

Simultaneous quantification of acetaminophen and tryptophan using a composite graphene foam/Zr-MOF film modified electrode

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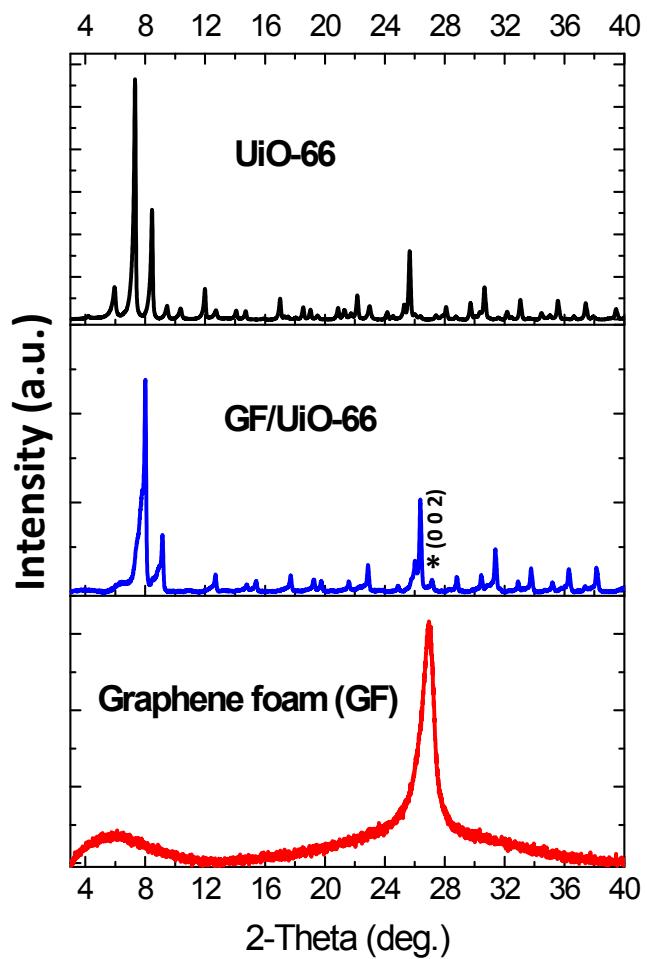


FIGURE S1: PXRD patterns for GF, UiO-66 and GF/UiO-66

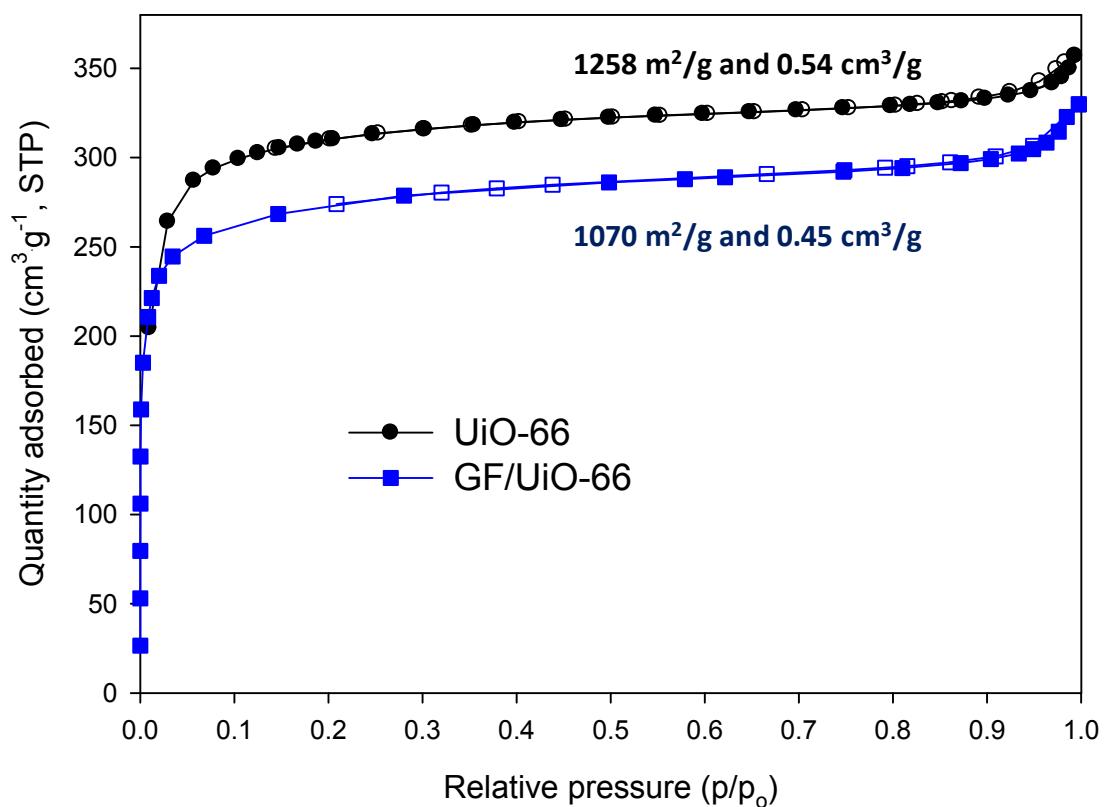


FIGURE S2 : Nitrogen adsorption isotherms for UiO-66 and GF/UiO-66. The desorption isotherms are represented with open symbols.

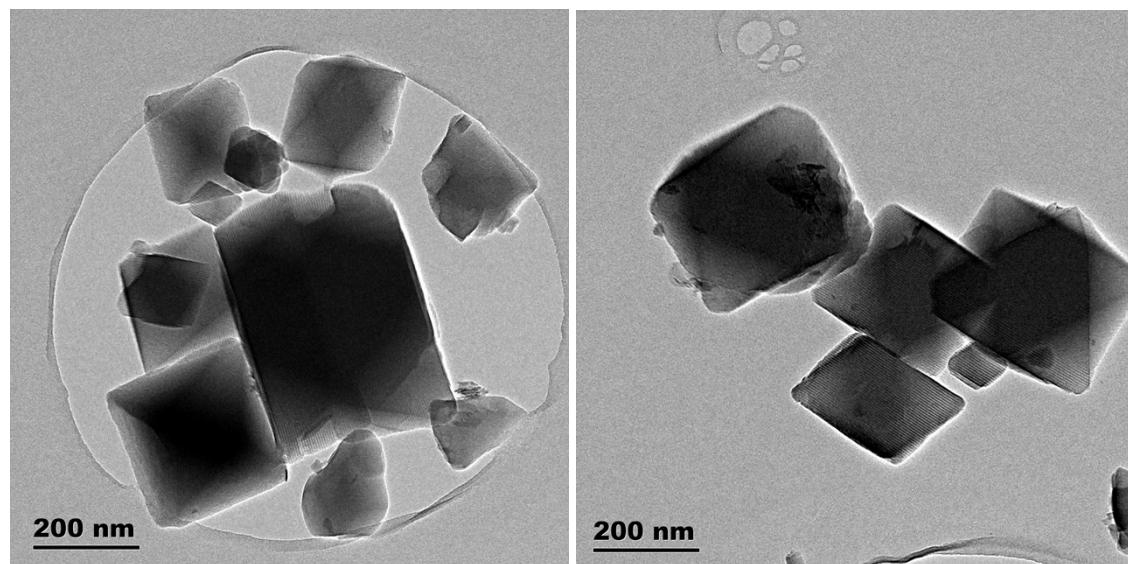


FIGURE S3: TEM images of pristine UiO-66 at 40 000X magnification.

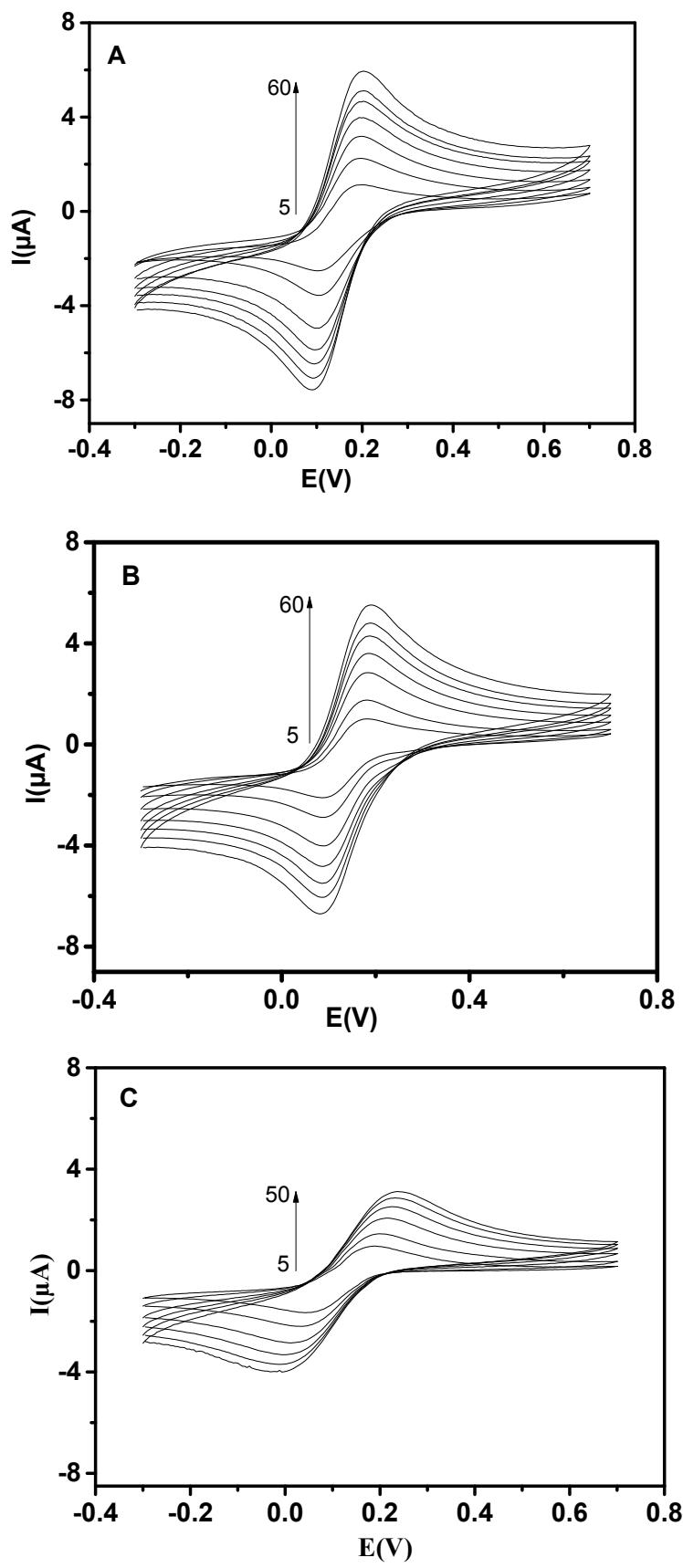


FIGURE S4: CVs recorded for (A) GF-UiO-66/GCE, (B) UiO-66/GCE, (C) GCE at different scan rates

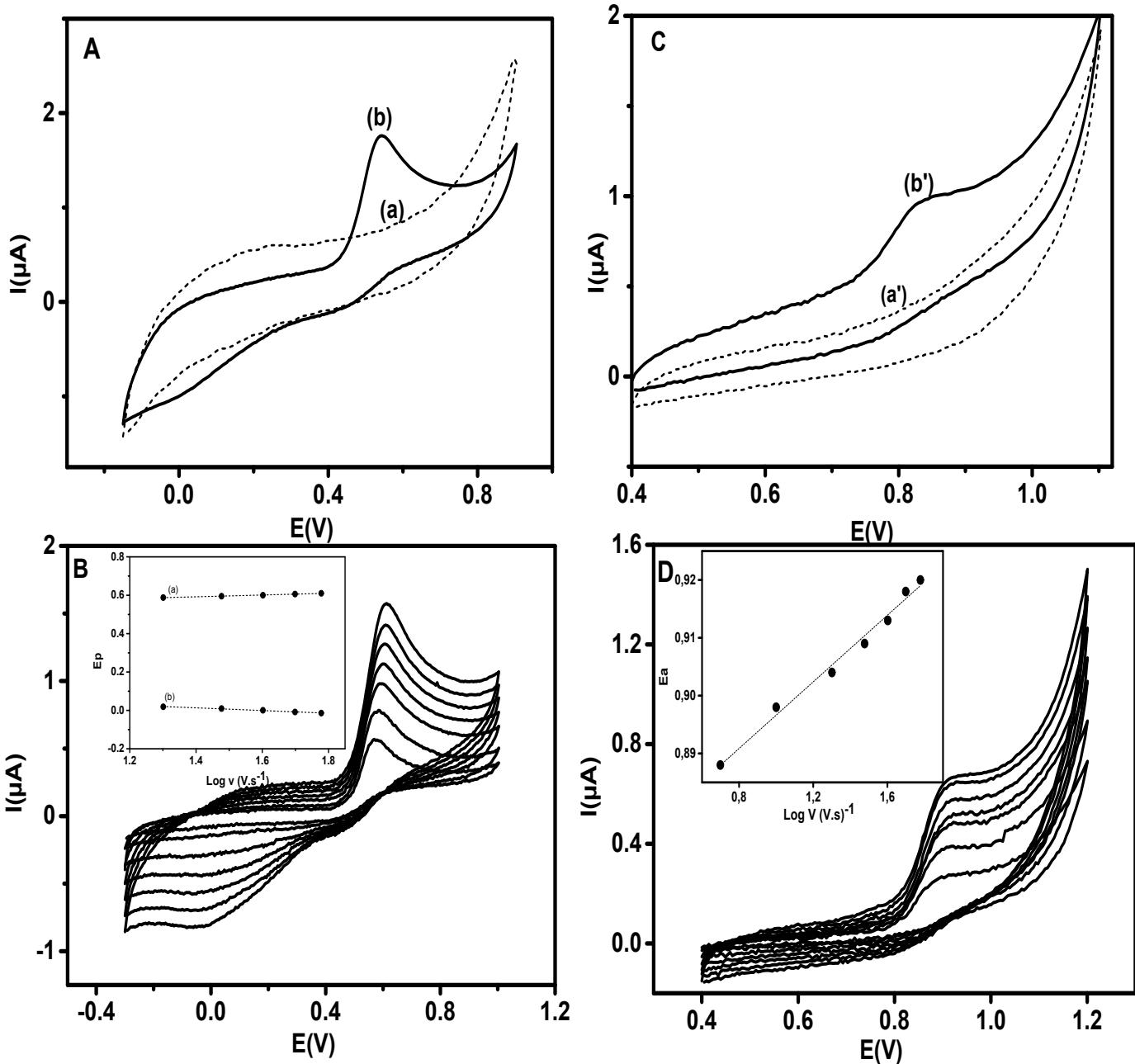


FIGURE S5 CVs recorded in AB (pH 4) at bare GCE: In the absence of AC ((A), curve a) and TRYP ((B), curve a') and in the presence of 51.2 $\mu\text{mol.L}^{-1}$ of AC ((A), curve b) (A) and in the presence of 12 μM of TRYP ((B), curve b') (B). CVs at different scan rates in the presence of 51.2 μM AC (C) and 15 μM TRYP (D) at UiO-66/GCE. Inset shows anodic peak potential versus $\log v$.

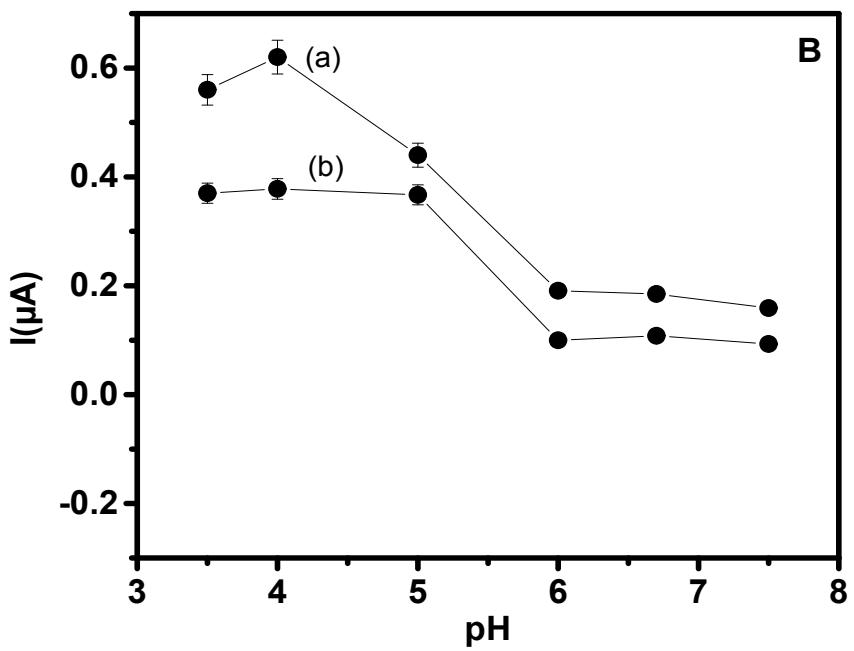
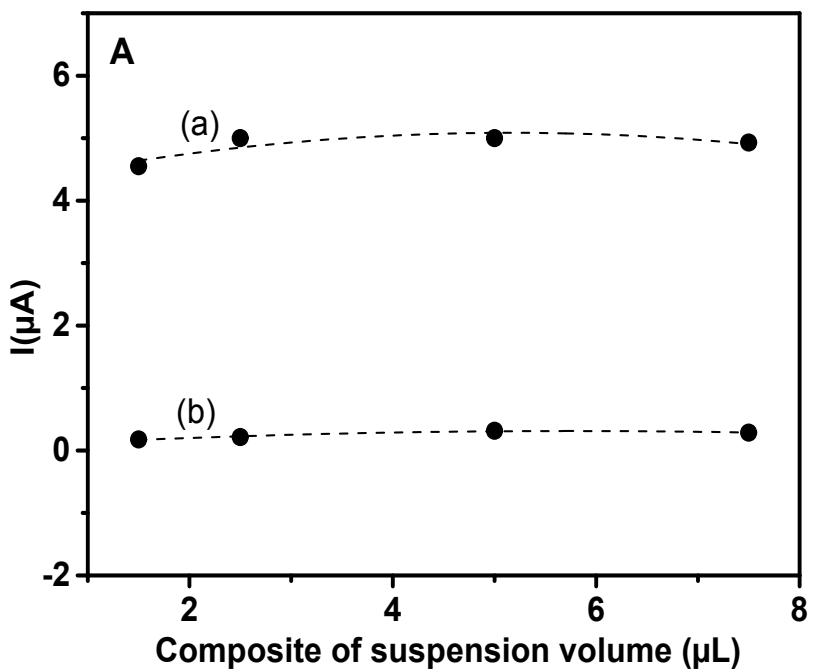


FIGURE S6 A) Plot of anodic peak current of (a) TRYP and (b) AC recorded at GF/U_iO-66/GCE versus: (A) volume of the suspension o f GF/U_iO-66 and (B) pH of the electrolyte

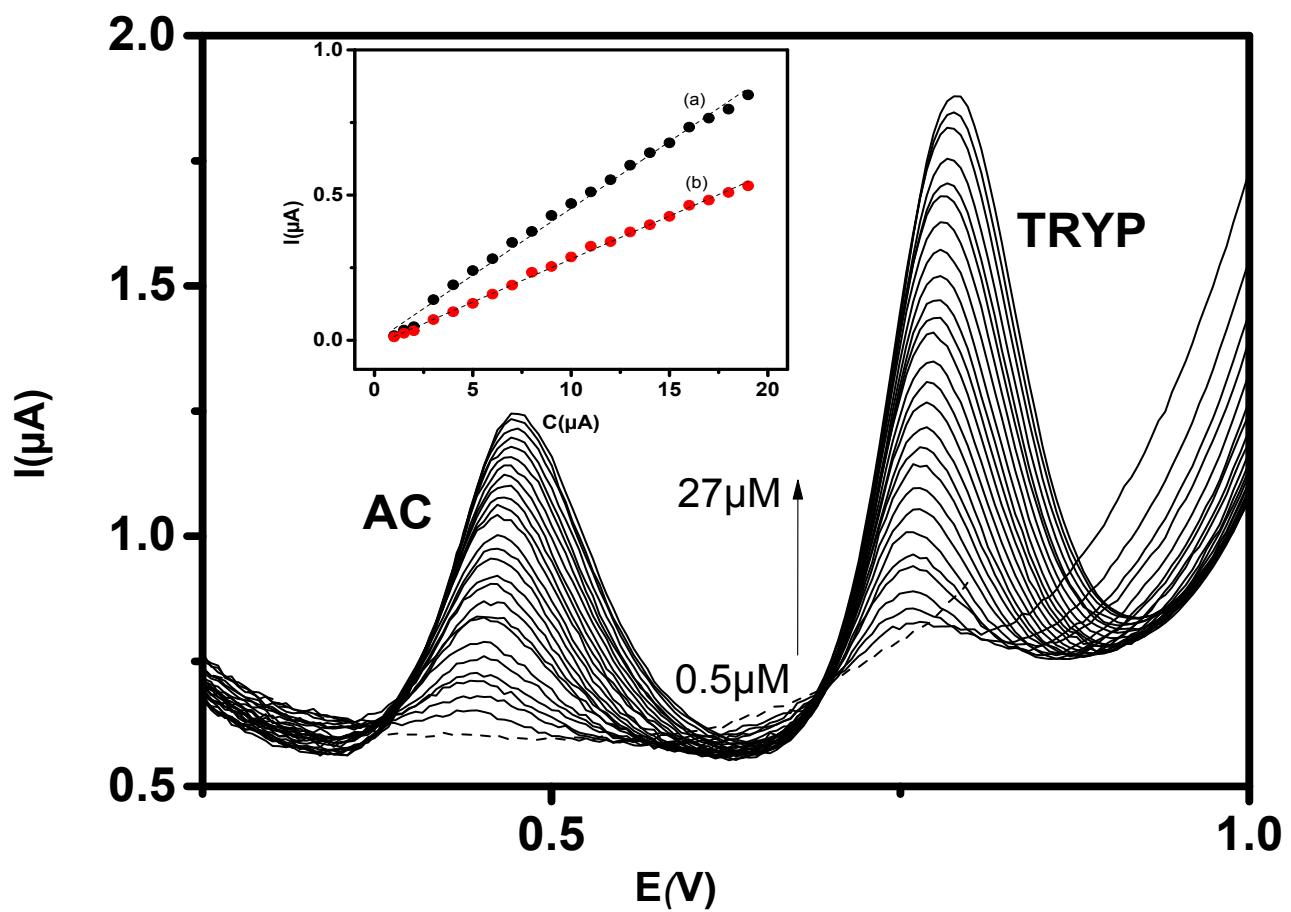


FIGURE S7 DPVs of GF/U_iO-66/GCE in AB (pH 4) with simultaneous continuous addition of AC and TRYP concentration ranging from $0.5\mu\text{M}$ to $27\mu\text{M}$. The inset shows the calibration curve of (b) AC and (a) TRYP

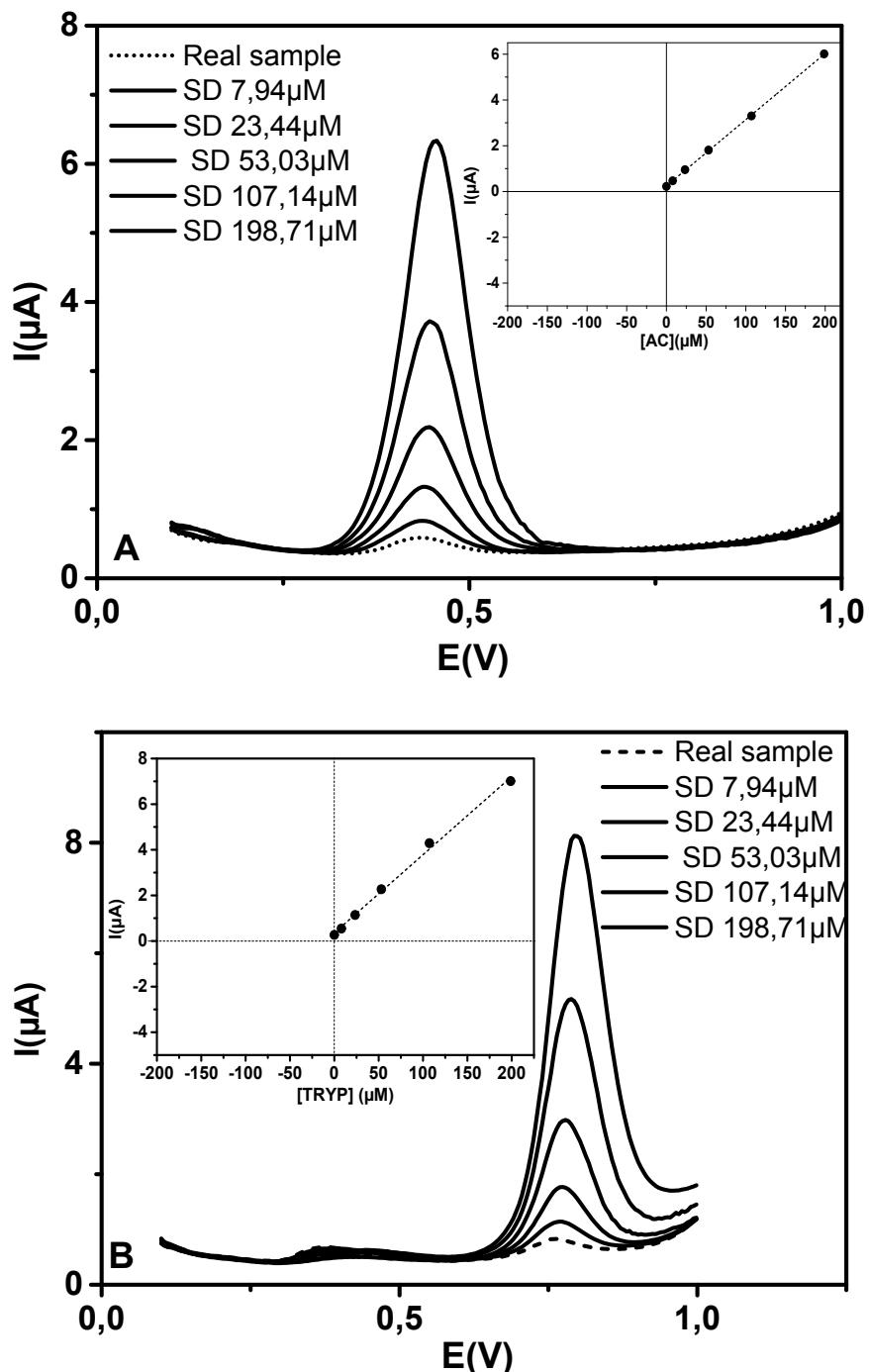


FIGURE S8: DPVs of GF/UiO-66/GCE recorded in AB (pH 4) containing: (A) an amount of AC tablet solution (dashed line) followed by continuous addition of standard analyte in the same condition as in Fig. 7A and (B) an amount μM urine TRYP sample followed by continuous addition of standard analyte in the same condition as in Fig. 7B

continuous addition of standard analyte in the same condition as in Fig. 7B. Insets show TRYP and AC concentration with peak current obtained

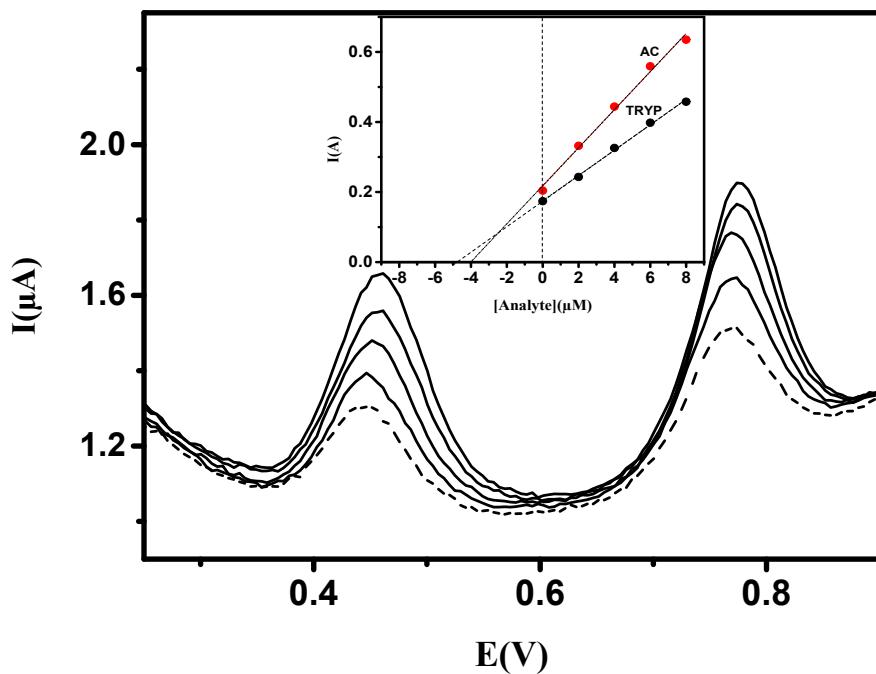


FIGURE S9: DPVs of GF/UiO-66/GCE recorded in AB (pH 4) containing: (A) an amount of AC and TRYP in tap water (dashed line) followed by continuous addition of a mixture of standard analyte in the same condition as in Fig S7 he inset shows TRYP and AC concentration with peak current obtained