

Electronic Supplementary Information (ESI)

Electrocatalytic study of 1,10-phenanthroline-cobalt(II) metal-complex catalyst supported on reduced graphene oxide towards oxygen reduction reaction

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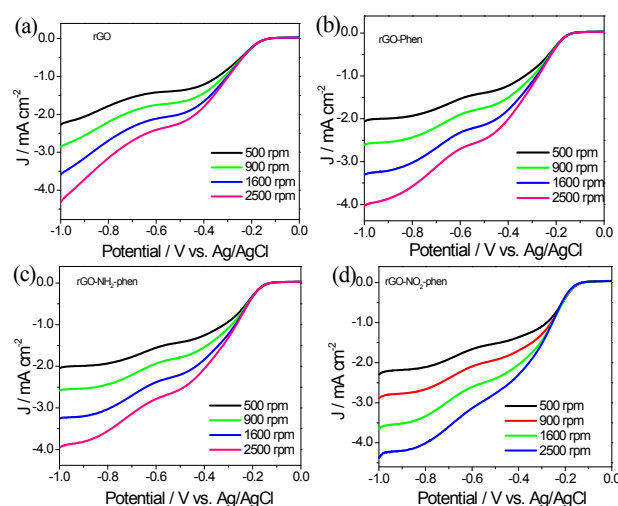


Fig. S1 RDE LSV curves for (a) rGO, (b) rGO-Phen, (c) rGO-NH₂-Phen, and (d) rGO-NO₂-Phen at different rotation rates in O₂-saturated 0.1 M KOH solution (scan

rate: 5 mV/s).

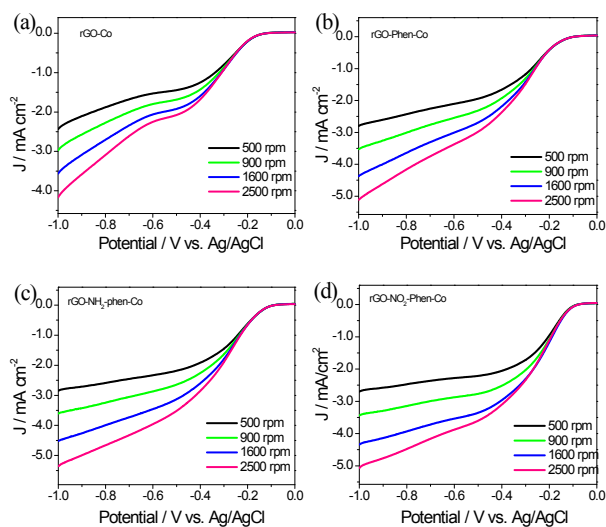


Fig. S2 RDE LSV curves for (a) Co-RGO, (b) Phen-Co-RGO, (c) NH₂-Phen-Co-RGO, and (d) NO₂-Phen-Co-RGO at different rotation rates in O₂-saturated 0.1 M KOH solution (scan rate: 5 mV/s).

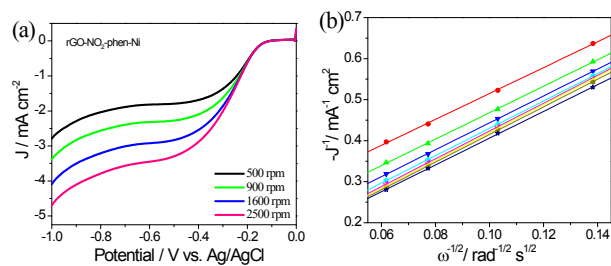


Fig. S3 (a) RDE LSV curves for rGO-NO₂-Phen-Ni at different rotation rates in O₂-saturated 0.1 M KOH solution (scan rate: 5 mV/s) and (b) corresponding Koutecky–Levich plots ($J^{-1}-\omega^{-1/2}$) at different potentials (from top to bottom: -0.35 , -0.40 , -0.45 , -0.50 , -0.55 , -0.60 , -0.65 , -0.70 V).