CO₂-responsive self-healable hydrogels based on hydrophobically-modified

polymers bridged by wormlike micelles

Chunming Xiong,^a Kang Peng,^b Xiaofen Tang,^a Zhengrong Ye,^a Yang Shi^a and Haiyang Yang^{*b}

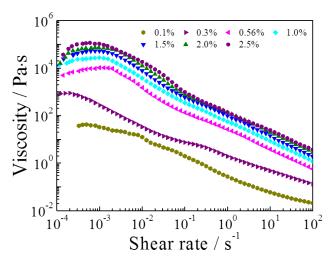


Figure S1. Viscosity *versus* shear rate plots for the HMPAM hydrogel with various polymer weight percentages.

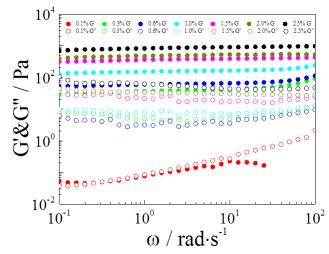


Figure S2. Linear viscoelastic modulus, $G'(\omega)$ and $G''(\omega)$, for the HMPAM hydrogel with various polymer weight percentages.

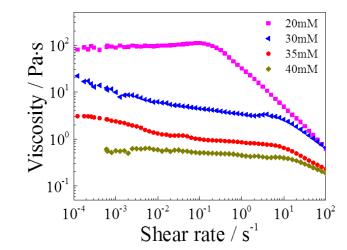


Figure S3. Viscosity *versus* shear rate plots for the HMPAM hydrogel with various concentrations of SDS/TMPDA before bubbling CO₂.

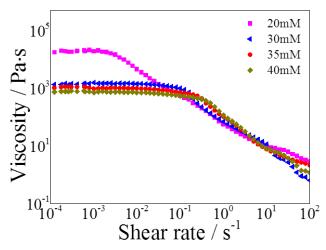


Figure S4. Viscosity *versus* shear rate plots for the HMPAM hydrogel with various concentrations of SDS/TMPDA after bubbling CO₂.

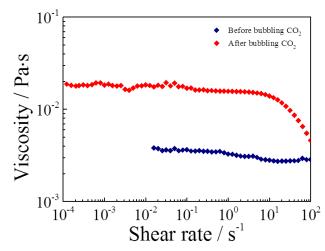


Figure S5. Viscosity versus shear rate plots for 35mM SDS/TMPDA solution before and after bubbling CO₂.

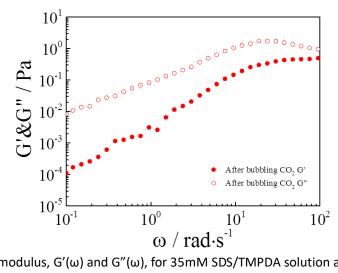


Figure S6. Linear viscoelastic modulus, G'(ω) and G"(ω), for 35mM SDS/TMPDA solution after bubbling CO₂.