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Lingua di pubblicazione	Inglese
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Nota di contenuto	- Proteomics in Domestic Animals on a Farm to Systems Biology perspective: introductory note -- Considerations for farm animal proteomics experiments: an introductory view gel based versus non-gel based approaches -- Quantitative Gel electrophoresis -- Sample preparation for 2DE using samples of animal-origin -- Gel-free Proteomics -- Proteomic research in farm animal serum and plasma -- Proteomic Research in Urine and Other Fluids -- Colostrum proteomics research: a complex fluid with multiple physiological functions -- PROTEOMICS IN MILK AND DAIRY PRODUCTS -- Proteomics in skeletal muscle research -- Proteomics and the characterization of fatty liver metabolism in early lactation dairy cows -- Proteomics Research in the adipose tissue -- Proteomics and mammary gland research in dairy species -- Proteomics in wool and fibre research -- Proteomics of meat products -- Proteomics in Fish and Aquaculture research -- The use of

proteomics to study biomarkers of stress and welfare in farm animals -- Bioinformatics Support for Farm Animal Proteomics -- Peptidomics on Farm Animal Research -- Studying the animal transcriptome: state of the art and challenges in the context of Animal and Veterinary Sciences -- NMR Metabolomics pari passu with Proteomics: two relevant tools for animal sciences combined -- Omics and Systems Biology Integration of Production and Omics data in Systems Biology -- CONCLUSION: Proteomics in Domestic Animals on a Farm to Systems Biology perspective: final remarks and future prospects.

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Sommario/riassunto

Proteomics, like other post-genomics tools, has been growing at a rapid pace and has important applications in numerous fields of science. While its use in animal and veterinary sciences is still limited, there have been considerable advances in this field in recent years, in areas as diverse as physiology, nutrition and food of animal origin processing. This is mainly as a consequence of a wider availability and better understanding of proteomics methodologies by animal and veterinary researchers. This book provides a comprehensive, state-of-the-art account of the status of farm-animal proteomics research, focusing on the principles behind proteomics methodologies and its specific applications and offering clear example.

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