

Supplemental Information

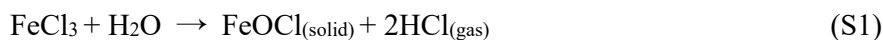
Nitrogen Self-Doped Metal Free Catalysts Derived from Chitin via One Step Method for Efficient Electrocatalytic CO₂ Reduction to CO

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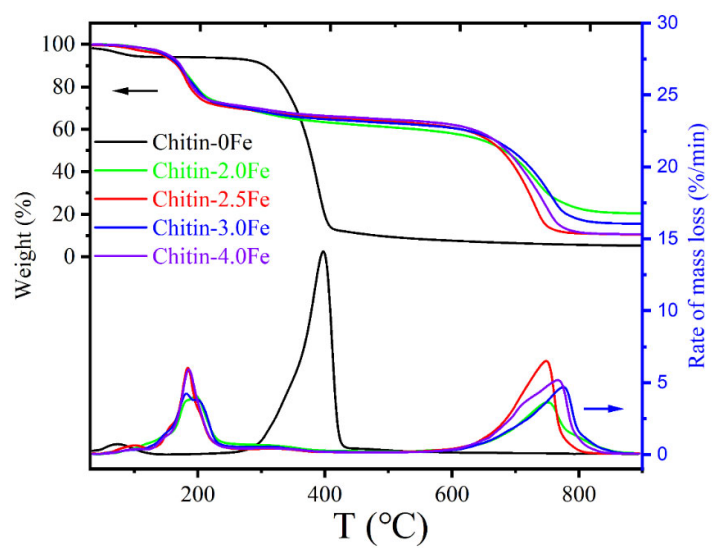


Figure S1. TGA of chitin derived catalysts prepared at different ratios of Chitin to FeCl_3

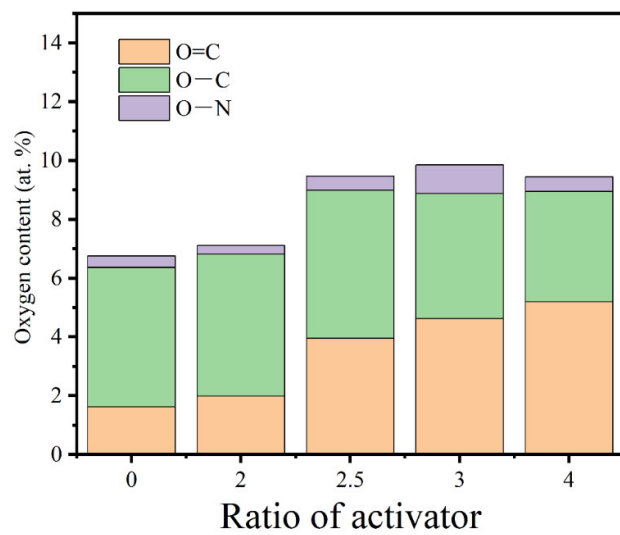
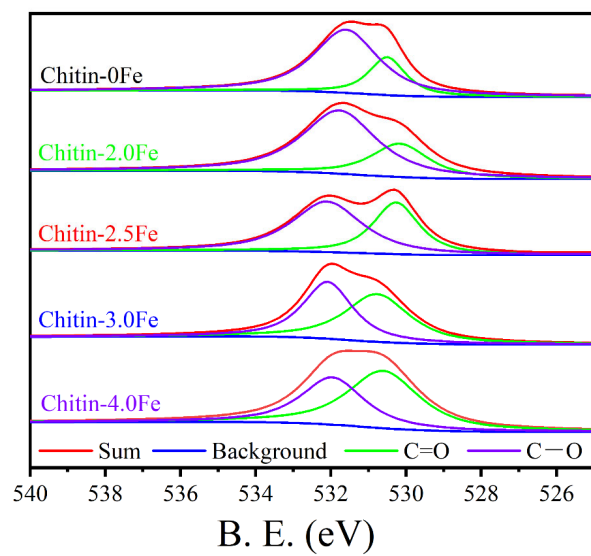


Figure S2. Oxygen content of chitin derived catalysts prepared at different ratios of Chitin to FeCl_3

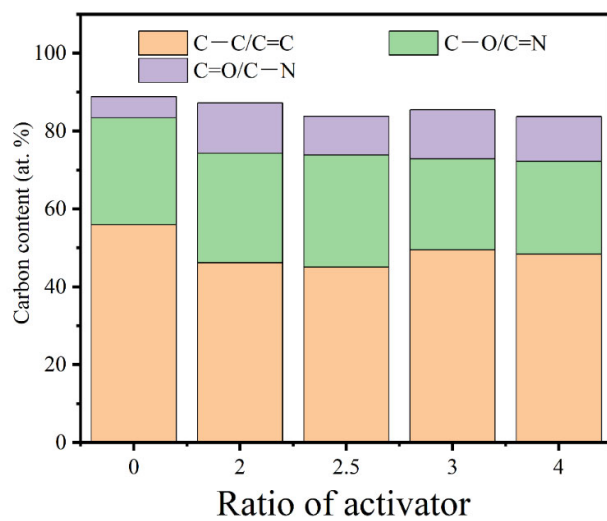
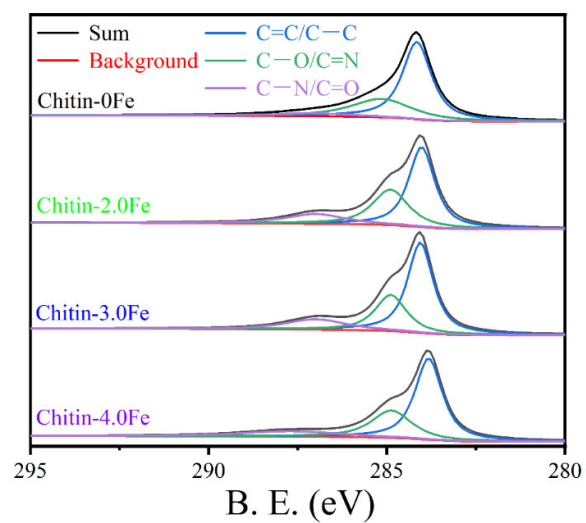


Figure S3. Carbon content of chitin derived catalysts prepared at different ratios of Chitin to FeCl₃

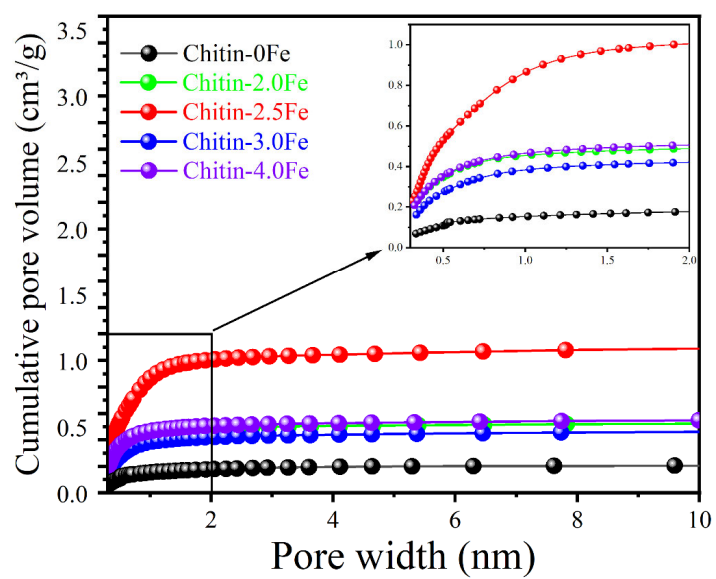


Figure S4. Cumulative pore volume of chitin derived catalysts prepared at different ratios of Chitin to FeCl_3

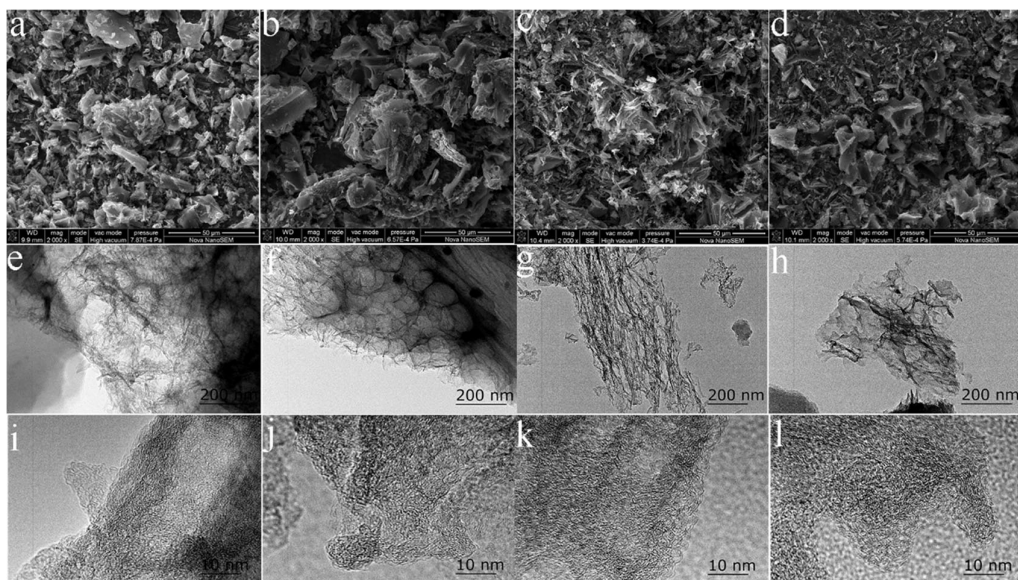


Figure S5. Morphology of chitin derived catalysts prepared at different temperatures of 700-1000 °C

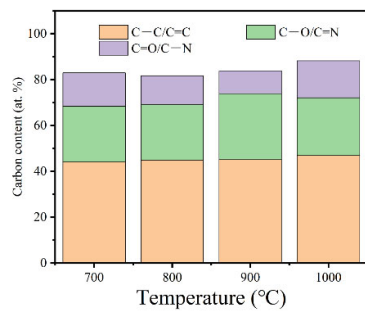
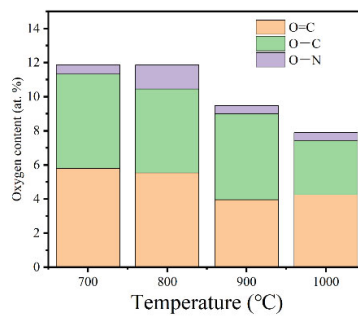
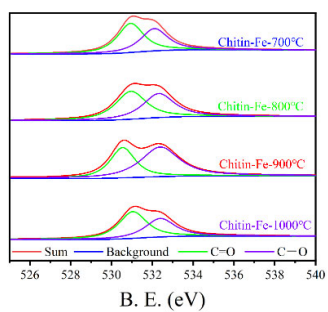
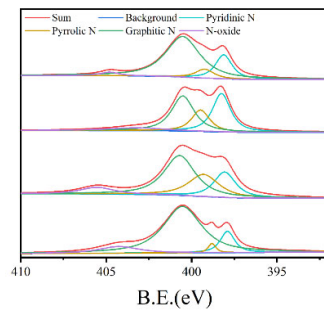
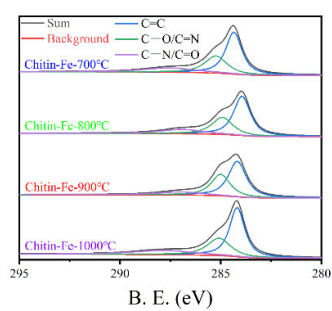


Figure S6. XPS analysis of chitin derived catalysts prepared at different temperatures of 700-1000 °C

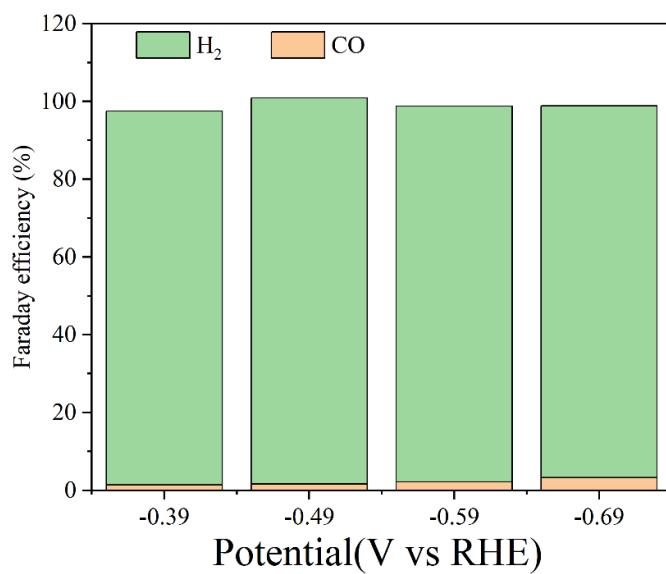
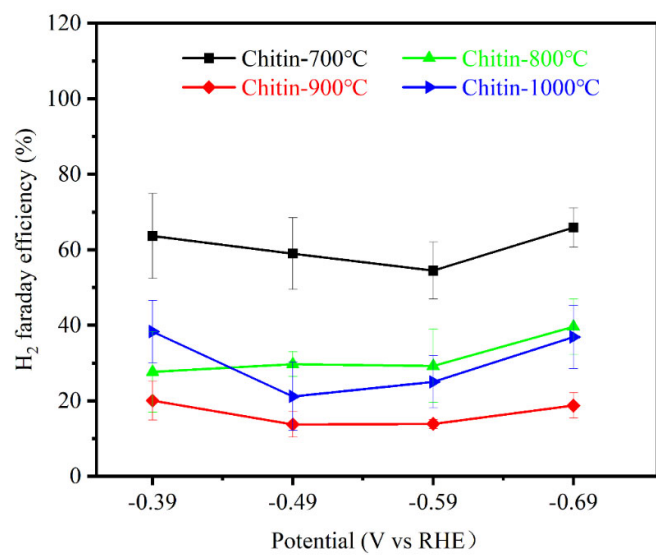


Figure S7. FE of catalysts. top: FE_{H₂} of chitin derived catalysts prepared at different temperatures of 700-1000 °C. bottom: FE_{CO} and FE_{H₂} of a carbon plate without coating

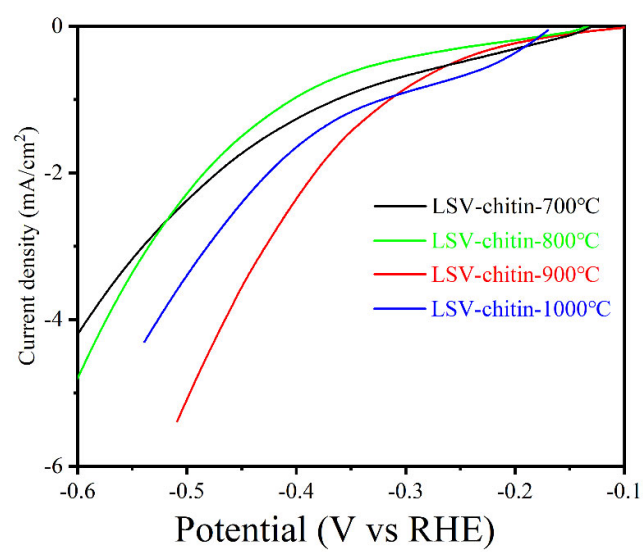


Figure S8. LSV of chitin derived catalysts prepared at different temperatures of 700-1000 °C

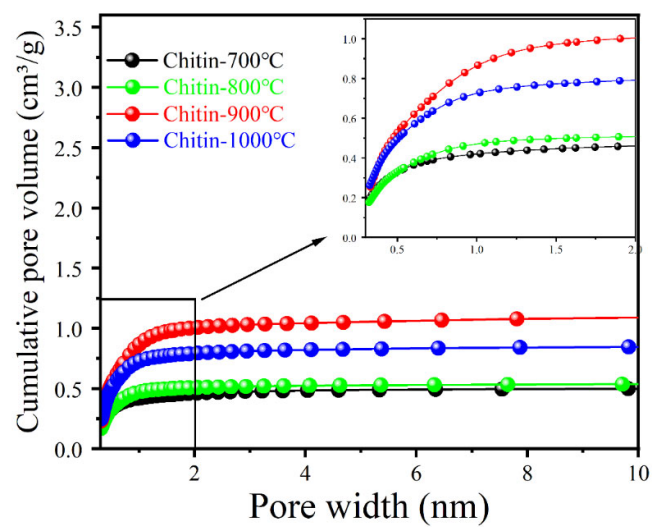
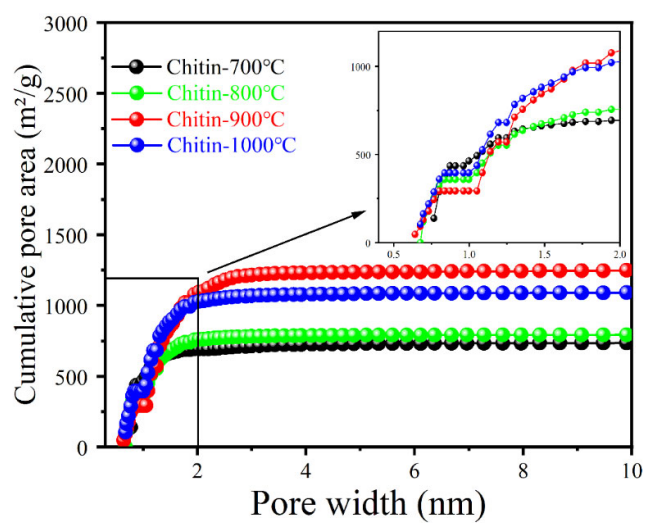


Figure S9. BET analysis of incremental pore volume and surface area for N₂ adsorption at 273 K