Erratum: High spin states in ⁹³Sr [Phys. Rev. C 67, 014317 (2003)]

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In this Erratum to our publication, we report the corrections to the previous paper of ⁹³Sr.

In our original publication of level schemes, we defined level energies based on certain transitions and then adjusted the raw data for other transitions to fit those energies. This is not correct scientific procedure as it alters original data to match preconceived beliefs and it has the danger of introducing incorrect transition and level energies into the literature. The main purpose of this Erratum is to provide the original data.

Everywhere in the text where our original paper specified transition or level energies, these should now be replaced by the corresponding ones in Table I. The new level scheme of ⁹³Sr is shown in Fig. 1.

Furthermore, the level scheme has been updated for the following additional reasons:

In the original paper, the 3882 and 4798 keV levels were assigned as $(21/2^+)$ and $(25/2^+)$ states of band (A), respectively. In this Erratum, the 574 keV transition decaying from the 3882 keV level to the 3308 keV level is identified. If the original spin/parity assignments of the 3882 keV level are adopted, the 574 keV level would be a *M*3 transition and is not likely to

Εγ			
original	new	original	new
292.4	292.0	2072.2	2072.1
388.8	388.9	2168.6	2169.1
597.7	597.8	3880.9	3882.0
750.6	750.8	2530.4	2531.0
793.7	793.7	1779.8	1780.2
833.9	833.7	2072.2	2072.1
863.1		5333.9	
882.1	882.5	2954.3	2954.7
916.1	916.4	4797.0	4798.4
931.6	931.8	3100.2	3101.0
986.1	986.5	986.1	986.5
989.3	990.2	4470.8	4471.8
1114.6	1115.1	3283.2	3284.2
1174.5	1174.5	2954.3	2954.7
1182.5	1182.6	2168.6	2169.1
1235.5	1235.7	3307.7	3307.8
1238.3	1238.3	1238.3	1238.3
1289.1	1289.4	4596.8	4597.2
1320.4	1320.9	3100.2	3101.0
1409.3	1409.5	3481.5	3481.6
1992.2	1992.4	3772.0	3772.6
2090.1	2087.5	3869.9	3867.7
2258.1	2257.6	4037.9	4037.8
2376.6	2377.3	4156.4	4157.5

TABLE I. List of the γ -ray transition energies in keV in ⁹³Sr. The old energy values from Fig. 2 of the original paper are also listed for comparison.



FIG. 1. Level scheme showing levels and transitions in ⁹³Sr.

be seen in our data. Thus, the 3882 and 4798 keV levels are removed from band (A) without spin/parity assignments in this Erratum. In Figs. 3 and 6 of the original paper, the ⁹³Sr levels were used for comparison. The 3882 and 4798 keV levels should be removed from those two figures because of the change of spin/parity assignments.

The 1992, 2087, 2258, and 2377 keV transitions are only seen in the 986-793 keV double gate but not seen in the fission partner nor the *x*-ray gate. However, those transitions are still included in the level scheme in Fig. 1. The 863 keV transition in band (D) in the original paper is not confirmed in this Erratum. Thus, this transition is not included in Fig. 1 and Table I.

Other typos are also listed in this Erratum. In Fig. 4 of the original paper, the experimental levels of ⁹⁰Sr taken from Ref. [2] of the original paper were shown. The 3259 and 4060 keV levels were not labeled with the correct energies. The energies from Ref. [2] of the original paper are 3269 and 4066 keV, respectively.

In Figs. 3 and 5 of the original paper, the ⁹⁴Sr levels were taken from Ref. [1] of the original paper and used for comparison. Recently, a new (8^+) at 4360 keV (different from the 3753 keV in Ref. [1] of the original paper) was assigned to the same band in ⁹⁴Sr in Ref. [1]. More work is needed to confirm the 8^+ and 10^+ levels in ⁹⁴Sr to give the correct version of Figs. 3 and 5 in the original paper.

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^[1] W. Urban et al., Phys. Rev. C 104, 064309 (2021).