Special Issue

Functional Nanomaterials for Food Safety and Biomedicine Analysis Applications

Message from the Guest Editor

Functional nanomaterials have unique optical, electrical, magnetic, and catalytic functions and have shown transformative potential in food safety and biomedicine analysis.

Nanotechnology is revolutionizing food safety by introducing highly sensitive and specific detection methods. Functional nanomaterial-based sensors are employed for detecting trace amounts of foodborne pathogens, toxins, pesticides, and contaminants in real-time, significantly improving food monitoring processes. In biomedical analysis, functional nanomaterials offer tremendous potential in the development of advanced biosensors for the rapid and sensitive detection of drugs and biomolecules such as glucose, cholesterol, DNA, proteins, and enzymes, facilitating point-of-care testing and early disease diagnosis.

This Special Issue aims to collate the most recent research that focuses on the exploration of novel functional nanomaterials and their applications in food and biomedicine analysis applications. Both review articles and research papers are welcome to be submitted to this Special Issue.

Guest Editor

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As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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