

Supporting Information

**Modulating Interfacial Charge Distribution and Compatibility
Boosts High Energy Density and Discharge Efficiency of Polymer
Nanocomposites**

Tao Zhang,^a Mengfan Guo,^a Jianyong Jiang,^a Xueyou Zhang,^a Yuanhua Lin,^a Ce-Wen Nan,^a Yang Shen^{*a}

^a School of Materials Science and Engineering, and State Key Lab of New Ceramics and Fine Processing, Tsinghua University, Beijing 100084, China. E-mail: shyang_mse@tsinghua.edu.cn

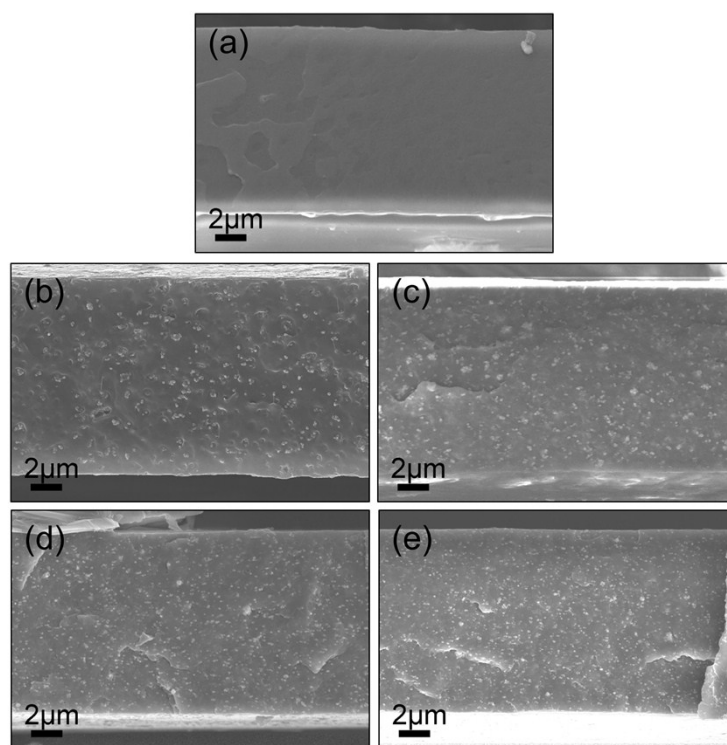


Figure S1. Cross-sectional SEM images of the P(VDF-HFP)-based nanocomposite films: (a) Pure P(VDF-HFP), (b) BTO/P(VDF-HFP), (c) BTO@PTFEMA/P(VDF-HF), (d) BTO@PHFBMA/P(VDF-HF), (e) BTO@PDFHMA/P(VDF-HF).

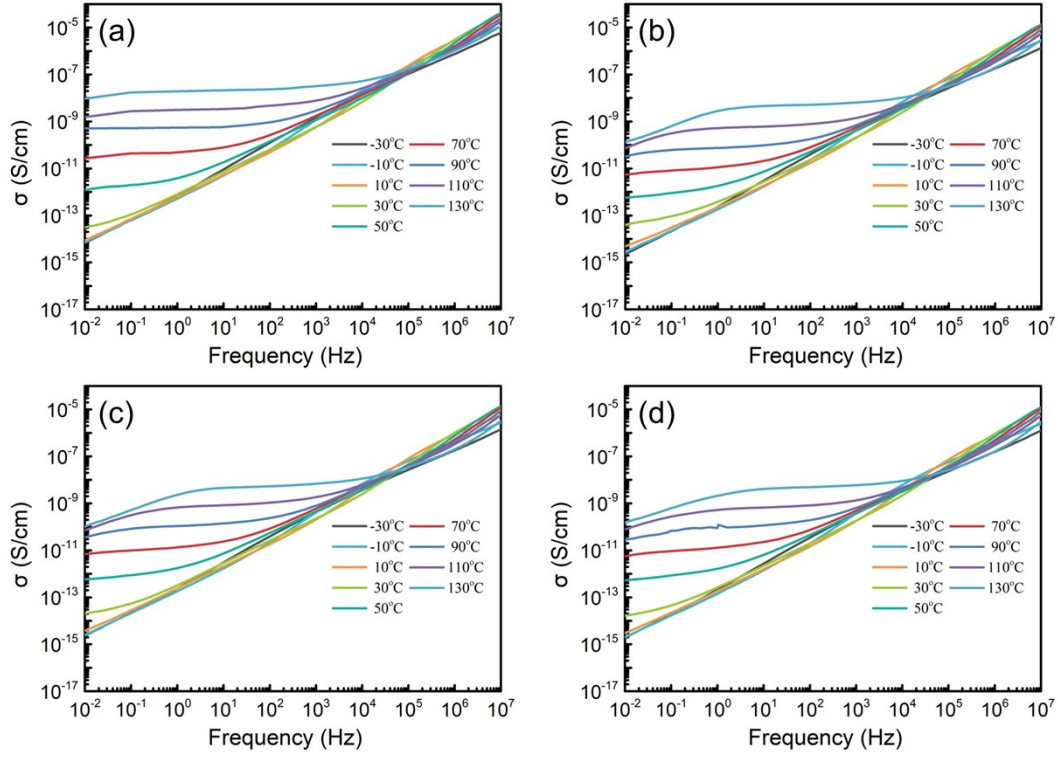


Figure S2. Frequency dependence of the conductivity ranging from -30 to 130 °C for P(VDF-HFP)-based nanocomposite films: (a) BTO/P(VDF-HFP), (b) BTO@PTFEMA/P(VDF-HF), (c) BTO@PHFBMA/P(VDF-HF), (d) BTO@PDFHMA/P(VDF-HF).

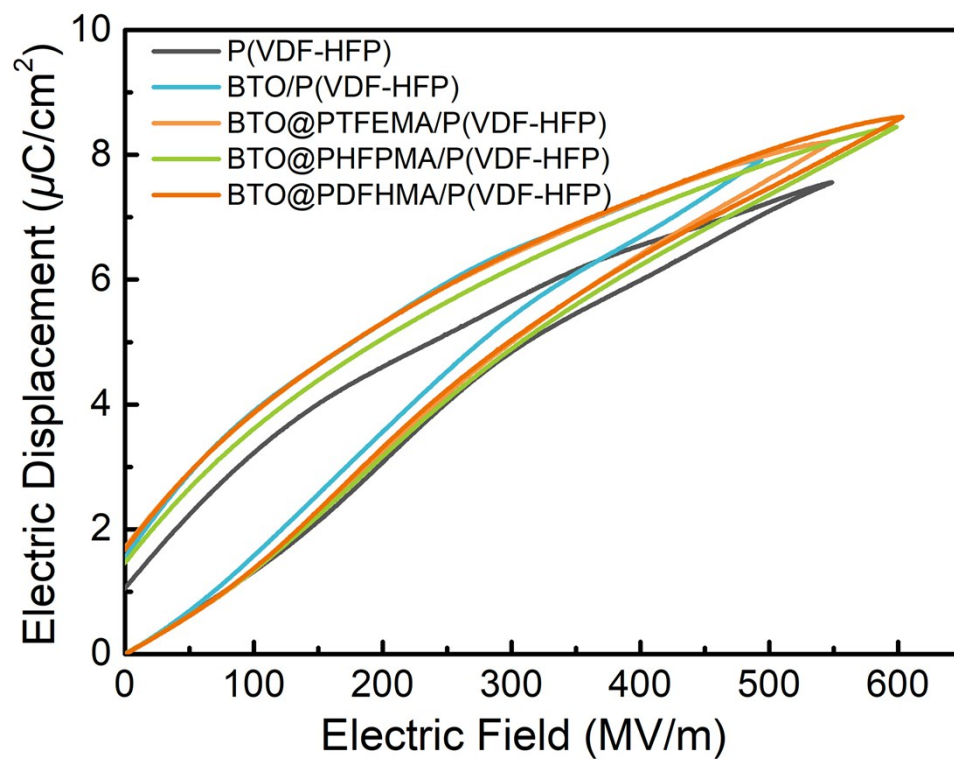


Figure S3. Unipolar electric displacement-electric field ($D-E$) loops for P(VDF-HFP)-based nanocomposite films.