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Journal of Materials Chemistry C

Supporting Information

High Strain in $(K_{0.40}Na_{0.60})(Nb_{0.955}Sb_{0.045})O_3$ -Bi $_{0.50}Na_{0.50}ZrO_3$ Lead-free Ceramics with Large Piezoelectricity

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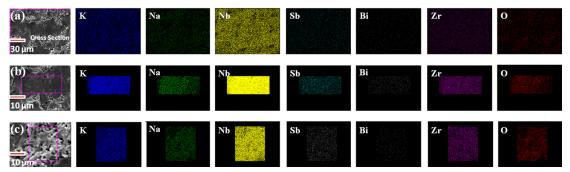


Figure S1: Element mapping of (a) cross section as well as (b) large and (c) small grains of the ceramics with x=0.04.

In this work, we measured the element mapping of cross section as well as small and large grains by the field emission-scanning electron microscopy (FE-SEM) with an energy-dispersive X-ray spectroscopy (JSM-7500, Japan), as shown in Figure S1. All the elements are well distributed to the ceramic matrix.

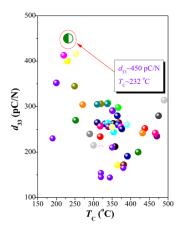


Figure S2: Comparison analysis of d_{33} vs. $T_{\rm C}$ of KNN –based materials.

Figure S2 gives the d_{33} and $T_{\rm C}$ of the KNN –based ceramics derived from the references. According to Figure S2, the d_{33} of this work is higher than other reported results of KNN –based ceramics.