

Supplementary information

An application of miniaturized electrochemical sensing for determination of arsenic in herbal medicines

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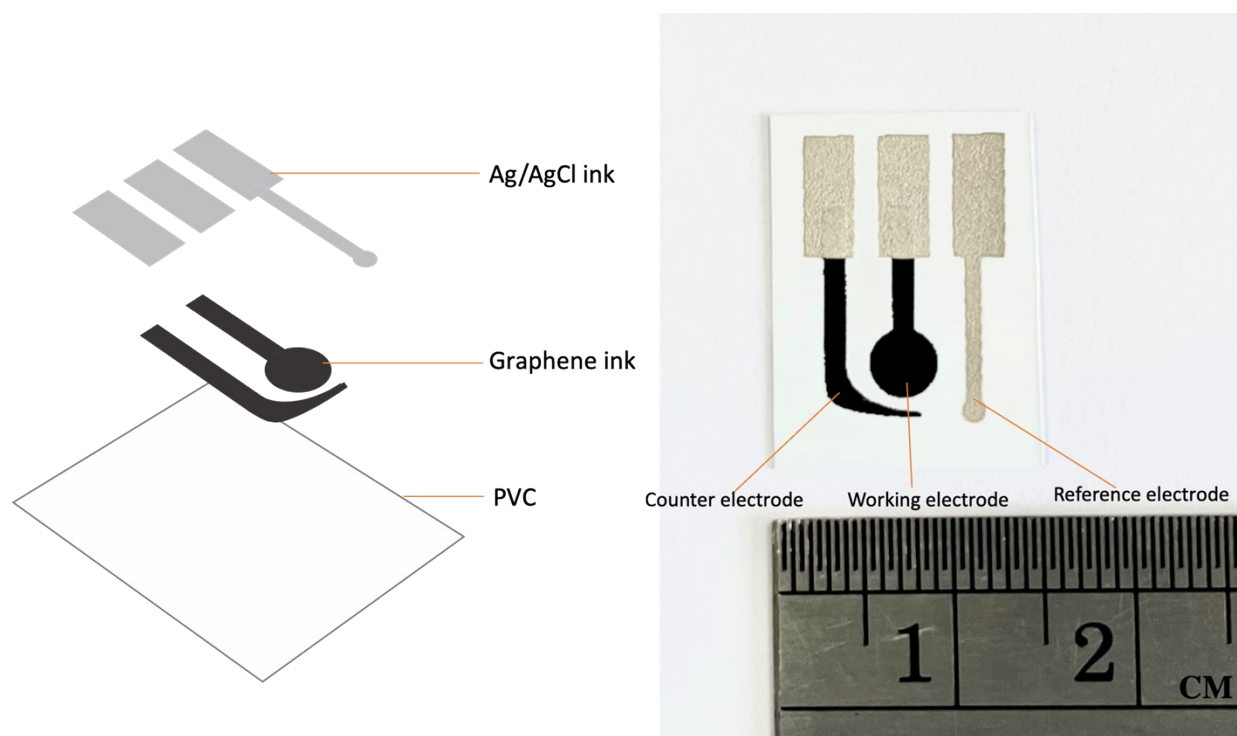


Figure S1 The components of in-house screen-printed graphene electrode.

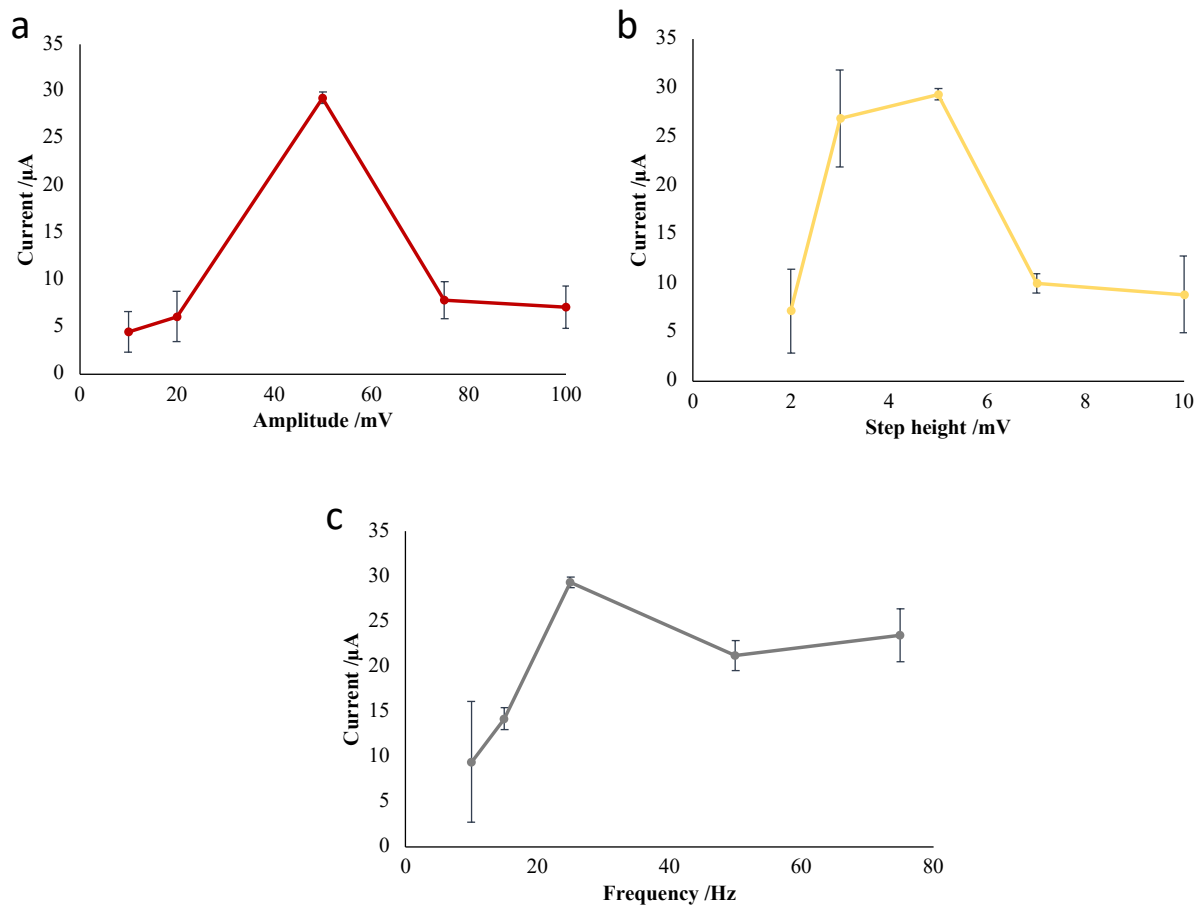


Figure S2 The effect of (a) amplitude (b) step height and (c) frequency of square wave voltammetry.

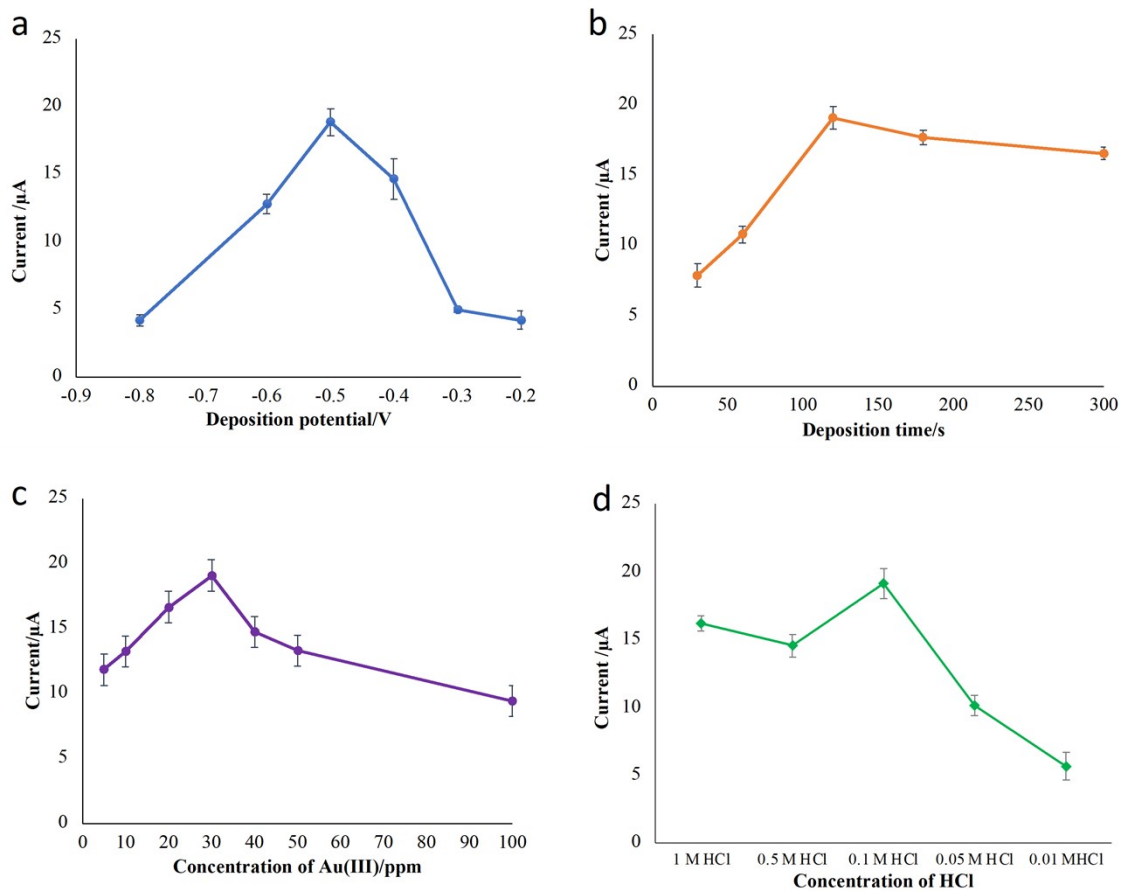


Figure S3 The effect of (a) deposition potential (b) deposition time (c) concentration of Au(III) and (d) concentration of HCl (electrolyte)

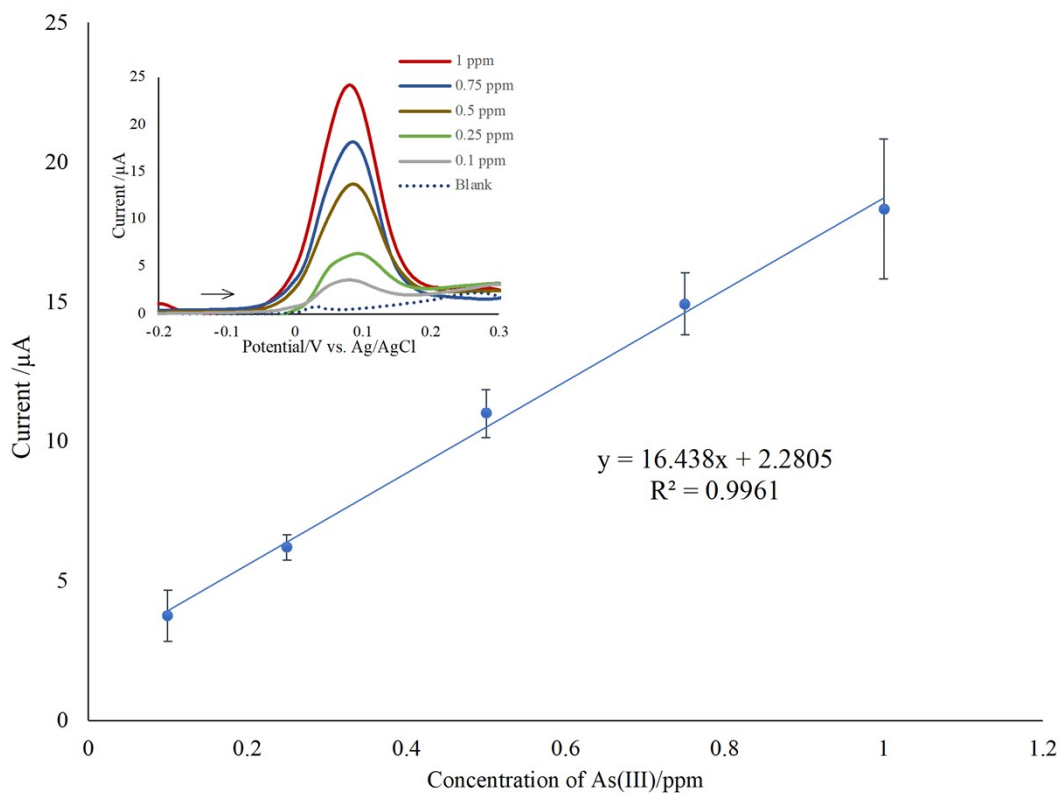


Figure S4 The calibration curve of As(III) concentrations and current responses at low concentration from 0.1 to 1.0 ppm. And Inset shows square wave voltammograms of As(III) at 0.1–1.0 ppm.

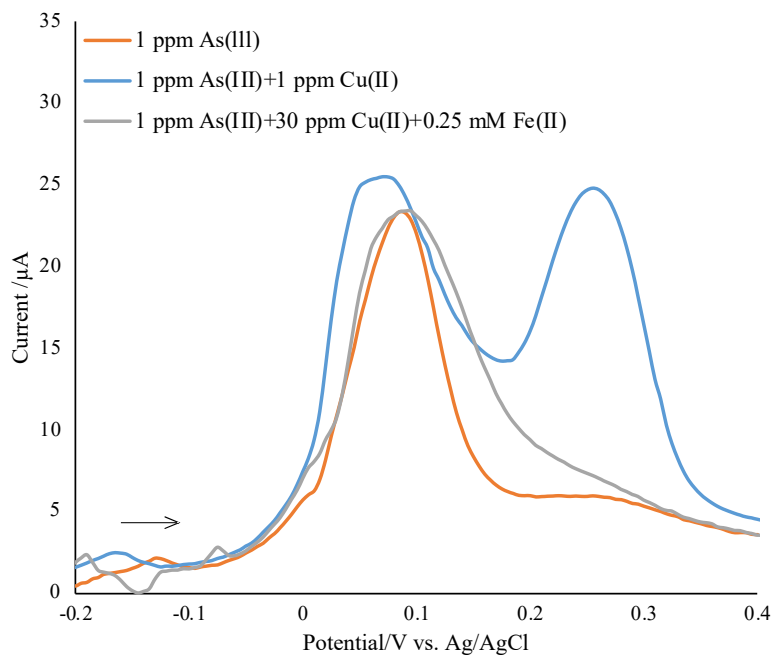


Figure S5 Square wave voltammograms of 1 ppm As(III) (orange line), 1 ppm As(III) in the presence of 1 ppm Cu²⁺ (blue line) and 1 ppm As(III) in the presence of 30 ppm Cu²⁺ with 0.25 mM Fe²⁺ (grey line) in 0.1 M HCl.