

Construction of a non-enzymatic electrochemical sensor based on Graphitic Carbon Nitride Nanosheets for sensitive detection of Procalcitonin

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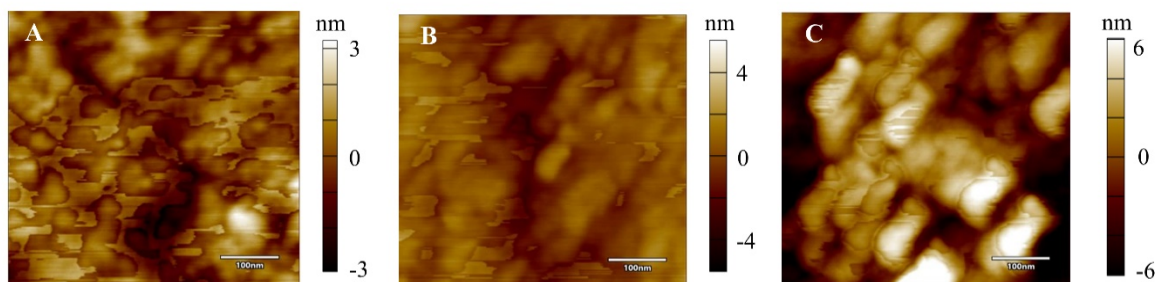


Fig. S1 Tapping-mode AFM images in air for the electrode surface. (A) bare GCE, (B) g-C₃N₄/GCE, (C) PP/g-C₃N₄/GCE.

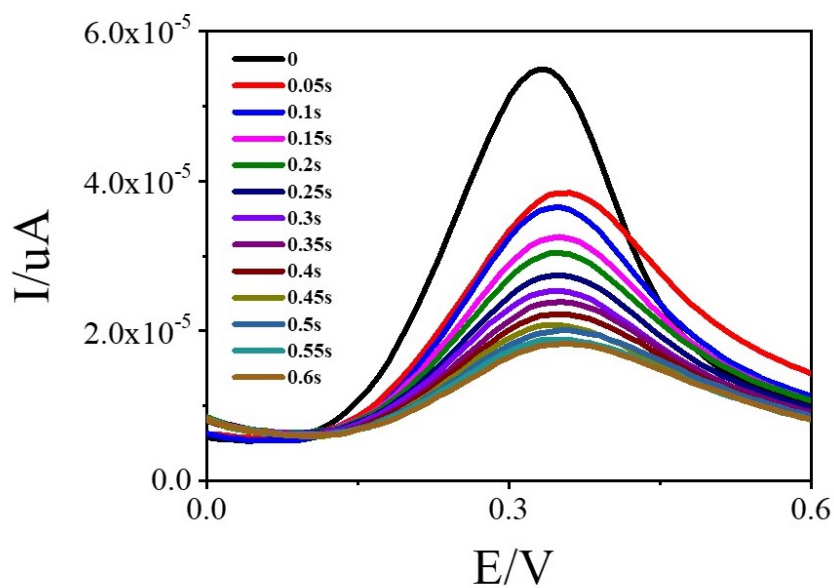


Fig.S2 DPV measure with different pulse times.

Table S1. The N and S elementary content after each modified step.

Sample	Element	N	S
	Content (%)		
GCE		1.89	0.25
g-C ₃ N ₄ NS/GCE		2.36	0.22
PP/g-C ₃ N ₄ NS /GCE		4.71	0.45

Table S2. Comparison of different methods for PCT determination.

Detection method	Components		Linearity and limit of detection	Ref.
	Recognition element	Transducer		

Electrochemical immunosensor	Anti-PCT	Platinum nanoparticles	6 pg/mL	[1]
SPR sensor	Ab specific to PCT	KOH-treated gold-coated SPR chip	4.2 ng/mL	[2]
Point-of-care testing device	Monoclonal antibodies targeting PCT	TIRF-based quantification	0.04 ng/mL	[3]
Electrochemiluminescent immunosensor	Ab specific to PCT	Chitosan-graphene nanocomposite	3.4 pg/mL	[4]
Electrochemical Biosensor	Peptide specific to PCT	graphitic carbon nitride	0.11 fg/mL	This work

References

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