



Handbook of Biosensors and Biochips

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Summary:

Publisher Summary 1

Seeking to survey and describe the science and technology of biosensors and biochips in use, this impressive two-volume handbook meets this ambitious goal, with 85 articles, each written by a specialist in that technology, that describes the history, theory, technology, use, and future prospects of the topic described. The material is grouped into 10 major areas, including biological and molecular recognition systems; the biology-materials interface; transducer technologies; miniaturized, microengineered, and particle systems; array technologies; data analysis, conditioning, and presentation; applications; and commercialization and regulation. Three introductory chapters offer an overview of the technology, analytical needs, and history of development. The articles are thorough, incorporating an initial descriptive introduction of the technology or issue, its methodology, development, and uses, then providing a detailed description of all aspects of the technology, with summarizing material on use and outcome. Lengthy lists of references and detailed illustrations accompany each article. Both volumes include subject and author indexes as well as a full list of acronyms and abbreviations. The contributors are research scientists at universities and private labs in the US, Canada, Europe, India, Israel, Australia, Japan, and Senegal. Annotation ©2008 Book News,

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Publisher Summary 2

With contributions from experts in the field, the *Handbook of Biosensors and Biochips* provides an essential reference, underpinning many of the applications used in medical diagnostics, environmental control and pharmaceutical and food industries. It presents an invaluable addition for those in both academia and industry.

Handbook of Surface Plasmon Resonance, RBM Scasfoort, A. Tudos, RSC, (Ch 1, Ch 4, Ch 5). Ressources en bibliothéque.
Handbook of Surface Plasmon Resonance. Bioelectronics. Bioelectronics handbook. Surface design : applications in bioscience and nanotechnology. Intermolecular and Surface Forces. Notes/Handbook. The course material is made available on the moodle. Moodle Link. Credits 3. Subject examined Fundamentals of biosensors and electronic biochips. Number of places 70. Lecture 2 Hour(s) per week x 14 weeks.