

Supporting Information

Figure S1. Raman spectra of bare (red) and APTES-functionalized (blue) (a) graphene and (b) MWCNTs.

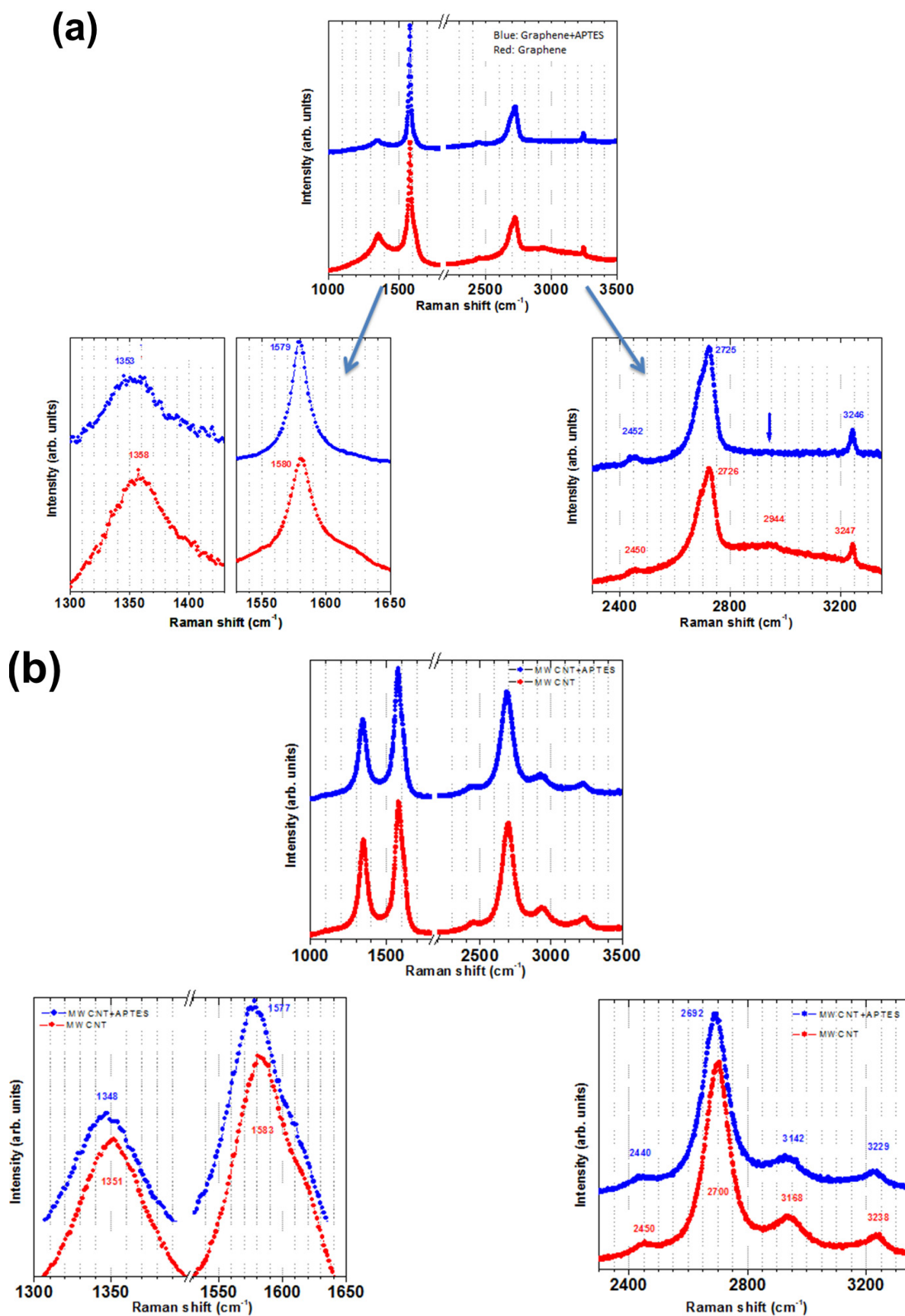


Figure S2. The FTIR spectrum of (a) the KOH-treated GCE modified with APTES and MWCNTs dispersed in dimethylformamide (DMF); (b) the KOH-treated GCE modified with MWCNTs dispersed in APTES; (c) same as (b) followed by conjugation with GOx.

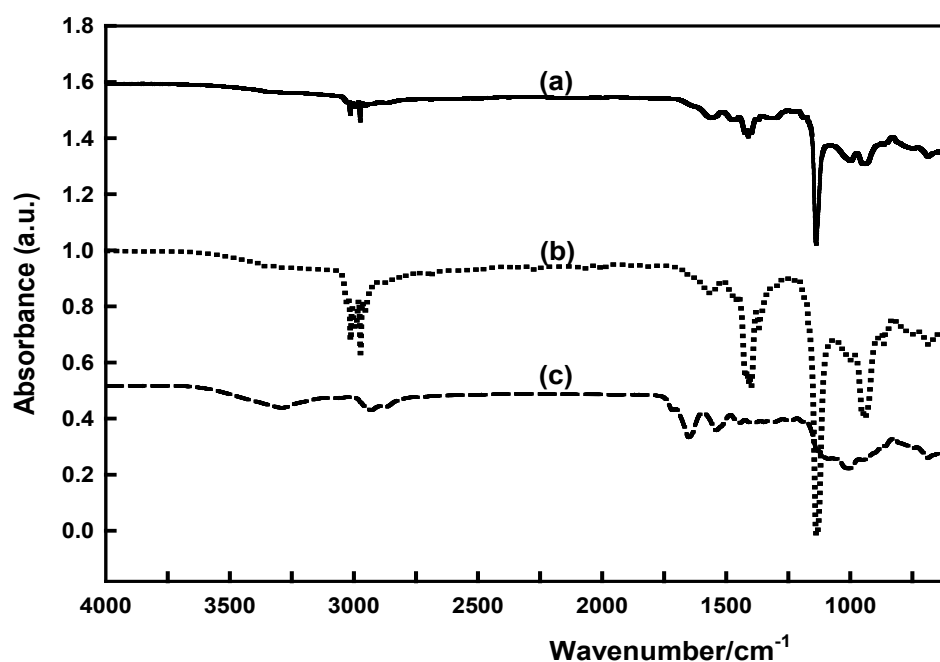


Figure S3. The FTIR spectrum of (a) the KOH-treated GCE modified with “layered by layered” APTES and graphene dispersed in DMF; (b) the KOH-treated GCE modified with graphene dispersed in APTES; and (c) same as (b) followed by conjugation with GOx.

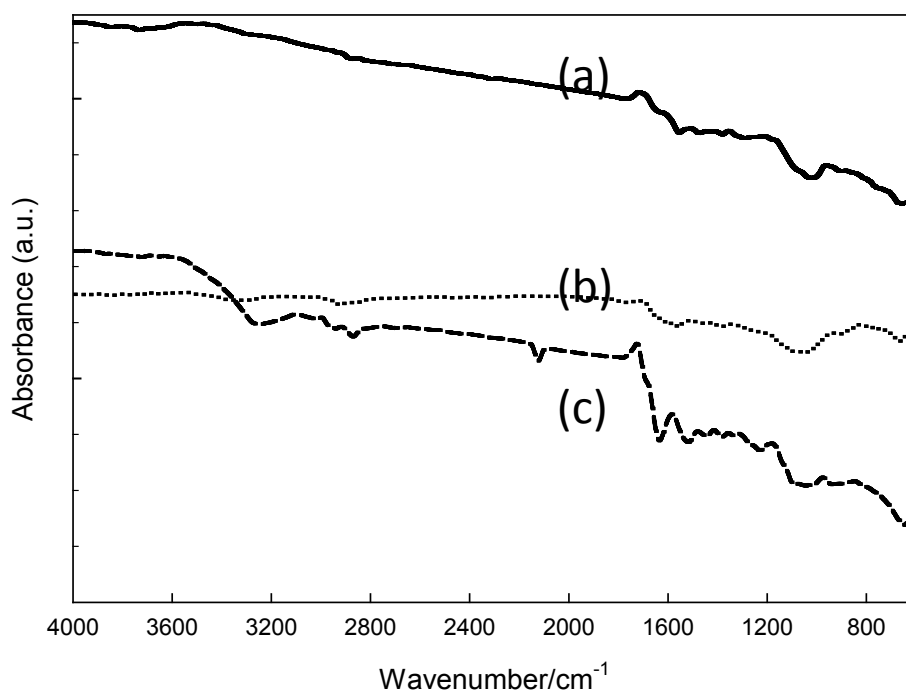


Figure S4. CVs of graphene- (a) and MWCNT-functionalized (b) GCE at different scan rates in 5 mM $\text{Fe}(\text{CN})_6^{3-}$ (0.5 M KCl). Scan rate: 20–200 mV s^{-1} . Inlet: linear relationship between i_p and $v^{1/2}$.

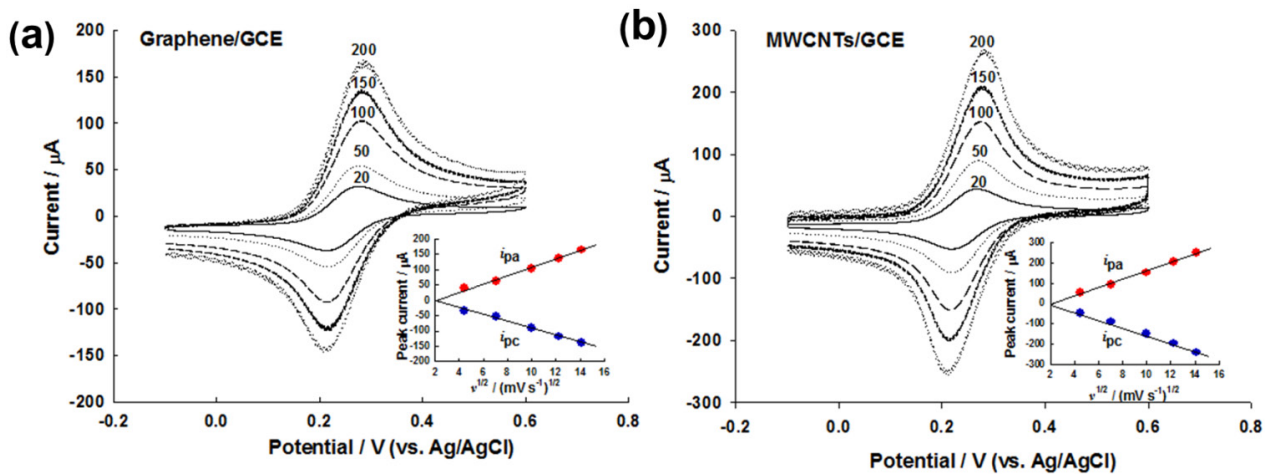


Figure S5. Optimization of the applied potential for the electrochemical detection of 4 mM glucose by Nafion/MWCNT-GOx/GCE.

