

SUPPLEMENTARY FIGURES

Cryogels from Pt/ γ -Fe₂O₃ and Pd/ γ -Fe₂O₃ NPs as Promising Electrocatalysts for Ethanol Oxidation Reaction

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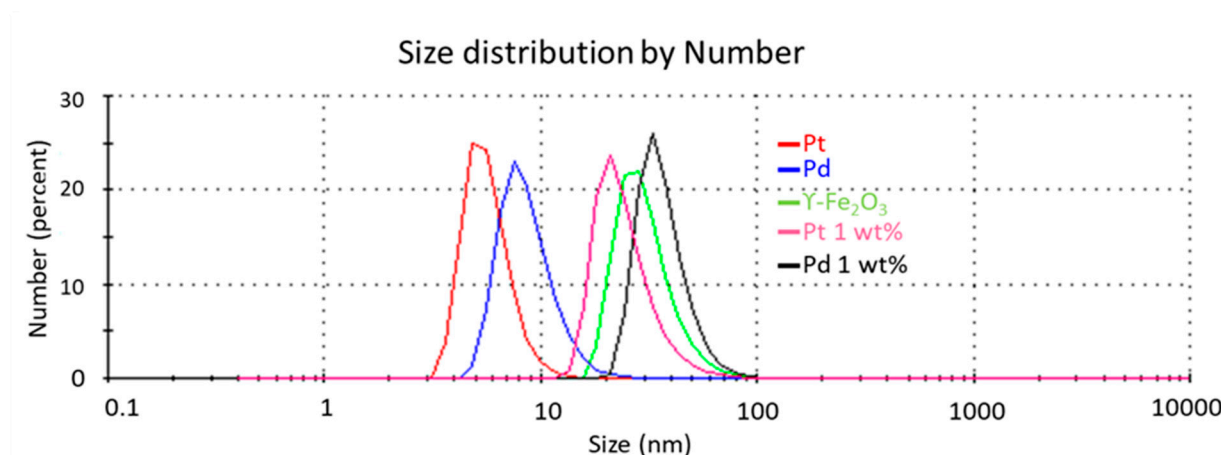


Figure S1. DLS measurement (number distribution) of the Pt, Pd and γ -Fe₂O₃ NPs and mixed colloids (1 wt% Pt/ γ -Fe₂O₃ and 1 wt% Pd/ γ -Fe₂O₃ NPs).

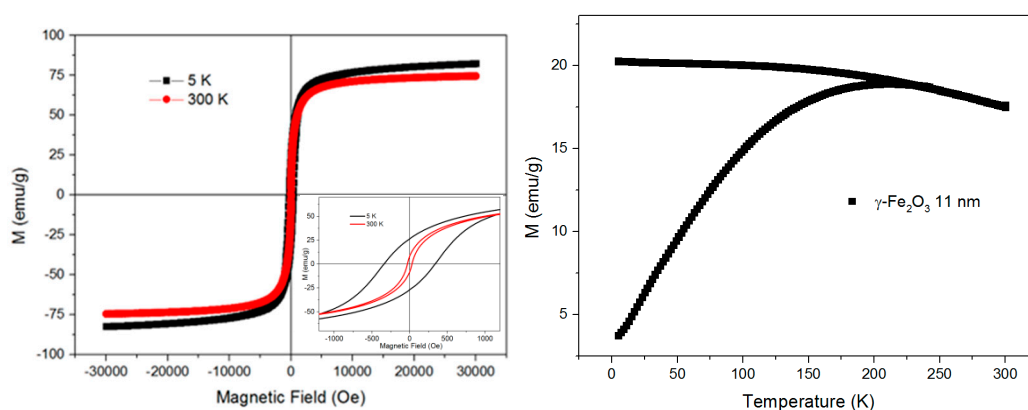


Figure S2. Hysteresis cycles at 5 and 300 K (A) and ZFC-FC measured at 100 Oe for the 11 nm γ -Fe₂O₃ NPs (B).

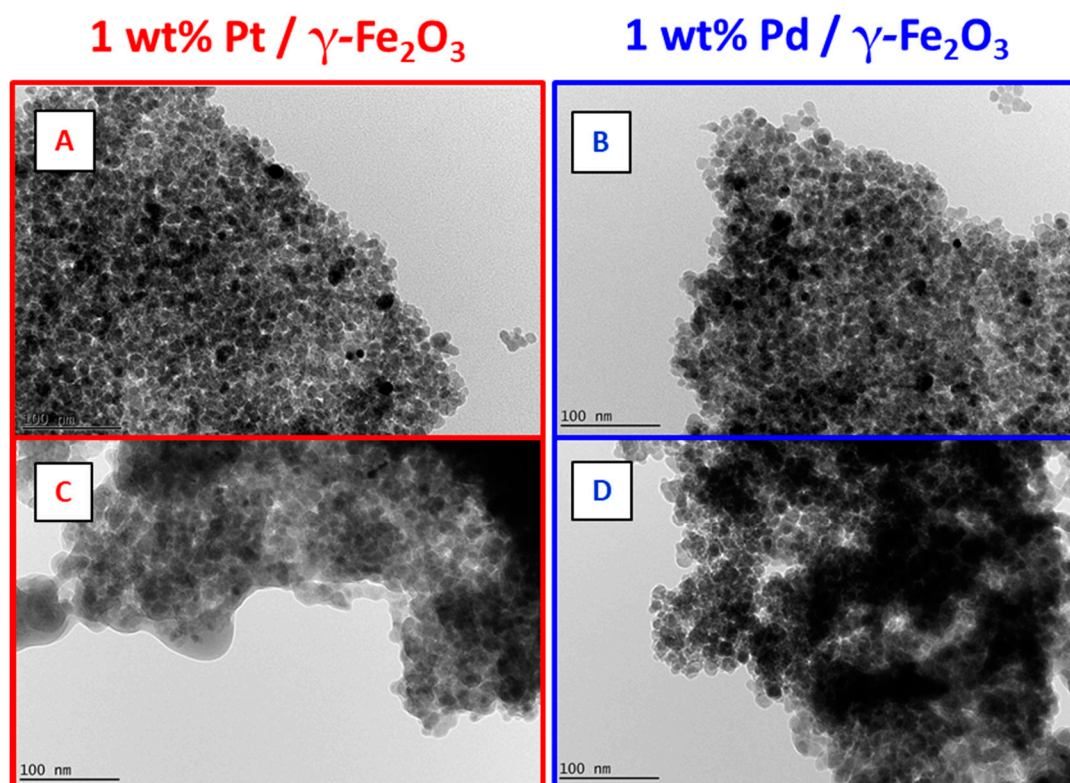


Figure S3. TEM images of (A) cryoaerogel of 1 wt% Pt/ γ -Fe₂O₃ before CV measurements, (B) cryoaerogel of 1 wt% Pd/ γ -Fe₂O₃ before CV measurements, (C) ambient condition dried cryohydrogels of 1 wt% Pt/ γ -Fe₂O₃ after CV measurements and (D) ambient condition dried cryohydrogels of 1 wt% Pd/ γ -Fe₂O₃ after CV measurements.

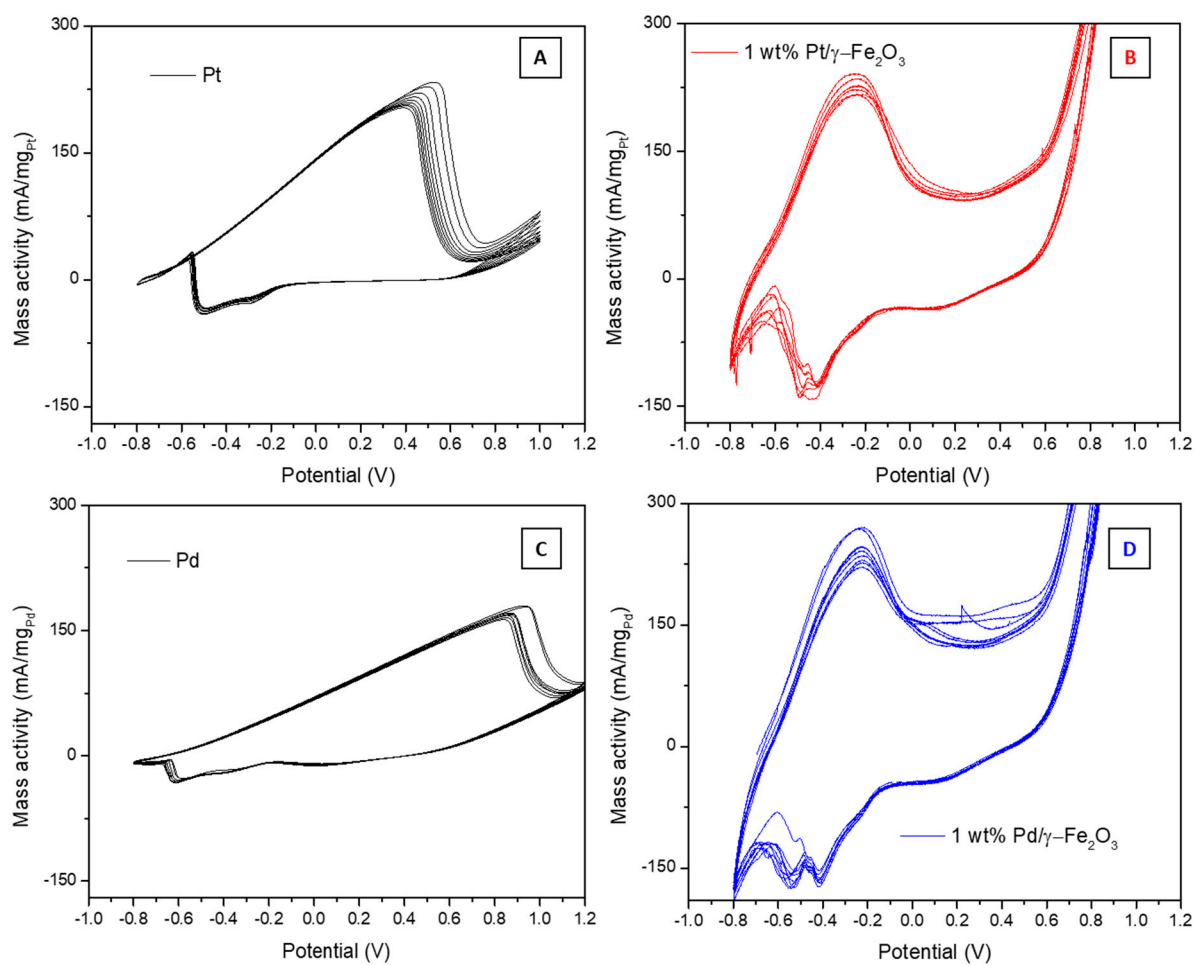


Figure S4. Cyclic voltammetry of the cryohydrogel thin films from (A) Pt, (B) 1 wt% Pt/ γ -Fe₂O₃ NPs, (C) Pd and (D) 1 wt% Pd/ γ -Fe₂O₃ NPs. All measurements have been done in 0.25 M Ethanol/ 1 M KOH at a scan rate of 50 mV/s.