Electronic Supplementary Information (ESI)



Figure S1. The SEM images of the green membrane composed of Ni particle and PAN: (a) upper surface, (b) high magnification of the membrane surface region, (d) cross-section, and high magnification of the selected cross-section region.



Figure S2.The digital photos of green Ni/PAN membrane and porous Ni membrane: (a) the comparison of green Ni/PAN membrane left and right; (b) green Ni/PAN membrane in bending state.



Figure S3. The SEM images of 3DNi/CNFs membrane (a) upper surfaces, and (b) the corresponding high magnification of selected region.



Figure S4. (a) N_2 adsorption-desorption isotherm and (b) the inset of pore size distribution curve.



Figure S5. The specific capacitances versus current density.