Electrodeposition of Cu-SWCNT Composites

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Supplementary Materials

Figure S1. Image showing the association of the aggregates with the magnetic stir bar indicating the presence of the SWCNTs containing iron catalyst impurities.



Figure S2. SEM image of HiPCO SWCNTs.



Figure S3. SEM of copper wire cathode showing scratches likely produced during manufacture and subsequent handling.



Figure S4. Photographic image of Cu-SWCNT composite deposited on the surface of the copper cathode after electrolysis using constant voltage (14 V) power supply: [Cu²⁺] = ~0.095 M, [SWCNT] = 2.3 wt%.



Figure S5. Plot of copper (at%) versus carbon (at%) composition as determined by EDX analysis ($R^2 = 0.98$). EDX shown as an average of 5 independent measurements per sample.



Figure S6. Plot of iron (at%) versus carbon (at%) composition as determined by EDX analysis ($R^2 = 0.92$). EDX shown as an average of 5 independent measurements per sample.



Figure S7. Copper wire cathodes with hard coatings (Cu-SWCNT) before rinsing, and drying.