Electronic Supplementary Material (ESI) for RSC Advances.

Mineralization of calcium phosphate induced by silk fibroin film in different biological conditions

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Supporting information

Table S1. The thickness of MSF and SF formed in different concentrations of silk fibroin.

SF & MSF	**3 %**	**6 %**	**9 %**	**12 %**	**15 %**
Thickness (mm)	0.32	0.55	0.64	0.75	1.03

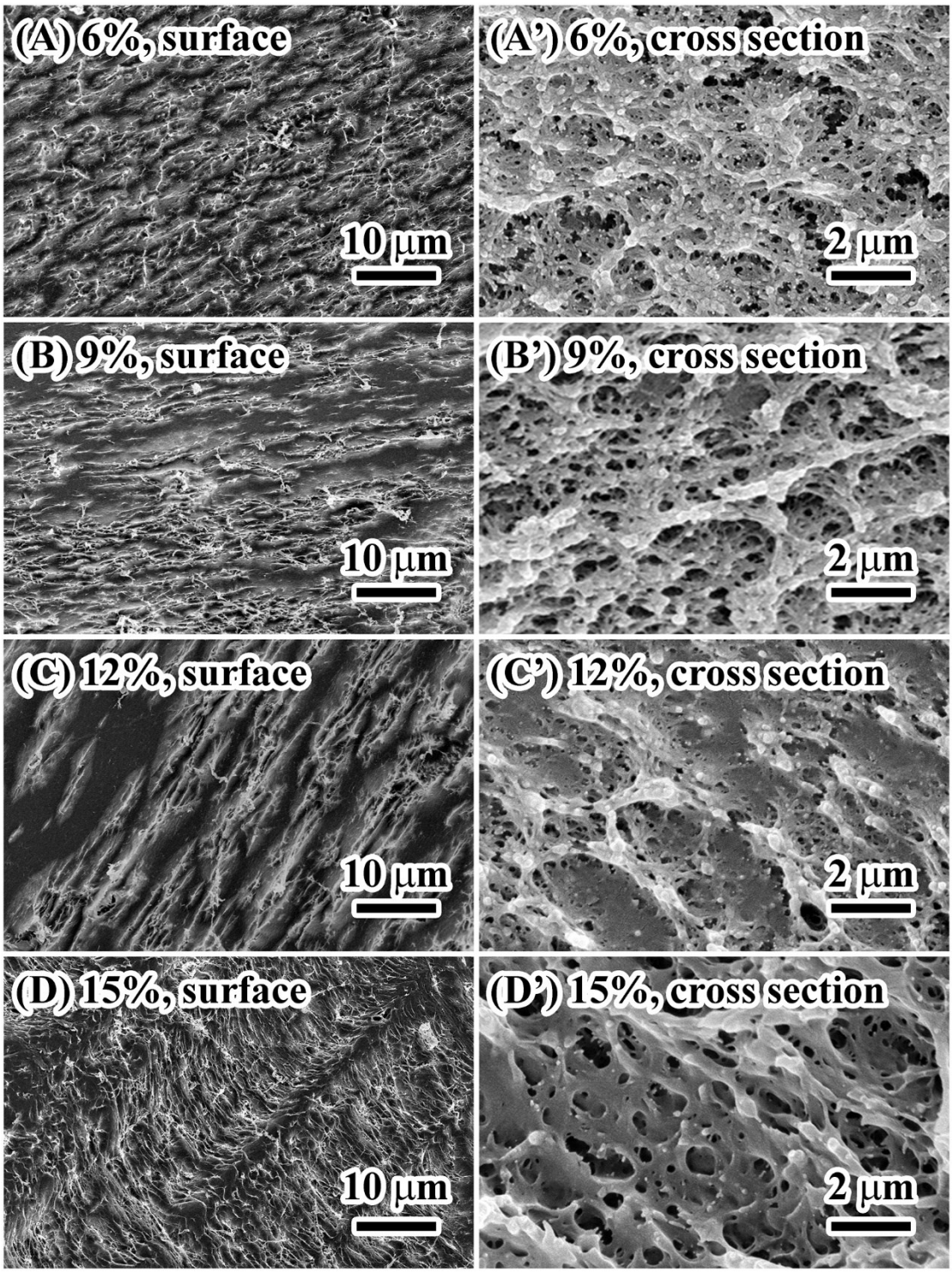

Figure S1. Surface and cross section of SF generated in 6% (A, A'), 9% (B, B'), 12% (C, C'), and 15% (D, D') silk fibroin solutions.

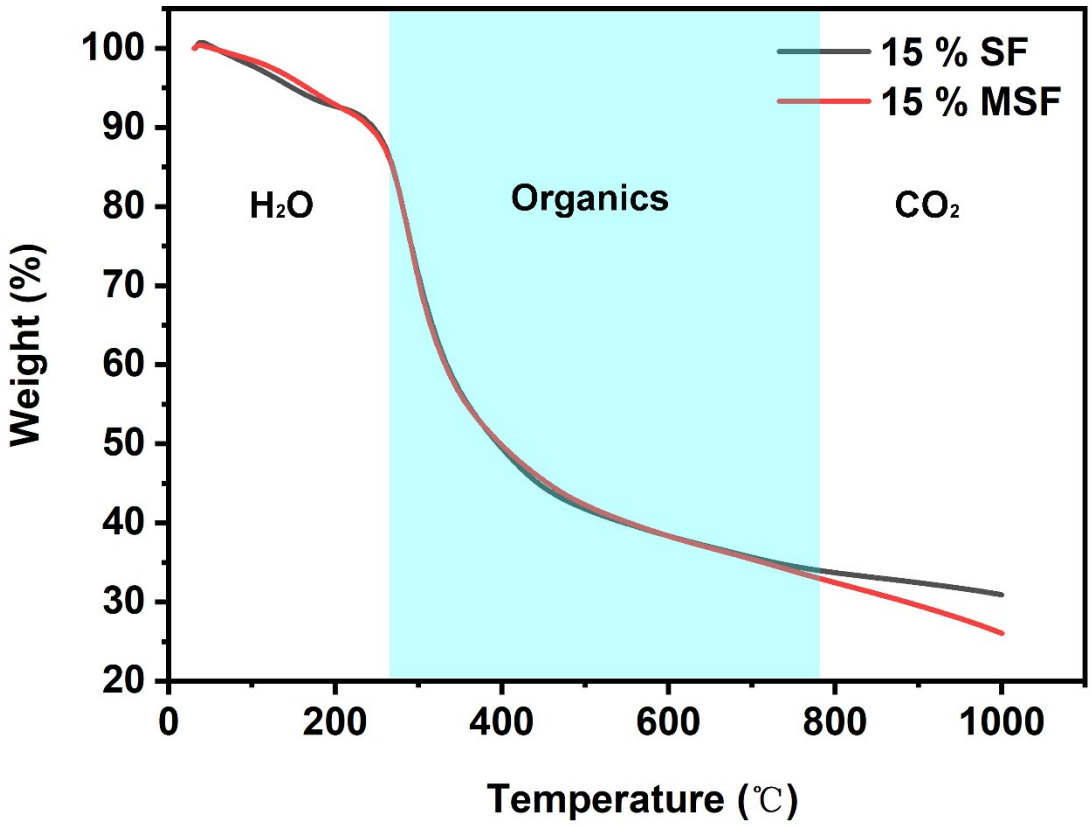

Figure S2. TGA analysis of SF and MSF.

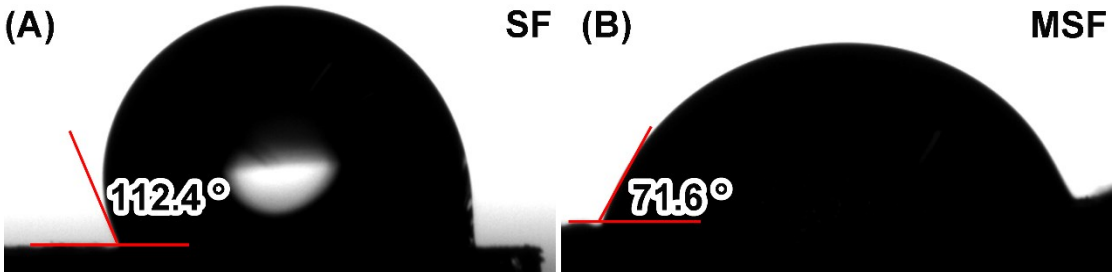

Figure S3. Water contact angles of SF (A) and MSF (B).

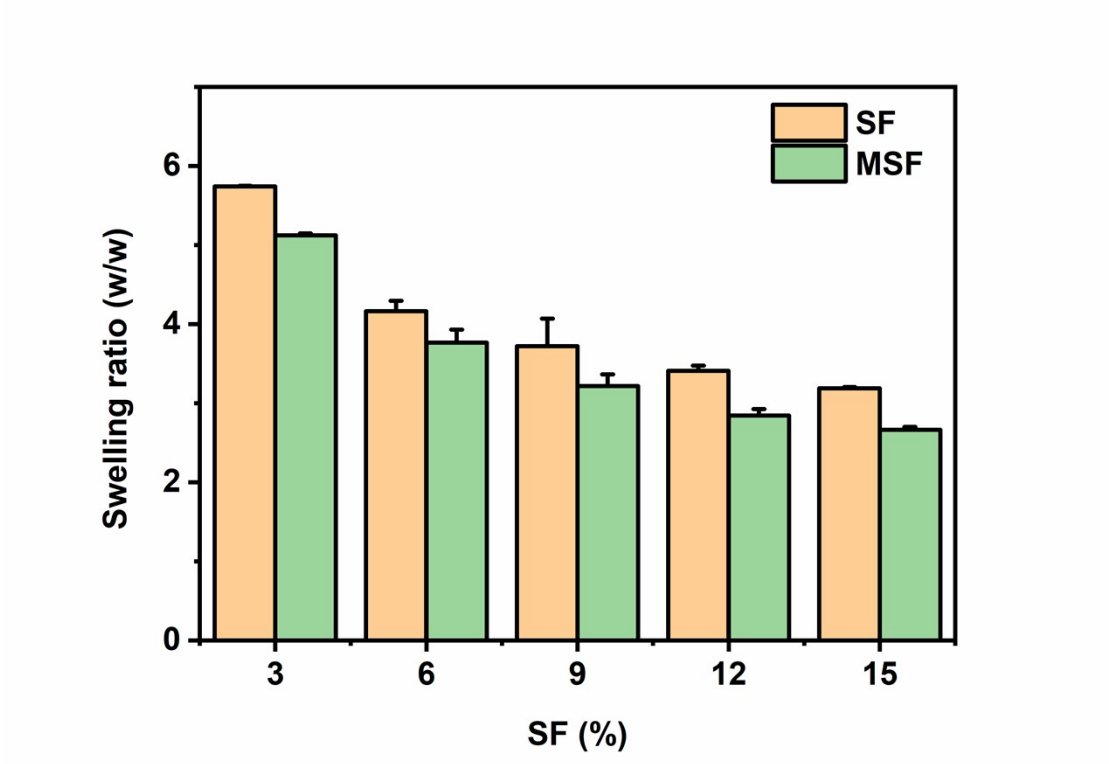

Figure S4. Swelling ratio of SF and MSF with different concentrations of silk fibroin.

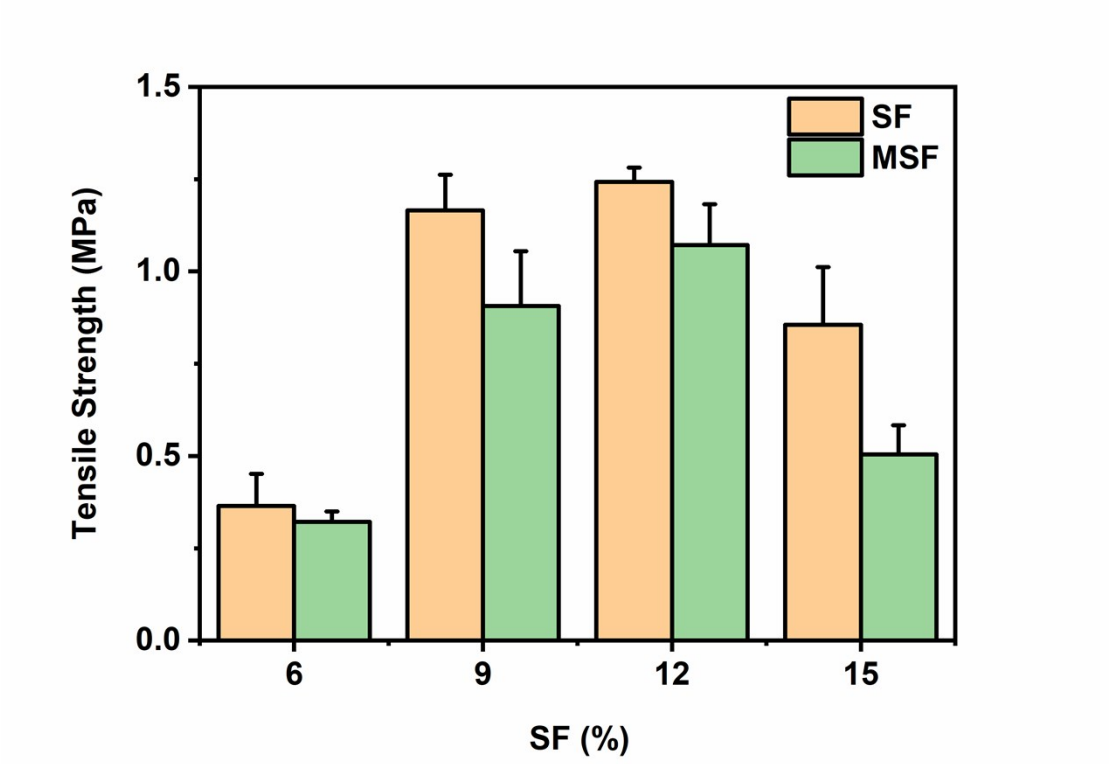

Figure S5. Tensile strength of SF and MSF with different concentrations of silk fibroin.

Table S2. Ca/P ratio of MSF after enzymatic solutions 24 h treatment

	Ca	P	Ca/P
1	20.79	13.28	1.57
2	20.41	13.6	1.50
3	20.24	12.35	1.64
Average			1.57±0.07

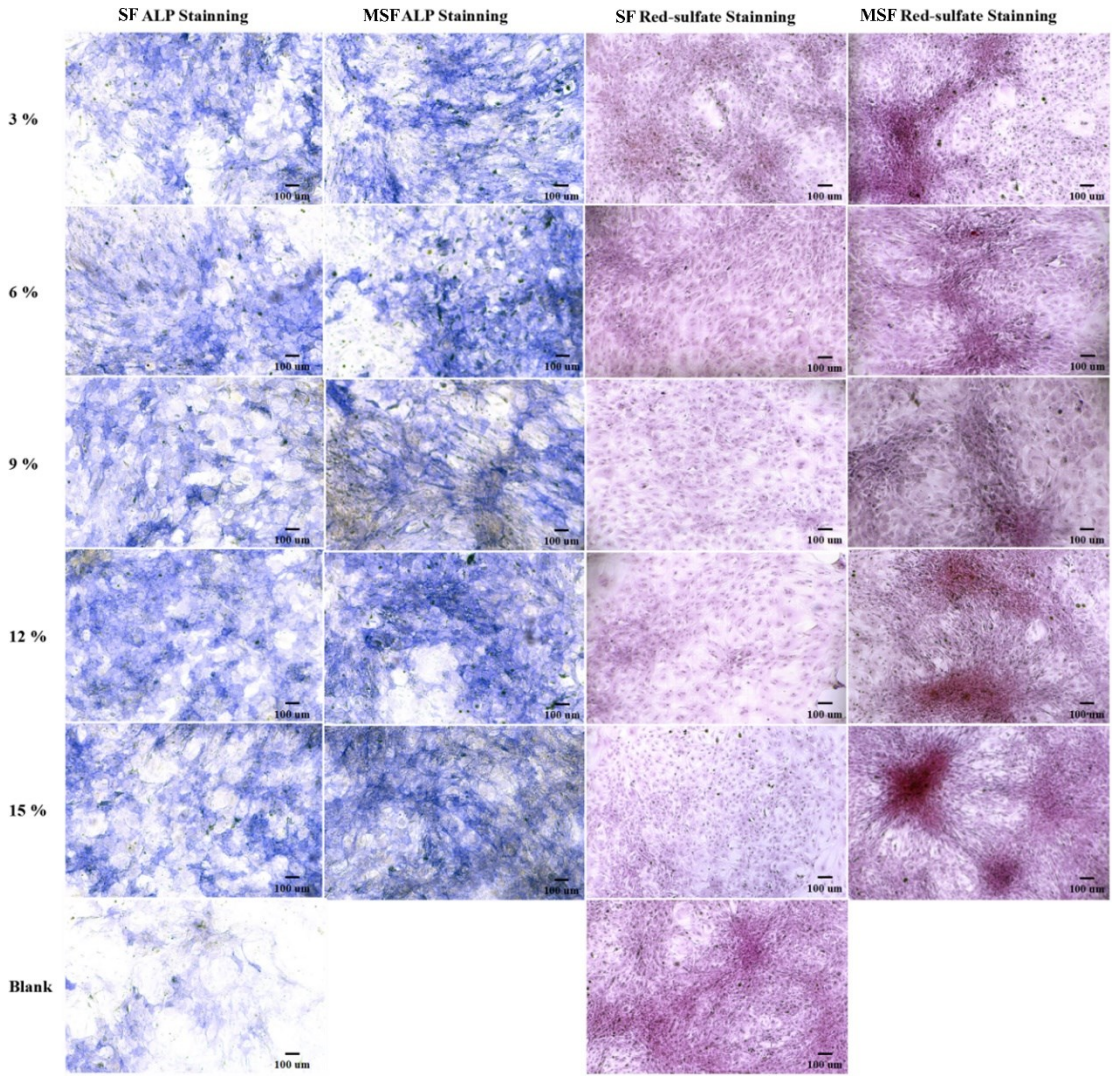

Figure S6. ALP staining and red sulfate staining of osteoblast cultivation with or without silk fibroin films. The concentrations of silk fibroin used for generating silk fibroin films are shown in the left row. Blank indicates cells growing without addition of silk fibroin films.