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Bio-inspired Polydopamine Coating as a Facile Approach to Constructing Polymer Nanocomposites for Energy Storage

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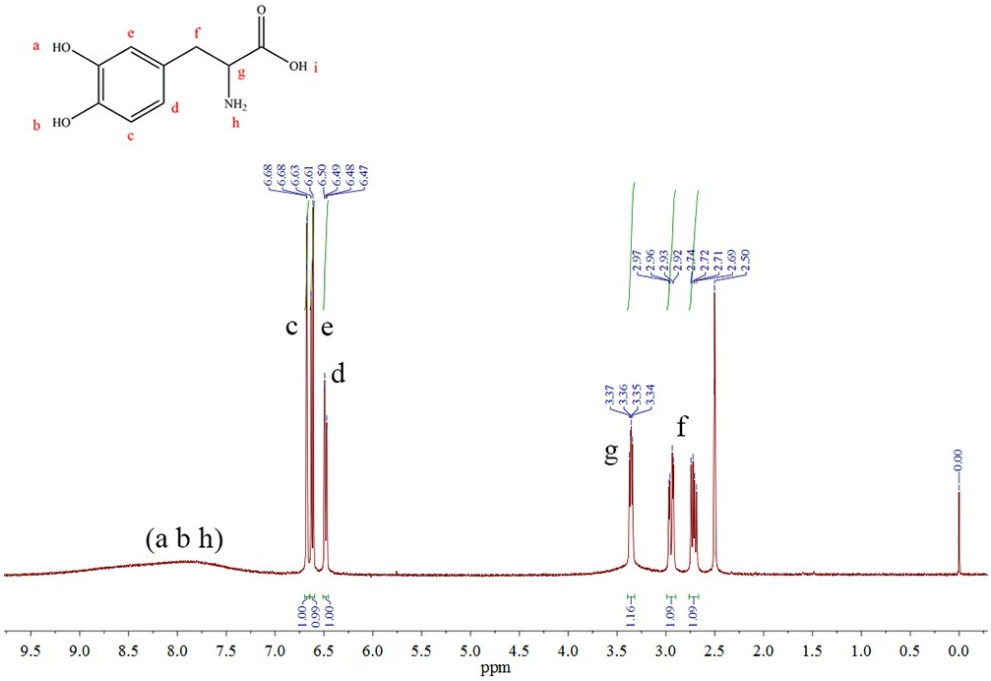

Fig. S1. ^{1}H NMR spectrum of *L*-DOPA. The deuterated solvent is d_6-DMSO.

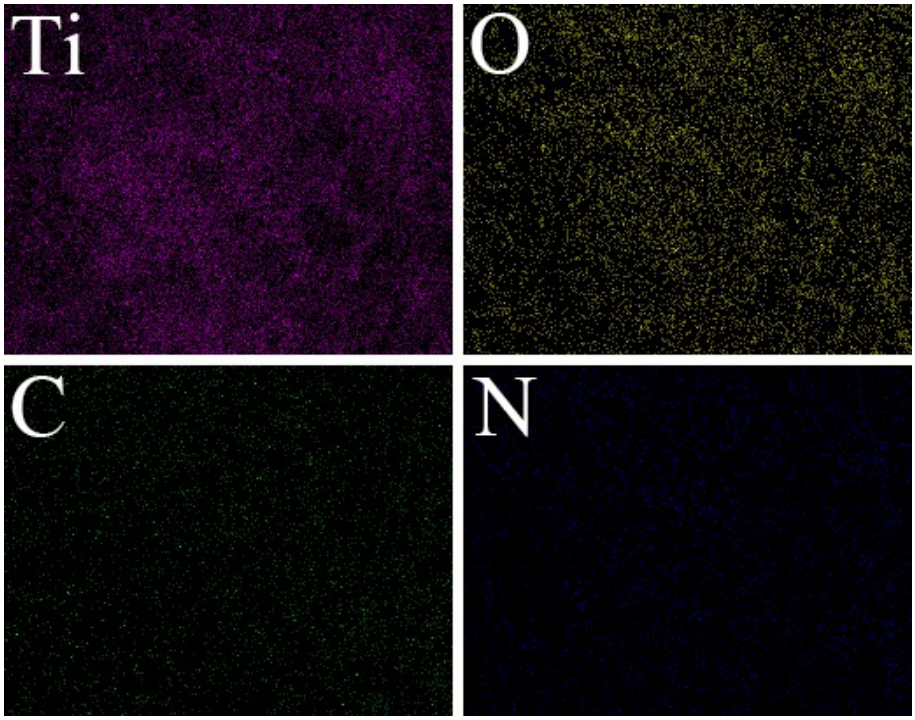

Fig. S2. EDX elemental mapping images of *h*-DOPA@TiO_2 NWs: Ti mapping in cyan, O mapping in yellow, C mapping in green, N mapping in blue.

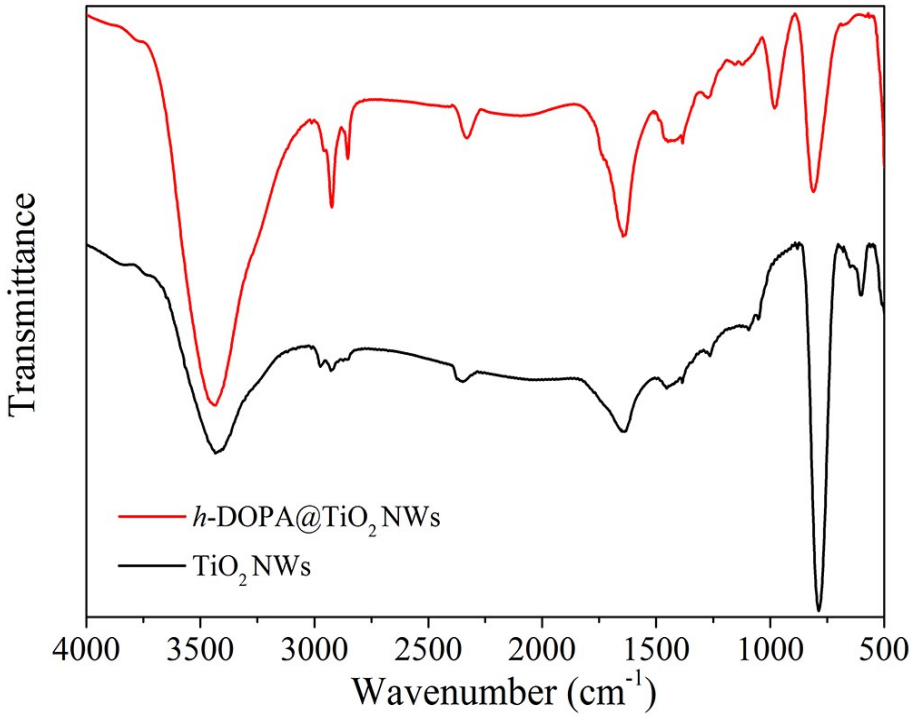

Fig. S3. FT-IR spectra of TiO_2 and *h*-DOPA@TiO_2 NWs.

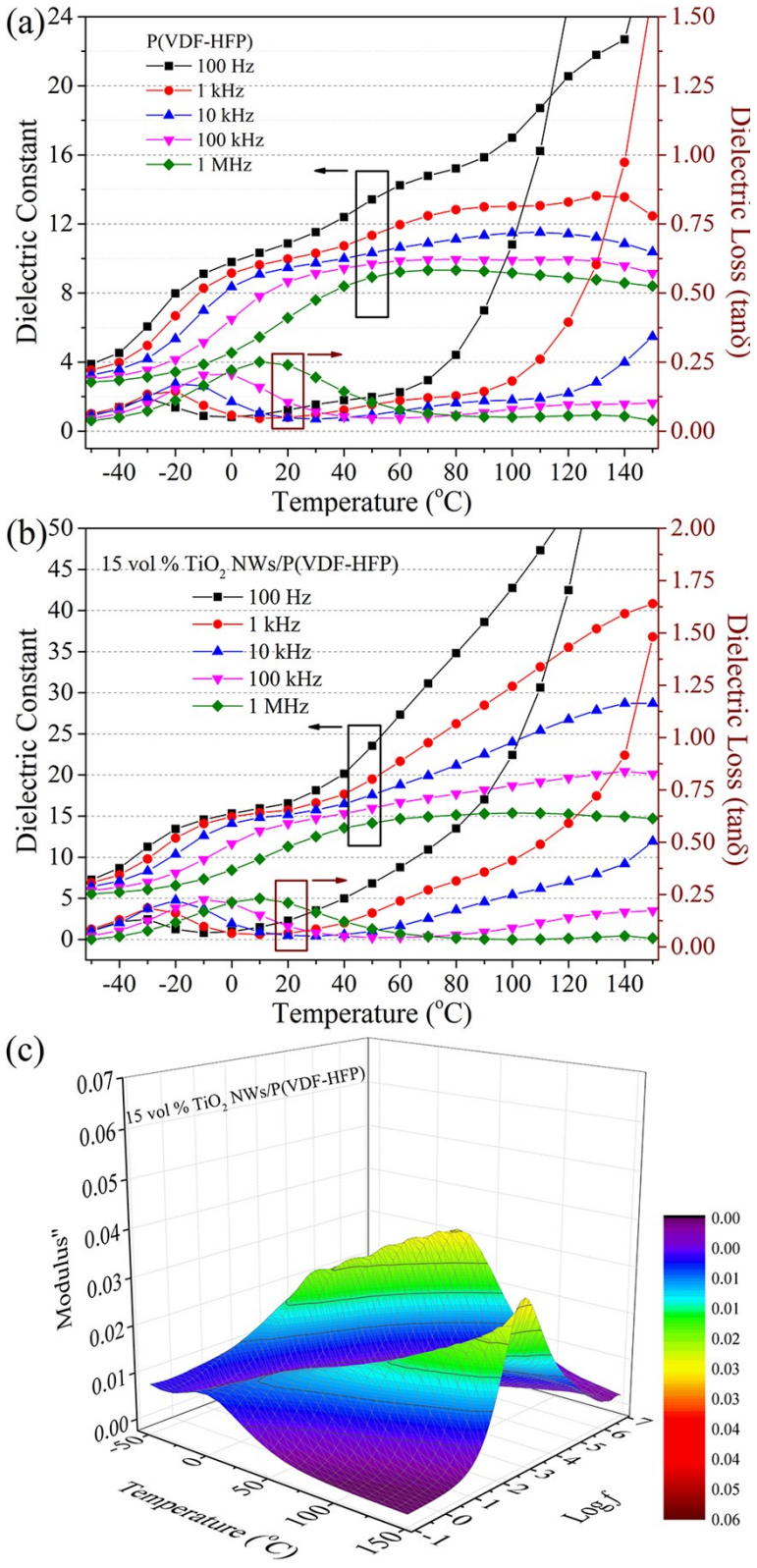

Fig. S4. Temperature-dependent dielectric spectra of (a) P(VDF-HFP) and 15 vol % TiO_2 NWs/P(VDF-HFP) nanocomposites. Frequency dependent of imaginary electric modulus at various temperature of (c) P(VDF-HFP)-based nanocomposites with 15 vol % of TiO_2 NWs.

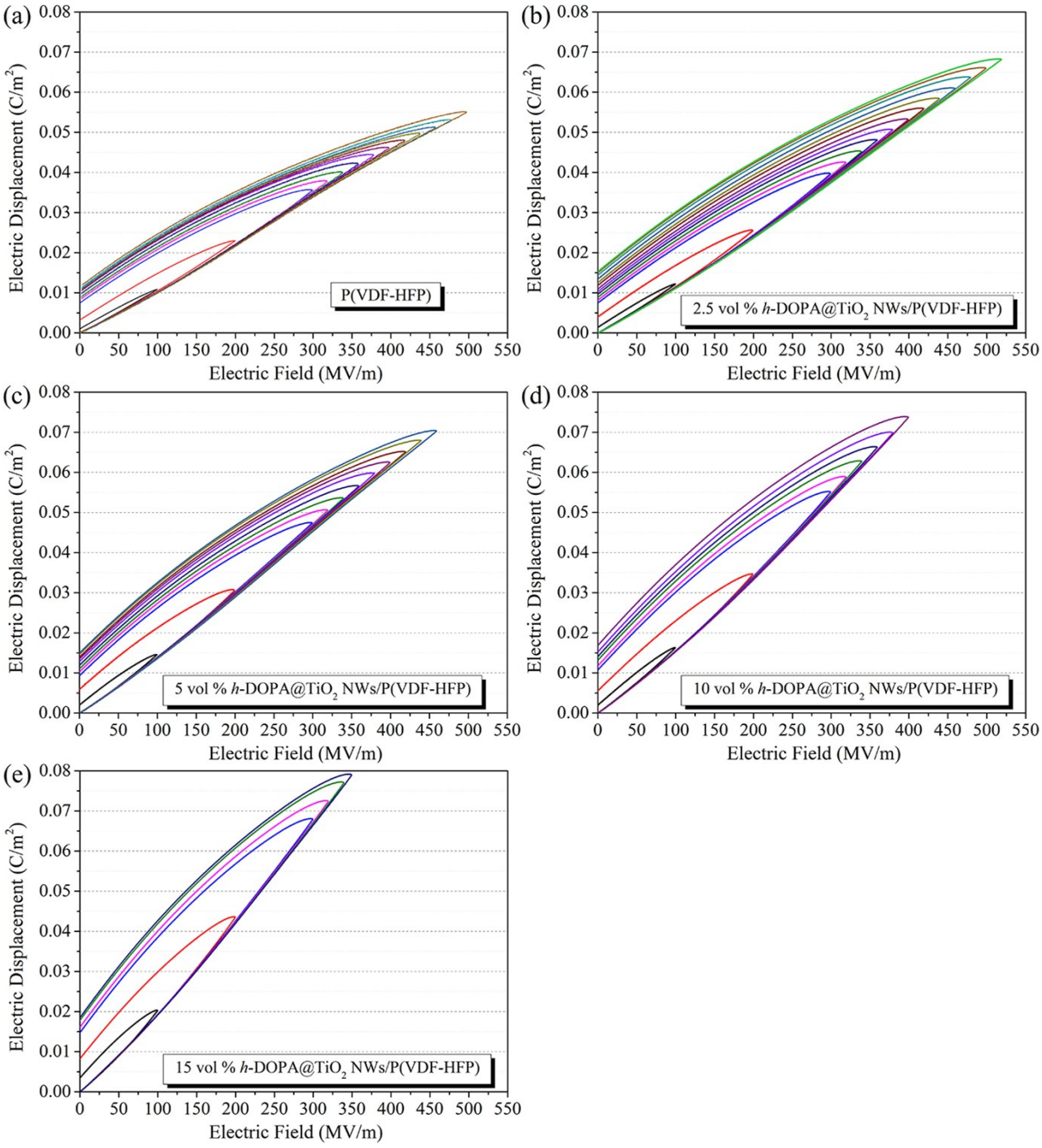

Fig. S5. Electric displacement-electric field (*D*-*E*) loops under unipolar electric fields of 100 Hz for (a) pure P(VDF-HFP) and P(VDF-HFP)-based nanocomposites with (b) 2.5 vol %, (c) 5 vol %, (d) 10 vol %, and (e) 15 vol % of *h*-DOPA@TiO_2 NWs.