

Electronic Supporting Information

One-pot synthesize high stable carbon-MoS₂ nano-sphere electrodes by co-growth mechanism for supercapacitors

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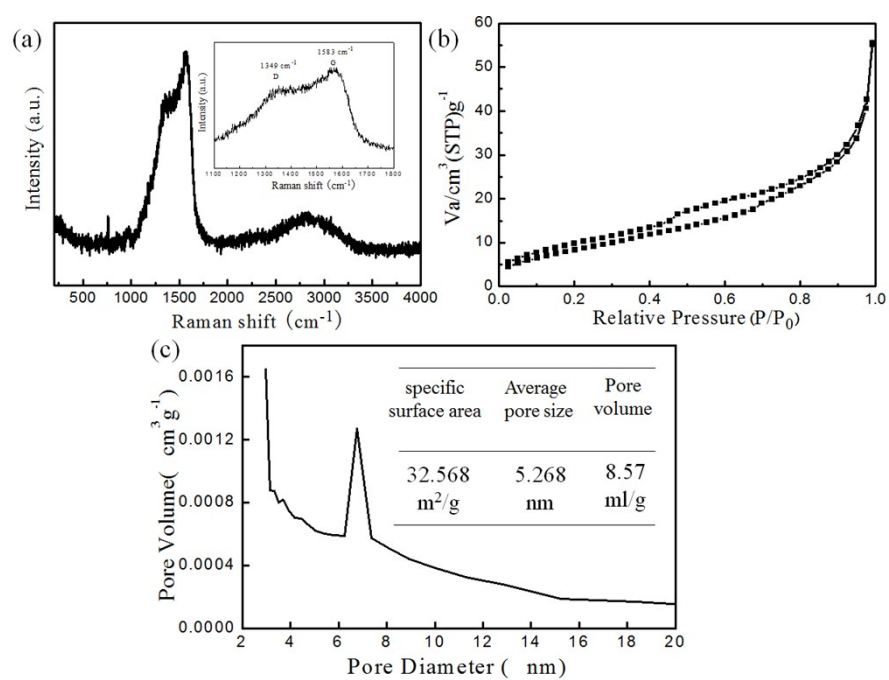


Figure S1. (a) Raman, (b) N_2 adsorption/desorption isotherms and (c) corresponding pore size distribution of the carbon- MoS_2 nano-sphere

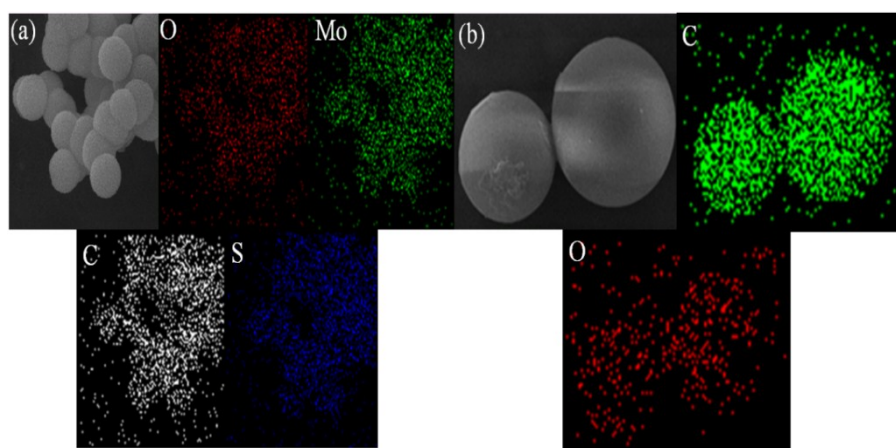


Figure S2. EDS-mapping images of (a) carbon- MoS_2 nano-sphere and (b) carbon nano-sphere

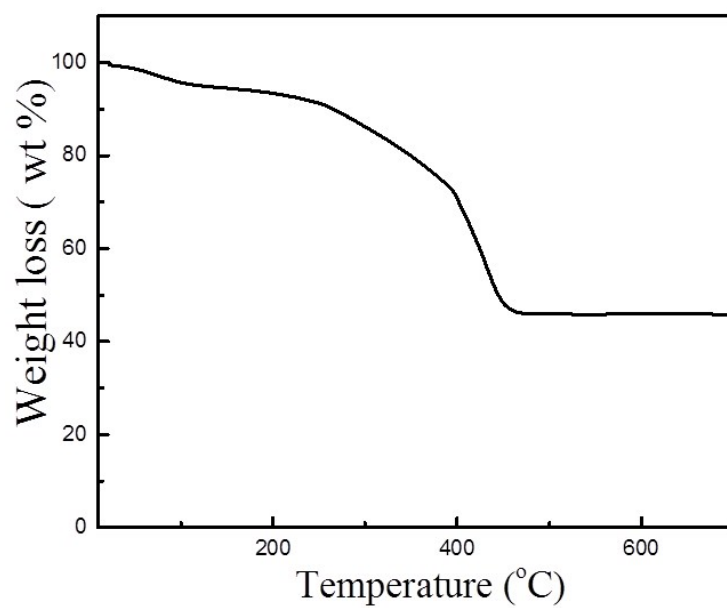


Figure S3. The TG curves of carbon-MoS₂ nano-sphere.

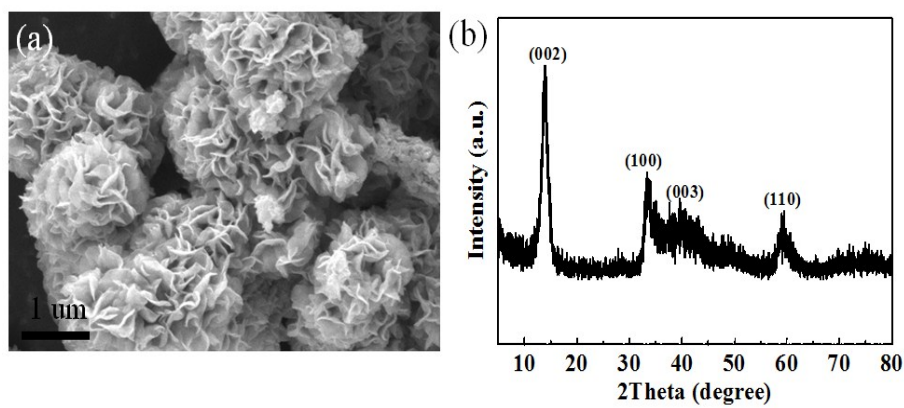


Figure S4. (a) SEM, (b) XRD of MoS₂ nano-flower for comparison.

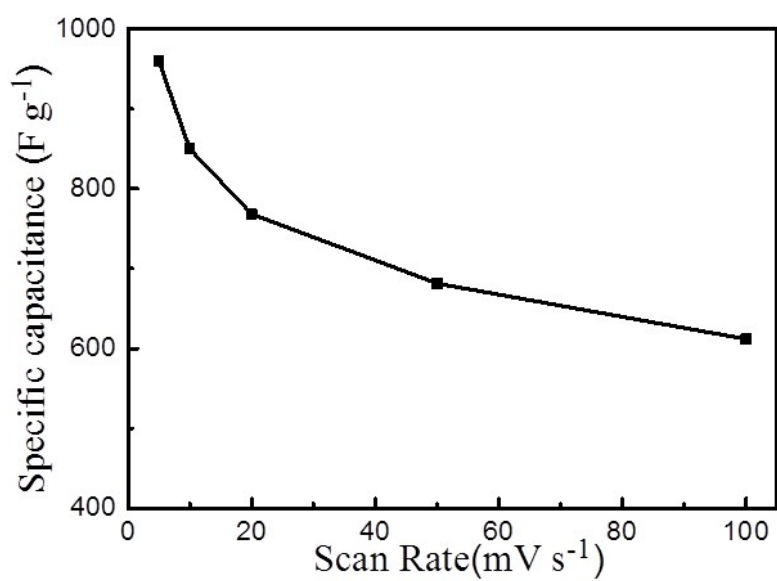


Figure.S5. Variation of specific capacitance versus scan rate for carbon-MoS₂ nano-sphere

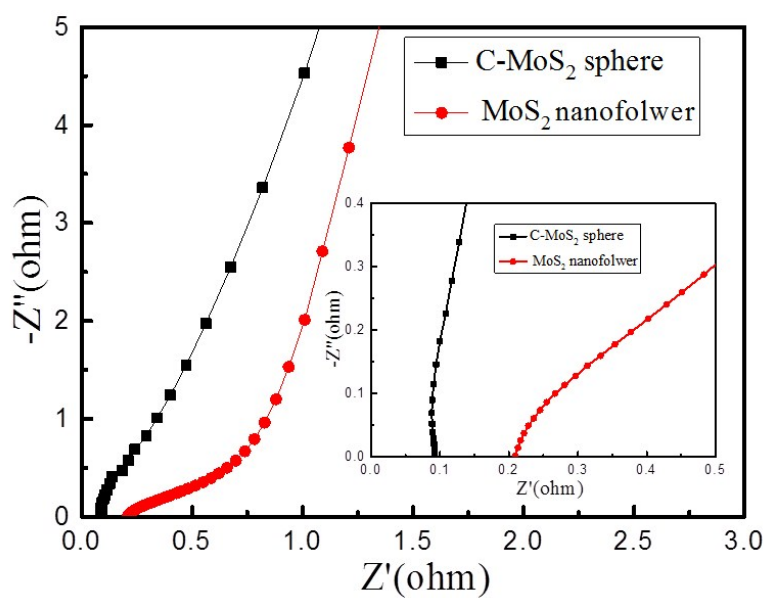


Figure.S6 Impedance Nyquist plots of MoS₂ nano-flower and carbon-MoS₂ nano-sphere at open circuit potential

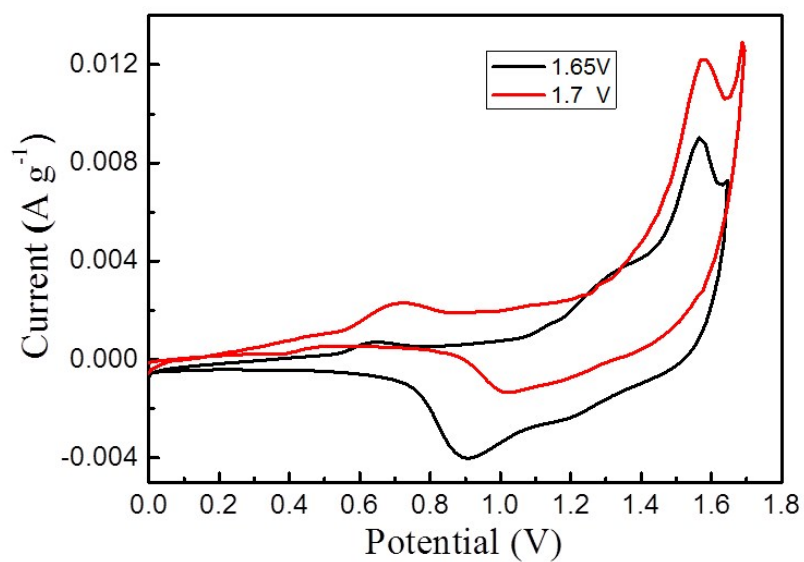


Figure S7. CV curves of the carbon-MoS₂ nano-sphere//AC asymmetric supercapacitor at potential windows of 1.65 V and 1.7 V at a scan rate of 20 mV s⁻¹ in a two-electrode system.