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Titolo	Mass spectrometry in drug metabolism and disposition [[electronic resource] ] : basic principles and applications // edited by Mike S. Lee, Mingshe Zhu
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Descrizione fisica	1 online resource (776 p.)
Collana	Wiley series on pharmaceutical science and biotechnology: practices, applications and methods
Altri autori (Persone)	LeeMike S. <1960-> ZhuMingshe
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	(Publisher-supplied data) Part I Basic Concepts of Drug Metabolism and Disposition -- The Progression of Drug Metabolism -- Common Biotransformation Reactions -- Metabolic Activation of Organic Functional Groups Utilized in Medicinal Chemistry -- Drug Metabolizing Enzymes, Transporters and Drug-Drug Interactions -- Experimental Models of Drug Metabolism and Disposition -- Principles of Pharmacokinetics: Predicting Human Pharmacokinetics -- Drug Metabolism Research as an Integral Part of the Drug Discovery and Development Processes -- Part II Mass Spectrometry in Drug Metabolism: Principles and Common Practice -- Theory and Instrumentation of Mass Spectrometry -- Common Liquid Chromatography-Mass Spectrometry (LC-MS) Methodology for Metabolite Identification -- Mass Spectral Interpretation -- Techniques to Facilitate the Performance of Mass Spectrometry: Sample

Preparation, Liquid Chromatography and Non-Mass Spectrometric Detection -- Part III Applications of New LC/MS Techniques in Drug Metabolism and Disposition -- Quantitative In Vitro ADME Assays using LC-MS as a Part of Early Drug Metabolism Screening -- High Resolution Mass Spectrometry and Drug Metabolite Identification -- Distribution Studies of Drugs and Metabolites in Tissue by Mass Spectrometric Imaging -- Use of Triple Quadrupole-Linear Ion Trap Mass Spectrometry as a Single LC/MS Platform in Drug Metabolism and Pharmacokinetics Studies -- Quantitative Drug Metabolism with Accelerator Mass Spectrometry -- Standard-Free Estimation of Metabolite Levels Using Nanospray Mass Spectrometry: Current Statutes and Future Directions -- Profiling and Characterization of Herbal Medicine and their Metabolites using LC-MS -- Liquid Chromatography Mass Spectrometry Bioanalysis of Proteins in Biological Matrices -- Mass Spectrometry in the Analysis of DNA, Protein, Peptide, and Lipid Biomarkers of Oxidative Stress -- LC-MS in Endogenous Metabolite Profiling and Small Molecule Biomarker Discovery.

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Sommario/riassunto

"This book examines the background, industrial context, process, analytical methodology, and technology of metabolite identification. It emphasizes the applications of metabolite identification in drug research. While primarily a textbook, the book also functions as a comprehensive reference to those in the industry. The authors have worked closely together and combine complementary backgrounds to bring technical and cultural awareness to this very important endeavor while serving to address needs within academia and industry. It also contains a variety of problem sets following specific sections in the text"--Provided by publisher.

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