

Supporting Information

Development of High-Strength, Tough, and Self-Healing Carboxymethyl Guar Gum-Based Hydrogels for Human Motion Detection

Wei Chen^{a,*}, *Yunhao Bu*^a, *Delin Li*^a, *Yuan Liu*^a, *Guangxue Chen*^b, *Xiaofang Wan*^b,
Nan Li^{a,*}

^a College of Engineering, Qufu Normal University, Rizhao 276826, China

^b State Key Laboratory of Pulp and Paper Engineering, South China University of
Technology, Guangzhou 510640, China

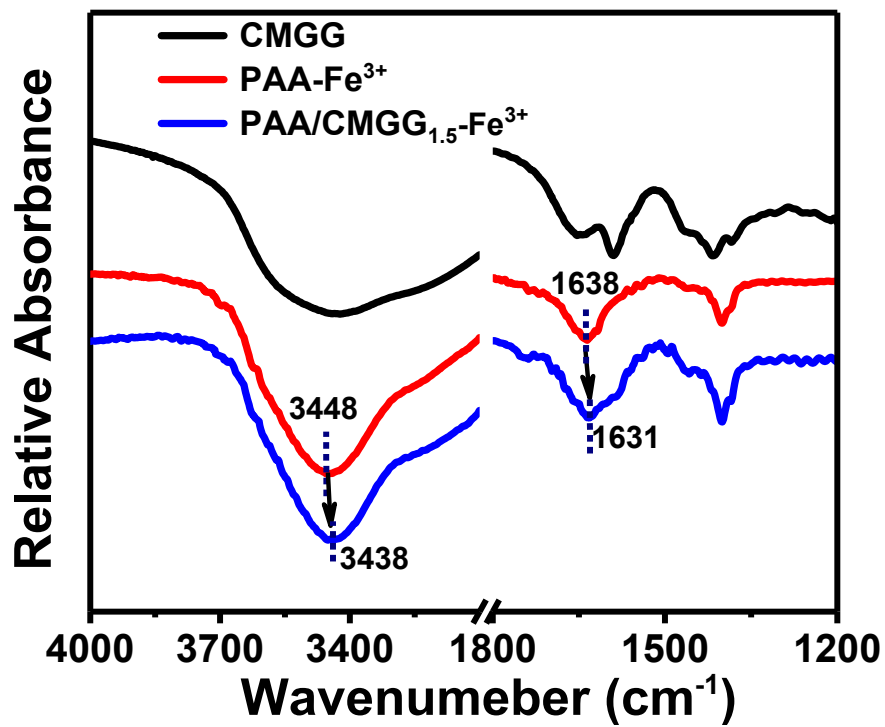


Figure S1 FT-IR spectra of CMGG powder, PAA-Fe³⁺, and PAA/CMGG_{1.0}-Fe³⁺ hydrogels.

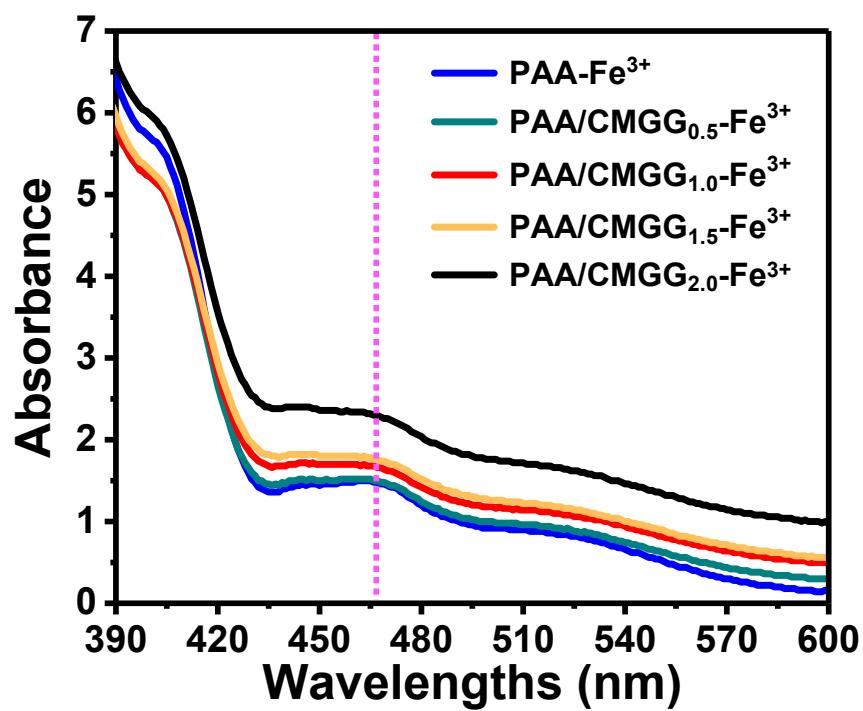


Figure S2 UV-vis spectra of PAA-Fe³⁺, PAA/CMGG_{0.5}-Fe³⁺, PAA/CMGG_{1.0}-Fe³⁺, PAA/CMGG_{1.5}-Fe³⁺, and PAA/CMGG_{2.0}-Fe³⁺ solutions.

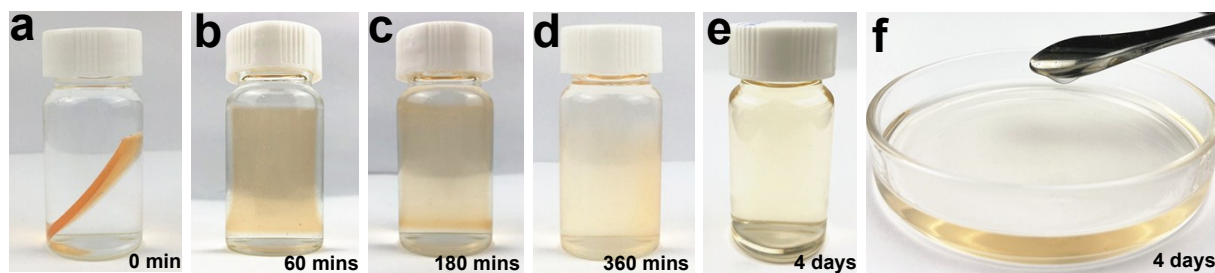


Figure S3 a-f) A series of photos showing the progressive decomposition of the PAA/CMGG_{1.5}-Fe³⁺ hydrogel in water.