Supporting information

Anti-fatigue Adhesive and Tough Hydrogels Regulated by Adenine and Uracil

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Figure S1. The Fracture distance and maximum adhesion energy of AU_7 - C_{30} adhesive hydrogel.



Figure S2. The compress performance of adhesive hydrogels: (a) with different A-U and (b) with different MBA.



Figure S3. Anti-fatigue adhesive behavior of adhesive hydrogels for aluminum substrate: (a) with chemical crosslinker of MBA and (b) with chemical crosslinker of MBA.



Figure S4. FTIR spectroscopy of (a) A-Aa and (b) U-Ua.

According to FTIR spectroscopy, Aa and Ua are successfully synthesized. The strong band at 1635 cm⁻¹ was attributed to the functionalized acrylic group of Aa. And the successful synthesis of acrylated uracil was confirmed by the strong peak at 1713 cm⁻¹.