Electronic Supplementary Material (ESI) for Analytical Methods.

Electronic Supplementary Material

A comparative study of different Fe_3O_4-functionalized carbon-based nanomaterials on the development of electrochemical sensors for bisphenol A

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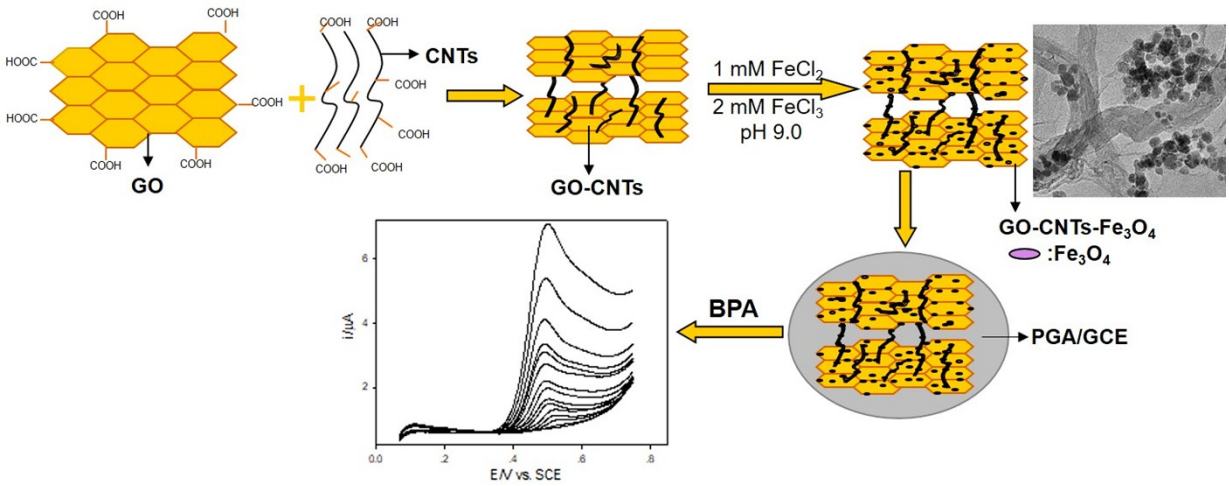

Scheme S1 The schematic diagram of sensor preparation and direct electrochemical detection of BPA

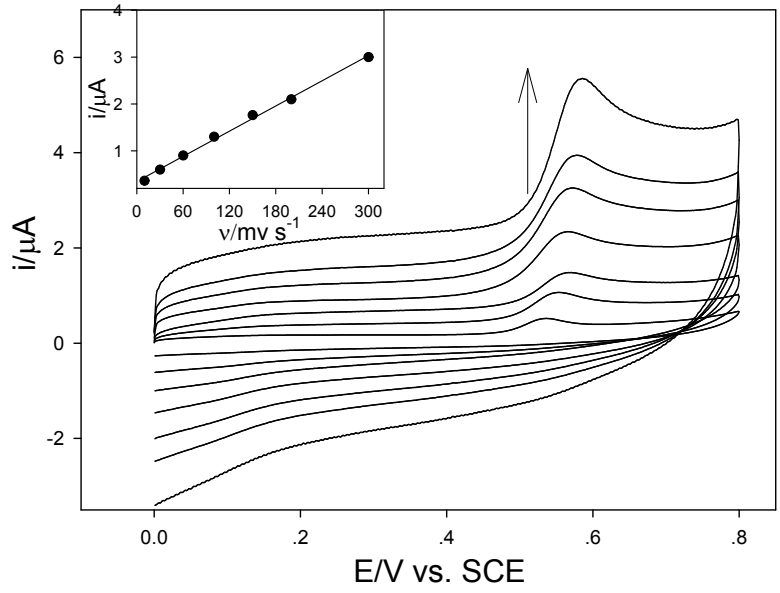

Fig. S1 CVs of GO-Fe_3O_4/PGA/GCE at different scan rates (10, 40, 70, 100, 150, 200, and 300 mV s^{-1}) in 0.1 mol L^{-1} PBS (pH 7.0) containing 2.0 μmol L^{-1} of BPA. The inset graph is the plot for the dependence of peak current on the scan rates.

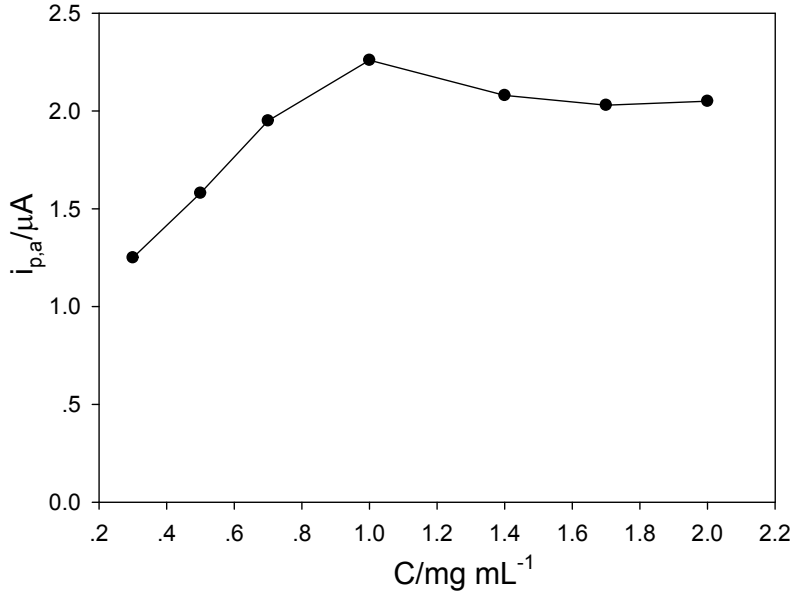

Fig. S2 Effects of the concentration of GO-CNTs-Fe_3O_4 on the response to 2.0 μmol L^{-1} BPA in 0.1 mol L^{-1} PBS (pH 7.0).

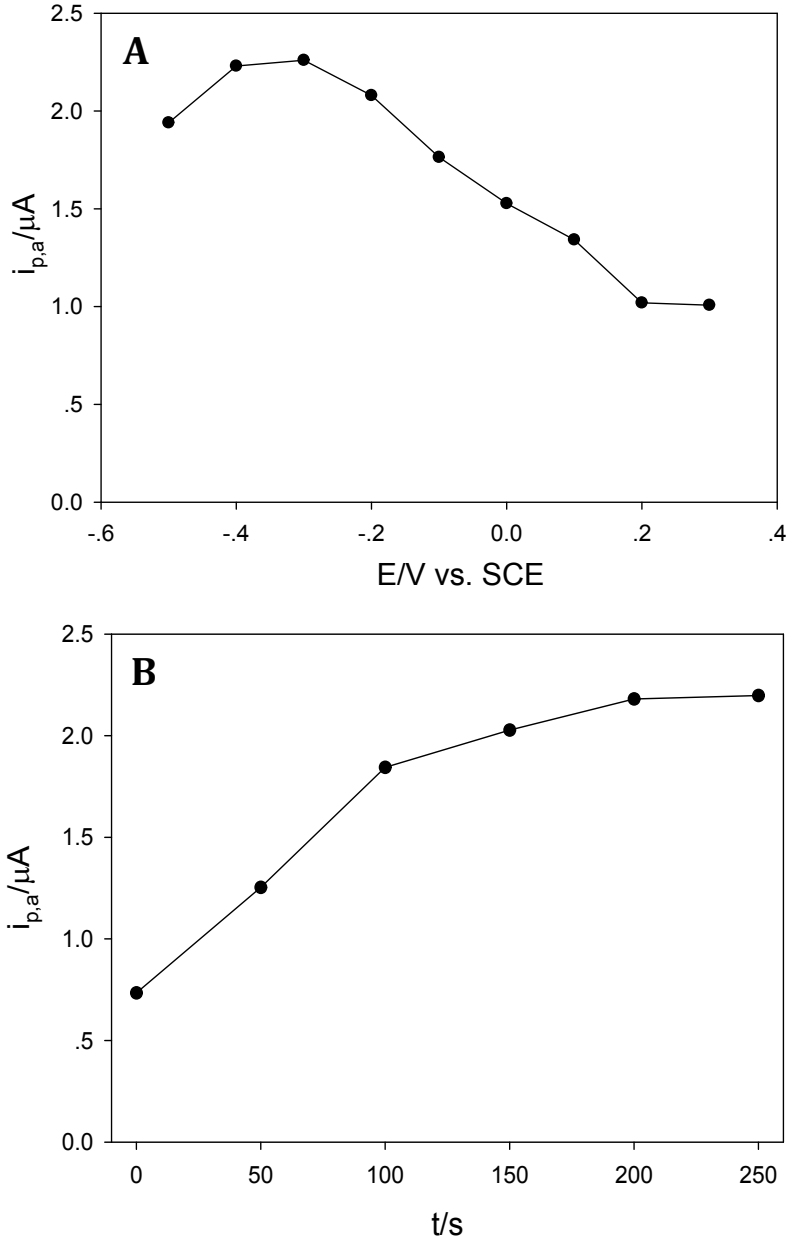

Fig. S3 The influence of accumulation potential (A) and accumulation time (B) on $i_{p,a}$ in 0.1 mol L^{-1} PBS (pH 7.0) containing 2.0 μmol L^{-1} BPA at GO-CNTs-Fe_3O_4/PGA/GCE.

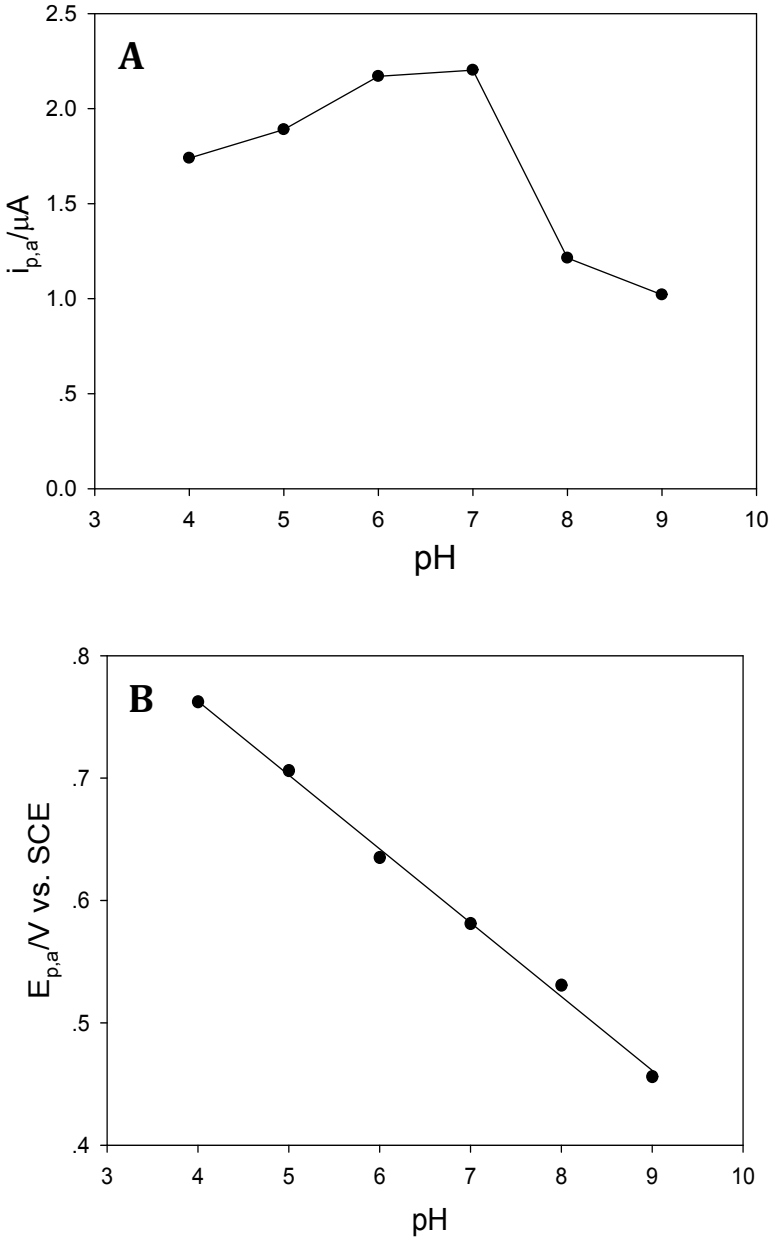

Fig.S4 The relationship of $i_{p,a}$ (A) and $E_{p,a}$ (B) against pH in 0.1 mol L^{-1} PBS containing 2.0 μmol L^{-1} BPA at GO-CNTs-Fe_3O_4/PGA/GCE.