

Supplementary Information

The Perfect Matching between Low-cost Fe₂O₃ Nanowires Anode and
NiO Nanoflakes Cathode Significantly Enhances the Energy Density
of Asymmetric Supercapacitors

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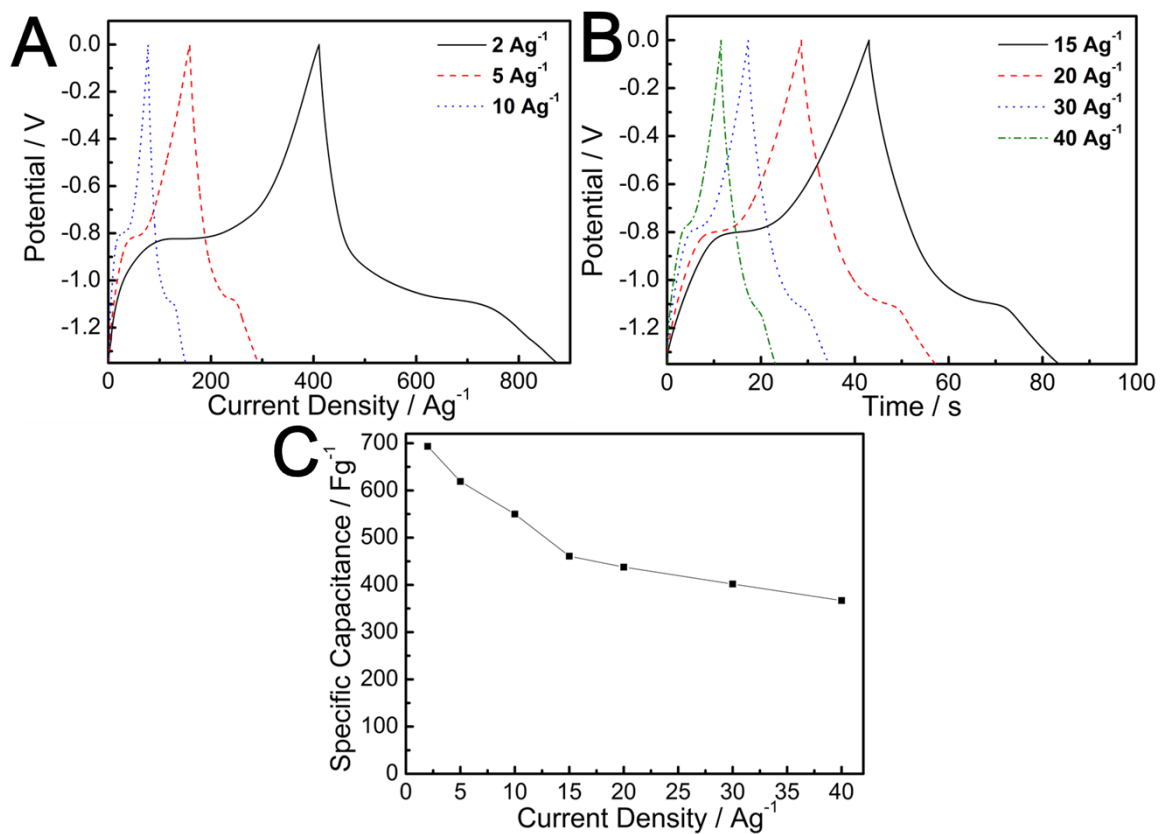


Fig. S1 Electrochemical performance of Fe₂O₃ bundles on CFP with three-electrode measurement in 2 M KOH (A, B) galvanostatic charge-discharge curves at various current densities from 5 to 40 Ag⁻¹, (C) specific capacitances at various current densities.

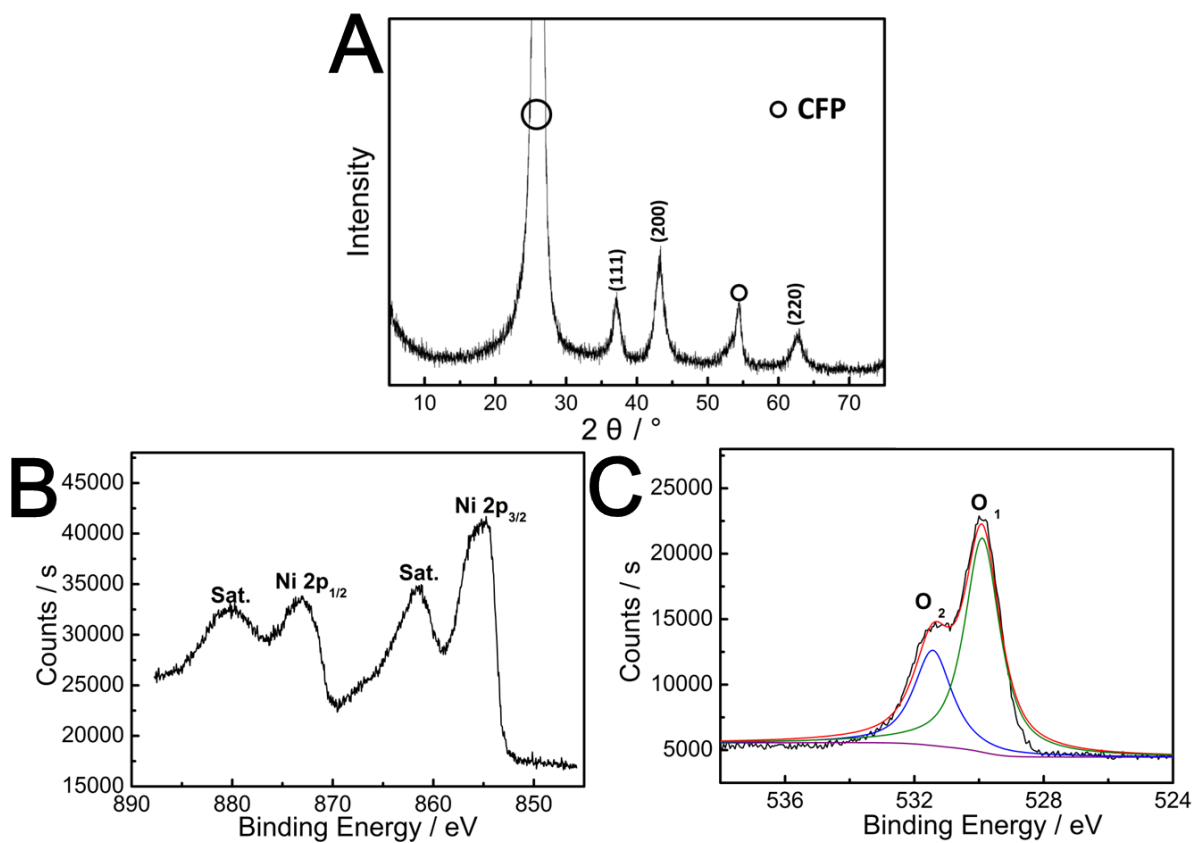


Fig. S2 (A) XRD pattern of NiO nanoflakes on CFP, (B) Ni2p and (C) O1s XPS spectrum of NiO nanoflakes on CFP.

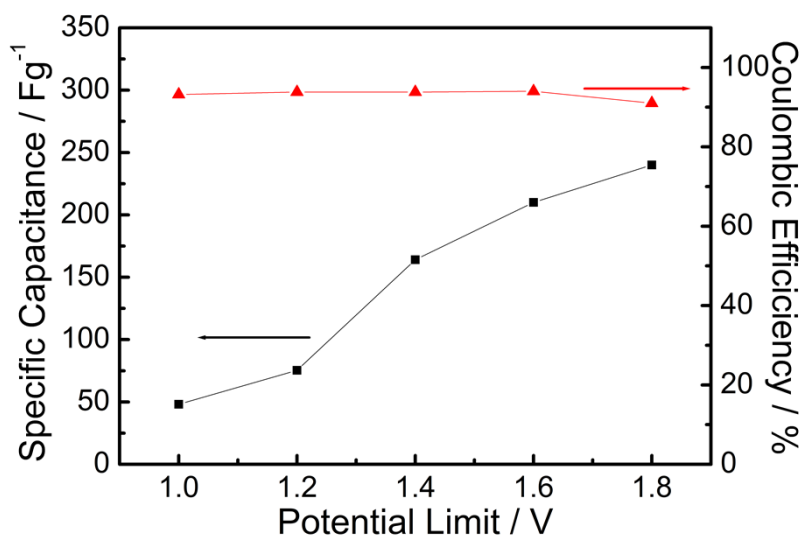


Fig. S3. Specific capacitance and coulombic efficiency of the as-assembled NiO nanoflakes//Fe₂O₃ nanowires AASCs as a function of various potential limit.

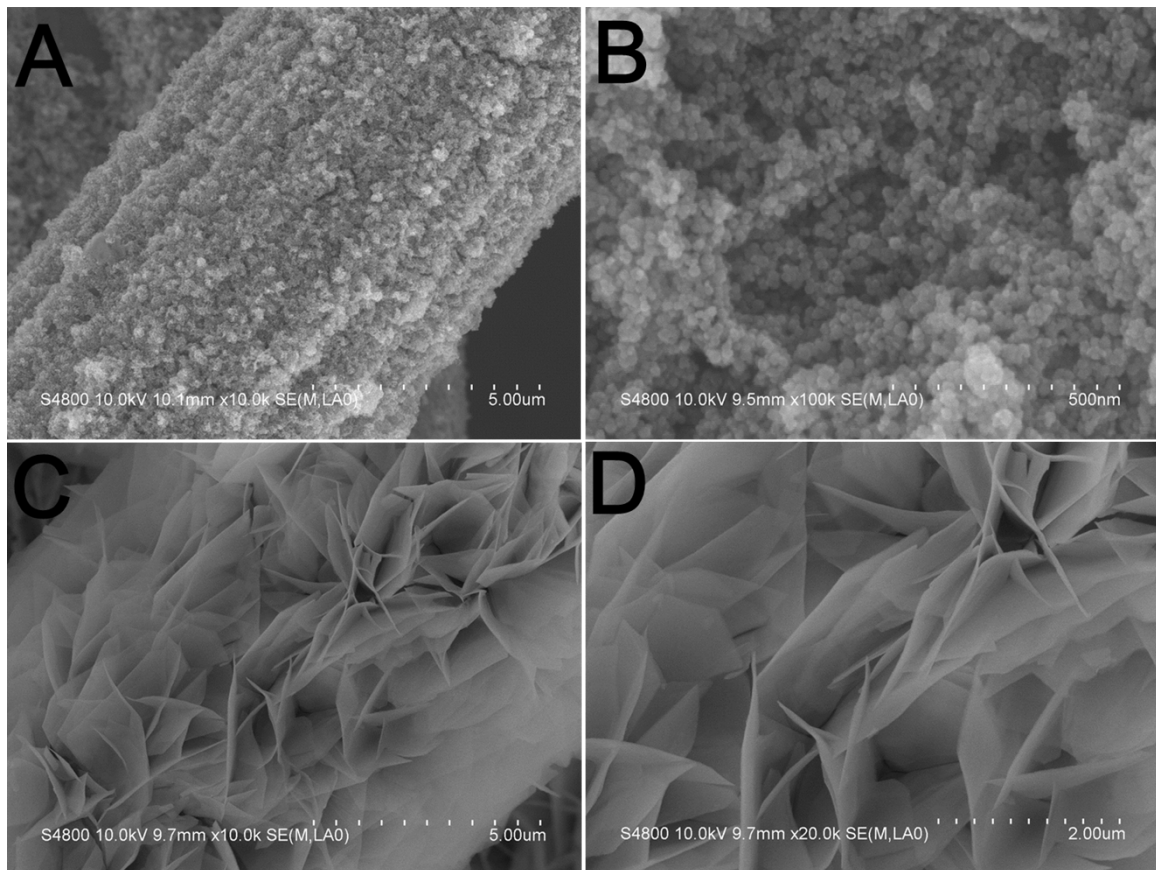


Fig. S4. FE-SEM images of (A, B) Fe₂O₃ on CFP and (C, D) NiO on CFP after 5000 cycles at a current density of 5 A g⁻¹ (based on the mass of Fe₂O₃ nanowires on CFP) in the potential window of 0~1.8 V

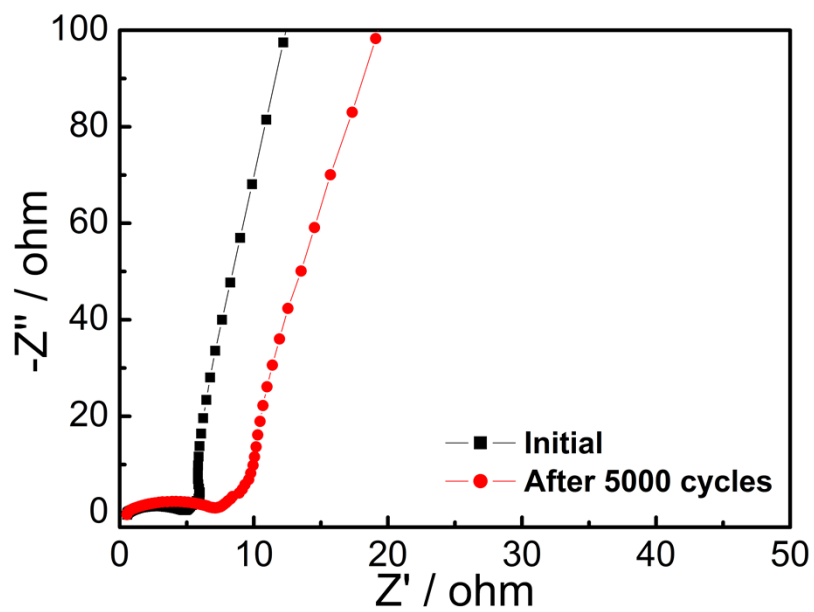


Fig. S5. Nyquist plots of the as-assembled NiO nanoflakes//Fe₂O₃ nanowires AASCs in the frequency range of 100 kHz to 0.01 Hz before and after 5000 cycles.