

Derek C Sinclair

List of Publications by Year in descending order

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213
papers

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citations

22099

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docs citations

227
times ranked

9546
citing authors

#	ARTICLE	IF	CITATIONS
1	Electroceramics: Characterization by Impedance Spectroscopy. <i>Advanced Materials</i> , 1990, 2, 132-138.	11.1	2,163
2	CaCu ₃ Ti ₄ O ₁₂ : One-step internal barrier layer capacitor. <i>Applied Physics Letters</i> , 2002, 80, 2153-2155.	1.5	1,498
3	Impedance and modulus spectroscopy of semiconducting BaTiO ₃ showing positive temperature coefficient of resistance. <i>Journal of Applied Physics</i> , 1989, 66, 3850-3856.	1.1	1,116
4	A family of oxide ion conductors based on the ferroelectric perovskite Na _{0.5} Bi _{0.5} TiO ₃ . <i>Nature Materials</i> , 2014, 13, 31-35.	13.3	715
5	Characterization of grain boundary impedances in fine- and coarse-grained CaCu ₃ Ti ₄ O ₁₂ ceramics. <i>Physical Review B</i> , 2006, 73, .	1.1	443
6	Ultrahigh energy storage density lead-free multilayers by controlled electrical homogeneity. <i>Energy and Environmental Science</i> , 2019, 12, 582-588.	15.6	393
7	Electrical and structural characteristics of lanthanum-doped barium titanate ceramics. <i>Journal of Applied Physics</i> , 1999, 86, 6355-6366.	1.1	333
8	Characterization of Electrical Materials, Especially Ferroelectrics, by Impedance Spectroscopy. , 1997, 1, 65-71.		325
9	Effects of sintering temperature on the internal barrier layer capacitor (IBLC) structure in CaCu ₃ Ti ₄ O ₁₂ (CCTO) ceramics. <i>Journal of the European Ceramic Society</i> , 2012, 32, 3313-3323.	2.8	277
10	Characterization of Lanthanum-Doped Barium Titanate Ceramics Using Impedance Spectroscopy. <i>Journal of the American Ceramic Society</i> , 2001, 84, 531-538.	1.9	270
11	Novel high capacitance materials:- BaTiO ₃ :La and CaCu ₃ Ti ₄ O ₁₂ . <i>Journal of the European Ceramic Society</i> , 2004, 24, 1439-1448.	2.8	256
12	Superior energy density through tailored dopant strategies in multilayer ceramic capacitors. <i>Energy and Environmental Science</i> , 2020, 13, 2938-2948.	15.6	212
13	Dramatic Influence of A-Site Nonstoichiometry on the Electrical Conductivity and Conduction Mechanisms in the Perovskite Oxide Na _{0.5} Bi _{0.5} TiO ₃ . <i>Chemistry of Materials</i> , 2015, 27, 629-634.	3.2	210
14	Use of Raman spectroscopy to determine the site occupancy of dopants in BaTiO ₃ . <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	209
15	Hydrothermal synthesis and characterisation of BaTiO ₃ fine powders: precursors, polymorphism and properties. <i>Journal of Materials Chemistry</i> , 1999, 9, 83-91.	6.7	204
16	The route to resource-efficient novel materials. <i>Nature Materials</i> , 2011, 10, 899-901.	13.3	190
17	Influence of Mn doping on the semiconducting properties of CaCu ₃ Ti ₄ O ₁₂ ceramics. <i>Applied Physics Letters</i> , 2006, 88, 232903.	1.5	184
18	Origin(s) of the apparent high permittivity in CaCu ₃ Ti ₄ O ₁₂ ceramics: clarification on the contributions from internal barrier layer capacitor and sample-electrode contact effects. <i>Journal of Applied Physics</i> , 2009, 106, .	1.1	184

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19	Charge Compensation Mechanisms in La-Doped BaTiO ₃ . , 2001, 6, 219-232.		174
20	High-Figure-of-Merit Thermoelectric La-Doped A-Site-Deficient SrTiO ₃ Ceramics. Chemistry of Materials, 2016, 28, 925-935.	3.2	172
21	A novel enhancement of ionic conductivity in the cation-deficient apatite La _{9.33} (SiO ₄) ₆ O ₂ . Journal of Materials Chemistry, 2001, 11, 1978-1979.	6.7	159
22	Effect of atmosphere on the PTCR properties of BaTiO ₃ ceramics. Journal of Materials Science, 1994, 29, 6061-6068.	1.7	152
23	Defect chemistry and electrical properties of sodium bismuth titanate perovskite. Journal of Materials Chemistry A, 2018, 6, 5243-5254.	5.2	145
24	Impedance Spectroscopy of (Bi _{1/2} Na _{1/2})TiO ₃ Ceramics Modified with (K _{0.5} Na _{0.5})NbO ₃ . Journal of the American Ceramic Society, 2014, 97, 1523-1529.	1.9	139
25	An Alternative Explanation for the Origin of the Resistivity Anomaly in La-Doped BaTiO ₃ . Journal of the American Ceramic Society, 2001, 84, 474-76.	1.9	133
26	BaTiO ₃ -Based Ceramics for Tunable Microwave Applications. Journal of the American Ceramic Society, 2004, 87, 1082-1087.	1.9	132
27	Structure and electrical properties of oxygen-deficient hexagonal BaTiO ₃ . Journal of Materials Chemistry, 1999, 9, 1327-1331.	6.7	123
28	Doping mechanisms and electrical properties of La-doped BaTiO ₃ ceramics. Solid State Sciences, 2001, 3, 1205-1210.	0.8	121
29	Extrinsic origins of the apparent relaxorlike behavior in CaCu ₃ Ti ₄ O ₁₂ ceramics at high temperatures: A cautionary tale. Journal of Applied Physics, 2011, 109, .	1.1	121
30	Fatigue resistant lead-free multilayer ceramic capacitors with ultrahigh energy density. Journal of Materials Chemistry A, 2020, 8, 11414-11423.	5.2	114
31	Relaxor ferroelectric-like high effective permittivity in leaky dielectrics/oxide semiconductors induced by electrode effects: A case study of CuO ceramics. Journal of Applied Physics, 2009, 105, .	1.1	109
32	High strain (0.4%) Bi(Mg _{2/3} Nb _{1/3})O ₃ -BaTiO ₃ -BiFeO ₃ lead-free piezoelectric ceramics and multilayers. Journal of the American Ceramic Society, 2018, 101, 5428-5442.	1.9	106
33	Comment on the origin(s) of the giant permittivity effect in CaCu ₃ Ti ₄ O ₁₂ single crystals and ceramics. Journal of Materials Chemistry, 2009, 19, 5916.	6.7	105
34	Electrical properties of AlTaO ₃ single crystal. Physical Review B, 1989, 39, 13486-13492.	1.1	102
35	Novel Doping Mechanism for Very-High-Permittivity Barium Titanate Ceramics. Journal of the American Ceramic Society, 1998, 81, 1957-1960.	1.9	101
36	Origin of the large electrostrain in BiFeO ₃ -BaTiO ₃ based lead-free ceramics. Journal of Materials Chemistry A, 2019, 7, 21254-21263.	5.2	101

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37	Non-stoichiometry in $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ (CCTO) ceramics. RSC Advances, 2013, 3, 14580.	1.7	98
38	Polar order and diffuse scatter in $\text{Ba}(\text{Ti}^{1-x}\text{Zr}^x)\text{O}_3$ ceramics. Journal of Applied Physics, 2009, 106, .	1.1	95
39	Microwave Dielectric Properties of Low Firing Temperature $\text{Bi}_{2-x}\text{W}_x\text{O}_9$ Ceramics. Journal of the American Ceramic Society, 2008, 91, 1338-1341.	1.9	94
40	Optimising dopants and properties in BiMeO_3 (Me = Al, Ga, Sc, Y, $\text{Mg}_{2/3}\text{Nb}_{1/3}$, $\text{Zn}_{2/3}\text{Nb}_{1/3}$, $\text{Zn}_{1/2}\text{Ti}_{1/2}$) lead-free BaTiO_3 - BiFeO_3 based ceramics for actuator applications. Journal of the European Ceramic Society, 2018, 38, 4220-4231.	2.8	92
41	Ti Doping to Reduce Conductivity in $\text{Bi}_{0.85}\text{Nd}_{0.15}\text{FeO}_3$ Ceramics. Advanced Functional Materials, 2011, 21, 3737-3743.	7.8	87
42	Are lead-free piezoelectrics more environmentally friendly?. MRS Communications, 2017, 7, 1-7.	0.8	84
43	Donor-doping and reduced leakage current in Nb-doped $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$. Applied Physics Letters, 2015, 106, .	1.5	83
44	Optimisation of oxide-ion conductivity in acceptor-doped $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ perovskite: approaching the limit?. Journal of Materials Chemistry A, 2017, 5, 21658-21662.	5.2	82
45	Comment on the use of calcium as a dopant in X8R BaTiO_3 -based ceramics. Applied Physics Letters, 2007, 90, 142914.	1.5	81
46	A new potential model for barium titanate and its implications for rare-earth doping. Journal of Materials Chemistry, 2011, 21, 4861.	6.7	81
47	Synthesis, Crystal Structure, and Characterization of $\text{Ba}(\text{Ti}_{1/2}\text{Mn}_{1/2})\text{O}_3$: A High Permittivity 12R-Type Hexagonal Perovskite. Chemistry of Materials, 2004, 16, 2007-2015.	3.2	80
48	Modulus spectroscopy of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ ceramics: clues to the internal barrier layer capacitance mechanism. RSC Advances, 2013, 3, 7030.	1.7	77
49	Controlling mixed conductivity in $\text{Na}_{1/2}\text{Bi}_{1/2}\text{TiO}_3$ using A-site non-stoichiometry and Nb-donor doping. Journal of Materials Chemistry C, 2016, 4, 5779-5786.	2.7	77
50	Enhanced bulk conductivity of A-site divalent acceptor-doped non-stoichiometric sodium bismuth titanate. Solid State Ionics, 2017, 299, 38-45.	1.3	75
51	Impedance Spectroscopy of $\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3$ Based High-Temperature Dielectrics. Journal of the American Ceramic Society, 2014, 97, 2825-2831.	7.3	74
52	<i>In situ</i> Raman spectroscopy of A-site doped barium titanate. Applied Physics Letters, 2007, 91, .	1.5	72
53	Origin of the high permittivity in $(\text{La}_{0.4}\text{Ba}_{0.4}\text{Ca}_{0.2})(\text{Mn}_{0.4}\text{Ti}_{0.6})\text{O}_3$ ceramics. Journal of Applied Physics, 2005, 98, 084101.	1.1	71
54	Dielectric properties of spark-plasma-sintered BaTiO_3 . Journal of Materials Science, 1999, 34, 917-924.	1.7	70

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55	Energetics of Donor Doping, Metal Vacancies, and Oxygen Loss in A-Site Rare Earth Doped BaTiO ₃ . <i>Advanced Functional Materials</i> , 2013, 23, 3925-3928.	7.8	70
56	Ba ₈ ZnTa ₆ O ₂₄ : a high-Q microwave dielectric from a potentially diverse homologous series. <i>Applied Physics Letters</i> , 2003, 82, 4537-4539.	1.5	68
57	Anomalous Increase of Dielectric Permittivity in Sr-Doped CCTO Ceramics Ca _{1-x} Sr _x Cu ₃ Ti ₄ O ₁₂ (0 ≤ x ≤ 0.7843). <i>Applied Physics Letters</i> , 2006, 89, 212904.	1.5	66
58	High intrinsic permittivity in Na _{1-2x} Bi _{2x} Cu ₃ Ti ₄ O ₁₂ . <i>Applied Physics Letters</i> , 2006, 89, 212904.	1.5	66
59	Crystal Structure and Microwave Dielectric Properties of Alkaline Earth Hafnates, AHfO ₃ (A=Ba, Sr, Ca). <i>Journal of the American Ceramic Society</i> , 2008, 91, 893-901.	1.9	66
60	High-temperature (1-x)BiSc _{1-2x} Fe _{1-2x} O _{3-x} PbTiO ₃ piezoelectric ceramics. <i>Applied Physics Letters</i> , 2005, 87, 242901.	1.5	63
61	Anomalous Curie temperature behavior of A-site Gd-doped BaTiO ₃ ceramics: The influence of strain. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	63
62	High Ionic Conductivity with Low Degradation in A-Site Strontium-Doped Nonstoichiometric Sodium Bismuth Titanate Perovskite. <i>Chemistry of Materials</i> , 2016, 28, 5269-5273.	3.2	61
63	Suppression of electrical conductivity and switching of conduction mechanisms in $\tilde{\text{stoichiometric}}^{\text{TM}}$ (Na _{0.5-x} Bi _{0.5-x} Ti _{3-x}) _{1-x} (BiAlO ₃) _x (0 ≤ x ≤ 0.08) solid solutions. <i>Journal of Materials Chemistry C</i> , 2017, 5, 7243-7252.	2.7	58
64	High quality factor cold sintered Li ₂ MoO ₄ BaFe ₁₂ O ₁₉ composites for microwave applications. <i>Acta Materialia</i> , 2019, 166, 202-207.	3.8	58
65	Synthesis and electrical properties of Nb-doped BaTiO ₃ . <i>Journal of Materials Chemistry</i> , 2006, 16, 3114-3119.	6.7	57
66	Robust Antiferromagnetism and Structural Disorder in Bi _x Ca _{1-x} FeO ₃ Perovskites. <i>Chemistry of Materials</i> , 2009, 21, 2085-2093.	3.2	54
67	The Influence of A-Site Rare Earth Ion Size in Controlling the Curie Temperature of Ba _{1-x} RE _x Ti ₄ O ₃ . <i>Advanced Functional Materials</i> , 2013, 23, 491-495.	7.8	51
68	The influence of A-cation disorder on the Curie temperature of ferroelectric ATiO ₃ perovskites. <i>Chemical Communications</i> , 1999, , 1497-1498.	2.2	50
69	Microwave Dielectric Properties of Gallium Doped Hexagonal Barium Titanate Ceramics. <i>Journal of the American Ceramic Society</i> , 2003, 86, 511-513.	1.9	50
70	Investigation of high Curie temperature (1-x)BiSc _{1-y} FeyO _{3-x} PbTiO ₃ piezoelectric ceramics. <i>Journal of Applied Physics</i> , 2009, 106, .	1.1	50
71	Temperature stable and fatigue resistant lead-free ceramics for actuators. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	49
72	Localized electrical characterization of the giant permittivity effect in CaCu ₃ Ti ₄ O ₁₂ ceramics. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	48

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73	The application of a new potential model to the rare-earth doping of SrTiO ₃ and CaTiO ₃ . Journal of Materials Chemistry C, 2013, 1, 1574.	2.7	48
74	Characterization of (Bi _{1/2} Na _{1/2})TiO ₃ using electric modulus spectroscopy. Journal of Materials Science Letters, 1997, 16, 422-425.	0.5	47
75	The extrinsic origins of high permittivity and its temperature and frequency dependence in Y _{0.5} Ca _{0.5} MnO ₃ and La _{1.5} Sr _{0.5} NiO ₄ ceramics. Journal of Applied Physics, 2012, 111, .	1.1	46
76	Average and Local Structure of (1-x)BaTiO ₃ -xLaYO ₃ (0 ≤ x ≤ 0.50) Ceramics. Journal of the American Ceramic Society, 2010, 93, 4174-4181.	1.9	45
77	Ferroelectric, electrical, and structural properties of Dy and Sc co-doped BaTiO ₃ . Journal of Materials Chemistry, 2011, 21, 6292.	6.7	45
78	A-Site Strain and Displacement in Ba _{1-x} CaxTiO ₃ and Ba _{1-x} SrxTiO ₃ and the Consequences for the Curie Temperature. Chemistry of Materials, 2014, 26, 6104-6112.	3.2	45
79	Influence of Nonstoichiometry on Extrinsic Electrical Conduction and Microwave Dielectric Loss of BaCo _{1/3} Nb _{2/3} O ₃ Ceramics. Journal of the American Ceramic Society, 2010, 93, 4087-4095.	1.9	44
80	Structural and electrical characterization of CeAlO ₃ ceramics. Journal of Applied Physics, 2007, 101, 064110.	1.1	42
81	Structure and Microwave Dielectric Properties of Ca _{1-x} YxTiAl _x O ₃ (CYTA) Ceramics. Journal of Materials Research, 2005, 20, 2391-2399.	1.2	41
82	Field enhanced bulk conductivity of acceptor-doped BaTi _{1-x} CaxO _{3-x} ceramics. Applied Physics Letters, 2010, 97, 062907.	1.5	41
83	Development of an Equivalent Circuit Model for Cement Pastes from Microstructural Considerations. Journal of the American Ceramic Society, 1997, 80, 2876-2884.	1.9	40
84	Oxygen loss, semiconductivity, and positive temperature coefficient of resistance behavior in undoped cation-stoichiometric BaTiO ₃ ceramics. Journal of Applied Physics, 2005, 98, 094102.	1.1	40
85	A Pure Bismuth A-Site Polar Perovskite Synthesized at Ambient Pressure. Angewandte Chemie - International Edition, 2007, 46, 8785-8789.	7.2	38
86	Classification of the interlayer coupling in high-Tccuprates from low-field magnetization studies. Physical Review B, 1996, 53, 6752-6758.	1.1	36
87	Spark-plasma-sintering of fine BaTiO ₃ powder prepared by a sol-crystal method. Journal of Materials Science, 2001, 36, 2329-2334.	1.7	35
88	Protocols for the Fabrication, Characterization, and Optimization of n-Type Thermoelectric Ceramic Oxides. Chemistry of Materials, 2017, 29, 265-280.	3.2	35
89	High temperature piezoelectric ceramics in the Bi(Mg _{1/2} Ti _{1/2})O ₃ -BiFeO ₃ -BiScO ₃ -PbTiO ₃ system. Journal of Electroceramics, 2010, 25, 130-134.	0.8	34
90	Incipient ferroelectricity and microwave dielectric resonance properties of CaCu _{2.85} Mn _{0.15} Ti ₄ O ₁₂ ceramics. Applied Physics Letters, 2007, 91, 132911.	1.5	33

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91	From insulator to oxide-ion conductor by a synergistic effect from defect chemistry and microstructure: acceptor-doped Bi-excess sodium bismuth titanate $\text{Na}_{0.5}\text{Bi}_{0.51}\text{Ti}_{3.015}\text{O}$. Journal of Materials Chemistry A, 2020, 8, 25120-25130.	5.2	33
92	Structure-property relationships in $(1-x)\text{BaTiO}_3-x\text{BiGdO}_3$ ceramics. Journal of the European Ceramic Society, 2015, 35, 2479-2488.	2.8	32
93	Crystal Structure and Dielectric Properties of LaYbO_3 . Journal of the American Ceramic Society, 2007, 90, 1475-1482.	1.9	31
94	Synthesis of Barium Titanate Using Deep Eutectic Solvents. Inorganic Chemistry, 2017, 56, 542-547.	1.9	31
95	Finite element modeling on the effect of intra-granular porosity on the dielectric properties of BaTiO_3 MLCCs. Journal of the American Ceramic Society, 2018, 101, 1211-1220.	1.9	31
96	FORMATION OF Ti^{2+} DEFECT DIPOLES IN BaTiO_3 CERAMICS HEAT-TREATED UNDER REDUCED OXYGEN PARTIAL-PRESSURE. Functional Materials Letters, 2010, 03, 65-68.	0.7	30
97	Defect chemistry of Ti-doped antiferroelectric $\text{Bi}_{0.85}\text{Nd}_{0.15}\text{FeO}_3$. Applied Physics Letters, 2012, 100, .	1.5	30
98	An atomistic study into the defect chemistry of hexagonal barium titanate. Journal of Applied Physics, 2011, 109, 084102.	1.1	29
99	Composition-Structure-Property Relationships of 6H- and 12R-Type Hexagonal $\text{Ba}(\text{Mn,Ti})\text{O}_3$ Perovskites. Chemistry of Materials, 2009, 21, 1731-1742.	3.2	28
100	Relaxor-like Dielectric Behavior in Stoichiometric Sillenite $\text{Bi}_{12}\text{Si}_{20}$. Chemistry of Materials, 2013, 25, 48-54.	3.2	28
101	Insulating Properties of Lanthanum-Doped BaTiO_3 Ceramics Prepared by Low-Temperature Synthesis. Journal of the American Ceramic Society, 2004, 87, 2132-2134.	1.9	27
102	Direct imaging of the core-shell effect in positive temperature coefficient of resistance- BaTiO_3 ceramics. Applied Physics Letters, 2009, 95, .	1.5	27
103	Microwave Dielectric Properties of Hexagonal 12R- $\text{Ba}_3\text{LaNb}_3\text{O}_{12}$ Ceramics. Journal of the American Ceramic Society, 2006, 89, 332-335.	1.9	26
104	Dielectric Properties of the "Twinned" 8H-Hexagonal Perovskite $\text{Ba}_8\text{Nb}_4\text{Ti}_3\text{O}_{24}$. Journal of the American Ceramic Society, 2006, 89, 336-339.	1.9	26
105	Study of the Structural, Magnetic, and Electrical Properties of the 5H Hexagonal-Type Perovskite $\text{BaMn}_{0.2}\text{Co}_{0.8}\text{O}_{2.80}$. Chemistry of Materials, 2008, 20, 2818-2828.	3.2	26
106	The influence of nanometric phase separation on the dielectric and magnetic properties of $(1-x)\text{TjETQqO}_0\text{O}_0\text{rgBT}$ /Overlock 10 Tf 50 1 2009, 19, 356-359.	6.7	26
107	Characterisation of Incommensurate $\text{Bi}_{2-x}\text{Sr}_{2-x}\text{CuO}_z$ by X-Ray Powder Diffraction and Oxygen Content Determinations. Japanese Journal of Applied Physics, 1990, 29, L2002-L2005.	0.8	25
108	Cation distributions and possible phase separation in $\text{Tl}_2\text{Ba}_2\text{CuO}_6$ from synchrotron powder x-ray diffraction. Physical Review B, 1995, 51, 12747-12753.	1.1	25

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109	Synthesis, phase stability and electrical characterisation of BINAFOX solid solutions. Journal of Materials Chemistry, 1997, 7, 2091-2095.	6.7	25
110	Electrical characterization of pore reduced cement by impedance spectroscopy. Journal of Materials Science Letters, 1996, 15, 1566-1568.	0.5	25
111	Cation distribution in the superconducting Tl, Pb-1223 phase ($\text{Tl}_{0.5}\text{Pb}_{0.5}\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_9$) from resonant synchrotron powder X-ray diffraction. Physica C: Superconductivity and Its Applications, 1994, 221, 304-310.	0.6	24
112	Cation distribution and composition of the Tl-2223 superconductor from combined powder neutron and resonant X-ray diffraction. Physica C: Superconductivity and Its Applications, 1994, 225, 307-316.	0.6	24
113	A resource efficient design strategy to optimise the temperature coefficient of capacitance of BaTiO_3 -based ceramics using finite element modelling. Journal of Materials Chemistry A, 2016, 4, 6896-6901.	5.2	24
114	$\text{NaBi}_3\text{V}_2\text{O}_{10}$: a new oxide ion conductor. Journal of Materials Chemistry, 1998, 8, 281-282.	6.7	23
115	Decomposition Reactions in $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ Ceramics. Journal of the American Ceramic Society, 2006, 89, 060711111453002-???	1.9	23
116	EELS characterisation of bulk $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ ceramics. Micron, 2006, 37, 412-419.	1.1	23
117	Simulation of Impedance Spectra for a Full Three-Dimensional Ceramic Microstructure Using a Finite Element Model. Journal of the American Ceramic Society, 2014, 97, 885-891.	1.9	23
118	Structure-Property Relationships of $\text{BaTi}_{1-2y}\text{GayNb}_y\text{O}_3$ ($0 < y <= 0.35$) Ceramics. Journal of the American Ceramic Society, 2005, 88, 3055-3062.	1.9	22
119	Structural phase transitions in Ti-doped $\text{Bi}_{1-x}\text{Nd}_x\text{FeO}_3$ ceramics. Journal of Applied Physics, 2012, 111, .	1.1	22
120	Phase transitions, domain structure, and pseudosymmetry in La- and Ti-doped BiFeO_3 . Journal of Applied Physics, 2016, 119, .	1.1	22
121	p-Type/n-type behaviour and functional properties of $\text{K}_x\text{Na}_{(1-x)}\text{NbO}_3$ ($0.49 < x <= 0.51$) sintered in air and N_2 . Journal of the European Ceramic Society, 2018, 38, 3118-3126.	2.8	22
122	Electrical conductivity and conduction mechanisms in $(\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3)_{1-x}(\text{BiScO}_3)_x$ ($0.00 < x <= 0.25$) solid solutions. Journal of Materials Chemistry C, 2018, 6, 11598-11607.	2.7	22
123	Crystallization and dielectric properties of borate-based ferroelectric PbTiO_3 glass-ceramics. Journal of Electroceramics, 2007, 19, 221-228.	0.8	21
124	Influence of octahedral tilting on the microwave dielectric properties of $\text{A}_3\text{LaNb}_3\text{O}_{12}$ hexagonal perovskites (A=Ba, Sr). Applied Physics Letters, 2009, 94, .	1.5	21
125	Nanoscale electrical probing of heterogeneous ceramics: the case of giant permittivity calcium copper titanate ($\text{CaCu}_3\text{Ti}_4\text{O}_{12}$). Nanoscale, 2011, 3, 1171.	2.8	21
126	Stoichiometry-dependent local instability in MAPb_3 perovskite materials and devices. Journal of Materials Chemistry A, 2018, 6, 23578-23586.	5.2	21

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127	Comparative environmental profile assessments of commercial and novel material structures for solid oxide fuel cells. <i>Applied Energy</i> , 2019, 235, 1300-1313.	5.1	21
128	Use of Succinic Acid to Test the Stability of PTCR Barium Titanate Ceramics under Reducing Conditions. <i>Journal of the American Ceramic Society</i> , 1995, 78, 241-244.	1.9	20
129	Electrical Properties of $6\text{H-BaTiO}_{0.95}\text{M}_0.05\text{O}_3$ Ceramics where M = Mn, Fe, Co and Ni. <i>Journal of Electroceramics</i> , 2004, 13, 305-309.	0.8	20
130	Soft-mode behavior and incipient ferroelectricity in $\text{Na}_{1-x}\text{Bi}_x\text{TiO}_3$. <i>Physical Review B</i> , 2010, 81, .	1.1	20
131	Ca K-edge X-ray absorption fine structure in BaTiO_3 - CaTiO_3 solid solutions. <i>Journal of Applied Physics</i> , 2013, 113, 044106.	1.1	20
132	Simulation of Impedance Spectra for Core-Shell Grain Structures Using Finite Element Modeling. <i>Journal of the American Ceramic Society</i> , 2015, 98, 1925-1931.	1.9	20
133	Mixed ionic-electronic conduction in $\text{K}_{1/2}\text{Bi}_{1/2}\text{TiO}_3$. <i>Journal of Materials Chemistry C</i> , 2017, 5, 6300-6310.	2.7	20
134	Use of the time constant related parameter f_{max} to calculate the activation energy of bulk conduction in ferroelectrics. <i>Journal of Materials Chemistry C</i> , 2018, 6, 9258-9268.	2.7	20
135	Bulk PTC effect on doped BaTiO_3 . <i>Journal of Materials Science Letters</i> , 1988, 7, 823-824.	0.5	19
136	Stoichiometry and kinetics of formation of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_7$ solid solutions. <i>Journal of Materials Chemistry</i> , 1992, 2, 579.	6.7	19
137	Oxygen-loss in A-site deficient $\text{Sr}_{0.85}\text{La}_{0.10}\text{TiO}_3$ perovskite. <i>RSC Advances</i> , 2014, 4, 32549-32554.	1.7	19
138	Boriding kinetics and mechanical behaviour of AISI O1 steel. <i>Surface Engineering</i> , 2015, 31, 588-597.	1.1	19
139	Electric field enhancement in ceramic capacitors due to interface amplitude roughness. <i>Journal of the European Ceramic Society</i> , 2019, 39, 1170-1177.	2.8	19
140	Displacive Order-Disorder Behavior and Intrinsic Clustering of Lattice Distortions in Bi -Substituted NaNbO_3 . <i>Advanced Functional Materials</i> , 2020, 30, 2001840.	7.8	19
141	First-principles study of intrinsic point defects in hexagonal barium titanate. <i>Journal of Applied Physics</i> , 2012, 111, 094108.	1.1	18
142	An AC impedance spectroscopy study of hydrated cement pastes. <i>Advances in Cement Research</i> , 1998, 10, 151-159.	0.7	17
143	Electrical properties of $\text{Cu}_2\text{P}_3\text{I}_2$. <i>Materials Research Bulletin</i> , 1996, 31, 171-176.	2.7	16
144	Synthesis, structure and electrical properties of $\text{Cu}_{3.21}\text{Ti}_{1.16}\text{Nb}_{2.63}\text{O}_{12}$ and the CuO - TiO_2 - Nb_2O_5 pseudoternary phase diagram. <i>Journal of Solid State Chemistry</i> , 2011, 184, 1813-1819.	1.4	16

#	ARTICLE	IF	CITATIONS
145	Ba ₂ Bi _{1.4} Nb _{0.6} O ₆ : A Nonferroelectric, High Permittivity Oxide. <i>Chemistry of Materials</i> , 2012, 24, 2247-2249.	3.2	16
146	Design of a bilayer ceramic capacitor with low temperature coefficient of capacitance. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	16
147	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. <i>ACS Omega</i> , 2017, 2, 2126-2133.	1.6	16
148	Reducing dielectric loss in Na _{0.5} Bi _{0.5} TiO ₃ based high temperature capacitor material. <i>Journal of the European Ceramic Society</i> , 2021, 41, 2587-2595.	2.8	16
149	The crystal structure of a new oxide ion conductor NaBi ₃ V ₂ O ₁₀ and oxide ion conductivity in Pb ₂ Bi ₂ V ₂ O ₁₀ . <i>Journal of Materials Chemistry</i> , 1999, 9, 2617-2621.	6.7	15
150	Possible incipient ferroelectricity in Mn-doped Na _{1/2} Bi _{1/2} Cu ₃ Ti ₄ O ₁₂ . <i>Applied Physics Letters</i> , 2009, 94, 212901.	1.5	15
151	Mn-Rich BaMn _{1-x} Fe _x O ₃ Perovskites Revisited: Structural, Magnetic, and Electrical Properties of Two New 6H Polytypes. <i>Chemistry of Materials</i> , 2009, 21, 5272-5283.	3.2	14
152	Structure-Composition-Property Relationships of 6H-BaTi _{1-y} Co _y O ₃ (0.1 ≤ y ≤ 0.4). <i>Chemistry of Materials</i> , 2011, 23, 1050-1060.	3.2	14
153	Transformation from insulating p-type to semiconducting n-type conduction in CaCu ₃ Ti ₄ O ₁₂ -related Na(Cu _{5/2} Ti _{1/2})Ti ₄ O ₁₂ ceramics. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	14
154	The Analysis of Impedance Spectra for Core-Shell Microstructures: Why a Multiformalism Approach is Essential. <i>Advanced Functional Materials</i> , 2019, 29, 1904036.	7.8	13
155	Using Metadynamics to Obtain the Free Energy Landscape for Cation Diffusion in Functional Ceramics: Dopant Distribution Control in Rare Earth-Doped BaTiO ₃ . <i>Advanced Functional Materials</i> , 2020, 30, 1905077.	7.8	13
156	Structure-Property Relationships of the 10H Hexagonal-Type Perovskite BaMn _{0.4} Fe _{0.6} O _{2.73} . <i>Chemistry of Materials</i> , 2007, 19, 3425-3432.	3.2	12
157	High temperature oxygen separation for the sulphur family of thermochemical cycles - part I: Membrane selection and flux testing. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 10614-10625.	3.8	12
158	Synthesis of a 12R-type hexagonal perovskite solid solution Sr ₃ NdNb _{3-x} Ti _x O ₁₂ and the influence of acceptor doping on electrical properties. <i>Dalton Transactions</i> , 2015, 44, 7643-7653.	1.6	12
159	Densification and conductivity enhancement of Na ₄ Zr ₂ Si ₃ O ₁₂ -based solid electrolytes using TiO ₂ as a sintering aid. <i>Solid State Ionics</i> , 1999, 120, 33-41.	1.3	11
160	Ferroelectric Aging and Recoverable Electrostrain in BaTi _{0.98} Ca _{0.02} O _{2.98} Ceramics. <i>Journal of the American Ceramic Society</i> , 2008, 91, 3101-3104.	1.9	10
161	Synthesis, structure and properties of the hexagonal perovskite, h-BaTi _{1-x} HoxO _{3-x/2} . <i>Journal of Materials Chemistry</i> , 2009, 19, 5201.	6.7	10
162	Polytypism in the BaMn _{0.85} Ti _{0.15} O ₃ System (0.07 ≤ x ≤ 0.34). Structural, Magnetic, and Electrical Characterization of the 9R-Polymorph. <i>Chemistry of Materials</i> , 2010, 22, 4320-4327.	3.2	10

#	ARTICLE	IF	CITATIONS
163	The Influence of La Doping and Heterogeneity on the Thermoelectric Properties of Sr ₃ Ti ₂ O ₇ Ceramics. Journal of the American Ceramic Society, 2016, 99, 515-522.	1.9	10
164	Non-ohmic conduction in sodium bismuth titanate: the influence of oxide-ion conduction. Physical Chemistry Chemical Physics, 2020, 22, 20941-20950.	1.3	10
165	Anomalous grain boundary conduction in BiScO ₃ -BaTiO ₃ high temperature dielectrics. Acta Materialia, 2021, 216, 117136.	3.8	10
166	Characterisation of Grain Boundaries in CaCu ₃ Ti ₄ O ₁₂ using HREM, EDS and EELS. Journal of Physics: Conference Series, 2006, 26, 65-68.	0.3	9
167	Effects of average and local structure on the dielectric behavior of (1-x)BaTiO ₃ -xLaYO ₃ (x=0.40) ceramics. Journal of Applied Physics, 2010, 108, .	1.1	9
168	High temperature oxygen separation for the sulphur family of thermochemical cycles – Part II: Sulphur poisoning and membrane performance recovery. International Journal of Hydrogen Energy, 2013, 38, 785-794.	3.8	9
169	Dramatic impact of the TiO ₂ polymorph on the electrical properties of –stoichiometric™ Na _{0.5} Bi _{0.5} TiO ₃ ceramics prepared by solid-state reaction. Journal of Materials Chemistry A, 2022, 10, 891-901.	5.2	9
170	Characterization of Ca-doped Bi _{2-x} Sr _{2-x} CuO _z . Journal of Materials Chemistry, 1991, 1, 147-148.	6.7	8
171	AC impedance spectroscopy of pore reduced cements: Influence of contact resistance. Journal of Materials Science, 2000, 35, 4823-4826.	1.7	8
172	An in situ time-resolved neutron diffraction study of the hydrothermal crystallisation of barium titanate. Chemical Communications, 2000, , 1267-1268.	2.2	8
173	La and Sm Co-doped SrTiO ₃ – Thermoelectric Ceramics. Materials Today: Proceedings, 2017, 4, 12360-12367.	0.9	8
174	The influence of excess K ₂ O on the electrical properties of (K,Na) _{1/2} Bi _{1/2} TiO ₃ ceramics. Applied Physics Letters, 2018, 112, .	1.5	8
175	Characterization of Pb- and Ca-doped Bi _{2-x} Sr _{2-x} CuO ₆ . Journal of Materials Research, 1992, 7, 43-47.	1.2	8
176	Resistive upper critical field of single crystals of Tl ₂ Ba ₂ CuO ₆ . Journal of Superconductivity and Novel Magnetism, 1994, 7, 271-277.	0.5	7
177	Characterization of Ba _{0.9} Sr _{0.1} TiO ₃ prepared by low temperature chloride aqueous synthesis. Journal of Materials Science, 2007, 42, 2492-2498.	1.7	7
178	Giant Barrier Layer Capacitance Effects in CaCu ₃ Ti ₄ O ₁₂ Ceramics.. ChemInform, 2002, 33, 17-17.	0.1	6
179	A link between <i>p</i> -type electrical conduction and microwave dielectric loss in highly ordered Ba(Co _{1/3} Nb _{2/3})O ₃ ceramics. Journal of Materials Research, 2010, 25, 1011-1014.	1.2	6
180	High oxide-ion conductivity in acceptor-doped Bi-based perovskites at modest doping levels. Physical Chemistry Chemical Physics, 2021, 23, 11327-11333.	1.3	6

#	ARTICLE	IF	CITATIONS
181	Lead titanate glass-ceramics derived from a silicate-based melt. Journal of Materials Research, 2005, 20, 1316-1323.	1.2	5
182	Synthesis and characterization of a pyrochlore solid solution in the $\text{Na}_2\text{O}-\text{Bi}_2\text{O}_3-\text{TiO}_2$ system. Journal of the American Ceramic Society, 2020, 103, 6801-6810.	1.9	5
183	The influence of Fe_2O_3 reagent grade purity on the electrical properties of LaFeO_3 ceramics: A cautionary reminder. Journal of the European Ceramic Society, 2021, 41, 4189-4198.	2.8	5
184	Synthesis and Characterization of $\text{BaTi}_{1-x}\text{GaxO}_3$ (0x0.15) Ceramics. Journal of the American Ceramic Society, 2006, 89, 060427083300029-???	1.9	4
185	Engineered sintering aids for PbO-based electroceramics. Journal of Electroceramics, 2007, 18, 77-85.	0.8	4
186	Modeling the influence of two terminal electrode contact geometry and sample dimensions in electroceramics. Journal of the American Ceramic Society, 2019, 102, 3609-3622.	1.9	4
187	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.	3.8	4
188	Origin of improved tunability and loss in N_2 annealed barium strontium titanate films. Physical Review Materials, 2020, 4, .	0.9	4
189	Direct Atomic Observation in Powdered $4\text{H}-\text{Ba}_{0.8}\text{Sr}_{0.2}\text{Mn}_{0.4}\text{Fe}_{0.6}\text{O}_{2.7}$. Chemistry of Materials, 2013, 25, 548-554.	3.2	3
190	Tuning the electrical conductivity of Rare Earth-doped BaTiO_3 using Gd_2O_3 as an exemplar. Open Ceramics, 2022, 9, 100250.	1.0	3
191	Synthesis and crystal structure of $\text{Li}_2\text{NaTa}_7\text{O}_{19}$. Journal of Materials Chemistry, 1994, 4, 445-447.	6.7	2
192	Microstructural and Electrical Characterisation of $\text{La}_x\text{Ba}_{1-x}\text{Ti}_{1-x}\text{Y}_x\text{O}_3$ (0% x 0.50) Ceramics. Key Engineering Materials, 2006, 317-318, 873-876.	0.4	2
193	Nanoscale Imaging of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ Dielectric Properties: The Role of Surface Defects. Solid State Phenomena, 2008, 131-133, 443-448.	0.3	2
194	Polymorphism and Dielectric Properties of Nb-Doped BaTiO_3 . Journal of the American Ceramic Society, 2007, 91, 071018043821002-???	1.9	2
195	Detection of heterogeneities in single-crystal $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ using conductive atomic force microscopy. IOP Conference Series: Materials Science and Engineering, 2010, 8, 012018.	0.3	2
196	Structure-property relations in anion deficient 5H- and 3C-polytype $\text{Ba}(\text{Ti},\text{Co})\text{O}_3$ perovskites. Journal of Materials Chemistry, 2012, 22, 15092.	6.7	2
197	In-Situ Monitoring of Solid Oxide Electrolysis Cells. ECS Transactions, 2013, 58, 207-216.	0.3	2
198	Predicting the energy storage density in poly(methyl methacrylate)/methyl ammonium lead iodide composites. Journal of Applied Physics, 2019, 125, 214103.	1.1	2

#	ARTICLE	IF	CITATIONS
199	Probing dielectric ceramics surface at sub-micrometer scale. IOP Conference Series: Materials Science and Engineering, 2010, 8, 012038.	0.3	1
200	Methodology for Analysis of Solid Oxide Cells via Raman Spectroscopy. ECS Transactions, 2015, 68, 2083-2092.	0.3	1
201	Electrochemical Impedance Spectroscopy Data from Solid Oxide Cells Undergoing Co-Electrolysis: The Influence of Rig Inductance. ECS Transactions, 2015, 68, 3417-3427.	0.3	1
202	Themed issue on advances in solid state chemistry and its applications. Journal of Materials Chemistry A, 2018, 6, 5241-5242.	5.2	1
203	Optimization of superconducting critical temperatures by control of cation and anion stoichiometry in Bi ₂ Sr ₂ CaCu ₂ O ₇ -based solid solutions. Journal of Materials Science, 1995, 30, 2743-2746.	1.7	0
204	The influence of moisture on the electrical conductivity of Bi _{1-x} Bi ₄ VO ₁₀ ceramics. Journal of Materials Science Letters, 1997, 17, 203-205.	0.5	0
205	PREPARATION AND CHARACTERIZATION OF IONIC CONDUCTOR Bi ₂₃ V ₄ O _{44.5} , 2002, , .		0
206	Microwave Dielectric Properties of Gallium-Doped Hexagonal Barium Titanate Ceramics.. ChemInform, 2003, 34, no.	0.1	0
207	Synthesis, Crystal Structure, and Characterization of Ba(Ti _{1/2} Mn _{1/2})O ₃ : A High Permittivity 12R-Type Hexagonal Perovskite.. ChemInform, 2004, 35, no.	0.1	0
208	Electrical Conductivity of Hexagonal Ba(Ti _{0.90} Mn _{0.10})O ₃ Ceramics. , 2007, , .		0
209	Probing heterogeneity in ptcr-BaTiO ₃ thermistors by local probe electrical measurements. IOP Conference Series: Materials Science and Engineering, 2010, 8, 012037.	0.3	0
210	Microwave dielectric properties of Na _{1/2} Bi _{1/2} Cu _{2.82} Mn _{0.18} Ti ₄ O ₁₂ ceramics. IOP Conference Series: Materials Science and Engineering, 2011, 18, 092004.	0.3	0
211	Finite element modeling of resistive surface layers by micro-contact impedance spectroscopy. Journal of the American Ceramic Society, 2020, 103, 2702-2714.	1.9	0
212	ELECTRICAL CHARACTERISATION OF OXIDE ION CONDUCTING PEROVSKITES AND APATITES. , 2002, , .		0
213	SYNTHESIS AND IONIC CONDUCTIVITY OF PbBi ₆ M ₂ O ₁₅ (M = V, P, As) AND Pb _{1-x} Sr _x Bi ₆ V ₂ O ₁₅ SOLID SOLUTIONS. , 2002, , .		0