

## Electronic Supplementary Information

**Nitrogen-doped graphene-supported Co/CoN<sub>x</sub> nanohybrid as a high-efficient electrocatalyst for oxygen reduction reaction in an alkaline medium**

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## Supplementary data

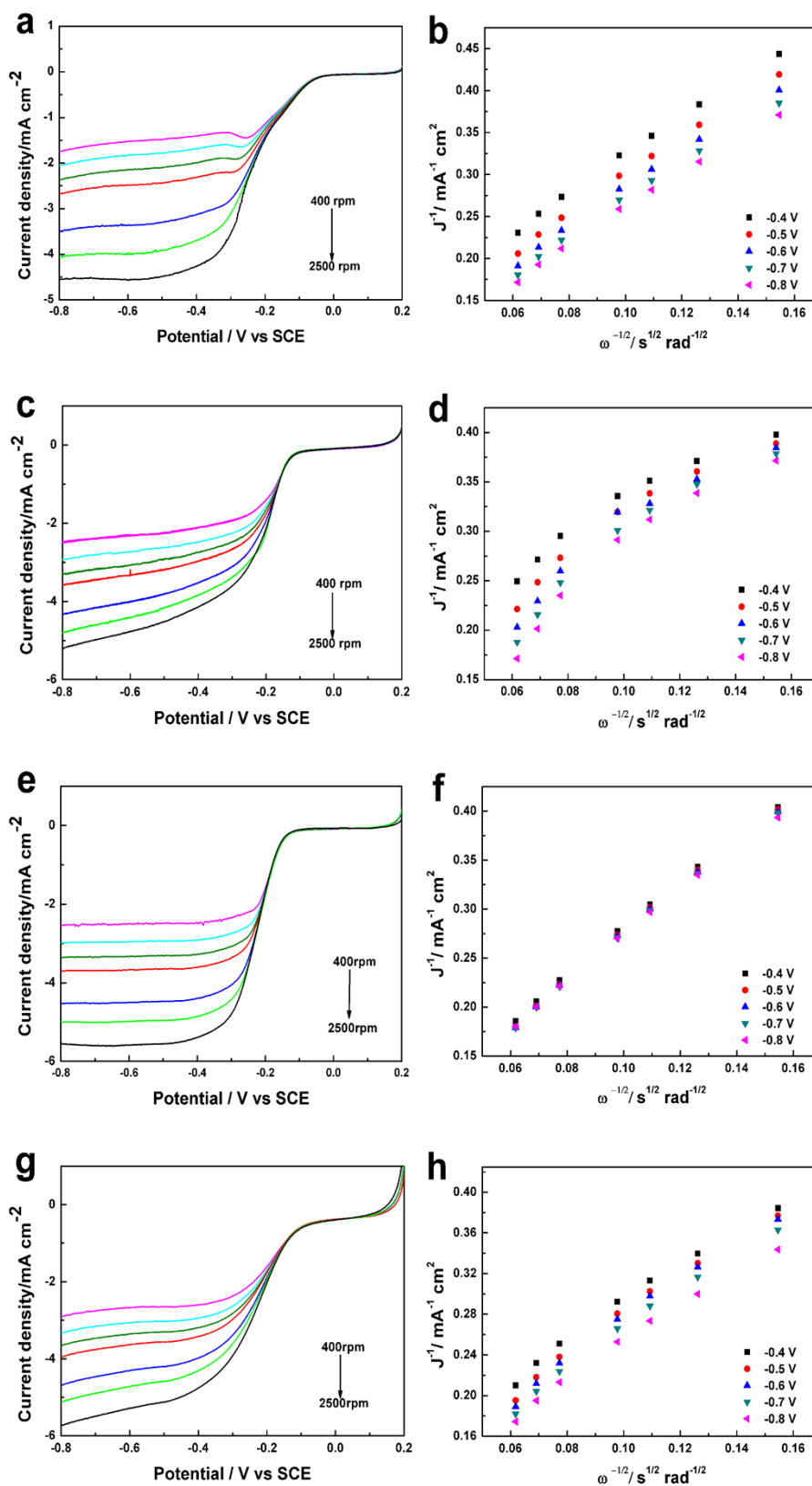


Fig. S1 LSVs for ORR on (a) Co-NG 650, (c) Co-NG 750, (e) Co-NG 950 and (g) NG at different rotation speeds from -0.8 V to +0.2 V vs. SCE in O<sub>2</sub>-saturated 0.1 M KOH at a scan rate of 10 mV s<sup>-1</sup>. The corresponding K-L plots for (b) Co-NG 650, (d) Co-NG 750, (f) Co-NG 950 and (h) NG at different potentials.

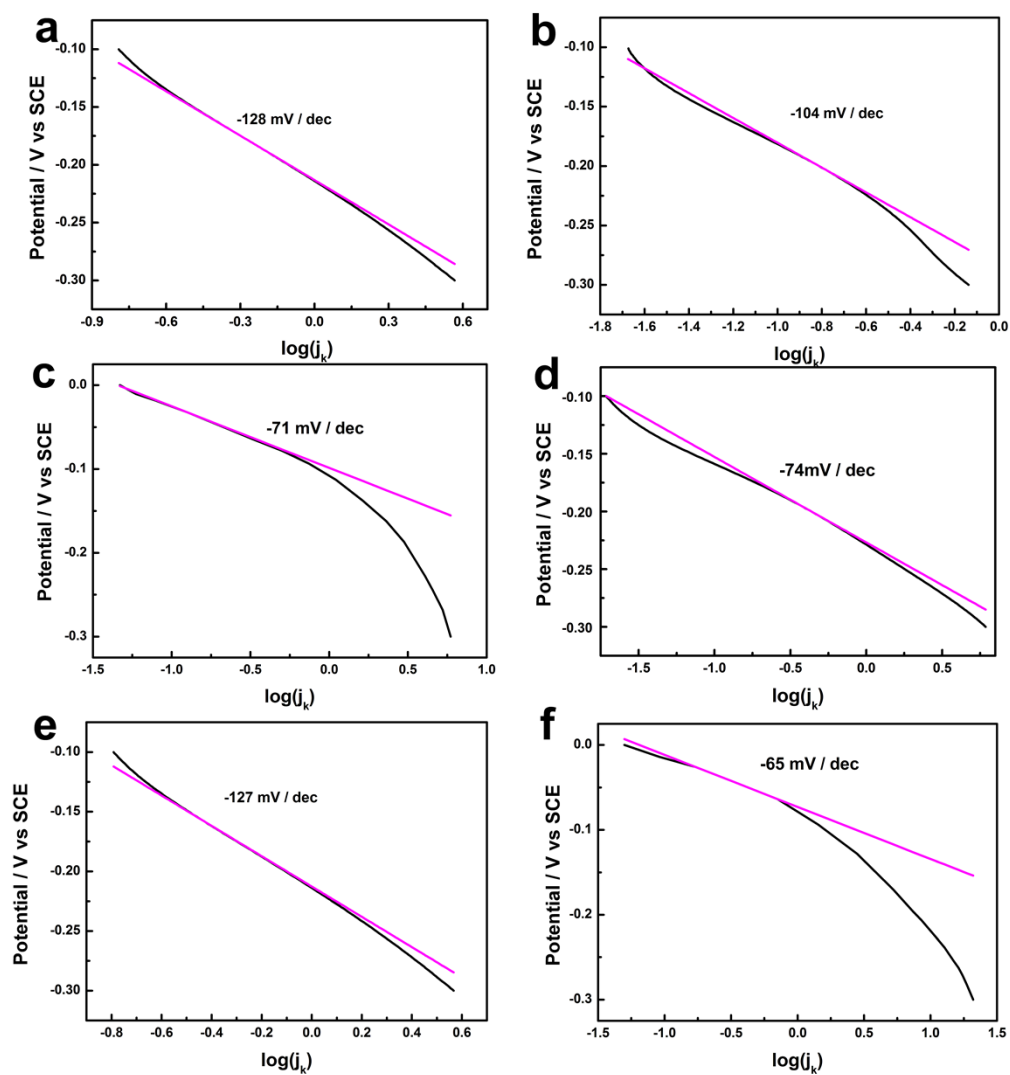


Fig. S2 Tafel plots of Co-NG650, Co-NG750, Co-NG850, Co-NG950, NG and Pt/C derived by the mass-transport correction of corresponding RDE data.