

Supplementary Material

Efficient Co and GO co-doped TiO₂ catalysts for the electrochemical reduction of nitrate to ammonia

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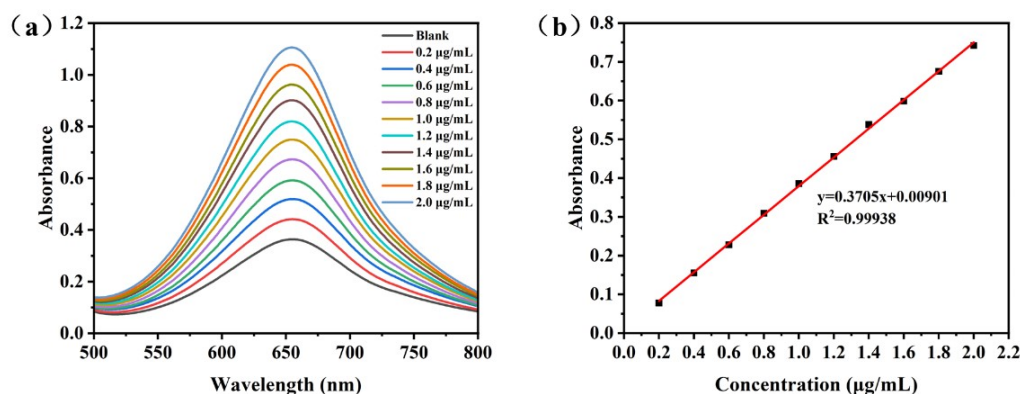


Figure S1. (a) UV-Vis absorption spectra of indophenol assays kept with different concentrations of NH_4^+ after incubation for 1 h at room temperature. (b) Calibration curve used for estimation of NH_4^+ concentration.

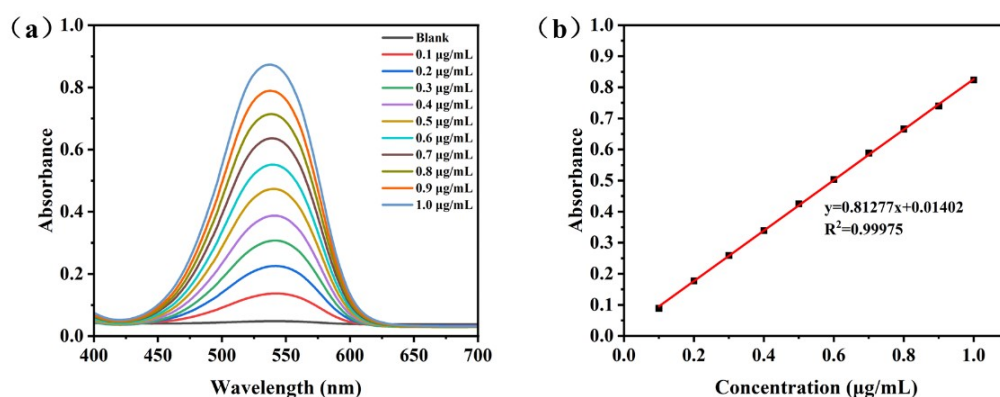


Figure S2. (a) UV-Vis absorption spectra of indophenol assays kept with different concentrations of NO_2^- after incubation for 1 h at room temperature. (b) Calibration curve used for estimation of NO_2^- concentration.

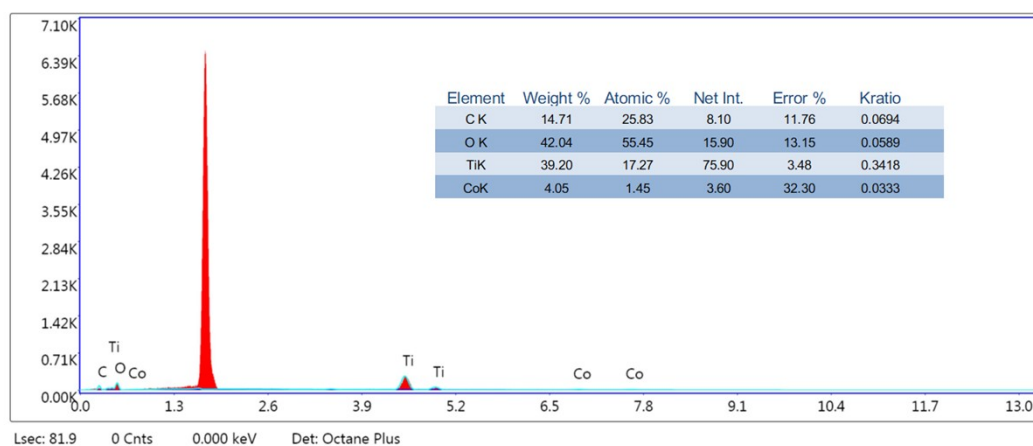


Figure S3. Total EDX spectra and eZAF intelligent quantization results of Co-TiO₂/GO.

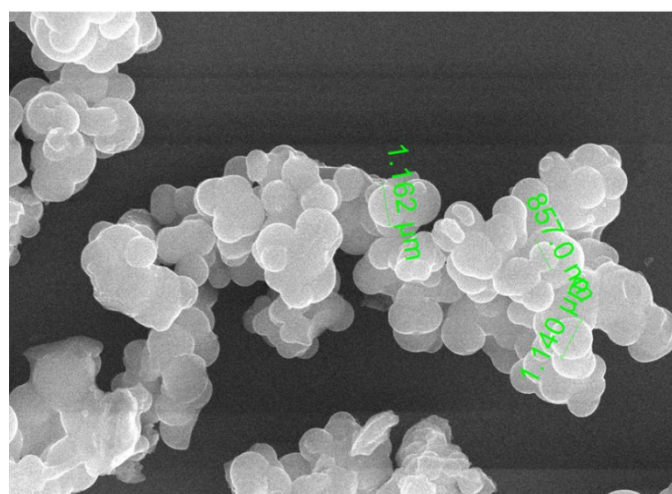


Figure S4. SEM image of TiO₂/GO.

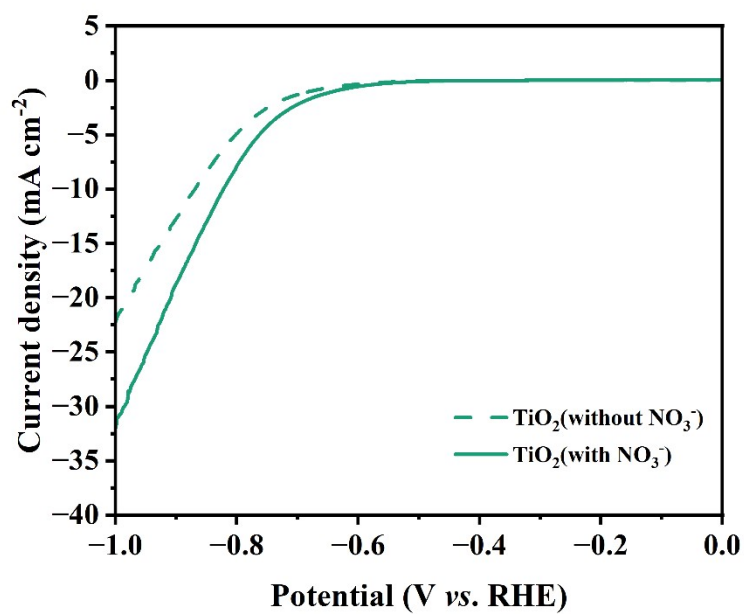


Figure S5. LSV curves of TiO_2 in 0.1 M KOH with and without 0.1 M NO_3^- .

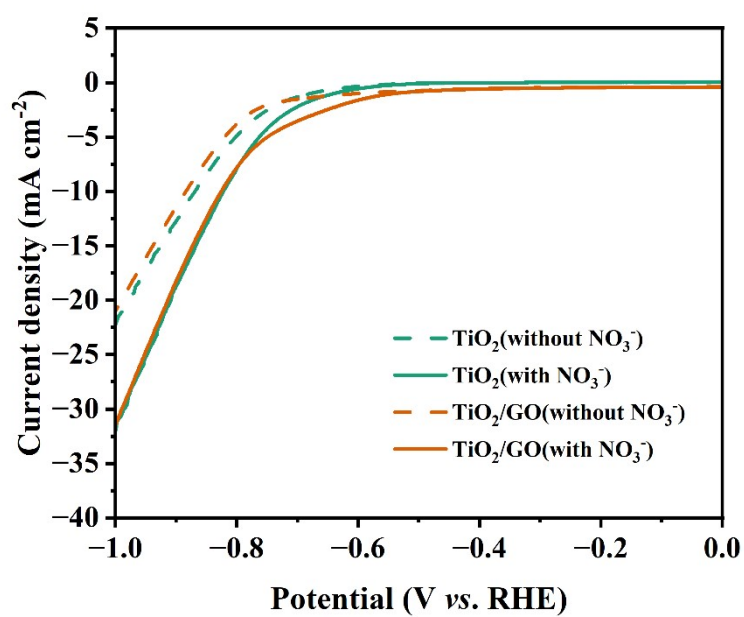


Figure S6. LSV curves of TiO_2 and TiO_2/GO tested in 0.1M KOH electrolyte with or without 0.1M KNO_3 .

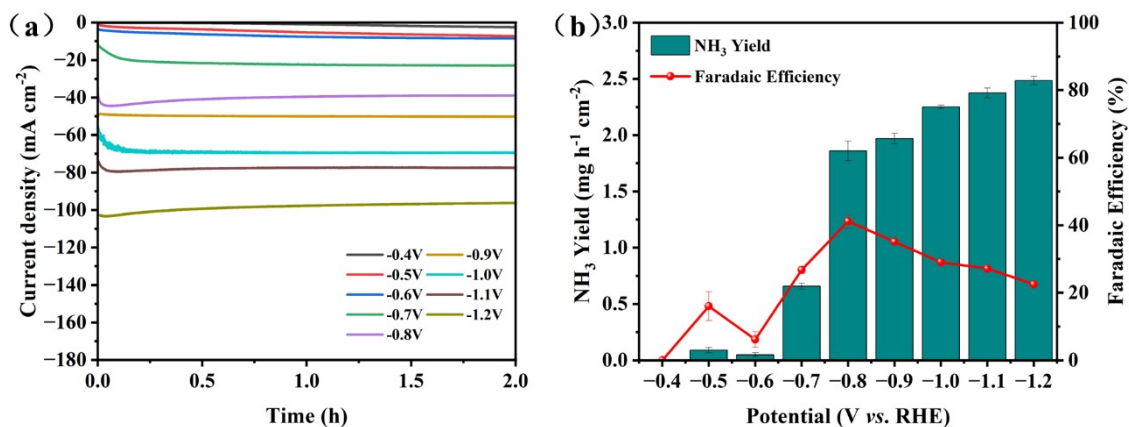


Figure S7. (a) CA curve of Co-TiO₂ at different potentials. (b) NH₃ yield and FEs of Co-TiO₂ at each given potential.

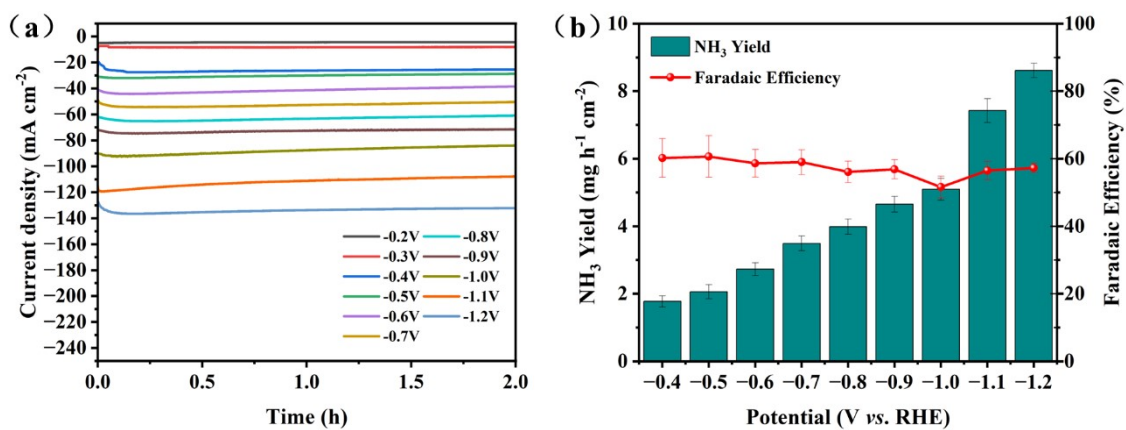


Figure S8. (a) CA curve of Co-TiO₂/GO at different potentials. (b) NH₃ yield and FEs of Co-TiO₂/GO at each given potential.

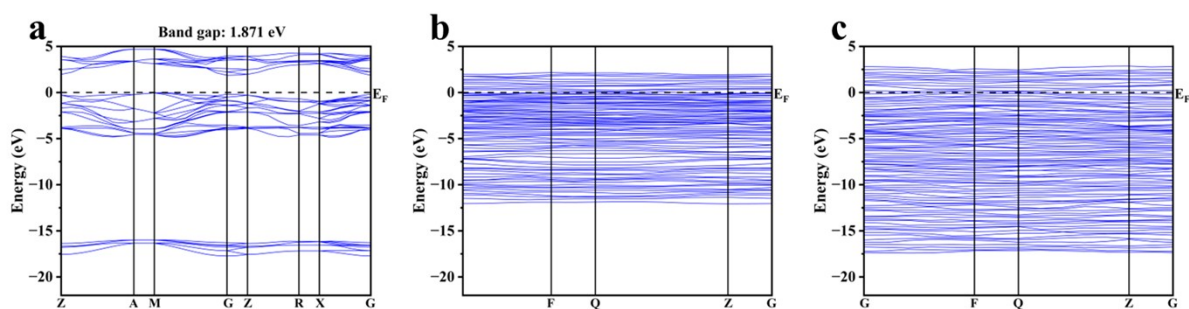


Figure S9. (a) TiO₂ (b) Co-TiO₂ and (c) Co-TiO₂/GO band structure diagram.