

Supporting Information

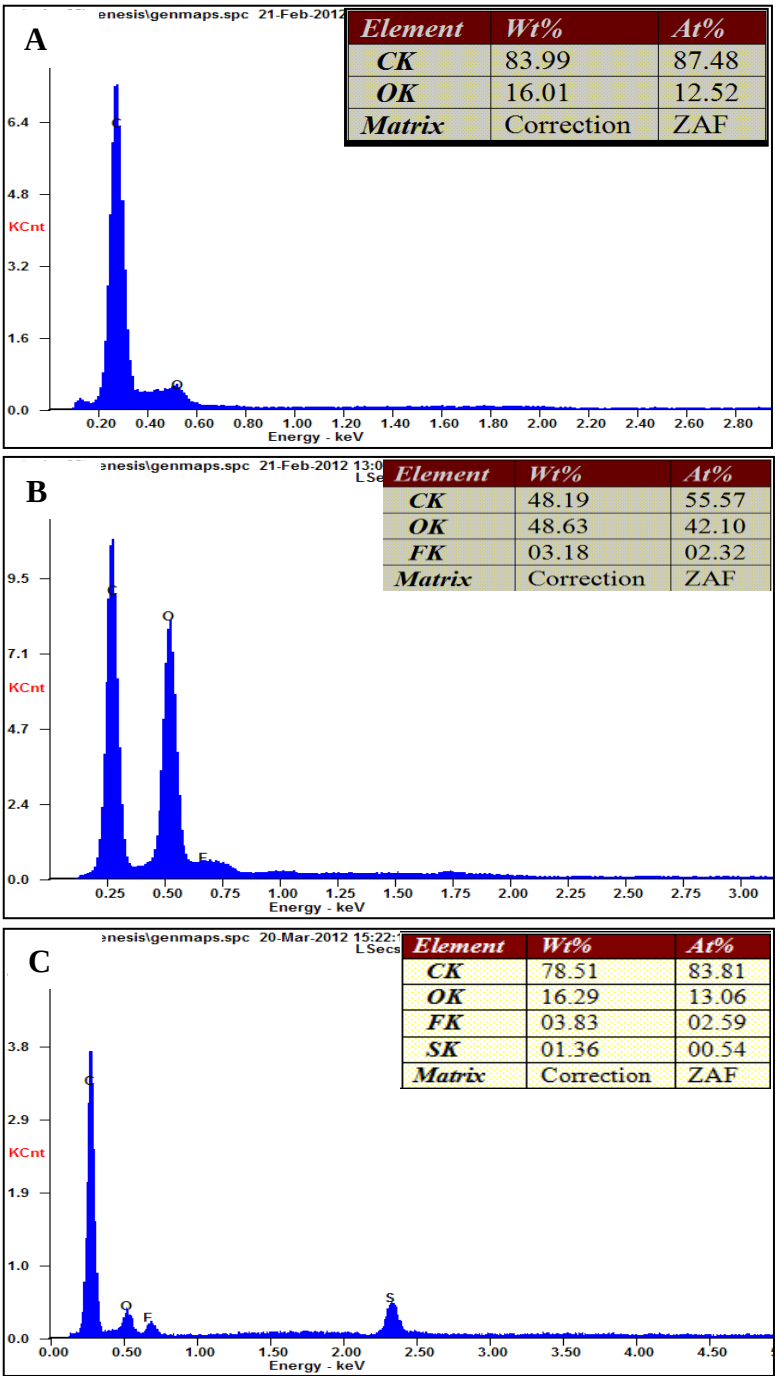


Figure S1. EDX pattern of (A) Pristine ACM electrodes, (B) ACM electrodes discharged to 2 V in triglyme/LiTFSI solution, and (C) ACM electrodes charged to 4.3 V in triglyme/LiTFSI solution

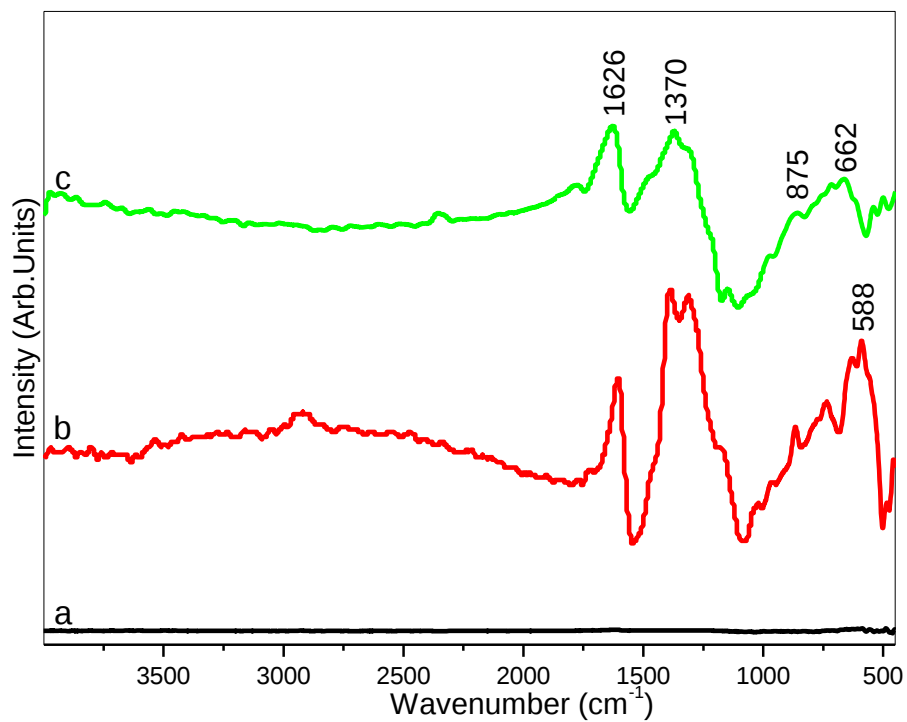


Figure S2. FTIR spectra of (a) pristine ACM electrodes, (b) ACM electrodes discharged to 2 V in triglyme/LiTFSI solution (c) ACM electrodes charged to 4.3 V in triglyme/LiTFSI solution

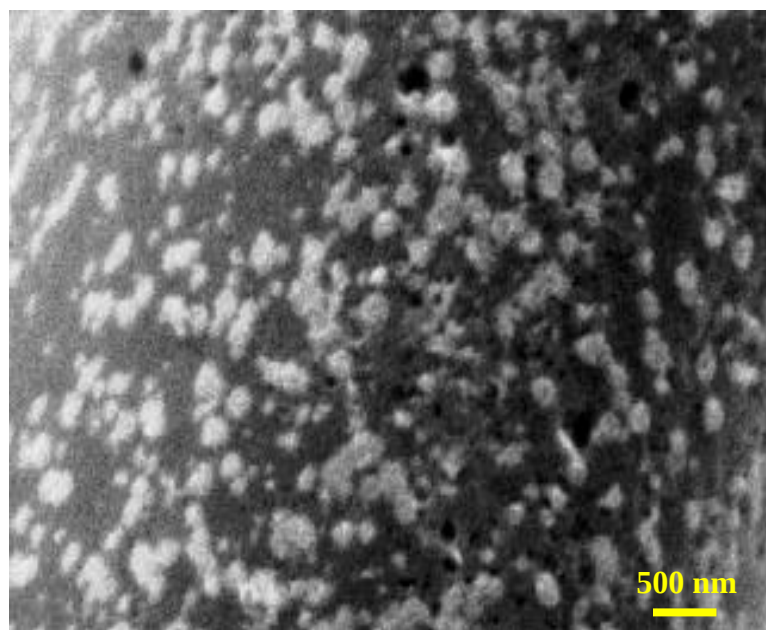


Figure S3. High resolution SEM images of ACM/ α - MnO_2 hybrid electrodes

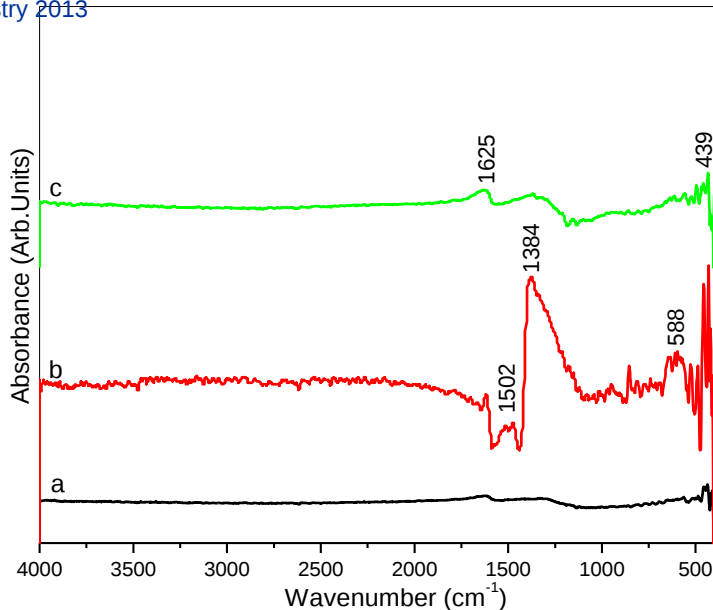


Figure S4. FTIR spectra of (a) Pristine ACM/ α - MnO_2 hybrid electrodes (b) ACM/ α - MnO_2 hybrid electrodes discharged to 2 V in triglyme/LiTFSI solution, and (c) ACM/ α - MnO_2 hybrid electrodes charged to 3.75 V in triglyme/LiTFSI solution

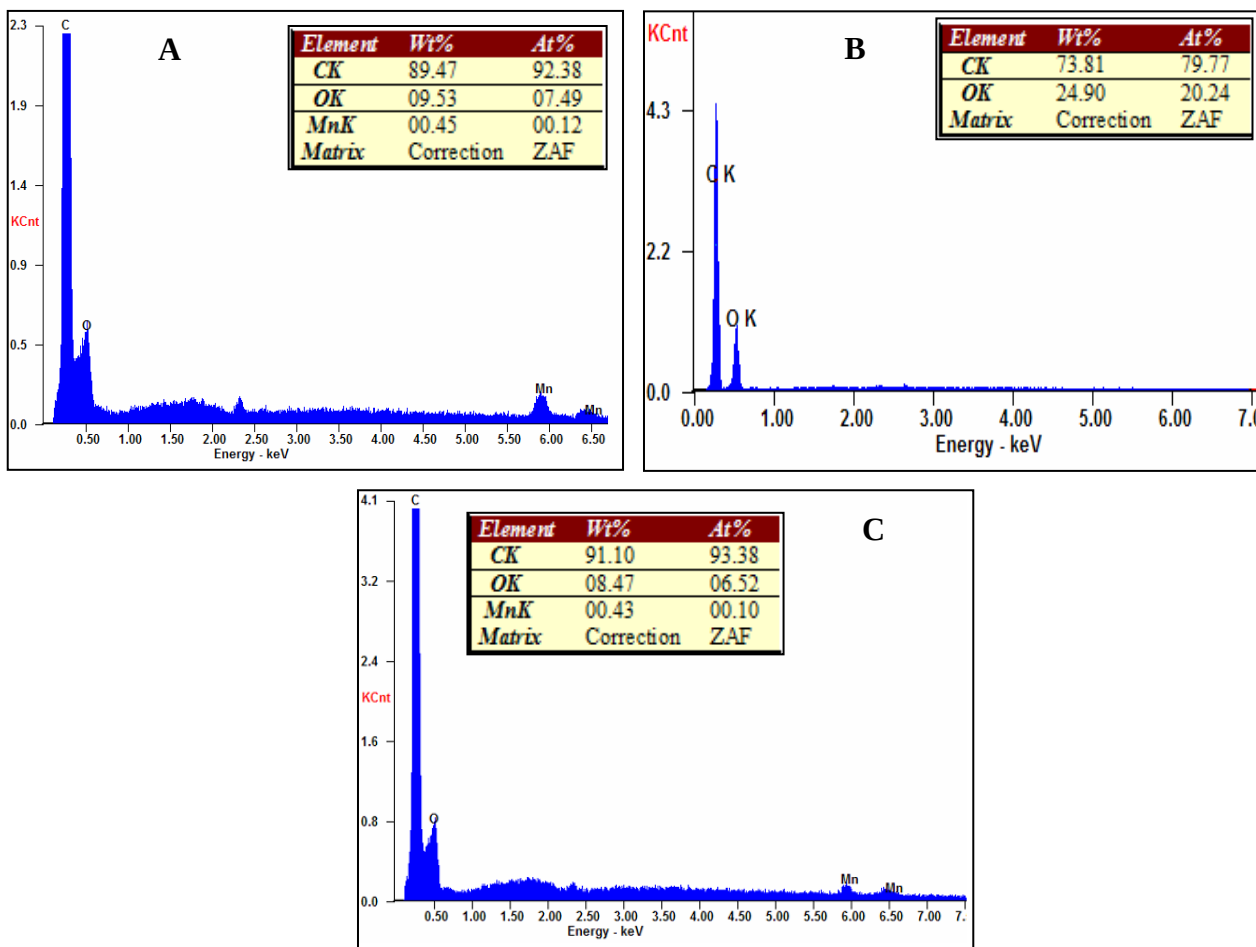
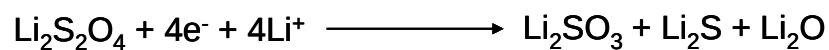
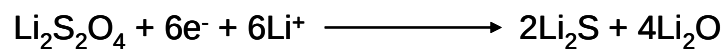
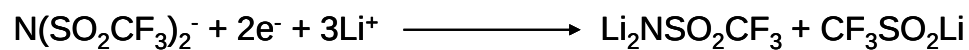
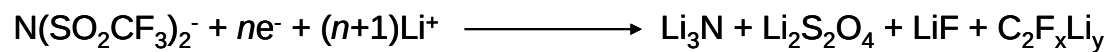


Figure S5. EDX pattern of (A) Pristine ACM/ α - MnO_2 hybrid electrodes (B) ACM/ α - MnO_2 hybrid electrodes discharged to 2 V in triglyme/LiTFSI solution, and (C) ACM/ α - MnO_2 hybrid electrodes charged to 3.75 V in triglyme/LiTFSI solution



Scheme S1. Suggested mechanism for the decomposition of LiTFSI during electrochemical cycling