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Feature Papers in Antibacterial Nanomaterials and Biomaterials

Guest Editor:

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Message from the Guest Editor

Bacterial infections constitute a great threat to human health. For many years, antibiotic therapy has played essential roles in the antibacterial treatment. However, the irrational use of antibiotics has led to the emergence of drug-resistant pathogens, which substantially compromises the efficacy of antibiotic therapy. Since the synthesis or discovery of new antibiotics is quite challenging and time-consuming, developing novel antibacterial approaches is of great importance and significance.

Previous decades have witnessed the rapid development of various materials for biomedical use. Many functional nanomaterials and biomaterials for antibacterial use have been reported. Some serve as advanced carries for delivery of antibiotics and/or other antibacterial agents, including hydrogels, polymeric nanoparticles and liposomes. Some others, such as metal (oxide) nanoparticles, MXene nanosheets and graphene-based nanomaterials, act as antibacterial agents directly due to their intrinsic or stimuliinduced antibacterial activity. Particularly, these materials do not induce bacterial resistance.



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Editor-in-Chief

Message from the Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

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