

RESEARCH ARTICLE

Drop-on-demand bioprinting: A redesigned laser-induced side transfer approach with continuous capillary perfusion

Supplementary file

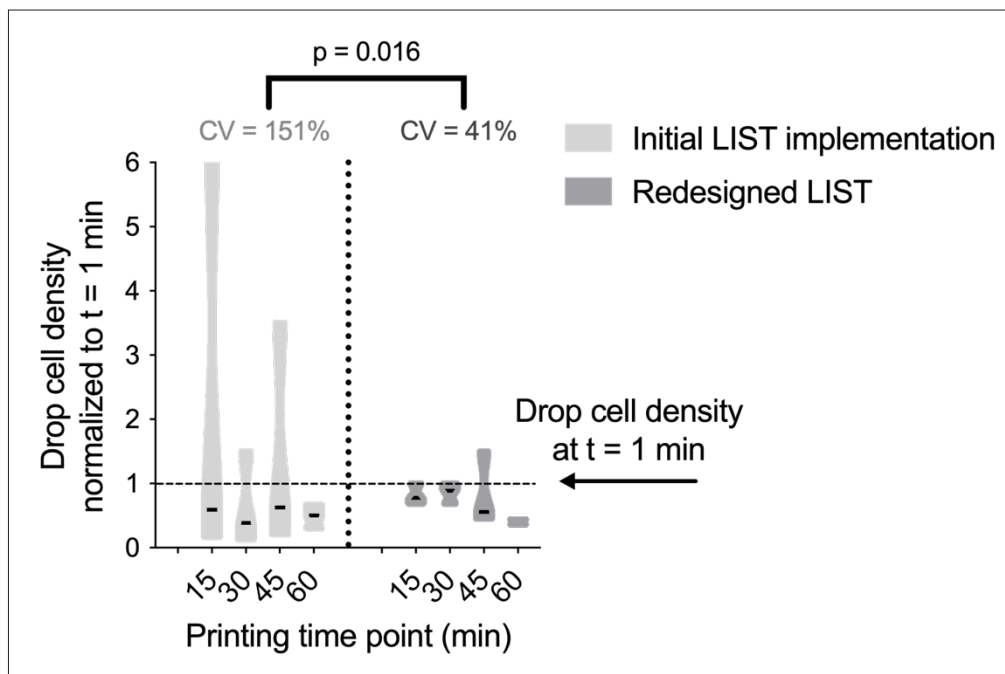


Figure S1. Comparison of printing stability between the initial laser-induced side transfer (LIST) implementation and the redesigned setup. Drops were printed at 1, 15, 30, and 60 min after loading the ink into the capillary, and the drop cell density was compared. The redesigned setup exhibited a lower coefficient of variation (CV) compared to the initial setup (41% vs. 151%, respectively; $p = 0.016$). Data represent three independent repetitions. The Forkman test was used to compare coefficients of variation.

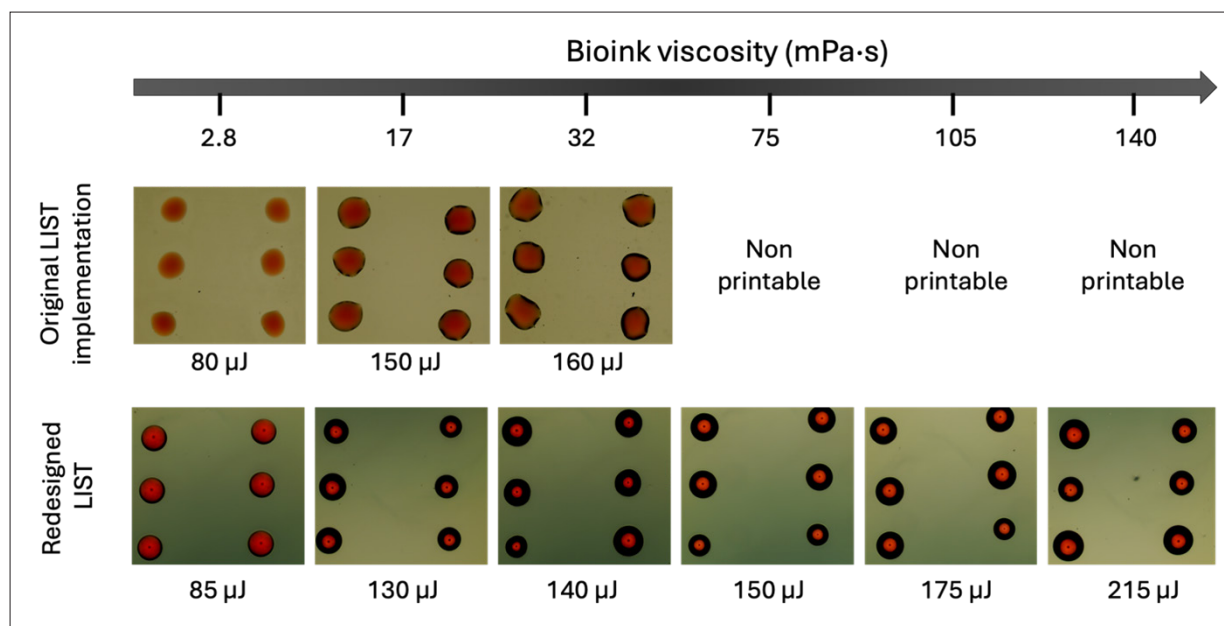


Figure S2. Comparison of printability between the initial laser-induced side transfer (LIST) implementation and the redesigned setup using a model ink with increasing viscosity. The lowest printing energy resulting in stable printing (i.e., absence of missing drops and/or satellite drop deposition) is reported for each ink viscosity.