

## Supporting information

### **Hydrothermal fabrication of hierarchical CuO nanoflower for dual-function amperometric sensing of hydrogen peroxide and glucose**

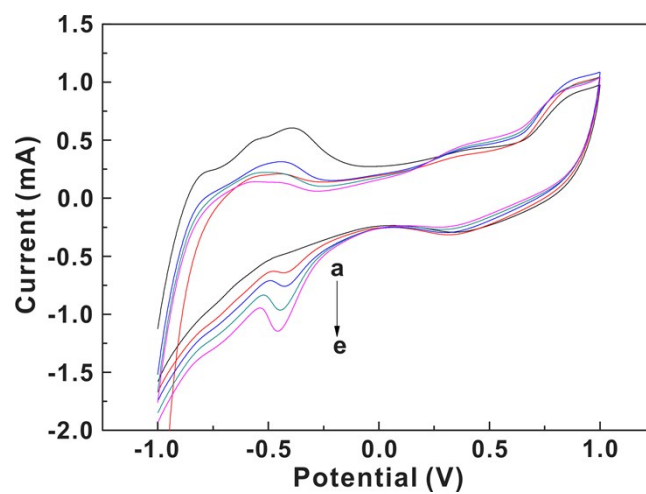
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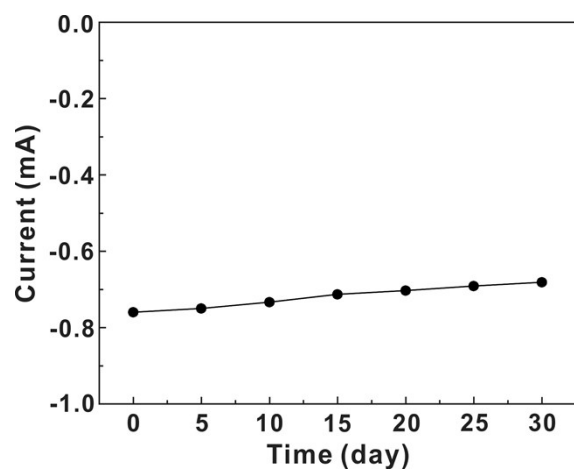
<sup>b</sup> *CAS Key Laboratory of Chemistry of Northwestern Plant Resources and Key Laboratory for Natural Medicine of Gansu Province, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, P. R. China.*

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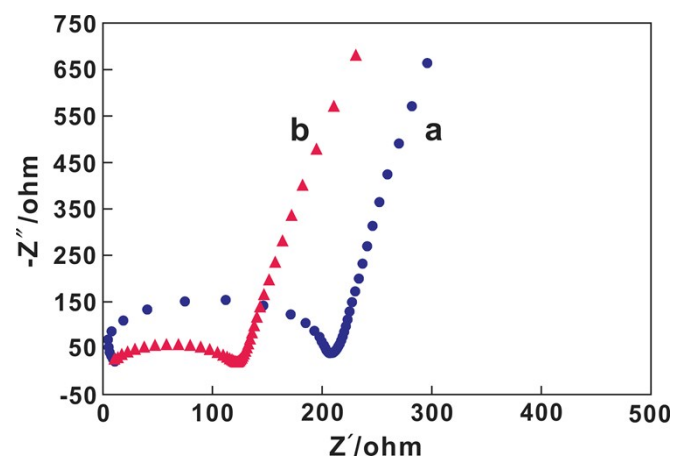
E-mail: niyue2009@sina.cn



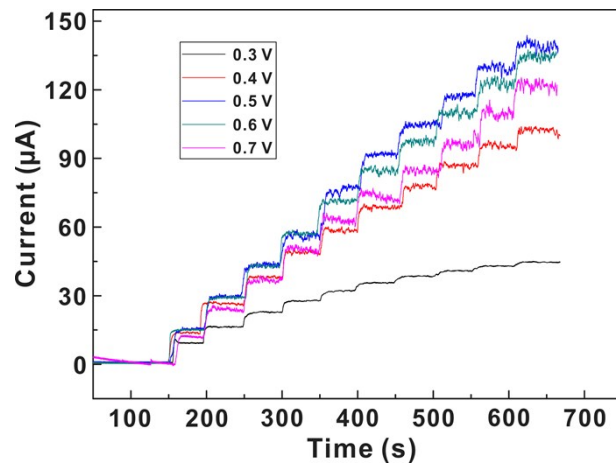
**Fig. S1** CVs of the CuO NFs/GC electrode with different concentrations of H<sub>2</sub>O<sub>2</sub> (from the top to bottom: 0 to 2.0 mM) in N<sub>2</sub>-saturated 0.1 M PBS solution (pH=7) at a scan rate of 100 mV s<sup>-1</sup>.



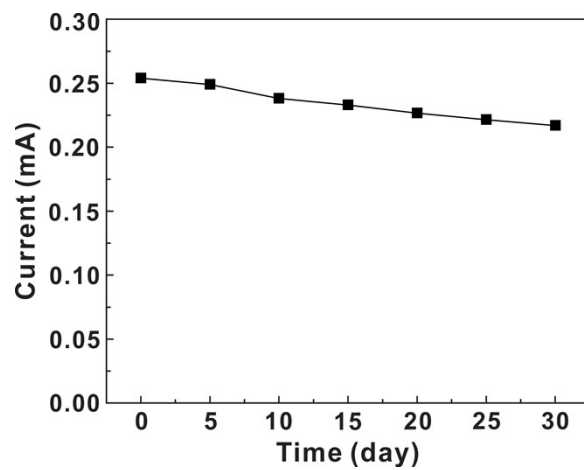
**Fig. S2** Long-term stability of CuO NFs/GC electrode for H<sub>2</sub>O<sub>2</sub> detection. Electrocatalytic current of H<sub>2</sub>O<sub>2</sub> was recorded at -0.4V.



**Fig. S3** Nyquist plots of (a) bare GCE and (b) CuO NFs/GC electrode in 0.1 M KCl containing 5 mM  $[\text{Fe}(\text{CN})_6]^{3-/4-}$ .



**Fig. S4** Amperometric response of CuO NFs/GC electrode at different applied potentials with successive addition of 0.2 mM glucose.



**Fig. S5** Long-term stability of CuO NFs/GC electrode for glucose detection. Electrocatalytic current of glucose was recorded at 0.5 V.