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Supplementary Information

Electrocatalytic Oxidation of Dopamine, Ascorbic Acid and Uric Acid at Poly-2,6-Diaminopyridine on the Surface of Carbon Nanotubes/GC Electrodes

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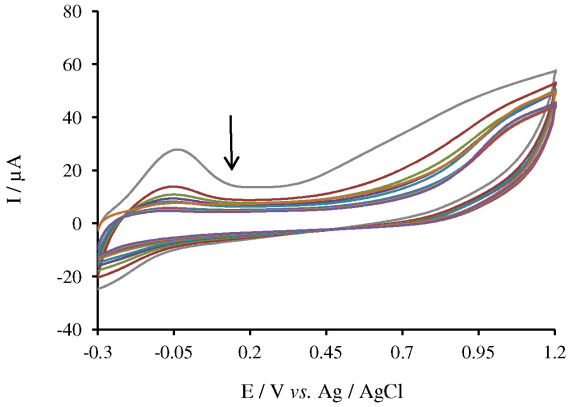

Figure S1. Cyclic voltammograms recorded of poly(2,6-DAP) films on the MWNTs/GCE electrode in 0.01 mol L^{-1} NaOH solution (alkaline treatment) between –0.3 and 1.2 V *vs.* Ag / AgCl, potential scan rate 50 mV s^{-1}.

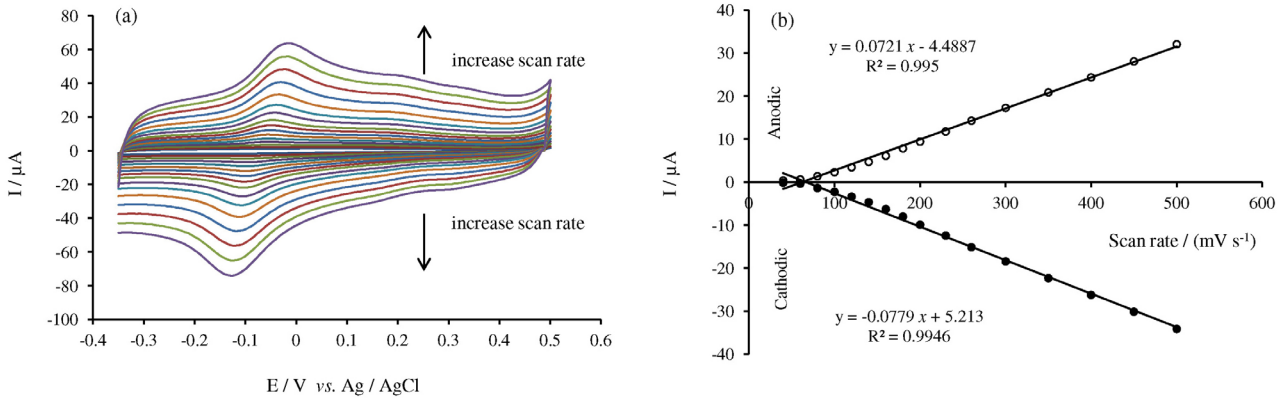

Figure S2. (a) Cyclic voltammograms of poly(2,6-DAP)/MWNTs/GCE in the 0.1 mol L^{-1} PBS pH 8.0 with varying scan rate, scan rates (mV s^{-1}) of 40, 60, 80, 100, 120, 140, 160, 180, 200, 230, 260, 300, 350, 400, 450 and 500, and (b) plot of cathodic and anodic current *vs.* scan rate (ν).

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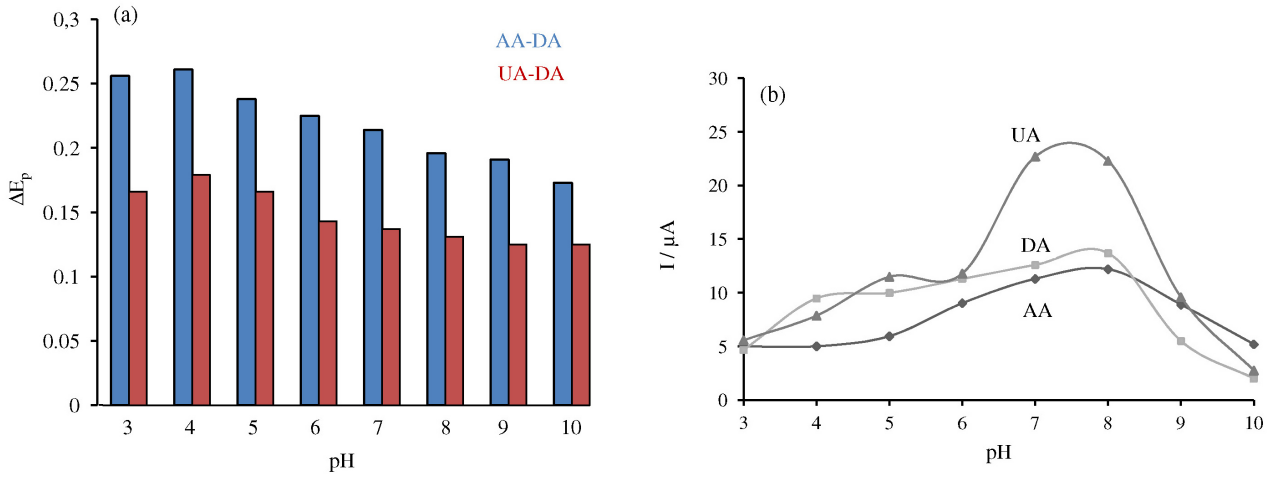

Figure S3. (a) Anodic peak potential differences (E_{pa}) between AA-DA and DA-UA of ascorbic acid (0.5 mmol L^{-1}), dopamine (100 μmol L^{-1}) and uric acid (0.5 mmol L^{-1}) and (b) anodic peak current of AA, DA and UA at the poly(2,6-DAP)/MWNTs/GCE in 0.1 mol L^{-1} buffer solution with different pH values. Scan rate was 100 mV s^{-1}.

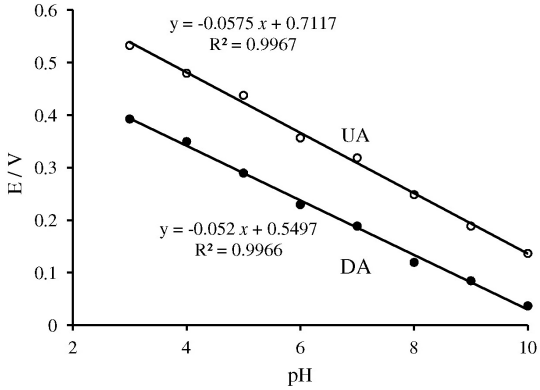

Figure S4. Dependence of the oxidation peak potentials of 100 μmol L^{-1} dopamine and 0.5 mmol L^{-1} uric acid on pH at the poly(2,6-DAP)/MWNT modified GC electrode in 0.1 mol L^{-1} buffer solution with different pH values. Scan rate was 100 mV s^{-1}.

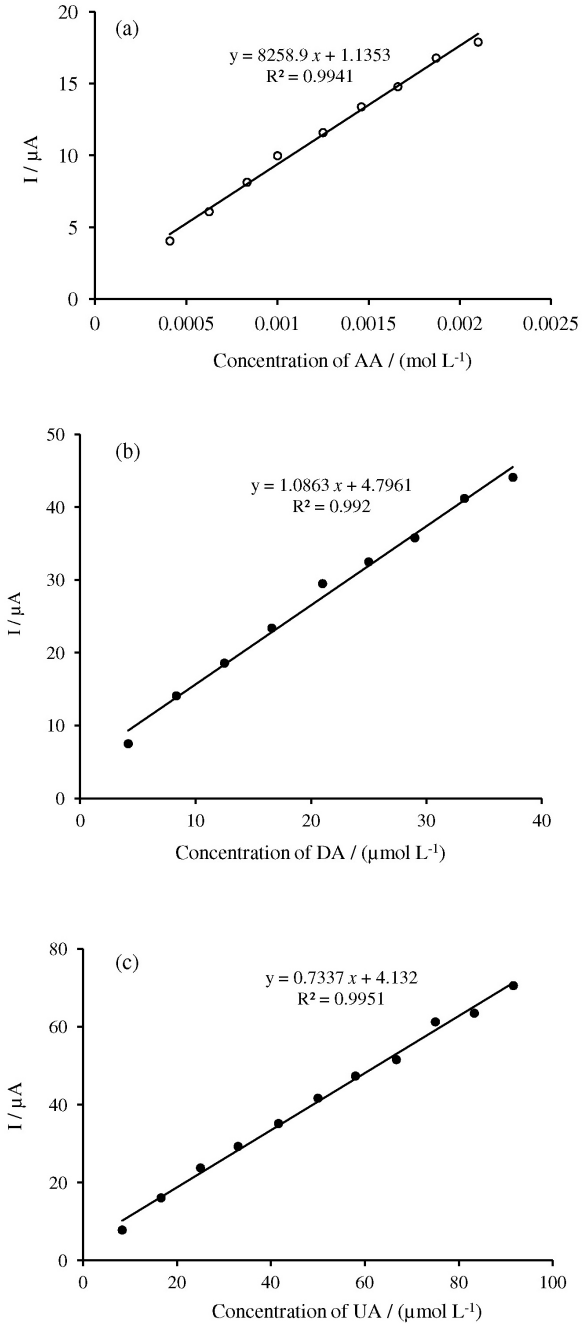

Figure S5. Calibration curve for (a) AA, (b) DA and (c) UA based on differential pulse voltammograms, in PBS pH 8.0, the scan rate was 100 mV s^{-1}.