



## Emerging Topics in Structural Biology

Guest Editors:

**Prof. Dr. Giuseppe Zanotti**

Department of Biomedical  
Sciences, University of Padua,  
35131 Padova, Italy

**Prof. Dr. Zhongzhou Chen**

State Key Laboratory of  
Agrobiotechnology and Beijing  
Advanced Innovation Center for  
Food Nutrition and Human  
Health, College of Biological  
Sciences, China Agricultural  
University, Beijing 100193, China

Deadline for manuscript  
submissions:

**closed (30 December 2022)**

### Message from the Guest Editors

Dear Colleagues,

In the last few years, two events have revolutionized the field of structural biology: the “resolution revolution” of cryo-electron Microscopy (cryo-EM), which allows the visualization of single particles at a near-atomic resolution without the need of growing them in a crystalline form, and the recent development of AlphaFold 2, an AI system able to predict the 3D structure of a single protein with high reliability. This last event will strongly influence crystallography since that most of the future crystal structures will be solved using the molecular replacement technique. In parallel, new techniques/methods are emerging in crystallography, such as new crystal growing methods, more intense and focused X-ray beams, novel data collection methods, ultra-sensitive detectors, advanced computational algorithms, and new software.

The present Special Issue is aimed at summarizing frontier technologies and methodological advances in the field, as well as structures and functions of special proteins or protein complexes, to take stock of the present situation and to create a virtual forum for the future of Structural Biology.





an Open Access Journal by MDPI

## 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

## 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.

## 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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

## Contact Us

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI