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Nota di contenuto	Mass Spectrometry for Proteomics-based Investigation -- MALDI profiling and applications in medicine -- Applications of Matrix-Assisted Laser Desorption Ionization In-Source Decay Mass Spectrometry -- Proteome imaging: from classic to modern mass spectrometry-based molecular histology -- Mass Spectrometry-Based Tissue Imaging of Small Molecules -- Sequencing Proteins from Bottom to Top: Combining Techniques for Full Sequence Analysis of Glucokinase -- Proteomics and non-proteomics approaches to study stable and transient protein-protein interactions -- Contribution of Mass spectrometry-based Proteomics to Discoveries in Developmental Biology -- Profiling optimal conditions for capturing EDEM proteins complexes in melanoma using mass spectrometry -- The Methods employed in Mass Spectrometric Analysis of Posttranslational Modifications (PTMs) and Protein-Protein Interactions (PPIs) -- Identification of post-translational modifications (PTMs) of proteins by mass spectrometry -- Sequence Variant and Post-translational Modification Analysis During Cell Line Selection via High-throughput

Peptide Mapping -- Selective derivatization of hexahistidine-tagged recombinant proteins -- Investigation of Antibody-Drug Conjugates by Mass Spectrometry -- Mass Spectrometry- and Computational Structural Biology-Based Investigation of Proteins and Peptides -- Strategies for Membrane Protein Analysis by Mass Spectrometry -- The Potential for Ion Mobility in Pharmaceutical and Clinical Analyses -- Application of Ion Mobility Mass Spectrometry in Lipidomics -- Mass Spectrometry in Advancement of Redox Precision Medicine -- Applications for mass spectrometry in the study of ion channel structure and function -- Immuno – affinity Mass Spectrometry: A Novel Approaches with Biomedical Relevance -- Developing well-annotated species-specific protein databases using comparative proteogenomics -- Stoichiometry of heavy metal binding to peptides involved in Alzheimer's disease: mass spectrometric evidence -- Role of mass spectrometry in investigating a novel protein: the example of Tumor Differentiation Factor (TDF) -- Mass Spectrometry-Based Biomarkers in Drug Development -- Combinatorial Electrophoresis and Mass Spectrometry-Based Proteomics in Breast Milk for Breast Cancer Biomarker Discovery -- Proteomic approaches to dissect neuronal signalling pathways -- Mass Spectrometry for the Study of Autism and Neurodevelopmental Disorders -- Simplifying the proteome: Analytical strategies for improving peak capacity -- Exploration of nicotine metabolism in *Paenarthrobacter nicotinovorans* pAO1 by microbial proteomics -- Stable Isotope Labeling by Amino Acids in Cell Culture (SILAC) for Quantitative Proteomics -- Mass spectrometry based comparative proteomics using one dimensional and two dimensional SDS-PAGE of rat atria induced with obstructive sleep apnea -- 2D SDS PAGE in combination with western blotting and mass spectrometry is a robust method for protein analysis with many applications -- Pulse SILAC approaches to the measurement of cellular dynamics -- Protein Biomarkers in Major Depressive Disorder: an Update -- A Pilot Exploratory Proteomics Investigation of Mental Fatigue and Mental Energy -- Metabolomics and biomarker discovery -- Analytical Methods for Mass Spectrometry-Based Metabolomics Studies -- Trends in analysis of cortisol and its derivatives -- Detection of biomedically relevant stilbenes from wines by mass spectrometry -- Mass spectrometry as a complementary approach for noncovalently bound complexes based on cyclodextrins -- Trends in glycolipid biomarker discovery in neurodegenerative disorders by mass spectrometry -- Non-targeted Screening in Environmental Monitoring Programs -- Mass Spectrometric DNA Adduct Quantification by Multiple Reaction Monitoring and its Future Use for the Molecular Epidemiology of Cancer -- Bottlenecks in proteomics: an update -- Recent Applications of Mass Spectrometry at Clarkson University -- Index.

Sommario/riassunto

The chapter "2D SDS PAGE in Combination with Western Blotting and Mass Spectrometry Is a Robust Method for Protein Analysis with Many Applications" is available open access under a Creative Commons Attribution 4.0 International License via link.springer.com.
