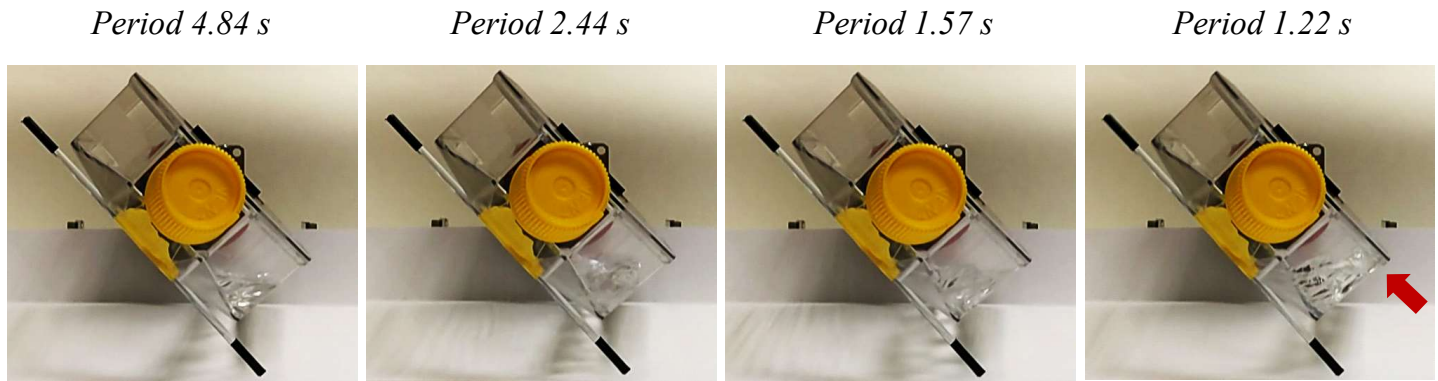
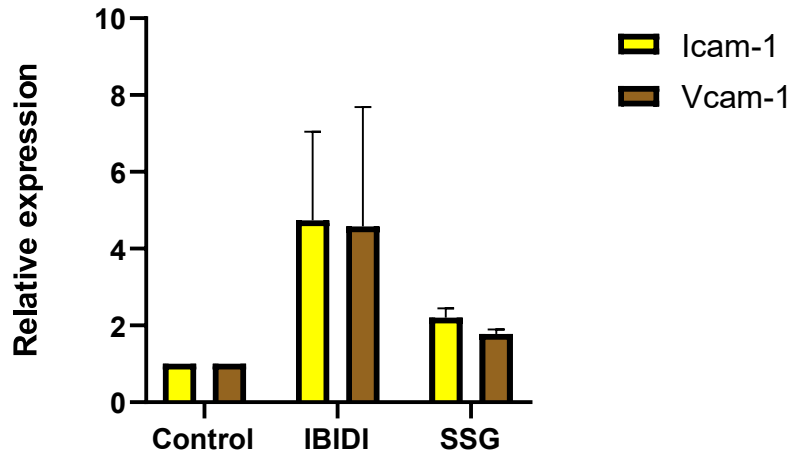


Supplementary Figure 2

a



b



Supplementary Figure 2: **a)** The behavior of the liquid at maximum rotation induced by dangling regimes in a standardized 150 cm² flask with a $\pm 47.5^\circ$ oscillation angle and periods of 4.84, 2.44, 1.57, and 1.22 seconds, respectively. The arrow indicates the point of contact between the liquid and the flask lid. **b)** Comparison of transcriptional responses of mechanosensing ICAM-1 and VCAM-1 markers between cells cultivated for 24h on the shear stress generator (SSG) under the standard setup (mean shear stress value 0.9 Pa) and commercial microfluidics system (IBIDI) set for oscillatory flow, with 2s flow change period at shear stress setting corresponding to 1 Pa.