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) NH$_2$-Phen-Co-RGO, and (d) NO$_2$-Phen-Co-RGO at different rotation rates in O$_2$-saturated 0.1 M KOH solution (scan rate: 5 mV/s).

**Fig. S3** (a) RDE LSV curves for rGO-NO$_2$-Phen-Ni at different rotation rates in O$_2$-saturated 0.1 M KOH solution (scan rate: 5 mV/s) and (b) corresponding Koutecky–Levich plots ($J^{1/2}$ vs. $\omega^{1/2}$) at different potentials (from top to bottom: −0.35, −0.40, −0.45, −0.50, −0.55, −0.60, −0.65, −0.70 V).