

Electronic Supplementary Information

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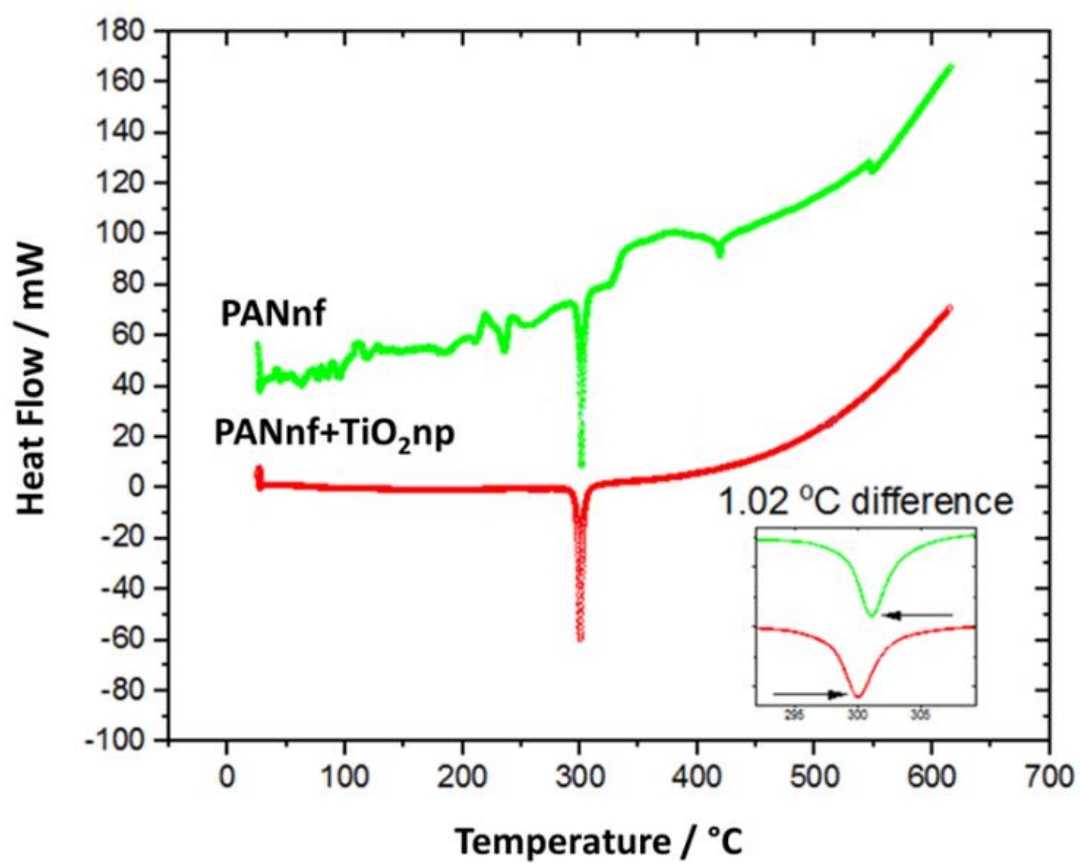
An electrochemical immunosensor modified with titanium IV oxide/polyacrylonitrile nanofibers for the determination of carcino embriyonic antigen

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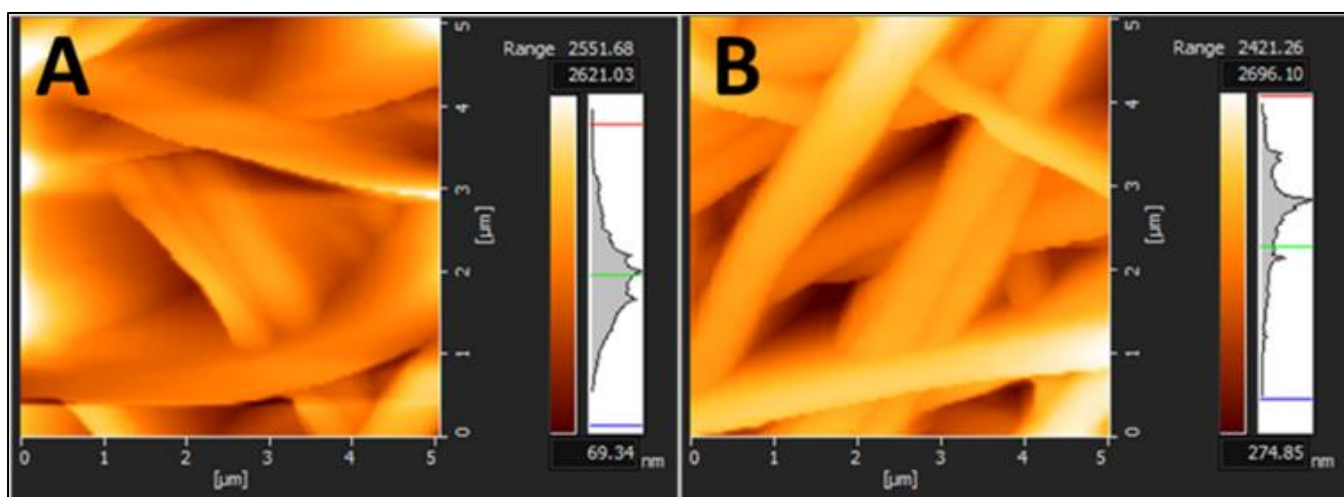
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Supporting Table 1. The major FTIR peaks obtained from the spectra of PANnf and PANnf+TiO₂np structures.

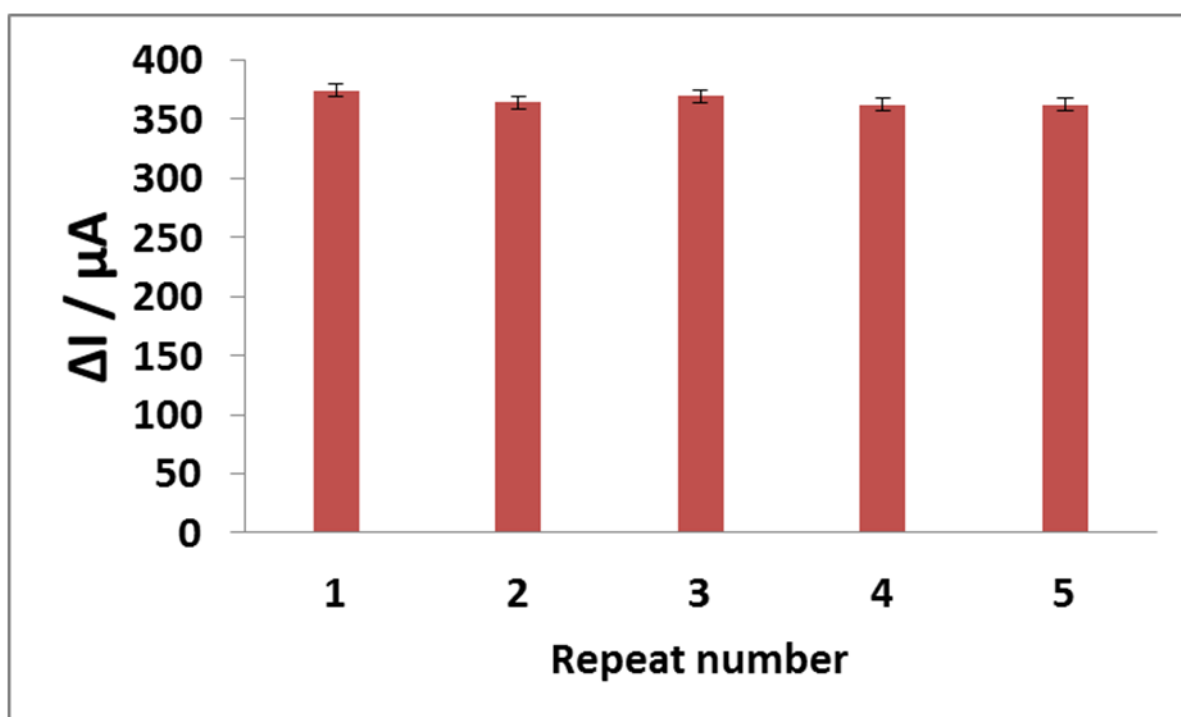
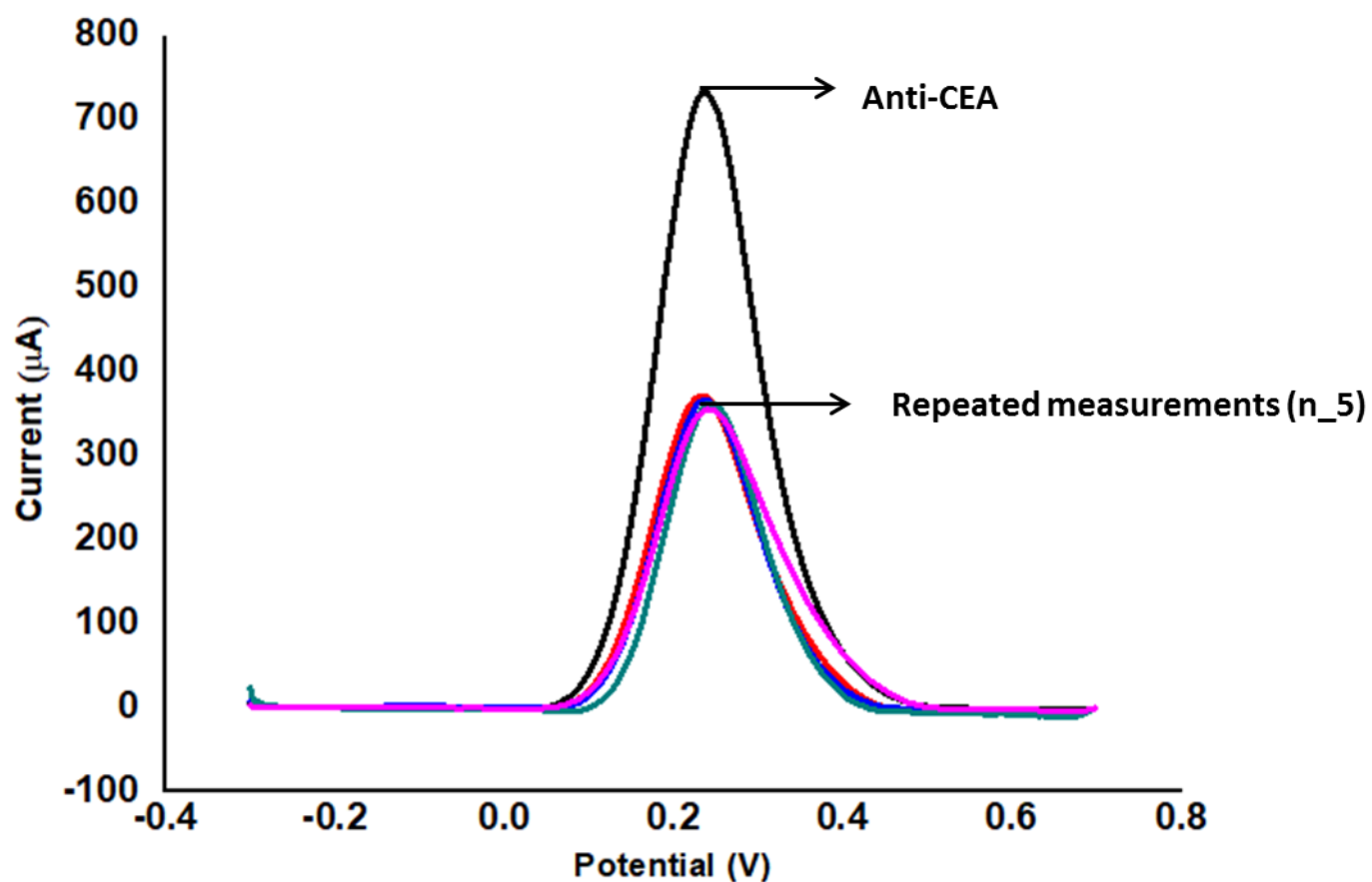
Wavelengths cm⁻¹	Transmittance %	
	PANnf	PANnf+TiO₂np
2950.554	99.5765	100.13
2265.948	98.6091	99.41
2150.240	96.7728	98.62
2001.748	96.9944	98.689
1951.608	97.83	99.077
1700.908	100.188	100.32
1450.207	98.3722	99.006
1351.855	99.6389	99.956
1051.014	99.1194	99.849
609.396	97.9167	97.195
551.542	94.7261	-



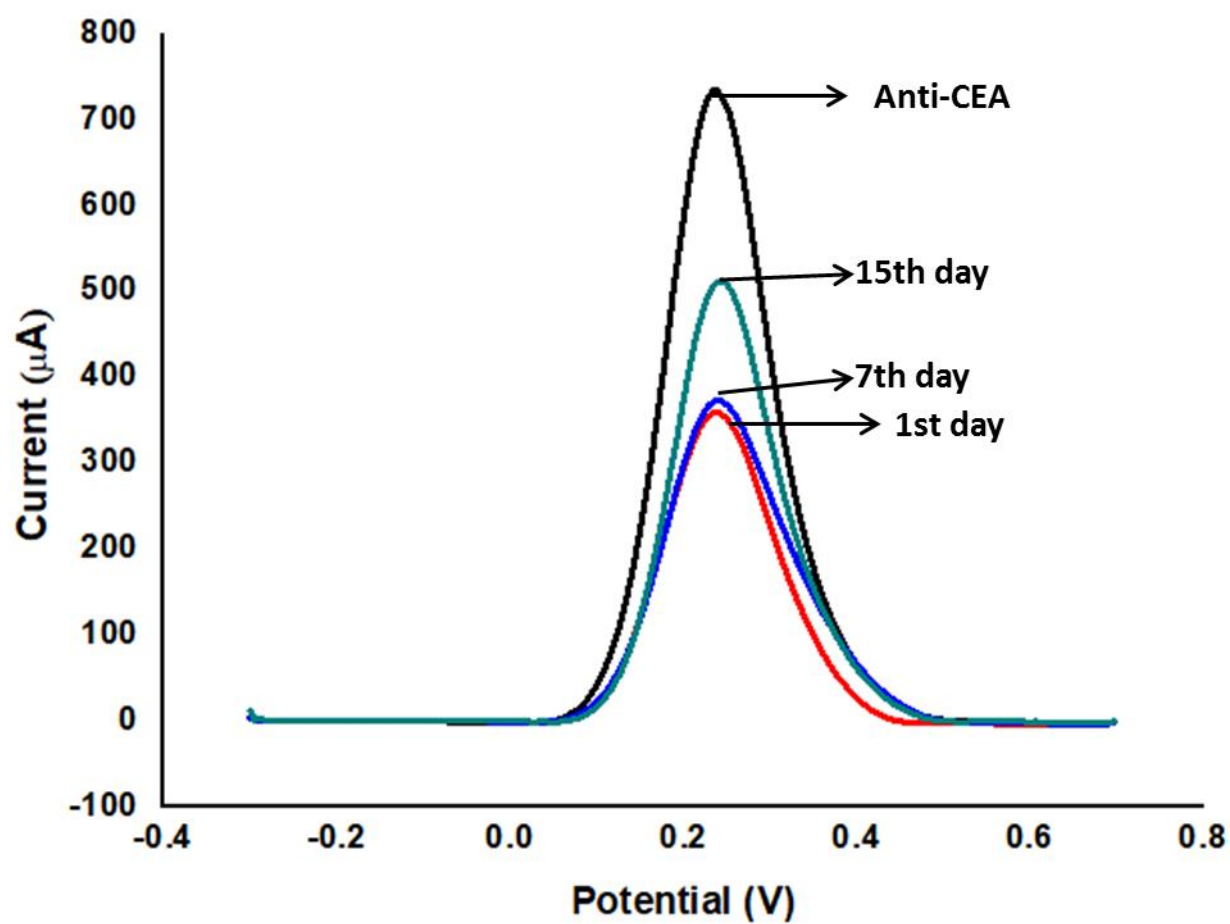
Supporting Fig. 1 DSC measurements of a) PANnf and, b) PANnf+TiO₂np composite



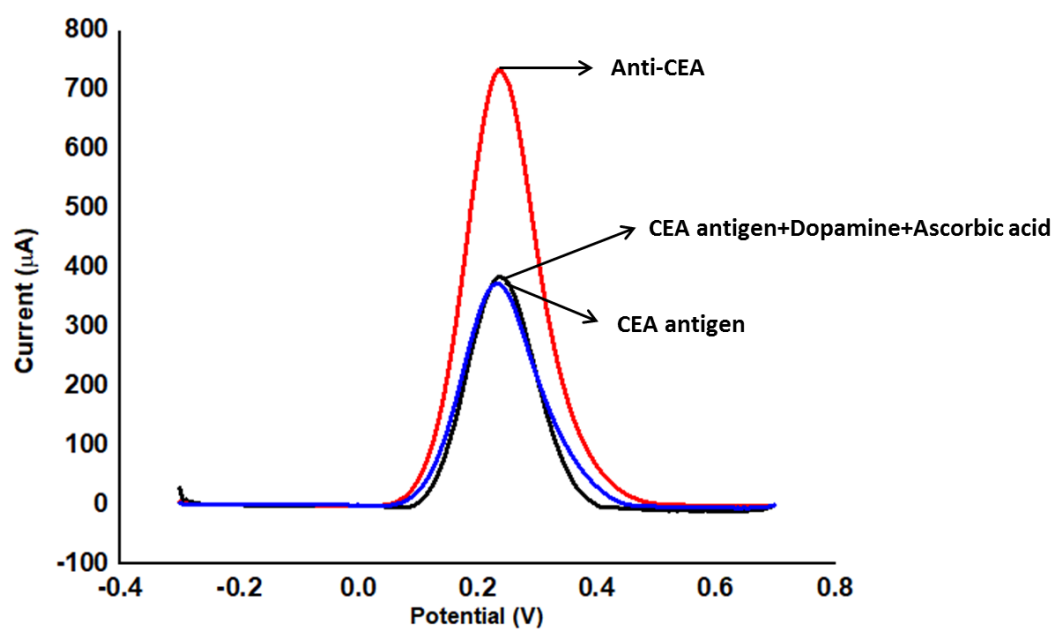
Supporting Fig. 2 AFM images of A) PANnf+TiO₂np/Anti-CEA, B) PANnf+TiO₂np/Anti-CEA/CEA composite nanofibers.



Supporting Fig. 3 DPV voltammograms and histograms of repeatability measurements.



Supporting Fig. 4 DPV voltammograms of the stability measurements of developed DBC/PANnf+TiO₂np/Anti-CEA immunosensor



Supporting Fig. 5 DPV voltammograms of the selectivity measurements of developed DBC/PANnf+TiO₂np/Anti-CEA immunosensor