

Special Issue

Nanoparticle Delivery to Tumors: Challenges and Advances

Message from the Guest Editors

Nanoparticles have emerged as versatile drug delivery vehicles for applications in oncology and other pathologies. However, although several types of nanoparticles have been developed, their effective delivery to tumors is still a major challenge, especially nanoparticles ≥ 100 nm in diameter. Enhanced vascular permeability in tumors has been shown to play an essential role in the delivery of nanoparticles of this diameter range to tumors, through the enhanced permeability and retention (EPR) effect. Furthermore, the poor clinical performance of some nanoparticles has been partially attributed to variabilities in the vascular permeability within tumors and within different patient populations. Consequently, tumor-priming strategies designed specifically to enhance tumor vascular permeability and subsequently increase the delivery of nanoparticles to tumors are currently being explored. In this Special Issue, we shall cover some of the challenges associated with delivering nanoparticles to tumors, and some advances that have been made to increase the delivery efficiency of nanoparticles to tumors.

Guest Editors

Dr. Sangeeta Ray

Department of Radiology, Johns Hopkins University School of Medicine, Baltimore, MD 21205, USA

Dr. Ethel J. Ngen

Department of Radiology, Johns Hopkins University School of Medicine, Baltimore, MD 21205, USA

Deadline for manuscript submissions

closed (31 July 2023)



Pharmaceutics

an Open Access Journal
by MDPI

Impact Factor 5.5
CiteScore 10.0
Indexed in PubMed



mdpi.com/si/73416

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 10.0
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

Department of Pharmaceutics, Ernest Mario School of Pharmacy,
Rutgers University, Piscataway, NJ 08854, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / 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 14.9 days after submission; acceptance to publication is undertaken in 3.3 days (median values for papers published in this journal in the first half of 2025).