

## Special Issue

# Metal Oxide Nanomaterials: Synthesis, Structures and Optical Properties

### Message from the Guest Editor

This Special Issue is focused on cutting-research relating to the synthesis, properties and applications of metal oxide nanomaterials. Nanomaterials based on metal oxides represent an important class of materials with many applications such as catalysts in pollutant photodegradation, active compounds in solar cells, highly sensitive chemical and biological sensors, vectors for controlled drug delivery, etc. Integrating these nanomaterials in hybrid systems or smart devices is of great importance in fields such as nanomedicine, green technologies, and optical communications. Potential topics include, but are not limited to, the following: synthesis procedures, metal doping, optical and electric properties, photocatalysis, band-gap engineering, defect characterization and engineering, nanomaterials for sensors and biosensors, and antibacterial nanomaterial platform.

---

### Guest Editor

Dr. Anton Airinei

“Petru Poni” Institute of Macromolecular Chemistry, 41A Grigore Ghica Voda Alley, 700487 Iasi, Romania

---

### Deadline for manuscript submissions

closed (31 December 2025)



## Molecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.6  
CiteScore 8.6  
Indexed in PubMed



[mdpi.com/si/244903](https://mdpi.com/si/244903)

*Molecules*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[molecules@mdpi.com](mailto:molecules@mdpi.com)

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





# Molecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.6  
CiteScore 8.6  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 30th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

---

### Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Reaxys, CaPlus / SciFinder, MarinLit, AGRIS, and other databases.

#### Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).