

Special Issue

Antimicrobial Peptides: Discovery, Optimization and Biomedical Applications

Message from the Guest Editors

The continued use of antibiotics has been accompanied by the rapid emergence and spread of antibiotic-resistant strains of bacteria. Multidrug resistance among nosocomial pathogens is a major threat to public health and poses a huge economic burden on global healthcare. It is thus imperative to develop new antimicrobials. Antimicrobial peptides (AMPs), also known as host defense peptides, show multiple features as an ideal antimicrobial agent, including potent, rapid, and broad-spectrum antimicrobial activity, low promotion of antimicrobial resistance, potent anti-biofilm activity, and lethality against metabolically inactive microorganisms. Although AMPs hold considerable promise for translational applications, several drawbacks constrain their use as clinical drugs, e.g., liability in vivo and toxicity when used systemically. Thus, an increasing number of studies focus on strategic optimization approaches to increase the therapeutic potential of AMPs. The Special Issue seeks to gather regular research papers, reviews and communications focusing on new AMPs, chemical modifications, and/or optimization of AMPs as therapeutics.

Guest Editors

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Deadline for manuscript submissions

closed (20 June 2023)



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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.

Editor-in-Chief

Prof. Dr. Pankaj Vadgama

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