1. Record Nr. UNINA9910254332703321

Autore Hosseini Samira

Titolo Fundamentals of MALDI-ToF-MS Analysis [[electronic resource]]:

Applications in Bio-diagnosis, Tissue Engineering and Drug Delivery / /

by Samira Hosseini, Sergio O. Martinez-Chapa

Pubbl/distr/stampa Singapore:,: Springer Singapore:,: Imprint: Springer,, 2017

ISBN 981-10-2356-5

Edizione [1st ed. 2017.]

Descrizione fisica 1 online resource (XI, 68 p. 34 illus., 31 illus. in color.)

Collana SpringerBriefs in Forensic and Medical Bioinformatics, , 2196-8845

Disciplina 543.0873

Soggetti Biomedical engineering

Mass spectrometry Spectroscopy

Microscopy Biotechnology

Regenerative medicine Tissue engineering

Pharmaceutical technology

Biomedical Engineering and Bioengineering

Mass Spectrometry

Spectroscopy and Microscopy

Regenerative Medicine/Tissue Engineering Pharmaceutical Sciences/Technology

Lingua di pubblicazione Inglese

Nota di contenuto

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di bibliografia Includes bibliographical references at the end of each chapters.

Fundamentals of MALDI-ToF-MS analysis -- Application of MALDI-ToF-MS analysis in bio-diagnostic domain -- Application of MALDI-ToF-MS analysis in tissue engineering -- Application of MALDI-ToF-MS analysis

in drug delivery -- References -- Summary.

Sommario/riassunto This book presents the fundamentals and applications of Matrix

Assisted Laser Desorption/Ionization Time-of-Flight Mass

Spectrometry (MALDI-ToF-MS) technique. It highlights the basic principles, the history of invention as well as the mechanism of ionization and mass determination using this technique. It describes

the fundamental principles and methods for MALDI spectra interpretation and determination of exact chemical structures from experimental data. This book guides the reader through the interpretation of MALDI data where complex macromolecular spectra are simplified in order to present the major principles behind data interpretation. In addition, each chapter describes how MALDI-ToF-MS analysis provides necessary understanding of the copolymer systems that have been designed for specialized biomedical applications.