Electronic Supplementary Information

$Ni_{0.33}Mn_{0.33}Co_{0.33}Fe_2O_4$ nanoparticles anchored on oxidized carbon nanotubes as advanced anode materials in Li-ion batteries

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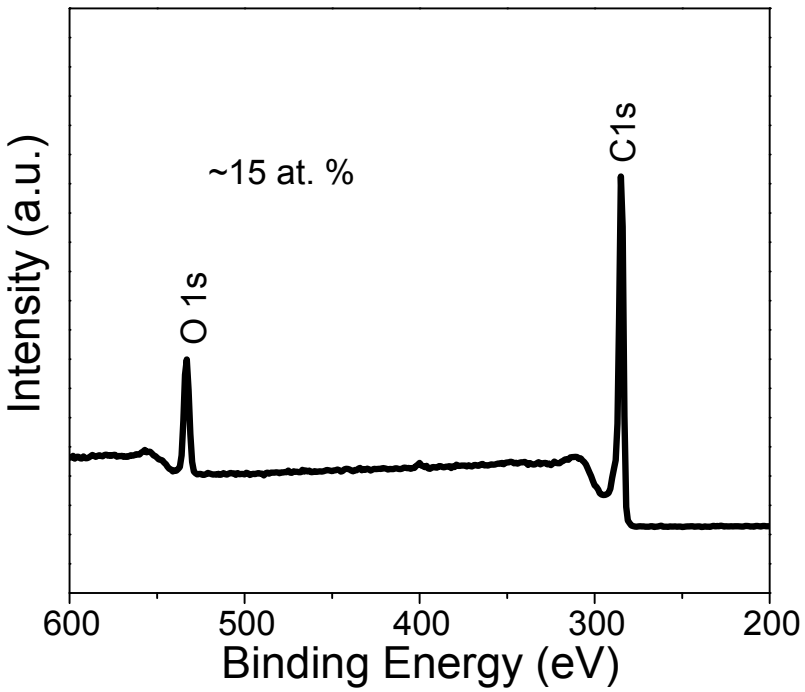

Fig. S1 XPS spectra for the OCNT.

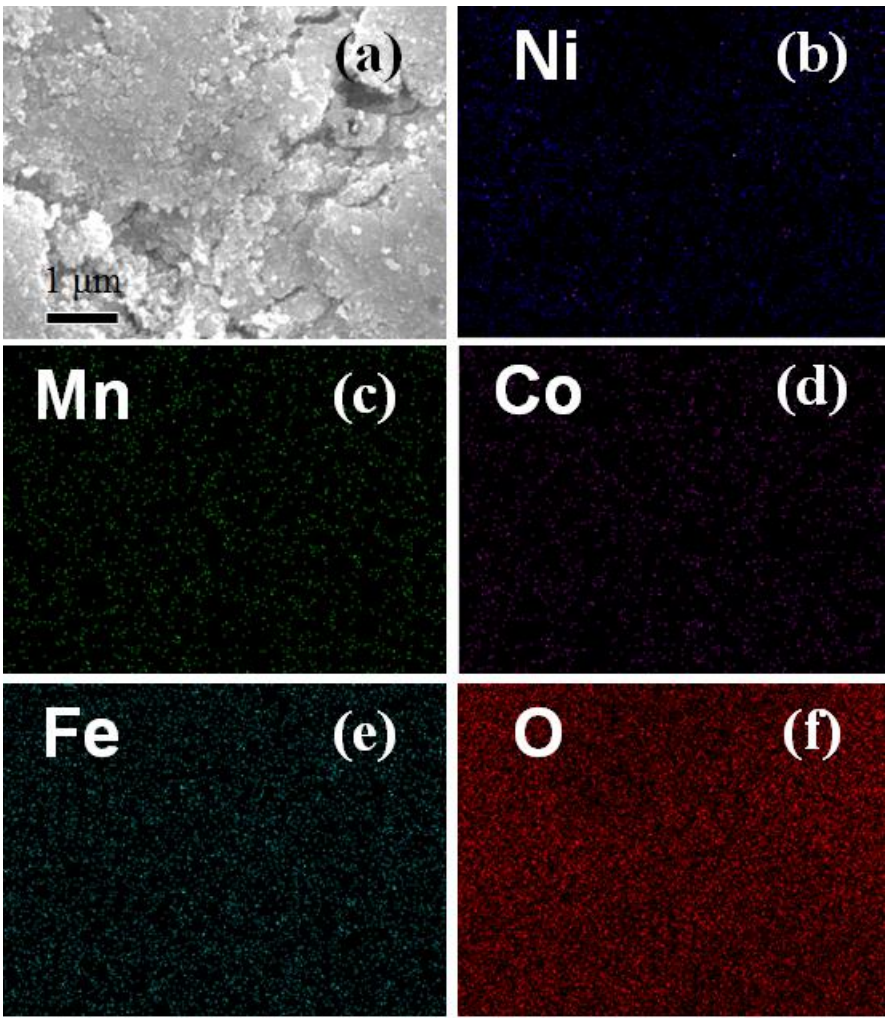

Fig. S2 Elemental mapping images of Ni, Mn, Co, Fe, and O for NMCFO nanoparticles.

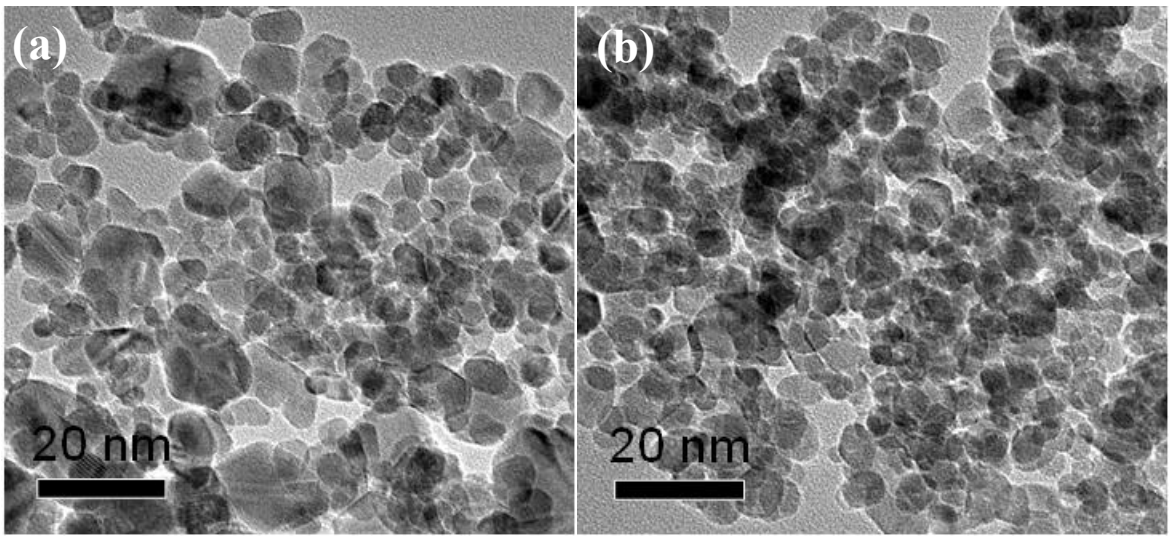

Fig. S3 TEM images of (a) $Ni_{0.2}Mn_{0.4}Co_{0.4}Fe_2O_4$ and (b) $Ni_{0.4}Mn_{0.4}Co_{0.2}Fe_2O_4$.

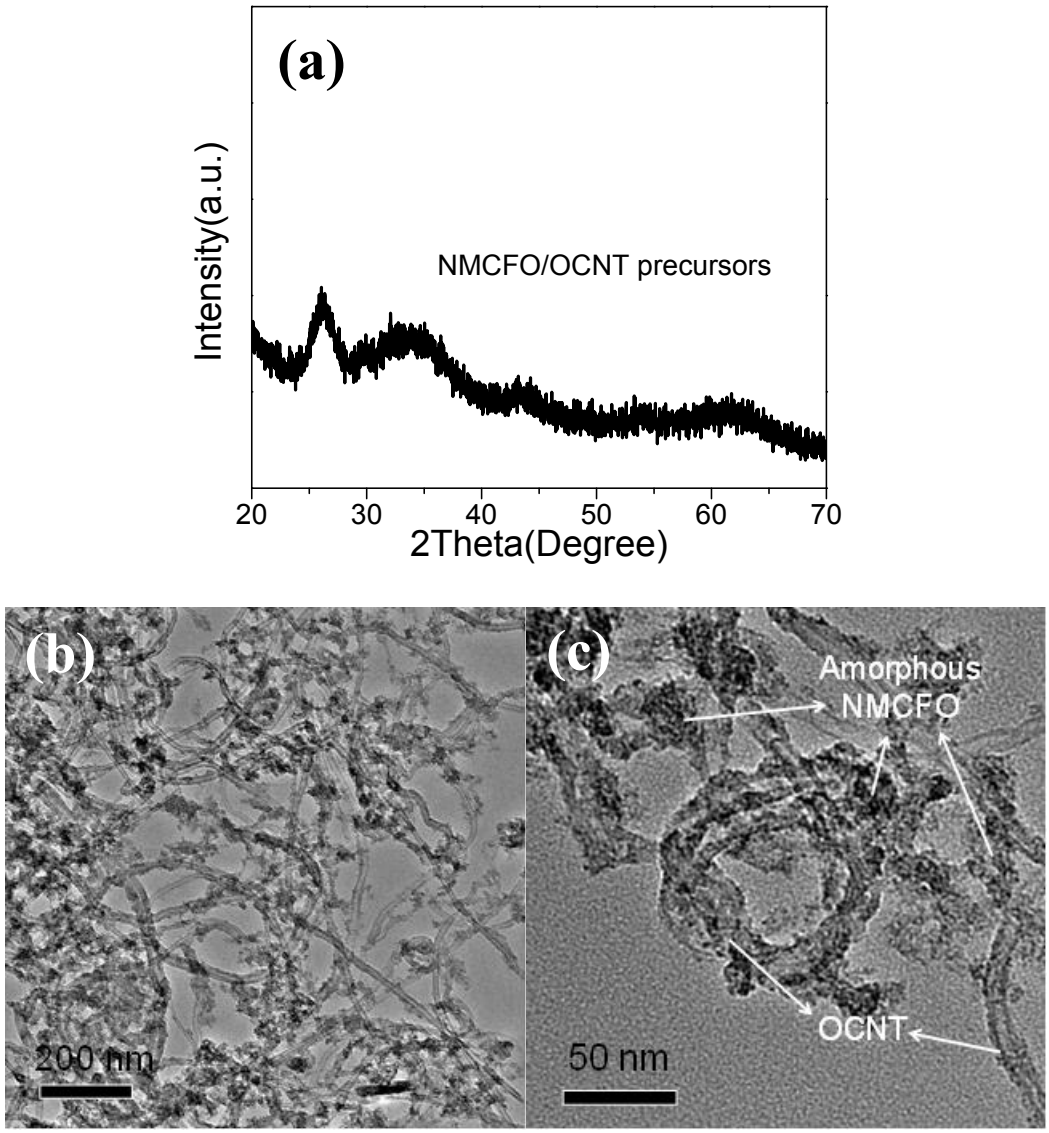

Fig. S4 XRD pattern (a) and TEM images (b and c) of NMCFO/OCNT precursors.

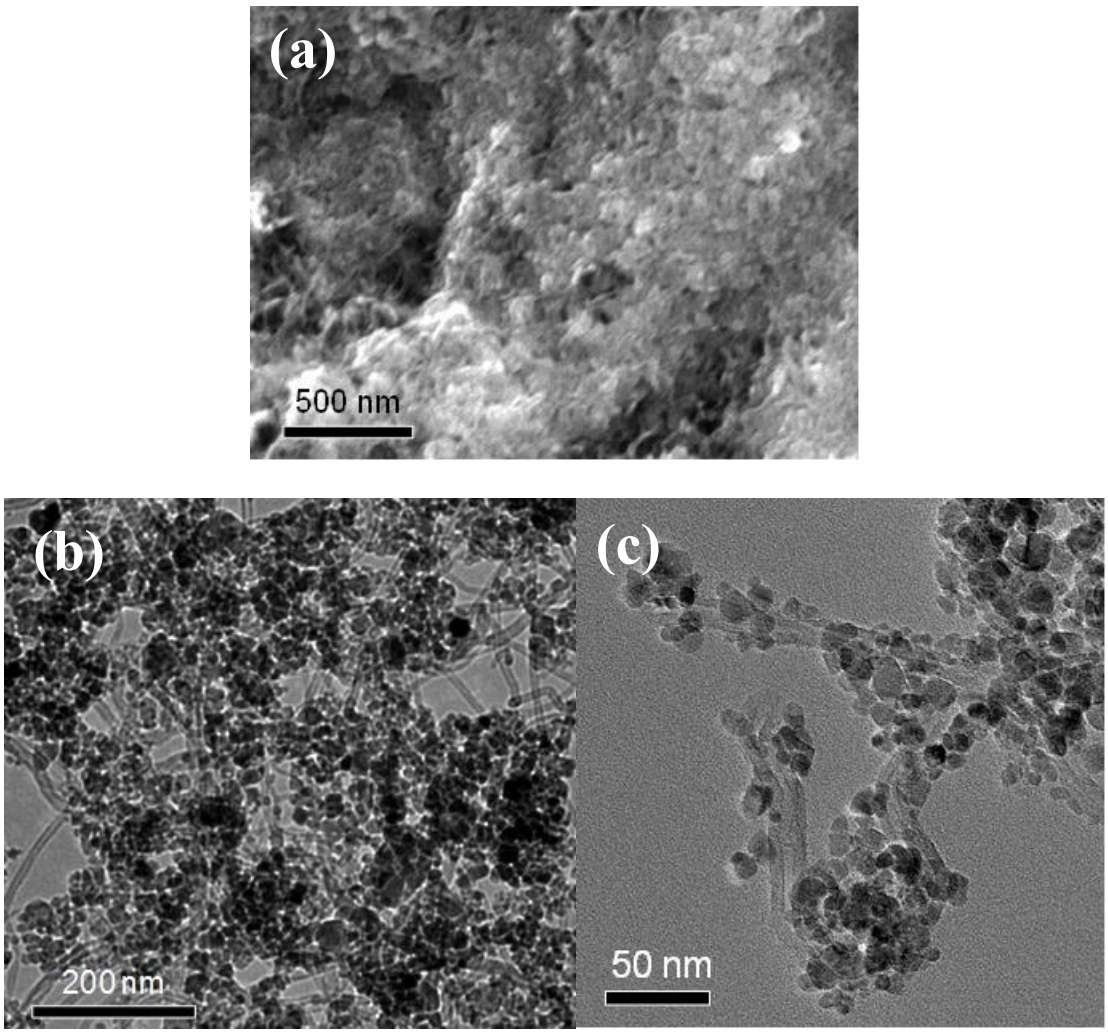

Fig. S5 SEM image (a), and TEM images of NMCFO/OCNT-4 (b and c).

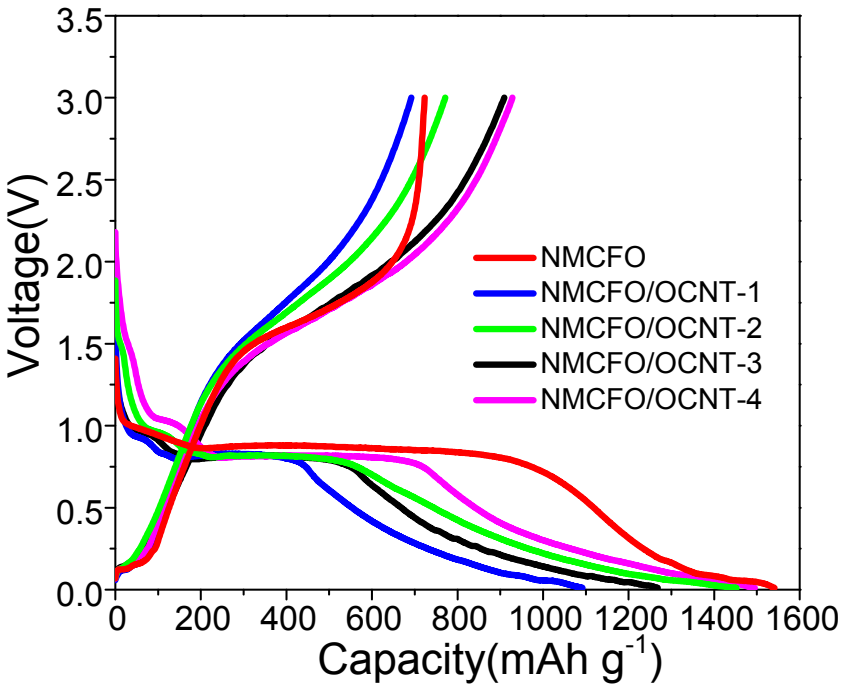

Fig. S6 The first discharge-charge curves of NMCFO, NMCFO/OCNT-1, NMCFO/OCNT-2, NMCFO/OCNT-3, and NMCFO/OCNT-4.

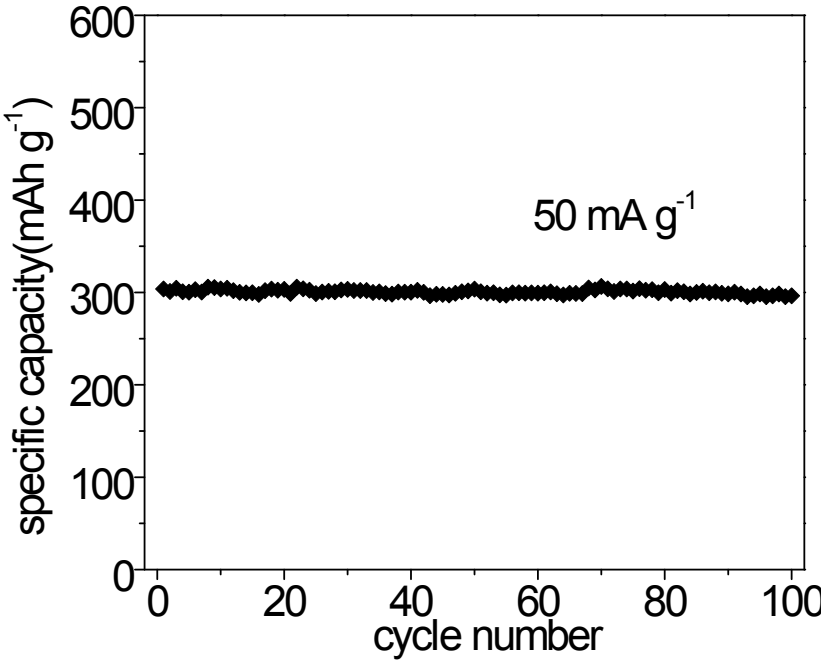

Fig. S7 Cycling property of OCNT at a current density of 50 mA g^{-1}.

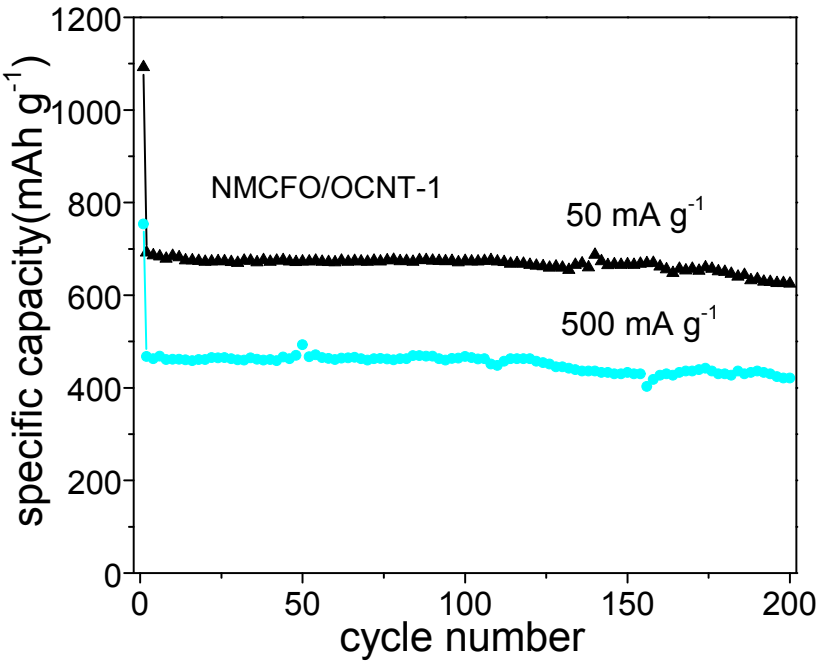

Fig. S8 The cycling property of NMCFO/OCNT-1 at current densities of 50 and 500 mA g^{-1}.

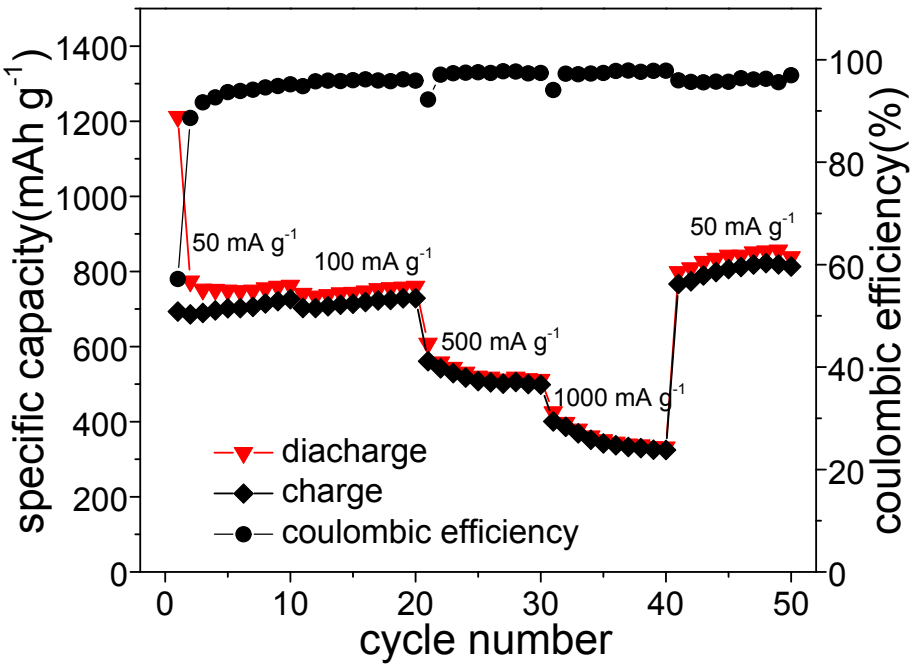

Fig. S9 Rate performance of NMCFO/OCNT-2 at different current densities.

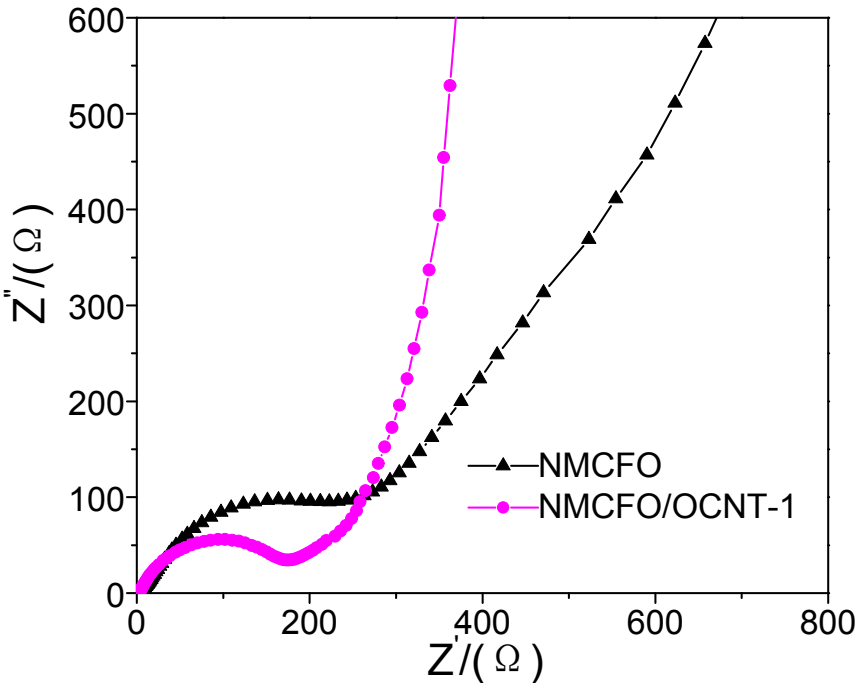

Fig. S10 Nyquist plots of NMCFO and NMCFO/OCNT-1 samples at the electrode potentials from 0.70 to 0.10 V.