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## **Supplementary Information**

## Improved Electrocaloric Effect and Working Temperature Span in BaTiO<sub>3</sub>-based Ferroelectric Ceramics via Texture Engineering

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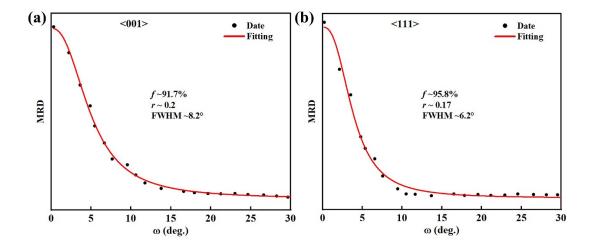
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Table S1 The lattice parameters for random, <001>, <111> textured ceramics

ceramics	Phase type	a	ь	c	α	$R_{ m wp}$	$R_{\rm p}$	$\chi^2$
random	R3m (74.3%)	4.0248	4.0248	4.0248	89.925	9.39%	6.81%	1.185
	P4mm (25.7%)	4.0182	4.0182	4.0254	90			
<001>	<i>R3m</i> (63.6%)	4.0256	4.0256	4.0256	89.899	8.99%	6.42%	1.058
	<i>P4mm</i> (36.4%)	4.0179	4.0179	4.0334	90			
<111>	<i>R3m</i> (86.3%)	4.0253	4.0253	4.0253	89.907	8.94%	6.67%	1.107
	P4mm (13.7%)	4.0173	4.0173	4.0235	90			



**Fig. S1.** The grain orientation distributions and texture quality parameters obtained by fitting the (001) and (111) pole figures data to the March-Dollase texture model.