Erratum: Spectroscopic Quadrupole Moments in ^{96,98}Sr: Evidence for Shape Coexistence in Neutron-Rich Strontium Isotopes at $N = 60$ [Phys. Rev. Lett. 116, 022701 (2016)]

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In the analysis of the Coulomb excitation cross sections leading to the results that were presented in our recent Letter, a minor error occurred regarding the declaration of the $E2/E0$ branching ratio [1,2] in the GOSIA input file for ^{98}Sr. The value used was not properly corrected for internal conversion. Proper introduction of this constraint in the GOSIA minimization procedure changed the fitted value of $B(E2, 0_2^+ \to 2_1^+)$ to 61(5) W.u., which is seen to be in much better agreement with the previously reported value of $B(E2, 0_2^+ \to 2_1^+) = 57(5)$ W.u. [3].

The $\langle 2_2^+ \| E2 \| 0_2^+ \rangle$ matrix element is also influenced by this change, which leads to a $B(E2, 2_2^+ \to 0_2^+)$ value of $0.034(7)\ e^2b^2$, which is closer to the $B(E2)$ for the $2_1^+ \to 0_1^+$ transition in ^{96}Sr. All other matrix elements remain unchanged within 1σ with respect to the published values. The quadrupole invariants for the 0_2^+ state are now equal to

TABLE I. Observed γ-ray transitions with their intensities for each system (without efficiency correction) and reduced transition probabilities between low-lying states in ^{96,98}Sr. The error bars correspond to 1σ.

^{98}Sr beam	^{208}Pb/^{60}Ni target	$B(E2; I_2 \to I_1)$ (e^2b^2)	
$I_2 \to I_1$	I_γ	Experiment	5DCH
$2_1^+ \to 0_1^+$	$1.21(2) \times 10^5/5.0(2) \times 10^4$	$0.259^{+0.008}_{-0.008}$	0.1455
$4_1^+ \to 2_1^+$	$1.80(3) \times 10^4/8.06(12) \times 10^3$	$0.346^{+0.022}_{-0.020}$	0.2961
$6_1^+ \to 4_1^+$	$2.72(7) \times 10^3/1.11(5) \times 10^3$	$0.47^{+0.04}_{-0.04}$	0.4037
$8_1^+ \to 6_1^+$	232(63)/not observed	$0.33^{+0.05}_{-0.04}$	0.4634
$10_1^+ \to 8_1^+$	From $T_{1/2}$ [4]	$0.34^{+0.08}_{-0.05}$	0.4915
$2_2^+ \to 0_2^+$	198(21)/128(74)	$0.034^{+0.007}_{-0.007}$	0.0762
$2_2^+ \to 0_1^+$	From branching ratio [3]	$0.0021^{+0.0004}_{-0.0004}$	0.0002
$0_2^+ \to 2_1^+$	From $T_{1/2}$ [1,3]	$0.163^{+0.015}_{-0.015}$	0.3243
$2_2^+ \to 2_1^+$	58(11)/not observed	$0.001^{+0.002}_{-0.002}$	0.0021
$2_2^+ \to 4_1^+$	From branching ratio [3]	$0.011^{+0.011}_{-0.007}$	0.0521
		$B(M1; I_2 \to I_1)$ (μ_N^2)	
		Experiment	5DCH
$2_1^+ \to 2_2^+$		$0.0016^{+0.0006}_{-0.0007}$	
^{96}Sr beam	^{120}Sn/^{109}Ag target	$B(E2; I_2 \to I_1)$ (e^2b^2)	
		Experiment	5DCH
$2_1^+ \to 0_1^+$	660(30)/354(21)	$0.045^{+0.011}_{-0.008}$	0.084

TABLE II. Spectroscopic quadrupole moments obtained in this Letter in ^{96,98}Sr. The error bars correspond to 1σ.

	^{96}Sr		^{98}Sr	
Q_s (e fm^2)	Experiment	5DCH	Experiment	5DCH
2_1^+	-22^{+33}_{-31}	-5.6	-48^{+25}_{-22}	-60
4_1^+			-213^{+16}_{-17}	-112
6_1^+			-130^{+23}_{-22}	-136
8_1^+			-90^{+100}_{-80}	-149
2_2^+			$+3^{+24}_{-16}$	-28

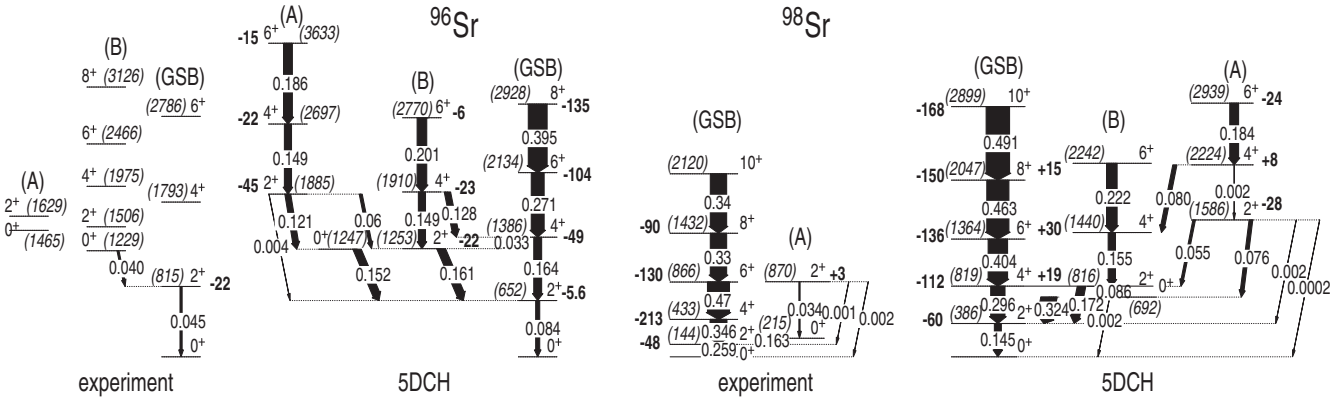

FIG. 1. Comparison between the theoretical and experimental level schemes of ^{96}Sr (left) and ^{98}Sr (right). The excitation energies (in keV) are given in brackets. The widths and labels of the arrows represent the measured and calculated $B(E2)$ in e^2b^2. The measured and calculated spectroscopic quadrupole moments are given in efm^2 next to each state.

$\langle \mathcal{Q}^2 \rangle = 0.33(3)\ e^2b^2$ and $\langle \cos(3\delta) \rangle = 0.36(16)$, again within the published error bars. The mixing amplitude for the 0^+ states, $\cos^2\theta_0$, is now equal to 0.87(1), again in better agreement with Refs. [1,2]. The amended values are given in Tables I and II, and in Fig. 1.

This correction does not affect the conclusions of the Letter.

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