

Special Issue

Antibacterial, Antimicrobial and Antioxidant Properties of Biomaterials Derived from Peptides and Peptoids

Message from the Guest Editors

Peptides and peptoids have drawn enormous interest due to their facile synthesis, biocompatibility, and versatility. Owing to the diversity of primary structures and their vast possibilities to form conjugates, these compounds are easily programmable and able to generate a plethora of tunable structures with an extended potential in biomedical applications. Amphiphilic, capped, and cyclic peptides, lipopeptides, aromatic peptides and peptoids display interesting features and are used in many applications. Peptides/peptoids alone; in combination with macromolecules such as proteins, nucleic acids, and other polymers; or conjugated with nanoparticles and stimuli-responsive moieties can provide interesting functional hybrid materials with enhanced biocompatibility, biodegradability, and targeting capacity. These affordable biomaterials with antibacterial, antimicrobial, and antioxidant features can be employed in tissue engineering or culture; antibacterial coatings; wound healing; food and cosmetic preservation; in the textile industry; in drug delivery matrices and biosensors; and in therapy against cancer, bioimaging or gene therapy.

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About the Journal

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

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