Supplementary information

Figure S1. Optimum the nebulizer gas flow rate ($Q_g$) for emission lines of different $E_{\text{sum}}$ operating (♦) 1.0% w w$^{-1}$ nitric acid and, (■) 0.5% w w$^{-1}$ calcium nitrate solutions in MIP-OES.
Figure S2. Influence of $E_{\text{sum}}$ on the relative signal intensity ($I_{\text{rel}}$) obtained in ICP-OES operating 1400 W rf power for different emission lines operating (■) 0.5% w$^{-1}$ calcium nitrate; (□) 5% w$^{-1}$ glycerol; and (●) 5% w$^{-1}$ sulfuric acid solutions, in comparison to the corresponding 1.0% w$^{-1}$ nitric acid. $Q_g$ 0.6 L min$^{-1}$. $I_{\text{rel}}$ values in-between dashed lines indicate no matrix effects.
Figure S3. Influence of the nebulizer gas flow rate ($Q_g$) on the net emission signal obtained in MIP-OES for (□) Sc I 391.182 nm; and, (■) Zn 213.857 nm when operating a 5% w w$^{-1}$ glycerol (dashed lines) and 1.0% w w$^{-1}$ nitric acid (continuous lines) solutions.
Figure S4. Influence of the nebulizer gas flow rate ($Q_g$) on the net emission signal obtained in MIP-OES for (square) Sc I 391.182 nm; and, (■) Zn 213.857 nm when operating a 5% w w$^{-1}$ sulfuric acid (dashed lines) and 1.0% w w$^{-1}$ nitric acid (continuous lines) solutions.