Micro/Nano Fabrication for Life Sciences

Message from the Guest Editors

Dear Colleagues,

Scientific discoveries in the life sciences—the study of living organisms—have decisively contributed to the improvement of human health and agriculture, but there are still many research challenges remaining. Much could be gained in these areas by utilizing miniaturization to make devices portable and reduce sample volumes. Micro- and nanofabrication are established technologies originating from the microelectronics industry used to fabricate structures on a micro- and nanometer scale. The evolution of these technologies paves the way for improvements in resolution, reproducibility, and production time and costs, all necessary for complex and detailed life science studies. Whilst many benefits are expected, there are also challenges involved with miniaturization, such as design requirements, engineering limitations, and fabrication constraints. As such, in order to rapidly advance, researchers from different areas should unite to overcome these challenges together.

This Special Issue collects research papers, technical notes, communications, and review articles that discuss the latest advancements and future perspectives in microfabrication methods applied to life science research questions and applications. It is our ambition to facilitate interdisciplinary collaboration in order to achieve progress for all involved. Contributions related to the development, design, fabrication, characterization, and especially applications of micro-fabricated devices within diverse life sciences contexts are highly welcome.

We look forward to receiving your submissions.

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