Electronic Supplementary Material (ESI) for RSC Advances

Supporting Information

Hierarchical Co_3O_4 Nanosheet@Nanowire Arrays with Enhanced Pseudocapacitive Performance

Part I. The way to do capacitance calculation:

The specific capacitances C were calculated from the galvanostatic discharge curves using the equation 1. where I is the current applied, $\Delta V/\Delta t$ is the slope of the discharge curve, and m is the mass of the sample on one electrode.

$$C = \frac{I * \Delta t}{\Delta V * m} \qquad \text{(Equation 1)}$$

Part II. Supplementary Figures

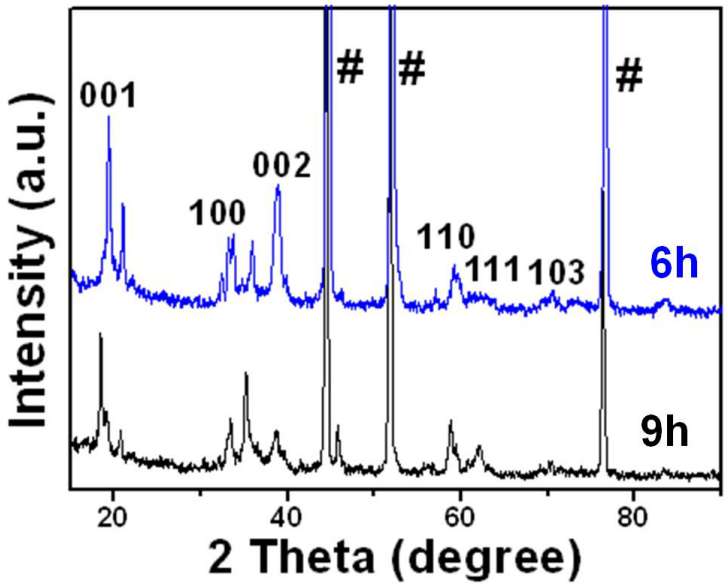

Figure S1. XRD pattern of the precursor for 6h and 9h.

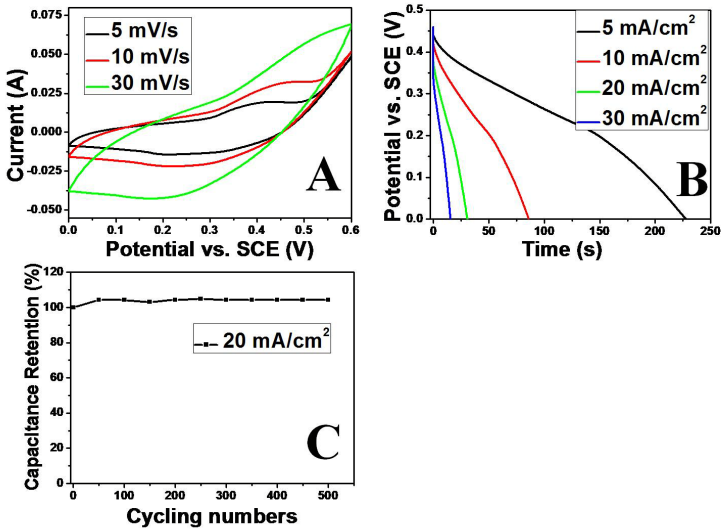

Figure S2. Electrochemical characterization of the Co_3O_4 NSAs: (A) CV curves of the Co_3O_4 NSAs at different scan rates; (B) galvanostatic discharge curves of the Co_3O_4 NSAs at various discharge current densities; (C) average specific capacitance versus cycle number of the Co_3O_4 NSAs at a galvanostatic charge and discharge current density of 20 mA/cm^2.

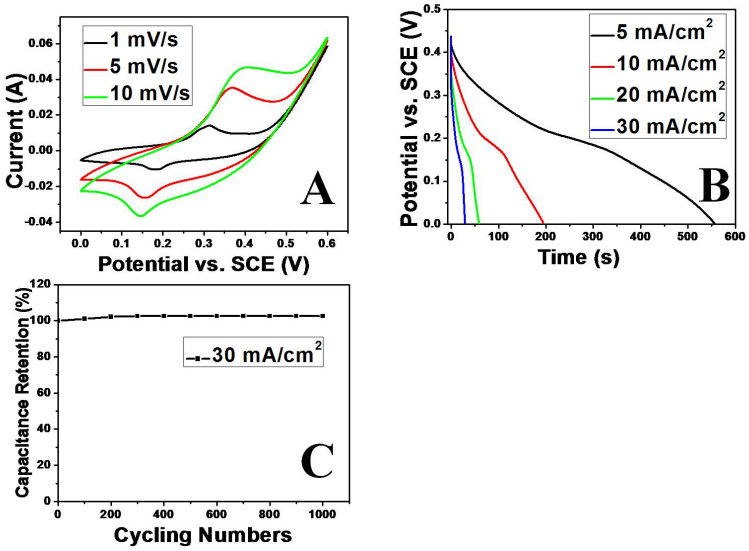

Figure S3. Electrochemical characterization of the Co_3O_4 NWAs: (A) CV curves of the Co_3O_4 NWAs at different scan rates; (B) galvanostatic discharge curves of the Co_3O_4 NWAs at various discharge current densities; (C) average specific capacitance

versus cycle number of the Co_3O_4 NWAs at a galvanostatic charge and discharge current density of 30 mA/cm^2.