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Supplementary Information

An Innovative Data Processing Method for Studying Nanoparticle Formation in Droplet Microfluidics using X-rays Scattering

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Figure S1. Higher magnification for TEM observation of the nanoparticles obtained from bulk synthesis and long time-scale microfluidics synthesis.



Figure S2. Size analysis of the nanoparticles formed with both bulk and long-time scale microfluidics experiments done by measuring the length and width of all of the particles with visible discernible edges from a number of images. Measurements of n = 83 particles for the late droplet (130 sec) and n = 96 particles for the particles from bulk precipitation were collected using ImageJ-win64 (Fiji). The average of the length and width for the particles was calculated, with particles from the late droplet (130 sec) having a smaller size and narrower distribution (size = 5.5 ± 1.2 nm) than those formed from a bulk solution (size = 8.5 ± 1.6 nm). These data were also fitted with Gaussian distributions and plotted as box-and-whisker diagrams in Origin 2018 64 bit as they show a normal distribution about the mean.