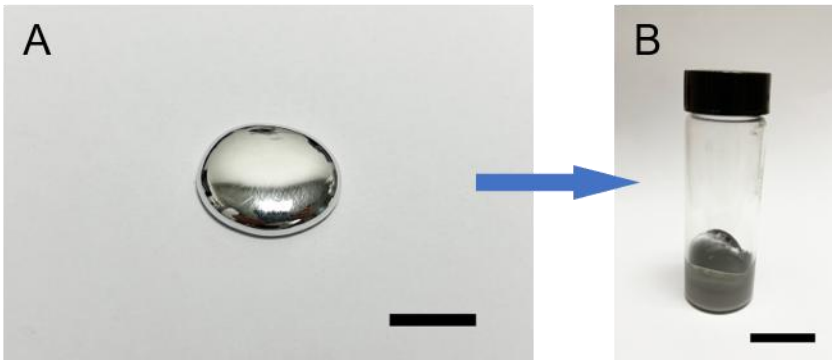
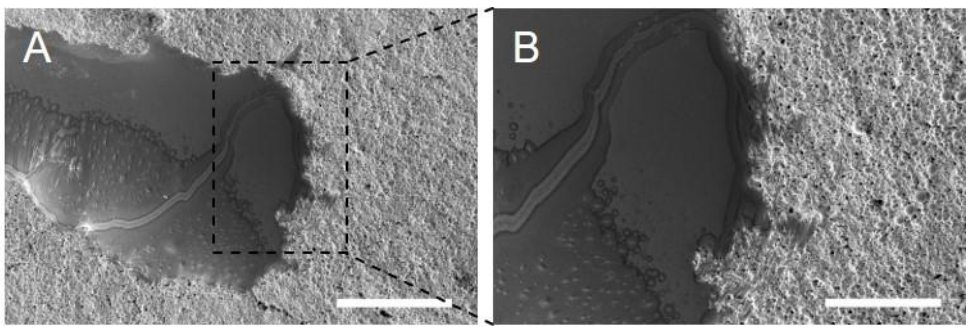
Surname *et al. Soft Sci* Year;Volume:Number
DOI: 10.20517/ss.2021.xx

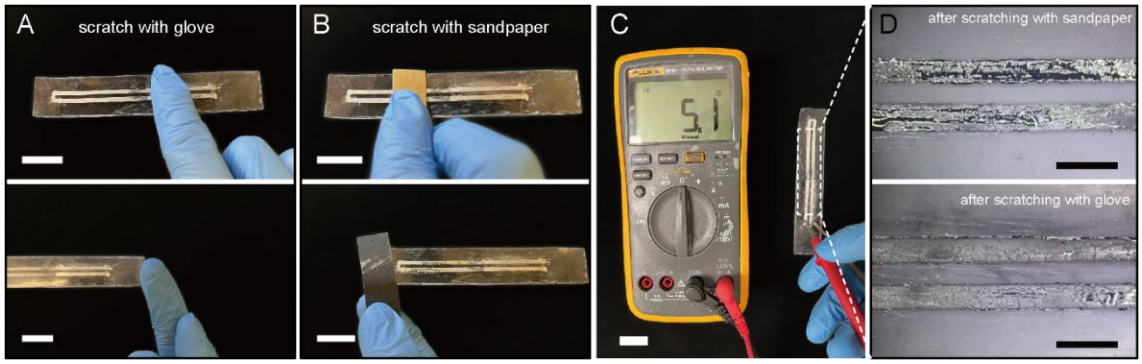
Supplementary Material: Liquid Metal-based Strain-sensing Glove for Human-machine Interaction



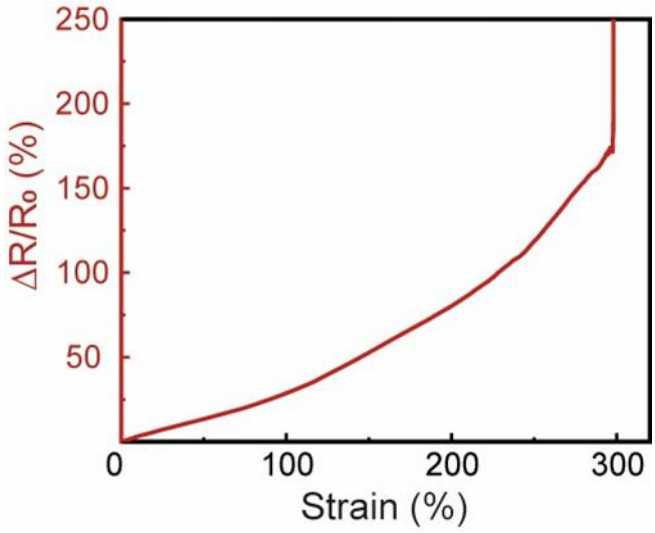
Supplementary Figure 1. Transformation of liquid metal form. (A) Fresh bulk liquid metal. Scale bar: 10mm. (B) Prepared liquid metal slurry for scraping. Scale bar: 20mm.



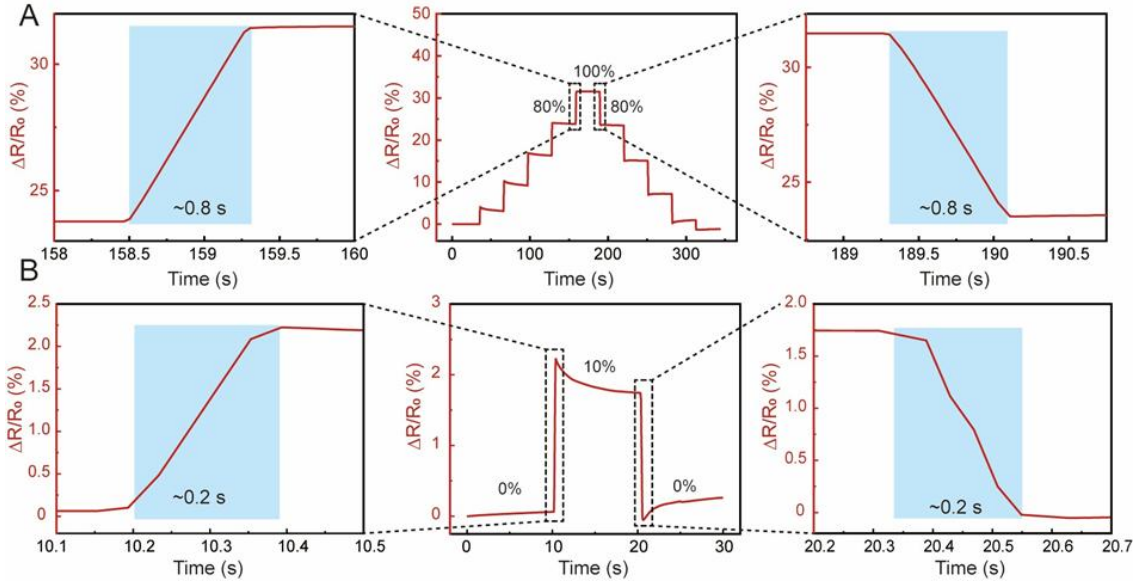
Supplementary Figure 2. SEM images of liquid metal trace after a tweezer tip was used to draw on its surface. (A) The released bulk liquid metal and surrounding unactivated liquid metal particles. Scale bar: 200 μm. (B) is the enlarged view of details at the junction of two forms of liquid metal. Scale bar: 100 μm.



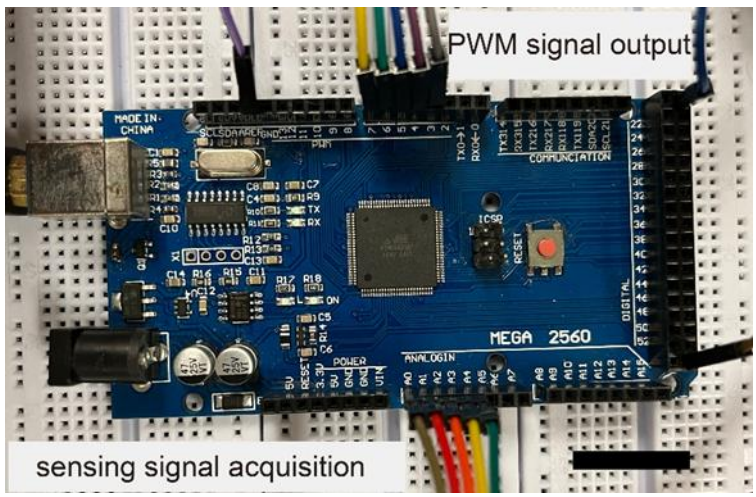
Supplementary Figure 3. Abrasion resistance performance of sensing circuits based on liquid metal slurry. (A) Scraping the circuit with a nitrile glove. Scale bar: 2 cm. (B) Scraping the circuit with sandpaper. Scale bar: 2 cm. (C) The circuit remains conductive after two scraping operations. Scale bar: 2 cm. (D) Optical microscope images of the circuit after scraping. Scale bar: 5 mm.



Supplementary Figure 4. Extreme sensing strain of strain-sensing circuit and its resistance changes.



Supplementary Figure 5. Response time and relaxation time of the sensing circuit. (A) The response time and relaxation time of the sensing circuit when the tensile distance is 8 mm, and the tensile rate is 10 mm/s. (B) The response time and relaxation time of the sensing circuit when the tensile distance is 4 mm, and the tensile rate is 20 mm/s.



Supplementary Figure 6. The circuit diagram of Arduino MEGA 2560 as the MCU of human-machine interaction. Scale bar: 2 cm.