^{133}Te β^- decay (55.4 min) 1984Wa04

History

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

Parent: ^{133}Te: E=334.26 *4*; J^π=(11/2$^-$); $T_{1/2}$=55.4 min *4*; Q(β^-)=2942 *24*; %β^- decay=83.5 *20*

1984Wa04: ^{133}Te β^- decay (55.4 min) [from ^{235}U(n,f) products]; measured Eγ, Iγ, $\gamma\gamma$ coin.; radiochemical techniques, Ge detectors; deduced levels, J^π, β^- feeding, log *ft*.

Others: 1968Be64, 1968Mc09, 1968Pa03, 1984Br31.

^{133}I Levels

E(level)†	J^π‡	$T_{1/2}$	Comments
0.0	7/2$^+$	20.83 h *8*	$T_{1/2}$: from 'Adopted Levels'.
312.073 *3*	(5/2$^+$)		
912.675 *4*	11/2$^+$		
914.772 *10*	(9/2$^+$)		
1307.177 *17*	(7/2$^+$)		
1334.0 *10*	(5/2$^+$)		
1454.90 *6*	(7/2$^+$)		
1516.27 *6*	(9/2$^+$)		
1560.162 *11*	15/2$^+$		
1634.200 *11*	(19/2$^-$)		
1646.660 *12*	11/2$^+$		
1704.41 *7*	(9/2$^+$)		
1707.46 *14*			
1729.189 *11*	(15/2$^-$)	≈170 ns	$T_{1/2}$: from $\gamma\gamma$(t) in 1984Wa04.
1776.637 *9*	(11/2$^-$,13/2)		
1797.482 *11*	(11/2$^+$)		
1798.600 *15*	(15/2,17/2$^-$)		
1816.692 *25*	15/2$^-$		
1885.545 *11*	(11/2$^+$)		
1893.025 *18*	(11/2$^+$)		
1942.661 *15*	(11/2$^-$,13/2)		
1974.638 *19*	11/2$^+$		
1990.822 *12*	(11/2$^-$,13/2$^-$)		
2005.16 *4*	(9/2$^+$)		
2049.35 *4*	(9/2,11/2$^+$)		
2141.658 *22*	(9/2$^-$,11/2)		
2211.91 *4*	(13/2)		
2248.56 *3*	(11/2,13/2)		
2261.641 *15*	(13/2)		
2371.627 *21*	(11/2$^-$,13/2$^+$)		
2372.96 *6*	(9/2,11/2,13/2)		
2419.24 *10*	(11/2$^+$,13/2$^+$)		
2426.66 *15*			
2444.99 *6*	(13/2)		
2467.40 *5*	(9/2,11/2,13/2)		
2482.63 *24*	(9/2,11/2$^+$)		
2500.24 *5*	(9/2,11/2,13/2$^+$)		
2506.01 *6*	(11/2$^+$,13/2)		
2516.42 *7*	(9/2,11/2,13/2)		
2551.84 *11*			
2556.31 *3*	(13/2)		
2595.889 *15*	(11/2$^-$)		
2686.03 *5*	(9/2,11/2,13/2)		
2783.48 *8*	(9/2,11/2,13/2)		
2795.9 *3*			

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^{133}Te β^- decay (55.4 min) 1984Wa04 (continued)

^{133}I Levels (continued)

E(level)†	Jπ‡	E(level)†	Jπ‡
2807.94 *7*	(9/2,11/2,13/2)	2968.1 *4*	(9/2,11/2,13/2)
2826.49 *22*	(9/2,11/2)	2974.7 *7*	(9/2,11/2,13/2)
2880.57 *15*	(9/2,11/2,13/2)	3028.49 *13*	(9/2,11/2,13/2)
		3051.30 *8*	(9/2,11/2$^+$)

† From a least-squares fit to Eγ.
‡ From Adopted Levels.

β^- radiations

E(decay)	E(level)	Iβ$^-$†‡	Log *ft*	Comments
(225 *24*)	3051.30	1.42 *18*	4.68 *17*	av Eβ=62.4 *74*
(248 *24*)	3028.49	0.74 *18*	5.09 *18*	av Eβ=69.4 *75*
(302 *24*)	2974.7	0.31 *12*	5.75 *21*	av Eβ=86.3 *78*
(308 *24*)	2968.1	0.106 *19*	6.24 *14*	av Eβ=88.4 *78*
(396 *24*)	2880.57	0.90 *19*	5.67 *13*	av Eβ=117.3 *82*
(450 *24*)	2826.49	0.82 *19*	5.90 *13*	av Eβ=135.8 *84*
(468 *24*)	2807.94	0.64 *11*	6.07 *11*	av Eβ=142.2 *84*
(480 *24*)	2795.9	0.16 *6*	6.71 *18*	av Eβ=146.4 *85*
(493 *24*)	2783.48	1.23 *23*	5.86 *11*	av Eβ=150.8 *86*
(590 *24*)	2686.03	2.7 *4*	5.78 *9*	av Eβ=185.9 *89*
(680 *24*)	2595.889	16.3 *17*	5.22 *8*	av Eβ=219.6 *91*
(720 *24*)	2556.31	4.5 *6*	5.86 *8*	av Eβ=234.6 *93*
(724 *24*)	2551.84	0.95 *24*	6.55 *13*	av Eβ=236.3 *93*
(760 *24*)	2516.42	0.8 *4*	6.70 *23*	av Eβ=250.0 *94*
(770 *24*)	2506.01	0.90 *15*	6.67 *9*	av Eβ=254.0 *94*
(776 *24*)	2500.24	1.7 *4*	6.40 *12*	av Eβ=256.3 *94*
(794 *24*)	2482.63	0.17 *6*	7.44 *16*	av Eβ=263.1 *94*
(809 *24*)	2467.40	3.1 *4*	6.21 *8*	av Eβ=269.1 *95*
(831 *24*)	2444.99	0.95 *24*	6.76 *12*	av Eβ=277.9 *95*
(850 *24*)	2426.66	0.32 *11*	7.27 *16*	av Eβ=285.1 *96*
(857 *24*)	2419.24	0.58 *15*	7.02 *13*	av Eβ=288.1 *96*
(903 *24*)	2372.96	0.74 *14*	7.00 *10*	av Eβ=306.5 *97*
(905 *24*)	2371.627	5.7 *7*	6.12 *7*	av Eβ=307.1 *97*
(1015 *24*)	2261.641	0.9 *3*	7.10 *15*	av Eβ=351.7 *99*
(1028 *24*)	2248.56	1.10 *24*	7.03 *11*	av Eβ=357.0 *99*
(1064 *24*)	2211.91	1.2 *3*	7.05 *12*	av Eβ=372 *10*
(1135 *24*)	2141.658	1.38 *22*	7.09 *8*	av Eβ=401 *10*
(1227 *24*)	2049.35	1.8 *4*	7.11 *11*	av Eβ=440 *11*
(1271 *24*)	2005.16	2.4 *5*	7.04 *10*	av Eβ=459 *11*
(1285 *24*)	1990.822	5.6 *6*	6.69 *6*	av Eβ=465 *11*
(1302 *24*)	1974.638	0.6 *6*	7.7 *5*	av Eβ=472 *11*
(1334 *24*)	1942.661	0.4 *4*	7.9 *5*	av Eβ=486 *11*
(1383 *24*)	1893.025	<1.0	>7.6	av Eβ=507 *11*
(1391 *24*)	1885.545	2.3 *9*	7.21 *18*	av Eβ=510 *11*
(1500 *24*)	1776.637	6.5 *9*	6.88 *7*	av Eβ=557 *11*
(1572 *24*)	1704.41	<0.2	>8.5	av Eβ=589 *11*
(1630 *24*)	1646.660	1.4 *4*	7.69 *13*	av Eβ=614 *11*
(1716 *24*)	1560.162	2.3 *9*	8.51^{1u} *18*	av Eβ=655 *11* Iβ$^-$: calculated I_β=2.3% is high for 11/2$^-$ → 15/2$^+$ β$^-$ transition; it will be <1% if six unplaced γ-rays (201-, 214-, 235-, 278-, 406-, 681-keV) feed this level, as suggested by the coincidence data (1984Wa04).
(1760 *24*)	1516.27	0.37 *24*	8.4 *3*	av Eβ=672 *11*

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^{133}Te β^- decay (55.4 min) 1984Wa04 (continued)

β^- radiations (continued)

E(decay)	E(level)	Iβ^-[†‡]	Log *ft*	Comments
(1821 *24*)	1454.90	<0.5	>9.3[1u]	av Eβ=701 *11*
(2361 *24*)	914.772	0.8 *5*	8.6 *3*	av Eβ=944 *11*
(2364 *24*)	912.675	1.0 *8*	8.5 *4*	av Eβ=945 *11*
(3276 *24*)	0.0	3.8 *25*	9.9[1u] *3*	av Eβ=1354 *11* Iβ^-: From systematics of 11/2$^-$ isomer decay in ^{127,129,131}Te. Note that the decay scheme requires Iβ=24% 8.

† From intensity balances and the established level scheme.

‡ For absolute intensity per 100 decays, multiply by 0.835 *20*.

$\gamma(^{133}I)$

Iγ normalization: From Iγ(912.671+914.774)=63% *6* (1984Br31). Others: Iγ(912.671+914.774)=88% *4* (1974Fu13) and 35% *3* (1968Be64).

E_γ ‡	I_γ ‡d	E_i(level)	J_i^π	E_f	J_f^π	Mult.#	δ#	α†	Comments
(18.08)	0.44 *6*	1816.692	15/2$^-$	1798.600	(15/2,17/2$^-$)	[M1]		15.92	α(L)=12.77 *18*; α(M)=2.57 *4*; α(N+..)=0.580 *9* α(N)=0.520 *8*; α(O)=0.0605 *9* E_γ: from level energy difference. $I_{(\gamma+ce)}$: 7 1 in 1984Wa04. I_γ: from I(γ+ce)=7.1 and by assuming mult.=M1.
20.86 *1*	7.3 *4*	1797.482	(11/2$^+$)	1776.637	(11/2$^-$,13/2)				
39.9f *1*	3.3f *4*	1816.692	15/2$^-$	1776.637	(11/2$^-$,13/2)	[M1]		10.68	α(K)=9.16 *15*; α(L)=1.219 *20*; α(M)=0.246 *4*; α(N+..)=0.0555 *9* α(N)=0.0497 *8*; α(O)=0.00579 *10* I_γ: I(γ)=5.3 *4* was measured for the doublet, I(γ+ce)=38 *3* from the intensity balance at the 1816-keV level. If mult.=M1, Iγ=3.3 *4*, then Iγ=2.0 *4* leaves for γ-ray from 2556.32-keV level.
39.9f *1*	2.0f *5*	2556.31	(13/2)	2516.42	(9/2,11/2,13/2)				I_γ: measured Iγ=5.3 *4* for doublet peak; see comment to 1816 keV level.
47.47 *1*	4.0 *3*	1776.637	(11/2$^-$,13/2)	1729.189	(15/2$^-$)				
50.0 *2*	1.5 *11*	1942.661	(11/2$^-$,13/2)	1893.025	(11/2$^+$)				
x52.5 *3*	0.3 *2*								
74.05 *1*	6.8 *5*	1634.200	(19/2$^-$)	1560.162	15/2$^+$	(M2)		23.6	α(K)=18.4 *3*; α(L)=4.12 *6*; α(M)=0.874 *13*; α(N+..)=0.196 *3* α(N)=0.1763 *25*; α(O)=0.0197 *3* Mult.: from K/L=3.5 4 (1968Be64).
81.61 *1*	5.8 *3*	1974.638	11/2$^+$	1893.025	(11/2$^+$)	M1(+E2)	0.4 *14*	1.7 *15*	α(K)exp=1.3 *3* α(K)=1.3 *7*; α(L)=0.3 *6*; α(M)=0.06 *13*; α(N+..)=0.01 *3* α(N)=0.011 *25*; α(O)=0.0012 *22*
86.9@ *5*	0.8 *1*	1646.660	11/2$^+$	1560.162	15/2$^+$	[E2]		2.89 *8*	α(K)=1.85 *5*; α(L)=0.830 *25*; α(M)=0.176 *6*; α(N+..)=0.0369 *11* α(N)=0.0338 *10*; α(O)=0.00311 *9* E_γ: 86.85 2 keV in 1984Wa04.
88.064 *3*	24 *1*	1885.545	(11/2$^+$)	1797.482	(11/2$^+$)	M1+E2	0.53 *50*	1.4 *5*	α(K)exp=1.11 *17* α(K)=1.1 *3*; α(L)=0.27 *20*; α(M)=0.06 *5*; α(N+..)=0.012 *9* α(N)=0.011 *8*; α(O)=0.0011 *7*
92.33 *3*	3.6 *8*	2141.658	(9/2$^-$,11/2)	2049.35	(9/2,11/2$^+$)				
94.989 *2*	52 *1*	1729.189	(15/2$^-$)	1634.200	(19/2$^-$)	E2		2.11	K/L=2.2 *8*; α(K)exp=1.23 *15* α(K)=1.404 *20*; α(L)=0.558 *8*; α(M)=0.1182 *17*;

^{133}Te β^- decay (55.4 min) 1984Wa04 (continued)

$\gamma(^{133}I)$ (continued)

E_γ ‡	I_γ ‡ d	E_i(level)	J_i^π	E_f	J_f^π	Mult. #	α †	Comments
								α(N+..)=0.0249 *4* α(N)=0.0228 *4*; α(O)=0.00211 *3*
97.8 *1*	2.4 *4*	1990.822	(11/2$^-$,13/2$^-$)	1893.025	(11/2$^+$)	[E1]	0.217	α(K)=0.187 *3*; α(L)=0.0245 *4*; α(M)=0.00490 *7*; α(N+..)=0.001082 *16* α(N)=0.000974 *14*; α(O)=0.0001079 *16*
110.2 @ *5*	1.5 *4*	2371.627	(11/2$^-$,13/2$^+$)	2261.641	(13/2)			E_γ: 110.23 7 keV in 1984Wa04.
112.26 *15*	1.9 *8*	2005.16	(9/2$^+$)	1893.025	(11/2$^+$)	[M1]	0.539	α(K)=0.463 *7*; α(L)=0.0605 *9*; α(M)=0.01220 *18*; α(N+..)=0.00276 *4* α(N)=0.00247 *4*; α(O)=0.000289 *5*
116.44 *9*	5 & *2*	1893.025	(11/2$^+$)	1776.637	(11/2$^-$,13/2)	[E1]	0.1331	α(K)=0.1146 *17*; α(L)=0.01486 *21*; α(M)=0.00297 *5*; α(N+..)=0.000658 *10* α(N)=0.000592 *9*; α(O)=6.61×10^{-5} *10*
119.58 *15*	2 *1*	2005.16	(9/2$^+$)	1885.545	(11/2$^+$)	[M1]	0.451	α(K)=0.388 *6*; α(L)=0.0506 *8*; α(M)=0.01020 *15*; α(N+..)=0.00231 *4* α(N)=0.00206 *3*; α(O)=0.000242 *4*
136.64 *5*	2.8 *8*	2141.658	(9/2$^-$,11/2)	2005.16	(9/2$^+$)			
150.80 *2*	6 *2*	1797.482	(11/2$^+$)	1646.660	11/2$^+$	[M1+E2]	0.32 *9*	α(K)=0.26 *6*; α(L)=0.05 *3*; α(M)=0.011 *6*; α(N+..)=0.0023 *12* α(N)=0.0021 *11*; α(O)=0.00022 *10*
150.80 f *2*	12 f *1*	2141.658	(9/2$^-$,11/2)	1990.822	(11/2$^-$,13/2$^-$)			
157.6 *1*	2.0 *5*	2419.24	(11/2$^+$,13/2$^+$)	2261.641	(13/2)			
164.40 *1*	17.5 *9*	1798.600	(15/2,17/2$^-$)	1634.200	(19/2$^-$)			
169.025 *6*	95 *2*	1729.189	(15/2$^-$)	1560.162	15/2$^+$	(E1)	0.0469	ce(K)<0.9; α(K)exp<0.15 α(K)=0.0405 *6*; α(L)=0.00515 *8*; α(M)=0.001030 *15*; α(N+..)=0.000230 *4* α(N)=0.000206 *3*; α(O)=2.34×10^{-5} *4* E_γ: 169.016 *21* measured by bent-crystal spectrometer (1979Bo26).
176.9 *5*	4 *2*	1885.545	(11/2$^+$)	1707.46				
177.19 *14*	4 *1*	1974.638	11/2$^+$	1797.482	(11/2$^+$)	[M1+E2]	0.19 *5*	α(K)=0.16 *3*; α(L)=0.029 *12*; α(M)=0.0059 *25*; α(N+..)=0.0013 *6* α(N)=0.0012 *5*; α(O)=0.00012 *5*
178.10 *14*	6 *2*	2426.66		2248.56	(11/2,13/2)			
184.61 *16*	3 *1*	2556.31	(13/2)	2371.627	(11/2$^-$,13/2$^+$)			
193.394 *24*	10.7 *5*	1990.822	(11/2$^-$,13/2$^-$)	1797.482	(11/2$^+$)	[E1]	0.0323	α(K)=0.0279 *4*; α(L)=0.00353 *5*; α(M)=0.000706 *10*; α(N+..)=0.0001578 *22* α(N)=0.0001417 *20*; α(O)=1.613×10^{-5} *23*
198.18 *7*	3 *2*	1974.638	11/2$^+$	1776.637	(11/2$^-$,13/2)	[E1]	0.0302	α(K)=0.0261 *4*; α(L)=0.00330 *5*; α(M)=0.000660 *10*; α(N+..)=0.0001475 *21* α(N)=0.0001324 *19*; α(O)=1.509×10^{-5} *22*
x200.65 *8*	8 *2*							E_γ: assigned from 2142 level in 1984Wa04; the level energy difference equals to 199.020 *22*.
x201.0 a *1*	3 *1*							E_γ: 201.00 *1* in table 1 (1968Wa04), probably a misprint.
213.478 *11*	39 *1*	1942.661	(11/2$^-$,13/2)	1729.189	(15/2$^-$)			

$^{133}_{53}I_{80}$-5

^{133}Te β^- decay (55.4 min) 1984Wa04 (continued)

$\gamma(^{133}I)$ (continued)

E_γ ‡	I_γ ‡ d	E_i(level)	J_i^π	E_f	J_f^π	Mult. #	α †	Comments
x214.0 a 1	4 1							E_γ: 214.00 1 in table 1 (1968Wa04), probably a misprint.
221.1 1	4.3 9	2211.91	(13/2)	1990.822	(11/2$^-$,13/2$^-$)			
224.17 7	3 1	2595.889	(11/2$^-$)	2371.627	(11/2$^-$,13/2$^+$)			
x230.1 2	5 2							
x235.0 a 1	3 1							
240.9 2	6 2	2686.03	(9/2,11/2,13/2)	2444.99	(13/2)			
244.38 5	6 1	2506.01	(11/2$^+$,13/2)	2261.641	(13/2)			
248.9 5	0.6 2	2141.658	(9/2$^-$,11/2)	1893.025	(11/2$^+$)			
251.51 7	5 1	2807.94	(9/2,11/2,13/2)	2556.31	(13/2)			
257.79 7	8 1	2248.56	(11/2,13/2)	1990.822	(11/2$^-$,13/2$^-$)			
261.626 7	142 2	1990.822	(11/2$^-$,13/2$^-$)	1729.189	(15/2$^-$)	[M1,E2]	0.058 5	α(K)=0.049 3; α(L)=0.0075 16; α(M)=0.0015 4; α(N+..)=0.00034 7 α(N)=0.00030 7; α(O)=3.4×10^{-5} 6 E_γ: from a text of 1984Wa04; E=261.616 in the table 1; Eγ=261.56 3 measured by bent-crystal spectrometer (1979Bo26).
x278.00 a 11	10 2							
281.2 5	2 1	1797.482	(11/2$^+$)	1516.27	(9/2$^+$)	[M1]	0.0442	α(K)=0.0381 6; α(L)=0.00486 8; α(M)=0.000978 15; α(N+..)=0.000221 4 α(N)=0.000198 3; α(O)=2.33×10^{-5} 4 I_γ: from intensity balance.
284.8 5	4 2	2880.57	(9/2,11/2,13/2)	2595.889	(11/2$^-$)			I_γ: from intensity balance.
294.82 13	4 1	2556.31	(13/2)	2261.641	(13/2)			
307.9 1	5 1	2807.94	(9/2,11/2,13/2)	2500.24	(9/2,11/2,13/2$^+$)			
312.072 3	40 3	312.073	(5/2$^+$)	0.0	7/2$^+$	[M1+E2]	0.0346 10	α(K)=0.0292 5; α(L)=0.0043 6; α(M)=0.00086 13; α(N+..)=0.000192 25 α(N)=0.000173 23; α(O)=1.94×10^{-5} 17 E_γ: 312.071 14 measured by bent-crystal spectrometer (1979Bo26).
314.24 16	7 1	2686.03	(9/2,11/2,13/2)	2371.627	(11/2$^-$,13/2$^+$)			
318.8 5	4 & 2	2261.641	(13/2)	1942.661	(11/2$^-$,13/2)			
322.4 2	2 1	2371.627	(11/2$^-$,13/2$^+$)	2049.35	(9/2,11/2$^+$)			
326.0 4	5 & 2	2826.49	(9/2,11/2)	2500.24	(9/2,11/2,13/2$^+$)			
334.245 5	60 2	2595.889	(11/2$^-$)	2261.641	(13/2)			
342.8 3	9 1	1797.482	(11/2$^+$)	1454.90	(7/2$^+$)	[E2]	0.0263	α(K)=0.0220 4; α(L)=0.00348 5; α(M)=0.000710 11; α(N+..)=0.0001566 23 α(N)=0.0001412 21; α(O)=1.535×10^{-5} 22
344.40 5	13 2	2556.31	(13/2)	2211.91	(13/2)			
345.6 4	4 & 3	2049.35	(9/2,11/2$^+$)	1704.41	(9/2$^+$)			
347.30 4	12 1	2595.889	(11/2$^-$)	2248.56	(11/2,13/2)			
355.42 13	11.7 7	2248.56	(11/2,13/2)	1893.025	(11/2$^+$)			

$^{133}_{53}I_{80}$-6

^{133}Te β^- decay (55.4 min) 1984Wa04 (continued)

$\gamma(^{133}I)$ (continued)

E_γ[‡]	I_γ[‡d]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	α[†]	Comments
[x]360.8 *6*	0.8 *6*							
363.06 *7*	9 *1*	2248.56	(11/2,13/2)	1885.545	(11/2$^+$)			
367.9 *2*	4 *1*	2372.96	(9/2,11/2,13/2)	2005.16	(9/2$^+$)			
368.5 *2*	2 *1*	2261.641	(13/2)	1893.025	(11/2$^+$)			
369.3 *2*	2 *1*	1885.545	(11/2$^+$)	1516.27	(9/2$^+$)	[M1]	0.0219	α(K)=0.0189 *3*; α(L)=0.00239 *4*; α(M)=0.000480 *7*; α(N+..)=0.0001087 *16* α(N)=9.72×10^{-5} *14*; α(O)=1.144×10^{-5} *16*
376.8 *1*	4 *1*	1893.025	(11/2$^+$)	1516.27	(9/2$^+$)	[M1]	0.0208	α(K)=0.0180 *3*; α(L)=0.00227 *4*; α(M)=0.000456 *7*; α(N+..)=0.0001032 *15* α(N)=9.23×10^{-5} *13*; α(O)=1.087×10^{-5} *16*
384.0 *7*	3 *2*	2595.889	(11/2$^-$)	2211.91	(13/2)			
392.44[b] *3*	3.2 *4*	1307.177	(7/2$^+$)	914.772	(9/2$^+$)	[M1]	0.0187	α(K)=0.01620 *23*; α(L)=0.00204 *3*; α(M)=0.000411 *6*; α(N+..)=9.30×10^{-5} *13* α(N)=8.32×10^{-5} *12*; α(O)=9.79×10^{-6} *14*
396.97 *4*	13 *1*	2371.627	(11/2$^-$,13/2$^+$)	1974.638	11/2$^+$			
[x]406.0[a] *1*	7 *1*							
413.2 *2*	12 *1*	2211.91	(13/2)	1798.600	(15/2,17/2$^-$)			
415	2 *1*	2419.24	(11/2$^+$,13/2$^+$)	2005.16	(9/2$^+$)			
429.03 *5*	40 *2*	2371.627	(11/2$^-$,13/2$^+$)	1942.661	(11/2$^-$,13/2)			
435.28 *5*	22 *3*	2211.91	(13/2)	1776.637	(11/2$^-$,13/2)			
444.94 *2*	37 *2*	2261.641	(13/2)	1816.692	15/2$^-$			
458.0 *7*	2 *1*	1974.638	11/2$^+$	1516.27	(9/2$^+$)	[M1]	0.01273	α(K)=0.01100 *16*; α(L)=0.001381 *20*; α(M)=0.000277 *4*; α(N+..)=6.28×10^{-5} *10* α(N)=5.62×10^{-5} *9*; α(O)=6.62×10^{-6} *10*
462.23 *3*	28 *4*	2467.40	(9/2,11/2,13/2)	2005.16	(9/2$^+$)			
464.0 *5*	5[&] *3*	2261.641	(13/2)	1797.482	(11/2$^+$)			
471.87 *4*	15 *2*	2248.56	(11/2,13/2)	1776.637	(11/2$^-$,13/2)			
474.7 *4*	2 *1*	2686.03	(9/2,11/2,13/2)	2211.91	(13/2)			
478.62 *6*	17 *3*	2371.627	(11/2$^-$,13/2$^+$)	1893.025	(11/2$^+$)			
487.40 *6*	10 *2*	2372.96	(9/2,11/2,13/2)	1885.545	(11/2$^+$)			
492.96 *15*	14 *2*	2467.40	(9/2,11/2,13/2)	1974.638	11/2$^+$			
495.0 *1*	3.5 *4*	2500.24	(9/2,11/2,13/2$^+$)	2005.16	(9/2$^+$)			
[x]507.2 *3*	8 *2*							
519.7 *1*	5 *2*	1974.638	11/2$^+$	1454.90	(7/2$^+$)	[E2]	0.00769 *11*	α=0.00769 *11*; α(K)=0.00654 *10*; α(L)=0.000923 *13*; α(M)=0.000187 *3*; α(N+..)=4.17×10^{-5} *6* α(N)=3.74×10^{-5} *6*; α(O)=4.21×10^{-6} *6*
525.63 *14*	5 *2*	2516.42	(9/2,11/2,13/2)	1990.822	(11/2$^-$,13/2$^-$)			
532.40 *5*	16 *1*	2261.641	(13/2)	1729.189	(15/2$^-$)			
534.88 *4*	19 *2*	3051.30	(9/2,11/2$^+$)	2516.42	(9/2,11/2,13/2)			
540.3 *2*	5 *2*	1454.90	(7/2$^+$)	914.772	(9/2$^+$)	[M1]	0.00847 *12*	α=0.00847 *12*; α(K)=0.00733 *11*; α(L)=0.000915 *13*; α(M)=0.000184 *3*; α(N+..)=4.16×10^{-5} *6* α(N)=3.72×10^{-5} *6*; α(O)=4.39×10^{-6} *7*

$^{133}_{53}I_{80}$-7

^{133}Te β^- decay (55.4 min) 1984Wa04 (continued)

$\gamma(^{133}I)$ (continued)

E_γ[‡]	I_γ[‡d]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	α[†]	Comments
555.0 *2*	2 *1*	2371.627	(11/2$^-$,13/2$^+$)	1816.692	15/2$^-$			
565.3 *5*	1.2 *5*	2556.31	(13/2)	1990.822	(11/2$^-$,13/2$^-$)			
574.1[fb@] *5*	13[f] *2*	2467.40	(9/2,11/2,13/2)	1893.025	(11/2$^+$)			E_γ: 574.11 3 keV in 1984Wa04.
574.11[f] *3*	22[f] *1*	2371.627	(11/2$^-$,13/2$^+$)	1797.482	(11/2$^+$)			
581.38 *15*	9 *2*	2556.31	(13/2)	1974.638	11/2$^+$			
[x]586.4 *3*	5 *2*							
601.5[@] *5*	2.3[&] *3*	1516.27	(9/2$^+$)	914.772	(9/2$^+$)	[M1+E2]	0.0059 *7*	α=0.0059 *7*; α(K)=0.0050 *7*; α(L)=0.00065 *5*; α(M)=0.000132 *10*; α(N+..)=2.97×10^{-5} *24* α(N)=2.66×10^{-5} *21*; α(O)=3.1×10^{-6} *3* E_γ: 601.5 2 keV in 1984Wa04.
602.1 *2*	0.3 *1*	914.772	(9/2$^+$)	312.073	(5/2$^+$)	[E2]	0.00517 *8*	α=0.00517 *8*; α(K)=0.00442 *7*; α(L)=0.000605 *9*; α(M)=0.0001221 *18*; α(N+..)=2.73×10^{-5} *4* α(N)=2.45×10^{-5} *4*; α(O)=2.79×10^{-6} *4*
605.11 *4*	23 *1*	2595.889	(11/2$^-$)	1990.822	(11/2$^-$,13/2$^-$)			
607.3 *8*	3 *2*	2500.24	(9/2,11/2,13/2$^+$)	1893.025	(11/2$^+$)			
621.3 *5*	9[&] *4*	2595.889	(11/2$^-$)	1974.638	11/2$^+$			
623.3 *2*	5[&] *2*	2516.42	(9/2,11/2,13/2)	1893.025	(11/2$^+$)			
629.0[@] *5*	6[&] *2*	2444.99	(13/2)	1816.692	15/2$^-$			E_γ: 629.0 1 keV in 1984Wa04.
632.0 *4*	5[&] *2*	2880.57	(9/2,11/2,13/2)	2248.56	(11/2,13/2)			
636.5 *4*	4[&] *2*	2686.03	(9/2,11/2,13/2)	2049.35	(9/2,11/2$^+$)			
642.33 *9*	16[&] *2*	2371.627	(11/2$^-$,13/2$^+$)	1729.189	(15/2$^-$)			
647.51[c] *2*	351 *6*	1560.162	15/2$^+$	912.675	11/2$^+$	E2	0.00428 *6*	α=0.00428 *6*; α(K)=0.00367 *6*; α(L)=0.000495 *7*; α(M)=9.99×10^{-5} *14*; α(N+..)=2.24×10^{-5} *4* α(N)=2.01×10^{-5} *3*; α(O)=2.29×10^{-6} *4* Mult.: from adopted gammas.
653.3 *6*	11 *4*	2595.889	(11/2$^-$)	1942.661	(11/2$^-$,13/2)			
663.2 *2*	2.0[&] *8*	2556.31	(13/2)	1893.025	(11/2$^+$)			
[x]681.0[a] *1*	2 *1*							
698.1 *1*	17 *3*	2005.16	(9/2$^+$)	1307.177	(7/2$^+$)	[M1]	0.00457 *7*	α=0.00457 *7*; α(K)=0.00396 *6*; α(L)=0.000490 *7*; α(M)=9.82×10^{-5} *14*; α(N+..)=2.23×10^{-5} *4* α(N)=1.99×10^{-5} *3*; α(O)=2.35×10^{-6} *4*
702.91 *4*	44 *3*	2595.889	(11/2$^-$)	1893.025	(11/2$^+$)			
710.4 *1*	13 *3*	2595.889	(11/2$^-$)	1885.545	(11/2$^+$)			
718.9 *2*	15 *4*	2516.42	(9/2,11/2,13/2)	1797.482	(11/2$^+$)			
723.5 *2*	5[&] *2*	2500.24	(9/2,11/2,13/2$^+$)	1776.637	(11/2$^-$,13/2)			
724 *1*	2[&] *1*	2371.627	(11/2$^-$,13/2$^+$)	1646.660	11/2$^+$			
731.88 *1*	11 *2*	1646.660	11/2$^+$	914.772	(9/2$^+$)	[M1]	0.00408 *6*	α=0.00408 *6*; α(K)=0.00354 *5*; α(L)=0.000437 *7*; α(M)=8.77×10^{-5} *13*; α(N+..)=1.99×10^{-5} *3* α(N)=1.778×10^{-5} *25*; α(O)=2.10×10^{-6} *3*

$\gamma(^{133}I)$ (continued)

E_γ[‡]	I_γ[‡d]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	α[†]	Comments
734.00 *4*	32 *2*	1646.660	11/2$^+$	912.675	11/2$^+$	[M1+E2]	0.0036 *5*	α=0.0036 *5*; α(K)=0.0031 *5*; α(L)=0.00039 *4*; α(M)=7.9×10^{-5} *8*; α(N+..)=1.79×10^{-5} *19* α(N)=1.60×10^{-5} *17*; α(O)=1.87×10^{-6} *22*
734.1 *1*	1.3[&] *7*	2783.48	(9/2,11/2,13/2)	2049.35	(9/2,11/2$^+$)			
739.79 *15*	11 *3*	2516.42	(9/2,11/2,13/2)	1776.637	(11/2$^-$,13/2)			
742.9[@] *5*	7 *2*	2049.35	(9/2,11/2$^+$)	1307.177	(7/2$^+$)			E_γ: 742.9 2 keV in 1984Wa04.
[x]753.3 *2*	6 *2*							
[x]756.8 *4*	6 *2*							
779.67 *4*	32 *3*	2556.31	(13/2)	1776.637	(11/2$^-$,13/2)			
[x]782.11 *13*	6 *1*							
789.7 *3*	8 *2*	1704.41	(9/2$^+$)	914.772	(9/2$^+$)	[M1+E2]	0.0030 *4*	α=0.0030 *4*; α(K)=0.0026 *4*; α(L)=0.00033 *4*; α(M)=6.6×10^{-5} *7*; α(N+..)=1.50×10^{-5} *17* α(N)=1.34×10^{-5} *15*; α(O)=1.57×10^{-6} *19*
791.7 *9*	2 *2*	1704.41	(9/2$^+$)	912.675	11/2$^+$	[M1]	0.00339 *5*	α=0.00339 *5*; α(K)=0.00294 *5*; α(L)=0.000363 *6*; α(M)=7.27×10^{-5} *11*; α(N+..)=1.649×10^{-5} *24* α(N)=1.475×10^{-5} *21*; α(O)=1.742×10^{-6} *25*
792.6 *9*	2 *2*	1707.46		914.772	(9/2$^+$)			
792.9 *9*	2 *2*	2500.24	(9/2,11/2,13/2$^+$)	1707.46				
794.7 *9*	19 *5*	1707.46		912.675	11/2$^+$			
795.9 *9*	2 *2*	2500.24	(9/2,11/2,13/2$^+$)	1704.41	(9/2$^+$)			
800.54 *5*	20 *5*	2686.03	(9/2,11/2,13/2)	1885.545	(11/2$^+$)			E_γ: 800.54 *54* in table 1 (1984Wa04), perhaps, δE is a misprint.
805.1 *3*	3 *1*	2795.9		1990.822	(11/2$^-$,13/2$^-$)			
[x]816.34 *8*	14 *1*							
819.3 *3*	3 *2*	2595.889	(11/2$^-$)	1776.637	(11/2$^-$,13/2)			
827.05 *9*	10 *2*	2556.31	(13/2)	1729.189	(15/2$^-$)			
851.7 *5*	2[&] *1*	2826.49	(9/2,11/2)	1974.638	11/2$^+$			
859 *1*	2[&] *1*	2419.24	(11/2$^+$,13/2$^+$)	1560.162	15/2$^+$			
863.955 *9*	283 *6*	1776.637	(11/2$^-$,13/2)	912.675	11/2$^+$			
882.70 *5*	40 *3*	1797.482	(11/2$^+$)	914.772	(9/2$^+$)	[M1]	0.00264 *4*	α=0.00264 *4*; α(K)=0.00229 *4*; α(L)=0.000281 *4*; α(M)=5.63×10^{-5} *8*; α(N+..)=1.276×10^{-5} *18* α(N)=1.141×10^{-5} *16*; α(O)=1.349×10^{-6} *19*
884.80[e] *6*	18 *3*	1797.482	(11/2$^+$)	912.675	11/2$^+$	[M1+E2]	0.0023 *3*	α=0.0023 *3*; α(K)=0.0020 *3*; α(L)=0.00025 *3*; α(M)=5.0×10^{-5} *6*; α(N+..)=1.14×10^{-5} *13* α(N)=1.02×10^{-5} *12*; α(O)=1.19×10^{-6} *15* I_γ: it is not clear whether the intensities are suitably divided.
884.80[e] *6*	18 *3*	2444.99	(13/2)	1560.162	15/2$^+$			I_γ: it is not certain whether the intensities are divided for both the placements.
888.53 *15*	15 *3*	2595.889	(11/2$^-$)	1707.46				
889.9 *3*	5[&] *1*	2880.57	(9/2,11/2,13/2)	1990.822	(11/2$^-$,13/2$^-$)			

$^{133}_{53}I_{80}$-9

^{133}Te β^- decay (55.4 min) 1984Wa04 (continued)

$\gamma(^{133}I)$ (continued)

E_γ[‡]	I_γ[‡d]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	α[†]	Comments
891.4 *1*	19 *3*	2595.889	(11/2$^-$)	1704.41	(9/2$^+$)			
912.671[c] *4*	1000 *3*	912.675	11/2$^+$	0.0	7/2$^+$	[E2]	0.00188 *3*	α=0.00188 *3*; α(K)=0.001619 *23*; α(L)=0.000207 *3*; α(M)=4.17×10^{-5} *6*; α(N+..)=9.39×10^{-6} *14* α(N)=8.41×10^{-6} *12*; α(O)=9.75×10^{-7} *14*
914.774 *12*	198 *4*	914.772	(9/2$^+$)	0.0	7/2$^+$	[M1]	0.00243 *4*	α=0.00243 *4*; α(K)=0.00211 *3*; α(L)=0.000259 *4*; α(M)=5.18×10^{-5} *8*; α(N+..)=1.174×10^{-5} *17* α(N)=1.050×10^{-5} *15*; α(O)=1.241×10^{-6} *18*
945.2[@] *5*	11 *2*	2506.01	(11/2$^+$,13/2)	1560.162	15/2$^+$			E_γ: 945.2 2 keV in 1984Wa04.
949.2 *3*	12[&] *3*	2595.889	(11/2$^-$)	1646.660	11/2$^+$			
970.5 *2*	6 *3*	1885.545	(11/2$^+$)	914.772	(9/2$^+$)	[M1]	0.00212 *3*	α=0.00212 *3*; α(K)=0.00184 *3*; α(L)=0.000225 *4*; α(M)=4.51×10^{-5} *7*; α(N+..)=1.024×10^{-5} *15* α(N)=9.15×10^{-6} *13*; α(O)=1.082×10^{-6} *16*
972.64 *11*	10 *3*	1885.545	(11/2$^+$)	912.675	11/2$^+$	[M1+E2]	0.00187 *25*	α=0.00187 *25*; α(K)=0.00162 *22*; α(L)=0.000202 *23*; α(M)=4.0×10^{-5} *5*; α(N+..)=9.1×10^{-6} *11* α(N)=8.2×10^{-6} *10*; α(O)=9.6×10^{-7} *12*
978.30 *4*	88 *3*	1893.025	(11/2$^+$)	914.772	(9/2$^+$)	[M1]	0.00208 *3*	α=0.00208 *3*; α(K)=0.00181 *3*; α(L)=0.000221 *3*; α(M)=4.43×10^{-5} *7*; α(N+..)=1.005×10^{-5} *14* α(N)=8.99×10^{-6} *13*; α(O)=1.062×10^{-6} *15*
980.26 *5*	27 *3*	1893.025	(11/2$^+$)	912.675	11/2$^+$	[M1+E2]	0.00184 *24*	α=0.00184 *24*; α(K)=0.00159 *21*; α(L)=0.000198 *23*; α(M)=4.0×10^{-5} *5*; α(N+..)=9.0×10^{-6} *11* α(N)=8.0×10^{-6} *10*; α(O)=9.4×10^{-7} *12*
995.09[b] *2*	9 *3*	1307.177	(7/2$^+$)	312.073	(5/2$^+$)	[M1]	0.00200 *3*	α=0.00200 *3*; α(K)=0.001737 *25*; α(L)=0.000213 *3*; α(M)=4.26×10^{-5} *6*; α(N+..)=9.66×10^{-6} *14* α(N)=8.64×10^{-6} *12*; α(O)=1.022×10^{-6} *15*
996.1 *3*	7 *5*	2556.31	(13/2)	1560.162	15/2$^+$			
1007.5[@] *5*	12[&] *3*	2783.48	(9/2,11/2,13/2)	1776.637	(11/2$^-$,13/2)			E_γ: 1007.5 2 keV in 1984Wa04.
[x]1015.1 *3*	2 *1*							
1029.88 *6*	22 *3*	1942.661	(11/2$^-$,13/2)	912.675	11/2$^+$			
1035.5 *1*	2 *1*	2551.84		1516.27	(9/2$^+$)			
1053.7 *3*	3 *1*	3028.49	(9/2,11/2,13/2)	1974.638	11/2$^+$			
1059.8[b] *5*	1 *1*	1974.638	11/2$^+$	914.772	(9/2$^+$)	[M1]	0.001735 *25*	α=0.001735 *25*; α(K)=0.001506 *22*; α(L)=0.000184 *3*; α(M)=3.69×10^{-5} *6*; α(N+..)=8.36×10^{-6} *12* α(N)=7.47×10^{-6} *11*; α(O)=8.84×10^{-7} *13*
1061.89 *6*	30 *3*	1974.638	11/2$^+$	912.675	11/2$^+$	[M1+E2]	0.00154 *20*	α=0.00154 *20*; α(K)=0.00133 *17*; α(L)=0.000165 *19*; α(M)=3.3×10^{-5} *4*; α(N+..)=7.5×10^{-6} *9* α(N)=6.7×10^{-6} *8*; α(O)=7.9×10^{-7} *10*
1078.13 *15*	3 *2*	1990.822	(11/2$^-$,13/2$^-$)	912.675	11/2$^+$	[E1]	0.000562 *8*	α=0.000562 *8*; α(K)=0.000490 *7*; α(L)=5.86×10^{-5} *9*; α(M)=1.169×10^{-5} *17*; α(N+..)=2.65×10^{-6} *4* α(N)=2.37×10^{-6} *4*; α(O)=2.79×10^{-7} *4*
1079.63 *14*	10 *2*	2595.889	(11/2$^-$)	1516.27	(9/2$^+$)			

$^{133}_{53}I_{80}$-10

^{133}Te β^- decay (55.4 min) 1984Wa04 (continued)

$\gamma(^{133}I)$ (continued)

E_γ[‡]	I_γ[‡][d]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	α[†]	Comments
1090.5[b] *2*	2[&] *1*	2005.16	(9/2$^+$)	914.772	(9/2$^+$)	[M1+E2]	0.00145 *18*	α=0.00145 *18*; α(K)=0.00125 *16*; α(L)=0.000155 *18*; α(M)=3.1×10^{-5} *4*; α(N+..)=7.0×10^{-6} *8* α(N)=6.3×10^{-6} *8*; α(O)=7.4×10^{-7} *9*
1098.4[@] *5*	16 *4*	2551.84		1454.90	(7/2$^+$)			E_γ: 1098.4 2 keV in 1984Wa04.
1103.9 *3*	2 *1*	2807.94	(9/2,11/2,13/2)	1704.41	(9/2$^+$)			
1134.88 *15*	6 *2*	2049.35	(9/2,11/2$^+$)	914.772	(9/2$^+$)			
1137.3 *5*	5[&] *3*	2049.35	(9/2,11/2$^+$)	912.675	11/2$^+$			
1142.74 *9*	24 *4*	1454.90	(7/2$^+$)	312.073	(5/2$^+$)	[M1]	0.001466 *21*	α=0.001466 *21*; α(K)=0.001271 *18*; α(L)=0.0001551 *22*; α(M)=3.10×10^{-5} *5*; α(N+..)=8.64×10^{-6} α(N)=6.30×10^{-6} *9*; α(O)=7.45×10^{-7} *11*; α(IPF)=1.599×10^{-6} *23*
1174.0[g] *5*	7 *2*	2482.63	(9/2,11/2$^+$)	1307.177	(7/2$^+$)			
1198 *1*	4 *2*	2974.7	(9/2,11/2,13/2)	1776.637	(11/2$^-$,13/2)			
1204.2 *2*	4 *1*	1516.27	(9/2$^+$)	312.073	(5/2$^+$)	[E2]	0.001038 *15*	α=0.001038 *15*; α(K)=0.000893 *13*; α(L)=0.0001112 *16*; α(M)=2.23×10^{-5} *4*; α(N+..)=1.215×10^{-5} α(N)=4.50×10^{-6} *7*; α(O)=5.27×10^{-7} *8*; α(IPF)=7.12×10^{-6} *11*
1227.5 *8*	3[&] *2*	2141.658	(9/2$^-$,11/2)	914.772	(9/2$^+$)			
1229.6 *3*	4 *2*	2141.658	(9/2$^-$,11/2)	912.675	11/2$^+$			
1252.0 *2*	6 *2*	3028.49	(9/2,11/2,13/2)	1776.637	(11/2$^-$,13/2)			
1299.2 *2*	3[&] *2*	2211.91	(13/2)	912.675	11/2$^+$			
1307.2 *2*	7 *1*	1307.177	(7/2$^+$)	0.0	7/2$^+$	[M1+E2]	0.00100 *11*	α=0.00100 *11*; α(K)=0.00085 *10*; α(L)=0.000104 *11*; α(M)=2.08×10^{-5} *22*; α(N+..)=2.76×10^{-5} *6* α(N)=4.2×10^{-6} *5*; α(O)=5.0×10^{-7} *6*; α(IPF)=2.29×10^{-5} *9*
1334 *1*	5 *4*	1334.0	(5/2$^+$)	0.0	7/2$^+$	[M1]	0.001066 *15*	α=0.001066 *15*; α(K)=0.000902 *13*; α(L)=0.0001096 *16*; α(M)=2.19×10^{-5} *3*; α(N+..)=3.26×10^{-5} α(N)=4.45×10^{-6} *7*; α(O)=5.27×10^{-7} *8*; α(IPF)=2.76×10^{-5} *5*
1348.87 *5*	27 *1*	2261.641	(13/2)	912.675	11/2$^+$			
1372.3 *5*	5 *2*	2826.49	(9/2,11/2)	1454.90	(7/2$^+$)			
1392.3 *5*	2 *1*	1704.41	(9/2$^+$)	312.073	(5/2$^+$)	[E2]	0.000813 *12*	α=0.000813 *12*; α(K)=0.000666 *10*; α(L)=8.20×10^{-5} *12*; α(M)=1.641×10^{-5} *23*; α(N+..)=4.88×10^{-5} α(N)=3.32×10^{-6} *5*; α(O)=3.90×10^{-7} *6*; α(IPF)=4.51×10^{-5} *7*
1405.0 *9*	2 *1*	3051.30	(9/2,11/2$^+$)	1646.660	11/2$^+$			
1455.0 *1*	13 *3*	1454.90	(7/2$^+$)	0.0	7/2$^+$	[M1+E2]	0.00084 *8*	α=0.00084 *8*; α(K)=0.00068 *7*; α(L)=8.3×10^{-5} *8*; α(M)=1.65×10^{-5} *16*; α(N+..)=6.66×10^{-5} *17* α(N)=3.4×10^{-6} *4*; α(O)=4.0×10^{-7} *4*; α(IPF)=6.28×10^{-5} *20*
1456	2 *2*	2371.627	(11/2$^-$,13/2$^+$)	914.772	(9/2$^+$)			
1458.9 *2*	3 *1*	2371.627	(11/2$^-$,13/2$^+$)	912.675	11/2$^+$			

^{133}Te β^- decay (55.4 min) 1984Wa04 (continued)

$\gamma(^{133}I)$ (continued)

E_γ[‡]	I_γ[‡d]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	α[†]	Comments
1506.2 *8*	5 *2*	2419.24	(11/2$^+$,13/2$^+$)	912.675	11/2$^+$			
1516.26 *8*	23 *3*	1516.27	(9/2$^+$)	0.0	7/2$^+$	[M1]	0.000868 *13*	α=0.000868 *13*; α(K)=0.000683 *10*; α(L)=8.27×10^{-5} *12*; α(M)=1.654×10^{-5} *24*; α(N+..)=8.54×10^{-5} α(N)=3.36×10^{-6} *5*; α(O)=3.97×10^{-7} *6*; α(IPF)=8.17×10^{-5} *12*
[x]1537.0 *8*	1.6 *5*							
1552 *1*	3 *2*	2467.40	(9/2,11/2,13/2)	914.772	(9/2$^+$)			
1559[c]		1560.162	15/2$^+$	0.0	7/2$^+$			E_γ: from 1970BeZT.
1570.0 *3*	2 *1*	2482.63	(9/2,11/2$^+$)	912.675	11/2$^+$			
1573.5 *2*	5 *2*	3028.49	(9/2,11/2,13/2)	1454.90	(7/2$^+$)			
[x]1581.0 *8*	3 *2*							
1587.66 *6*	26 *3*	2500.24	(9/2,11/2,13/2$^+$)	912.675	11/2$^+$			
1643.6 *5*	6 *2*	2556.31	(13/2)	912.675	11/2$^+$			
1646.2 *3*	5 *2*	1646.660	11/2$^+$	0.0	7/2$^+$	[E2]	0.000690 *10*	α=0.000690 *10*; α(K)=0.000481 *7*; α(L)=5.86×10^{-5} *9*; α(M)=1.172×10^{-5} *17*; α(N+..)=0.0001387 α(N)=2.37×10^{-6} *4*; α(O)=2.79×10^{-7} *4*; α(IPF)=0.0001361 *19*
1683.23 *2*	75 *2*	2595.889	(11/2$^-$)	912.675	11/2$^+$			I_γ: 75 *2* is taken from the figure 3, whereas Iγ=7 *2* is given in the table 1 (1984Wa04).
1693.3 *3*	0.2 *1*	2005.16	(9/2$^+$)	312.073	(5/2$^+$)	[E2]	0.000681 *10*	α=0.000681 *10*; α(K)=0.000456 *7*; α(L)=5.55×10^{-5} *8*; α(M)=1.109×10^{-5} *16*; α(N+..)=0.0001585 α(N)=2.25×10^{-6} *4*; α(O)=2.64×10^{-7} *4*; α(IPF)=0.0001560 *22*
1704.4 *1*	13 *1*	1704.41	(9/2$^+$)	0.0	7/2$^+$	[M1]	0.000768 *11*	α=0.000768 *11*; α(K)=0.000532 *8*; α(L)=6.42×10^{-5} *9*; α(M)=1.284×10^{-5} *18*; α(N+..)=0.0001594 α(N)=2.61×10^{-6} *4*; α(O)=3.09×10^{-7} *5*; α(IPF)=0.0001565 *22*
1773.2 *1*	12 *1*	2686.03	(9/2,11/2,13/2)	912.675	11/2$^+$			
1797.5 *2*	3.2 *8*	1797.482	(11/2$^+$)	0.0	7/2$^+$	[E2]	0.000672 *10*	α=0.000672 *10*; α(K)=0.000408 *6*; α(L)=4.94×10^{-5} *7*; α(M)=9.87×10^{-6} *14*; α(N+..)=0.000205 *3* α(N)=2.00×10^{-6} *3*; α(O)=2.36×10^{-7} *4*; α(IPF)=0.000203 *3*
1870.8 *1*	10 *2*	2783.48	(9/2,11/2,13/2)	912.675	11/2$^+$			
[x]1881.2 *2*	4 *1*							
1885.62 *7*	18 *2*	1885.545	(11/2$^+$)	0.0	7/2$^+$	[E2]	0.000672 *10*	α=0.000672 *10*; α(K)=0.000373 *6*; α(L)=4.51×10^{-5} *7*; α(M)=9.01×10^{-6} *13*; α(N+..)=0.000245 *4* α(N)=1.83×10^{-6} *3*; α(O)=2.15×10^{-7} *3*; α(IPF)=0.000243 *4*
1892.98 *8*	2.8 *7*	1893.025	(11/2$^+$)	0.0	7/2$^+$	[E2]	0.000673 *10*	α=0.000673 *10*; α(K)=0.000370 *6*; α(L)=4.48×10^{-5} *7*; α(M)=8.94×10^{-6} *13*; α(N+..)=0.000248 *4* α(N)=1.81×10^{-6} *3*; α(O)=2.14×10^{-7} *3*; α(IPF)=0.000246 *4*
1914 *1*	1.0 *8*	2826.49	(9/2,11/2)	912.675	11/2$^+$			
1967.8 *2*	3 *1*	2880.57	(9/2,11/2,13/2)	912.675	11/2$^+$			
1974.6 *2*	0.7 *2*	1974.638	11/2$^+$	0.0	7/2$^+$	[E2]	0.000679 *10*	α=0.000679 *10*; α(K)=0.000343 *5*; α(L)=4.13×10^{-5} *6*; α(M)=8.26×10^{-6} *12*; α(N+..)=0.000287 *4* α(N)=1.673×10^{-6} *24*; α(O)=1.97×10^{-7} *3*; α(IPF)=0.000285 *4*
2005.33 *9*	61 *4*	2005.16	(9/2$^+$)	0.0	7/2$^+$	[M1]	0.000732 *11*	α=0.000732 *11*; α(K)=0.000378 *6*; α(L)=4.55×10^{-5} *7*;

$^{133}_{53}I_{80}$-12

^{133}Te β^- decay (55.4 min) 1984Wa04 (continued)

$\gamma(^{133}I)$ (continued)

E_γ ‡	I_γ ‡ d	E_i(level)	J_i^π	E_f	J_f^π	Comments
						α(M)=9.09×10^{-6} *13*; α(N+..)=0.000300 *5* α(N)=1.84×10^{-6} *3*; α(O)=2.19×10^{-7} *3*; α(IPF)=0.000298 *5*
x2016 *1*	0.8 *4*					
2049.7@ *5*	22 *2*	2049.35	(9/2,11/2$^+$)	0.0	7/2$^+$	E_γ: 2049.66 6 keV in 1984Wa04.
2062 *1*	1.8 *5*	2974.7	(9/2,11/2,13/2)	912.675	11/2$^+$	
x2144.4 *5*	1.2 *3*					
2482.5 *4*	1.2 *4*	2482.63	(9/2,11/2$^+$)	0.0	7/2$^+$	
2826.3 *4*	2.5 *6*	2826.49	(9/2,11/2)	0.0	7/2$^+$	
2968.1 *4*	2.0 *3*	2968.1	(9/2,11/2,13/2)	0.0	7/2$^+$	
3051.3 *4*	5.8 *4*	3051.30	(9/2,11/2$^+$)	0.0	7/2$^+$	

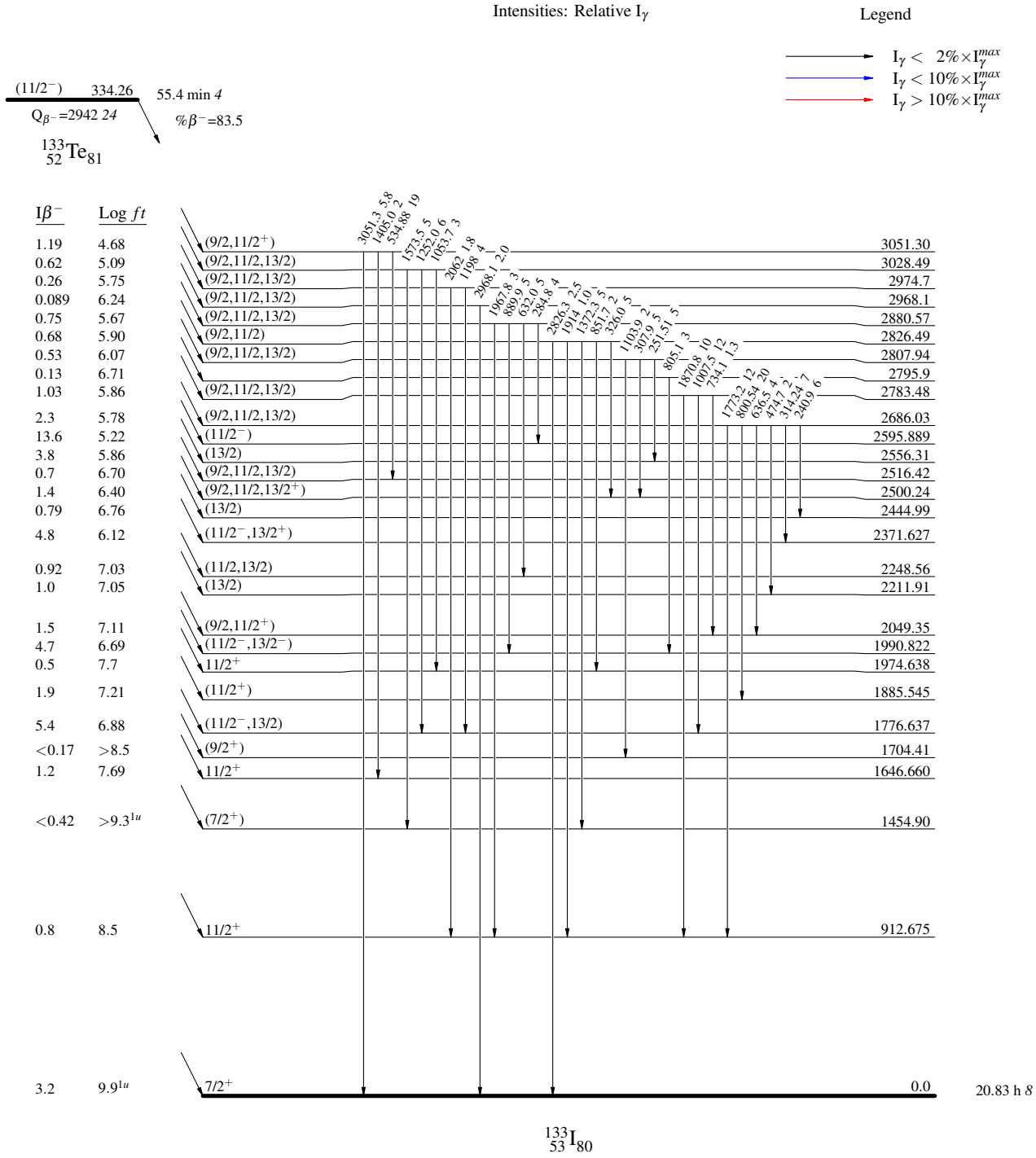
† Additional information 1.
‡ From 1984Wa04, unless otherwise stated.
# From α(K)exp and subshell ratios in 1968Be64, unless otherwise stated. α(K)exp were renormalized by evaluators to α(K)(74.05, M2)=18.4 (code BrIcc (2005KiZT)).
@ Energy fit is poor. $\Delta E\gamma$=0.5 keV assigned by evaluators.
& From coincidence spectra.
a Possibly feeds the 1560 level.
b From ^{133}Te β^- decay (12.5 min) (1983Hi03).
c This γ ray shows a 6 s time component (1970BeZT).
d For absolute intensity per 100 decays, multiply by 0.044 *4*.
e Multiply placed.
f Multiply placed with intensity suitably divided.
g Placement of transition in the level scheme is uncertain.
x γ ray not placed in level scheme.

$^{133}_{53}I_{80}$-13

^{133}Te β^- decay (55.4 min) 1984Wa04

Decay Scheme

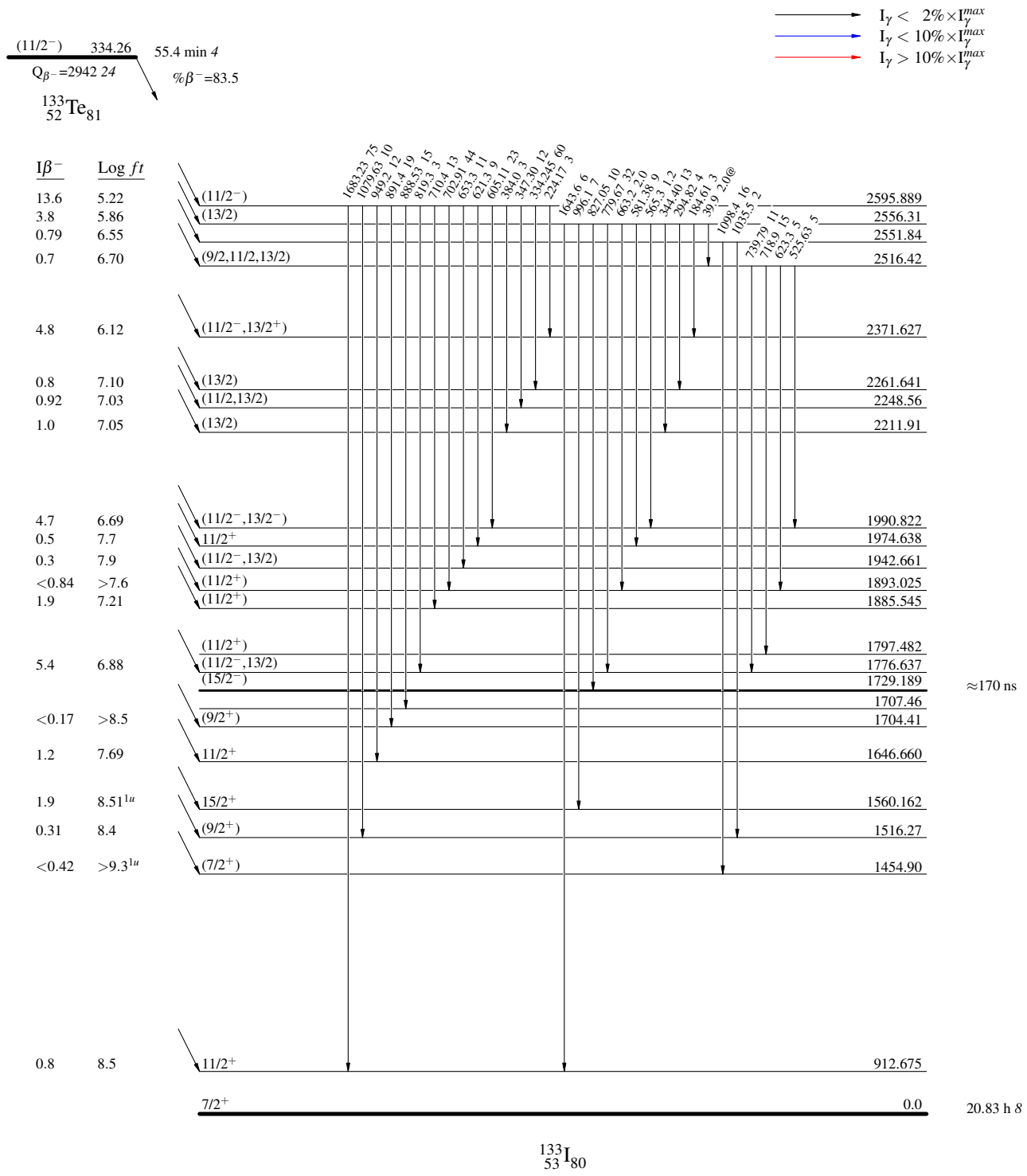
Intensities: Relative I_γ



^{133}Te β^- decay (55.4 min) 1984Wa04

Decay Scheme (continued)

Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided

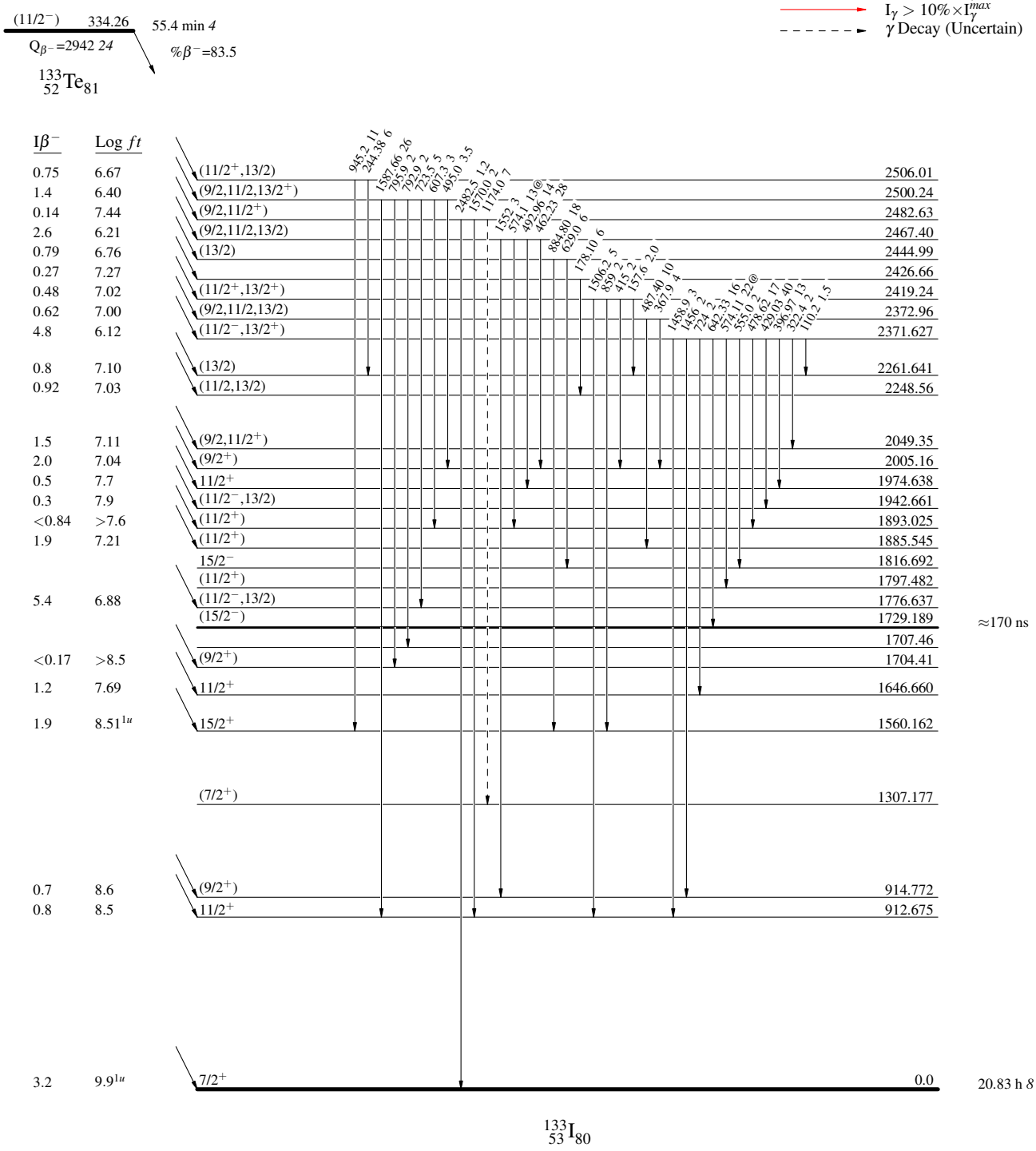


^{133}Te β^- decay (55.4 min) 1984Wa04

Decay Scheme (continued)

Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided

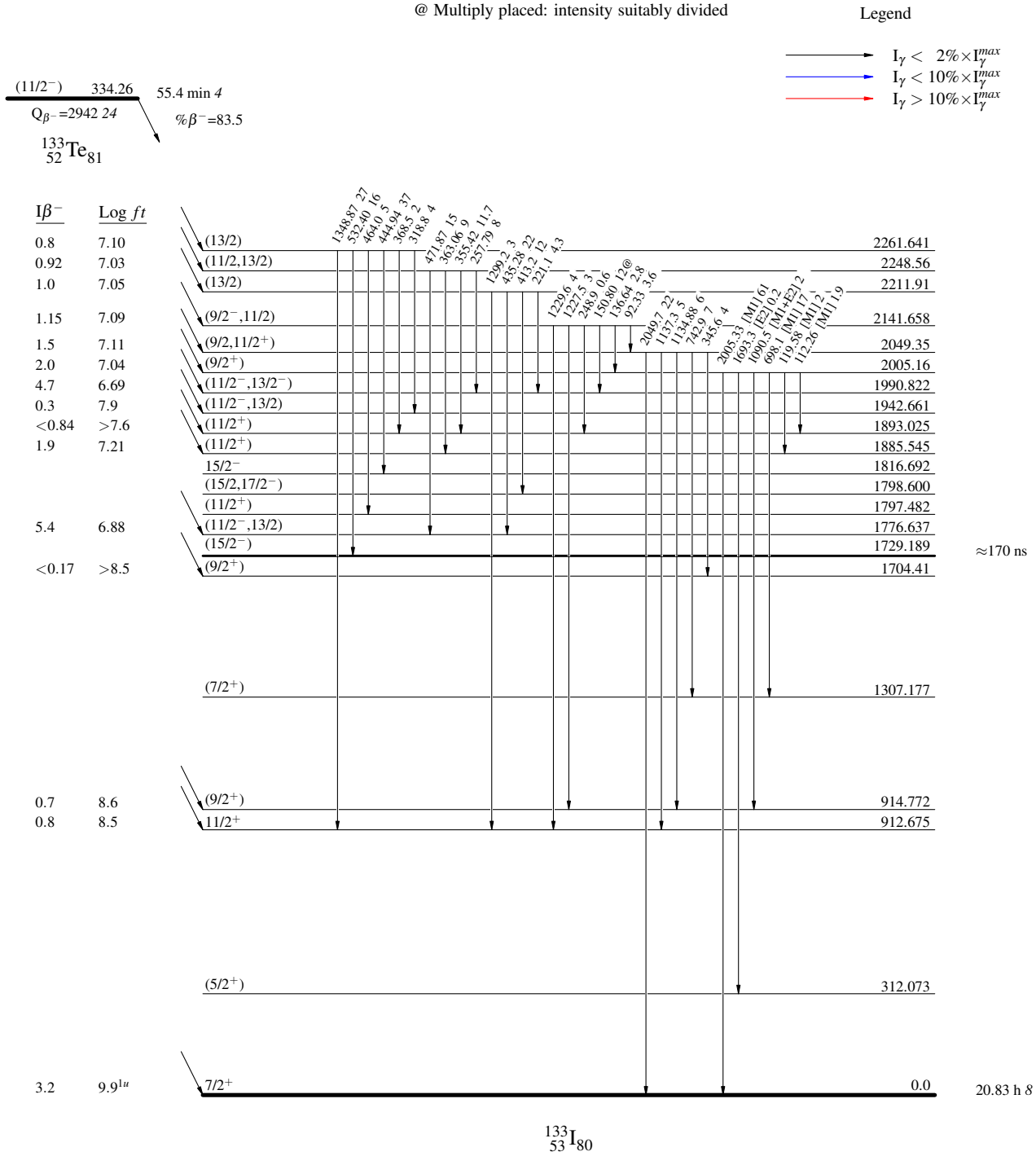
Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)



^{133}Te β^- decay (55.4 min) 1984Wa04

Decay Scheme (continued)

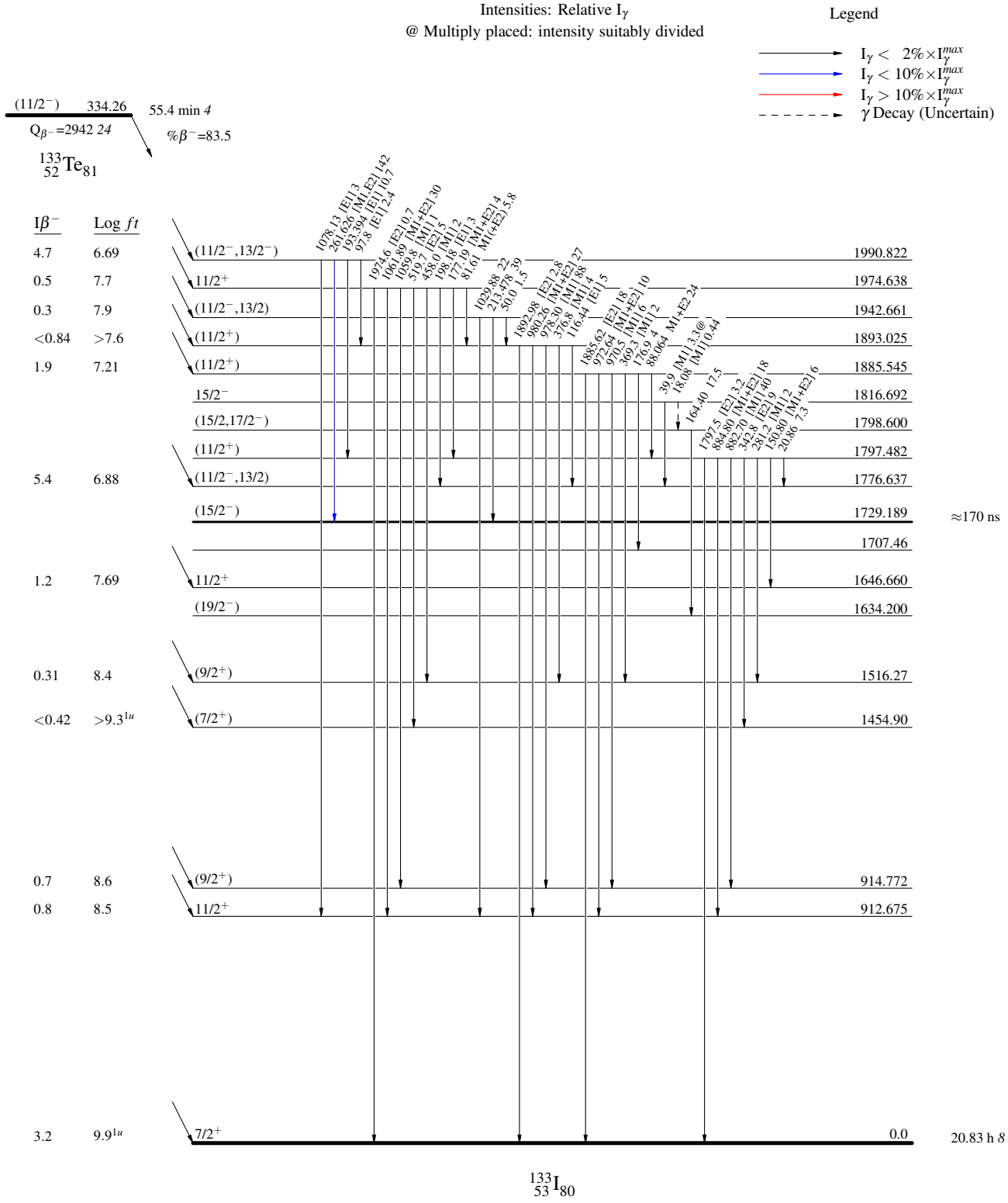
Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided



^{133}Te β^- decay (55.4 min) 1984Wa04

Decay Scheme (continued)

Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided



^{133}Te β^- decay (55.4 min) 1984Wa04

Decay Scheme (continued)

Intensities: Relative I_γ
@ Multiply placed: intensity suitably divided