

## Electronic Supplementary Information for

### Hierarchical Nickel Sulfide Hollow Spheres for High Performance Supercapacitors

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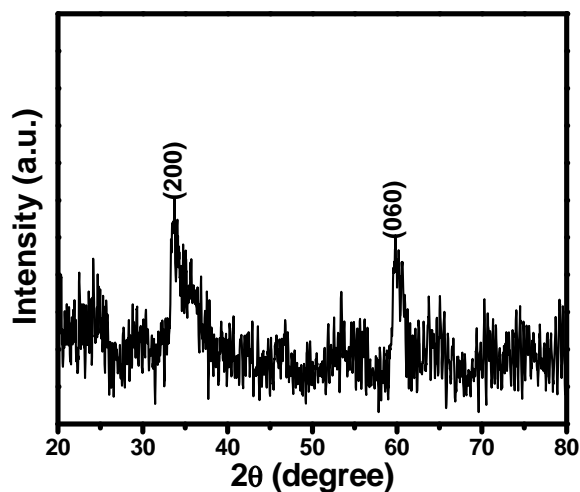


Figure S1. XRD pattern of the as-prepared core-shell structure of silica@nickel silicate.

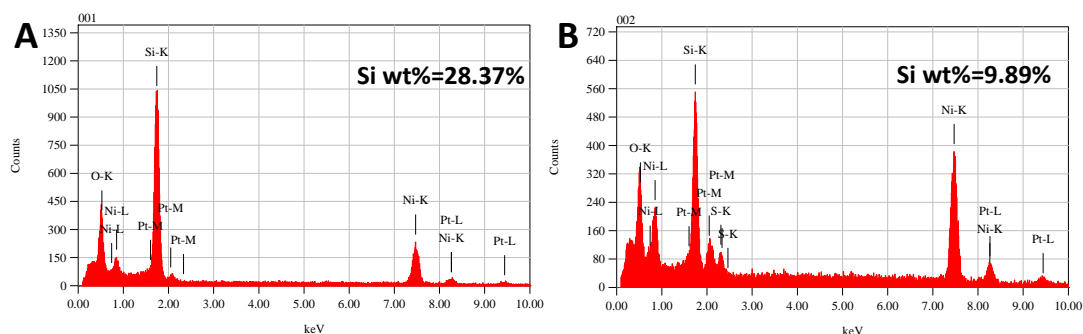


Figure S2. EDX spectra of the silica @ nickel silicate (A) and NiS hollow spheres (B).

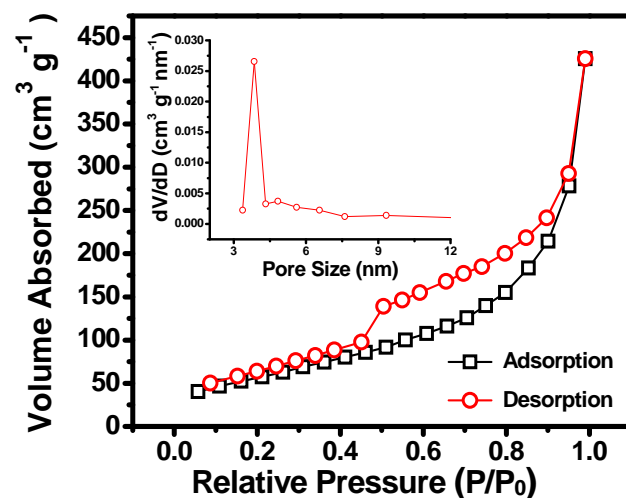


Figure S3.  $N_2$  adsorption-desorption isotherm of NiS hollow spheres. The corresponding pore size distribution is shown as the inset.

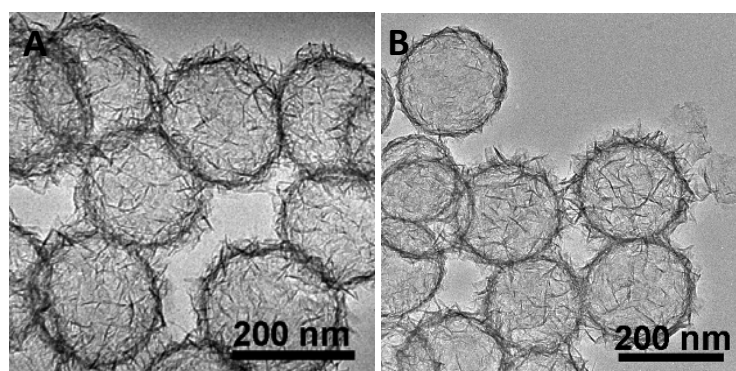


Figure S4. TEM images of NiS hollow spheres prepared by templating against 200 nm silica nanospheres. The reactions were conducted in a water/ethanol mixture with ethanol volume fractions of (A) 0 % and (B) 37.5% at 160 °C for 12 h.

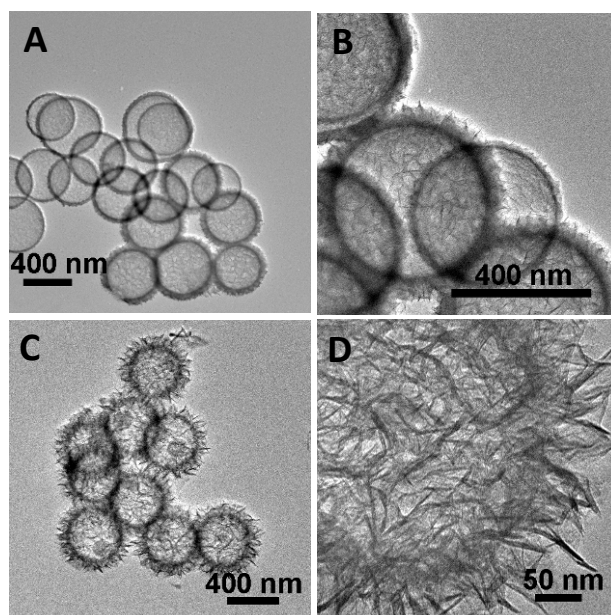


Figure S5. TEM images of NiS hollow spheres prepared in a water/ethanol mixture with ethanol volume fractions of (A and B) 37.5% and (C and D) 75% at 160 °C for 12 h.

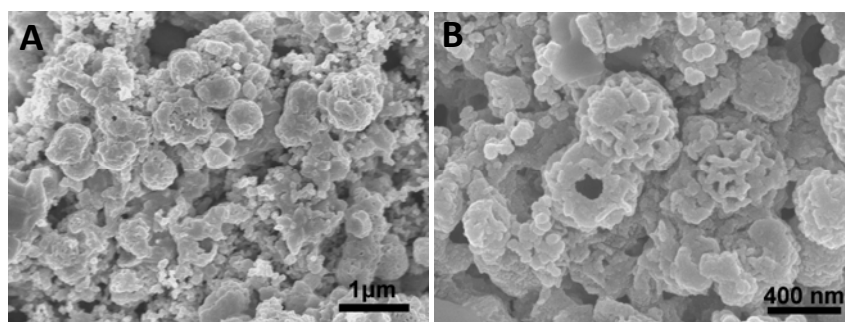


Figure S6. SEM images (A and B) of the NiS capacitive material after being charged and discharged for 3000 cycles.