Record Nr. UNINA9910830430503321 Chemical sensors and biosensors [[electronic resource] /] / edited by **Titolo** Rene Lalauze Pubbl/distr/stampa London, : ISTE Hoboken, N.J., : Wiley, 2012 **ISBN** 1-299-18705-6 1-118-58828-2 1-118-58796-0 Descrizione fisica 1 online resource (447 p.) Collana **ISTE** Altri autori (Persone) LalauzeRene Disciplina 543 Soggetti Electrochemical sensors Biosensors 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 and index. Nota di contenuto Chemical and biological recognition -- Adsorption phenomena --Microcantilever transduction -- Piezoelectric transduction -- Metal oxide gas sensors -- Molecular material-based conductimetric gas sensors -- Responses and electrical properties of gas microsensors --Gas microsensor technology -- Multisensors : measurements and behavior models -- Development of microtechnologies for the realization of chemical, biochemical, and/or biological microsensors --Development of micro-preconcentrators for detection of gaseous species at trace level -- Microfluidics: manipulation of nanovolume samples -- Electrochemical biosensors -- Fibre-optic biosensors --Microbial biosensors for environmental applications -- In vivo analyses with electrochemical microsensors. Sommario/riassunto Technological needs for chemical, ionic and biological species detection are giving rise to continuous research and development in physico-chemistry and biology. The constant progress being made in the theoretical and technological aspects concerning studies and developments of chemical sensors, biosensors and biochips is presented in this book by different scientists and professors from

different universities and constitutes an updating of the state of the art

for chemical sensors, biosensors and biochips. This book places a large emphasis on interaction between chemical and biologica