

## Supporting Information

### **Greatly enhanced discharge energy density and efficiency of novel relaxation ferroelectric BNT-BKT-based ceramics**

Di Hu<sup>a</sup>, Zhongbin Pan<sup>\*a</sup>, Xiang Zhang<sup>a</sup>, Haoran Ye<sup>a</sup>, Zhouyang He<sup>a</sup>, Mingkun Wang<sup>a</sup>,  
Shuang Xing<sup>a</sup>, Jiwei Zhai<sup>b</sup>, Qiang Fu<sup>\*c,d</sup>, and Jinjun Liu<sup>\*a</sup>

*<sup>a</sup>School of Materials Science and Chemical Engineering, Ningbo University, Ningbo, Zhejiang, 315211, China. E-mail: panzhongbin@163.com (Zhongbin Pan), liujinjun1@nbu.edu.cn (Jinjun Liu)*

*<sup>b</sup>School of Materials Science & Engineering, Tongji University, 4800 Caoan Road, Shanghai 201804, China. E-mail: apzhai@tongji.edu.cn (Jiwei Zhai)*

*<sup>c</sup>School of Pharmacy, Southwest Medical University, Luzhou 646000, China.*

*<sup>d</sup>Key Laboratory of Medical Electrophysiology, Ministry of Education, Institute of Cardiovascular Research of Southwest Medical University, Luzhou 646000, China. E-mail: fuqiang@swmu.edu.cn (Qiang Fu)*

## Supporting Information 1

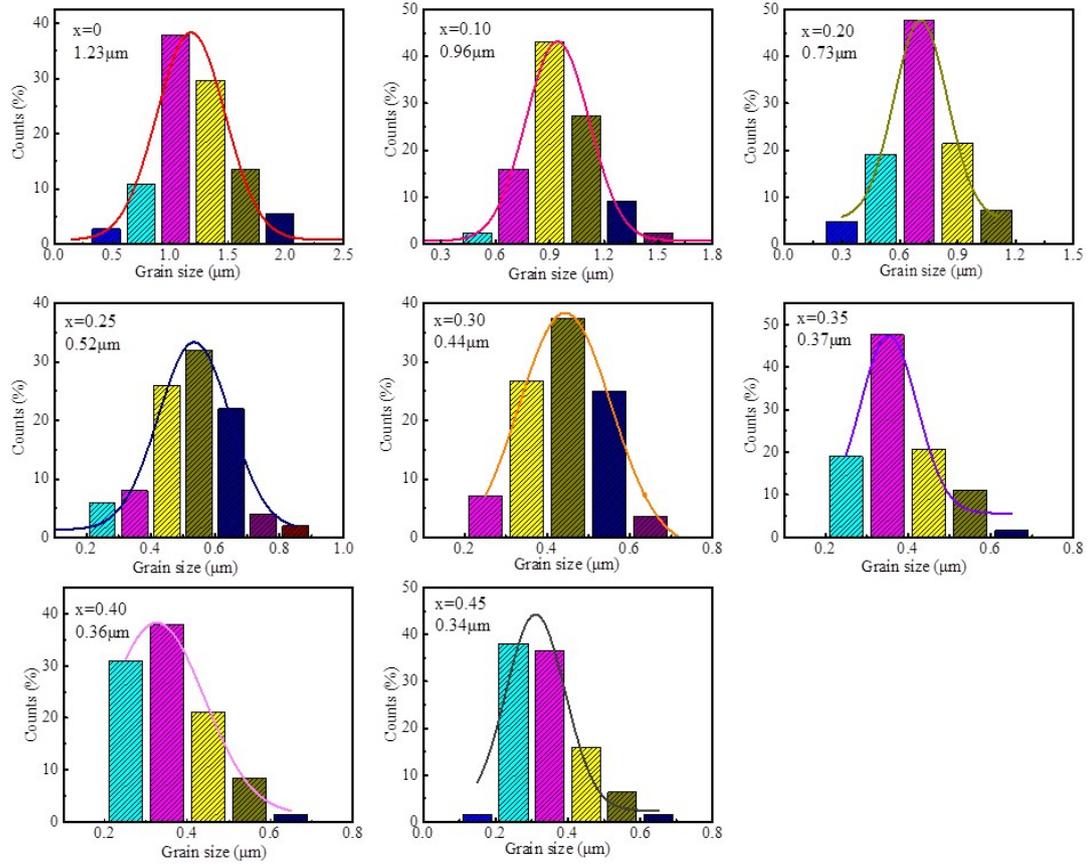


Figure S1 Average grain size of the  $(1-x)(\text{NBT-BKT})-x\text{SBT}$  ceramics of the  $(1-x)(\text{NBT-BKT})-x\text{SBT}$  ceramics with different contents of SBT (a)  $x=0$ , (b)  $x=0.10$ , (c)  $x=0.20$ , (d)  $x=0.25$ , (e)  $x=0.30$ , (f)  $x=0.35$ , (g)  $x=0.40$ , (h)  $x=0.45$ .

## Supporting Information 2

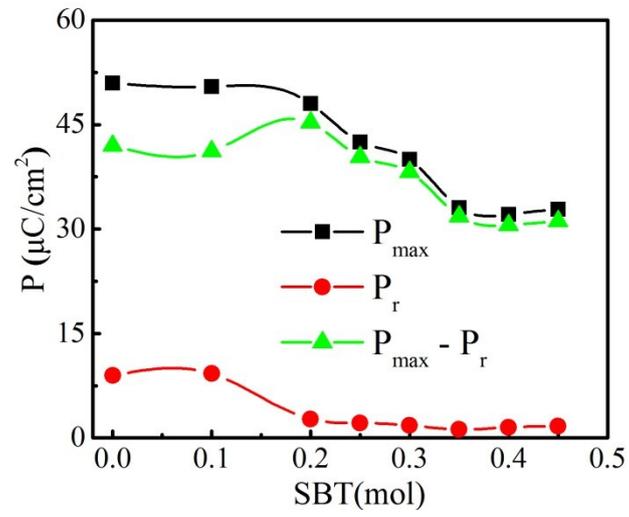


Figure S2  $P_{\text{max}}$ ,  $P_{\text{r}}$ , and  $P_{\text{max}} - P_{\text{r}}$  of the  $(1-x)(\text{NBT-BKT})-x\text{SBT}$  ceramics with different contents of SBT.