

Nitric acid effect in inductively coupled plasma mass spectrometry: new insights on possible causes and correction

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Supplementary Material

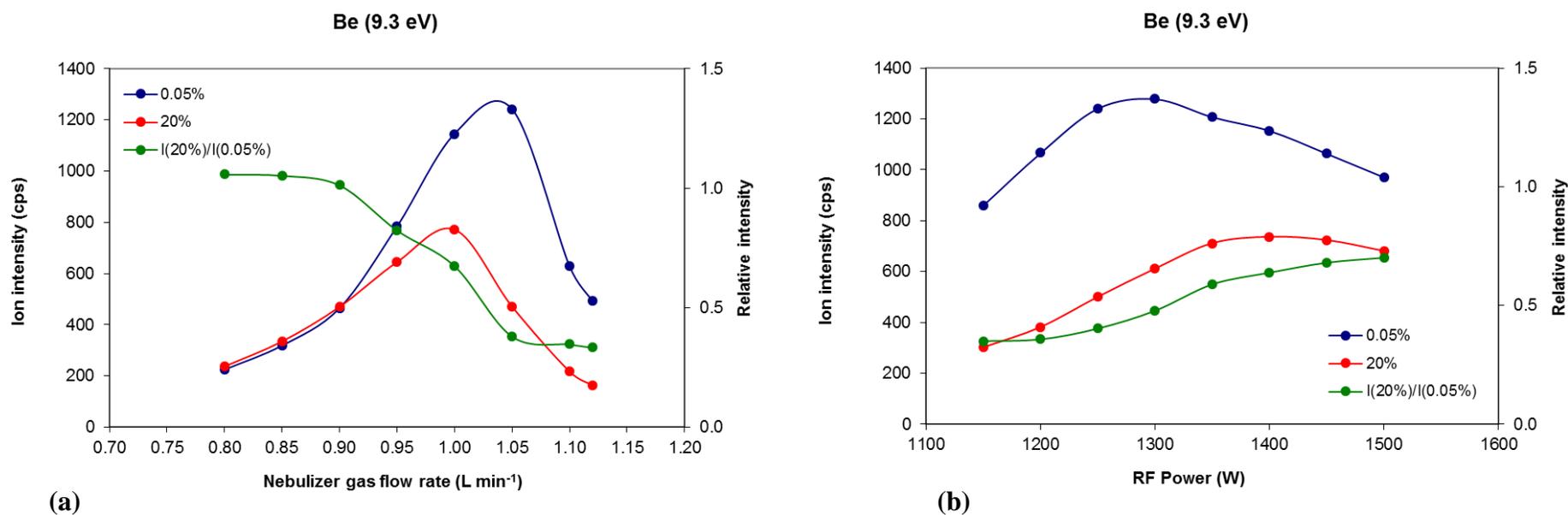


Figure S1. Effect of the operating conditions on the acid effect for beryllium. (a) effect of the nebulizer gas flow rate (RF power: 1400 W); (b) effect of the RF power (nebulizer gas flow rate: 1.0 L min⁻¹). Precision (%RSD, n=5) of each measurement was better than 3%.

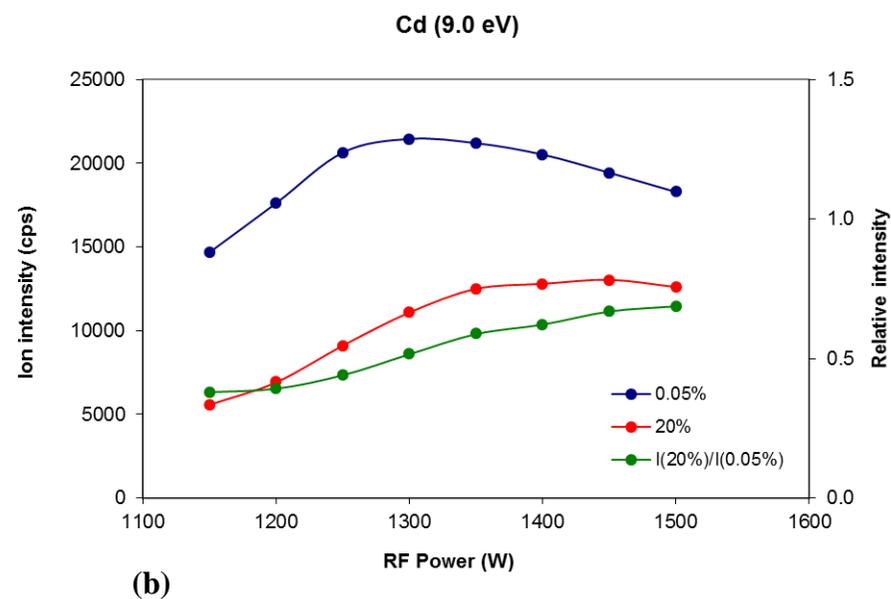
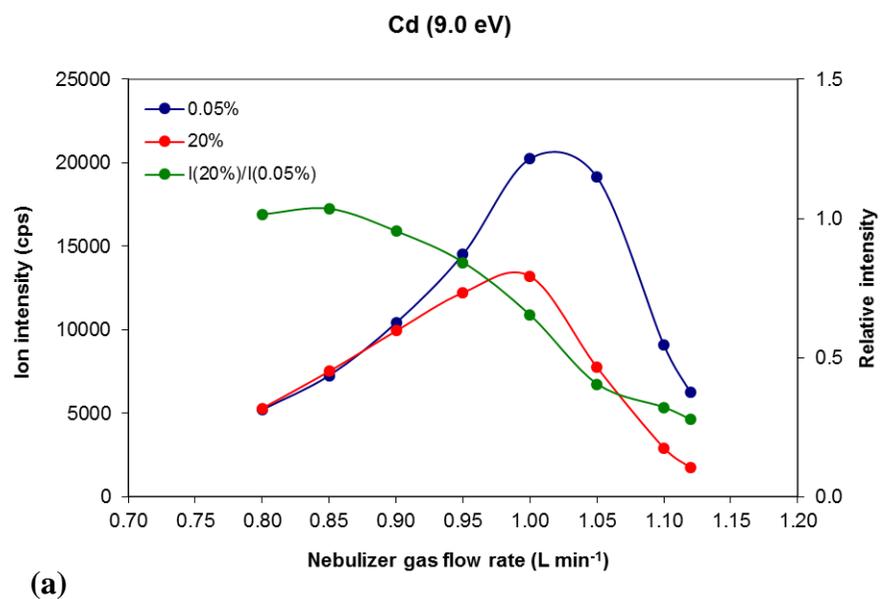
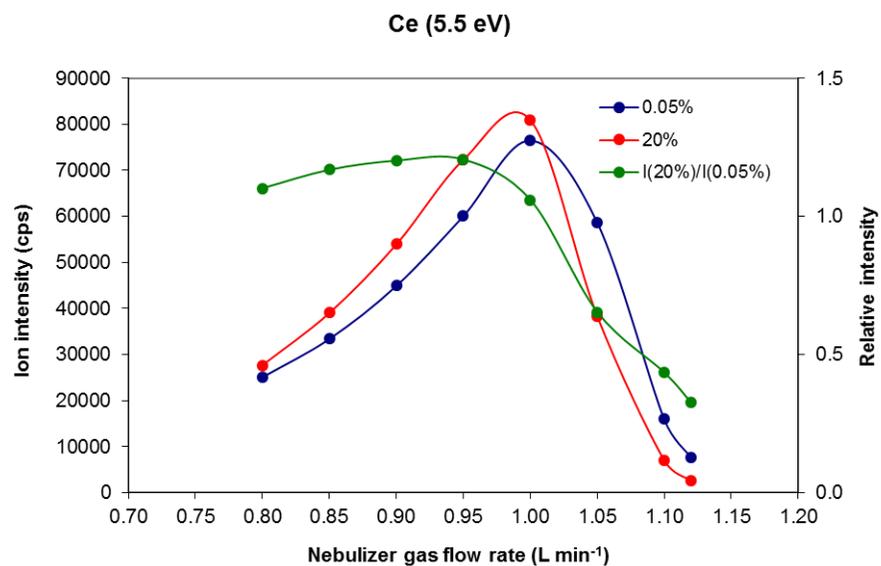
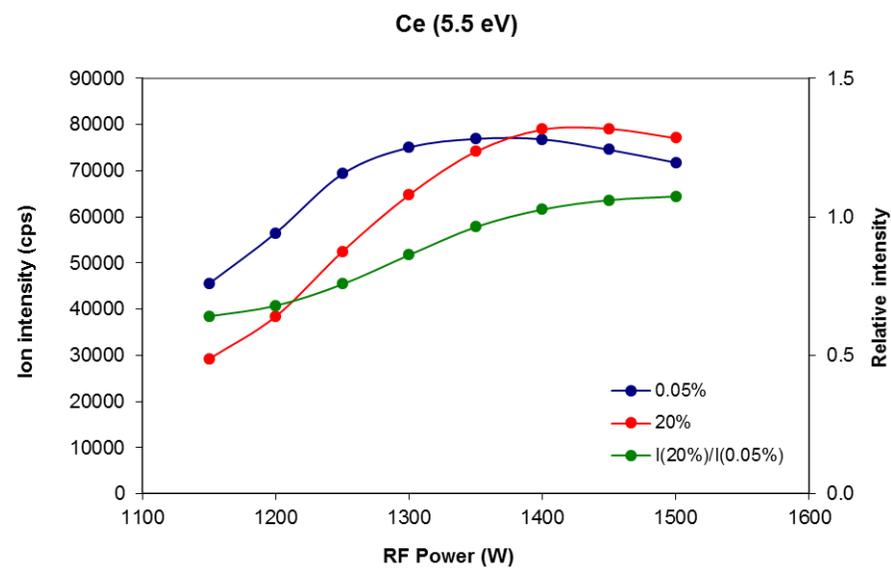


Figure S2. Effect of the operating conditions on the acid effect for cadmium. (a) effect of the nebulizer gas flow rate (RF power: 1400 W); (b) effect of the RF power (nebulizer gas flow rate: 1.0 L min⁻¹). Precision (%RSD, n=5) of each measurement was better than 3%.



(a)



(b)

Figure S3. Effect of the operating conditions on the acid effect for cerium. (a) effect of the nebulizer gas flow rate (RF power: 1400 W); (b) effect of the RF power (nebulizer gas flow rate: 1.0 L min⁻¹). Precision (%RSD, n=5) of each measurement was better than 3%.

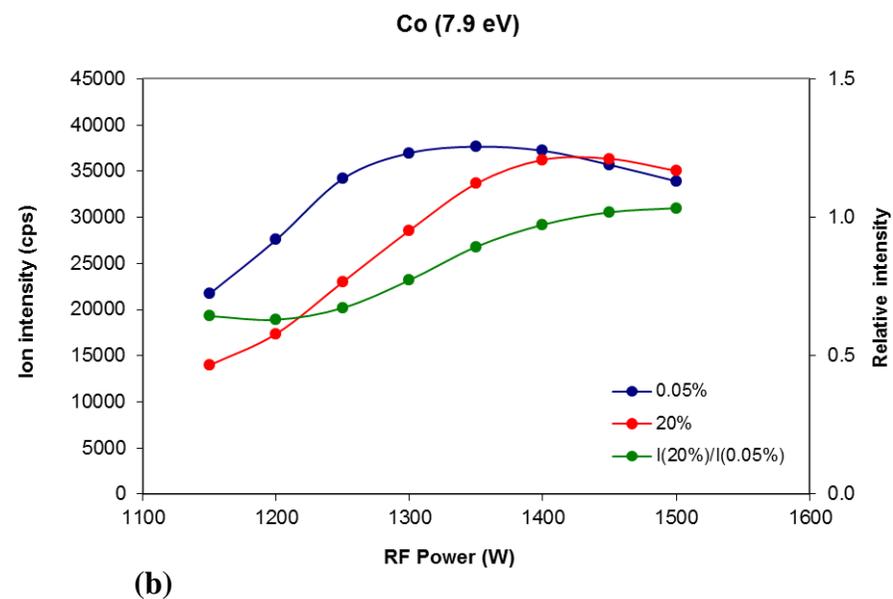
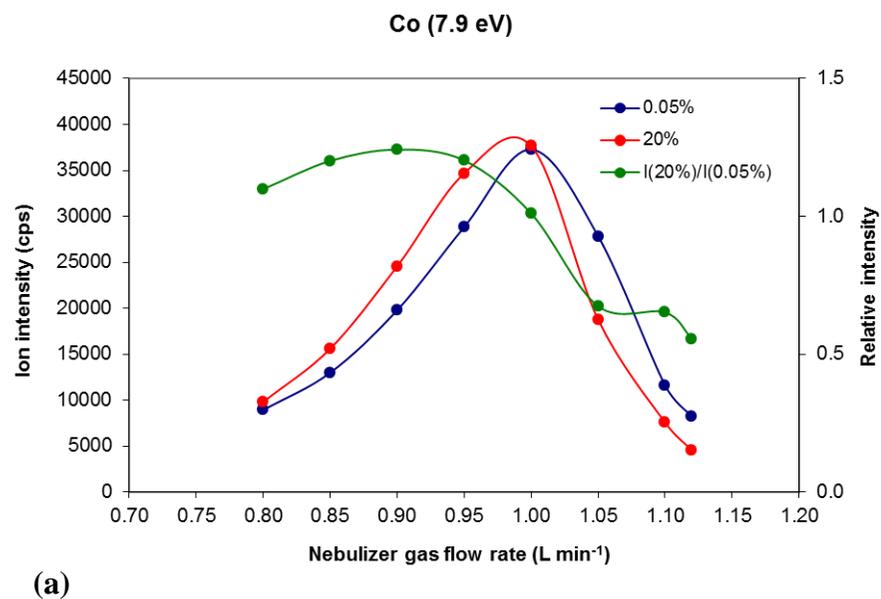


Figure S4. Effect of the operating conditions on the acid effect for cobalt. (a) effect of the nebulizer gas flow rate (RF power: 1400 W); (b) effect of the RF power (nebulizer gas flow rate: 1.0 L min⁻¹). Precision (%RSD, n=5) of each measurement was better than 3%.

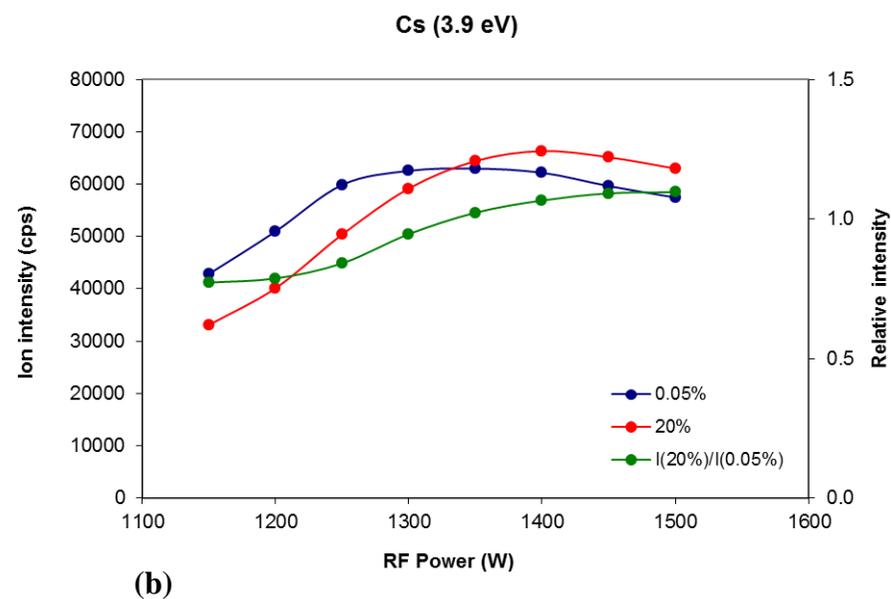
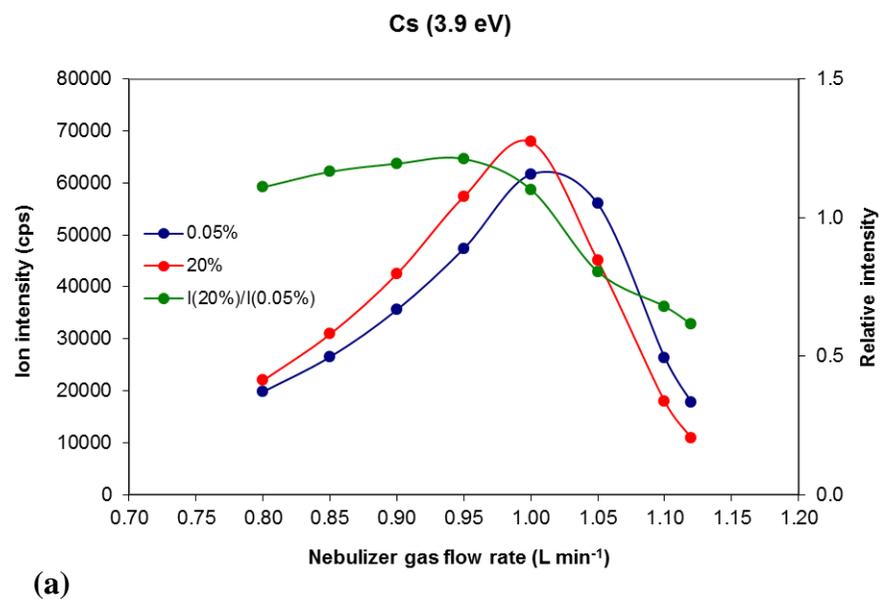


Figure S5. Effect of the operating conditions on the acid effect for cesium. (a) effect of the nebulizer gas flow rate (RF power: 1400 W); (b) effect of the RF power (nebulizer gas flow rate: 1.0 L min⁻¹). Precision (%RSD, n=5) of each measurement was better than 3%.

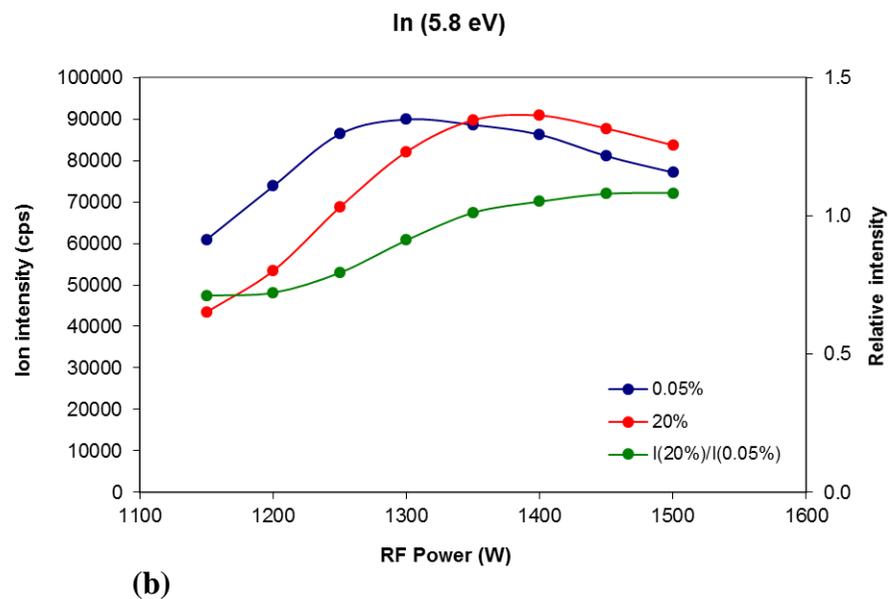
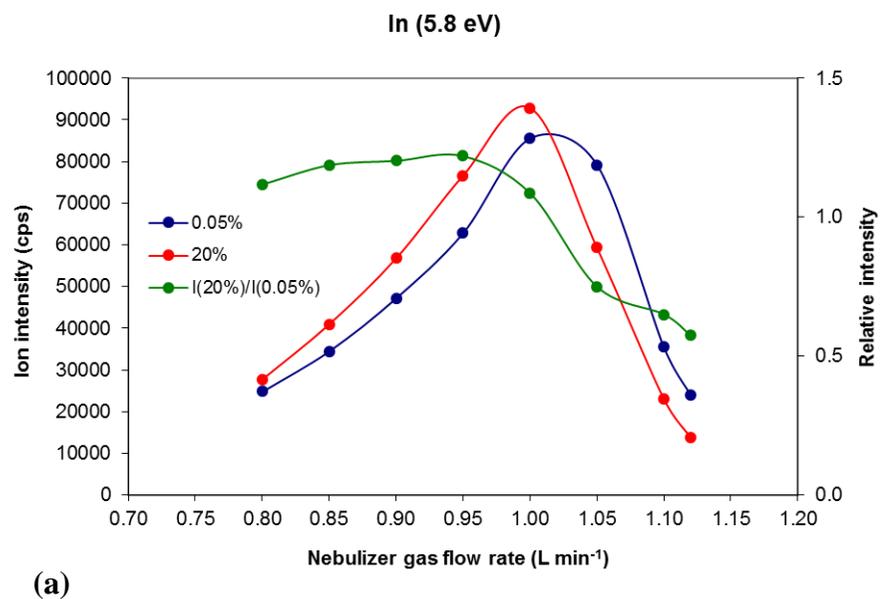


Figure S6. Effect of the operating conditions on the acid effect for indium. (a) effect of the nebulizer gas flow rate (RF power: 1400 W); (b) effect of the RF power (nebulizer gas flow rate: 1.0 L min⁻¹). Precision (%RSD, n=5) of each measurement was better than 3%.

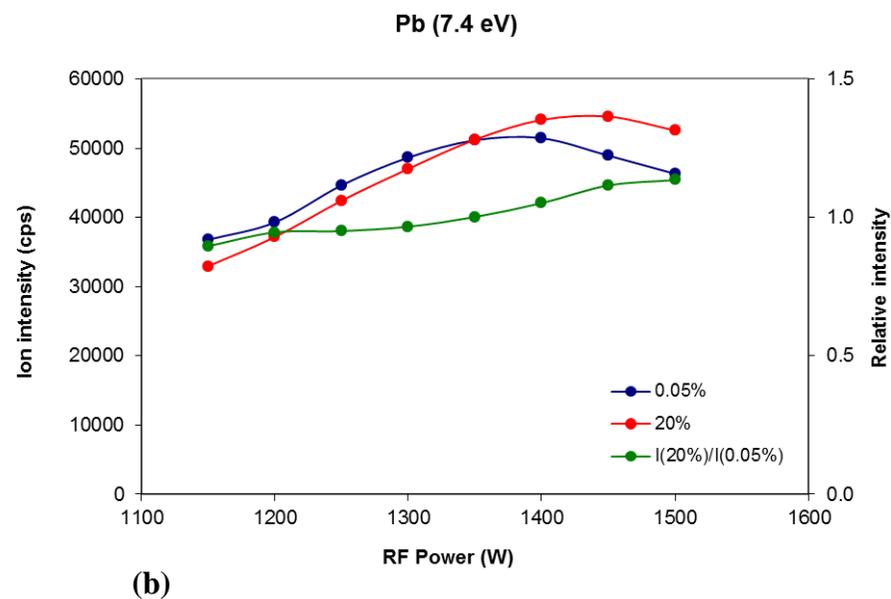
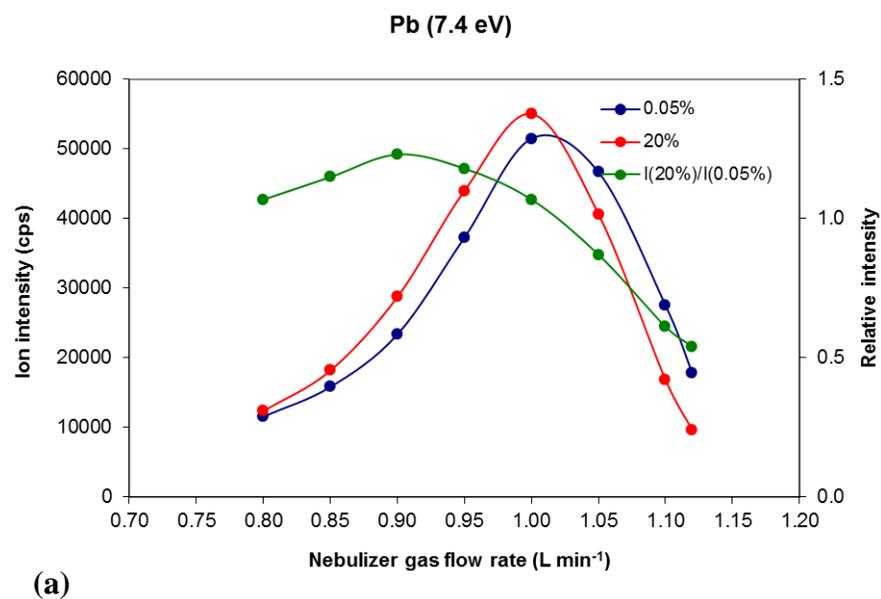


Figure S7. Effect of the operating conditions on the acid effect for lead. (a) effect of the nebulizer gas flow rate (RF power: 1400 W); (b) effect of the RF power (nebulizer gas flow rate: 1.0 L min⁻¹). Precision (%RSD, n=5) of each measurement was better than 3%.

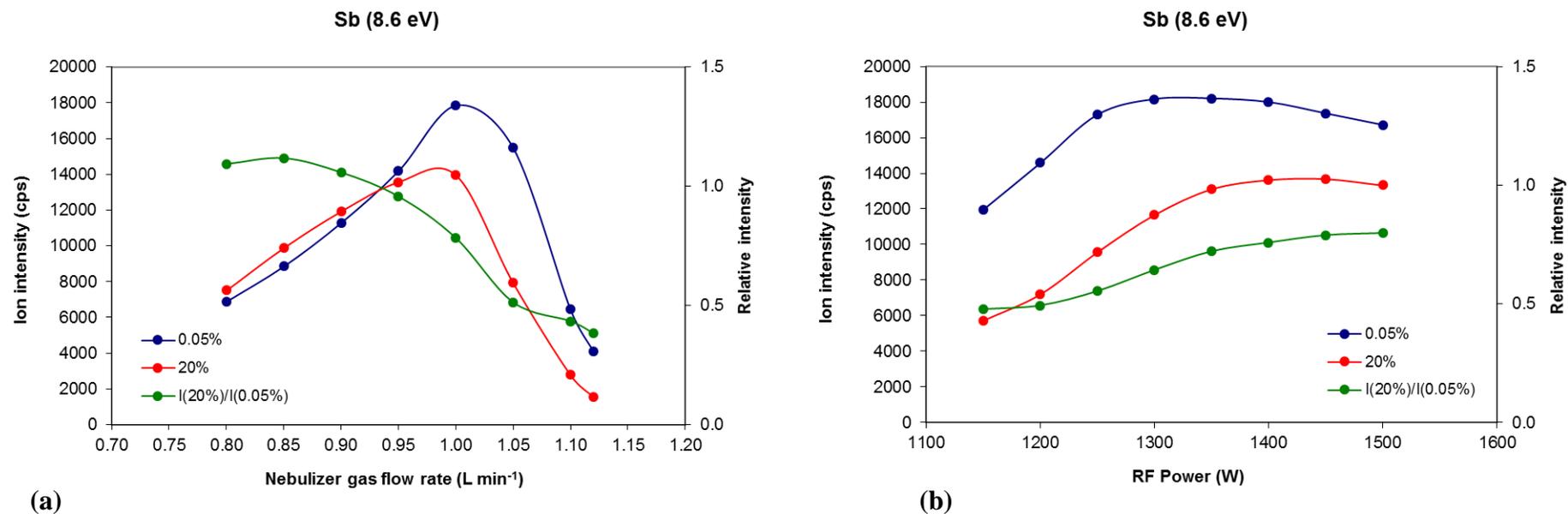


Figure S8. Effect of the operating conditions on the acid effect for antimony. (a) effect of the nebulizer gas flow rate (RF power: 1400 W); (b) effect of the RF power (nebulizer gas flow rate: 1.0 L min⁻¹). Precision (%RSD, n=5) of each measurement was better than 3%.

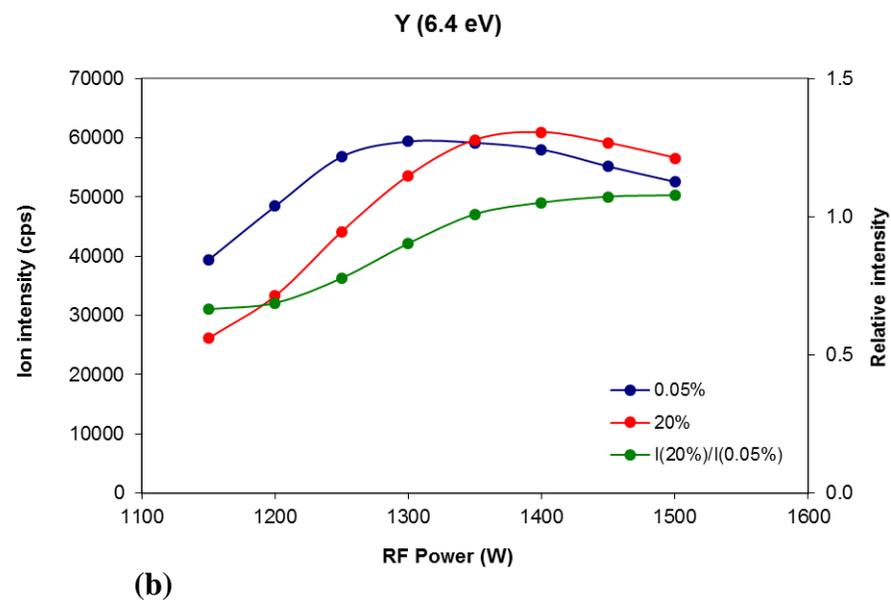
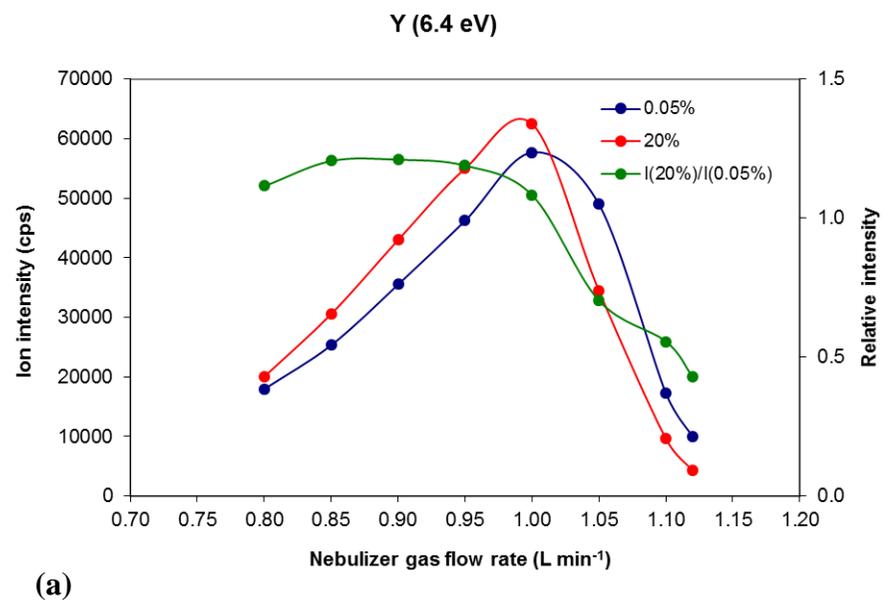


Figure S9. Effect of the operating conditions on the acid effect for yttrium. (a) effect of the nebulizer gas flow rate (RF power: 1400 W); (b) effect of the RF power (nebulizer gas flow rate: 1.0 L min⁻¹). Precision (%RSD, n=5) of each measurement was better than 3%.

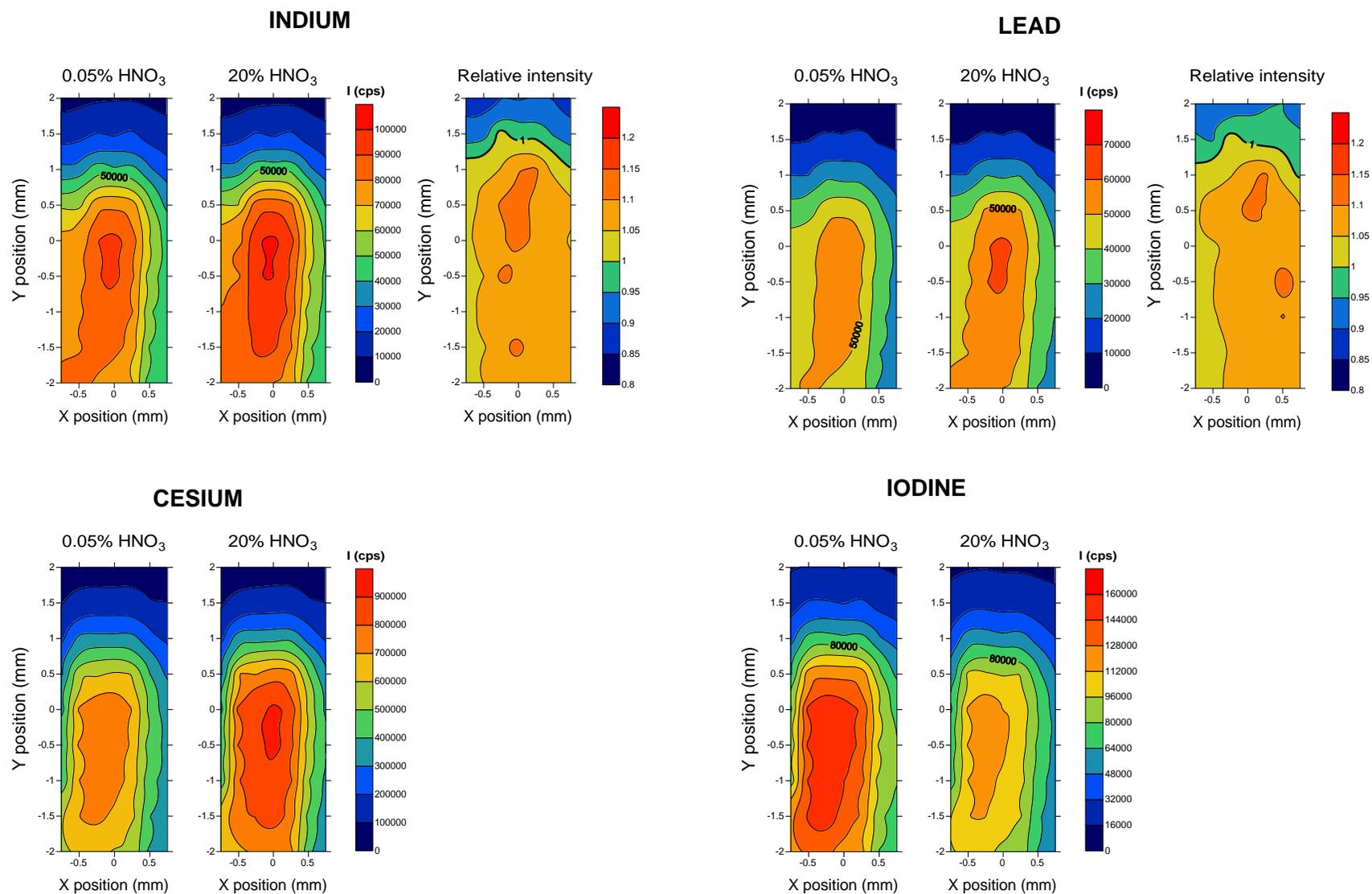


Figure S10. Spatially-resolved distributions in the ICP source (see manuscript for plasma positioning). RF power: 1400 W.