

# Free-Standing $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ /Carbon Nanofiber Network Film as Light-Weight and High-Power Cathode for Lithium Ion Batteries—Supporting Information

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Electrochemical test of pure carbon nanofiber network

Pure carbon nanofiber (CNF) network without  $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$  was tested in the voltage window of 3.5-5 V with Li metal as counter electrode. All other conditions were kept the same as battery tests for  $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$  / CNF network electrodes and conventional electrodes. The specific capacity of CNF network is shown in Figure S1. To make a fair comparison between  $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$  / CNF network electrodes and conventional electrodes, we have subtracted the capacity contributed from CNFs when calculating specific capacities for all  $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$  / CNF network electrodes.

Figure S1

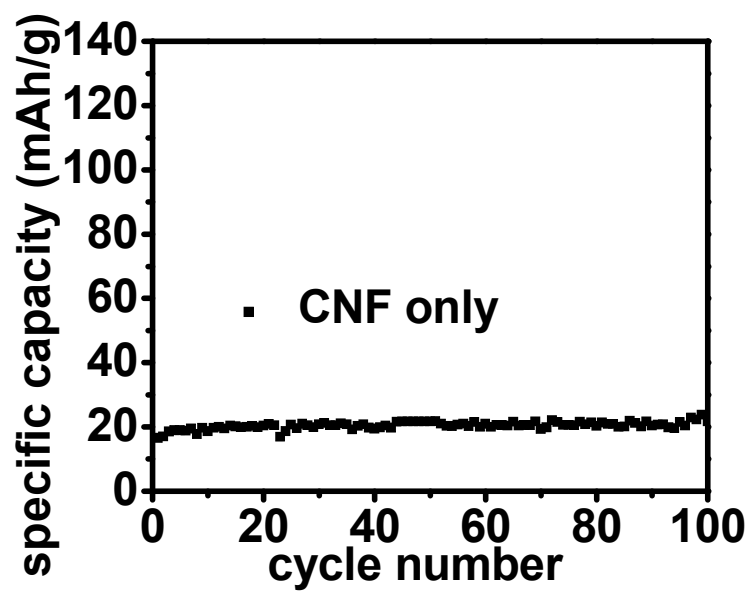


Figure S1. Specific capacity of carbon nanofibers at 3.5-5 V against Li metal.