Supplementary Materials

Hexagonal Co_3O_4 anchored reduced graphene oxide sheets for high-performance supercapacitors and non-enzymatic glucose sensing†

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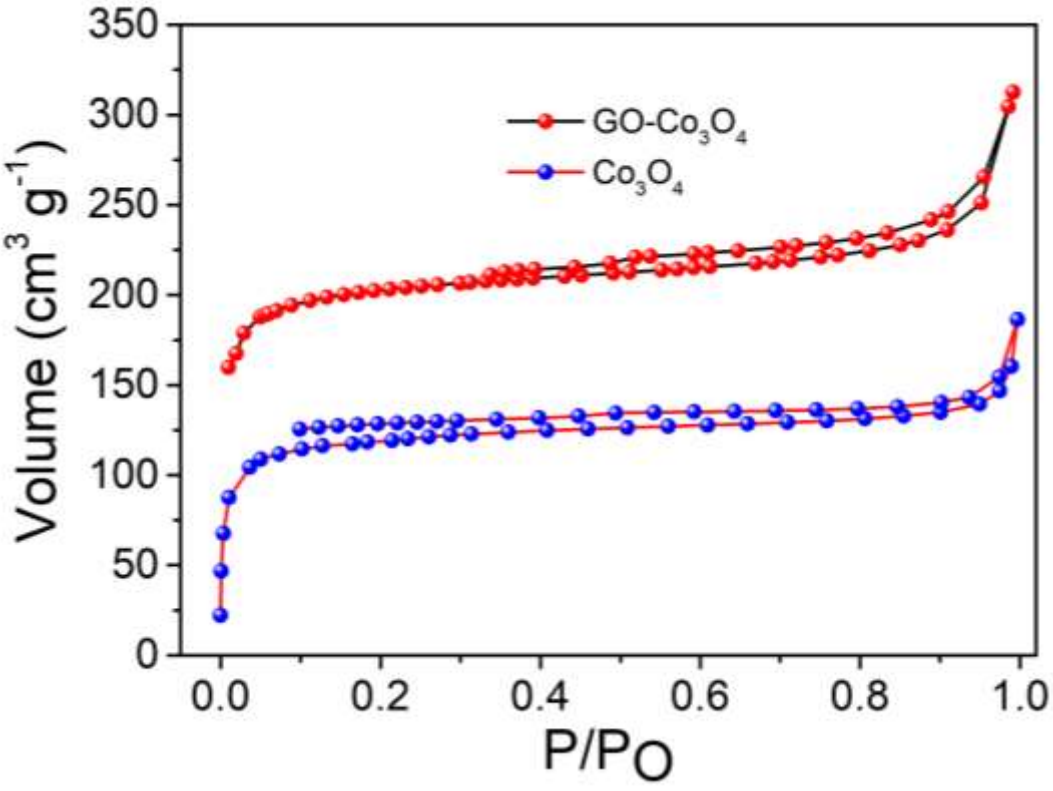

Fig. S1. Adsorption-desorption isotherms of GO-Co_3O_4 and Co_3O_4.

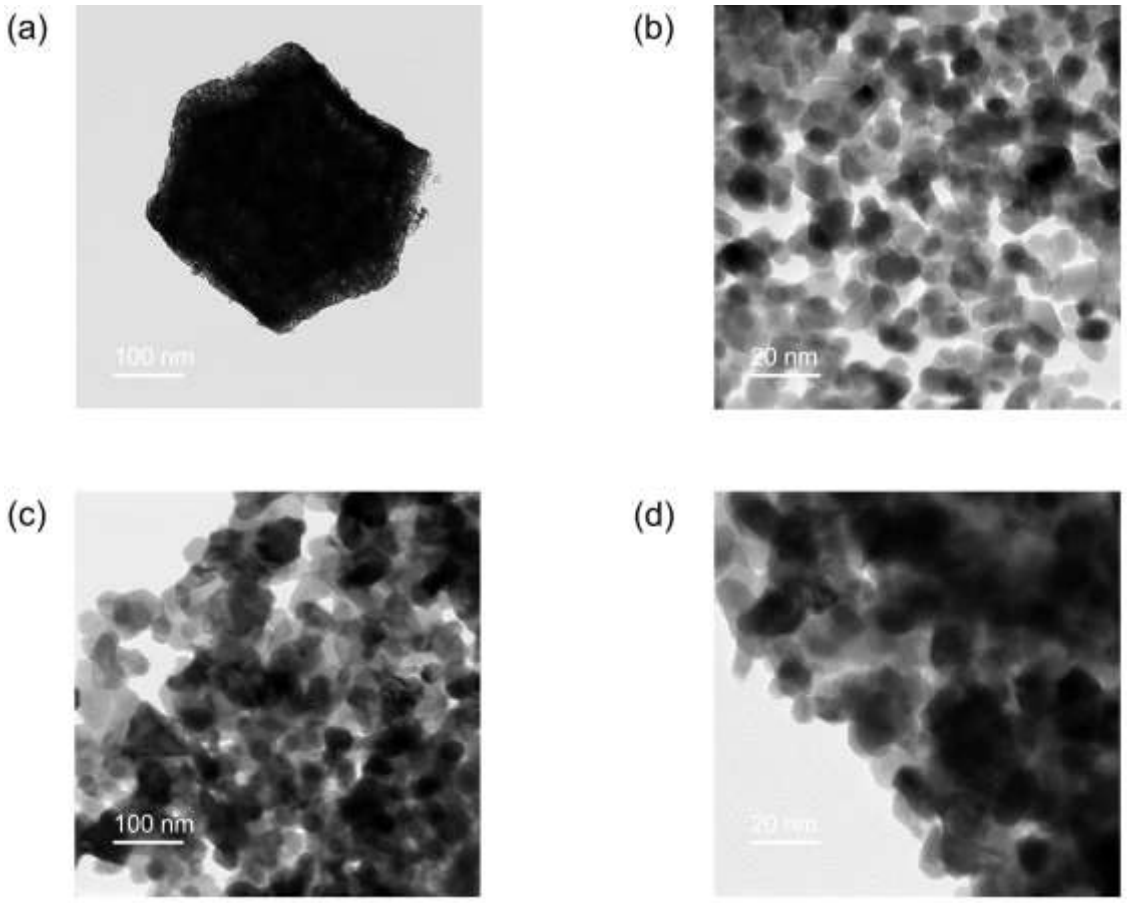

Fig. S2. TEM images of (a) Co_3O_4 and (b) RGO-Co_3O_4 sheets at different magnifications.

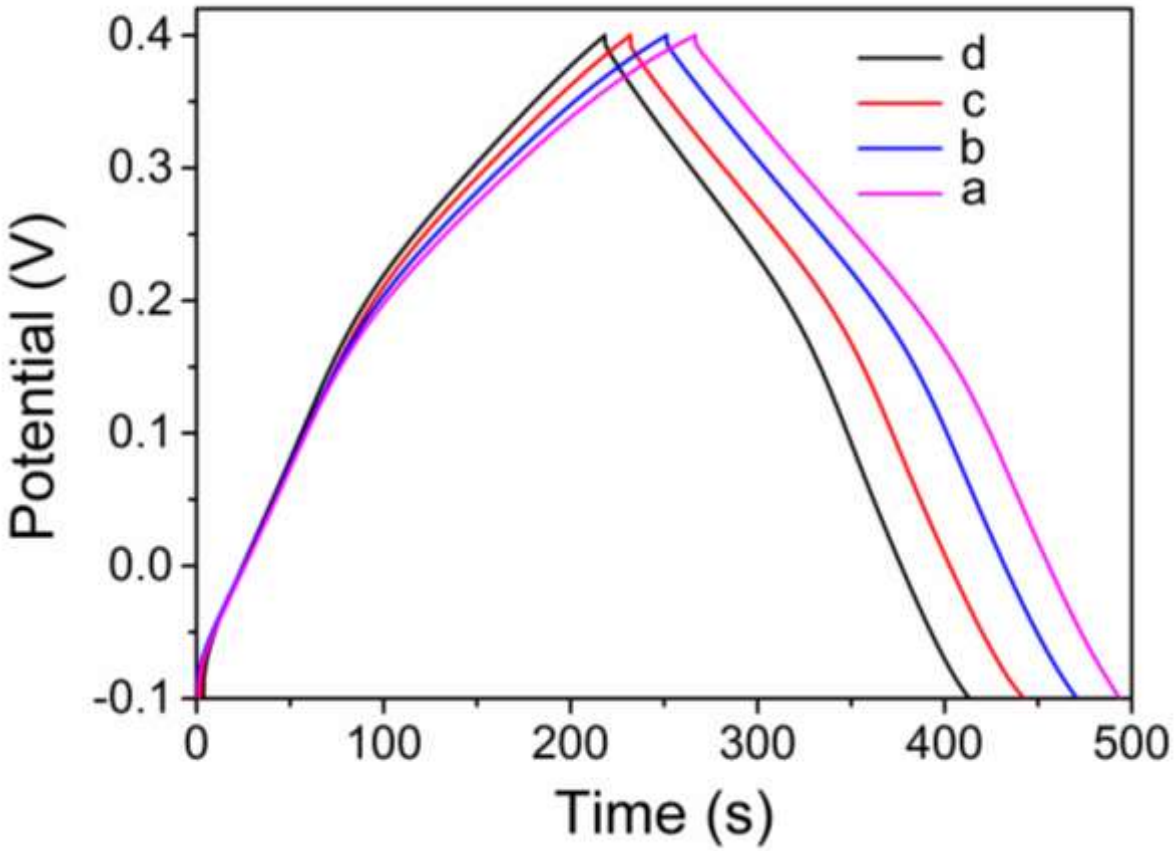

Fig. S3. (a) Galvanostatic charge-discharge curves of RGO-Co_3O_4 at a various mass loadings (a-d; 0.2, 0.6, 1.3 mg cm^{-2}) at 4 A g^{-1}.

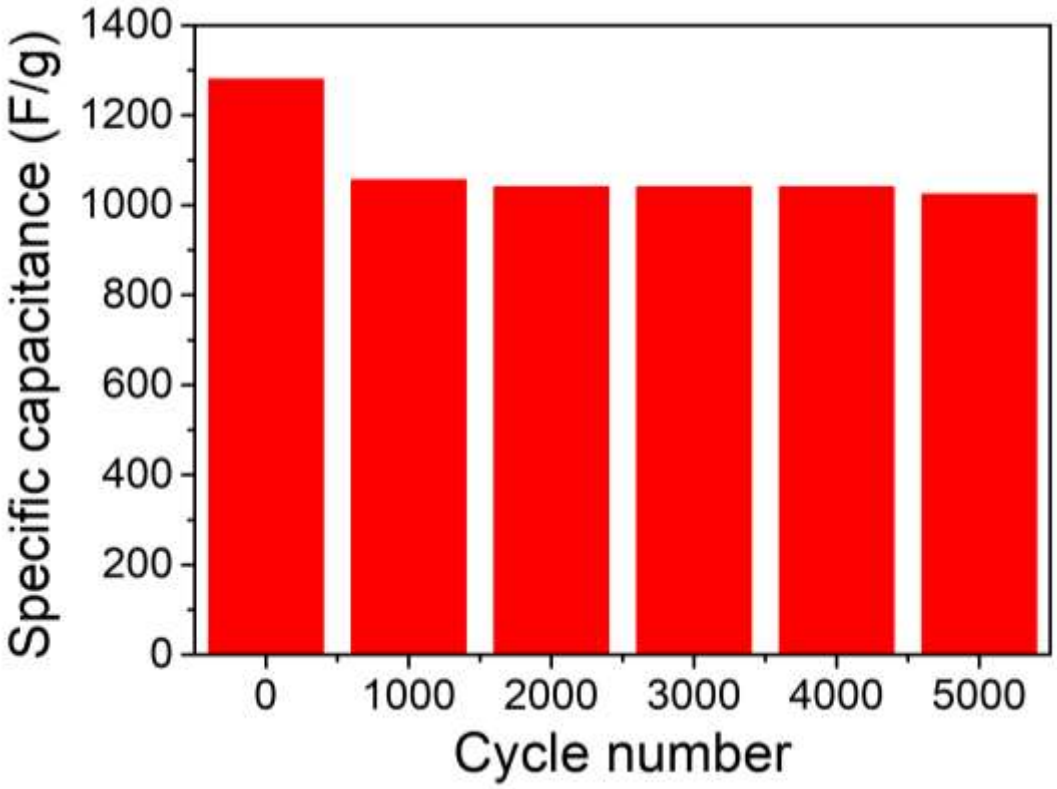

Fig. S4. A Plot between specific capacitance and respective cycles of RGO-Co_3O_4 at an applied current density of 4A/g.

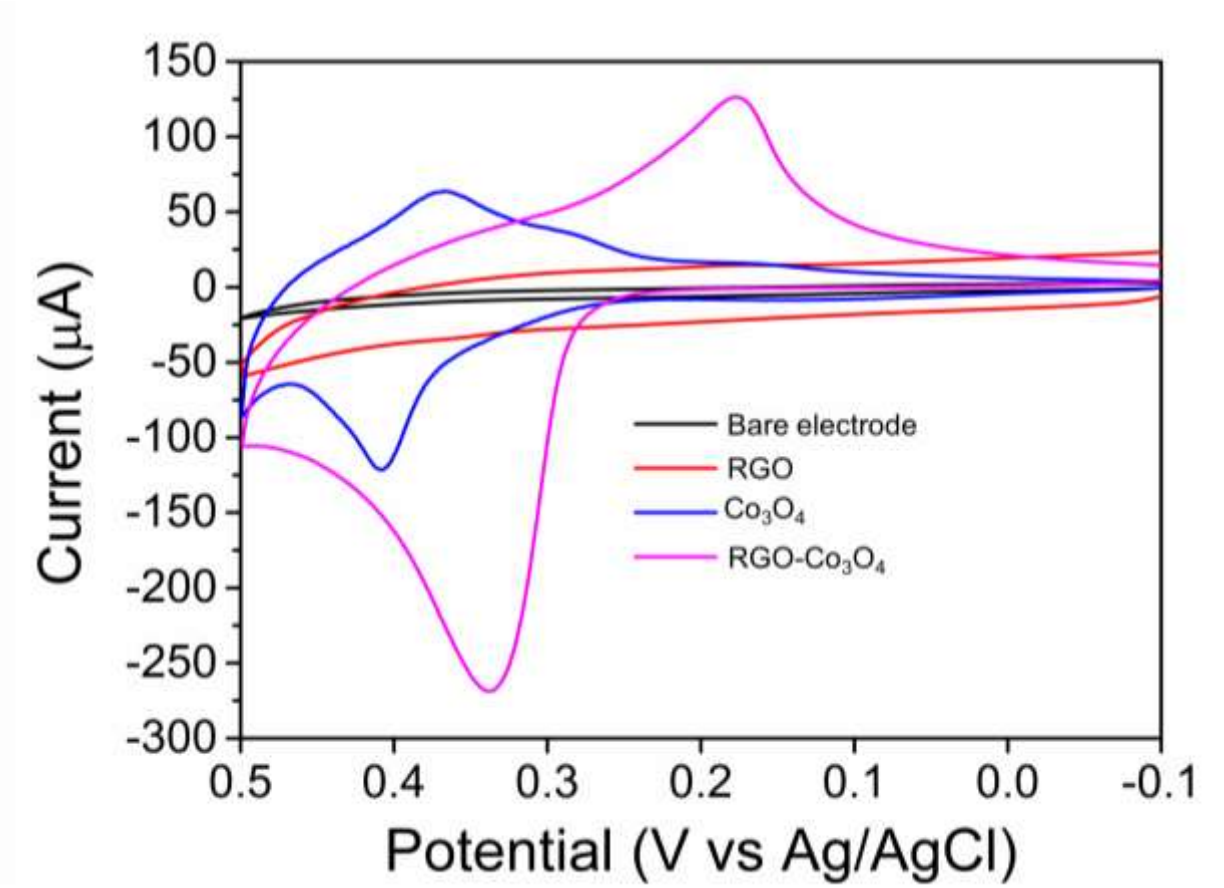

Fig. S5. CVs obtained for 4 mM glucose at different electrodes in 0.1 M KOH at a scan rate of 50 mV s^{-1}.

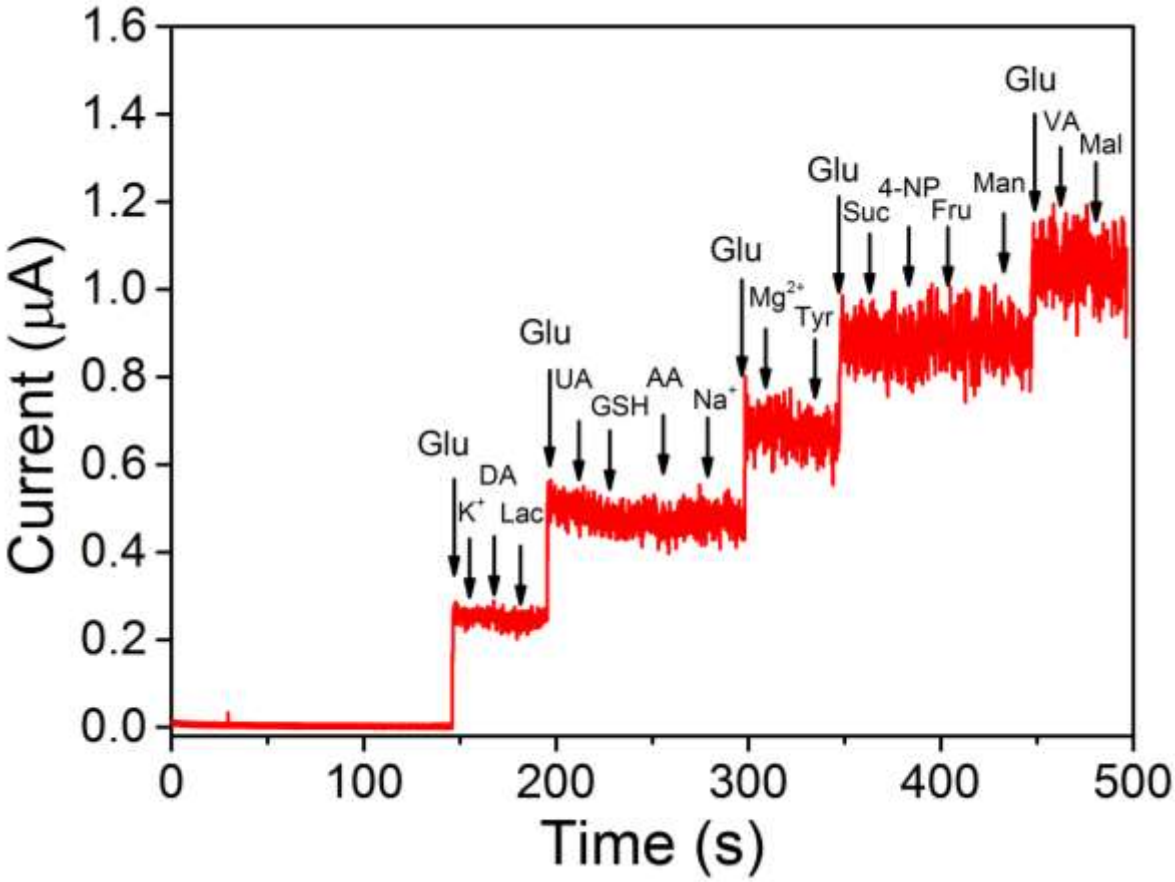

Fig. S6. Amperometric i-t response at RGO-Co_3O_4 modified electrode upon addition of 1 µM of glucose,Sucrose, Fructose,D-Mannose,glutathione, ascorbic acid,uric acid, D-maltose, dopamine, 4-nitrophenol, D-Lactose, vanillin, tyrosine and 500 µM of K^+, Na^+ and Mg^{2+} to glucose aqueous solutions into continuously stirred N_2 saturated KOH solution (Applied potential: +0.35 V).

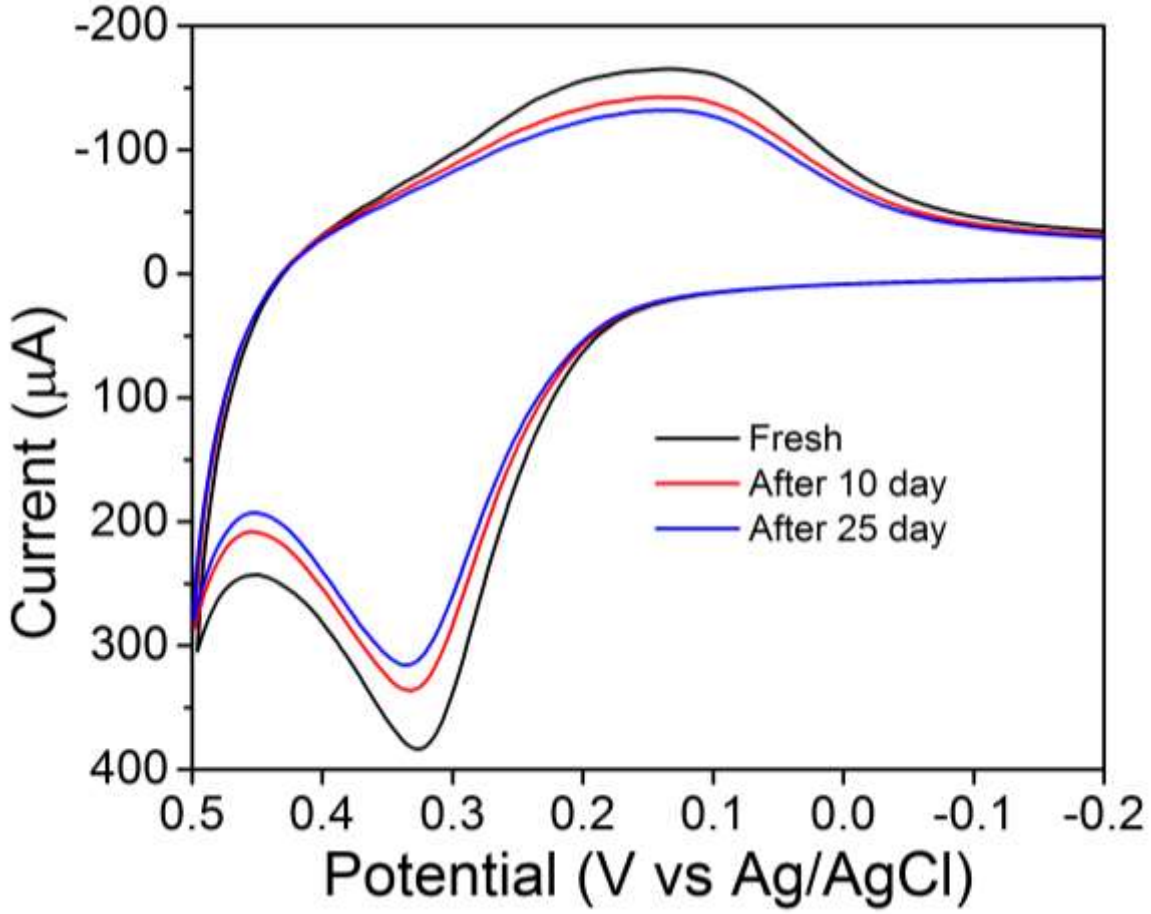

Fig. S7. Long-term stability of RGO-Co_3O_4 sensor measured in 1 mM glucose solution for 25 days.

Table S1 Comparisons of the proposed RGO-Co_3O_4 performance with the previous report non-enzymatic glucose sensors.

Electrode Material	**Linear range (μM)**	**LOD (μM)**	**Reference**
$CuCo_2O_4$	up to 320	5	[1]
$NiCo_2S_4$	1-664	1.2	[2]
$MnCo_2O_4$	20-100	3.2	[3]
NiOHSs-RGO-NF	0.6246-10,500	0.03	[4]
NiO/Pt/ERGO	50-5660	0.2	[5]
RGO-Co_3O_4	1-500	0.4	This work

References

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