Special Issue

Antibacterial Materials: Recent Advances in Methodologies and Regulations

Message from the Guest Editors

In recent years, the emergence of resistant bacteria has stimulated intensive research in developing antibacterial materials in different fields in order to reduce the spread of antibiotic-resistant bacterial strains.

Novel antibacterial materials include a large number of compounds such as nanoparticles, polymers, chemicals, proteins, and enzymes. Moreover, the final antibacterial products that embed the antibacterial compound can have many different shapes.

It is difficult to compare the performances of such different materials and applications because crossmethod comparisons are currently lacking in the literature. Moreover, the procedures for testing developed in the past are often unsuitable for new antibacterial materials/products, and the scientific soundness of the results can be weak. The conditions for testing required by current regulations should be critically evaluated to assess the limits of their applications.

On the other hand, existing procedures for antibacterial testing of materials are usually quite far from real conditions. Simple and affordable methods have to be developed in order to ensure reproducibility and robustness in conditions close to real world.

Guest Editors

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Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest growing research areas both in the scientific community and in the industrial one. Biomaterials are the result of collaborations between different disciplines: chemistry, medicine, pharmacology, engineering and biology. The objective of this collaboration is to lead to the implementation of new devices to restore form and human body functions. The mission of the Journal of Functional Biomaterials (JFB) is to focus attention on physico-chemical characteristics and their importance in the interactions between biomaterials and living tissues. JFB seeks to publish studies on the preparation, performance and use of biomaterials in biomedical devices, as well as regarding their behavior in physiological environments. We are pleased to welcome you as our authors.

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