

## Supporting information

### One-step synthesis of cobalt and nitrogen co-doped carbon nanotubes and their catalysis for oxygen reduction reaction

Shaofang Fu,<sup>a</sup> Chengzhou Zhu,<sup>a</sup> He Li,<sup>a,b</sup> Dan Du,<sup>a</sup> Yuehe Lin<sup>a\*</sup>

<sup>a</sup>School of Mechanical and Materials Engineering, Washington State University, Pullman, WA 99164

<sup>b</sup>School of Medicine and Life Sciences, University of Jinan, Jinan 250022, China

\*E-mail: yuehe.lin@wsu.edu

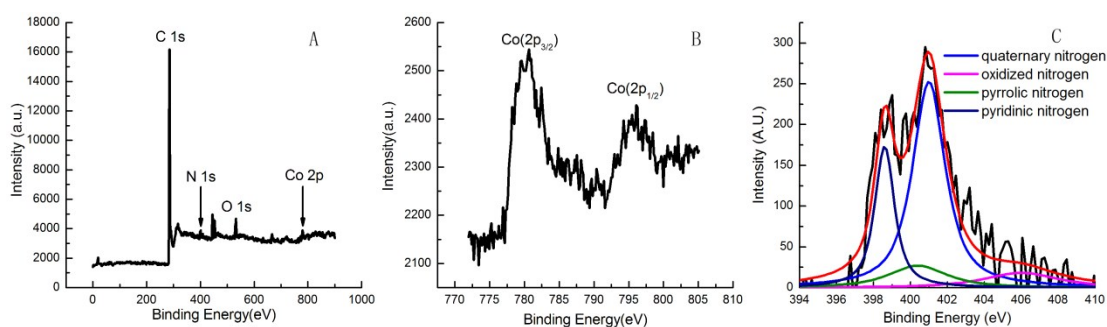


Fig. S1 XPS (A), Co 2p (B) and N 1s (C) spectra of Co-N-CNTs-2.

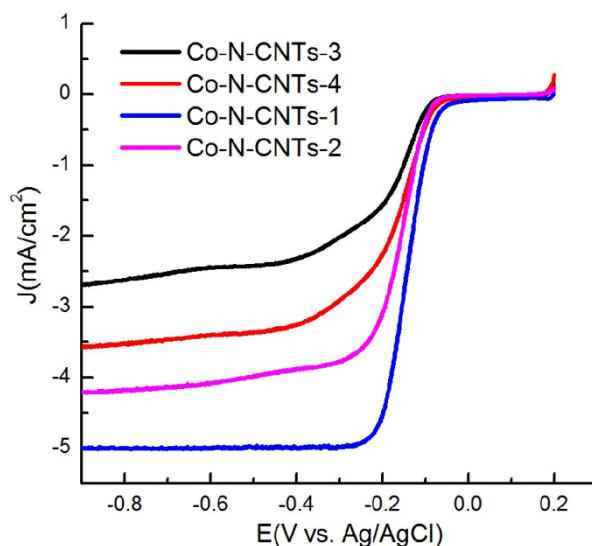


Fig. S2 LSV curves of Co-N-CNTs-1 (22:1), Co-N-CNTs-2 (44:1), Co-N-CNTs-3 (5:1), and Co-N-CNTs-4 (11:1) with a scan rate of 10 mV/s at a rotation rate of 1600 rpm.

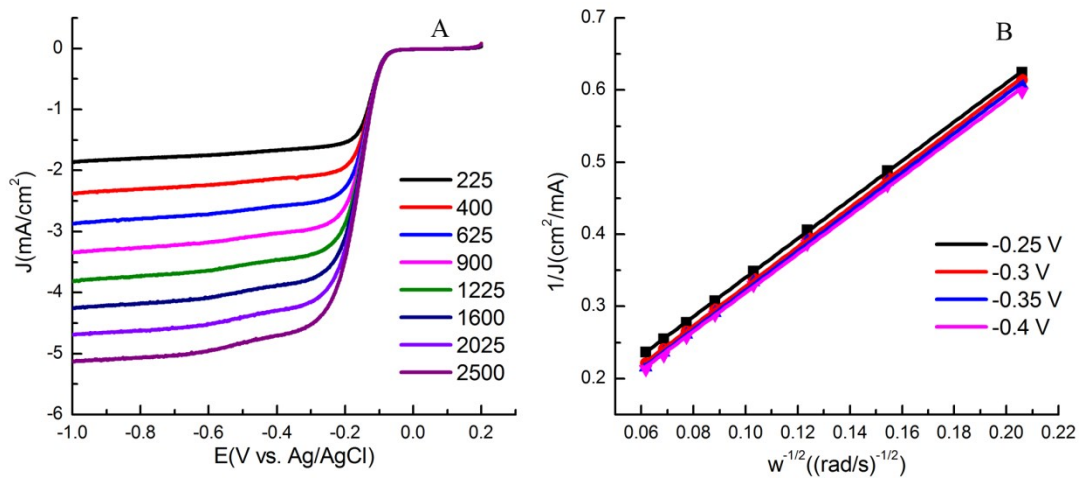


Fig. S3 (A) LSV curves of Co-N-CNTs-2 at different rotation rate. (B) Koutecky-Levich (K-L) plots of Co-N-CNTs-2 at different potentials.