

Supplementary figure:

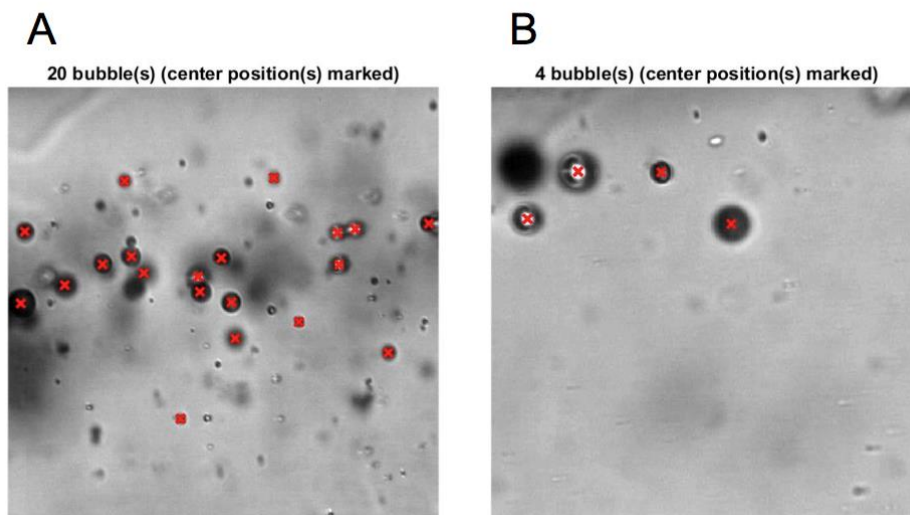


Figure S1. Representative photos showing the output of our custom bubble counting code. Center positions of the counted bubbles are marked with a cross. (A) Twenty bubbles are counted after vaporization of OFP droplets at 450 kPa. (B) Four bubbles counted after vaporization of DFB droplets at 750 kPa.

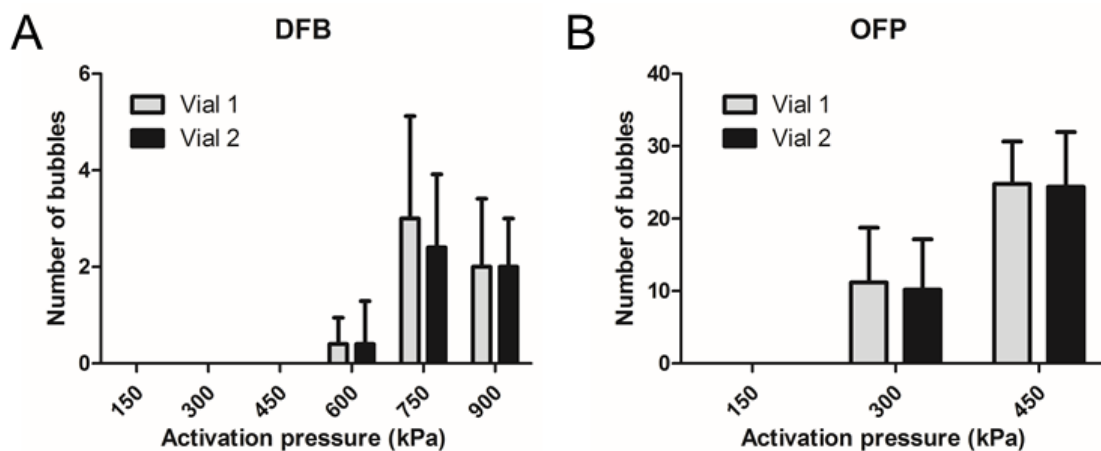


Figure S2. Number of bubbles formed after sonication in each vial showing negligible inter-vial variation. (A) DFB droplets. (B) OFP droplets.

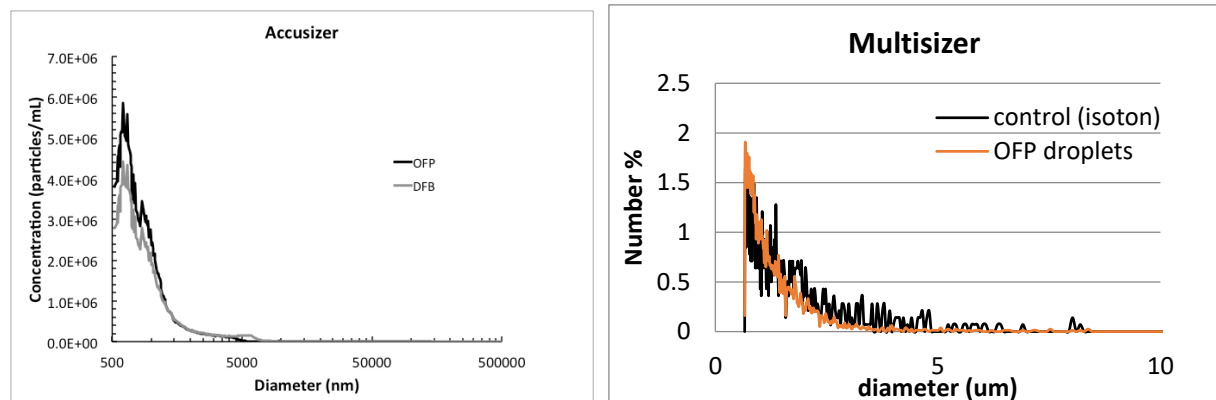


Figure S3. Micron-sized particle distribution in droplet solutions to assess the number of large droplets and spontaneous vaporized bubbles. (A) measurement using Accusizer for OFP and DFB droplets and (B) Multisizer for OFP droplets and the Isoton solution. The concentrations of particles in (A) within 0.5-500 μm were $2.51 \times 10^8 \pm 5.69 \times 10^7$ particles/ml and $2.06 \times 10^8 \pm 3.08 \times 10^7$ particles/ml for OFP and DFB, respectively.