Supplementary Material

Ag-coated tetrapod gold nanostars (Au@AgNSs) for acetamiprid determination in tea using SERS combined with microfluidics

Qian Ke[a], Limei Yin[a, b], Heera Jayan[a], Hesham R. El-Seedi[c, d], Xiaobo Zou[a, d], Zhiming Guo[a, b] *

[a] *China Light Industry Key Laboratory of Food Intelligent Detection & Processing, School of Food and Biological Engineering, Jiangsu University, Zhenjiang 212013, China*

[b] *International Joint Research Laboratory of Intelligent Agriculture and Agri-products Processing, Jiangsu University, Zhenjiang 212013, China*

[c] *Pharmacognosy Group, Department of Pharmaceutical Biosciences, BMC, Uppsala University, Box 591, SE 751 24 Uppsala, Sweden*

[d] *International Research Center for Food Nutrition and Safety, Jiangsu University, Zhenjiang 212013, China*

Corresponding author at: School of Food and Biological Engineering, Jiangsu University, Zhenjiang 212013, China

Email address: guozhiming@ujs.edu.cn (Z.M. Guo)
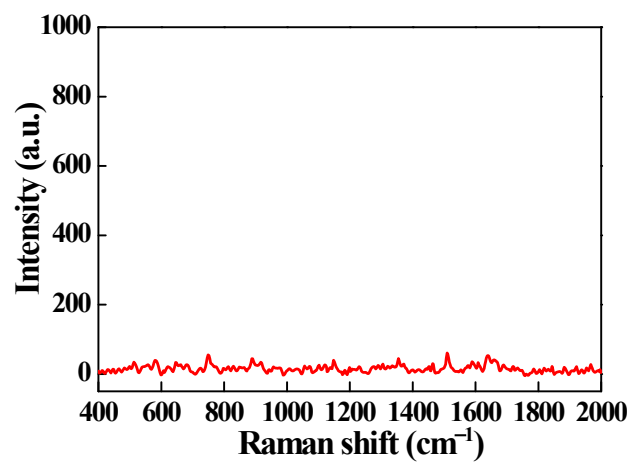
Figure S1. The Raman spectrum of Au@AgNSs in the microfluidic channel

The content of acetamiprid in the sample was calculated according to Formula (1)

$$X = \frac{\rho \times V}{m} \qquad (1)$$

X   the content of acetamiprid in the sample (mg/kg);

ρ the concentration of acetamiprid in the sample solution calculated from the standard curve (mg/mL);

V   final volume (mL)

m   sample weight (kg)