Supporting material

Direct electrochemistry and electrocatalysis of glucose oxidase based on poly (L-arginine)-multi-walled carbon nanotubes

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Fig. S1. Repetitive cyclic voltammograms of 10mM of L-Arg in pH 6 PBS at the f-MWNTs/GCE surface. Scan rate: 100mVs⁻¹.
Fig. S2. AFM images of f-MWCNTs films.

Fig. S3. AFM images of P-L-Arg/ f-MWCNTs films.
Fig.S4. Bioelectrocatalysis of the P-L-Arg /f-MWCNTs/GCE towards H$_2$O$_2$ in PBS (pH 6.5) with the scan rate of 0.5 V s$^{-1}$ and H$_2$O$_2$ concentrations of (a) Bare GCE (b) 0, to (g) 5, mM.
Fig. S5. Amperometric response of P-L-Arg /f-MWCNTs/GCE modified electrode during various successive addition H₂O₂: conditions -0.4 V constant potential in pH 6.5 and rotation speed 2000 rpm. Insets plots of chrono amperometric current vs. H₂O₂ concentration.

\[ y = 26.360x + 18.283 \]
\[ R^2 = 0.9916 \]
Fig. S6. Cyclic voltammograms for 100 multiple cycles in presences of 10 mM glucose in 0.05M pH 6.5 at a scan rate of 100 mV s$^{-1}$.