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| Titolo                  | Liquid chromatography-mass spectrometry [[electronic resource] ] : an introduction // Robert E. Ardrey   |
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| Descrizione fisica      | 1 online resource (298 p.)   |
| Collana                 | Analytical techniques in the sciences  |
| Disciplina              | 543.84<br>543/.0894  |
| Soggetti                | Liquid chromatography<br>Mass spectrometry   |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Description based upon print version of record.  |
| Nota di bibliografia    | Includes bibliographical references and index.   |
| Nota di contenuto       | LIQUID CHROMATOGRAPHY-MASS SPECTROMETRY: AN INTRODUCTION; Contents; Series Preface; Preface; Acknowledgements; Abbreviations, Acronyms and Symbols; About the Author; 1 Introduction; 1.1 What are the Advantages of Linking High Performance Liquid Chromatography with Mass Spectrometry?; 1.2 What Capabilities are Required of the Combination?; 1.3 What Problems, if Any, Have to be Addressed to Allow the LC-MS Combination to Function, and Function Effectively?; References; 2 Liquid Chromatography; 2.1 Introduction; 2.2 High Performance Liquid Chromatography; 2.2.1 Pump<br>2.2.2 Sample Introduction (Injector)2.2.3 Mobile Phase; 2.2.4 Stationary Phase; 2.2.5 Detectors; 2.3 Chromatographic Properties; 2.4 Identification Using High Performance Liquid Chromatography; 2.5 Quantitation Using High Performance Liquid Chromatography; 2.6 The Need for High Performance Liquid Chromatography-Mass Spectrometry; References; 3 Mass Spectrometry; 3.1 Introduction; 3.2 Ionization Methods; 3.2.1 Electron Ionization; 3.2.2 Chemical Ionization; 3.2.3 Fast-Atom Bombardment; 3.2.4 Matrix-Assisted Laser |

Desorption Ionization; 3.2.5 Negative Ionization; 3.3 Ion Separation  
3.3.1 The Quadrupole Mass Analyser 3.3.2 The (Quadrupole) Ion-Trap  
Mass Analyser; 3.3.3 The Double-Focusing and Tri-Sector Mass  
Analysers; 3.3.4 The Time-of-Flight Mass Analyser; 3.4 Tandem Mass  
Spectrometry (MS-MS); 3.4.1 Instrumentation; 3.4.2 Techniques; 3.5  
Data Acquisition; 3.5.1 Identification; 3.5.2 Quantitation; 3.6  
Processing of Mass Spectral Data; 3.6.1 The Total-Ion-Current Trace;  
3.6.2 Qualitative Analysis; 3.6.3 Quantitative Analysis; 3.6.4 The Use of  
Tandem Mass Spectrometry; References; 4 Interface Technology; 4.1  
Introduction; 4.2 The Moving-Belt Interface  
4.3 The Direct-Liquid-Introduction Interface 4.4 The Continuous-  
Flow/Frit (Dynamic) Fast-Atom-Bombardment Interface; 4.5 The  
Particle-Beam Interface; 4.6 The Thermospray Interface; 4.7 The  
Electrospray Interface; 4.7.1 The Mechanism of Electrospray Ionization;  
4.7.2 Sample Types; 4.7.3 The Appearance of the Electrospray  
Spectrum; 4.7.4 Structural Information from Electrospray Ionization; 4.8  
The Atmospheric-Pressure Chemical Ionization Interface; 4.8.1 The  
Mechanism of Atmospheric-Pressure Chemical Ionization; References  
5 Applications of High Performance Liquid Chromatography-Mass  
Spectrometry 5.1 Method Development; 5.1.1 The Use of Experimental  
Design for Method Development; 5.1.2 The Choice of Electrospray or  
APCI; 5.2 The Molecular Weight Determination of Biopolymers; 5.2.1  
Electrospray Spectra of Co-Eluting Components; 5.2.2 The Use of  
Selected-Ion Monitoring to Examine the Number of Terminal Galactose  
Moieties on a Glycoprotein; 5.2.3 The Effect of Mobile-Phase Additives  
and Cone-Voltage; 5.3 Structure Determination of Biopolymers; 5.3.1  
Amino Acid Sequencing of Proteins  
5.3.2 The Use of Enzymes for Amino Acid Sequencing

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Sommario/riassunto

First explaining the basic principles of liquid chromatography and mass spectrometry and then discussing the current applications and practical benefits of LC-MS, along with descriptions of the basic instrumentation, this title will prove to be the indispensable reference source for everyone wishing to use this increasingly important tandem technique.\* First book to concentrate on principles of LC-MS\* Explains principles of mass spectrometry and chromatography before moving on to LC-MS\* Describes instrumental aspects of LC-MS\* Discusses current applications of LC-MS and shows b

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