

Electronic Supplementary Material

Application of magnetic nanoparticles modified with poly(2-amino thiophenol) as a sorbent for solid phase extraction and trace detection of lead, copper and silver ions in food matrices

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Fig. 1S. TGA curves of (a) Fe_3O_4 , (b) $\text{Fe}_3\text{O}_4@\text{SiO}_2$, (c) $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{SiC}_3\text{H}_6\text{NH}_2$ and (d) $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{SiC}_3\text{H}_6\text{NH}_2/\text{poly(2-aminothiophenol)}$ nanocomposite.

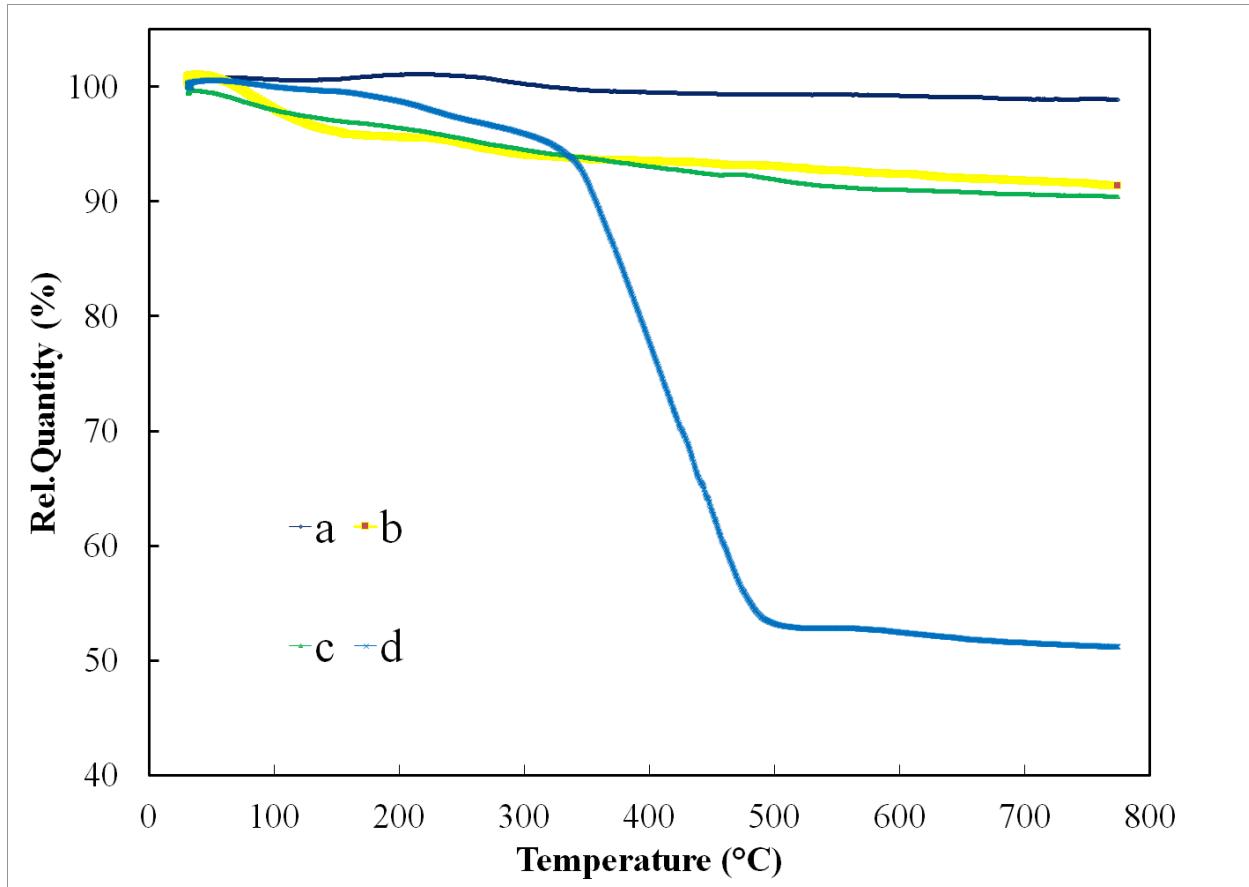


Fig. 2S. The effect of shaking time on the retention of the target ions by the synthesized sorbent.

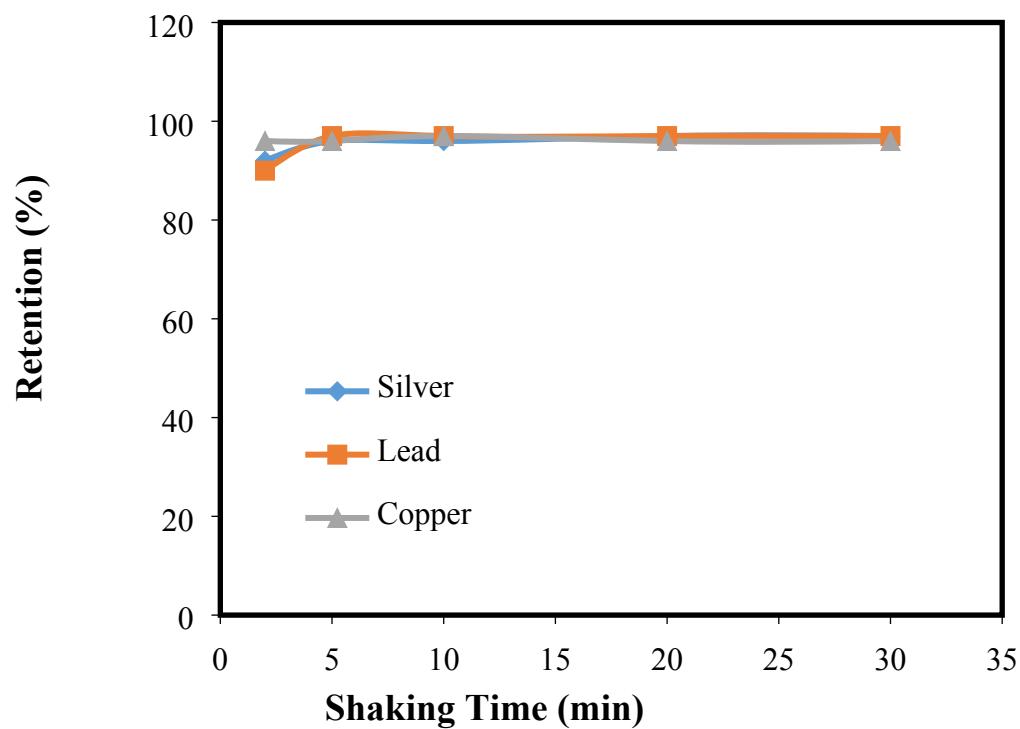


Table 1S. Application of the introduced sample preparation method for analysis of target ions in certified reference materials.

Certified reference material	Element	Certified(mg kg^{-1})	Added (ng mL^{-1})	Found(mg kg^{-1})	Relative error(%)
Ore Polymetallic gold Zidarovo PMZrZ(206 BG 326)	Ag	17.2 (± 0.1)	----	16.9 (± 0.1)	-1.7
	Pb	5.47 (± 0.05)	----	5.34 (± 0.06)	-2.4
	Cu	0.51 (± 0.04)	----	0.49 (± 0.05)	-3.9