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One-Step Polylactic Acid Screen-Printing Microfluidic Paper-Based Analytical Device: Application for Simultaneous Detection of Nitrite and Nitrate in Food Samples

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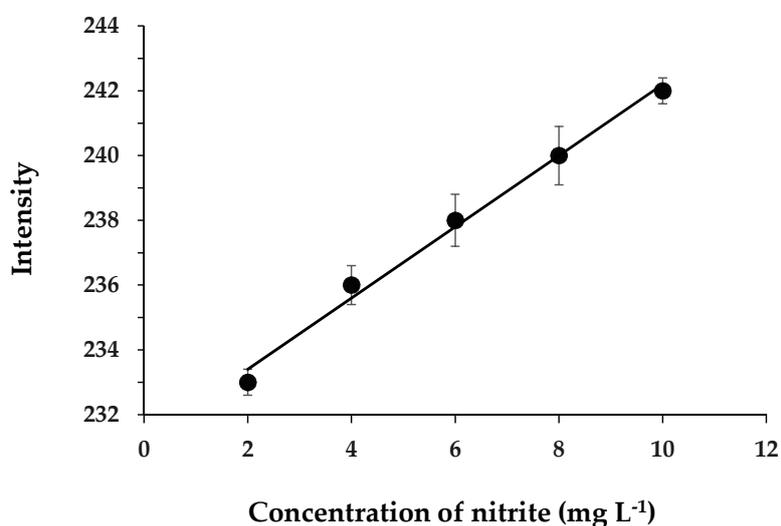


Figure S1. Calibration curves for nitrite.

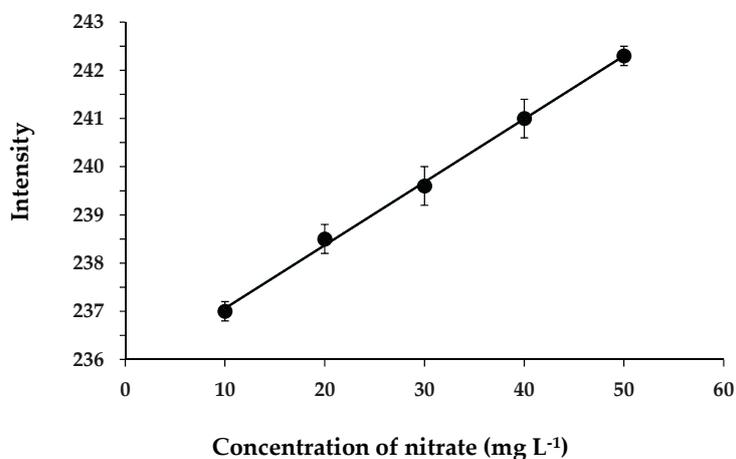


Figure S2. Calibration curves for nitrate.

Table S1. The comparison between different methods used for detection of nitrite and nitrate in food samples.

Analyze	Real Sample	Analytical Method	Remarked	[Ref]
nitrate and nitrite	smoked sausage, chicken sausage, fish ball, meatballs, sour pork	μ PAD	nitrite and nitrate reaction on chromatography paper and using scanner as detector	This work
nitrate and nitrite	tuna fish, tomato paste, infant food	electrothermal atomic absorption spectrometry	Indirect method; nitrite and nitrate were complex with Cu(I)-neocuproine before detection and also required liquid microextraction before real sample analysis	[1]
nitrite and nitrate	cheese, salam, Sausage	gas chromatography–mass spectrometry and liquid chromatography	nitrite was derivatived with 2,3-naphthotriazole to form fluorescent compound	[2]
nitrite	chips, pickle food, pickled vegetables	amperometry	using tetrasulfonated copper phthalocyanine modified glassy carbon electrode as working electrode	[3]
nitrite and nitrate	skim milk, whole milk, hydrolysate, buttermilk, infant formula	ion-exchange chromatography	required coupled post-column reduction of nitrate and derivatisation via Griess chemistry	[4]
nitrite and nitrate	baby foods	flow injection analysis	employing sulfanilamide and N-(1-naphthyl)ethylenediamine dihydrochloride as color reagents	[5]

References

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