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Fast Scanning Voltammetric Detector for High Performance Liquid Chromatography

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Abstract:

This article describes the application of fast scan differential pulse voltammetry on a glassy carbon electrode as a working electrode in a wall-jet arrangement in combination with a high performance liquid chromatography. During the characterization of electrochemical detection, the separability, the repeatability, and the concentration characteristics for determination of common antioxidants in standard solutions were found. Finally, as an application of the technique, the optimized procedure has been used for the first time to determine antioxidants contained in tea samples by applying a simple extraction procedure.

Keywords: high performance liquid chromatography; fast scan differential pulse voltammetry; glassy carbon electrode; antioxidants.

Graphical abstract



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