



Erratum: High-spin states in the semimagic nucleus ^{89}Y and neutron-core excitations in the $N = 50$ isotones [Phys. Rev. C **94**, 014315 (2016)]

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In Fig. 1 of the original article, we determined the level energies through the energies of strong transitions. And the energies of the relatively weak and linking transitions were labeled by the corresponding energy differences between the initial and the final states. As a result, the χ^2 for the fit to the γ transitions is almost zero. In fact, all the transition energies should come directly from the fitting of our data.

In this Erratum, the energies of all γ transitions have been changed to their measured energy values. In total, 22 transition energies have been corrected, and, therefore, a corrected version of the level scheme (Fig. 1), typical prompt γ - γ coincidence spectra (Fig. 2), and the table of corrected transitions are shown below (Table I). In the text, the 915.8-keV transitions in the second line from below on p. 2 and in the first paragraph on p. 4 should be replaced as 915.5 keV. In the fifth line of the first paragraph on p. 4, 244.4 should be replaced by 244.6. In the fifth line of the last paragraph on p. 4, 283.8, 324.1, and 456.1 keV should be replaced by 283.5, 323.7, and 465.3 keV, respectively.

TABLE I. γ -ray energies, relative intensities, measured angular distribution from oriented state (ADO) ratios, initial and final level energies, and spin-parity assignments of the transitions in ^{89}Y . This table only includes those transitions for which the earlier energies were incorrect and gives the correct ones.

E_γ (keV)	I_γ	R_{ADO}	$E_i \rightarrow E_f$ (keV)	$I_i^\pi \rightarrow I_f^\pi$
172.3	4.4(9)	0.78(27)	7431.8 \rightarrow 7259.7	25/2 ⁽⁺⁾ \rightarrow (23/2 ⁺)
173.7	4.8(9)	0.87(23)	8264.1 \rightarrow 8089.9	29/2 ⁽⁺⁾ \rightarrow (27/2 ⁺)
238.1	3.9(8)	0.88(19)	7431.8 \rightarrow 7193.8	25/2 ⁽⁺⁾ \rightarrow (23/2 ⁺)
244.6	8.1(10)	0.81(14)	7834.8 \rightarrow 7590.4	27/2 ⁽⁺⁾ \rightarrow (25/2 ⁺)
255.4	4.7(9)	0.85(34)	8089.9 \rightarrow 7834.8	(27/2 ⁺) \rightarrow 27/2 ⁽⁺⁾
283.5	3.8(7)		8866.8 \rightarrow 8583.0	(33/2 ⁻) \rightarrow (31/2 ⁻)
317.6	29.2(18)	0.85(13)	4449.8 \rightarrow 4132.3	17/2 ⁻ \rightarrow 15/2 ⁻
323.7	3.5(8)	0.83(36)	8537.9 \rightarrow 8213.8	(31/2 ⁻) \rightarrow (29/2 ⁻)
326.8	<2		2893.0 \rightarrow 2566.5	13/2 ⁺ \rightarrow 11/2 ⁺
388.6	13.8(10)	0.91(15)	4838.8 \rightarrow 4449.8	19/2 ⁻ \rightarrow 17/2 ⁻
465.3	<2		8583.0 \rightarrow 8117.9	(31/2 ⁻) \rightarrow (29/2 ⁻)
481.6	<2		10385.0 \rightarrow 9903.0	(35/2 ⁺) \rightarrow
571.3	<2		4825.3 \rightarrow 4254.3	17/2 ⁺ \rightarrow (15/2 ⁺)
650.3	15.1(43)	0.78(13)	7834.8 \rightarrow 7184.1	27/2 ⁽⁺⁾ \rightarrow (25/2 ⁺)
756.9	8.0(8)	0.89(31)	7431.8 \rightarrow 6674.6	25/2 ⁽⁺⁾ \rightarrow (23/2 ⁺)
788.4	14.8(15)	0.84(18)	4132.3 \rightarrow 3343.5	15/2 ⁻ \rightarrow 13/2 ⁻
859.4	<2		5309.5 \rightarrow 4449.8	21/2 ⁻ \rightarrow 17/2 ⁻
915.5	6.4(15)	0.91(26)	7590.4 \rightarrow 6674.6	(25/2 ⁺) \rightarrow (23/2 ⁺)
984.6	3.8(15)	0.73(16)	7184.1 \rightarrow 6199.3	(25/2 ⁺) \rightarrow 23/2 ⁺
1753.9	5.4(11)	1.12(27)	6674.6 \rightarrow 4920.3	(23/2 ⁺) \rightarrow 19/2 ⁺
1883.8	<2		7193.8 \rightarrow 5309.5	(23/2 ⁺) \rightarrow 21/2 ⁻
1919.6	6.6(18)	1.41(29)	7184.1 \rightarrow 5264.1	(25/2 ⁺) \rightarrow 21/2 ⁺

89Y

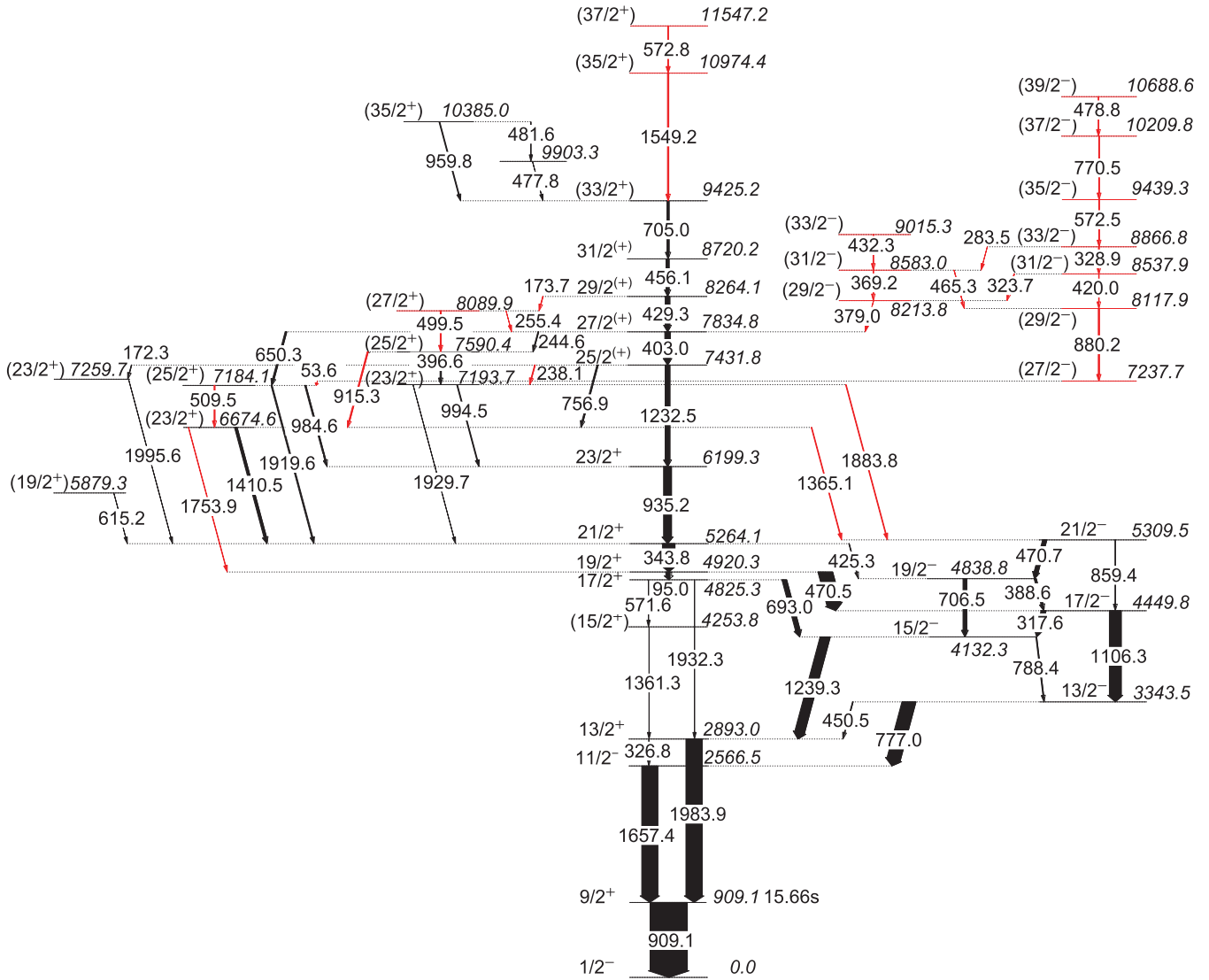


FIG. 1. Level scheme of ^{89}Y established in the present Erratum. New transitions and levels observed in the current Erratum are denoted in red.

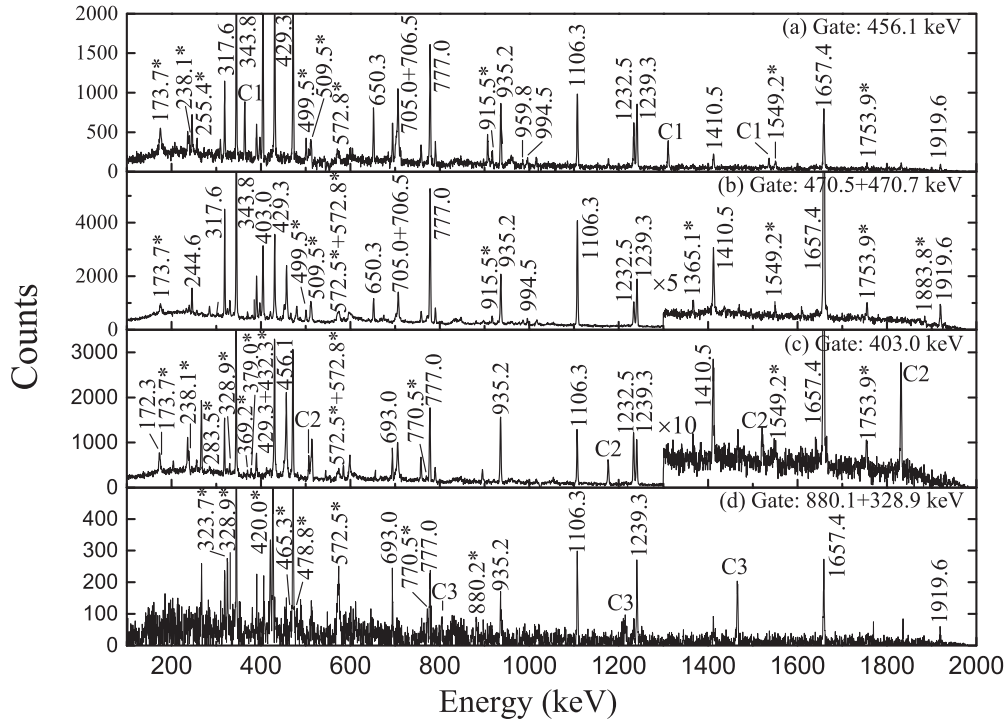


FIG. 2. Spectra of γ rays gated on the 456.1-, 470.5 + 470.7-, 403.0-, and 880.1-keV transitions, respectively. The newly observed transitions are indicated by asterisks. Peaks labeled C1–C3 in the spectra originate from the contaminations of ^{89}Sr [1], ^{87}Rb [2], and ^{84}Kr [3], respectively.

The conclusions of the original article are not affected.

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- [1] E. A. Stefanova, R. Schwengner, G. Rainovski, K. D. Schilling, A. Wagner, F. Döna, E. Galindo, A. Jungclaus, K. P. Lieb, O. Thelen, J. Eberth, D. R. Napoli, C. A. Ur, G. de Angelis, M. Axiotis, A. Gadea, N. Marginean, T. Martinez, T. Kröll, and T. Kutsarova, *Phys. Rev. C* **63**, 064315 (2001).
- [2] N. Fotiades, J. A. Cizewski, R. Krücken, R. M. Clark, P. Fallon, I. Y. Lee, A. O. Macchiavelli, D. P. McNabb, J. A. Becker, L. A. Bernstein, and W. Younes, *Phys. Rev. C* **71**, 064312 (2005).
- [3] H. Rotter, J. Döring, L. Funke, L. Käubler, H. Prade, R. Schwengner, G. Winter, A. E. Zobov, A. P. Grinberg, I. K. Lemberg, A. S. Mishin, L. A. Rassadin, I. N. Chugunov, A. D. Efimov, K. I. Erokhina, V. I. Isakov, L. O. Norlin, and U. Rosengård, *Nucl. Phys. A* **514**, 401 (1990).