

Supplementary Information

Glucose-derived nitrogen-doped hierarchical hollow nest-like carbon nanostructure from a novel template-free method as an outstanding electrode material for supercapacitors

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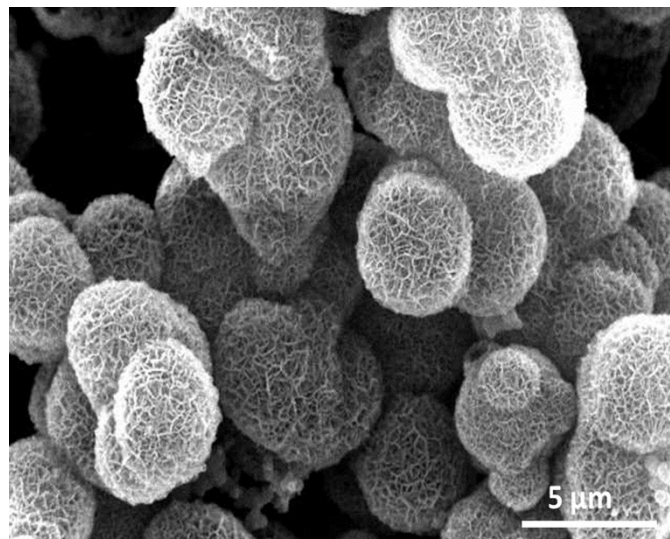


Fig. S1 SEM image of $\text{Ni}_3\text{ZnC}_{0.7}/\text{Ni}@\text{C}$.

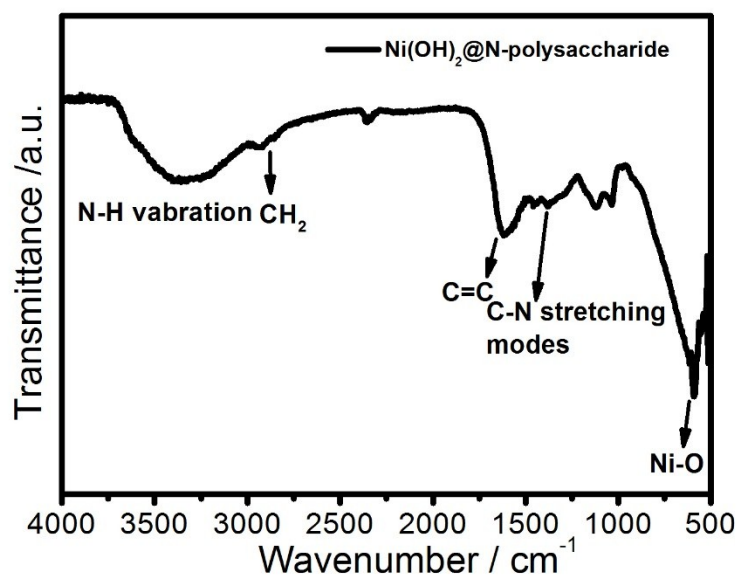


Fig. S2 FTIR spectrum of $\text{Ni}(\text{OH})_2@\text{N-polysaccharide}$.

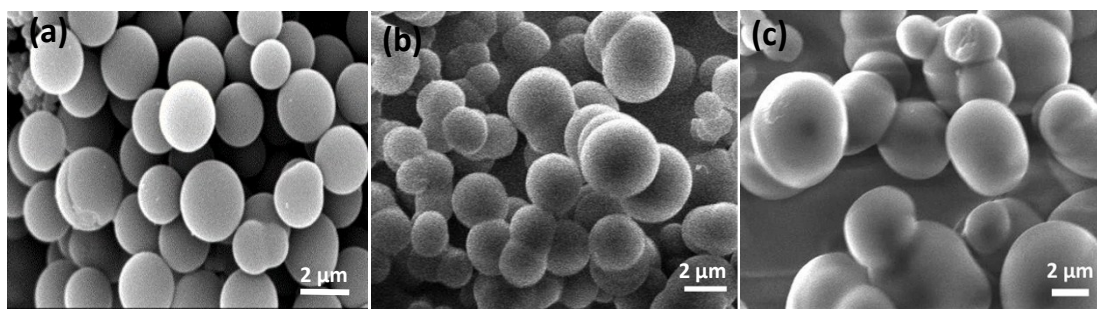


Fig. S3 SEM images of products obtained from hydrothermal treatment of (a) glucose only, (b) glucose and HMT, and (c) glucose and NiSO₄.

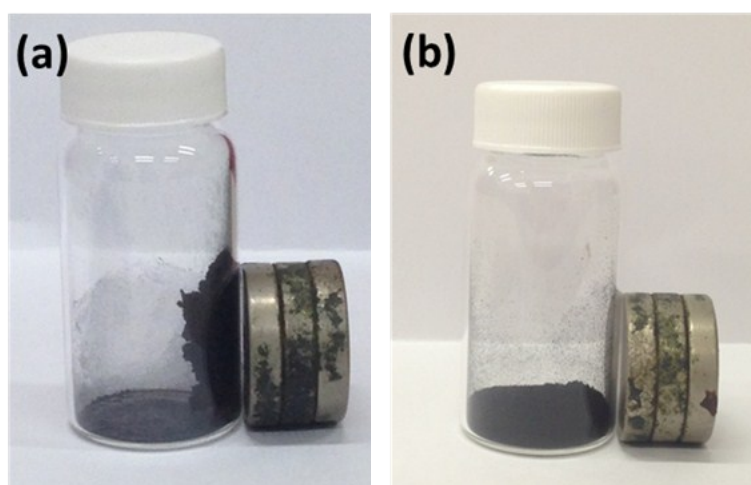


Fig. S4 Photos showing magnetic responses of (a) Ni₃ZnC_{0.7}/Ni@C and (b) NHHNC.

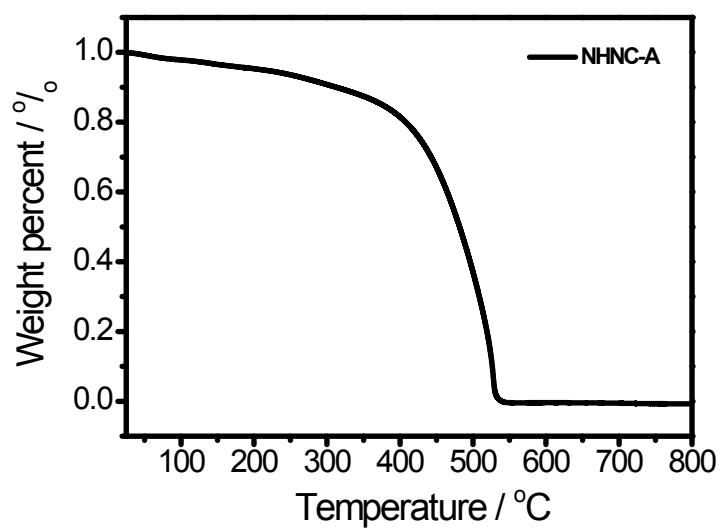


Fig. S5 Thermogravimetric analysis curve of NHHNC in air atmosphere.

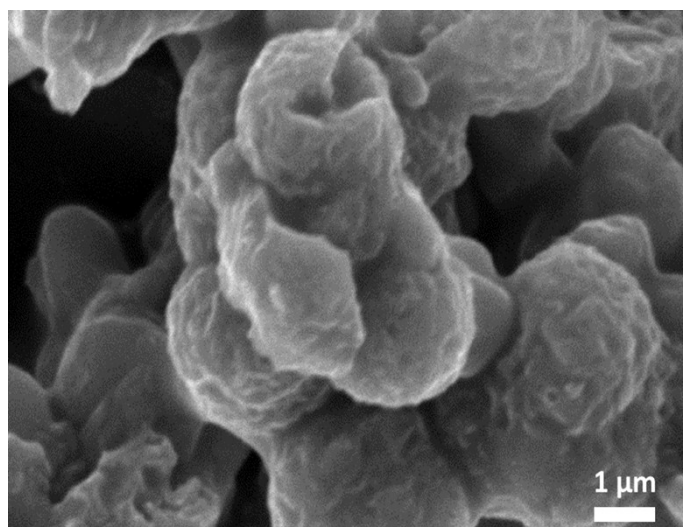


Fig. S6 SEM image of NHHNC prepared with ZnCl_2 vs. precursor ratio of 2:1.

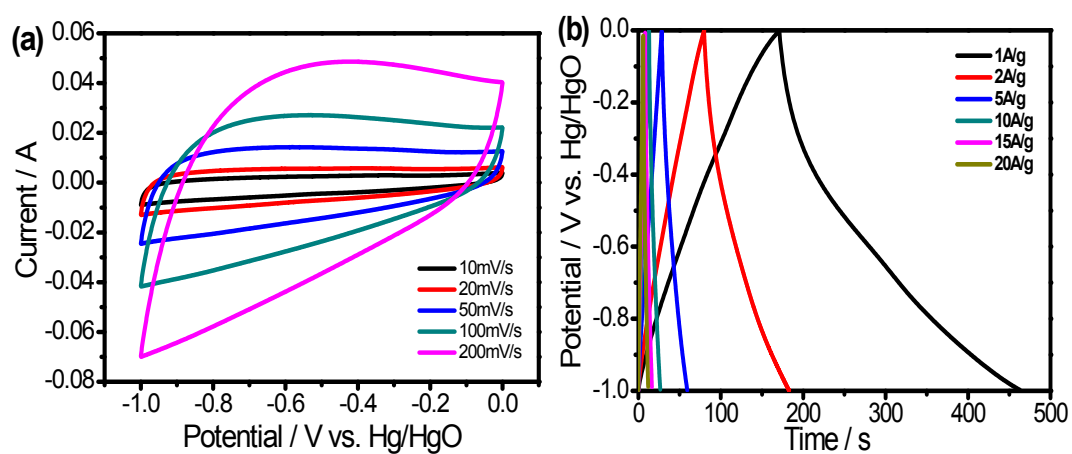


Fig. S7 (a) Cyclic voltammograms of NHHNC-na electrode at increasing scan rates. (b) Galvanostatic charge/discharge curves of NHHNC-na electrode at increasing current densities.

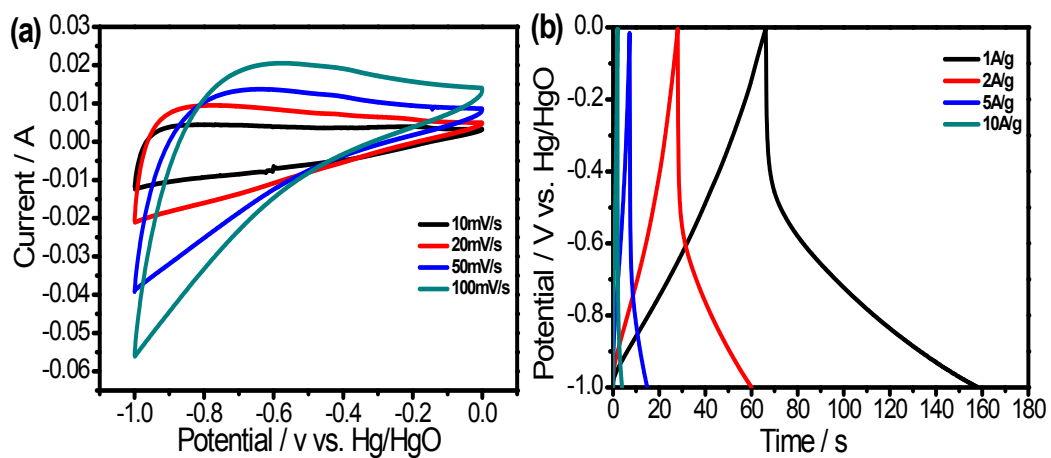


Fig. S8 (a) Cyclic voltammograms of carbon sphere electrode at increasing scan rates.
 (b) Galvanostatic charge/discharge curves of carbon sphere electrode at increasing current densities.