عنوان مقاله:

Selective voltammetric determination of metionine at a modified carbon paste electrode incorporating multi-walled carbon nanotube and Cu2O nanoparticles

محل انتشار:

اولین همایش ملی توسعه تکنولوژی در صنایع نفت، گاز و پتروشیمی (سال: 1389)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

A carbon-paste electrode (CPE) chemically modified with multi wall carbon nanotube as a sensor and Cu2 O nanoparticles as a mediator was used as a electrochemical sensor for sensitive and highly selective voltammetric determination of metionine. This modified electrode showed very efficient electrocatalytic activity for anodic oxidation of metionine. In optimal conditions, linear ranges spanned a metionone concentration from 0.5 μM to150.0 μM and the detection limit was 0.7 μM at a signal-to-noise ratio of 2 . In addition, the sensor had good stability and reproducibility.

کلمات کلیدی:

Carbon Paste Electrode, Modified Electrode, Multi Walled Carbon Nanotube, Cu 2O Nanoparticles, Metionine