

## Special Issue

# Molecular and Cellular Mechanisms on Autism Spectrum Disorder

### Message from the Guest Editor

Autism spectrum disorder (ASD) is a group of neurodevelopmental disorders characterized by social and communication abnormalities. Synaptic abnormalities have been observed in preclinical ASD models. They are thought to play a major role in ASD and might be modified by targeted interventions. An imbalance in excitatory to inhibitory neurotransmission (E/I imbalance), through altered glutamatergic and GABAergic neurotransmission, respectively, is thought to be implicated in the pathogenesis of ASD. Molecular abnormalities in synaptic structures and functions in ASD involve neuroligins and neurexins, proteins that are crucial for aligning and activating synapses along with the SHANK3 scaffolding protein. The aim of this topic is to contribute to disentangling the complex synaptic and molecular abnormalities of ASD and related new experimental treatments.

---

### Guest Editor

Dr. Roberto Canitano

Division of Child and Adolescent Neuropsychiatry, University Hospital of Siena, 53100 Siena, Italy

---

### Deadline for manuscript submissions

closed (30 June 2024)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/145517](https://mdpi.com/si/145517)

*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)