

## Special Issue

# Application of Nanomaterials in Drug Delivery System

### Message from the Guest Editors

The issue is targeted at publications in the area of nanomaterial application as delivery agents. One significant area of research in nanotechnology is the use of nanomaterials in drug delivery systems. Drug use can frequently cause side effects, and often, drugs they work well in vitro but cannot withstand the effect of the enzymes of the gastrointestinal (GI) tract and thus do not work well in vivo. Nanoparticles can be used to enhance drug delivery to tissue, help in improving drug stability in vivo, and sustain controlled release. Due to their small size and larger surface area, drug-encapsulated nanoparticles show increased solubility and thus enhanced bioavailability. This also enhances their ability to cross the blood-brain barrier (BBB). Nanoparticles made from natural and synthetic polymers (biodegradable and non-biodegradable) have received attention for customized targeted delivery of drugs with controlled release of drug and better bioavailability. Through manipulation of the size and surface of properties, nanomaterials are being used frequently for drug delivery. **Keywords:** nanomaterial; drug delivery; bioavailability

---

### Guest Editors

Dr. Komal Vig

Department of Biological Sciences, Alabama State University, Montgomery, AL 36101, USA

Dr. Sameer Joshi

Department of Pharmaceutical Sciences, College of Pharmacy, Larkin University, 18301 N. Miami Avenue, Miami, FL 33169, USA

---

### Deadline for manuscript submissions

closed (20 August 2023)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/136483](https://mdpi.com/si/136483)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

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

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





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



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



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

---

### 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), Ei Compendex, Inspec, Embase, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )