Special Issue

Interactions of Nanosized Particles with Living Cells and Subcellular Structures

Message from the Guest Editor

Despite persistent hurdles, the development of nanoparticles has led to the development of nanobased medicines for a broad range of clinical applications. Emerging evidence suggests that we still understand the mechanisms by which nanomaterials act at the cellular and sub-cellular levels poorly. Better understanding of fundamental signaling events that are modified by nanomaterials is essential to overcome the clinical problems with nanoparticles. Therefore, we invite authors to contribute with studies that critically revisit mechanisms of nanomaterial-cell interactions and challenges related to their identification. We aim to achieve a timely update of current views on nanomaterial-cell interactions, potential in vitro models and platforms used in bio-nano interaction research, and critically assess their strengths and limitations. We invite the submission of manuscripts that not only demonstrate the success of nano-based medicines, but also critically analyse pitfalls and challenges in the field. Highlighting problems in the field will certainly create a basis for the future rational design of nanomaterials and improve their clinical translation.

Guest Editor

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closed (31 March 2022)



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Message from the Editor-in-Chief

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