

Electronic Supplementary Information

Supplemental Movie Captions:

cross128.mpg: Movie clip of the formation of O/W emulsion droplets in the module having 128 cross-junctions, recorded at 4000 fps. Disperse phase flow rate (Q_d) was 320.0 mL h^{-1} and continuous phase flow rate (Q_c) was 480.0 mL h^{-1} .

coflow128-Janus.mpg: Movie clip of the formation of Janus droplets in the module having 128 co-flow junctions, recorded at 4000 fps. Flow rates were $Q_d = 128.0 \text{ mL h}^{-1}$ ($64.0 \text{ mL h}^{-1} \times 2$) and $Q_c = 1024 \text{ mL h}^{-1}$.

coflow32-Janus.mpg: Movie clip of the formation of Janus droplets in the module having 32 co-flow junctions, recorded at 4000 fps. Flow rates were $Q_d = 32.0 \text{ mL h}^{-1}$ ($16.0 \text{ mL h}^{-1} \times 2$) and $Q_c = 256.0 \text{ mL h}^{-1}$.

coflow128-mono.mpg: Movie clip of the formation of O/W emulsion droplets in the module having 128 co-flow junctions, recorded at 2000 fps. Flow rates were $Q_d = 256.0 \text{ mL h}^{-1}$ and $Q_c = 1280 \text{ mL h}^{-1}$.

All movies are prepared in MPEG-1 format.