

Supporting Information

Concave Ni(OH)₂ Nanocube Synthesis and Its Application in High-Performance Hybrid Capacitors

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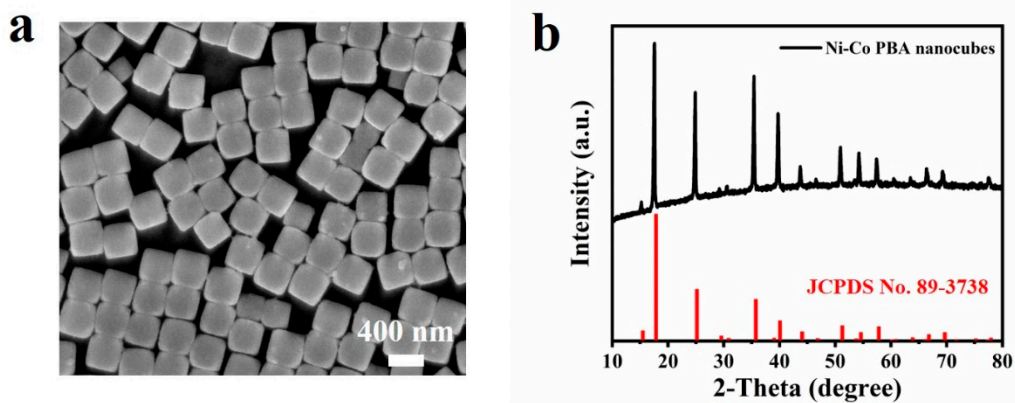


Figure S1. (a) SEM image and (b) XRD pattern of Ni-Co PBAs nanocubes with a size of 400 nm.

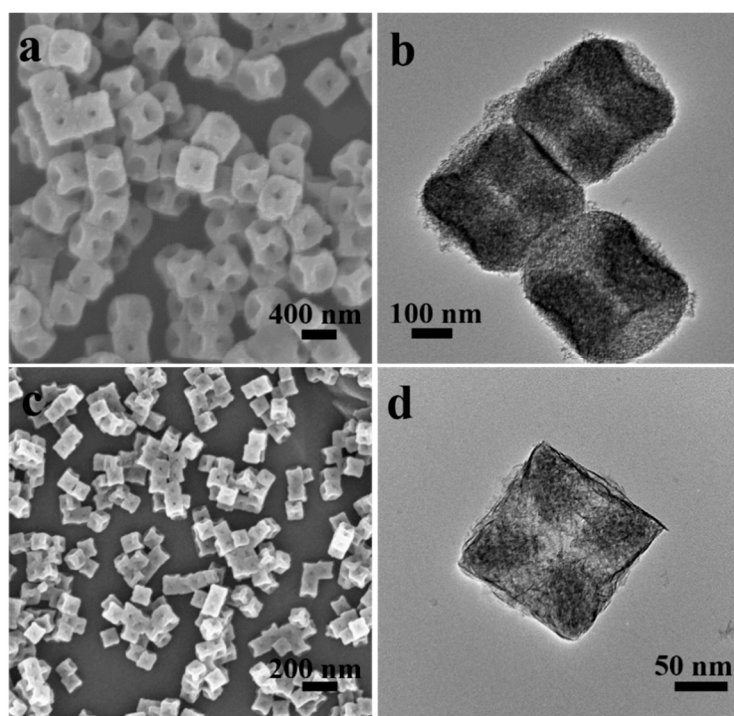


Figure S2. SEM images and TEM images of concave $\text{Ni}(\text{OH})_2$ nanocubes with average size of (a,b) 350 nm and (c,d) 100 nm, respectively.

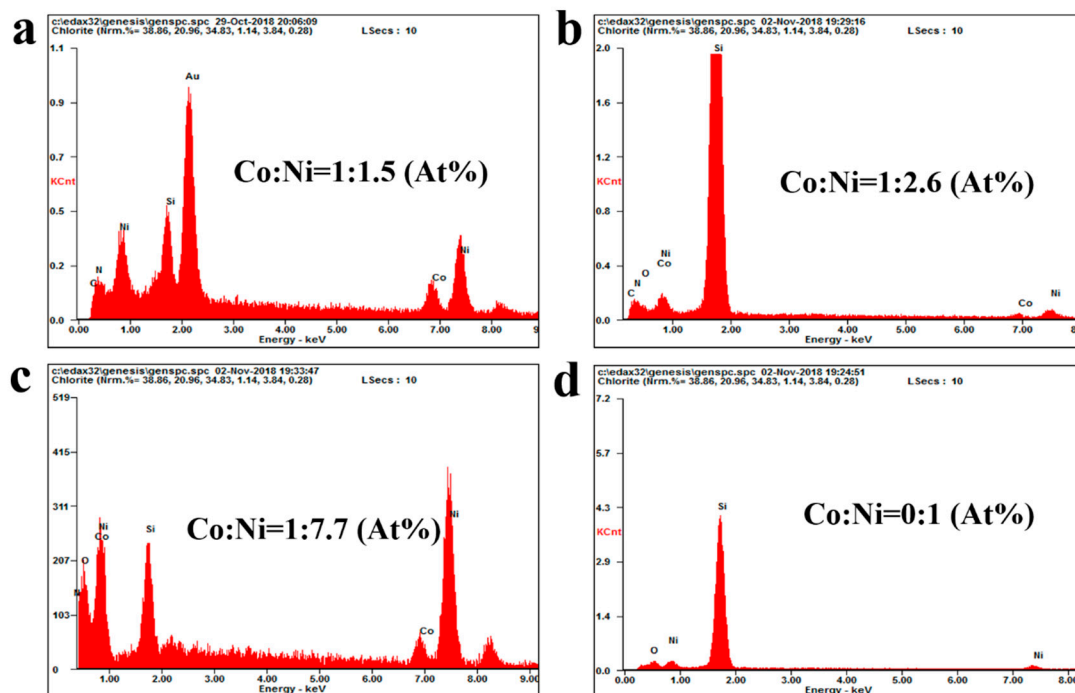


Figure S3. EDS spectra of the as-obtained products after reaction for 0 h (a), 1 h (b), 3 h (c), and 6 h (d).

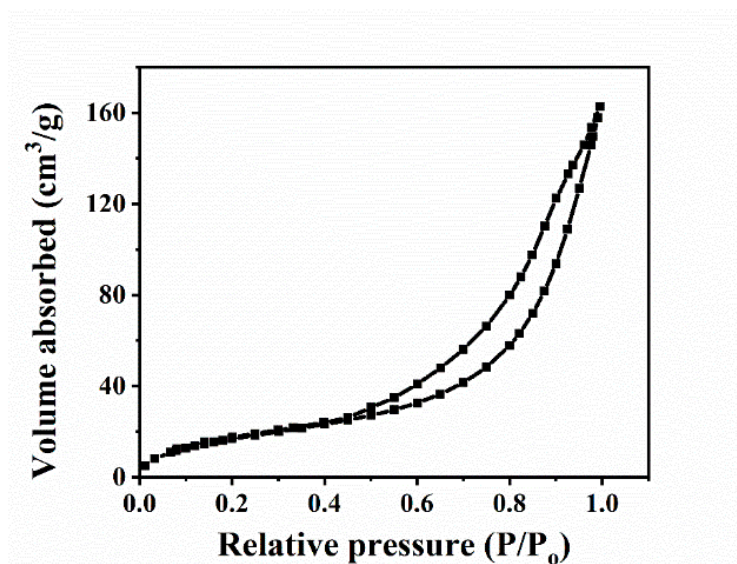


Figure S4. Nitrogen adsorption-desorption isotherms of the concave $\text{Ni}(\text{OH})_2$ nanocubes.

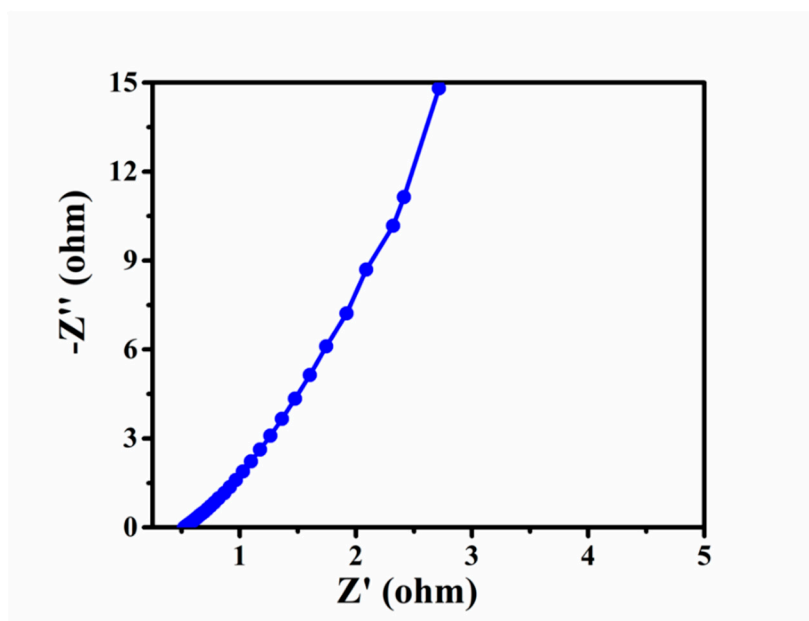


Figure S5. Nyquist plot of concave $\text{Ni}(\text{OH})_2$ nanocubes.

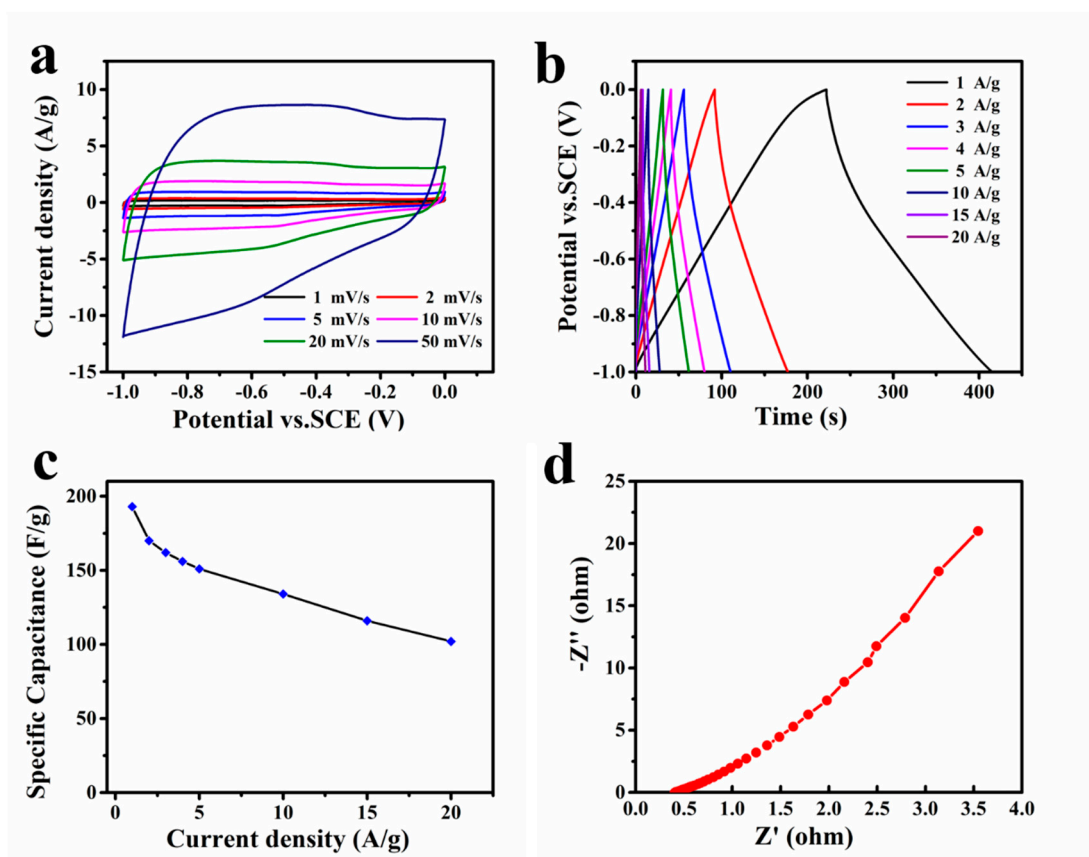


Figure S6. The electrochemistry properties of graphene: (a) CV curves at different scan rates, (b) Charge-discharge curves at varied current densities, (c) Specific

capacitances at a series of current densities, (d) Nyquist plot of graphene collected from the electrochemical impedance measurements.

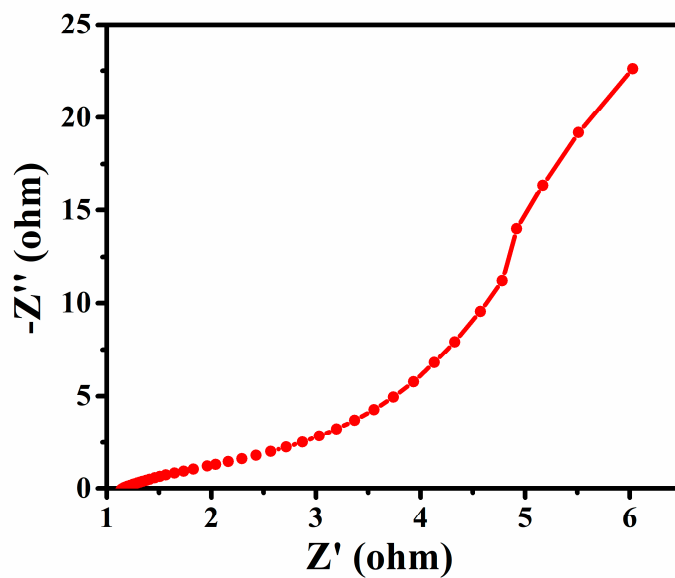


Figure S7. Nyquist plot for concave $\text{Ni}(\text{OH})_2$ nanocubes//graphene hybrid capacitor.

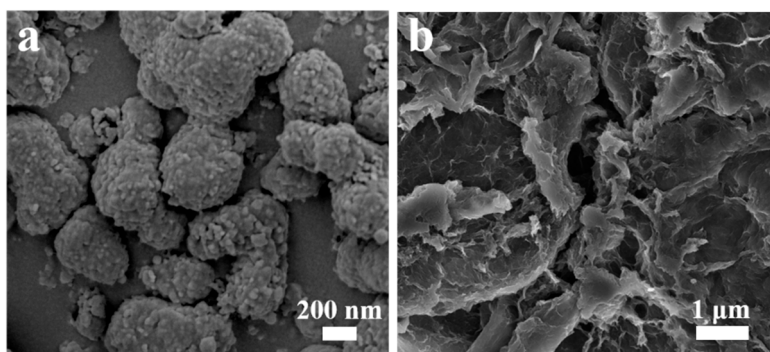


Figure S8. SEM image of concave $\text{Ni}(\text{OH})_2$ nanocubes and graphene after 4000 cycles.