Rahul Vaish

List of Publications by Year in Descending Order

230 papers	3,105 citations	27 h-index	40 g-index
244 ext. papers	3,970 ext. citations	3.3 avg, IF	6.32 L-index

#	Paper	IF	Citations
230	A review of piezoelectric energy harvesting tiles: Available designs and future perspective. *Energy Conversion and Management*, **2022**, 254, 115272	10.6	3
229	Crystallization and sintering studies on an anomalous Li2O-Al2O3-SiO2 glass for making tunable thermal expansion ceramic. *International Journal of Applied Glass Science*, **2022**, 13, 41	1.8	0
228	Effect of poling on piezocatalytic and electrochemical properties of Pb(Zr0.52Ti0.48)O3 ceramics. *Surfaces and Interfaces*, **2022**, 30, 101827	4.1	2
227	An optimization study on $$left(B{a}_{0.85}C{a}_{0.15}right)left(Z{r}_{0.1}T{i}_{0.9}right){O}_{3}$$-based piezoelectric energy-harvester using finite element method. *Journal of the Australian Ceramic Society*, **2022**, 58, 309-319	1.5	
226	Ferroelectric ceramics and glass ceramics for photocatalysis **2022**, 297-322		
225	Improved piezoelectric performance of 0.965 (K0.48Na0.52)(Nb0.96Sb0.04)O3 – 0.035Bi0.5Na0.5Zr0.15Hf0.75O3 piezocomposites using inherently auxetic polyethylene matrix. *Applied Physics A: Materials Science and Processing*, **2021**, 127, 1	2.6	0
224	Lead lanthanum zirconate titanate (PLZT)-based fiber composites for enhanced photostrictive actuation: a numerical study. *European Physical Journal Plus*, **2021**, 136, 1	3.1	
223	Hydrophobization of Melamine Sponges Using Radiation-Synthesized Tetrafluoroethylene Telomers. *High Energy Chemistry*, **2021**, 55, 488-494	0.9	
222	Surface crystallization of BiOCl on 2Bi2O3–B2O3 glasses for photocatalytic applications. *Journal of Materials Science: Materials in Electronics*, **2021**, 32, 10520-10531	2.1	1
221	Performance indexes for flexoelectricity in transverse and longitudinal modes. *Journal of Applied Physics*, **2021**, 129, 145105	2.5	0
220	Promising multicatalytic and adsorption capabilities in V2O5/BiVO4 composite pellets for water-cleaning application. *Surfaces and Interfaces*, **2021**, 23, 100924	4.1	6
219	Energy harvesting using piezoelectric cementitious composites for water cleaning applications. *Materials Research Bulletin*, **2021**, 137, 111205	5.1	12
218	Antibacterial ferroelectric materials: Advancements and future directions. *Journal of Industrial and Engineering Chemistry*, **2021**, 97, 95-110	6.3	7
217	Flexible Ag@LiNbO/PVDF Composite Film for Piezocatalytic Dye/Pharmaceutical Degradation and Bacterial Disinfection. *ACS Applied Materials & Interfaces*, **2021**, 13, 22914-22925	9.5	15
216	A finite element computational framework for enhanced photostrictive performance in 0–3 composites. *International Journal of Mechanics and Materials in Design*, **2021**, 17, 609-632	2.5	0
215	Effect of sintering temperature on sensing, actuation and energy harvesting performance of (Ba0.85Ca0.15)(Ti0.9Zr0.1)O3 ceramics: A numerical and simulation based study. *Engineering Research Express*, **2021**, 3, 025018	0.9	0
214	Diesel Soot as a Supercapacitor Electrode Material. *Journal of the Electrochemical Society*, **2021**, 168, 050551	3.9	1

213	Efficient dye removal using adsorption and photocatalytic capabilities of titania-supported vanadia. *Materials Technology*, **2021**, 36, 504-512	2.1	
212	Design of spatially varying electrical poling for enhanced piezoelectricity in Pb(Mg1/3Nb2/3)O3–0.35PbTiO3. *International Journal of Mechanics and Materials in Design*, **2021**, 17, 99-118	2.5	4
211	Utilizing the localized surface piezoelectricity of centrosymmetric Sr1-xFexTiO3 (x=0.2) ceramics for piezocatalytic dye degradation. *Journal of the European Ceramic Society*, **2021**, 41, 326-334	6	8
210	Effect of poling on piezocatalytic removal of muti-pollutants using BaTiO3. *Journal of the American Ceramic Society*, **2021**, 104, 1661-1668	3.8	8
209	Surface plasmon resonance triggered promising visible light photocatalysis of LiNbO3 ceramic supported Ag nanoparticles. *Journal of the American Ceramic Society*, **2021**, 104, 1237-1246	3.8	2
208	Emerging trends in glass-ceramic photocatalysts. *Chemical Engineering Journal*, **2021**, 407, 126971	14.7	14
207	Piezo/pyro/photo-catalysis activities in Ba 0.85 Ca 0.15 (Ti 0.9 Zr 0.1) 1-x Fe x O 3 ceramics. *Journal of the American Ceramic Society*, **2021**, 104, 45-56	3.8	12
206	A reduced graphene oxide/bismuth vanadate composite as an efficient piezocatalyst for degradation of organic dye. *Materials Advances*, **2021**, 2, 4093-4101	3.3	1
205	Universal converse flexoelectricity in dielectric materials via varying electric field direction. *International Journal of Smart and Nano Materials*, **2021**, 12, 107-128	3.6	3
204	Eggshell derived CaO-Portland cement antibacterial composites. *Composites Part C: Open Access*, **2021**, 5, 100123	1.6	7
203	Piezocatalysis in ferroelectric Ba0.85Ca0.15Zr0.1Ti0.9O3/polyvinylidene difluoride (PVDF) composite film. *Journal of Applied Physics*, **2021**, 130, 085107	2.5	2
202	WS2 Monolayer for Piezo-Phototronic Dye Degradation and Bacterial Disinfection. *ACS Applied Nano Materials*, **2021**, 4, 7879-7887	5.6	5
201	An isogeometric analysis-based investigation of the flexocaloric effect in functionally graded dielectrics. *Acta Mechanica*, **2021**, 232, 4261	2.1	0
200	Synthesis of BiF3 and BiF3-Added Plaster of Paris Composites for Photocatalytic Applications. *Energies*, **2021**, 14, 5159	3.1	0
199	Effective properties and sensing capabilities of cement-based porous piezocomposites: a comparative study. *European Physical Journal Plus*, **2021**, 136, 1	3.1	1
198	Polar glass-ceramics for piezocatalytic applications. *Journal of Applied Physics*, **2021**, 130, 125101	2.5	1
197	Photocatalytic and wettability behavior of regenerative bio-inspired CuxO (x=1,2). *Materials Research Bulletin*, **2021**, 144, 111489	5.1	1
196	Active vibration control of smart structure using poling tuned piezoelectric material. *Journal of Intelligent Material Systems and Structures*, **2020**, 31, 1298-1313	2.3	9

195	Solar Energy Harvesting using Candle-Soot-Coated Thermoelectric Materials. *Global Challenges*, **2020**, 4, 1900080	4.3	4
194	Enhanced dye adsorption and rapid photocatalysis of candle soot coated BaTiO3 ceramics. *Materials Chemistry and Physics*, **2020**, 252, 123311	4.4	14
193	Optimization of dye removal by diesel exhaust emission soot using response surface methodology. *Environmental Progress and Sustainable Energy*, **2020**, 39, e13419	2.5	3
192	Multicatalytic behavior of Ba0.85Ca0.15Ti0.9 Zr0.1O3 ceramics for pharmaceutical/dye/bacterial treatments. *Journal of Applied Physics*, **2020**, 127, 135103	2.5	22
191	Effect of Porosity on Energy Harvesting Performance of 0.5Ba(Ca0.8Zr0.2)O3 □0.5(Ba0.7Ca0.3)TiO3 Ceramics: A Numerical Study. *Energy Technology*, **2020**, 8, 1901302	3.5	6
190	Exploring the piezocatalytic dye degradation capability of lithium niobate. *Advanced Powder Technology*, **2020**, 31, 1771-1775	4.6	26
189	Vibration energy harvesting for degradation of dye and bacterial cells using cement-based Ba0.85Ca0.15Zr0.1Ti0.90O3 composites. *Materials Today Communications*, **2020**, 25, 101592	2.5	2
188	Transparent ferroelectric glass□ceramics for wastewater treatment by piezocatalysis. *Communications Materials*, **2020**, 1,	6	7
187	Tunable adsorption activity of candle soot nanoparticles depending on the flame height. *Engineering Research Express*, **2020**, 2, 035018	0.9	1
186	Anticorrosion and electromagnetic interference shielding behavior of candle soot-based epoxy coating. *Journal of Applied Polymer Science*, **2020**, 137, 48678	2.9	6
185	Poling tuning: A plausible solution for minimizing microphony and secondary pyroelectric coefficient in ferroelectrics. *International Journal of Applied Ceramic Technology*, **2020**, 17, 1328-1333	2	3
184	Candle soot-coated egg carton material for oil water separation and detergent adsorption. *Bulletin of Materials Science*, **2020**, 43, 1	1.7	5
183	Structural, thermal and dielectric properties and thermal degradation kinetics of nylon 11/CaCu3Ti4O12 (CCTO) nanocomposites. *Journal of Thermal Analysis and Calorimetry*, **2020**, 141, 1123-1135	4.1	14
182	Cement-based diesel exhaust emission soot coatings for the removal of organic pollutants from water. *Construction and Building Materials*, **2020**, 234, 117377	6.7	10
181	Processing Li2O-Al2O3-SiO2 (LAS) glass-ceramic with and without P2O5 through bulk and sintering route. *Journal of Non-Crystalline Solids*, **2020**, 550, 120289	3.9	5
180	Effect of poling condition on piezocatalysis activity of BaTiO3-cement composites. *Materials Letters* , **2020**, 280, 128583	3.3	5
179	Effect of Ce on piezo/photocatalytic effects of Ba0.9Ca0.1CexTi1-xO3 ceramics for dye/pharmaceutical waste water treatment. *Materials Research Bulletin*, **2020**, 122, 110647	5.1	23
178	Deciphering the importance of graded poling in piezoelectric materials: A numerical study. *Engineering Reports*, **2020**, 2, e12266	1.2	2

177	Flexo/electro-caloric performance of BaTi0.87Sn0.13O3 ceramics. *Applied Physics Letters*, **2020**, 117, 092904	3.4	5
176	Pyroelectric energy harvesting for dye decolorization using Ba0.9Ca0.1TiO3 ceramics. *Journal of Applied Physics*, **2020**, 128, 095108	2.5	5
175	Pyroelectric performance of [Bi0.48Na0.4032K0.0768]Sr0.04(Ti0.975Nb0.025)O3 ceramics. *Journal of the Australian Ceramic Society*, **2020**, 56, 395-402	1.5	0
174	Melt quenched V2O5/BiVO4 composite: A novel and promising adsorbent and photocatalyst. *Materials Chemistry and Physics*, **2020**, 240, 122238	4.4	8
173	TiO@C core@shell nanocomposites: A single precursor synthesis of photocatalyst for efficient solar water treatment. *Journal of Hazardous Materials*, **2020**, 381, 120883	12.8	19
172	Dye degradation and bacterial disinfection using multicatalytic BaZr0.02Ti0.98O3 ceramics. *Journal of the American Ceramic Society*, **2020**, 103, 4774-4784	3.8	25
171	Ag nanoparticles loadedBa0.85Ca0.15Ti0.9Zr0.1O3for multicatalytic dye degradation. *Nanotechnology*, **2020**,	3.4	6
170	Candle soot coated polyurethane foam as an adsorbent for removal of organic pollutants from water. *European Physical Journal Plus*, **2019**, 134, 1	3.1	17
169	Vibration induced refrigeration and energy harvesting using piezoelectric materials: a finite element study.. *RSC Advances*, **2019**, 9, 3918-3926	3.7	8
168	Multifunctional diesel exhaust emission soot coated sponge for water treatment. *Environmental Science and Pollution Research*, **2019**, 26, 8148-8156	5.1	17
167	Bi0.5Na0.5TiO3-BiOCl composite photocatalyst for efficient visible light degradation of dissolved organic impurities. *Journal of Environmental Chemical Engineering*, **2019**, 7, 102842	6.8	12
166	Diesel soot coated non-woven fabric for oil-water separation and adsorption applications. *Scientific Reports*, **2019**, 9, 8503	4.9	17
165	Crystallisation studies on site saturated lithium aluminosilicate (LAS) glass. *Thermochimica Acta*, **2019**, 679, 178311	2.9	10
164	Transparent ZnO crystallized glass ceramics for photocatalytic and antibacterial applications. *Journal of Applied Physics*, **2019**, 125, 175102	2.5	14
163	Rapid bacterial disinfection using low frequency piezocatalysis effect. *Journal of Industrial and Engineering Chemistry*, **2019**, 77, 355-364	6.3	27
162	Photocatalytic, piezocatalytic, and piezo-photocatalytic effects in ferroelectric (Ba0.875Ca0.125)(Ti0.95Sn0.05)O3 ceramics. *Journal of the American Ceramic Society*, **2019**, 102, 5807-5817	3.8	32
161	Diesel Exhaust Emission Soot Coated Pyroelectric Materials for Improved Thermal Energy Harvesting. *Global Challenges*, **2019**, 3, 1800089	4.3	6
160	Dielectric properties of nylon 11/CaCu3Ti4O12 (CCTO) nanocomposite films with high permittivity. *IEEE Transactions on Dielectrics and Electrical Insulation*, **2019**, 26, 568-575	2.3	7

159	Vibration induced refrigeration using ferroelectric materials. *Scientific Reports*, **2019**, 9, 3922	4.9	1
158	Effect of poling orientation on piezoelectric materials operating in longitudinal mode. *Materials Research Express*, **2019**, 6, 065711	1.7	5
157	Effect of poling direction and porosity on piezoelectric figures of merit: A numerical study. *European Physical Journal Plus*, **2019**, 134, 1	3.1	3
156	Impact of remnant surface polarization on photocatalytic and antibacterial performance of BaTiO3. *Journal of the European Ceramic Society*, **2019**, 39, 2915-2922	6	35
155	Pyroelectric energy conversion using Ba0.85Sr0.15Zr0.1Ti0.9O3 ceramics and its cement-based composites. *Journal of Intelligent Material Systems and Structures*, **2019**, 30, 869-877	2.3	10
154	Separation of dyes/oils from water by diesel exhaust emission soot coated polyurethane foam: a kinetic and equilibrium isotherm study. *Engineering Research Express*, **2019**, 1, 015010	0.9	13
153	Solar Energy Harvesting Using Pyroelectric Effect Associated with Piezoelectric Buzzer. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1900440	1.6	7
152	Transparent CaF2 surface crystallized CaO□B2O3 glass possessing efficient photocatalytic and antibacterial properties. *Journal of the American Ceramic Society*, **2019**, 102, 5127-5137	3.8	8
151	Enhanced dye adsorption and rapid photo catalysis in candle soot coated Bi2WO6 ceramics. *Engineering Research Express*, **2019**, 1, 025056	0.9	5
150	Influence of LiNbO3 crystallization on the optical, dielectric and nanoindentation properties of the 30SiO2□5Li2O□5Nb2O5 glass. *Journal of Applied Physics*, **2019**, 126, 214101	2.5	9
149	Tunable wettability and adsorption activity of candle soot coated steel mesh. *Engineering Research Express*, **2019**, 1, 025044	0.9	1
148	Candle soot: Journey from a pollutant to a functional material. *Carbon*, **2019**, 144, 684-712	10.4	57
147	Tunable surface adsorption and wettability of candle soot coated on ferroelectric ceramics. *Journal of Advanced Research*, **2019**, 16, 35-42	13	13
146	Controlled crystallization of BiOCl/BiF3 on ZnO□Bi2O3□B2O3 glass surfaces for photocatalytic and self-cleaning applications. *Materialia*, **2019**, 5, 100196	3.2	5
145	Antibacterial and photocatalytic active transparent TiO2 crystallized CaO□BaO□B2O3□Al2O3□TiO2□ZnO glass nanocomposites. *Journal of the American Ceramic Society*, **2019**, 102, 3378-3390	3.8	12
144	Smart Materials Selection for Thermal Energy Efficient Architecture. *Proceedings of the National Academy of Sciences India Section A - Physical Sciences*, **2019**, 89, 11-21	0.9	3
143	Piezoelectric energy harvester for pacemaker application: a comparative study. *Materials Research Express*, **2018**, 5, 075701	1.7	5
142	Large Gain in Pyroelectric Energy Conversion through a Candle Soot Coating. *Energy Technology*, **2018**, 6, 950-955	3.5	8

141	Poling direction driven large enhancement in piezoelectric performance. *Scripta Materialia*, **2018**, 151, 76-81	5.6	17
140	Flexoelectric effect in functionally graded materials: A numerical study. *European Physical Journal Plus*, **2018**, 133, 1	3.1	10
139	Solar light induced antibacterial performance of TiO2 crystallized glass ceramics. *International Journal of Applied Glass Science*, **2018**, 9, 480-486	1.8	7
138	Functional Cementitious Composites for Pyroelectric Applications. *Journal of Electronic Materials*, **2018**, 47, 2378-2385	1.9	9
137	Lead-Free Pyroelectric Materials for Thermal Energy Harvesting: A Comparative Study. *Energy Technology*, **2018**, 6, 943-949	3.5	5
136	Hierarchical growth of BiOCl on SrO-Bi2O3-B2O3 glass-ceramics for self-cleaning applications. *Journal of the American Ceramic Society*, **2018**, 101, 2901-2913	3.8	10
135	Electrocaloric behavior and temperature dependent scaling of dynamic hysteresis of BaxSr1-xTiO3 (x = 0.7, 0.8 and 0.9) bulk ceramics. *Journal of the Australian Ceramic Society*, **2018**, 54, 439-450	1.5	8
134	Controlled crystallization of photocatalytic active Bismuth oxyfluoride/Bismuth fluoride on SrO-Bi2O3-B2O3transparent glass ceramic. *Journal of the European Ceramic Society*, **2018**, 38, 3635-3642	6	10
133	Photocatalytic Active Bismuth Fluoride/Oxyfluoride Surface Crystallized 2Bi2O3-B2O3 Glass□Ceramics. *Journal of Electronic Materials*, **2018**, 47, 3490-3496	1.9	8
132	Pyroelectric performance of BaTi1-xSnxO3 ceramics. *International Journal of Applied Ceramic Technology*, **2018**, 15, 546-553	2	13
131	Structural Optimization for Wideband Flexoelectric Energy Harvester Using Bulk Paraelectric Ba0.6Sr0.4TiO3. *Journal of Electronic Materials*, **2018**, 47, 394-401	1.9	3
130	A numerical study on anomalous behavior of piezoelectric response in functionally graded materials. *Journal of Materials Science*, **2018**, 53, 2413-2423	4.3	7
129	Ferroelectric electrocatalysts: a new class of materials for oxygen evolution reaction with synergistic effect of ferroelectric polarization. *Journal of Materials Science*, **2018**, 53, 1414-1423	4.3	8
128	Photocatalytic, hydrophobic and antimicrobial characteristics of ZnO nano needle embedded cement composites. *Construction and Building Materials*, **2018**, 158, 285-294	6.7	57
127	Finite Element Study on Performance of Piezoelectric Bimorph Cantilevers Using Porous/Ceramic 0□ Polymer Composites. *Journal of Electronic Materials*, **2018**, 47, 233-241	1.9	10
126	Near-zero thermal expansion transparent lithium aluminosilicate glass-ceramic by microwave hybrid heat treatment. *Journal of the American Ceramic Society*, **2018**, 101, 140-150	3.8	16
125	Surface-selective bactericidal effect of poled ferroelectric materials. *Journal of Applied Physics*, **2018**, 124, 014901	2.5	12
124	A numerical study on flexoelectric bistable energy harvester. *Applied Physics A: Materials Science and Processing*, **2018**, 124, 1	2.6	8

123	Pyroelectric signals in (Ba,Ca)TiO3-xBa(Sn,Ti)O3 ceramics: A viable alternative for lead-based ceramics. *Scripta Materialia*, **2018**, 146, 146-149	5.6	13
122	Finite Element Study on Acoustic Energy Harvesting Using Lead-Free Piezoelectric Ceramics. *Journal of Electronic Materials*, **2018**, 47, 1447-1458	1.9	1
121	A Water-Driven Triboelectric Generator for Electrocatalytic Wastewater Treatment. *Energy Technology*, **2018**, 6, 670-676	3.5	2
120	Photocatalytic study on SrBi2B2O7 (SrO-Bi2O3-B2O3) transparent glass ceramics. *Materials Research Bulletin*, **2018**, 99, 453-459	5.1	19
119	Thermomechanical Energy Conversion Potential of Lead-Free 0.50Ba(Zr0.2Ti0.8)O3□0.50(Ba0.7Ca0.3)TiO3 Bulk Ceramics. *Energy Technology*, **2018**, 6, 872-882	3.5	12
118	Pyroelectric performance of porous Ba0.85Sr0.15TiO3 ceramics. *International Journal of Applied Ceramic Technology*, **2018**, 15, 140-147	2	15
117	Janus nanostructures for heterogeneous photocatalysis. *Applied Physics Reviews*, **2018**, 5, 041111	17.3	29
116	Adsorption of dyes onto candle soot: Equilibrium, kinetics and thermodynamics. *European Physical Journal Plus*, **2018**, 133, 1	3.1	20
115	Waste Paper Pulp Derived Reduced Graphene Oxide for Antimicrobial Cement Composites. *Journal of Electronic Materials*, **2018**, 47, 6862-6867	1.9	4
114	Pyroelectric and impedance studies of the 0.5Ba(Zr0.2Ti0.8)O3-0.5(Ba0.7Sr0.3)TiO3 ceramics. *Ceramics International*, **2018**, 44, 21976-21981	5.1	10
113	Candle Soot-Driven Performance Enhancement in Pyroelectric Energy Conversion. *Journal of Electronic Materials*, **2018**, 47, 4721-4730	1.9	14
112	Flexoelectric Induced Caloric Effect in Truncated Pyramid Shaped Ba0.67Sr0.33TiO3 Ferroelectric Material. *Journal of Electronic Materials*, **2017**, 46, 4166-4171	1.9	6
111	Visible light driven multifunctional photocatalysis in TeO 2 -based semiconductor glass ceramics. *Journal of Photonics for Energy*, **2017**, 7, 016502	1.2	5
110	Enhanced electrocaloric, pyroelectric and energy storage performance of BaCe Ti1□O3 ceramics. *Journal of the European Ceramic Society*, **2017**, 37, 3927-3933	6	53
109	Portable triboelectric based wind energy harvester for low power applications. *European Physical Journal Plus*, **2017**, 132, 1	3.1	14
108	Large barocaloric effect and pressure-mediated electrocaloric effect in Pb0.99Nb0.02(Zr0.95Ti0.05)0.08O3 ceramics. *Journal of the American Ceramic Society*, **2017**, 100, 4902-4911	3.8	5
107	Harvesting thermal energy (via radiation) using pyroelectric materials (PZT-5H): An experimental study. *Ferroelectrics, Letters Section*, **2017**, 44, 35-41	0.5	9
106	Enhanced pyroelectric figure of merits of porous BaSn0.05Ti0.95O3 ceramics. *Journal of the European Ceramic Society*, **2017**, 37, 3943-3950	6	27

105	Photocatalytic self-cleaning transparent 2Bi2O3-B2O3 glass ceramics. *Journal of Applied Physics*, **2017**, 122, 094901	2.5	7
104	Pyro-paraelectric effect in ferroelectric materials: A device perspective for transcending Curie limitation. *Materials Today Communications*, **2017**, 12, 146-151	2.5	5
103	Enhanced performance of ferroelectric materials under hydrostatic pressure. *Journal of Applied Physics*, **2017**, 122, 224105	2.5	4
102	Engineered microstructure for tailoring the pyroelectric performance of Ba0.85Sr0.15Zr0.1Ti0.9O3 ceramics by 3BaO-3TiO2-B2O3 glass addition. *Applied Physics Letters*, **2017**, 110, 232901	3.4	9
101	Enhanced electrocaloric effect in glass-added 0.94Bi0.5Na0.5TiO3-0.06BaTiO3 ceramics. *Journal of the Australian Ceramic Society*, **2017**, 53, 523-529	1.5	6
100	Effect of sintering temperature and dwell time on electrocaloric properties of Ba0.85Ca0.075Sr0.075Ti0.90Zr0.10O3 ceramics. *Phase Transitions*, **2017**, 90, 465-474	1.3	14
99	Performance of K0.5Na0.5NbO3-LiSbO3-CaTiO3 ceramics in acoustic energy harvesting exposed to sound pressure. *Ferroelectrics*, **2016**, 504, 149-159	0.6	2
98	Enhanced electrocatalytic performance of perovskite supported iron oxide nanoparticles for oxygen reduction reaction. *RSC Advances*, **2016**, 6, 94826-94832	3.7	13
97	Large-Temperature-Invariant and Electrocaloric Performance of Modified Barium Titanate for Solid-State Refrigeration. *Energy Technology*, **2016**, 4, 1097-1105	3.5	4
96	Efficient Solar Energy Conversion Using CaCu3Ti4O12 Photoanode for Photocatalysis and Photoelectrocatalysis. *Scientific Reports*, **2016**, 6, 18557	4.9	62
95	Visible light induced water detoxification through Portland cement composites reinforced with photocatalytic filler: A leap away from TiO2. *Construction and Building Materials*, **2016**, 120, 364-372	6.7	14
94	Development of Figures of Merit for Pyroelectric Energy-Harvesting Devices. *Energy Technology*, **2016**, 4, 843-850	3.5	15
93	A study on epoxy-based 1□3 piezoelectric composites using finite element method. *Polymer Composites*, **2016**, 37, 1895-1905	3	11
92	Thermal energy conversion and temperature-dependent dynamic hysteresis analysis for Ba0.85Ca0.15Ti0.9□FexZr0.1O3 ceramicsPeer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society.View all notes. *Journal of Asian Ceramic Societies*, **2016**, 4, 102-111	2.4	18
91	Large pyroelectric figure of merits for Sr-modified Ba 0.85 Ca 0.15 Zr 0.1 Ti 0.9 O 3 ceramics. *Solid State Sciences*, **2016**, 52, 10-18	3.4	51
90	Highly efficient visible light mediated azo dye degradation through barium titanate decorated reduced graphene oxide sheets. *Electronic Materials Letters*, **2016**, 12, 281-289	2.9	17
89	Enhanced thermal energy conversion and dynamic hysteresis behavior of Sr-added Ba0.85Ca0.15Ti0.9Zr0.1O3 ferroelectric ceramics. *Journal of Materiomics*, **2016**, 2, 75-86	6.7	21
88	Enhanced electrocaloric effect in Ba0.85Ca0.15Zr0.1Ti0.9□SnxO3 ferroelectric ceramics. *Phase Transitions*, **2016**, 89, 1062-1073	1.3	16

87	Large room temperature electrocaloric strength in bulk ferroelectric ceramics: an optimum solution. *Phase Transitions*, **2016**, 89, 1019-1028	1.3	9
86	Electric-Field-Driven Caloric Effects in Ferroelectric Materials for Solid-State Refrigeration. *Energy Technology*, **2016**, 4, 417-423	3.5	5
85	Caloric Effects in Bulk Lead-Free Ferroelectric Ceramics for Solid-State Refrigeration. *Energy Technology*, **2016**, 4, 244-248	3.5	12
84	An experimental study on thermal energy harvesting using Ca0.15(Sr0.5Ba0.5)0.85Nb2O5 pyroelectric ceramics. *Ferroelectrics, Letters Section*, **2016**, 43, 52-58	0.5	7
83	Elastocaloric and Piezocaloric Effects in Lead Zirconate Titanate Ceramics. *Energy Technology*, **2016**, 4, 647-652	3.5	10
82	Enhanced Visible Light Photocatalytic Activity of Curcumin-Sensitized Perovskite Bi0.5Na0.5TiO3 for Rhodamine 6G Degradation. *International Journal of Applied Ceramic Technology*, **2016**, 13, 333-339	2	13
81	Capacitor and battery charging from hot/cold air using pyroelectric ceramics. *Integrated Ferroelectrics*, **2016**, 176, 160-170	0.8	7
80	Effect of sintering temperature and dwell time dependent dynamic hysteresis scaling behavior of (Ba0.85Ca0.075Sr0.075)(Ti0.90Zr0.10)O3 ceramics. *Ferroelectrics*, **2016**, 505, 52-66	0.6	9
79	Piezoelectric materials for bistable energy harvester: A comparative study. *Integrated Ferroelectrics* , **2016**, 176, 73-84	0.8	6
78	Effect of sintering parameters on the dynamic hysteresis scaling behavior of Ba0.85Sr0.15Zr0.1Ti0.9O3 ceramics. *Integrated Ferroelectrics*, **2016**, 176, 95-108	0.8	7
77	Pyro-paraelectric and flexocaloric effects in barium strontium titanate: A first principles approach. *Applied Physics Letters*, **2016**, 108, 162901	3.4	18
76	Reaping the benefits of ferroelectricity in selectively precipitated lithium niobate microcrystals in silica matrix for photocatalysis. *Applied Physics Letters*, **2016**, 109, 223901	3.4	8
75	Elastocaloric and barocaloric effects in polyvinylidene di-fluoride-based polymers. *Applied Physics Letters*, **2016**, 108, 072903	3.4	33
74	Effect of Peierls stress and strain-hardening parameters on EMR emission in metals and alloys during progressive plastic deformation. *International Journal of Materials Research*, **2016**, 107, 503-517	0.5	9
73	An insight into thermal and vibration cyclic energy harvesting using ferroelectric ceramics. *Integrated Ferroelectrics*, **2016**, 168, 69-84	0.8	4
72	Composition dependent electrocaloric behavior of (SrxBa1-x)Nb2O6 ceramics. *Integrated Ferroelectrics*, **2016**, 168, 163-169	0.8	1
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