Special Issue

Biomaterial- and Engineering-Based Approaches for Organoids

Message from the Guest Editor

Organoids, three-dimensional multicellular structures that mimic the architecture and functionality of native tissues, have emerged as powerful tools in biomedical research, drug discovery, and regenerative medicine. The integration of biomaterial- and engineering-based approaches has significantly advanced the development and application of organoids. Biomaterials provide tailored microenvironments that mimic the extracellular matrix, enabling precise control over mechanical, chemical, and biological cues to guide organoid growth, differentiation, and functionality. This interdisciplinary approach holds immense potential for personalized medicine, disease modeling, and tissue engineering, paving the way for breakthroughs in understanding human development, pathology, and therapeutic interventions.

Guest Editor

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Editor-in-Chief

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