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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

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. .