

## Supplementary Information

### **Aligned Carbon Nanotube/Polymer Hybrid Electrolytes for High Performance Dye Sensitized Solar Cell Applications**

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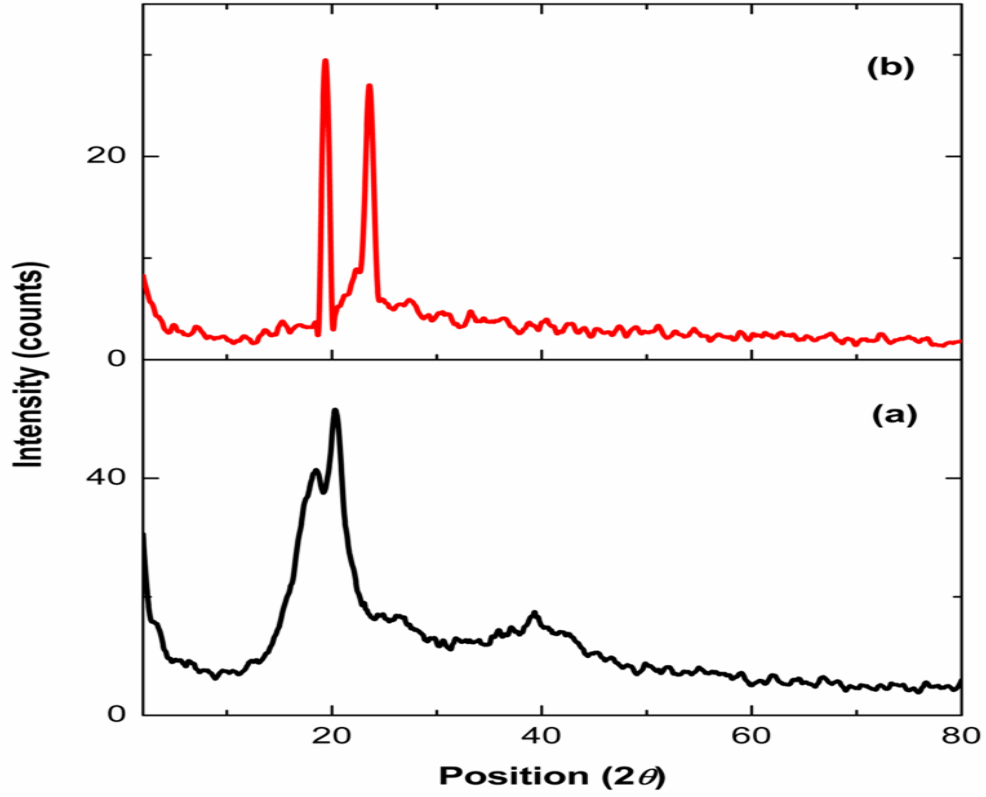


Fig. S1<sup>†</sup> WAXD patterns of (a) PVDF-HFP and (b) PEO

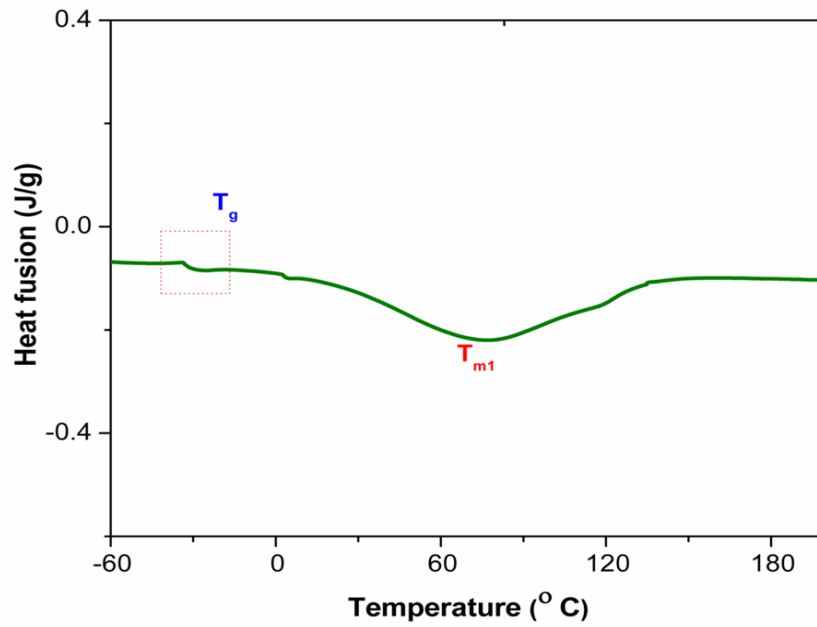
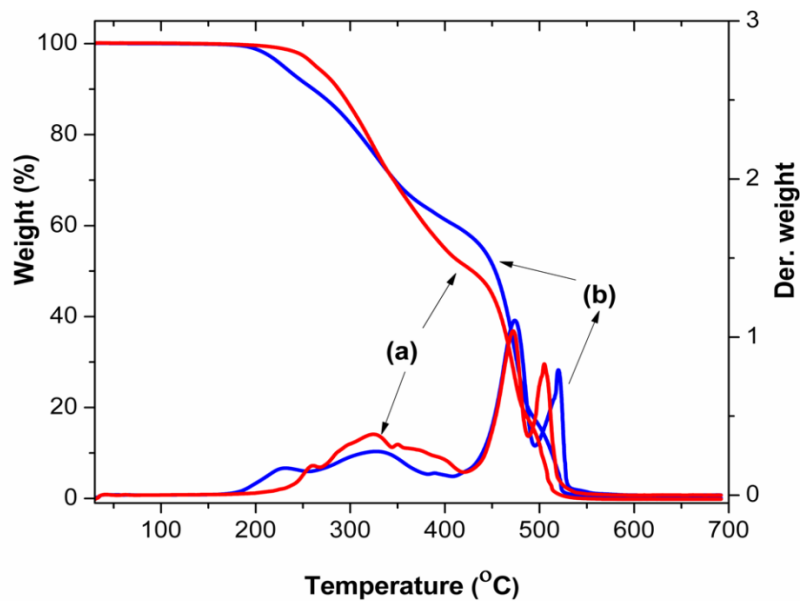
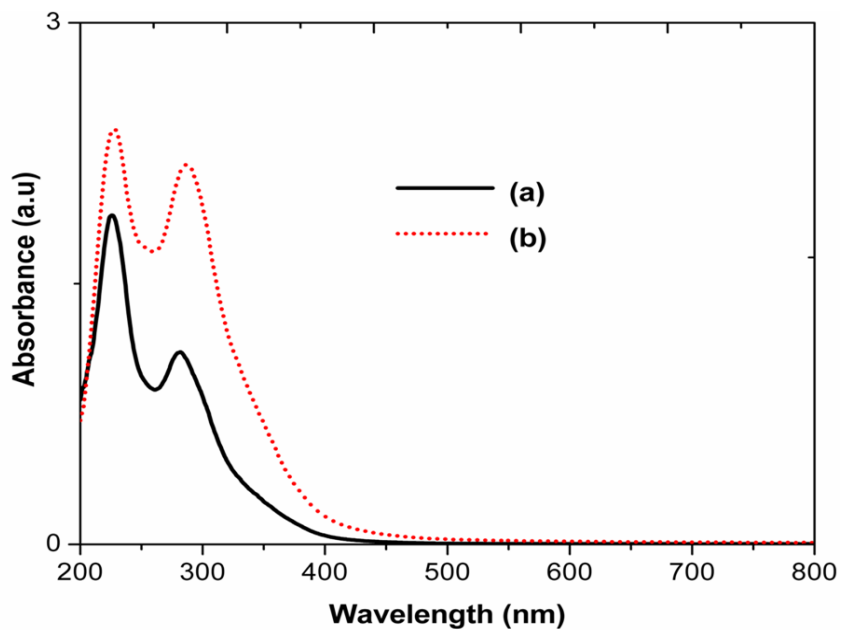


Fig.S2<sup>†</sup> DSC curve of aMWCNT-PEO/ PVDF-HFP/electrolyte membrane



**Fig. S3<sup>†</sup>** TGA and DTA curves of (a) PEO/PVDF-HFP and (b) PEO/PVDF-HFP-MWCNT nanocomposite membrane



**Fig. S4<sup>†</sup>** UV-Visible spectra of (a) PEO/PVDF-HFP and (b) PEO/PVDF-HFP-MWCNT nanocomposite electrolyte

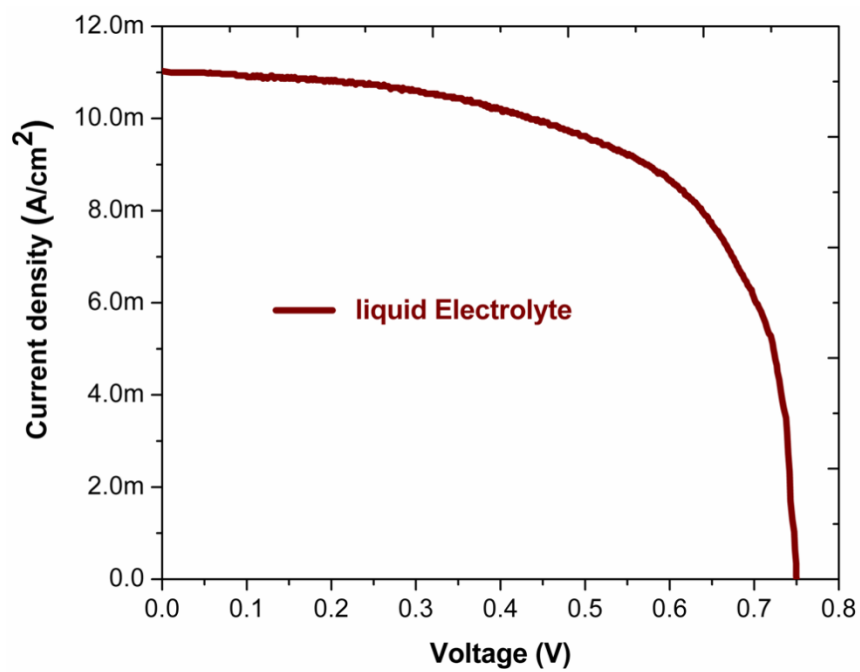


Fig. S5<sup>†</sup> J-V characteristics curves of liquid electrolyte

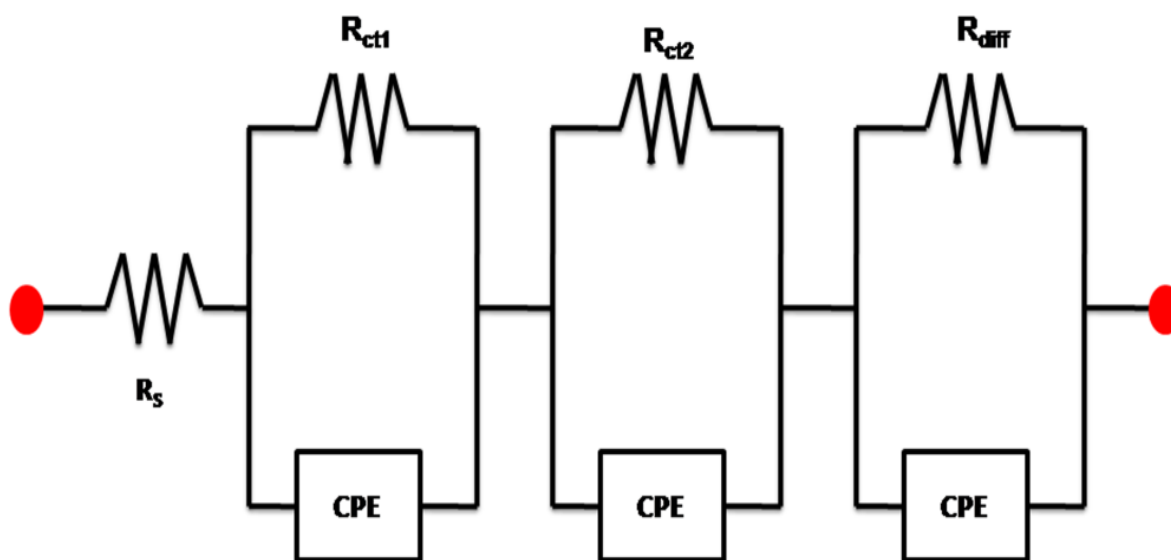


Fig. S6<sup>†</sup> Equivalent circuit for EIS spectra of DSSC