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| Titolo | Electroanalysis in Biomedical and Pharmaceutical Sciences : Voltammetry, Amperometry, Biosensors, Applications // by Sibel A. Ozkan, Jean-Michel Kauffmann, Petr Zuman |
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| Collana | Monographs in Electrochemistry, , 1865-1836 |
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| Soggetti | Electrochemistry Pharmaceutical technology Pharmacy Analytical chemistry Pharmaceutical Sciences/Technology Analytical Chemistry |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references at the end of each chapters and index. |
| Nota di contenuto | Introduction -- Polarography in Studies of Pharmaceuticals -- Electroanalytical Techniques Most Frequently Used in Drug Analysis -- Solid Electrodes in Drug Analysis -- Screen Printed Electrodes (SPE) for Drug Compounds Determination -- Electrochemical Biosensors for Drug Analysis -- Electrochemical and hyphenated electrochemical detectors in liquid chromatography and flow injection systems for drug compound analysis -- Electroanalytical Methods Validation in Pharmaceutical Analysis and Their Applications -- Applications for Drug Assays. |
| Sommario/riassunto | Through this monograph, the pharmaceutical chemist gets familiar with the possibilities electroanalytical methods offer for validated analyses of drug compounds and pharmaceuticals. The presentation focuses on the techniques most frequently used in practical applications, particularly voltammetry and polarography. The authors present the information in such a way that the reader can judge whether the |

application of such techniques offers advantages for solving a particular analytical problem. Basics of individual electroanalytical techniques are outlined using as simple language as possible, with a minimum of mathematical apparatus. For each electroanalytical technique, the physical and chemical processes as well as the instrumentation are described. The authors also cover procedures for the identification of electroactive groups and the chemical and electrochemical processes involved. Understanding the principles of such processes is essential for finding optimum analytical conditions in the most reliable way. Added to this is the validation of such analytical procedures. A particularly valuable feature of this book are extensive tables listing numerous validated examples of practical applications. Various Indices according to the drug type, the electroactive group, and the type of method as well as a subject and author index are also provided for easy reference.
