



## Erratum: First identification of a collective band in the odd-odd $^{104}\text{Nb}$ nucleus [Phys. Rev. C **78**, 014313 (2008)]

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We report several corrections to the original paper.

In our original publication of level scheme of  $^{104}\text{Nb}$ , we determined level energies based on certain transitions and subsequently adjusted the raw data for other transitions to fit these energies. This is not correct scientific procedure as it alters original data, and it risks introducing incorrect transition and level energies into the literature. The main purpose of this erratum is to provide the original data.

In this erratum, a new level scheme of  $^{104}\text{Nb}$  is illustrated in Fig. 1, accompanied by their new transition energies listed in Table I. A recalibration of energy was applied, resulting in numerical adjustments. Everywhere in the text where our original paper specified transition or level energies, these should now be replaced by the corresponding new ones in the table in this erratum.

There are other changes to the level scheme in this erratum. In the original paper, the  $(9^+)$  level was labeled as 1397.7 keV. The correct value deduced from the energy gap should be 1391.7. The 724.5 keV transition is replaced by a 720.7 keV new transition. Such replacement would slightly change Figs. 7 and 8 of the original paper but does not effect the conclusion.

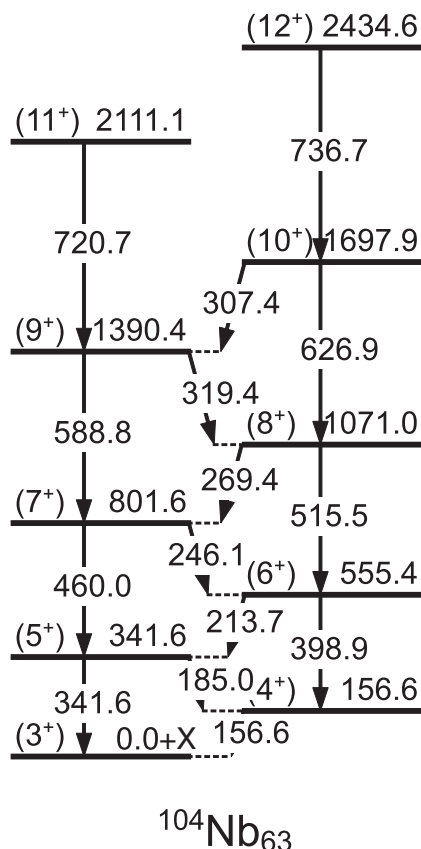


FIG. 1. Level scheme of  $^{104}\text{Nb}$ . Energies are given in keV. The level energies are normalized to the band head energy  $X$ .

TABLE I. List of the  $\gamma$ -ray transition energies in keV in  $^{104}\text{Nb}$ . The old energy values from the original paper are also listed for comparison. The level energies are normalized to the band head energy  $X$ .

$E_\gamma$ (keV)		$E_i$ (keV)	
Original	New	Original	New
157.0	<b>156.6</b>	157.0	<b>156.6</b>
185.5	<b>185.0</b>	342.5	<b>341.6</b>
213.9	<b>213.7</b>	556.4	<b>555.4</b>
246.3	<b>246.1</b>	802.7	<b>801.6</b>
269.7	<b>269.4</b>	1072.4	<b>1071.0</b>
307.9	<b>307.4</b>	1699.6	<b>1697.9</b>
319.3	<b>319.4</b>	1397.7	<b>1390.4</b>
342.5	<b>341.6</b>	342.5	<b>341.6</b>
399.4	<b>398.9</b>	556.4	<b>555.4</b>
460.2	<b>460.0</b>	802.7	<b>801.6</b>
516.0	<b>515.5</b>	1072.4	<b>1071.0</b>
589.0	<b>588.8</b>	1397.7	<b>1390.4</b>
627.2	<b>626.9</b>	1699.6	<b>1697.9</b>
724.5	<b>720.7</b>	2116.2	<b>2111.1</b>
737.6	<b>736.7</b>	2437.2	<b>2434.6</b>

We note that in a later paper in Ref. [1], a 130.5 keV transition has been added depopulating the band head. This transition is not observed in this erratum. Spins and parities of the rotational bands have also been reassigned in Ref. [1]. However, we still keep the original assignments because those two papers both gave tentative assignments. More work is needed to confirm the spin and parity information about the rotational band in this nucleus.

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[1] Y. X. Luo *et al.*, *Phys. Rev. C* **89**, 044326 (2014).