Special Issue

Application of Nanoparticles as Biosensors in the Biomedical Field

Message from the Guest Editor

Since 2000, advances in nanotechnology have led the rapid development of biotechnology and health technology. The introduction of a variety of nanomaterials to biosensors and biomedical devices has attracted substantial research efforts, because of the tremendous characteristics, including the physical, chemical, electrical, and electrochemical properties of nanoparticles. In addition to the use of nanoparticles in biosensor- and biomedical-devices, they can improve the sensitivity, selectivity, response time, and biocompatibility. This Special Issue aims to put together a set of original research papers and review papers representing part of the depth of the current research on the recent advances in biosensor- and biomedical-devices with nanoparticles. Here, we cordially invite you to contribute original research papers aligned with these themes, so as to advance and improve the state-of-the-art in nanoparticle-based biosensors and biomedical devices that lead the new opportunities, approaches, and solutions to next-generation biomedical application and novel biosensor challenges.

Guest Editor

Dr. Taek Lee

Department of Chemical Engineering, Kwangwoon University, Seoul 01897, Republic of Korea

Deadline for manuscript submissions

closed (20 June 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 5.8
Indexed in PubMed

mdpi.com/si/33164

Materials
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 5.8
Indexed in PubMed

mdpi.com/journal/materials

MDPI

About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (Condensed Matter Physics)