Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supporting Information

Architecture-Controlled Synthesis of M_xO_y (M=Ni, Fe, Cu) Microfibres from Seaweed Biomass for High-Performance Lithium Ion Battery Anodes

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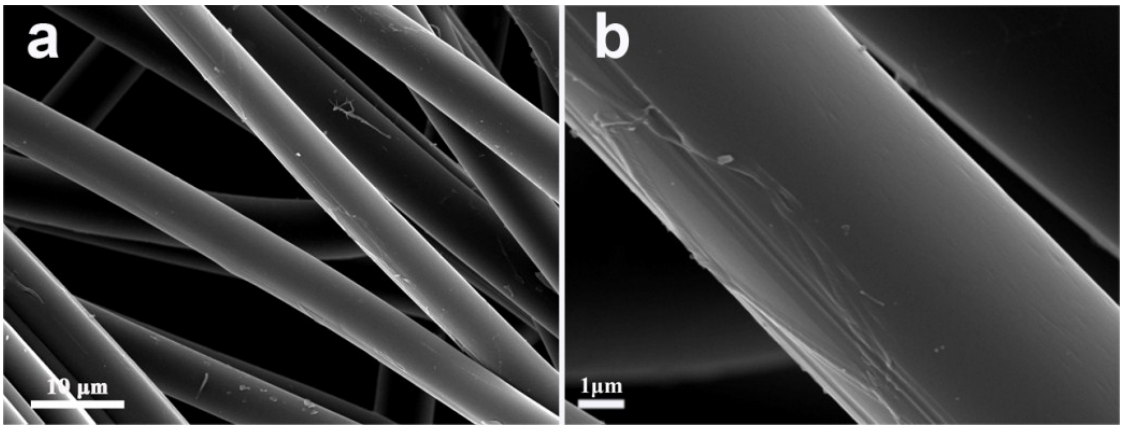

Fig. S1. (a,b) SEM images of Ca-AF.

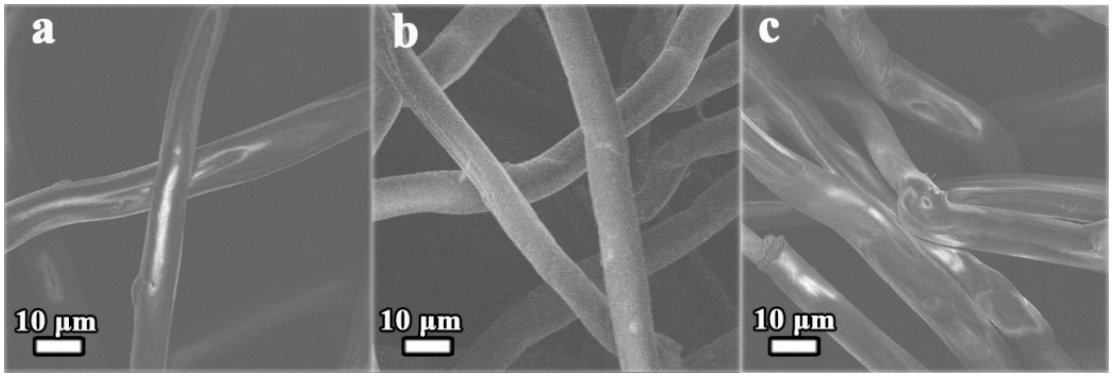

Fig. S2. (a,b,c) SEM images of M-AF (M=Ni, Fe, Cu).

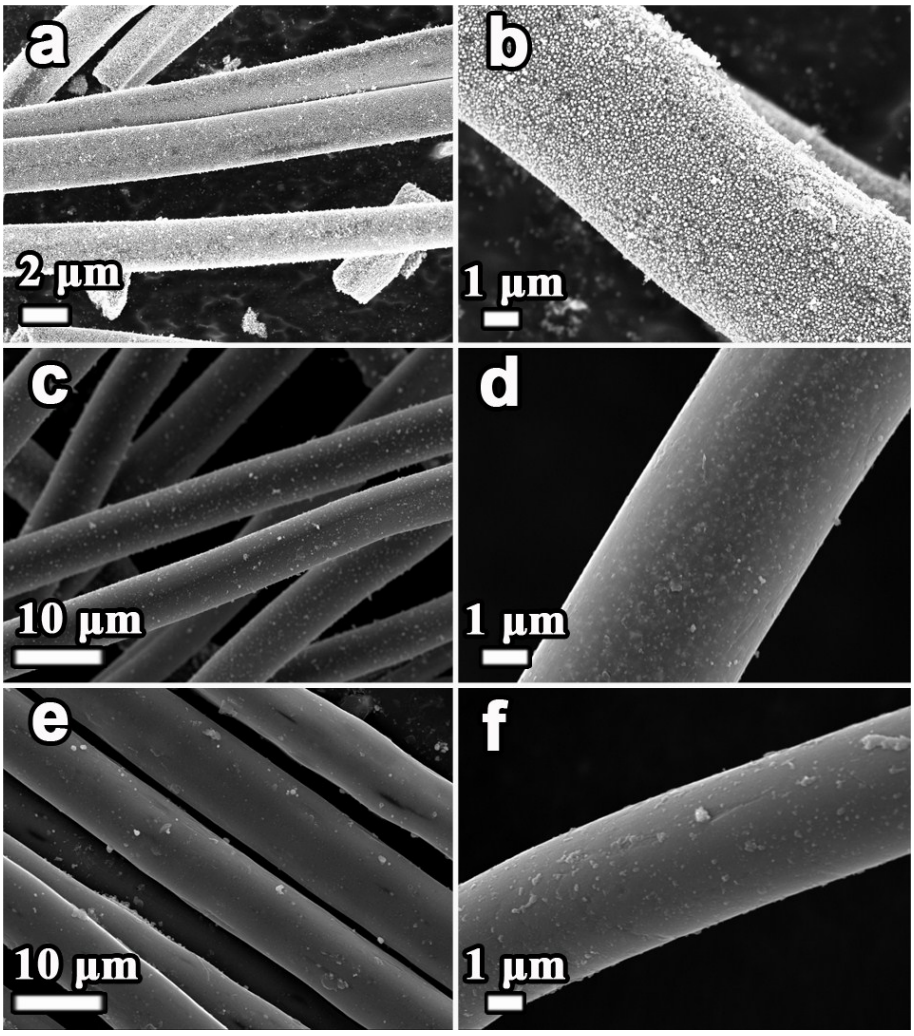

Fig. S3. SEM images of (a,b) Ni-CF, (c,d) Fe-CF and (e,f) Cu-CF.

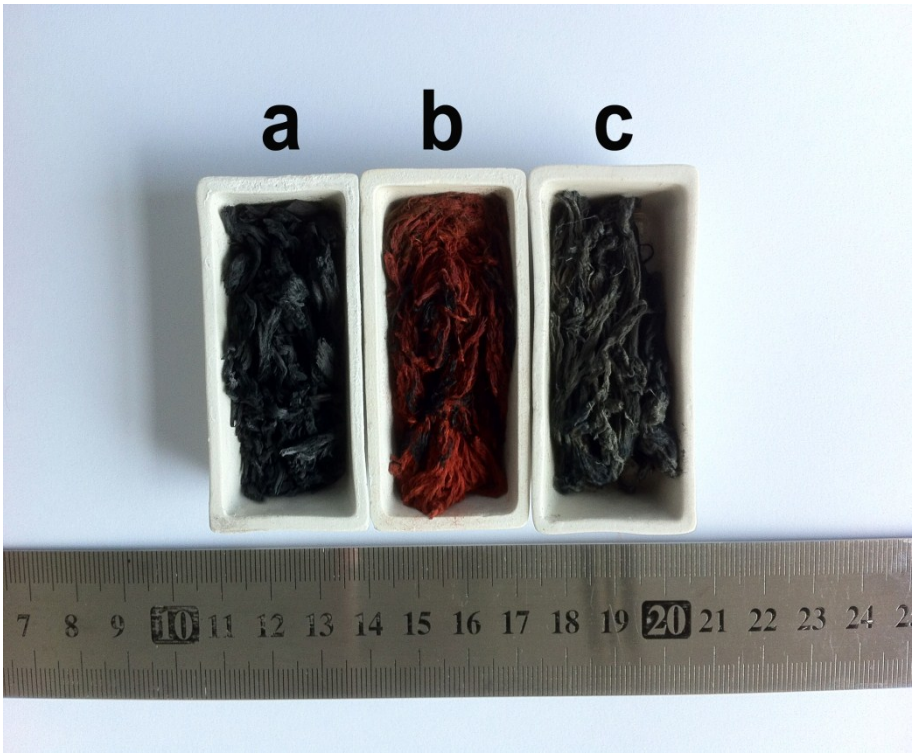

Fig. S4. Photographic image of (a) NiO/Ni/C-F,(b) C@Fe_2O_3-F and (c) CuO-HF.

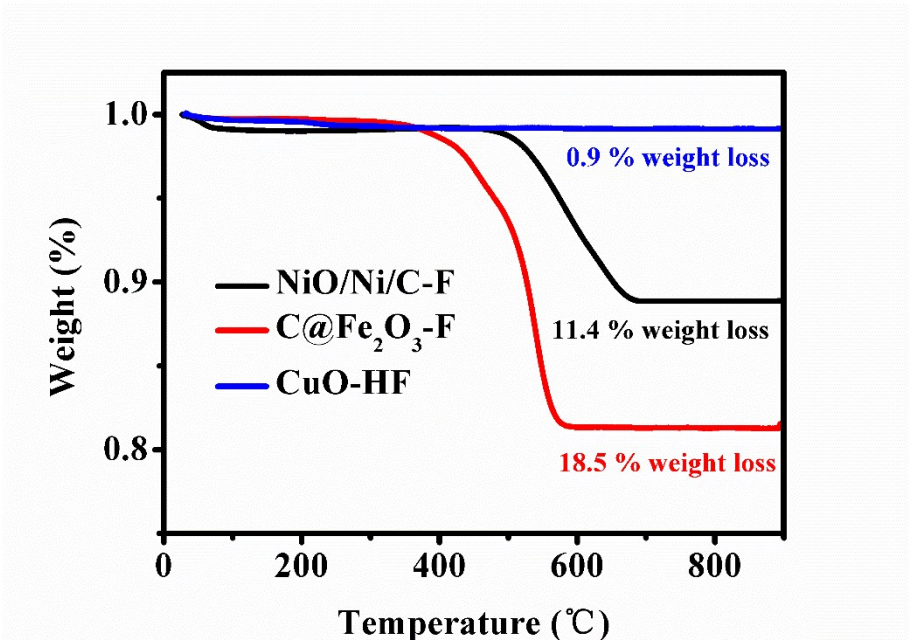

Fig. S5. TGA Characterizations of NiO/Ni/C-F, C@Fe_2O_3-F and CuO-HF.

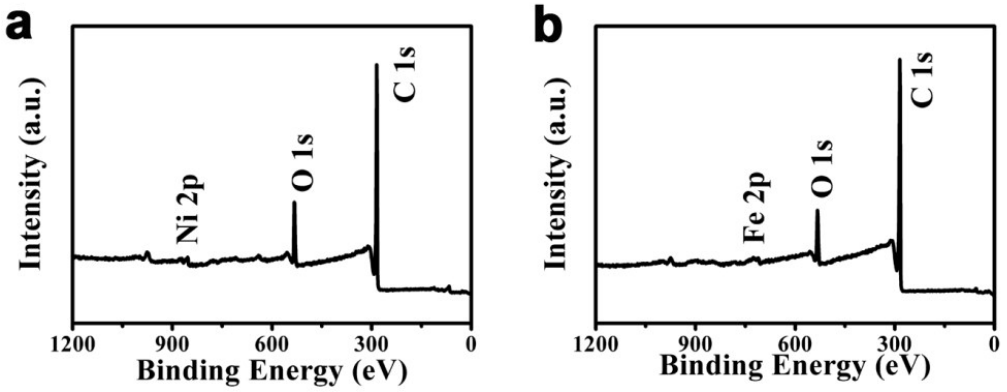

Fig. S6. Full survey scan spectrum XPS spectras of (a) NiO/Ni/C-F and (b) C@Fe_2O_3-F.

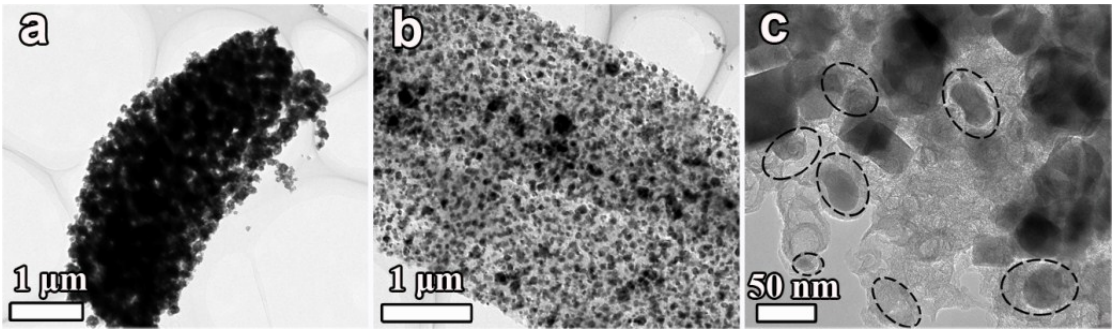

Fig. S7. TEM images of (a) NiO/Ni/C-F and (b,c) C@Fe_2O_3-F.

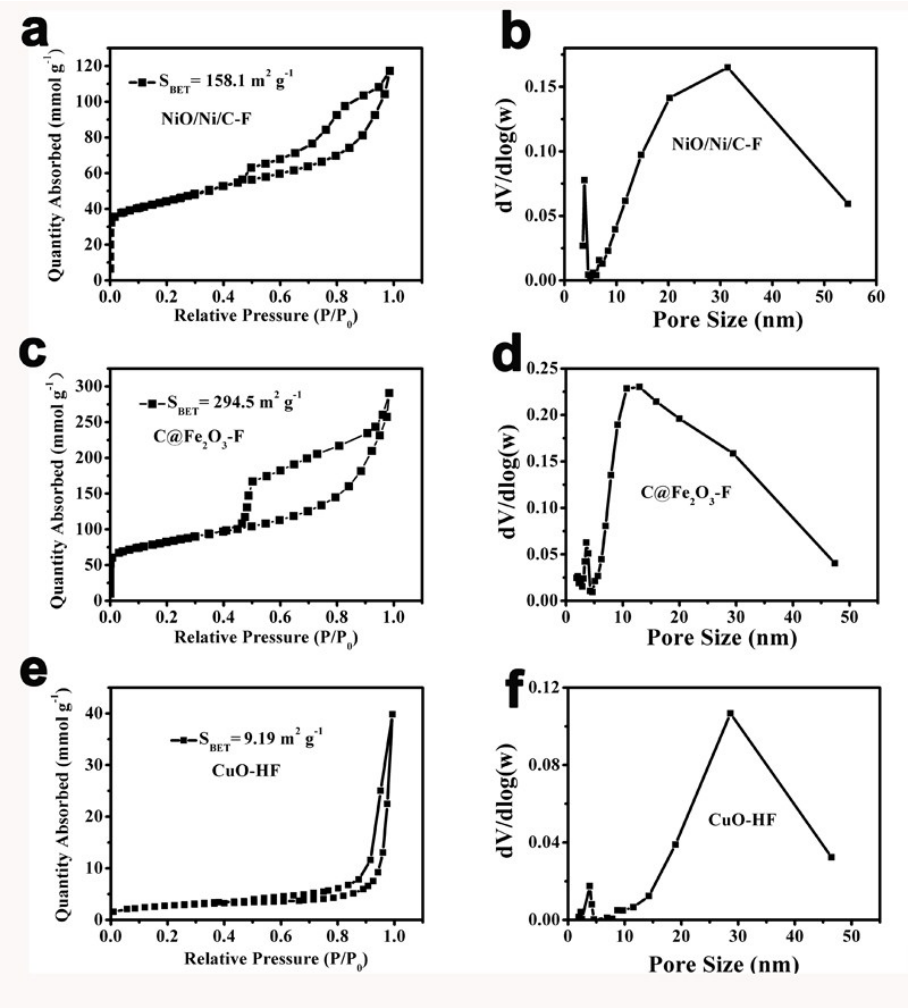

Fig. S8. (a,c,d)Nitrogen adsorption-desorption isotherm and (b,d,e) the corresponding pore size distribution curve of NiO/Ni/C-F, C@Fe_2O_3-F and CuO-HF.

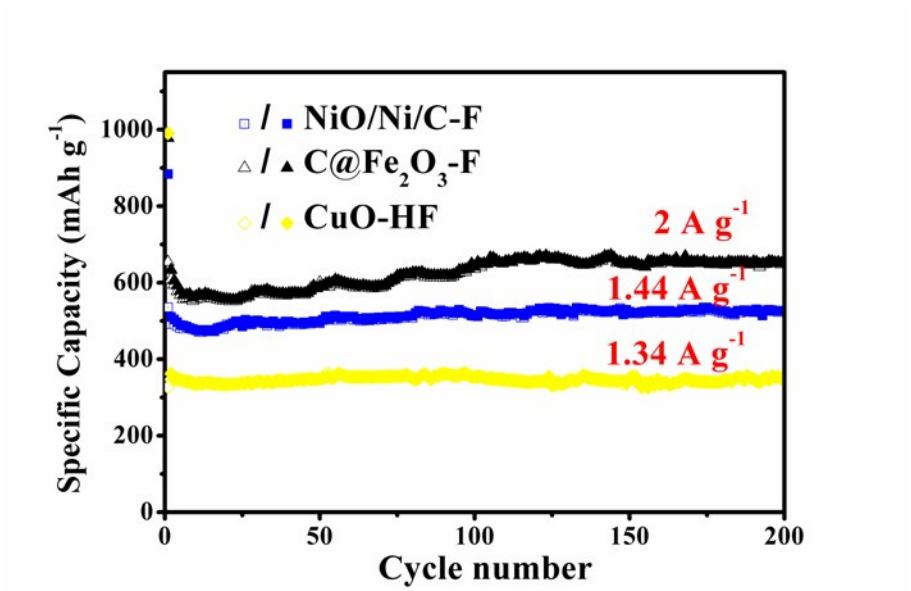

Fig. S9. Cycling performance of NiO/Ni/C-F, C@Fe_2O_3-F and CuO-HF electrodes at current density of 2A g^{-1}, 1.44A $g^{-1}$and 1.34A g^{-1}, respectively.

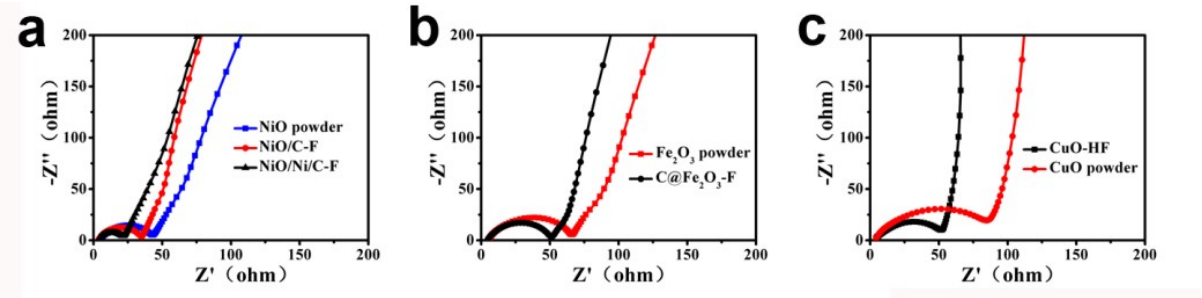

Fig. S10. Electrochemical impedance spectroscopy (EIS) for NiO/Ni/C-F, C@Fe_2O_3-F, CuO-HF electrodes and the comparative samples.

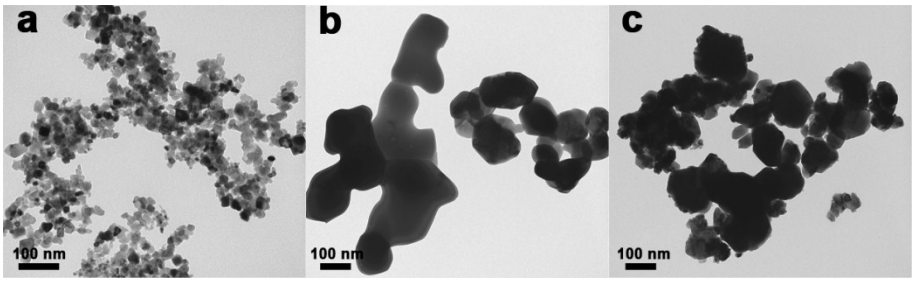

Fig. S11. TEM of commercial (a) NiO powder, (b) Fe_2O_3 powder and (c) CuO powder.