Supporting information

Bimetallic CoMoS composite anchored to bio-carbon fibers as a high-capacity anode for Li-ion batteries

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XRD (X-Ray Diffraction) measurements were performed on a D8 diffractometer from Bruker instruments (Cu Kα radiation, λ = 0.154 nm) with a scan rate of two degree/min. SEM (Scanning Electron Microscopy) and EDS (Energy Dispersive Spectroscopy) images were obtained by using a Hitachi S-4800 machine. TEM (Transmission Electron Microscopy) images were acquired by a Hitachi H-7650 equipment. Image J software was used to measure the sizes of the particles and carbonized cellulose fibers from SEM images. The software used for fitting the Nyquist plots was EIS Spectrum Analyzer.

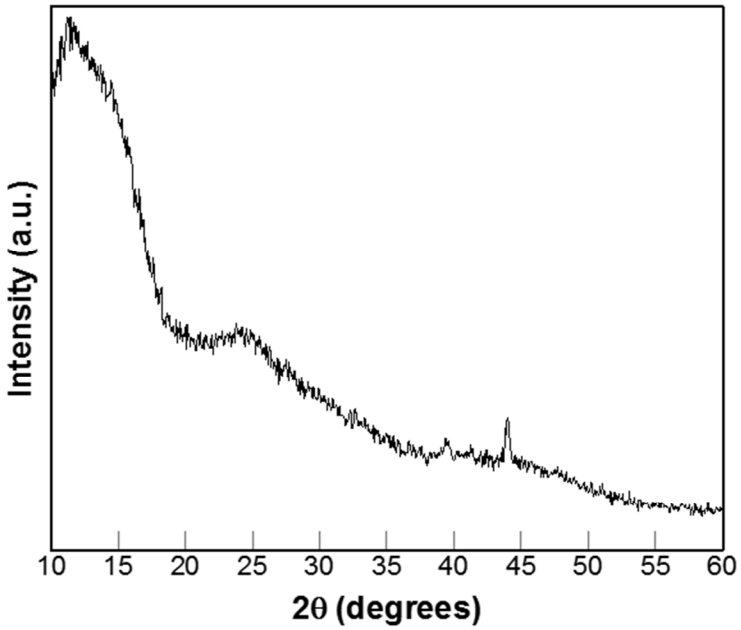

Figure. S1. XRD patterns of carbonized cellulose fibers.

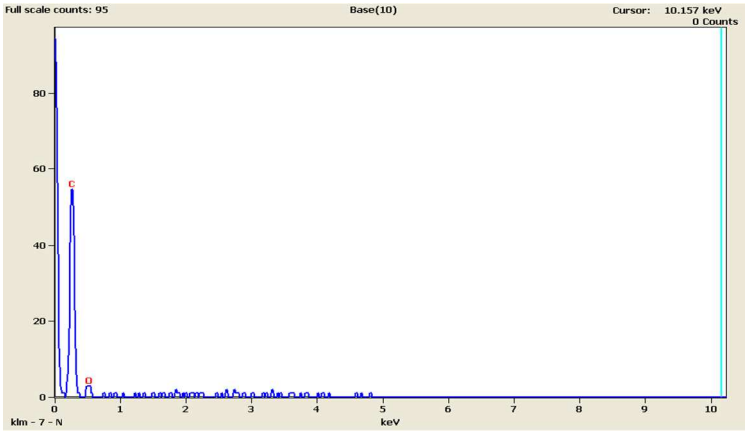

Figure. S2. EDS spectrum of carbonized cellulose fibers.

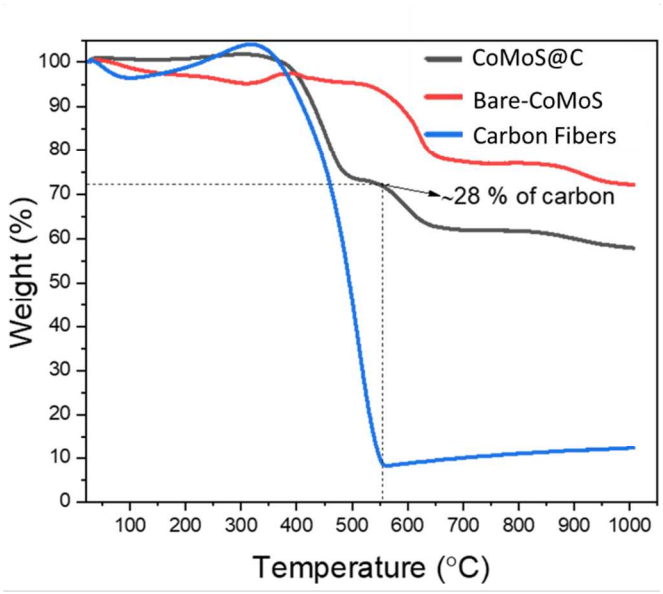

Figure. S3. TGA for samples CoMoS@C, bare-CoMoS and carbon fibers (cellulose fibers carbonized at 400 □C for 1h).

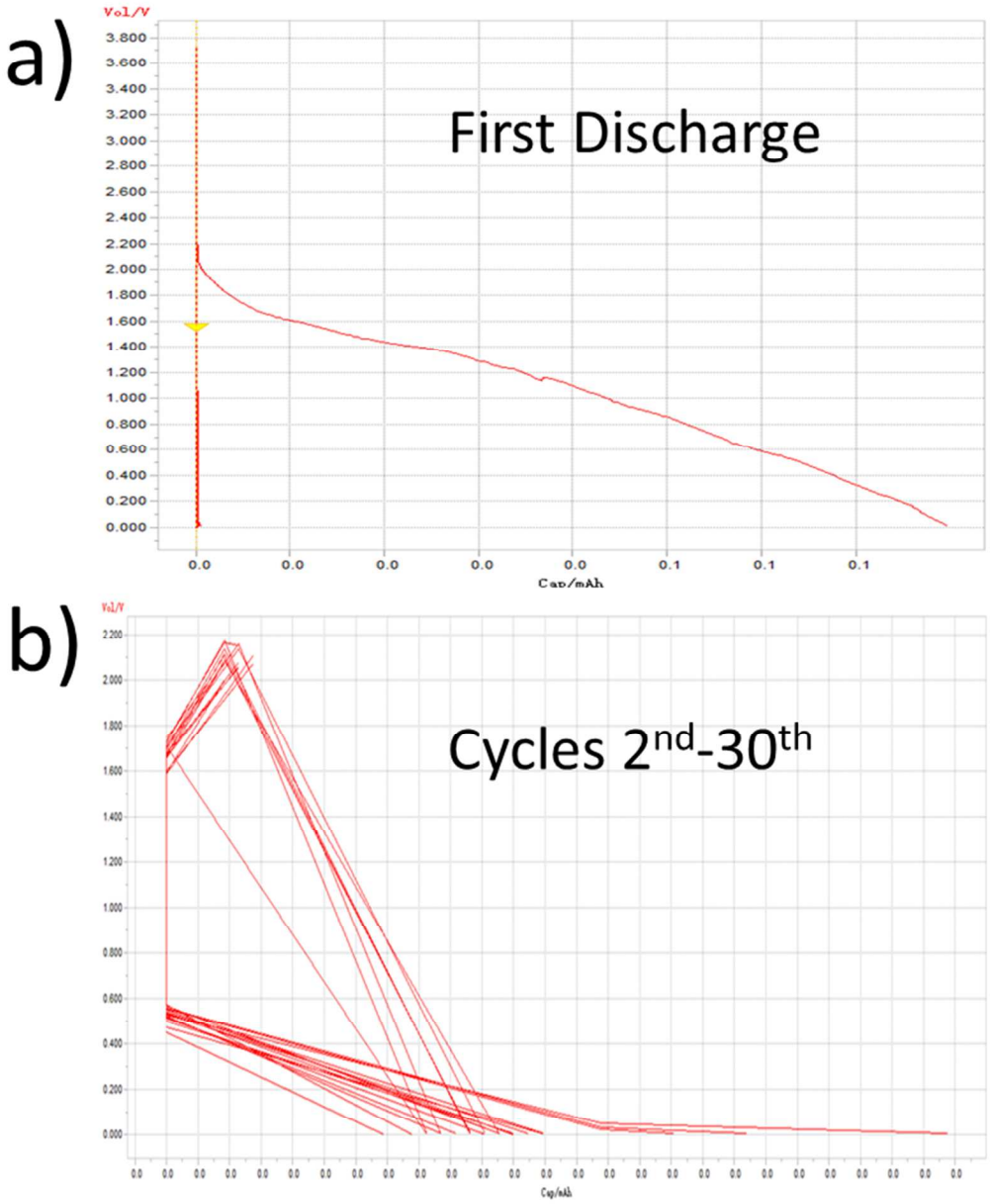

Figure. S4. Charging and discharging plots for carbonized cellulose fibers a) first discharge and b) cycles from 2nd to 30th.

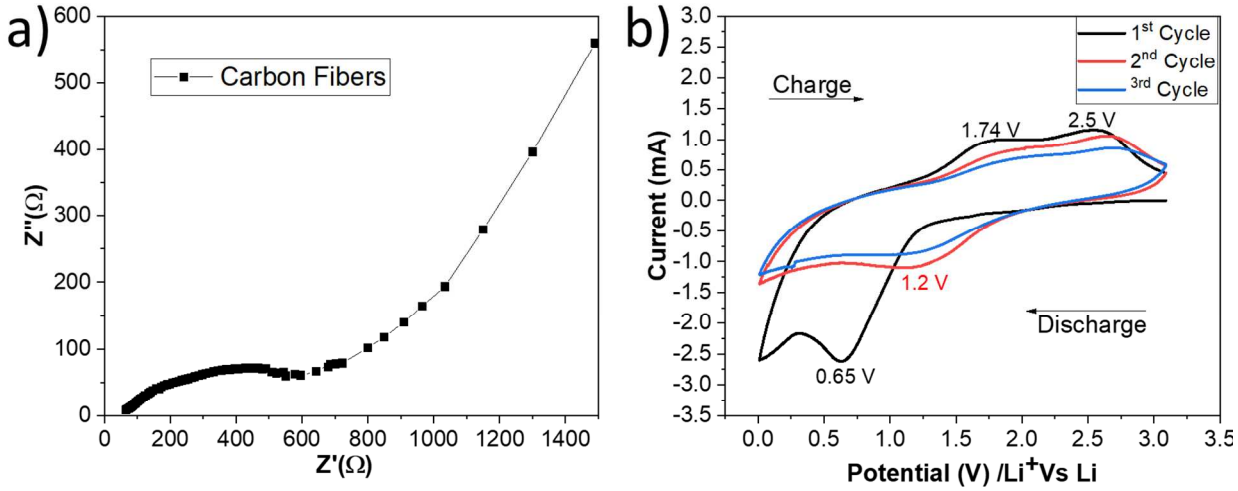

Figure. S5. a) Nyquist plots for carbon fibers and b) Cyclic voltammetry curves for bare-CoMoS.