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Supporting Information

A Polyimide-MWCNTs composite as high performance anode for aqueous Na-ion batteries

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1. Nitrogen adsorption/desorption isotherms of the polymer

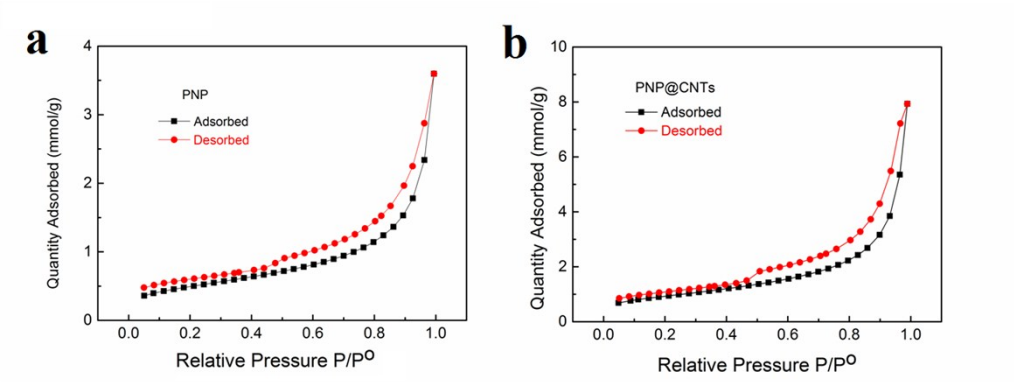

Figure S1. Nitrogen adsorption/desorption isotherms of as-prepared PNP (a) and PNP@CNTs (b)

The specific surface area of PNP and PNP@CNTs is calculated to be 8.7546, 24.8775m^2g^{-1}, respectively.

2. Charge-discharge curves of the PNP@CNTs at various current densities.

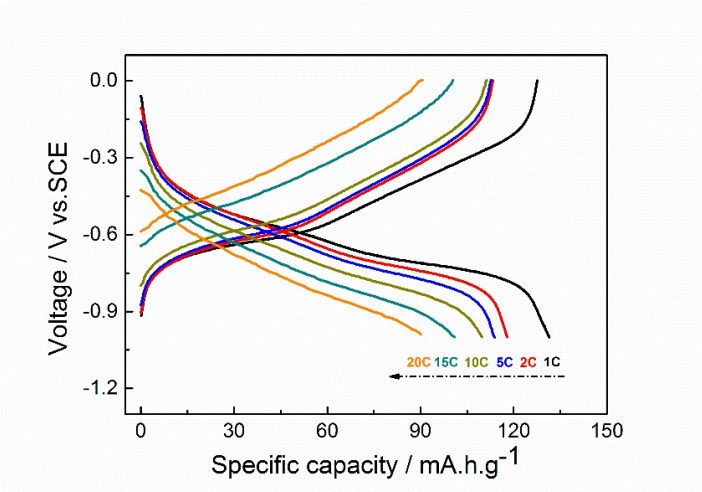

Figure S2. Charge-discharge curves of PNP@CNTs at various current densities from 1 C to 20 C (1 C=100 mA g^{-1}).

3. Electrochemical performances of the $Na_{0.44}MnO_2$ electrode.

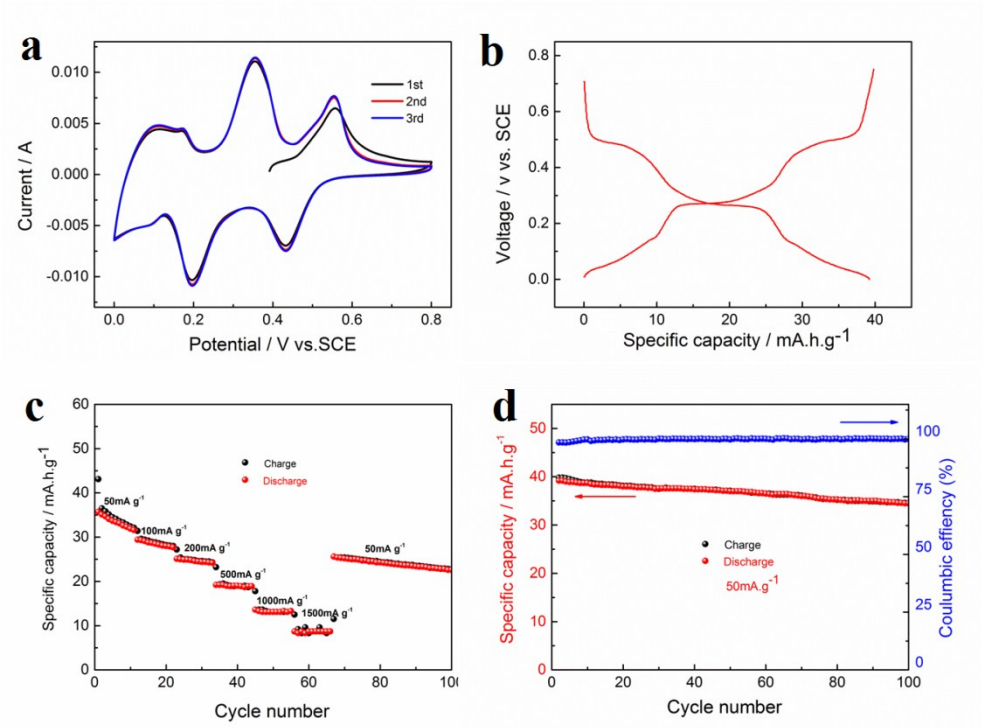

Figure S3 (a) CV curves measured at a scan rate of 2 mV s^{-1}; (b) charge-discharge profiles at 50 mA g^{-1}. (c) reversible capacities at various current densities and (d) cycling stability at 50 mA g^{-1}.

The $Na_{0.44}MnO_2$ electrode were made in the same way with the PNP@CNTs electrode. The full aqueous cell was assembled in an argon-filled glove box (water/oxygen content lower than 1 ppm) with 2032 type coin cells, using 1 M Na_2SO_4 solution (pH = 7) as the electrolyte, $Na_{0.44}MnO_2$ and PNP@CNTs as the cathode and anode, respectively. The anode and cathode was separated by a

glass fiber separator (whatman, GF/B). The mass ratio of the cathode ($Na_{0.44}MnO_2$) and anode (PNP@CNTs) is 2.5:1.