Electronic Supplementary information

## The self-assembly of the peptide amphiphile based on hydrolysed *Bombyx mori* silk fibroin

## Ruiwen Hao, Jinming Zhang, Tao Xu, Lei Huang, Jinrong Yao, Xin Chen, and Zhengzhong Shao\*

State Key Laboratory of Molecule Engineering of Polymers, Laboratory of Advanced Materials and Department of Macromolecular Science, Fudan University, 220 Handan Road, Shanghai, 200433, People's Republic of China.

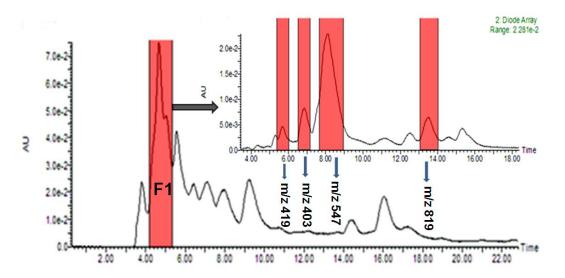


Fig. S1 Preparative HPLC chromatograms of the silk fibroin hydrolysis products (the insert is the second time of corresponding preparative HPLC chromatogram of the F1)

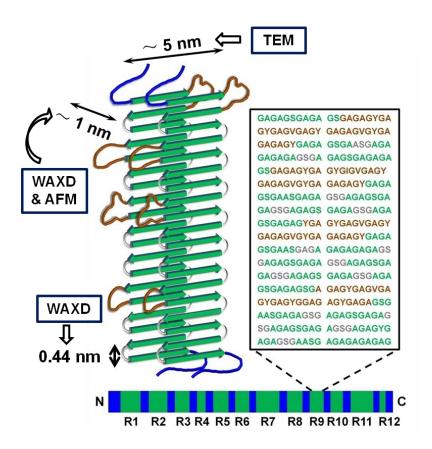


Fig. S2 Tentative structural model for the molecular arrangement of the ninth crystalline domain with repetitive sequence (R9) in a cross- $\beta$  fibril of SF, Sub-domain containing GAGAGS (green) and GAGAGY (brown), as well as nonrepetitive sequence with charged residues (blue).