

## Electronic Supplementary Information

### Piezoelectric properties of individual nanocrystallites of $\text{Ba}_{0.85}\text{Ca}_{0.15}\text{Zr}_{0.1}\text{Ti}_{0.9}\text{O}_3$ obtained by Oxalate precursor route.

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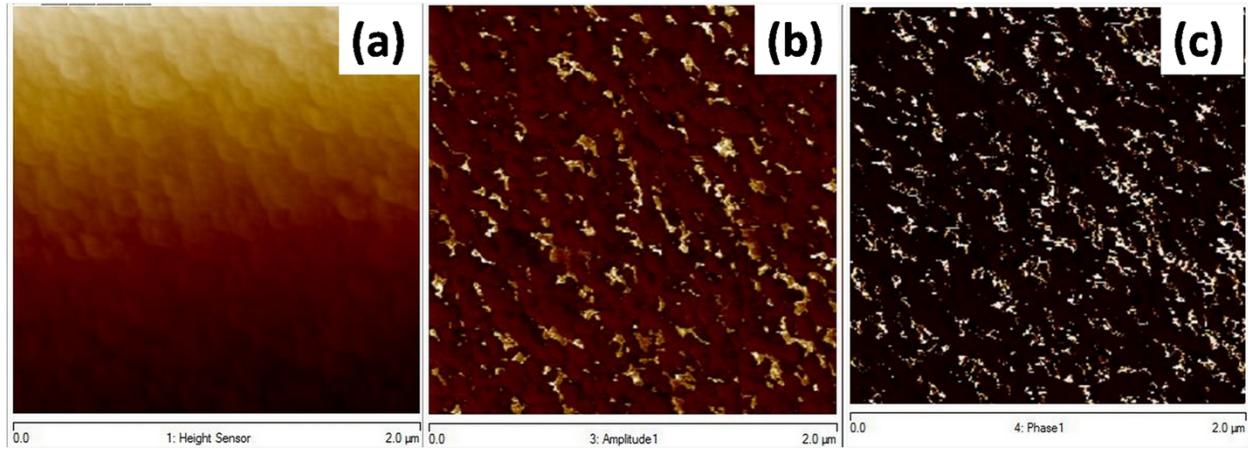
**Table S1:** Fitted profile parameters of BCZT nanocrystallites heat treated at 800°C and 1000°C/5h – Page S2.

**Section 1: Fig.S1** (a) Topographical image and (b & c) its corresponding amplitude and phase response image of BCZT nanocrystalline powder heat treated at 1000°C/5h – Page S3.

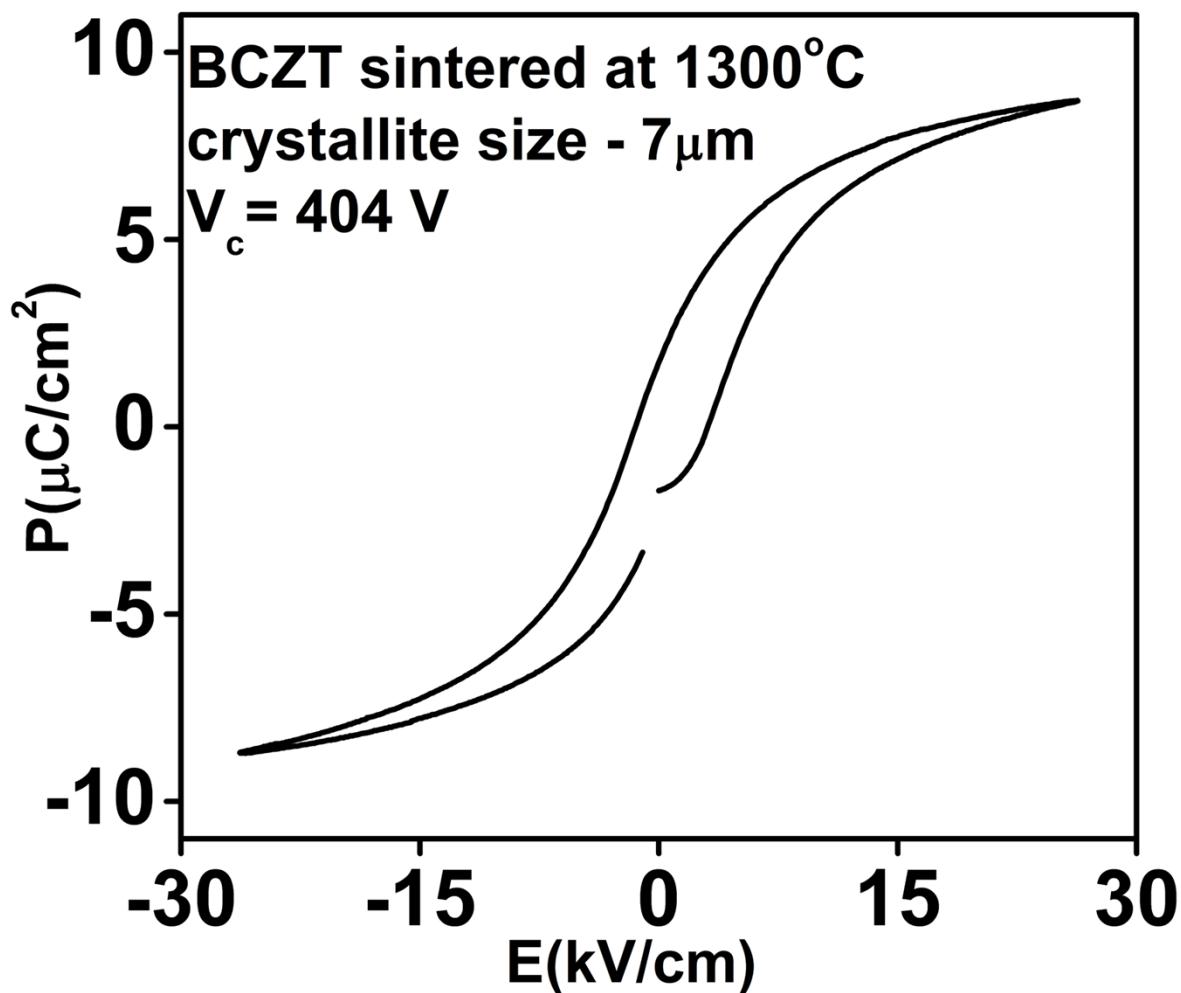
**Fig.S2** Polarization versus Electric field (P-E) loop for BCZT ceramic sintered at 1300°C – Page S4.

**Table S1:** Fitted profile parameters of BCZT nanocrystallites heat treated at 800°C and 1000°C/5h.

	Crystal system	Cell parameters (Å)	Volume (Å <sup>3</sup> )	Volume Fraction (%)	Goodness of fit (GOF)	R <sub>p</sub> (%)	wR <sub>p</sub> (%)
<b>BCZT nanocrystalline powder (heat-treated at 800°C/5h)</b>	<b>Cubic (Pm-3m)</b>	a=b=c =4.0097	64.5	50	1.37	3.21	4.08
	<b>Tetragonal (P4mm)</b>	a =b=3.9960 c= 4.0221	64.2	49.8			
<b>BCZT nanocrystalline powder (heat-treated at 1000°C/5h)</b>	<b>Cubic (Pm-3m)</b>	a=b=c=4.0027	64.1	49.4	1.25	4.53	5.94
	<b>Tetragonal (P4mm)</b>	a =b=4.0158 c= 4.0687	65.6	51			



**Fig. S1** (a) Topographical image and (b & c) its corresponding amplitude and phase response image of BCZT nanocrystalline powder heat treated at 1000°C/5h.



**Fig. S2** Polarization versus Electric field (P-E) loop for BCZT ceramic sintered at 1300°C