

^{83}Sr IT decay **1973Si16,1976Li27**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 125, 201 (2015)	31-Dec-2014

Parent: ^{83}Sr : $E=259.15$ 9; $J^\pi=1/2^-$; $T_{1/2}=4.95$ s 12; %IT decay=100.0

^{83}Sr -%IT decay: since no β^+ decay from the isomeric 259-keV level has been observed, the evaluator assumes IT decay branching=100%.

1976Li27: Measured E_γ , I_γ , $\gamma(t)$ using 2 coaxial Ge(Li) detectors and a low-energy Ge(Li) detector.

1973Si16: Measured E_γ , I_γ , $\gamma(t)$ using two Ge(Li) detectors and a Ge(Li) x-ray detector, measured Ece, Ice using a cooled Si detector.

Additional information 1.

α : **Additional information 2.**

 ^{83}Sr Levels

<u>E(level)[†]</u>	<u>J^π[†]</u>	<u>$T_{1/2}$[†]</u>
0	7/2 ⁺	32.41 h 3
259.15 9	1/2 ⁻	4.95 s 12

[†] From the Adopted Levels.

 $\gamma(^{83}\text{Sr})$

I_γ normalization: from %IT=100.

<u>E_γ[†]</u>	<u>I_γ[‡]</u>	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.</u>	<u>α</u>	<u>Comments</u>
259.1 1	100	259.15	1/2 ⁻	0	7/2 ⁺	E3	0.1416 20	$\alpha(\text{K})_{\text{exp}}=0.16$ (1973Si16) $\alpha(\text{K})=0.1192$ 17; $\alpha(\text{L})=0.0188$ 3; $\alpha(\text{M})=0.00319$ 5; $\alpha(\text{N})=0.000373$ 6 Mult.: from $\alpha(\text{K})_{\text{exp}}$.

[†] From **1976Li27**.

[‡] For absolute intensity per 100 decays, multiply by 0.876 3.

 ${}^{83}\text{Sr}$ IT decay 1973Si16,1976Li27Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
%IT=100.0

