

Electronic Supplementary Information

Corrosion assisted In-Situ Growth of NiCoFe-Layered Double Hydroxides on Fe Foam for Sensitive Non-Enzymatic Glucose Detection

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Calculation of low detection limit (LOD).

The LOD value was calculated by the equation: $LOD = 3S_b/K$ ($S/N = 3$),¹ where S_b is the relative standard deviation (RSD) of 10 blank samples, and K is the slope of the calibration curve of NiCoFe LDH/FF composite for the current response of glucose in the range of 0.01 to 1.0 mM.

Figures

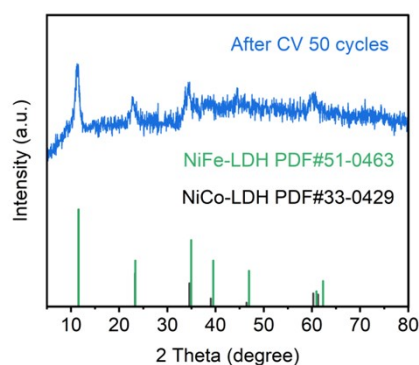


Fig. S1 Chemical stability of NiCoFe LDH after CV 50 cycles in 0.1 M NaOH with adding 3 mM glucose.

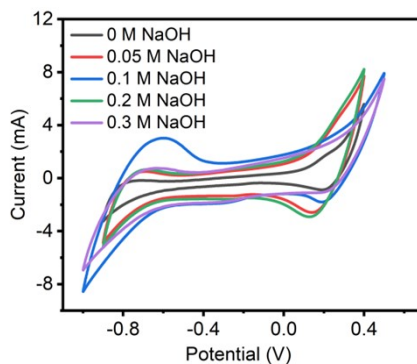


Fig. S2 CV curves of NiCoFe LDH/FF recorded in NaOH solution of various concentrations containing 3 mM glucose.

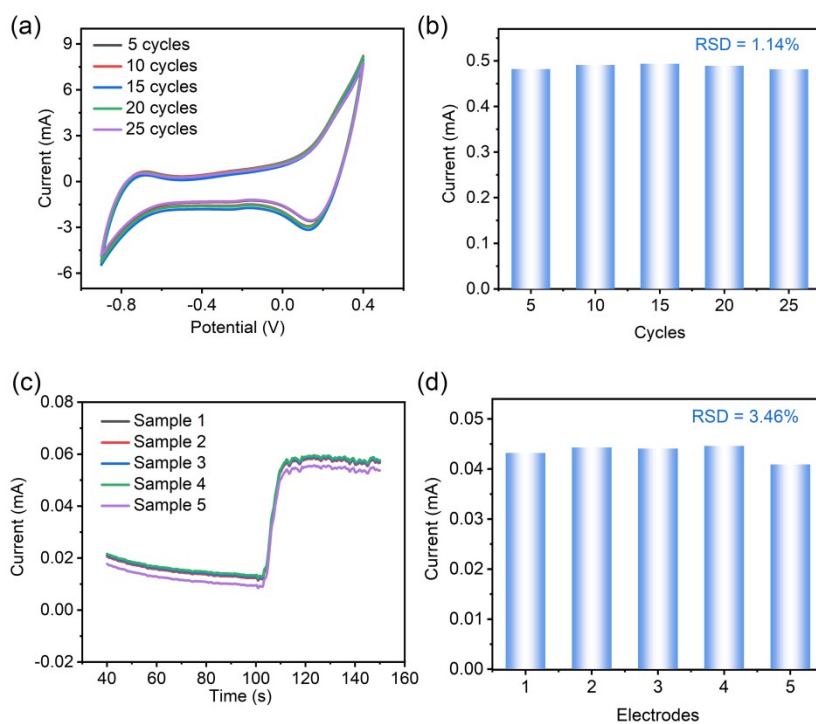


Fig. S3 (a) Recycled CV curves of NiCoFe LDH/FF electrode in 3 mM glucose at a scan rate of 50 mV/s and (b) corresponding repeatability measurements of the electrode;(c) Current response of five independent electrodes, and (d) reproducibility measurement of the five electrodes (Electrolyte: 0.10 M NaOH).

Reference

[1] J. Li, L. Wang, Y. Yang, B. Wang, C. Duan, L. Zheng, R. Li, Y. Wei, J. Xu, Z. Yin, *Nanotechnology*, 2021, 32, 505710.