

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: The mechanical simulation displaying the stress distribution of the different microstructures under pressure loading.

File Name: Supplementary Movie 2

Description: The response time measured by loading a 50g weight.

File Name: Supplementary Movie 3

Description: The response time measured by using a linear actuator.

File Name: Supplementary Movie 4

Description: The experiment to measure the limit of detection.

File Name: Supplementary Movie 5

Description: The experiment to measure the pressure resolution.

File Name: Supplementary Movie 6

Description: Interaction with the robotic hand.