

Special Issue

Advances in Antimicrobial Strategies Based on Nanoparticles

Message from the Guest Editor

In recent years, the resurgence of bacterial resistance to traditional antibiotics and the extensive pandemic context have paved the way for alternative therapeutic approaches that can overcome these problems. Nanoparticles and nanosystems have received increasing attention due to their unique physical and chemical properties.

This Special Issue of *Materials* will try to cover recent advances in the design and synthesis of nanoparticles and nanomaterials (metals, oxides, carbon-based nanoparticles, dendrimers, lipids, liposomes, polymer nanoparticles, etc.) used in new antimicrobial strategies. We welcome the submission of full papers, communications, and reviews. Potential topics include, but are not limited to:

- Nanomaterials in medicine (biomedical devices, drug delivery, imaging etc.);
- New therapeutic approaches based on antimicrobial nanoparticles;
- Advances in drug delivery systems, from 0 to 3D structures;
- Stimuli-responsive systems;
- Nanoparticles in sensing systems;
- Antimicrobial strategies based on nanoparticles.

Guest Editor

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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.

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