

Supporting Information

Stripping Voltammetric Detection of Mercury (II) Based on a Bimetallic Au-Pt Inorganic–Organic Hybrid Nanocomposite Modified Glassy Carbon Electrode

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Experiment Section

The preparation of colloidal gold sol-gel: Citrate-stabilized nanosized gold sol-gel was prepared by adding 0.64 mL of 1.15% trisodium citrate and freshly prepared 0.08% NaBH₄ (0.32 mL) in 1% trisodium citrate to 30 mL of water containing 1% HAuCl₄ (0.32 mL) and stirring the solution for 10 min at room temperature.

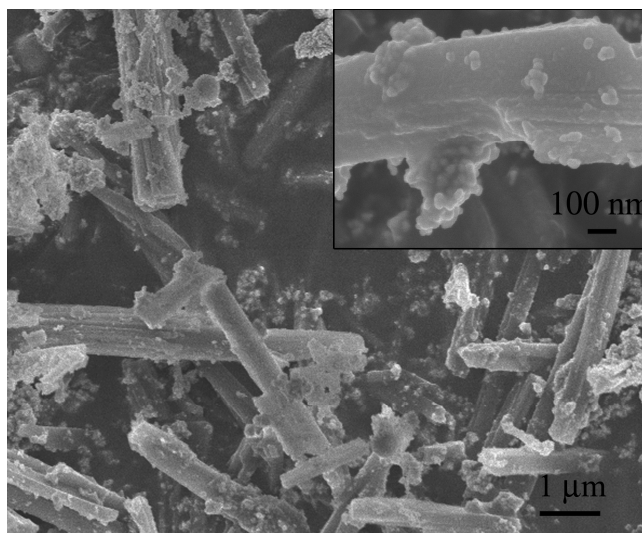


Figure S-1. SEM image of AuNPs/NFs modified GC electrode obtained by immersion of NFs/GCE into gold sol-gel solution.

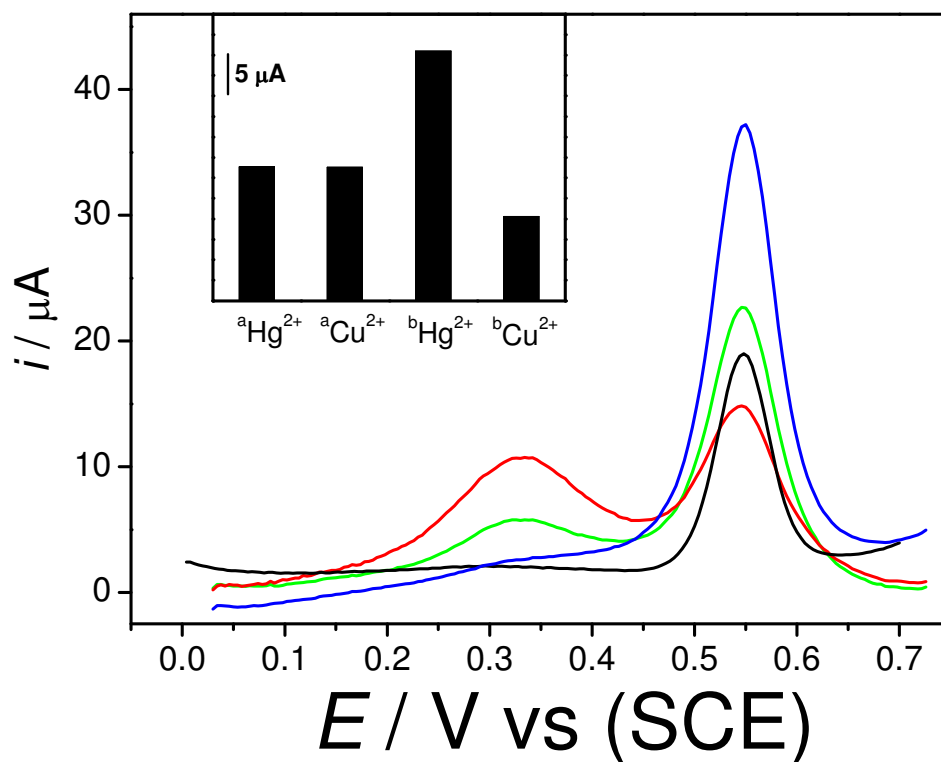


Figure S-2. Stripping voltammograms of (black) 2 ppb Hg^{2+} , (green) 2 ppb Hg^{2+} +20 ppb Cu^{2+} (deposition at 0.5 V for 120 S), and (blue) 2ppb Hg^{2+} , (red) 2ppb Hg^{2+} +20 ppb Cu^{2+} (deposition at -0.1 V for 120 S) in 1 M HCl. Inset shows the effects of the application of a deposition potential on the stripping signals of Hg^{2+} at Au-PtNPs/NFs/GCE (2 ppb Hg^{2+} and 20 ppb for Cu^{2+}). ^a Deposition at 0.5 V for 100 S; ^b Deposition at -0.1 V for 100 S.