

Synthesis of PEDOT/CNTs Thermoelectric Thin Films with a High Power Factor

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Figure S1 showcases the SEM images capturing the structural characteristics of both multi-walled carbon nanotube (MWCNTs) and single-walled carbon nanotube (SWCNTs) samples in the absence of PEDOT. The images distinctly illustrate a higher level of islands in the MWCNTs sample compared to the SWCNTs sample. Consequently, in the absence of PEDOT, the SWCNTs sample exhibits a more homogenous structure in comparison to the MWCNTs sample [3]

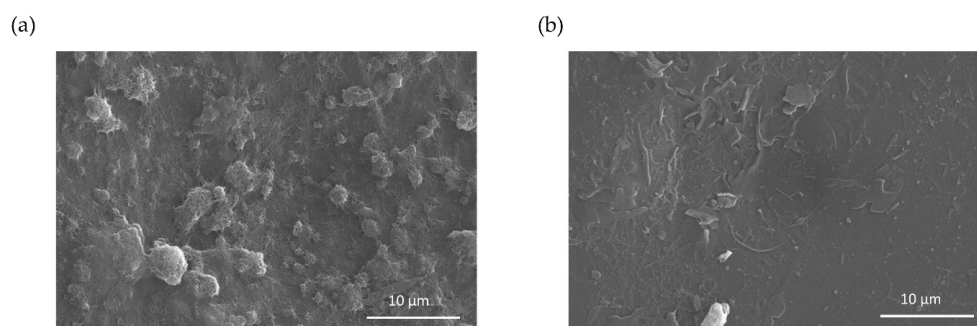


Figure S1. The SEM images of the CNTs samples. (a) MWCNTs. (b) SWCNTs.

Figure S2 presents the RAMAN spectra capturing the distinctive spectral profiles of both MWCNTs and SWCNTs films in the absence of PEDOT. The MWCNTs spectrum demonstrates characteristic peaks at 1300cm^{-1} and 1600cm^{-1} , indicative of its structural properties. Conversely, the RAMAN spectrum of SWCNTs distinctly exhibits a sharp and singular peak at 1600cm^{-1} , underscoring its unique spectral signature [1,2].

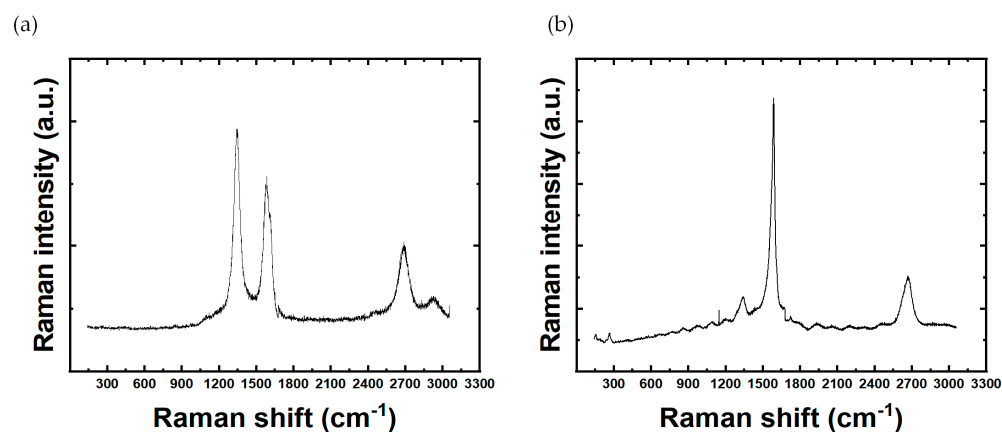


Figure S2. The RAMAN spectra of the CNT films. (a) MWCNT. (b) SWCNT.

References

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