

Supporting Information

for

Accurate control of the covalent functionalization of single-walled carbon nanotubes for the electro-enzymatically controlled oxidation of biomolecules

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Additional experimental data

Figure S1A. Global XPS survey spectra of raw HiPCO and HiPCO-H₂SO₄-FcETG₈ samples deposited on gold surfaces

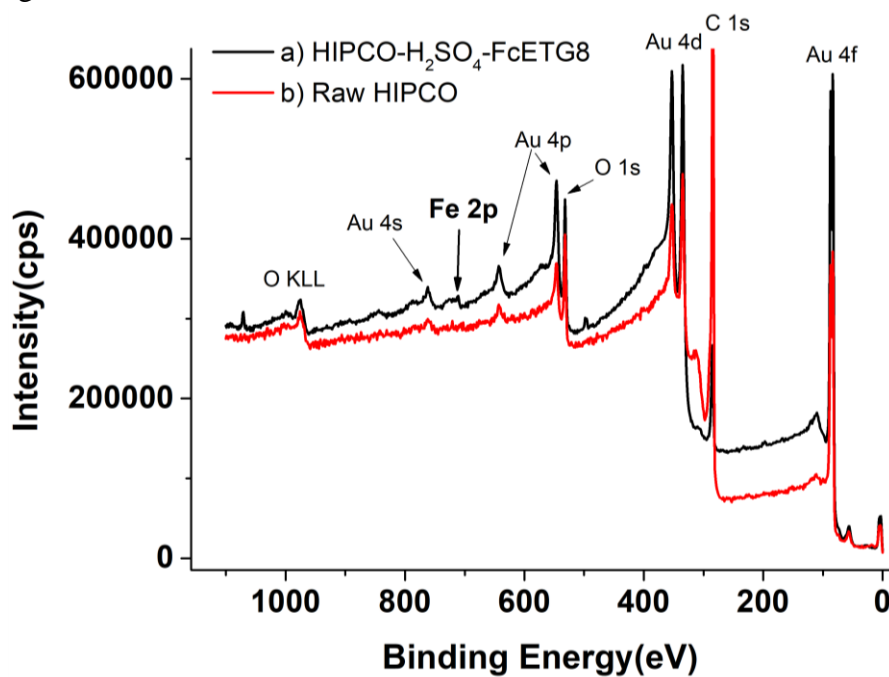


Figure S1B. Detailed XPS spectra in the Fe 2p region for the HiPCO-H₂SO₄-FcETG₂ sample

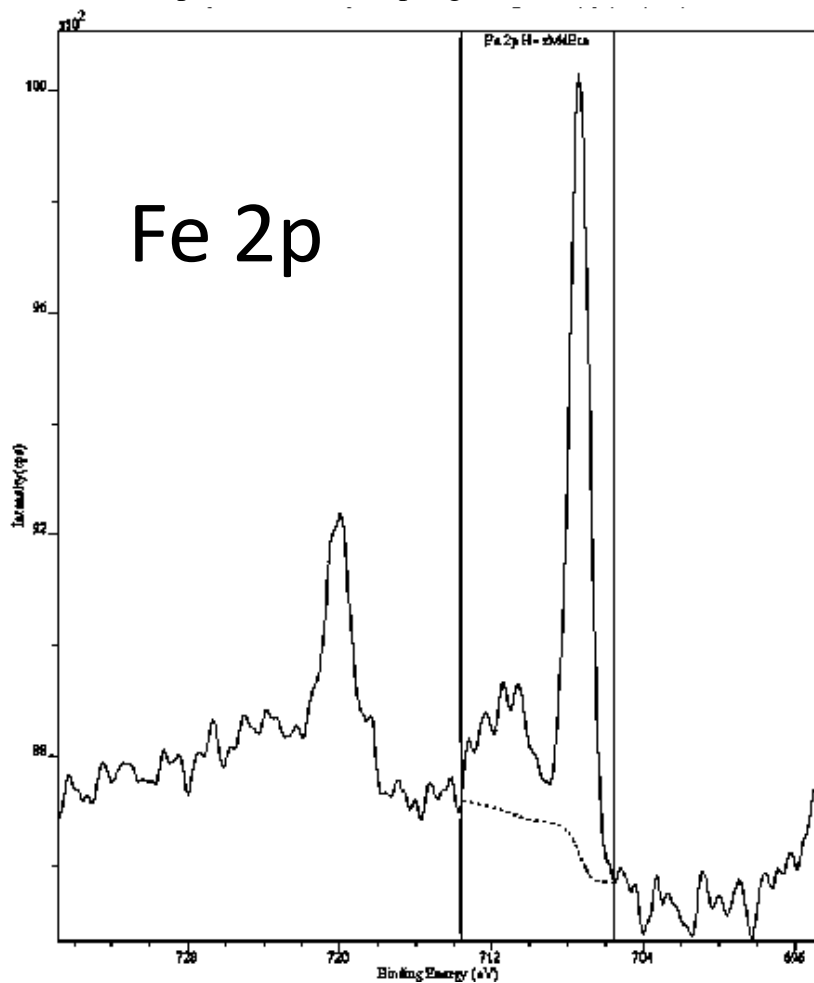


Figure S2. TGA-MS detection of CO and CO₂ fragments for A) HIPCO-HNO₃ and B) HIPCO-HNO₃-FcETG₂ samples.

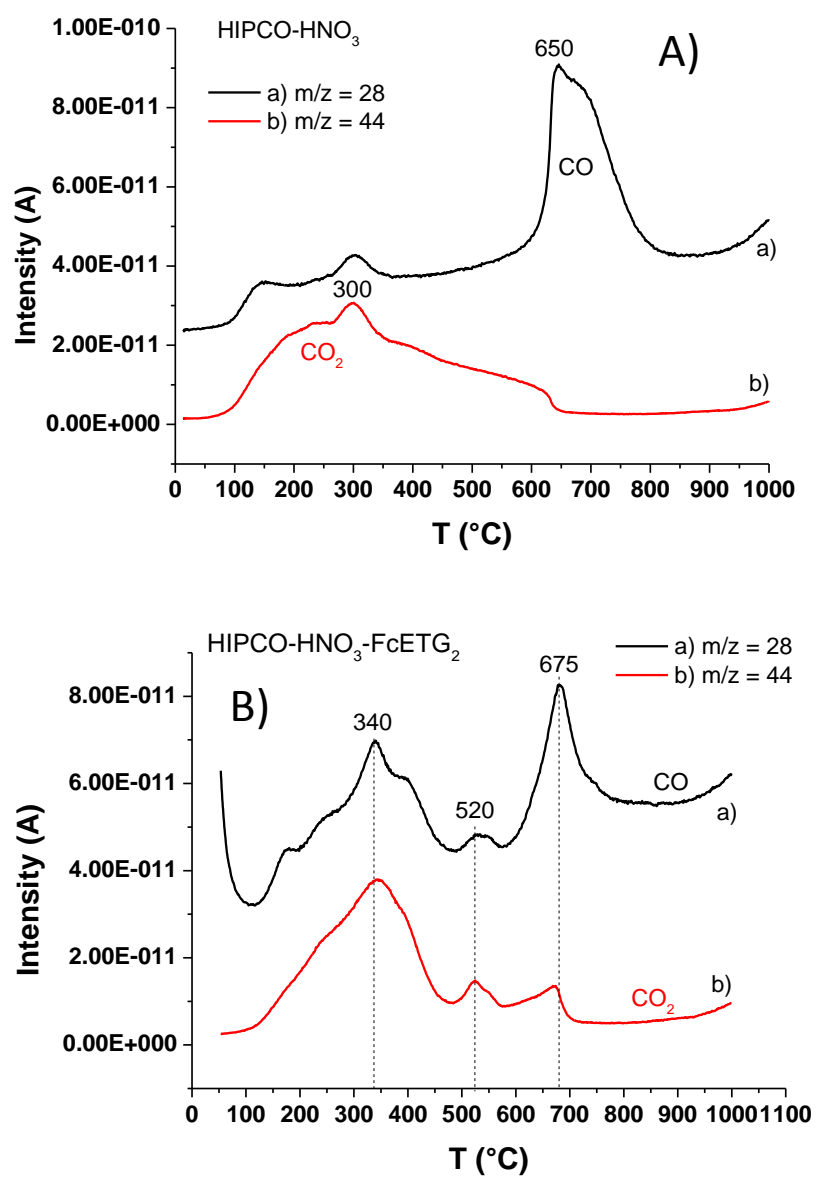


Figure S3. Raman spectra taken using a laser wavelength of 458 nm for samples oxidized by HNO₃ and functionalized with ferrocene derivatives.

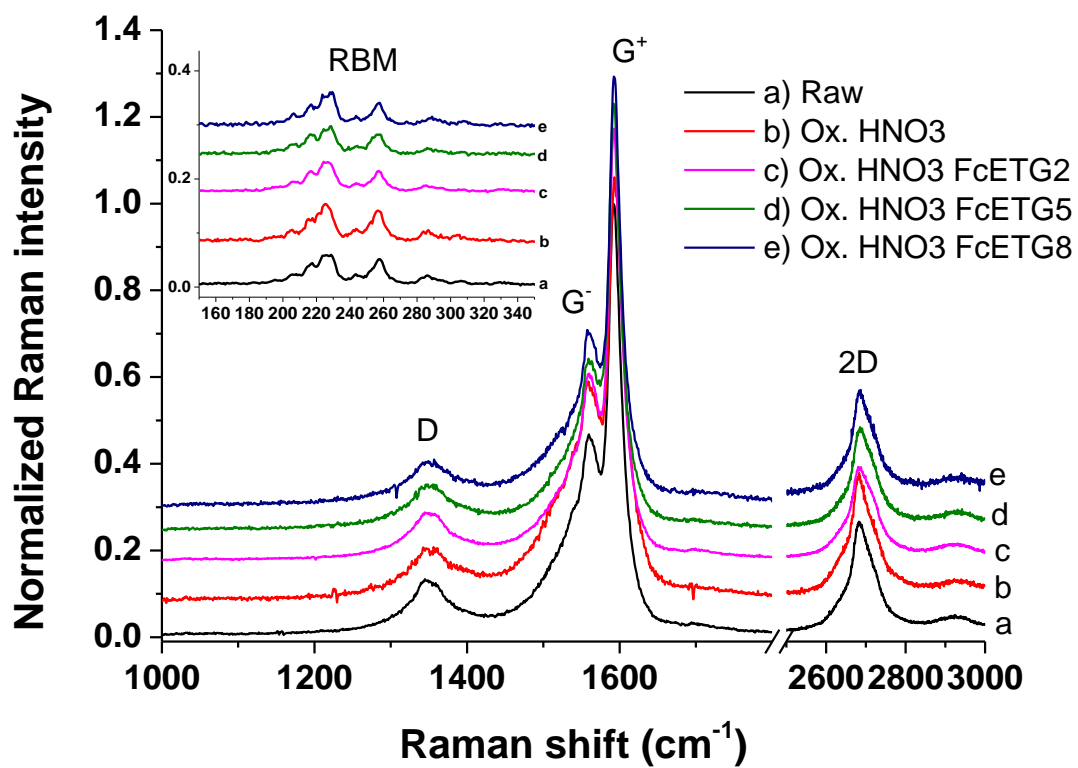


Figure S4. A) Incorporation of the modified GCE in a three-electrode set-up; B) principle of the complete biosensor for glucose detection.

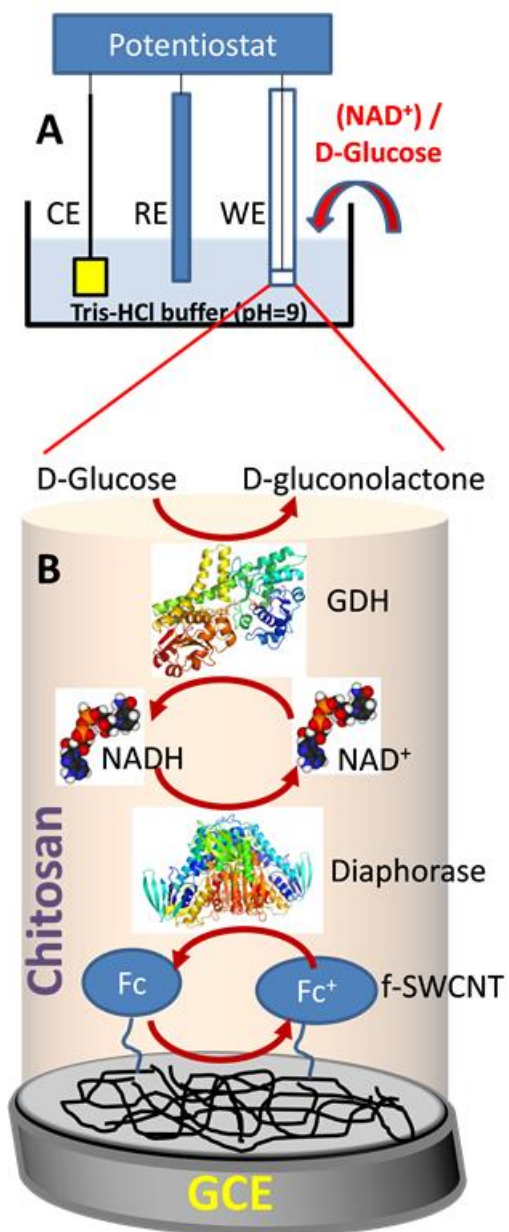


Figure S5. Cyclovoltammogram of HIPCO-HNO₃-FcAlkyl

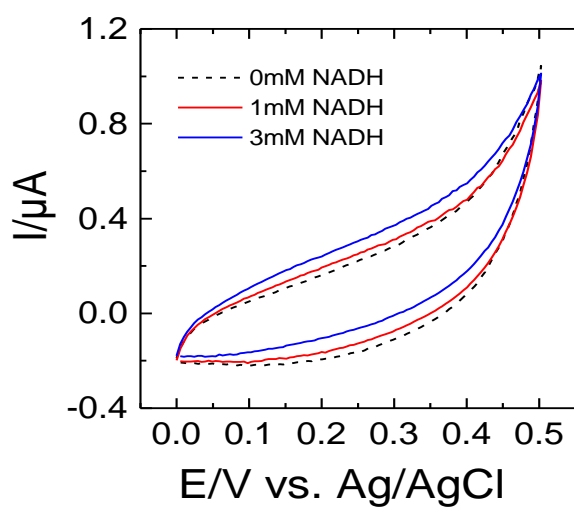


Figure S6. A) Variation of the cyclovoltammogram of HIPCO-H₂SO₄-FcETG₂ samples with the scan rate; B) Current intensities of the anodic and cathodic peaks as a function of the scan rate.

