Anal. Bioanal. Electrochem., Vol. 16, No. 5, 2024, 405-422 (Supplements)
https://www.doi.org/10.22034/abec.2024.713501

Analytical& Bioanalytical Electrochemistry

2024 by CEE
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Supplementary Materials

A Novel Sensor for Simultaneous Determination of Histamine and Uric Acid Based on Green Synthesized CuO Nanoparticles/Graphene Oxide Composite Modified Carbon Paste Electrode

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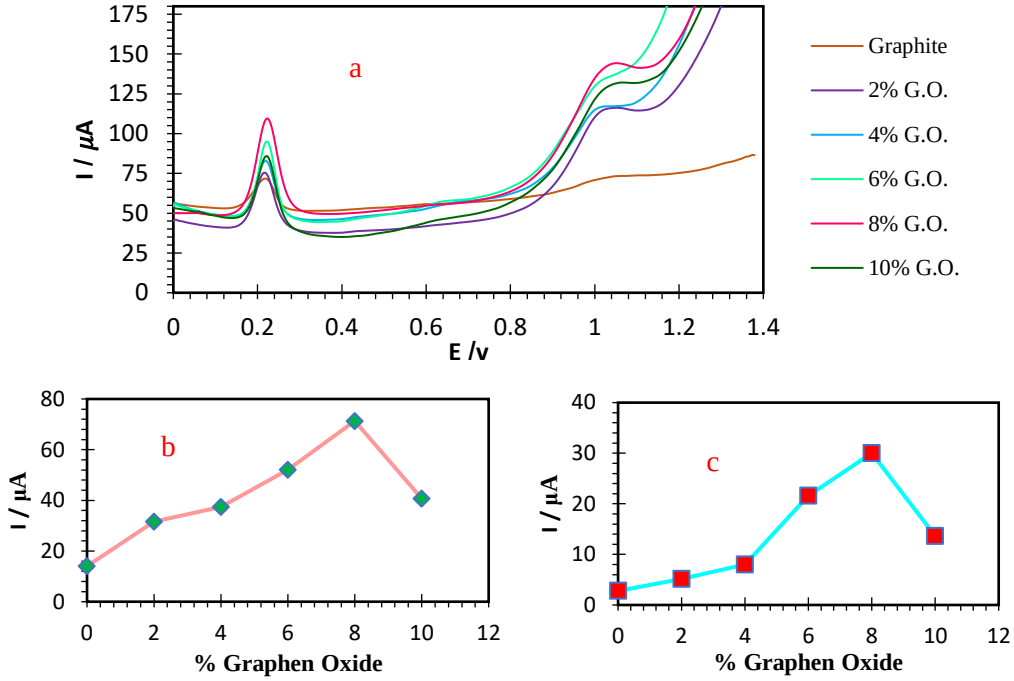

Figure S1. Differential pulse voltammograms (DPVs) with a scan rate 0.02 v/s for concentrations of 200 µL of uric acid and 200 µL of histamine in phosphate buffer 0.1 M with pH=7.0 on not modified CPE (Graphite), and CPE modified with different percentage of GO (a) and oxidation peak flow curve uric acid (b) and histamine (c) as a percentage of changes in graphene oxide content and constant amount of copper oxide nanoparticles

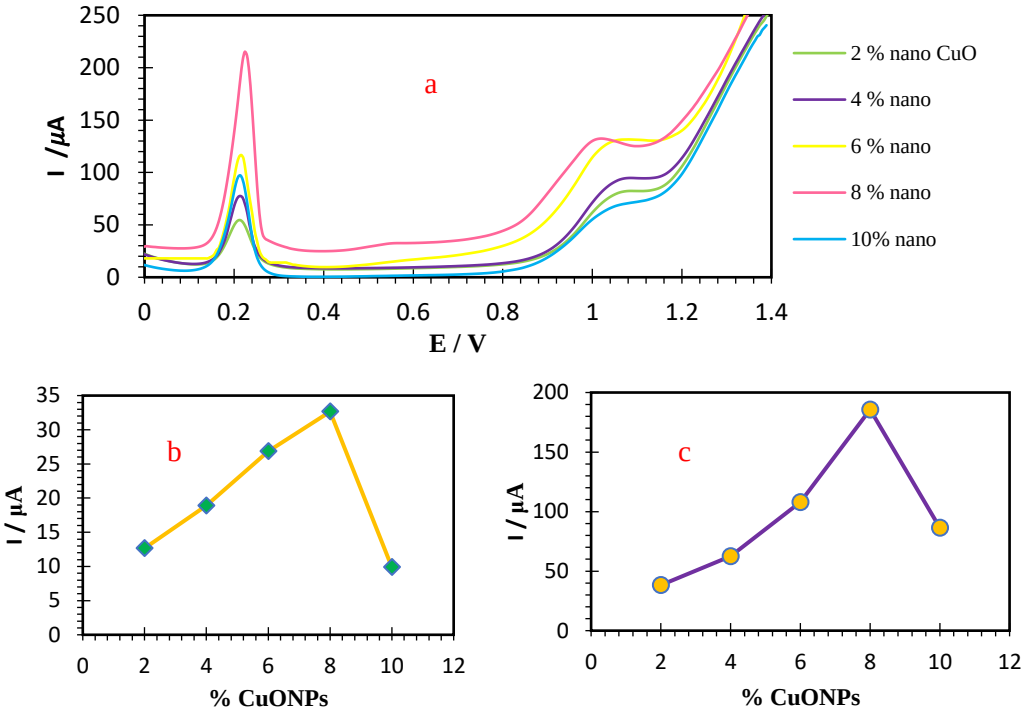

Figure S2. Differential pulse voltammogram with scan rate of 0.02 v/s for 200 µM uric acid and 200 µM histamine in 0.1 M phosphate buffer with pH=7 in a constant percentage of optimal graphene oxide and percentages of 2%, 4%, 6%, 8 and 10% copper oxide nanoparticles (a) and Oxidation peak flow curve histamine (b) and uric acid (c) in terms of percentage change in the amount of copper oxide nanoparticles and a constant amount of graphene oxide

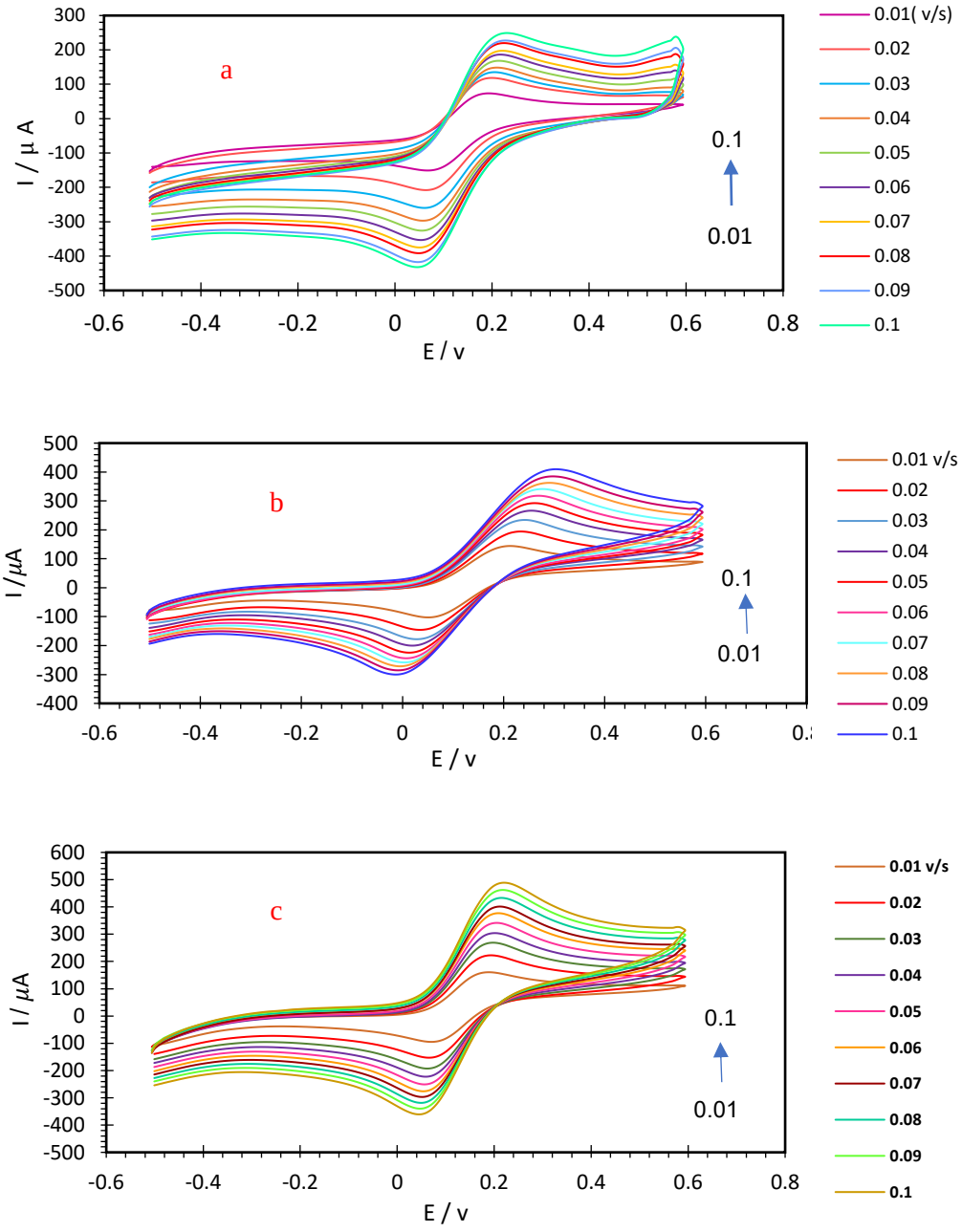

Figure S3. Cyclic voltammograms of 4 mM of potassium hexa cyanophrate (II) solution in 0.1 M phosphate buffer (pH=7) that Scan rate (from inside to outside) 10, 20, 30, 40, 50, 60, 70, 80, 90 and 100 mV/s on the not modified electrode (Graphite) (a), modified with GO (b), and modified with GO and CuONPs

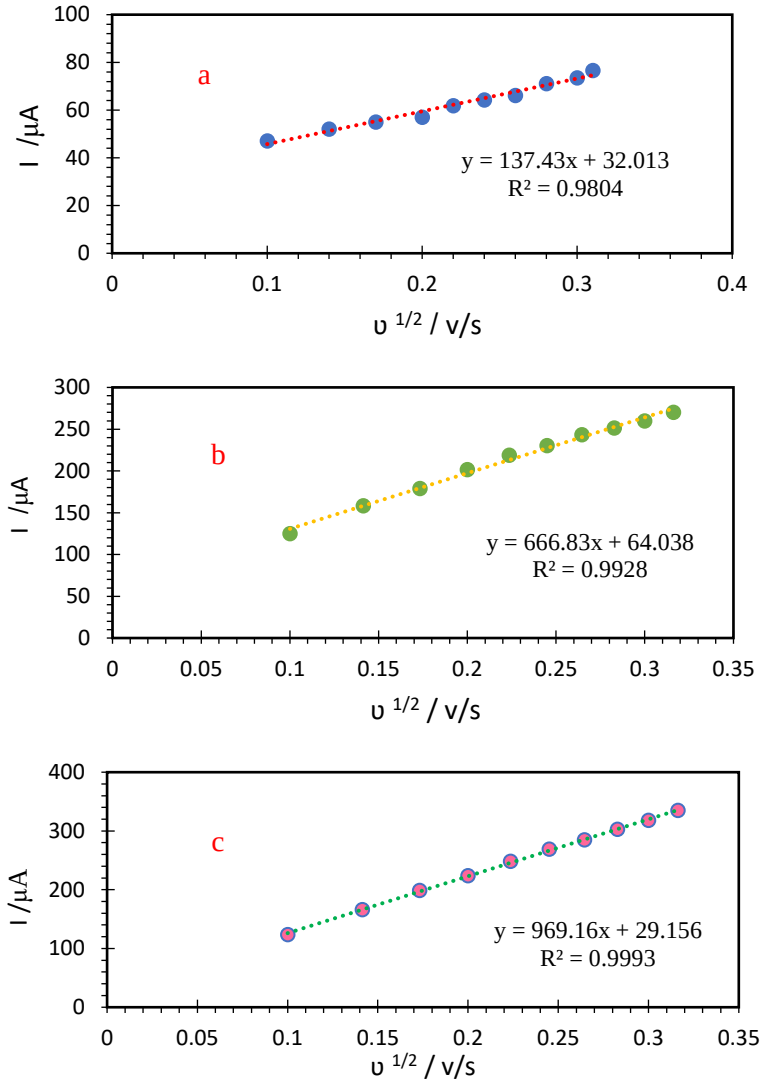

Figure S4. Diagram of changes in the corresponding oxidation peak currents relative to the root of the scan rate at the not modified electrode (a), modified with GO (b), and modified with GO and CuONPs (c)

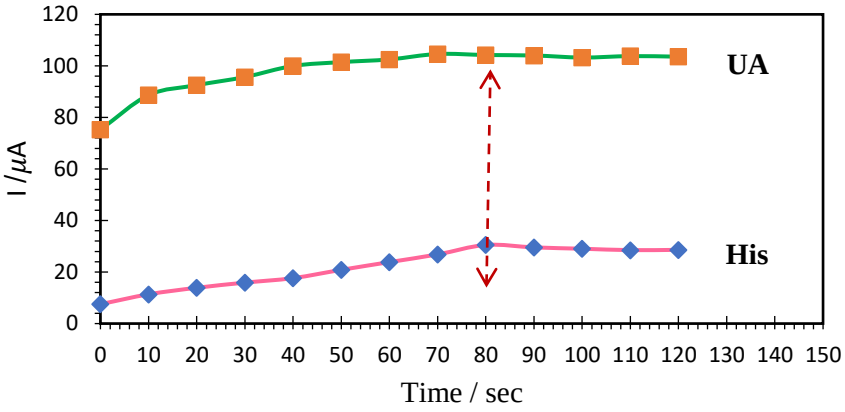

Figure S5. Effect of accumulation time on the differential pulse voltammogram peak currents of 200 µM UA and 200 µM His in phosphate buffer (pH=7.0) solution at CuONPs/GO/CPE