Special Issue

Alliums: Traditional Uses, Phytochemistry and Biological Activities

Message from the Guest Editors

Allium is an enormous genus that compromises economically important crops, including the bulb onion (Allium cepa), shallot (the A. cepa Aggregatum group), Japanese bunching onion (A. fistulosum), garlic (A. sativum), chive (A. schoenoprasum), Chinese chive (A. tuberosum), and leek (A. ampeloprasum). Allium is a rich source of diverse metabolites, such as amino acids, phenolics and fructooligosaccharides. The Allium metabolites not only affect economically important traits such as color, flavor and pungency, but also play an important role in plant physiology and in promoting human health. This Special Issue will highlight articles analyzing the role of metabolomics in the Allium crops. It will consider the translations and applications of metabolomics. association studies and integrative omics and the inherent bioinformatics and computing challenges will also be considered. Articles focusing on the potential of Allium metabolomics for Allium breeding, including comparative genotyping, natural products, medicinal properties, and plant–environment interactions, are desired.

Guest Editors

Dr. Masayoshi Shigyo
Yamaguchi University, Yamaguchi, Japan

Dr. Mostafa Abdelrahman
Laboratory of Molecular Breeding, Arid Land Research Center, Tottori University, Tottori, Japan

Deadline for manuscript submissions

closed (31 October 2020)

Molecules

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed

mdpi.com/si/32740

Molecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
molecules@mdpi.com

mdpi.com/journal/molecules

Molecules

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed

mdpi.com/journal/molecules

MDPI

About the Journal

Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt
Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Reaxys, CaPlus / SciFinder, MarinLit, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).