

Supporting Information for

Highly compliant and low strain hysteresis sensory electronic skins based on solution processable hybrid hydrogels

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1 Mechanical properties and chemical compositions of PVA/PANI hydrogels

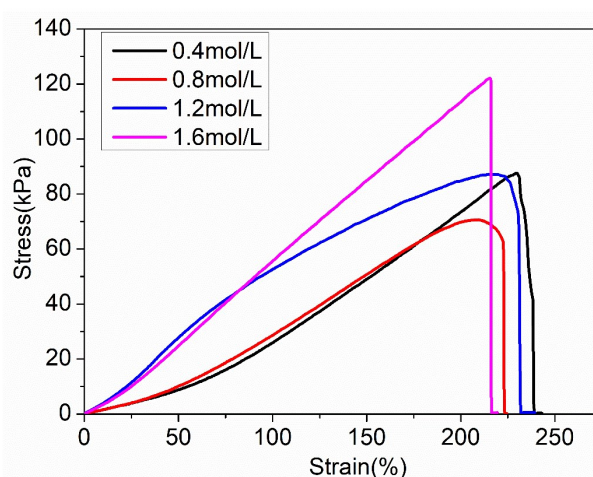


Figure S1. The mechanical properties of hydrogels prepared with different aniline concentrations.

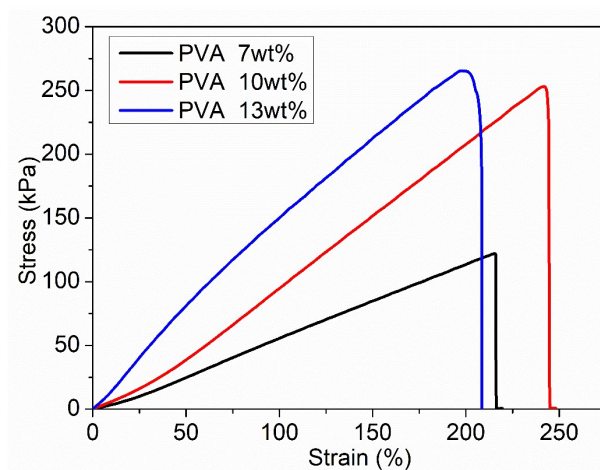


Figure S2. The mechanical properties of hydrogels with different PVA contents.

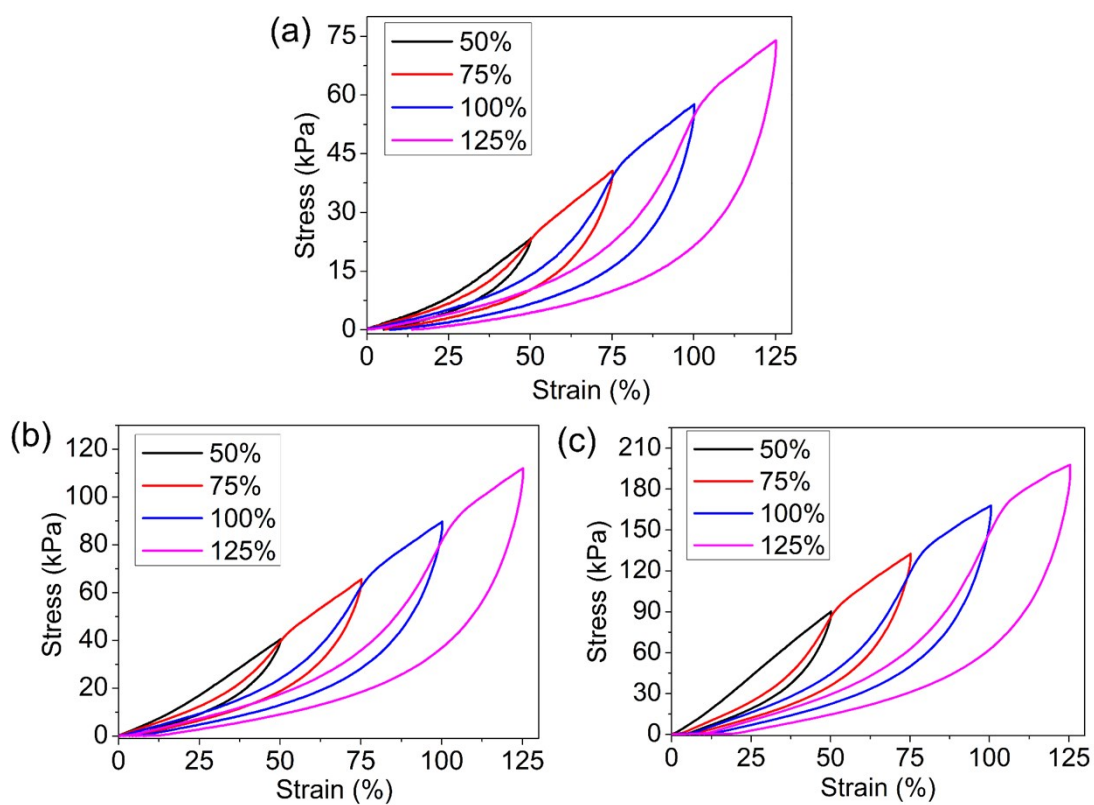


Figure S3. Tensile loading-unloading curves of PVA/PANI hydrogels. Aniline concentrations: 1.6 mol/L. (a) PVA: 7 wt%, (b) PVA: 10 wt%, (c) PVA: 13 wt%.

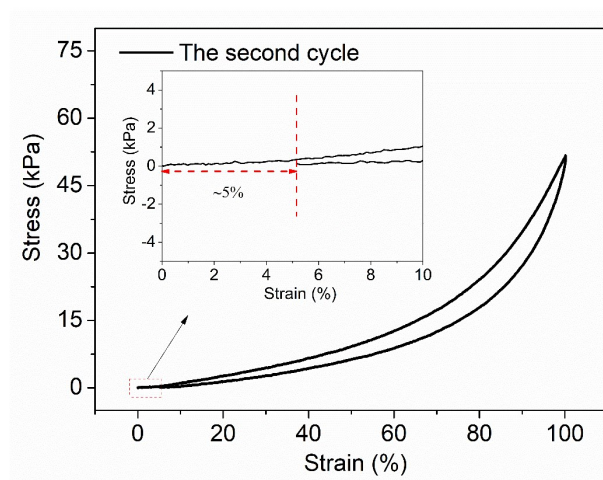


Figure S4. The second cyclic loading-unloading curves at a strain of 100%. (PVA: 7 wt%, Aniline concentrations: 1.6 mol/L).

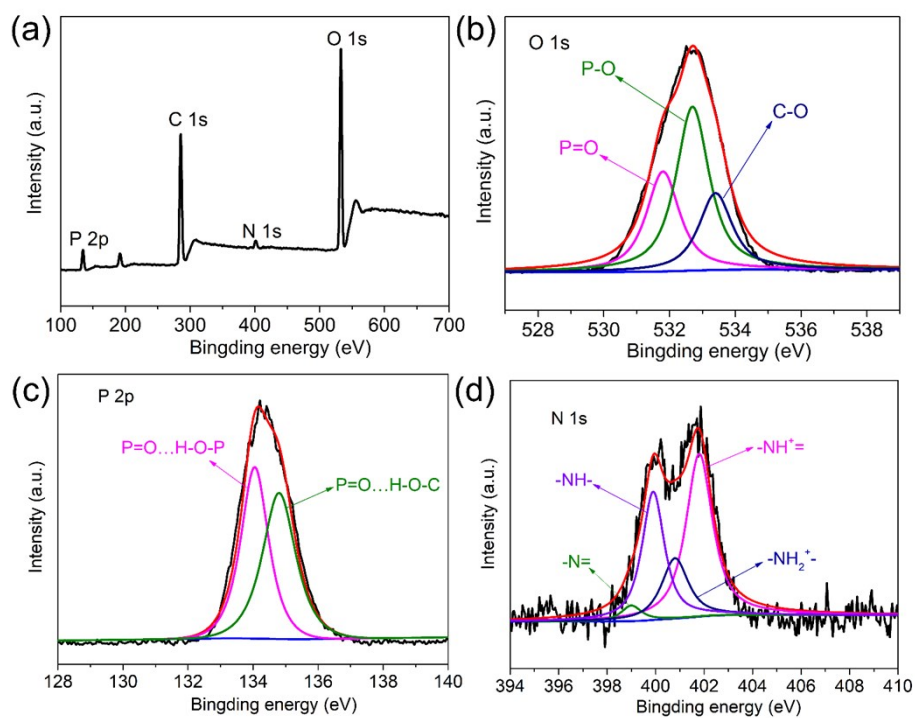


Figure S5. XPS spectra of PVA/PANI hydrogel. (a) Full score, (b), (c), (d) are the high-resolution O 1s, P 2p, and N 1s spectra respectively.

2 Conductivity of PVA/PANI hydrogels

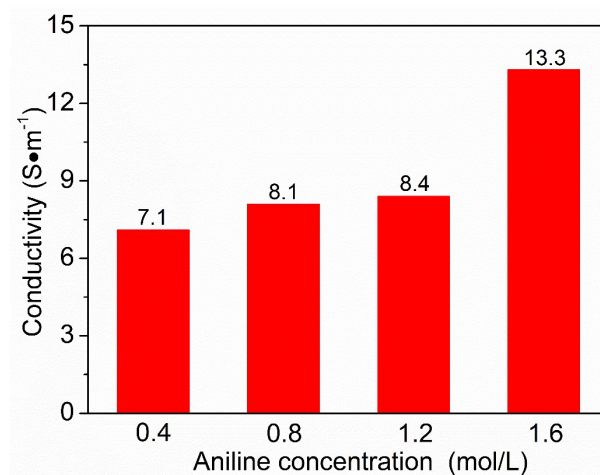


Figure S6. The conductivity of hydrogels prepared with different aniline concentrations. (PVA: 7 wt%)

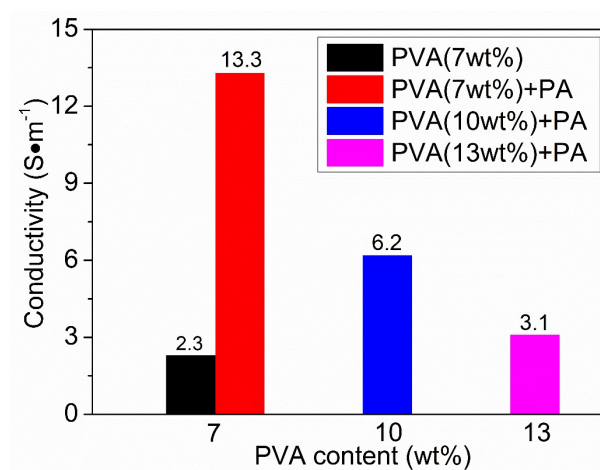


Figure S7. The conductivity of hydrogels with different PVA contents. (Aniline concentrations: 1.6 mol/L)

3 Conductivity of regenerated hydrogels

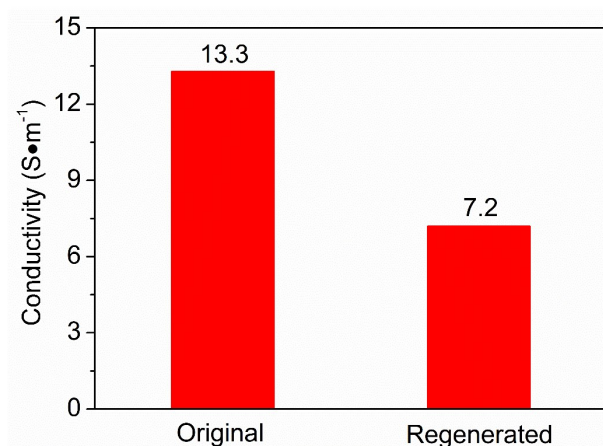


Figure S8. The conductivity of original hydrogel and regenerated hydrogel. (PVA: 7 wt%, Aniline concentrations: 1.6 mol/L)

4 Thermogravimetric analysis and mechanical properties of organohydrogels

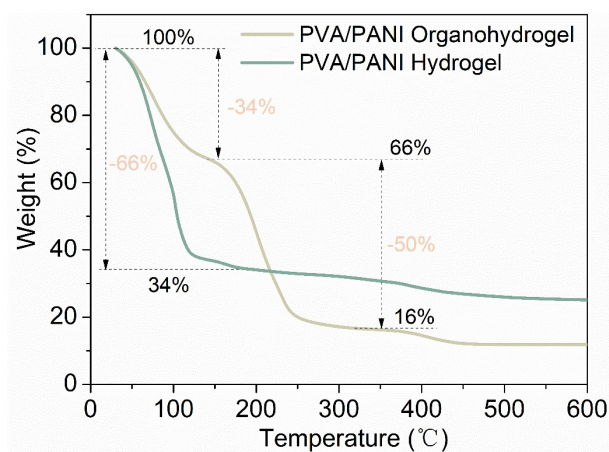


Figure S9. Thermogravimetric analysis of organohydrogels and hydrogels.

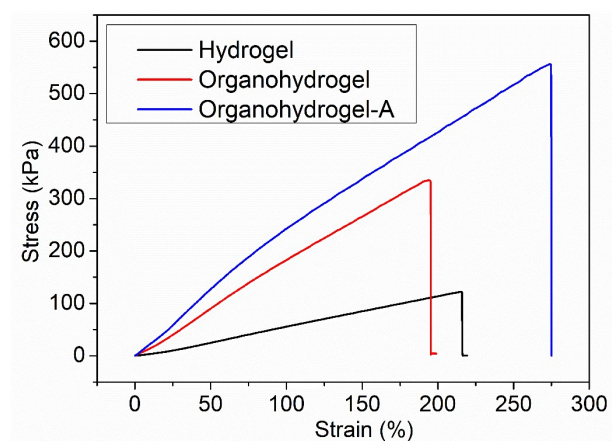


Figure S10. Typical stress-strain curves of typical PVA/PANI hydrogels, organohydrogel and organohydrogel-A. (PVA: 7 wt%, Aniline concentrations: 1.6 mol/L)