Ian M Reaney

List of Publications by Citations

364 papers	15,587 citations	68 h-index	110 g-index
381 ext. papers	18,166 ext. citations	5.2 avg, IF	6.76 L-index

#	Paper	IF	Citations
364	A family of oxide ion conductors based on the ferroelectric perovskite Na0.5Bi0.5TiO3. *Nature Materials*, **2014**, 13, 31-5	27	548
363	Dielectric and Structural Characteristics of Ba- and Sr-based Complex Perovskites as a Function of Tolerance Factor. *Japanese Journal of Applied Physics*, **1994**, 33, 3984-3990	1.4	543
362	Effect of structural changes in complex perovskites on the temperature coefficient of the relative permittivity. *Journal of Applied Physics*, **1993**, 74, 3414-3425	2.5	333
361	Orientation of rapid thermally annealed lead zirconate titanate thin films on (111) Pt substrates. *Journal of Materials Research*, **1994**, 9, 2540-2553	2.5	275
360	Crystal chemistry and domain structure of rare-earth doped BiFeO3 ceramics. *Journal of Materials Science*, **2009**, 44, 5102-5112	4.3	262
359	Electron diffraction of tilted perovskites. *Acta Crystallographica Section B: Structural Science*, **2005**, 61, 387-99		242
358	Investigation of Pt/Ti bilayer metallization on silicon for ferroelectric thin film integration. *Journal of Applied Physics*, **1994**, 75, 232-239	2.5	240
357	Ultrahigh energy storage density lead-free multilayers by controlled electrical homogeneity. *Energy and Environmental Science*, **2019**, 12, 582-588	35.4	239
356	Spontaneous (zero-field) relaxor to ferroelectric-phase transition in disordered Pb(Sc1/2Nb1/2)O3. *Journal of Applied Physics*, **1995**, 77, 1671-1676	2.5	235
355	Bismuth ferrite-based lead-free ceramics and multilayers with high recoverable energy density. *Journal of Materials Chemistry A*, **2018**, 6, 4133-4144	13	232
354	Review of crystal and domain structures in the PbZrxTi1−xO3 solid solution. *Physical Review B*, **2005**, 72,	3.3	227
353	Structure–microwave property relations in (SrxCa(1−x))n+1TinO3n+1. *Journal of the European Ceramic Society*, **2001**, 21, 1723-1726	6	223
352	Crystal and domain structure of the BiFeO3–PbTiO3 solid solution. *Journal of Applied Physics*, **2003**, 94, 3313-3318	2.5	217
351	Fabrication and characterization of nanoscale, Er3+-doped, ultratransparent oxy-fluoride glass ceramics. *Applied Physics Letters*, **2002**, 81, 1937-1939	3.4	199
350	Nano- and Mesoscale Structure of Na$_{1 over 2}$Bi$_{1 over 2}$TiO3: A TEM Perspective. *Advanced Functional Materials*, **2012**, 22, 3445-3452	15.6	198
349	Relation between tolerance factor and Tc in Aurivillius compounds. *Journal of Materials Research*, **2001**, 16, 3139-3149	2.5	190
348	High permittivity and low loss microwave dielectrics suitable for 5G resonators and low temperature co-fired ceramic architecture. *Journal of Materials Chemistry C*, **2017**, 5, 10094-10098	7.1	186

347	Investigation of a high Tc piezoelectric system: (1−x)Bi(Mg1/2Ti1/2)O3−(x)PbTiO3. *Journal of Applied Physics*, **2004**, 95, 3633-3639	2.5	179
346	Dramatic Influence of A-Site Nonstoichiometry on the Electrical Conductivity and Conduction Mechanisms in the Perovskite Oxide Na0.5Bi0.5TiO3. *Chemistry of Materials*, **2015**, 27, 629-634	9.6	178
345	Novel temperature stable high-ε microwave dielectrics in the Bi2O3–TiO2–V2O5 system. *Journal of Materials Chemistry C*, **2016**, 4, 5357-5362	7.1	151
344	Perovskite solar cells: An integrated hybrid lifecycle assessment and review in comparison with other photovoltaic technologies. *Renewable and Sustainable Energy Reviews*, **2017**, 80, 1321-1344	16.2	150
343	Niobate-based microwave dielectrics suitable for third generation mobile phone base stations. *Applied Physics Letters*, **2001**, 79, 2952-2954	3.4	150
342	Use of Raman spectroscopy to determine the site occupancy of dopants in BaTiO3. *Journal of Applied Physics*, **2011**, 109, 114110	2.5	148
341	Nd-doped BiFeO3 ceramics with antipolar order. *Applied Physics Letters*, **2009**, 94, 112903	3.4	146
340	High Energy Storage Density and Large Strain in Bi(Zn2/3Nb1/3)O3-Doped BiFeO3–BaTiO3 Ceramics. *ACS Applied Energy Materials*, **2018**, 1, 4403-4412	6.1	138
339	Dielectric loss caused by oxygen vacancies in titania ceramics. *Journal of the European Ceramic Society*, **2009**, 29, 419-424	6	134
338	Use of Transmission Electron Microscopy for the Characterization of Rapid Thermally Annealed, Solution-Gel, Lead Zirconate Titanate Films. *Journal of the American Ceramic Society*, **1994**, 77, 1209-1216	3.8	130
337	Electroceramics for High-Energy Density Capacitors: Current Status and Future Perspectives. *Chemical Reviews*, **2021**, 121, 6124-6172	68.1	129
336	High-Figure-of-Merit Thermoelectric La-Doped A-Site-Deficient SrTiO3 Ceramics. *Chemistry of Materials*, **2016**, 28, 925-935	9.6	124
335	BaTiO3-Based Ceramics for Tunable Microwave Applications. *Journal of the American Ceramic Society*, **2004**, 87, 1082-1087	3.8	119
334	Structural changes underlying the diffuse dielectric response in AgNbO3. *Physical Review B*, **2009**, 79,	3.3	117
333	Temperature dependent, large electromechanical strain in Nd-doped BiFeO3-BaTiO3 lead-free ceramics. *Journal of the European Ceramic Society*, **2017**, 37, 1857-1860	6	114
332	BaTiO3–Bi(Zn1/2Ti1/2)O3–BiScO3 Ceramics for High-Temperature Capacitor Applications. *Journal of the American Ceramic Society*, **2012**, 95, 3554-3561	3.8	111
331	A Crystal-Chemical Framework for Relaxor versus Normal Ferroelectric Behavior in Tetragonal Tungsten Bronzes. *Chemistry of Materials*, **2015**, 27, 3250-3261	9.6	107
330	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

329	Reorientation of magnetic dipoles at the antiferroelectric-paraelectric phase transition of Bi1NdxFeO3 (0.15.25). *Physical Review B*, **2010**, 81,	3.3	106
328	Coupling between octahedral tilting and ferroelectric order in tetragonal tungsten bronze-structured dielectrics. *Applied Physics Letters*, **2006**, 89, 122908	3.4	106
327	B-site order and infrared reflectivity in A(BB)O3 complex perovskite ceramics. *Journal of Applied Physics*, **1994**, 76, 2086-2092	2.5	106
326	Displacive Phase Transitions and Magnetic Structures in Nd-Substituted BiFeO3. *Chemistry of Materials*, **2011**, 23, 2166-2175	9.6	104
325	Raman spectroscopy of B-site orderdisorder in CaTiO3-based microwave ceramics. *Journal of the European Ceramic Society*, **2003**, 23, 2653-2659	6	104
324	Collective dynamics underpins Rayleigh behavior in disordered polycrystalline ferroelectrics. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 7219-24	11.5	102
323	Vacancy ordering in reduced barium titanate. *Applied Physics Letters*, **2004**, 84, 4650-4652	3.4	102
322	Angular dispersion of oblique phonon modes in BiFeO3 from micro-Raman scattering. *Physical Review B*, **2011**, 83,	3.3	100
321	Classification of transition temperature behavior in ferroelectric PbTiO3Bi(Me?Me?)O3 solid solutions. *Journal of Applied Physics*, **2006**, 99, 024106	2.5	100
320	BiFeO3-BaTiO3: A new generation of lead-free electroceramics. *Journal of Advanced Dielectrics*, **2018**, 08, 1830004	1.3	100
319	Raman spectroscopy of CaTiO3-based perovskite solid solutions. *Journal of Materials Research*, **2004**, 19, 488-495	2.5	98
318	Structureproperty relationships of low sintering temperature scheelite-structured (1 x)BiVO4LaNbO4 microwave dielectric ceramics. *Journal of Materials Chemistry C*, **2017**, 5, 2695-2701	7.1	96
317	Dielectric and structural studies of Ba2MTi2Nb3O15 (BMTNO15, M=Bi3+,La3+,Nd3+,Sm3+,Gd3+) tetragonal tungsten bronze-structured ceramics. *Journal of Applied Physics*, **2007**, 101, 104114	2.5	96
316	Investigation of relaxors that transform spontaneously into ferroelectrics. *Ferroelectrics*, **1994**, 151, 343-348	0.6	95
315	Microwave Dielectric Ceramics for Resonators and Filters in Mobile Phone Networks. *Journal of the American Ceramic Society*, **2006**, 89, 060428035142006-???	3.8	93
314	Effect of Nb Doping on the Microstructure of Solel-Derived PZT Thin Films. *Journal of the American Ceramic Society*, **1995**, 78, 1513-1520	3.8	93
313	BiVO4 based high k microwave dielectric materials: a review. *Journal of Materials Chemistry C*, **2018**, 6, 9290-9313	7.1	92
312	Environmental life cycle assessment and techno-economic analysis of triboelectric nanogenerators. *Energy and Environmental Science*, **2017**, 10, 653-671	35.4	90

311	Superior energy density through tailored dopant strategies in multilayer ceramic capacitors. *Energy and Environmental Science*, **2020**, 13, 2938-2948	35.4	90
310	On the temperature coefficient of resonant frequency in microwave dielectrics. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **2001**, 81, 501-510		86
309	Polar order and diffuse scatter in Ba(Ti1-xZrx)O3 ceramics. *Journal of Applied Physics*, **2009**, 106, 114111	2.5	83
308	Integrated hybrid life cycle assessment and supply chain environmental profile evaluations of lead-based (lead zirconate titanate) versus lead-free (potassium sodium niobate) piezoelectric ceramics. *Energy and Environmental Science*, **2016**, 9, 3495-3520	35.4	82
307	Ti-Doping to Reduce Conductivity in Bi0.85Nd0.15FeO3 Ceramics. *Advanced Functional Materials*, **2011**, 21, 3737-3743	15.6	81
306	Local structure, pseudosymmetry, and phase transitions in Na1/2Bi1/2TiO3-K1/2Bi1/2TiO3 ceramics. *Physical Review B*, **2013**, 87,	3.3	79
305	Crystal structure of the compound Bi2Zn2/3Nb4/3O7. *Journal of Materials Research*, **2002**, 17, 1406-1411	2.5	76
304	High Quality Factor, Ultralow Sintering Temperature Li6B4O9Microwave Dielectric Ceramics with Ultralow Density for Antenna Substrates. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 11138-11143	8.3	74
303	BaTiO3-Bi(Li0.5Ta0.5)O3, Lead-Free Ceramics, and Multilayers with High Energy Storage Density and Efficiency. *ACS Applied Energy Materials*, **2018**, 1, 5016-5023	6.1	72
302	Mechanism of enhanced energy storage density in AgNbO3-based lead-free antiferroelectrics. *Nano Energy*, **2021**, 79, 105423	17.1	72
301	Role of Defects in the Ferroelectric Relaxor Lead Scandium Tantalate. *Journal of the American Ceramic Society*, **1995**, 78, 1947-1952	3.8	71
300	Current Understanding of Structure-Processing-Property Relationships in BaTiO3-Bi(M)O3 Dielectrics. *Journal of the American Ceramic Society*, **2016**, 99, 2849-2870	3.8	69
299	High strain (0.4%) Bi(Mg2/3Nb1/3)O3-BaTiO3-BiFeO3 lead-free piezoelectric ceramics and multilayers. *Journal of the American Ceramic Society*, **2018**, 101, 5428-5442	3.8	68
298	Decomposition of NiMn2O4 spinel: an NTC thermistor material. *Journal of the European Ceramic Society*, **2001**, 21, 2145-2148	6	68
297	Tunability of in perovskites and related compounds. *Journal of Materials Research*, **2002**, 17, 2033-2040	2.5	68
296	Composition and temperature dependence of structure and piezoelectricity in (1-x)(K1-yNay)NbO3-x(Bi1/2Na1/2)ZrO3 lead-free ceramics. *Journal of the American Ceramic Society*, **2017**, 100, 627-637	3.8	66
295	Cold-Sintered Temperature Stable Na0.5Bi0.5MoO4-Li2MoO4 Microwave Composite Ceramics. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 2438-2444	8.3	65
294	Transmission electron microscopy investigation of the high temperature BiScO3-PbTiO3 piezoelectric ceramic system. *Journal of Applied Physics*, **2003**, 93, 9271-9274	2.5	63

293	Microwave dielectric solid□solution phase in system BaO□Ln203□Ti02 (Ln = lanthanide cation). *International Materials Reviews*, **1998**, 43, 205-219	16.1	63
292	Microwave dielectric solid□solution phase in system BaO□Ln203□Ti02 (Ln = lanthanide cation). *International Materials Reviews*, **1998**, 43, 205-219	16.1	63
291	Are lead-free piezoelectrics more environmentally friendly?. *MRS Communications*, **2017**, 7, 1-7	2.7	62
290	Early Stages of Crystallization of Sol□Gel-Derived Lead Zirconate Titanate Thin Films. *Chemistry of Materials*, **2003**, 15, 1147-1155	9.6	61
289	Fatigue resistant lead-free multilayer ceramic capacitors with ultrahigh energy density. *Journal of Materials Chemistry A*, **2020**, 8, 11414-11423	13	60
288	Comparison of lead zirconate titanate thin films on ruthenium oxide and platinum electrodes. *Journal of Applied Physics*, **1994**, 75, 1521-1525	2.5	59
287	Hydrothermal Synthesis and Crystal Growth Studies of BaTiO3 Using Ti Nanotube Precursors. *Crystal Growth and Design*, **2008**, 8, 3309-3315	3.5	58
286	Influence of a Single Grain Boundary on Domain Wall Motion in Ferroelectrics. *Advanced Functional Materials*, **2014**, 24, 1409-1417	15.6	57
285	Controlling mixed conductivity in Na1/2Bi1/2TiO3 using A-site non-stoichiometry and Nb-donor doping. *Journal of Materials Chemistry C*, **2016**, 4, 5779-5786	7.1	57
284	Optimising dopants and properties in BiMeO3 (Me = Al, Ga, Sc, Y, Mg2/3Nb1/3, Zn2/3Nb1/3, Zn1/2Ti1/2) lead-free BaTiO3-BiFeO3 based ceramics for actuator applications. *Journal of the European Ceramic Society*, **2018**, 38, 4220-4231	6	57
283	Structure-microwave property relations of Ca and Sr titanates. *Journal of the European Ceramic Society*, **2001**, 21, 2629-2632	6	55
282	Crystal structure and domain-wall contributions to the piezoelectric properties of strontium bismuth titanate ceramics. *Journal of Applied Physics*, **1996**, 80, 4223-4225	2.5	55
281	The osteogenic response of mesenchymal stromal cells to strontium-substituted bioactive glasses. *Journal of Tissue Engineering and Regenerative Medicine*, **2015**, 9, 619-31	4.4	54
280	High-temperature (1□)BiSc1□Fe1□O3-xPbTiO3 piezoelectric ceramics. *Applied Physics Letters*, **2005**, 87, 242901	3.4	54
279	Effects of strontium substitution in Nb-doped PZT ceramics. *Journal of the European Ceramic Society*, **2001**, 21, 1371-1375	6	54
278	Origin of the large electrostrain in BiFeO3-BaTiO3 based lead-free ceramics. *Journal of Materials Chemistry A*, **2019**, 7, 21254-21263	13	53
277	In situ Raman spectroscopy of A-site doped barium titanate. *Applied Physics Letters*, **2007**, 91, 062908	3.4	53
276	Order□disorder behavior in Ba(Zn1/3Ta2/3)O3. *Journal of Applied Physics*, **2000**, 88, 6708-6714	2.5	52

275	BaTiO3–Bi(Mg2/3Nb1/3)O3 Ceramics for High-Temperature Capacitor Applications. *Journal of the American Ceramic Society*, **2016**, 99, 2089-2095	3.8	50
274	Electromechanical strain in Bi(Zn1/2Ti1/2)O3–(Bi1/2Na1/2)TiO3–(Bi1/2K1/2)TiO3 solid solutions. *Journal of Applied Physics*, **2012**, 111, 094105	2.5	47
273	Circularly Polarized Dielectric-Loaded Antennas: Current Technology and Future Challenges. *Advanced Functional Materials*, **2008**, 18, 2293-2300	15.6	47
272	Microwave Dielectric Properties of Gallium-Doped Hexagonal Barium Titanate Ceramics. *Journal of the American Ceramic Society*, **2003**, 86, 511-513	3.8	47
271	Ultrahigh energy density in short-range tilted NBT-based lead-free multilayer ceramic capacitors by nanodomain percolation. *Energy Storage Materials*, **2021**, 38, 113-120	19.4	47
270	Crystal Structure, Infrared Spectra, and Microwave Dielectric Properties of Temperature-Stable Zircon-Type (Y,Bi)VO Solid-Solution Ceramics. *ACS Omega*, **2016**, 1, 963-970	3.9	46
269	Effects of Octahedral Tilting on the Piezoelectric Properties of Strontium/Barium/Niobium-Doped Soft Lead Zirconate Titanate Ceramics. *Journal of the American Ceramic Society*, **2002**, 85, 2337-2344	3.8	46
268	Novel water insoluble (NaxAg2−x)MoO4 (0⩽x⩽2) microwave dielectric ceramics with spinel structure sintered at 410 degrees. *Journal of Materials Chemistry C*, **2017**, 5, 6086-6091	7.1	45
267	Displacive Ordering Transitions in Perovskite-Like AgNb1/2Ta1/2O3. *Chemistry of Materials*, **2010**, 22, 4987-4995	9.6	45
266	Novel BaTiO-Based, Ag/Pd-Compatible Lead-Free Relaxors with Superior Energy Storage Performance. *ACS Applied Materials & Interfaces*, **2020**, 12, 43942-43949	9.5	45
265	Composition dependence of the lattice vibrations in Srn+1TinO3n+1 Ruddlesden–Popper homologous series. *Journal of the European Ceramic Society*, **2003**, 23, 2639-2645	6	44
264	Nucleation and crystallisation of transparent, erbium III-doped, oxyfluoride glass-ceramics. *Journal of Non-Crystalline Solids*, **2001**, 290, 25-31	3.9	44
263	Continuously controllable optical band gap in orthorhombic ferroelectric KNbO3-BiFeO3 ceramics. *Applied Physics Letters*, **2017**, 110, 172902	3.4	43
262	Low loss Sr1−xCaxLa4Ti5O17 microwave dielectric ceramics. *Materials Research Bulletin*, **2011**, 46, 1092-1096	5.1	43
261	A new relaxor ferroelectric, Ba2LaTi2Nb3O15. *Journal of Materials Chemistry*, **2002**, 12, 2609-2611		43
260	High Ionic Conductivity with Low Degradation in A-Site Strontium-Doped Nonstoichiometric Sodium Bismuth Titanate Perovskite. *Chemistry of Materials*, **2016**, 28, 5269-5273	9.6	43
259	Investigation of high Curie temperature (1−x)BiSc1−yFeyO3–xPbTiO3 piezoelectric ceramics. *Journal of Applied Physics*, **2009**, 106, 084107	2.5	42
258	A new family of ferroelectric tetragonal tungsten bronze phases, Ba2MTi2X3O15. *Journal of the European Ceramic Society*, **2005**, 25, 2471-2475	6	42

257	Domain variance and superstructure across the antiferroelectric/ferroelectric phase boundary in Pb1−1.5xLax(Zr0.9TiM0.1)O3. *Journal of Materials Research*, **2003**, 18, 262-271	2.5	41
256	Lead-free (Ba,Sr)TiO3 –BiFeO3 based multilayer ceramic capacitors with high energy density. *Journal of the European Ceramic Society*, **2020**, 40, 1779-1783	6	41
255	Temperature-dependent crystal structure of ferroelectric Ba2LaTi2Nb3O15. *Journal of Materials Chemistry*, **2005**, 15, 798		40
254	Structure of the nanocrystals in oxyfluoride glass ceramics. *Applied Physics Letters*, **2003**, 83, 467-469	3.4	40
253	Phase transition and chemical order in the ferroelectric perovskite (1−x)Bi(Mg3/4W1/4)O3–xPbTiO3 solid solution system. *Journal of Applied Physics*, **2005**, 97, 024101	2.5	40
252	DiP256: The temperature coefficient of the relative permittivity of complex perovskites and its relation to structural transformations. *Ferroelectrics*, **1992**, 133, 217-222	0.6	40
251	Local stabilisation of polar order at charged antiphase boundaries in antiferroelectric (Bi0.85Nd0.15)(Ti0.1Fe0.9)O3. *APL Materials*, **2013**, 1, 021102	5.7	39
250	Formation of apatite layers on modified canasite glass-ceramics in simulated body fluid. *Journal of Biomedical Materials Research Part B*, **2002**, 59, 473-80		39
249	Raman spectroscopy and microwave properties of CaTiO3-based ceramics. *Journal of Applied Physics*, **2003**, 94, 2948-2956	2.5	39
248	Cold-Sintered C0G Multilayer Ceramic Capacitors. *Advanced Electronic Materials*, **2019**, 5, 1900025	6.4	38
247	Temperature stable and fatigue resistant lead-free ceramics for actuators. *Applied Physics Letters*, **2016**, 109, 142907	3.4	38
246	High frequency dielectric properties of CaTiO3-based microwave ceramics. *Journal Physics D: Applied Physics*, **2005**, 38, 741-748	3	37
245	Fatigue, rejuvenation and self-restoring in ferroelectric thin films. *Integrated Ferroelectrics*, **1995**, 9, 293-3.86		37
244	Life cycle assessment and environmental profile evaluation of lead-free piezoelectrics in comparison with lead zirconate titanate. *Journal of the European Ceramic Society*, **2018**, 38, 4922-4938	6	37
243	Chemical Solution-Deposited BaTiO3 Thin Films on Ni Foils: Microstructure and Interfaces. *Journal of the American Ceramic Society*, **2008**, 91, 1845-1850	3.8	36
242	Kinetic Study of the Static Hydrothermal Synthesis of BaTiO3 Using Titanate Nanotubes Precursors. *Crystal Growth and Design*, **2011**, 11, 3358-3365	3.5	35
241	In situ observations of octahedral tilt transitions in strontium bismuth titanate layered perovskites. *Ferroelectrics*, **1995**, 165, 295-305	0.6	35
240	High quality factor cold sintered Li2MoO4BaFe12O19 composites for microwave applications. *Acta Materialia*, **2019**, 166, 202-207	8.4	35

239	Crystal structure, impedance and broadband dielectric spectra of ordered scheelite-structured Bi(Sc1/3Mo2/3)O4 ceramic. *Journal of the European Ceramic Society*, **2018**, 38, 1556-1561	6	34
238	Ordering and quality factor in 0.95BaZn1/3Ta2/3O3–0.05SrGa1/2Ta1/2O3 production resonators. *Journal of the European Ceramic Society*, **2003**, 23, 3021-3034	6	34
237	Temperature dependent piezoelectric response and strain–electric-field hysteresis of rare-earth modified bismuth ferrite ceramics. *Journal of Materials Chemistry C*, **2016**, 4, 7859-7868	7.1	34
236	Novel water-assisting low firing MoO3 microwave dielectric ceramics. *Journal of the European Ceramic Society*, **2019**, 39, 2374-2378	6	31
235	Multiferroic and magnetoelectric properties of Pb0.99[Zr0.45Ti0.47(Ni1/3Sb2/3)0.08]O3–CoFe2O4 multilayer composites fabricated by tape casting. *Journal of the European Ceramic Society*, **2018**, 38, 1473-1478	6	31
234	Order–disorder phase transition in Ba(Zn1/3Ta2/3)O3. *Journal of the European Ceramic Society*, **2001**, 21, 2613-2616	6	31
233	Cold sintered CaTiO3-K2MoO4 microwave dielectric ceramics for integrated microstrip patch antennas. *Applied Materials Today*, **2020**, 18, 100519	6.6	31
232	Band gap evolution and a piezoelectric-to-electrostrictive crossover in (1 − x)KNbO3–x(Ba0.5Bi0.5)(Nb0.5Zn0.5)O3 ceramics. *Journal of Materials Chemistry C*, **2017**, 5, 1990-1996	7.1	30
231	Dielectric and structural characteristics of perovskites and related materials as a function of tolerance factor. *Ferroelectrics*, **1999**, 228, 23-38	0.6	30
230	Domain Wall Motion Across Various Grain Boundaries in Ferroelectric Thin Films. *Journal of the American Ceramic Society*, **2015**, 98, 1848-1857	3.8	29
229	Low Sintering Temperature Microwave Dielectric Ceramics and Composites Based on Bi 2 O 3 –B 2 O 3. *Journal of the American Ceramic Society*, **2012**, 95, 3207-3213	3.8	29
228	In vitro biocompatibility of a novel Fe2O3 based glass ionomer cement. *Journal of Dentistry*, **2006**, 34, 533-8	4.8	29
227	Multiferroic properties of BiFeO3-(K0.5Bi0.5)TiO3 ceramics. *Materials Letters*, **2013**, 94, 172-175	3.3	28
226	Mechanisms of the Effect of Dopants and P(O2) on the Improper Ferroelastic Phase Transition in SrTiO3. *Chemistry of Materials*, **2007**, 19, 6471-6477	9.6	28
225	Devitrification of ionomer glass and its effect on the in vitro biocompatibility of glass-ionomer cements. *Biomaterials*, **2003**, 24, 3153-60	15.6	28
224	FORMATION OF $({rm Ti}'_{rm Ti} - V_{rm O}^{bullet bullet})^{bullet}$ DEFECT DIPOLES IN BaTiO3 CERAMICS HEAT-TREATED UNDER REDUCED OXYGEN PARTIAL-PRESSURE. *Functional Materials Letters*, **2010**, 03, 65-68	1.2	27
223	Effect of glass additions on the sintering and microwave properties of composite dielectric ceramics based on BaO–Ln2O3–TiO2 (Ln = Nd, La). *Journal of the European Ceramic Society*, **2007**, 27, 4479-4487	6	27
222	Microstructure and microwave properties of {CaT{i}O}3–LaGaO3 {solid solutions}. *Journal of Materials Science*, **2005**, 40, 5207-5214	4.3	27

221	Defect chemistry of Ti-doped antiferroelectric Bi0.85Nd0.15FeO3. *Applied Physics Letters*, **2012**, 100, 182902	3.4	26
220	Novel Nanorod Precipitate Formation in Neodymium and Titanium Codoped Bismuth Ferrite. *Advanced Functional Materials*, **2013**, 23, 683-689	15.6	26
219	Surface Decomposition of Strontium-Doped Soft PbZrO3–PbTiO3. *Journal of the American Ceramic Society*, **2004**, 85, 207-212	3.8	26
218	Order–disorder behaviour in 0.9Ba([Zn0.60Co0.40]1/3Nb2/3)O3–0.1Ba(Ga0.5Ta0.5)O3 microwave dielectric resonators. *Journal of the European Ceramic Society*, **2005**, 25, 1183-1189	6	26
217	Molten salt synthesis of MAX phases in the Ti-Al-C system. *Journal of the European Ceramic Society*, **2018**, 38, 4585-4589	6	26
216	Domain pinning near a single-grain boundary in tetragonal and rhombohedral lead zirconate titanate films. *Physical Review B*, **2015**, 91,	3.3	25
215	Local resistive switching of Nd doped BiFeO3 thin films. *Applied Physics Letters*, **2012**, 100, 133505	3.4	25
214	High temperature piezoelectric ceramics in the Bi(Mg1/2Ti1/2)O3-BiFeO3-BiScO3-PbTiO3 system. *Journal of Electroceramics*, **2010**, 25, 130-134	1.5	25
213	Ferroelectric PZT Thin Films by Sol-Gel Deposition. *Journal of Sol-Gel Science and Technology*, **1998**, 13, 813-820	2.3	25
212	Towards revealing key factors in mechanical instability of bioabsorbable Zn-based alloys for intended vascular stenting. *Acta Biomaterialia*, **2020**, 105, 319-335	10.8	25
211	Temperature stable K0.5(Nd1−xBix)0.5MoO4 microwave dielectrics ceramics with ultra-low sintering temperature. *Journal of the American Ceramic Society*, **2018**, 101, 1806-1810	3.8	25
210	Study of the temperature dependence of the giant electric field-induced strain in Nb-doped BNT-BT-BKT piezoceramics. *Materials Research Bulletin*, **2018**, 97, 385-392	5.1	24
209	(1−x)CaTiO3–x(Li0.5Nd0.5)TiO3 for ultra-small dielectrically loaded antennas. *Journal of Materials Science*, **2009**, 44, 6247-6250	4.3	24
208	Structure and Dielectric Properties of Lead Pyrochlores. *Journal of the American Ceramic Society*, **2002**, 85, 2472-2478	3.8	24
207	Dielectric spectra of a new relaxor ferroelectric system Ba2LnTi2Nb3O15 (Ln = La, Nd). *Journal of the European Ceramic Society*, **2005**, 25, 3069-3073	6	24
206	Drivers of U.S. toxicological footprints trajectory 1998-2013. *Scientific Reports*, **2016**, 6, 39514	4.9	24
205	Synthesis of Barium Titanate Using Deep Eutectic Solvents. *Inorganic Chemistry*, **2017**, 56, 542-547	5.1	23
204	Protocols for the Fabrication, Characterization, and Optimization of n-Type Thermoelectric Ceramic Oxides. *Chemistry of Materials*, **2017**, 29, 265-280	9.6	23

203	High-Permittivity and Low-Loss Microwave Dielectric Ceramics Based on (x)RE(Zn1/2Ti1/2)O3(1−x)CaTiO3 (RE=La and Nd). *Journal of the American Ceramic Society*, **2011**, 94, 817-821	3.8	23
202	Displacive Phase Transitions and Intermediate Structures in Perovskites. *Journal of the American Ceramic Society*, **2011**, 94, 2242-2247	3.8	23
201	Microstructure and mechanical properties of fluorcanasite glass-ceramics for biomedical applications. *Journal of Materials Science*, **2008**, 43, 759-765	4.3	23
200	Microstructural studies of PZT thick films on Cu foils. *Acta Materialia*, **2006**, 54, 3211-3220	8.4	23
199	Multi-material additive manufacturing of low sintering temperature Bi2Mo2O9 ceramics with Ag floating electrodes by selective laser burnout. *Virtual and Physical Prototyping*, **2020**, 15, 133-147	10.1	22
198	A resource efficient design strategy to optimise the temperature coefficient of capacitance of BaTiO3-based ceramics using finite element modelling. *Journal of Materials Chemistry A*, **2016**, 4, 6896-6901	12	22
197	Structural phase transitions in Ti-doped Bi1-xNdxFeO3 ceramics. *Journal of Applied Physics*, **2012**, 111, 064107	2.5	22
196	Characterisation of fluorine containing glasses and glass-ceramics by 19F magic angle spinning nuclear magnetic resonance spectroscopy. *Journal of the European Ceramic Society*, **2009**, 29, 2185-2191	6	22
195	Prediction of osteoconductive activity of modified potassium fluorrichterite glass-ceramics by immersion in simulated body fluid. *Journal of Materials Science: Materials in Medicine*, **2010**, 21, 2979-88	4.5	22
194	A structural study of ceramics in the (BiMnO3)x(PbTiO3)1−xsolid solution series. *Journal of Physics Condensed Matter*, **2004**, 16, 8823-8834	1.8	22
193	Structure–property relations in xCaTiO3(1−x)SrMg1/3Nb2/3O3 based microwave dielectrics. *Journal of the European Ceramic Society*, **2003**, 23, 2435-2441	6	22
192	Decomposition of NiMn2O4 spinels. *Journal of Materials Research*, **2003**, 18, 1301-1308	2.5	22
191	Transmission electron microscopy investigation of Bi2O3–ZnO–Nb2O5 pyrochlore and related phases. *Materials Letters*, **2002**, 57, 414-419	3.3	22
190	Temperature Stable Cold Sintered (BiLi)(VMo)O-NaMoO Microwave Dielectric Composites. *Materials*, **2019**, 12,	3.5	21
189	Nanoscale Polar Heterogeneities and Branching Bi-Displacement Directions in K0.5Bi0.5TiO3. *Chemistry of Materials*, **2019**, 31, 2450-2458	9.6	21
188	Direct Integration of Cold Sintered, Temperature-Stable Bi2Mo2O9-K2MoO4 Ceramics on Printed Circuit Boards for Satellite Navigation Antennas. *Journal of the European Ceramic Society*, **2020**, 40, 4029-4034	6	21
187	In vitro biocompatibility of fluorcanasite glass-ceramics for bone tissue repair. *Journal of Biomedical Materials Research - Part A*, **2007**, 80, 175-83	5.4	21
186	Effect of CaF2 and CaO Substituted for MgO on the Phase Evolution and Mechanical Properties of K-Fluorrichterite Glass Ceramics. *Journal of the American Ceramic Society*, **2006**, 89, 587-595	3.8	21

185	Structure–Property Relations in xBaTiO3–(1–x)La(Mg1/2Ti1/2)O3 Solid Solutions. *Journal of the American Ceramic Society*, **2004**, 87, 584-590	3.8	21
184	High electromechanical response in the non morphotropic phase boundary piezoelectric system PbTiO3–Bi(Zr1/2Ni1/2)O3. *Physical Review B*, **2018**, 97,	3.3	21
183	Influence of octahedral tilting on the microwave dielectric properties of A3LaNb3O12 hexagonal perovskites (A=Ba, Sr). *Applied Physics Letters*, **2009**, 94, 192904	3.4	20
182	Crystallization of Canasite/Frankamenite-Based Glass-Ceramics. *Chemistry of Materials*, **2004**, 16, 5736-5743	7.6	20
181	Phase transitions, domain structure, and pseudosymmetry in La- and Ti-doped BiFeO3. *Journal of Applied Physics*, **2016**, 119, 054101	2.5	20
180	Grain Growth Anomaly and Dielectric Response in Ti-rich Strontium Titanate Ceramics. *Journal of Physical Chemistry C*, **2013**, 117, 24787-24795	3.8	19
179	Effect of P2O5 on the early stage crystallization of K-fluorrichterite glass–ceramics. *Journal of Non-Crystalline Solids*, **2008**, 354, 3362-3368	3.9	19
178	Characterization of High-Fracture Toughness K-Fluorrichterite-Fluorapatite Glass Ceramics. *Journal of the American Ceramic Society*, **2004**, 87, 240-246	3.8	19
177	Leakage behavior and conduction mechanisms of Ba(Ti0.85Sn0.15)O3/Bi1.5Zn1.0Nb1.5O7 heterostructures. *Journal of Applied Physics*, **2010**, 107, 104104	2.5	18
176	Crystallization and dielectric properties of borate-based ferroelectric PbTiO3 glass-ceramics. *Journal of Electroceramics*, **2007**, 19, 221-228	1.5	18
175	Synthesis of the ferroelectric solid solution, Pb(Zr1–xTix)O3 on a single substrate using a modified molecular beam epitaxy technique. *Applied Physics Letters*, **2007**, 90, 202907	3.4	18
174	Structure property relations in La(Mg1/2Ti1/2)O3-based solid solutions. *Journal of Applied Physics*, **2005**, 97, 033525	2.5	18
173	Structural determination and microwave properties of (x)Re(Co1/2Ti1/2)O3–(1–x)CaTiO3 (Re=La and Nd) solid solutions. *Journal of the European Ceramic Society*, **2006**, 26, 875-882	6	18
172	Domain structure-property relations in lead lanthanum zirconate titanate ceramics. *Journal of Materials Research*, **1996**, 11, 2293-2301	2.5	18
171	Multibeam Dual-Circularly Polarized Reflectarray for Connected and Autonomous Vehicles. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 3574-3585	6.8	17
170	Cold sintered LiMgPO4 based composites for low temperature co-fired ceramic (LTCC) applications. *Journal of the American Ceramic Society*, **2020**, 103, 6237-6244	3.8	17
169	Life cycle assessment and environmental profile evaluations of high volumetric efficiency capacitors. *Applied Energy*, **2018**, 220, 496-513	10.7	17
168	The atomic structure and chemistry of Fe-rich steps on antiphase boundaries in Ti-doped Bi0.9Nd0.15FeO3. *APL Materials*, **2014**, 2, 066106	5.7	17

167	The effect of Li-substitution on the M-phases of AgNbO3. *Journal of Applied Physics*, **2012**, 111, 024107	2.5	17
166	Effect of Lead Zirconate Titanate Seeds on PtxPb Formation during the Pyrolysis of Lead Zirconate Titanate Thin Films. *Journal of the American Ceramic Society*, **2004**, 85, 641-646	3.8	17
165	Ferroelectric-paraelectric phase transition in the n=2 Aurivillius phase Bi3Ti1.5W0.5O9: A neutron powder diffraction study. *Physical Review B*, **2005**, 71,	3.3	17
164	Yttrium Iron Garnet/Barium Titanate Multiferroic Composites. *Journal of the American Ceramic Society*, **2016**, 99, 1609-1614	3.8	17
163	Reactive intermediate phase cold sintering in strontium titanate.. *RSC Advances*, **2018**, 8, 20372-20378	3.7	16
162	Synthesis and characterisation of Ga-doped hexagonal BaTiO3. *Crystal Engineering*, **2002**, 5, 439-448		16
161	Synthesis and characterisation of La(Co1/2Ti1/2)O3. *Journal of the European Ceramic Society*, **2005**, 25, 433-439	6	16
160	Structure□Property Relationships of BaTi1□yGayNbyO3 (0≦y≦0.35) Ceramics. *Journal of the American Ceramic Society*, **2005**, 88, 3055-3062	3.8	16
159	Temperature-dependent dielectric and Raman spectra and microwave dielectric properties of gehlenite-type Ca2Al2SiO7 ceramics. *International Journal of Applied Ceramic Technology*, **2020**, 17, 771-777	2	16
158	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
157	Ultrabroadband dielectric spectroscopy and phonons in (Pb1□x/2Lax)(Zr0.9Ti0.1)O3. *Journal of Applied Physics*, **2010**, 108, 104101	2.5	15
156	BISMUTH NIOBATE-BASED GLASS-CERAMICS FOR DIELECTRICALLY LOADED MICROWAVE ANTENNAS. *Functional Materials Letters*, **2008**, 01, 25-30	1.2	15
155	Space group symmetry of (CaxSr1□x)TiO3determined using electron diffraction. *Journal of Physics Condensed Matter*, **2006**, 18, 2401-2408	1.8	15
154	Structure and microwave dielectric properties of BaLa4Ti4O15. *Journal of Physics Condensed Matter* , **2006**, 18, 7051-7062	1.8	15
153	Early Stages of Crystallization in Canasite-Based Glass Ceramics. *Journal of the American Ceramic Society*, **2005**, 88, 3198-3204	3.8	15
152	Kinetic aspects of the formation of seeded lead zirconate titanate thin films. *Integrated Ferroelectrics*, **2000**, 30, 261-270	0.8	15
151	Effect of Nucleating Agents on the Crystallization of Calcium Phosphate Glasses. *Journal of the American Ceramic Society*, **1996**, 79, 1934-1944	3.8	15
150	Mechanism of densification in low-temperature FLASH sintered lead free potassium sodium niobate (KNN) piezoelectrics. *Journal of Materials Chemistry C*, **2019**, 7, 14334-14341	7.1	15

149	Enhancement of densification and microwave dielectric properties in LiF ceramics via a cold sintering and post-annealing process. *Journal of the European Ceramic Society*, **2021**, 41, 1726-1729	6	15
148	Nanoscale Mapping of Bromide Segregation on the Cross Sections of Complex Hybrid Perovskite Photovoltaic Films Using Secondary Electron Hyperspectral Imaging in a Scanning Electron Microscope. *ACS Omega*, **2017**, 2, 2126-2133	3.9	14
147	Microstructure Evolution of In Situ Pulsed-Laser Crystallized Pb(Zr0.52Ti0.48)O3 Thin Films. *Journal of the American Ceramic Society*, **2016**, 99, 43-50	3.8	14
146	Origin of microcracking in YMnO3 ceramics. *Scripta Materialia*, **2012**, 66, 288-291	5.6	14
145	Designing pseudocubic perovskites with enhanced nanoscale polarization. *Applied Physics Letters*, **2017**, 111, 212902	3.4	14
144	Tungsten Bronze-Structured Temperature-Stable Dielectrics. *Journal of the American Ceramic Society*, **2007**, 90, 980-982	3.8	14
143	Microwave properties of doped lead pyroniobate. *Journal of the European Ceramic Society*, **2001**, 21, 2659-2662	6	14
142	Cold sintering of microwave dielectric ceramics and devices. *Journal of Materials Research*, **2021**, 36, 333-349	2.9	14
141	Structure and microwave dielectric properties of La5□ Sr x Ti4+x Ga1□ O17 ceramics. *Journal of Materials Science*, **2015**, 50, 3510-3516	4.3	13
140	Determination of relative in vivo osteoconductivity of modified potassium fluorrichterite glass-ceramics compared with 45S5 bioglass. *Journal of Materials Science: Materials in Medicine*, **2012**, 23, 2521-9	4.5	13
139	Terahertz and infrared studies of antiferroelectric phase transition in multiferroic Bi0.85Nd0.15FeO3. *Journal of Applied Physics*, **2011**, 110, 074112	2.5	13
138	Phase Transitions in Lanthanum-Doped Strontium Bismuth Tantalate. *Chemistry of Materials*, **2008**, 20, 6427-6433	9.6	13
137	A microscopic model for the temperature coefficient of the resonant frequency (Ef) in complex perovskites used for microwave filter. *Ferroelectrics*, **1994**, 154, 35-40	0.6	13
136	Design of a bilayer ceramic capacitor with low temperature coefficient of capacitance. *Applied Physics Letters*, **2016**, 109, 082904	3.4	13
135	Anomalous dielectric behaviour during the monoclinic to tetragonal phase transition in La(Nb0.9V0.1)O4. *Inorganic Chemistry Frontiers*, **2021**, 8, 156-163	6.8	13
134	Stoichiometry-dependent local instability in MAPbI3 perovskite materials and devices. *Journal of Materials Chemistry A*, **2018**, 6, 23578-23586	13	13
133	Mixed ionic□electronic conduction in K1/2Bi1/2TiO3. *Journal of Materials Chemistry C*, **2017**, 5, 6300-6310	7.1	12
132	p-Type/n-type behaviour and functional properties of KxNa(1-x)NbO3 (0.49□x□0.51) sintered in air and N2. *Journal of the European Ceramic Society*, **2018**, 38, 3118-3126	6	12

131	Magnetic color symmetry of lattice rotations in a diamagnetic material. *Physical Review Letters*, **2008**, 100, 257601	7.4	12
130	Microstructure-Property Relationship in Dielectric Ceramics Containing (Nb, Ti)O6 Octahedra. *Ferroelectrics*, **2004**, 302, 259-263	0.6	12
129	Composite Dielectric Ceramics Based on BaO□n2O3□iO2(Ln = Nd, La). *Japanese Journal of Applied Physics*, **2005**, 44, 3087-3090	1.4	12
128	Transmission electron microscopy of lead scandium tantalate thin-films. *Journal of Microscopy*, **1990**, 160, 213-224	1.9	12
127	Cold sintered, temperature-stable CaSnSiO5-K2MoO4 composite microwave ceramics and its prototype microstrip patch antenna. *Journal of the European Ceramic Society*, **2021**, 41, 424-429	6	12
126	Growth of BiFeO thin films by chemical solution deposition: the role of electrodes. *Physical Chemistry Chemical Physics*, **2017**, 19, 14337-14344	3.6	11
125	Characterization of Yttrium Iron Garnet/Barium Titanate Multiferroic Composites Prepared by Sol-Gel and Coprecipitation Methods. *International Journal of Applied Ceramic Technology*, **2014**, 11, 457-467	2	11
124	Enhanced tunable and pyroelectric properties of Ba(Ti0.85Sn0.15)O3 thin films with Bi1.5Zn1.0Nb1.5O7 buffer layers. *Applied Physics Letters*, **2010**, 96, 082901	3.4	11
123	Magnetic, ferroelectric, and dielectric properties of Bi(Sc0.5Fe0.5)O3□bTiO3 thin films. *Journal of Applied Physics*, **2009**, 105, 074101	2.5	11
122	Low sintering temperature high permittivity glass ceramic composites for dielectric loaded microwave antennas. *Advances in Applied Ceramics*, **2011**, 110, 387-393	2.3	11
121	High dielectric tunability in lead niobate pyrochlore films. *Applied Physics Letters*, **2012**, 100, 082901	3.4	11
120	Effect of Divalent Dopants on Properties of Ba3.75Nd9.5Ti18O54 Microwave Dielectric Resonators. *Materials Research Society Symposia Proceedings*, **1996**, 453, 495		11
119	Antiferroelectrics: History, fundamentals, crystal chemistry, crystal structures, size effects, and applications. *Journal of the American Ceramic Society*, **2021**, 104, 3775-3810	3.8	11
118	Comparative environmental profile assessments of commercial and novel material structures for solid oxide fuel cells. *Applied Energy*, **2019**, 235, 1300-1313	10.7	11
117	Additively manufactured ultra-low sintering temperature, low loss Ag2Mo2O7 ceramic substrates. *Journal of the European Ceramic Society*, **2021**, 41, 394-401	6	11
116	New low loss A9B9O31 (A□La; B□Ti, Mg, Sc, Fe, Al, Ga) ceramics for microwave applications. *Journal of Alloys and Compounds*, **2015**, 646, 368-371	5.7	10
115	Mechanical strain engineering of dielectric tunability in polycrystalline SrTiO3 thin films. *Journal of Materials Chemistry C*, **2018**, 6, 2467-2475	7.1	10
114	Layered composite thick films for dielectric applications. *Journal of the European Ceramic Society*, **2012**, 32, 4319-4326	6	10

113	Thermochemical Reactions Between PZT and Ag/Pd Powders: Relevance to Cofiring of Multilayer Actuators. *Journal of the American Ceramic Society*, **2008**, 91, 1013-1018	3.8	10
112	Temperature Dependence of Microwave and THz Dielectric Response in Srn + 1TinO3n + 1 (n = 1). *Integrated Ferroelectrics*, **2004**, 62, 199-203	0.8	10
111	Properties of the microwave dielectric phase Ba6−3XNd8+2XTi18O54. *Ferroelectrics*, **1999**, 228, 271-282	0.6	10
110	Preparation of Composite Electrospun Membranes Containing Strontium-Substituted Bioactive Glasses for Bone Tissue Regeneration. *Macromolecular Materials and Engineering*, **2016**, 301, 972-981	3.9	10
109	Microwave properties and structure of La-Si-B-O glass-ceramics for applications in GHz electronics. *Journal of the European Ceramic Society*, **2017**, 37, 2137-2142	6	9
108	Synthesis and characterization of Bi1−xNdxFeO3 thin films deposited using a high throughput physical vapour deposition technique. *Thin Solid Films*, **2013**, 531, 56-60	2.2	9
107	Guar gum: A novel binder for ceramic extrusion. *Ceramics International*, **2017**, 43, 16727-16735	5.1	9
106	Structural phase transitions in AgTa0.5Nb0.5O3 thin films. *Journal of Applied Physics*, **2010**, 107, 123517	2.5	9
105	Microstructural studies and electrical properties of Mg-doped SrTiO3 thin films. *Acta Materialia*, **2007**, 55, 4947-4954	8.4	9
104	X-ray diffraction data for the new ferroelectric tetragonal tungsten bronze phases, Ba2RETi2M3O15:M=Nb and RE=La, Pr, Nd, Sm, Gd, Dy, (Bi);M=Ta and RE=La, Nd. *Powder Diffraction*, **2005**, 20, 43-46	1.8	9
103	Modelling the particle contact influence on the Joule heating and temperature distribution during FLASH sintering. *Journal of the European Ceramic Society*, **2020**, 40, 1205-1211	6	9
102	Porous hydroxyapatite-bioactive glass hybrid scaffolds fabricated via ceramic honeycomb extrusion. *Journal of the American Ceramic Society*, **2018**, 101, 3541-3556	3.8	8
101	Optimization of magnetocaloric properties of arc-melted and spark plasma-sintered LaFe11.6Si1.4. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	8
100	In vitro biocompatibility of modified potassium fluorrichterite and potassium fluorrichterite-fluorapatite glass-ceramics. *Journal of Materials Science: Materials in Medicine*, **2011**, 22, 2065-70	4.5	8
99	High throughput synthesis and characterization of the PbnNb2O5+n (0.5. *Acta Materialia*, **2011**, 59, 2201-2209	8.4	8
98	Octahedral tilting, domain structure and piezoelectricity in perovskites and related ceramics. *Journal of Electroceramics*, **2007**, 19, 3-10	1.5	8
97	Effects of Octahedral Tilting on the Piezoelectric Properties of Sr-Doped Lead Zirconate Titanate. *Ferroelectrics*, **2002**, 268, 125-130	0.6	8
96	Perovskite NdTiO3 in Sr- and Ca-doped BaO-Nd2O3-TiO2 Microwave Dielectric Ceramics. *Journal of Materials Research*, **1999**, 14, 1576-1580	2.5	8

95	The cyan-green luminescent behaviour of nitrided Ba9Y2Si6O24: Eu2+ phosphors for W-LED. *Ceramics International*, **2018**, 44, S2-S6	5.1	8
94	Advances in Cold Sintering : Improving energy consumption and unlocking new potential in component manufacturing. *Johnson Matthey Technology Review*, **2020**, 64, 219-232	2.5	7
93	Stabilisation of Fe2O3-rich Perovskite Nanophase in Epitaxial Rare-earth Doped BiFeO3 Films. *Scientific Reports*, **2015**, 5, 13066	4.9	7
92	Bi(Me)O3PbTiO3 high TC piezoelectric multilayers. *Materials Technology*, **2013**, 28, 247-253	2.1	7
91	Chemical solution deposited silver tantalate niobate, Ag x (Ta0.5Nb0.5)O3y , thin films on (111)Pt/Ti/SiO2/(100)Si substrates. *Journal of Sol-Gel Science and Technology*, **2007**, 42, 407-414	2.3	7
90	The effect of investment materials on the surface of cast fluorcanasite glasses and glass-ceramics. *Journal of Materials Science: Materials in Medicine*, **2008**, 19, 839-46	4.5	7
89	Space Group Determination of Ba6-3xNd8+2xTi18O54. *Journal of the American Ceramic Society*, **2004**, 82, 1336-1338	3.8	7
88	TEM studies of RF magnetron-sputtered thin films. *Journal of Materials Science: Materials in Electronics*, **1992**, 3, 51-63	2.1	7
87	The Influence of La Doping and Heterogeneity on the Thermoelectric Properties of Sr3Ti2O7 Ceramics. *Journal of the American Ceramic Society*, **2016**, 99, 515-522	3.8	7
86	Effect of Li3PO4 addition on the sintering temperature, phase, microstructure, and electrical properties of BaTiO3. *Journal of Materials Science*, **2015**, 50, 1752-1759	4.3	6
85	Life cycle assessment of functional materials and devices: Opportunities, challenges, and current and future trends. *Journal of the American Ceramic Society*, **2019**, 102, 7037-7064	3.8	6
84	Octahedral tilt transitions in relaxed epitaxial Pb(Zr1xTix)O3 films. *Journal of Applied Physics*, **2011** , 109, 094104	2.5	6
83	TEM observations of domains in ferroelectric and nonferroelectric perovskites. *Ferroelectrics*, **1995**, 172, 115-125	0.6	6
82	Microstructural Characterization of Ferroelectric Thin Films in Transverse Section. *Journal of the American Ceramic Society*, **1991**, 74, 1635-1638	3.8	6
81	Microstructure and microwave dielectric properties of 3D printed low loss Bi2Mo2O9 ceramics for LTCC applications. *Applied Materials Today*, **2020**, 21, 100862	6.6	6
80	In situ poling X-ray diffraction studies of lead-free BiFeO3SrTiO3 ceramics. *Materials Today Physics*, **2021**, 19, 100426	8	6
79	Materials matter in phosphorus sustainability. *MRS Bulletin*, **2020**, 45, 7-10	3.2	5
78	Fabrication of multilayer dielectrically loaded antennas using aqueous electrophorectic deposition of polyether ether ketone. *Journal of Materials Science*, **2014**, 49, 4121-4126	4.3	5

77	La and Sm Co-doped SrTiO 3- Thermoelectric Ceramics. *Materials Today: Proceedings*, **2017**, 4, 12360-12367	1.4	5
76	Coherently strained epitaxial Pb(Zr1Tix)O3 thin films. *Journal of Applied Physics*, **2013**, 114, 164104	2.5	5
75	Multiferroic properties of Bi(Fe0.5Sc0.5)O3PbTiO3thin films. *Physica Scripta*, **2010**, T139, 014003	2.6	5
74	Optimization of synthesis of the solid solution, Pb(Zr1Tix)O3 on a single substrate using a high-throughput modified molecular-beam epitaxy technique. *Journal of Materials Research*, **2009**, 24, 164-172	2.5	5
73	Tilt transitions in compressively strained AgTa0.5Nb0.5O3 thin films. *Physical Review B*, **2011**, 84,	3.3	5
72	Microwave Dielectric Properties and Microstructures of RETiNbO6 (RE=La, Sm and Y). *Advanced Materials Research*, **2011**, 197-198, 285-289	0.5	5
71	Osteoconductivity of modified fluorcanasite glass-ceramics for bone tissue augmentation and repair. *Journal of Biomedical Materials Research - Part A*, **2010**, 94, 760-8	5.4	5
70	Coreshell microstructures in 0.68Pb(Fe2/3W1/3)O3.32PbTiO3at the morphotropic phase boundary. *Journal of Physics Condensed Matter*, **2005**, 17, 2167-2175	1.8	5
69	Lead titanate glass-ceramics derived from a silicate-based melt. *Journal of Materials Research*, **2005**, 20, 1316-1323	2.5	5
68	Electron microscopy of lead pyroniobate. *Journal of the European Ceramic Society*, **2001**, 21, 2123-2126	6	5
67	Microstructural evolution during pyrolysis of triol-based sol-gel single-layer Pb(Zr0.53Ti0.47)O3 thin films. *Journal of Materials Research*, **2002**, 17, 2066-2074	2.5	5
66	TfC13. Rapid thermal processing of PZT thin films. *Ferroelectrics*, **1992**, 134, 285-290	0.6	5
65	The observation of a Mo,Fe-rich phase in an oxidized 9 wt% Cr-1 wt% Mo steel that exhibits fivefold symmetry. *Philosophical Magazine Letters*, **1988**, 57, 247-253	1	5
64	Analytical electron microscopy of oxide/metal interface on some engineering materials. *Materials Science and Technology*, **1988**, 4, 391-397	1.5	5
63	The effect of substrate clamping on the paraelectric to antiferroelectric phase transition in Nd-doped BiFeO3 thin films. *Thin Solid Films*, **2016**, 616, 767-772	2.2	5
62	Combinatorial synthesis and screening of (Ba,Sr)(Ti,Mn)O3 thin films for optimization of tunable co-planar waveguides. *Journal of Materials Chemistry C*, **2018**, 6, 6222-6228	7.1	5
61	Laser sintering of electrophoretically deposited (EPD) Ti3SiC2 MAX phase coatings on titanium. *Surface and Coatings Technology*, **2019**, 366, 199-203	4.4	4
60	Maghemite-like regions at the crossing of two antiphase boundaries in doped BiFeO3. *Materials Science and Technology*, **2016**, 32, 242-247	1.5	4

59	Synthesis, microstructure and microwave dielectric properties of Ca4-xMgxLa2Ti5O17 ceramics. *Journal of Materials Science: Materials in Electronics*, **2012**, 23, 746-752	2.1	4
58	Tuning dielectric properties in ceramics with anisotropic grain structure: The effect of sintering temperature on BaLa4Ti4O15. *Materials and Design*, **2017**, 113, 377-383	8.1	4
57	Phase transitions in LixAg1−x(Nb0.5Ta0.5)O3 solid solutions. *Journal of Applied Physics*, **2010**, 108, 064117	2.5	4
56	(111)(p) microtwinning in SrRuO(3) thin films on (001)(p) LaAlO(3). *Acta Crystallographica Section B: Structural Science*, **2009**, 65, 694-8		4
55	BiNbO4-Based Glass–Ceramic Composites for Microwave Applications. *Journal of the American Ceramic Society*, **2009**, 92, 1981-1985	3.8	4
54	Atomic scale structure and chemistry of anti-phase boundaries in (Bi0.85Nd0.15)(Fe0.9Ti0.1)O3ceramics. *Journal of Physics: Conference Series*, **2012**, 371, 012036	0.3	4
53	Engineered sintering aids for PbO-based electroceramics. *Journal of Electroceramics*, **2007**, 18, 77-85	1.5	4
52	Thermal analysis and phase evolution of ferroelectric PbTiO3 obtained from silicate and borate based glasses. *Journal of Materials Science*, **2008**, 43, 1265-1269	4.3	4
51	Crystallization of Gallium Lanthanum Sulfide Glasses. *Journal of the American Ceramic Society*, **2005**, 81, 1913-1918	3.8	4
50	Correlation of microstructures with electrical performance of Ag-based metal electrode–PZT electroceramic interfaces. *Journal of the European Ceramic Society*, **2005**, 25, 1647-1655	6	4
49	Evaluation of Modified Fluorcanasite Glass-Ceramics for Bone Tissue Augmentation. *Key Engineering Materials*, **2005**, 284-286, 557-560	0.4	4
48	Novel Fe2O3-Containing Glass Ionomer Cements: Glass Characterisation. *Key Engineering Materials*, **2005**, 284-286, 799-802	0.4	4
47	Microstructural characterisation of ferroelectric thin films in transverse section. *Microelectronic Engineering*, **1995**, 29, 277-284	2.5	4
46	Temperature Dependent Piezoelectric Properties of Lead-Free (1-x)K0.6Na0.4NbO3–xBiFeO3 Ceramics. *Frontiers in Materials*, **2020**, 7,	4	4
45	Tailoring the Mechanical and Degradation Performance of Mg-2.0Zn-0.5Ca-0.4Mn Alloy Through Microstructure Design. *Jom*, **2020**, 72, 1880-1891	2.1	3
44	Spark plasma texturing: A strategy to enhance the electro-mechanical properties of lead-free potassium sodium niobate ceramics. *Applied Materials Today*, **2020**, 19, 100566	6.6	3
43	Piezoelectrics: Influence of a Single Grain Boundary on Domain Wall Motion in Ferroelectrics (Adv. Funct. Mater. 10/2014). *Advanced Functional Materials*, **2014**, 24, 1408-1408	15.6	3
42	Enhancing Properties in Microwave Ceramics Using a Designer Sintering Aid. *Journal of the American Ceramic Society*, **2015**, 98, 3891-3896	3.8	3

41	The effect of processing conditions on the phase, microstructure and dielectric properties of SrCa4Nb4TiO17 and Ca5Nb4TiO17 microwave ceramics. *Materials Science-Poland*, **2012**, 30, 98-104	0.6	3
40	Ba6-3XNd8+2XTi18O54 Microwave dielectric resonators. *Ferroelectrics*, **1999**, 223, 293-300	0.6	3
39	Porous Hydroxyapatite Scaffolds Fabricated From Nano-Sized Powder Via Honeycomb Extrusion. *Advanced Materials Letters*, **2017**, 8, 377-385	2.4	3
38	A Chemical Element Sustainability Index. *Resources, Conservation and Recycling*, **2021**, 166, 105317	11.9	3
37	The influence of Fe2O3 reagent grade purity on the electrical properties of undoped LaFeO3 ceramics: A cautionary reminder. *Journal of the European Ceramic Society*, **2021**, 41, 4189-4198	6	3
36	The Role of Cycle Life on the Environmental Impact of Li6.4La3Zr1.4Ta0.6O12 based Solid-State Batteries. *Advanced Sustainable Systems*, **2021**, 5, 2000241	5.9	3
35	How to extract reliable core-volume fractions from core-shell polycrystalline microstructures using cross sectional TEM micrographs. *Journal of the European Ceramic Society*, **2017**, 37, 2795-2801	6	2
34	Predicting the energy storage density in poly(methyl methacrylate)/methyl ammonium lead iodide composites. *Journal of Applied Physics*, **2019**, 125, 214103	2.5	2
33	Piezoelectric reconfigurable antenna **2013**,		2
32	Unveiling the Role of CNTs in the Phase Formation of One-Dimensional Ferroelectrics. *Langmuir*, **2015**, 31, 6713-20	4	2
31	Nanorods: Novel Nanorod Precipitate Formation in Neodymium and Titanium Codoped Bismuth Ferrite (Adv. Funct. Mater. 6/2013). *Advanced Functional Materials*, **2013**, 23, 654-654	15.6	2
30	Structure and Microstructure of Y-doped Strontium Titanate Ceramics. *Microscopy and Microanalysis*, **2008**, 14, 11-12	0.5	2
29	Castability and Biocompatibility of Novel Fluorcanasite Glass-Ceramics. *Key Engineering Materials*, **2006**, 309-311, 293-296	0.4	2
28	TEM Characterization of Single- and Multilayer Triol-Based Sol Gel PZT (53/47) Thin Films. *Journal of the American Ceramic Society*, **2004**, 87, 221-226	3.8	2
27	Origin of Porosity in Triol Sol-Gel PbZr 53 Ti 47 O 3 Single Layer Thin Films Deposited on Pt/Ti/SiO 2 /Si Substrates. *Ferroelectrics*, **2002**, 271, 353-358	0.6	2
26	Microdomain fluctuations in lead scandium tantalate (PST) observed by high resolution transmission electron microscopy. *Ferroelectrics*, **1993**, 140, 225-230	0.6	2
25	The Role of Particle Contact in Densification of FLASH Sintered Potassium Sodium Niobate. *European Journal of Inorganic Chemistry*, **2020**, 2020, 3720-3728	2.3	2
24	Characterizing oxygen atoms in perovskite and pyrochlore oxides using ADF-STEM at a resolution of a few tens of picometers. *Acta Materialia*, **2021**, 208, 116717	8.4	2

23	Direct ink writing of bismuth molybdate microwave dielectric ceramics. *Ceramics International*, **2021**, 47, 7625-7631	5.1	2
22	Tailoring Ferroelectric Properties of 0.37BiScO3□0.63PbTiO3 Thin Films Using a Multifunctional LaNiO3 Interlayer. *Crystal Growth and Design*, **2018**, 18, 4037-4044	3.5	2
21	Phase transitions and octahedral rotations in epitaxial Ag(TaxNb1□)O3 thin films under tensile strain. *Journal of Applied Physics*, **2015**, 117, 085309	2.5	1
20	Coherent Growth of □Fe2O3 in Ti and Nd Co-doped BiFeO3 Thin Films. *Materials Research Letters*, **2016**, 4, 168-173	7.4	1
19	Linking sintering stresses to nano modification in the microstructure of BaLa4Ti4O15 by transmission electron microscopy. *Materials Characterization*, **2018**, 142, 1-8	3.9	1
18	Electronically Beam-steerable Dual-band Reflectarray for Satellite Communications **2019**,		1
17	Microstructures of alkoxide-derived barium osumilite (BaMg2Al6Si9O30) glass ceramics. *Journal of Sol-Gel Science and Technology*, **1997**, 8, 381-384	2.3	1
16	Microstructural Characterization of Thick PZT films on Cu Foils Deposited by Electrophoresis. *Microscopy and Microanalysis*, **2008**, 14, 23-26	0.5	1
15	Synthesis and Characterization of BaTi1□GaxO3□(0x0.15) Ceramics. *Journal of the American Ceramic Society*, **2006**, 89, 060427083300029-???	3.8	1
14	Crystallization in 70Ga2S3.30La2S3(mol%) Glasses as a Function of Oxide/Hydroxide Concentration. *Journal of the American Ceramic Society*, **2004**, 83, 617-622	3.8	1
13	Effect of octahedral tilt transitions on the properties of perovskites and related materials. *Ferroelectrics*, **1999**, 222, 143-152	0.6	1
12	Origin of improved tunability and loss in N2 annealed barium strontium titanate films. *Physical Review Materials*, **2020**, 4,	3.2	1
11	Raman spectroscopy of CaTiO3-based perovskite solid solutions **2004**, 19, 488		1
10	Synthesis and dielectric characterisation of a low loss BaSrTiO3/ABS ceramic/polymer composite for fused filament fabrication additive manufacturing. *Additive Manufacturing*, **2022**, 55, 102844	6.1	1
9	Microstructure evaluation of titanate based layered perovskites: constrained vs. free sintering. *Microscopy and Microanalysis*, **2015**, 21, 92-93	0.5	
8	Synthesis of magnetocaloric LaFe11.6Si1.4 alloy by spark plasma sintering. *Journal of Physics: Conference Series*, **2017**, 903, 012041	0.3	
7	Atomic-resolution STEM imaging and EELS-SI of defects in BiFeO3ceramics co-doped with Nd and Ti. *Journal of Physics: Conference Series*, **2012**, 371, 012034	0.3	
6	Ferroelectric Domain Studies of KNN Single Crystals by Piezo-force and Transmission Electron Microscopy. *Microscopy and Microanalysis*, **2012**, 18, 113-114	0.5	

5	Synthesis of the Ferroelectric Solid Solution, Pb(Zr1-xTix)O3 on a Single Substrate Using a Modified Molecular Beam Epitaxy Technique. *Materials Research Society Symposia Proceedings*, **2007**, 1034, 134	
4	HRTEM Study of a New Non-Stoichiometric BaTiO(3-)Structure. *Microscopy and Microanalysis*, **2004**, 10, 992-993	0.5
3	Origin of Ferroelectricity in Aurivillius Compounds. *Materials Research Society Symposia Proceedings* , **2000**, 658, 1191	
2	Solution based approaches for the morphology control of BaTiO3 particulates. *Processing and Application of Ceramics*, **2010**, 4, 115-125	1.4
1	Finite element study of the effect of particle interaction on the energy storage density of composite dielectrics. *Energy Procedia*, **2018**, 151, 129-134	2.3