

SUPPLEMENTAL INFORMATION

Dispersive liquid–liquid microextraction using magnetic room temperature ionic liquid for extraction ultra-trace amounts of parabens

Kobra Zavar Mousavi ¹, Yadollah Yamini ^{1*}, Shahram Seidi ²

¹ *Department of Chemistry, Tarbiat Modares University, P.O. Box 14115-175, Tehran, Iran*

² *Department of Analytical Chemistry, K.N. Toosi University of Technology, Tehran, Iran*

Fig. S1. UV spectrum for the $[N_{1,8,8,8}^+][FeCl_4^-]$ IL

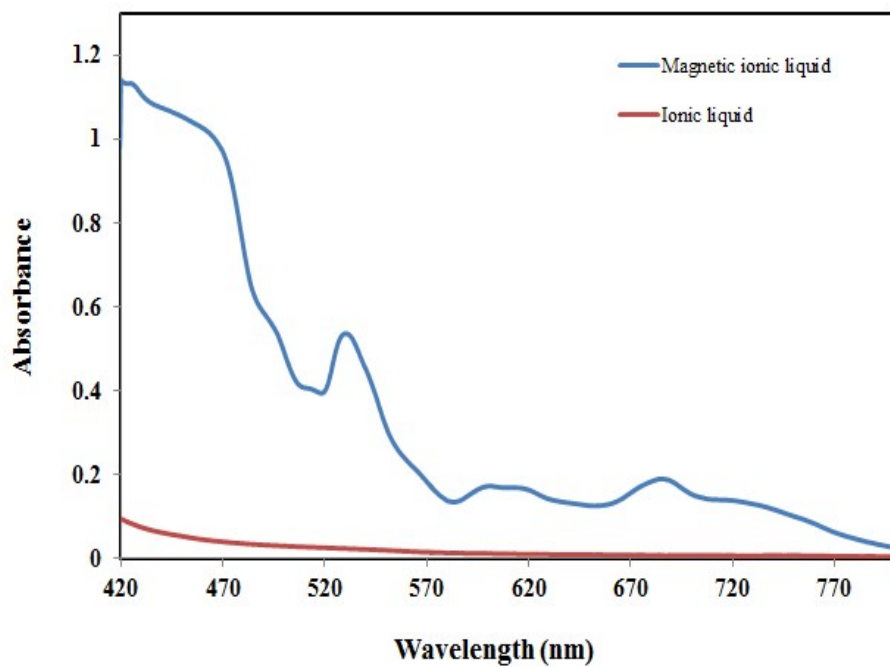


Fig. S2. Raman spectrum for the $[N_{1,8,8,8}^+][FeCl_4^-]$ IL

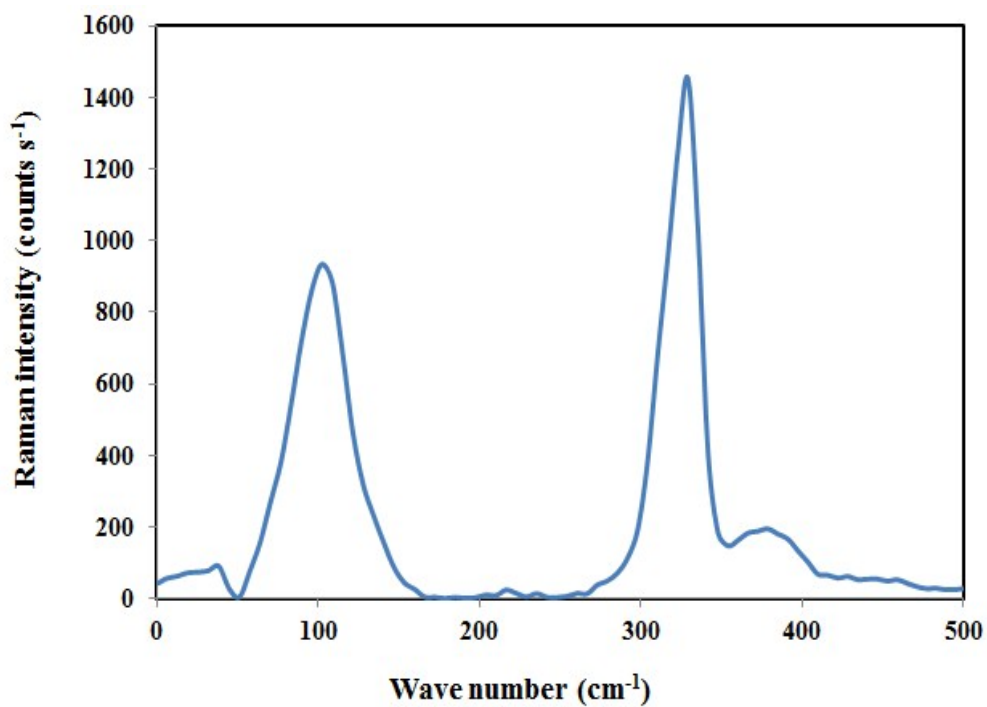


Fig. S3. The relationship between magnetization of $[N_{1,8,8,8}^+][FeCl_4^-]$ and applied magnetic field

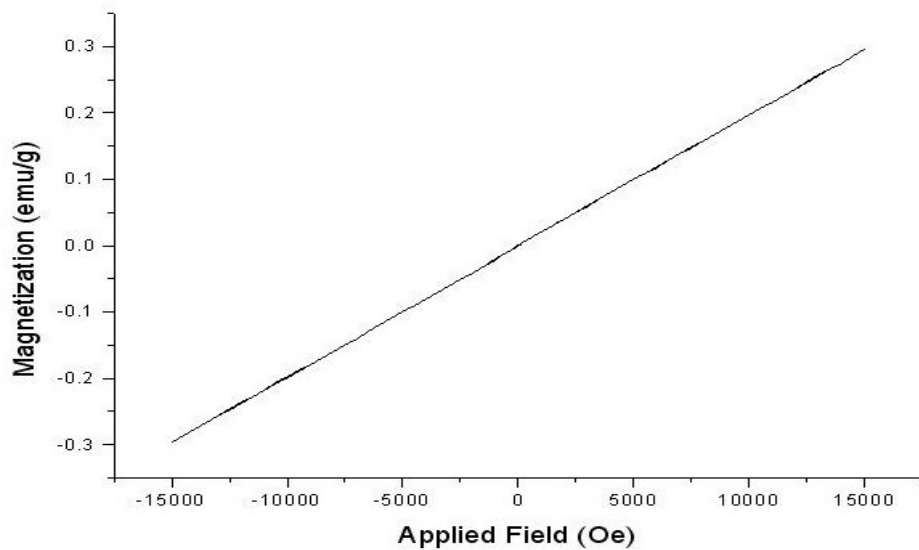


Fig. S4. Effect of volume of extraction solvent on the extraction efficiency of parabens.

Experimental conditions were the same as in Fig. 2, except volume of $[N_{1,8,8,8}^+][FeCl_4^-]$

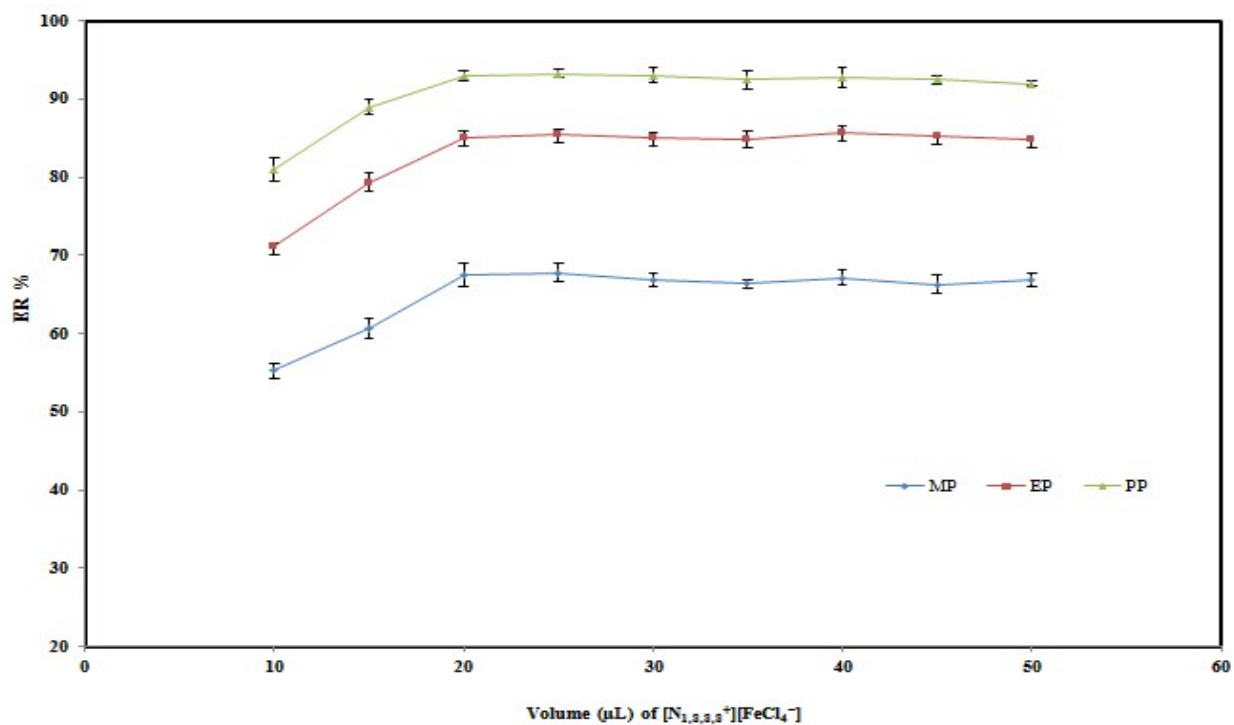


Fig. S5. Study of the type of dispersion force (vortex, sonication, or none)

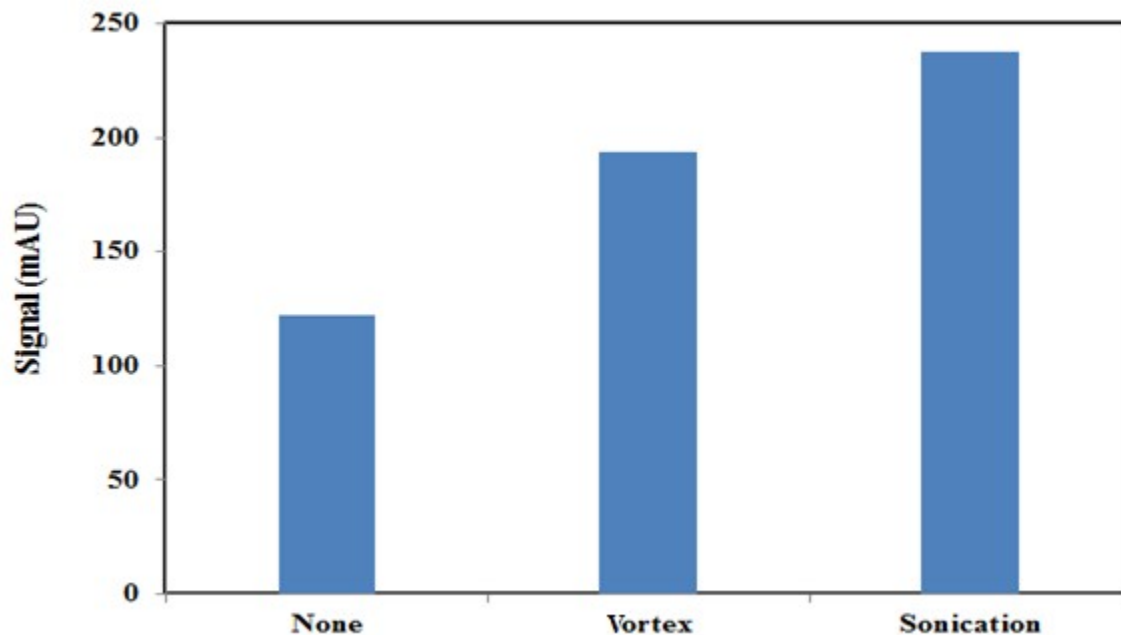


Fig. S6. Effect of sonication time on the extraction efficiency of parabens: Extraction conditions: concentration of analytes, $100 \mu\text{g L}^{-1}$; sample volume, 20.0 mL; sample pH, 6.0; ionic strength, 10% w/v NaCl; sonication time, 1 min; volume of disperser solvent, 250 μL ; disperser solvent, acetone.

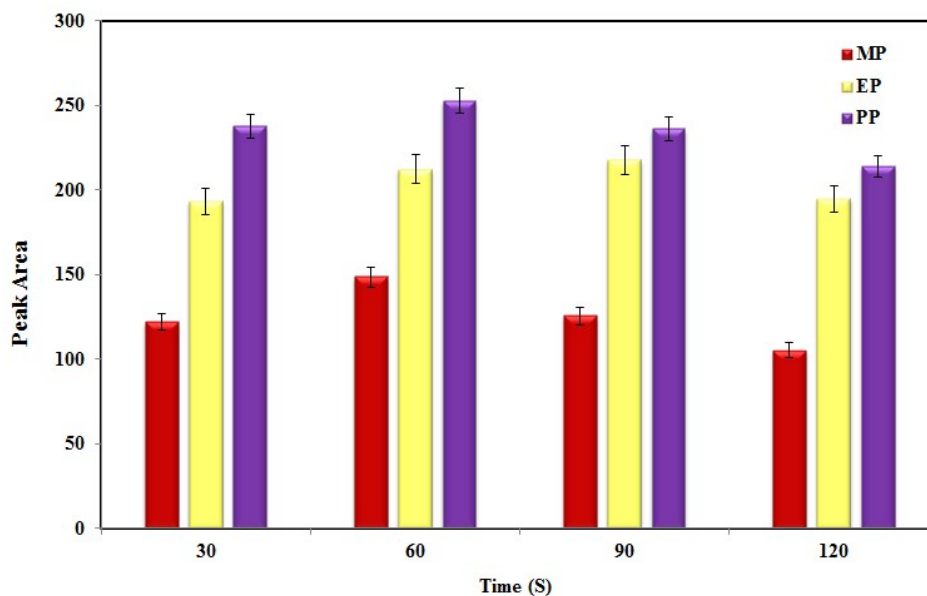


Fig. S7. CMC determination from surface tension vs aqueous concentration of $[N_{1,8,8,8}^+][FeCl_4^-]$.

