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Bubble dislodgment in a capillary network with microscopic multi-channel and multi-bifurcation features

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Supporting information:

Bubble dislodgment in a capillary network with microscopic multi-channel and multi-bifurcation features

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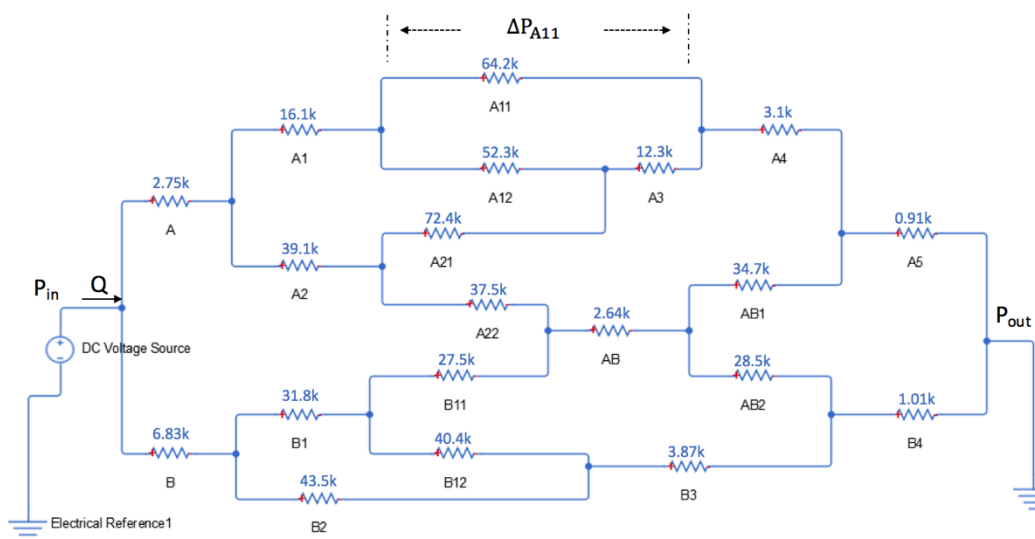
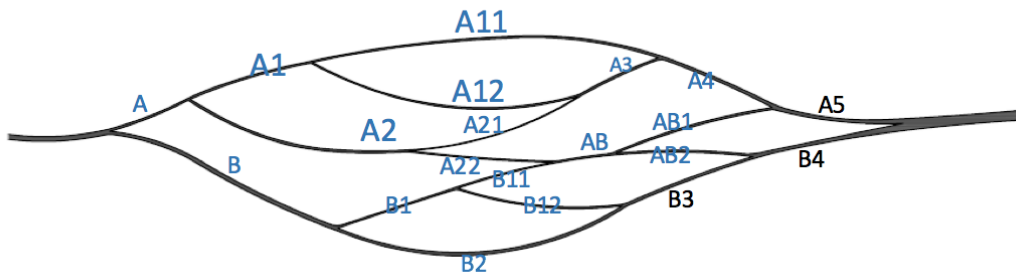
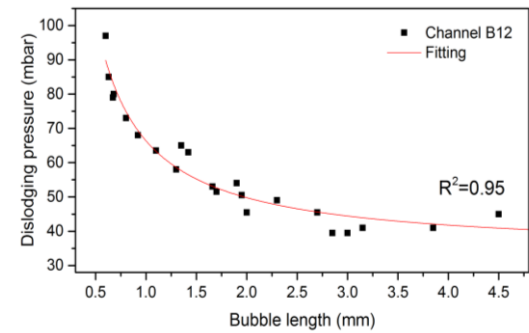
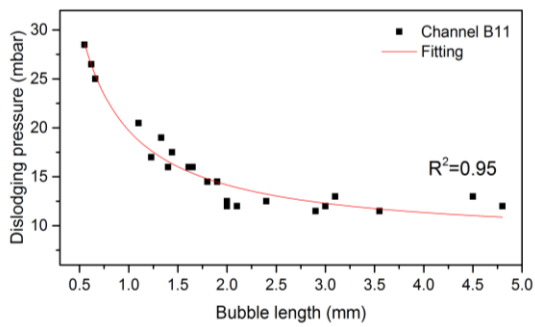
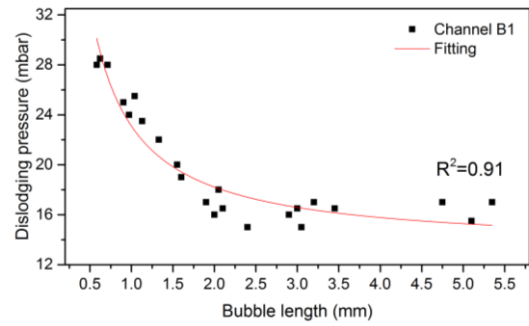
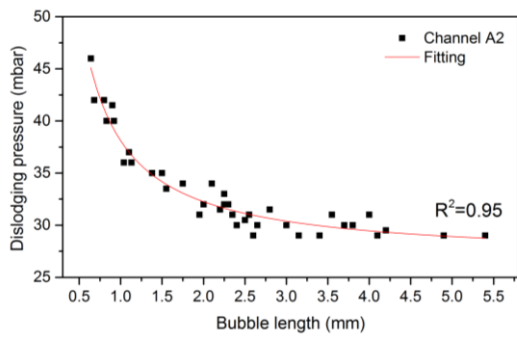
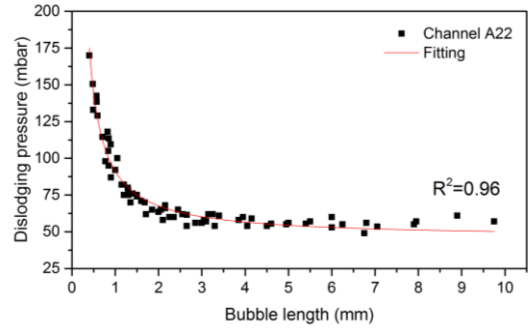
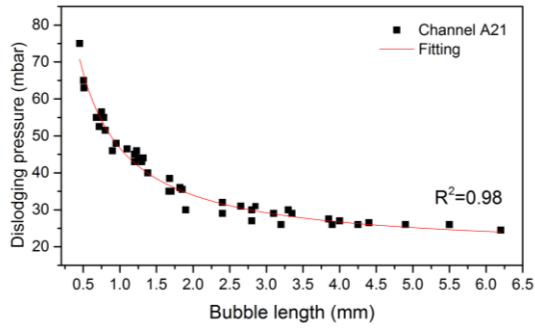
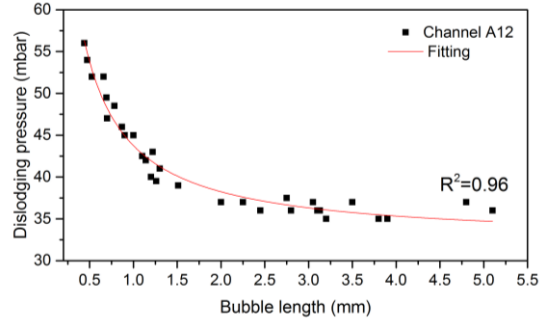
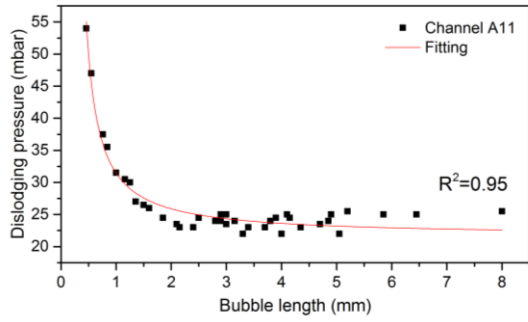


Fig. S1 Schematic of the microfluidic network, the equivalent fluidic circuit and fluidic resistors. The hydraulic resistance R_H of each channel has been provided above each resistor (the unit is $\text{Pa}\cdot\text{s}\cdot\text{cm}^{-3}$).

Table S1 Pressure difference across the single channel (ΔP_j is the predicted pressure across the single channel j where the bubble is lodged)

Bubble length (mm)	ΔP_{A11} (mbar)	ΔP_{A12} (mbar)	ΔP_{AB1} (mbar)	ΔP_{AB2} (mbar)
1.0	22.62	28.54	10.07	8.62
1.5	19.25	24.73	8.34	7.39
3.0	17.11	23.15	7.19	5.85



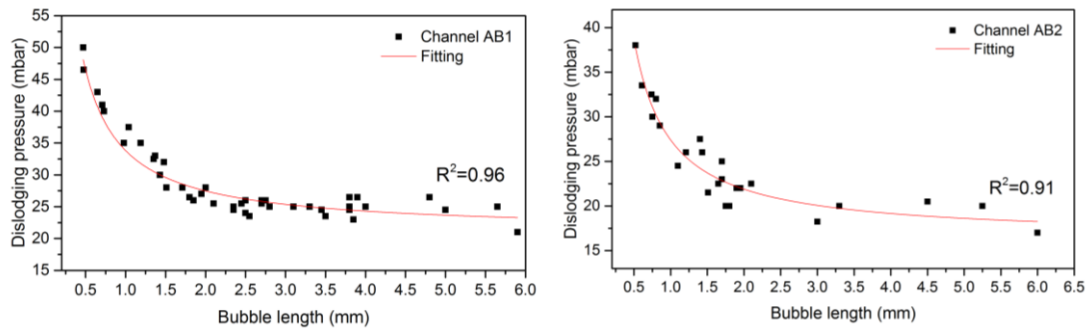


Fig. S2 The plot of the dislodging pressure profiles for bubbles in different channels, and the red lines are the model-fitted values