## Supporting Information

# Self-assembly of graphene-encapsulated $\mathbf{C u}$ composites for nonenzymatic glucose sensing 

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## 1. The characterization of GO sheets



Figure S1. AFM image (a) and height profile (b) of GO sheets; (c) SEM image of GO sheets, the inset showed the digital photo of GO solution; (d) TEM image of GO sheets.

## 2. The size distribution of GO sheets



Figure S2. The size distribution of GO sheets which was obtained by ultrasonication for an hour.

## 3. The mechanism for the oxidation of glucose on Cu@RGO

 electrode

Figure S3. The mechanism for the oxidation of glucose on $\mathrm{Cu} @ R G O$ electrode.

## 4. $\mathbf{C V}$ curves of $\mathrm{Cu} @$ RGO electrode in NaOH electrolyte



Figure S4. CV curves recorded at graphene-encapsulated Cu nanoparticle in $\mathrm{N}_{2}$-saturated 50 mM NaOH electrolyte at $50 \mathrm{mV} / \mathrm{s}$.


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