Special Issue

Applications of Mass Spectrometry in Food Analysis

Message from the Guest Editors

Mass spectrometry (MS) has become one of the most powerful and versatile tools in contemporary food science and is now widely recognized as an essential analytical technique in this field. Technological advancements and MS integration with chromatographic separation and bioinformatics have broadened its application across food science, including targeted and untargeted approaches. MS, with its unparalleled sensitivity, precision, and ability to resolve complex molecular profiles, underpins advances in food quality, safety, and authenticity. Applications include characterizing intricate flavor and bioactive compounds, detecting and quantifying trace contaminants, and identifying food adulteration. This Special Issue of Foods welcomes cutting-edge research on the application of MS in food science. We invite studies on targeted quantitation, structural characterization, and comprehensive omics-based profiling of food components. We particularly encourage submissions that advance understanding and foster innovation in MS-enabled food safety, quality, and authenticity, and that critically address current challenges while proposing emerging solutions.

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About the Journal

Message from the Editor-in-Chief

Foods (ISSN 2304-8158) is an open access and peer reviewed scientific journal that publishes original articles, critical reviews, case reports, and short communications on food science. Articles are released monthly online, with unlimited free access. Currently, Foods has been indexed by the Science Citation Index Expanded (SCIE - Web of Science), PubMed, and Scopus. Our aim is to encourage scientists, researchers, and other food professionals to publish their experimental and theoretical results as much detail as possible. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global food science community.

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