

Special Issue

Application of Emerging Nonthermal Technologies in the Food Industry: Second Edition

Message from the Guest Editors

In the past, thermal processing technologies were widely used to sterilize and enhance the flavor of food. However, some toxic substances such as acrylamide and furan are easily released during thermal processing, and these are considered to be carcinogens by the WHO. Recently, emerging nonthermal processing technologies, such as high-pressure processing, radiation, pulsed electric fields, pulsed light, and cold plasma, have been found to ensure the quality and freshness of foods and avoid the generation of carcinogens. In addition, nonthermal technologies have been used to extract active substances from fruit, vegetables, and industrial crop residues, which facilitate the utilization of food and its byproducts. Current studies focus on combination treatment which may be a more effective processing technique for the food industry. Clarifying the mechanisms, optimizing the processes, producing industrial-scale equipment, analyzing potential risks, and designing safety rules will be essential in promoting future nonthermal processing technologies.

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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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