Electronic supporting material

Dispersive solid phase extraction of gold with magnetite-graphene oxide prior to their determination via Microwave Plasma–Atomic Emission Spectrometery

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This Electronic Supplementary Information (ESI) file includes the supplementary figures and table.

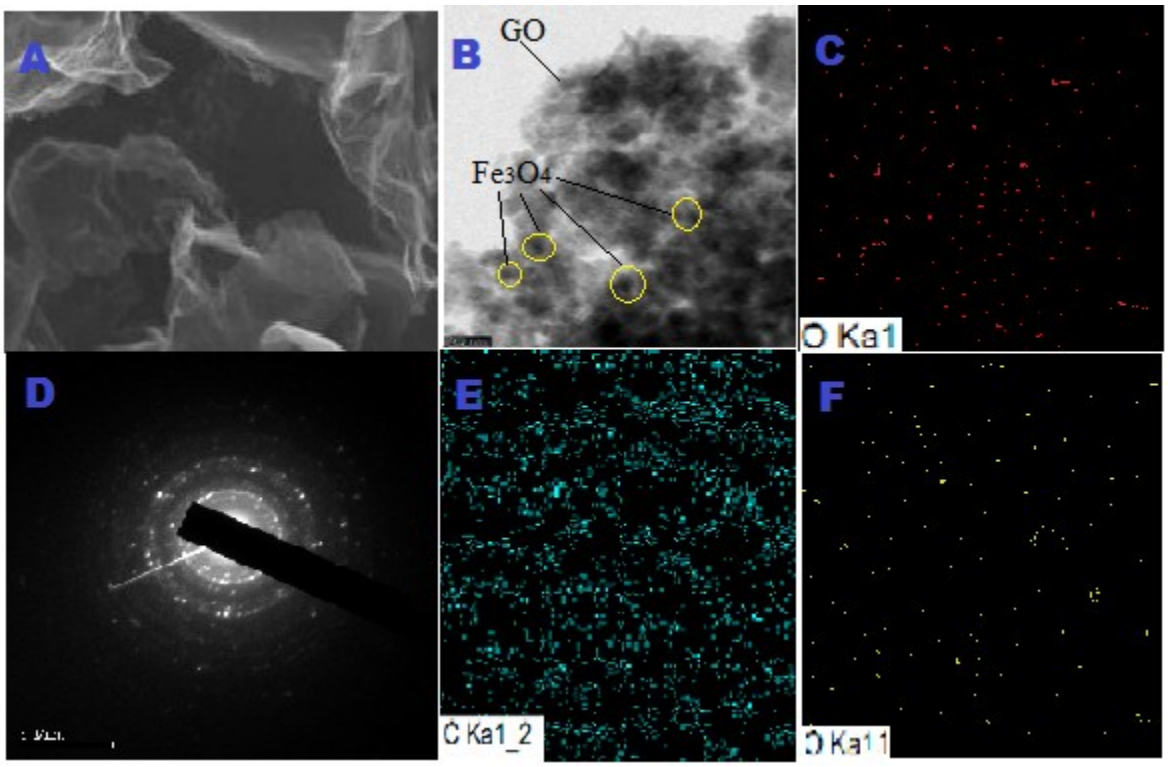

Fig. ESM 1 (A) SEM image of m-GO, (B) TEM image of m-GO; (C,E,F) Elemental mapping images of carbon, oxygen and gold, respectively; (D) SAED pattern of m-GO.

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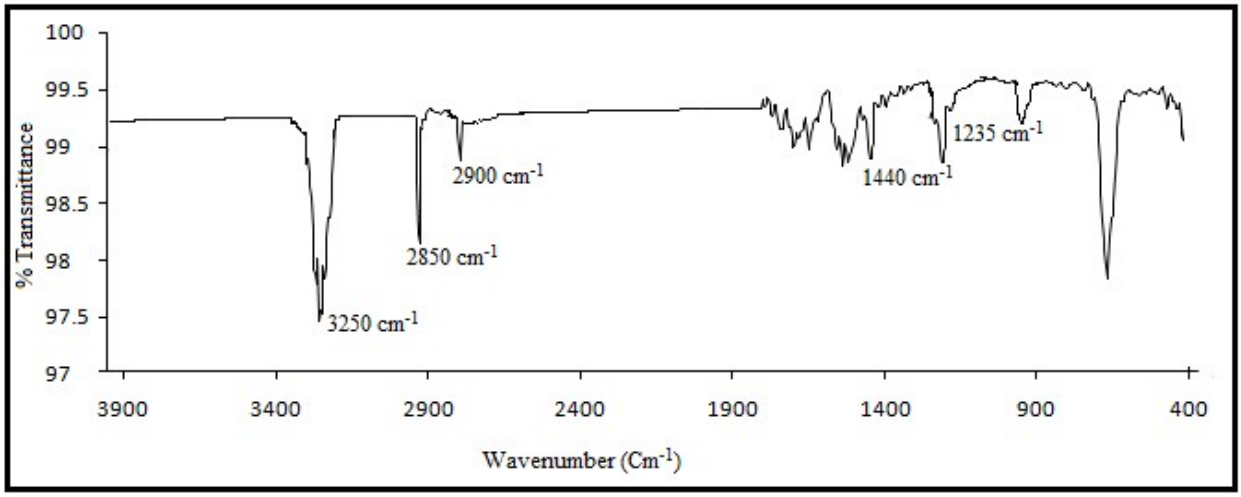

Fig. ESM 2 FT-IR spectra of m-GO.

ESM Table 1. Effect of foreign ions on the recovery and determination of 1.0 µg L^{-1} of Au using DSPE/MP-AES method.

Foreign ions	Added as	Amount added (µg L^{-1})	%Recovery	RSD (N=3)
Cu^{2+}	$CuNO_3$	300	100.4	1.25
Ni^{2+}	$NiNO_3$	250	97	0.75
Co^{2+}	$CoNO_3$	500	96.3	1.42
Cd^{2+}	$CdCl_2$	500	98.5	0.43
Zn^{2+}	$ZnCl_2$	300	97.5	0.62
Na^{+}	NaCl	50000	98	1.71
K^{+}	KCl	40000	97.2	0.68
Ca^{2+}	$CaCl_2$	6000	101	0.87
Mg^{2+}	$MgCl_2$	10000	102	0.95
Pd^{2+}	$Pd(NO_3)_2$	250	102.2	0.67

Cr^{3+}	$CrCl_3$	250	101	0.91
CO_3^{2-}	Na_2CO_3	2000	102	1.1
Br^-	NaBr	75000	100	0.73
Cl^-	NaCl	75000	101.4	1.72
NO_3^-	$NaNO_3$	3000	101.2	2.01
PO_4^{3-}	Na_2HPO_4	20000	98.8	2.43
SO_4^{2-}	Na_2SO_4	22000	100.6	1.77