Special Issue

Progress in Cytotoxicity of Biomaterials

Message from the Guest Editor

The cytotoxicity of biomaterials is a critical aspect of biomedical research, influencing the safety, efficacy, and long-term biocompatibility of materials used in medical implants, drug delivery systems, and tissue engineering. This Special Issue aims to highlight recent advances in the evaluation of biomaterial cytotoxicity. including in vitro and in vivo testing methodologies, mechanisms of cellular interactions, and strategies to enhance biocompatibility. Topics of interest for this Special Issue include the role of surface modifications, nanomaterials, and biodegradable polymers in reducing cytotoxic effects, as well as emerging techniques for assessing cell viability, oxidative stress, and inflammatory responses. We invite contributions that provide insights into novel biomaterial designs, toxicity mitigation strategies, and regulatory considerations to ensure safe biomedical applications.

Guest Editor

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Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

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