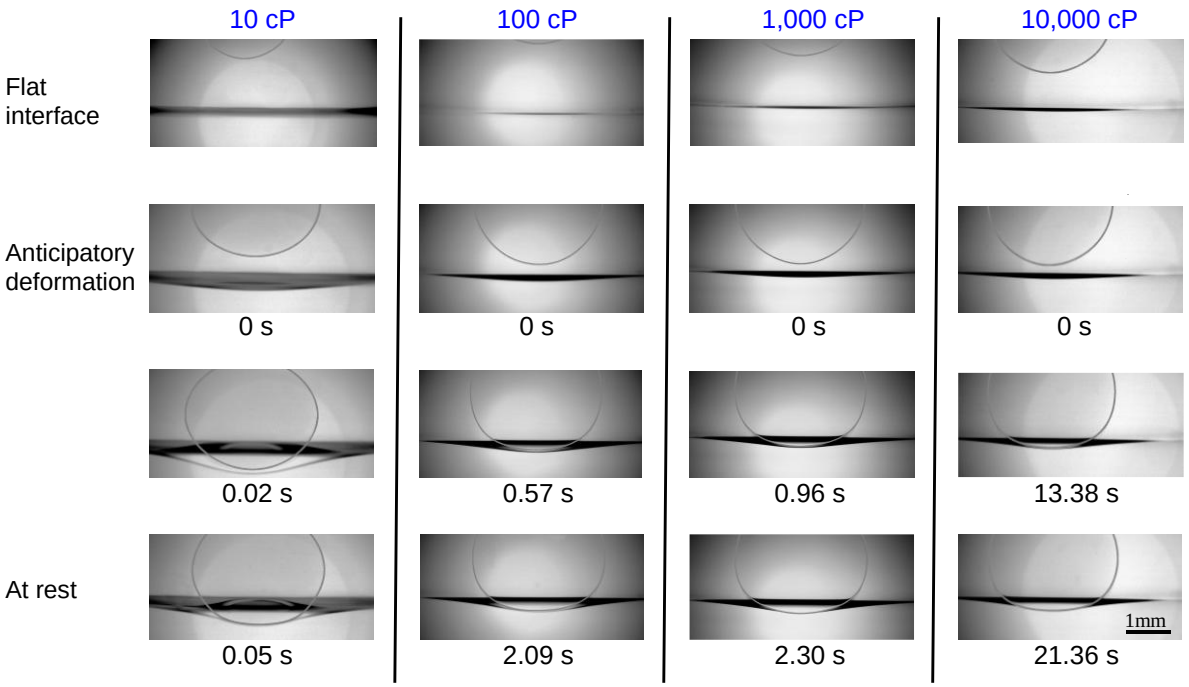
Droplets at Liquid-Fluid Interfaces: Stages Leading to Coalescence

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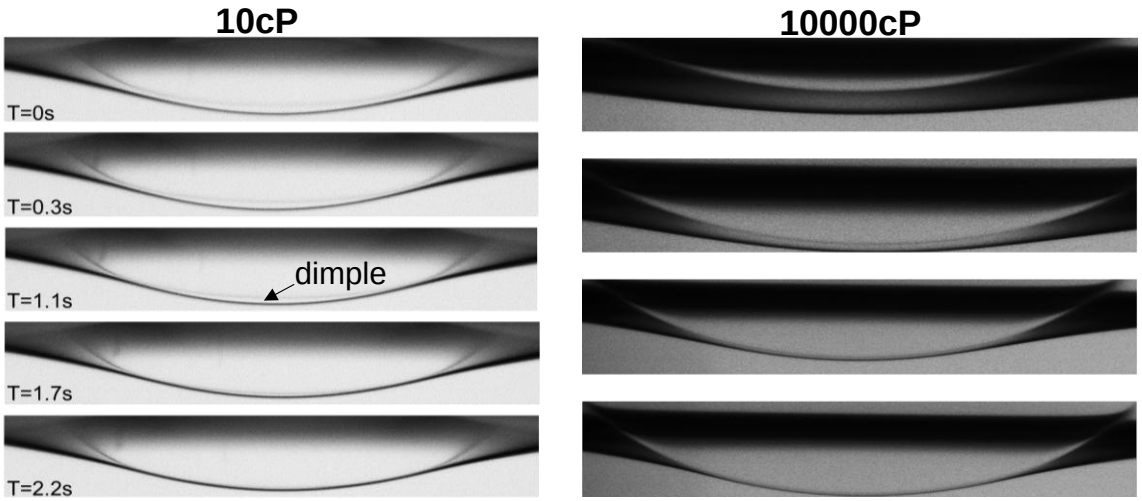
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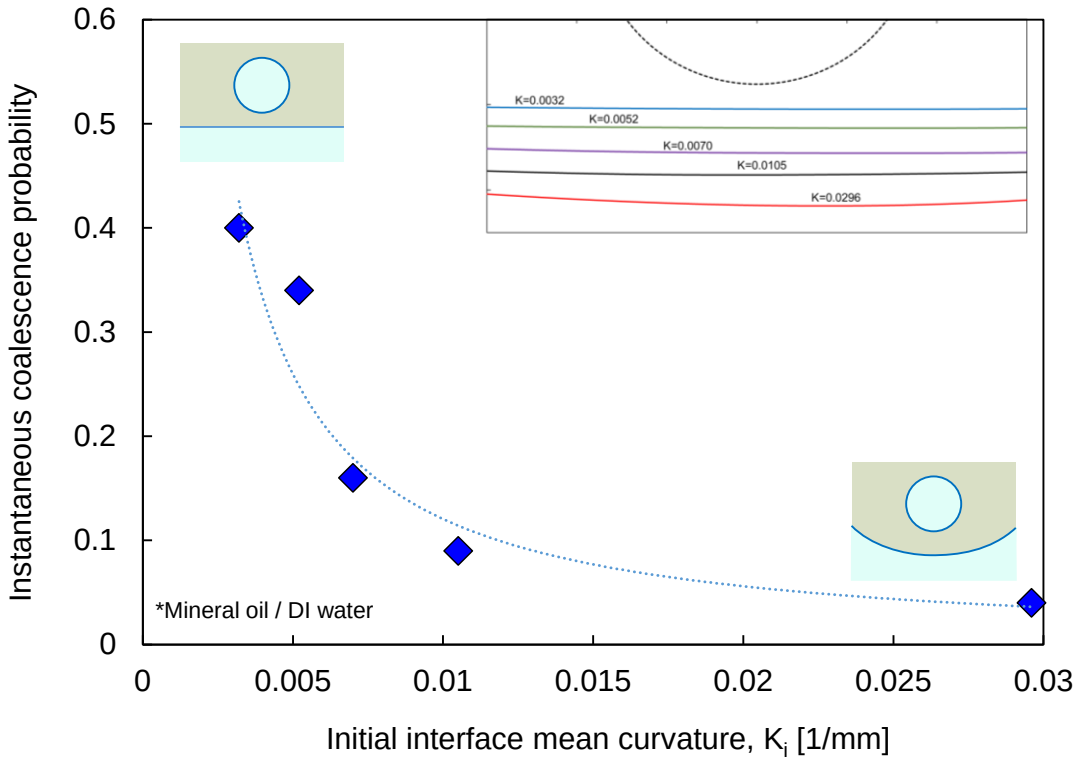
Supplemental Information



Supplemental Figure S1: Droplet falling towards a liquid interface. Columns correspond to different host fluid viscosities.



Supplemental Figure S2: Dimple formation when the host fluid viscosity is 10cP – No dimple detected when the host fluid has high viscosity.



Supplemental Figure S3: Instantaneous coalescence probability as function of the initial interface curvature. Upper inset shows the different interface curvatures. Note: The 70µL droplets have a mean curvature $K_{drop} \approx 0.78$ mm^{-1}. 100 droplets were observed for each interface curvature.