

$^{148}\text{Cs}$   $\beta^-$ -n decay 2018Li06,2017Li06

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	N. Nica and B. Singh		NDS 181, 1 (2022)	9-Mar-2022

Parent:  $^{148}\text{Cs}$ :  $E=0.0$ ;  $T_{1/2}=0.1511$  s 12;  $Q(\beta^-n)=5282$  24;  $\% \beta^-n$  decay=29.0 45

$^{148}\text{Cs}$ - $T_{1/2}$ : from 2020Li32.

$^{148}\text{Cs}$ - $Q(\beta^-n)$ : From 2021Wa16.

$^{148}\text{Cs}$ - $\% \beta^-n$  decay: from 2020Li32.

2018Li06, 2017Li06 (same group and setup): U(p,f),  $E=1.4$  GeV using General Purpose Separator (GPS) at ISOLDE-CERN.

Measured  $E_\gamma$ ,  $I_\gamma$ ,  $E_\beta$ ,  $\gamma\gamma$ - and  $\beta\gamma$ -coin, half-lives.

 $^{147}\text{Ba}$  Levels

$E(\text{level})^\dagger$	$J^\pi^\dagger$	$T_{1/2}^\dagger$
0.0	(5/2 <sup>-</sup> )	0.894 s 7
109.8	(7/2 <sup>-</sup> )	1.4 ns

$^\dagger$  Adopted values.

 $\gamma(^{147}\text{Ba})$ 

$E_\gamma^\dagger$	$I_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. $^\dagger$	Comments
109.8	100	109.8	(7/2 <sup>-</sup> )	0.0	(5/2 <sup>-</sup> )	M1+E2	$E_\gamma$ : observed by 2018Li06 in the $^{148}\text{Ba}$ $\beta^-$ -gated $\gamma$ spectrum (recorded in the first 500 ms relative to proton pulse) having a similar time distribution ( $T_{1/2}=158$ ms 6) as the 141.6 $\gamma$ from $^{148}\text{Ba}$ $\beta^-$ decay ( $T_{1/2}=151$ ms 1), which excluded direct population from $^{147}\text{Cs}$ $\beta^-$ ( $T_{1/2}=229.5$ ms 10).

$^\dagger$  Adopted values.

$^{148}\text{Cs}$   $\beta^{-}$  n decay 2018Li06,2017Li06

## Decay Scheme

Intensities: Relative  $I_{\gamma}$ 