

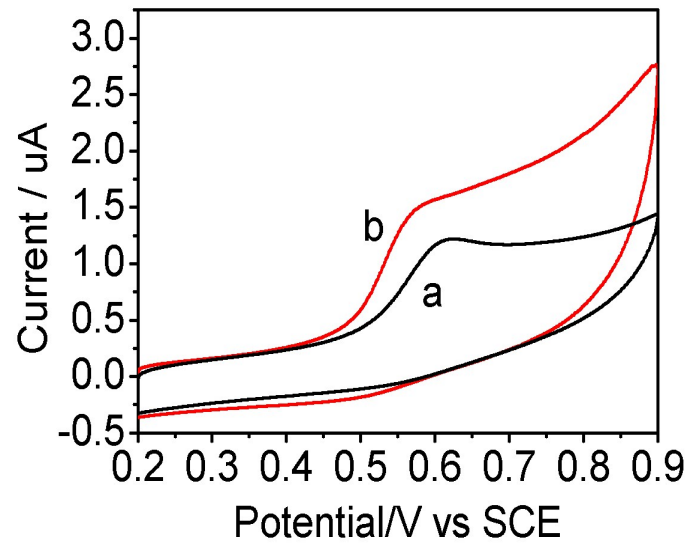
## Supporting information

### **A facile synthesis of nanostructured $\text{CoFe}_2\text{O}_4$ for the electrochemical sensing of bisphenol A**

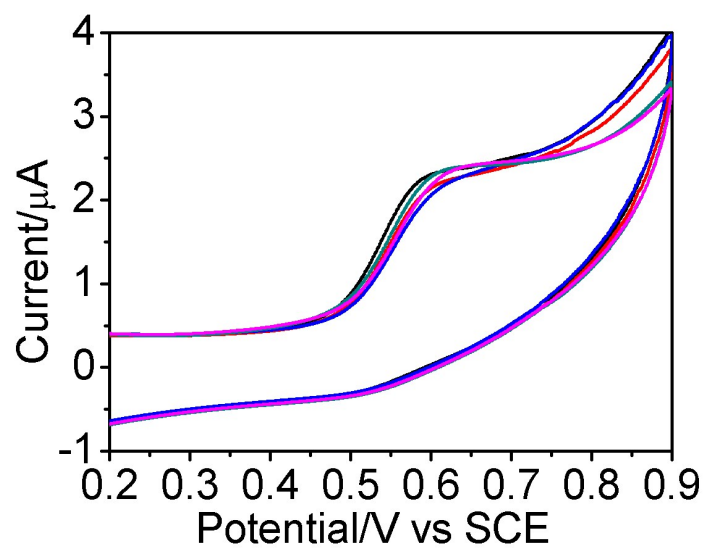
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**Figure S1.** CVs of  $1.0 \times 10^{-5}$  mol L<sup>-1</sup> BPA at a bare GCE (a), CoFe<sub>2</sub>O<sub>4</sub>/GCE (b) in 0.01 M PBS (pH 7.0) with the scan rate of 50 mV/s.



**Figure S2.** The reproducibility curves of  $1.0 \times 10^{-5} \text{ mol L}^{-1}$  BPA on  $\text{CoFe}_2\text{O}_4 / \text{GCE}$ .

**Table S1.** Comparison of the electrocatalytic performance of different modified electrodes for the determination of BPA.

Modified electrode	Linear range ( $\mu\text{M}$ )	Detection limit ( $\mu\text{M}$ )	Recovery (%)	References
CS/MNPs-rGO/GCE	0.06-11	0.0167	97.0-109.2 %	1
MWCNT-Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> /GCE	0.1-10	0.078	97.8-106.3 %	2
MWCNTs/GCE	4.5-82.5	0.08	-	3
CuMOF-Tyr-Chit/GCE	0.05-3	0.013	94.0-101.6 %	4
ZnTsPc/f-GN/GCE	0.05-4	0.02	96.8-103.6 %	5
FeOx- $\beta$ CD/GCE	0.1-50	0.5	-	6
PAMAM-Fe <sub>3</sub> O <sub>4</sub> /GCE	0.01-3.07	0.005	95.3-104.0 %	7
MM P NP-CTAB/CPE	0.1-100	0.1	95.0-112.0 %	8
CoFe <sub>2</sub> O <sub>4</sub> /GCE	0.05-10	0.0036	95.5%-102.0 %	This work

**Table S2.** The effect of different interferences at CoFe<sub>2</sub>O<sub>4</sub> / GCE in the determination of BPA.

Interference	Concentration (mol L <sup>-1</sup> )	Peak change (%)
K	1 $\times$ 10 <sup>-3</sup>	4.27
Na	1 $\times$ 10 <sup>-3</sup>	3.39
Ca <sup>2+</sup>	1 $\times$ 10 <sup>-3</sup>	2.55
Mg <sup>2+</sup>	1 $\times$ 10 <sup>-3</sup>	4.58
Zn <sup>2+</sup>	1 $\times$ 10 <sup>-3</sup>	2.70
NO <sub>3</sub> <sup>-</sup>	1 $\times$ 10 <sup>-3</sup>	3.29
2-nitrophenol	1 $\times$ 10 <sup>-4</sup>	-1.78
4-nitrophenol	1 $\times$ 10 <sup>-4</sup>	1.95
2,4-dinitrophenol	1 $\times$ 10 <sup>-4</sup>	4.40
resorcinol	1 $\times$ 10 <sup>-4</sup>	3.61
glucose	1 $\times$ 10 <sup>-4</sup>	3.57

## Reference

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