

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: A movie showing the elasticity and recoverability of this conductor.

File Name: Supplementary Movie 2

Description: A movie showing the squeezing test of a PAA/IL ionogel.

File Name: Supplementary Movie 3

Description: A movie showing the squeezing test of a polyacrylamide/NaCl hydrogel.

File Name: Supplementary Movie 4

Description: A movie showing the squeezing test of this conductor.

File Name: Supplementary Movie 5

Description: A movie showing the transparent integrated sensory system can track the movements of a robotic finger with real-time capacitance signals.

File Name: Supplementary Movie 6

Description: A movie showing the transparent integrated sensory system can sense temperature stimulus with real-time resistive response.

File Name: Supplementary Movie 7

Description: A movie showing the transparent sensory system can recognize H₂O.

File Name: Supplementary Movie 8

Description: A movie showing the transparent sensory system can recognize ethanol.