

***In situ* forming silk-gelatin hybrid hydrogels for affinity-based growth factor sequestration and release**

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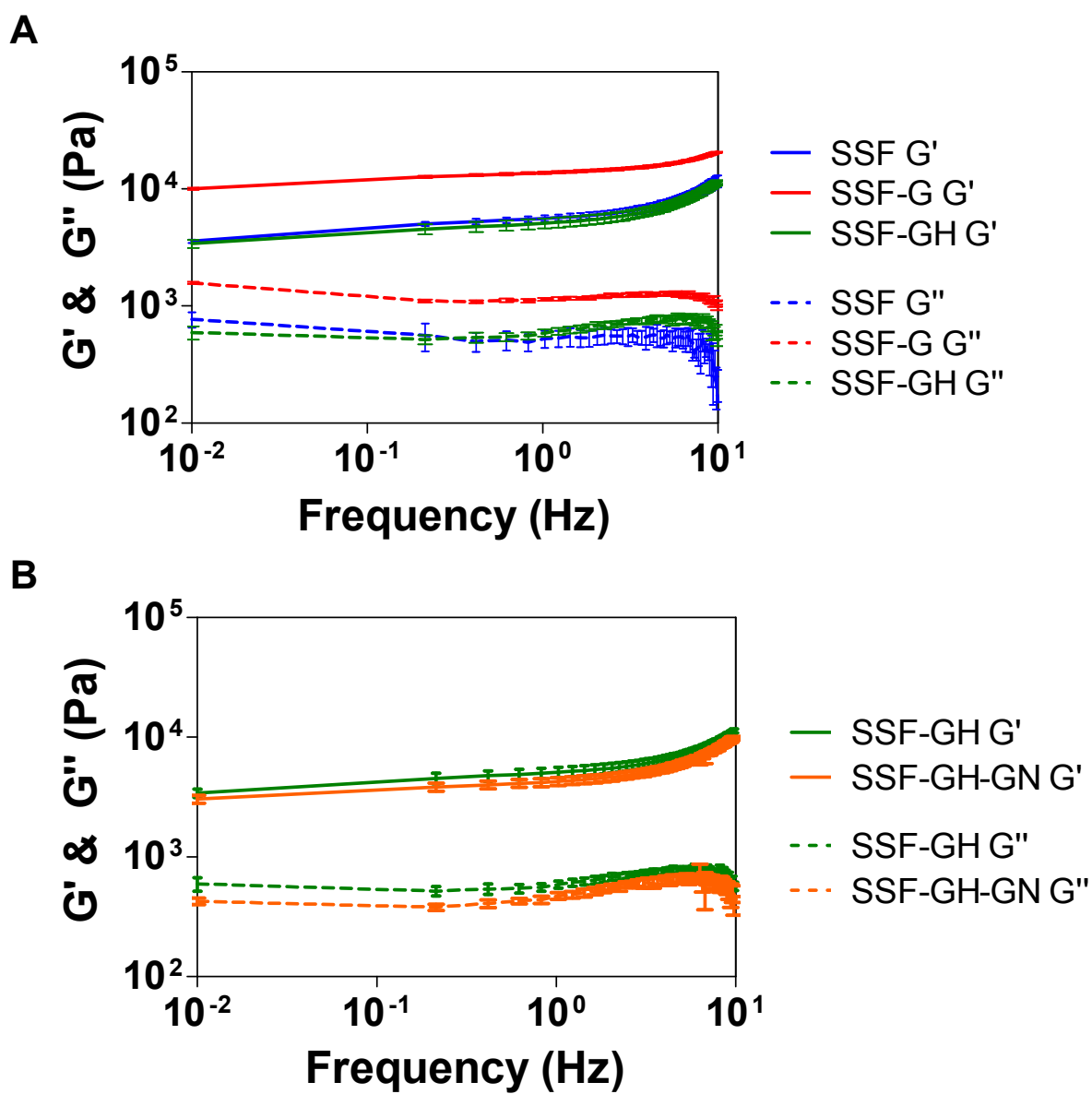
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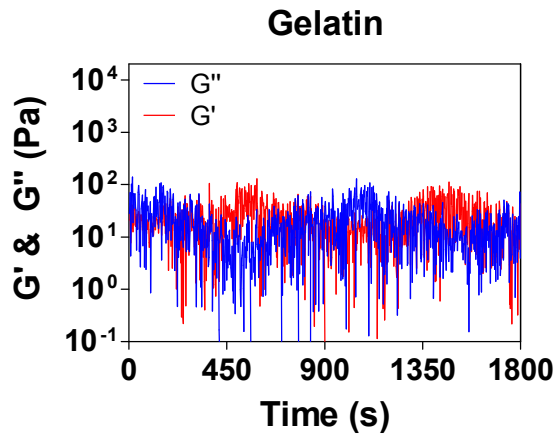
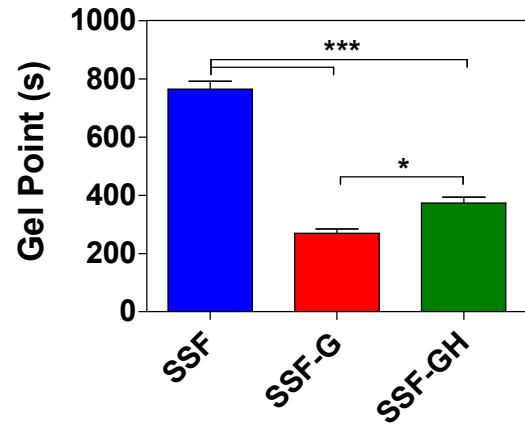
(Supplementary information)

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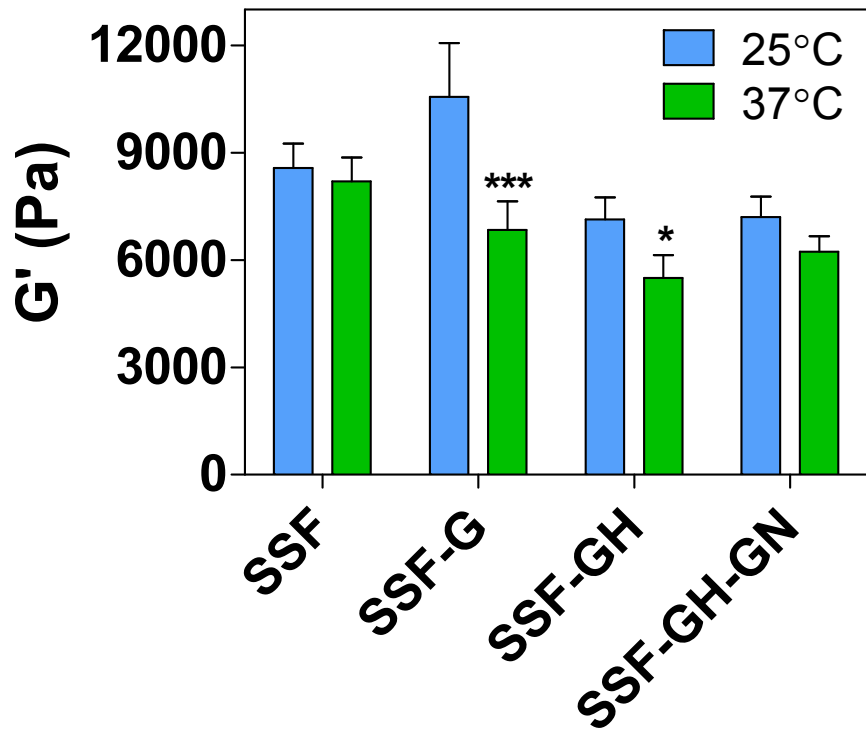
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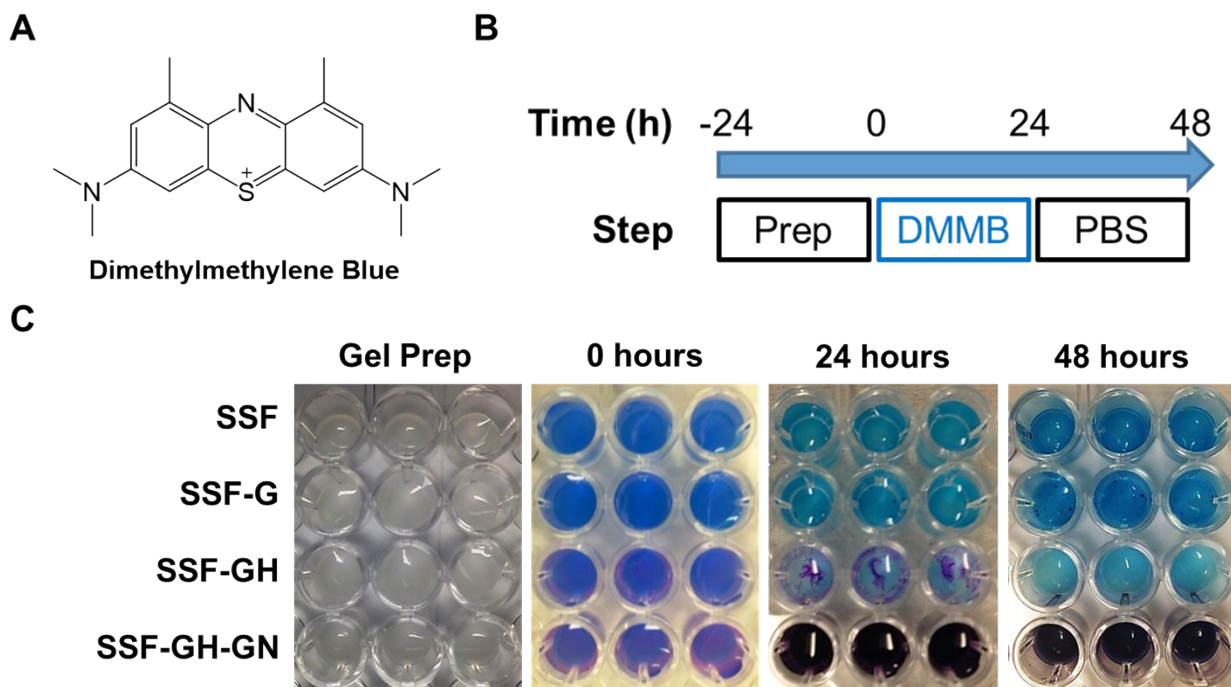
**Figure S1.** (A) Frequency dependence of storage ( $G'$ ) and loss moduli ( $G''$ ) for silk fibroin-gelatin hydrogels (A) and the effect of genipin crosslinking on gel frequency response (B).

**A****B**

**Figure S2.** *In situ* rheometry of gelatin (A) and (B) gel points of the three physical hydrogels. Gel point data represent Mean  $\pm$  SEM; \* $p < 0.05$ , \*\*\* $p < 0.0001$ .



**Figure S3.** Effect of temperature on shear modulus ( $G'$ ) of silk fibroin-gelatin physical gels. Data represent Mean  $\pm$  SEM of three independent experiments for each condition; \* $p < 0.05$ ; \*\*\* $p < 0.0001$ . Statistics shown compare between temperatures within each group.



**Figure S4.** (A) Chemical structure of dimethyl methylene blue (DMMB) (B) Schematic of qualitative DMMB assay procedure (C) DMMB assay images to verify heparin immobilization within hydrogels. All gels contained 3wt% SSF and/or 3wt% G/GH. SSF-GH-GN gels included an additional 0.1 wt% genipin.