Electronic Supplementary Material (ESI) for Materials Horizons.

Supporting Information

Cu-EGaIn Enabled Highly Conductive and Stretchable E-skin for Wearable Electronics and CT Assistant Localization

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Movie S1: Fabrication of E-skin.
Movie S2: Stretchable E-skin.
Movie S3: Functional E-skin Circuits.
Movie S4: Thermochromic E-skin.

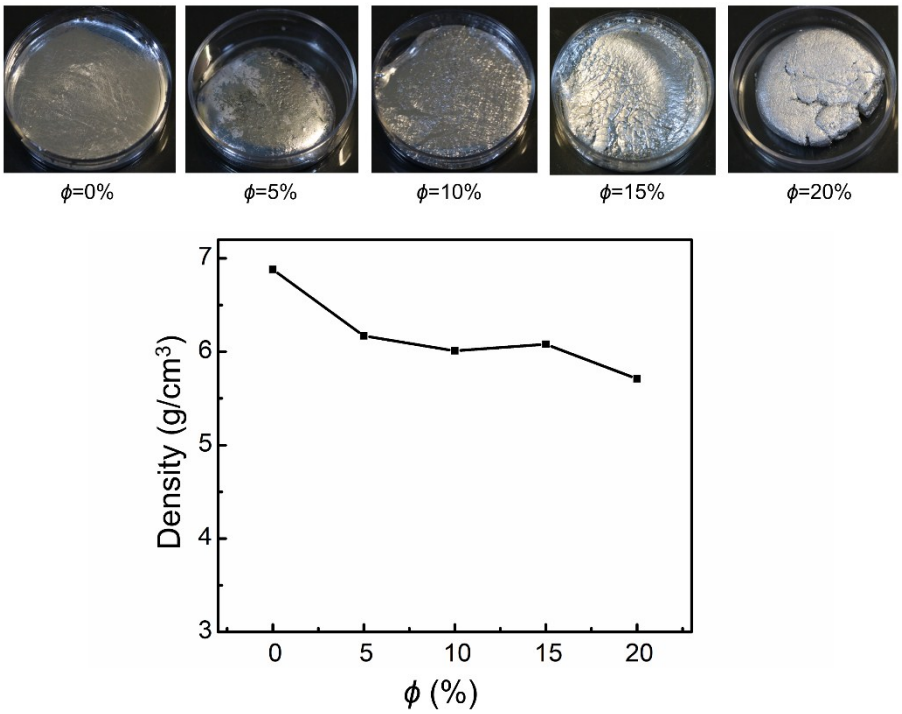

Fig. S1. Photos of Cu-EGaIn of different packing ratios ϕ.

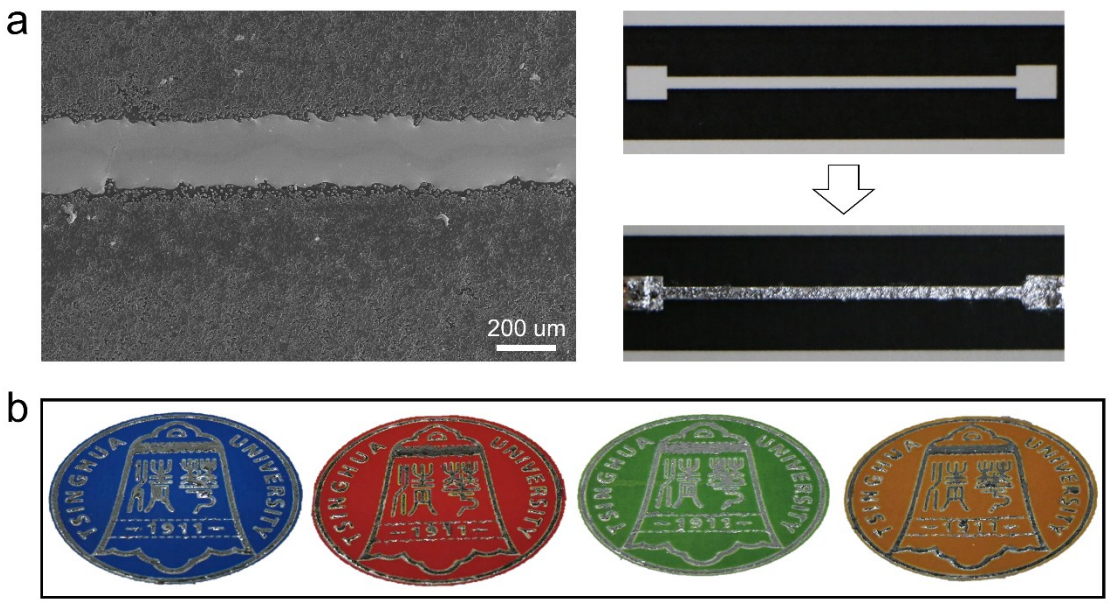

Fig. S2. a) SEM and optical images of Cu-EGaIn printed on PMA film. b) Photos of Cu-EGaIn printed on PMA film covered with different color toner.

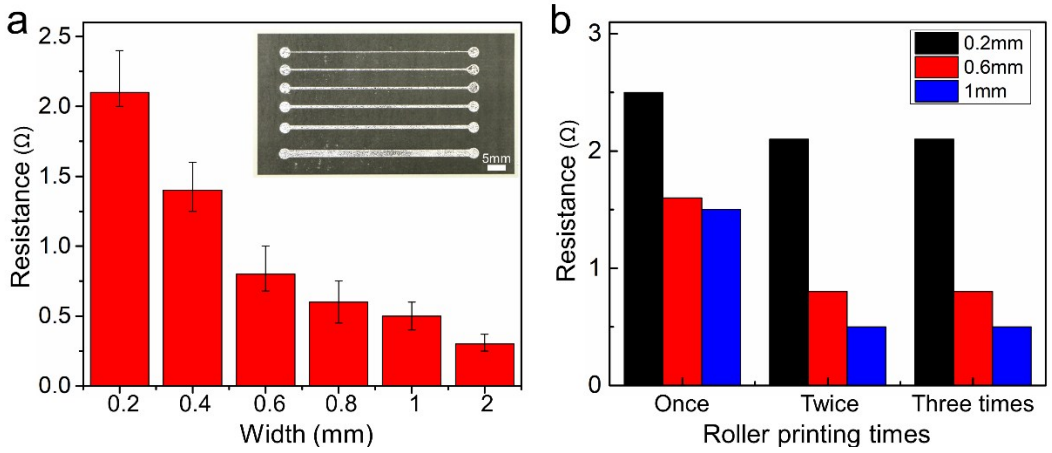

Fig. S3. a) Resistance of different widths of Cu-EGaIn lines (n = 4). b) The resistances of these Cu-EGaIn lines (width of 0.2mm, 0.6mm and 1mm) after once, twice and three times roller printing.

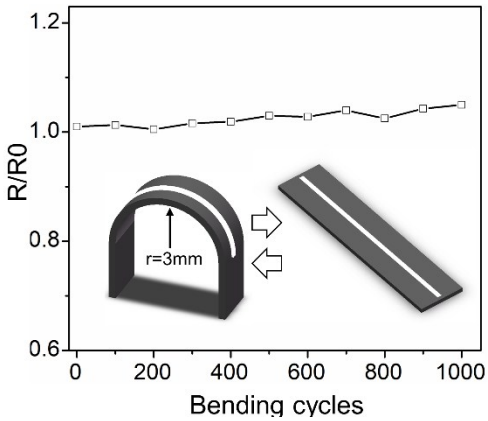

Fig. S4. Resistance of Cu-EGaIn line under bend radius of 3 mm for 1000 cycles.

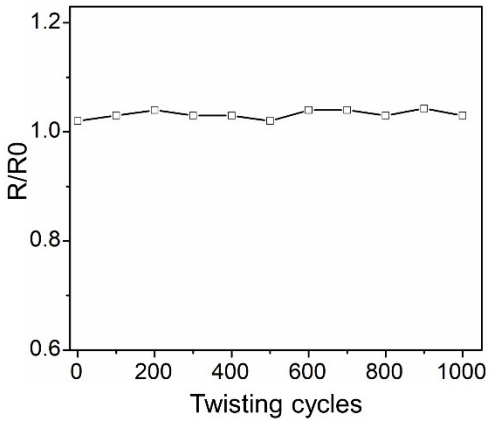

Fig. S5. Resistance of Cu-EGaIn line under twisting angle of 180° for 1000 cycles.

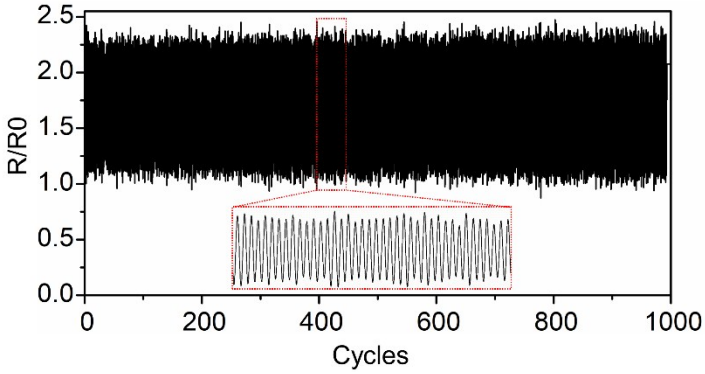

Fig. S6. Resistance of Cu-EGaIn line with strain of 20% for 1000 cycles.

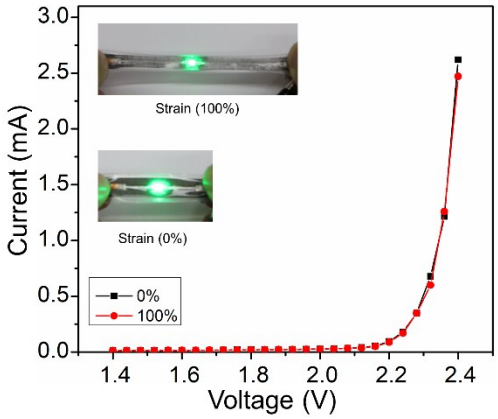

Fig. S7. I−V curves of the Cu-EGaIn lines with LED under various strains.

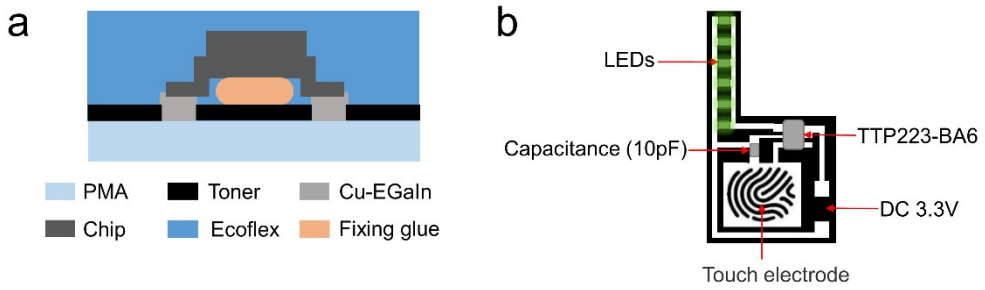

Fig. S8. a) The structure details of the chip junction. b) Circuit diagram of the interactive circuit.

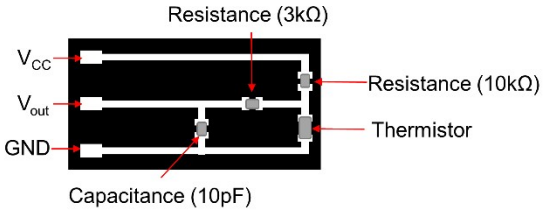

Fig. S9. Circuit diagram of the temperature monitoring circuit.

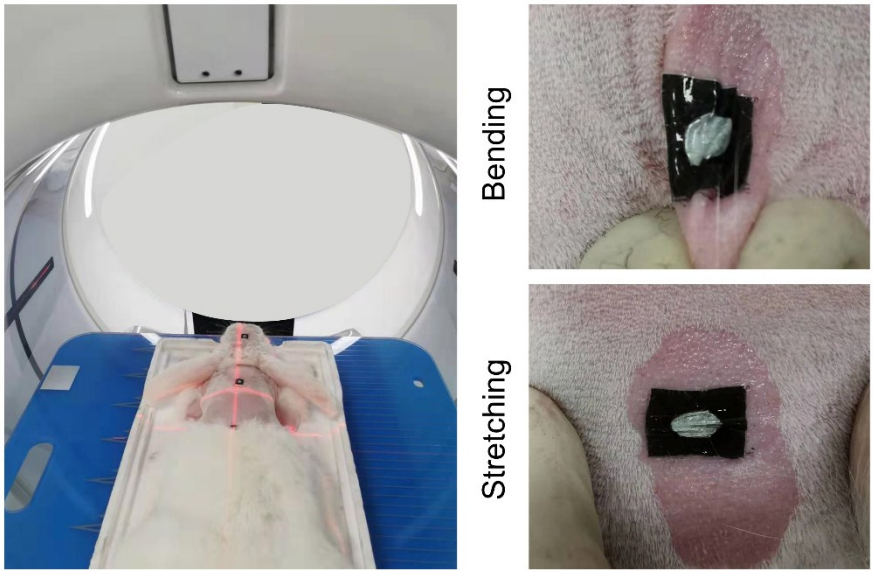

Fig. S10. The images of CT assistant localization marker on a white rabbit.

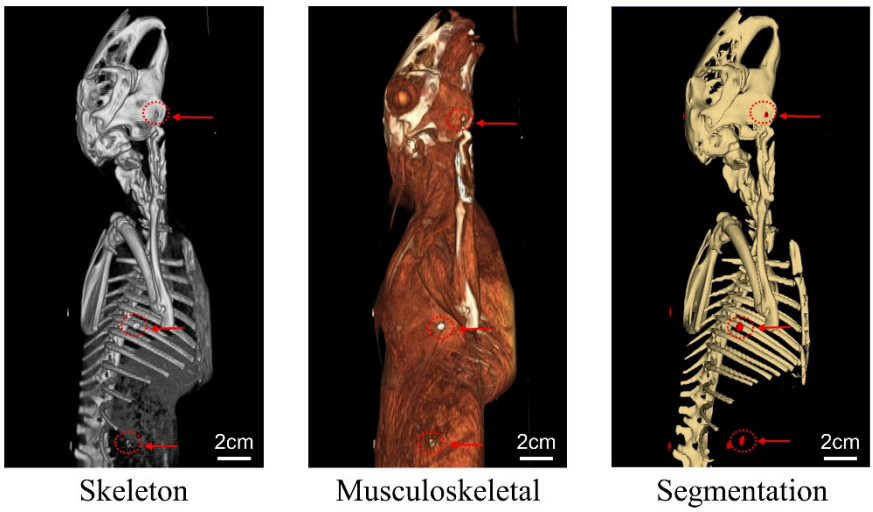

Fig. S11. The VR lateral views of CT images (musculoskeletal structure and skeleton with segmentation of the markers) about the rabbit.

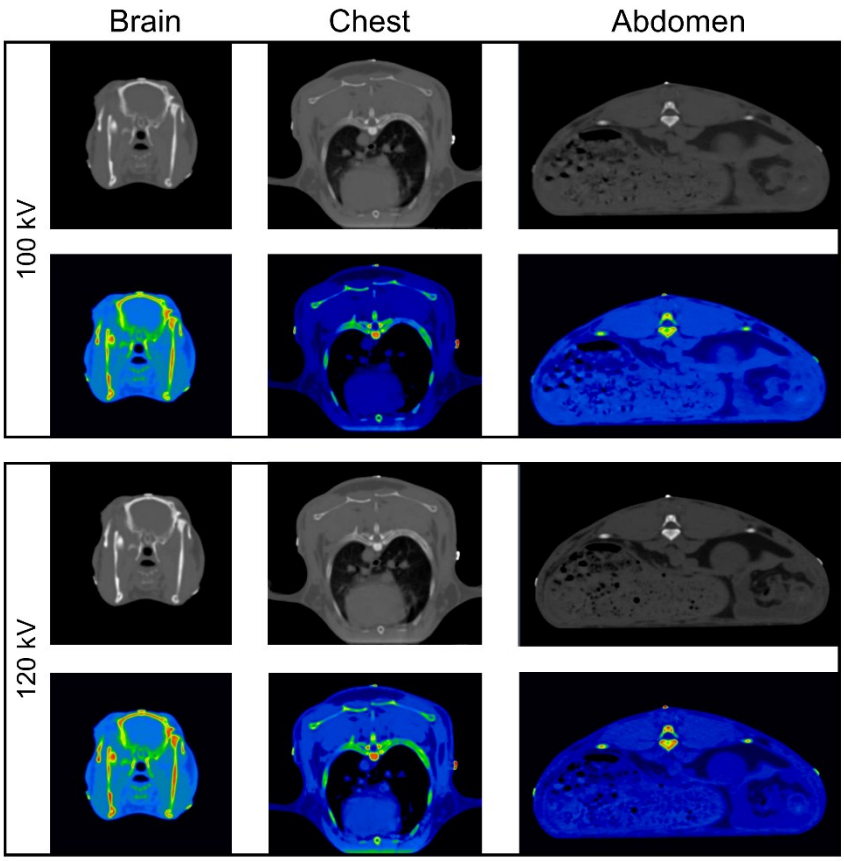

Fig. S12. The CT images of the rabbit with the same markers at 100 kV and 120 kV.