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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 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
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3.6.2 Qualitative Analysis; 3.6.3 Quantitative Analysis; 3.6.4 The Use of
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4.3 The Direct-Liquid-Introduction Interface 4.4 The Continuous-
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Particle-Beam Interface; 4.6 The Thermospray Interface; 4.7 The
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The Atmospheric-Pressure Chemical Ionization Interface; 4.8.1 The
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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

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
