Supplementary Materials for

Colloidal Au Spheres and Nanoflowers-Based

Immunochromatographic Strip for Sensitive Detection of

Zearalenone in Cereals

Weili Qiao ^a, Baoshan He ^{a,*}, Wenjie Ren ^a, Renyong Zhao ^{a,**}, Zhiguang Suo ^a,

Haoyang Yan ^b, Yiwei Xu ^a, Min Wei ^a, Huali Jin ^a

^a School of Food Science and Technology, Henan University of Technology, Zhengzhou,

Henan 450001, P. R. China

^b School of International Education, Henan University of Technology, Zhengzhou, Henan

450001, P. R. China

* Corresponding author. Tel.: +86 371 67758022; Fax: +86 371 67758022

E-mail addresss: hebaoshan@126.com

**Corresponding author. Tel.: +86 371 67758036; Fax: +86 371 67758036

E-mail addresss: zry8600@126.com

Calculation of RSD and LOD

The relative standard deviation (RSD) comes from the result of dividing the average value (\overline{x}) by the standard deviation (SD), and its formula is as follows:

$$RSD=SD/\bar{x}$$

The following is the original data table and the RSD calculated based on the original data and formula:

Table S1. Original data for RSD Calculation

| | SD | x | RSD |
|-------------|------|-------|-------|
| | 1.30 | 76.63 | 1.69% |
| Real sample | 0.64 | 29.75 | 2.16% |
| | 0.28 | 8.45 | 3.28% |

Calculation of LOD

The calibration equation was determined to be $y=A_2+(A_1-A_2)/[1+(x/x_0^p)]$.

For AuNFs-ICS, A_1 =114.2646, A_2 = -3.73737, X_0 =0.55731, p=0.69537. y=90.00.

For AuSPs-ICS, A_1 =93.08247, A_2 =8.35071, X_0 =1.62614, p=1.56982. y=90.00.

The LODs were calculated based on the above data and formula.