



Biomacromolecules in Algae: Metabolism, Regulation and Bioactivity

Guest Editors:

Dr. Zhanru Shao

CAS and Shandong Key
Laboratory of Experimental
Marine Biology, Institute of
Oceanology, Chinese Academy of
Sciences, Qingdao 266071, China

Dr. Wenhui Gu

CAS and Shandong Key
Laboratory of Experimental
Marine Biology, Institute of
Oceanology, Chinese Academy of
Sciences, Qingdao 266071, China

Deadline for manuscript
submissions:

closed (31 December 2023)

Message from the Guest Editors

Biomacromolecules from algae are an important manifestation of this particularity. They encompass bioactive compounds with complex composition, structure, biosynthesis, and bioactivity. Algal biomacromolecules metabolism encompasses various of biological pathways and play a crucial role in cell–cell adhesion and interaction, mechanical shear resistance, osmoregulation, photosynthetic reserve, etc. However, despite an increasing interest in biomacromolecules application, their enzyme-catalyzed biosynthesis and degradation and the underlying regulation mechanism in algae remain to be further elucidated.

In this Special Issue we aim to assemble a serial of articles with topics including (not exclusively):

- Biomacromolecules biosynthesis and degradation in algae;
- Photosynthesis and carbon fixation related to biomacromolecules;
- Biotechnology, bioactivity, and application studies of biomacromolecules;
- Multi-omics analysis concerning biosynthesis and regulation of biomacromolecules;
- Enzymological studies of algal biomacromolecules-related enzymes;
- Biotechnological engineering devoted to algal biomacromolecules extraction, production, and utilization.





an Open Access Journal by MDPI

Editor-in-Chief

Dr. Amedeo Lonardo

1. Formerly Director of the Simple Operating Unit "Metabolic Syndrome", Azienda Ospedaliero-Universitaria, 41126 Modena, Italy
2. Formerly Professor of Internal Medicine, School of Specialization of Allergology and Clinical Immunology, University of Modena and Reggio Emilia, 41121 Modena, Italy

Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

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, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Biochemistry and Molecular Biology*) / CiteScore - Q2 (*Endocrinology, Diabetes and Metabolism*)

Contact Us

Metabolites Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/metabolites
metabolites@mdpi.com
[X@MetabolitesMDPI](https://twitter.com/MetabolitesMDPI)