Supplementary Information for

Polypyrrole Coated δ-MnO$_2$ Nanosheet Arrays as Highly Stable Lithium-ion-storage Anode

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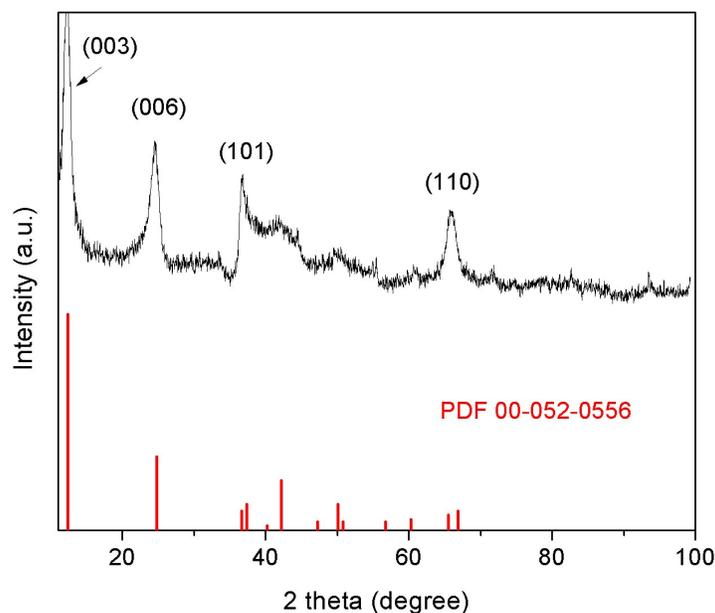
Figure S1. XRD pattern of decomposition products of KMnO$_4$.
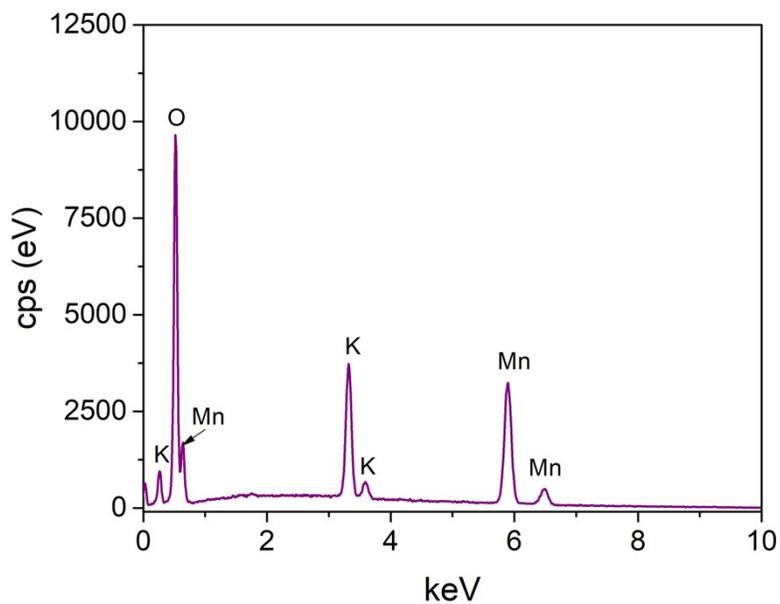
Figure S2. EDS pattern of decomposition products of $KMnO_4$.
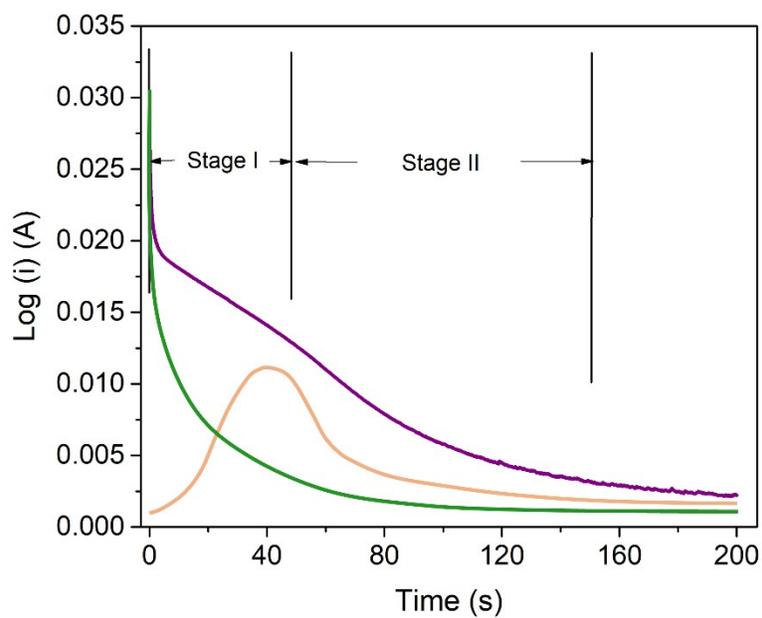
Figure S3. Chronoamperometric graph of PPy electrodeposition at the potential of 1.2 V (vs. Ag/AgCl) which could be divided into two stages and two separate curves.
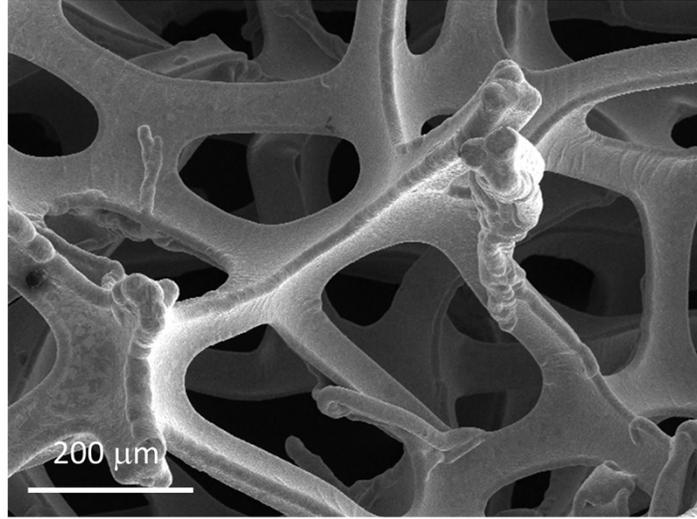
Figure S4. SEM image of bare nickel foam at the scale bar of 200 μm.
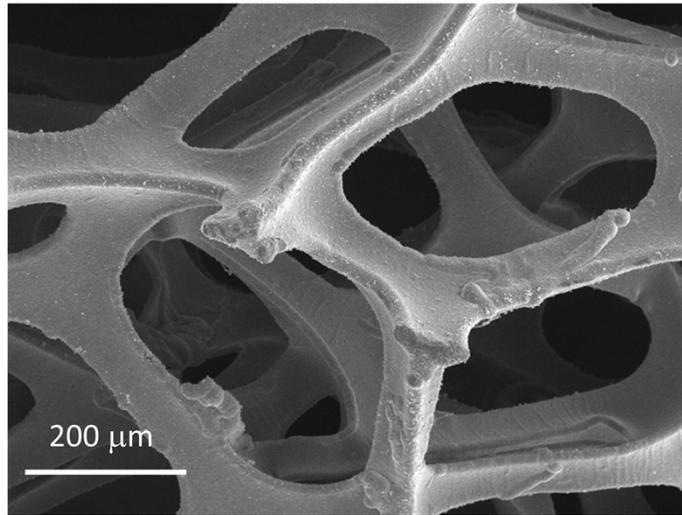
Figure S5. SEM image of MnO$_2$@PPy/NF-50 at the scale bar of 200 μm.
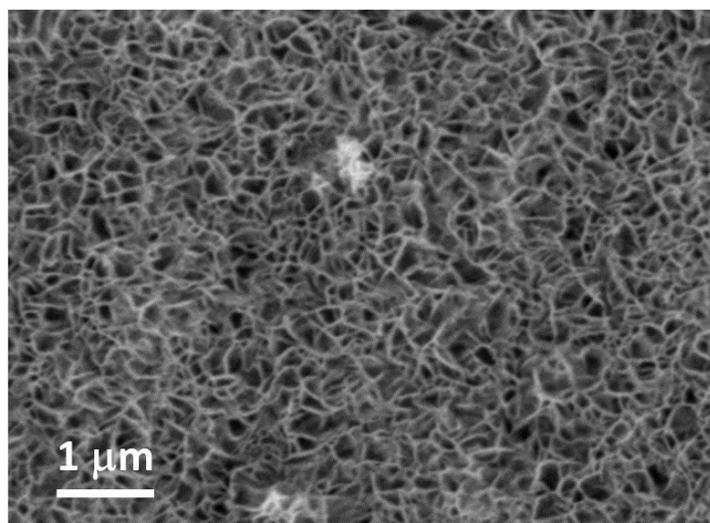
Figure S6. SEM image of MnO$_2$@PPy/NF-50 at the scale bar of 1 μm.
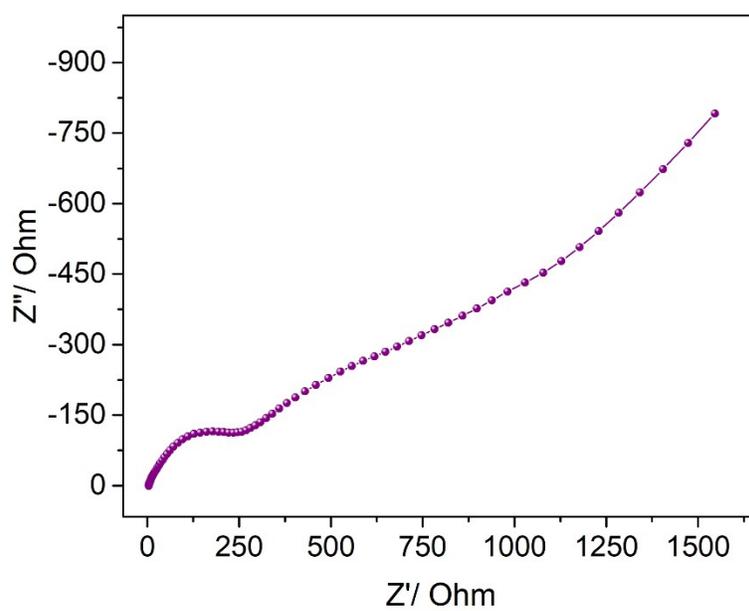
Figure S7. Electrochemical impedance spectra of the MnO$_2$@PPy/NF-50 electrodes in the frequency range of 100 kHz – 0.01 Hz.
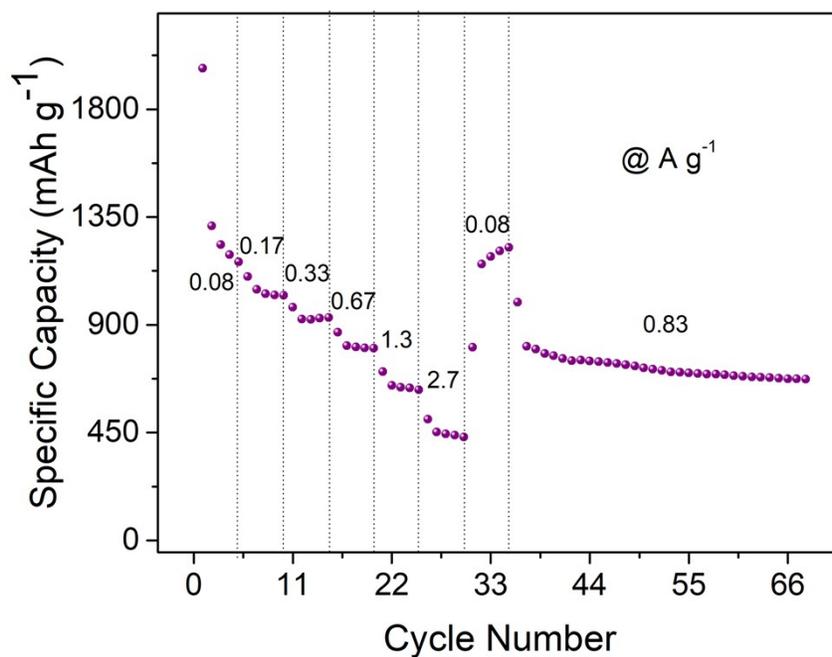
Figure S8. Rate capacities of MnO$_2$@PPy/NF-50 electrodes at various current densities.
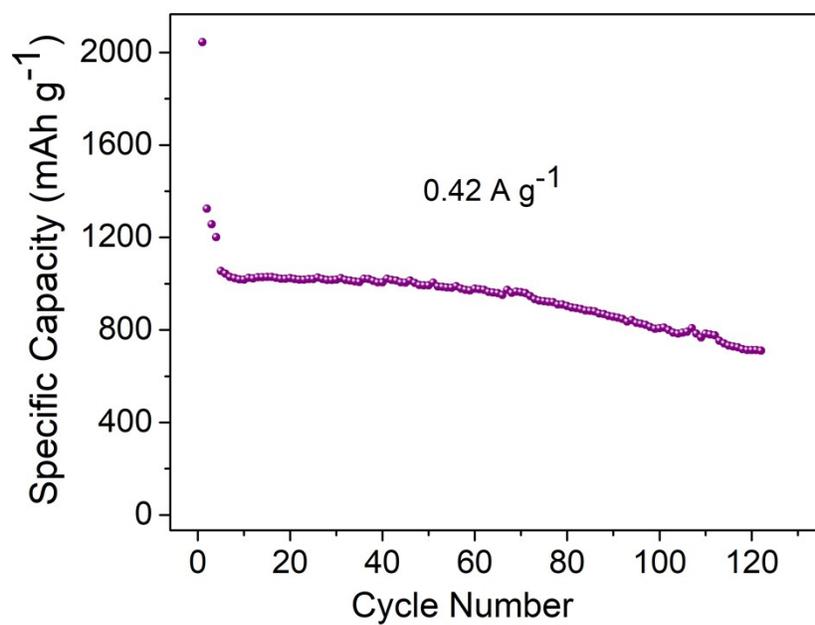
Figure S9. Cycling performance of the MnO$_2$@PPy/NF-50 electrodes at the current density of 0.42 A g^{-1}.