ACCSCIENCE PUBLISHING

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RESEARCH ARTICLE

A mobile drop-on-demand laser-assisted printing head integrated with a robotic arm and a target tracking system

Supplementary file

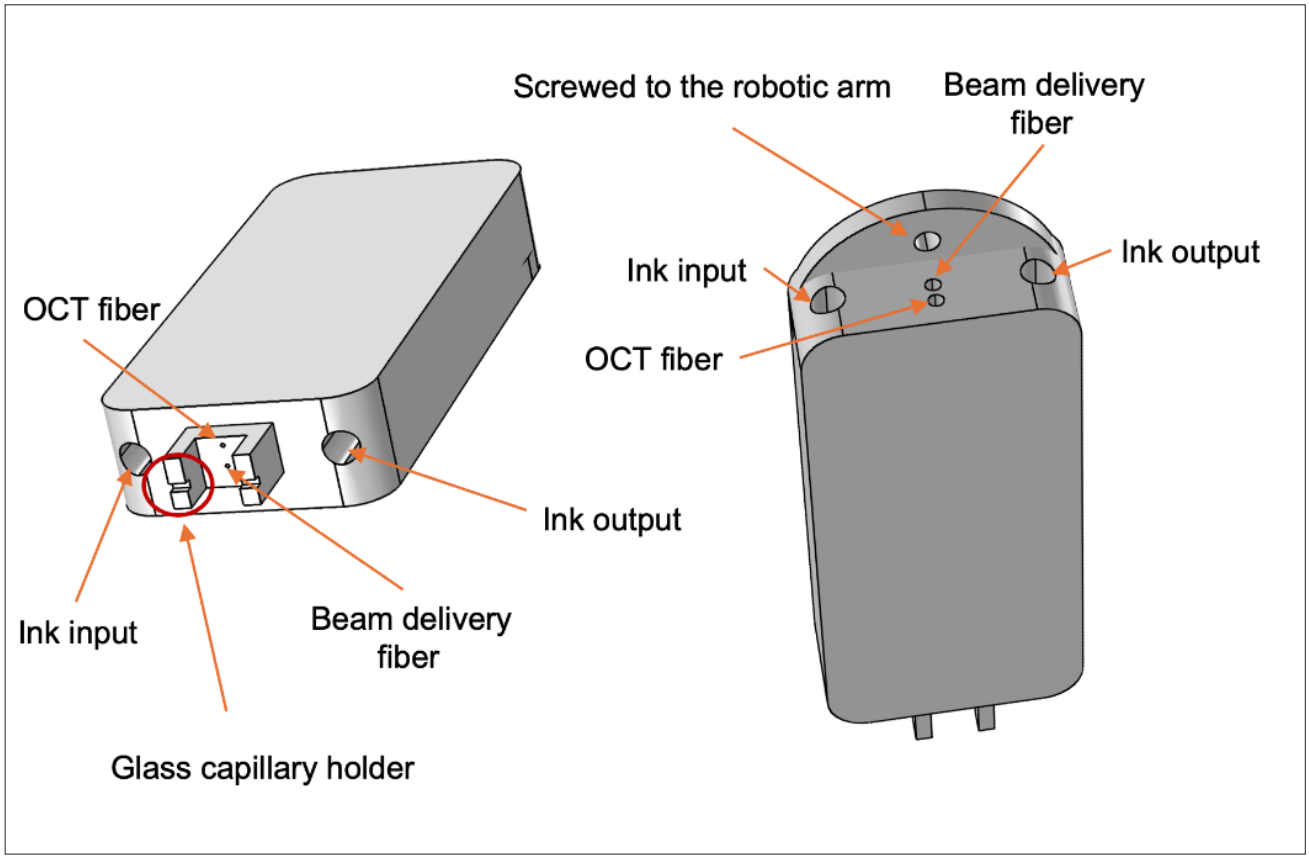

Figure S1. 3D CAD rendering of the print head. The design includes two dedicated openings: one for the optical fiber that delivers the laser beam used to generate droplets, and another for the optical coherence tomography (OCT) fiber, which enables real-time monitoring of the nozzle-substrate distance. It also features two channels for tubing, a holder for mounting the glass capillary, and a mounting extension that allows the print head to be attached to the robotic arm using a screw.

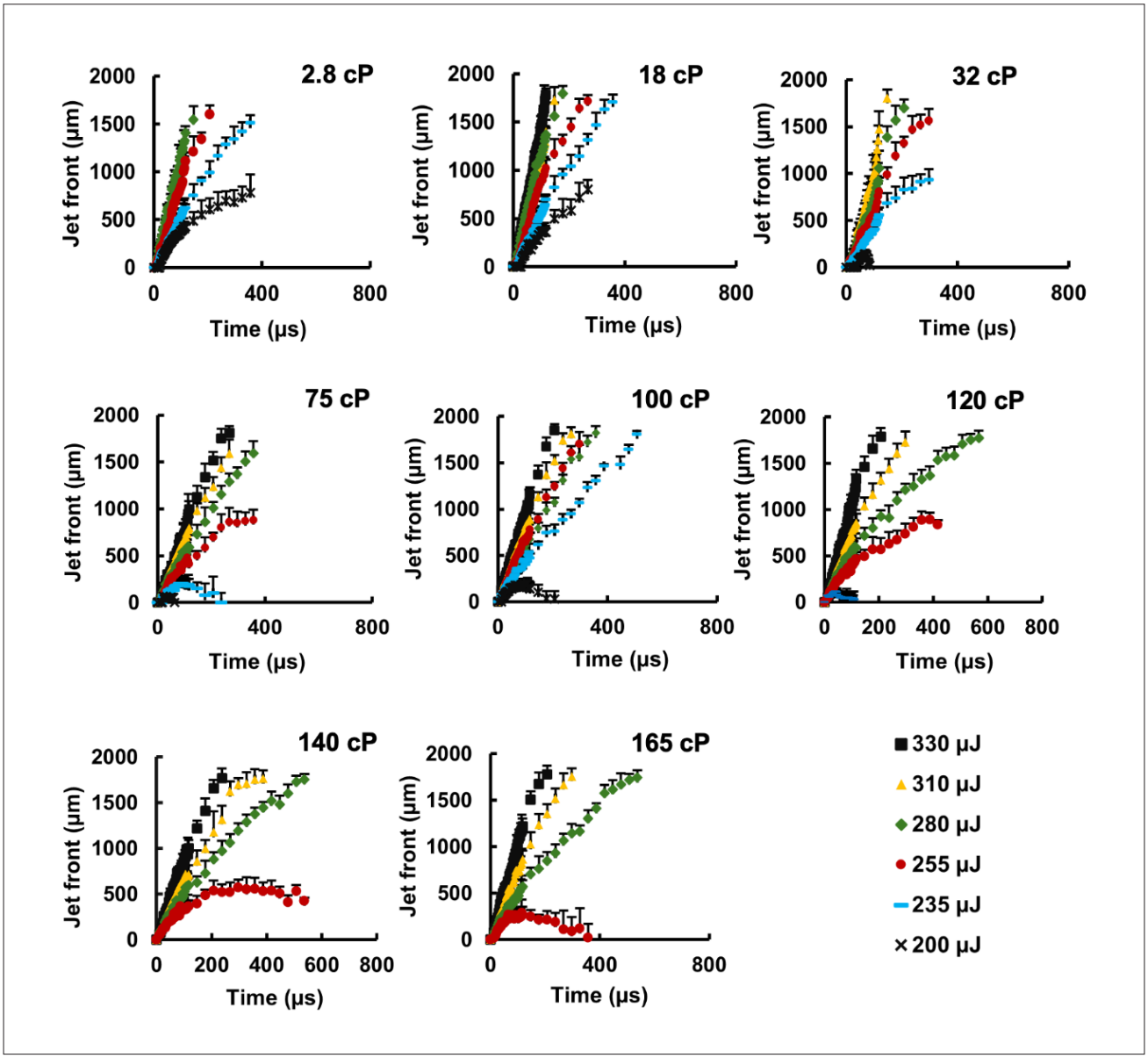

Figure S2. The jet front position evolution for tested viscosities.

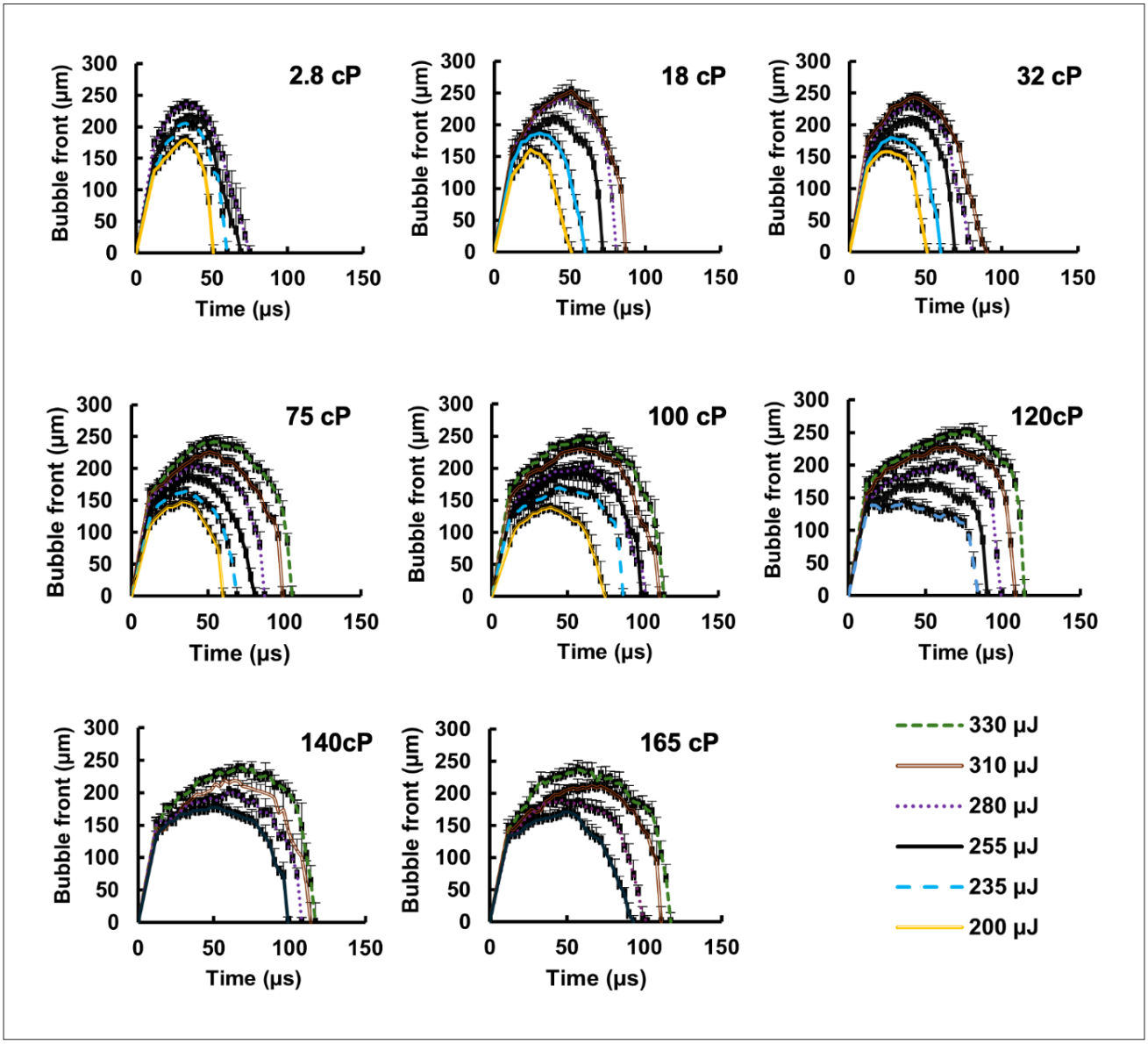

Figure S3. The bubble front evolution for tested viscosities.