

Electronic Supplementary Information

Fabrication and electrochemical performances of hierarchical porous Ni(OH)₂ nanoflakes anchored on graphene sheets

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Fig. S1.

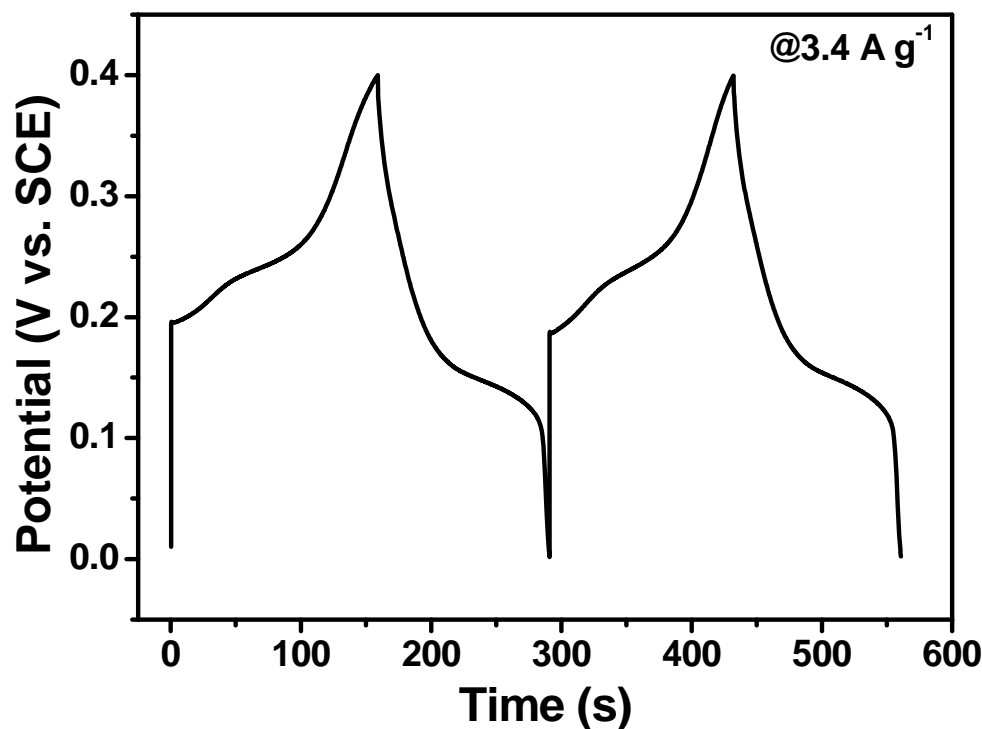


Fig. S1. Galvanostatic charge/discharge curve of the graphene/Ni(OH)₂ composite at a current density of 3.4 A g⁻¹.

Fig. S1 shows the galvanostatic charge/discharge curves of the graphene/Ni(OH)₂ composite measured at a current density of 3.4 A g⁻¹ within the potential window of -0.1-0.45 V (vs. SCE). The shapes of the charge/discharge curves do not display the characteristic of a pure electric double layer capacitor, but mainly pseudocapacitance, which corresponds with the results of the CV tests as shown in Fig. 6b. Specific capacitance could also be calculated from the galvanostatic charge and discharge curves using the following formula: $C = i \frac{\Delta t}{m \Delta V}$, where I is charge and discharge current, Δt is the time for a full charge or discharge, m indicates the mass of the active

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material in the electrode, and ΔV represents the potential change after a full charge or discharge. The calculated specific capacitance is about 1476 F g^{-1} for graphene/ $\text{Ni}(\text{OH})_2$ electrode at a charge/discharge current density of 3.4 A g^{-1} .