Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

Supporting Information

Table S1. Compositions of SF-Mel modified PCL nanofiber films

Terms	$W_{SF\text{-}Mel}$ (g)	W_{PCL} (g)	V_{HFIP} (mL)	C_{MASS} (m/v)%	$W_{SF\text{-}Mel}$:W_{PCL} (g:g)
PSNF-0	0.00	12.00	100	12	0:100
PSNF-10	1.09	9.81	100	10.90	10:99
PSNF-20	2.00	8.00	100	10.00	20:80
PSNF-30	2.77	6.46	100	9.23	30:70

Table S2. Viscosity of electrospinning precursor solution

Terms	C_{Mass} (m/v)%	V_{HFIP} (mL)	η (mPa·s)
PSNF-0	10	40	277.5~297.5
PSNF-10	10	40	255~257.5
PSNF-20	10	40	205~215
PSNF-30	10	40	177.5~185
Pure SF-Mel	10	40	43.5~45.5

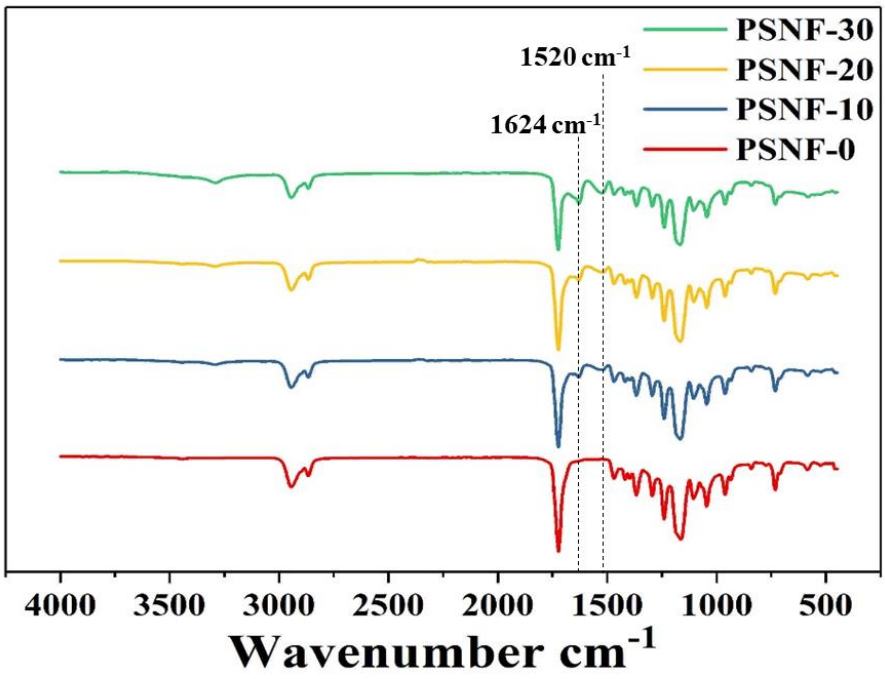

Figure S1. FT-IR spectrums of PSNFs. The typical peaks of amide I and amide II were present and located at 1624 and 1520 cm^{-1} to verify the formation of β-sheet structure of the silk fibroin segments in PSNFs.

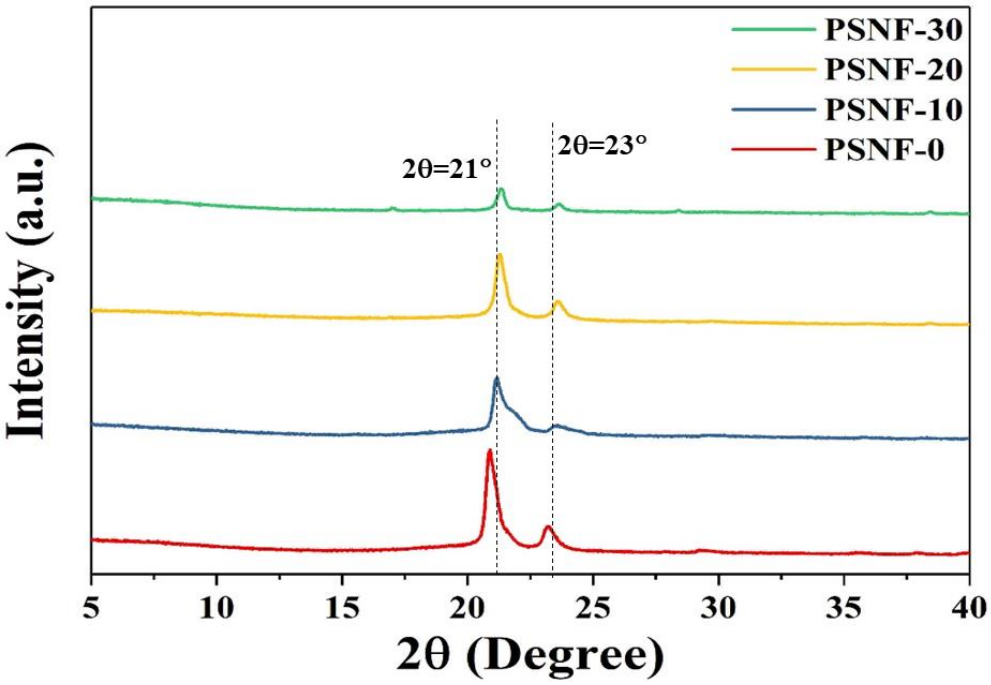

Figure S2. XRD spectrums of PSNFs. Two stronger peaks (2θ=21°, 23°) were the characteristic peaks of PCL to denote the scattering of the crystalline region (110) and the amorphous region (200). With the increase of SF-Mel content, two peaks exhibited a significant decline.

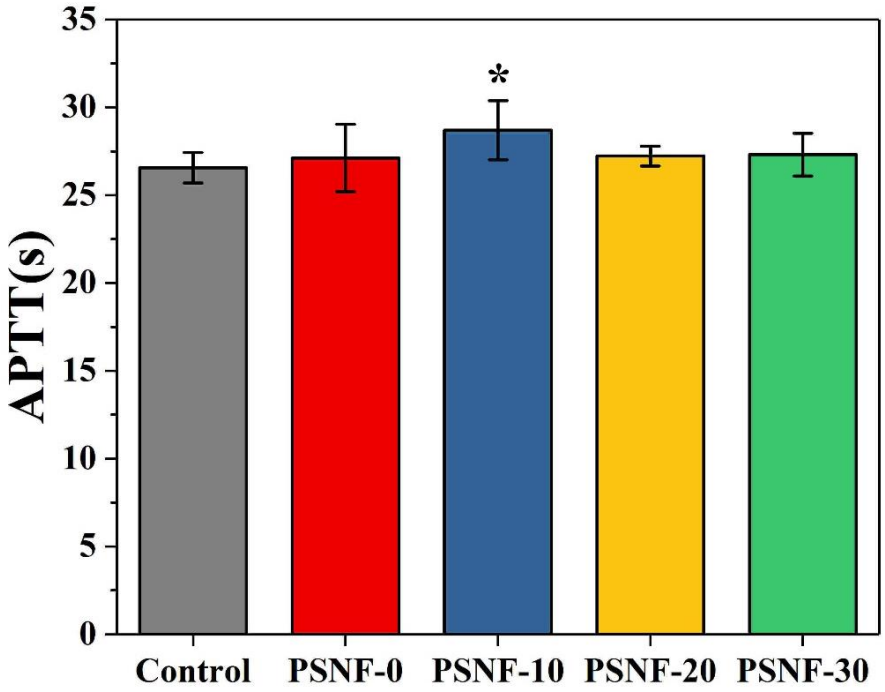

Figure S3. Analysis of activated partial thromboplastin time (APTT). The APTT values increased slightly after incubation with PSNFs. The group of PSNF-10 showed a significant difference in comparison with the control group (*$p<0.05$).