Irreversible Phase Transitions in BiFeO$_3$-SrTiO$_3$ Lead-Free Piezoceramics

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Table S1. Summary of XRD Rietveld refinement results for (1-x)BF-xST ceramics (x = 0.42, 0.44, 0.46, and 0.48) ceramics.

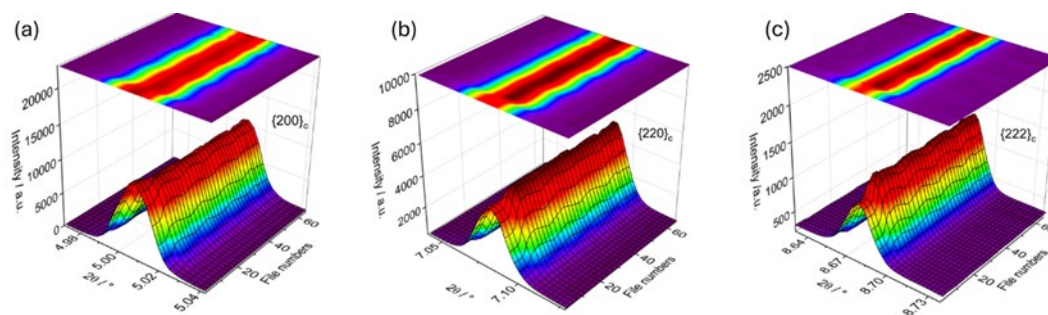| Compositions	Lattice Parameter a (Å)	Cell Volume (Å^3)	GOF
x = 0.42	3.94588(5)	61.43723(2)	1.39
x = 0.44	3.94456(4)	61.37559(2)	1.35
x = 0.46	3.94357(4)	61.32939(18)	1.29
x = 0.48	3.94287(4)	61.29674(18)	1.26

Fig. S1. 3D and contour maps of (a) {200}$_{pc}$ (b) {220}$_{pc}$ and {222}$_{pc}$ XRD profiles at ψ=90° of x = 0.44 ceramic during *in-situ* poling synchrotron XRD.