Title:

Ultrasensitive detection for reduced form of nicotinamide adenine dinucleotide based on carbon nanotube field effect transistor

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Supplementary Material

Results and discussion

3. Examination and optimization of CNTFET modification

Figure S-1 Drain current responses of the CNT-FET following 5.0 μl Tris buffer injection with different pH values.

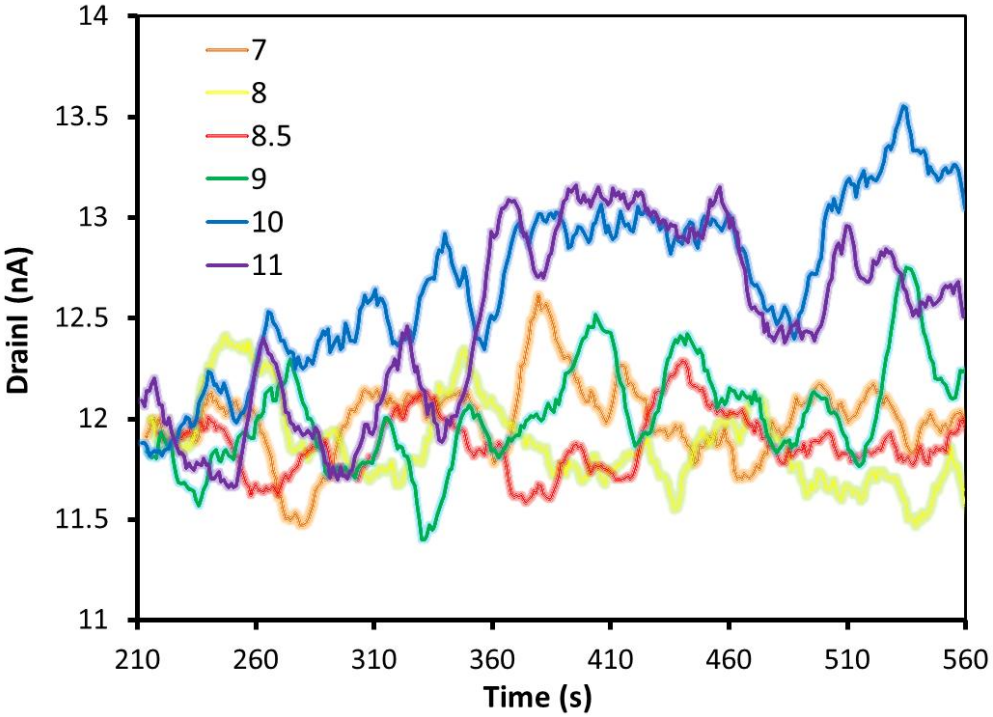
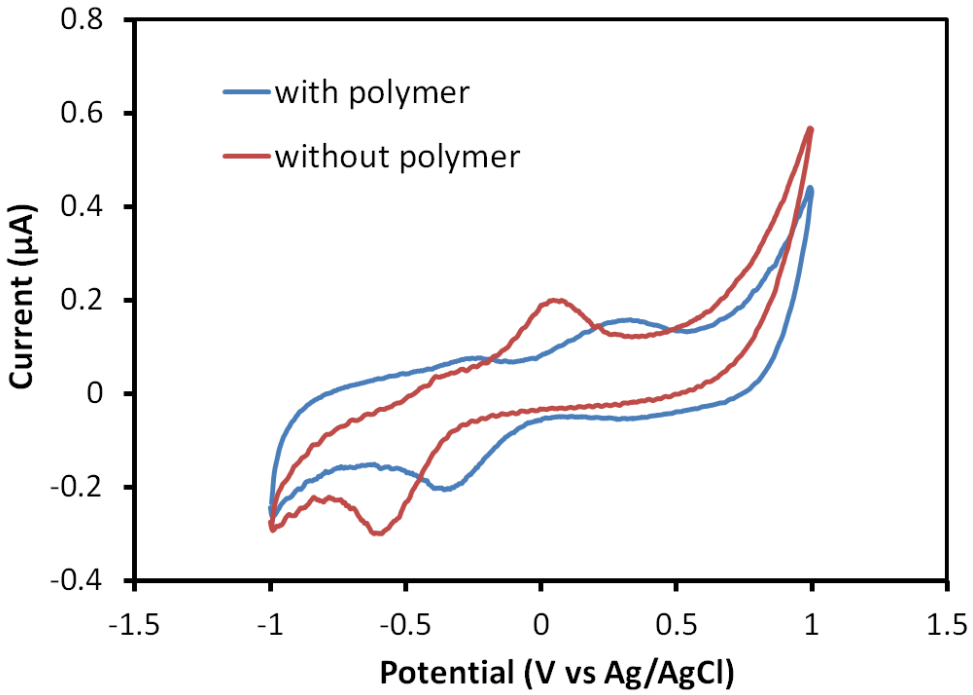


Figure S-2 Cyclic voltammograms of mPMS-CNT in Tris buffer (0.01 M, pH 8.0) by electrode with/without polymer. Scan rate was 4 mV s^{-1}.



Results and discussion

4. NADH detection using CNTFET treated by mPMS

Figure S-3 Electrical responses of the CNT-FET following NADH injection at different concentrations measured by semiconductor characterization system. A source-drain (SD) bias of 50 mV was maintained throughout the electrical measurements for ~1000 seconds. The control indicates electrical conductance where only Tris buffer (0.01 M, pH 8.0) was introduced into the chamber.