

Erratum: Predictions for the synthesis of unknown $^{279-281}\text{Nh}$ and $^{287,288}\text{Nh}$ isotopes [Phys. Rev. C **111**, 024611 (2025)]

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In our original article, several inaccuracies need to be corrected as follows:

(1) Introduction, p. 1, right column, line 4.

There was a typo in the parent element symbol; it should refer to ‘Ts’ (not ‘Bk’). The correct sentence should state: “In the $^{48}\text{Ca} + ^{249}\text{Bk}$ reaction aimed at synthesizing the 117th element, ^{285}Nh and ^{286}Nh were identified as the α -decay descendants of ^{293}Ts and ^{294}Ts .”

(2) The Model, p. 2, right column, line 7.

There was a typo on the left side of the equation for the surface tension coefficient; the factor $R_{1,2}^2$ was missing. The correct relation between the surface-energy coefficient a_s and the surface tension σ is $4\pi R_{1,2}^2 \sigma = a_s A_{1,2}^{2/3}$. This typographical error does not affect the results.

(3) Table I caption.

The published caption is incorrect. The correct caption should read, “Summary of reaction systems and methods for synthesizing $^{278,282-286}\text{Nh}$ isotopes.” (replacing the incorrect caption “The comparison of the reaction systems for producing new isotopes $^{278,282-286}\text{Nh}$ with different theoretical models.”)

(4) Conclusion, p. 6, line 3.

The published conclusion listing four reaction systems is misleading; only results for the second one, $^{48}\text{Ca} + ^{237}\text{Np} \rightarrow ^{285-xn}\text{Nh} + xn$, were presented. The correct sentence should read, “In this paper, we examine the reliability of the DNS model by comparing its predictions with experimental results of the reaction $^{48}\text{Ca} + ^{237}\text{Np} \rightarrow ^{285-xn}\text{Nh} + xn$.” (replacing the misleading sentence “In this paper, we examine the reliability of the DNS model by comparing its predictions with experimental results of the reactions $^{48}\text{Ca} + ^{238}\text{U} \rightarrow ^{286-xn}\text{Cn} + xn$, $^{48}\text{Ca} + ^{237}\text{Np} \rightarrow ^{285-xn}\text{Nh} + xn$, $^{48}\text{Ca} + ^{242}\text{Pu} \rightarrow ^{290-xn}\text{Fl} + xn$, and $^{48}\text{Ca} + ^{244}\text{Pu} \rightarrow ^{292-xn}\text{Fl} + xn$.”)

We apologize for these errors and for any confusion they may have caused. These corrections do not affect the main conclusions of the paper.