Special Issue

Application of Mass Spectrometry-Based Omics and Chemometrics in Food

Message from the Guest Editors

Mass spectrometry (MS)-based omics, which includes, among other fields of study, the areas of proteomics, metabolomics, and lipidomics, enables the simultaneous identification and quantification of diverse molecular components within food matrices. It also aids in accurately identifying biomarkers related to quality, safety, authenticity, processing or storage conditions, nutritional value, physicochemical properties, bioactivity, and more. To extract relevant chemical information from the extensive datasets generated in MS-based omics, the application of chemometrics becomes essential. This involves data pre-processing, deconvolution, peak peaking, feature identification, statistical analysis, multivariate data analysis, pattern recognition, classification, predictive modeling, etc., facilitating synergies with other artificial intelligence disciplines, such as machine learning.

This Special Issue aims to summarize novel applications of MS-based omics and chemometrics in food science and technology and welcomes both research articles and reviews.

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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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