

Supplementary Information

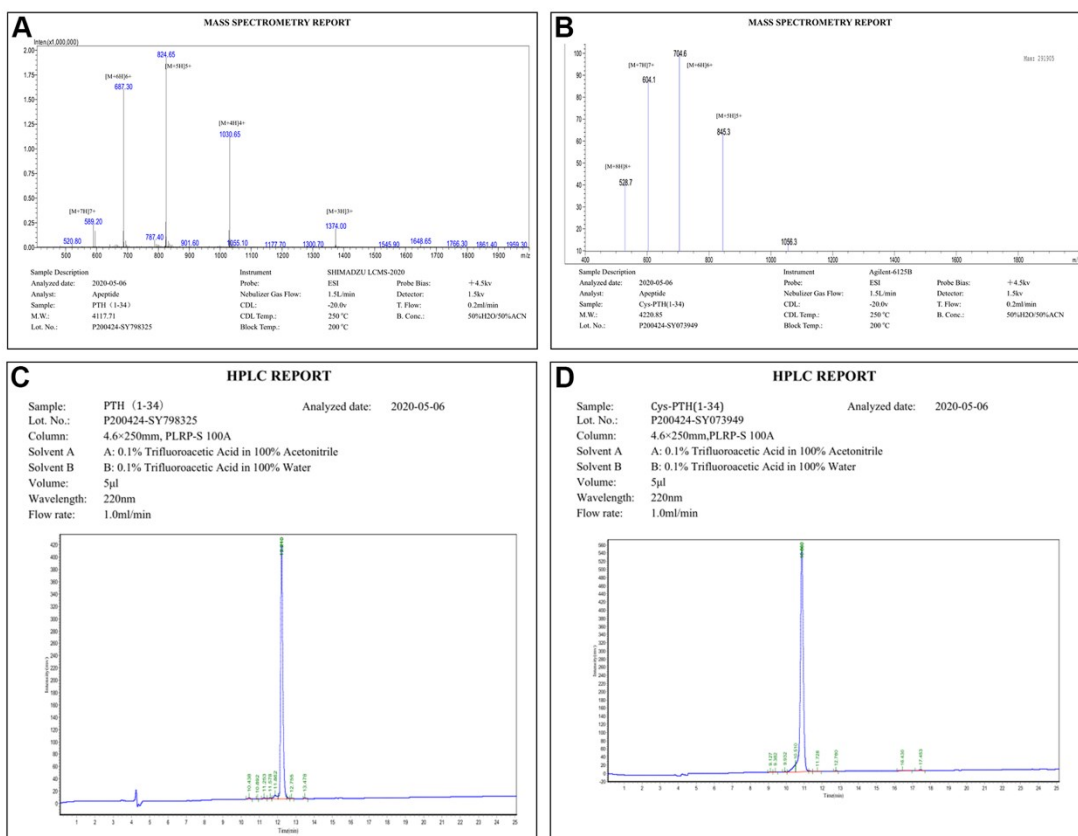


Figure S1 Mass spectrometry and high-performance liquid chromatography reports of PTH (1-34) and Cys-PTH (1-34).

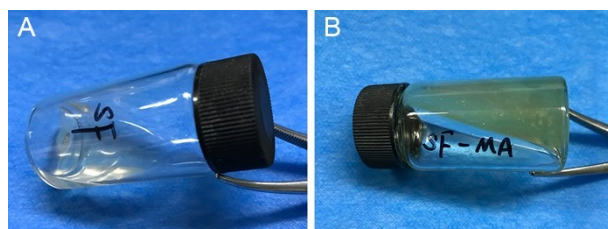


Figure S2 Images of gelation of SF and SF-MA under blue light. A: Unmodified SF solution. B: MA modified SF gel.

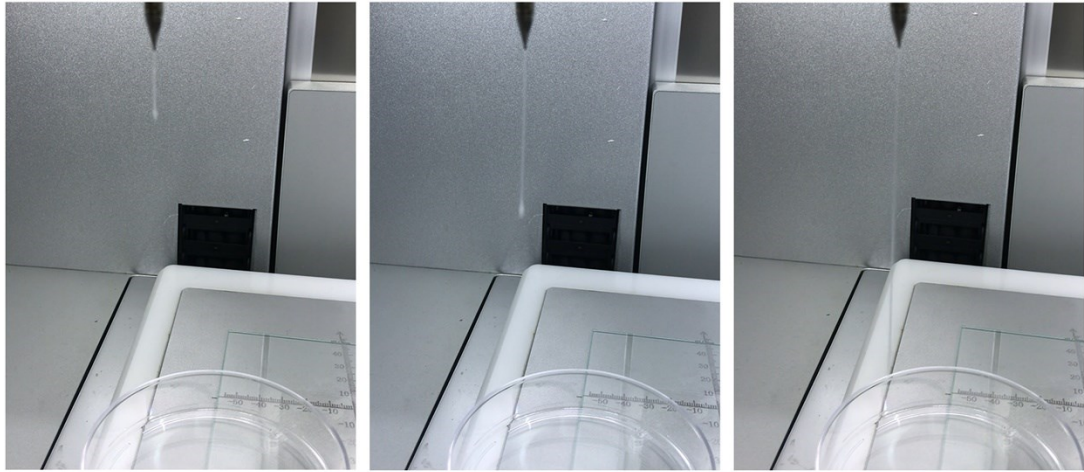


Figure S3 Pictures of the extrusion process of the 10%GM-5%SF composite ink.

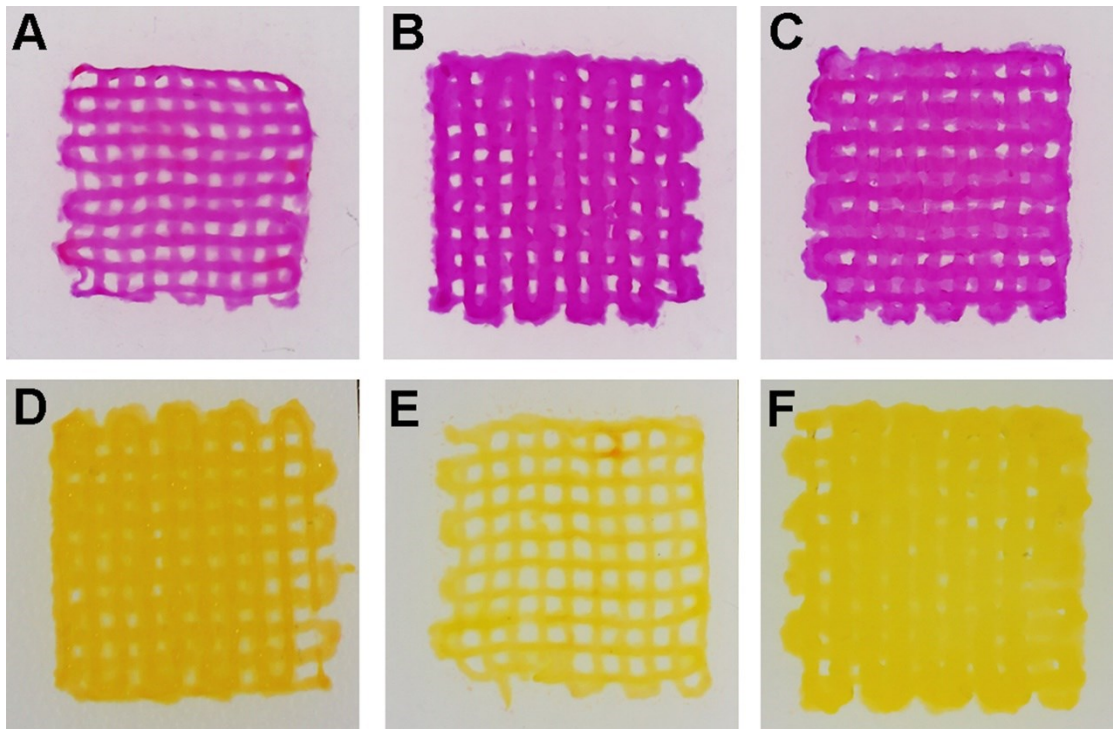


Figure S4 Pictures of the 6 groups of 3D printed scaffolds. A:5%GM ; B:5%GM-5%SF ; C:5%GM-10%SF ; D:10%GM ; E:10%GM-5%SF ; F:10%GM-10%SF.

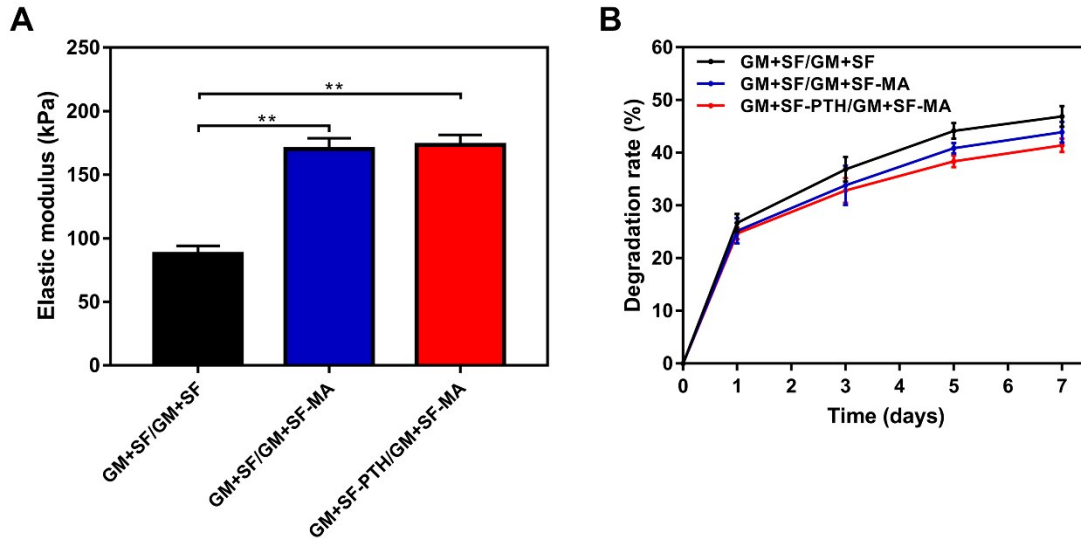


Figure S5 Evaluation of mechanical and degradation properties of the scaffolds. A: Elastic modulus of the scaffolds. B: Degradation rate of the scaffolds. Asterisks indicate significant statistical differences (n = 5; **p < 0.01).

Table S1 Primer sequences of specific genes used in qRT-PCR.

Genes	Primers sequences
Collagen II	F: 5'-CCAAGGGAGAGCAAGGAGAA-3' R: 5'-CCTTTGGGGCCTTCTTTTCC-3'
Aggrecan	F: 5'-GGTTTCTGGAGCCACAAGTG-3' R: 5'-CATCAATGGTCTCAGGCGTG-3'
Collagen X	F: 5'-GGAGTGGGGAAAAGAGGTGA-3' R: 5'-GCCTTTGGTTCCTGGAATCC-3'
MMP13	F: 5'-CTGCCCTCCTCAACAGTAA-3' R: 5'-CCTGTCACCTCTAAGCCGAA-3'
GAPDH	F: 5'-CAAAGTGGATGTTGTCCCA-3' R: 5'-TGGAAGATGGTGTGGCCTT-3'