

Electronic Supplementary Information

Iridium-Platinum Alloy Nanoparticles: Composition-Dependent Electrocatalytic Activity for Formic Acid Oxidation

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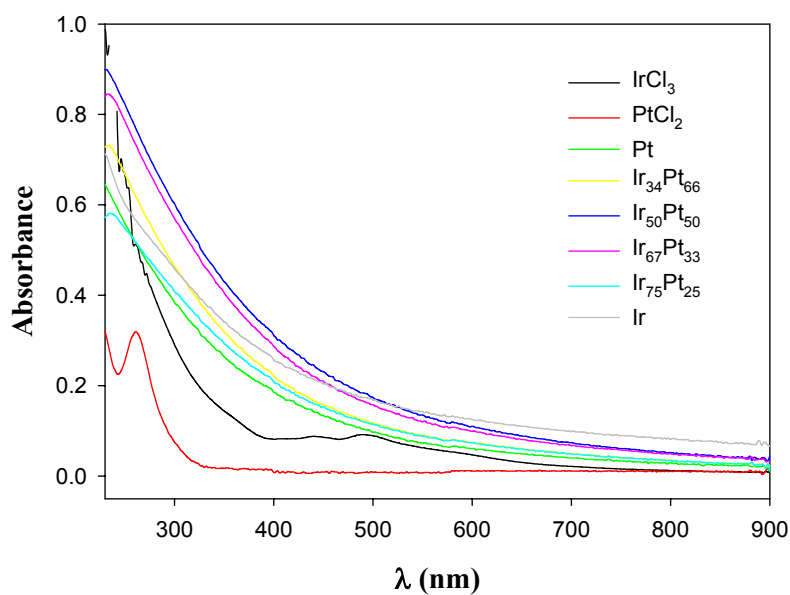


Figure S1. UV-visible spectra of Ir_xPt_{100-x} nanoparticles ($x = 100$ to 0). All the particle concentrations are 0.1 mg/mL in CH₂Cl₂. For the IrCl₃ and PtCl₂ precursors, the concentrations are 1 mM in water.

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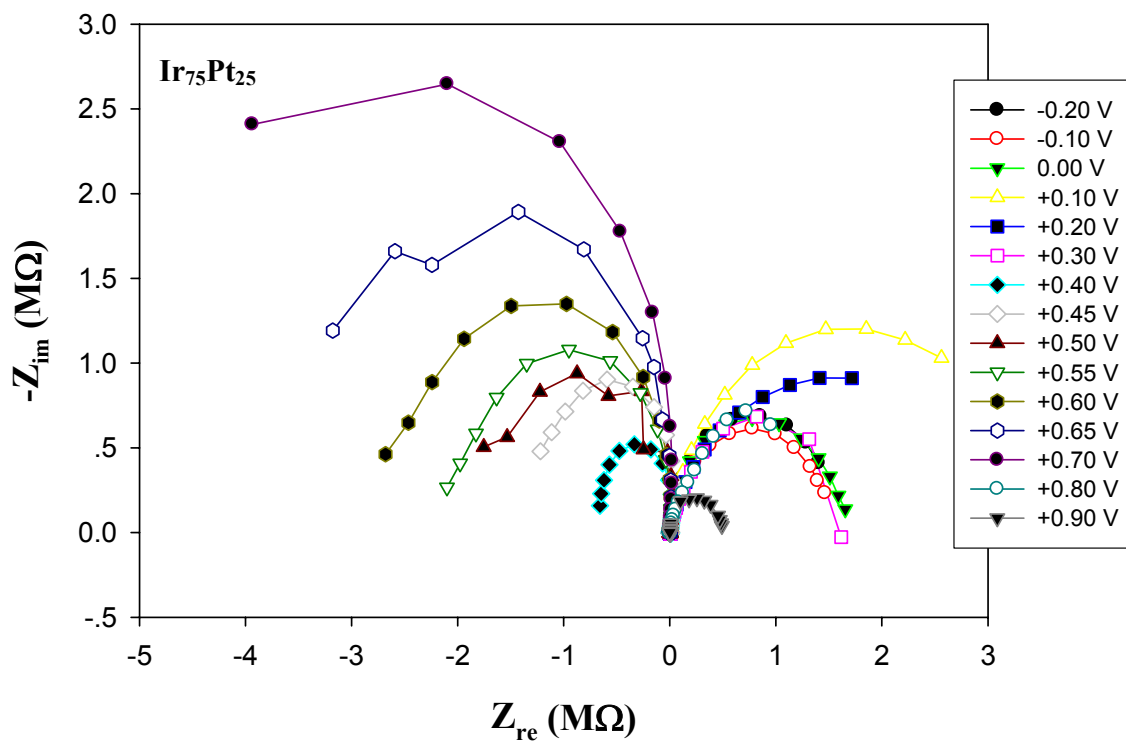


Figure S2. Complex-plane electrochemical impedance plots (Nyquist plots) of the $\text{Ir}_{75}\text{Pt}_{25}/\text{Au}$ electrode in 0.1 M HCOOH + 0.1 M HClO_4 at various electrode potentials.

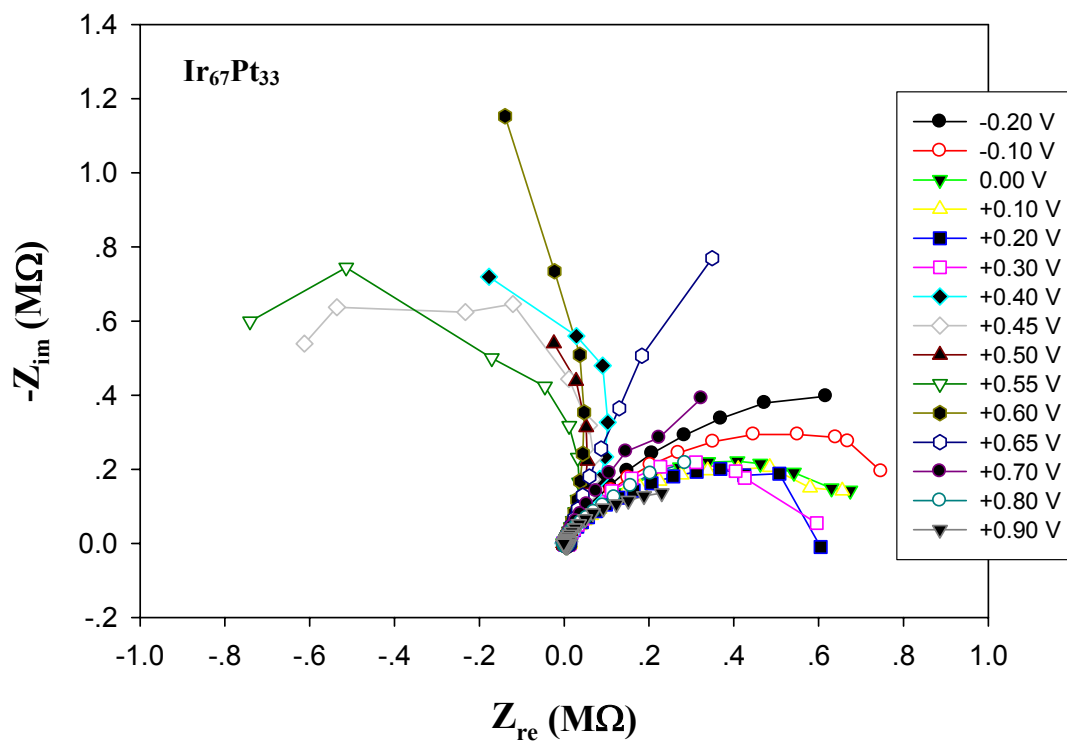


Figure S3. Complex-plane electrochemical impedance plots (Nyquist plots) of the $\text{Ir}_{67}\text{Pt}_{33}/\text{Au}$ electrode in 0.1 M HCOOH + 0.1 M HClO_4 at various electrode potentials.

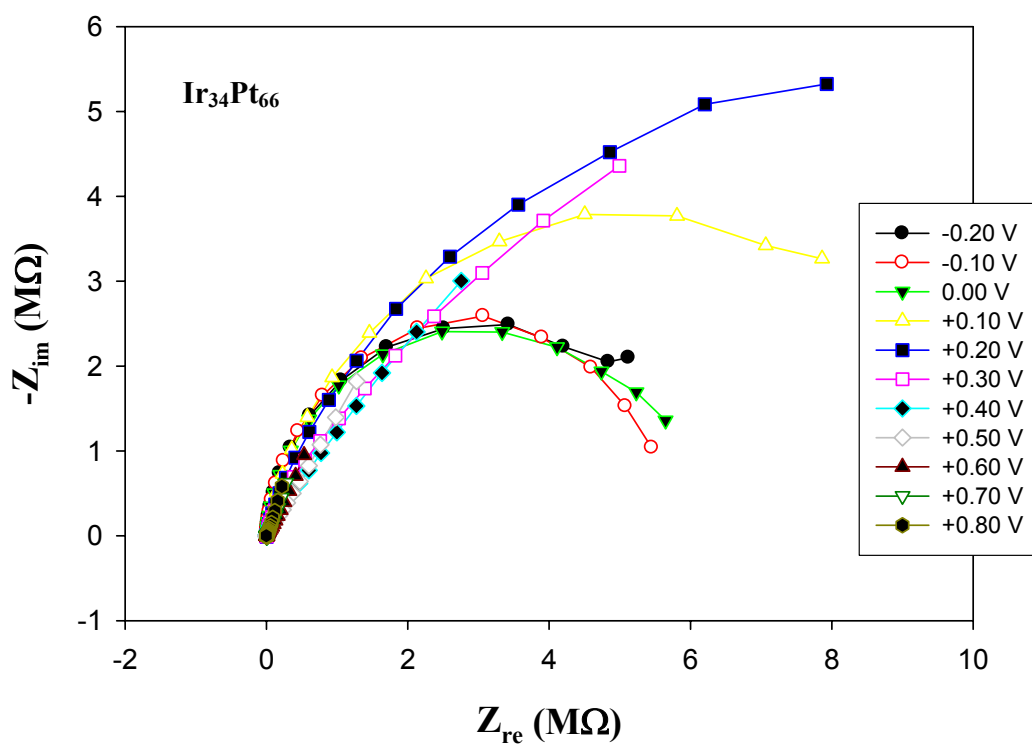


Figure S4. Complex-plane electrochemical impedance plots (Nyquist plots) of the $\text{Ir}_{34}\text{Pt}_{66}/\text{Au}$ electrode in 0.1 M HCOOH + 0.1 M HClO_4 at various electrode potentials.