

## Supporting Information

### Nonlinear ferroelectric characteristics of barium titanate nanocrystals determined via a polymer nanocomposite approach

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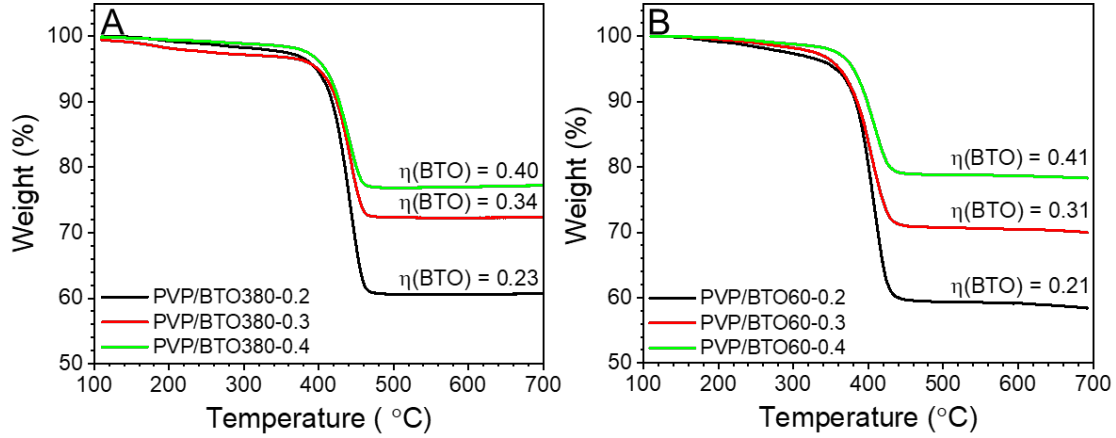
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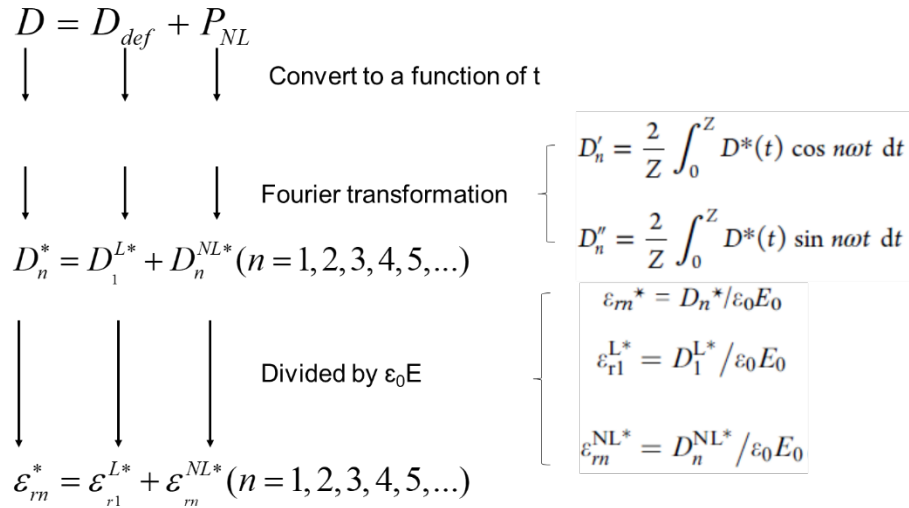
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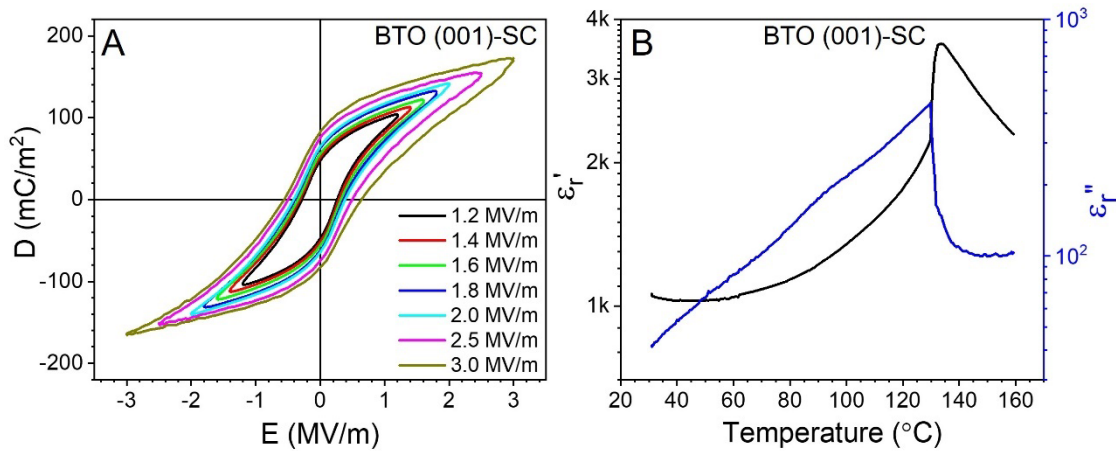
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**Fig. S1.** TGA results for (A) PVP/BTO380 and (B) PVP/BTO60 nanocomposites. The heating rate is 10 °C/min.



**Scheme S1.** Procedure for nonlinear dielectric analysis.



**Fig. S2.** (A) Bipolar D-E experimental loops for the BaTiO<sub>3</sub> (001)-single crystal at  $E > 1.0$  MV/m. (B) Temperature-scan BDS results for the BaTiO<sub>3</sub> (001)-single crystal at 10 Hz.