

Supporting Information

**Polymer-assisted formation of 3D Pd nanoassemblies: highly active catalysts for
formic acid electro-oxidation**

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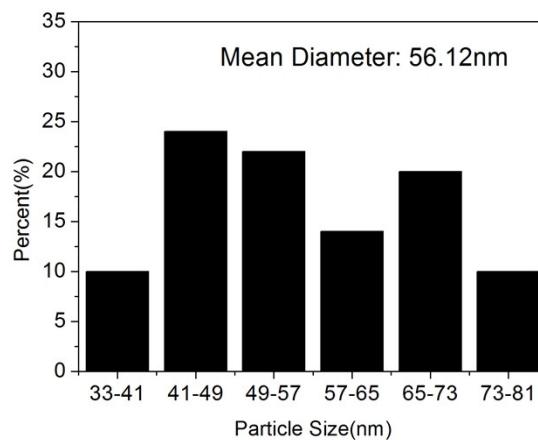


Figure S1 Pd nanoassemblies size distribution histogram

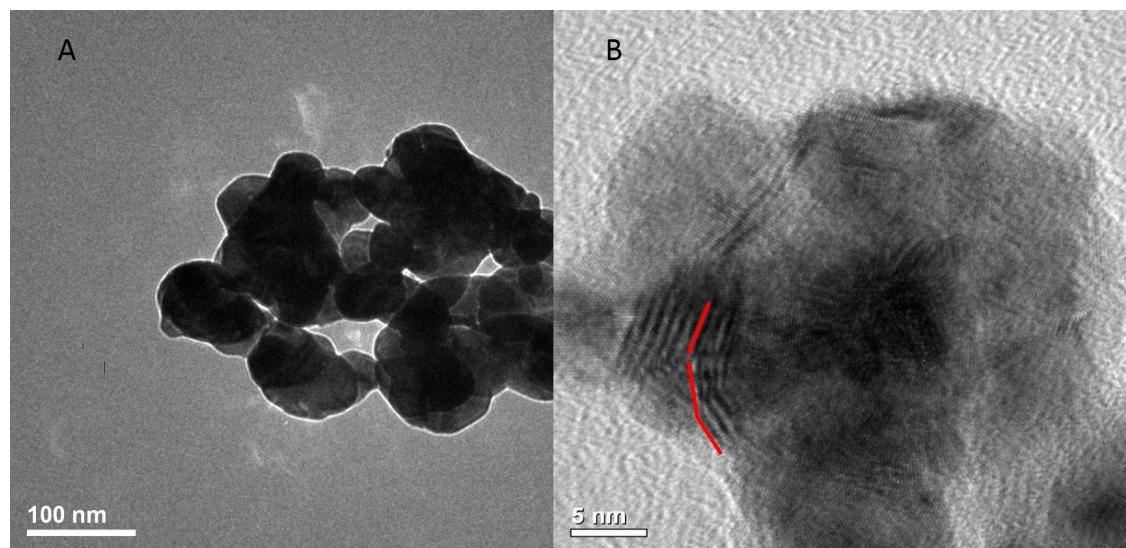


Figure S2 (A) Pd bulk growing without PAH, (B) HRTEM image showing edge and corner atoms



Figure S3 EDX spectrum of Pd nanoassemblies

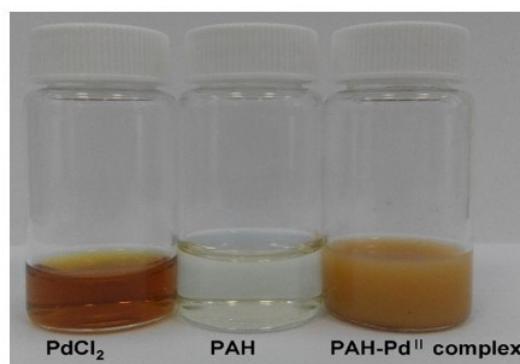
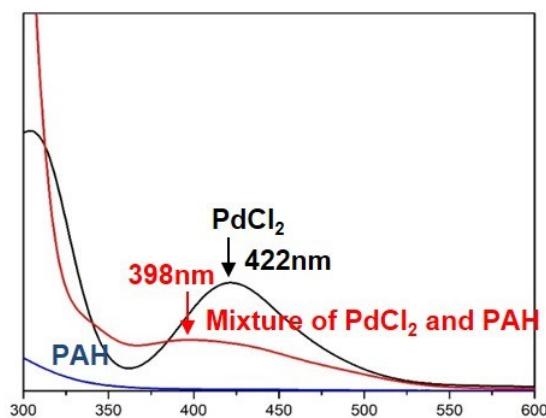


Figure S4 UV-Vis spectrum of solution of PdCl_2 , PAH, PAH- Pd^{II} complex.

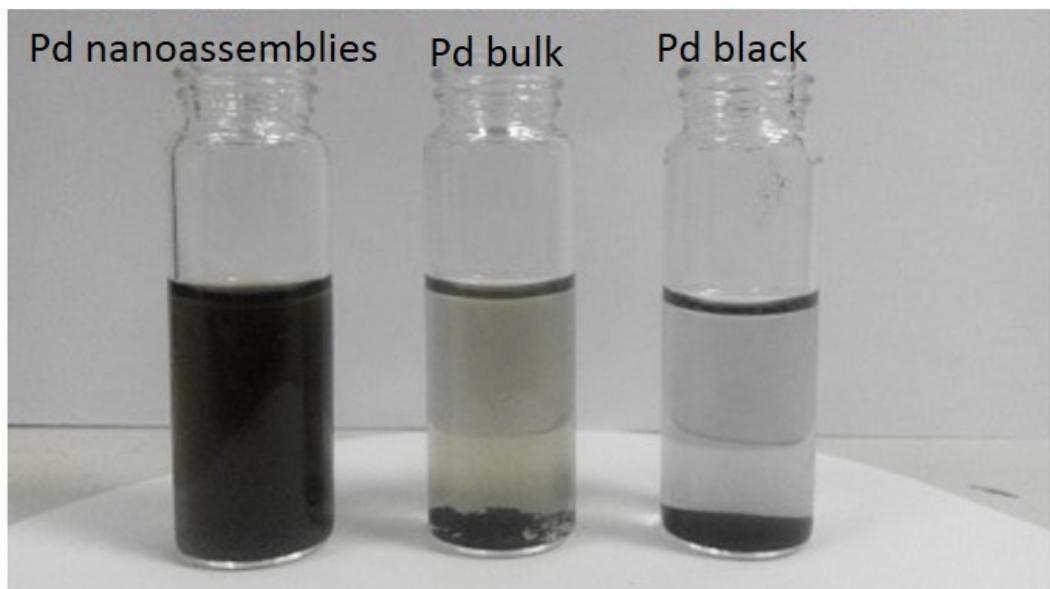


Figure S5 Comparison of dispersity of the three samples: Pd nanoassemblies, Pd bulk, Pd black

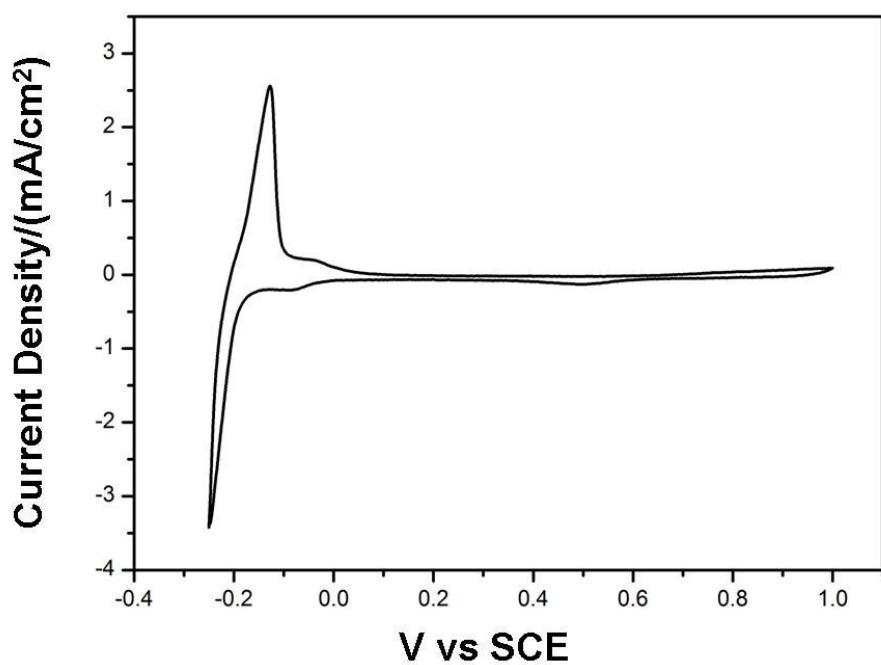


Figure S6 Cyclic voltammogram of Pd nanoassemblies electrocatalysts coated on a 3 mm diameter glassy carbon electrode in 0.5 M H₂SO₄ using a Saturated Calomel Electrode as reference electrode and Pt foil as a counter electrode at a scan rate of 50 mV/s

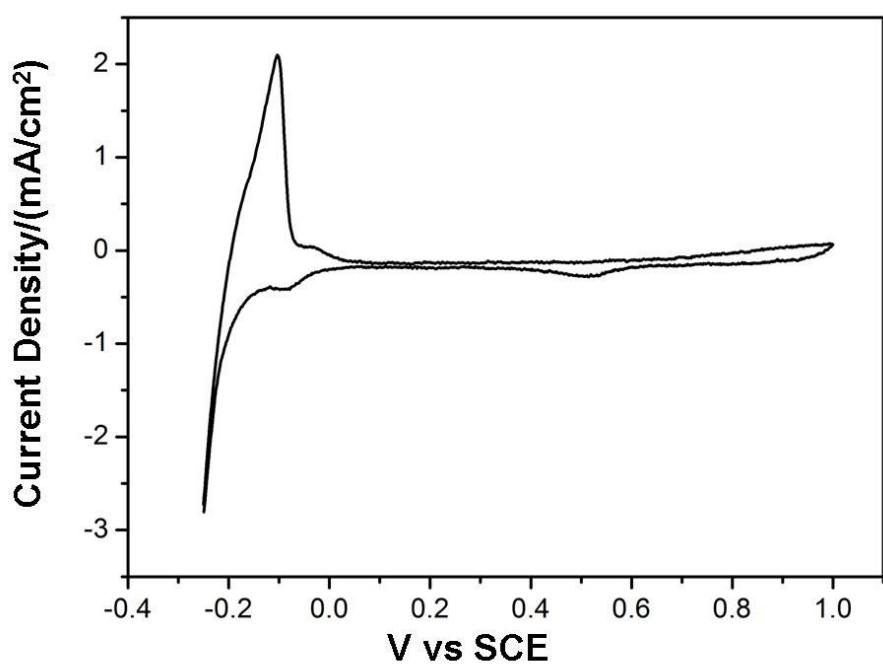


Figure S7 Cyclic voltammogram of Pd bulk electrocatalysts coated on a 3 mm diameter glassy carbon electrode in 0.5 M H₂SO₄ using a Saturated Calomel Electrode as reference electrode and Pt foil as a counter electrode at a scan rate of 50 mV/s

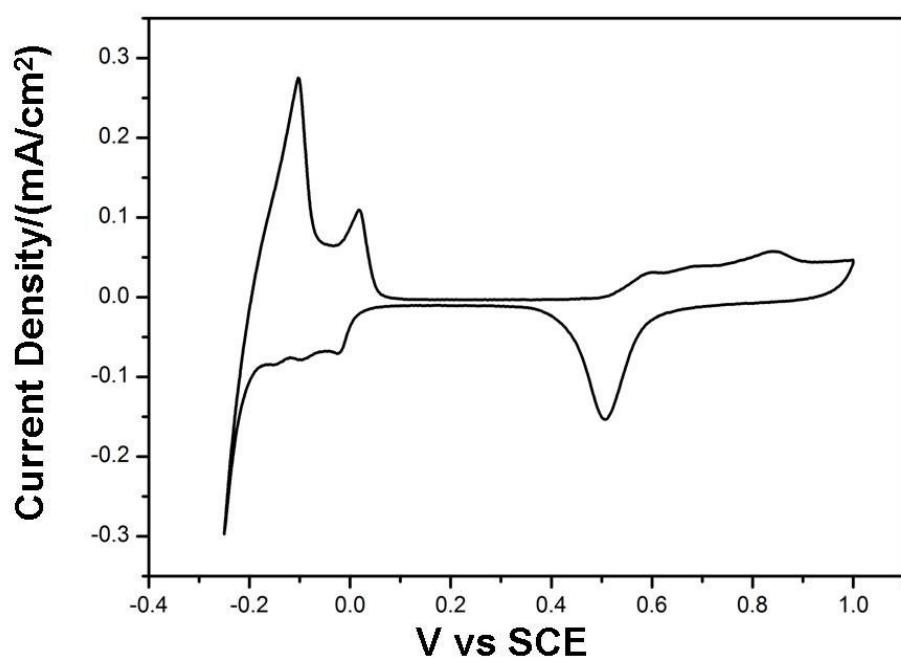


Figure S8 Cyclic voltammogram of Pd black electrocatalysts coated on a 3 mm diameter glassy carbon electrode in 0.5 M H₂SO₄ using a Saturated Calomel Electrode as reference electrode and Pt foil as a counter electrode at a scan rate of 50 mV/s