

Showcasing research from Professor Vincent Remcho's laboratory, Department of Chemistry, Oregon State University, Corvallis, Oregon, USA.

Selective laser ablation for *in situ* fabrication of enclosed channel porous-media microfluidic analytical devices

Microfluidic structures are produced inside enclosed multilayer devices in two fabrication steps using selective laser ablation. A sheet of porous material is first sandwiched and bonded between two sheets of polymeric film. The porous substrate is then selectively ablated using a laser cutter to create hollow barriers for microfluidic channels. Selective ablation of only the porous layer is achieved because the porous substrate layer is susceptible to ablation by the laser beam, whereas the film layer is resistant to laser ablation due to its light transmission properties.





See Saichon Sumantakul and Vincent T. Remcho, *Lab Chip*, 2023, **23**, 3194.

