

^{150}Cs β^- -n decay (81 ms) 2018Li06

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 185, 2 (2022)	23-Aug-2022

Parent: ^{150}Cs : $E=0$; $T_{1/2}=81$ ms 3; $Q(\beta^-)=6590$ SY; $\% \beta^-$ -n decay=20 10

^{150}Cs - $T_{1/2}$: Weighted average of 80 ms 3 (2018Li06, also 80 ms 4 in 2017Li06); 84.4 ms 82 (2017Wu04); 82 ms 7 (2000KoZH).

^{150}Cs - $Q(\beta^-)$: 6590 400 (syst,2021Wa16).

^{150}Cs - $\% \beta^-$ -n decay: $\% \beta^-$ -n=20 10 for ^{150}Cs decay (2000KoZH). Other: $\approx 44\%$, estimated by 2018Li06 from γ intensities.

2018Li06: ^{150}Cs produced at ISOLDE-CERN by fission of UC_x induced by the 1.4-GeV proton beam from PS Booster (PSB).

Measured E_γ , I_γ , $\beta\gamma$ and $\gamma\gamma$ -coin, half-lives of decay of ^{150}Cs g.s. The only information available about γ -ray data from ^{150}Cs β^- -n decay to ^{149}Cs is observation of two γ rays of 282.9 and 316.6 keV displayed in $\beta\gamma$ -coin spectrum Fig. 5a, and brief discussion in text. These two γ rays are most strongly emitted in the decay of ^{149}Ba to ^{149}Cs .

 ^{149}Ba Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	(5/2 ⁻ ,3/2 ⁻)	352 ms 6	$J^\pi, T_{1/2}$: from the Adopted Levels.
282.9			
316.6			

 $\gamma(^{149}\text{Ba})$

E_γ^\dagger	$E_i(\text{level})$	E_f	J_f^π	Comments
282.9	282.9	0.0	(5/2 ⁻ ,3/2 ⁻)	E_γ : read by evaluators from spectral Fig. 5a in 2018Li06.
316.6	316.6	0.0	(5/2 ⁻ ,3/2 ⁻)	E_γ : value is mentioned in the text by 2018Li06.

† From spectrum Fig. 5a and text in 2018Li06.

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Decay Scheme

