Adopted Levels, Gammas

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

Q(β^-)=1523 *6*; S(n)=7675 *5*; S(p)=10902 *5*; Q(α)=−4828 *4* 2012Wa38
Note: Current evaluation has used the following Q record 1513 7 *7690* 30 *10910* 30 −4845 15 2003Au03.

^{134}Te Levels

Cross Reference (XREF) Flags

A	^{134}Sb β^- decay (0.78 s)	D	^{135}Sb β^-n decay
B	^{134}Sb β^- decay (10.07 s)	E	^{248}Cm SF decay
C	^{134}Te IT decay (164.1 ns)	F	Coulomb excitation

E(level)[†]	J$^\pi$	T$_{1/2}$	XREF	Comments
0.0	0$^+$	41.8 min *8*	ABCDEF	%β^-=100 T$_{1/2}$: from 1968Be63. Other: 1962Fe03.
1279.11 *10*	2$^+$	0.64 ps *20*	ABCDEF	B(E2)↑=0.13 *4* (2003Ba01). B(E2) from Coulomb Excitation. J$^\pi$: from systematics of N=82 Nuclei. T$_{1/2}$: from B(E2) value; other: <0.17 ns (1980Ka31).
1576.13 *14*	4$^+$	1.36 ns *11*	BCDE	T$_{1/2}$: weighted average of 1.28 ns *10* (1995Om01) and 1.50 ns *13* (1980Ka31). J$^\pi$: E2 γ to 2$^+$.
1691.34 *16*	6$^+$	164.1 ns *9*	BCDE	%IT=100 μ=+5.08 *15* (1989Ra17) J$^\pi$: E2 γ to 4$^+$. T$_{1/2}$: weighted average of 165 ns *6* (2001Mi22), 164 ns *1* (1995Om01), 163 ns *7* (1970Jo20), 163 ns *4* (1974ClZX), 170 ns *4* (1974Su04), 161 ns *4* (1976ChZD). Other: 196 ns *7* (1974Bl03), 197 ns *20* (2004Hw02).
2397.70 *18*	(6)$^+$	<16 ps	B DE	J$^\pi$: M1,E2 γ to 6$^+$. T$_{1/2}$: from 1995Om01.
2464.93 *15*	2$^+$	<1 ns	AB E	J$^\pi$: log $f^{1u}t$=9.2 from (0$^-$) parent, γ's to 2$^+$ and 0$^+$. T$_{1/2}$: from 1990Fo03.
2554.52 *18*	(4$^+$)[‡]		B E	
2631.55 *15*	(1)$^+$	<1 ns	AB	J$^\pi$: log *ft*=6.2 from (0$^-$) parent, γ's to 0$^+$ and 2$^+$.
2682.98 *18*	(3$^+$)[‡]		E	
2727.05 *19*	(5$^+$)	<20 ps	B E	J$^\pi$: log $f^{1u}t$≈8.9 from (7$^-$) parent, γ's to 4$^+$ and (6)$^+$. T$_{1/2}$: from 1995Om01.
2933.71 *22*	2$^+$	<1 ns	A	J$^\pi$: log $f^{1u}t$=8.8 from (0$^-$) parent, γ's to 0$^+$ and 2$^+$. T$_{1/2}$: from 1990Fo03.
4013.46 *20*	(9$^-$)[‡]	0.703 ns *26*	B E	T$_{1/2}$: from 1995Om01.
4269.7	4,5,6[#]		B	
4299.40 *22*	(7$^-$)[‡]	<16 ps	B E	T$_{1/2}$: From 1995Om01.
4323.2	(5$^-$)[#]		B	
4402.5	(5$^+$)[#]		B	
4458.4			B	
4501.2			B	
4504.1			B	
4556.89 *21*	(8$^+$)[‡]		B E	
4563.01 *21*	(8$^-$)[‡]		B E	
5079.31 *23*	(9$^+$)[‡]		E	

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Adopted Levels, Gammas (continued)

^{134}Te Levels (continued)

E(level)[†]	J$^{\pi}$	$T_{1/2}$	XREF	Comments
5621.38 *23*	(10$^+$)[‡]		E	
5657.8 *3*	(10$^-$)[‡]		E	
5804.0 *3*	(12$^+$)[‡]	18 ns *2*	E	$T_{1/2}$: from 2002Sa02.
5822.2 *3*	(11$^-$)[‡]		E	
5986.7 *3*			E	
6009.7 *4*	(13$^+$)[‡]		E	
6098.9 *3*	(11$^-$)[‡]		E	
6709.5 *5*			E	
7050.3 *5*	(14$^+$)[‡]		E	
7566.3 *6*	(15$^+$)[‡]		E	
7722.4 *7*			E	

[†] From least-squares procedure to Eγ.
[‡] Following ^{248}Cm SF decay, based on $\gamma\gamma(\theta)$, intensity pattern, Shell Model calculations.
[#] As suggested by 1995Om01 in ^{134}Sb β^- Decay (10.07 s).

$\gamma(^{134}Te)$

E$_i$(level)	J$_i^{\pi}$	E$_\gamma$	I$_\gamma$	E$_f$	J$_f^{\pi}$	Mult.	α[&]	Comments
1279.11	2$^+$	1279.01[†] *10*	100[†]	0.0	0$^+$	[E2]	0.00086	B(E2)(W.u.)=6.3 *20* α(K)=0.00074 *2*
1576.13	4$^+$	297.0[‡] *1*	100[‡]	1279.11	2$^+$	E2[#]	0.0399	B(E2)(W.u.)=4.3 *4* α(K)=0.0332 *10*; α(L)=0.00540 *17*; α(M)=0.00109 *4*; α(N+..)=0.00025 *1*
1691.34	6$^+$	115.2[‡] *1*	100[‡]	1576.13	4$^+$	E2[#]	1.04	B(E2)(W.u.)=2.05 *4* α(K)=0.757 *23*; α(L)=0.225 *7*; α(M)=0.0465 *14*; α(N+..)=0.0104 *4*
2397.70	(6)$^+$	706.3[‡] *1*	100[‡] *5*	1691.34	6$^+$	M1,E2[#]	0.0037 *5*	α(K)=0.0032 *4*; α(L)=0.00040 *4*
		822[‡]	0.7[‡]	1576.13	4$^+$			
2464.93	2$^+$	1185.9[@] *4*	9[@]	1279.11	2$^+$			
		2465.3[@] *2*	100[@]	0.0	0$^+$			
2554.52	(4$^+$)	978.5[@] *2*	100[@]	1576.13	4$^+$			
2631.55	(1)$^+$	166.93[†] *20*	12.5[†] *2*	2464.93	2$^+$			
		1352.14[†] *20*	97[†] *5*	1279.11	2$^+$			
		2631.47[†] *30*	100[†] *7*	0.0	0$^+$			
2682.98	(3$^+$)	128.4 *2*	29	2554.52	(4$^+$)			
		218.5 *4*	5	2464.93	2$^+$			
		1403.8 *2*	100	1279.11	2$^+$			
2727.05	(5$^+$)	172.7[@] *2*	8[@]	2554.52	(4$^+$)			
		329.3[@] *2*	89[@]	2397.70	(6)$^+$			
		1150.8[@] *2*	100[@]	1576.13	4$^+$			
2933.71	2$^+$	1654.57[†] *20*	100[†] *8*	1279.11	2$^+$			
		2934.0[†] *10*	5.0[†] *15*	0.0	0$^+$			
4013.46	(9$^-$)	1615.6[@] *2*	17[@]	2397.70	(6)$^+$	(E3)[#]		B(E3)(W.u.)=8.2 *3*
		2322.0[@] *2*	100[@]	1691.34	6$^+$	(E3)[#]		B(E3)(W.u.)=3.80 *14*
4299.40	(7$^-$)	1901.7[@] *2*	100[@]	2397.70	(6)$^+$			

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Adopted Levels, Gammas (continued)

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

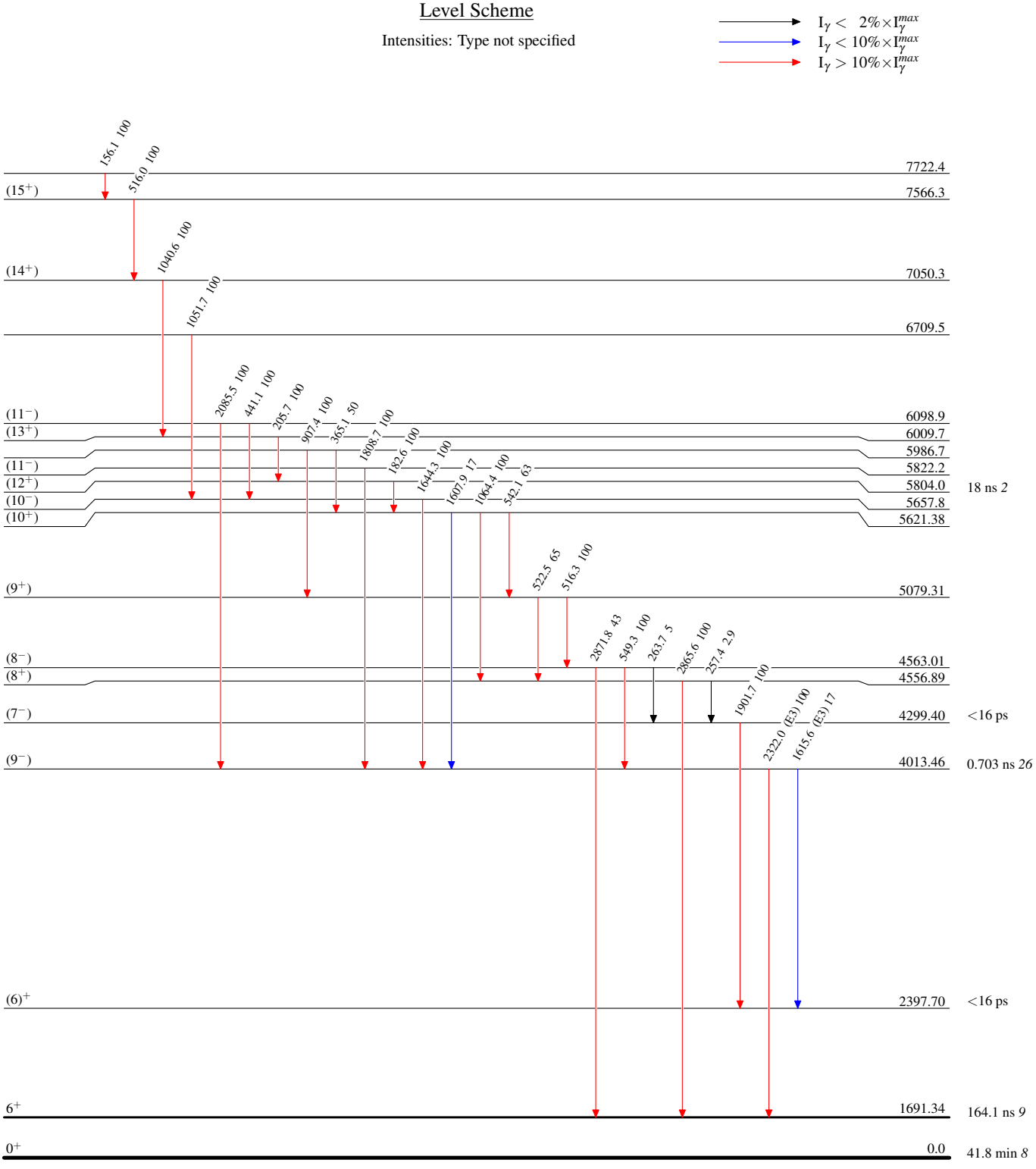
E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π
4556.89	(8^+)	257.4[@] *2*	2.9[@]	4299.40	(7^-)	5804.0	(12^+)	182.6 *2*	100	5621.38	(10^+)
		2865.6[@] *2*	100[@]	1691.34	6^+	5822.2	(11^-)	1808.7 *2*	100	4013.46	(9^-)
4563.01	(8^-)	263.7[@] *2*	5[@]	4299.40	(7^-)	5986.7		365.1 *4*	50	5621.38	(10^+)
		549.3[@] *2*	100[@]	4013.46	(9^-)			907.4 *2*	100	5079.31	(9^+)
		2871.8[@] *2*	43[@]	1691.34	6^+	6009.7	(13^+)	205.7 *2*	100	5804.0	(12^+)
5079.31	(9^+)	516.3 *2*	100	4563.01	(8^-)	6098.9	(11^-)	441.1 *2*	100	5657.8	(10^-)
		522.5 *2*	65	4556.89	(8^+)			2085.5 *2*	100	4013.46	(9^-)
5621.38	(10^+)	542.1 *2*	63	5079.31	(9^+)	6709.5		1051.7 *4*	100	5657.8	(10^-)
		1064.4 *2*	100	4556.89	(8^+)	7050.3	(14^+)	1040.6 *2*	100	6009.7	(13^+)
		1607.9 *2*	17	4013.46	(9^-)	7566.3	(15^+)	516.0 *4*	100	7050.3	(14^+)
5657.8	(10^-)	1644.3 *2*	100	4013.46	(9^-)	7722.4		156.1 *4*	100	7566.3	(15^+)

† From ^{134}Sb β^- decay (0.78 s).
‡ From ^{134}Sb β^- decay (10.07 s).
# From ^{134}Sb β^- decay (10.07 s).
@ From ^{248}Cm SF decay.
& 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.

Adopted Levels, Gammas

Level Scheme

Intensities: Type not specified

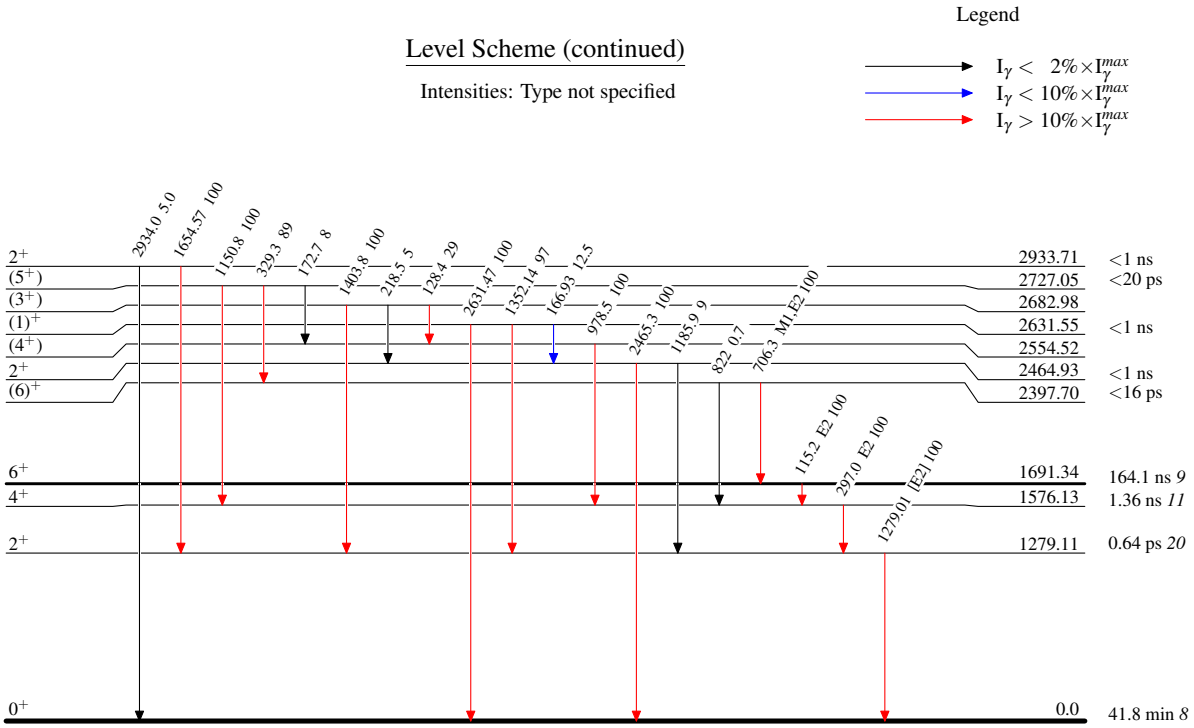


$^{134}_{52}Te_{82}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified



$^{134}_{52}Te_{82}$