# Supplemental Information: Heterogeneous Immunoassay Using Channels and Droplets in a Digital Microfluidic Platform

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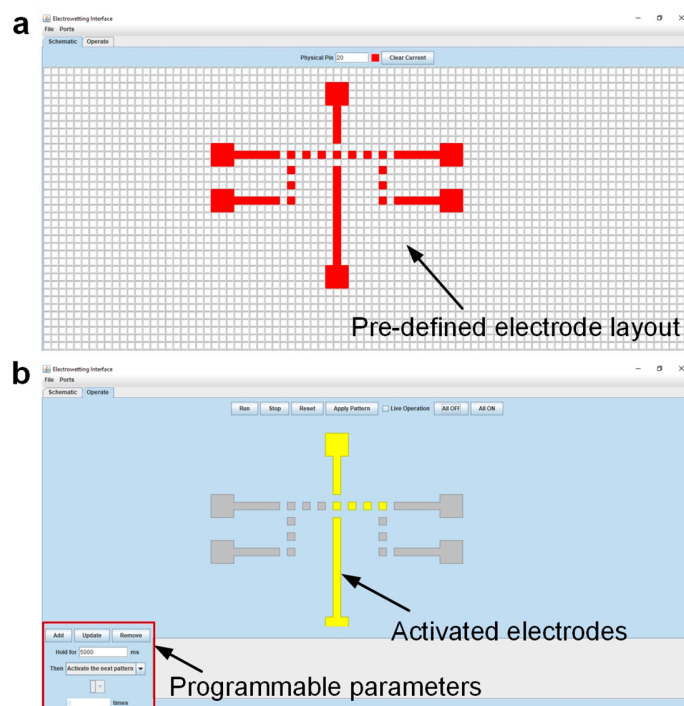
Figure S1. GUI used to control automated electrode activation and deactivation. (**a**) The GUI allows for defining the electrode layout according to customized devices. Each discrete red block indicates one electrode on the DMF device. (**b**) Each discrete red block indicates an activated electrode, and each discrete gray block indicates an de-activated electrode.
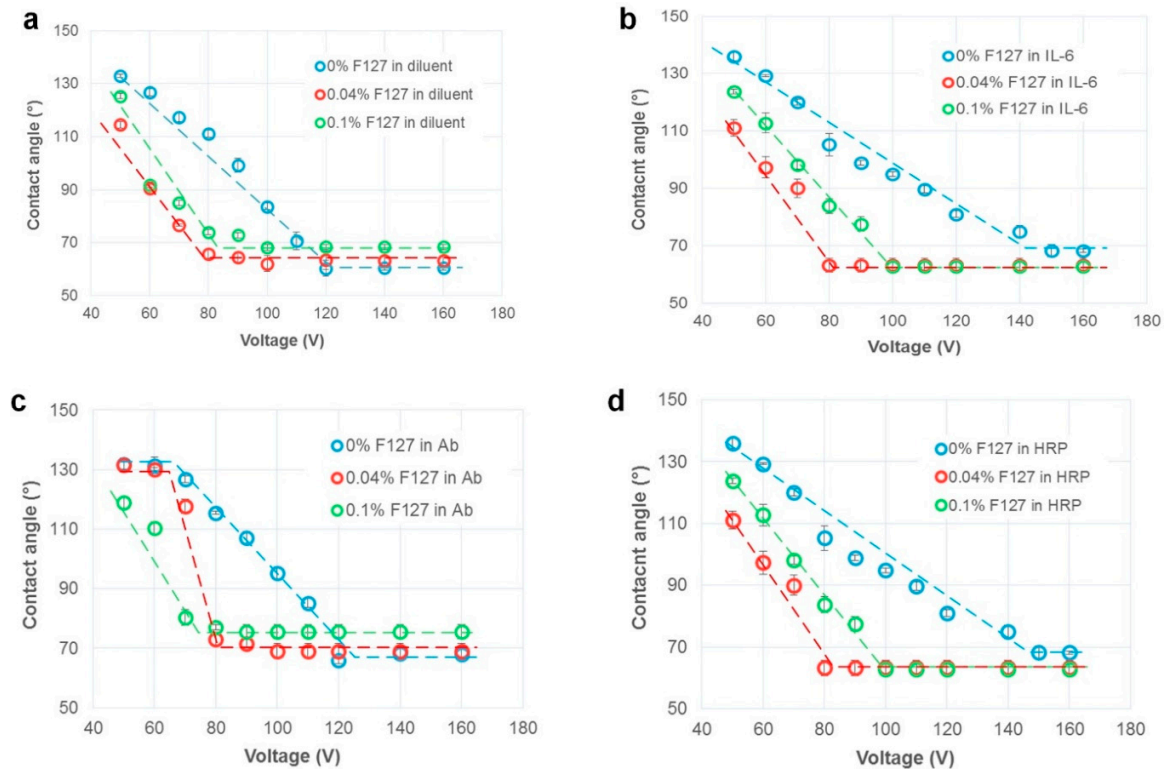
Figure S2. Electrowetting characteristics for relevant biological solutions w/o surfactant Pluoronic F127. AC voltage from 50–160 V was tested. (**a**) PBS buffer solution (**b**) 0.1 mg/mL capture antibody functionalized magnetic beads suspended in PBS (**c**) 1000 pg/mL human IL-6 standard in PBS (**d**) 2000 pg/mL detection antibody-HRP conjugates in PBS.
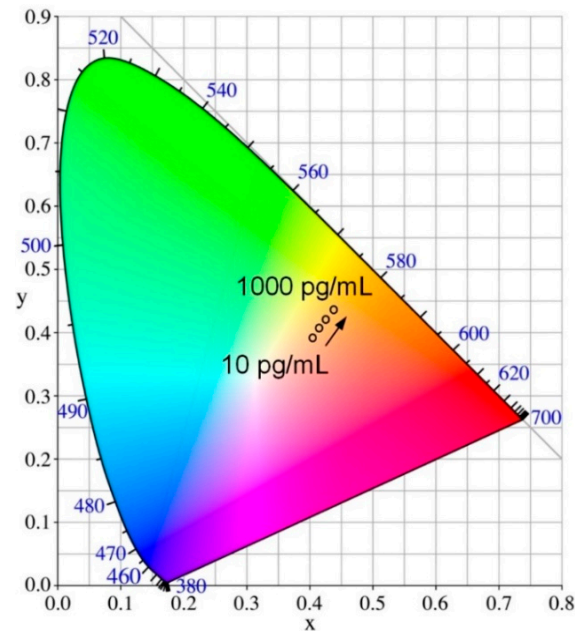
Figure S3. Colorimetric image analysis in CIE color space. A shift in the color space toward yellower region corresponds to the higher concentration of IL-6 molecules.