

## Supporting Information:

### In situ determination on the interplay of structure and domain under subcoercive field in $\text{BiScO}_3\text{-PbTiO}_3$

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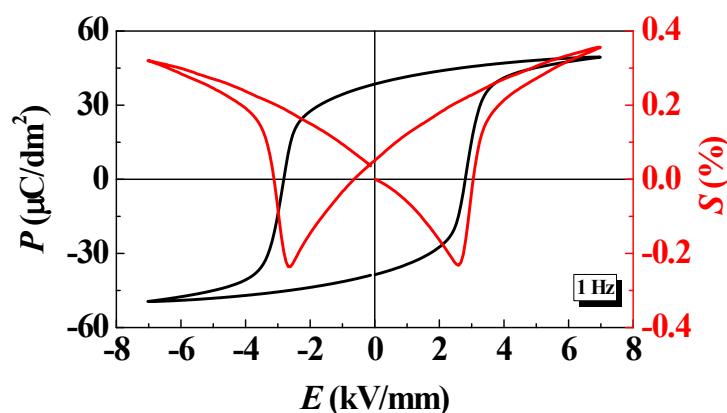


FIG. S1. Electric-field-induced strain curve (S-E) and ferroelectric hysteresis loop (P-E) of 0.365BS-0.635PT ceramics measured at 1 Hz at room temperature.

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Table S1. Structural parameters of tetragonal (P4mm) and monoclinic (Cm) phase in 0.365BS-0.635PT at electric fields of 2.5 kV/mm. In consideration of the use of high-energy X-ray photons, the anisotropic displacement parameters were merely refined for the heavy element of Pb/Bi.

Electric Field	Tetragonal	Monoclinic
<i>a</i> (Å)	3.99534 (7)	5.72102(26)
<i>b</i> (Å)		5.70761(29)
<i>c</i> (Å)	4.08823(7)	4.02297(36)
$\beta$ (°)		89.63550(628)
$U_{11,22}$ -Pb (Å <sub>2</sub> )	0.03120(4)	/
$U_{33}$ -Pb (Å <sup>2</sup> )	0.01200(1)	/
<i>x</i> -Ti/Sc	0	0.458990
<i>y</i> -Ti/Sc	0	0
<i>z</i> -Ti/Sc	0.548700(14)	0.505410
<i>x</i> -O1	0.5	0.379910
<i>y</i> -O1	0.5	0
<i>z</i> -O1	0.084500(77)	0.025330
<i>x</i> -O2	0.5	0.179350
<i>y</i> -O2	0	0.263160
<i>z</i> -O2	0.619400(54)	0.507840
Phase fraction(%)	54.30(0.56)	45.70(0.50)
Bragg R-factor	3.29	3.638
<i>R</i> <sub>p</sub>		7.32
<i>R</i> <sub>wp</sub>		6.75
$\chi^2$		11.6