

Control and Automation of Multilayered Integrated Microfluidic Device Fabrication

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Supporting information

Figures:

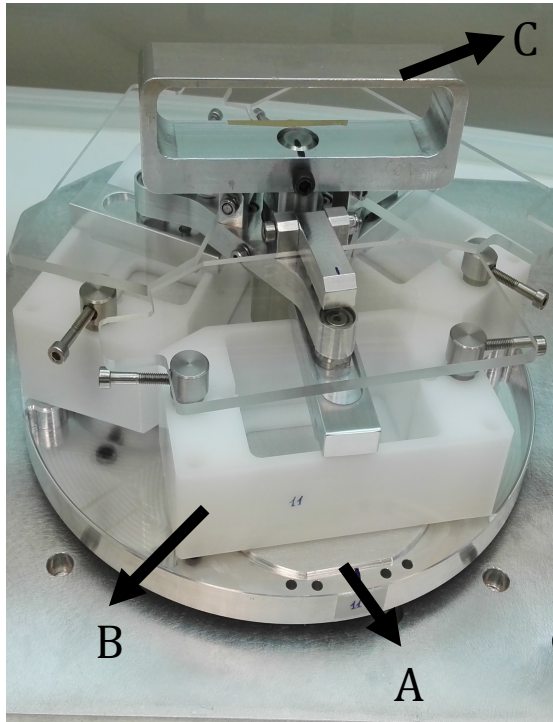
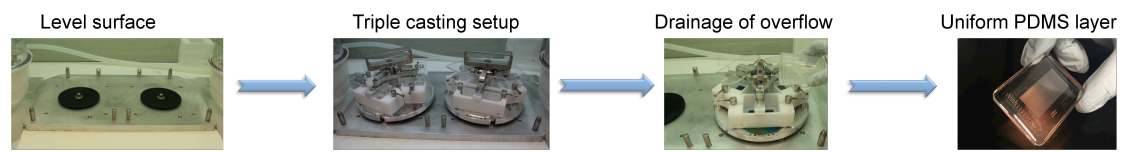


Figure S1. PDMS layer preparation using the height control device (HCD). The HCD structure allows fabrication of uniform casting of 3 chips simultaneously. The mold positioning platform (A) allows accurate mold placement on a flat surface. (B) is the container into which the PDMS is poured. The PDMS casting enables preparation of uniform chips of the same size and thickness. The locking system (C) applies pressure on A & B to prevent PDMS leakage and regulates the thickness of the slab.

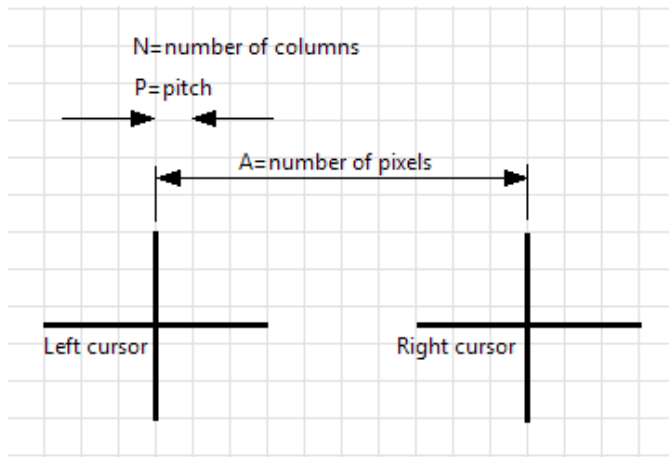


Fig S2. Zoom Factor diagram. A grid with known distance between the lines is placed on the stage. The user enters the number of grid columns (N) and column width, the pitch (P). The Zoom Factor is calculated by multiplying P by N, and dividing by the number of pixels between the two cursors (A). **Zoom factor = $(P \cdot N) / A$** . Each measurement taken by the camera was translated from pixels to millimeters by multiplying by the Zoom factor: Distance (mm) = Number of pixels x Zoom Factor.