Electronic Supplementary Material (ESI) for Nanoscale.

Supporting Information

Fabrication of biofuel cell improved by π-conjugated electron pathway effect induced from a new enzyme catalyst employing terephtalaldehyde

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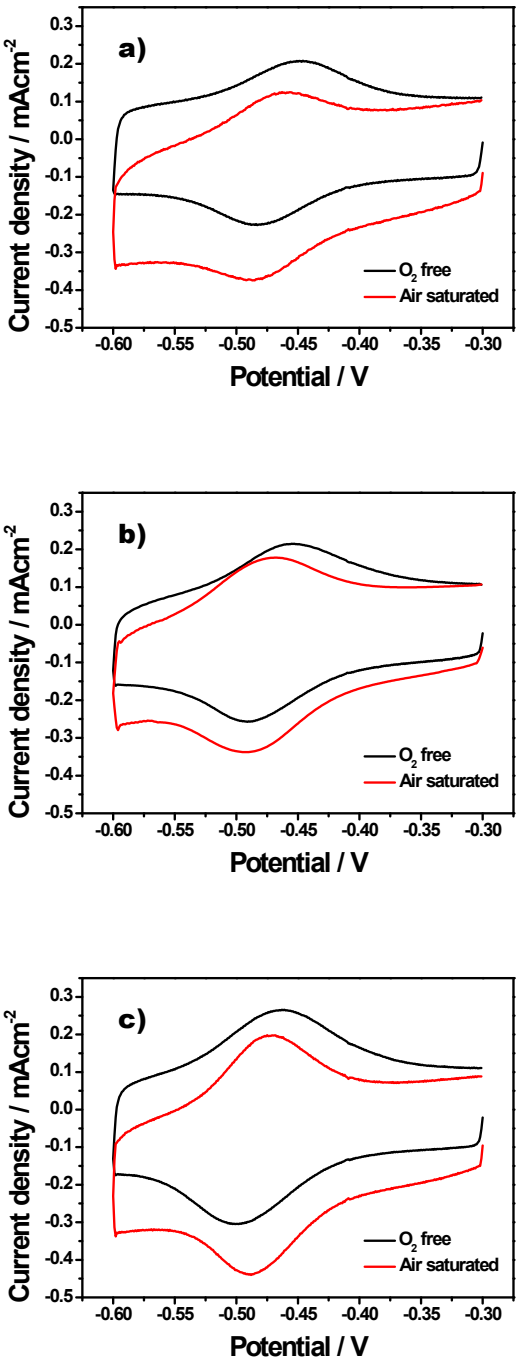

Fig. S1. Cyclic voltammograms of a) GOx/PEI/CNT, b) GA/[GOx/PEI/CNT] and c) TPA/[GOx/PEI/CNT] run at air-saturated state and N_2 state without provision of glucose.

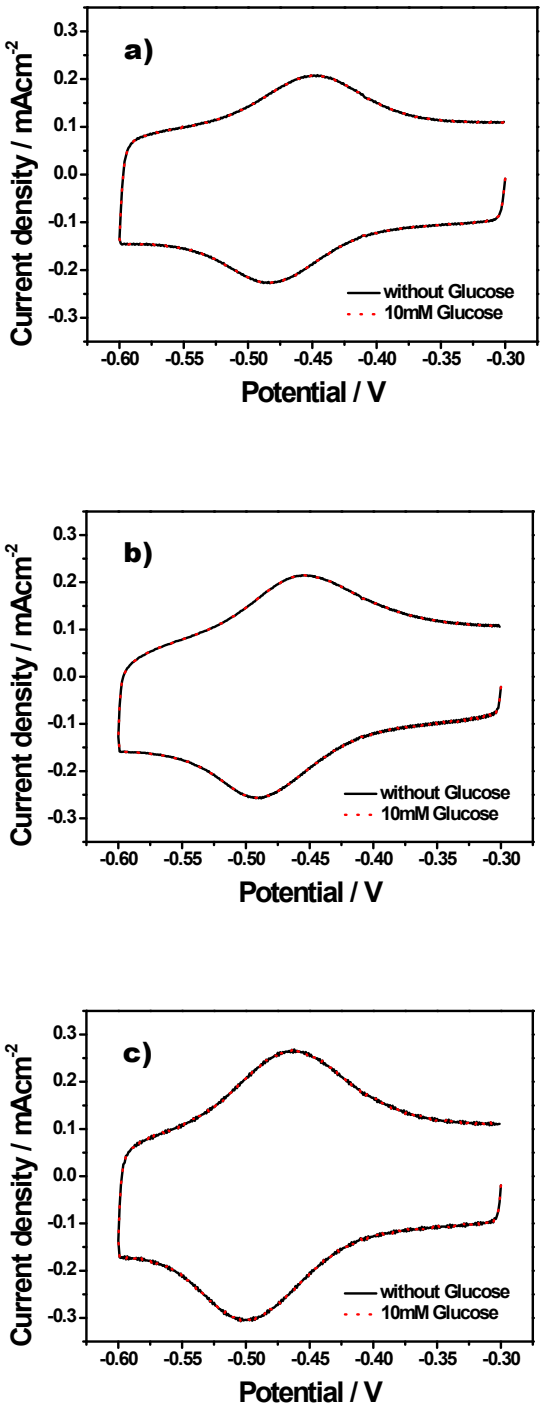

Fig. S2. Cyclic voltammograms of a) GOx/PEI/CNT, b) GA/[GOx/PEI/CNT] and c) TPA/[GOx/PEI/CNT] run at N_2 state with provision of 0 and 10 mM glucose.

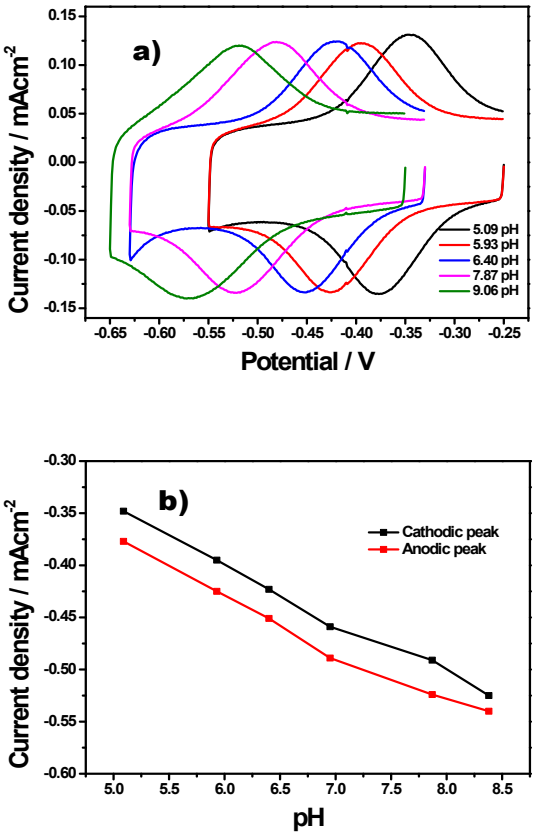

Figure S3. a) Cyclic voltammograms of TPA/[GOx/PEI/CNT] run under the condition of different pHs and b) a relationship between electrolyte pH and its peak potential. For the CV tests, 1.0 M PBS (pH 7.4) was used as electrolyte and potential scan rate was 50mV s^{-1}, while electrolyte pH was varied from 5.09 to 9.06.