

## **Electronic Supplementary Information (ESI)**

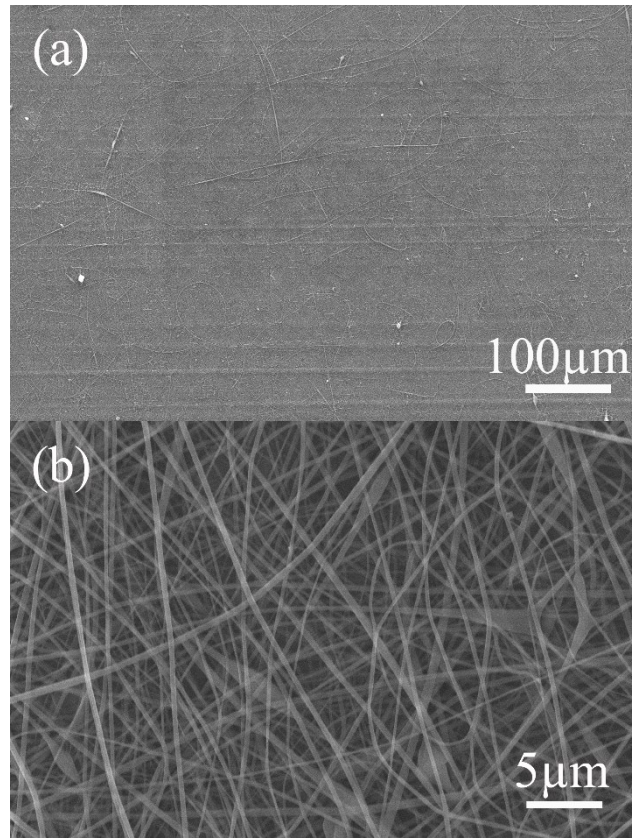
### **Electrospun Flexible Poly(Bisphenol A Carbonate) Nanofibers Decorated with Ag Nanoparticles as Effective 3D SERS Substrates for Trace TNT Detection**

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Wang\*

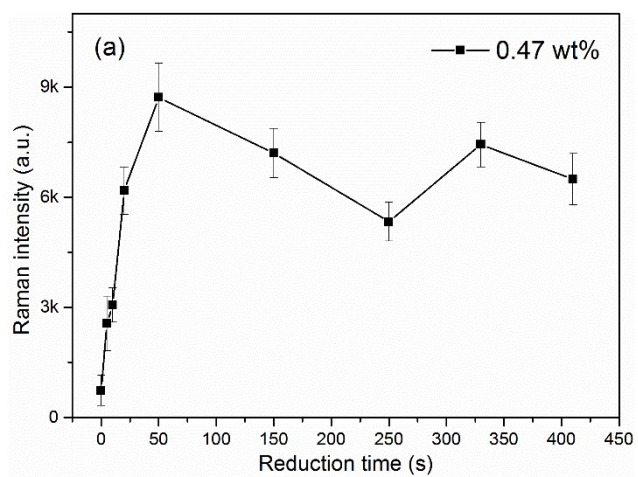
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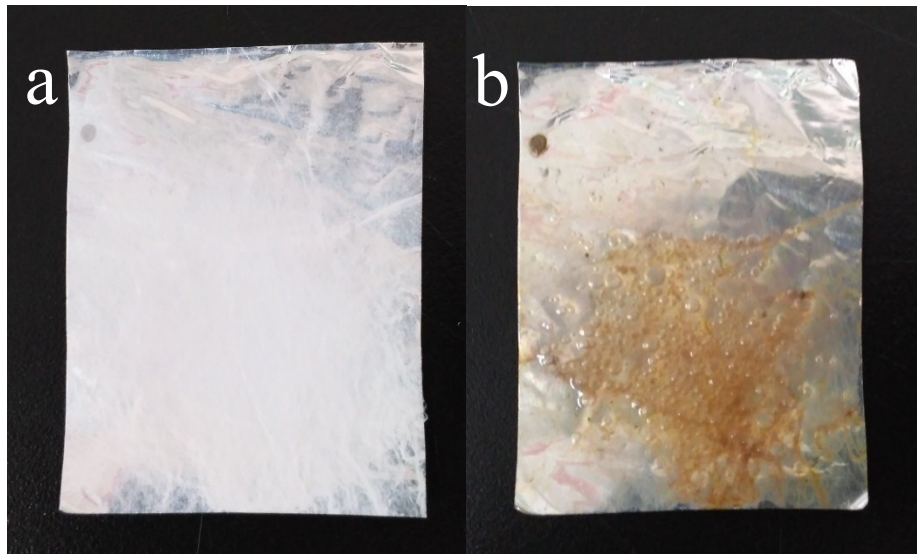
\*E-mail: [wanglj@mail.njust.edu.cn](mailto:wanglj@mail.njust.edu.cn)



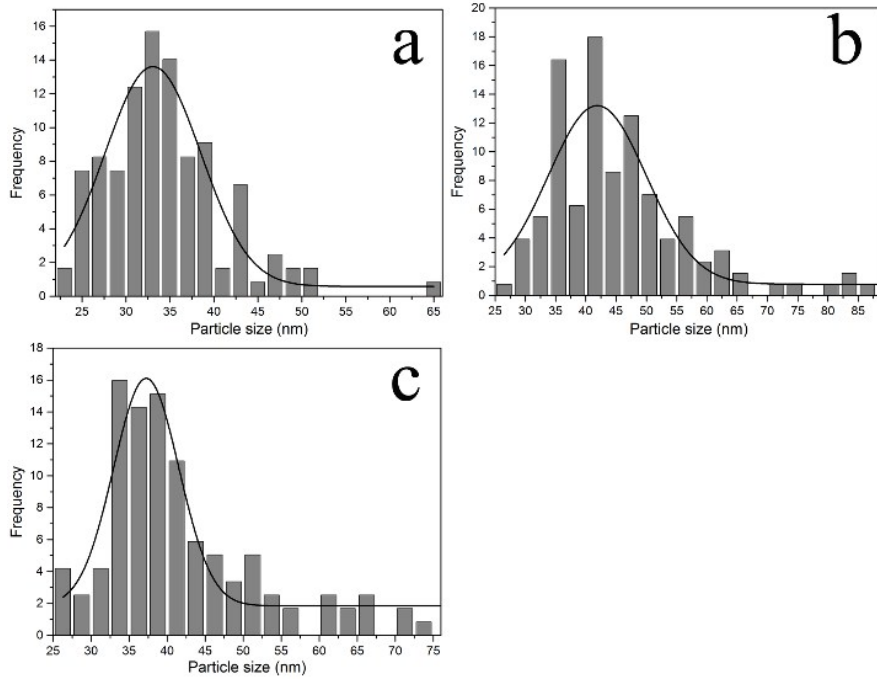
**Fig. S1.** SEM images of pure PC nanofiber membrane (14 wt% PC): (a) 500×magnification; (b)10000×magnification.



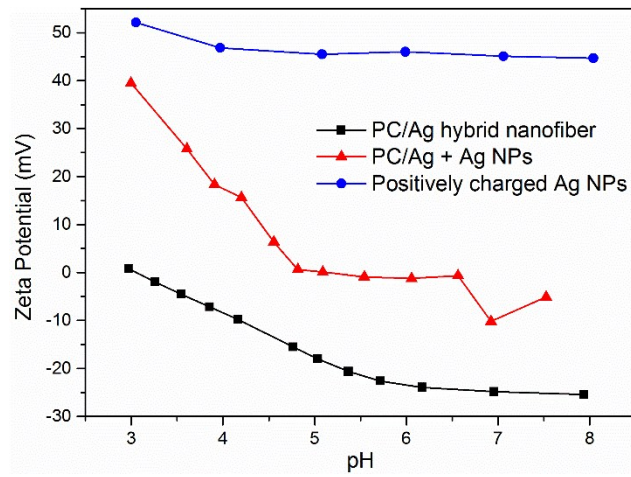
**Fig. S2.** Peak Intensity of  $10^{-6}$  M 4-ATP recorded on hybrid substrate with different chemical reduction time (0.47 wt%  $\text{AgNO}_3$  content).



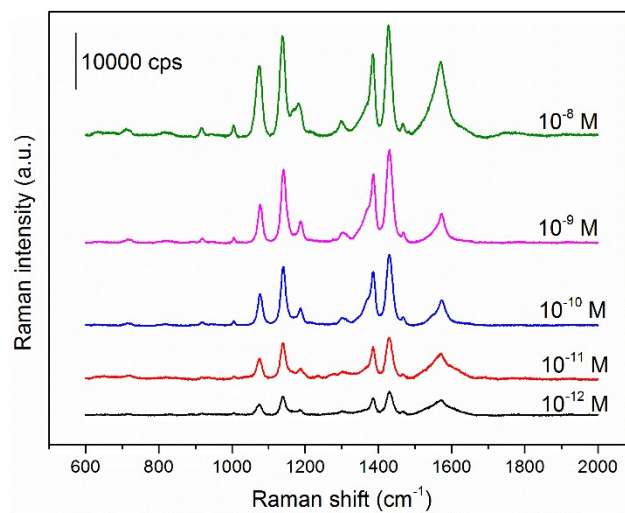
**Fig. S3.** Optical photograph of PC/Ag hybrid substrate: (a) before reduction; (b) 410 s chemical reduction.



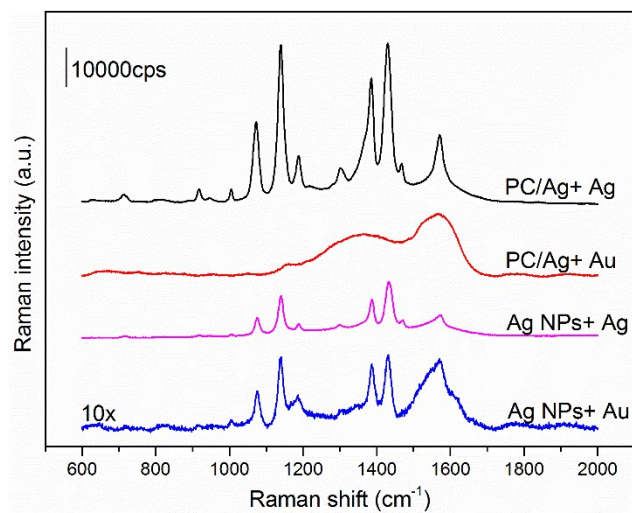
**Fig. S4.** Particle size distributions for sample b) 30 s, c) 60 s and d) 120 s shown in Fig. 5.



**Fig. S5.** Zeta potential of positively charged Ag NPs, PC/Ag hybrid nanofiber and PC/Ag+Ag substrate.



**Fig. S6.** SERS spectra of different concentrations of TNT collected on the PC/Ag+Ag substrate.



**Fig. S7.** Raman spectrum of  $10^{-6}$  M TNT on different substrates.