Supplementary Materials for
Colloidal Au Spheres and Nanoflowers-Based
Immunochromatographic Strip for Sensitive Detection of
Zearalenone in Cereals

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Calculation of RSD and LOD

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

$$\text{RSD} = \frac{\text{SD}}{\bar{x}}$$

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

<table>
<thead>
<tr>
<th>SD</th>
<th>$\bar{x}$</th>
<th>RSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.30</td>
<td>76.63</td>
<td>1.69%</td>
</tr>
<tr>
<td>Real sample</td>
<td>0.64</td>
<td>29.75</td>
</tr>
<tr>
<td>0.28</td>
<td>8.45</td>
<td>3.28%</td>
</tr>
</tbody>
</table>

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.