Supplementary Information for

Manufacturable Plastic Microfluidic Valves Using Thermal Actuation

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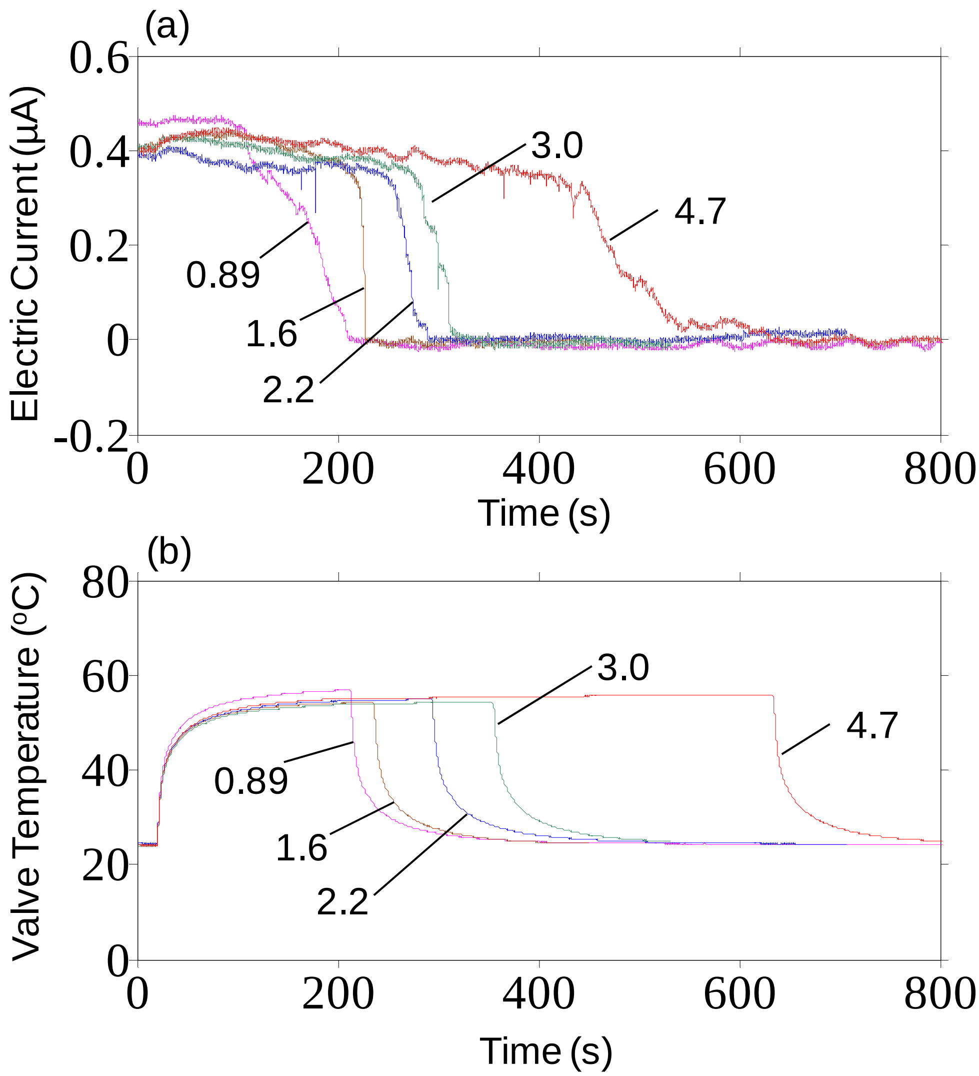

Supplementary Figure 1. (**a**) Temporal profiles of the electric ionic conduction current through the microchannel when the valve was actuating. Different flow rates were achieved by using a range of hydrostatic pressure heads at the inlet of a 47 mm-long microchannel. The flow rates (μL/min) indicated in the diagram were calculated from Hagen-Poiseuille equation as discussed in the text. The solution in the channel was 0.1 M NaCl and three-point moving average was used to smooth out the current fluctuations. (**b**) Temporal profiles of the micro-heater temperature when the valve was actuating. The heater was turned off when the electric current reached zero in (a) (i.e., the valve was closed). The power supplied to the heater was 55 mW.