

^{134}In β^- n decay 1996Ho16,2000Ho32

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yu. Khazov and A. Rodionov, F. G. Kondev		NDS 112, 855 (2011)	31-Oct-2010

Parent: ^{134}In : E=0.0; $T_{1/2}=140$ ms 4; $Q(\beta^-n)=10752$ SY; % β^- n decay=65.0

^{134}In -Q(β^- n): 10752 401 (syst, 2009AuZZ).

^{134}In -% β^- n decay: from 1996Ho16.

1995JoZZ, 1996Ho16, 2000Ho32: ^{134}In (β^- n) [from ^{238}U (p,f) E=1 GeV]; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -, ny-, $\beta\gamma$ -coin, $T_{1/2}$ from $(\beta n)\gamma(t)$. ISOLDE facility; plastic scin β detector, two liquid scin n detectors, two Ge γ -ray detectors.

 ^{133}Sn Levels

E(level) [†]	J^π [†]	Comments
0.0	(7/2 ⁻)	Population=50% per β -n decay of ^{134}In (1996Ho16,2000Ho32). possible configuration $v(f_{7/2}^{+1})$.
853.7 3	(3/2 ⁻)	Population=2% per β -n decay of ^{134}In (1996Ho16,2000Ho32). possible configuration $v(p_{3/2}^{+1})$.
1560.9 5	(9/2 ⁻)	Population=10% per β -n decay of ^{134}In (1996Ho16,2000Ho32). possible configuration $v(h_{9/2}^{+1})$.
1655.7? 11	(1/2 ⁻)	possible configuration $v(p_{1/2}^{+1})$.
2004.6 10	(5/2 ⁻)	Population=3% per β -n decay of ^{134}In (1996Ho16,2000Ho32). possible configuration $v(f_{5/2}^{+1})$.
≈3700?	(11/2 ⁻)	E(level): observed in the spectrum of β -delayed neutrons. No deexciting γ observed. possible configuration: neutron hole at $v(h_{11/2}^{-1})$.

[†] From Adopted Levels.

 $\gamma(^{133}\text{Sn})$

E_γ [†]	I_γ [†]	E_i (level)	J_i^π	E_f	J_f^π	Comments
^x 354.0 10	2.3 7					I_γ : <2.3 β^- gated.
802.0 [‡] 10	2.1 10	1655.7?	(1/2 ⁻)	853.7 (3/2 ⁻)		I_γ : 9 2 β^- gated.
853.7 3	13 2	853.7	(3/2 ⁻)	0.0 (7/2 ⁻)		I_γ : 23 2 β^- gated.
1560.9 5	100 5	1560.9	(9/2 ⁻)	0.0 (7/2 ⁻)		The absolute intensity of the transition is 5-10% per decay of ^{134}In (1996Ho16, 2000Ho32).
2004.6 10	5.1 10	2004.6	(5/2 ⁻)	0.0 (7/2 ⁻)		I_γ : 26 3 β^- gated.

[†] From 1996Ho16, 2000Ho32; neutron gated intensities are given.

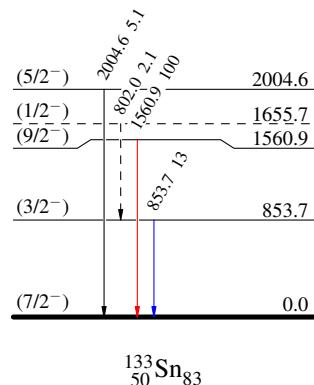
[‡] Placement of transition in the level scheme is uncertain.

^x γ ray not placed in level scheme.

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Legend

Decay Scheme

Intensities: Relative I_γ  $^{133}_{50}\text{Sn}_{83}$