Special Issue

Nano-Based Drug Delivery System: Recent Developments and Future Prospects

Message from the Guest Editors

The rise of nanotechnology has resulted in a new focus on advanced techniques of drug delivery. In recent years, there has been a surge of interest in using nanotechnology to solve the issues with gene and drug delivery. Drug and gene delivery applications have prompted the substantial study of nanosystems with a wide range of compositions and biological features. Researchers have discovered a variety of compounds with intriguing biological features, but low bioavailability (owing to issues such as poor solubility, toxicities, rapid clearance, metabolic degradation, and the inability to pass the blood–brain and intestinal barriers). Therefore, nanocarriers may be the most effective method for achieving targeted drug delivery to a specific location over a prolonged period of time and at a predetermined dosage. Nanocarriers allow for controlled and prolonged medication release at the treatment site. This Special Issue's primary goal is to investigate the state of nanoparticles as drug delivery systems and elaborate their potential future scope.

Guest Editors

Dr. Venkata Krishna Kowthavarapu

Center for Pharmacometrics and Systems Pharmacology, Department of Pharmaceutics, College of Pharmacy, University of Florida, Orlando, FL 32827, USA

Dr. Nitin Charbe

Division of Clinical Pharmacology, Department of Medicine, School of Medicine, Indiana University, Indianapolis, IN, USA

Deadline for manuscript submissions

closed (31 December 2024)

Bioengineering

an Open Access Journal by MDPI

Impact Factor 3.7
CiteScore 5.3
Indexed in PubMed

mdpi.com/si/163628

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

mdpi.com/journal/bioengineering

Bioengineering

an Open Access Journal by MDPI

Impact Factor 3.7
CiteScore 5.3
Indexed in PubMed

mdpi.com/journal/bioengineering

About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie
Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Engineering, Biomedical) Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.2 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).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.

MDPI