^{159}Pm β^- decay

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. W. Reich	NDS 113, 157 (2012)	31-Dec-2010

Parent: ^{159}Pm: E=0; $T_{1/2}$=1.5 s *2*; Q(β^-)=5.46×10^3 *14*; %β^- decay=100.0

^{159}Pm-Q(β^-): From 2007Ha57, total-absorption γ spectroscopy.

Additional information 1.

^{159}Pm was produced in proton-induced fission of ^{238}U and identified through mass separation and the genetic relationship to ^{159}Sm. Studies are reported in 1998IcZZ, 2000IcZZ, 2001AsZY, 2003ShZU, 2005Ic02, and 2007Ha57 (all by the many of the same authors).

^{159}Sm Levels

E(level)	J$^\pi$[†]	$T_{1/2}$	Comments
0[‡]	5/2$^-$	11.37 s *15*	J$^\pi$,$T_{1/2}$: From the adopted values.
71.8[‡]	(7/2$^-$)		J$^\pi$: From the expected energy spacing of the 7/2$^-$ member of the ground-state rotational band.

[†] From Adopted Levels.

[‡] Band(A): ν5/2[523] band.

γ(^{159}Sm)

E_γ	E_i(level)	J_i^π	E_f	J_f^π
71.8	71.8	(7/2$^-$)	0	5/2$^-$
[x]261.3				

[x] γ ray not placed in level scheme.

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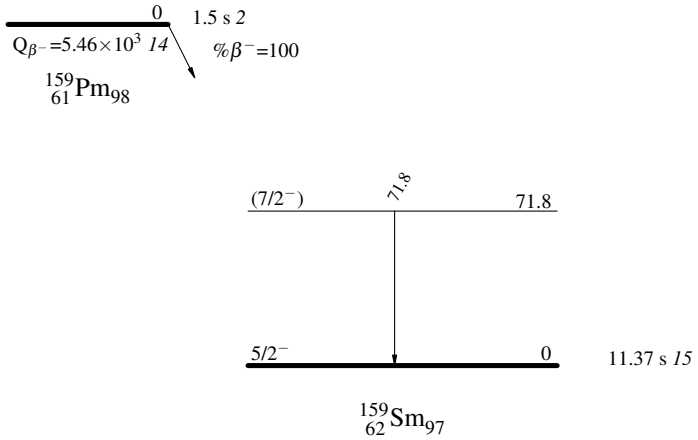
Decay Scheme



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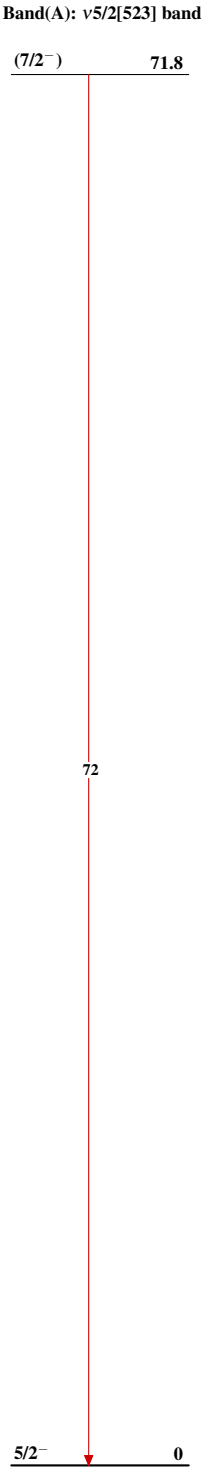

$^{159}_{62}Sm_{97}$