

Supplementary Material

Modification of cellulose paper with polydopamine as a thin film microextraction phase for determination of nitrophenols in oil samples

Cunling Ye^{1*}, Yujun Wu¹, Zhike Wang²

(1 School of Chemistry and Chemical Engineering, Henan Normal University, Xinxiang 453007, China

2 School of Environment, Henan Key Laboratory for Environmental Pollution Control, Key Laboratory for

Yellow River and Huai River Water Environment and Pollution Control, Ministry of Education, Henan

Normal University, Xinxiang 453007, China)

*Corresponding Author: Cunling Ye

Tel: 86-373-3326335

E-mail: ycl@htu.cn

Results and discussion section

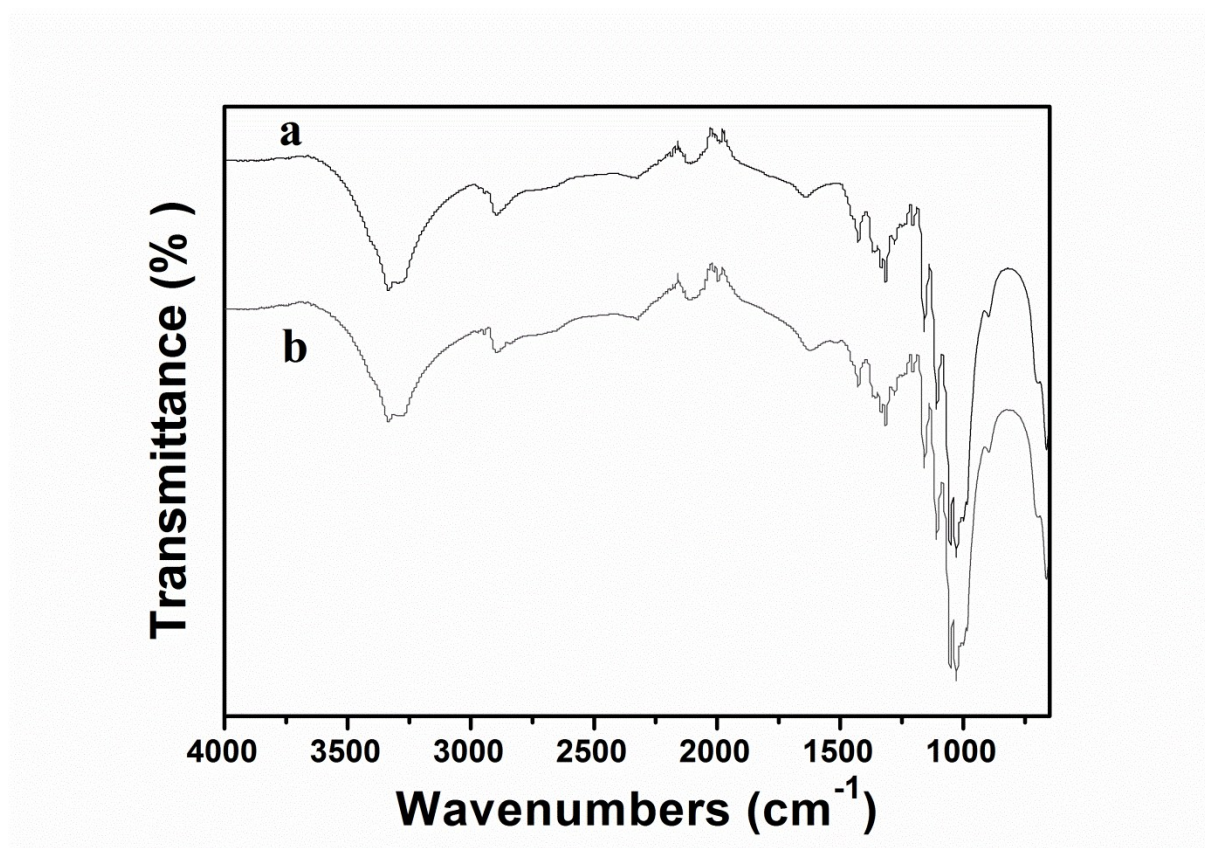


Fig. S1 FT-IR spectra of cellulose filter papers (a) and PDA modified cellulose papers (b).

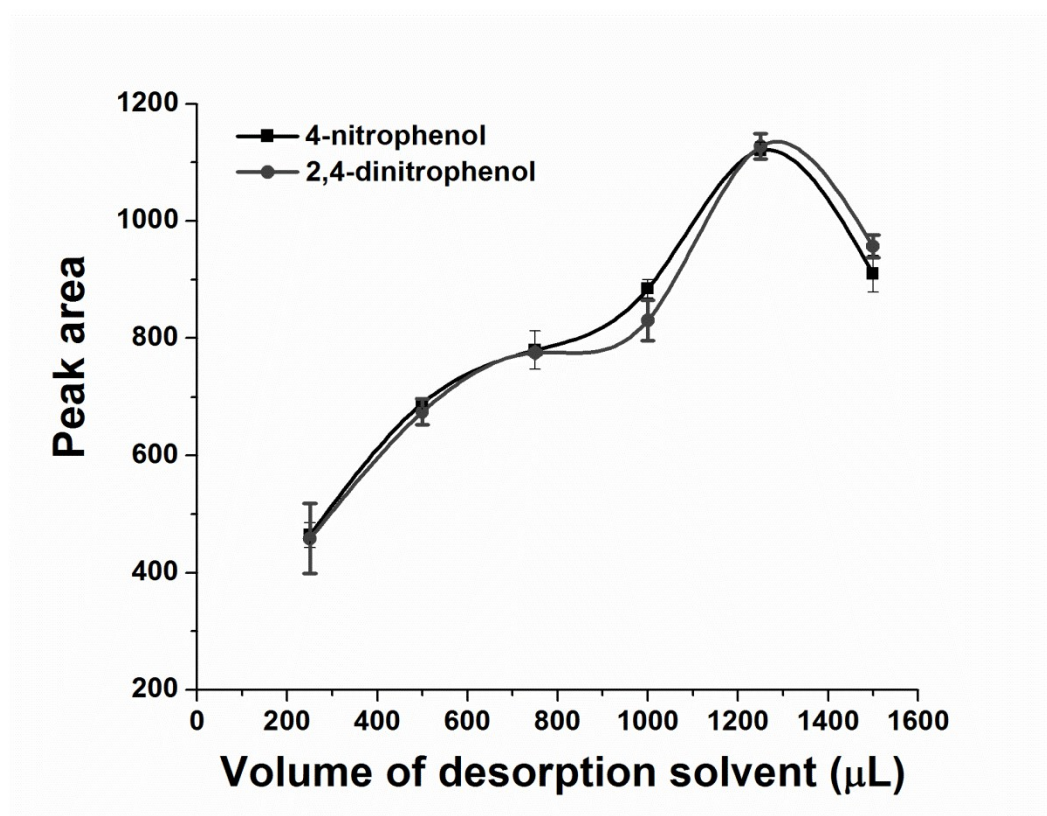


Fig. S2 Effect of volume of desorption solvent on the extracted amounts of the phenolic compounds (1000 μL oil; concentration of phenolic compounds, $200 \mu\text{g L}^{-1}$; 9 mL n-hexane; 10 μL 2 mol L^{-1} NaOH; shaking rate, 150 rpm; extraction temperature, 30°C ; time of extraction, 150 min; desorption solvent, 25 μL hydrochloric acid in 2.5 mL acetonitrile; time of desorption, 10 min).

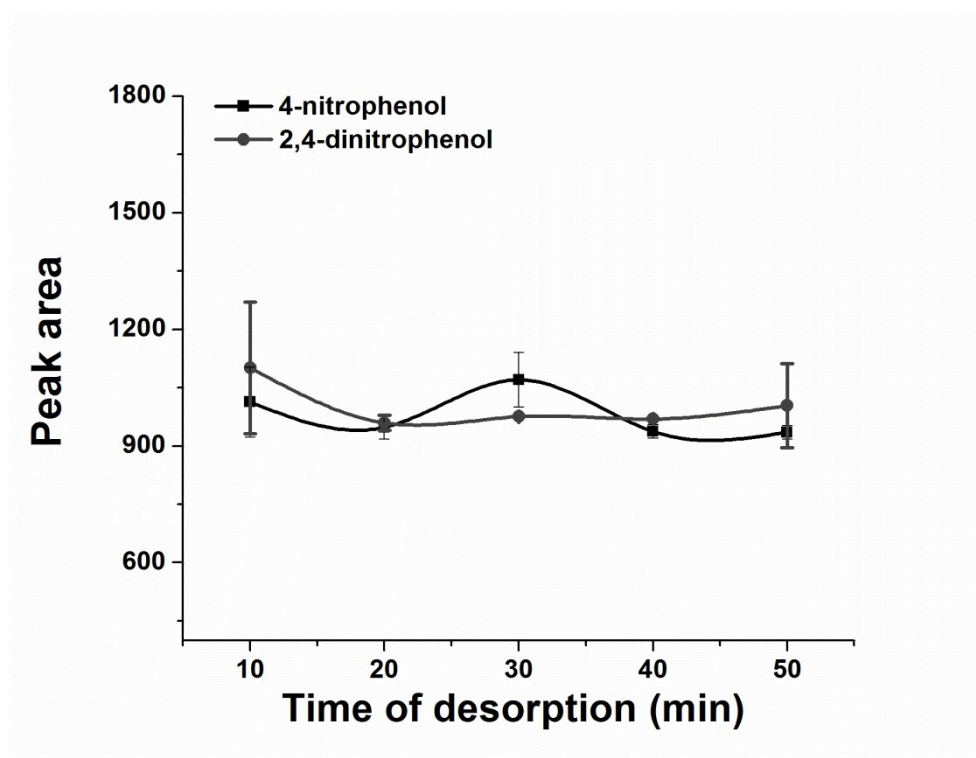


Fig. S3 Effect of time of desorption solvent on the extracted amounts of the phenolic compounds (1000 μL oil; concentration of phenolic compounds, $200 \mu\text{g L}^{-1}$; 9 mL n-hexane; 10 μL 2 mol L^{-1} NaOH; shaking rate, 150 rpm; extraction temperature, $30 \text{ }^{\circ}\text{C}$; time of extraction, 150 min; desorption solvent, 25 μL hydrochloric acid in 2.5 mL acetonitrile; volume of desorption, 1250 μL).

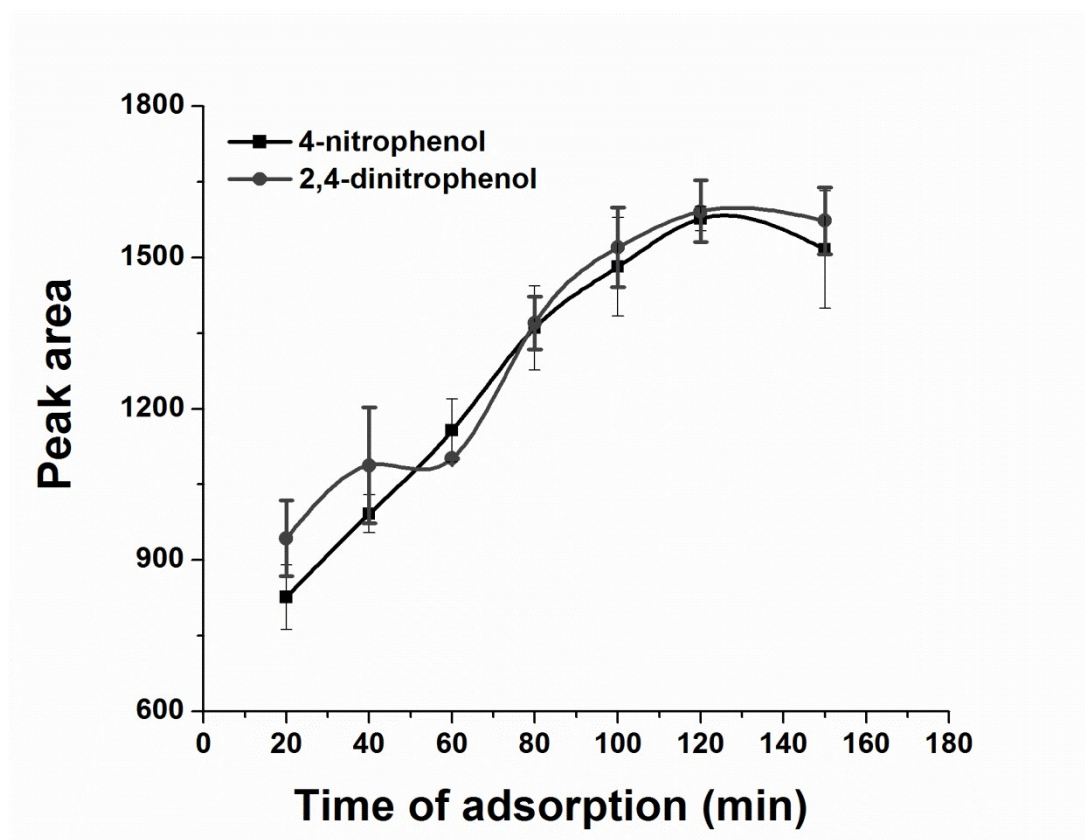


Fig. S4 Effect of time of adsorption on the extracted amounts of the phenolic compounds (1000 μL oil; concentration of phenolic compounds, $200 \mu\text{g L}^{-1}$; 9 mL n-hexane; 5 μL 2 mol L^{-1} NaOH; shaking rate, 150 rpm; extraction temperature, 30°C ; desorption solvent, 25 μL hydrochloric acid in 2.5 mL acetonitrile; volume of desorption, 1250 μL ; time of desorption, 10 min).