

Supporting Information for
Self-assembly of layered double hydroxide nanosheets/Au
nanoparticles ultrathin films for enzyme-free electrocatalysis of glucose

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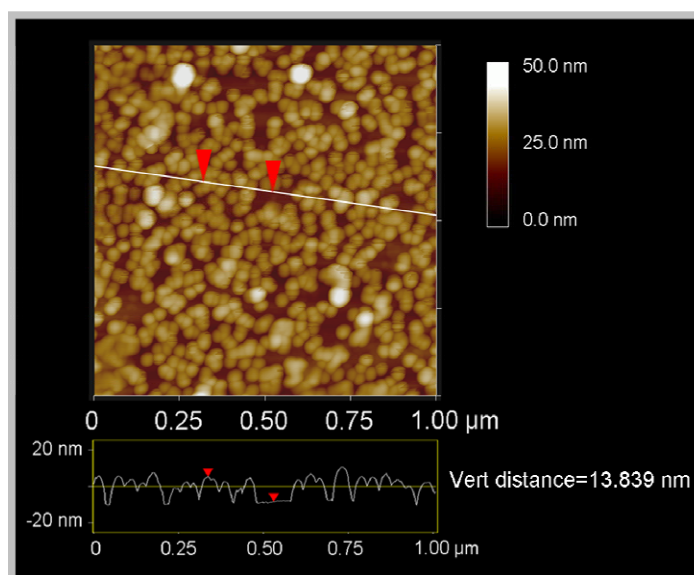


Figure S1. Tapping-mode AFM image of the as-prepared AuNPs deposited on a Si wafer substrate, with a height profile measurement along the marked white line.

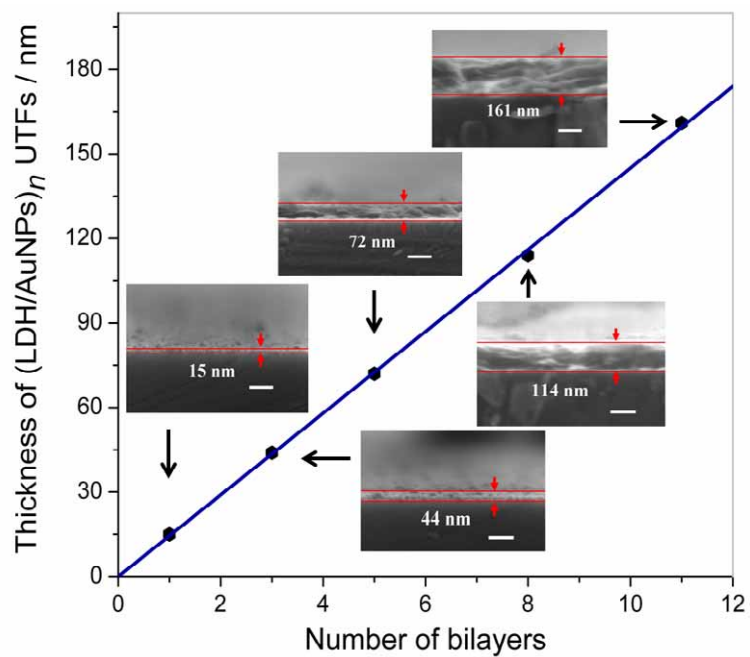


Figure S2. Thickness of the $(\text{LDH}/\text{AuNPs})_n$ UTFs as a function of n ; the insets show the cross-sectional view of SEM images. Scale bar: 100 nm.

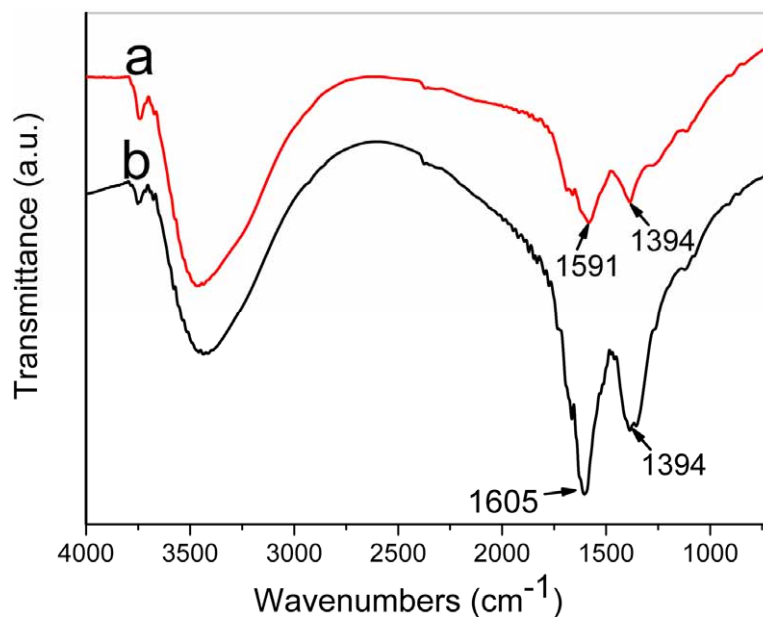


Figure S3. (ATR) FTIR spectra of (a) the citric-capped AuNPs and (b) the $(\text{LDH}/\text{AuNPs})_8$ UTF.

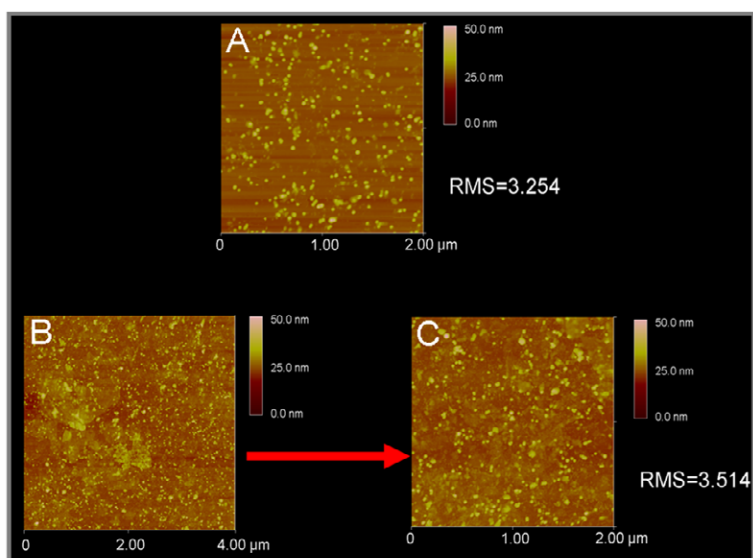


Figure S4. Tapping-mode AFM images of (A) the $(\text{LDH}/\text{AuNPs})_1$ UTF, the $\text{LDH}/\text{AuNPs}/\text{LDH}$ UTF at low magnification (B) and high magnification (C).

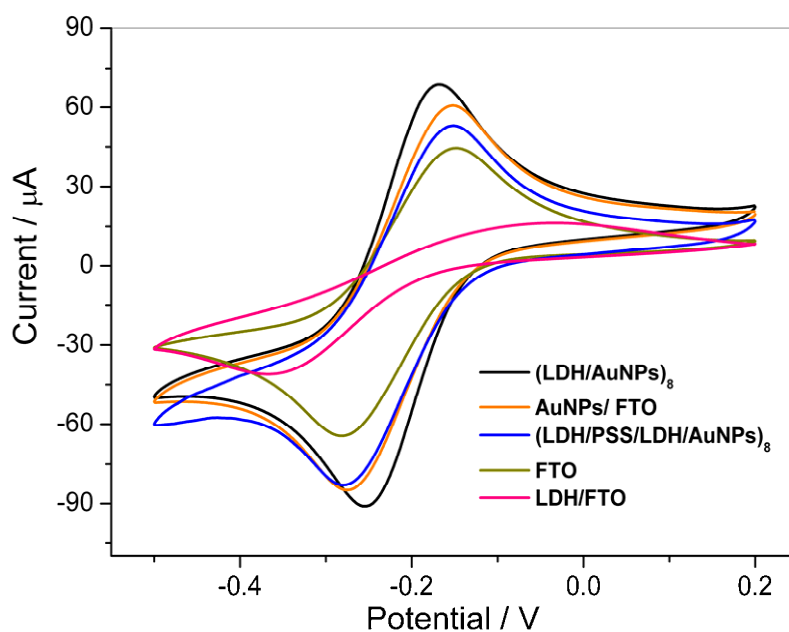


Figure S5. Cyclic voltammograms of bare FTO, LDH/FTO, AuNPs/FTO, $(\text{LDH}/\text{PSS}/\text{LDH}/\text{AuNPs})_8/\text{FTO}$ and $(\text{LDH}/\text{AuNPs})_8/\text{FTO}$ electrode in 0.1 M KNO_3 solution containing 1 mM $\text{Ru}(\text{NH}_3)_6^{3+}$ at a scan rate of 20 mV s^{-1} .

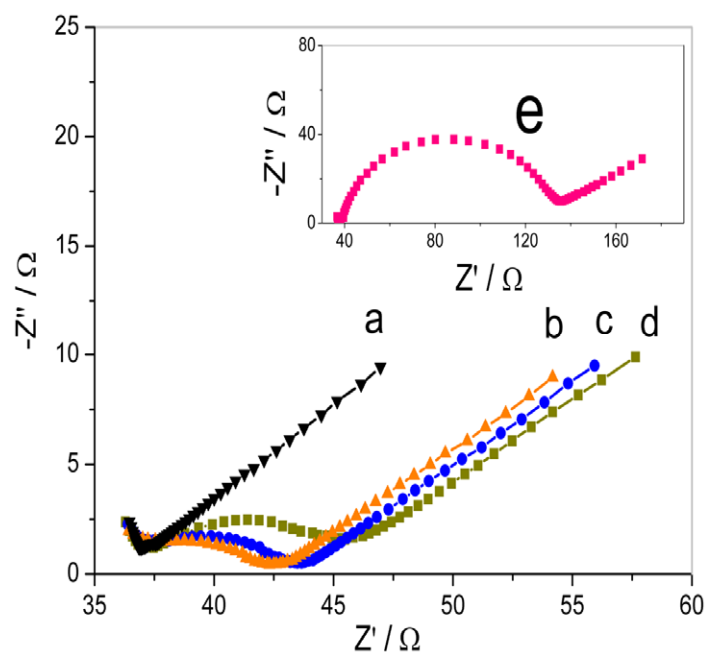


Figure S6. Nyquist plots of EIS for the (a) (LDH/AuNPs)₈/FTO, (b) AuNPs/FTO, (c) (LDH/PSS/LDH/AuNPs)₈/FTO, (d) bare FTO and (e) LDH/FTO in 0.1 M KNO₃ solution containing 1 mM Ru(NH₃)₆^{3+/2+} at a potential of -0.20 V vs. Ag/AgCl.