


Figure S1. Effect of sample pH on the absorbance. Mean value \pm standard deviation of five replicates. All experimental parameters as given in Table 1.



**GDAŃSK UNIVERSITY
OF TECHNOLOGY**

ComplexGAPI Green Analytical
Procedure Index

SAMPLE PREPARATION AND ANALYSIS Sample preparation		PRE-ANALYSIS PROCESSES Yield and conditions	
1. Collection:	On-line or at-line ▼	I. Yield:	n.a. ▼
2. Preservation:	None ▼	II. Temperature/time:	n.a. ▼
3. Transport:	Required ▼	Relation to Green Economy	
4. Storage:	Under normal conditio ▼	III. Number of rules met:	n.a. ▼
5. Type of method:	Extraction required ▼	Reagents and solvents	
6. Scale of extraction:	Micro-extraction ▼	IVa. Health hazard:	n.a. ▼
7. Solvents/reagents used:	Non-green solvents/re ▼	IVb. Safety hazard:	n.a. ▼
8. Additional treatments:	None ▼	Instrumentation	
Reagents and solvents		Va. Technical setup:	n.a. ▼
9. Amount:	< 10 mL (< 10 g) ▼	Vb. Energy:	n.a. ▼
10. Health hazard:	Moderately toxic; couli ▼	Vc. Occupational hazard:	n.a. ▼
11. Safety hazard:	Highest NFPA flammal ▼	Workup and purification	
Instrumentation		Via. End products workup, purification:	n.a. ▼
12. Energy:	<= 0.1 kWh per sample ▼	Vib. Purity:	n.a. ▼
13. Occupational hazard:	Hermetic sealing of th ▼	E-factor	
14. Waste:	1-10 mL (1-10 g) ▼	VII. E-factor input:	0 <input type="text"/> <input type="button" value="Apply"/>
15. Waste treatment:	No treatment ▼		
Method type			
Type of analysis:	Qualitative and quantit ▼		

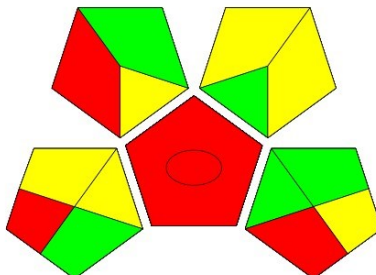


Figure S2. ComplexGAPI parameters for the LIS-LPME-FAAS method

1. Type of analysis	Quantitative and confirmatory ▼
2. Multi- or single-element analysis	Single Element ▼
3. Analytical technique	Simple instrumentation available in most labs (UV, HPLC-UV, HPLC-DAD, UHPLC, FAAS, ▼
4. Simultaneous sample preparation	1 ▼
5. Sample preparation	Miniaturized extraction sample preparation (SPME, DLLME, MEPS, SBSE, d-SPE, FPSE, ▼
6. Samples per h	>10 ▼
7. Reagents and materials	Common commercially available reagents (methanol, acetonitrile, HNO ₃ , nitrogen or o ▼
8. Preconcentration	No preconcentration required. Required sensitivity and /or legislation criteria are met c ▼
9. Degree of automation	Fully automated with novel technology advanced devices (robotics, lab-in-syringe, etc.) ▼
10. Amount of sample	<100 µL (or mg) bioanalytical samples; <10 mL (or g) food/environmental ▼

Figure S3. BAGI parameters for the LIS-LPME-FAAS method