Electronic Supplementary Information (ESI)

Sandwich Nanocomposites of Polyaniline Embedded between Graphene layers and Multi-walled Carbon Nanotubes for Cycle-stable Electrode Materials of Supercapacitors

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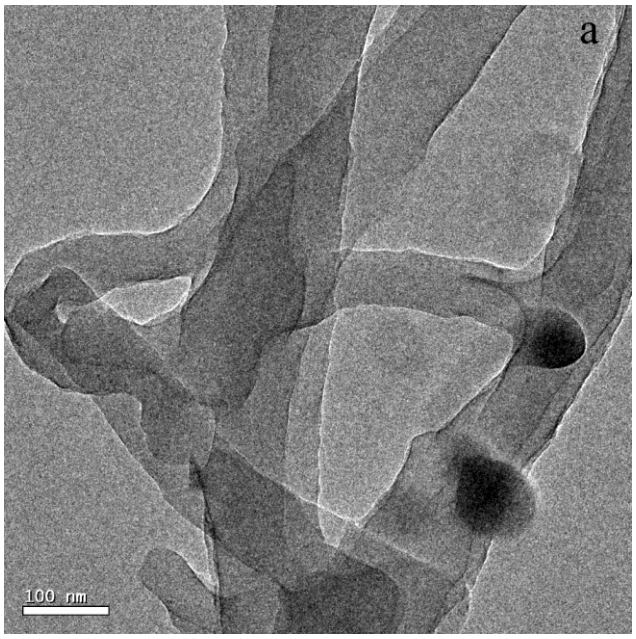
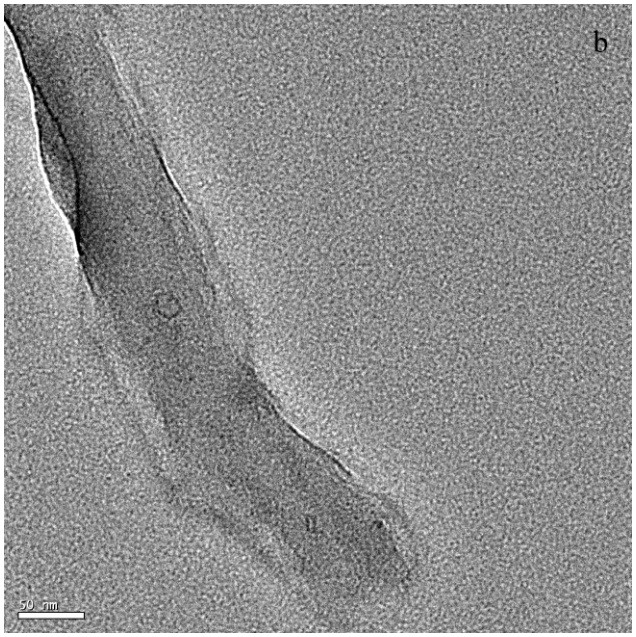
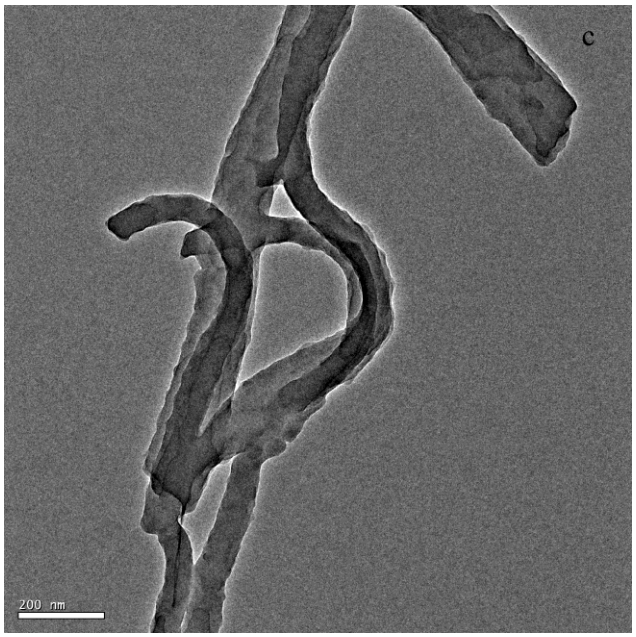
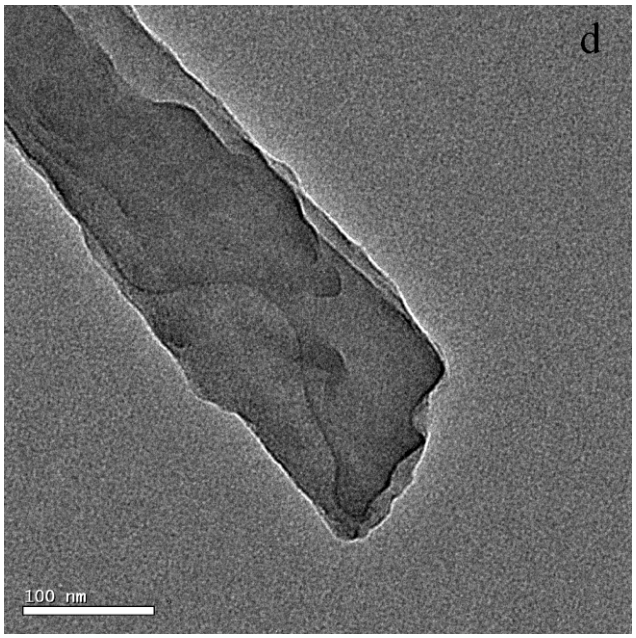
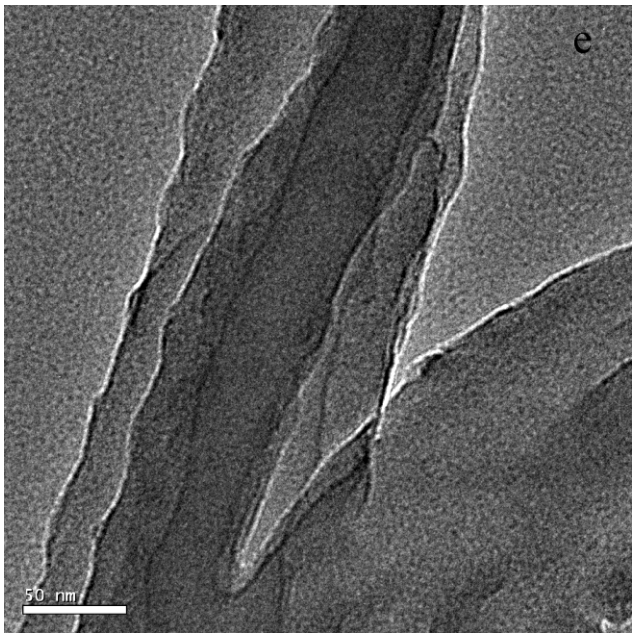
1. The TEM images of the series of PANI/MWCNTs composites (the images of PANI/MWCNTs 1.0 were shown in Fig.2c and 2d).

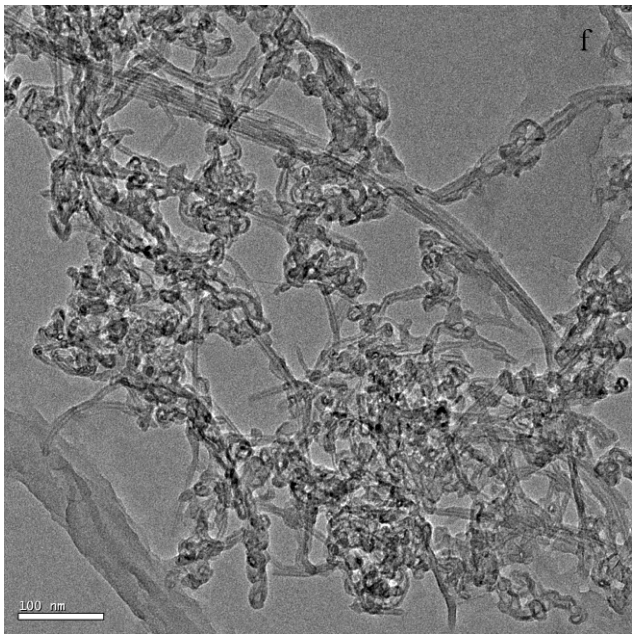












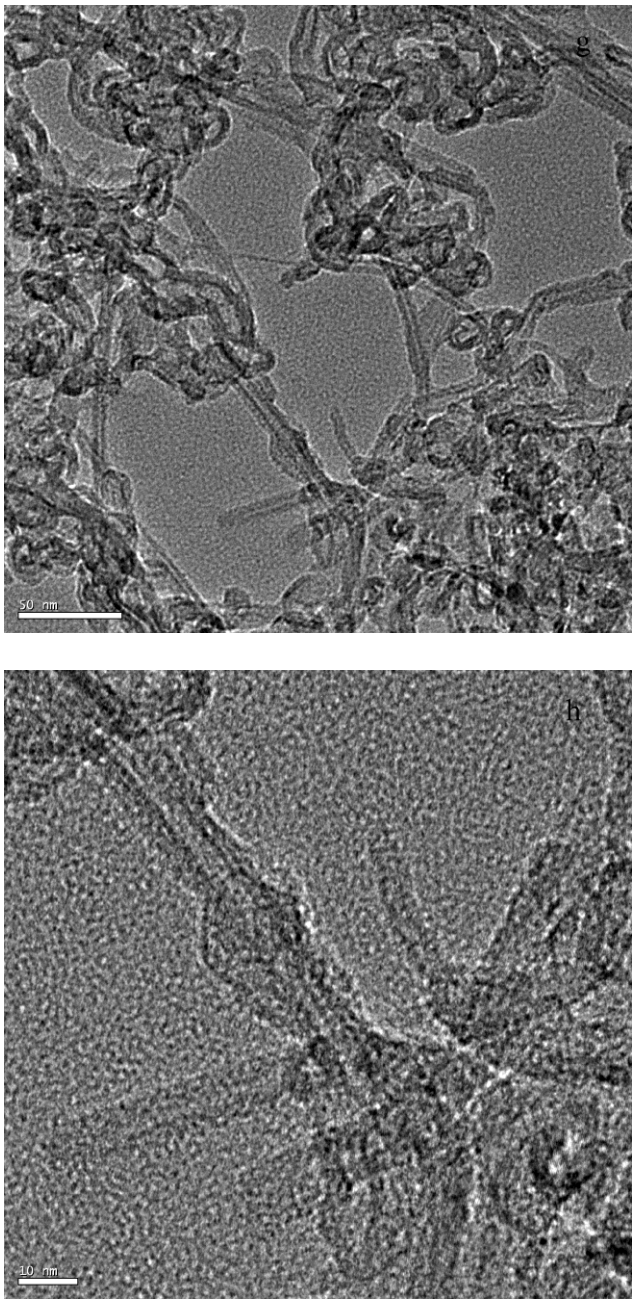
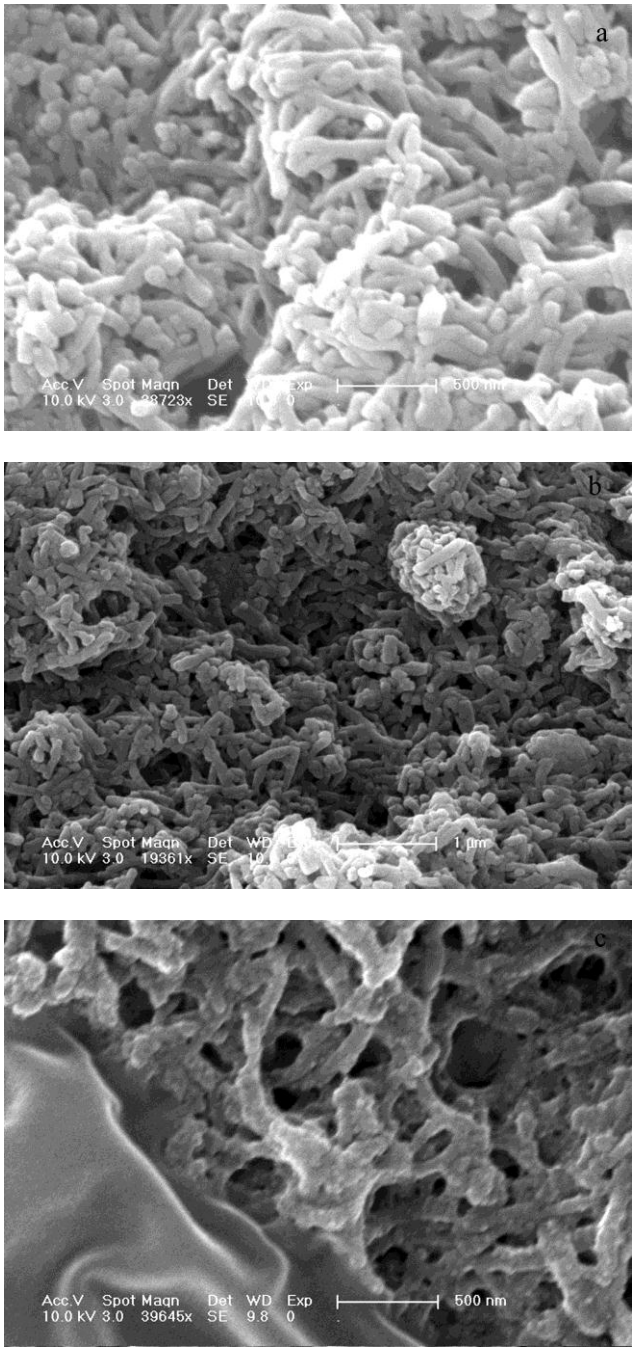


Fig.S1. The images of (a) PANI/MWCNTs 2.0, scale bar of 100 nm, (b) PANI/MWCNTs 2.0, scale bar of 50 nm, (c) PANI/MWCNTs 3.0, scale bar of 200 nm, (d) PANI/MWCNTs 3.0, scale bar of 100 nm, (e) PANI/MWCNTs 3.0,scale bar of 50 nm, (f) PANI/MWCNTs 4.0, scale bar of 100nm, (g) PANI/MWCNTs 4.0, scale bar of 50 nm, (h) PANI/MWCNTs 4.0, scale bar of 10 nm.

2. The SEM images of the pristine pure PANI nanofibers electrode and the sandwich nanocomposites electrode before and after the electrochemical measurements were exhibited in Fig. S2 and Fig.S3.



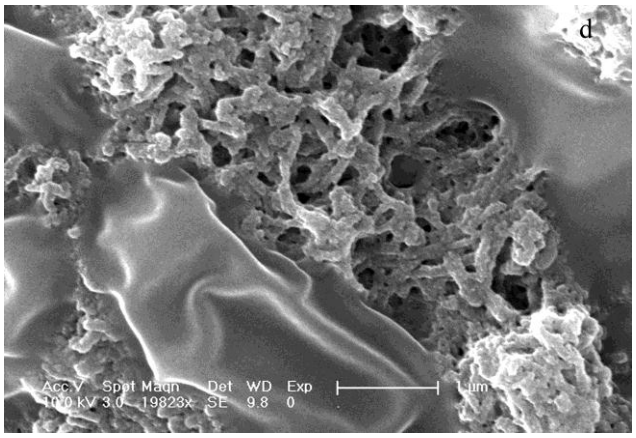
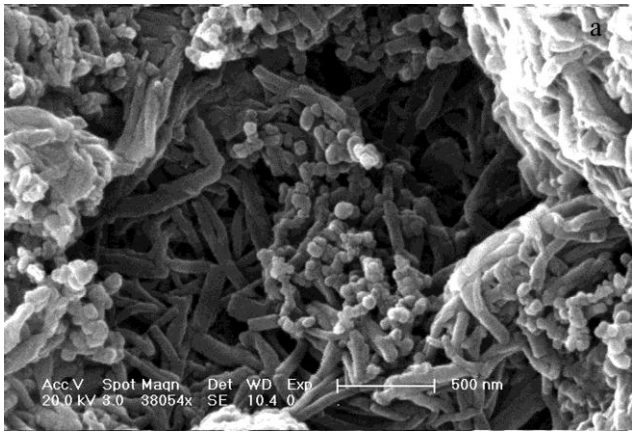
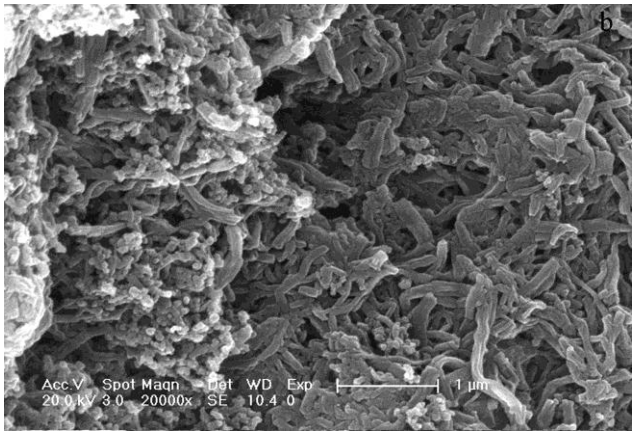


Fig.S2. SEM images of PANI nanofibers electrode before the electrochemical measurements (a, b) and PANI nanofibers electrode after the electrochemical measurements (c, d).





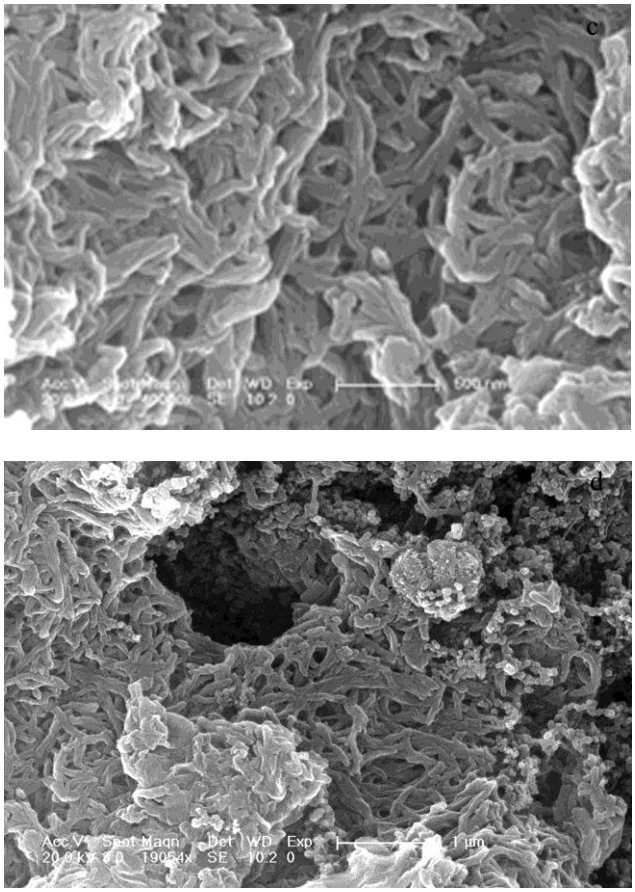


Fig.S3. SEM images of the sandwich nanocomposites electrode before the electrochemical measurements (a, b) and the sandwich nanocomposites electrode after the electrochemical measurements (c, d).