



Alliums: Traditional Uses, Phytochemistry and Biological Activities

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)

Message from the Guest Editors

Allium is an enormous genus that comprises 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.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical
Biology and Phytochemistry,
University of Münster,
Corrensstrasse 48, D-48149
Münster, Germany

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.

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](#), [MEDLINE](#), [PMC](#), [Reaxys](#), [CaPlus / SciFinder](#), [MarinLit](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (*Chemistry (miscellaneous)*)

Contact Us

Molecules Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/molecules
molecules@mdpi.com
[X@Molecules_MDPI](https://twitter.com/X@Molecules_MDPI)