
Supplementary Information (SI)

Preparation of palladium-based catalyst by plasma-assisted atomic layer deposition and its applications in CO₂ hydrogenation reduction

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1. Preparation process parameters of Pd/Al₂O₃ catalyst:

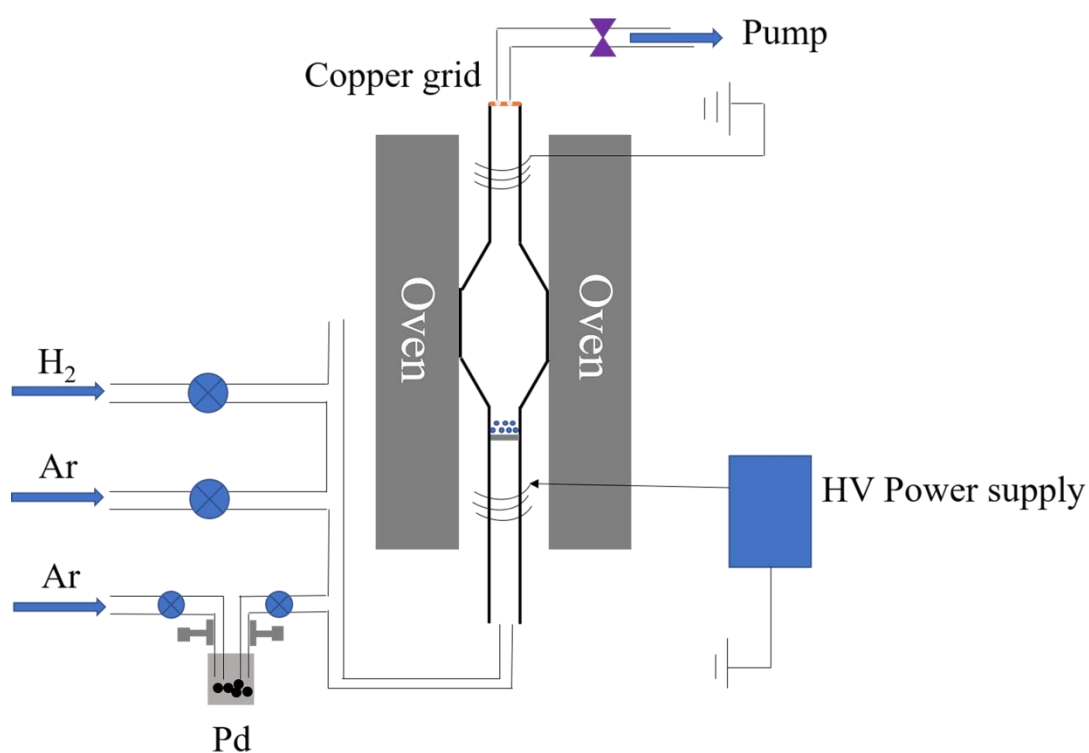


Figure S1. Schematic of the experimental set-up

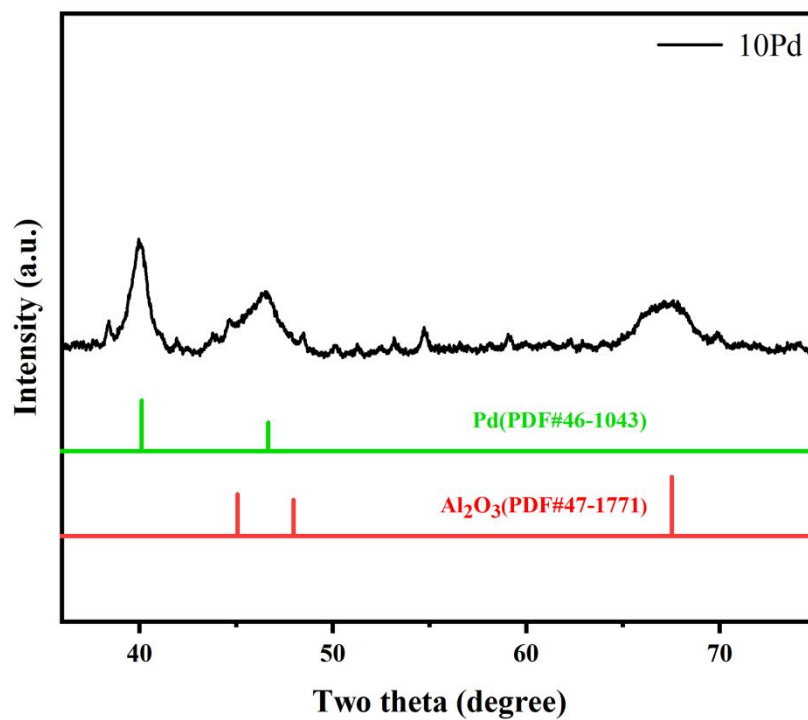


Fig. S2 XRD patterns of 10Pd/Al₂O₃

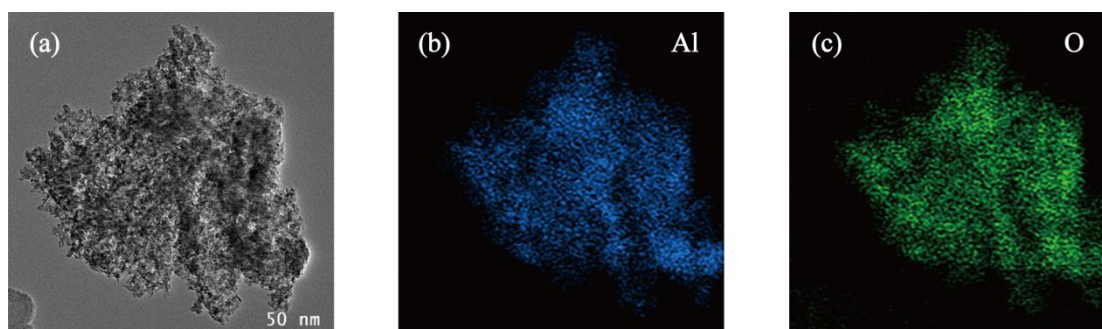


Fig. S3 (a) TEM image of γ -Al₂O₃; (b) Distribution of Al element in EDS image of γ -Al₂O₃; (c) Distribution of O element in EDS image of γ -Al₂O₃

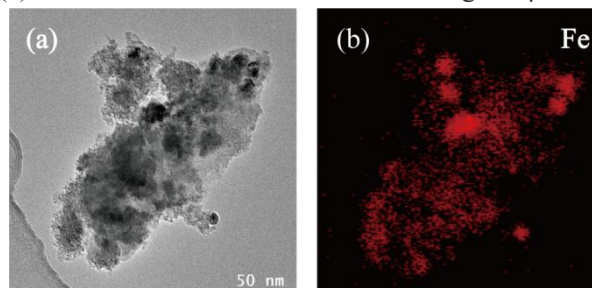


Fig. S4 (a) TEM image of 10Fe₂O₃/Al₂O₃; (b) Distribution of Fe element in EDS image of 10Fe₂O₃/Al₂O₃