

about the book...

Concentrating on increasing the selectivity and sensitivity of bioprocess sensing devices, this practical volume helps scientists and engineers explore *new concepts* in transduction modes in order to create the next generation of biosensors. Twenty leading authorities in various specialties related to this new technology from Europe, the United States, and Japan have combined their expertise to present a comprehensive, up-to-date survey.

Complete with more than 900 bibliographic citations of the literature plus more than 150 illustrative diagrams and tables, *Biosensor Principles and Applications* identifies major contributions in each related discipline and gives numerous examples... focuses on the principle of measurement, biological materials, transducer descriptions, and biosensor characteristics and performance for each device... provides a common biosensor vocabulary bridging the gaps between disciplines... critically surveys the subject from enzyme electrodes to field effect transistors and optoelectronic devices... and assesses prospects for future developments in biosensors.

Biosensor Principles and Applications is an essential reference for analytical, clinical, environmental, bioorganic, enzymatic, and industrial chemists and biochemists; biomedical, bioprocess, biotechnology, microelectronics, and optical engineers; biophysicists and physicists; bioprocess technologists; computer and automation scientists; and graduate and medical students interested in bioprocess technology.

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