Special Issue

Enzymatic Browning in Fruits and Vegetables: Formation Mechanisms and Inhibitory Measures

Message from the Guest Editors

This Special Issue will showcase the recent progress made in understanding and controlling enzymatic browning—an important factor influencing the quality of plant-based foods. The articles compiled here will examine the biochemical and molecular mechanisms underlying pigment formation, with a focus on the catalytic functions of polyphenol oxidase (PPO), peroxidase (POD), and related oxidative enzymes. Beyond elucidating reaction pathways, this Special Issue will highlight innovative approaches to browning inhibition. Contributions should explore the applications of natural antioxidants, enzyme inhibitors, and edible coatings, as well as technologies, including highpressure processing, pulsed electric fields, or controlled atmosphere packaging. By combining insights from fundamental enzymology with practical solutions for postharvest management and food processing, this Special Issue will provide a comprehensive and up-todate overview of current research trends. It will serve as a valuable resource for scientists, technologists, and industry professionals seeking to improve the stability, safety, and sensory quality of fresh and minimally processed fruits and vegetables.

Guest Editors

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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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