



Cite this: *J. Anal. At. Spectrom.*, 2019, 34, 413

## Correction: A UV digital micromirror spectrometer for dispersive AFS: spectral interference in simultaneous determination of Se and Pb

 Chen Tao, <sup>a</sup> Chunsheng Li, <sup>\*a</sup> Yingchao Li, <sup>a</sup> Hongxia Wang, <sup>a</sup>  
Yaru Zhang, <sup>a</sup> Zhiheng Zhou,<sup>b</sup> Xuefei Mao, <sup>c</sup> Zhenyu Ma <sup>d</sup> and Di Tian <sup>\*a</sup>

DOI: 10.1039/c8ja90055h

www.rsc.org/jaas

Correction for 'A UV digital micromirror spectrometer for dispersive AFS: spectral interference in simultaneous determination of Se and Pb' by Chen Tao *et al.*, *J. Anal. At. Spectrom.*, 2018, 33, 2098–2106.

The authors regret that the units of the concentration of  $\text{KBH}_4$ ,  $\text{K}_3\text{Fe}(\text{CN})_6$  and HCl were not correctly given in the original article. In Table 1 and in the text, the units of  $\text{KBH}_4$  and  $\text{K}_3\text{Fe}(\text{CN})_6$  concentration should be given as a percentage in w/v, and the units of HCl concentration should be given as a percentage in v/v. The corrected version of Table 1 is shown below.

The sentence beginning "The  $\text{K}_3\text{Fe}(\text{CN})_6$  (Sinopharm Group Chemical Reagent Co., Ltd.)" and the following sentence on page 2100 should read as follows: "The  $\text{K}_3\text{Fe}(\text{CN})_6$  (Sinopharm Group Chemical Reagent Co., Ltd.) and  $\text{KBH}_4$  (Tianjin Institute of Chemical Reagents, Tianjin, China) solution were prepared by dissolving  $\text{KBH}_4$  in a 0.5% (w/v) NaOH solution (Beijing Chemicals Co., China). Argon (99.99%) (Praxair Inc., Beijing, China) was used as the carrier gas and the shield gas."

The sentence beginning "As can be seen in Fig. 12" and the following sentence on page 2103 should read as follows: "As can be seen in Fig. 12, the signal increased with increasing HCl concentration from 2% to 7% (v/v) for Se. Higher concentration was unfavourable for Pb excitation. Using 3% (v/v) HCl is suitable for simultaneous determination of Se and Pb, and the reaction system is stable."

Table 1 Main analytical conditions in the experimental setup

Parameters	Setting value (by UV digital micromirror spectrometer method)	Setting value (by non-dispersive method)
Flow rate of carrier gas	400 mL min <sup>-1</sup>	400 mL min <sup>-1</sup>
Flow rate of shield gas	850 mL min <sup>-1</sup>	850 mL min <sup>-1</sup>
$\text{KBH}_4$ concentration (w/v)	1.6%	1.6%
HCl concentration (v/v)	3%	3%
$\text{K}_3\text{Fe}(\text{CN})_6$ concentration (w/v)	2.5%	2.5%
Sample flow rate	0.1 mL s <sup>-1</sup>	0.1 mL s <sup>-1</sup>
Reductant flow rate	0.05 mL s <sup>-1</sup>	0.05 mL s <sup>-1</sup>
Lamp primary/boost current of Se	60 mA/30 mA	60 mA/30 mA
Lamp primary/boost current of Pb	60 mA/30 mA	60 mA/30 mA
Negative high voltage of PMT	450 V	280 V

The sentence beginning "Because the grating is designed to divide" on page 2100 should read as follows: "Because the grating is designed to divide the wavelengths nearly equally and project them onto the DMD, the relationship between the lines of the DMD and wavelength satisfies the approximate formula  $\lambda = -3 \times 10^{-5}C^2 + 0.195C + 174.25$ , where  $\lambda$  is the wavelength and  $C$  is the number of lines of the DMD."

The relative fluorescence intensity of Se at 196.0 nm and 203.9 nm in Table 3 has been written incorrectly in the original article. The corrected version of Table 3 is shown below.

<sup>a</sup>College of Instrumentation & Electrical Engineering, Jilin University, Changchun 130023, China. E-mail: tiandi@jlu.edu.cn<sup>b</sup>Beijing Bohui Innovation Optoelectronic Technology Co., Ltd, Beijing 102206, China<sup>c</sup>Grating Technology Laboratory, Changchun Institute of Optics and Fine Mechanics and Physics, Chinese Academy of Sciences, Changchun 130033, China<sup>d</sup>Institute of Quality Standard and Testing Technology for Agro-Products, Chinese Academy of Agricultural Sciences, Beijing 100081, China

Table 3 Analytical results for Se and Pb in standard samples

Element	Wavelength (nm)	Relative fluorescence intensity (%)	Linear range ( $\mu\text{g L}^{-1}$ )	Relative coefficient	Detection limit ( $\mu\text{g L}^{-1}$ )
Se	196.0	42.83	4–200	0.9984	2.05
	203.9	100	2–200	0.9963	0.89
Pb	217.0	29.35	4–200	0.9978	1.46
	261.3	52.84	2–200	0.9987	0.94
	283.3	100	2–200	0.9991	0.42

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

