Amperometric glucose biosensor based on immobilization of glucose oxidase on a magnetic glassy carbon electrode modified with a novel magnetic nanocomposite

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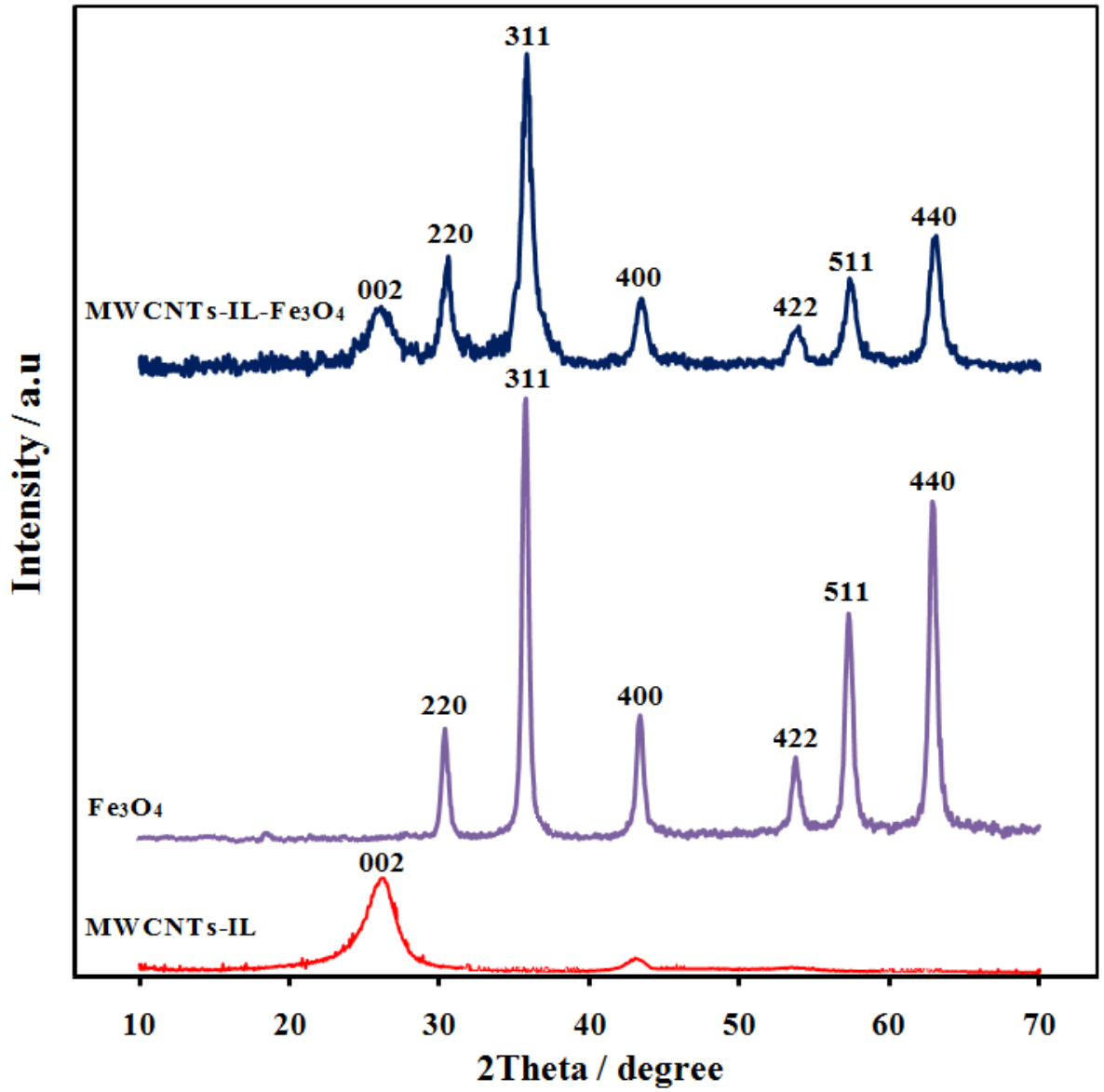

Figure S-1

Figure S-1. XRD patterns of MWCNT-IL, Fe_3O_4 NPs and MWCNT-IL-Fe_3O_4

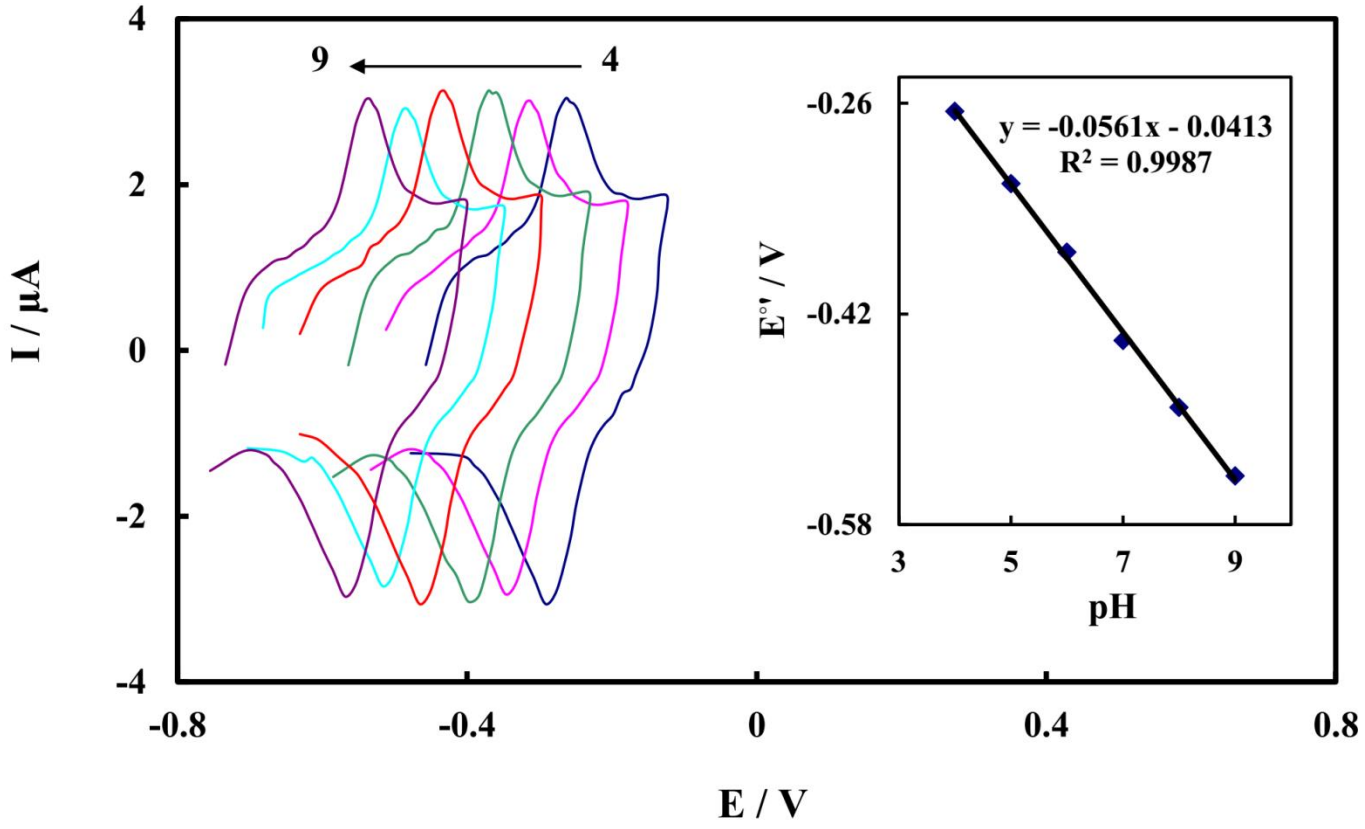

Figure S-2

Figure S-2. CVs of the GOx/Ag@MWCNT-IL-Fe_3O_4/MGCE in 0.1 M PBS at different pHs. Scan rate: 0.1 V s^{-1}. pH (from 4.0 to 9.0): 4.0, 5.0, 6.0, 7.0, 8.0 and 9.0. Inset: plot of formal potential vs. pH.

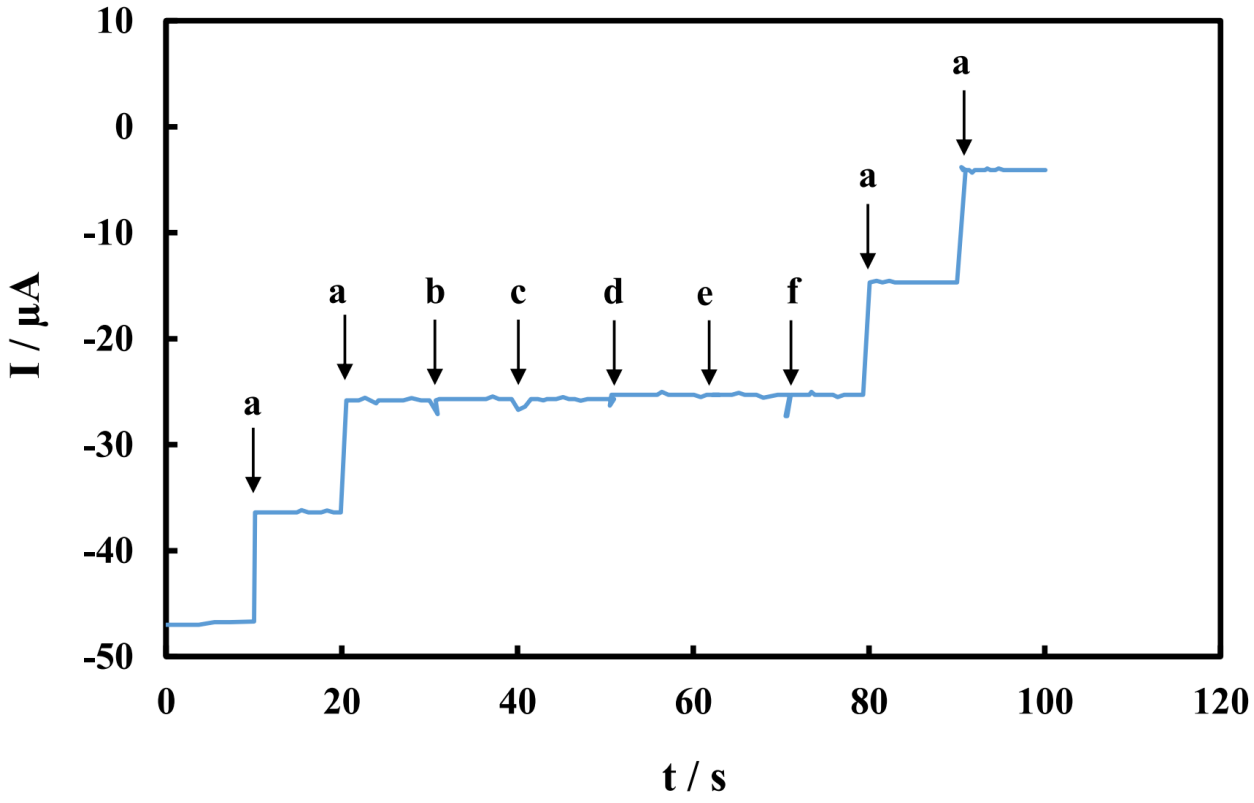

Figure S-3

Figure S-3. Amperometric response of the GOx/Ag@MWCNT-IL-Fe_3O_4/MGCE in air saturated PBS (pH 7.0) at the working potential of -0.51 V upon successive additions of 400 µM glucose (a) and 1200 µM of each of acetic acid (b), ethanol (c), ascorbic acid (d), uric acid (e), dopamine (f).