Electronic Supplementary Material (ESI) for RSC Advances

Supporting Information for

Direct Assembly of Tin-MWCNT 3D-Networked Anode for rechargeable Lithium Ion Batteries

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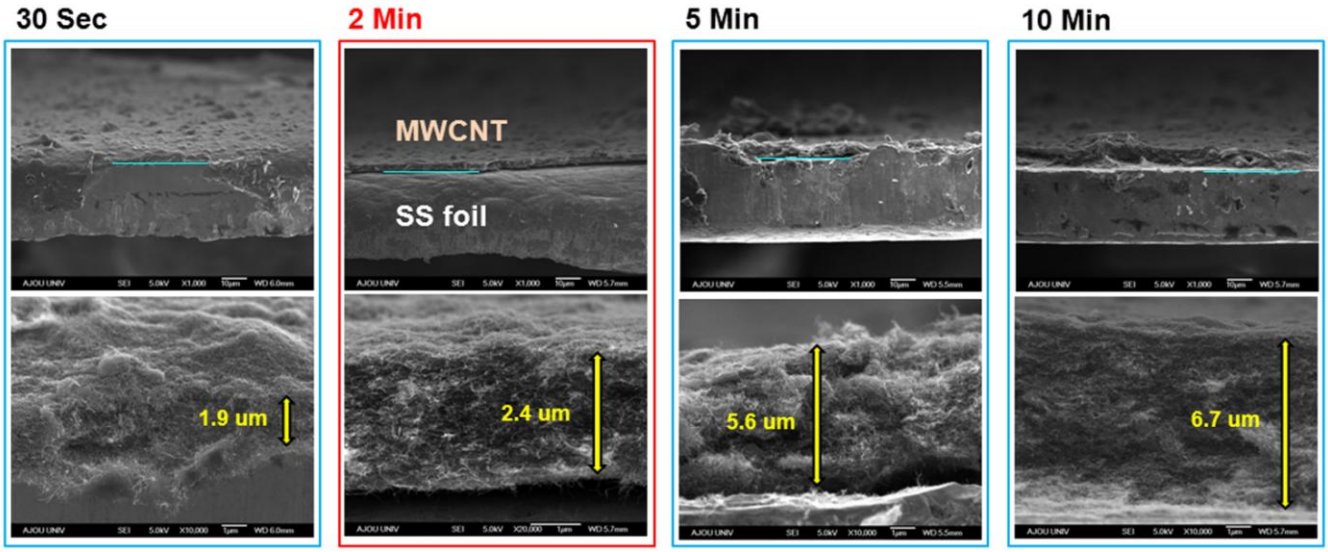

Figure S1. Cross-sectional SEM images of the MWCNT film obtained by electrophoretic deposition on a SS substrate as a function of deposition time.

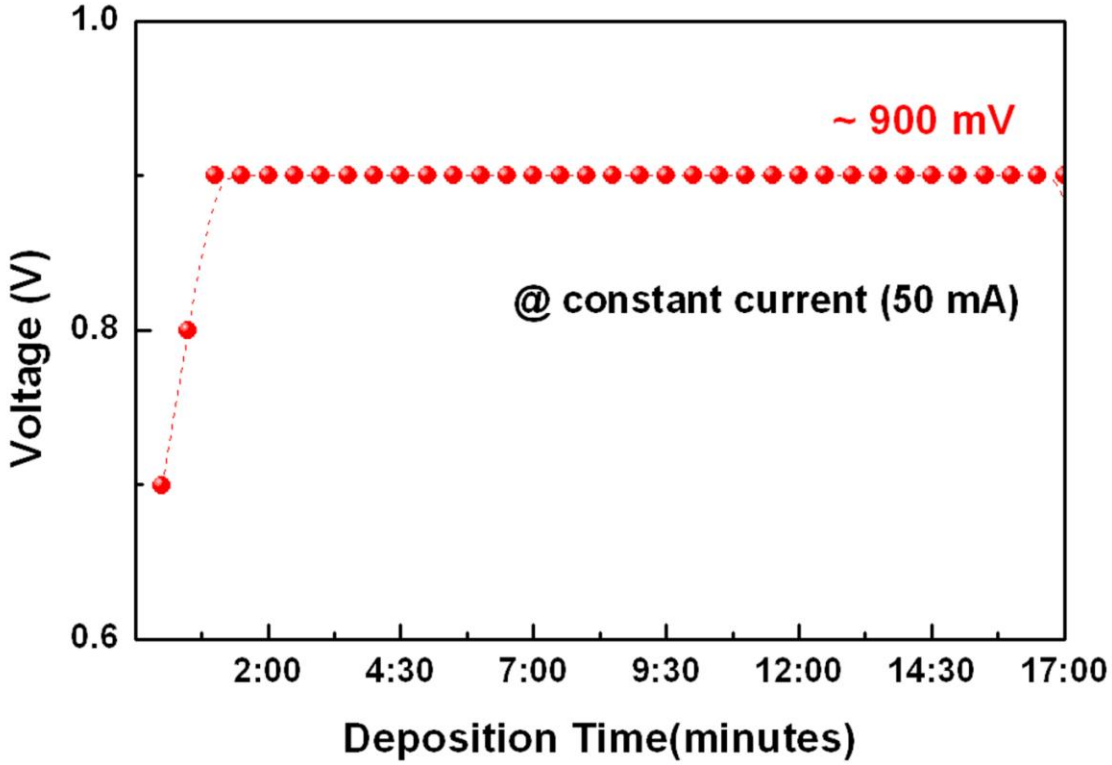

Figure S2. Voltage variation during the deposition of Sn as a function of deposition time under a constant current of 50 mA.

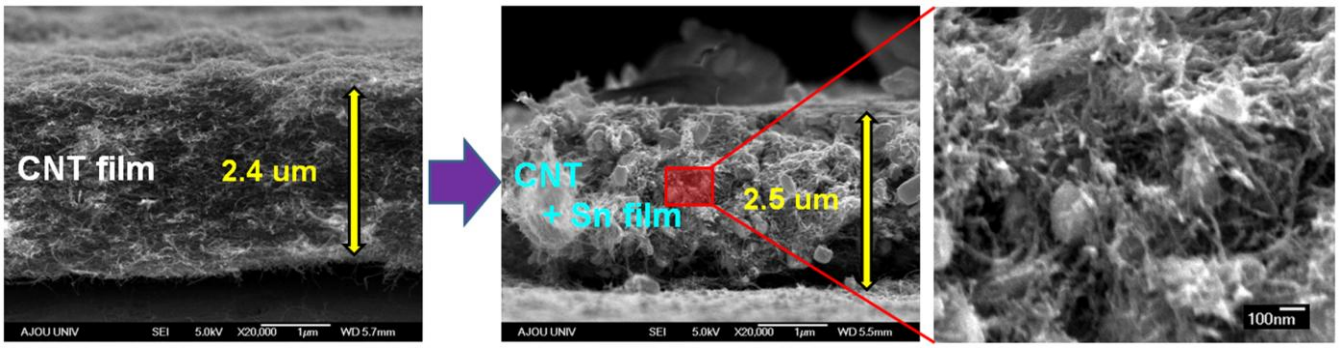

Figure S3. Cross-sectional SEM images of the MWCNT and Sn-MWCNT films (7 min deposition) on a SS substrate.

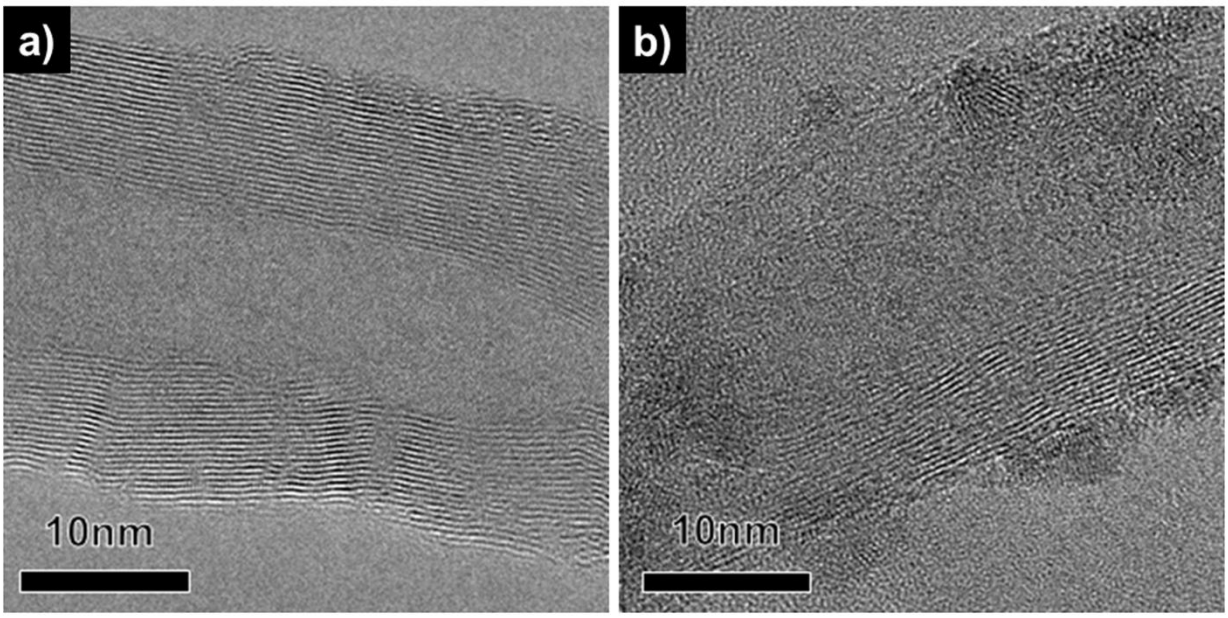

Figure S4. HRTEM images of (a) pristine MWCNTs and (b) the Sn-MWCNT nanocomposite deposited for 3 min.

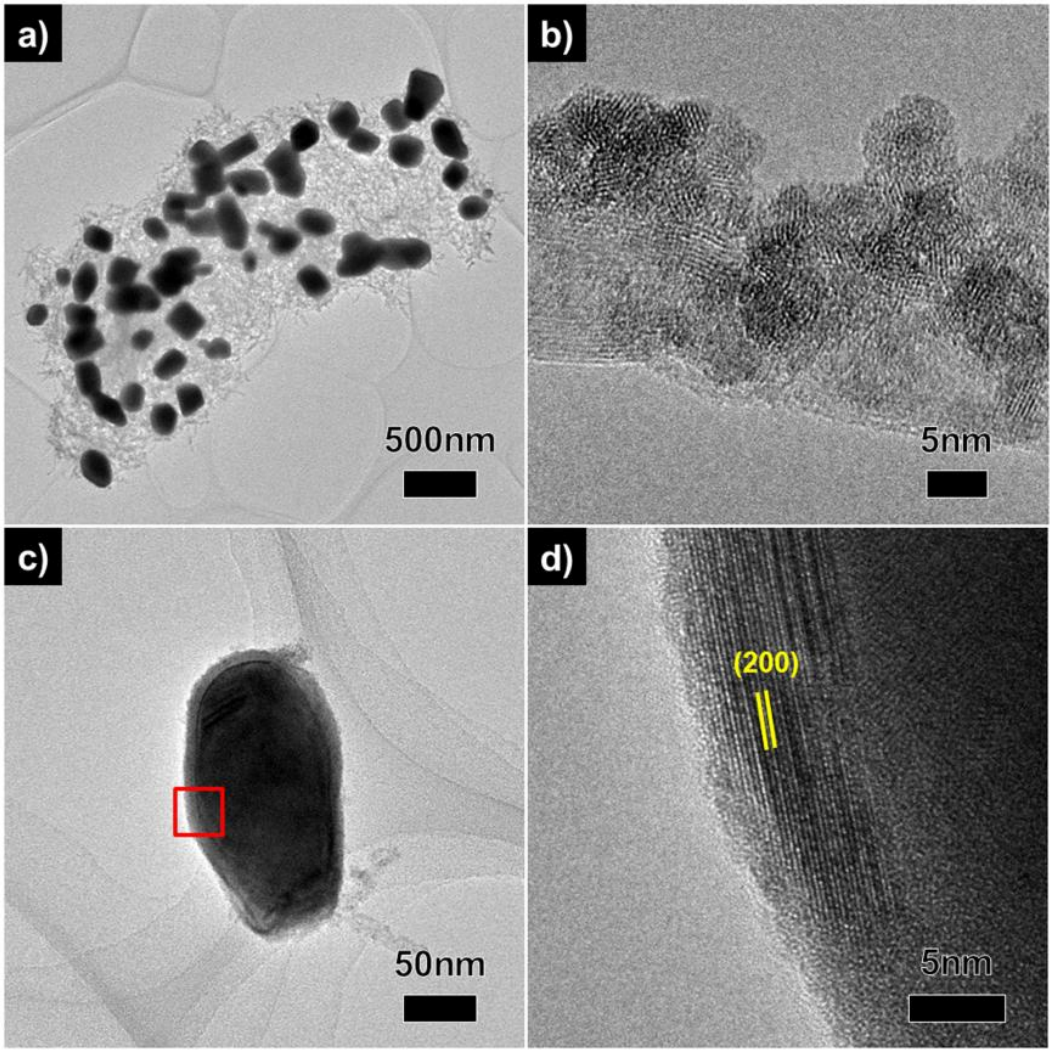

Figure S5. TEM image of the Sn-MWCNT nanocomposite film deposited for 10 min. (a, b) Low-magnification and high-magnification views and (c,d) low-magnification and high-magnification views of an isolated Sn nanoparticle.

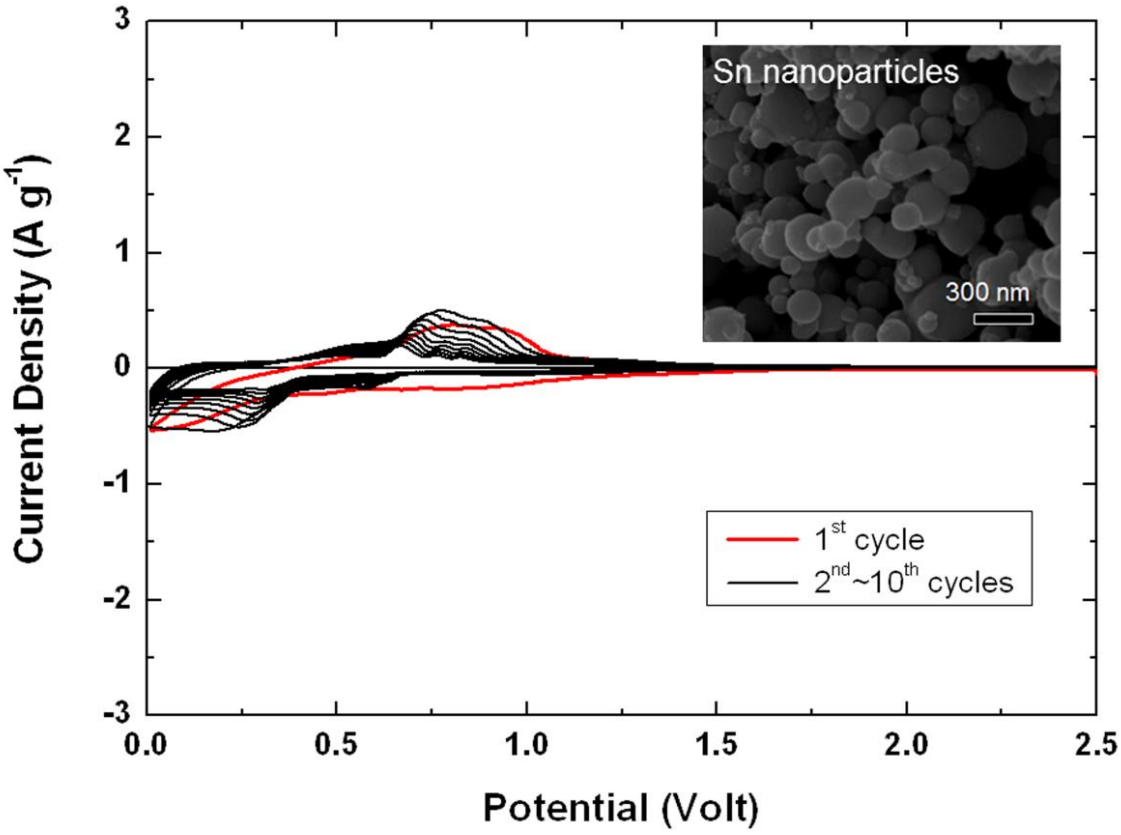

Figure S6. Cyclic voltammogram of commercial Sn nanoparticles.

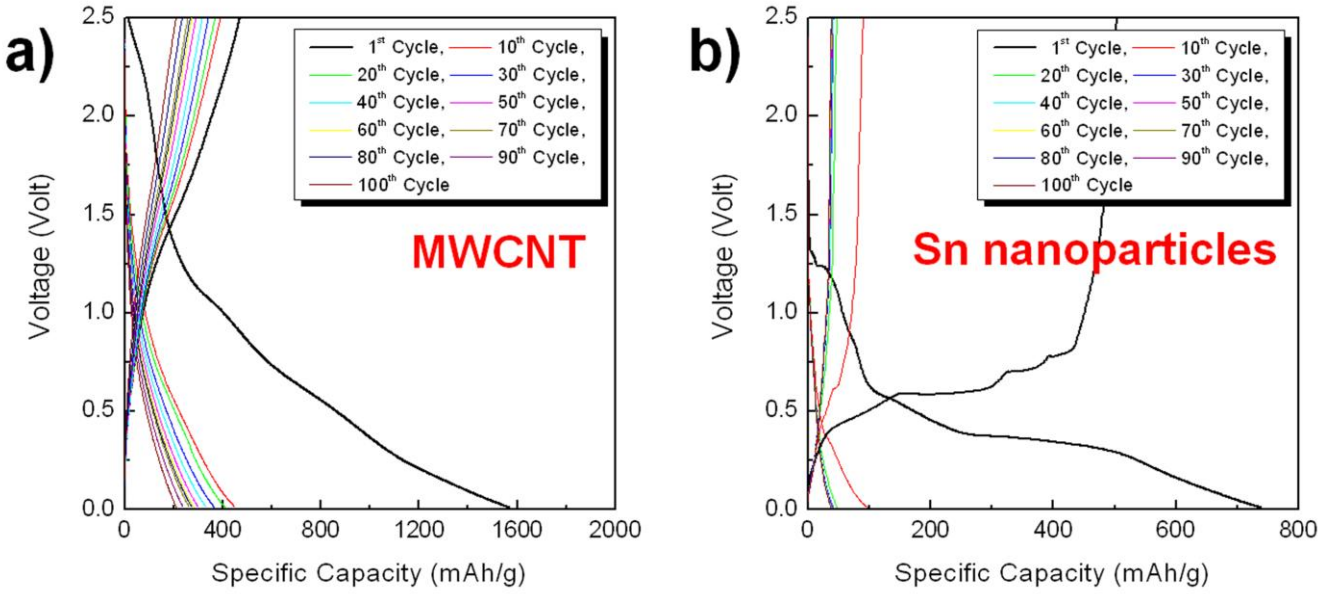

Figure S7. Galvanostatic voltage-specific capacity profiles of MWCNT and commercial Sn nanoparticle electrodes.

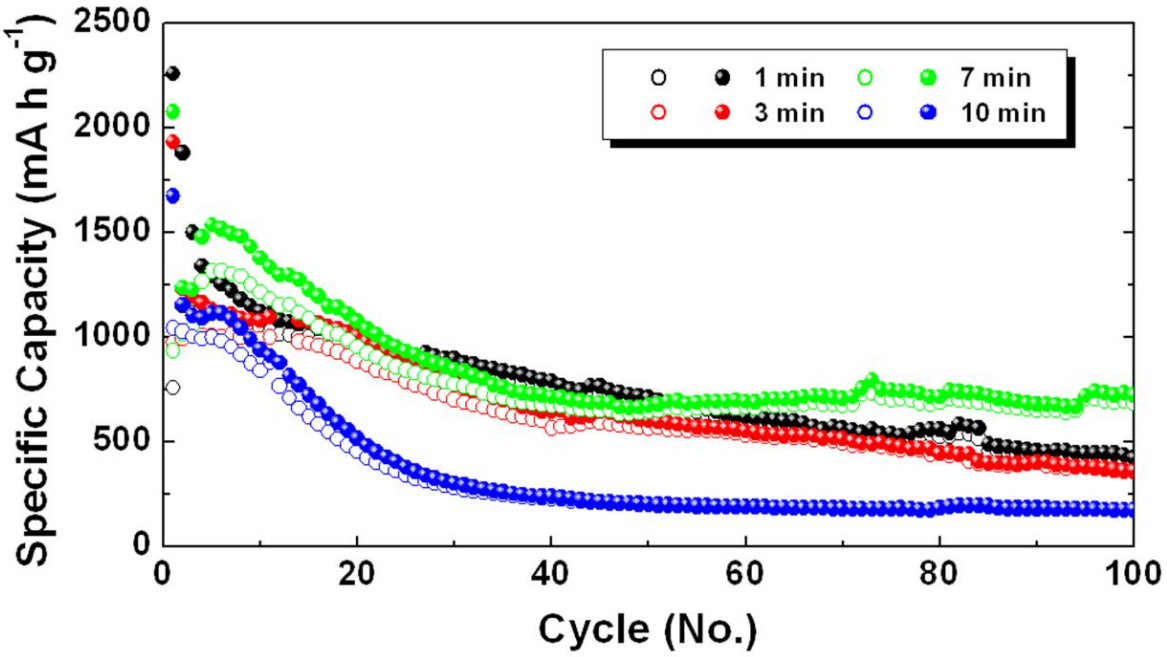

Figure S8. Cyclic performances of Sn-MWCNT nanocomposites deposited with the same current for different durations.