

Special Issue

Cell-Material Interaction 2022

Message from the Guest Editors

There is great interest in generating materials guiding cellular behavior in fundamental studies as well as biomedical applications including regenerative medicine. Other than the molecular structure, mechanical properties, degradation behavior, stimulus-sensitivity, specific molecular interactions, and the 3D form of materials (e.g., nanoparticles, 3D scaffold, coating, film) is known to have a major influence in this respect. Furthermore, efforts have been made to design advanced biofunctional systems by combining biomaterials with cells (e.g., stem cells, differentiated cells, induced pluripotent stem cells) or drugs. In addition, cellular and protein adsorption to materials may change the material's biological effect. This Special Issue focuses on several aspects of cell/biomaterial interaction, and we invite contributions of reviews and/or original papers reporting recent efforts in the field of biomaterials applications. Keywords

- cell-material interaction
- biomaterials
- regenerative medicine
- stem cells
- cell therapy
- nanomedicine
- regenerative medicine
- cell fate
- nanoparticles
- 3D scaffold
- biofunctionalization

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Deadline for manuscript submissions

closed (30 September 2022)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



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*International Journal of
Molecular Sciences*
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