^{134}Sb β^- decay (0.78 s) 1990Fo03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni	NDS 103, 1 (2004)	31-Jul-2004

Parent: ^{134}Sb: E=0.0; $J^\pi=(0^-)$; $T_{1/2}$=0.78 s *6*; Q(β^-)=8394 *42*; %β^- decay=100.0
1990Fo03: source obtained following ^{134}Sn β^- decay from Osiris fission fragment separator.

^{134}Te Levels

E(level)[†]	J^π[‡]	$T_{1/2}$[#]	Comments
0.0	0^+	41.8 min *8*	$T_{1/2}$: from Adopted Levels.
1279.04 *10*	2^+		
2464.38 *19*	2^+	<1 ns	
2631.29 *16*	$(1)^+$	<1 ns	
2933.63 *22*	2^+	<1 ns	

[†] From least-squares procedure to Eγ.
[‡] From Adopted Levels.
[#] From coincidence data (1990Fo03), unless noted otherwise.

β^- radiations

E(decay)	E(level)	Iβ^-[†]	Log *ft*	Comments
(5.46×10^3 *4*)	2933.63	0.27 *2*	8.83^{1u} *5*	av Eβ=2379 *20*
(5.76×10^3 *4*)	2631.29	2.03 *9*	6.19 *5*	av Eβ=2542 *20*
(5.93×10^3 *4*)	2464.38	0.21 *4*	9.17^{1u} *10*	av Eβ=2601 *20*
8.42×10^3 *12*	0.0	97.6 *5*	5.23 *4*	av Eβ=3784 *20* E(decay): from 1979Ke02. Other: 8400 *300* (1972Ke21).

[†] Absolute intensity per 100 decays.

γ(^{134}Te)

Iγ normalization: Normalized by using Iγ(706.3)=57% 6 in decay of 10.07-s ^{134}Sb (1990Fo03).

Eγ	Iγ[‡]	E$_i$(level)	J_i^π	E$_f$	J_f^π	Mult.	α[#]	Comments
x52.80[†] *20*	0.03 *1*							
166.93 *20*	0.12 *2*	2631.29	$(1)^+$	2464.38	2^+	[M1]	0.1643	α(K)= 0.1416; α(L)=0.01819; α(M)=0.00361; α(N+..)=0.00086
x921.5[†] *5*	0.08 *2*							
x1117.3[†] *5*	0.08 *2*							
1185.6 *5*	0.06 *2*	2464.38	2^+	1279.04	2^+			
1279.01 *10*	1.1 *5*	1279.04	2^+	0.0	0^+	[E2]	0.00086	α(K)=0.00074
x1325.6[†] *5*	0.018 *5*							
1352.14 *20*	0.93 *5*	2631.29	$(1)^+$	1279.04	2^+			
1654.57 *20*	0.26 *2*	2933.63	2^+	1279.04	2^+			
x1710.2 *4*	0.03 *1*							
2464.29 *30*	0.29 *2*	2464.38	2^+	0.0	0^+			
2631.47 *30*	0.96 *7*	2631.29	$(1)^+$	0.0	0^+			
2934.0 *10*	0.013 *4*	2933.63	2^+	0.0	0^+			

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^{134}Sb β^- decay (0.78 s) 1990Fo03 (continued)

$\gamma(^{134}Te)$ (continued)

E_γ	I_γ‡	E_i(level)	E_γ	I_γ‡	E_i(level)	E_γ	I_γ‡	E_i(level)
[x]3630.4 *6*	0.04 *1*		[x]6279.6 *10*	0.07 *2*		[x]6733.2 *15*	0.04 *1*	
[x]3660.2 *6*	0.06 *2*		[x]6450.9 *10*	0.12 *2*		[x]6820.4 *15*	0.06 *2*	
[x]4103.2 *7*	0.06 *2*		[x]6624.0 *10*	0.07 *2*				
[x]5645.0 *10*	0.09 *2*		[x]6686.7 *10*	0.14 *3*				

† Possibly due to ^{134}Sn.

‡ Absolute intensity per 100 decays.

Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

[x] γ ray not placed in level scheme.

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Decay Scheme

Intensities: I_γ per 100 parent decays