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عنوان مقاله:

Electrochemical Determination of Ascorbic Acid with using Glassy Carbon Electrodes modified with Multi-walled Carbon Nanotubes

محل انتشار:

اولین همایش نانومواد و نانوتکنولوژی (سال: 1390)

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خلاصه مقاله:

Multi-walled carbon nanotube (MWCNT) was used to modify glassy carbon electrode because of its unique structure and extraordinary properties. MWCNT modified electrode exhibited obvious enhancing andelectro-catalyzing effects to the oxidation of ascorbic acid using cyclic voltammetry technique.This method of modification has lowered the capacitance background current and enabled lower detection limit of ascorbic acid concentration.Under the optimized parameters, the calibration curve constructed was linear up from 370 μM to 1mM. The cyclic voltammetric method can be used by Quality Control laboratories to identify and quantify Vitamin C in environment samples as well as in .pharmaceutical preparations

کلمات کلیدی:

Ascorbic acid, Nanotube, Voltammetric, Modified electrode

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