## **Supplementary Materials**

Replicate	[Glucose] /M	[Glucose] average / M	s / M	RSD / %
1	0.15			
2	0.15			
3	0.16	0.15	1.19x10 <sup>-3</sup>	0.8
4	0.15			
5	0.15			

Table S1. Study of the system repeatability. Measurements done during the same laboratory session.

Table S2. Study of the system reproducibility. Measurements done during five days over five lemon samples.

Sample	[Glucose] / M	[Glucose] average / M	s / M	RSD / %
1	0.15			
2	0.15			
3	0.14	0.15	3.75x10-2	2.5
4	0.15			
5	0.15			

**Table S3.** Study of the method robustness. The measurements were done with five different Chitosan-GOx/TiO2NAs/Ti biosensors.

	GOx/11O2NAs/11 biosensors.					
Biosensor	[Glucose] / M	[Glucose] average / M	s / M	RSD / %		
1	0.14					
2	0.15					
3	0.15	0.15	4.82x10-3	3.3		
4	0.14					
5	0.15					