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Nota di contenuto	Electrochemical Glucose Biosensors for Diabetes Care -- Electrochemical Arrays for Bioassay Applications -- Bioelectronic Tongues Employing Electrochemical Biosensors -- Novel Electrochemical DNA Biosensors as Tools for Investigation and Detection of DNA Damage -- Recent advances in the Study of Electrochemistry of Redox Proteins -- Trends in Electrochemical Sensing of Blood Gases -- Application of Scanning Electrochemical Microscopy in Bioanalytical Chemistry.
Sommario/riassunto	This volume offers a careful selection of trend-setting topics in the field. In-depth review articles illustrate current trends in the field. Experienced experts present a comprehensive overview concerning the electrochemical biosensing of glucose for diabetes care from an industrial research and development perspective a survey of bioassay applications for individually addressable electrochemical arrays, focusing on liquid-phase bioanalytical assays a review of recent advances in the development of electronic tongues based on the use of biosensor arrays coupled with advanced chemometric data analysis

novel strategies of DNA biosensor development and corresponding applications for studies of DNA damage a survey of recent trends in the electrochemistry of redox proteins, including the increasing diversity of redox proteins used in electrochemical studies, novel immobilization strategies, and biosensor / biofuel cell applications an overview of electrochemical sensing of blood gases with advanced sensor concepts a survey of recent bioelectroanalytical studies with high spatial resolution using scanning electrochemical microscopy with a wide range of applications covering imaging of living cells, studies of metabolic activity, imaging of local enzyme activity, and studies of transport through biolayers This timely collection will be of interest not only for experts in the field, but also to students and their teachers in disciplines that include analytical chemistry, biology, electrochemistry, and various interdisciplinary research areas.