 ERRATA

**Erratum: “Formation of Zr I and Zr II Lines under NON-LTE
Conditions of Stellar Atmospheres”
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A. B. Velichko¹, L. I. Mashonkina¹, and H. Nilsson²

¹*Institute of Astronomy, Russian Academy of Sciences, ul. Pyatnitskaya 48, Moscow, 119017 Russia*

²*Department of Atomic Astrophysics, Lund Observatory, Sweden*

**e-mail: anna@inasan.rssi.ru*

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In the published calculations, $E_{\text{ion}}(\text{Zr I}) = 6.84$ eV instead of $E_{\text{ion}}(\text{Zr I}) = 6.63$ eV recommended by the NIST atomic database (<http://physics.nist.gov/PhysRefData>) was erroneously used for the ionization energy of neutral zirconium. The change in $E_{\text{ion}}(\text{Zr I})$ affected the ratio of the number densities of atoms in two ionization stages $n(\text{Zr I})/n(\text{Zr II})$, but the b factors of not only Zr II but also Zr I levels remained almost unchanged. The latter is explained by the fact that the wavelength of the ultraviolet ionizing photons increased by no more than 100 Å and, hence, the ratio $J_{\nu}/B_{\nu}(T)$ changed only slightly. For example, for the $4d^35s^5F_5$ and $4d^35p^5G_6^o$ levels, which are the lower and upper levels of the transition responsible for the Zr I 4687 Å line, the change in b_i does not exceed 1.5 % in the solar atmosphere at depths with $\log \tau_{5000}$ from -0.5 to -1 . Therefore, the solar abundance that we derived previously from Zr I lines turned out to be underestimated by 0.18 dex irrespective of the line formation scenario. To correct this error, the corresponding values in Table 1 (the first two rows) and Table 3 must be increased by 0.18 dex. The errors did not affect in any way the solar abundance determined from Zr II lines.

Once the abundance derived from Zr I lines has been corrected, the difference between the two ionization stages (Zr I–Zr II) changed. It is now -0.10 dex under the assumption of LTE and from $+0.14$ to $+0.10$ dex for different coefficients k_{H} when the lines are formed under non-LTE conditions. Thus, the conclusion about the necessity of allowance for the departures from LTE for zirconium lines is retained, but the calculated non-LTE corrections for Zr I lines were overestimated probably due to missing the highly excited Zr I levels in the model atom.

We are grateful to Nikolas Grevesse who pointed out that the ionization energy used for neutral zirconium is erroneous.