

Supporting Information

**A dual-enzyme, micro-band array biosensor based on the electrodeposition of carbon nanotubes embedded in chitosan and nanostructured Au-foams on microfabricated gold band electrodes**

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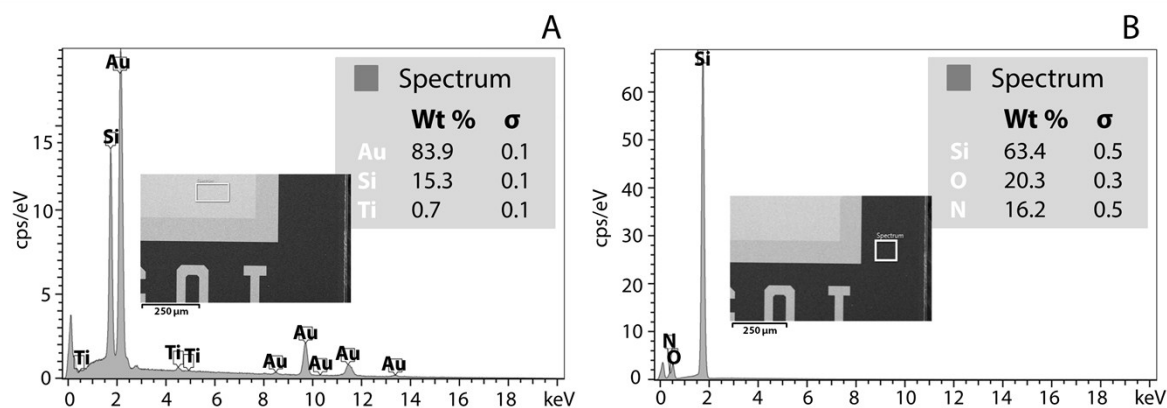


Fig S1. EDX spectrum analysis of (A) gold surface of the connection pad and (B) passivated outer layer.

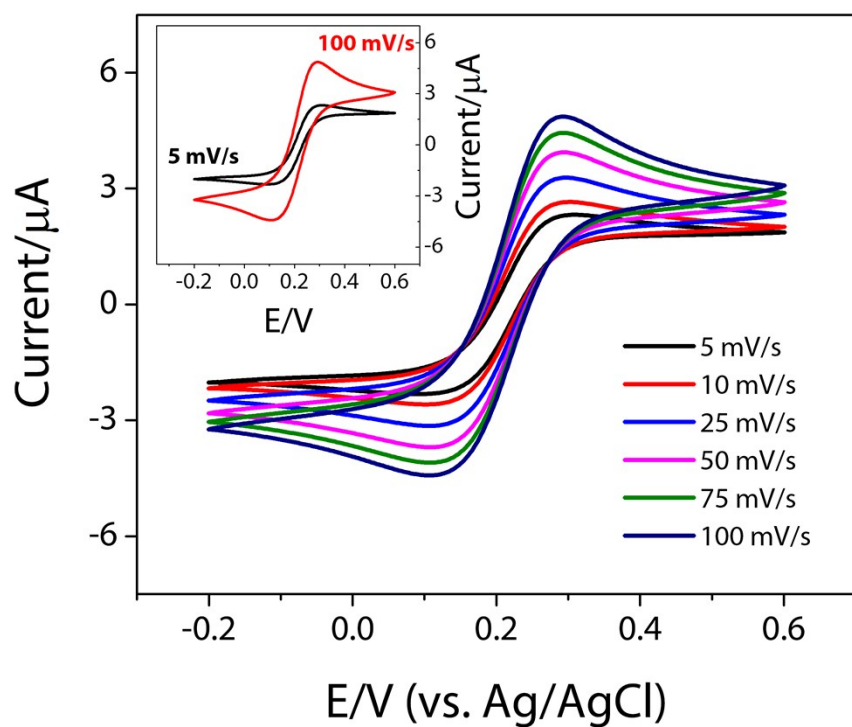


Fig S2. CVs of bare band array electrode recorded at different scan rates; 5, 10, 25, 50, 75 and 100  $\text{mV s}^{-1}$ , (inset: CVs recorded at scan rates of 5 and 100  $\text{mV s}^{-1}$ ) in a solution of 5 mM  $\text{Fe}(\text{CN})_6^{3-/4-}$  as a redox probe in 0.01 M PBS (pH 7.4), containing 0.1 M KCl

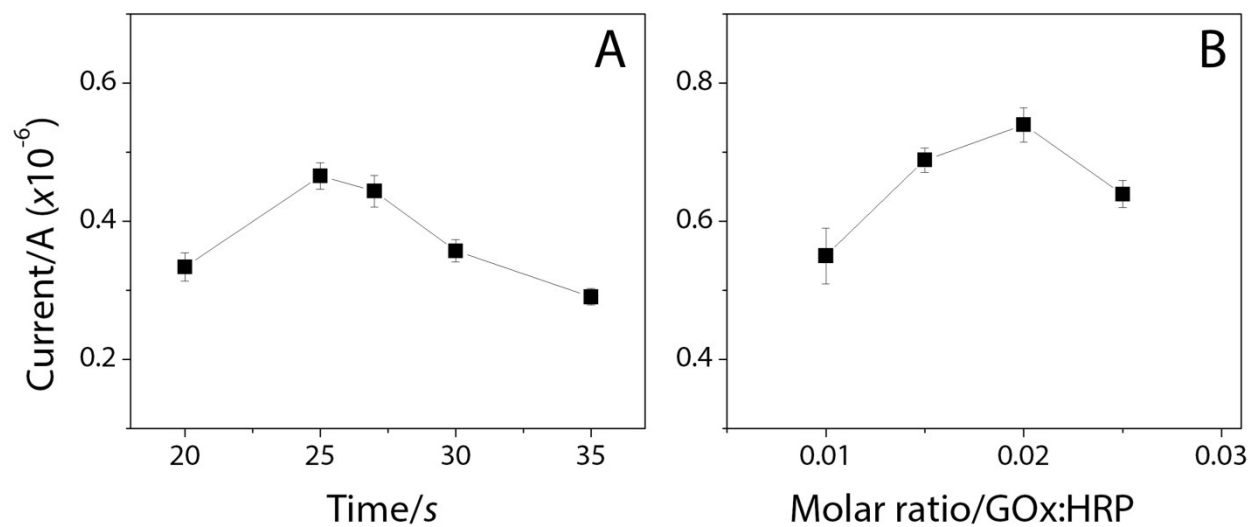


Figure S3. (A) Effect of the CS-MWCNT electrodeposition time in 0.01 M PBS (pH 7.4) containing 1 mM glucose, and (B) Effect of the molar ratio of GOx and HRP in 0.01 M PBS (pH 7.4) containing 5 mM glucose

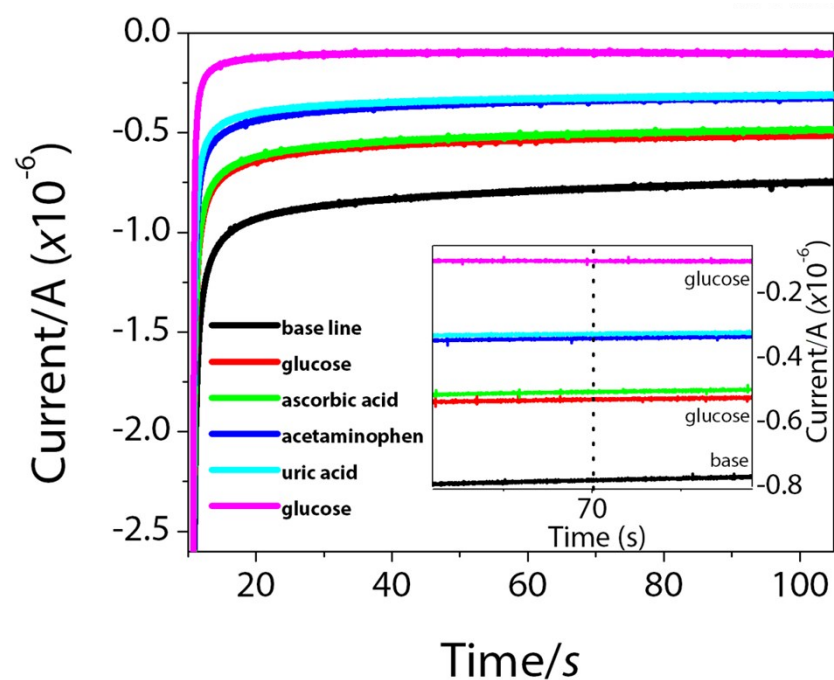


Figure S4. Chronoamperometric response of the biosensor towards glucose, ascorbic acid, acetaminophen and uric acid