Special Issue

High-Performance Liquid Chromatography–Mass Spectrometry in Food Analysis: Development and Applications

Message from the Guest Editors

Chromatography has become a key technique for food analysis and quality control. At present, high-performance liquid chromatography (HPLC) is a major choice for this purpose, by virtue of its highly efficient separation of compounds from complex food matrices, allowing for their detection. Combining HPLC with mass spectrometry (MS) has enabled the development and use of highly sensitive analytical methodology. High selectivity isolates individual compounds, while high sensitivity enables identification at ultra-trace levels. Single-quadrupole MS, though simple and cost-effective, is commonly used for quantification. However, advanced high-resolution MS instruments, such as tandem MS, MS/MS, offer greater selectivity and sensitivity for identifying and quantifying co-eluting compounds. The significance of HPLC in food analysis is confirmed by its widespread use to develop new methods and approaches for validating existing methods. The aim of this Special Issue is to disseminate state-of-the-art research and new advances in the use of HPLC–MS methods to determine nutrients and contaminants in foods. Both original research and review articles are welcome.

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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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