Electronic Supplementary Information

In situ preparation of hierarchical CuO@NiCo LDH core-shell nanosheet arrays on Cu foam for highly sensitive electrochemical glucose sensing

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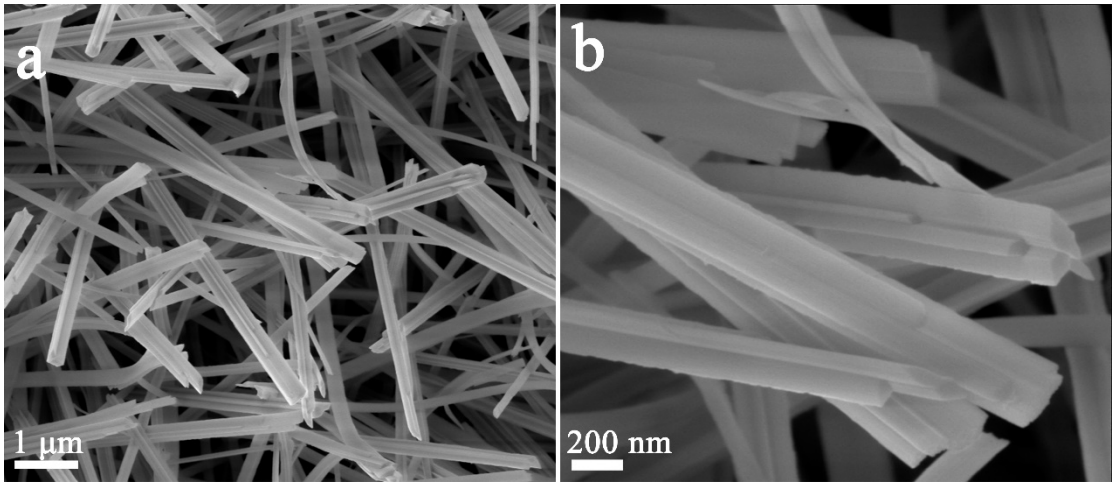
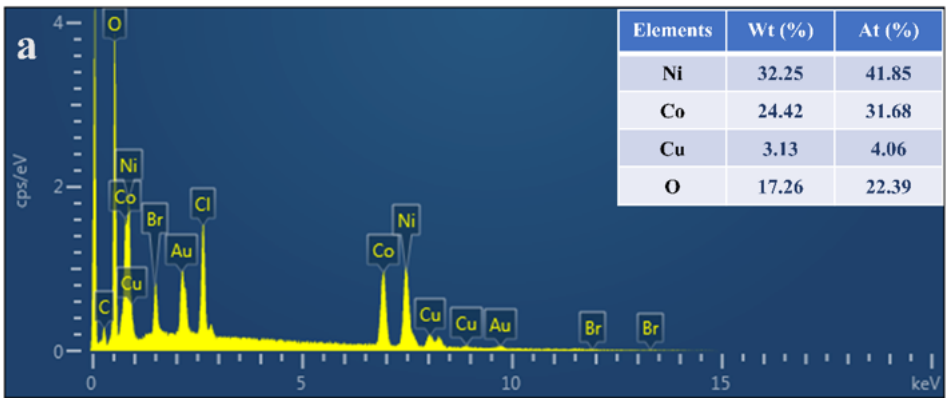


Fig.S1 The SEM image of $Cu(OH)_2$ NR/CF



Elements	Wt (%)	At (%)
Ni	32.25	41.85
Co	24.42	31.68
Cu	3.13	4.06
O	17.26	22.39

Fig. S2 EDX spectrum of CuO@NiCo LDH NSAs/CF.

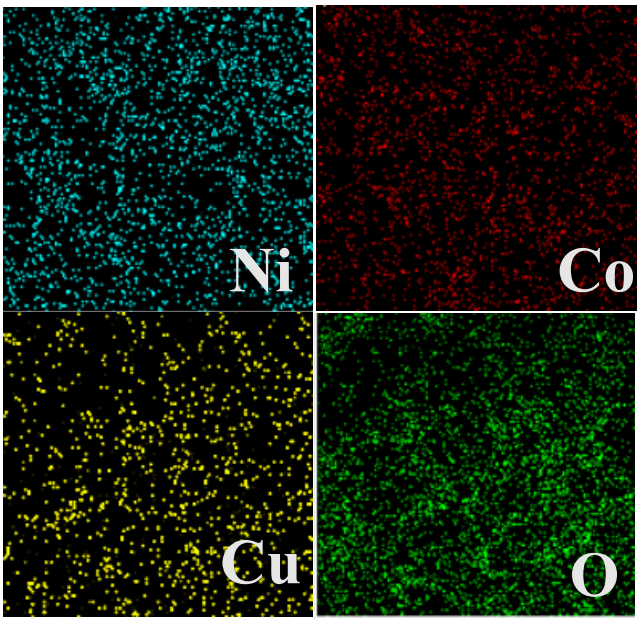


Fig. S3 Element mapping of CuO@NiCo LDH NSAs/CF.

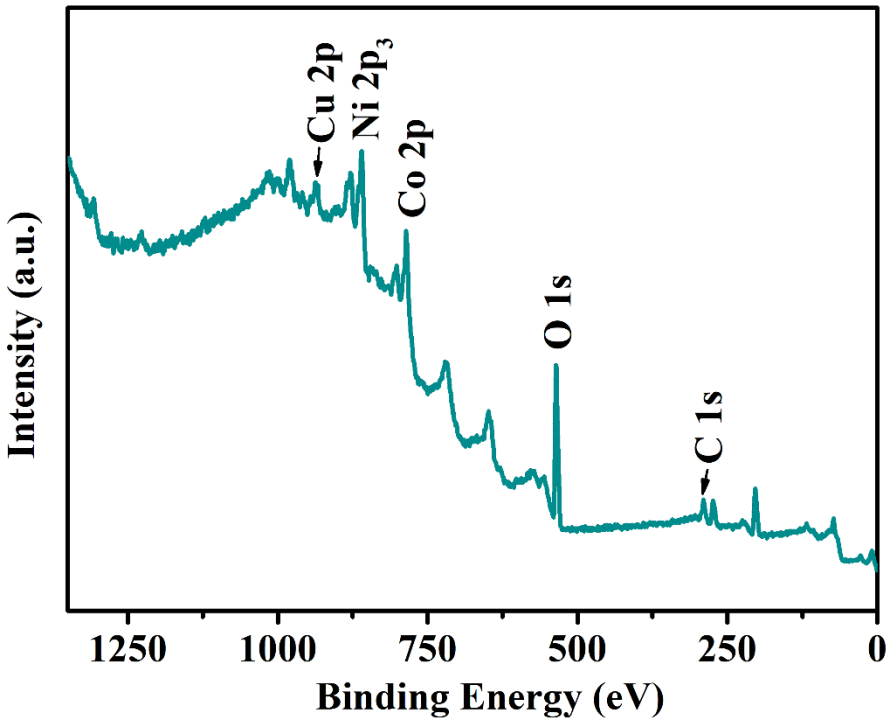


Fig. S4 XPS spectra of CuO@NiCo LDH NSAs/CF.

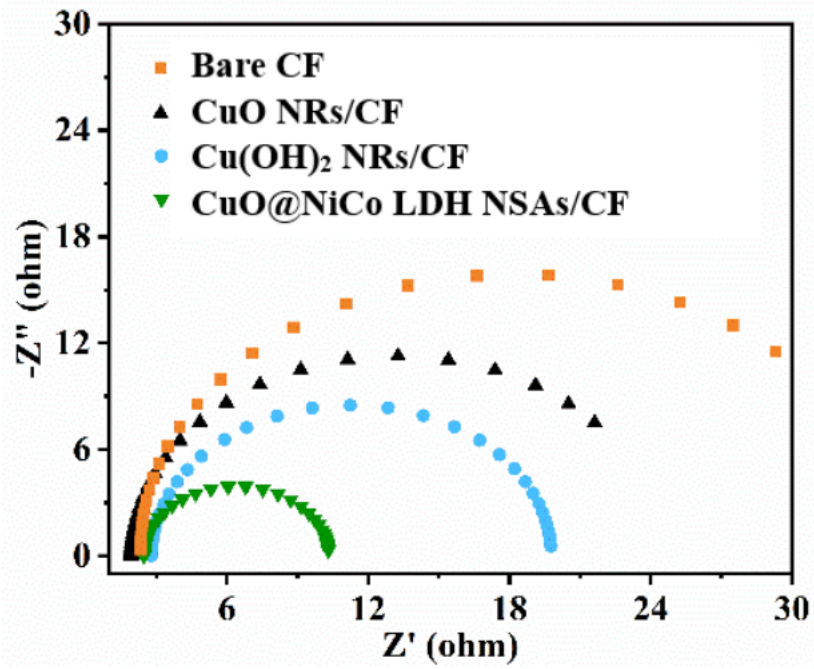


Fig. S5 Nyquist diagram of bare CF, $Cu(OH)_2$ NRs/CF, CuO NRs/CF and CuO@NiCo LDH NSAs/CF in 0.1 M NaOH dripping with 1 mM glucose.

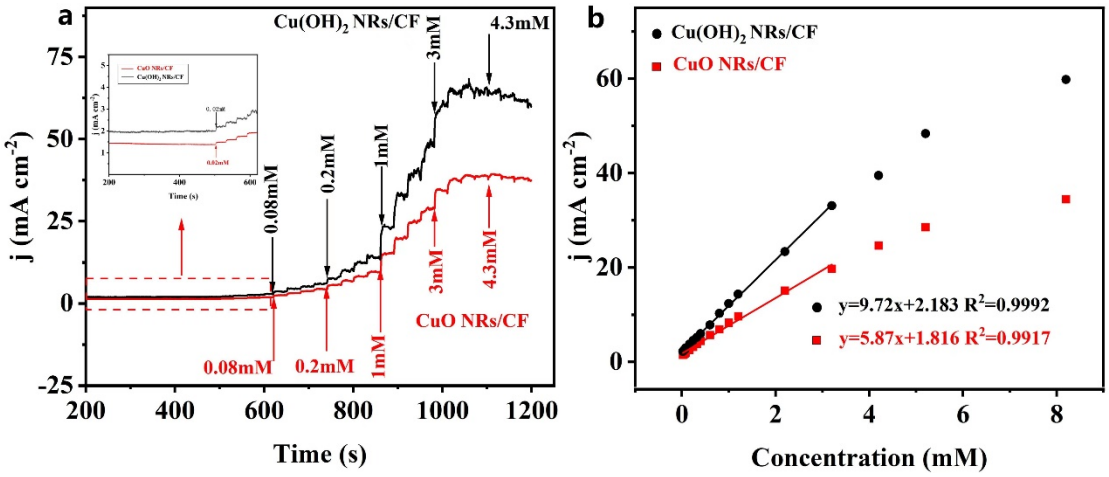


Fig. S6 (a) Amperometric responses of $Cu(OH)_2$ NRs/CF and CuO NRs/CF with successive additions of glucose to 0.1 M NaOH at 0.7 V. (b) Corresponding linear fitting relationship for $Cu(OH)_2$ NRs/CF and CuO NRs/CF electrodes.

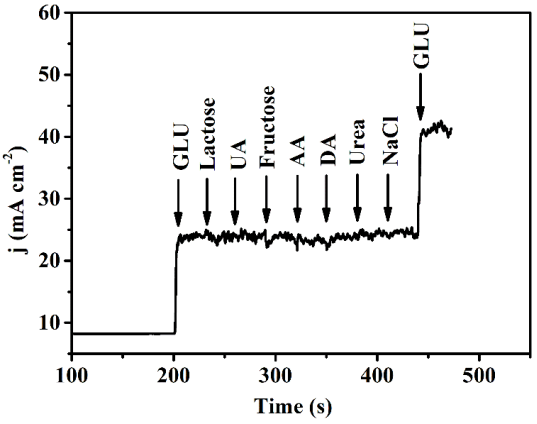


Fig. S7 I-t curves of CuO@NiCo LDH NSAs/CF under different interferences.

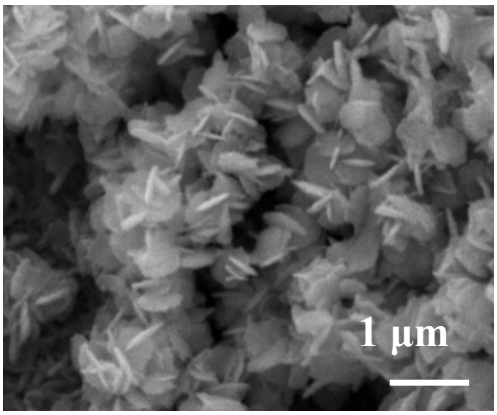


Fig. S8 The SEM image of the CuO@NiCo LDH NSAs electrode after stability test.

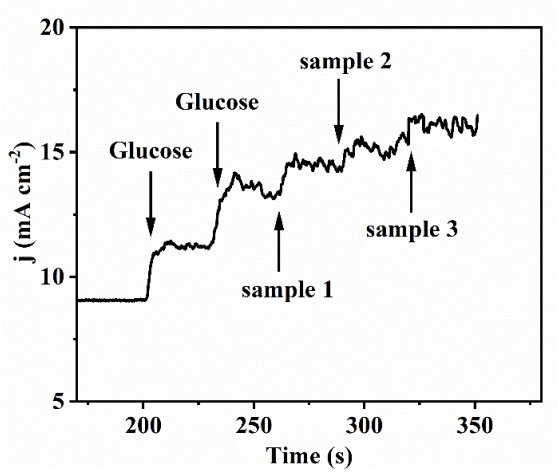


Fig.S9 The amperage current response of CuO@NiCo LDH NSAs/CF electrode to 20 μM glucose and three different human serum samples successively added to 0.1 M NaOH solution at an applied potential of 0.7 V.