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Supplementary information

Robust DualPhysically Cross-Linked Hydrogels with Unique Self-Reinforcing Behavior and Improved Dye Adsorption Capacity

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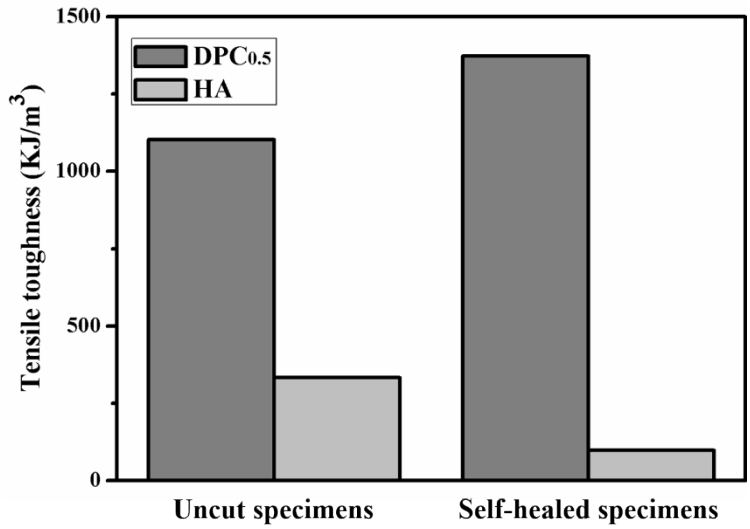

Fig. S1 Tensile toughness of uncut specimens and self-healed specimens calculated from **Fig. 5b**.

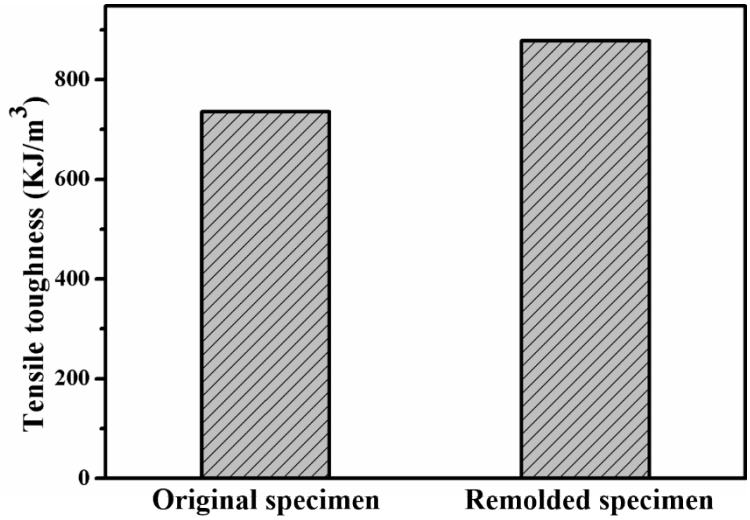

Fig. S2 Tensile toughness of the original and remolded $DPC_{1.5}$ gel calculated from **Fig. 6b**.

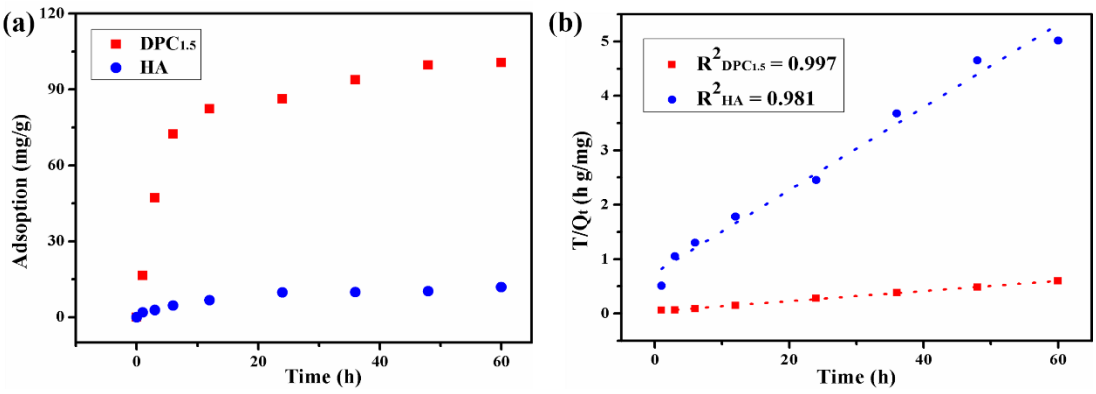

Fig. S3 (a) Time-dependent adsorption of crystal violet (CV) on $DPC_{1.5}$ and HA gels. (b) Pseudo-second-equation fitting for adsorption kinetics of $DPC_{1.5}$ and HA gels.

For pseudo-second order equation, the integratedform could be described below

$$T/Q_t = T/Q_{eq} + 1/k_2Q^2_{eq},$$

where Q_{eq} and Q_t (mg/g) are the amounts of dye adsorbed at the equilibrium and time T, respectively, k_2 is the pseudo-first-order rate constant.