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# **Novel 3D Printing Techniques for Microfluidic Systems**

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# **Message from the Guest Editors**

Microfluidics, also known as a micro-total analysis system, has been used in diverse applications, such as mineral processing, chemical synthesis, and tissue engineering. Moreover, 3D printing, formally known as additive manufacturing, serves as an alternative manufacturing method for microfluidic fabrication, due to its ability to produce complex and multi-level geometry. Furthermore, 3D printing has the ability to translate virtual designs into physical prototypes, with the help of computer-assisted modelling and simulations. Moreover, different working units can be introduced to the design to fabricate a microfluidic system with different functionalities. Functionalities such as chemical sensing or mechanical actuation can be incorporated into the system. The aim is to highlight different technologies and strategies that incorporate 3D printing into microfluidic fabrication. Authors are invited to submit their work exploring 3Dprinted microfluidic devices, novel techniques in the fabrication of microfluidic systems, simulation models on 3D-printed microfluidic devices through virtual and physical prototyping, integrating 3D-printed parts with microfluidic systems.









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