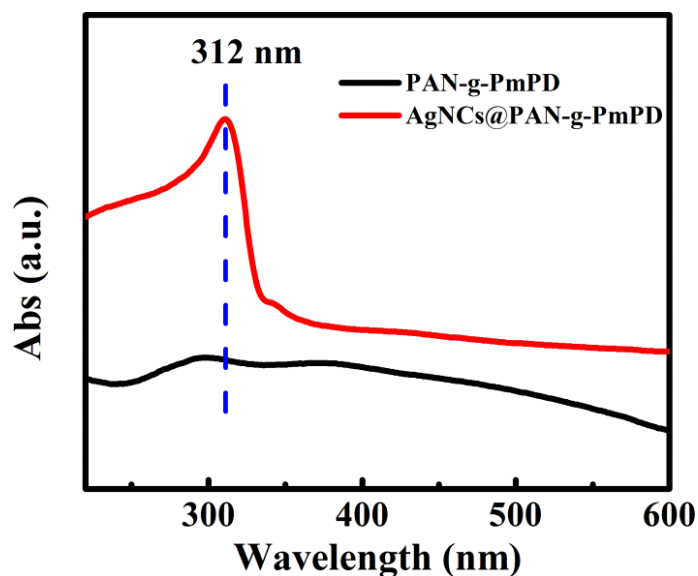


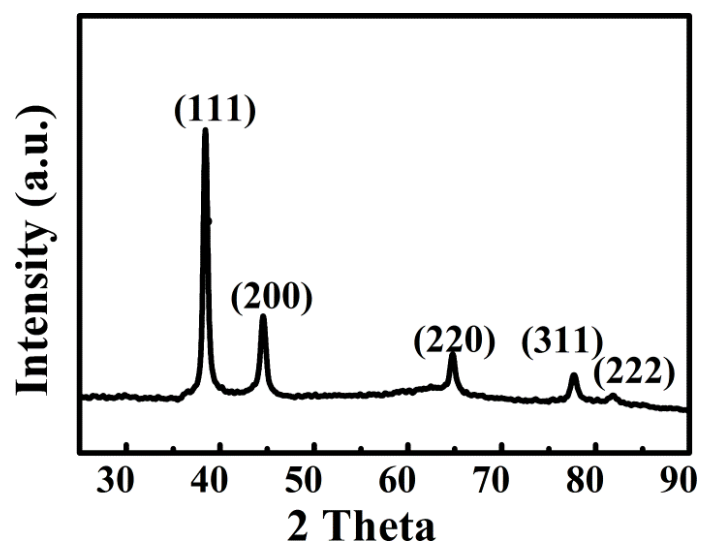
## Supplementary Information

### Controlled growth of polyhedral and plate-like Ag nanocrystals on nanofiber mat as SERS substrates

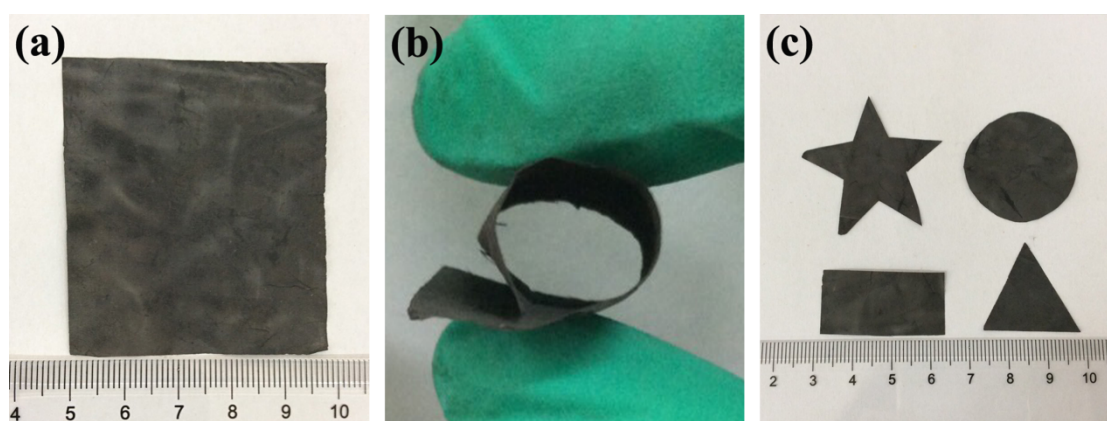
*Peng Jia, Jin Qu, Bing Cao, Yuxuan Liu, Chao Luo, Junhu An, Kai Pan\**



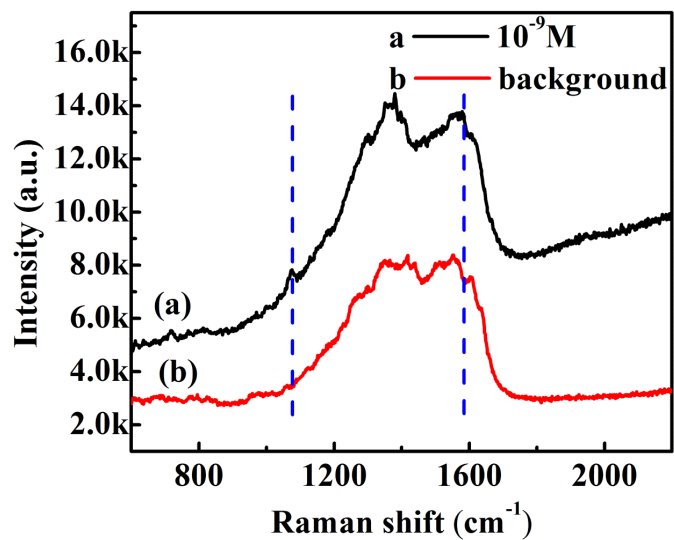
**Figure S1.** UV-Vis spectra of the PAN-g-PmPD nanofiber and the AgNCs@PAN-g-PmPD nanofiber .



**Figure S2.** XRD pattern of AgNCs@PAN-g-PmPD nanofiber which was prepared at the condition of pH=10.7, T=60 °C, c=10 g/L.



**Figure S3.** The photograph of the AgNCs@PAN-g-PmPD nanofiber mat (a) which was folded into a hollow cylinder (b) and tailored into several pieces with any desired shape (c).



**Figure S4.** (a) SERS spectra of  $10^{-9}$  M 4-MBA adsorbed on the AgNCs@PAN-g-PmPD nanofiber mat ( $T=60$  °C,  $pH=10.74$ ,  $c=10$  g/L). (b) SERS spectra of the pure AgNCs@PAN-g-PmPD nanofiber mat