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Titolo	Biosensors Based on Sandwich Assays / / edited by Fan Xia, Xiaojin Zhang, Xiaoding Lou, Quan Yuan
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018
ISBN	981-10-7835-1
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (IX, 216 p. 80 illus., 70 illus. in color.)
Disciplina	543
Soggetti	Analytical chemistry Nucleic acids Nanotechnology Biomedical engineering Biotechnology Proteins Analytical Chemistry Nucleic Acid Chemistry Biomedical Engineering and Bioengineering Protein Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Colorimetric Sandwich Assays for Protein Detection -- Fluorescence Sandwich Assays for Protein Detection -- Electrochemical Sandwich Assays for Protein Detection -- Sandwich Assays Based on SPR, SERS, GMR, QCM, Microcantilever, SAW, and RRS Techniques for Protein Detection -- Colorimetric Sandwich Assays for Nucleic Acid Detection -- Fluorescence Sandwich Assays for Nucleic Acid Detection -- Electrochemical Sandwich Assays for Nucleic Acid Detection -- Sandwich Assays Based on QCM, SPR, Microcantilever, and SERS Techniques for Nucleic Acid Detection -- Sandwich Assays for Small Molecule and Ion Detection -- Sandwich Assay for Pathogen and Cells Detection -- Biosensors Based on Supersandwich Assays.
Sommario/riassunto	This book shows the various sandwich assays that are constructed from recognition molecules, such as antibodies, oligonucleotide sequences

and aptamers, developed as a result of nano- and biotechnology advances. It consists of ten chapters presenting interesting examples of these assays, organized according to the type of analytic methods (colorimetric, fluorescence, electrochemical, etc.) and detected objects (protein, nucleic acid, small-molecule, ion, etc.). It also includes a chapter discussing the introduction of sandwich assays as biosensors for the detection of a range of targets. It is an interesting and useful resource for a wide readership in various fields of chemical science and nanotechnology.