Special Issue

Micro/Nanobubbles for Biomedical Applications

Message from the Guest Editor

Gas-filled micro/nanobubbles encapsulated with a polymer, a lipid, surfactant shells, or various nanoparticles have been well established and applied in the biomedical field over the last decade. Micro/nanobubbles are distinctly distinguished from other carrier materials because of their high compressibility and nonlinear properties under ultrasound exposure. This Special Issue aims to cover the current state-of-the-art research on micro/nanobubbles and their biomedical applications beyond imaging and drug/gene delivery for anticancer treatment, antibacterial activity, and biosensing. The format of welcomed articles includes regular research papers, communications, and reviews. Potential topics include, but are not limited to: - Formation, stability, and structure of micro/nanobubbles:

- Detection, imaging, and tracking methods for micro/nanobubbles;
- Imaging and biosensing applications;
- Drug and gene delivery applications;
- Modeling of micro/nanobubbles.

Guest Editor

Prof. Dr. Fang Yang

State Key Laboratory of Bioelectronics, Jiangsu Key Laboratory for Biomaterials and Devices, School of Biological Sciences and Medical Engineering, Southeast University, Nanjing 210096, China

Deadline for manuscript submissions

closed (31 December 2023)



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3 CiteScore 9.2 Indexed in PubMed



mdpi.com/si/148711

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

mdpi.com/journal/nanomaterials





Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3 CiteScore 9.2 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometerscale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, Nanomaterials, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)

