**Supporting Information**

**Multi-layered stack consisting of PVDF nanocomposites with flow-induced oriented MWCNT structure can supress electromagnetic radiation**

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**Figure S1: FT-IR spectra of PVDF composites of (i) 0.5 wt% MWCNT as pressed, (ii) 0.5 wt% MWCNT rolled, (iii) 1 wt% MWCNT as pressed, (iv) 1 wt% MWCNT rolled, (v) 2 wt% MWCNT as pressed and (vi) 2 wt% MWCNT rolled**



**Figure S2: DMTA of as pressed and rolled PVDF with 2 wt% MWCNT**

**Table S1:** Power law fitting exponent values of PVDF composites (obtained from AC conductivity plots)

|  |  |
| --- | --- |
| Compositions |  n |
| 0.5 wt% MWCNT as pressed1 wt% MWCNT as pressed2 wt% MWCNT as pressed0.5 wt% MWCNT rolled1 wt% MWCNT rolled2 wt% MWCNT rolled | 0.820.760.730.690.650.58 |

**Table S2: FT-IR analysis of the variation of β-phase with concentration of MWCNTs before and after rolling.**

|  |  |  |
| --- | --- | --- |
| **Samples** | **As pressed (Fβ) content (%)** | **Rolled (Fβ) content (%)** |
| **PVDF + 0.5 wt% MWCNTs** | **65** | **87** |
| **PVDF + 1 wt% MWCNTs** | **66** | **88** |
| **PVDF + 2 wt% MWCNTs** | **66** | **88** |