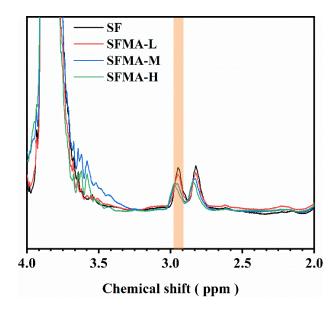
Tunable metacrylated silk fibroin-based hybrid bioinks for bioprinting of tissue engineering scaffolds

Jin Yang, Zhihui Li, Shikai Li, Qianqian Zhang, Xiaojun Zhou, Chuanglong He* Shanghai Engineering Research Center of Nano-Biomaterials and Regenerative Medicine; College of Biological Science and Medical Engineering, Donghua University, Shanghai 201620, P. R. China.

*Corresponding author: Chuanglong He, E-mail: hcl@dhu.edu.cn (C.L. He).



Formulations	Degree of methacrylation
SF	0
SFMA-L	18.8%
SFMA-M	21.9%
SFMA-H	25.0%

Fig. S1. ¹H-NMR spectra and methylation degrees of SFMA-L, SFMA-M and SFMA-

H. The silk fibroin (SF) was used as control.

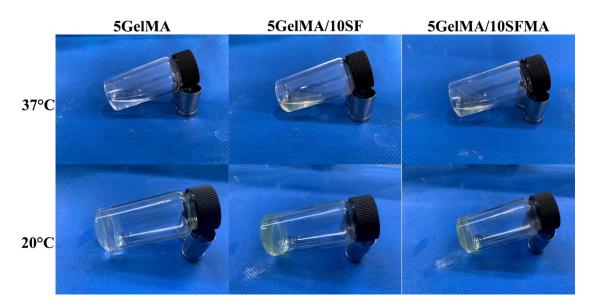


Fig. S2. Sol-gel transition of 5GelMA, 5GelMA/10SF, 5GelMA/10SFMA bioinks solution at 37°C and 20°C.

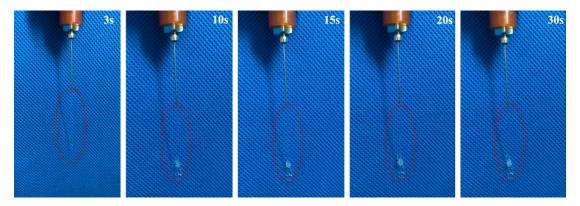


Fig. S3. (A) Continuous extrusion of 5GelMA/10SFMA-M bioink at different time

points.

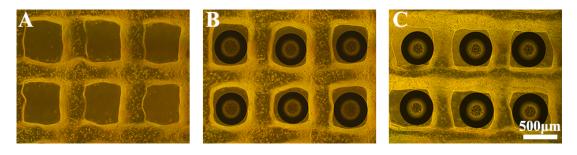


Fig. S4. Photographs of grid structure printed with 5GelMA/10SFMA-M bioink. (A) 2

layers, (B) 4 layers, and (C) 6 layers of the 3D printed 5GelMA/10SFMA-M constructs.