Supplementary Information

Electrodeposited Spinel NiCo$_2$O$_4$ Nanosheet Arrays for Glucose Sensing Application

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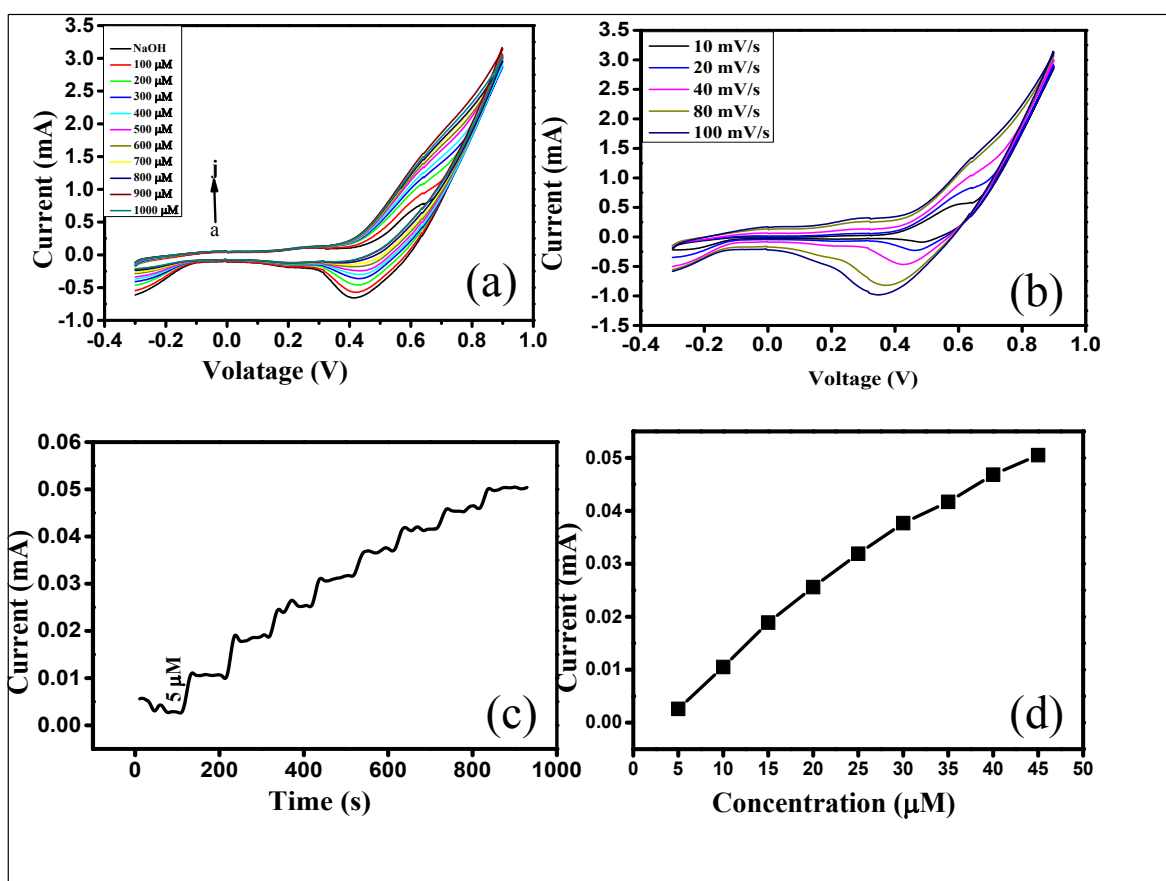*School of Basic Sciences, Indian Institute of Technology, Bhubaneswar751013, Odisha*

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Fig. S1. (a) CVs of Cobalt Oxide electrode at different glucose concentrations: black colour solid line shows the CV without glucose and in (a) 100 µM to (j) 1000 µM glucose in 0.1 M of NaOH, (b) CVs in presence of 100 µM glucose at different scan rate, (c) Current versus time measurement at 0.4 V with successive addition of 5 µM of glucose in 100 s time interval. (d) dpendence on current with respect to the glucose concentration.

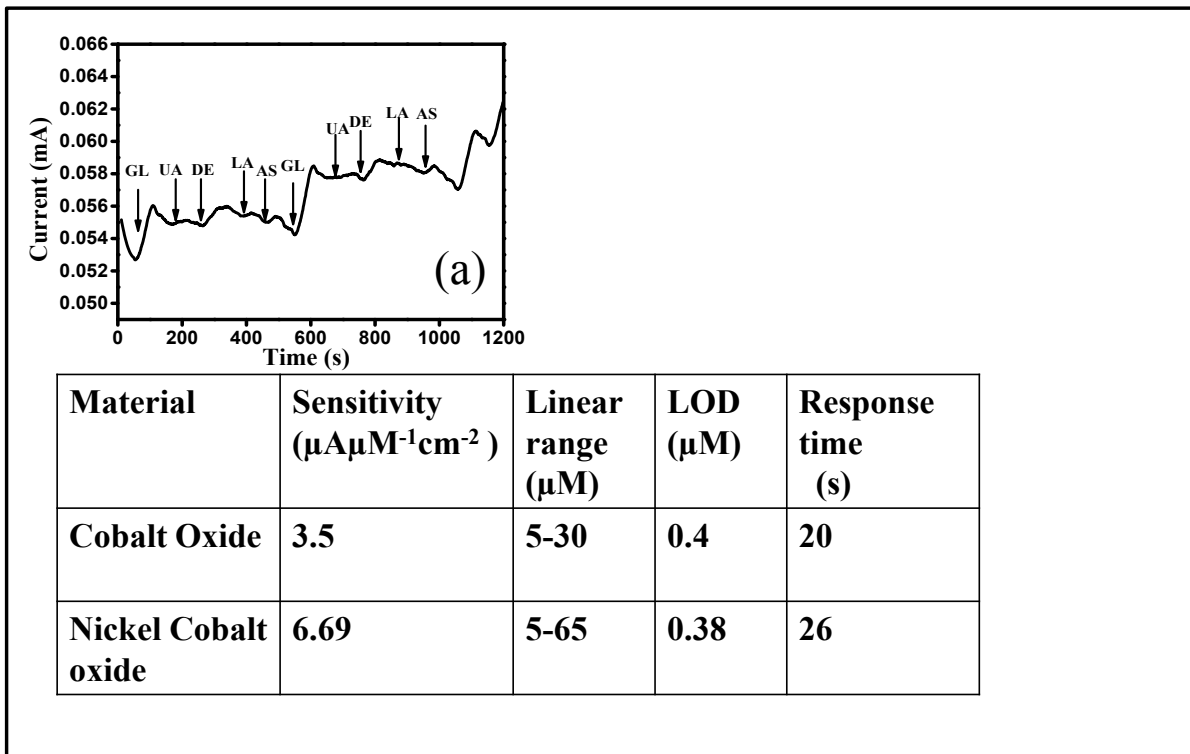| Material	Sensitivity (µAµM⁻¹cm⁻²)	Linear range (µM)	LOD (µM)	Response time (s)
Cobalt Oxide	3.5	5-30	0.4	20
Nickel Cobalt oxide	6.69	5-65	0.38	26

Fig. S2. (a) Interference study of Cobalt oxide at 0.4 V. Comparision data between Cobalt oxide and Nickel cobalt oxide.
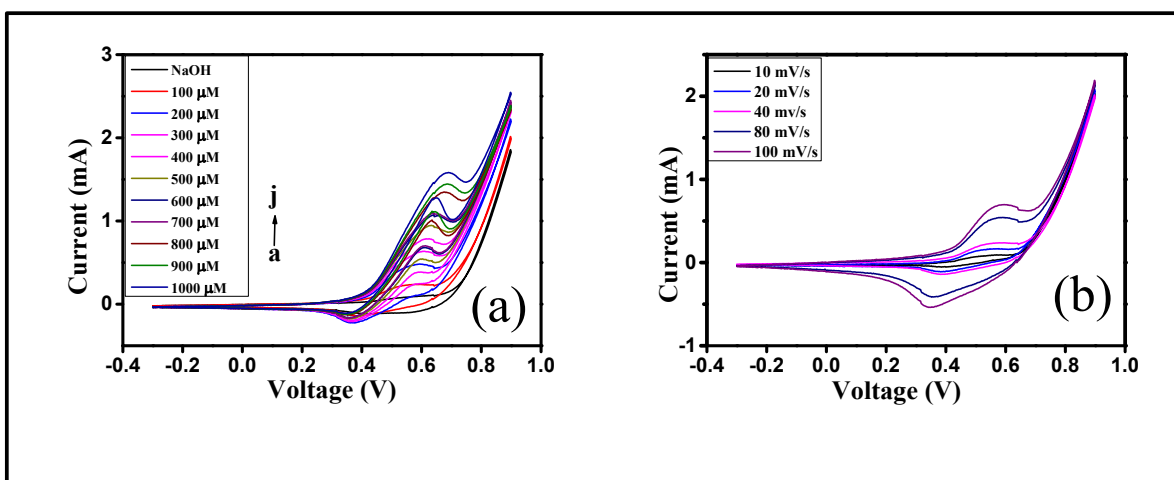

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Fig. S3. (a) CVs of Nickel Oxide electrode at different glucose concentrations: black colour solid line shows the CV without glucose and in (a) 100 µM to (j) 1000 µM glucose in 0.1 M of NaOH, (b) CVs in presence of 100 µM glucose at different scan rate.
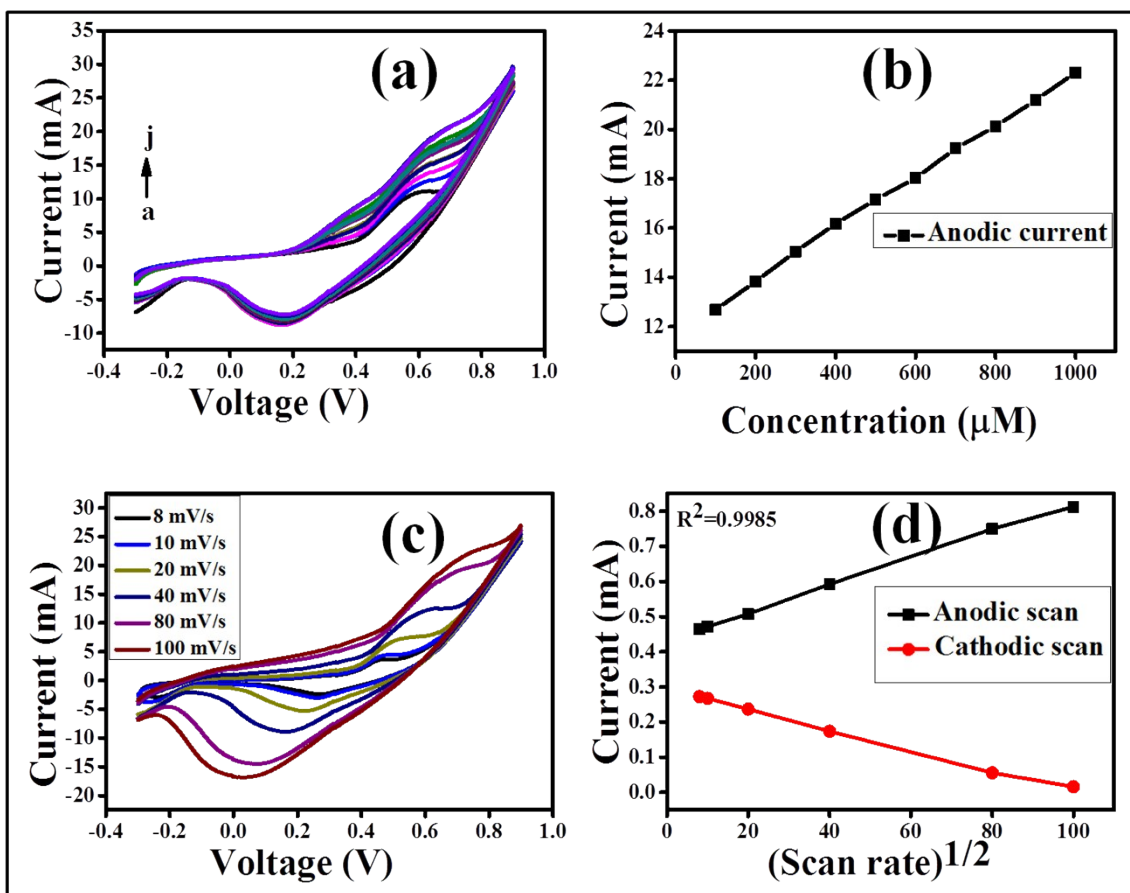
Fig. S4. (a) CVs of Nickel Cobalt Oxide on Ni foam at different glucose concentrations: black colour solid line shows the CV without glucose and in (a) 100 µM to (j) 1000 µM glucose in 0.1 M of NaOH, (b) Current vs Concentration graph, (c) CVs in presence of 100 µM glucose at different scan rate and (d) Current vs (scan rate)$^{1/2}$ graph.
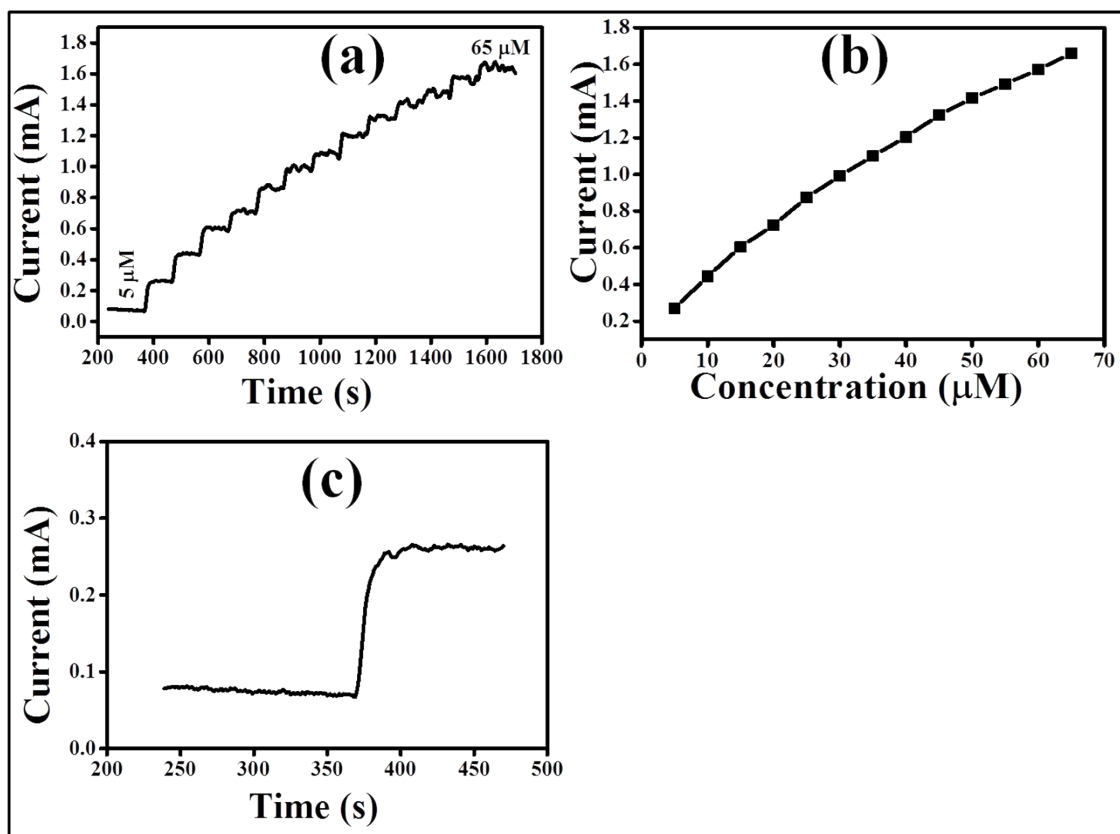
Fig. S5. (a) CA study of Nickel Cobalt oxide on Ni foam at 0.4 V, (b) Callibration graph and (c) response time.
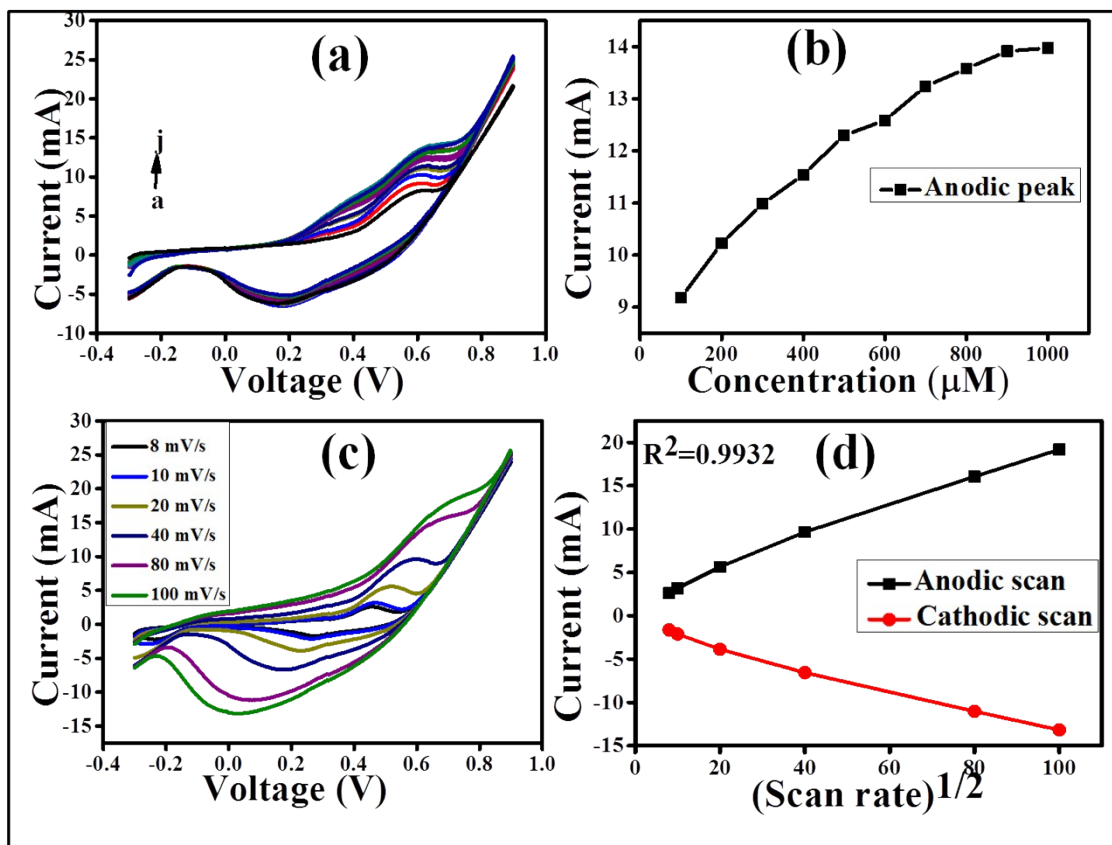
Fig. S6. (a) CVs of Nickel Cobalt Oxide on Ni strip at different glucose concentrations: black colour solid line shows the CV without glucose and in (a) 100 μM to (j) 1000 μM glucose in 0.1 M of NaOH, (b) Current vs Concentration graph, (c) CVs in presence of 100 μM glucose at different scan rate and (d) Current vs (scan rate)$^{1/2}$ graph.
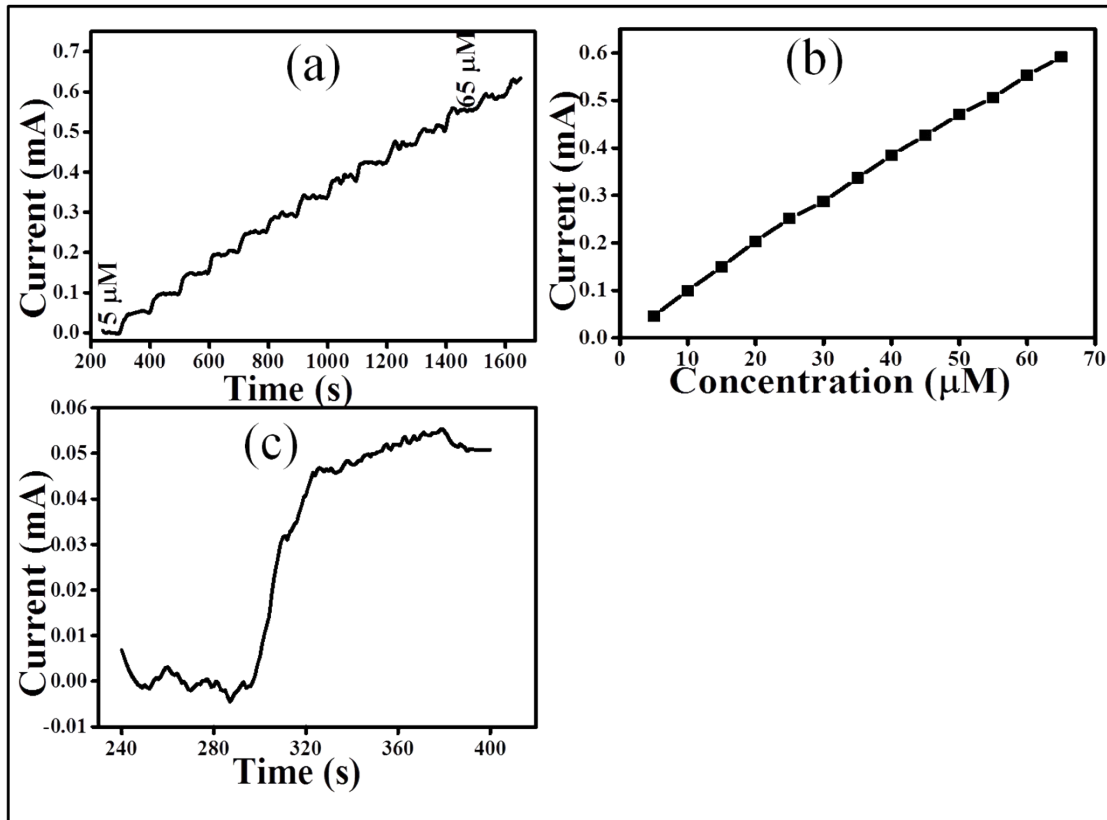
Fig. S7. (a) CA study of Nickel Cobalt oxide on Ni strip at 0.4 V, (b) Callibration graph and (c) response time.