



Design and Fabrication of Theranostic Nanoparticles

Guest Editors:

Dr. Gianina Dodi

Faculty of Medical
Bioengineering, Grigore T. Popa
University of Medicine and
Pharmacy of Iasi, 700115 Iasi,
Romania

Prof. Dr. Abbas Rahdar

Department of Physics, Faculty of
Science, University of Zabol,
Zabol, Iran

Deadline for manuscript
submissions:

closed (30 June 2023)

Message from the Guest Editors

Dear Colleagues,

Theranostics, defined as nanomedicine that combines diagnostics with therapeutics, employ personalized medicine for cancer treatment or other diseases, are designed to improve the detection, increase the efficacy of the treatment, and limit the associated systemic toxicity.

The ideal theranostic agent should assemble the below criteria:

- Safe to the organism;
- Stable under physiological conditions when delivered;
- Able to penetrate through any biological barrier encountered whole en route to the intended tissue or organ while also having no significant toxic side effects;
- Rapidly and selectively able to accumulate in target(s) of interest;
- Efficiently deliver a sufficient amount of the drug(s);
- Report biochemical and morphological characteristics of the disease(s);
- Be rapidly cleared from the body or biodegraded into nontoxic byproducts.

This Special Issue is devoted to the field of theranostic selection from design and synthesis to in vitro and in vivo studies and up to a clinical applied solution based on a core technology that combines imaging, therapeutic drugs, and diagnostic labels into a single entity or multiple combinations of nanomedicine.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

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

Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th 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 multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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](#), [MEDLINE](#), [PMC](#), [Reaxys](#), [CaPlus / SciFinder](#), [MarinLit](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q2 (Chemistry, Multidisciplinary) / CiteScore - Q1 (Chemistry (miscellaneous))

Contact Us

Molecules Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/molecules
molecules@mdpi.com
[X@Molecules_MDPI](https://twitter.com/Molecules_MDPI)