

Continuous operation of a hybrid solid-liquid state reconfigurable photonic system without resupply of liquids

Erica Eunjung Jung and David Erickson *

*Sibley School of Mechanical and Aerospace Engineering, Cornell University, Ithaca, New York
14853, USA*

*To whom correspondence may be addressed: de54@cornell.edu

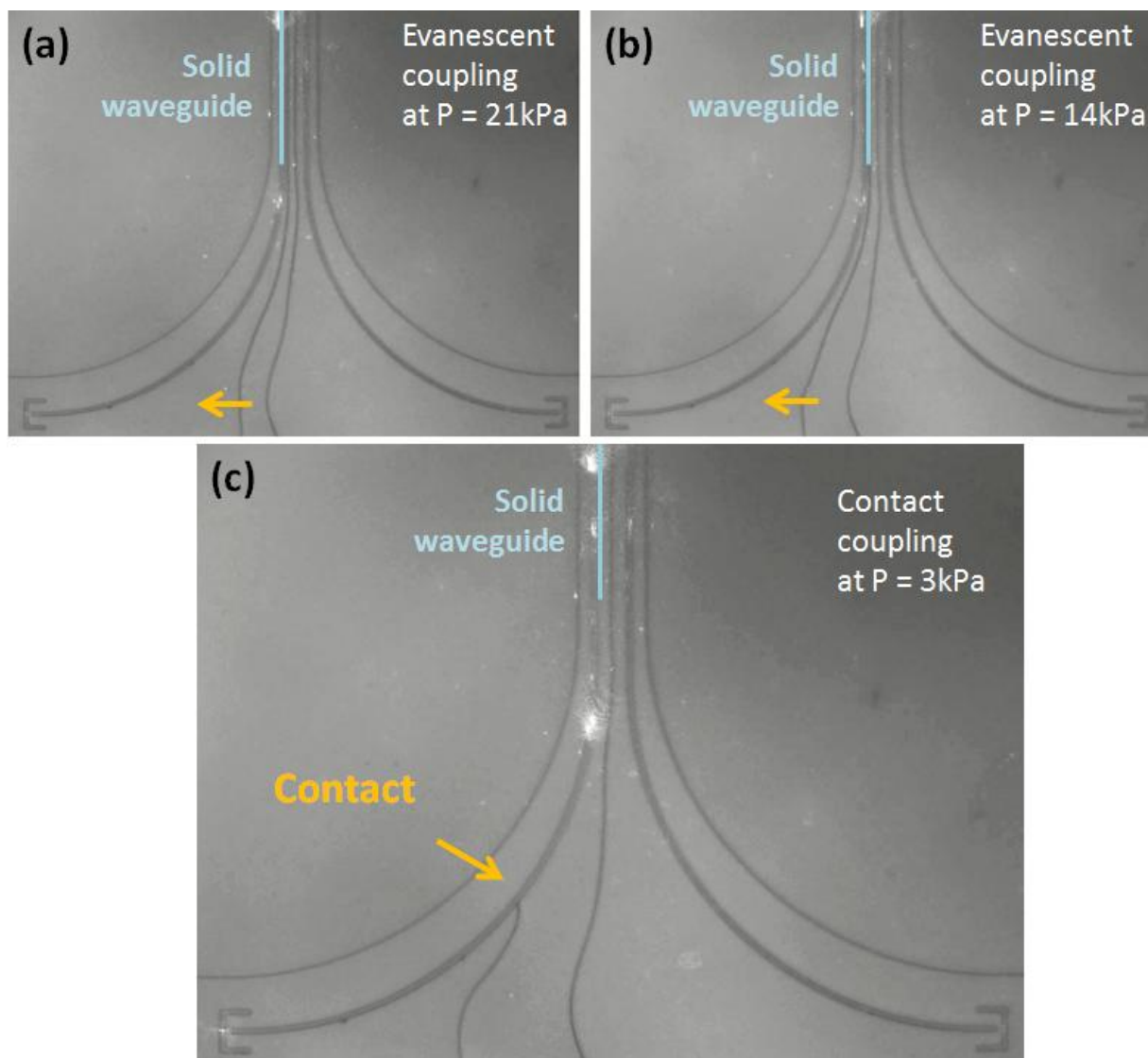


Fig. S1. (a) Evanescent coupling when the pressure was 21kPa. (b) Evanescent coupling when the pressure was 14kPa. (c) Contact coupling when the pressure was 3kPa. The liquid waveguide contacted the solid waveguide resulting in no downstream flow of the left cladding stream.

Supplementary video information

Video legends

Video S1 : Demonstration of end-fire switching with 1s switching speed.

Video S2 : Whole chip view of end-fire switching with 3s switching speed.

Short descriptive titles

Video S1 : Optofluidic swithing observed from inside the chip

Video S2 : Optofluidic swithing observed from outside the chip

Keywords

Optofluidics, Reconfigurable photonics, Microfluidics, Hybrid solid-liquid state optical coupling, and Optofluidic device without resupply of liquids.