxor Na1/2Bi1/2TiO3-based composites. *Physical Review B*, **2020**, 101,	3.3	10
331	Role of thermal gradients on the depolarization and conductivity in quenched Na1/2Bi1/2TiO3-BaTiO3. *Applied Physics Letters*, **2020**, 116, 262902	3.4	11
330	Mechanically tuned conductivity at individual grain boundaries in polycrystalline ZnO varistor ceramics. *Journal of Applied Physics*, **2020**, 127, 034101	2.5	6
329	High temperature creep-mediated functionality in polycrystalline barium titanate. *Journal of the American Ceramic Society*, **2020**, 103, 1891-1902	3.8	15
328	Segregation and properties at curved vs straight (000) inversion boundaries in piezotronic ZnO bicrystals. *Journal of the American Ceramic Society*, **2020**, 103, 2817-2827	3.8	2
327	Influence of dislocations on thermal conductivity of strontium titanate. *Applied Physics Letters*, **2020**, 117, 021902	3.4	10
326	Large electromechanical strain and unconventional domain switching near phase convergence in a Pb-free ferroelectric. *Communications Physics*, **2020**, 3,	5.4	5
325	Nanoscale to microscale reversal in room-temperature plasticity in SrTiO3 by tuning defect concentration. *Scripta Materialia*, **2020**, 188, 228-232	5.6	14
324	Crystallographic design for energy storage. *Nature Materials*, **2020**, 19, 932-934	27	2
323	Mechanical versus electromechanical hardening in relaxor ferroelectric Na1/2Bi1/2TiO3-BaTiO3 with ZnO inclusions. *Scripta Materialia*, **2019**, 169, 92-95	5.6	6
322	Temperature dependent fracture toughness of KNN-based lead-free piezoelectric ceramics. *Acta Materialia*, **2019**, 174, 369-378	8.4	16
321	(Na1/2Bi1/2)TiO3-based lead-free co-fired multilayer actuators with large strain and high fatigue resistance. *Journal of the American Ceramic Society*, **2019**, 102, 6147-6155	3.8	14
320	Melting of dxy Orbital Ordering Accompanied by Suppression of Giant Tetragonal Distortion and Insulator-to-Metal Transition in Cr-Substituted PbVO3. *Chemistry of Materials*, **2019**, 31, 1352-1358	9.6	12

319	Influence of metal/semiconductor interface on attainable piezoelectric and energy harvesting properties of ZnO. *Acta Materialia*, **2019**, 162, 277-283	8.4	18
318	An ideal amplitude window against electric fatigue in BaTiO3-based lead-free piezoelectric materials. *Acta Materialia*, **2018**, 151, 253-259	8.4	26
317	High-performance piezoelectric (K,Na,Li)(Nb,Ta,Sb)O3 single crystals by oxygen annealing. *Acta Materialia*, **2018**, 148, 499-507	8.4	31
316	Requirements for the transfer of lead-free piezoceramics into application. *Journal of Materiomics*, **2018**, 4, 13-26	6.7	121
315	Piezotronic Tuning of Potential Barriers in ZnO Bicrystals. *Advanced Materials*, **2018**, 30, 1705573	24	21
314	Interplay of conventional with inverse electrocaloric response in (Pb,Nb)(Zr,Sn,Ti)O3 antiferroelectric materials. *Physical Review B*, **2018**, 97,	3.3	26
313	Electric field–temperature phase diagram of sodium bismuth titanate-based relaxor ferroelectrics. *Journal of Materials Science*, **2018**, 53, 9393-9400	4.3	18
312	Long term stability of electrocaloric response in barium zirconate titanate. *Journal of the European Ceramic Society*, **2018**, 38, 551-556	6	34
311	Crack-tip toughness of lead-free (1−x)(Na1/2Bi1/2)TiO3–xBaTiO3 piezoceramics. *Journal of the American Ceramic Society*, **2018**, 101, 5304-5308	3.8	7
310	Lead-free piezoceramics: Status and perspectives. *MRS Bulletin*, **2018**, 43, 576-580	3.2	106
309	Thermomechanical Energy Conversion Potential of Lead-Free 0.50Ba(Zr0.2Ti0.8)O3–0.50(Ba0.7Ca0.3)TiO3 Bulk Ceramics. *Energy Technology*, **2018**, 6, 872-882	3.5	12
308	Propensity for spontaneous relaxor-ferroelectric transition in quenched (Na1/2Bi1/2)TiO3-BaTiO3 compositions. *Applied Physics Letters*, **2018**, 113, 252902	3.4	28
307	Piezotronic sensors. *MRS Bulletin*, **2018**, 43, 941-945	3.2	24
306	ZnO-based single crystal-polycrystal structures for piezotronic applications. *Journal of the American Ceramic Society*, **2018**, 102, 2640	3.8	5
305	Na1/2Bi1/2VO3 and K1/2Bi1/2VO3: New Lead-Free Tetragonal Perovskites with Moderate c/a Ratios. *Chemistry of Materials*, **2018**, 30, 6728-6736	9.6	4
304	Hardening behavior and highly enhanced mechanical quality factor in (K 0.5 Na 0.5)NbO 3 –based ceramics. *Journal of the European Ceramic Society*, **2017**, 37, 2083-2089	6	31
303	Temperature-dependent volume fraction of polar nanoregions in lead-free (1−x)(Bi0.5Na0.5)TiO3–xBaTiO3 ceramics. *Physical Review B*, **2017**, 95,	3.3	61
302	Electromechanical properties of CaZrO3 modified (K,Na)NbO3-based lead-free piezoceramics under uniaxial stress conditions. *Journal of the American Ceramic Society*, **2017**, 100, 2116-2122	3.8	23

301	Piezotronic effect at Schottky barrier of a metal-ZnO single crystal interface. *Journal of Applied Physics*, **2017**, 121, 155701	2.5	18
300	Absence of toughening behavior in 0.94(Na 1/2 Bi 1/2)TiO 3 -0.06BaTiO 3 relaxor ceramic. *Scripta Materialia*, **2017**, 136, 115-119	5.6	11
299	Short crack fracture toughness in (1−x)(Na1/2Bi1/2)TiO3−xBaTiO3 relaxor ferroelectrics. *Journal of the American Ceramic Society*, **2017**, 100, 4760-4769	3.8	18
298	Influence of composition on the unipolar electric fatigue of Ba(Zr0.2Ti0.8)O3-(Ba0.7Ca0.3)TiO3 lead-free piezoceramics. *Journal of the American Ceramic Society*, **2017**, 100, 4699-4709	3.8	17
297	Local structure of the B-site in BNT-xBT investigated by 47,49Ti NMR: Effect of barium content. *Journal of Applied Physics*, **2017**, 121, 114104	2.5	14
296	Gauge factors for piezotronic stress sensor in polycrystalline ZnO. *Journal Physics D: Applied Physics* , **2017**, 50, 175106	3	10
295	Hardening of electromechanical properties in piezoceramics using a composite approach. *Applied Physics Letters*, **2017**, 111, 022905	3.4	23
294	Stress-induced phase transition in lead-free relaxor ferroelectric composites. *Acta Materialia*, **2017**, 136, 271-280	8.4	75
293	Critical Role of Monoclinic Polarization Rotation in High-Performance Perovskite Piezoelectric Materials. *Physical Review Letters*, **2017**, 119, 017601	7.4	62
292	BaTiO3-based piezoelectrics: Fundamentals, current status, and perspectives. *Applied Physics Reviews*, **2017**, 4, 041305	17.3	487
291	Piezoelectricity and rotostriction through polar and non-polar coupled instabilities in bismuth-based piezoceramics. *Scientific Reports*, **2016**, 6, 28742	4.9	22
290	Reconciling Local Structure Disorder and the Relaxor State in (Bi1/2Na1/2)TiO3-BaTiO3. *Scientific Reports*, **2016**, 6, 31739	4.9	61
289	Influence of Ta5+ content on the crystallographic structure and electrical properties of [001]PC-oriented (Li,Na,K)(Nb,Ta)O3 single crystals. *CrystEngComm*, **2016**, 18, 2081-2088	3.3	17
288	Nanoscale mapping of heterogeneity of the polarization reversal in lead-free relaxor-ferroelectric ceramic composites. *Nanoscale*, **2016**, 8, 2168-76	7.7	25
287	Temperature-Dependent Deformation and Dislocation Density in SrTiO3 (001) Single Crystals. *Journal of the American Ceramic Society*, **2016**, 99, 3411-3420	3.8	25
286	Defect Structure of Doped Lead-Free 0.9(Bi0.5Na0.5)TiO3−0.1(Bi0.5K0.5)TiO3 Piezoceramics. *Journal of the American Ceramic Society*, **2016**, 99, 543-550	3.8	9
285	High-Temperature Multilayer Ceramic Capacitors Based on 100−x(94Bi1/2Na1/2TiO3−6BaTiO3)−xK0.5Na0.5NbO3. *Journal of the American Ceramic Society*, **2016**, 99, 2040-2046	3.8	22
284	Role of (Bi1/2K1/2)TiO3 in the dielectric relaxations of BiFeO3-(Bi1/2K1/2)TiO3 ceramics. *Journal of Applied Physics*, **2016**, 119, 154101	2.5	22

283	Orientation-dependent electromechanical properties of Mn-doped (Li,Na,K)(Nb,Ta)O3 single crystals. *Applied Physics Letters*, **2016**, 109, 152902	3.4	32
282	Criticality: Concept to Enhance the Piezoelectric and Electrocaloric Properties of Ferroelectrics. *Advanced Functional Materials*, **2016**, 26, 7326-7333	15.6	71
281	Cyclic electric field response of morphotropic Bi1/2Na1/2TiO3-BaTiO3 piezoceramics. *Applied Physics Letters*, **2015**, 106, 222904	3.4	41
280	Preparation and enhanced electrical properties of grain-oriented (Bi1/2Na1/2)TiO3-based lead-free incipient piezoceramics. *Journal of the European Ceramic Society*, **2015**, 35, 2501-2512	6	187
279	Large Strain in Relaxor/Ferroelectric Composite Lead-Free Piezoceramics. *Advanced Electronic Materials*, **2015**, 1, 1500018	6.4	102
278	Origin of the large piezoelectric activity in (1□)Ba(Zr0.2Ti0.8)O3□(Ba0.7Ca0.3)TiO3 ceramics. *Physical Review B*, **2015**, 91,	3.3	103
277	Temperature Stability of Lead-Free Niobate Piezoceramics with Engineered Morphotropic Phase Boundary. *Journal of the American Ceramic Society*, **2015**, 98, 2177-2182	3.8	99
276	Semiconductor/relaxor 0-3 type composites without thermal depolarization in Bi□Na□TiO□based lead-free piezoceramics. *Nature Communications*, **2015**, 6, 6615	17.4	197
275	Infiltration of silver into porous SnO2□ : influence of atmosphere, interfacial reactions, and surface properties. *Journal of Materials Science*, **2015**, 50, 4962-4969	4.3	4
274	Nanofragmentation of Ferroelectric Domains During Polarization Fatigue. *Advanced Functional Materials*, **2015**, 25, 270-277	15.6	39
273	Varistor piezotronics: Mechanically tuned conductivity in varistors. *Journal of Applied Physics*, **2015**, 118, 085703	2.5	21
272	Mechanisms of electromechanical response in (1 □x)Ba(Zr0.2Ti0.8)O3-x(Ba0.7Ca0.3)TiO3 ceramics. *Applied Physics Letters*, **2015**, 107, 142906	3.4	27
271	Orientation-Dependence of Thermal Depolarization and Phase Development in Bi1/2Na1/2TiO3-BaTiO3 Single Crystals. *Journal of the American Ceramic Society*, **2015**, 98, 3966-3974	3.8	18
270	Core□Shell Lead□Free Piezoelectric Ceramics: Current Status and Advanced Characterization of the Bi1/2Na1/2TiO3□SrTiO3 System. *Journal of the American Ceramic Society*, **2015**, 98, 3405-3422	3.8	97
269	Stress-dependent electromechanical properties of doped (Ba1□Cax)(ZryTi1□)O3. *Journal of the European Ceramic Society*, **2015**, 35, 1209-1217	6	32
268	Transferring lead-free piezoelectric ceramics into application. *Journal of the European Ceramic Society*, **2015**, 35, 1659-1681	6	823
267	Thermal Depolarization in the High-Temperature Ternary Piezoelectric System xPbTiO3□BiScO3□Bi(Ni1/2Ti1/2)O3. *Journal of the American Ceramic Society*, **2015**, 98, 455-463	3.8	17
266	Cycling stability of lead-free BNT□BT and BNT□BT□KNN multilayer actuators and bulk ceramics. *Journal of the European Ceramic Society*, **2014**, 34, 653-661	6	44

265	Ergodicity reflected in macroscopic and microscopic field-dependent behavior of BNT-based relaxors. *Journal of Applied Physics*, **2014**, 115, 084111	2.5	60
264	Bi1/2Na1/2TiO3BaTiO3 based thick-film capacitors for high-temperature applications. *Journal of the European Ceramic Society*, **2014**, 34, 37-43	6	72
263	Frequency and temperature dependence of actuating performance of Bi1/2Na1/2TiO3-BaTiO3 based relaxor/ferroelectric composites. *Journal of Applied Physics*, **2014**, 115, 234107	2.5	15
262	Investigation of the depolarisation transition in Bi-based relaxor ferroelectrics. *Journal of Applied Physics*, **2014**, 115, 114109	2.5	22
261	Effect of Texture on Temperature-Dependent Properties of K0.5Na0.5NbO3 Modified Bi1/2Na1/2TiO3BaTiO3. *Journal of the American Ceramic Society*, **2014**, 97, 2557-2563	3.8	37
260	Stress, temperature and electric field effects in the lead-free (Ba,Ca)(Ti,Zr)O 3 piezoelectric system. *Acta Materialia*, **2014**, 78, 37-45	8.4	48
259	Anisotropy of ferroelectric behavior of (1 x)Bi1/2Na1/2TiO3BaTiO3 single crystals across the morphotropic phase boundary. *Journal of Applied Physics*, **2014**, 116, 044111	2.5	35
258	Temperature- and Frequency-Dependent Properties of the 0.75Bi1/2Na1/2TiO30.25SrTiO3 Lead-Free Incipient Piezoceramic. *Journal of the American Ceramic Society*, **2014**, 97, 1937-1943	3.8	127
257	Tailoring Strain Properties of (0.94)Bi1/2Na1/2TiO30.06BaTiO3K0.5Na0.5NbO3 Ferroelectric/Relaxor Composites. *Journal of the American Ceramic Society*, **2014**, 97, 1465-1470	3.8	44
256	Impedance Spectroscopy of (Bi1/2Na1/2)TiO3BaTiO3 Based High-Temperature Dielectrics. *Journal of the American Ceramic Society*, **2014**, 97, 2825-2831	3.8	68
255	Relationship between electromechanical properties and phase diagram in the Ba(Zr0.2Ti0.8)O3(Ba0.7Ca0.3)TiO3 lead-free piezoceramic. *Acta Materialia*, **2014**, 80, 48-55	8.4	149
254	Macroscopic and Nanoscopic Polarization Relaxation Kinetics in Lead-Free Relaxors Bi1/2Na1/2TiO3Bi1/2K1/2TiO3BiZn1/2Ti1/2O3. *Journal of the American Ceramic Society*, **2014**, 97, 3904-3912	3.8	19
253	Nanoscale phase quantification in lead-free (Bi1/2Na1/2)TiO3BaTiO3 relaxor ferroelectrics by means of Na23 NMR. *Physical Review B*, **2014**, 90,	3.3	48
252	Peculiar Bi-ion dynamics in Na1/2Bi1/2TiO3 from terahertz and microwave dielectric spectroscopy. *Phase Transitions*, **2014**, 87, 953-965	1.3	21
251	Temperature dependence of the local piezoresponse in (K,Na)NbO3-based ceramics with large electromechanical strain. *Journal of Applied Physics*, **2014**, 116, 066811	2.5	9
250	Enhanced bipolar fatigue resistance in CaZrO3-modified (K,Na)NbO3 lead-free piezoceramics. *Applied Physics Letters*, **2014**, 104, 242912	3.4	64
249	Aging in the relaxor and ferroelectric state of Fe-doped (1-x)(Bi1/2Na1/2)TiO3-xBaTiO3 piezoelectric ceramics. *Journal of Applied Physics*, **2014**, 116, 104102	2.5	46
248	Electric-fieldemperature phase diagram of the ferroelectric relaxor system (1 x)Bi1/2Na1/2TiO3 xBaTiO3 doped with manganese. *Journal of Applied Physics*, **2014**, 115, 194104	2.5	76

247	Impedance Spectroscopy of (Bi1/2Na1/2)TiO3–BaTiO3 Ceramics Modified with (K0.5Na0.5)NbO3. *Journal of the American Ceramic Society*, **2014**, 97, 1523-1529	3.8	108
246	In situ electric field induced domain evolution in Ba(Zr0.2Ti0.8)O3-0.3(Ba0.7Ca0.3)TiO3 ferroelectrics. *Applied Physics Letters*, **2014**, 105, 112904	3.4	36
245	Bulk ZnO as piezotronic pressure sensor. *Applied Physics Letters*, **2014**, 105, 111604	3.4	27
244	Local structure change evidenced by temperature-dependent elastic measurements: Case study on Bi1/2Na1/2TiO3-based lead-free relaxor piezoceramics. *Journal of Applied Physics*, **2014**, 115, 084108	2.5	10
243	Simultaneous Enhancement of Fracture Toughness and Unipolar Strain in Pb(Zr,Ti)O3-ZrO2 Composites Through Composition Adjustment. *Journal of the American Ceramic Society*, **2014**, 97, 1582-1588	2.8	10
242	Relaxor/Ferroelectric Composites: A Solution in the Quest for Practically Viable Lead-Free Incipient Piezoceramics. *Advanced Functional Materials*, **2014**, 24, 356-362	15.6	133
241	R-curves in transformation toughened lead zirconate titanate. *Engineering Fracture Mechanics*, **2013**, 100, 86-91	4.2	4
240	Fatigue-free unipolar strain behavior in CaZrO3 and MnO2 co-modified (K,Na)NbO3-based lead-free piezoceramics. *Applied Physics Letters*, **2013**, 103, 192907	3.4	51
239	Polarization dynamics across the morphotropic phase boundary in Ba(Zr0.2Ti0.8)O3-x(Ba0.7Ca0.3)TiO3 ferroelectrics. *Applied Physics Letters*, **2013**, 103, 152904	3.4	34
238	Electric-field-induced polarization and strain in 0.94(Bi1/2Na1/2)TiO3–0.06BaTiO3 under uniaxial stress. *Acta Materialia*, **2013**, 61, 1350-1358	8.4	53
237	Temperature-dependent R-curve behavior of Pb(Zr1−xTix)O3. *Acta Materialia*, **2013**, 61, 6418-6427	8.4	29
236	Temperature-Insensitive (K,Na)NbO3-Based Lead-Free Piezoactuator Ceramics. *Advanced Functional Materials*, **2013**, 23, 4079-4086	15.6	406
235	Structure and mechanical properties of silica doped zirconia thin films. *Thin Solid Films*, **2013**, 527, 200-204	2.1	5
234	Two-stage processes of electrically induced-ferroelectric to relaxor transition in 0.94(Bi1/2Na1/2)TiO3-0.06BaTiO3. *Applied Physics Letters*, **2013**, 102, 192903	3.4	162
233	Optimal working regime of lead zirconate titanate for actuation applications. *Sensors and Actuators A: Physical*, **2013**, 189, 187-194	3.9	31
232	Local structure, pseudosymmetry, and phase transitions in Na1/2Bi1/2TiO3–K1/2Bi1/2TiO3 ceramics. *Physical Review B*, **2013**, 87,	3.3	79
231	Quenching-induced circumvention of integrated aging effect of relaxor lead lanthanum zirconate titanate and (Bi1/2Na1/2)TiO3-BaTiO3. *Applied Physics Letters*, **2013**, 102, 032901	3.4	25
230	Bi(Me)O3–PbTiO3 high TC piezoelectric multilayers. *Materials Technology*, **2013**, 28, 247-253	2.1	7

229	A High-Temperature-Capacitor Dielectric Based on K0.5Na0.5NbO3-Modified Bi1/2Na1/2TiO3–Bi1/2K1/2TiO3. *Journal of the American Ceramic Society*, **2012**, 95, 3519-3524	3.8	107
228	Large blocking force in Bi1/2Na1/2TiO3-based lead-free piezoceramics. *Scripta Materialia*, **2012**, 67, 100-103	3.3	27
227	Coexistence of ergodicity and nonergodicity in LaFeO3-modified Bi(1/2)(Na(0.78)K(0.22))(1/2)TiO3 relaxors. *Journal of Physics Condensed Matter*, **2012**, 24, 365901	1.8	59
226	Temperature-Dependent Properties of (Bi1/2Na1/2)TiO3–(Bi1/2K1/2)TiO3–SrTiO3 Lead-Free Piezoceramics. *Journal of the American Ceramic Society*, **2012**, 95, 2241-2247	3.8	307
225	Deconvolving Ferroelastic and Phase Transformation Toughening in Pb(Zr1−xTix)O3 and Pb1−yLay(Zr1−xTix)O3. *Journal of the American Ceramic Society*, **2012**, 95, 3713-3715	3.8	6
224	High-temperature dielectrics in CaZrO3-modified Bi1/2Na1/2TiO3-based lead-free ceramics. *Journal of the European Ceramic Society*, **2012**, 32, 4327-4334	6	127
223	Frequency-dependence of large-signal properties in lead-free piezoceramics. *Journal of Applied Physics*, **2012**, 112, 014101	2.5	32
222	Nanoscale Insight Into Lead-Free BNT-BT-xKNN. *Advanced Functional Materials*, **2012**, 22, 4208-4215	15.6	198
221	Piezoelectric activity of (1-x)[0.35Bi(Mg1/2Ti1/2)O3-0.3BiFeO3-0.35BiScO3] - xPbTiO3 ceramics as a function of temperature. *Journal of Electroceramics*, **2012**, 28, 95-100	1.5	15
220	Giant electric-field-induced strains in lead-free ceramics for actuator applications – status and perspective. *Journal of Electroceramics*, **2012**, 29, 71-93	1.5	674
219	Structure and the Electrical Properties of Pb(Zr,Ti)O3–Zirconia Composites. *Journal of the American Ceramic Society*, **2012**, 95, 651-657	3.8	22
218	Temperature Dependence of the Piezoelectric Coefficient in BiMeO3-PbTiO3 (Me=Fe, Sc, (Mg1/2Ti1/2)) Ceramics. *Journal of the American Ceramic Society*, **2012**, 95, 711-715	3.8	76
217	Domain fragmentation during cyclic fatigue in 94%(Bi1/2Na1/2)TiO3-6%BaTiO3. *Journal of Applied Physics*, **2012**, 112, 044101	2.5	34
216	Influence of electric fields on the depolarization temperature of Mn-doped (1-x)Bi1/2Na1/2TiO3-xBaTiO3. *Journal of Applied Physics*, **2012**, 111, 014105	2.5	121
215	Structure and temperature-dependent phase transitions of lead-free Bi1/2Na1/2TiO3–Bi1/2K1/2TiO3–K0.5Na0.5NbO3 piezoceramics. *Journal of Materials Research*, **2012**, 27, 2466-2478	2.5	17
214	On the phase identity and its thermal evolution of lead free (Bi1/2Na1/2)TiO3-6 mol% BaTiO3. *Journal of Applied Physics*, **2011**, 110, 074106	2.5	638
213	Structural origins of relaxor behavior in a 0.96(Bi1/2Na1/2)TiO3–0.04BaTiO3 single crystal under electric field. *Applied Physics Letters*, **2011**, 98, 252904	3.4	58
212	Electric-field-induced volume change and room temperature phase stability of (Bi1/2Na1/2)TiO3-x mol. % BaTiO3 piezoceramics. *Applied Physics Letters*, **2011**, 99, 042901	3.4	109

211	Effect of K0.5Na0.5NbO3on Properties at and off the Morphotropic Phase Boundary in Bi0.5Na0.5TiO3Bi0.5K0.5TiO3Ceramics. *Japanese Journal of Applied Physics*, **2011**, 50, 055802	1.4	20
210	Bipolar and Unipolar Fatigue of Ferroelectric BNT-Based Lead-Free Piezoceramics. *Journal of the American Ceramic Society*, **2011**, 94, 529-535	3.8	76
209	Stabilization of the Fatigue-Resistant Phase by CuO Addition in (Bi1/2Na1/2)TiO3BaTiO3. *Journal of the American Ceramic Society*, **2011**, 94, 2473-2478	3.8	49
208	Effect of Ferroelectric Long-Range Order on the Unipolar and Bipolar Electric Fatigue in Bi1/2Na1/2TiO3-Based Lead-Free Piezoceramics. *Journal of the American Ceramic Society*, **2011**, 94, 3927-3933	3.8	74
207	Relaxor Characteristics of Morphotropic Phase Boundary (Bi1/2Na1/2)TiO3(Bi1/2K1/2)TiO3 Modified with Bi(Zn1/2Ti1/2)O3. *Journal of the American Ceramic Society*, **2011**, 94, 4283-4290	3.8	112
206	R-Curve Behavior of Pb(Mg1/3Nb2/3)O3-29 mol% PbTiO3 Single Crystals: The Effect of Crystallographic Orientation and Grain Structure. *Journal of the American Ceramic Society*, **2011**, 94, 2728-2730	3.8	8
205	CuO as a sintering additive for (Bi1/2Na1/2)TiO3BaTiO3(K0.5Na0.5)NbO3 lead-free piezoceramics. *Journal of the European Ceramic Society*, **2011**, 31, 2107-2117	6	58
204	Lead-free electrostrictive bismuth perovskite ceramics with thermally stable field-induced strains. *Materials Letters*, **2011**, 65, 2607-2609	3.3	57
203	Wear behaviour of interpenetrating alumina copper composites. *Wear*, **2011**, 271, 2845-2851	3.5	28
202	Temperature and driving field dependence of fatigue processes in PZT bulk ceramics. *Acta Materialia*, **2011**, 59, 6083-6092	8.4	54
201	Mechanical properties of cBNAl composite materials. *Ceramics International*, **2011**, 37, 1-8	5.1	78
200	Domain switching energies: Mechanical versus electrical loading in La-doped bismuth ferrite lead titanate. *Journal of Applied Physics*, **2011**, 109, 054109	2.5	30
199	Evolving morphotropic phase boundary in lead-free (Bi1/2Na1/2)TiO3BaTiO3 piezoceramics. *Journal of Applied Physics*, **2011**, 109, 014110	2.5	361
198	Determination of depolarization temperature of (Bi1/2Na1/2)TiO3-based lead-free piezoceramics. *Journal of Applied Physics*, **2011**, 110, 094108	2.5	230
197	Lead-free high-temperature dielectrics with wide operational range. *Journal of Applied Physics*, **2011**, 109, 034107	2.5	155
196	Electric-field-induced strain mechanisms in lead-free 94%(Bi1/2Na1/2)TiO36%BaTiO3. *Applied Physics Letters*, **2011**, 98, 082901	3.4	130
195	Effect of K0.5Na0.5NbO3on Properties at and off the Morphotropic Phase Boundary in Bi0.5Na0.5TiO3Bi0.5K0.5TiO3Ceramics. *Japanese Journal of Applied Physics*, **2011**, 50, 055802	1.4	11
194	Constrained Sintering of a Glass Ceramic Composite: I. Asymmetric Laminate. *Journal of the American Ceramic Society*, **2010**, 93, 74-81	3.8	29

193	Temperature-Insensitive Large Strain of (Bi1/2Na1/2)TiO3–(Bi1/2K1/2)TiO3–(K0.5Na0.5)NbO3 Lead-Free Piezoceramics. *Journal of the American Ceramic Society*, **2010**, 93, 1392	3.8	163
192	Microstructure and Electrical Properties of (1−x)Bi(Li1/3Zr2/3)O3–xPbTiO3 Piezoelectric Ceramics. *Journal of the American Ceramic Society*, **2010**, 93, 1692	3.8	7
191	In Situ Transmission Electron Microscopy of Electric Field-Triggered Reversible Domain Formation in Bi-Based Lead-Free Piezoceramics. *Journal of the American Ceramic Society*, **2010**, 93, 2452-2455	3.8	163
190	Effect of Nb-donor and Fe-acceptor dopants in (Bi1/2Na1/2)TiO3–BaTiO3–(K0.5Na0.5)NbO3 lead-free piezoceramics. *Journal of Applied Physics*, **2010**, 108, 014110	2.5	66
189	EFFECT OF SUBSTITUTION OF K FOR Na ON THE FERROELECTRIC STABILITY AND PROPERTIES OF (Bi1/2Na1/2)TiO3-BaTiO3-(K0.5Na0.5)NbO3. *Functional Materials Letters*, **2010**, 03, 41-44	1.2	22
188	Sintering of hierarchically structured ZnO. *Journal of Materials Research*, **2010**, 25, 2125-2134	2.5	7
187	High temperature blocking force measurements of soft lead zirconate titanate. *Journal Physics D: Applied Physics*, **2010**, 43, 365401	3	24
186	Electric-field-induced antiferroelectric to ferroelectric phase transition in mechanically confined Pb0.99Nb0.02[(Zr0.57Sn0.43)0.94Ti0.06]0.98O3. *Physical Review B*, **2010**, 81,	3.3	59
185	Can an electric field induce an antiferroelectric phase out of a ferroelectric phase?. *Physical Review Letters*, **2010**, 105, 255702	7.4	46
184	High temperature stress-induced "double loop-like" phase transitions in Bi-based perovskites. *Journal of Applied Physics*, **2010**, 108, 014101	2.5	49
183	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	26
182	Effect of tetragonal distortion on ferroelectric domain switching: A case study on La-doped BiFeO3–PbTiO3 ceramics. *Journal of Applied Physics*, **2010**, 108, 014103	2.5	97
181	Stress-induced structural changes in La-doped BiFeO3–PbTiO3 high-temperature piezoceramics. *Acta Materialia*, **2010**, 58, 5962-5971	8.4	20
180	Electric-field-induced phase-change behavior in (Bi0.5Na0.5)TiO3–BaTiO3–(K0.5Na0.5)NbO3: A combinatorial investigation. *Acta Materialia*, **2010**, 58, 2103-2111	8.4	185
179	Phase field simulation and experimental investigation of the electro-mechanical behavior of ferroelectrics. *ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik*, **2010**, 90, 623-632	1	17
178	Origin of the large strain response in (K0.5Na0.5)NbO3-modified (Bi0.5Na0.5)TiO3–BaTiO3 lead-free piezoceramics. *Journal of Applied Physics*, **2009**, 105, 094102	2.5	493
177	Effect of uniaxial stress on ferroelectric behavior of (Bi1/2Na1/2)TiO3-based lead-free piezoelectric ceramics. *Journal of Applied Physics*, **2009**, 106, 044107	2.5	76
176	Auxetic behavior under electrical loads in an induced ferroelectric phase. *Applied Physics Letters*, **2009**, 94, 042909	3.4	34

175	Electric-field-induced phase transformation at a lead-free morphotropic phase boundary: Case study in a 93%(Bi0.5Na0.5)TiO3–7% BaTiO3 piezoelectric ceramic. *Applied Physics Letters*, **2009**, 95, 032904	3.4	311
174	Temperature dependence of piezoelectric properties of high-TC Bi(Mg1/2Ti1/2)O3–PbTiO3. *Journal of Applied Physics*, **2009**, 106, 034109	2.5	73
173	Shift in Morphotropic Phase Boundary in La-Doped BiFeO3–PbTiO3Piezoceramics. *Japanese Journal of Applied Physics*, **2009**, 48, 120205	1.4	27
172	Degradation of lead-zirconate-titanate ceramics under different dc loads. *Journal of Applied Physics* , **2009**, 105, 104105	2.5	21
171	High-Strain Lead-free Antiferroelectric Electrostrictors. *Advanced Materials*, **2009**, 21, 4716-4720	24	321
170	Densification of Powder Compact Containing Large and Small Pores. *Journal of the American Ceramic Society*, **2009**, 92, 1414-1418	3.8	17
169	Perspective on the Development of Lead-free Piezoceramics. *Journal of the American Ceramic Society*, **2009**, 92, 1153-1177	3.8	2236
168	Constrained Sintering of a Glass Ceramic Composite: II. Symmetric Laminate. *Journal of the American Ceramic Society*, **2009**, 92, 2900-2906	3.8	18
167	Influence of crystal structure on crack propagation under cyclic electric loading in lead–zirconate–titanate. *Journal of the European Ceramic Society*, **2009**, 29, 425-430	6	8
166	Development of a roadmap for advanced ceramics: 2010–2025. *Journal of the European Ceramic Society*, **2009**, 29, 1549-1560	6	98
165	Correlation of small- and large-signal properties of lead zirconate titanate multilayer actuators. *Acta Materialia*, **2009**, 57, 77-86	8.4	41
164	Evaluation of crack-tip stress fields on microstructural-scale fracture in Al–Al2O3 interpenetrating network composites. *Acta Materialia*, **2009**, 57, 570-581	8.4	12
163	Temperature-dependent ferroelastic switching of soft lead zirconate titanate. *Acta Materialia*, **2009**, 57, 4614-4623	8.4	135
162	Codoping of zirconia with yttria and scandia. *Scripta Materialia*, **2008**, 58, 215-218	5.6	13
161	Lead-free piezoceramics with giant strain in the system Bi0.5Na0.5TiO3–BaTiO3–K0.5Na0.5NbO3. I. Structure and room temperature properties. *Journal of Applied Physics*, **2008**, 103, 034107	2.5	253
160	Lead-free piezoceramics with a giant strain for actuator applications **2008**,		1
159	High-temperature poling of ferroelectrics. *Journal of Applied Physics*, **2008**, 104, 024116	2.5	75
158	Current-voltage characteristics for lead zirconate titanate bulk ceramics. *Journal of Applied Physics*, **2008**, 104, 054120	2.5	12

157	Morphotropic phase boundary in (1−x)Bi0.5Na0.5TiO3–xK0.5Na0.5NbO3 lead-free piezoceramics. *Applied Physics Letters*, **2008**, 92, 222902	3.4	204
156	Lead-free piezoceramics with giant strain in the system Bi0.5Na0.5TiO3–BaTiO3–K0.5Na0.5NbO3. II. Temperature dependent properties. *Journal of Applied Physics*, **2008**, 103, 034108	2.5	180
155	Characterization of warpage behaviour of Gd-doped ceria/NiO–yttria stabilized zirconia bi-layer samples for solid oxide fuel cell application. *Journal of Power Sources*, **2008**, 185, 759-764	8.9	21
154	Constrained sintering: A delicate balance of scales. *Journal of the European Ceramic Society*, **2008**, 28, 1451-1466	6	154
153	Cracking of titania nanocrystalline coatings. *Journal of the European Ceramic Society*, **2008**, 28, 2003-2010	6	28
152	Sintering of thin film nanocrystalline titania–tin oxide composites. *Journal of the European Ceramic Society*, **2008**, 28, 2225-2232	6	10
151	Liquid-Phase Sintering of Nanocrystalline Titania Doped with Boron Oxide: Bulk Versus Thin Film. *Journal of the American Ceramic Society*, **2008**, 91, 3856-3863	3.8	10
150	Giant strain in lead-free piezoceramics Bi0.5Na0.5TiO3–BaTiO3–K0.5Na0.5NbO3 system. *Applied Physics Letters*, **2007**, 91, 112906	3.4	660
149	Mechanism of electric fatigue crack growth in lead zirconate titanate. *Acta Materialia*, **2007**, 55, 301-312	8.4	36
148	Influence of radial stress on the poling behaviour of lead zirconate titanate ceramics. *Acta Materialia*, **2007**, 55, 675-680	8.4	37
147	Stress-induced anisotropy of sintering alumina: Discrete element modelling and experiments. *Acta Materialia*, **2007**, 55, 5187-5199	8.4	74
146	Fatigue crack growth law for ferroelectrics under cyclic electrical and combined electromechanical loading. *Journal of the European Ceramic Society*, **2007**, 27, 2485-2494	6	30
145	Influence of thickness on the constrained sintering of alumina films. *Journal of the European Ceramic Society*, **2007**, 27, 2623-2627	6	44
144	Uniaxial viscosity of gadolinium-doped ceria determined by discontinuous sinter forging. *Journal of the European Ceramic Society*, **2007**, 27, 3127-3133	6	15
143	Fatigue of Lead Zirconate Titanate Ceramics. I: Unipolar and DC Loading. *Journal of the American Ceramic Society*, **2007**, 90, 1081-1087	3.8	80
142	Fatigue of Lead Zirconate Titanate Ceramics II: Sesquipolar Loading. *Journal of the American Ceramic Society*, **2007**, 90, 1088-1093	3.8	28
141	PMN–PT Ceramics Prepared By Spark Plasma Sintering. *Journal of the American Ceramic Society*, **2007**, 90, 1101-1106	3.8	32
140	Anisotropic Microstructural Development During the Constrained Sintering of Dip-Coated Alumina Thin Films. *Journal of the American Ceramic Society*, **2007**, 90, 1394-1400	3.8	60

139	Effect of Green-State Processing on the Sintering Stress and Viscosity of Alumina Compacts. *Journal of the American Ceramic Society*, **2007**, 90, 1637-1640	3.8	25
138	Effect of Grain Size on Mechanical Properties of Submicrometer 3Y-TZP: Fracture Strength and Hydrothermal Degradation. *Journal of the American Ceramic Society*, **2007**, 90, 2830-2836	3.8	80
137	Constrained Sintering of Alumina Thin Films: Comparison Between Experiment and Modeling. *Journal of the American Ceramic Society*, **2007**, 90, 1733-1737	3.8	40
136	Electric-Field-Induced Crack Initiation From a Notch in a Ferroelectric Ceramic. *Journal of the American Ceramic Society*, **2007**, 90, 2849-2854	3.8	12
135	Bipolar Fatigue Caused by Field Screening in Pb(Zr,Ti)O3 Ceramics. *Journal of the American Ceramic Society*, **2007**, 90, 070922001254005-???	3.8	20
134	Effect of Anisotropic Microstructure on the Viscous Properties of an LTCC Material. *Journal of the American Ceramic Society*, **2007**, 90, 071019062949005-???	3.8	5
133	Ferroelectric properties of lead zirconate titanate under radial load. *Applied Physics Letters*, **2007**, 91, 142904	3.4	11
132	Crack growth resistance (R-curve) behaviour and thermo-physical properties of Al2O3 particle-reinforced AlN/Al matrix composites. *Composites Part A: Applied Science and Manufacturing*, **2007**, 38, 1038-1050	8.4	6
131	Near-Field Acoustical Imaging using Lateral Bending Mode of Atomic Force Microscope Cantilevers. *Acoustical Imaging*, **2007**, 31-41		1
130	R-curve behaviour of 2Y-TZP with submicron grain size. *Journal of the European Ceramic Society*, **2006**, 26, 3575-3582	6	23
129	Crack Initiation and Crack Propagation under Cyclic Electric Loading in PZT **2006**, 40-48		
128	Electromechanical poling of piezoelectrics. *Applied Physics Letters*, **2006**, 88, 252907	3.4	43
127	Al/SiC carriers for microwave integrated circuits by a new technique of pressureless infiltration. *IEEE Transactions on Electronics Packaging Manufacturing*, **2006**, 29, 58-63		14
126	Viscosity of LTCC Determined by Discontinuous Sinter-Forging. *International Journal of Applied Ceramic Technology*, **2006**, 3, 437-441	2	24
125	Ferroelasticity and R-Curve Behavior in BiFeO3–PbTiO3. *Journal of the American Ceramic Society*, **2006**, 89, 1761-1763	3.8	30
124	Sintering and Electrical Properties of Lead-Free Na0.5K0.5NbO3 Piezoelectric Ceramics. *Journal of the American Ceramic Society*, **2006**, 89, 2010-2015	3.8	340
123	Mechanical Properties of Dry-Pressed Powder Compacts: Case Study on Alumina Nanoparticles. *Journal of the American Ceramic Society*, **2006**, 89, 2641-2644	3.8	11
122	Anisotropic constitutive laws for sintering bodies. *Acta Materialia*, **2006**, 54, 111-118	8.4	81

121	Effect of geometry and electrical boundary conditions on R-curves for lead zirconate titanate ceramics. *Engineering Fracture Mechanics*, **2006**, 73, 309-317	4.2	32
120	Uniaxial viscosity of low-temperature cofired ceramic (LTCC) powder compacts determined by loading dilatometry. *Journal of the European Ceramic Society*, **2005**, 25, 417-424	6	13
119	Crack opening displacements of Vickers indentation cracks. *Engineering Fracture Mechanics*, **2005**, 72, 647-659	4.2	52
118	Influence of microcracking on crack-tip toughness of alumina. *Engineering Fracture Mechanics*, **2005**, 72, 1011-1019	4.2	15
117	Heterogeneity of fatigue in bulk lead zirconate titanate. *Acta Materialia*, **2005**, 53, 2203-2213	8.4	48
116	Near electrode fatigue in lead zirconate titanate ceramics. *European Physical Journal Special Topics*, **2005**, 128, 97-103		11
115	Tailored Porosity Gradients via Colloidal Infiltration of Compression-Molded Sponges. *Journal of the American Ceramic Society*, **2005**, 81, 1661-1664	3.8	45
114	Evolution of Young's Modulus, Strength, and Microstructure during Liquid-Phase Sintering. *Journal of the American Ceramic Society*, **2005**, 81, 1852-1860	3.8	30
113	Fracture of Alumina with Controlled Pores. *Journal of the American Ceramic Society*, **2005**, 81, 2449-2457	3.8	46
112	Generalized Orowan-Petch Plot for Brittle Fracture. *Journal of the American Ceramic Society*, **2005**, 81, 2527-2532	3.8	26
111	Cyclic Fatigue Crack Growth in PZT Under Mechanical Loading. *Journal of the American Ceramic Society*, **2005**, 88, 1331-1333	3.8	30
110	Microcrack Evolution in Alumina Ceramics: Experiment and Simulation. *Journal of the American Ceramic Society*, **2005**, 88, 2809-2816	3.8	35
109	Fatigue In Bulk Lead Zirconate Titanate Actuator Materials. *Advanced Engineering Materials*, **2005**, 7, 882-898	3.5	143
108	Continuum Mechanical Approach to Sintering of Nanocrystalline Zirconia. *Advanced Engineering Materials*, **2005**, 7, 949-952	3.5	8
107	Bridging stresses in sintered reaction-bonded Si3N4 from COD measurements. *Journal of the European Ceramic Society*, **2005**, 25, 29-36	6	18
106	An optical method to assess electromechanical coupling in ferroelectric ceramics. *Experimental Mechanics*, **2005**, 45, 290-294	2.6	
105	Shielding Stresses for Soft PZT. *International Journal of Fracture*, **2005**, 134, 151-159	2.3	3
104	Evolution of bias field and offset piezoelectric coefficient in bulk lead zirconate titanate with fatigue. *Applied Physics Letters*, **2005**, 86, 012910	3.4	25

103	Evolution of a stable polarization state in lead zirconate titanate ceramics by repeated partial switching. *Applied Physics Letters*, **2005**, 87, 212901	3.4	19
102	Effect of thermal annealing on switching dynamics of fatigued bulk lead zirconate titanate. *Applied Physics Letters*, **2004**, 85, 3211-3213	3.4	21
101	Stretched exponential relaxation in perovskite ferroelectrics after cyclic loading. *Journal of Applied Physics*, **2004**, 95, 1386-1390	2.5	49
100	Fracture Statistics Based on Pore/Grain-Size Interaction. *Journal of the American Ceramic Society*, **2004**, 82, 2279-2281	3.8	18
99	Influence of Oxygen Partial Pressure and Oxygen Content on the Wettability in the Copper□Oxygen□Alumina System. *Journal of the American Ceramic Society*, **2004**, 82, 2825-2832	3.8	38
98	Evolution of Mechanical Properties of Porous Alumina during Free Sintering and Hot Pressing. *Journal of the American Ceramic Society*, **2004**, 82, 3080-3086	3.8	62
97	Residual Stress Distributions in Ceramics. *Journal of the American Ceramic Society*, **2004**, 82, 3155-3160	3.8	51
96	Effect of Poling Direction on R-Curve Behavior in Lead Zirconate Titanate. *Journal of the American Ceramic Society*, **2004**, 83, 424-426	3.8	79
95	Comparison of R-Curves from Single-Edge V-Notched-Beam (SEVNB) and Surface-Crack-in-Flexure (SCF) Fracture-Toughness Test Methods on Multilayered Alumina□Zirconia Composites. *Journal of the American Ceramic Society*, **2004**, 83, 445-447	3.8	24
94	Constrained Film Sintering of Nanocrystalline TiO2. *Journal of the American Ceramic Society*, **2004**, 83, 1889-1896	3.8	33
93	Processing and Mechanical Properties of Al2O3/Ni3Al Composites with Interpenetrating Network Microstructure. *Journal of the American Ceramic Society*, **2004**, 84, 2034-2040	3.8	24
92	Subcritical Crack Growth in Lead Zirconate Titanate. *Journal of the American Ceramic Society*, **2004**, 87, 1362-1364	3.8	30
91	Mechanical Properties of Monoclinic Zirconia. *Journal of the American Ceramic Society*, **2004**, 87, 1401-1408	3.8	63
90	Fracture Mirrors in Nanoscale 3Y-TZP. *Journal of the American Ceramic Society*, **2004**, 87, 513-516	3.8	9
89	Shrinkage-Free Sintering of Low-Temperature Cofired Ceramics by Loading Dilatometry. *Journal of the American Ceramic Society*, **2004**, 87, 526-528	3.8	17
88	Crack-Tip Toughness Measurements on a Sintered Reaction-Bonded Si3N4. *Journal of the American Ceramic Society*, **2004**, 87, 1502-1508	3.8	14
87	Stresses and stress intensity factor from COD of Vickers indentation cracks. *Journal of Materials Science*, **2004**, 39, 2219-2221	4.3	15
86	Laser-assisted high-resolution loading dilatometer and applications. *Experimental Mechanics*, **2004**, 44, 71-75	2.6	30

85	Crack opening profiles of indentation cracks in normal and anomalous glasses. *Acta Materialia*, **2004**, 52, 293-297	8.4	69
84	Temperature dependence of constitutive behaviour for solid-state sintering of alumina. *Acta Materialia*, **2004**, 52, 3059-3067	8.4	23
83	Crack tip switching zone in ferroelectric ferroelastic materials. *Acta Materialia*, **2004**, 52, 4919-4927	8.4	39
82	Laser-assisted high-resolution loading dilatometer and applications **2004**, 44, 71		1
81	Near the static fatigue limit in glass. *International Journal of Fracture*, **2003**, 121, 1-7	2.3	10
80	Crack deflection in piezoelectric ceramics. *Journal of the European Ceramic Society*, **2003**, 23, 1147-1156	6	11
79	Unipolar fatigue of ferroelectric lead zirconate titanate. *Journal of the European Ceramic Society*, **2003**, 23, 1409-1415	6	56
78	R-curves of lead zirconate titanate (PZT). *Journal of the European Ceramic Society*, **2003**, 23, 1401-1408	6	23
77	Critical Evaluation of Hot Forging Experiments: Case Study in Alumina. *Journal of the American Ceramic Society*, **2003**, 86, 1099-1105	3.8	42
76	Crack tip Toughness of a Soft Lead Zirconate Titanate. *Journal of the American Ceramic Society*, **2003**, 86, 1973-1975	3.8	33
75	Experimental determination of sintering stresses and sintering viscosities. *Acta Materialia*, **2003**, 51, 4563-4574	8.4	77
74	Experimental and Theoretical Investigation of R-Curve Behaviour in Al/Al2O3 Functionally Graded Materials. *Materials Science Forum*, **2003**, 423-425, 269-274	0.4	2
73	Viscous Poisson coefficient determined by discontinuous hot forging. *Journal of Materials Research*, **2003**, 18, 2170-2176	2.5	36
72	Mixed electromechanical fatigue in lead zirconate titanate. *Journal of Applied Physics*, **2003**, 93, 5551-5556	2.5	29
71	From Microcharacterization to Macroscopic Property: A Pathway Discussed on Metal/Ceramic Composites. *Springer Series in Materials Science*, **2003**, 391-418	0.9	
70	Damage and Failure of Ceramic Metal Composites: Experimental and Numerical Investigations. *Lecture Notes in Applied and Computational Mechanics*, **2003**, 203-221	0.3	
69	Microstructural modifications of ferroelectric lead zirconate titanate ceramics due to bipolar electric fatigue. *Journal of the European Ceramic Society*, **2002**, 22, 2133-2142	6	87
68	Weight Function Analysis on the R-Curve Behavior of Multilayered Alumina/Zirconia Composites. *Journal of the American Ceramic Society*, **2002**, 85, 1505-1511	3.8	30

67	Crack Growth in Soda□Lime□Silicate Glass near the Static Fatigue Limit. *Journal of the American Ceramic Society*, **2002**, 85, 2287-2292	3.8	29
66	Electrically driven cracks in piezoelectric ceramics: experiments and fracture mechanics analysis. *Journal of the Mechanics and Physics of Solids*, **2002**, 50, 2333-2353	5	28
65	R-curve behavior in alumina□zirconia composites with repeating graded layers. *Engineering Fracture Mechanics*, **2002**, 69, 1647-1665	4.2	32
64	Stability of pinning centers in fatigued lead□zirconate□titanate. *Applied Physics Letters*, **2002**, 80, 1049-1051	3.4	36
63	Stability of defects in lead□zirconate□titanate after unipolar fatigue. *Applied Physics Letters*, **2002**, 81, 2596-2598	3.4	31
62	Residual stresses in functionally graded plates. *Journal of Materials Research*, **2002**, 17, 2912-2920	2.5	26
61	Fracture resistance curve behavior of multilayered alumina□zirconia composites produced by centrifugation. *Acta Materialia*, **2001**, 49, 995-1003	8.4	26
60	Constraint-induced crack initiation at electrode edges in piezoelectric ceramics. *Acta Materialia*, **2001**, 49, 2751-2759	8.4	83
59	Failure of metal□ceramic composites with spherical inclusions1Dedicated to Prof. Fritz Aldinger in honour of his 60th birthday.1. *Acta Materialia*, **2001**, 49, 3177-3187	8.4	26
58	Crack initiation and crack propagation in partially electroded PZT. *Journal of the European Ceramic Society*, **2001**, 21, 1425-1428	6	13
57	Continuum Mechanical Description of Sintering Nanocrystalline Zirconia. *Advanced Engineering Materials*, **2001**, 3, 158-162	3.5	15
56	Short Crack R-Curves in Ferroelectric and Electrostrictive PLZT. *Journal of the American Ceramic Society*, **2001**, 84, 593-597	3.8	24
55	Residual Stress Induced R-Curves in Laminar Ceramics That Exhibit a Threshold Strength. *Journal of the American Ceramic Society*, **2001**, 84, 2722-2724	3.8	30
54	Cosintering Simulation and Experimentation: Case Study of Nanocrystalline Zirconia. *Journal of the American Ceramic Society*, **2001**, 84, 2757-2763	3.8	44
53	Effect of Residual Stress on the Fracture Toughness of Al2O3/Al Gradient Materials. *Key Engineering Materials*, **2001**, 206-213, 965-968	0.4	3
52	Liquid-crystal display of stress fields in ferroelectrics. *Applied Physics Letters*, **2001**, 78, 2554-2556	3.4	13
51	Negligible oxygen liberation during bipolar electric cycling of ferroelectric lead zirconate titanate ceramics. *Applied Physics Letters*, **2001**, 79, 3675-3677	3.4	13
50	Microcrack clouds in fatigued electrostrictive 9.5/65/35 PLZT. *Journal of the European Ceramic Society*, **2001**, 21, 1421-1423	6	32

49	Influence of Electrical and Geometrical Boundary Conditions on Crack Growth in PZT. *Key Engineering Materials*, **2001**, 206-213, 609-612	0.4	2
48	Effect of initial grain size on sintering trajectories. *Acta Materialia*, **2000**, 48, 1239-1246	8.4	43
47	Evolution of defect size and strength of porous alumina during sintering. *Journal of the European Ceramic Society*, **2000**, 20, 2561-2568	6	81
46	Damage evolution in ferroelectric PZT induced by bipolar electric cycling. *Acta Materialia*, **2000**, 48, 3783-3794	8.4	154
45	Functionally graded materials by electrochemical processing and infiltration: application to tungsten/copper composites. *Journal of Materials Science*, **2000**, 35, 477-486	4.3	72
44	Acoustic emission in PZT under bipolar electric driving and uniaxial mechanical stress. *Ferroelectrics*, **2000**, 240, 1293-1302	0.6	6
43	Computer Simulation of Residual Stress Distribution and Microcracking due to Thermal Expansion Anisotropy. *Materials Science Forum*, **2000**, 347-349, 211-216	0.4	1
42	Fracture mode of alumina/silicon carbide nanocomposites. *Journal of Materials Research*, **2000**, 15, 107-114	2.9	6
41	Acoustic emission from different PZT. *Ferroelectrics*, **1999**, 222, 249-255	0.6	7
40	Thermal residual strains and stresses in Al2O3/Al composites with interpenetrating networks. *Acta Materialia*, **1999**, 47, 565-577	8.4	58
39	Sintering behaviour of nanocrystalline Y2O3. *Scripta Materialia*, **1999**, 12, 701-704		10
38	Detection of prefracture microcracking in Al2O3 by acoustic emission. *Journal of the European Ceramic Society*, **1998**, 18, 1645-1654	6	5
37	Thermal expansion behavior and macrostrain of Al2O3/Al composites with interpenetrating networks. *Acta Materialia*, **1998**, 46, 2493-2499	8.4	69
36	Suggestion for Mechanism of Strengthening of Nanotoughened Ceramics. *Journal of the Ceramic Society of Japan*, **1997**, 105, 1086-1090		13
35	Reliability of alumina ceramics. 2: Effect of processing. *Journal of the European Ceramic Society*, **1997**, 17, 727-733	6	24
34	Preparation of high-strength (Mg,Y)-partially stabilised zirconia by hot isostatic pressing. *Journal of the European Ceramic Society*, **1997**, 17, 843-850	6	12
33	Fracture behaviour in metal fibre reinforced ceramics. *Acta Materialia*, **1997**, 45, 3609-3623	8.4	20
32	Wear Properties of Alumina/Aluminum Composites with Interpenetrating Networks. *Journal of the American Ceramic Society*, **1996**, 79, 121-128	3.8	34

31	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	3.8	29
30	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	3.8	62
29	Fracture Toughness and Subcritical Crack Growth in an Alumina/Silicon Carbide Nanocomposite **1996**, 179-186		7
28	Ca Segregation to Basal Surfaces in Alumina. *Journal of the American Ceramic Society*, **1995**, 78, 2841-2844	3.8	49
27	Phase Stability of Fine-Grained (Mg,Y)-PSZ. *Journal of the American Ceramic Society*, **1995**, 78, 1997-1999	3.8	9
26	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	5.3	150
25	Ni3AlAl2O3 composites with interpenetrating networks. *Scripta Metallurgica Et Materialia*, **1995**, 33, 843-848		56
24	Reliability of structural ceramics. *Philosophical Transactions of the Royal Society: Physical and Engineering Sciences*, **1995**, 351, 469-483		4
23	Reliability of alumina ceramics: Effect of grain size. *Journal of the European Ceramic Society*, **1995**, 15, 395-404	6	60
22	R-curve behaviour in ceramic composites produced by directed metal oxidation. *Journal of the European Ceramic Society*, **1994**, 14, 153-161	6	14
21	Effect of Microstructural Scale on Thermal Shock Resistance of Aluminum-Reinforced Alumina. *Journal of the American Ceramic Society*, **1994**, 77, 701-704	3.8	25
20	Mechanical properties of AlAl2O3 and CuAl2O3 composites with interpenetrating networks. *Scripta Metallurgica Et Materialia*, **1994**, 31, 1085-1090		39
19	Formation of Al2O3 fibre-reinforced AlN/Al-matrix composites by Al(Mg)-melt nitridation. *Journal of Materials Science Letters*, **1993**, 12, 939-942		10
18	Subcritical Crack Growth in Y-TZP and Al2O3-Toughened Y-TZP. *Journal of the American Ceramic Society*, **1993**, 76, 2681-2684	3.8	20
17	Interaction between crack deflection and crack bridging. *Journal of the European Ceramic Society*, **1992**, 10, 143-150	6	69
16	Crack closure forces in ceramics: Characterization and formation. *Journal of the European Ceramic Society*, **1992**, 9, 323-334	6	38
15	Gas-Pressure Metal Infiltration of Porous Ceramic Preforms **1992**, 401-406		
14	Cyclic Fatigue from Frictional Degradation at Bridging Grains in Alumina. *Journal of the American Ceramic Society*, **1991**, 74, 1340-1348	3.8	168

13	In Situ Observations of Toughening Processes in Alumina Reinforced with Silicon Carbide Whiskers. *Journal of the American Ceramic Society*, **1991**, 74, 3154-3157	3.8	39
12	Fracture mechanics model for subthreshold indentation flaws. *Journal of Materials Science*, **1991**, 26, 2313-2321	4.3	17
11	Fracture mechanics model for subthreshold indentation flaws. *Journal of Materials Science*, **1991**, 26, 2157-2168	4.3	41
10	Anisotropy of Grain Growth in Alumina. *Journal of the American Ceramic Society*, **1990**, 73, 3292-3301	3.8	102
9	Pore Drag and Pore-Boundary Separation in Alumina. *Journal of the American Ceramic Society*, **1990**, 73, 3302-3312	3.8	49
8	In Situ Measurements of Bridged Crack Interfaces in the Scanning Electron Microscope. *Journal of the American Ceramic Society*, **1990**, 73, 3313-3318	3.8	206
7	High-Temperature Healing of Lithographically Introduced Cracks in Sapphire. *Journal of the American Ceramic Society*, **1990**, 73, 592-5601	3.8	70
6	Photolithography: a New Tool for Ceramic Science. *Materials Research Society Symposia Proceedings* , **1989**, 155, 293		1
5	Ceramic/metal interfacial crack growth: Toughening by controlled microcracks and interfacial geometries. *Acta Metallurgica*, **1988**, 36, 2083-2093		76
4	A technique for investigating the elimination and coarsening of model pore arrays. *Materials Letters* , **1988**, 6, 351-355	3.3	13
3	Application of Controlled Interfacial Pore Structures to Kinetic Studies in Alumina. *Materials Research Society Symposia Proceedings*, **1988**, 122, 485		6
2	Production of Controlled-Morphology Pore Arrays: Implications and Opportunities. *Journal of the American Ceramic Society*, **1987**, 70, C-172-C-175	3.8	25
1	Degradation of Mn-doped BaTiO3 ceramic under a high d.c. electric field **1984**, 19, 3515		4