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Determination of uric acid by voltammetry and coulometric titration

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Abstract

Possible mechanisms of the electrochemical oxidation of uric acid at platinum, gold, graphite, and copper electrodes in a 0.5 M NaOH solution and phosphate (pH 6.86) and borate (pH 9.18) buffer solutions were considered. The stoichiometric coefficients in the reaction of boric acid with electrogenerated bromine and hypobromite ion were determined. Working conditions for the voltammetric determination of uric acid were selected and the detection limits for uric acid were found in model solutions and blood serum. © 2001 MAIK "Nauka/Interperiodica".
