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Titolo	Chemical and biological microsensors [[electronic resource] ] : applications in liquid media // edited by Jacques Fouletier, Pierre Fabry
Pubbl/distr/stampa	London, : ISTE Hoboken, N.J., : Wiley, c2010
ISBN	1-118-60387-7 1-118-60006-1 1-299-18746-3
Descrizione fisica	1 online resource (354 p.)
Collana	ISTE
Altri autori (Persone)	FouletierJacques FabryPierre
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Note generali	"First published in France in 2003 by Hermes Science/Lavoisier entitled: Microcapteurs chimiques et biologiques : applications en milieu liquide."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	General features / Bernard Michaux -- Chemical sensors : development and industrial requirements / Jacques Fouletier, Pierre Fabry -- Sensitivity and selectivity of electrochemical sensors / Pierre Fabry and Jean-Claude Moutet -- Potentiometric sensors (ions and dissolved gases) / Annie Pradel and Eric Saint-Aman -- Amperometric sensors / Alain Walcarius, Chantal Gondran and Serge Cosnier -- ISFET, BioFET sensors / Nicole Jaffrezic-Renault and Claude Martelet -- Biosensors and chemical sensors based upon guided optics / Jean-Pierre Goure and Loic Blum -- Sensors and voltammetric probes for in situ monitoring of trace elements in aquatic media / Marie-Louise Tercier-Waeber and Jacques Buffle -- Chemometrics / Philippe Breuil -- Impedancemetric sensors / Jacques Fouletier and Pierre Fabry.
Sommario/riassunto	This book reviews the state of art in the field of chemical sensors for analyses of ionic or molecular species dissolved in liquid media, mainly

in aqueous solutions. The transduction of such devices is based on chemical, biological and physical phenomena. The fundamental phenomena involved in these sensors are described in the different chapters by specialists having a good expertise in the field. Numerous recent bibliographic references are given. Most of the devices could be miniaturised using modern technologies allowing a fabrication on a large scale, for a mass production at low cost. Mo

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