Supporting Information

Tough Dual-Network Janus Hydrogel Patch for Universal and Reversible Adhesion

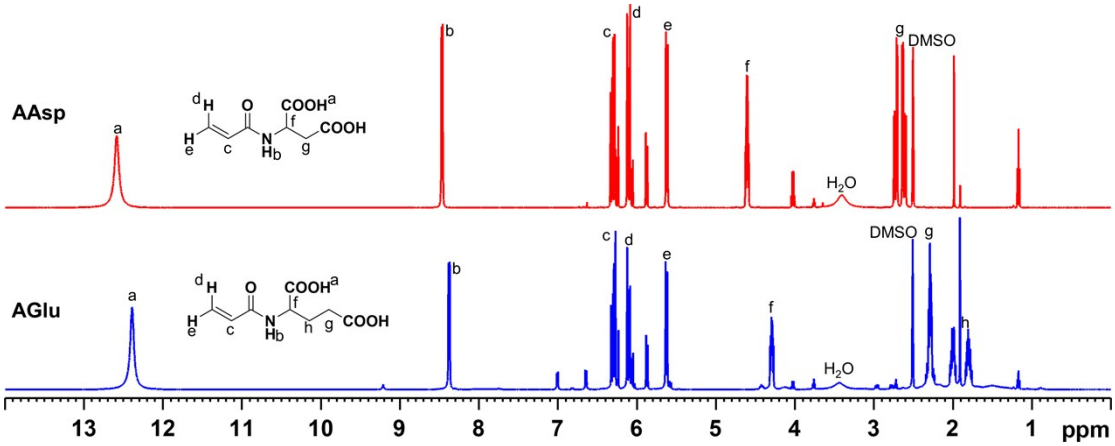

Figure S1. ^{1}H-NMR spectra of AAsp and AGlu.

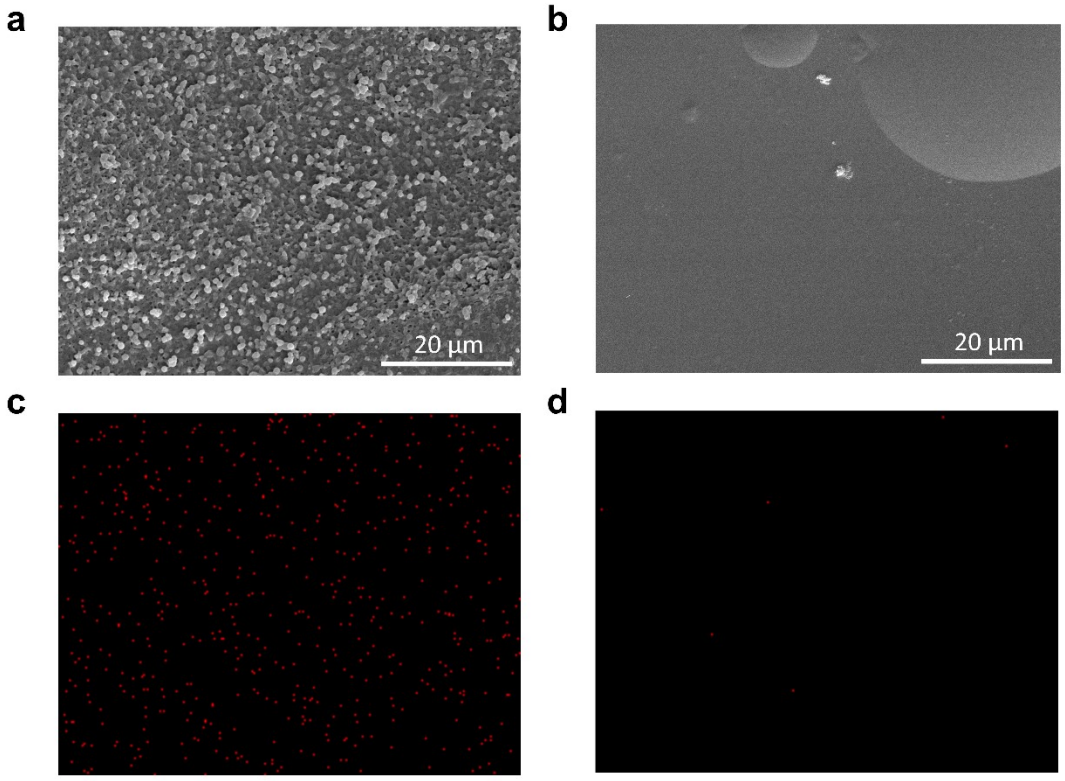

Figure S2. (a)(c) SEM and EDS images of the adhesive surface of Janus hydrogel. (b)(d) SEM and EDS images of the non-adhesive surface of Janus hydrogel.

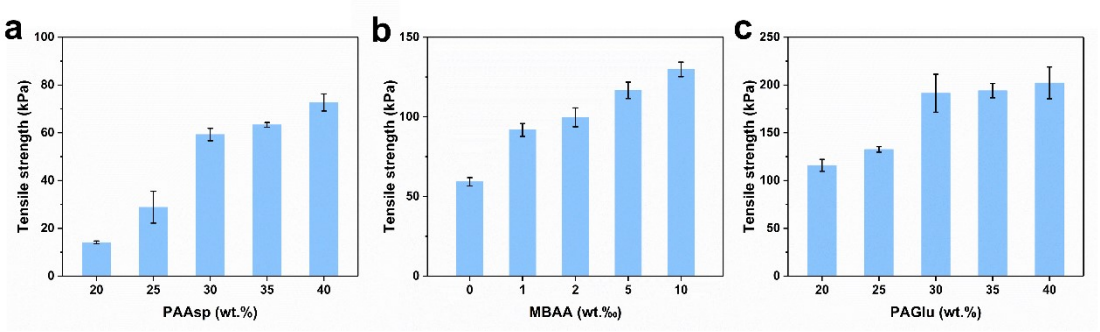

Figure S3. (a) Tensile strength of PAAsp hydrogels with different solid contents. (b) Tensile strength of PAAsp hydrogel with different content of MBAA. (c) Tensile strength of PAGlu hydrogels with different solid contents.

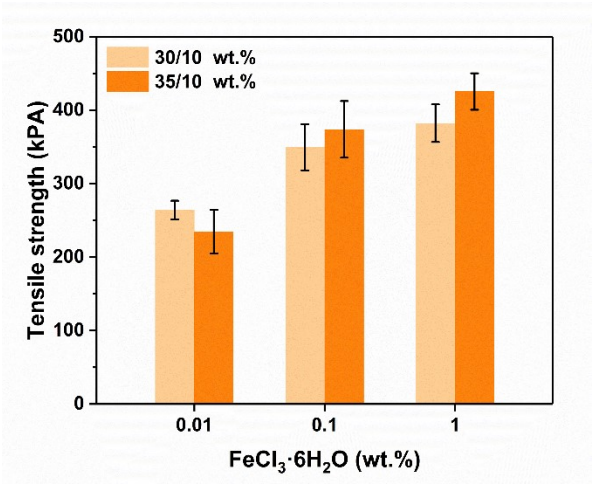

Figure S4. Tensile strength of PAAsp/PAADA Janus hydrogels with different $FeCl_3$ concentration.

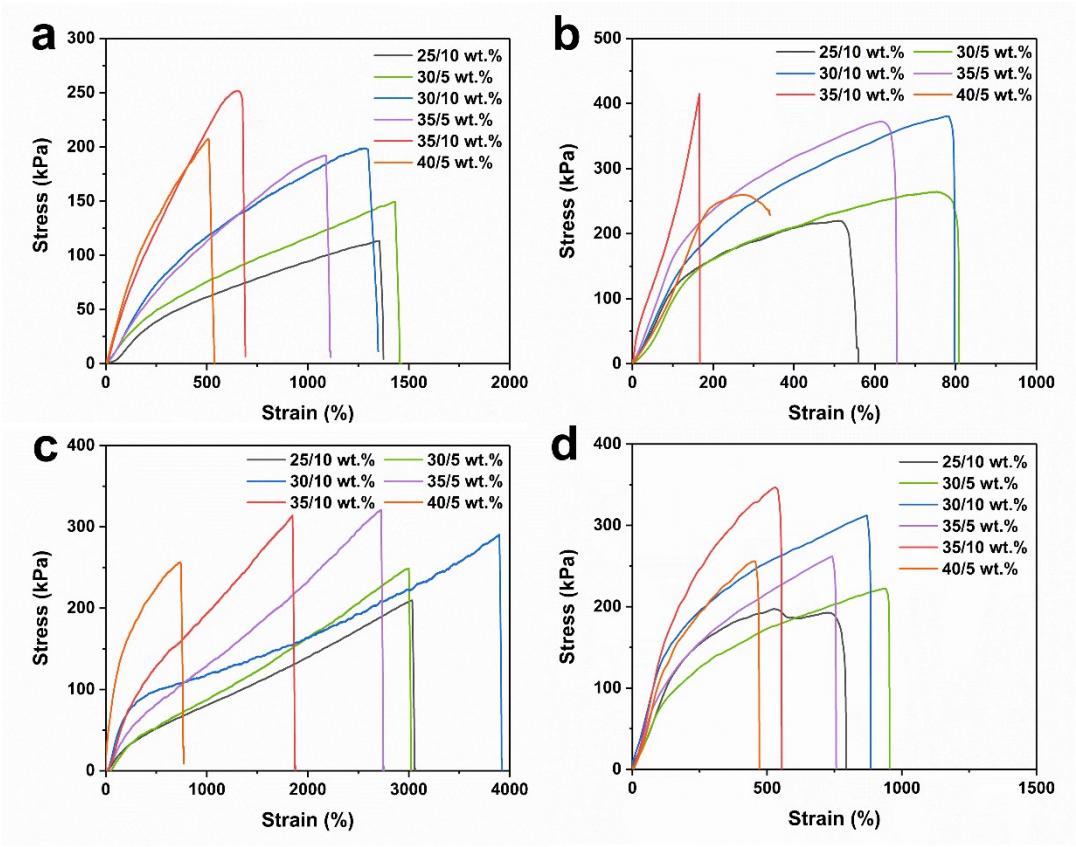

Figure S5. (a) Tensile stress–strain curves of PAAsp/PAADA hydrogels. (b) Tensile stress–strain curves of PAAsp/PAADA Janus hydrogels. (c) Tensile stress–strain curves of PAGlu/PAADA hydrogels. (d) Tensile stress–strain curves of PAGlu/PAADA Janus hydrogels.

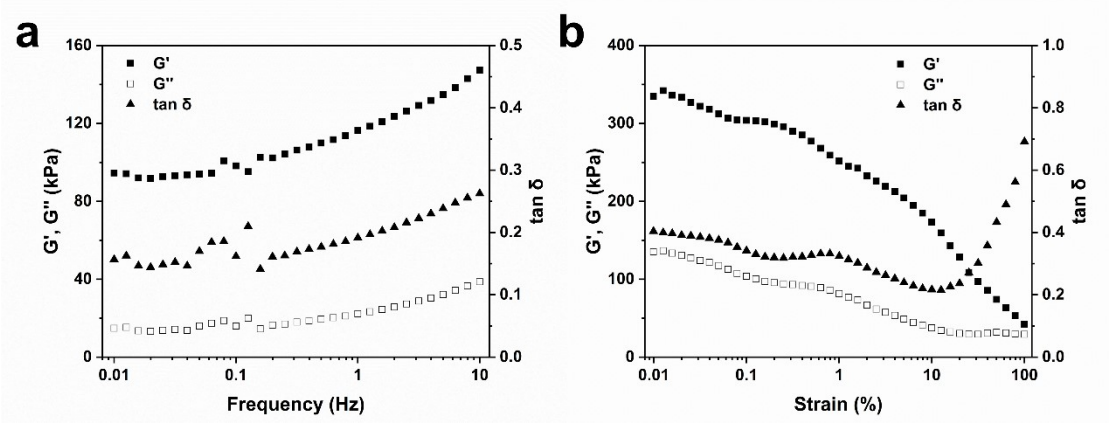

Figure S6. (a) Dynamic frequency sweep and (b) Strain sweep of the P(AAsp-AGlu)/PAADA Janus hydrogel.

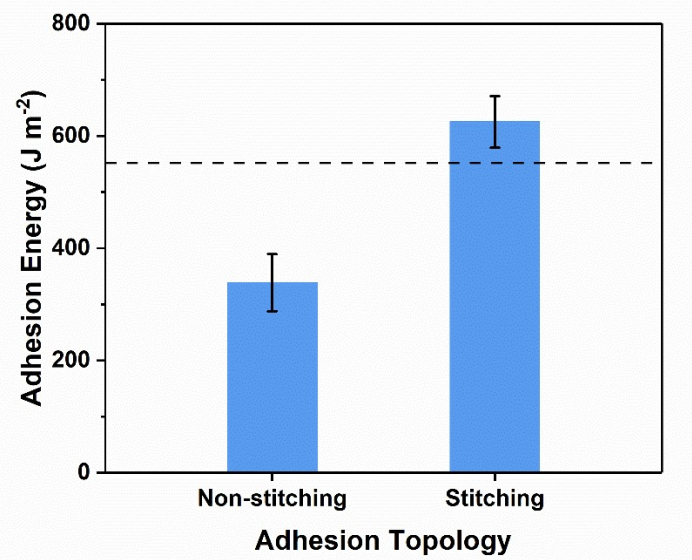

Figure S7. The influence of adhesion topology on adhesion energy (dashed line is the control using PAAm without NaIO4 as adherend).