

Supplementary material:

Ca²⁺-induced Self-Assembly of *Bombyx mori* Silk Sericin into A Nanofibrous Network-like Protein Matrix for Directing controlled nucleation of Hydroxylapatite Nano-Needles

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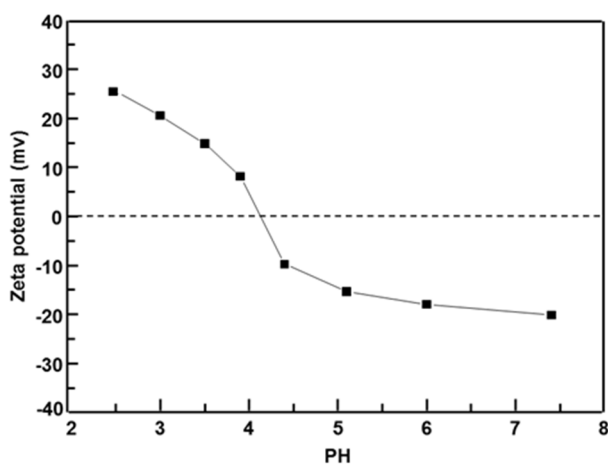


Figure S1. Zeta potential as a function of the pH values for aqueous *BS* solution at 0.01 M ionic strength (1 mM KCl). The intersection of the horizontal dotted line with the curves depicts the isoelectric point of *BS*.

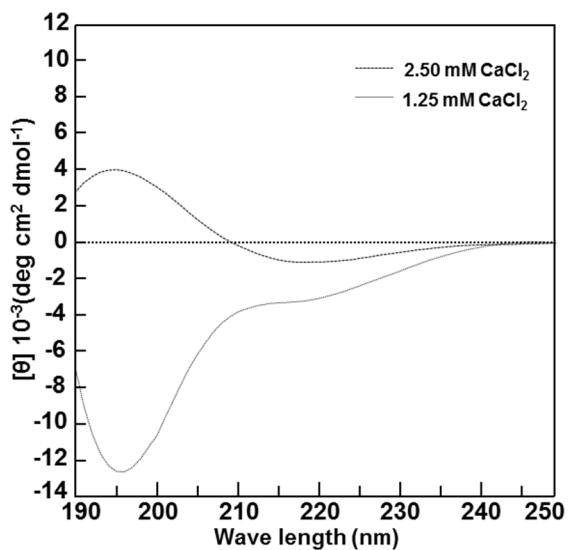


Figure S2. CD spectra of aqueous *BS* solution incubated by CaCl₂ with concentration ranged from 1.25 mM to 2.50 mM for 1 day.

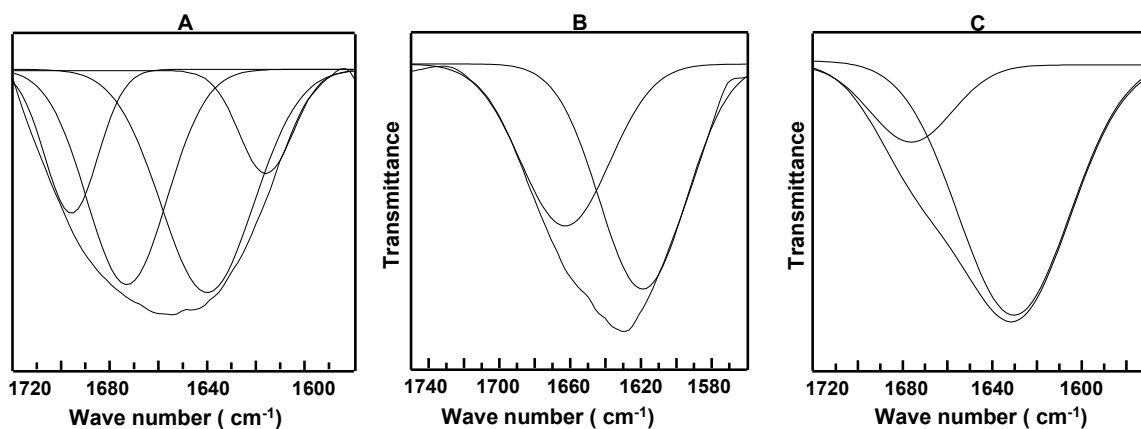


Figure S3. The deconvoluted spectra in the amide I region of *BS* before (A) and after mineralized for 3 days (B) and 5 days (C).

Table S1 The deconvoluted peaks in the amide I region of *BS*, *BS*₃ and *BS*₅.

	Peak (cm ⁻¹)	Secondary structure	Fraction (%)
<i>BS</i>	1694	β-turn	15
	1674	β-turn	35
	1640	random coil	40
	1616	β-sheet	10
<i>BS</i>₃	1663	β-turn	45
	1619	β-sheet	55
<i>BS</i>₅	1676	β-turn	20
	1630	β-sheet	80