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Electrocatalytic Oxidation of Cysteine and Cystine at a Carbon-Paste Electrode Modified with Ruthenium(IV) Oxide

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Abstract

The electrocatalytic activity of ruthenium(IV) oxide incorporated into a carbon-paste electrode was studied in the oxidation of cysteine and cystine. The oxidation potentials of the amino acids decreased and the current peaks of their oxidation increased at a modified electrode as compared to an unmodified one. Procedures for the voltammetric determination of cysteine and cystine with the use of electrodes chemically modified with ruthenium(IV) oxide were proposed.

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