

Fig. S1 CVs of GCE (A) and N-GCE (B) using 5.0 mM  $\text{Fe}(\text{CN})_6^{4-/3-}$  as a probe in 0.1 M KCl at different scan rates from inner to outer: 10, 30, 50, 70, 90 ( $\text{mV s}^{-1}$ ) (a) and the corresponding linear relationship between anodic peak current and square root of scan rate (b).

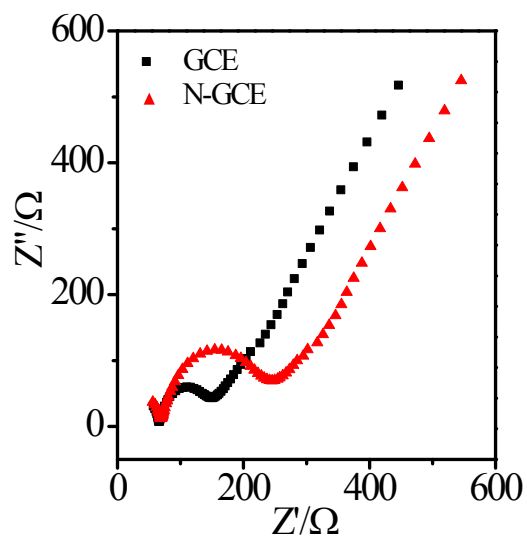


Fig. S2 Nyquist plots of GCE and N-GCE in 0.1 M KCl solution using 5 mM  $[\text{Fe}(\text{CN})_6]^{3-/4-}$  as a probe.

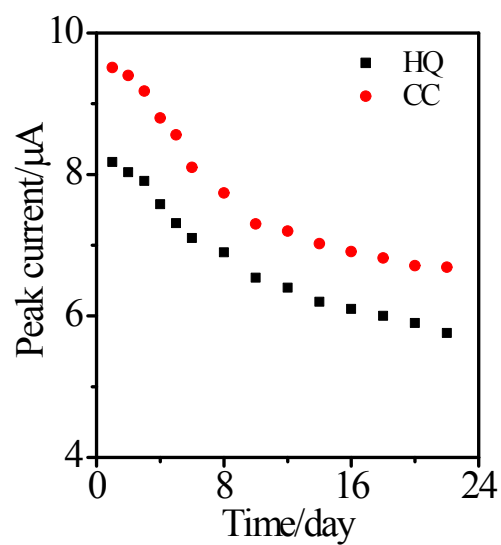


Fig. S3 Time dependence of current response of N-GCE to a mixture of 300  $\mu\text{M}$  HQ and 300  $\mu\text{M}$  CC in PBS (0.1M, pH 7.0). N-GCE was stored in PBS (0.1M, pH 7.0) at room temperature when it was not in use.

Table.S1 Influence of some possible interfering substances on the simultaneous determination of 300  $\mu\text{M}$  HQ and 30  $\mu\text{M}$  CC (n=5)

Coexisting substances	Concentration/M	Relative error/%
Na <sup>+</sup>	$3.0 \times 10^{-2}$	1.22
K <sup>+</sup>	$3.0 \times 10^{-2}$	1.03
Ca <sup>2+</sup>	$3.0 \times 10^{-2}$	1.10
Mg <sup>2+</sup>	$3.0 \times 10^{-2}$	1.05
Fe <sup>2+</sup>	$3.0 \times 10^{-2}$	2.04
NO <sub>3</sub> <sup>-</sup>	$3.0 \times 10^{-2}$	2.05
SO <sub>4</sub> <sup>2-</sup>	$3.0 \times 10^{-2}$	2.12
Cl <sup>-</sup>	$3.0 \times 10^{-2}$	2.30
Resorcinol	$3.0 \times 10^{-4}$	4.54
Phenol	$3.0 \times 10^{-4}$	3.02
Hydroxybenzoic acid	$3.0 \times 10^{-4}$	3.41
Hydroxy benzaldehyde	$3.0 \times 10^{-4}$	1.56
Hydroxybenzyl alcohol	$3.0 \times 10^{-4}$	2.04
Acetaminophen	$3.0 \times 10^{-4}$	3.26
Ascorbic acid	$3.0 \times 10^{-4}$	4.25
Uric acid	$3.0 \times 10^{-4}$	1.45