

Special Issue

Sensoric Applications of Silicon Nanostructures

Message from the Guest Editor

The application of silicon nanostructures in sensorics has many advantages, such as high sensitivity, fast response, low cost, and the ability for multiple uses. Additionally, silicon nanostructures can be obtained through various methods, such as electrochemical or metal-assisted etching of silicon, gas-phase deposition, and thermal treatment, allowing for the tuning of their morphology and properties to create materials with specific functional characteristics.

Silicon nanostructures can be used to create composite materials based on silicon and noble metal nanoparticles, which can improve detection sensitivity and selectivity. Such silicon-based plasmonic sensors can be used for the ultra-sensitive and fast detection of biomolecules and other analytes.

This issue of the IJMS is dedicated to research on the use of silicon nanostructures in sensing, which has great potential for scientific, medical, and industrial applications. Further development of this technology may lead to the creation of rapid, accurate, and efficient sensors for various fields of application.

Guest Editor

Dr. Kirill A. Gonchar

Physics Department, Lomonosov Moscow State University, Leninskie Gory 1, 119991 Moscow, Russia

Deadline for manuscript submissions

closed (31 May 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/170288

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)* 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, and molecular biophysics. *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. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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, CAPus / SciFinder, and other databases.

Journal Rank:

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