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Supporting Information

Phase Evolution, Filler-Matrix Interactions, and Piezoelectric Properties in Lead Zirconate Titanate (PZT)-Filled Polymer-Derived Ceramics (PDCs)

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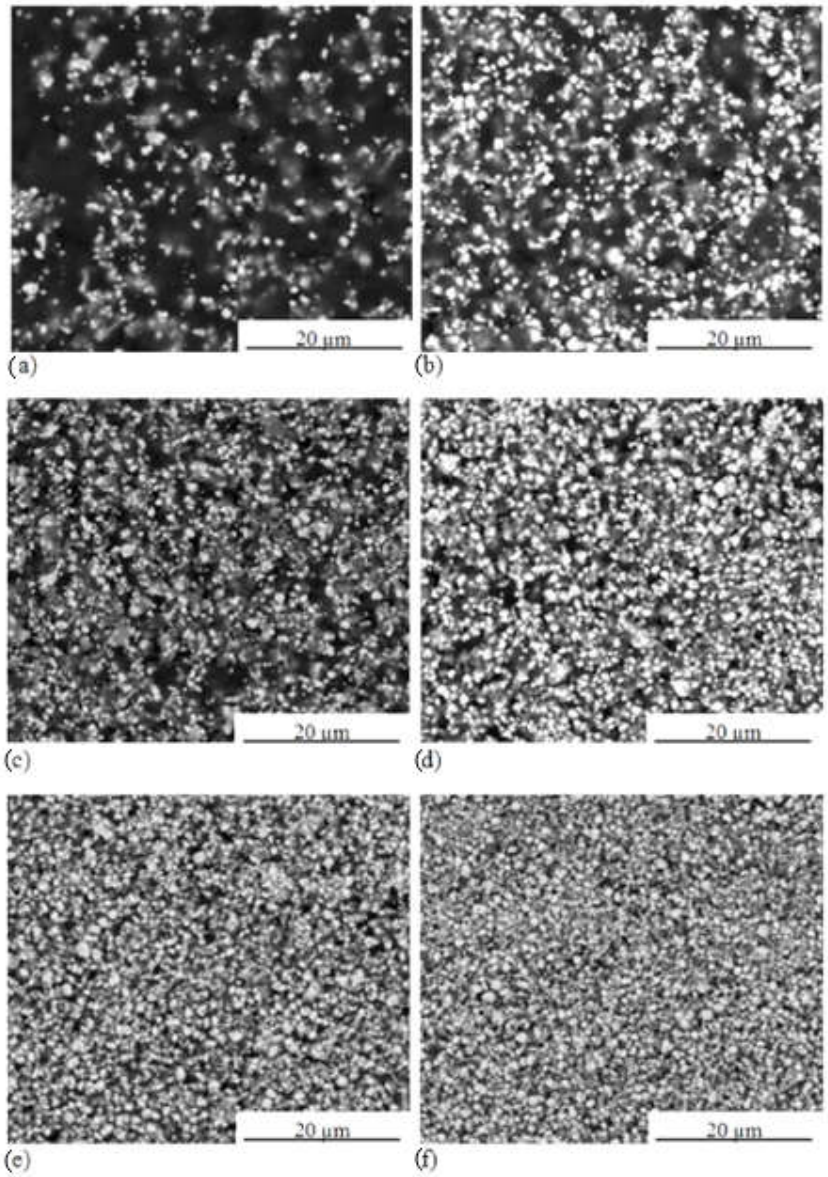

Figure S1. SEM micrographs of PZT-polymer composites with increasing filler content (dark: polymer matrix, bright: filler particles); (**a**) 5 vol.% PZT, (**b**) 15 vol.% PZT, (**c**) 25 vol.% PZT, (**d**) 35 vol.% PZT, (**e**) 45 vol.% PZT, (**f**) 55 vol.% PZT.

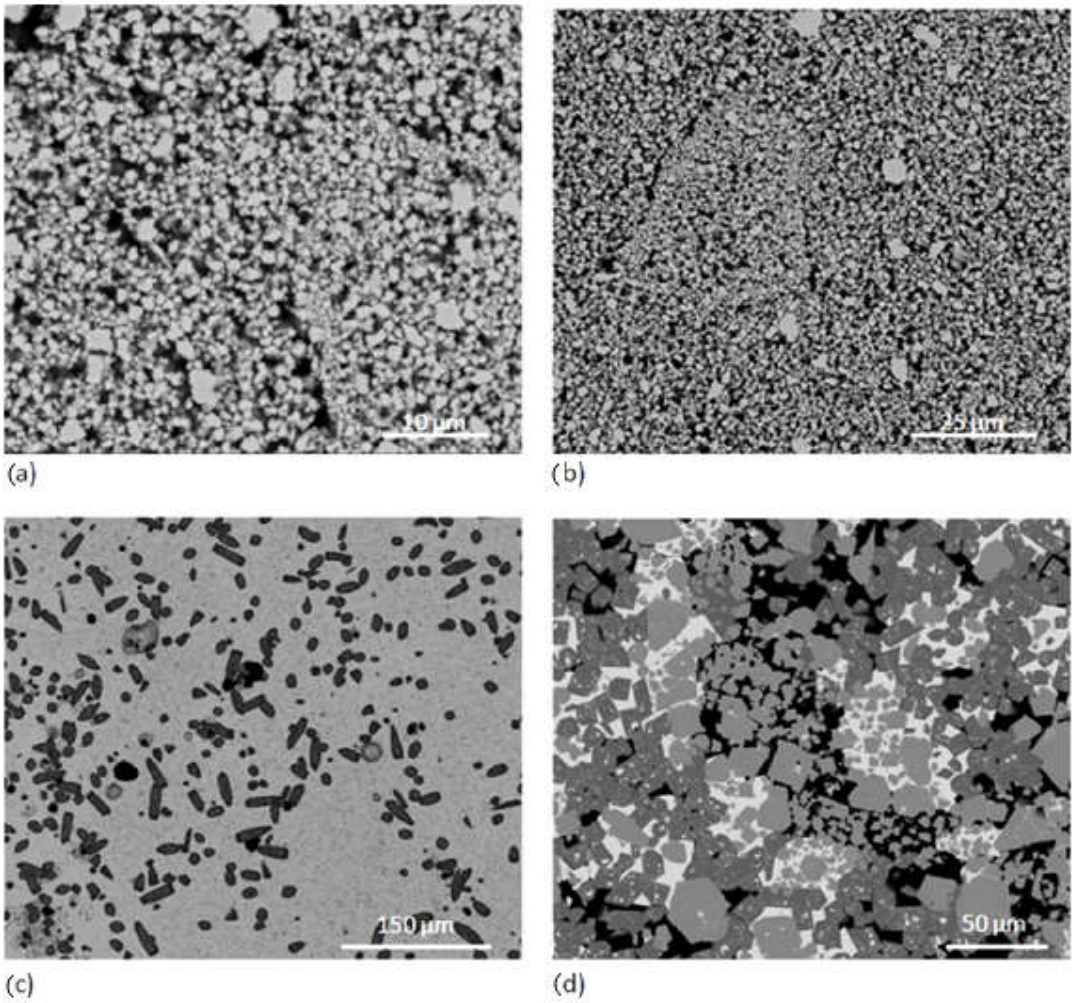

Figure S2. SEM micrographs of selected PZT-polymer composites with with a filler content of 40 vol.% PZT with increasing heat treatment processing; (**a**) 500 °C, (**b**) 750 °C, (**c**) 1000 °C, (**d**) 1250 °C.

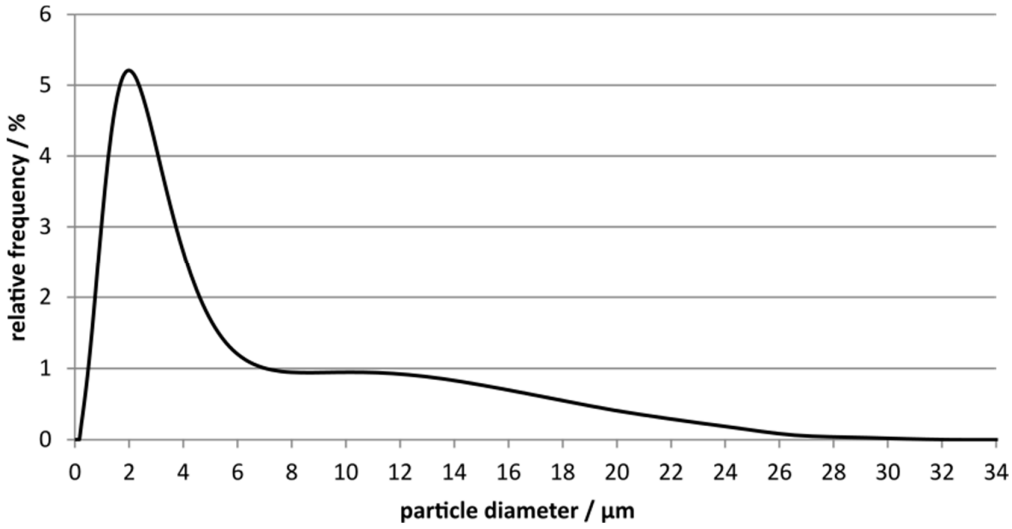

Figure S3. Particle size distribution of the NCE51 PZT-powder