Special Issue

Biomedical Applications of Mixed-Charge Nanomaterials

Message from the Guest Editors

This Special Issue will collect research articles and highquality review papers reporting preparation methods, characterization techniques, computational modeling studies, and biological applications of synthetic or biologically derived nanoparticles with tunable surface charge. Authors are encouraged to submit papers of selective interactions of such nanoparticles with the biological system(s), including complex protein mixtures in extracellular fluids (e.g., formation of the biomolecular corona), organelle-specific targeting, or biological effects in in vivo systems, as well as selective anticancer, antibacterial, or antiviral effects. Some examples of materials of interest include but are not limited to: Mixed-charge nanoparticles (with various core materials: gold, silver, iron oxide, mesoporous silica, and others):

Surface-charge engineered protein nanoparticles; Protein-like nanoparticles from mixtures of oppositely charged polymers;

Hybrid nanosystems;

Patchy, striped, Janus nanoparticles;

Catanionic liposomes;

Mixed-charge exosomes.

Guest Editors

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Deadline for manuscript submissions

closed (20 August 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

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