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Descrizione fisica	1 online resource (VII, 215 p. 61 illus., 47 illus. in color.)
Collana	Advances in Biochemical Engineering/Biotechnology, , 0724-6145 ; ; 174
Disciplina	572.85
Soggetti	Biotechnology Immunology
	Nucleic acids
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	Biomedical Engineering and Bioengineering
Lingua di pubblicazione	Inglese
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Nota di contenuto	Biophysical Characterization of Aptamer-Target Interactions Impedimetric Aptamer-based Biosensors: Principles and Techniques Impedimetric Aptamer-based Biosensors: Applications Aptamer- based affinity chromatography for protein extraction and purification Aptamers in diagnostic and molecular imaging applications Aptamer-modified nanoparticles in medical applications Defining Target Product Profiles (TPPs) for Aptamer based diagnostics.
Sommario/riassunto	This book reviews the development, characterization and applications of aptamers in different areas of biotechnology ranging from therapeutics to diagnostics and protein purification. Hailed as chemical antibodies, these single-stranded nucleic acid receptors were predicted to supersede antibodies in traditional assays, such as ELISA, within a short time. While this has yet to happen, readers will find in this book a deep insight into the progress of aptamer technology and a critical

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discussion about the limitations that need to be overcome in order to
find wider acceptance and use outside of the still relatively small
aptamer-community. This book covers all aspects of aptamer
generation and application for the aptamer-experienced reader and
curious novice alike, with the addition of an industry perspective on the
future of aptamer-use in biotechnology