## Cobalt and nitrogen-cofunctionalized graphene as a durable non-precious metal catalyst with enhanced ORR activity

Shu Jiang, <sup>1</sup> Chengzhou Zhu, <sup>1</sup> Shaojun Dong\*

State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry,
Chinese Academy of Sciences, Changchun 130022, China, and Graduate School of the Chinese
Academy of Sciences, Beijing, 100039, China

1 These authors contribute equally to this work.

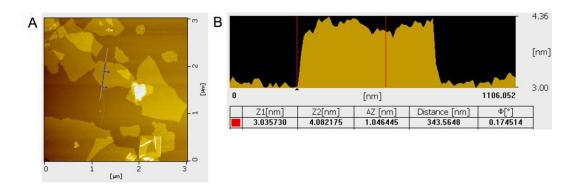


Figure S1. (A) AFM images and (B) height profiles along the lines shown in AFM images of exfoliated GO.

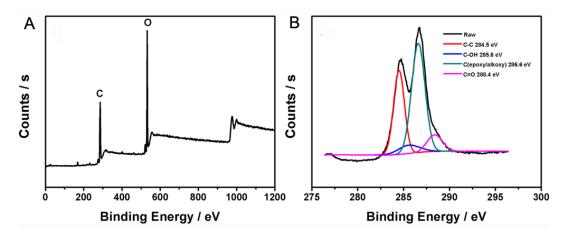


Figure S2. (A) XPS and (B) C1s spectra of GO.

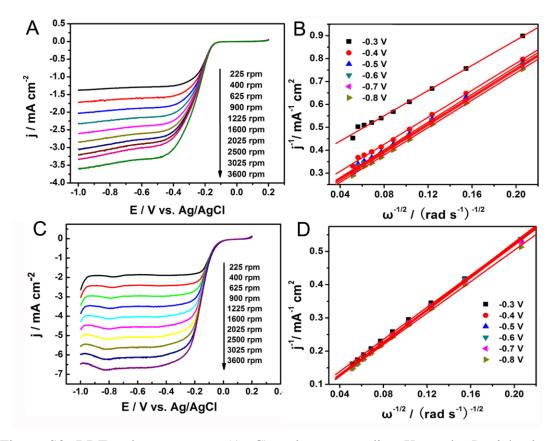


Figure S3. RDE voltammograms (A, C) and corresponding Koutecky-Levich plots (B, D) at different potentials of Co-PPy and Co-N-GN in  $O_2$ -saturated 0.1 M KOH solution with a sweep rate of 10 mV s<sup>-1</sup> at the different rotation rates indicated.