Supplementary Materials:

Giant energy storage efficiency and high recoverable energy storage density achieved in $K_{0.5}Na_{0.5}NbO_3$-$Bi(Zn_{0.5}Zr_{0.5})O_3$ ceramics

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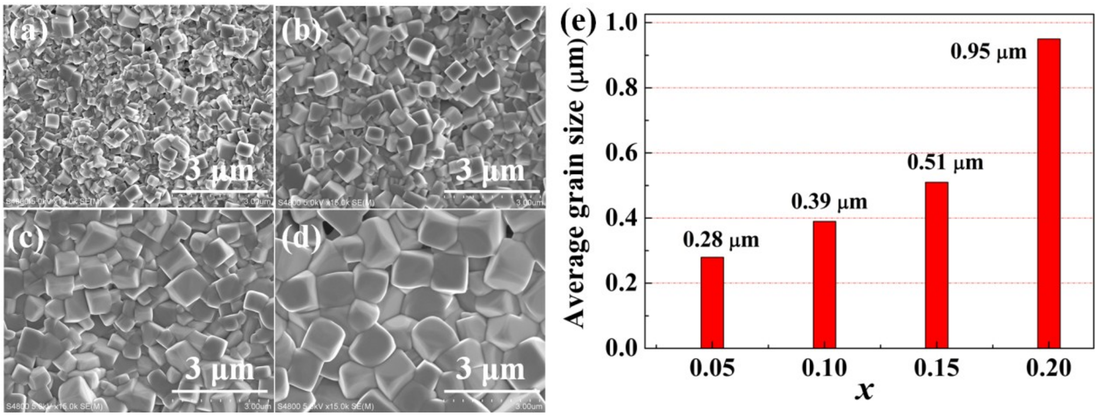

Fig. S1 SEM of (1-*x*)KNN-*x*BZZ ceramics (a) *x*=0.05; (b) *x*=0.10; (c) *x*=0.15; (c) *x*=0.20. (e) average gain sizes of (1-*x*)KNN-*x*BZZ ceramics.

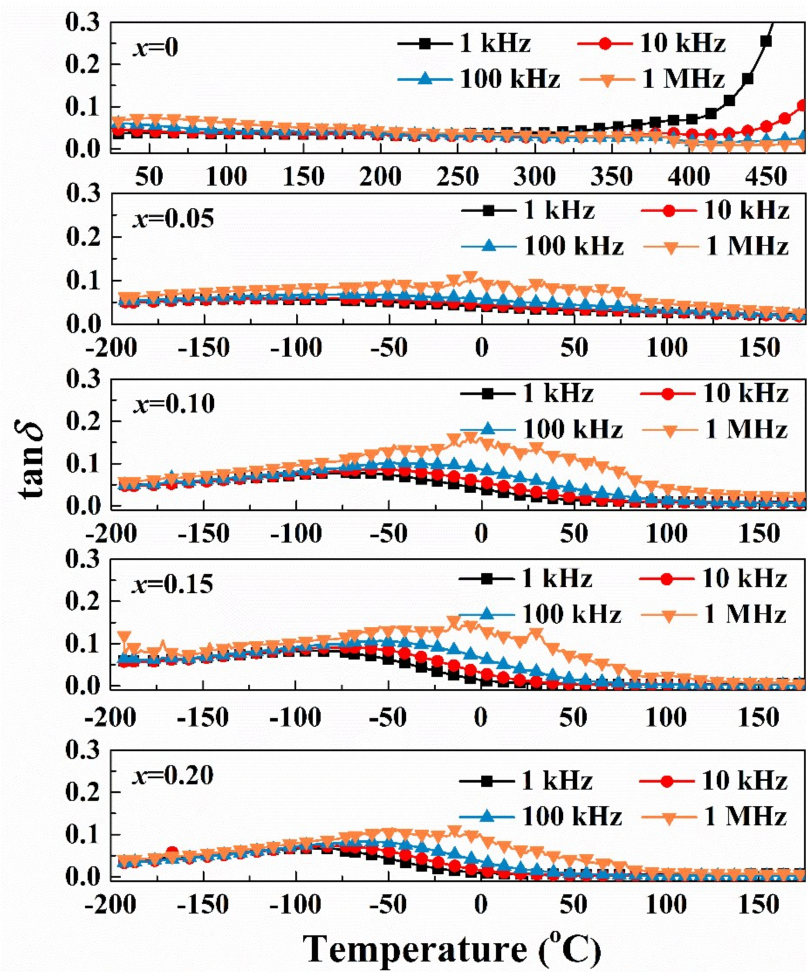

Fig. S2 Temperature dependence of dielectric loss (tanδ) of (1-*x*)KNN-*x*BZZ ceramics.

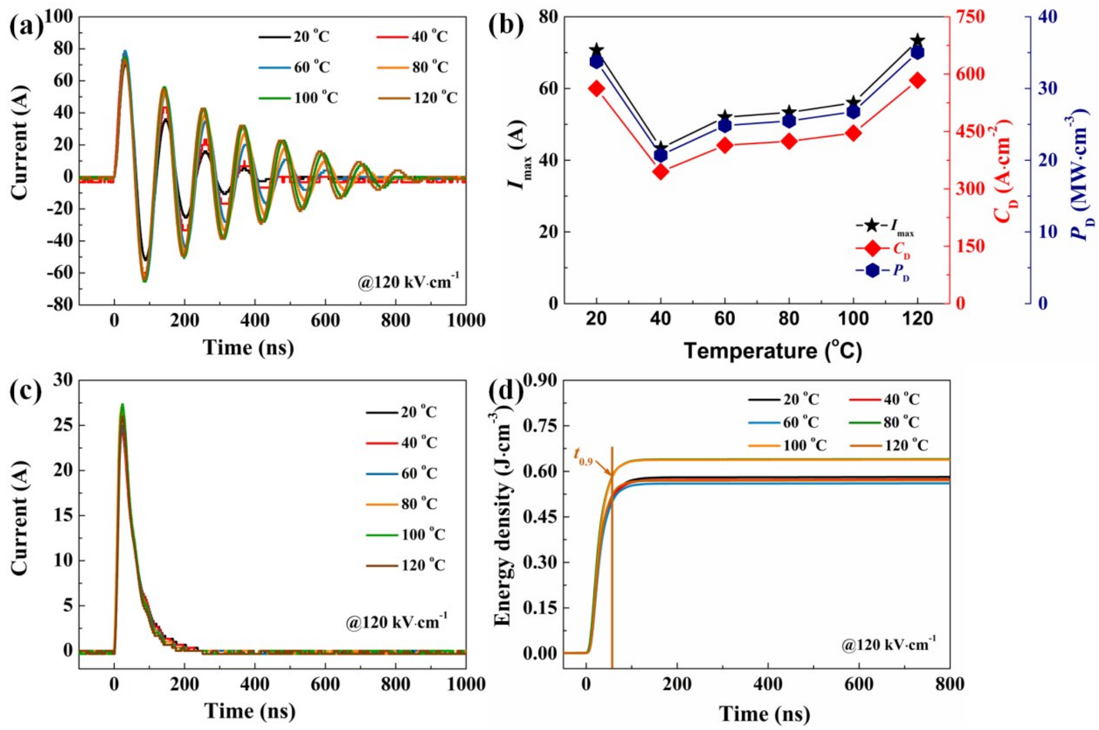

Fig. S3 (a) Underdamped discharge waveforms of the 0.85KNN-0.15BZZ ceramic measured over a temperature range from 20 to 120 ^{o}C. (b) Variations in the I_{max}, C_D and P_D values as functions of temperature. (c) Overdamped discharge current curves of the 0.85KNN-0.15BZZ ceramic at different temperatures at 120 kV·cm^{-1}. (d) Relationship between energy density (W_d) and time (t).