

Geometrical Optimization of Helical Flow in Grooved Micromixers

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Supplementary Information: Figure S1

Figure S1 displays the computational domain of a typical SGM in this study together with the non-axial x -velocity contour profile taken from the mid-plane of the channel. Numerical velocity data are exported from the midplane of the microchannel, and subsequently used to calculate the normalized transverse flow magnitude η for each groove/ridge structure using equation 2. The x -velocity contour profile helps explain the corkscrew flow profile displayed in figure 1. The x -velocity is positive within the grooves and negative above the ridges.

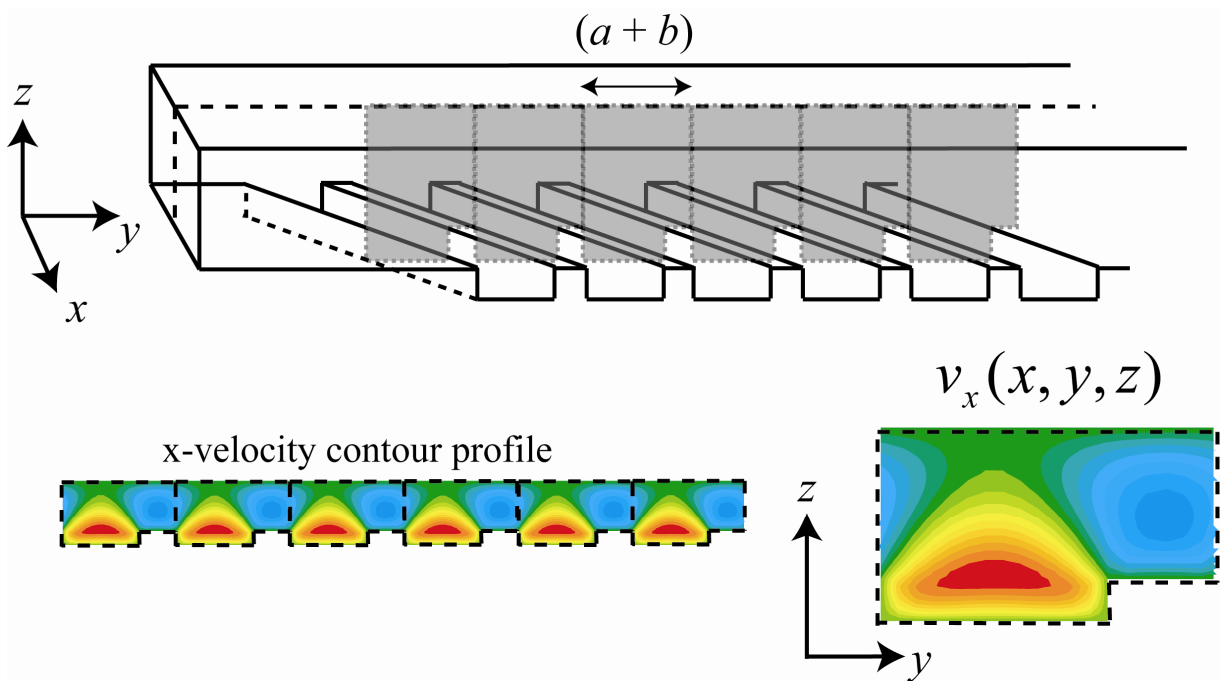


Figure S1. Typical computational domain used in this study. The x -velocity contour profile is shown below.