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 $Q_d = 128.0$ mL h$^{-1}$ (64.0 mL h$^{-1}$ × 2) and $Q_c = 1024$ 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 $Q_d = 32.0$ mL h$^{-1}$ (16.0 mL h$^{-1}$ × 2) and $Q_c = 256.0$ 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 $Q_d = 256.0$ mL h$^{-1}$ and $Q_c = 1280$ mL h$^{-1}$.

All movies are prepared in MPEG-1 format.