Supporting Information

Boosting energy storage performance of $BiFeO_3$-based multilayer capacitors via enhancing ionic bonding and relaxor behavior

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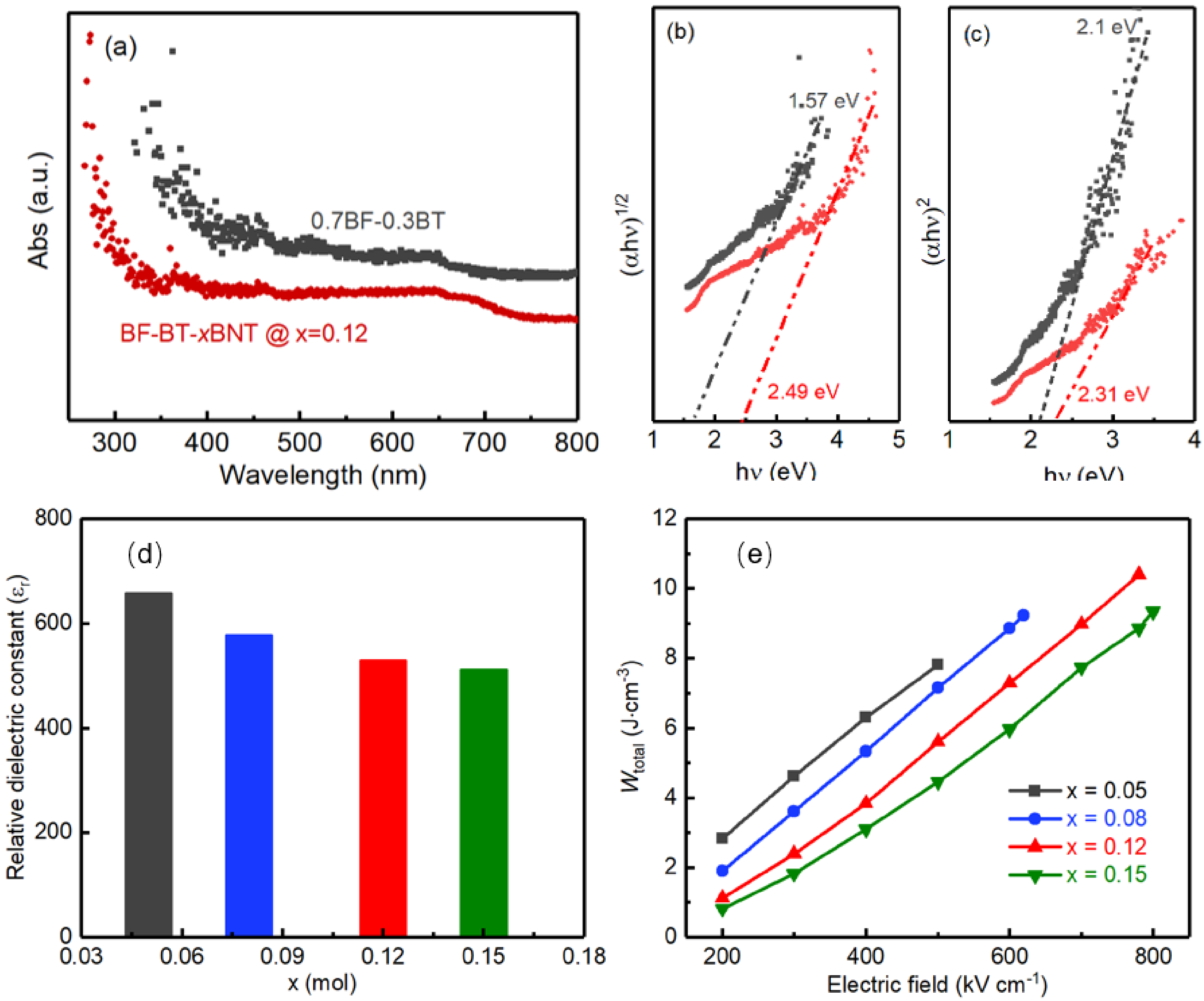

Fig.S1 UV–Vis diffuse reflectance spectra for 0.7BF-0.3BT and BF-BT-0.12NT capacitors (a), the indirect band gap calculated by plots of $(\alpha h\nu)^{1/2}$ versus hν (b), and direct band gap calculated by plots of $(\alpha h\nu)^2$ versus hν (c) for the for 0.7BF-0.3BT and BF-BT-0.12NT capacitors, relative dielectric constant (ε_r) measured at 1 kHz (d) and total energy storage (W_{total}) (e) for BF-BT-xNT capacitors

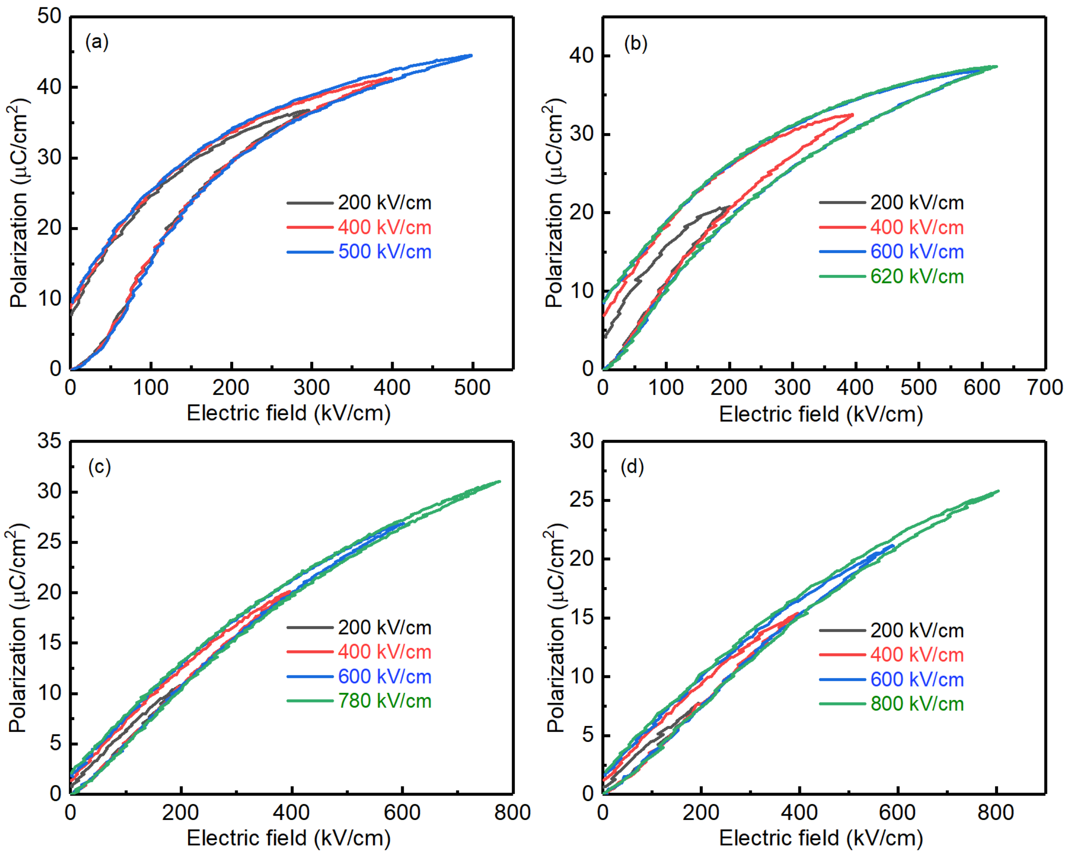

Fig.S2 Unipolar P-E loops for BF-BT-xNT capacitors x = 0.05 (a), x = 0.08 (b), x = 0.12 (c) and x = 0.15 (d)

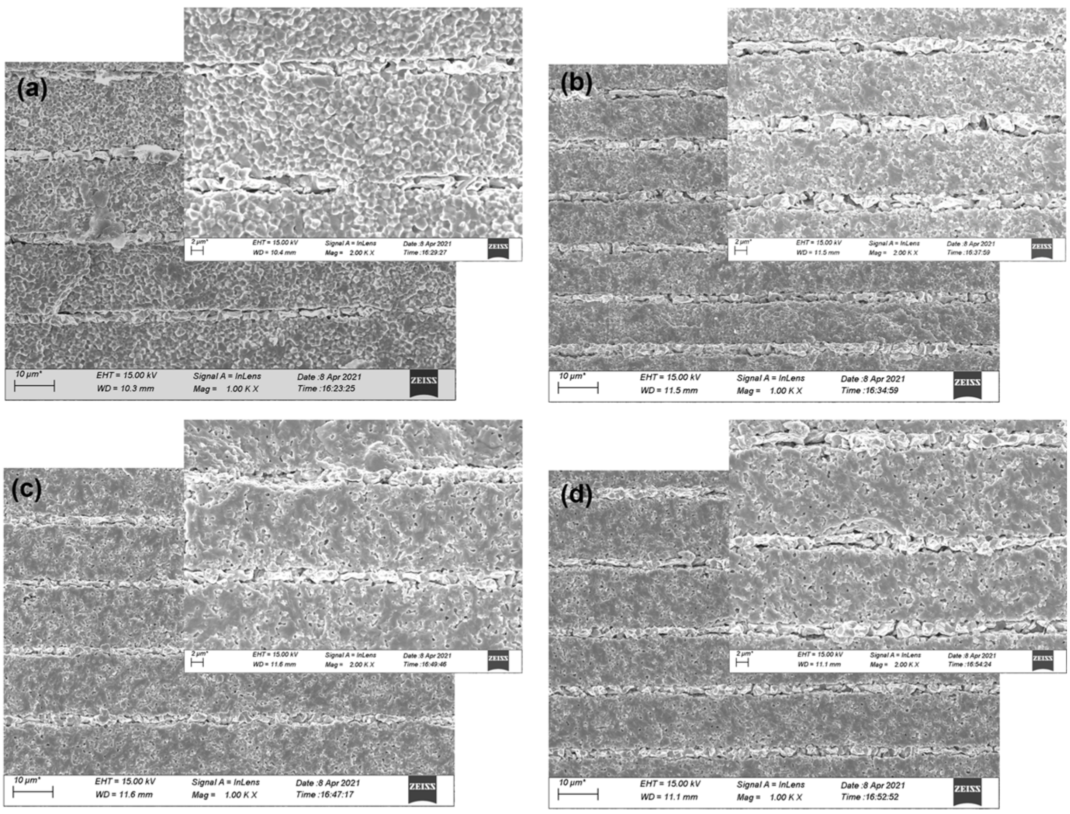

Figure S3 SEM images of the MLCCs for BF-BT-xNT capacitors x = 0.05 (a), x = 0.08 (b), x = 0.12 (c) and x = 0.15 (d)

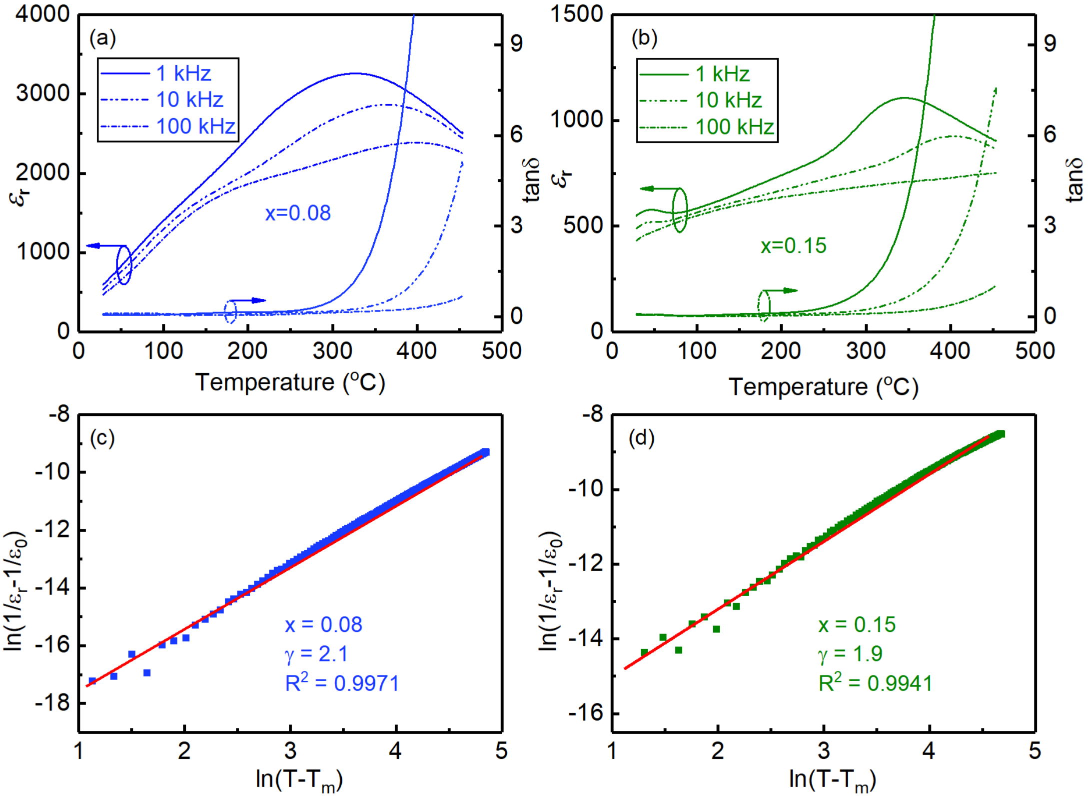

Fig.S4 temperature dependence of the dielectric constant ε_r and dielectric loss tanδ for the capacitors at *x*=0.08 (a) and 0.15 (b), plots of ln $(1/\varepsilon_r\text{-}1/\varepsilon_m)$ versus ln $(T\text{–}T_m)$ at 1 kHz for the corresponding ceramics, *x* = 0.08 (c) and 0.15 (d)