

Special Issue

Antibacterial Applications of Nanomaterials

Message from the Guest Editor

Dear colleagues, The extent of the problem of infections and undesired bacterial contamination has triggered massive research efforts by researchers around the World in an attempt to find a solution. One area of substantial promise is nanotechnology. Over the last three decades, scientists and engineers have made exciting discoveries of nanoscale materials capable of eliminating bacteria or preventing their attachment to surfaces. The purpose of this Special Issue is to serve as an exciting collection of primary research and review articles of the recent progress in the field of synthesis, fabrication, and utilization of nanoscale materials for antibacterial applications. Topics include but are not limited to:

- Antibacterial nanoparticles and nanomaterials;
- Nanoscale delivery vehicles for antibacterial agents;
- Nanoscale coatings and surface modification strategies for antibacterial applications;
- Responsive systems at the nanoscale for the delivery of antibacterials;
- Nanoscale vehicles for targeted delivery of antibacterial compounds.

Guest Editor

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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.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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