SUPPORTING INFORMATION

Symmetric pseudocapacitors based on molybdenum disulfide (MoS₂)-modified carbon nanospheres: Correlating physicochemistry and synergistic interaction on energy storage

Tobile N.Y. Khawula¹, Kumar Raju², Paul J. Franklyn³, Iakovos Sigalas^{1,*} and Kenneth I. Ozoemena^{2,3,*}

¹School of Chemical and Metallurgical Engineering, University of the Witwatersrand, Johannesburg 2050, South Africa
²Energy Materials, Materials Science and Manufacturing, Council for Scientific and Industrial Research (CSIR), Pretoria 0001, South Africa
³School of Chemistry, University of the Witwatersrand, Johannesburg 2050, South Africa

^{*} Authors to whom correspondence should be addressed: K.I. Ozoemena; E-mail: kozoemena@csir.co.za.

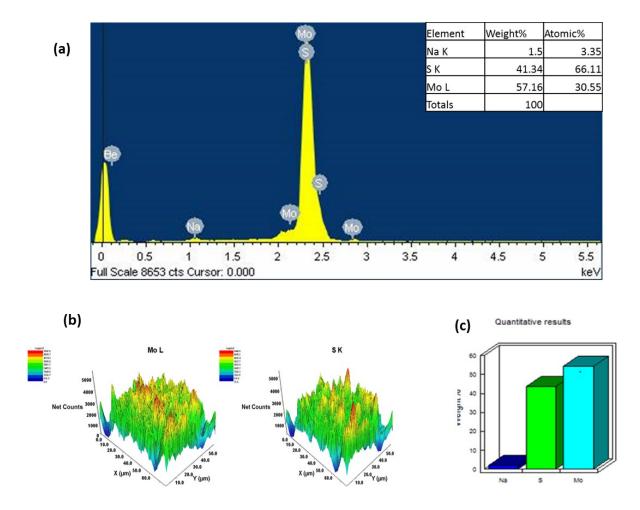


Figure-S1: (a) EDS spectra and elemental composition of s-MoS₂, (b) 3-D EDS topographical profile of the Mo and S, in s-MoS₂, and (c) bar chart representation of the elemental composition of s-MoS₂

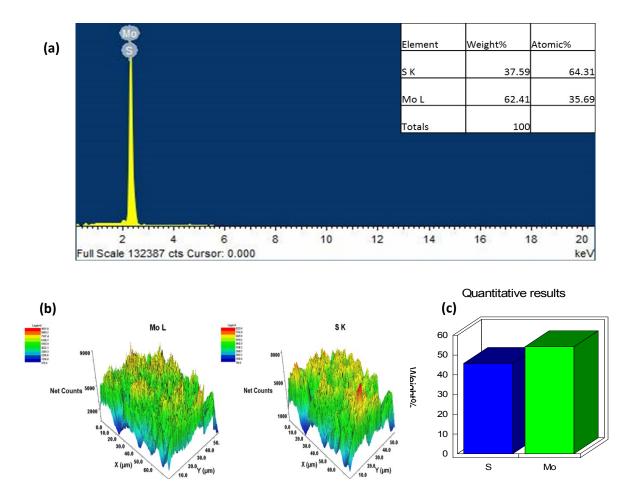


Figure-S2: (a) EDS spectra and elemental composition of f-MoS₂, (b) 3-D EDS topographical profile of the Mo and S, in f-MoS₂, and (c) bar chart representation of the elemental composition of f-MoS₂

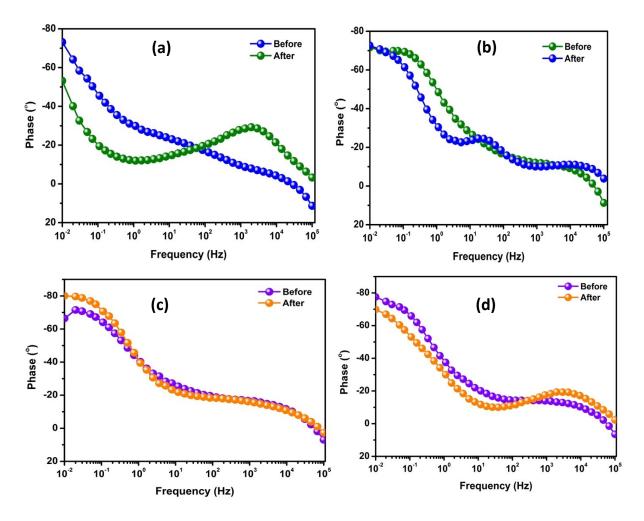


Figure-S3: Typical Bode plots for the symmetric pseudocapacitors based on (a) s-MoS₂, (b) s- MoS_2/CNS (c) s- MoS_2 , and (d) s- MoS_2/CNS based materials obtained before and after 50-hour voltage experiments.