

Supporting Information

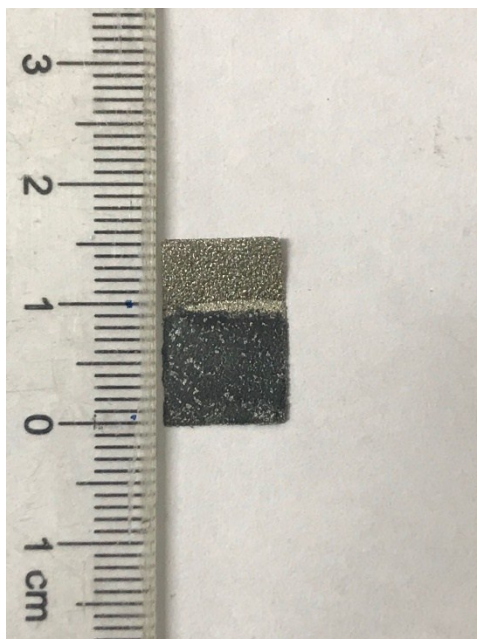


Fig. S1. Image of the prepared working electrode.

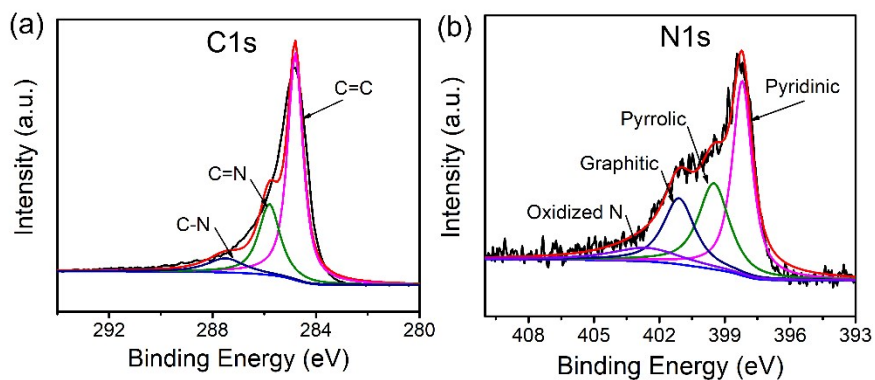


Fig. S2. (a) High-resolution C1s spectra and (b) N1s spectra of the NG-1.

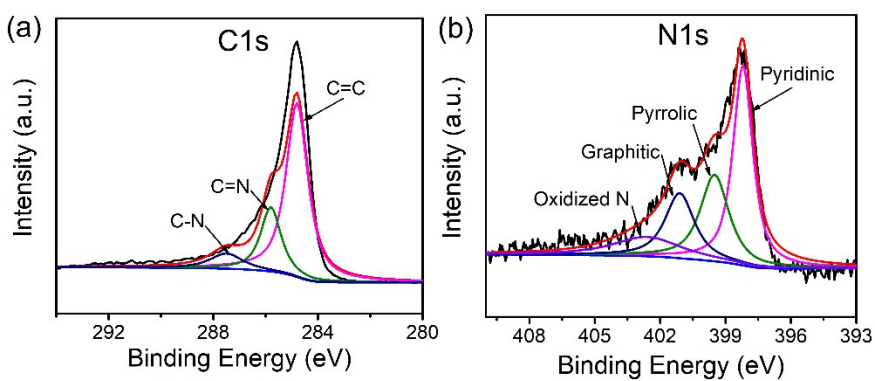


Fig. S3. (a) High-resolution C1s spectra and (b) N1s spectra of the NG-10.

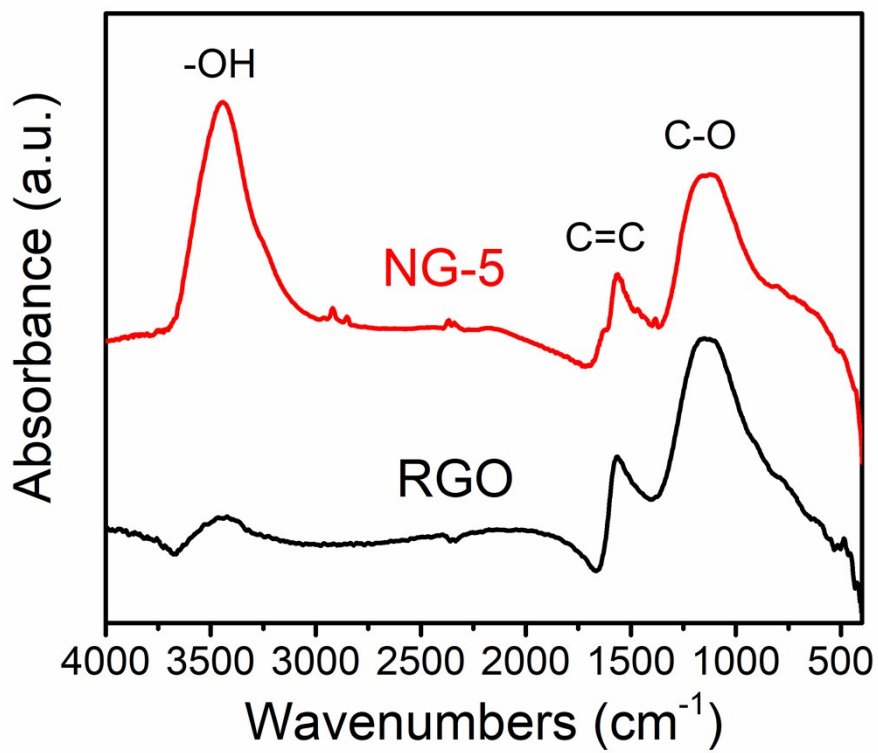


Fig. S4. FT-IR spectra of RGO and NG-5.

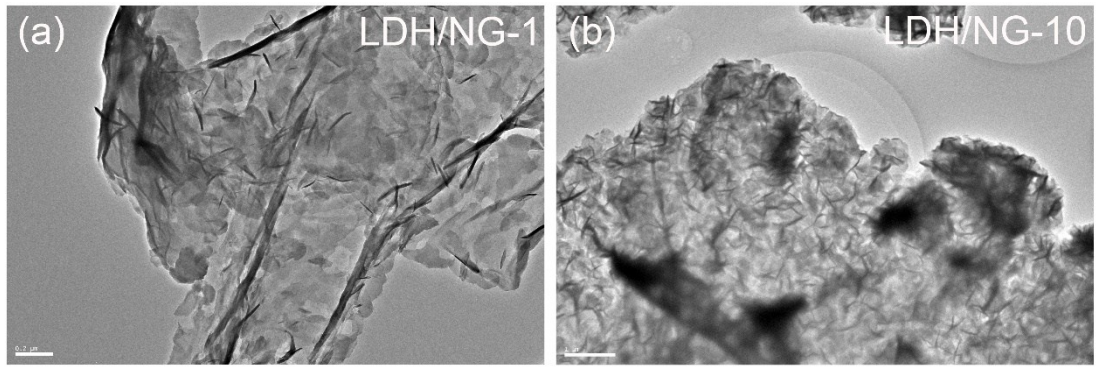


Fig. S5. TEM images of (a) LDH/NG-1 and (b) LDH/NG-10.

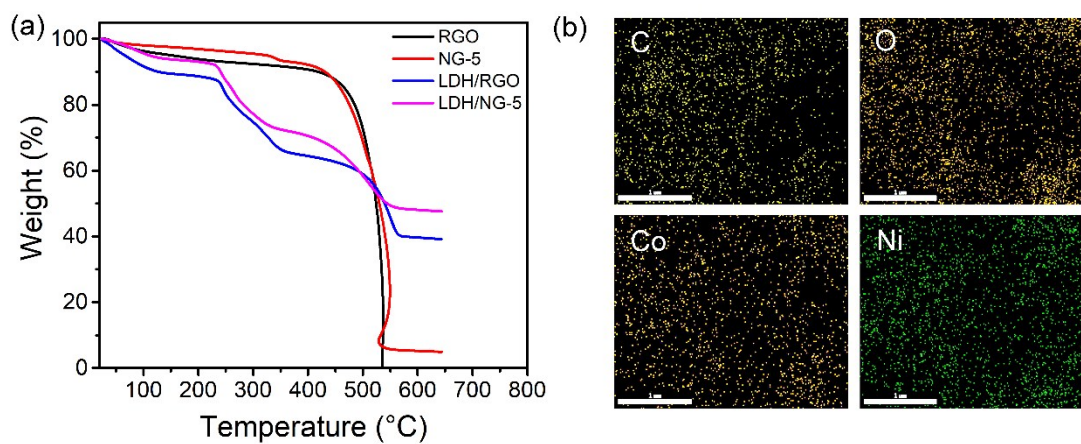


Fig. S6. (a) TG curves of RGO, NG-5, LDH/RGO, and LDH/NG-5. (b) EDS images of C, O, Co, Ni elements distributions of LDH/NG-5.

Table S1

Percentages of C, O, Co, Ni elements in the LDH/NG-1, LDH/NG-5, and LDH/NG-10.

	LDH/NG-1	LDH/NG-5	LDH/NG-10
C (%)	25	23	22
O (%)	28	28	32
Co (%)	18	18	19
Ni (%)	29	31	27

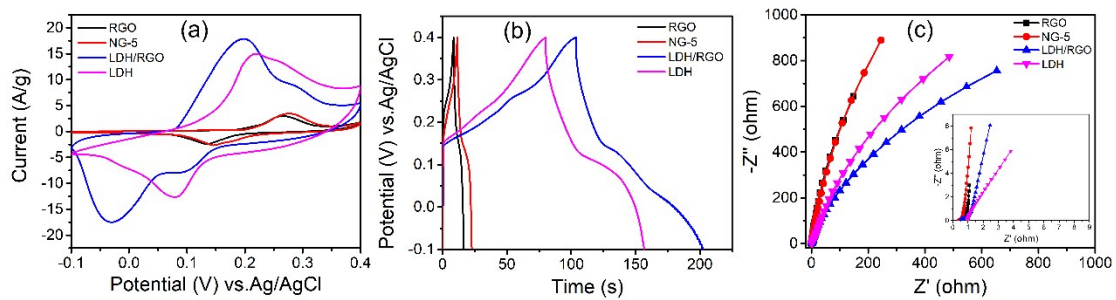


Fig. S7. (a) Cyclic voltammety curves of different electrodes at 5 mV s^{-1} , (b) charge-discharge curves of different electrodes at current density of 6.25 A g^{-1} , and (c) Nyquist plots of different electrodes, where the inset shows the impedance in the high-frequency region.

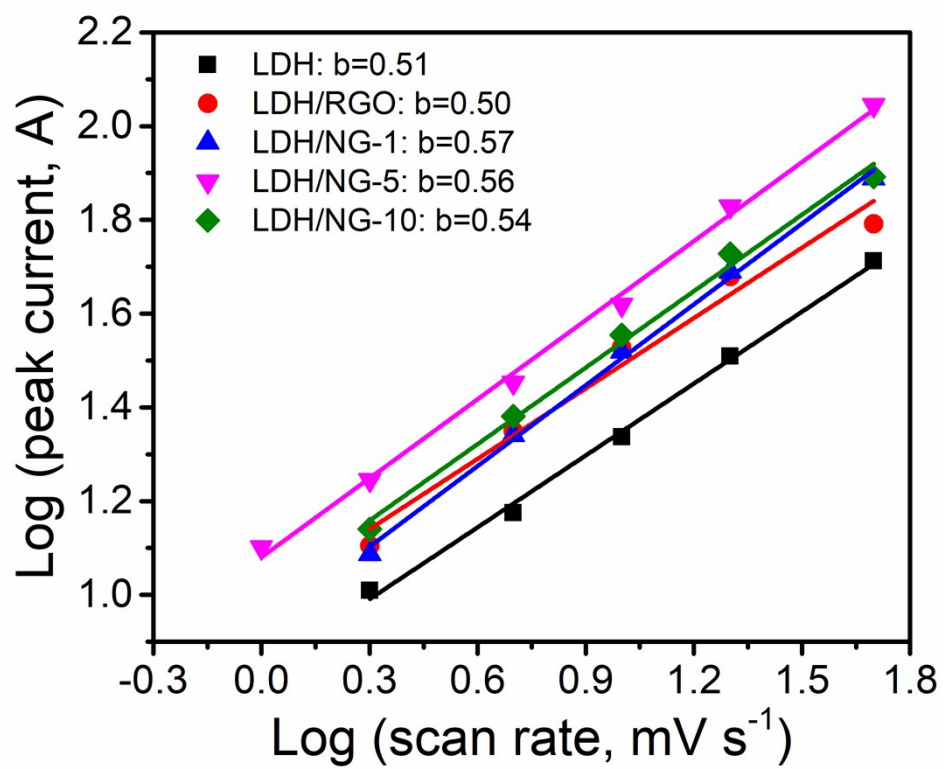


Fig. S8. Logarithm relationship between anodic peak current and scan rate

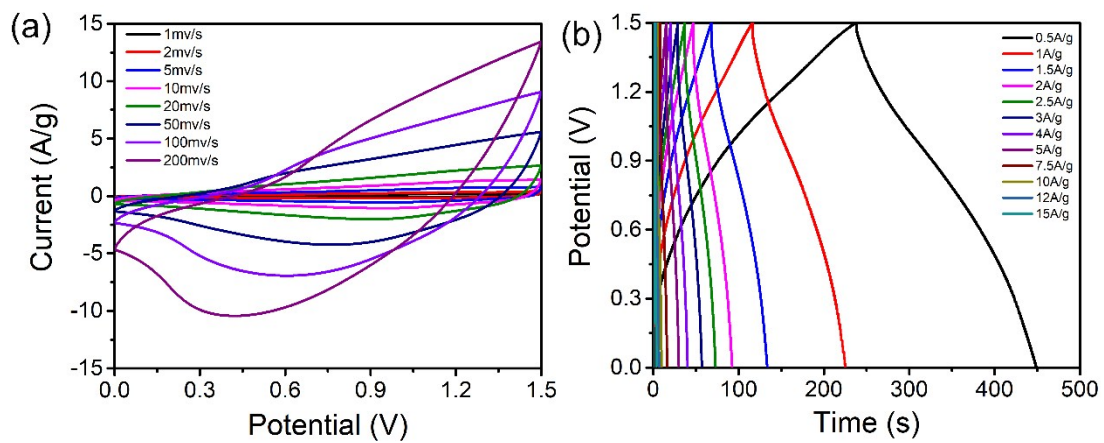


Fig. S9. CV and GCD curves of LDH//AC capacitor

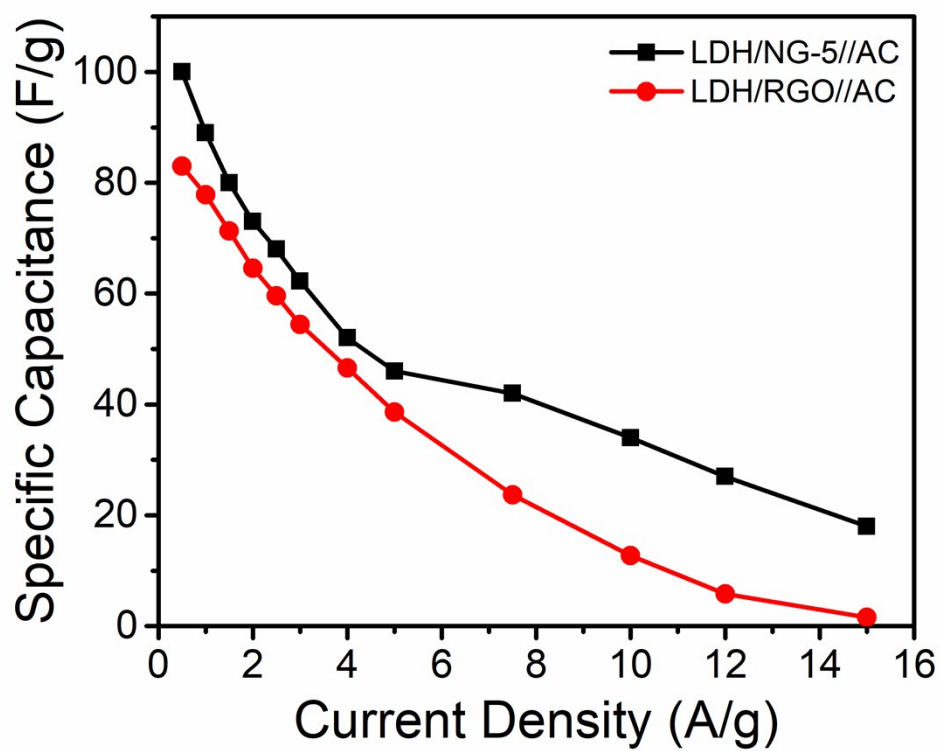


Fig. S10. Rate capabilities of LDH/NG-5//AC and LDH/RGO//AC