

## Special Issue

# Copper in Biology: Maturation of Copper Proteins and Copper Homeostasis

### Message from the Guest Editor

Copper is an essential transition metal ion found in many key human enzymes. Its ability to assume distinct redox states by cycling between oxidized copper(II) and reduced copper(I) makes copper an appropriate cofactor in proteins, showing a wide range of catalytic functions, such as reactive oxygen species detoxification, electron transfer and mitochondrial functions. In order to prevent the binding of the “wrong” copper ion, cells have developed very efficient homeostatic and trafficking mechanisms. Thus, copper distribution, exploitation and excretion is tightly regulated in cells. Molecular recognition by protein–protein interactions efficiently guarantees the correct delivery of copper to Cu-dependent enzymes. An overview on copper proteins will be considered, and original papers aim to unravel the precise molecular nature of copper within different cellular compartments are welcome. Contributions that show recent advances in maturation of copper proteins and copper homeostasis processes will be also considered.

### Guest Editor

Dr. Francesca Cantini

1. Magnetic Resonance Center, University of Florence, Sesto Fiorentino, 50019 Firenze, Italy
2. Department of Chemistry, University of Florence, Sesto Fiorentino, 50019 Firenze, Italy

### Deadline for manuscript submissions

closed (20 June 2019)



## International Journal of Molecular Sciences

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/17894](https://mdpi.com/si/17894)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)



## About the Journal

### 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.

---

### 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

---

### 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 and Molecular Biology) / CiteScore  
- Q1 (Organic Chemistry)