Electronic Supplementary Material (ESI) for RSC Advances.

Electronic Supplementary Information

Fabrication of carbon-coated NiO supported on graphene for high performance supercapacitors

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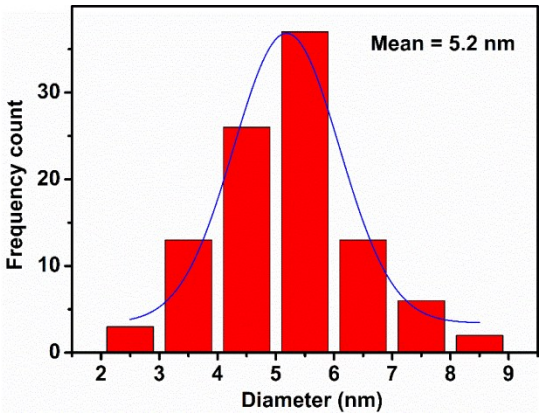

Fig. S1 The size distribution analysis of NiO nanoparticles.

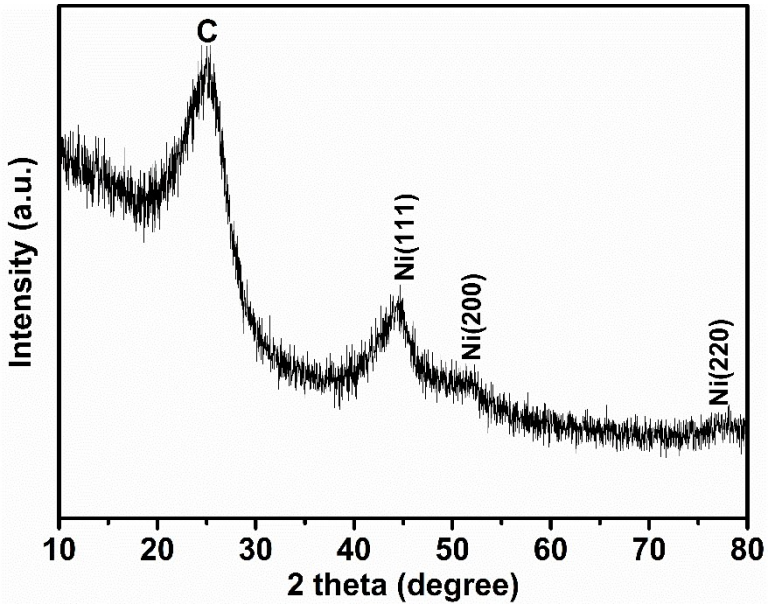

Fig. S2 XRD pattern of the sample obtained at 450 °C.

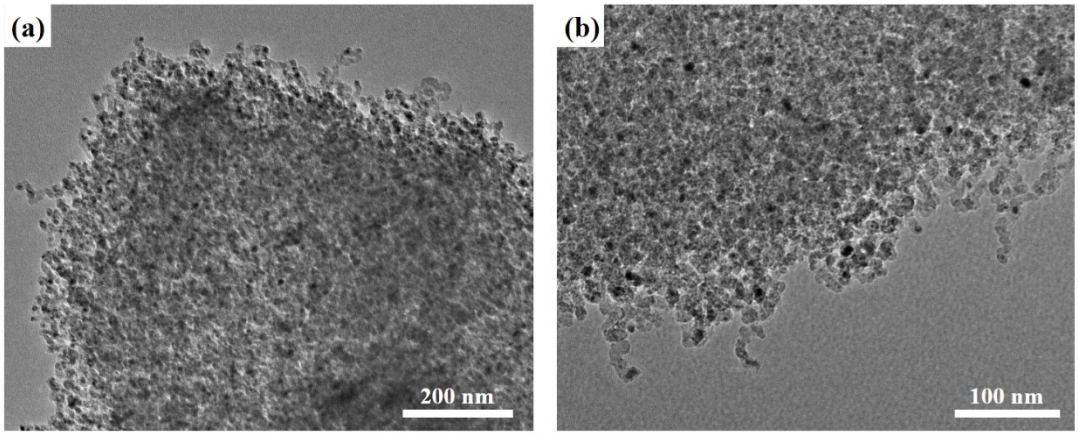

Fig. S3 TEM images of the sample obtained at 450 °C.

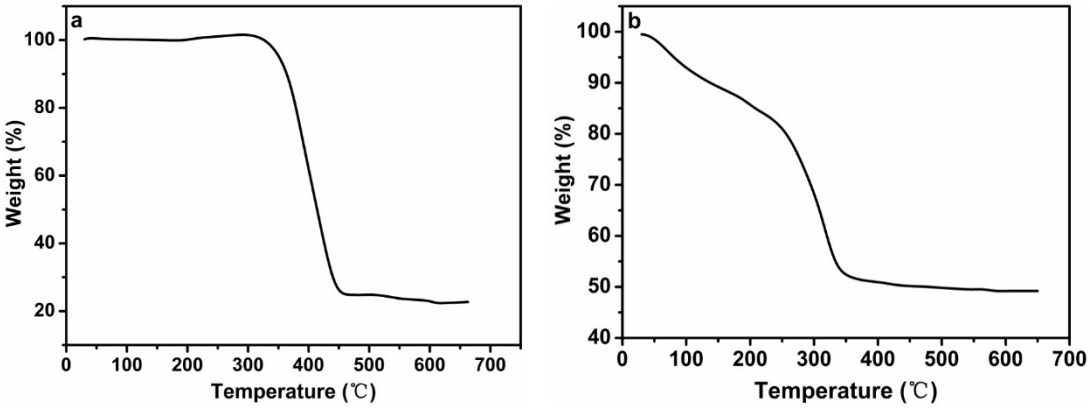

Fig. S4 TGA spectra of (a) 400-NiO@C/graphene and (b) 400-NiO/graphene.

To find out how much NiO was contained in the composites, we did TGA measurements on 400-NiO@C/graphene and 400-NiO/graphene. The TGA were conducted under air atmosphere from room temperature to 650 ºC (Fig. S4). The weight content of the NiO in the 400-NiO@C/graphene and 400-NiO/graphene examined by TGA are about 22.2% and 49.2%, respectively.

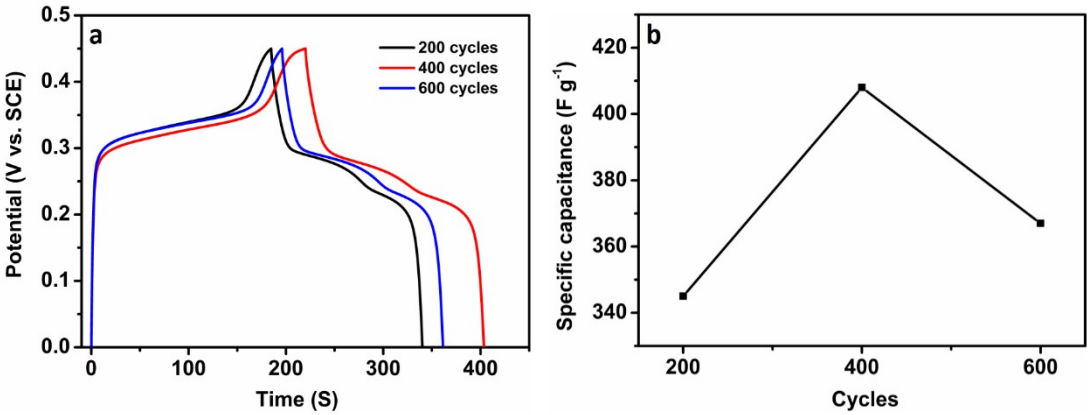

Fig. S5 (a) Galvanostatic charge-discharge curves at 1 A g^{-1} and (b) specific capacitance with different NiO cycles.