Polypyrrole/α-Fe_2O_3 Hybrids for enhanced Electrochemical Sensing Performance towards Uric Acid

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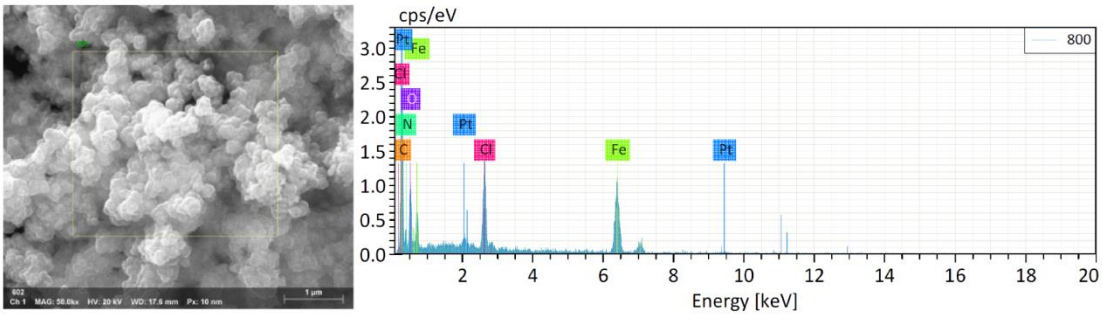

Figure S1. EDS mapping of PPy/α-Fe_2O_3 composite.

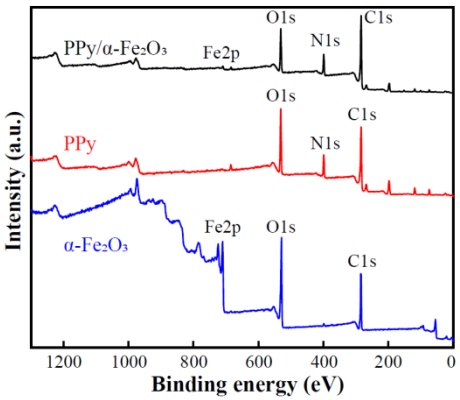

Figure S2. The XPS spectra of α-Fe_2O_3, PPy, and PPy/α-Fe_2O_3 composite.

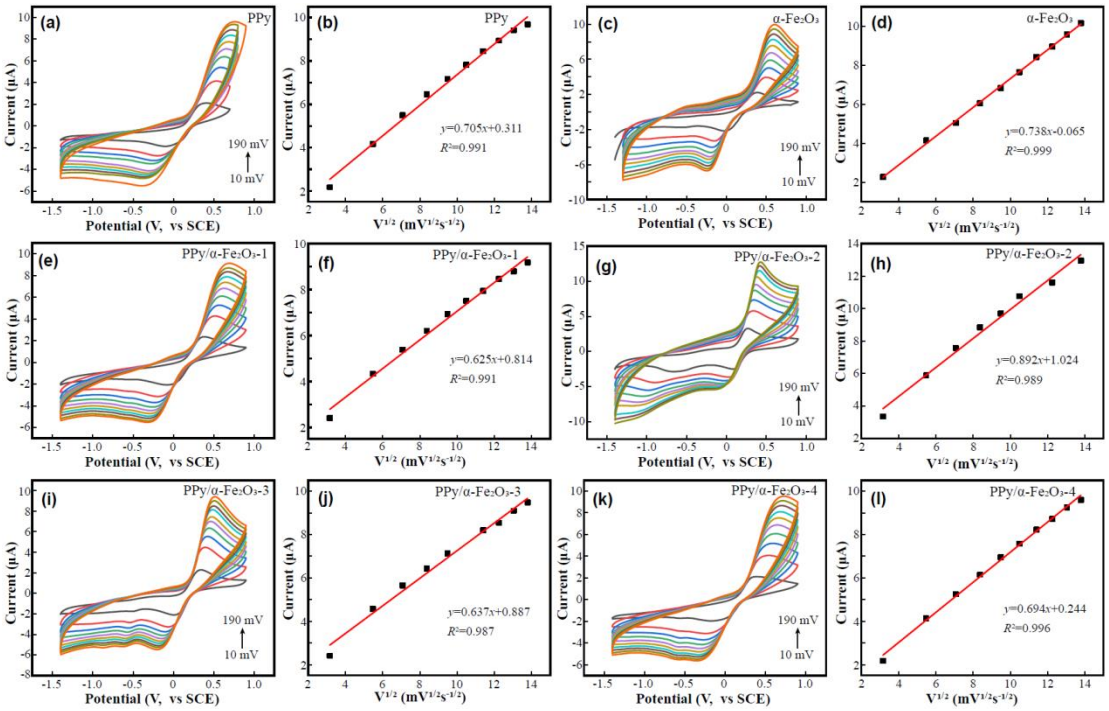

Figure S3. CV curves and the dependence plots of anodic peak current vs square root of scan rate of (a-b) PPy, (c-d) α-Fe_2O_3, (e-f) PPy/α-Fe_2O_3-1, (g-h) PPy/α-Fe_2O_3-2, (i-j) PPy/α-Fe_2O_3-3, and (k-l) PPy/α-Fe_2O_3-4 in 0.1 M KCl solution containing 5 mM $[Fe(CN)_6]^{3-/4-}$.

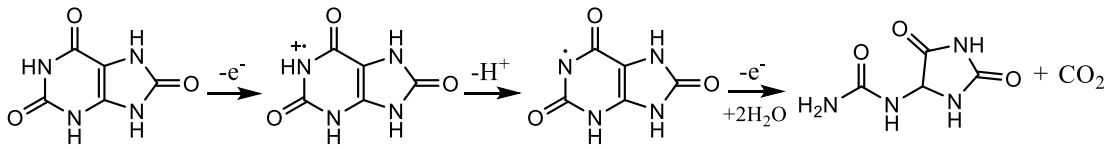

Figure S4. The probable reaction mechanisms of UA on PPy/α-Fe_2O_3 electrode.

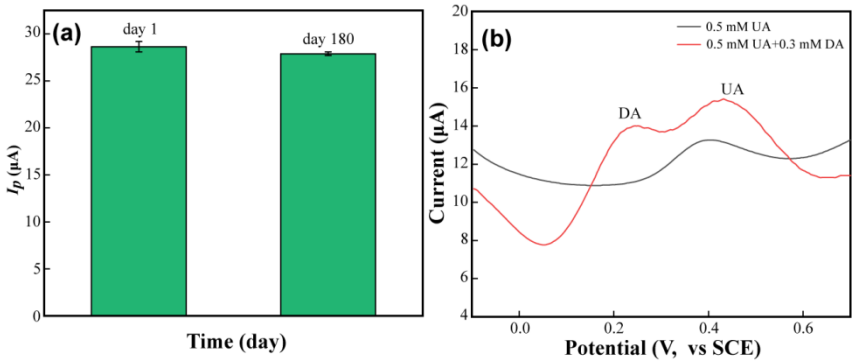

Figure S5. (a) Storage stability of the PPy/α-Fe_2O_3 electrode tested by CV for 180 days. (b) DPV curves of the PPy/α-Fe_2O_3 electrode were obtained in a solution containing 0.5 mM UA, and 0.3 mM DA their mixtures, respectively.