

## SUPPORTING INFORMATION

The supporting information includes FESEM images, XRD patterns, electrochemical measurements, and stability studies of the compounds prepared in this study.

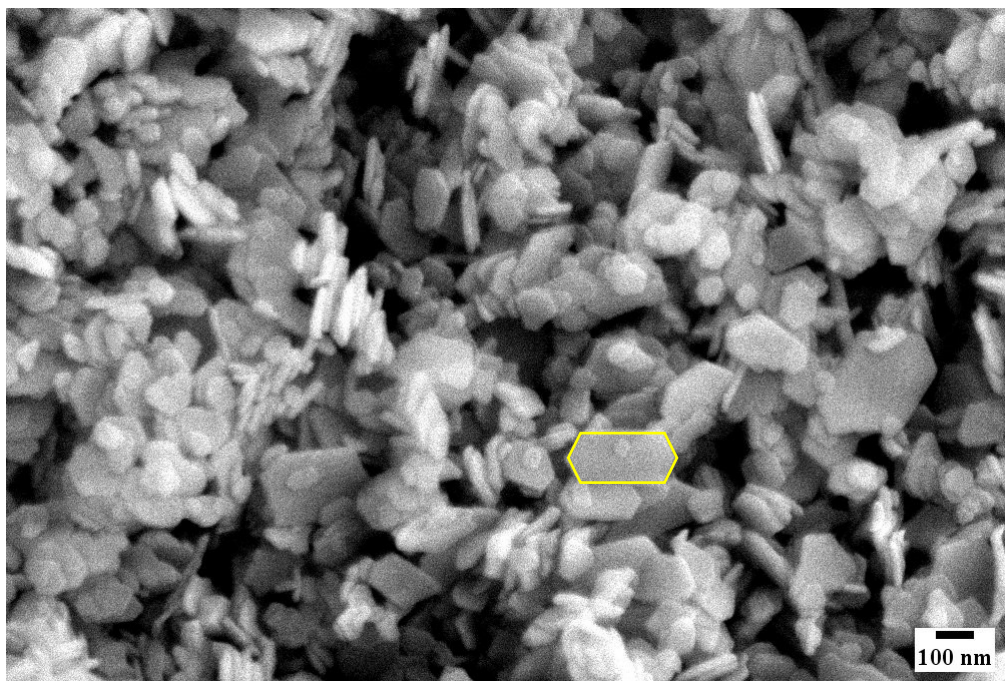


Figure S1. FESEM image of NC-2.

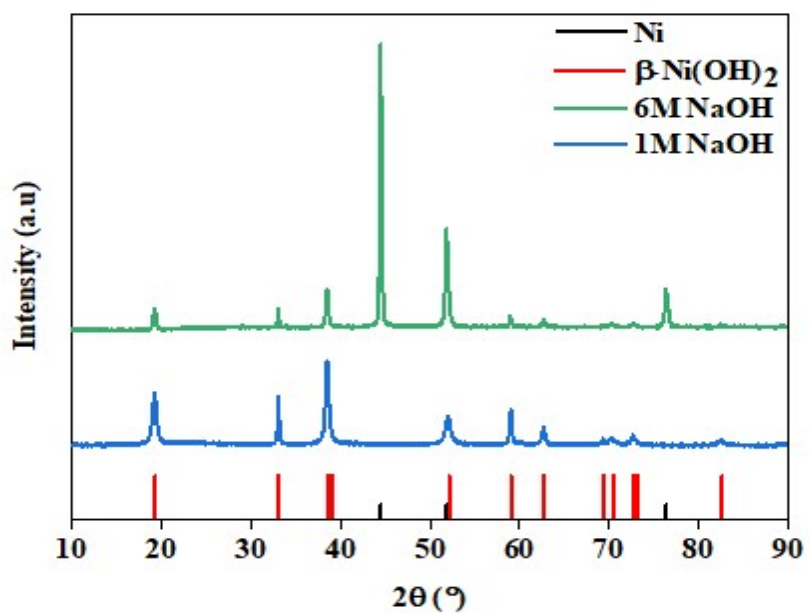


Figure S2. Concentration variation of NaOH for the synthesis of Ni@Ni(OH)<sub>2</sub>.

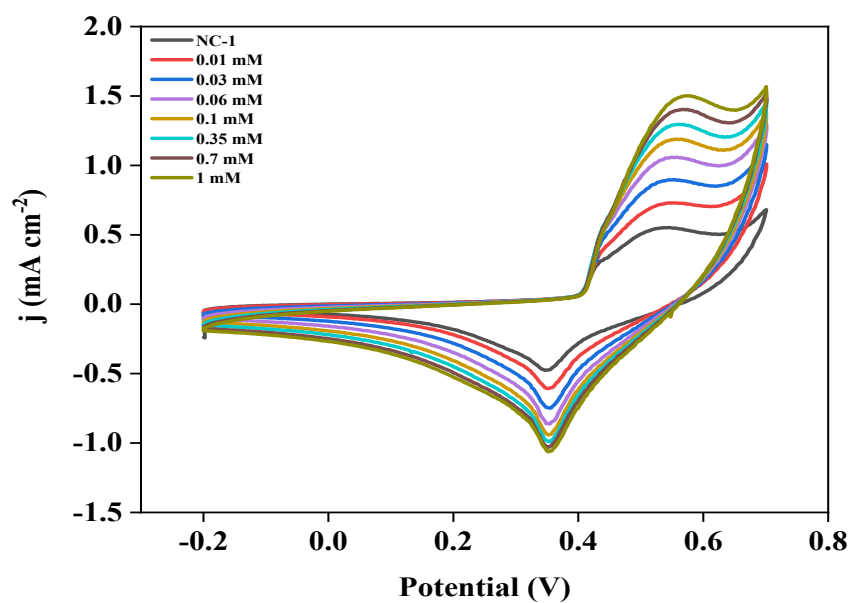


Figure S3. CV of NC-1 with various concentrations of glucose at the scan rate of  $50\text{mV s}^{-1}$ .

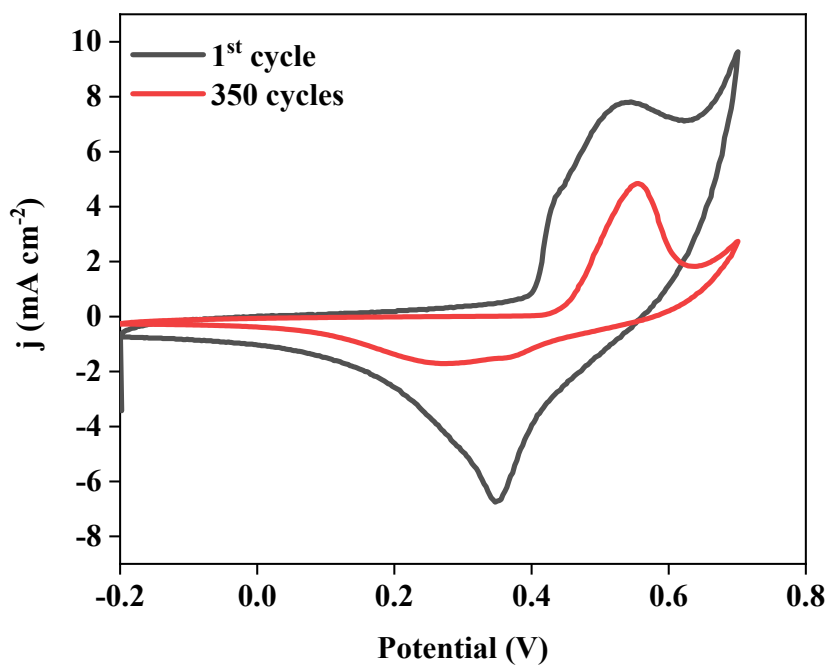


Figure S4. Number of cycles NC-1 from  $\alpha$  to  $\beta$ -Ni(OH)<sub>2</sub>.

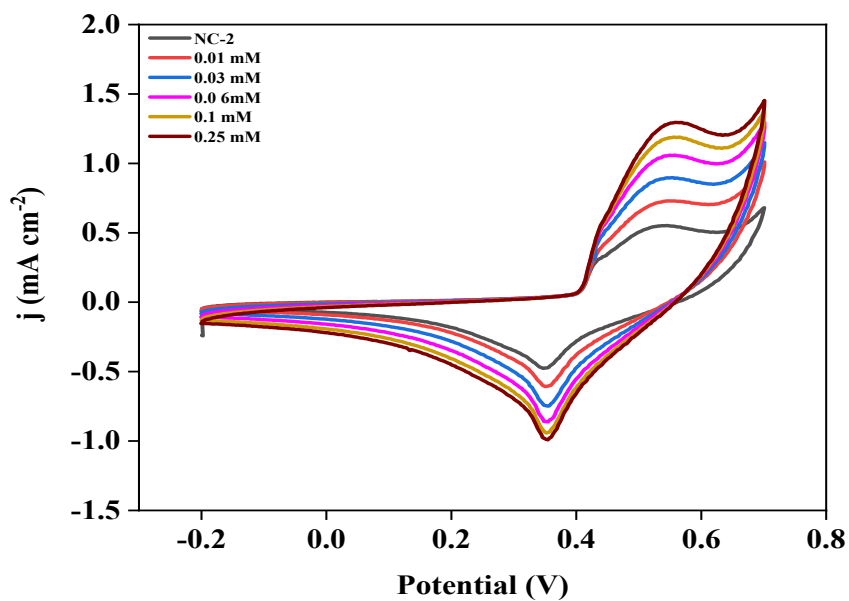


Figure S5. Concentration variation of NC-2 with the addition of glucose (both phases).

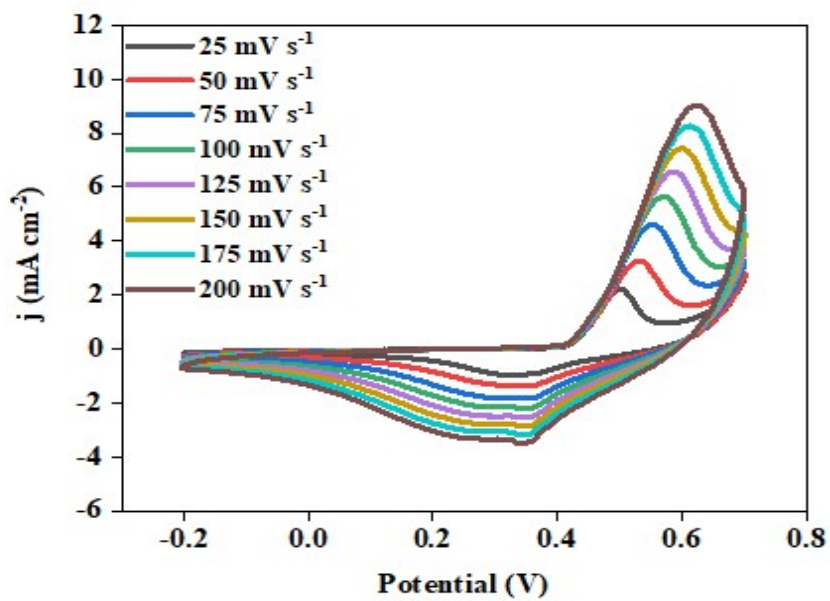


Figure S6. Scan rate variation of NC-1 with 0.5 mM glucose in 0.1 M NaOH.

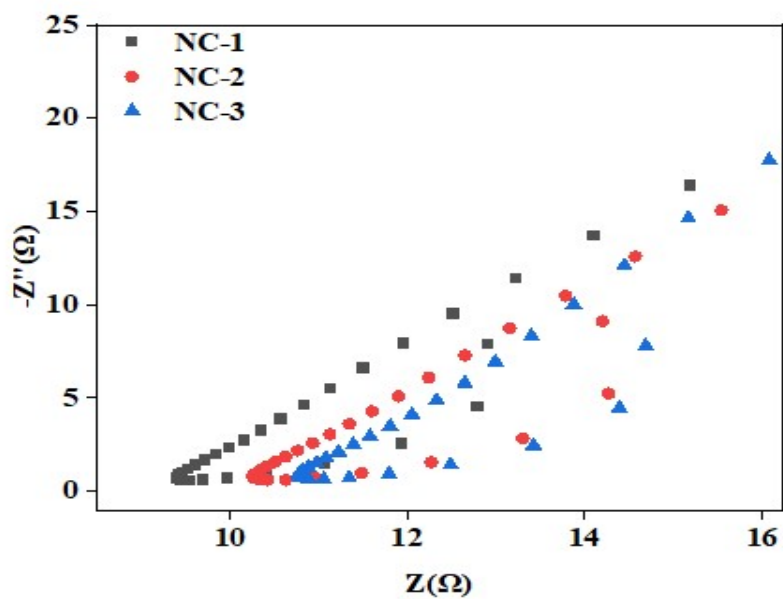


Figure S7. Nyquist plot of as-synthesized compounds with and without glucose addition.

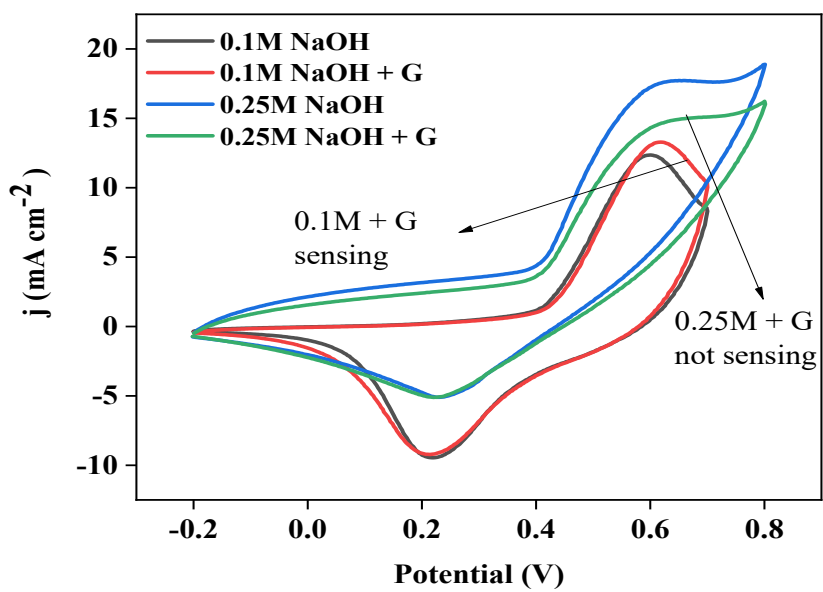


Figure S8. Concentration variation of NaOH in the presence of NC-1 with and without glucose.

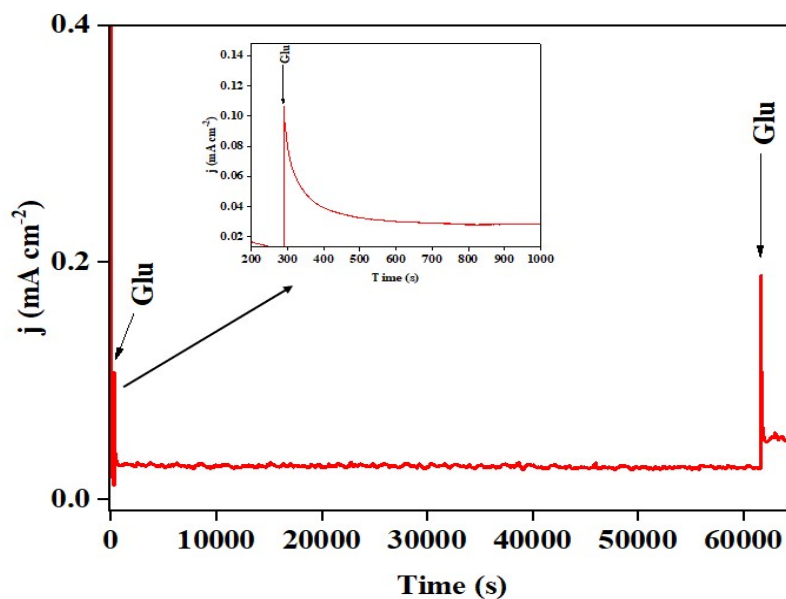


Figure S9. Response of NC-1 with the addition of glucose.

Table S1: Comparison of salivary glucose sensors based on Ni(OH)<sub>2</sub> based nanocomposites

S.No	Electrode	Linear range	Detection limit( $\mu\text{M}$ )	Sensitivity ( $\mu\text{A mM}^{-1} \text{cm}^{-2}$ )	Reference
1	Ni/Ni(OH) <sub>2</sub>	1 $\mu\text{M}$ – 3.1mM	9	683	This work
2	Ni(OH) <sub>2</sub> &NiOOH film/Ni	1 $\mu\text{M}$ – 1.3mM	0.414	5.7584	[31]
3	$\beta$ -Ni(OH) <sub>2</sub> /NP-Ni/MG	Upto 18mM	0.35	1496	[48]
4	Ni(OH) <sub>2</sub> /CC electrode	4 $\mu\text{M}$ – 0.6mM	0.47	1942	[29]
5	$\alpha$ -Ni(OH) <sub>2</sub> /rGO/NF	0.5 mM – 22.5 mM	0	95.5	[47]
6	Ni(OH) <sub>2</sub> /3DPN templates	0.46 $\mu\text{M}$ – 2.1 mM	0.46	2761.1	[68]
7	Ni(OH) <sub>2</sub> /NND film	20 $\mu\text{M}$ – 1 mM; 1-9 mM	1.2	3200,1410	[69]
8	Ni(OH) <sub>2</sub> /ITO; NiO/ITO	0.1 mM–156 mM; 0.01-30 mM	70; 8.1	12.09; 24	[44]

9	CuO/FTO	5 $\mu$ M – 0.225 mM	0.41	3072	[70]
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