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Stereolithography and high resolution 3D printing for organ-on-chips and 3D cell culture

Light based 3D printing, and in particular stereolithography and two photon polymerization, are more and more used for the fabrication of micro and nanodevices. Several examples of these techniques for microfluidics, organ-on-chip and 3D cell culture will be presented , including moulds for PDMS replication, direct printing of chips with advanced functionnalities, discussion about biocompatibility of commercial resins, and recent works on the fabrication of models of extracellular matrices using high resolution two photon polymerization.