

Supplementary Materials

Effect of Embedment of MWCNTs for Enhancement of Physical and Mechanical Performance of Medium Density Fiberboard

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Scanning Electron Microscopy of MWCNTs

Scanning electron microscopy (SEM) imaging was used to characterize the surface morphology of multiwalled carbon nanotubes. Figure S1 displays the SEM images of raw MWCNTs. It is evident from the figure that the MWCNTs are cylindrical in shape, curved and tangled together. The dimension of the nanotubes ranges from 20 to 40 nanometers.

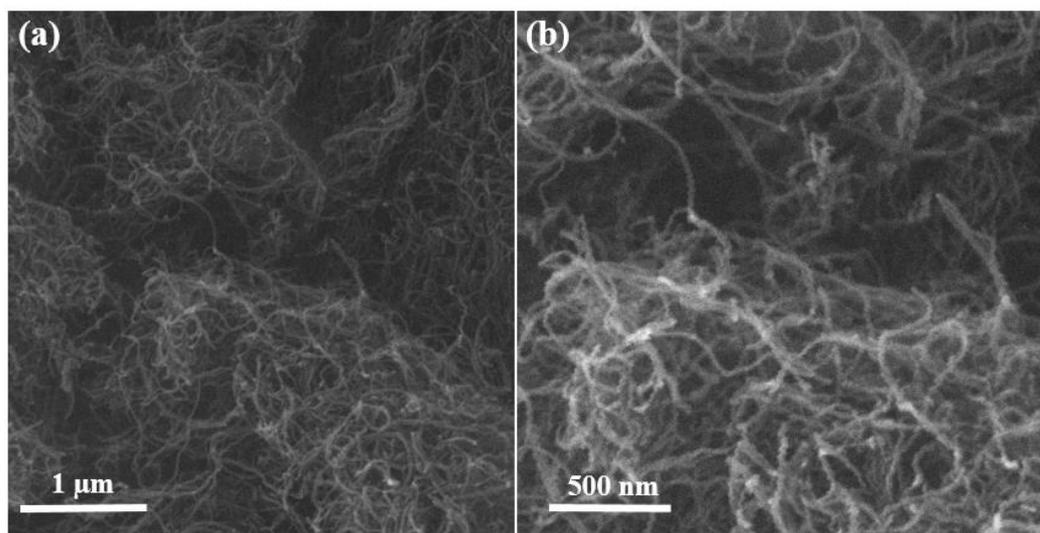


Figure S1. Scanning electron microscopy images of MWCNTs at. (a) 50,000X, (b) 100,000X.

X-Ray Diffraction Analysis of MWCNTs

Figure S2 shows the X-ray diffraction patterns of raw MWCNTs. From Figure S2 it can be seen that the diffractogram of raw MWCNTs exhibits the typical peaks at 2θ around 26.5° and 42.7° , corresponding to the normal structure of graphite (0 0 2) and (1 0 0) reflections (Joint Committee for Powder Diffraction Studies (JCPDS) No. 01-0646) respectively [16]. Similar findings were reported by Chen et al. [17], Gupta et al. [18], Oh et al. [19] and Chen & Oh [20].

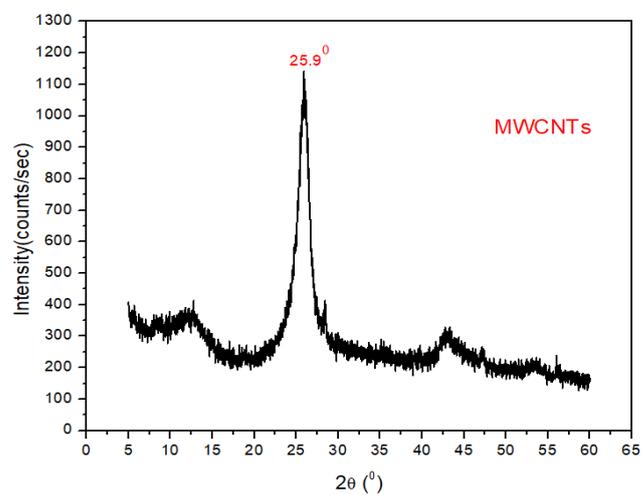


Figure S2. X-ray diffraction analysis of MWCNTs.