Special Issue

Advances in Bioactive Glucosinolates and Derivatives

Message from the Guest Editor

Glucosinolates are bio-relevant thiosaccaridic secondary metabolites present in a large number of plants, mainly of the order Brassicales, including common leaf and root vegetables, oilseed and ornamental crops cultivated worldwide. The occurrence of alucosinolates coincides with the presence of specific thioglucosidases, the myrosinases, which can hydrolyze these compounds into a variety of reactive transient and stable products, some of which have noteworthy bioactive properties. This Special Issue welcomes papers covering all aspects of glucosinolates and their derivatives, including: their screening in different wild and cultivated plant species: their isolation, enrichment and enzymatic transformation; their chemical synthesis, modification and characterization: the evaluation of their in vitro and in vivo bioactivity: the elucidation of their mechanisms of action; and the investigation of their stability and functionality for their potential practical application in different fields.

Guest Editor

Dr. Gina Rosalinda De Nicola

Research Centre for Vegetables and Ornamental Crops, Council for Agricultural Research and Economics (CREA), Via dei Fiori 8, 51017 Pescia, Italy

Deadline for manuscript submissions

closed (20 July 2024)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/158418

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

