Determination of Norepinephrine Tartrate at Oxidized Graphene Nanoribbon Modified Glassy Carbon Electrode

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In this paper the oxidized graphene nanoribbons for a sensor were prepared with glassy carbon electrode, and the electrochemical behavior of norepinephrine tartrate at the modified electrode was studied. It was found that the norepinephrine tartrate at the oxidized graphene nanoribbon modified glassy carbon electrode can be catalyzed significantly. The proposed method was used for determination of norepinephrine tartrate injection. The linear range and limit of detection were 6.0×10^{-6} - 7.6×10^{-5} - 1.5×10^{-4} M and 2.1×10^{-8} M, respectively. The recoveries were in the range from 96.0 to 104.4% with RSD of 1.2~3.0% (n=6) in the range of 0.0~50.0 mg.L⁻¹. The recoveries were in the range from 96.0 to 104.4% with RSD of 1.2~3.0% (n=6) in the range of 0.0~50.0 mg.L⁻¹.

Keywords: oxidized graphene nanoribbons, norepinephrine tartrate, electrochemical sensor

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