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ARTICLE TYPE

Supporting Informations

Naphtoquinone-mediated oxidation of glucose by glucose oxidase in a carbon nanotube 3D matrix. Application to a high power enzymatic glucose/O₂ biofuel cell.

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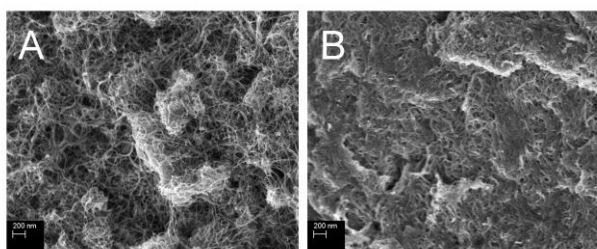


Figure S1. SEM images of MWCNT electrodes (A) before, (B) after electropolymerisation of 0.1M pyrrole in 0.1M PSS at 0.9 V during 10min.

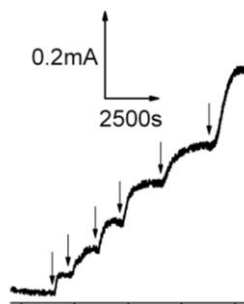


Figure S2. Chronoamperometry at 0.2V vs SCE for a GOX/NQ/catalase bioanode with 5 mg NQ with different concentrations of glucose: 5, 10, 20, 43, 76, 120 mM (0.2 mol L⁻¹ PBS, pH 7, 40°C).

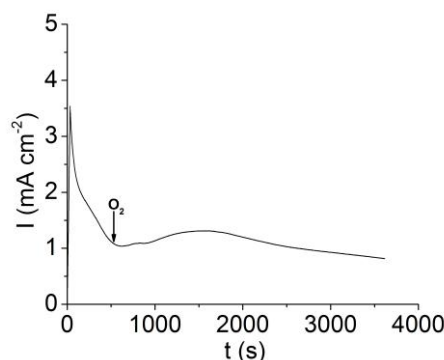


Figure S3. One-hour constant discharge of the GBFC at 0.5V in 0.2M PBS buffer (pH7, 25°C) with constant bubbling of oxygen.

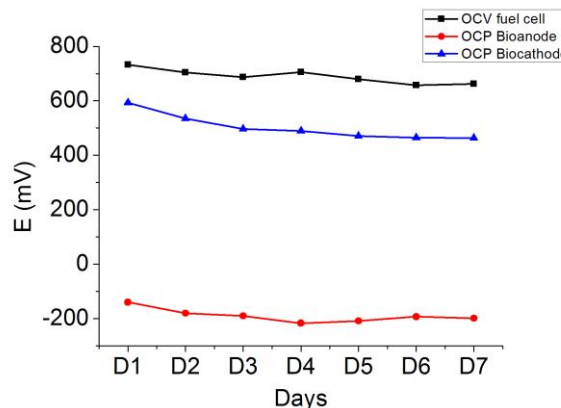


Figure S4. OCP of biocathode (blue) and bioanode (red) and OCV of the GBFC (black) monitored each day during one week. The GBFC was discharged each day during one minute at 0.6V (0.2M PBS, pH 7, RT)