Ionic Liquid-Polypyrrole-Gold Composites as Enhanced Enzyme Immobilization Platforms for Hydrogen Peroxide Sensing

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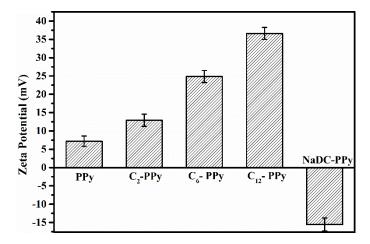


Figure S1. Zeta potential of different samples prepared in water, [C₂min]Br (1 M), [C₆min]Br (1 M), [C₁min]Br (1 M), NaDC (0.5 M) solutions respectively.

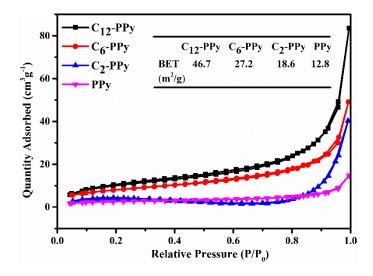


Figure S2. Nitrogen adsorption-desorption isotherms and BET surface area (inset) of C₁₂-PPy, C₆-PPy, C₂-PPy and PPy.

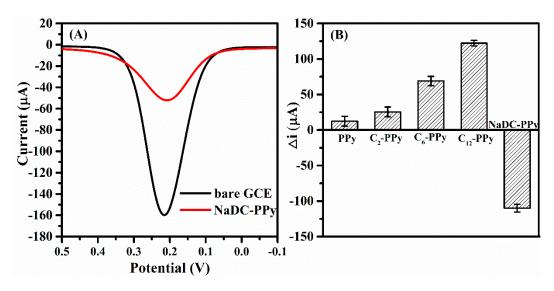


Figure S3. (**A**) DPV response of bare GCE and NaDC-PPy/GCE in 0.01 M PBS containing 5 mM $Fe[(CN)_6]^{3-/4-}$ and 0.1 M KCl (pH 7.0). (**B**) Comparison of current response variation of GCE modified by different material.

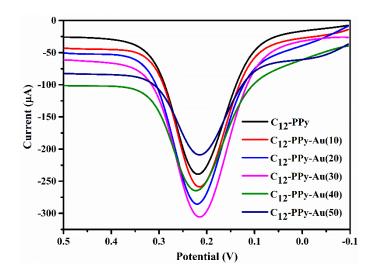


Figure S4. DPV response of C_{12} -PPy-Au/GCE obtained by scanning C_{12} -PPy/GCE for 10, 20, 30, 40, and 50 segments in 1 mM HAuCl₄ solution at a scan rate of 50 mVs⁻¹ respectively.