

Electro catalytic modified graphite tattoo probe for glucose detection

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In this studies reports the analytical performance of modified glassy carbon electrodes amplification with copper ionic particles dispersed in carbon structure for the quantification of glucose trace activity. The best diagnostic detection was obtained by catalyst immobilization during 20 cyclic redox in 1000 mg/L Cu(II) standard 10 ml electrolyte, for 2.0 V initial, -2.0 V switching potential, 0.5 v/sec scan rate, 30 sec accumulation time, the analytical glucose potential was obtained from the increase of the glucose oxidation with 0.2 V anodic, linear working ranges are 10 ~ 200 mg/L, 15 points reduction, more sensitive stripping anodic is 50 ~ 200 mg/L 10 points, and cathodic is 10 ~ 200 mg/L, 19 points obtained, which of optimum para strength of SW amplitude, SW increments, SW frequency, SW accumulation times and other results were obtained, final linear working results demonstrates a successful practical application of the catalytic sensing in a human vascular diagnosis at real in vitro direct, which can be promising for clinical applications such as muscle, skin and organic diagnostics.