

Supporting Information

Carbon material with high pyridine/graphite nitrogen content: an efficient electrocatalyst for oxygen reduction reaction

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To explore the effect of temperature on CNs, the effects of the three carbonizations on the ORR catalytic activity of the catalysts were investigated separately, and the XPS patterns of N elements in the catalysts were tested. It was found that at 800 °C, the catalyst had the best catalytic activity, with the highest content of graphitized-N to total pyridinic-N.

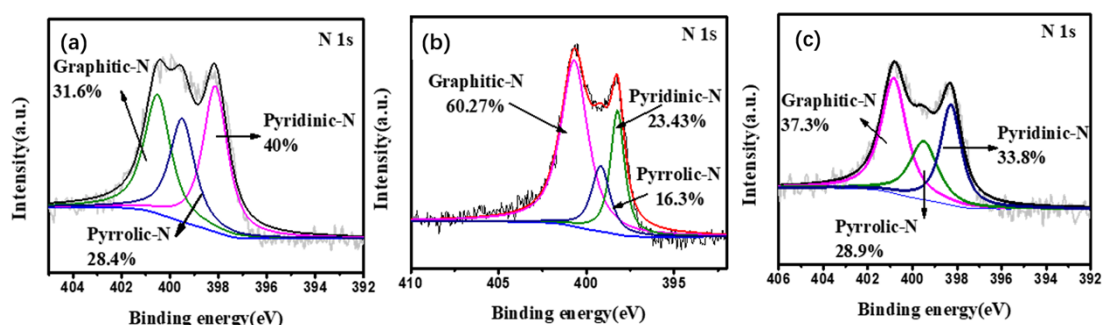


Figure S1. N 1s XPS fine spectra of (a) CN-700, (b) CN-800 and (c) CN-900.

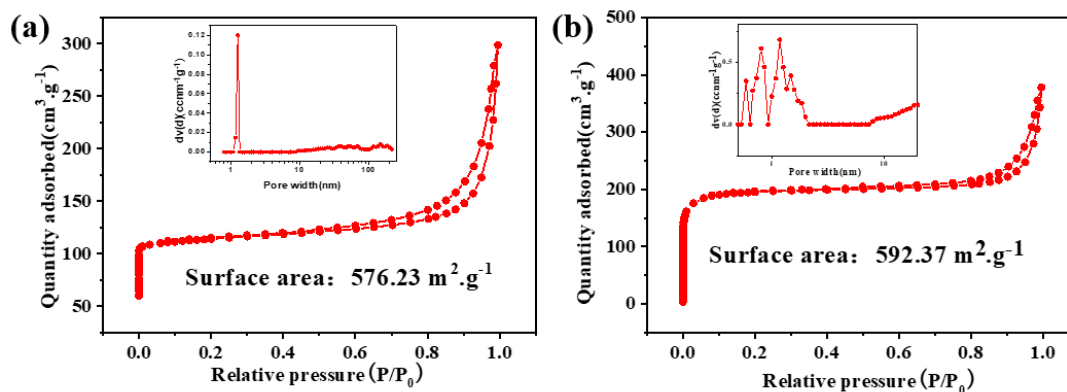


Figure S2. N₂ adsorption-desorption isotherms. Inse: pore-size distribution of (a) CN-700 and (b) CN-900.

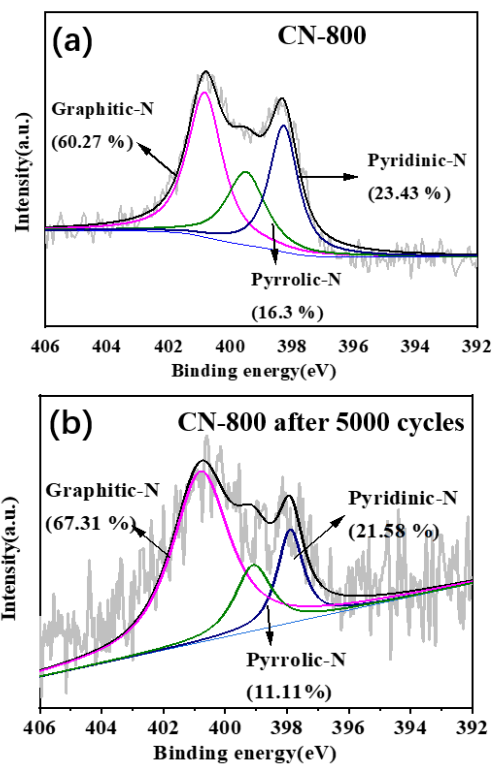


Figure S3. N1s XPS spectra of the CN-800 before and after 5000 cycles.