

# Supporting Information

## **Facile synthesis of biocompatible silver nanoparticle derived tripeptide supramolecular hydrogel for antibacterial wound dressings**

Turibius Simon, Chung-Shu Wu, Jie-Chuan Liang, Chieh Cheng, and Fu-Hsiang Ko\*

Department of Materials Science and Engineering, National Chiao Tung University,

Hsinchu 300, Taiwan.

\*Corresponding Author: Prof. Fu-Hsiang Ko

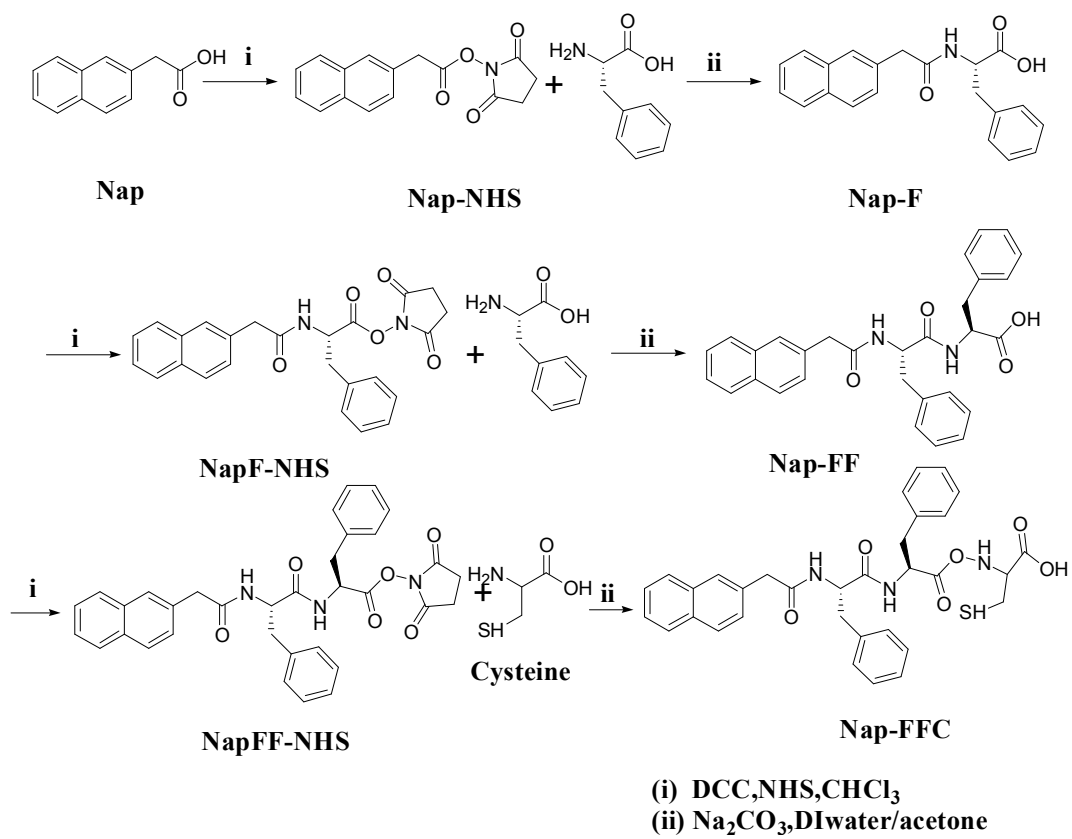
Department of Materials Science and Engineering

Institute of Nanotechnology

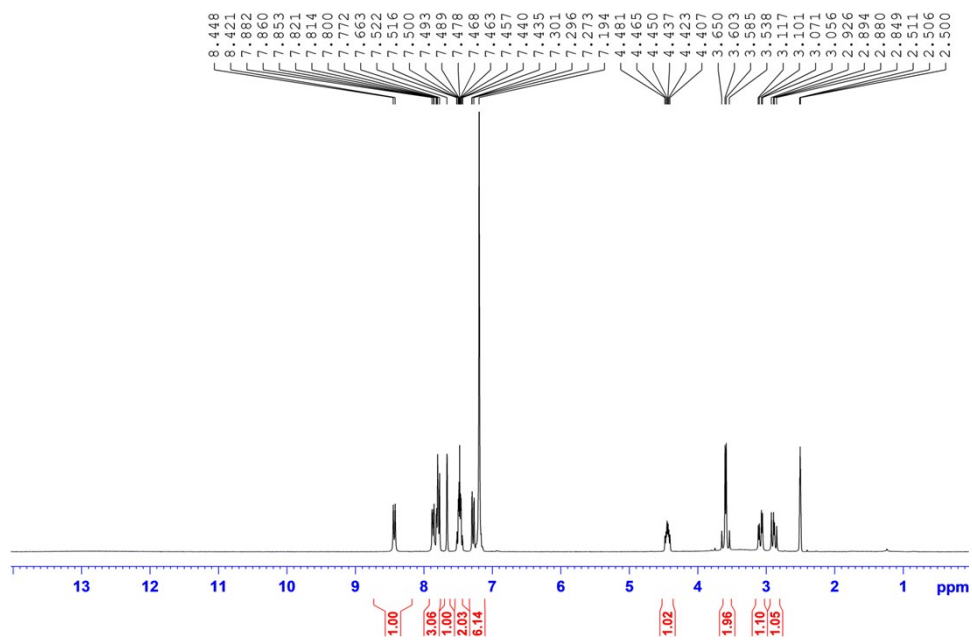
1001 Ta Hsueh Road, Hsinchu, Taiwan 30050

Tel: 886-35712121 ext 55803, Fax: 886-35724727

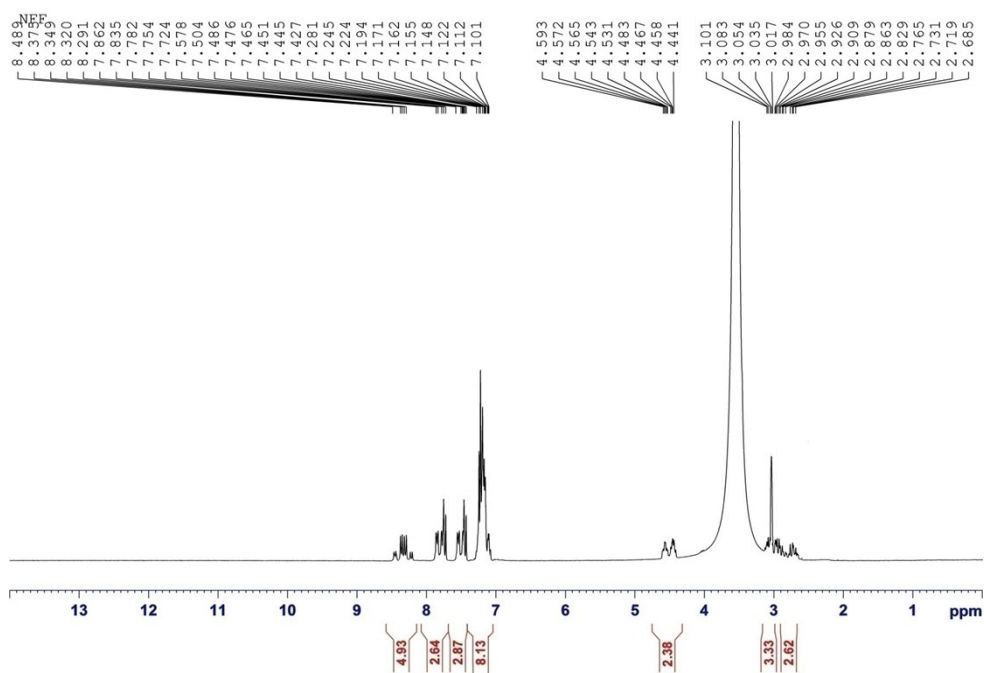
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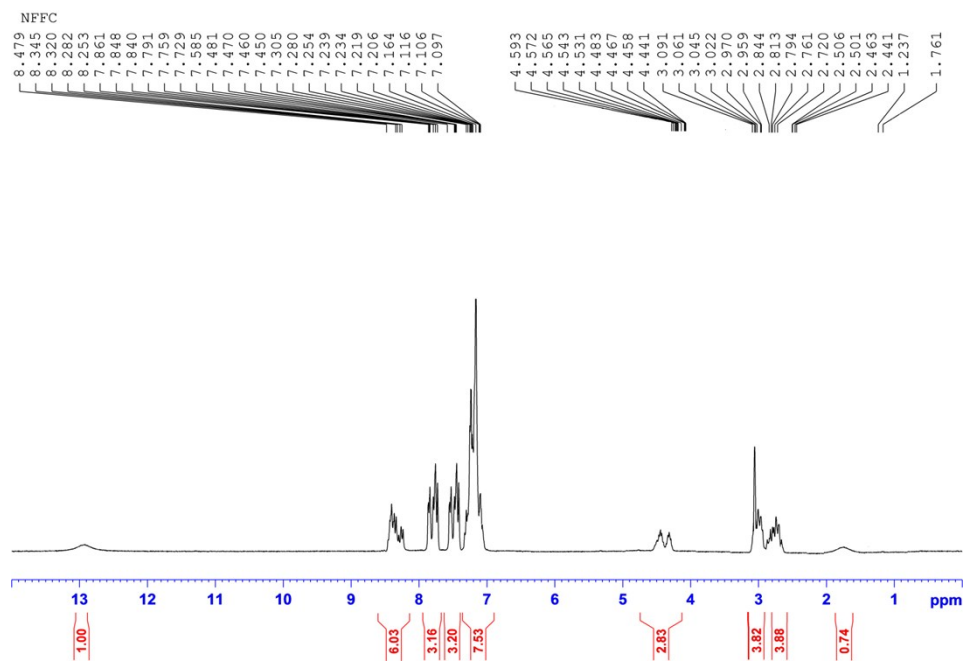
**Fig. S1.** The overall flow chart of Nap-FFC synthesis



**Fig. S2.** <sup>1</sup>H NMR (300MHz) spectra of Nap-F peptide.



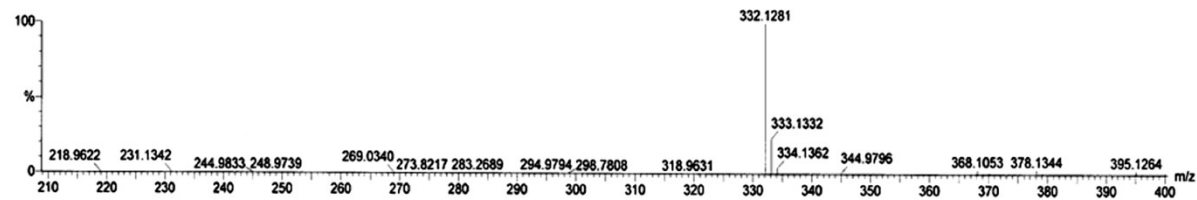
**Fig. S3.**  $^1\text{H}$  NMR (300MHz) spectra of Nap-FF peptide.



**Fig. S4.**  $^1\text{H}$  NMR (300MHz) spectra of Nap-FFC peptide.

C: 0-1000 H: 0-1000 N: 1-1 O: 3-3  
aa:700

0820\_aa:700\_2 13 (1.327)



Minimum: -1.5  
Maximum: 5.0 100.0 1000.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	i-FIT (Norm)	Formula
332.1281	332.1287	-0.6	-1.8	13.5	38.5	0.0	C21 H18 N O3

**Fig. S5.** High Resolution mass analysis [HRMS] of Nap-F peptide.

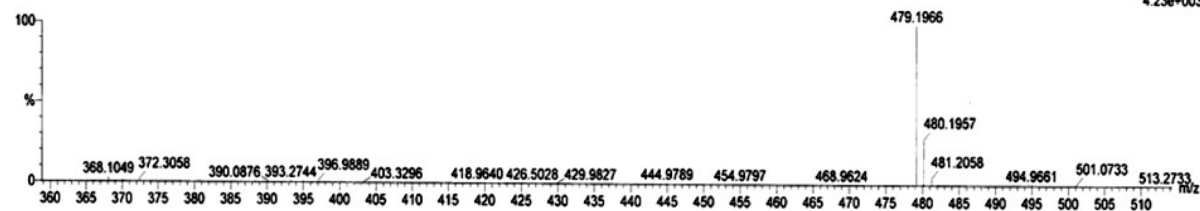
C: 0-1000 H: 0-1000 N: 2-2 O: 4-4

aa1-701

KE267

20-Aug-2014  
14:21:34  
2: TOF MS ES-  
4.23e+003

0620\_aa1-701\_2.25 (2.502)



Minimum:

Maximum: 5.0 100.0 -1.5

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	i-FIT (Norm)	Formula
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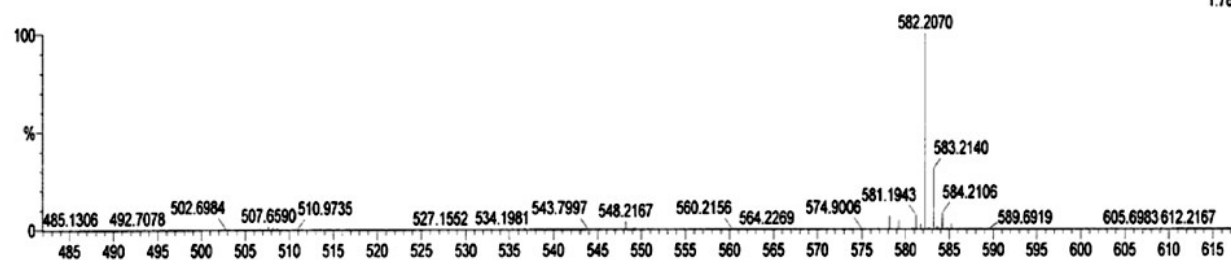
479.1966	479.1971	-0.5	-1.0	18.5	21.7	0.0	C30 H27 N2 O4
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**Fig. S6.** High Resolution mass analysis [HRMS] of Nap-FF peptide.

C: 0-1000 H: 0-1000 N: 3-3 O: 5-5 S: 1-1  
aa-j-s-1

1120\_aa-j-s-1\_3.11 (0.253) Cm (11-25)

21-Nov  
12:  
1: TOF MS  
1.78e

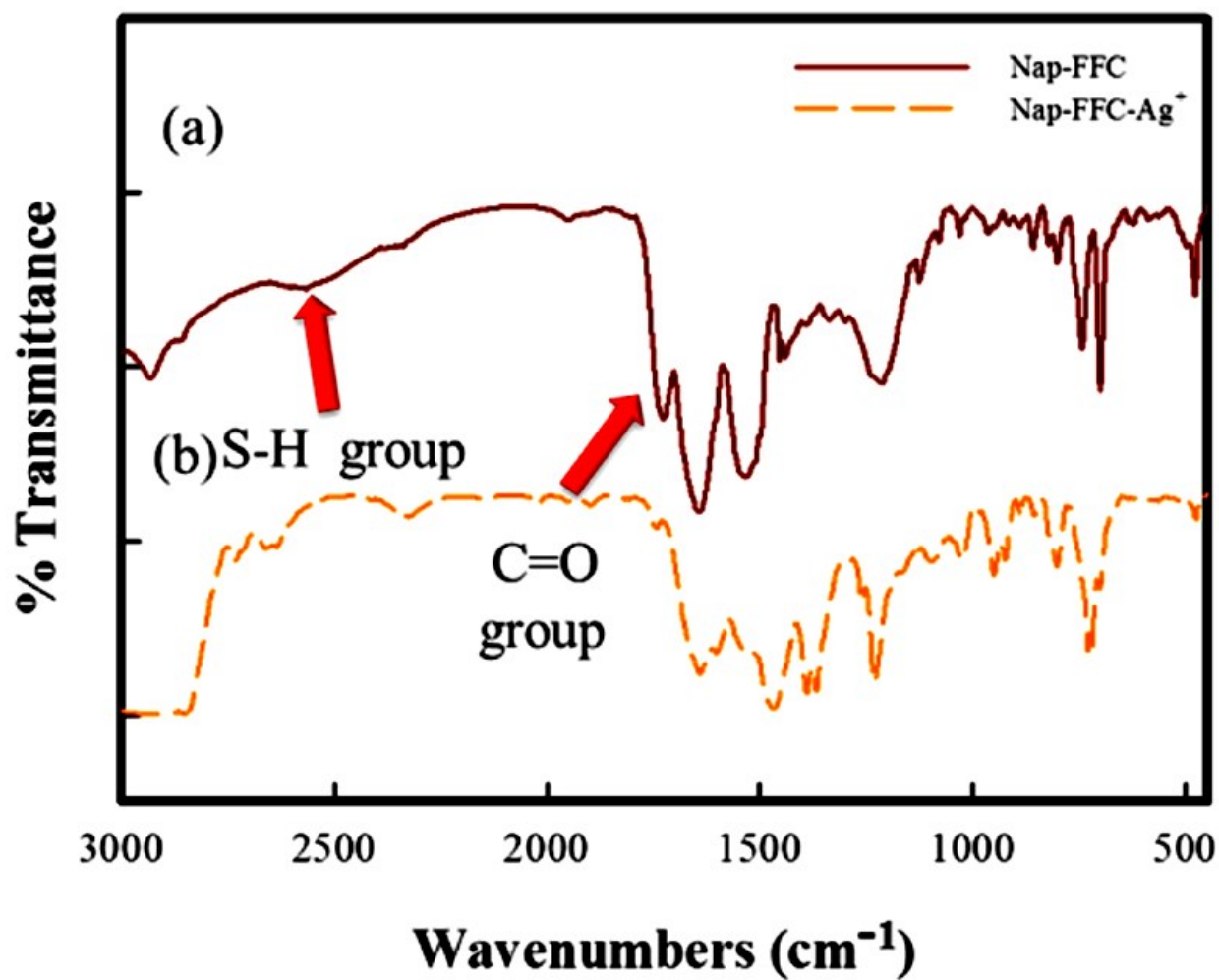


Minimum: -1.5  
Maximum: 5.0 10.0 1000.0

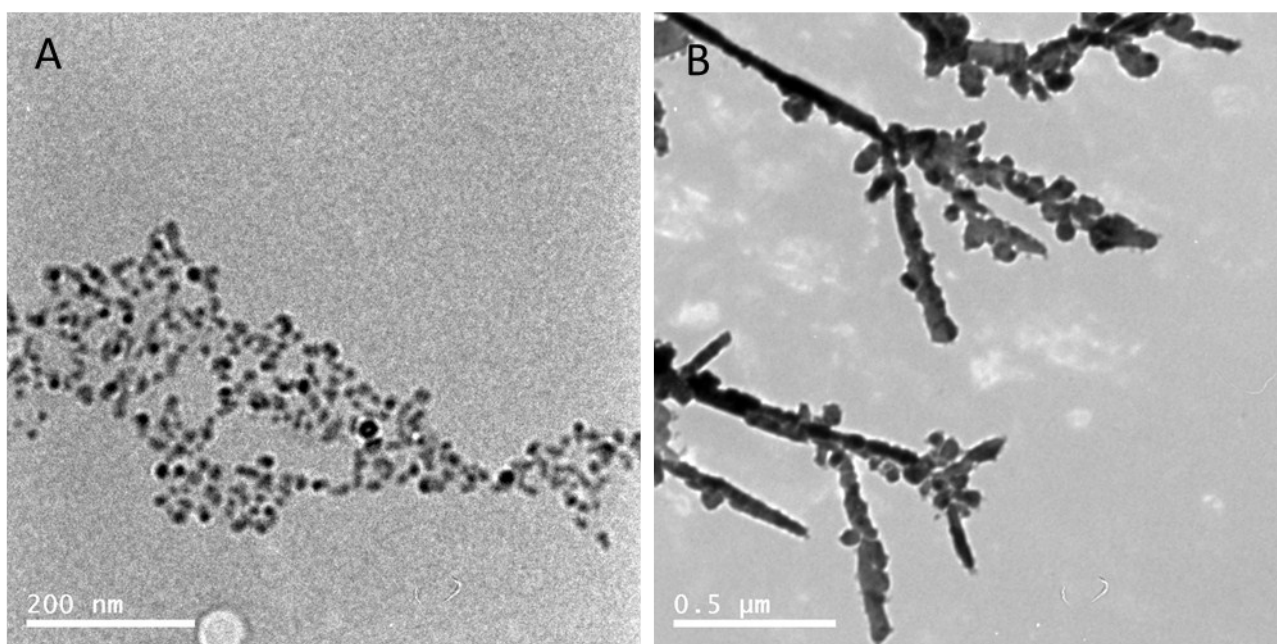
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	i-FIT (Norm)	Formula
582.2070	582.2063	0.7	1.2	19.5	48.6	0.0	C33 H32 N3 O5 S

Fig. S7. High Resolution mass analysis [HRMS] of Nap-FFC peptide.

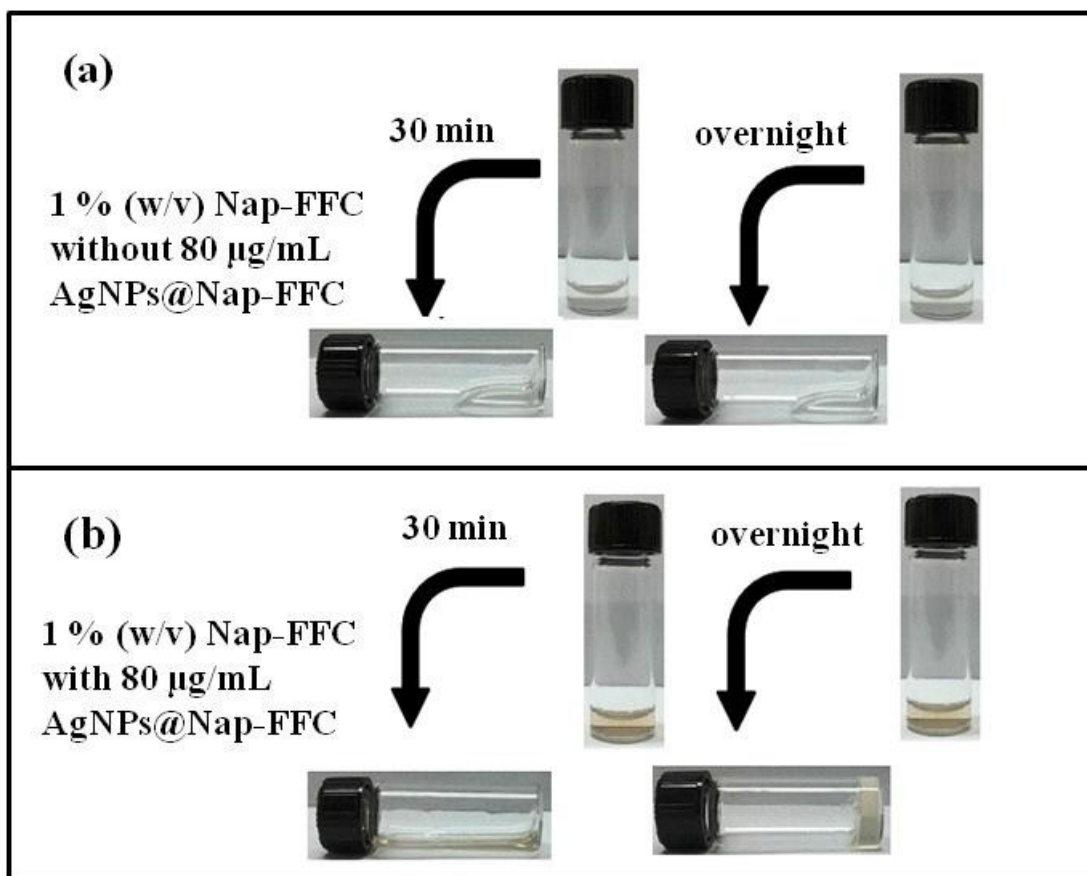




**Fig. S8.** FT-IR spectra of (a) Nap-FFC nanofibers, and (b) Ag<sup>+</sup> ions absorbed on Nap-FFC nanofibers



**Fig. S9.** The TEM analysis of (A) AgNPs (B) AgNPs@Nap-FFC nanocomposites.



**Fig. S10.** Photograph images (a and b) of 1 % (w/v) Nap-FFC at pH 12 without/with 80  $\mu\text{g/mL}$  AgNPs@Nap-FFC for different times.