

## Supplementary Information

# Carbon-Nanoparticles Encapsulated in Hollow Nickel Oxides for Supercapacitor Application

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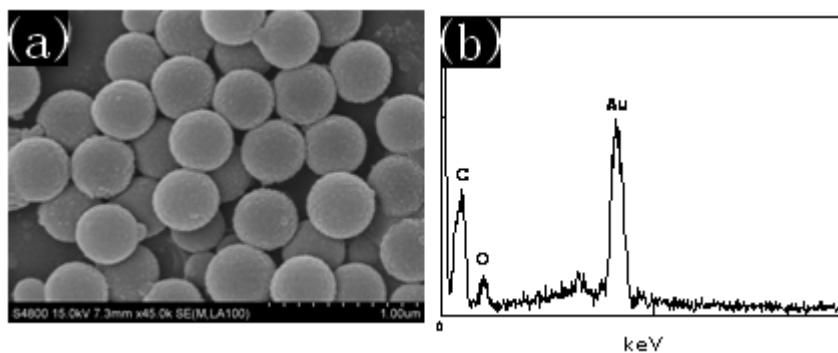


Fig. S1 FESEM (a) and EDX (b) patterns of the obtained carbonaceous spheres.

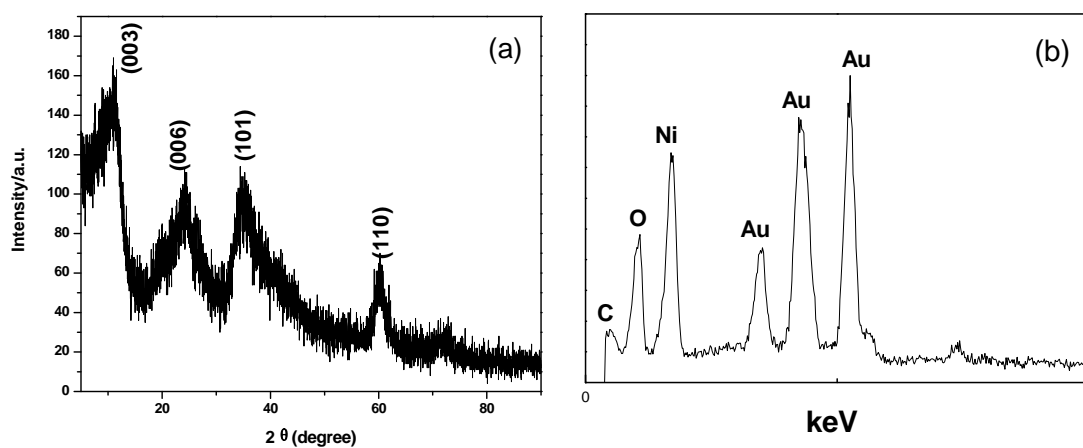


Fig. S2 XRD (a) and EDX (b) patterns of C@Ni(OH)<sub>2</sub> spheres.

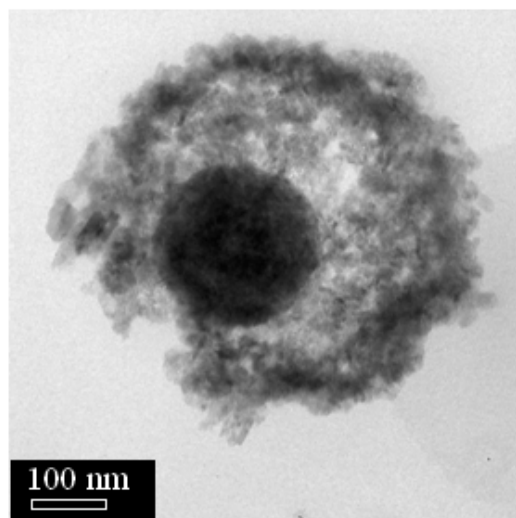


Fig. S3 TEM pattern of a single C@NiO core-shell structure.

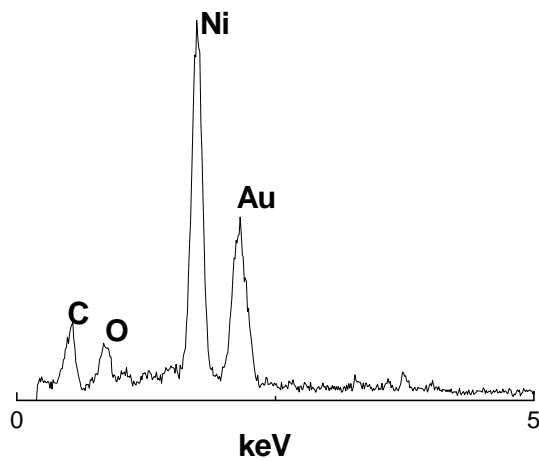


Fig. S4 EDX pattern of C@NiO products obtained with FESEM.

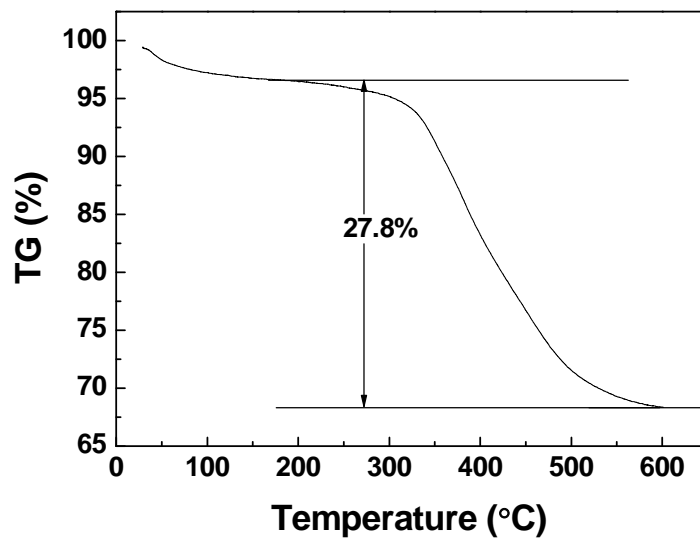


Fig S5 TG curves for the as-prepared C@NiO.

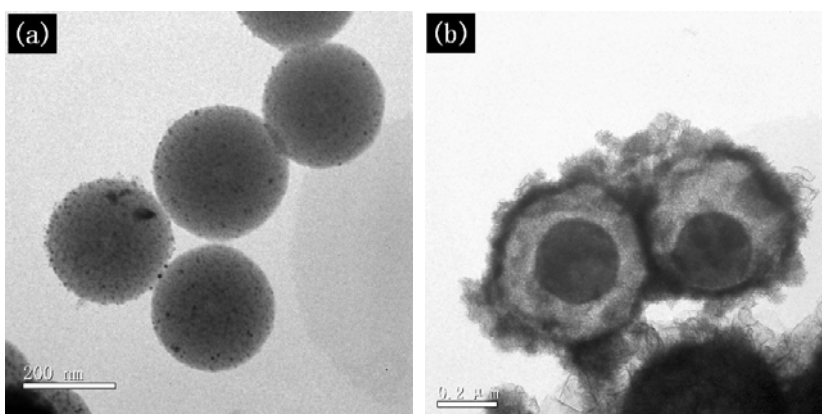


Fig. S6 TEM patterns of C and NiO composites obtained at different calcinations conditions: (a) NiO covered carbonous spheres; (b) carbon encapsulated in NiO spheres with bigger cores.

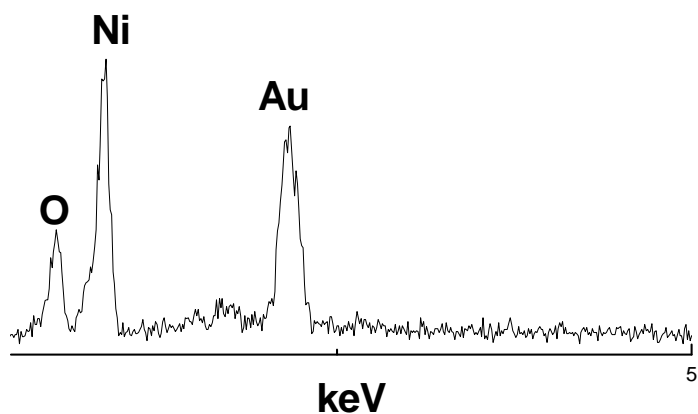


Fig. S7 EDX pattern of NiO hollow spheres.

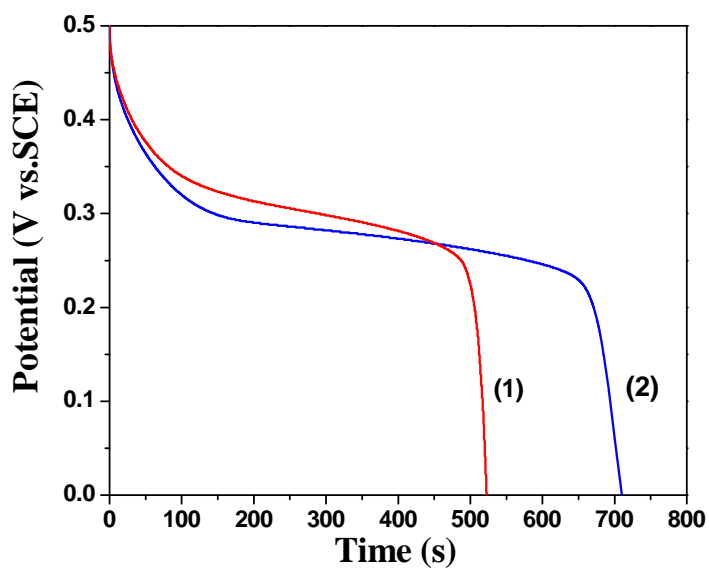


Fig. S8 Discharge curves of different morphology of C and NiO composites: (1) NiO covered carbonous spheres; (2) C@NiO structures with 200 nm cores.