One-for-two" strategy of N-doped carbon as anode and $ZnCo_2O_4$/N-doped carbon nanocomposite as cathode for high-performance asymmetric supercapacitor application

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Supplementary Information

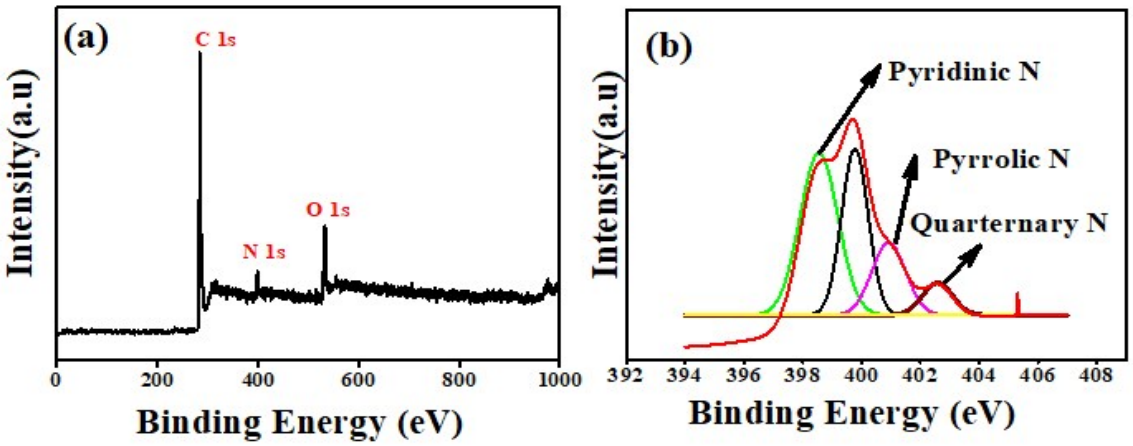

Fig. S1 (a) survey scan (b) de-convoluted N1s spectrum of N-doped carbon

X-ray photon spectroscopy (XPS) survey scan of N-doped carbon is displayed in (Fig. S1(a)), which shows three distinct peaks at 284.5 eV, 400 eV and 530 eV corresponding to C 1s, N 1s and O 1s respectively. The de-convoluted N 1s spectra of N-doped carbon is shown in (Fig. S1(b)), which has peaks of pyridinic (C-N), pyrrolic (C-N) and quaternary (N+) at 398.3 eV, 399.7 eV and 499.9 eV, respectively. From the results of the survey scan and the N1s spectra, N-doping of carbon is thus verified and confirmed.