Supplementary Information

Microfluidic Viscometer By Acoustic Streaming

Transducers

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Supplementary Video 1 caption:

Time-lapse of acoustic microstreaming under 1 cP.

Scale bar: 100 µm.

Supplementary Video 2 caption:

Time-lapse of acoustic microstreaming under 6 cP.

Scale bar: 100 µm.



Air-liquid interface

Supplementary Fig. 1. Device design for one well.



Supplementary Fig. 2. Complete microfluidic device on one chip. Scale bar: 4 mm.



Supplementary Fig. 3. Interface oscillation amplitude depends on applied voltage and fluid viscosity.



Supplementary Fig. 4. The oscillatory period of interface motion in different viscosities.



Supplementary Fig. 5. Particle tracing within acoustic microstreaming. Yellow line is the distance of the single bead travelled measured by Fiji. Scale bar: $50 \mu m$.