Supplementary Information

Multifunctional porous $NiCo_2O_4$ nanorods: sensitive enzymeless glucose detection and supercapacitor properties with impedance spectroscopic investigations

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Table S1. Determination of glucose in human blood serum.

Sensor	Added (μM)	Found (μM)	RSD (%)	Recovery (%)
NNCOGCE	30	28.76	1.04	95.68
	30	29.81	1.06	99.39

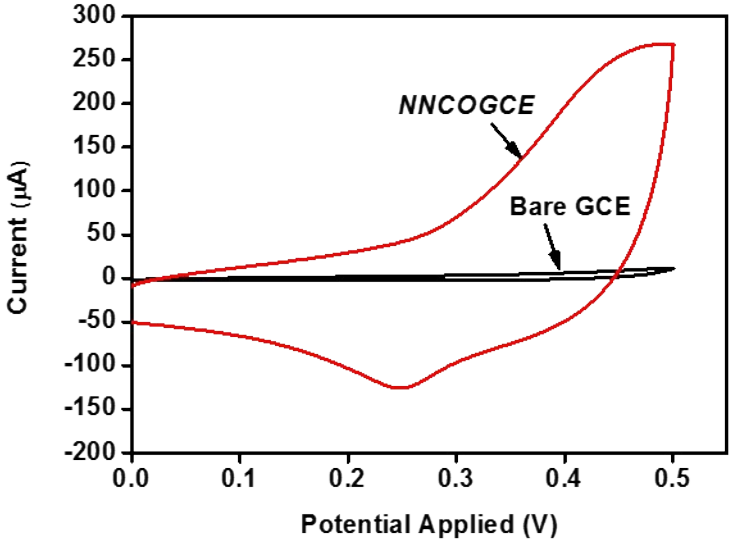

Fig. S1. A comparison of CV profiles of bare GCE and ***NNCOGCE*** in 1 M KOH.

Calculations of Supercapacitor Parameters

The specific capacitance for ***NNCOGCE*** were calculated from the charge-discharge curves according to the equation mentioned below:

$$\text{Specific capacitance} = I\,dt\,/m\,\Delta V$$

Since 10 mg of composite was dispersed in 10 mL ethanol, and 5 μL of as-formed suspension was dropcast on the GCE, which gives an effective mass loading (m) of 5 μg.

I is the applied current, dt is the discharge time, and ΔV is the potential window.

For the specific capacitance at current density (I/m) of 2 A g^{-1}, discharge time (dt) is 294 s and potential window (ΔV) is 0.6 V.

So according to the equation:

$$\text{Specific capacitance} = 2 * (294/0.6) = 980\ F\ g^{-1}$$

Similarly, at a current density (I/m) of 3 A g^{-1}, discharge time (dt) is 173 s.

$$\text{Specific capacitance} = 3 * (173/0.6) = 865\ F\ g^{-1}$$

Similarly specific capacitance were calculated at all other current densitites.