

SUPPLEMENTARY MATERIAL TO  
**Facile solvothermal synthesis of Pt–Cu nanocatalyst with improved electrocatalytic activity toward methanol oxidation**

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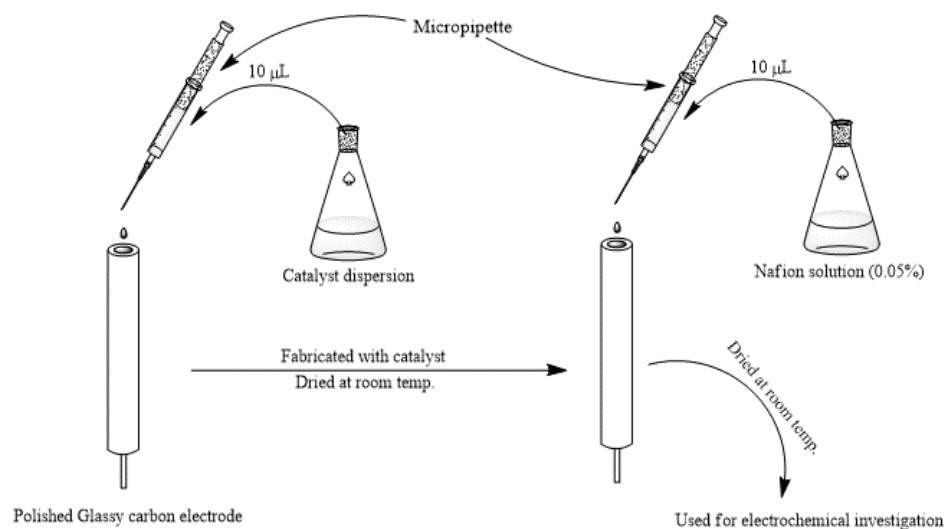


Fig. S-1. Schematic diagram showing fabrication of GCE by drop cast method.

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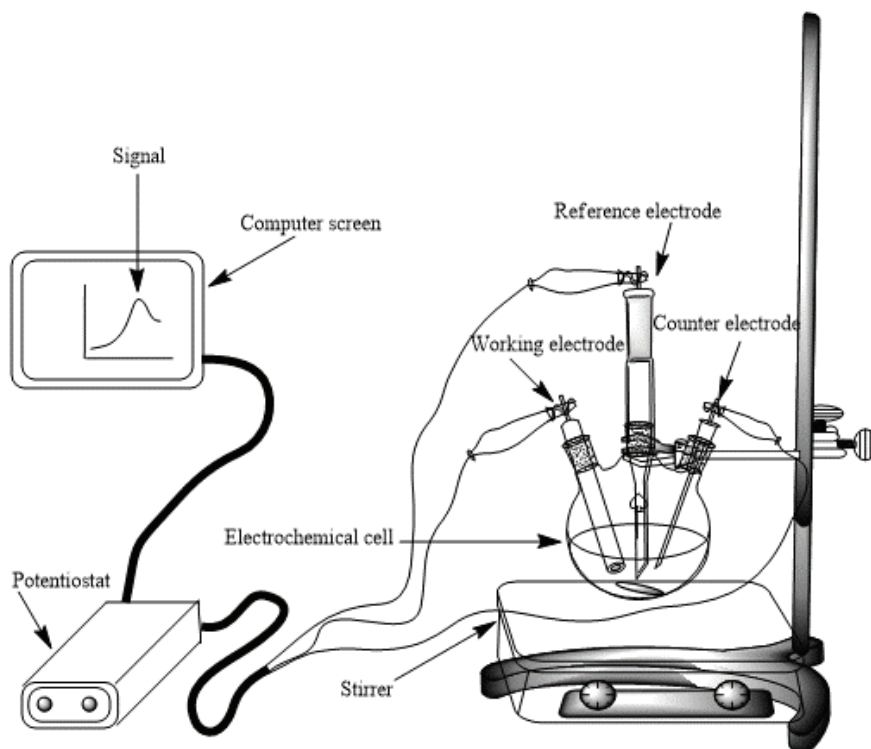


Fig. S-2. Experimental setup for electrochemical investigations.

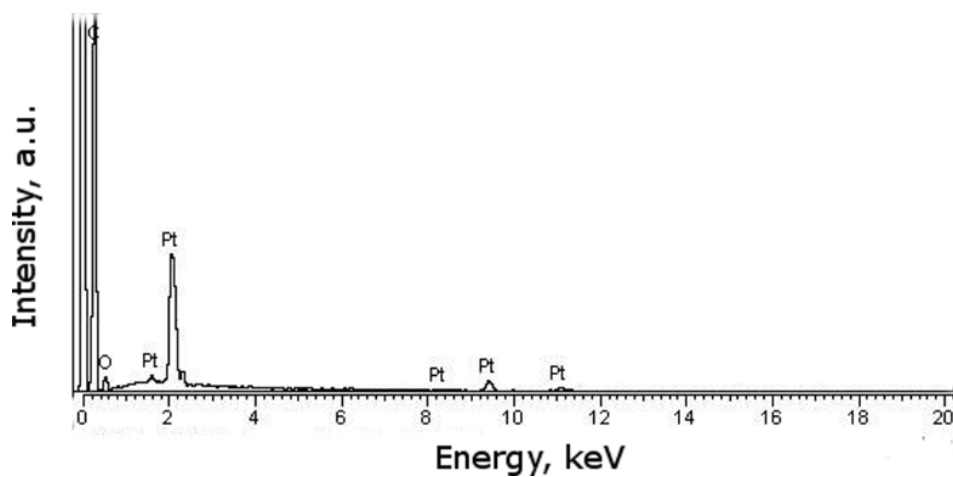


Fig. S-3. EDS spectrum of the commercial Pt/C (ETEK) catalyst.

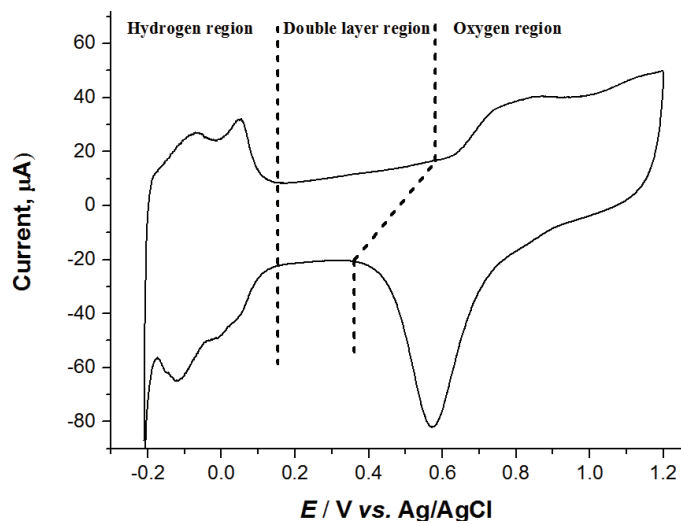


Fig. S-4. Cyclic voltammogram of platinum-based electrode showing different regions.

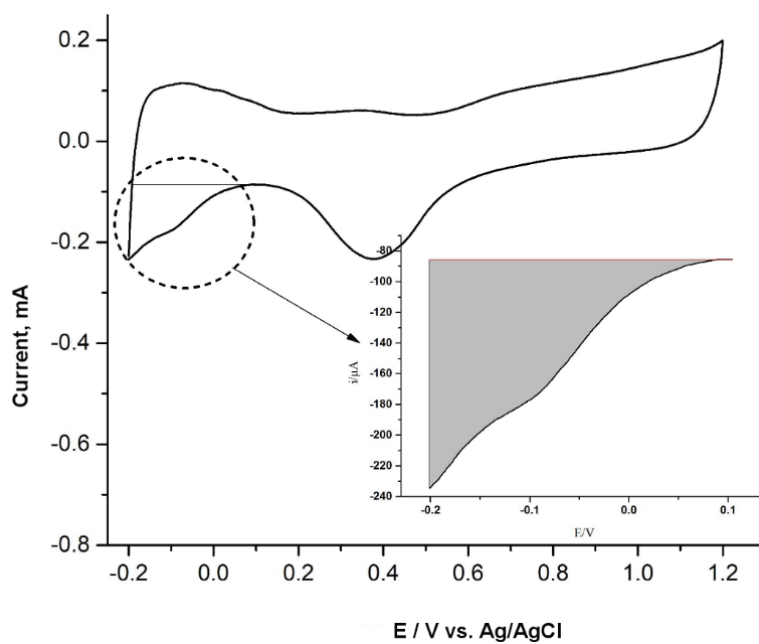


Fig. S-5. CV scan considered for the ECSA determination of Pt nanoparticles. Inset shows integrated area for hydrogen adsorption charge.

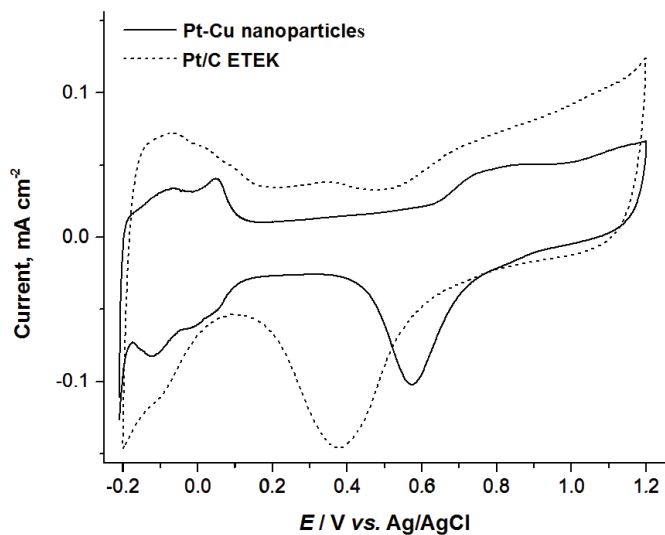


Fig. S-6. Comparison of cyclic voltammograms of Pt–Cu catalyst VS Pt/C (E-TEK) catalyst. CV scans taken in 0.5 M  $H_2SO_4$  at  $50\ mV\ s^{-1}$ .

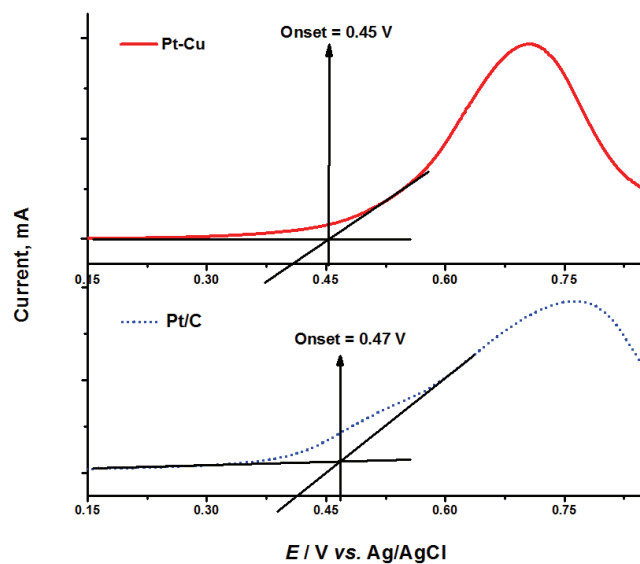


Fig. S-7. Forward scans of cyclic voltammograms showing onset potentials of Pt–Cu and Pt/C catalysts.