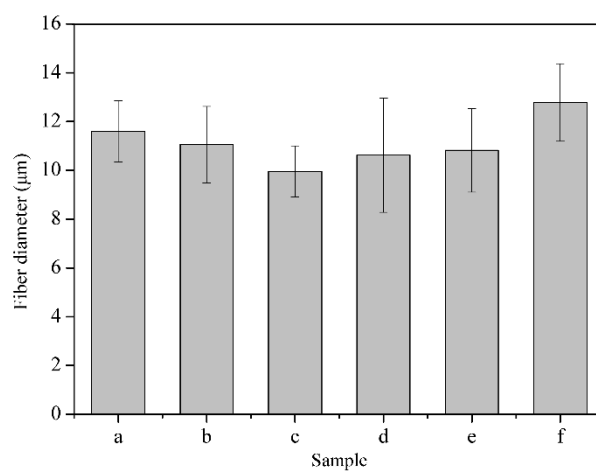


## Supplementary materials



**Figure S1.** The diameters of degummed silk fibers and raw silk. **(a)** subtilisin-silk; **(b)** trypsin-silk; **(c)** bromelain-silk; **(d)** papain-silk; **(e)** Na<sub>2</sub>CO<sub>3</sub>-silk; **(f)** raw silk.