

Special Issue

Application of Gold Nanoparticles and Gold-Based Polymer Composites in Biomedicine

Message from the Guest Editors

Gold nanoparticles (AuNPs) are cytocompatible and have enormous potential for biomedical application. We highlight cancer treatments using photothermal and imaging therapies and cancer diagnosis due to localized surface plasmon resonance properties. Polymers stabilize AuNPs due to hindrance and repulsion forces supported by ionized sites on polymer-capping agents. Polymers can also coordinate with AuNPs, protecting them against aggregation. Biopolymers improve biomedical AuNP response, providing durability and enhanced cytocompatibility. Polymer-stabilized AuNP composites are used as drug delivery devices, sensors, scaffolds, wound dressings, coatings, and materials for nonconventional cancer therapies.

This Special Issue invites researchers to submit papers concerning AuNPs and AuNP/polymer composites applied as drug delivery platforms, photothermal and imaging agents, biosensors, wound dressings, scaffolds, and antimicrobial coatings, highlighting the progress in the current biomedicine landscape.

Guest Editors

Prof. Dr. Alessandro F. Martins

Laboratory of Materials, Macromolecules, and Composites (LaMMAC), Federal University of Technology - Paraná (UTFPR), 86812-460 Apucarana, PR, Brazil

Prof. Dr. Matt Kipper

Department of Chemical and Biological Engineering, Colorado State University, Fort Collins, CO, USA

Deadline for manuscript submissions

closed (25 December 2021)



Pharmaceutics

an Open Access Journal
by MDPI

Impact Factor 5.5
CiteScore 12.5
Indexed in PubMed



mdpi.com/si/66482

Pharmaceutics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
pharmaceutics@mdpi.com

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





Pharmaceutics

an Open Access Journal
by MDPI

Impact Factor 5.5
CiteScore 12.5
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Pharmaceutics (ISSN 1999-4923) is an online open access journal on the science and technology of pharmaceuticals and biopharmaceuticals. The scientific community, the wider community and the general public have unlimited and free access to the content as soon as a paper is published; this open access to your research ensures your findings are shared with the widest possible audience. Please consider publishing your impressive work in this high quality journal. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Patrick J. Sinko

Ernest Mario School of Pharmacy, Rutgers, The State University of New Jersey, William Levine Hall, Room 225C, 160 Frelinghuysen Road, Piscataway, NJ 08854-8020, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Pharmaceutical Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.7 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the second half of 2025).