

Supplementary information

Reinforced Macromolecular Micelle-crosslinked Hyaluronate Gels Induced by Water/DMSO Binary Solvent

Hua Zhang ^{a, b}, Penggang Ren ^{a*}, Hua Wei ^b, Sami Halila ^c, Amarachi Rosemary Osi ^b,

Yang Zhou ^{b*}, Zhong Dai ^a, Rong Wang ^b, Jing Chen ^{b*}

- a. School of Materials Science and Engineering, Xi'an University of Technology, Xi'an 710048, China.
- b. Zhejiang Engineering Research Center for Biomedical Materials, Cixi Institute of Biomedical Engineering, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo 315300, China.
- c. Université Grenoble Alpes, Centre de Recherches sur les Macromolécules Végétales (CERMAV, UPR-CNRS 5301), F-38000 Grenoble, France.

Corresponding author:

E-mail: rengpg@126.com (P. G. Ren); zhouyang876@nimte.ac.cn (Y. Zhou);

jing.chen@nimte.ac.cn (J. Chen).

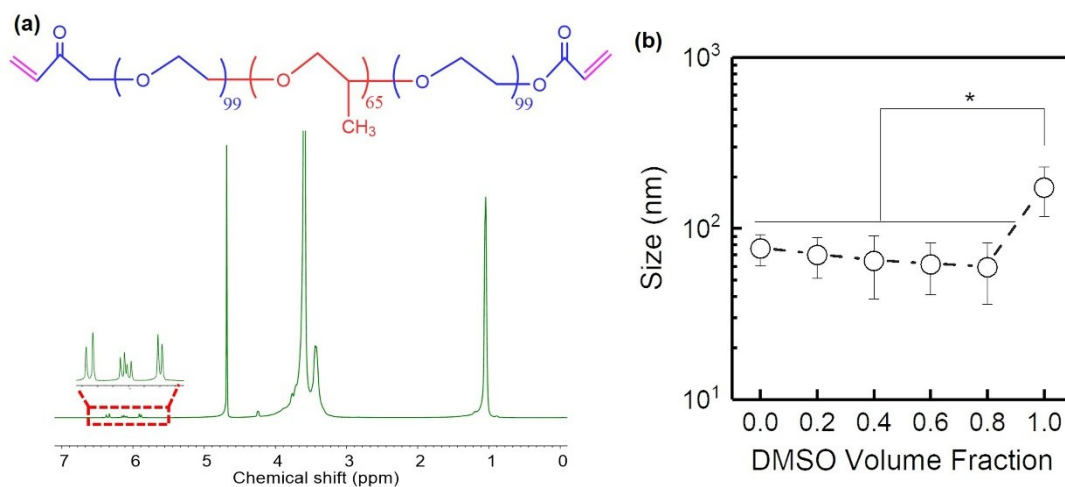


Figure S1. The (a) ¹H NMR spectrum of F127DA. (b) The nano-sizes of F127DA micelles in DMSO/H₂O binary solvent system with different DMSO volume fractions from DLS measurements.

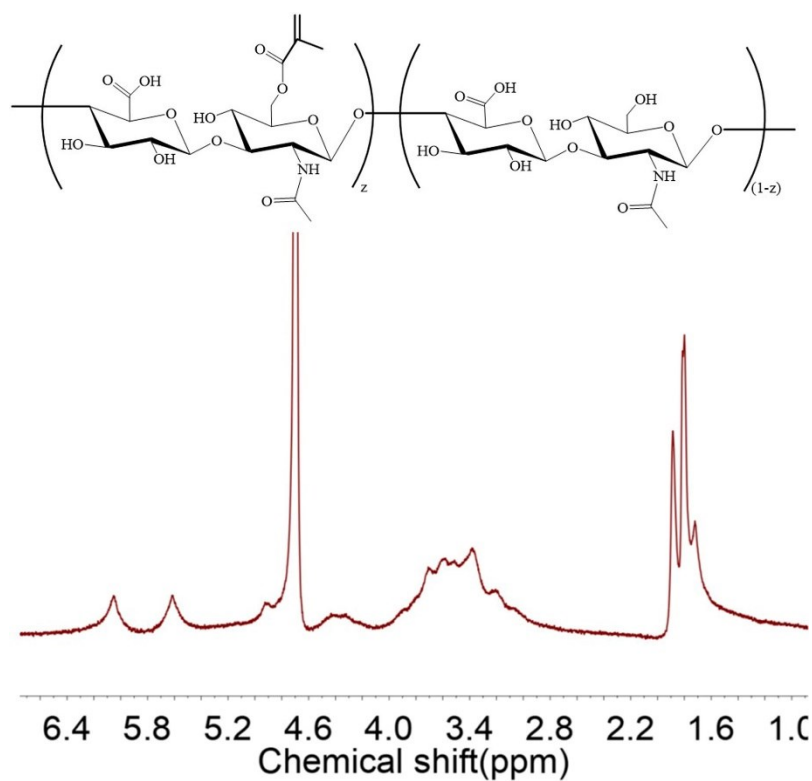


Figure S2. The ¹H NMR spectrum of methacrylate hyaluronic acid (MeHA)

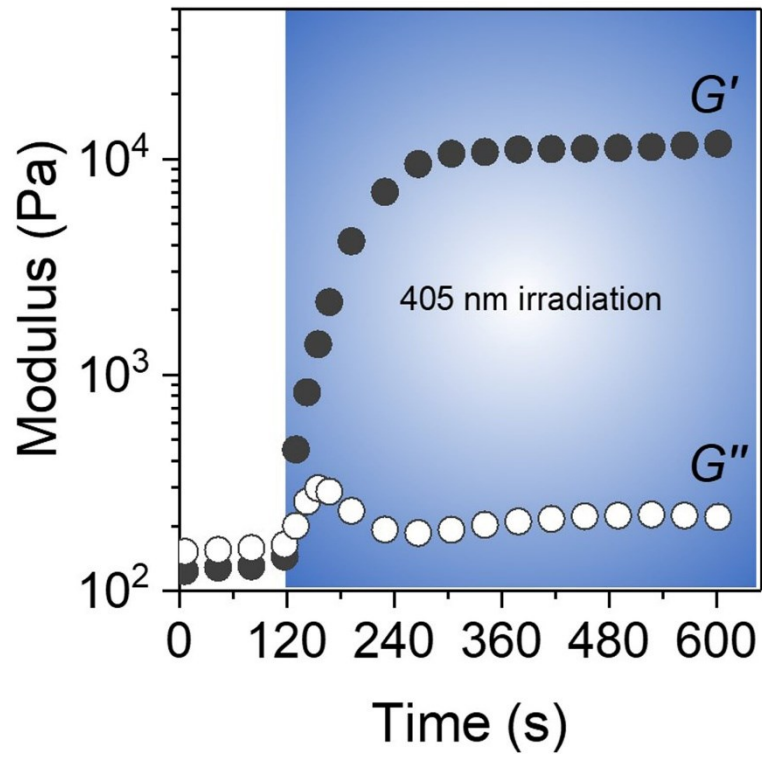


Figure S3. *In-situ* gelation analysis by the rheology detecting with 405nm blue-light exposure.