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Surface-enhanced Raman Scattering of Core-Shell Au@Ag Nanoparticles Aggregates for Rapid Detection of Difenoconazole in Grapes

Kaiqiang Wang[1,2,3], Da-Wen Sun[1,2,3,4*], Hongbin Pu[1,2,3], Qingyi Wei[1,2,3]

[1]School of Food Science and Engineering, South China University of Technology, Guangzhou 510641, China

[2]Academy of Contemporary Food Engineering, South China University of Technology, Guangzhou Higher Education Mega Center, Guangzhou 510006, China

[3]Engineering and Technological Research Centre of Guangdong Province on Intelligent Sensing and Process Control of Cold Chain Foods, Guangzhou Higher Education Mega Center, Guangzhou 510006, China

[4]Food Refrigeration and Computerized Food Technology (FRCFT), Agriculture and Food Science Centre, University College Dublin, National University of Ireland, Belfield, Dublin 4, Ireland

dawen.sun@ucd.ie

www.ucd.ie/refrig

www.ucd.ie/sun

[*]Corresponding author. Tel.: +353-1-7167342; fax: +353-1-7167493.

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Abstract

The residual of pesticides in fruit and vegetables is one of the major food safety concerns for consumers. There is a demand for easy and rapid analytical methods to sense pesticide residues in foods. In this study, a core-shell Au@Ag nanoparticles aggregates (Au@AgNAs) based surface-enhanced Raman scattering (SERS) method was developed to detect trace amount of difenoconazole. Results suggested that by targeting the characteristic peaks at 700 and 808 cm^{-1}, the

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