

Multi-Probe Nano-Genomic Biosensor to Detect *S. aureus* from Magnetically-Extracted Food Samples

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Table S1. Significance of fixed effects ($P > F$) and associated F statistic on treatments for the three experiments conducted. Within each experiment, p values followed by *** are significantly different at 0.001 alpha level. For food and sensitivity experiments, treatments were considered fixed effects; for specificity experiments, treatment, time, and treatment x time interaction were considered fixed effects.

Fixed Effects	Experiment					
	Food		Sensitivity		Specificity	
	F Statistic	p-Value	F Statistic	p-Value	F Statistic	p-Value
Treatment	428.2	<0.001 ***	435.9	<0.001 ***	175.7	<0.001 ***
Time	--	--	--	--	78.7	<0.001 ***
Time x Treatment	--	--	--	--	11.4	<0.001 ***

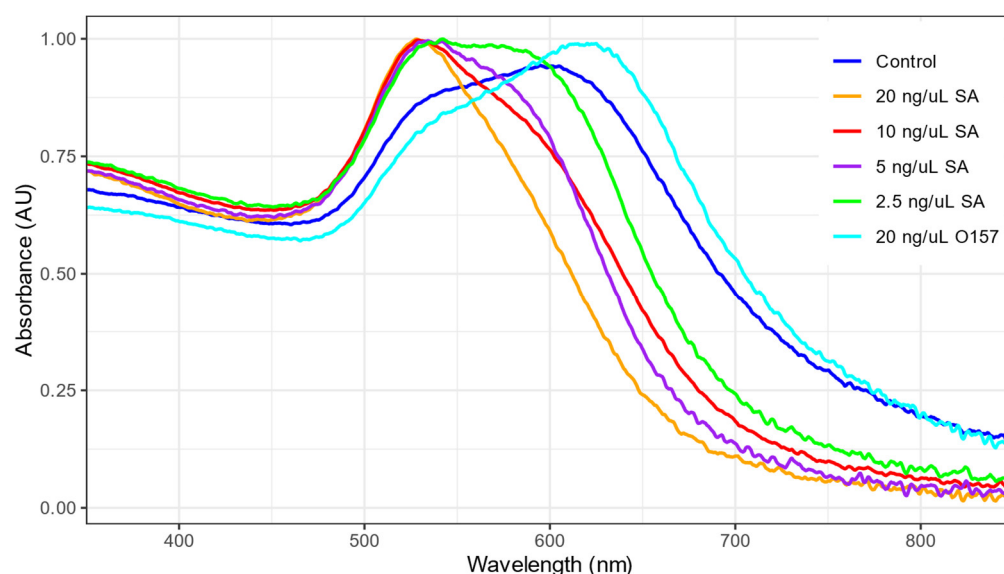


Figure S1. Spectra shows the sensitivity of the GNP biosensor 5 minutes after HCl 0.1 M is added to protonate the GNPs for 9 replicates. The control is nuclease-free water; the nontarget is *E. coli* O157 at 20 ng/ μ L. The target samples of *S. aureus* are 20, 10, 5, and 2.5 ng/ μ L.