

Scalable Attoliter Monodisperse Droplet Formation Using Multiphase Nano-Microfluidics

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Movie 1: In the constriction nanochannel, the oil phase flow as large droplets. When the oil large droplets exited from the nanochannel into the microchannel, they spontaneously break up into monodisperse smaller oil-in-water droplets. Here, the nanochannel height is 900 nm.

Movie 2: In the constriction nanochannel, the oil phase flow as a thread parallel to the channel wall. When the oil thread exits from the nanochannel into the microchannel, it spontaneously breaks up into monodisperse oil-in-water droplets. Here, the nanochannel height is 260 nm.