Supplementary Information

Polyaniline/SWCNT composite films prepared via the solvent-induced strategy for flexible energy harvesting

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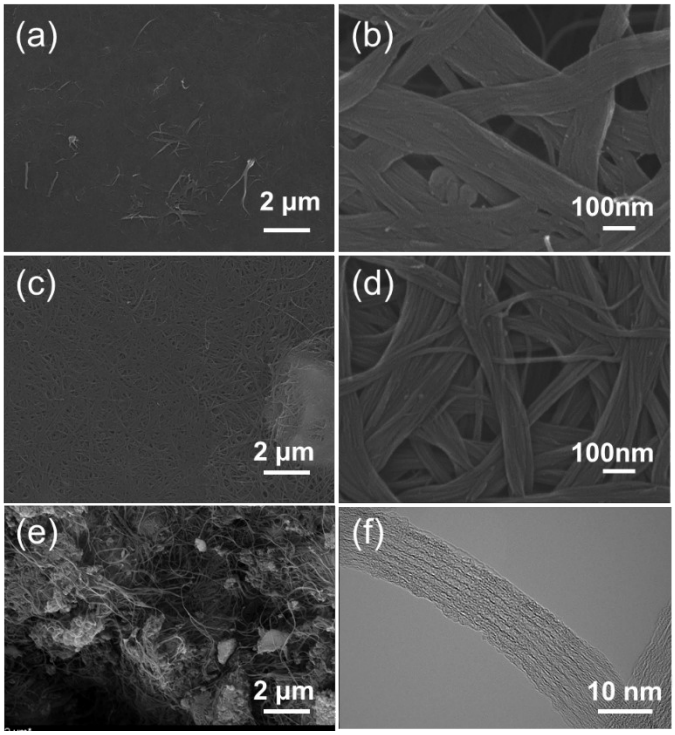

Figure S1. The typical SEM images of (a and b) P-DMF-0.5CNT, (c and d) P-DMF-0.9CNT and (c)EtOH-0.1CNT. (d) The typical TEM image of SWCNT.

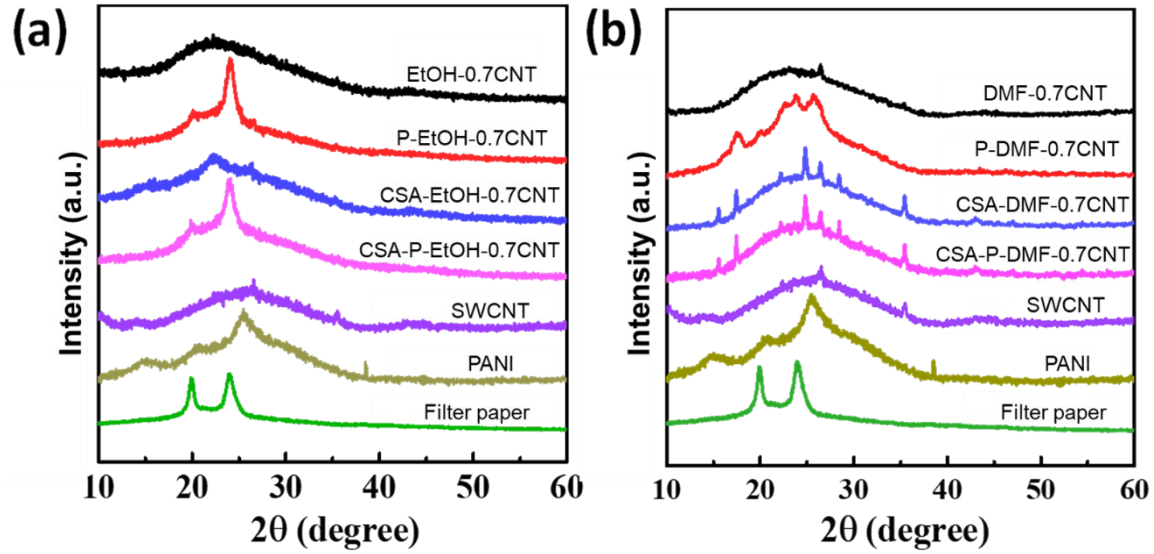

Figure S2. XRD patterns of SWCNT, PANI, filter paper, EtOH-0.7CNT, and DMF-0.7CNT, where CSA- means the sample was prepared from CSA-doped PANI.

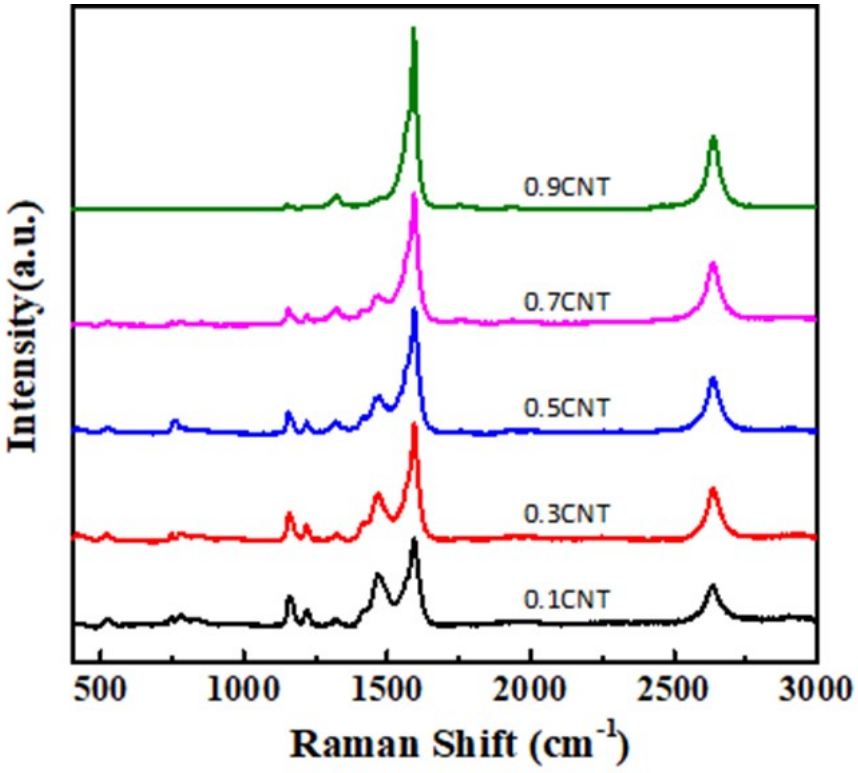

Figure S3. The Raman spectra of P-DMF-xCNT composite films with different CNTs contents (All spectra are normalized).

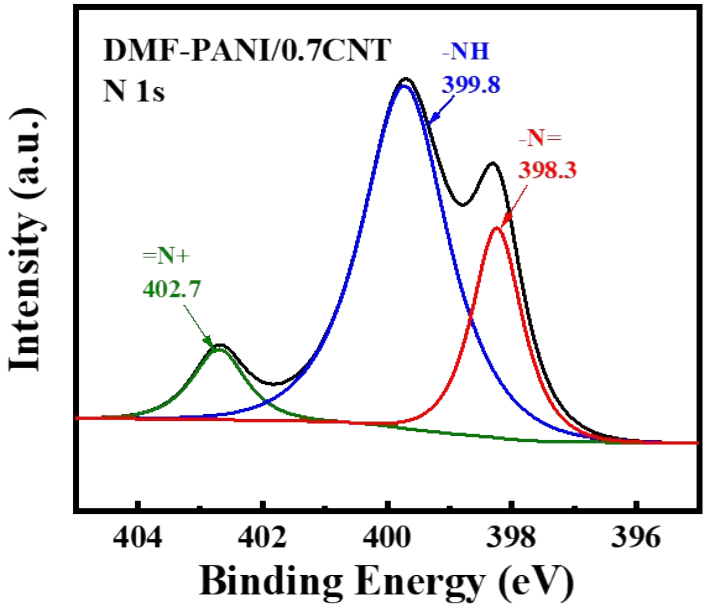

Figure S4 The XPS spectra of the DMF-0.7CNT composite film.

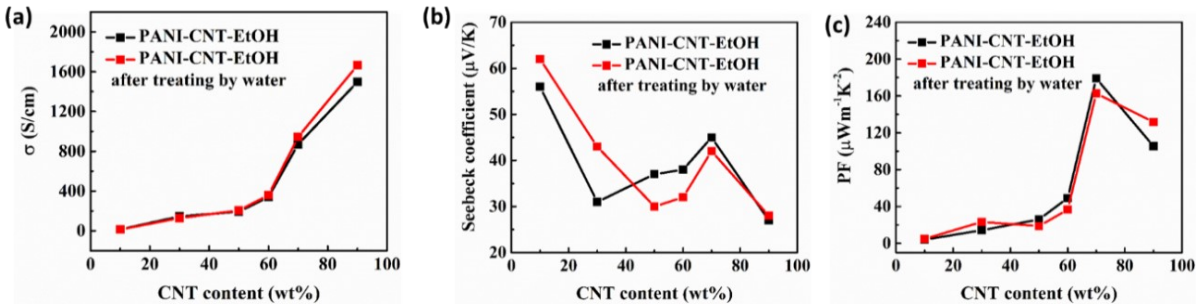

Figure S5. (a) The Seebeck coefficient, (b) conductivity, and (c) power factor of P-EtOH-xCNT with different CNTs content before and after treating by water at room temperature.

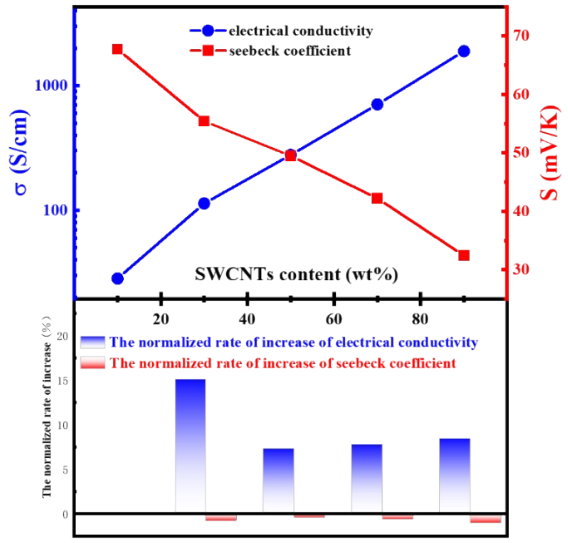

Figure S6. Electrical conductivity (σ) and Seebeck coefficient (S) of P-DMF-xCNT composites with different CNTs content, and the normalized rate of increase of electrical conductivity and Seebeck coefficient.

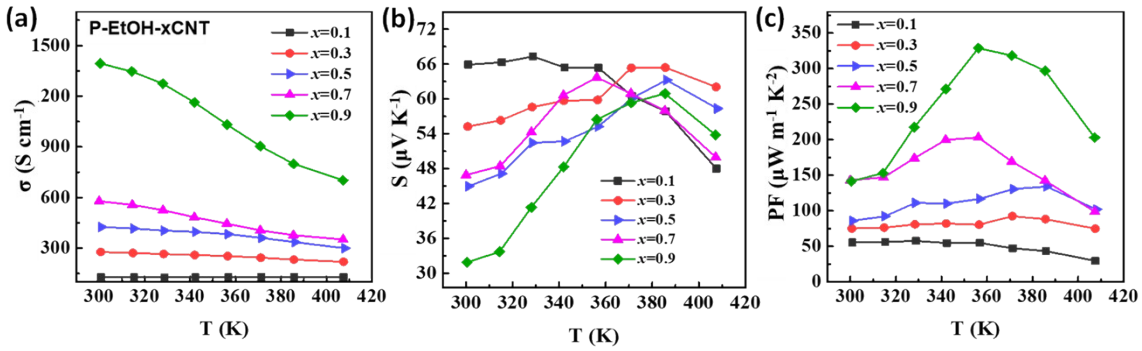

Figure S7. Temperature dependence of (a) electrical conductivity, (b) Seebeck coefficient, and (c) power factor for the P-EtOH-xCNT composite film.