# **Special Issue**

# Biomacromolecules in Algae: Metabolism, Regulation and Bioactivity

## 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 biomacromoleculesrelated enzymes;
- Biotechnological engineering devoted to algal biomacromolecules extraction, production, and utilization.

#### **Guest Editors**

Dr. Zhanru Shao

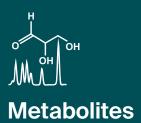
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## Deadline for manuscript submissions

closed (31 December 2023)



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## **About the Journal**

## 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.

## Editor-in-Chief

#### Dr. Amedeo Lonardo

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