

Electronic Supplementary Information

Manuscript Title: Single point calibration for semi-quantitative screening based on internal reference in thin layer chromatography-SERS: the case of Rhodamine B in chili oil

Author(s): Cong Wang,^a Fansheng Cheng,^a Yonghong Wang,^c Zhengjun Gong,^b Meikun Fan,^{b*} and Jianming Hu^{d*}

Experimental methods

10 μL of RhB ethanol solution (1.00×10^{-5} M) was dropped onto TLC plate, 10 μL of additional Ag NPs solution (1 mM) was dropped at the same place to get SERS signal. For comparison, the Raman spectrum of a control where only Ag NPs were added was also recorded.

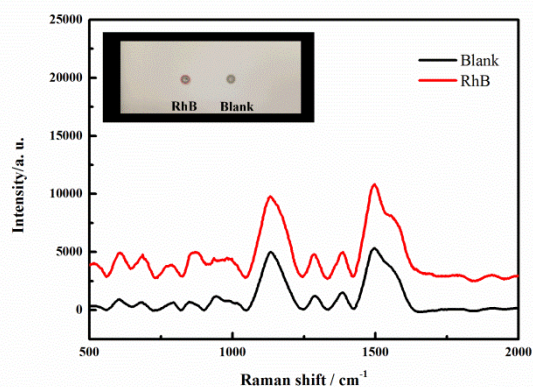


Figure s1: SERS spectra of RhB and blank silver colloids solution on TLC plate, obtained at 785 nm with 20 \times microscope objective (N. A. =0.25) and 5s integration time.

No RhB SERS signal could be identified by this method, even though the concentration of RhB solution reaches 1.00×10^{-5} M and the color of the RhB can be seen through naked eye.