

## Special Issue

# Antimicrobial and Antioxidant Activity of Nanoparticles

### Message from the Guest Editor

While antimicrobial nanoparticles play an important role in preventing and fighting infections or accelerating the healing of skin wounds in medicine, as well as in preventing the microbial contamination of water, food packaging, or various consumer products, antioxidant nanoparticles have been found to have potential for the successful treatment of various inflammatory diseases related to oxidative stress. In addition, such nanoparticles can also be used in cosmetics, especially for skin care products and anti-aging treatments. We invite researchers to submit articles on advances in the antimicrobial and antioxidant activity of nanoparticles. Possible topics include the following: the synthesis, modification and functionalization of nanoparticles for enhanced antimicrobial and antioxidant activity; the surface functionalization of solid materials; characterization techniques; mechanisms of antimicrobial and antioxidant activity; in vitro and in vivo studies of antimicrobial and antioxidant activity for establishing hygiene, infection control and/or antioxidant therapies; and the evaluation of potential health and environmental risks.

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### Guest Editor

Prof. Dr. Brigita Tomšič

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### Deadline for manuscript submissions

closed (31 March 2025)



## Nanomaterials

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## 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 nanometer-scale 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.

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### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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