

Microfluidics based total integrated nanocrystal synthesis platform

서태석[†]
경희대학교
(seots@khu.ac.kr[†])

Microfluidics have advanced remarkably and have demonstrated high fidelity for the unit operation on a single device such as sample loading, reagent storage, serial dilution, metering, aliquoting, mixing, incubation and detection. In this talk, I will introduce two prototypes of microfluidics for total integrated nanocrystal synthesis platform: An advanced centrifugal microsystem toward high-throughput screening of Pd@AuPt core-shell nanocatalysts for hydrogen peroxide generation and a fully integrated droplet based microdevice to automatically search for the optimum nanomaterials with feedback control.