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**Constructing phase boundary in AgNbO<sub>3</sub> antiferroelectrics: pathway simultaneously achieving high energy density and efficiency**

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#	Paper	IF	Citations
192	Lead-free antiferroelectric niobates AgNbO <sub>3</sub> and NaNbO <sub>3</sub> for energy storage applications. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 23724-23737	13	54
191	High energy storage density and power density achieved simultaneously in NaNbO <sub>3</sub> -based lead-free ceramics via antiferroelectricity enhancement. <b>2021</b> , 7, 629-639		27
190	Perspective on antiferroelectrics for energy storage and conversion applications. <b>2021</b> , 32, 2097-2107		4
189	Comprehensively enhanced energy-storage properties in (Pb <sub>1-3x</sub> /2Lax)(Zr <sub>0.995</sub> Ti <sub>0.005</sub> )O <sub>3</sub> antiferroelectric ceramics via composition optimization. <b>2021</b> , 9, 12399-12407		7
188	Topochemical synthesis of perovskite-type CuNb <sub>2</sub> O <sub>6</sub> with colossal dielectric constant.		1
187	Silver stoichiometry engineering: an alternative way to improve energy storage density of AgNbO <sub>3</sub> -based antiferroelectric ceramics. <b>2021</b> , 36, 1067-1075		5
186	High-performance lead-free bulk ceramics for electrical energy storage applications: design strategies and challenges. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 18026-18085	13	44
185	Superior energy-storage performance in 0.85Bi <sub>0.5</sub> Na <sub>0.5</sub> Ti <sub>0.3</sub> 0.15NaNbO <sub>3</sub> lead-free ferroelectric ceramics via composition and microstructure engineering. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 10088-10094	13	16
184	Observation of Ferroelastic and Ferroelectric Domains in AgNbO <sub>3</sub> Single Crystal. <b>2021</b> , 38, 037701		3
183	Lead-free ferroelectric materials: Prospective applications. <b>2021</b> , 36, 985-995		12
182	AgNbO <sub>3</sub> antiferroelectric film with high energy storage performance. <b>2021</b> , 7, 1294-1294		4
181	Terahertz Reading of Ferroelectric Domain Wall Dielectric Switching. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 12622-12628	9.5	10
180	The effect of Hf doping on the dielectric and energy storage performance of barium titanate based glass ceramics. <i>Ceramics International</i> , <b>2021</b> , 47, 11581-11586	5.1	6
179	Electroceramics for High-Energy Density Capacitors: Current Status and Future Perspectives. <b>2021</b> , 121, 6124-6172		129
178	Giant Energy-Storage Density and Thermally Activated Phase Transition in (Pb <sub>0.96</sub> La <sub>0.04</sub> )(Zr <sub>0.99</sub> Ti <sub>0.01</sub> )O <sub>3</sub> Antiferroelectric Ceramics. <b>2021</b> , 4, 4897-4902		6
177	Machine learning identified materials descriptors for ferroelectricity. <i>Acta Materialia</i> , <b>2021</b> , 209, 1168158.4		6
176	Advances in Dielectric Thin Films for Energy Storage Applications, Revealing the Promise of Group IV Binary Oxides. <b>2021</b> , 6, 2208-2217		14

175	Effects of A/B-Site Co-Doping on Microstructure and Dielectric Thermal Stability of AgNbO <sub>3</sub> Ceramics. <b>2021</b> , 13, 741-747		51
174	NaNbO <sub>3</sub> -(Bi <sub>0.5</sub> Li <sub>0.5</sub> )TiO <sub>3</sub> Lead-Free Relaxor Ferroelectric Capacitors with Superior Energy-Storage Performances via Multiple Synergistic Design. <b>2021</b> , 11, 2101378		39
173	Progress and perspectives in dielectric energy storage ceramics. <b>2021</b> , 10, 675-703		20
172	Synergic modulation of over-stoichiometrical MnO <sub>2</sub> and SiO <sub>2</sub> -coated particles on the energy storage properties of silver niobate-based ceramics. <i>Ceramics International</i> , <b>2021</b> , 47, 19595-19604	5.1	2
171	Excellent energy storage performance in La and Ta co-doped AgNbO <sub>3</sub> antiferroelectric ceramics. <i>Journal of the European Ceramic Society</i> , <b>2021</b> ,	6	3
170	Superior energy storage density and giant negative electrocaloric effects in (Pb <sub>0.98</sub> La <sub>0.02</sub> )(Zr, Sn)O <sub>3</sub> antiferroelectric ceramics. <b>2021</b> , 200, 113920		9
169	A Metal-Free Molecular Antiferroelectric Material Showing High Phase Transition Temperatures and Large Electrocaloric Effects. <b>2021</b> , 143, 14379-14385		3
168	Simultaneous improved polarization and breakdown strength in Mn/W co-doped silver niobate ceramics. <i>Journal of Materials Science</i> , 1	4.3	1
167	Effect of Ca <sup>2+</sup> /Hf <sup>4+</sup> modification at A/B sites on energy-storage density of Bi <sub>0.47</sub> Na <sub>0.47</sub> Ba <sub>0.06</sub> TiO <sub>3</sub> ceramics. <i>Chemical Engineering Journal</i> , <b>2021</b> , 420, 129861	14.7	21
166	Enhanced energy storage density of Sr <sub>0.7</sub> BixTiO <sub>3</sub> lead-free relaxor ceramics via A-site defect and grain size tuning. <i>Chemical Engineering Journal</i> , <b>2021</b> , 420, 129808	14.7	17
165	Novel lead-free NaNbO <sub>3</sub> -based relaxor antiferroelectric ceramics with ultrahigh energy storage density and high efficiency. <b>2021</b> ,		3
164	Revealing the solid-state processing mechanisms of antiferroelectric AgNbO <sub>3</sub> for energy storage.		1
163	A Bi <sub>1/2</sub> K <sub>1/2</sub> TiO <sub>3</sub> -based ergodic relaxor ceramic for temperature-stable energy storage applications. <b>2021</b> , 207, 109887		7
162	Pb/Bi-free Tungsten Bronze-Based Relaxor Ferroelectric Ceramics with Remarkable Energy Storage Performance. <b>2021</b> , 4, 9066-9076		3
161	Energy storage performance of Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> based lead-free ferroelectric ceramics prepared via non-uniform phase structure modification and rolling process. <i>Chemical Engineering Journal</i> , <b>2021</b> , 420, 130475	14.7	16
160	Enhanced energy storage properties achieved in Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> -based ceramics via composition design and domain engineering. <i>Chemical Engineering Journal</i> , <b>2021</b> , 419, 129601	14.7	31
159	Enhanced energy storage properties of lead-free NaNbO <sub>3</sub> -based ceramics via A/B-site substitution. <i>Chemical Engineering Journal</i> , <b>2021</b> , 422, 130130	14.7	18
158	Significantly enhanced energy storage properties of Nd <sup>3+</sup> doped AgNbO <sub>3</sub> lead-free antiferroelectric ceramics. <b>2021</b> , 877, 160162		6

157	Excellent energy storage performance of NaNbO <sub>3</sub> -based antiferroelectric ceramics with ultrafast charge/discharge rate. <i>Journal of the European Ceramic Society</i> , <b>2021</b> , 41, 6465-6473	6	2
156	Modulated band structure and phase transitions in calcium hafnate titanate modified silver niobate ceramics for energy storage. <i>Chemical Engineering Journal</i> , <b>2021</b> , 426, 131047	14.7	7
155	Ultrahigh energy storage density in lead-free relaxor antiferroelectric ceramics via domain engineering. <b>2021</b> , 43, 383-390		23
154	Temperature stable (1-x)(0.9Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> -0.1BiAlO <sub>3</sub> )-xNaTaO <sub>3</sub> ceramics and capacitors with ultra-wide operational range. <b>2021</b> , 886, 161315		2
153	High capacitive performance at moderate operating field in (Bi <sub>0.5</sub> Na <sub>0.5</sub> )TiO <sub>3</sub> -based dielectric ceramics via synergistic effect of site engineering strategy. <i>Chemical Engineering Journal</i> , <b>2021</b> , 426, 130811	14.7	10
152	Significantly enhanced energy-storage properties of Bi <sub>0.47</sub> Na <sub>0.47</sub> Ba <sub>0.06</sub> TiO <sub>3</sub> -CaHfO <sub>3</sub> ceramics by introducing Sr <sub>0.7</sub> Bi <sub>0.2</sub> TiO <sub>3</sub> for pulse capacitor application. <i>Chemical Engineering Journal</i> , <b>2022</b> , 429, 132145	14.7	9
151	NaNbO <sub>3</sub> -CaTiO <sub>3</sub> lead-free relaxor antiferroelectric ceramics featuring giant energy density, high energy efficiency and power density. <i>Chemical Engineering Journal</i> , <b>2022</b> , 429, 132534	14.7	3
150	(Bi <sub>0.5</sub> Na <sub>0.5</sub> )TiO <sub>3</sub> -based relaxor ferroelectrics with medium permittivity featuring enhanced energy-storage density and excellent thermal stability. <i>Chemical Engineering Journal</i> , <b>2022</b> , 427, 131989	14.7	9
149	Investigation of transitions between the M-phases in AgNbO <sub>3</sub> based ceramics. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 3520-3529	13	3
148	Multilayer ceramic film capacitors for high-performance energy storage: progress and outlook. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 9462-9480	13	12
147	Large polarization and record-high performance of energy storage induced by a phase change in organic molecular crystals. <b>2021</b> , 12, 14198-14206		3
146	X9R-type Ag <sub>1-3</sub> Bi NbO <sub>3</sub> based lead-free dielectric ceramic capacitors with excellent energy-storage properties. <i>Ceramics International</i> , <b>2021</b> ,	5.1	0
145	Ultrahigh Energy Storage Density and Efficiency in BiNaTiO-Based Ceramics via the Domain and Bandgap Engineering. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 51218-51229	9.5	8
144	Phase diagram with an antiferroelectric/ferroelectric phase boundary in AgNbO <sub>3</sub> BiTaO <sub>3</sub> energy-storage ceramics by lattice dynamics and electronic transitions. <b>2021</b> , 104,		0
143	Enhancement of energy storage and hardness of (Na <sub>0.5</sub> Bi <sub>0.5</sub> ) <sub>0.7</sub> Sr <sub>0.3</sub> TiO <sub>3</sub> -based relaxor ferroelectrics via introducing Ba(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> . <i>Chemical Engineering Journal</i> , <b>2021</b> , 431, 133441	14.7	8
142	Superior energy storage BaTiO <sub>3</sub> -based amorphous dielectric film with polymorphic hexagonal and cubic nanostructures. <i>Chemical Engineering Journal</i> , <b>2021</b> , 431, 133447	14.7	2
141	Outstanding Energy Storage Performance in High-Hardness (Bi <sub>0.5</sub> K <sub>0.5</sub> )TiO <sub>3</sub> -Based Lead-Free Relaxors via Multi-Scale Synergistic Design. 2110478		12
140	Grain size modulated (Na <sub>0.5</sub> Bi <sub>0.5</sub> ) <sub>0.65</sub> Sr <sub>0.35</sub> TiO <sub>3</sub> -based ceramics with enhanced energy storage properties. <i>Chemical Engineering Journal</i> , <b>2021</b> , 133584	14.7	3

139	Local Structure Engineered Lead-Free Ferroic Dielectrics for Superior Energy-Storage Capacitors: A Review. <b>2021</b> , 45, 541-541		11
138	High and thermally stable piezoelectricity in relaxor-based ferroelectrics for mechanical energy harvesting. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 26741-26749	13	0
137	Phase transition and piezoelectric property of (Ag,K)NbO <sub>3</sub> ceramics. <b>2022</b> ,		
136	Structural Phase Transition and In-Situ Energy Storage Pathway in Nonpolar Materials: A Review.. <b>2021</b> , 14,		1
135	Enhanced energy storage performances of Bi(Ni <sub>1/2</sub> Sb <sub>2/3</sub> )O <sub>3</sub> added NaNbO <sub>3</sub> relaxor ferroelectric ceramics. <i>Ceramics International</i> , <b>2022</b> ,	5.1	0
134	Enhanced energy storage density of antiferroelectric AgNbO <sub>3</sub> -based ceramics by Bi/Ta modification at A/B sites. <b>2022</b> , 33, 3081		1
133	Composition and Structure Optimized BiFeO <sub>3</sub> -SrTiO <sub>3</sub> Lead-Free Ceramics with Ultrahigh Energy Storage Performance.. <b>2022</b> , e2106515		16
132	Synergic Enhancement of Energy Storage Density and Efficiency in MnO-Doped AgNbO <sub>3</sub> @SiO <sub>2</sub> Ceramics via A/B-Site Substitutions.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2022</b> ,	9.5	4
131	High energy density of BaTiO <sub>3</sub> @TiO <sub>2</sub> nanosheet/polymer composites via ping-pong-like electron area scattering and interface engineering. <b>2022</b> , 14,		4
130	Dielectric properties of biofiber-based polymer composites. <b>2022</b> , 159-191		
129	Achieving ultrahigh energy-storage capability in PbZrO <sub>3</sub> -based antiferroelectric capacitors based on optimization of property parameters. <i>Journal of Materials Chemistry A</i> ,	13	3
128	Enhancement of energy storage performance in lead-free barium titanate-based relaxor ferroelectrics through a synergistic two-step strategy design. <i>Chemical Engineering Journal</i> , <b>2022</b> , 434, 134678	14.7	5
127	Structure and energy storage performance of lanthanide elements doped AgNbO <sub>3</sub> lead-free antiferroelectric ceramics. <i>Journal of the European Ceramic Society</i> , <b>2022</b> , 42, 2204-2211	6	1
126	Enhanced energy storage properties and superior thermal stability in SNN-based tungsten bronze ceramics through substitution strategy. <i>Journal of the European Ceramic Society</i> , <b>2022</b> , 42, 2781-2781	6	2
125	Outstanding energy-storage and charge/discharge performances in Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> lead-free ceramics via linear additive of Ca <sub>0.85</sub> Bi <sub>0.1</sub> TiO <sub>3</sub> . <i>Chemical Engineering Journal</i> , <b>2022</b> , 435, 135065	14.7	3
124	Improved Energy Storage Properties Achieved in (K, Na)NbO <sub>3</sub> -Based Relaxor Ferroelectric Ceramics via a Combinatorial Optimization Strategy. 2111776		18
123	Boosting energy storage performance of BiFeO <sub>3</sub> -based multilayer capacitors via enhancing ionic bonding and relaxor behavior. <i>Journal of Materials Chemistry A</i> , <b>2022</b> , 10, 7382-7390	13	4
122	Superior energy storage performance in (Bi <sub>0.5</sub> Na <sub>0.5</sub> )TiO <sub>3</sub> -based lead-free relaxor ferroelectrics for dielectric capacitor application via multiscale optimization design. <i>Journal of Materials Chemistry A</i> ,	13	9

121	Local Atomic Configuration in Pristine and A-Site Doped Silver Niobate Perovskite Antiferroelectrics.. <b>2022</b> , 2022, 9782343		1
120	A Combined Optimization Strategy for Improvement of Comprehensive Energy Storage Performance in Sodium Niobate-Based Antiferroelectric Ceramics.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2022</b> ,	9.5	4
119	Optimization of Energy Storage Properties in Lead-Free Barium Titanate-Based Ceramics via B-Site Defect Dipole Engineering. <b>2022</b> , 10, 2930-2937		1
118	Realizing enhanced energy storage and hardness performances in 0.90NaNbO <sub>3</sub> -0.10Bi(Zn <sub>0.5</sub> Sn <sub>0.5</sub> )O <sub>3</sub> ceramics. 1		2
117	Phase engineering in NaNbO <sub>3</sub> antiferroelectrics for high energy storage density. <b>2022</b> ,		1
116	Synergy of a Stabilized Antiferroelectric Phase and Domain Engineering Boosting the Energy Storage Performance of NaNbO-Based Relaxor Antiferroelectric Ceramics.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2022</b> ,	9.5	3
115	Discovery of electric devil's staircase in perovskite antiferroelectric.. <b>2022</b> , 8, eabl9088		2
114	Ultrahigh energy storage density and superior discharge power density in a novel antiferroelectric lead hafnate. <b>2022</b> , 24, 100681		3
113	Enhanced energy storage performance of 0.88(0.65Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> -0.35SrTiO <sub>3</sub> )-0.12Bi(Mg <sub>0.5</sub> Hf <sub>0.5</sub> )O <sub>3</sub> lead-free relaxor ceramic by composition design strategy. <i>Chemical Engineering Journal</i> , <b>2022</b> , 437, 135462	14.7	3
112	Antiferroelectric stability and energy storage properties of Co-doped AgNbO <sub>3</sub> ceramics. <b>2022</b> , 310, 123081		5
111	Constructing novel binary Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> -based composite ceramics for excellent energy storage performances via defect engineering. <i>Chemical Engineering Journal</i> , <b>2022</b> , 439, 135762	14.7	6
110	Recent Progress and Future Prospects on All-Organic Polymer Dielectrics for Energy Storage Capacitors.. <b>2021</b> ,		36
109	A review of ferroelectric materials for high power devices. <b>2022</b> ,		0
108	Ceramic-Based Dielectrics for Electrostatic Energy Storage Applications: Fundamental Aspects, Recent Progress, and Remaining Challenges. <i>Chemical Engineering Journal</i> , <b>2022</b> , 136315	14.7	2
107	Ultrahigh Energy Storage Density and High Efficiency in Lead-Free (BiNa)(FeTi)O-Modified NaNbO Ceramics via Stabilizing the Antiferroelectric Phase and Enhancing Relaxor Behavior.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2022</b> ,	9.5	5
106	Temperature-dependent ferroelastic behaviour of antiferroelectric AgNbO <sub>3</sub> . <i>Acta Materialia</i> , <b>2022</b> , 117934	9.1	1
105	Ultrahigh energy storage density in (Bi <sub>0.5</sub> Na <sub>0.5</sub> ) <sub>0.65</sub> Sr <sub>0.35</sub> TiO <sub>3</sub> -based lead-free relaxor ceramics with excellent temperature stability. <i>Nano Energy</i> , <b>2022</b> , 107276	17.1	10
104	High-Energy Storage Properties over a Broad Temperature Range in La-Modified BNT-Based Lead-Free Ceramics.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2022</b> ,	9.5	9

103	Phase-pure antiferroelectric AgNbO <sub>3</sub> films on Si substrates: chemical solution deposition and phase transitions. <i>Journal of Materials Chemistry A</i> ,	13	0
102	Superior energy storage properties in NaNbO <sub>3</sub> -based ceramics via synergistically optimizing domain and band structures. <i>Journal of Materials Chemistry A</i> ,	13	6
101	Concurrent achievement of giant energy density and ultrahigh efficiency in antiferroelectric ceramics via core-shell structure design. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 172902	3.4	0
100	Ferroelectricity and Schottky Heterojunction Engineering in AgNbO <sub>3</sub> : A Simultaneous Way of Boosting Piezo-photocatalytic Activity.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2022</b> ,	9.5	0
99	Ultrahigh Energy-Storage Performances in Lead-free NaBiTiO-Based Relaxor Antiferroelectric Ceramics through a Synergistic Design Strategy.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2022</b> ,	9.5	7
98	High-Performance PbZrO <sub>3</sub> -based Antiferroelectric Multilayer Capacitors Based on Multiple Enhancement Strategy. <i>Chemical Engineering Journal</i> , <b>2022</b> , 136729	14.7	3
97	Antiferroelectricity of NaNbO <sub>3</sub> : Single-crystal experimental study and first-principles calculation.		
96	Simultaneously achieving high performance of energy storage and transparency via A-site non-stoichiometric defect engineering in KNN-based ceramics. <i>Chemical Engineering Journal</i> , <b>2022</b> , 444, 136538	14.7	3
95	Achieving high energy storage performance of Pb(Lu <sub>1/2</sub> Nb <sub>1/2</sub> )O <sub>3</sub> antiferroelectric ceramics via equivalent A-site engineering. <i>Journal of the European Ceramic Society</i> , <b>2022</b> ,	6	0
94	Ultralow contents of AgNbO <sub>3</sub> fibers induced high energy storage density in ferroelectric polymer nanocomposites. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 223904	3.4	2
93	Giant energy-storage density with ultrahigh efficiency in lead-free relaxors via high-entropy design. <i>Nature Communications</i> , <b>2022</b> , 13,	17.4	19
92	Effective strategy to improve energy storage properties in lead-free (Ba <sub>0.8</sub> Sr <sub>0.2</sub> )TiO <sub>3</sub> -Bi(Mg <sub>0.5</sub> Zr <sub>0.5</sub> )O <sub>3</sub> relaxor ferroelectric ceramics. <i>Chemical Engineering Journal</i> , <b>2022</b> , 137389	14.7	1
91	Silver niobate perovskites: structure, properties and multifunctional applications. <i>Journal of Materials Chemistry A</i> ,	13	1
90	Controllable preparation of Na <sub>0.4</sub> K <sub>0.1</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> /CaZrO <sub>3</sub> /NaNbO <sub>3</sub> nanoceramics with excellent temperature-stable energy storage performance by combining sol-gel synthesis and two-step sintering. <i>Ceramics International</i> , <b>2022</b> ,	5.1	1
89	Improving the comprehensive energy storage performance of composite materials through the coupling effect of AgNbO <sub>3</sub> / PVDF nanocomposite. <i>Polymer Composites</i> ,	3	1
88	Phase structure and defect engineering in (Bi <sub>0.5</sub> Na <sub>0.5</sub> )TiO <sub>3</sub> -based relaxor antiferroelectrics toward excellent energy storage performance. <i>Nano Energy</i> , <b>2022</b> , 100, 107484	17.1	3
87	Achieving superior energy-storage efficiency by tailoring the state of polar nano-sized regions under low electric fields. <i>Chemical Engineering Journal</i> , <b>2022</b> , 447, 137494	14.7	2
86	Greatly Enhanced Energy Storage and Discharge Properties in AgNbO <sub>3</sub> Ceramics with Stable Antiferroelectric Phase and High Breakdown Strength Using Hydrothermally Synthesized Powders. <i>Journal of Materials Chemistry A</i> ,	13	1

85	A review on (Sr,Ca)TiO <sub>3</sub> -based dielectric materials: crystallography, recent progress and outlook in energy-storage aspects. <i>Journal of Materials Science</i> , <b>2022</b> , 57, 12279-12317	4.3	
84	Supercritical relaxor nanograined ferroelectrics for ultrahigh energy-storage capacitors. <i>Advanced Materials</i> , 2204356	24	6
83	Achieving Excellent Energy Storage Properties in Fine-Grain High-Entropy Relaxor Ferroelectric Ceramics. <i>Advanced Electronic Materials</i> , 2200503	6.4	4
82	Crystallization temperature dependence of structure, electrical and energy storage properties in BaO <sub>1-x</sub> Na <sub>2x</sub> B <sub>2</sub> O <sub>5</sub> Al <sub>2</sub> O <sub>3</sub> B <sub>2</sub> O <sub>3</sub> glass ceramics. <i>Ceramics International</i> , <b>2022</b> ,	5.1	0
81	Excellent temperature stability of energy storage performance by weak dipolar interaction strategy. <i>Applied Physics Letters</i> , <b>2022</b> , 121, 023902	3.4	5
80	Excellent Energy Storage Properties Achieved in Sodium Niobate-Based Relaxor Ceramics through Doping Tantalum. <i>ACS Applied Materials &amp; Interfaces</i> ,	9.5	0
79	(1-x)[0.90NN-0.10Bi(Mg <sub>2</sub> /3Nb <sub>1</sub> /3)O <sub>3</sub> ]-x(Bi <sub>0.5</sub> Na <sub>0.5</sub> ) <sub>0.7</sub> Sr <sub>0.3</sub> TiO <sub>3</sub> ceramics with core-shell structures: A pathway for simultaneously achieving high polarization and breakdown strength. <i>Nano Energy</i> , <b>2022</b> , 101, 107577	17.1	5
78	Achieving high pulse charge-discharge energy storage properties and temperature stability of (Ba <sub>0.98</sub> -Li <sub>0.02</sub> La)(Mg <sub>0.04</sub> Ti <sub>0.96</sub> )O <sub>3</sub> lead-free ceramics via bandgap and defect engineering. <i>Chemical Engineering Journal</i> , <b>2022</b> , 450, 137814	14.7	1
77	Enhanced pyroelectric performance in Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> -xNa <sub>0.5</sub> Bi <sub>4.5</sub> Ti <sub>4</sub> O <sub>15</sub> lead-free ferroelectric ceramics via composition and microstructure engineering. <i>Acta Materialia</i> , <b>2022</b> , 118194	8.4	0
76	Phase identification and structural evolution in BMT modified NN anti-ferroelectric ceramics. <i>Journal of the European Ceramic Society</i> , <b>2022</b> ,	6	1
75	Stabilization of the ferroelectric phase in NaNbO <sub>3</sub> -based lead-free ceramics for a wide-temperature large electrocaloric effect.		2
74	Ultrahigh-temperature film capacitors via homo/heterogeneous interfaces. <b>2022</b> , 10, 17166-17173		0
73	Boosting Energy Storage Performance of Lead-Free Ceramics via Layered Structure Optimization Strategy. <b>2022</b> , 18, 2202575		8
72	Outstanding comprehensive energy storage performance in lead-free BiFeO <sub>3</sub> -based relaxor ferroelectric ceramics by multiple optimization design. <b>2022</b> , 118286		5
71	Ferroelectric ceramics and composites for piezoelectric transducer applications.		0
70	Improved energy storage in antiferroelectric AgNbO <sub>3</sub> -modulated 0.925Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> □ 0.075BaTiO <sub>3</sub> relaxor ferroelectric ceramics. <b>2022</b> ,		1
69	Achieving Ultrahigh Energy Storage Density in Lead-Free Sodium Niobate-Based Ceramics by Modulating the Antiferroelectric Phase. <b>2022</b> , 34, 7313-7322		4
68	High discharge energy density in novel K <sub>1/2</sub> Bi <sub>1/2</sub> TiO <sub>3</sub> -BiFeO <sub>3</sub> based relaxor ferroelectrics. <b>2022</b> ,		1



67	Greatly enhanced discharged energy density and efficiency of BiFeO <sub>3</sub> -Based ceramics by regulating insulation performance. <b>2022</b> , 27, 100821	1
66	Enhanced energy storage properties under low electric fields in (Bi <sub>0.5</sub> Na <sub>0.5</sub> )TiO <sub>3</sub> -based relaxor ferroelectrics via a synergistic optimization strategy. <b>2022</b> , 450, 138432	
65	Local Diverse Polarization Optimized Comprehensive Energy Storage Performance in Lead-Free Superparaelectrics. 2205787	2
64	Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> -based relaxor-ferroelectric ceramics for low-electric-field dielectric energy storage via bidirectional optimization strategy. <b>2022</b> , 139422	0
63	Local probing of the non-uniform distribution of ferrielectric and antiferroelectric phases.	0
62	Enhanced energy storage performances under moderate electric field in aliovalent A/B-site co-doped AgNbO <sub>3</sub> . <b>2023</b> , 157, 112008	2
61	Excellent energy storage and mechanical performance in hetero-structure BaTiO <sub>3</sub> -based relaxors. <b>2023</b> , 452, 139222	1
60	Realizing high energy density and efficiency simultaneously in (Bi <sub>0.5</sub> Na <sub>0.5</sub> ) <sub>0.7</sub> Sr <sub>0.3</sub> TiO <sub>3</sub> -based ceramics via introducing linear dielectric CaTiO <sub>3</sub> . <b>2022</b> , 10, 18343-18353	0
59	Significantly Enhanced Energy Storage Performance of Lead-Free BiFeO <sub>3</sub> -Based Ceramics via Synergistic Optimization Strategy. <b>2022</b> , 14, 44539-44549	1
58	Enhanced Energy Density and Efficiency in Lead-Free Sodium Niobate-Based Relaxor Antiferroelectric Ceramics for Electrostatic Energy Storage Application. 2200793	1
57	Large (anti)ferrodistortive NaNbO <sub>3</sub> -based lead-free relaxors: Polar nanoregions embedded in ordered oxygen octahedral tilt matrix. <b>2022</b> ,	0
56	Ba(Zr <sub>0.3</sub> Ti <sub>0.7</sub> )O <sub>3</sub> doping to enhance the dielectric and energy discharging performances of a 0.65Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> 0.35Sr <sub>0.7</sub> Bi <sub>0.2</sub> TiO <sub>3</sub> lead-free ceramic. <b>2022</b> , 33, 21702-21712	0
55	Energy storage performance and phase transition under high electric field in Na/Ta co-doped AgNbO <sub>3</sub> ceramics. <b>2022</b> ,	0
54	Review on field-induced phase transitions in lead-free NaNbO <sub>3</sub> -based antiferroelectric perovskite oxides for energy storage. <b>2022</b> ,	0
53	Lead-free Nb-based dielectric film capacitors for energy storage applications.	0
52	Realizing simultaneously excellent energy storage and discharge properties in AgNbO <sub>3</sub> based antiferroelectric ceramics via La <sup>3+</sup> and Ta <sup>5+</sup> co-substitution strategy. <b>2022</b> ,	0
51	Artificially induced ferroelectric-like behavior in an antiferroelectric sandwich structure by interface engineering. <b>2022</b> , 42, 7441-7447	0
50	High Energy Storage Performance in La-Doped AgNbO <sub>3</sub> Ceramics via Tape Casting. <b>2022</b> , 14, 48926-48935	2

- 49 Enhanced breakdown strength and energy storage density of AgNbO<sub>3</sub> ceramics via tape casting. ○
- 48 Optimization of high temperature energy storage properties of PEI -based composite dielectric based on rapid in-situ growth of inorganic functional layer. ○
- 47 High energy storage properties in Ca<sub>0.7</sub>La<sub>0.2</sub>TiO<sub>3</sub>-modified NaNbO<sub>3</sub>-based lead-free antiferroelectric ceramics. ○
- 46 Glass-Ceramic Capacitors with Simultaneously High Power and Energy Densities under Practical Charge/Discharge Conditions. ○
- 45 Design of high energy-storage properties in eco-friendly AgNbO<sub>3</sub>-based ceramics via two-step sintering method and tuning phase boundary. ○
- 44 Achieving a high energy storage density in Ag(Nb,Ta)O<sub>3</sub> antiferroelectric films via nanograin engineering. **2023**, 12, 196-206 1
- 43 A synergistic two-step optimization design enables high capacitive energy storage in lead-free Sr<sub>0.7</sub>Bi<sub>0.2</sub>TiO<sub>3</sub>-based relaxor ferroelectric ceramics. ○
- 42 Simultaneous enhancement of breakdown strength, recoverable energy storage density and efficiency in antiferroelectric AgNbO<sub>3</sub> ceramics via multi-scale synergistic design. **2023**, 456, 141023 ○
- 41 Ultrahigh Polarization Response along Large Energy Storage Properties in BiFeO<sub>3</sub>/BaTiO<sub>3</sub>-Based Relaxor Ferroelectric Ceramics under Low Electric Field. **2022**, 14, 53690-53701 ○
- 40 Significantly Enhanced Energy Storage Performance in High Hardness BKT-Based Ceramic via Defect Engineering and Relaxor Tuning. **2022**, 14, 54021-54033 ○
- 39 Nanoscale grain sizes in BNT-based ceramics with superb energy storage performances via coating boron nitride nanosheets. **2022**, 140524 ○
- 38 Excellent Energy-Storage Performance in BNT-SST-LMN Lead-Free Relaxor Ferroelectric Ceramics with High Electrical Homogeneity. **2022**, 5, 15247-15256 ○
- 37 Enhanced energy storage performance achieved in Na<sub>0.5</sub>Bi<sub>0.5</sub>TiO<sub>3</sub>/Br<sub>0.7</sub>Bi<sub>0.2</sub>TiO<sub>3</sub> ceramics via domain structure and bandgap width tuning. **2022**, ○
- 36 Core/Shell Grain Structure and High Energy Storage Performance of BNT-Based Relaxor Ferroelectric Ceramics. ○
- 35 Superior Energy Storage Capability and Stability in Lead-Free Relaxors for Dielectric Capacitors Utilizing Nanoscale Polarization Heterogeneous Regions. 2206662 ○
- 34 Enhancing energy storage performance in Na<sub>0.5</sub>Bi<sub>0.5</sub>TiO<sub>3</sub>-based lead-free relaxor ferroelectrics ceramics along stepwise optimization route. 1
- 33 Delayed Polarization Saturation Induced Superior Energy Storage Capability of BiFeO<sub>3</sub> -Based Ceramics Via Introduction of Non-Isovalent Ions. 2206840 ○
- 32 Improved Energy Storage Density performance of the (1-x) [0.88BaTiO<sub>3</sub>-0.12Bi(Li<sub>0.5</sub>Nb<sub>0.5</sub>)O<sub>3</sub>]-x(0.8BaTiO<sub>3</sub>-0.2SrTiO<sub>3</sub>) Lead-Free Ceramics. **2023**, 112157 ○

- 31 Optimized dielectric energy storage performance in ZnO-modified Bi<sub>0.5</sub>Na<sub>0.5</sub>TiO<sub>3</sub>-Sr<sub>0.7</sub>Bi<sub>0.2</sub>?<sub>0.1</sub>TiO<sub>3</sub> ceramics with composite structure and element segregation. **2023**, 458, 141449 2
- 30 Optimized electric-energy storage in BiFeO<sub>3</sub>BaTiO<sub>3</sub> ceramics via tailoring microstructure and nanocluster. **2023**, 43, 1941-1951 0
- 29 A novel Sr<sub>5</sub>BiTi<sub>3</sub>Nb<sub>7</sub>O<sub>30</sub> tungsten bronze ceramic with high energy density and efficiency for dielectric capacitor applications. 0
- 28 High energy-storage performance in X9R-type Na<sub>0.5</sub>Bi<sub>0.5</sub>TiO<sub>3</sub>-based lead-free ceramics. **2023**, 0 0
- 27 High energy storage density and efficiency in AgNbO<sub>3</sub> based relaxor antiferroelectrics with reduced silver content. **2023**, 1 1
- 26 Review of lead zirconate-based antiferroelectric films. **2023**, 0 0
- 25 (Bi<sub>1/6</sub>Na<sub>1/6</sub>Ba<sub>1/6</sub>Sr<sub>1/6</sub>Ca<sub>1/6</sub>Pb<sub>1/6</sub>)TiO<sub>3</sub>-based high-entropy dielectric ceramics with ultrahigh recoverable energy density and high energy storage efficiency. **2023**, 11, 4937-4945 0
- 24 Multi-scale collaborative optimization of SrTiO<sub>3</sub>-based energy storage ceramics with high performance and excellent stability. **2023**, 109, 108275 0
- 23 Superior energy storage properties with thermal stability in lead-free ceramics by constructing an antiferroelectric/relaxor-antiferroelectric crossover. **2023**, 249, 118826 0
- 22 High energy storage performance in BaTiO<sub>3</sub>-based lead-free relaxors via multi-dimensional collaborative design. **2023**, 43, 2417-2425 0
- 21 High energy storage performance in AgNbO<sub>3</sub> relaxor ferroelectric films induced by nanopillar structure. **2023**, 155, 160-166 0
- 20 Morphotropic phase boundary, polymorphic phases and enhanced electrostrain/piezoelectricity in Ag<sub>1</sub>-K NbO<sub>3</sub> solid-solution ceramics. **2023**, 43, 4395-4407 0
- 19 Ultrahigh energy density and excellent discharge properties in Ce<sup>4+</sup> and Ta<sup>5+</sup> co-modified AgNbO<sub>3</sub> relaxor antiferroelectric ceramics via multiple design strategies. **2023**, 246, 118730 1
- 18 Stress-induced tailoring of energy storage properties in lead-free Ba<sub>0.85</sub>Ca<sub>0.15</sub>Zr<sub>0.1</sub>Ti<sub>0.9</sub>O<sub>3</sub> ferroelectric bulk ceramics. **2023**, 0 0
- 17 Improved capacitive energy storage in sodium niobate-based relaxor antiferroelectric ceramics. **2023**, 122, 072902 1
- 16 Effect of introducing Sr<sup>2+</sup>/Hf<sup>4+</sup> on phase structures, bandgaps, and energy storage performance in Bi<sub>0.47</sub>Na<sub>0.47</sub>Ba<sub>0.06</sub>TiO<sub>3</sub>-based ferroelectric ceramic. **2023**, 49, 18210-18218 0
- 15 Free energy regulation and domain engineering of BaTiO<sub>3</sub>-NaNbO<sub>3</sub> ceramics for superior dielectric energy storage performance. **2023**, 461, 142070 0
- 14 AgNbO<sub>3</sub>-based antiferroelectric ceramics with superior energy storage performance via Gd/Ta substitution at A/B sites. **2023**, 49, 18143-18152 0

- 13 Uniaxial stress-dependent dielectric properties and phase transitions of antiferroelectric AgNbO<sub>3</sub>. **2023**, 122, 082904 ○
- 12 Enhanced Energy Storage Performance of AgNbO<sub>3</sub>:xCeO<sub>2</sub> by Synergistic Strategies of Tolerance Factor and Density Regulations. **2023**, 13, 534 ○
- 11 Heterovalent-doping-enabled atom-displacement fluctuation leads to ultrahigh energy-storage density in AgNbO<sub>3</sub>-based multilayer capacitors. **2023**, 14, ○
- 10 Superior Capacitive Energy-Storage Performance in Pb-Free Relaxors with a Simple Chemical Composition. **2023**, 145, 6194-6202 ○
- 9 Large Energy Capacitive High-Entropy Lead-Free Ferroelectrics. **2023**, 15, ○
- 8 Zr-doped AgNbO<sub>3</sub> with enhanced visible light-induced photocatalytic performance. **2023**, 5, 100891 ○
- 7 Dielectric ceramics with excellent energy storage properties were obtained by doping 0.92NaNbO<sub>3</sub>-0.08Bi(Ni<sub>0.5</sub>Zr<sub>0.5</sub>)O<sub>3</sub> ceramics. **2023**, 566, 232934 ○
- 6 Tailoring high-energy-storage NaNbO<sub>3</sub>-based materials from antiferroelectric to relaxor states. **2023**, 14, ○
- 5 Excellent energy storage properties realized in novel BaTiO<sub>3</sub>-based lead-free ceramics by regulating relaxation behavior. **2023**, ○
- 4 Well-defined double hysteresis loop in NaNbO<sub>3</sub> antiferroelectrics. **2023**, 14, ○
- 3 Texture Engineering Modulating Electromechanical Breakdown in Multilayer Ceramic Capacitors. ○
- 2 Effect of A/B-site structural heterogeneity on ferroelectricity in AgNbO<sub>3</sub>-based ceramics. **2023**, 122, 143905 ○
- 1 Excellent Energy-Storage Performance of (0.85  $\lambda$ )NaNbO<sub>3</sub> $\lambda$ NaSbO<sub>3</sub> $\lambda$ 0.15(Na<sub>0.5</sub>La<sub>0.5</sub>)TiO<sub>3</sub> Antiferroelectric Ceramics through B-Site Sb<sup>5+</sup> Driven Phase Transition. **2023**, 15, 22301-22309 ○