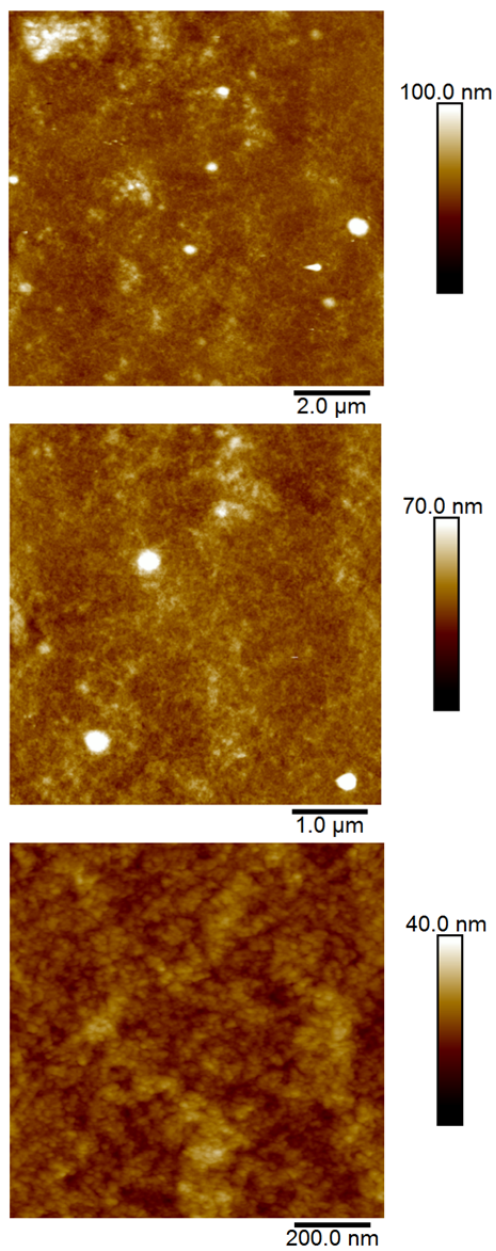


## Supporting Information

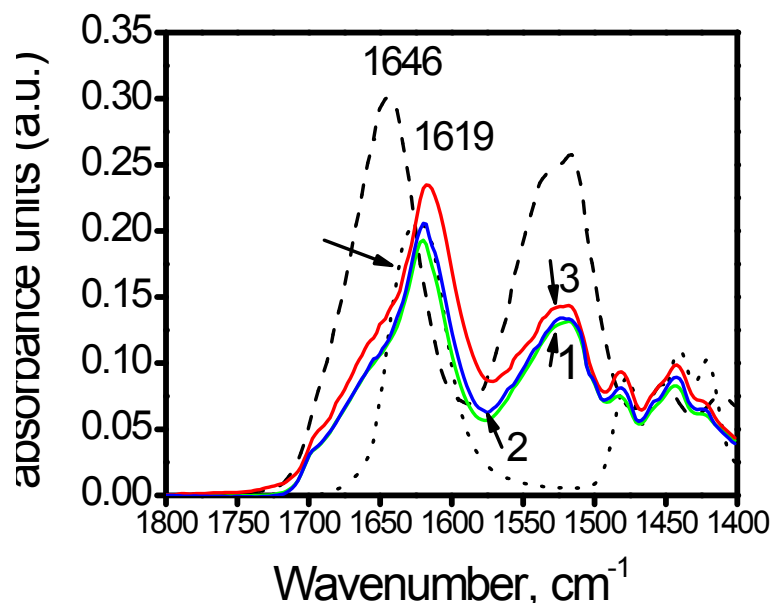
Tuning Assembly and Enzymatic Degradation of Silk/Poly(N-vinylcaprolactam) Multilayers via  
Molecular Weight and Hydrophobicity

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**Figure S1.** AFM height images of spin-assisted (silk)<sub>10</sub> film taken at 10 (top), 5 (middle), and 1 μm<sup>2</sup> (bottom) areas.



**Figure S2.** ATR-FTIR spectra of (SF/PVCL-80)<sub>10</sub> capsules prepared at pH=6 and freeze-dried (1) on the day of preparation, and after storage for (2) 3 days, and (3) 9 days in solution, and analyzed using ATR-FTIR spectroscopy. The spectra of pristine freeze-dried silk fibroin (dashed) and PVCL (dotted) have the vibrational bands centered at 1646 cm<sup>-1</sup> (corresponding to silk amide band) and at 1626 cm<sup>-1</sup> corresponding to PVCL carbonyl group.