^{195}Tl ε decay 1978Go15,1977GoZQ

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong and Kang Mengxiao	NDS 121, 395 (2014)	1-Mar-2014

Parent: ^{195}Tl: E=0.0; J$^{\pi}$=1/2^{+}; $T_{1/2}$=1.16 h *5*; Q(ε)=2845 *26*; %ε+%β^{+} decay=100.0

Measured Eγ, Iγ, I(ce), γγ-coin, γce-coin, and $T_{1/2}$ with Si(Li) and Ge(Li) (1978Go15,1977GoZQ).

Others: 1975Fe09, 1973Va27, and 1961Ju06.

Sources produced by W(^{16}O,xnp) (1978Go15), ^{196}Hg(d,3n) (1955Kn34), protons on Hg (1961Ju06), and protons on Pb (1973Va27) and ^{197}Au(^{3}He,5n) (1974St04).

Measured ce spectrum (1961Ju06) ms, s.

Low-energy level structure proposed by 1973Va27 is confirmed and extended by 1977GoZW.

Energy balance: total decay energy of 2855 keV *155* deduced (using RADLIST code) from proposed decay scheme is in agreement with scheme the expected value of 2845 keV *26* (2012Wa38), suggesting that the decay is reasonably complete.

^{195}Hg Levels

All data are shown in the drawing.

E(level)†	J$^{\pi}$‡	$T_{1/2}$‡	E(level)†	J$^{\pi}$‡
0.0	1/2^{-}	10.53 h *3*	1664.08 *10*	1/2,3/2,5/2^{-}
37.08 *3*	3/2^{-}		1714.65 *14*	1/2,3/2,5/2^{-}
53.29 *4*	5/2^{-}		1742.82 *9*	1/2,3/2
176.07 *5*	13/2^{+}	41.6 h *8*	1831.40 *14*	1/2,3/2
279.20 *3*	3/2^{-}		1879.26 *19*	1/2,3/2
300.57 *4*	3/2^{-},5/2^{-}		1893.13 *25*	1/2,3/2
373.17 *11*	(9/2^{+})		1975.35 *15*	1/2,3/2
410.30 *4*	3/2^{-},5/2^{-},7/2^{-}		2014.65 *7*	1/2,3/2
422.50 *10*	(1/2^{-} to 7/2^{-})		2057.36 *11*	1/2,3/2
595.48 *4*	(3/2)$^{-}$		2230.14 *14*	1/2,3/2
600.63 *4*	3/2^{-}		2255.59 *23*	1/2,3/2
764.53 *5*	1/2^{-}		2283.68 *12*	1/2,3/2
814.72 *4*	1/2^{-},3/2^{-}		2305.02 *11*	1/2,3/2
844.8 *4*	(5/2^{+})		2311.5 *3*	1/2,3/2
874.66 *19*	(7/2^{+})		2338.4 *4*	1/2,3/2
893.12 *5*	3/2^{-}		2339.6 *7*	1/2,3/2
921.59 *4*	1/2^{-},3/2^{-}		2363.1 *3*	1/2,3/2
1004.56 *5*	1/2^{-},3/2^{-}		2403.1 *4*	1/2,3/2
1067.21 *7*	(3/2^{-},5/2^{-})		2420.27 *14*	1/2,3/2
1140.33 *10*	(1/2^{-},3/2,5/2^{-})		2428.79 *16*	1/2,3/2
1259.51 *13*	1/2^{-},3/2,5/2^{-}		2456.8 *4*	1/2,3/2
1301.1 *4*	(3/2^{+})		2508.24 *19*	1/2,3/2
1400.92 *6*	1/2^{-}		2513.23 *10*	1/2^{+},3/2^{+}
1548.67 *6*	1/2^{-},3/2^{-}			

† From Eγ and decay scheme using least-squares fit to data.
‡ From Adopted Levels.

^{195}Tl ε decay 1978Go15,1977GoZQ (continued)

ε,β^+ radiations

%ε+%β^+=9.1 to ground+37-keV states is deduced from I(K x ray) for decay scheme (1978Go15). Other %(ε+β)≈70 (1973Va27,1974Ma14).

log *ft*: weak branches should be considered as lower limits due to the possibility of feeding by unplaced or unobserved transitions.

Unassigned %ε+%β^+=2.4 (1978Go15).

Max E(β^+): 1.98 *15* MeV (1960Gu08), ≈1.8 MeV (1961Ju06), 2.83 *30* MeV (1977WeZM), 2.80 *11* MeV (1993Au05) mass adjustment calc.

E(decay)	E(level)	Iβ^+ †‡	Iε†‡	Log *ft*	I(ε+β^+)†‡	Comments
(3.3×10^2 *3*)	2513.23		1.81 *19*	5.69 *11*	1.81 *19*	εK=0.730 *11*; εL=0.201 *8*; εM+=0.069 *3*
(3.4×10^2 *3*)	2508.24		0.43 *8*	6.33 *13*	0.43 *8*	εK=0.732 *11*; εL=0.200 *8*; εM+=0.068 *3*
(3.9×10^2 *3*)	2456.8		0.33 *5*	6.60 *11*	0.33 *5*	εK=0.746 *7*; εL=0.190 *5*; εM+=0.0642 *20*
(4.2×10^2 *3*)	2428.79		0.65 *8*	6.38 *9*	0.65 *8*	εK=0.752 *6*; εL=0.185 *5*; εM+=0.0625 *17*
(4.2×10^2 *3*)	2420.27		1.47 *16*	6.04 *9*	1.47 *16*	εK=0.754 *6*; εL=0.184 *4*; εM+=0.0621 *16*
(4.4×10^2 *3*)	2403.1		0.72 *10*	6.39 *9*	0.72 *10*	εK=0.757 *5*; εL=0.182 *4*; εM+=0.0612 *14*
(4.8×10^2 *3*)	2363.1		0.65 *11*	6.53 *10*	0.65 *11*	εK=0.763 *4*; εL=0.178 *3*; εM+=0.0595 *12*
(5.1×10^2 *3*)	2339.6		0.11 *3*	7.35 *14*	0.11 *3*	εK=0.766 *4*; εL=0.175 *3*; εM+=0.0586 *10*
(5.1×10^2 *3*)	2338.4		0.86 *10*	6.46 *8*	0.86 *10*	εK=0.766 *4*; εL=0.175 *3*; εM+=0.0585 *10*
(5.3×10^2 *3*)	2311.5		0.30 *5*	6.96 *10*	0.30 *5*	εK=0.769 *3*; εL=0.1730 *23*; εM+=0.0577 *9*
(5.4×10^2 *3*)	2305.02		1.51 *16*	6.27 *8*	1.51 *16*	εK=0.770 *3*; εL=0.1725 *22*; εM+=0.0575 *9*
(5.6×10^2 *3*)	2283.68		1.85 *22*	6.22 *8*	1.85 *22*	εK=0.772 *3*; εL=0.1710 *20*; εM+=0.0569 *8*
(5.9×10^2 *3*)	2255.59		0.59 *9*	6.77 *9*	0.59 *9*	εK=0.7746 *25*; εL=0.1692 *18*; εM+=0.0562 *7*
(6.1×10^2 *3*)	2230.14		0.38 *6*	7.00 *9*	0.38 *6*	εK=0.7767 *22*; εL=0.1677 *16*; εM+=0.0556 *7*
(7.9×10^2 *3*)	2057.36		2.2 *3*	6.48 *7*	2.2 *3*	εK=0.7867 *13*; εL=0.1605 *9*; εM+=0.0528 *4*
(8.3×10^2 *3*)	2014.65		4.8 *5*	6.19 *6*	4.8 *5*	εK=0.7885 *11*; εL=0.1593 *8*; εM+=0.0523 *3*
(8.7×10^2 *3*)	1975.35		0.52 *10*	7.20 *9*	0.52 *10*	εK=0.7899 *10*; εL=0.1582 *7*; εM+=0.0519 *3*
(9.5×10^2 *3*)	1893.13		0.27 *6*	7.57 *11*	0.27 *6*	εK=0.7925 *8*; εL=0.1564 *6*; εM+=0.05114 *23*
(9.7×10^2 *3*)	1879.26		0.52 *6*	7.30 *6*	0.52 *6*	εK=0.7929 *8*; εL=0.1561 *6*; εM+=0.05103 *22*
(1.01×10^3 *3*)	1831.40		1.15 *14*	7.00 *7*	1.15 *14*	εK=0.7941 *7*; εL=0.1552 *5*; εM+=0.05068 *20*
(1.10×10^3 *3*)	1742.82		2.8 *3*	6.69 *6*	2.8 *3*	εK=0.7962 *6*; εL=0.1537 *5*; εM+=0.05011 *17*
(1.13×10^3 *3*)	1714.65		1.47 *19*	6.99 *7*	1.47 *19*	εK=0.7967 *6*; εL=0.1533 *4*; εM+=0.04995 *16*
(1.18×10^3 *3*)	1664.08		1.55 *19*	7.01 *6*	1.55 *19*	εK=0.7977 *5*; εL=0.1526 *4*; εM+=0.04969 *14*
(1.30×10^3 *3*)	1548.67		6.5 *7*	6.47 *6*	6.5 *7*	εK=0.7995 *4*; εL=0.1513 *3*; εM+=0.04916 *12*
(1.44×10^3 *3*)	1400.92	0.0058 *18*	15.4 *15*	6.20 *5*	15.4 *15*	av Eβ=211 *13*; εK=0.8012 *3*; εL=0.14985 *25*; εM+=0.04861 *10*
(1.54×10^3 *3*)	1301.1		≈0.35	≈7.9	≈0.35	εK=0.8018 *2*; εL=0.14899 *23*; εM+=0.04828 *9* Iε,I(ε+β^+): only 0.35% of all ^{195}Tl ε decay passes through the 9/2$^+$ to 13/2$^+$ transition 197γ to the low-spin states of the decoupled i13/2 band (1978Go15).
(1.59×10^3 *3*)	1259.51	0.00038 *11*	0.30 *6*	7.99 *9*	0.30 *6*	av Eβ=275 *12*; εK=0.80195 *8*; εL=0.14865 *23*; εM+=0.04815 *9*
(1.70×10^3 *3*)	1140.33	0.0019 *5*	0.73 *15*	7.67 *10*	0.73 *15*	av Eβ=327 *12*; εK=0.8019 *2*; εL=0.14768 *22*; εM+=0.04779 *8*
(1.78×10^3 *3*)	1067.21	0.0010 *5*	0.25 *11*	8.18 *20*	0.25 *11*	av Eβ=360 *13*; εK=0.8014 *3*; εL=0.14709 *23*; εM+=0.04757 *9*
(1.84×10^3 *3*)	1004.56	0.017 *3*	3.3 *4*	7.09 *6*	3.3 *4*	av Eβ=387 *12*; εK=0.8008 *4*; εL=0.14657 *23*; εM+=0.04738 *9*
(1.92×10^3 *3*)	921.59	0.102 *16*	13.5 *14*	6.51 *5*	13.6 *14*	av Eβ=424 *12*; εK=0.7995 *5*; εL=0.14584 *25*; εM+=0.04713 *9*
(1.95×10^3 *3*)	893.12	0.018 *4*	2.2 *4*	7.32 *9*	2.2 *4*	av Eβ=436 *12*; εK=0.7990 *6*; εL=0.14559 *25*; εM+=0.04703 *9*
(2.03×10^3 *3*)	814.72	0.012 *4*	1.1 *3*	7.66 *12*	1.1 *3*	av Eβ=470 *12*; εK=0.7972 *8*; εL=0.1449 *3*; εM+=0.04678 *10*

Continued on next page (footnotes at end of table)

^{195}Tl ε decay 1978Go15,1977GoZQ (continued)

ϵ,β^+ radiations (continued)

E(decay)	E(level)	Iβ^+ [†‡]	Iε [†‡]	Log *ft*	I($\varepsilon+\beta^+$) [†‡]	Comments
(2.08×10^3 *3*)	764.53	0.032 *5*	2.4 *3*	7.34 *6*	2.4 *3*	av Eβ=492 *12*; εK=0.7958 *9*; εL=0.1444 *3*; εM+=0.04660 *10*
(2.24×10^3 *3*)	600.63	0.26 *3*	12.0 *13*	6.70 *5*	12.3 *13*	av Eβ=564 *12*; εK=0.7899 *12*; εL=0.1426 *4*; εM+=0.04599 *11*
(2.25×10^3 *3*)	595.48	0.070 *10*	3.1 *4*	7.29 *6*	3.2 *4*	av Eβ=566 *12*; εK=0.7897 *12*; εL=0.1425 *4*; εM+=0.04597 *11*
(2.42×10^3[#] *3*)	422.50					I($\varepsilon+\beta^+$): I($\varepsilon+\beta^+$)=0.01 (1978Go15); however, ΔJ=3 from ^{195}Tl (J=1/2$^+$) ε decay to this level (J=7/2$^-$).
(2.43×10^3[#] *3*)	410.30					I($\varepsilon+\beta^+$): I($\varepsilon+\beta^+$)=0.8 (1978Go15); however, ΔJ=3 from ^{195}Tl (J=1/2$^+$) ε decay to this level (J=7/2$^-$).
(2.54×10^3 *3*)	300.57	≈0.005	≈0.4	≈9.7^{1u}	≈0.4	av Eβ=698 *12*; εK=0.7894 *5*; εL=0.1499 *3*; εM+=0.04876 *10*
(2.57×10^3 *3*)	279.20	0.05 *4*	1.0 *9*	7.9 *4*	1.0 *9*	av Eβ=705 *12*; εK=0.7717 *20*; εL=0.1382 *5*; εM+=0.04451 *15*
(2.81×10^3 *3*)	37.08					I(γ+ce)(g.s. + 37-keV)=9.1 (1978Go15).
(2.85×10^3 *3*)	0.0	0.7 *4*	8 *5*	7.07 *24*	9.1 *50*	av Eβ=828 *12*; εK=0.748 *3*; εL=0.1333 *6*; εM+=0.04290 *18* I(γ+ce)(g.s. + 37-keV)=9.1 (1978Go15).

† From intensity imbalance. All data are from 1978Go15, except as noted.

‡ Absolute intensity per 100 decays.

\# Existence of this branch is questionable.

γ(^{195}Hg)

Iγ normalization: Assumed I(ε + β$^+$ to g.s.+37)=9.1 by the evaluator.
I(γ$^\pm$)/Iγ(563γ)=(56 *4*)/(100 *5*).
(I(γ$^\pm$) for measured)/(I(γ$^\pm$) for decay scheme)=0.91 (1978Go15).
All data are from 1978Go15 and 1977GoZQ, except as noted.

E_γ	I_γ[&af]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[b]	δ[b]	α[g]	$I_{(\gamma+ce)}$[f]	Comments
16.21[†] *3*	0.32 *4*	53.29	5/2⁻	37.08	3/2⁻	M1+E2	0.024 *6*	321 *13*	103 *12*	ce(L)/(γ+ce)=0.761 *21*; ce(M)/(γ+ce)=0.181 *9*; ce(N+)/(γ+ce)=0.055 *3* $I_{(\gamma+ce)}$: from adopted branching of 16 and 53γ′s and intensity balance at 53 level. I_γ: from I(γ+ce) and α. Mult.,δ: from α(M1)exp/α(M2)exp/α(M3)exp (1973Vi09) ^{195}Hg IT decay.
21.36 *4*		300.57	3/2⁻,5/2⁻	279.20	3/2⁻				8.5 *20*	$I_{(\gamma+ce)}$: from coin study. E_γ: from E(level) difference.
37.09[†] *3*	22.4 *6*	37.08	3/2⁻	0.0	1/2⁻	M1+E2	0.032 *5*	26.7 *5*	620 *16*	ce(L)/(γ+ce)=0.739 *8*; ce(M)/(γ+ce)=0.173 *4*; ce(N+)/(γ+ce)=0.0521 *12* I_γ: from I(γ+ce) and α; other Iγ=25 deduced from I(ce(L1))=470, α(L1)=18.7 is based on ce(K)(242γ)/ce(L1)(37γ)=0.055 *3* (1961Ju06) normalized to ce(K)(242γ)=26 *3* (1973Va27). Mult.: from α(L1)exp:α(L2)exp:α(L3)exp: α(M)exp:α(N1)exp=100:11 2:2.9 *5*:29 *3*:6.4 *6* (1961Ju06). δ: from α(L1)exp/α(L2)exp (1973Vi09,1969Ba42,1961Re12,1961Ju06) ^{195}Hg IT decay.
53.29[†] *3*	0.020 *1*	53.29	5/2⁻	0.0	1/2⁻	E2		99.8	2.0 *1*	ce(L)/(γ+ce)=0.741 *8*; ce(M)/(γ+ce)=0.193 *4*; ce(N+)/(γ+ce)=0.0557 *11* $I_{(\gamma+ce)}$: from adopted branching of 16 and 53γ′s and intensity balance at 53 level. I_γ: from I(γ+ce) and α. Mult.: from α(L1)exp/α(L2)exp/α(L3)exp (1973Vi09) ^{195}Hg IT decay.
107.0[@j]	<0.3[@]	921.59	1/2⁻,3/2⁻	814.72	1/2⁻,3/2⁻					
109.78 *10*	0.53 *30*	410.30	3/2⁻,5/2⁻,7/2⁻	300.57	3/2⁻,5/2⁻	[E2][c]		3.76		α(K)=0.569 *8*; α(L)=2.39 *4*; α(M)=0.624 *10*; α(N+..)=0.181 *3*
111.5[@j]	<0.18[@]	1004.56	1/2⁻,3/2⁻	893.12	3/2⁻					

γ(^{195}Hg) (continued)

E_γ	I_γ [&af]	E_i(level)	J^π_i	E_f	J^π_f	Mult. [b]	δ [b]	α [g]	$I_{(\gamma+ce)}$ [f]	Comments
122.0 [@j]	<0.2 [@]	422.50	(1/2$^-$ to 7/2$^-$)	300.57	3/2$^-$,5/2$^-$					
122.78 [‡#] 3	0.00179 16	176.07	13/2$^+$	53.29	5/2$^-$	M4		1.84×10^3	3.3 3	α(K)=159.3 23; α(L)=1179 17; α(M)=385 6; α(N+..)=118.0 17 α(L1)exp/α(L3)exp=0.41 2 (1969Ba42). Mult.: 1969Ba42 deduce E5 admixture of <0.5% on the basis of comparison of L-subshell ratios. $I_{(\gamma+ce)}$: Required for intensity balance at 176 level. I_γ: From I(γ+ce)/(1+α).
128.6 [@j]	<0.3 [@]	893.12	3/2$^-$	764.53	1/2$^-$					
131.14 10	1.4 3	410.30	3/2$^-$,5/2$^-$,7/2$^-$	279.20	3/2$^-$	[E2] [c]		1.84		α(K)=0.431 6; α(L)=1.057 16; α(M)=0.276 4; α(N+..)=0.0799 12
143.4 [@j]	<0.3 [@]	422.50	(1/2$^-$ to 7/2$^-$)	279.20	3/2$^-$					
157.1 [@j]	<0.15 [@]	921.59	1/2$^-$,3/2$^-$	764.53	1/2$^-$					
163.9 [@j]	<0.15 [@]	764.53	1/2$^-$	600.63	3/2$^-$					
169.2 [@j]	<0.15 [@]	764.53	1/2$^-$	595.48	(3/2)$^-$					
172.9 [@j]	<0.5 [@]	595.48	(3/2)$^-$	422.50	(1/2$^-$ to 7/2$^-$)					
178.1 [@j]	<0.5 [@]	600.63	3/2$^-$	422.50	(1/2$^-$ to 7/2$^-$)					
185.8 5	0.23 20	595.48	(3/2)$^-$	410.30	3/2$^-$,5/2$^-$,7/2$^-$					
189.8 [@j]	<0.15 [@]	1004.56	1/2$^-$,3/2$^-$	814.72	1/2$^-$,3/2$^-$					
190.4 [@j]	<0.15 [@]	600.63	3/2$^-$	410.30	3/2$^-$,5/2$^-$,7/2$^-$					
197.10 10	2.31 20	373.17	(9/2$^+$)	176.07	13/2$^+$	(E2)		0.411		α(K)=0.1755 25; α(L)=0.177 3; α(M)=0.0456 7; α(N+..)=0.01327 19 α(K)exp<0.23 (1978Go15); α(K)exp≈0.26 (1973Va27).
214.1 [@j]	<0.25 [@]	814.72	1/2$^-$,3/2$^-$	600.63	3/2$^-$					
219.3 [@j]	<0.18 [@]	814.72	1/2$^-$,3/2$^-$	595.48	(3/2)$^-$					
225.93 5	12.2 9	279.20	3/2$^-$	53.29	5/2$^-$	M1+E2	0.47 +17−20	0.69 6		α(K)=0.55 6; α(L)=0.1068 18; α(M)=0.0253 4; α(N+..)=0.00759 11 α(K)exp=0.58 6, α(K)exp/α(L12)exp=3.6 8

γ(^{195}Hg) (continued)

E_γ	I_γ[&af]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[b]	δ[b]	α[g]	Comments
									(1978Go15); α(K)exp=0.61 *10* (1973Va27).
240.0[@j]	<0.06[@]	1004.56	1/2⁻,3/2⁻	764.53	1/2⁻				
242.15 *5*	41 *3*	279.20	3/2⁻	37.08	3/2⁻	M1(+E2)	0.42 *+17−22*	0.58 *5*	α(K)=0.47 *5*; α(L)=0.0872 *20*; α(M)=0.0206 *4*; α(N+..)=0.00618 *12* α(K)exp=0.49 *5* (1978Go15); α(K)exp=0.51 *8* (1973Va27).
247.30 *5*	12.3 *8*	300.57	3/2⁻,5/2⁻	53.29	5/2⁻	M1(+E2)	0.52 *+17−19*	0.52 *5*	α(K)=0.42 *5*; α(L)=0.0811 *21*; α(M)=0.0192 *4*; α(N+..)=0.00576 *12* α(K)exp=0.437 *45*, α(K)exp/α(L12)exp=2.6 *12* (1978Go15); α(K)exp=0.48 *8* (1973Va27).
[x]252.9 *5*	0.18 *15*								
263.51 *10*	8.4 *5*	300.57	3/2⁻,5/2⁻	37.08	3/2⁻	M1(+E2)	1.0 *+3−2*	0.34 *5*	α(K)=0.25 *5*; α(L)=0.0623 *24*; α(M)=0.0151 *4*; α(N+..)=0.00449 *14* α(K)exp=0.267 *40*, α(K)exp/α(L12)exp=3.7 *11* (1978Go15); α(L1)exp+α(L2)exp=0.077 *23* (1977GoZW); α(L)exp=0.076 *24* (1973Va27).
279.19 *5*	35.7 *25*	279.20	3/2⁻	0.0	1/2⁻	M1+E2	1.53 *2*	0.224	α(K)=0.160 *3*; α(L)=0.0482 *7*; α(M)=0.01187 *17*; α(N+..)=0.00351 *5* α(K)exp=0.17 *2*, α(K)exp/α(L12)exp=3.3 *7*, α(L3)exp/α(L12)exp=0.27 *20* (1978Go15); α(L)exp=0.07 *2* (1977GoZW); α(K)exp=0.23 *5*, α(L)exp=0.054 *12* (1973Va27).
292.5[@j]	<0.18[@]	893.12	3/2⁻	600.63	3/2⁻				
295.14 *20*	1.3 *4*	595.48	(3/2)⁻	300.57	3/2⁻,5/2⁻	[M1][c]		0.377	α(K)=0.310 *5*; α(L)=0.0517 *8*; α(M)=0.01202 *17*; α(N+..)=0.00363 *6*
297.7[j]	<0.3	893.12	3/2⁻	595.48	(3/2)⁻				
299.9[@j]	<0.6[@]	600.63	3/2⁻	300.57	3/2⁻,5/2⁻				
300.60 *5*	22.9 *15*	300.57	3/2⁻,5/2⁻	0.0	1/2⁻	E2		0.1058	α(K)=0.0628 *9*; α(L)=0.0324 *5*; α(M)=0.00823 *12*; α(N+..)=0.00241 *4* α(K)exp=0.069 *14*, α(K)exp/α(L12)exp=1.9 *5* (1978Go15); α(L1)exp+α(L2)exp=0.039 *8* (1977GoZW).
316.27 *10*	0.9 *4*	595.48	(3/2)⁻	279.20	3/2⁻				
321.3[i]	0.51[id] *25*	600.63	3/2⁻	279.20	3/2⁻				
321.3[i]	1.6[id] *5*	921.59	1/2⁻,3/2⁻	600.63	3/2⁻				
326.0[i]	1.4[id] *4*	921.59	1/2⁻,3/2⁻	595.48	(3/2)⁻				
326.0[i]	0.21[id] *15*	1140.33	(1/2⁻,3/2,5/2⁻)	814.72	1/2⁻,3/2⁻				
356.99 *5*	4.4 *4*	410.30	3/2⁻,5/2⁻,7/2⁻	53.29	5/2⁻	M1		0.225	α(K)=0.185 *3*; α(L)=0.0307 *5*; α(M)=0.00714 *10*; α(N+..)=0.00216 *3* α(K)exp=0.176 *65* (1978Go15); α(K)exp=0.23 *5* (1973Va27).
369.26 *10*	1.96 *30*	422.50	(1/2⁻ to 7/2⁻)	53.29	5/2⁻				

$^{195}_{80}$Hg$_{115}$-6

γ(^{195}Hg) (continued)

E_γ	I_γ[&af]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[b]	α[g]	Comments
373.24 *5*	5.7 *4*	410.30	3/2⁻,5/2⁻,7/2⁻	37.08	3/2⁻	(E2)	0.0571	α(K)=0.0376 *6*; α(L)=0.01477 *21*; α(M)=0.00370 *6*; α(N+..)=0.001087 *16* α(K)exp<0.13 (1978Go15); α(K)exp≤0.06 (1973Va27).
385.5[@j]	<0.4[@]	422.50	(1/2⁻ to 7/2⁻)	37.08	3/2⁻			
392.2[@j]	<0.2[@]	814.72	1/2⁻,3/2⁻	422.50	(1/2⁻ to 7/2⁻)			
396.55 *30*	0.7 *4*	1400.92	1/2⁻	1004.56	1/2⁻,3/2⁻			
403.86 *10*	1.10 *25*	1004.56	1/2⁻,3/2⁻	600.63	3/2⁻			
404.5[@j]	<0.18[@]	814.72	1/2⁻,3/2⁻	410.30	3/2⁻,5/2⁻,7/2⁻			
408.8[i]	1.54[id] *25*	1004.56	1/2⁻,3/2⁻	595.48	(3/2)⁻	M1	0.1565	α(K)=0.1287 *18*; α(L)=0.0213 *3*; α(M)=0.00495 *7*; α(N+..)=0.001494 *21* α(K)exp=0.18 *8* (1978Go15).
408.8[i]	0.54[id] *25*	1548.67	1/2⁻,3/2⁻	1140.33	(1/2⁻,3/2,5/2⁻)	M1	0.1565	α(K)=0.1287 *18*; α(L)=0.0213 *3*; α(M)=0.00495 *7*; α(N+..)=0.001494 *21* α(K)exp=0.18 *8* (1978Go15).
426[#d]		1301.1	(3/2⁺)	874.66	(7/2⁺)			
456.35 *10*	1.0 *3*	1301.1	(3/2⁺)	844.8	(5/2⁺)			
464.01 *10*	1.1 *3*	764.53	1/2⁻	300.57	3/2⁻,5/2⁻			
470.8 *4*	1.2 *5*	893.12	3/2⁻	422.50	(1/2⁻ to 7/2⁻)	(E2)	0.0312	α(K)=0.0222 *4*; α(L)=0.00682 *10*; α(M)=0.001683 *24*; α(N+..)=0.000497 *7* α(K)exp<0.09 (1978Go15), α(K)exp=0.084 *32* (1973Va27).
471.7 *4*	1.2 *5*	844.8	(5/2⁺)	373.17	(9/2⁺)			
482.8[i]	3.3[id] *4*	893.12	3/2⁻	410.30	3/2⁻,5/2⁻,7/2⁻	[E2][c]	0.0293	α(K)=0.0210 *3*; α(L)=0.00630 *9*; α(M)=0.001553 *22*; α(N+..)=0.000459 *7* Doublet α(K)exp=0.090 *33* (1973Va27).
482.8[i]	1.7[id] *5*	1548.67	1/2⁻,3/2⁻	1067.21	(3/2⁻,5/2⁻)			
485.38 *10*	4.1[d] *4*	764.53	1/2⁻	279.20	3/2⁻	(M1+E2)	0.06 *4*	α(K)=0.05 *3*; α(L)=0.010 *4*; α(M)=0.0023 *8*; α(N+..)=0.00070 *25* α(K)exp=0.060 *30* (1978Go15).
499.0[@j]	<0.1[@]	921.59	1/2⁻,3/2⁻	422.50	(1/2⁻ to 7/2⁻)			
501.48 *15*	0.73 *25*	874.66	(7/2⁺)	373.17	(9/2⁺)			
511.4	4.6[d] *15*	921.59	1/2⁻,3/2⁻	410.30	3/2⁻,5/2⁻,7/2⁻			α(K)=0.01865; α(L)=0.00534
514.1[@j]	<0.3[@]	814.72	1/2⁻,3/2⁻	300.57	3/2⁻,5/2⁻			
535.5[@j]	<0.12[@]	814.72	1/2⁻,3/2⁻	279.20	3/2⁻			
542.16 *5*	10.0 *8*	595.48	(3/2)⁻	53.29	5/2⁻	(E2,M1)	0.05 *3*	Doublet α(K)exp=0.033 *10* (1978Go15).
544.0[i]	0.17[id] *10*	1140.33	(1/2⁻,3/2,5/2⁻)	595.48	(3/2)⁻			
544.0[i]	2.7[id] *4*	1548.67	1/2⁻,3/2⁻	1004.56	1/2⁻,3/2⁻	(M1,E2)	0.05 *3*	Doublet α(K)exp=0.033 *10* (1978Go15).
547.34 *5*	6.4 *4*	600.63	3/2⁻	53.29	5/2⁻	M1	0.0723	α(K)=0.0595 *9*; α(L)=0.00977 *14*; α(M)=0.00227 *4*; α(N+..)=0.000684 *10* α(K)exp=0.059 *25* (1978Go15).
558.38 *5*	24.3 *13*	595.48	(3/2)⁻	37.08	3/2⁻	M1	0.0686	α(K)=0.0565 *8*; α(L)=0.00927 *13*; α(M)=0.00215 *3*;

γ(^{195}Hg) (continued)

E_γ	I_γ[&af]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[b]	α[g]	Comments
								α(N+..)=0.000649 *9* α(K)exp=0.0536 *65*, α(K)exp/α(L12)exp=5.3 *26* (1978Go15); α(K)exp=0.091 *17* (1973Va27).
563.52 *5*	100 *5*	600.63	$3/2^-$	37.08	$3/2^-$	M1	0.0670	α(K)=0.0552 *8*; α(L)=0.00905 *13*; α(M)=0.00210 *3*; α(N+..)=0.000634 *9* α(K)exp=0.0535 *50*, α(K)exp/α(L12)exp=6.3 *13*, α(L12)exp/α(M)exp=2.1 *8* (1978Go15); α(K)exp/α(L)exp=6.0 (1973Va27).
[x]572.19 *15*	0.71 *20*							
582.3 *3*	1.08 *30*	1004.56	$1/2^-,3/2^-$	422.50	$(1/2^-$ to $7/2^-)$			
585.4 *5*	0.36 *30*	1400.92	$1/2^-$	814.72	$1/2^-,3/2^-$			
592.59 *10*	11.4 *12*	893.12	$3/2^-$	300.57	$3/2^-,5/2^-$	M1	0.0587	α(K)=0.0484 *7*; α(L)=0.00792 *11*; α(M)=0.00184 *3*; α(N+..)=0.000555 *8* α(K)exp=0.062 *10* (1978Go15); α(K)exp=0.056 *11* (1973Va27).
595.2[i]	0.9[id] *3*	595.48	$(3/2)^-$	0.0	$1/2^-$			
595.2[i]	2.1[id] *3*	1004.56	$1/2^-,3/2^-$	410.30	$3/2^-,5/2^-,7/2^-$			
600.64 *10*	6.2 *9*	600.63	$3/2^-$	0.0	$1/2^-$	[M1][c]	0.0567	α(K)=0.0467 *7*; α(L)=0.00764 *11*; α(M)=0.001773 *25*; α(N+..)=0.000535 *8* α(K)exp=0.058 *21* (1973Va27).
613.88 *10*	6.8 *8*	893.12	$3/2^-$	279.20	$3/2^-$	M1	0.0535	α(K)=0.0441 *7*; α(L)=0.00722 *11*; α(M)=0.001674 *24*; α(N+..)=0.000505 *7* α(K)exp=0.09 *20* (1978Go15); α(K)exp=0.043 *17* (1973Va27).
620.96 *10*	2.1 *3*	921.59	$1/2^-,3/2^-$	300.57	$3/2^-,5/2^-$	(E2)	0.01628	α(K)=0.01234 *18*; α(L)=0.00300 *5*; α(M)=0.000727 *11*; α(N+..)=0.000216 *3* α(K)exp<0.013 (1978Go15).
[x]628.0 *3*	0.31 *20*							
642.60 *20*	1.41 *25*	921.59	$1/2^-,3/2^-$	279.20	$3/2^-$			
655.45 *20*	4.4 *7*	1548.67	$1/2^-,3/2^-$	893.12	$3/2^-$	M1	0.0452	α(K)=0.0372 *6*; α(L)=0.00608 *9*; α(M)=0.001409 *20*; α(N+..)=0.000425 *6* α(K)exp=0.081 *30* (1978Go15).
657.11 *25*	1.6 *5*	1067.21	$(3/2^-,5/2^-)$	410.30	$3/2^-,5/2^-,7/2^-$			
659.3 *5*	0.31 *25*	1259.51	$1/2^-,3/2,5/2^-$	600.63	$3/2^-$			
[x]663.23 *30*	0.55 *25*							
675.38 *20*	0.61 *25*	1742.82	1/2,3/2	1067.21	$(3/2^-,5/2^-)$			
704.03 *15*	1.78 *20*	1004.56	$1/2^-,3/2^-$	300.57	$3/2^-,5/2^-$			
711.15 *10*	7.6 *5*	764.53	$1/2^-$	53.29	$5/2^-$	[E2][c]	0.01210	α(K)=0.00937 *14*; α(L)=0.00208 *3*; α(M)=0.000500 *7*; α(N+..)=0.0001488 *21*
725.27 *15*	6.0 *8*	1004.56	$1/2^-,3/2^-$	279.20	$3/2^-$	M1	0.0347	α(K)=0.0287 *4*; α(L)=0.00466 *7*; α(M)=0.001081 *16*; α(N+..)=0.000326 *5* Doublet α(K)exp=0.029 *10* (1978Go15).
727.40 *15*	6.1 *8*	764.53	$1/2^-$	37.08	$3/2^-$	(M1)	0.0345	α(K)=0.0285 *4*; α(L)=0.00463 *7*; α(M)=0.001073 *15*; α(N+..)=0.000324 *5*

$\gamma(^{195}Hg)$ (continued)

E_γ	I_γ[&af]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[b]	α[g]	Comments
733.94 *10*	6.1 *5*	1548.67	1/2⁻,3/2⁻	814.72	1/2⁻,3/2⁻	[M1][c]	0.0337	α(K)=0.0278 *4*; α(L)=0.00452 *7*; α(M)=0.001048 *15*; α(N+..)=0.000316 *5*
737.8 *4*	0.39 *20*	1742.82	1/2,3/2	1004.56	1/2⁻,3/2⁻			
[x]741.88 *20*	0.61 *15*							
[x]755.77 *20*	0.96 *20*							
761.42 *15*	1.6 *3*	814.72	1/2⁻,3/2⁻	53.29	5/2⁻			
764.52 *10*	3.9 *4*	764.53	1/2⁻	0.0	1/2⁻	E0+M1	0.15 *4*	α(K)= 0.13 *4* α(K)exp=0.13 *4* (1978Go15). α: based on the α(K)exp value corrected for higher shells.
777.68 *15*	10.6 *15*	814.72	1/2⁻,3/2⁻	37.08	3/2⁻	[M1][c]	0.0290	α(K)=0.0240 *4*; α(L)=0.00389 *6*; α(M)=0.000901 *13*; α(N+..)=0.000272 *4*
783.72 *30*	0.79 *25*	1548.67	1/2⁻,3/2⁻	764.53	1/2⁻			
788.06 *15*	0.88 *20*	1067.21	(3/2⁻,5/2⁻)	279.20	3/2⁻			
792.8 *4*	0.37 *15*	1714.65	1/2,3/2,5/2⁻	921.59	1/2⁻,3/2⁻			
799.9 *4*	0.37 *20*	1400.92	1/2⁻	600.63	3/2⁻			
805.32 *15*	1.7 *4*	1400.92	1/2⁻	595.48	(3/2)⁻			
814.68 *5*	18.0 *9*	814.72	1/2⁻,3/2⁻	0.0	1/2⁻	M1	0.0258	α(K)=0.0213 *3*; α(L)=0.00345 *5*; α(M)=0.000798 *12*; α(N+..)=0.000241 *4* α(K)exp=0.033 *8* (1978Go15); α(K)exp=0.019 *3* (1973Va27).
821.3[i]	1.0[id] *3*	1714.65	1/2,3/2,5/2⁻	893.12	3/2⁻			
821.3[i]	0.56[id] *30*	1742.82	1/2,3/2	921.59	1/2⁻,3/2⁻			
834.7 *5*	0.64 *30*	1975.35	1/2,3/2	1140.33	(1/2⁻,3/2,5/2⁻)			
839.9[@j]	<0.4[@]	893.12	3/2⁻	53.29	5/2⁻			
849.3[i]	0.46[id] *30*	1664.08	1/2,3/2,5/2⁻	814.72	1/2⁻,3/2⁻			
849.3[i]	1.2[id] *6*	1742.82	1/2,3/2	893.12	3/2⁻			
855.94 *10*	2.83 *25*	893.12	3/2⁻	37.08	3/2⁻			
861.13 *15*	1.45 *20*	1140.33	(1/2⁻,3/2,5/2⁻)	279.20	3/2⁻			
868.56 *30*	0.38 *20*	921.59	1/2⁻,3/2⁻	53.29	5/2⁻			
871.85 *30*	0.46 *20*	2420.27	1/2,3/2	1548.67	1/2⁻,3/2⁻			
884.47[i] *5*	95[i] *5*	921.59	1/2⁻,3/2⁻	37.08	3/2⁻	M1	0.0209	α(K)=0.01723 *25*; α(L)=0.00278 *4*; α(M)=0.000645 *9*; α(N+..)=0.000195 *3* α(K)exp=0.018 *2*, α(K)exp/α(L)exp=4 *1* (1978Go15); α(K)exp=0.018 *2* (1973Va27).
884.47[i] *5*	0.9[ie] *5*	2283.68	1/2,3/2	1400.92	1/2⁻			
893.06 *10*	8.5 *6*	893.12	3/2⁻	0.0	1/2⁻	M1	0.0204	α(K)=0.01681 *24*; α(L)=0.00272 *4*; α(M)=0.000629 *9*; α(N+..)=0.000190 *3* α(K)exp=0.038 *20* (1978Go15).
899.5 *4*	0.32 *15*	1714.65	1/2,3/2,5/2⁻	814.72	1/2⁻,3/2⁻			
921.59 *5*	21.4 *12*	921.59	1/2⁻,3/2⁻	0.0	1/2⁻	M1	0.0188	α(K)=0.01551 *22*; α(L)=0.00250 *4*; α(M)=0.000580 *9*; α(N+..)=0.0001751 *25* α(K)exp=0.023 *9* (1978Go15); α(K)exp=0.019 *3* (1973Va27).
927.90 *20*	3.5 *4*	1742.82	1/2,3/2	814.72	1/2⁻,3/2⁻			

γ(^{195}Hg) (continued)

E_γ	I_γ[&af]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[b]	α[g]	Comments
948.41 *30*	0.8 *4*	1548.67	1/2−,3/2−	600.63	3/2−			
951.39 *30*	1.7 *5*	1004.56	1/2−,3/2−	53.29	5/2−			
953.0 *10*	0.5 *3*	1548.67	1/2−,3/2−	595.48	(3/2)−			
967.46 *5*	20.4 *11*	1004.56	1/2−,3/2−	37.08	3/2−	M1	0.01659	α(K)=0.01371 *20*; α(L)=0.00221 *3*; α(M)=0.000512 *8*; α(N+..)=0.0001545 *22* α(K)exp=0.020 *6* (1978Go15); α(K)exp=0.013 *4* (1973Va27).
980.23 *15*	1.19 *15*	1259.51	1/2−,3/2,5/2−	279.20	3/2−			
[x]991.5 *4*	0.42 *20*							
[x]999.85 *20*	0.77 *20*							
1004.54 *10*	1.45 *20*	1004.56	1/2−,3/2−	0.0	1/2−			
1009.99 *10*	3.1 *4*	2014.65	1/2,3/2	1004.56	1/2−,3/2−			
1013.82 *20*	0.44 *25*	1067.21	(3/2−,5/2−)	53.29	5/2−			
1053.3[i]	0.57[id] *30*	1975.35	1/2,3/2	921.59	1/2−,3/2−			
1053.3[i]	0.44[id] *30*	2057.36	1/2,3/2	1004.56	1/2−,3/2−			
1063.14 *30*	1.2 *3*	1664.08	1/2,3/2,5/2−	600.63	3/2−			E_γ: 1064.14 reported by 1978Go15 is adopted as 1063.14 by evaluator, as reported in 1977GoZW.
1067.16 *10*	3.8 *4*	1067.21	(3/2−,5/2−)	0.0	1/2−			
1086.90 *20*	0.54 *15*	1140.33	(1/2−,3/2,5/2−)	53.29	5/2−			
1092.82 *15*	1.90 *20*	2014.65	1/2,3/2	921.59	1/2−,3/2−			
1100.33 *10*	22.3 *12*	1400.92	1/2−	300.57	3/2−,5/2−	E2	0.00501	α(K)=0.00405 *6*; α(L)=0.000732 *11*; α(M)=0.0001721 *24*; α(N+..)=5.17×10^{-5} *8* α(K)exp=0.09 *6* (1978Go15). Mult.: M1,E2 (1978Go15). But ΔJ=2 rules out M1 (evaluator).
1102.93 *30*	1.3 *6*	1140.33	(1/2−,3/2,5/2−)	37.08	3/2−			
1114.11 *30*	0.94 *30*	1714.65	1/2,3/2,5/2−	600.63	3/2−			
1121.66[i] *10*	20[i] *3*	1400.92	1/2−	279.20	3/2−	M1	0.01139	α(K)=0.00942 *14*; α(L)=0.001511 *22*; α(M)=0.000350 *5*; α(N+..)=0.0001063 *15* α(K)exp=0.013 *6* (1978Go15); α(K)exp=0.0036 *10* (1973Va27).
1121.66[i] *10*	3.0[id] *6*	2014.65	1/2,3/2	893.12	3/2−			
1140.47[i] *20*	5.1[id] *8*	1140.33	(1/2−,3/2,5/2−)	0.0	1/2−			
1140.47[i] *20*	0.48[id] *20*	1742.82	1/2,3/2	600.63	3/2−			
1163.96 *20*	0.87 *25*	2057.36	1/2,3/2	893.12	3/2−			
[x]1193.07 *25*	0.98 *25*							
1200.00 *25*	1.31 *25*	2014.65	1/2,3/2	814.72	1/2−,3/2−			
1210.88 *25*	0.98 *25*	1975.35	1/2,3/2	764.53	1/2−			
1216.53 *15*	2.16 *25*	2283.68	1/2,3/2	1067.21	(3/2−,5/2−)			
1222.37 *30*	0.56 *20*	1259.51	1/2−,3/2,5/2−	37.08	3/2−			
1242.61 *20*	0.78 *20*	2057.36	1/2,3/2	814.72	1/2−,3/2−			
1248.00 *20*	1.51 *25*	1548.67	1/2−,3/2−	300.57	3/2−,5/2−			
[x]1250.4 *4*	0.46 *25*							
1260.0 *5*	0.65 *20*	1259.51	1/2−,3/2,5/2−	0.0	1/2−			

$^{195}_{80}$Hg$_{115}$-10

γ(^{195}Hg) (continued)

Eγ	Iγ[&af]	Ei(level)	J^π_i	Ef	J^π_f	Mult.[b]	α[g]	Comments
1269.51 10	23.2 12	1548.67	1/2⁻,3/2⁻	279.20	3/2⁻	M1	0.00834	α(K)=0.00689 10; α(L)=0.001101 16; α(M)=0.000255 4; α(N+..)=9.64×10^{-5} 14 α(K)exp=0.010 5 (1978Go15); α(K)exp=0.0064 11 (1973Va27).
[x]1279.5 4	0.35 20							
1288.36 20	0.96 20	2428.79	1/2,3/2	1140.33	(1/2⁻,3/2,5/2⁻)			
[x]1315.5 4	0.81 20							
[x]1326.22 25	0.95 20							
1337.1 5	0.39 25	2230.14	1/2,3/2	893.12	3/2⁻			
1347.78 10	11.1 6	1400.92	1/2⁻	53.29	5/2⁻			
1363.88[i] 10	80[id] 4	1400.92	1/2⁻	37.08	3/2⁻	M1	0.00699	α(K)=0.00575 8; α(L)=0.000917 13; α(M)=0.000212 3; α(N+..)=0.0001104 16 α(K)exp=0.0066 9 (1978Go15); α(K)exp=0.0040 5 (1973Va27).
1363.88[i] 10	1.1[ie] 6	1664.08	1/2,3/2,5/2⁻	300.57	3/2⁻,5/2⁻			
1363.88[i] 10	1.4[id] 7	2283.68	1/2,3/2	921.59	1/2⁻,3/2⁻			
1374.68 20	0.90 15	1975.35	1/2,3/2	600.63	3/2⁻			
1383.43 20	1.86 20	2305.02	1/2,3/2	921.59	1/2⁻,3/2⁻			
1390.43 20	3.20 25	2283.68	1/2,3/2	893.12	3/2⁻			
[x]1394.2 5	0.47 25							
1400.7 3	0.63 15	1400.92	1/2⁻	0.0	1/2⁻	E0+M1	0.62 15	α(K)=0.52 13 α(K)exp=0.52 13 (1978Go15). α: based on the α(K)exp value corrected for higher shells.
1412.1 4	0.69 25	2305.02	1/2,3/2	893.12	3/2⁻			
1415.6 4	0.75 30	2420.27	1/2,3/2	1004.56	1/2⁻,3/2⁻			
1419.6 5	0.36 25	2014.65	1/2,3/2	595.48	(3/2)⁻			
1435.52 20	5.9 5	1714.65	1/2,3/2,5/2⁻	279.20	3/2⁻			
[x]1443.5 4	1.0 5							
[x]1447.3 4	1.0 5							
1456.6 5	1.4 5	2057.36	1/2,3/2	600.63	3/2⁻			
1462. 1	0.5[e] 3	2057.36	1/2,3/2	595.48	(3/2)⁻			
[x]1487.6 5	0.80 35							
1490.25 25	4.5 4	2305.02	1/2,3/2	814.72	1/2⁻,3/2⁻			
1511.62 10	13.8 7	1548.67	1/2⁻,3/2⁻	37.08	3/2⁻			
1519.1 3	0.32 15	2283.68	1/2,3/2	764.53	1/2⁻			
1531.01 25	1.57 15	1831.40	1/2,3/2	300.57	3/2⁻,5/2⁻			
1548.0[i]	1.2[id] 4	1548.67	1/2⁻,3/2⁻	0.0	1/2⁻			
1548.0[i]	2.0[id] 6	2363.1	1/2,3/2	814.72	1/2⁻,3/2⁻			
1552.26 25	2.44 25	1831.40	1/2,3/2	279.20	3/2⁻			
[x]1560.5 5	0.46 15							
[x]1584.3 7	0.42 25							
1588.4 5	1.1 3	2403.1	1/2,3/2	814.72	1/2⁻,3/2⁻			
1591.7 4	2.0 3	2513.23	1/2⁺,3/2⁺	921.59	1/2⁻,3/2⁻			
[x]1609.6 7	0.52 25							

$^{195}_{80}$Hg$_{115}$-11

γ(^{195}Hg) (continued)

E_γ	I_γ[&af]	E_i(level)	J_i^π	E_f	J_f^π
1613.9 3	0.93 25	1893.13	1/2,3/2	279.20	$3/2^-$
1619.5 10	0.6 5	2513.23	$1/2^+,3/2^+$	893.12	$3/2^-$
1627.00 10	5.5 5	1664.08	$1/2,3/2,5/2^-$	37.08	$3/2^-$
[x]1656.7 7	0.76 25				
1660.7 7	1.7 4	2255.59	1/2,3/2	595.48	$(3/2)^-$
1664.20 25	5.6 6	1664.08	$1/2,3/2,5/2^-$	0.0	$1/2^-$
[x]1668.2 7	0.57 30				
1675.2 7	0.54 30	1975.35	1/2,3/2	300.57	$3/2^-,5/2^-$
1678.0 5	0.87 30	1714.65	$1/2,3/2,5/2^-$	37.08	$3/2^-$
1688.2 6	1.5 5	2283.68	1/2,3/2	595.48	$(3/2)^-$
1690.0 6	1.5 5	1742.82	1/2,3/2	53.29	$5/2^-$
1696.6 10	1.0 4	1975.35	1/2,3/2	279.20	$3/2^-$
1698.8 10	0.59 30	2513.23	$1/2^+,3/2^+$	814.72	$1/2^-,3/2^-$
1705.88 15	14.2 8	1742.82	1/2,3/2	37.08	$3/2^-$
1714.4[i]	3.7[id] 9	1714.65	$1/2,3/2,5/2^-$	0.0	$1/2^-$
1714.4[i]	5.6[id] 8	2014.65	1/2,3/2	300.57	$3/2^-,5/2^-$
[x]1726.7 7	0.5 2				
1735.4 4	1.03 20	2014.65	1/2,3/2	279.20	$3/2^-$
1743.08 20	2.83 25	1742.82	1/2,3/2	0.0	$1/2^-$
1756.93 20	3.04 25	2057.36	1/2,3/2	300.57	$3/2^-,5/2^-$
[x]1772.8 7	0.59 30				
1778.2[i]	2.4[id] 6	1831.40	1/2,3/2	53.29	$5/2^-$
1778.2[i]	7.4[id] 10	2057.36	1/2,3/2	279.20	$3/2^-$
1794.13 20	3.9 3	1831.40	1/2,3/2	37.08	$3/2^-$
1824.6 4	0.84 25	2420.27	1/2,3/2	595.48	$(3/2)^-$
1833.2 4	0.45 15	2428.79	1/2,3/2	595.48	$(3/2)^-$
1842.16 20	4.2 3	1879.26	1/2,3/2	37.08	$3/2^-$
1856.4 7	1.0 3	1893.13	1/2,3/2	37.08	$3/2^-$
[x]1859.7 7	0.71 25				
[x]1871.9 7	0.41 15				
1879.3 5	0.43 15	1879.26	1/2,3/2	0.0	$1/2^-$
1893.0 5	0.51 20	1893.13	1/2,3/2	0.0	$1/2^-$
[x]1902.6 5	0.40 20				
1907.9 7	0.34 25	2508.24	1/2,3/2	600.63	$3/2^-$
1912.34 25	1.30 25	2513.23	$1/2^+,3/2^+$	600.63	$3/2^-$
1917.6 2	0.87 20	2513.23	$1/2^+,3/2^+$	595.48	$(3/2)^-$
1929.56 20	0.73 15	2230.14	1/2,3/2	300.57	$3/2^-,5/2^-$
[x]1944.4 5	0.37 15				
1950.88 20	1.74 20	2230.14	1/2,3/2	279.20	$3/2^-$
1961.6 3	1.02 20	2014.65	1/2,3/2	53.29	$5/2^-$
[x]1969.1 5	0.31 15				
1977.75 15	16.8 8	2014.65	1/2,3/2	37.08	$3/2^-$
2004.4[i]	1.6[id] 4	2057.36	1/2,3/2	53.29	$5/2^-$
2004.4[i]	1.2[id] 4	2283.68	1/2,3/2	279.20	$3/2^-$
2014.75 15	8.5 4	2014.65	1/2,3/2	0.0	$1/2^-$
2020.8 4	0.96 25	2057.36	1/2,3/2	37.08	$3/2^-$
2025.85 30	3.5 3	2305.02	1/2,3/2	279.20	$3/2^-$
2031.8 4	1.23 15	2311.5	1/2,3/2	279.20	$3/2^-$
2057.4 4	3.0 4	2057.36	1/2,3/2	0.0	$1/2^-$
2060.4 7	0.97 25	2339.6	1/2,3/2	279.20	$3/2^-$
2084.0 4	0.80 20	2363.1	1/2,3/2	279.20	$3/2^-$
[x]2088.0 7	0.23 25				
[x]2101.4 4	1.00 20				
[x]2105.3 5	0.30 20				
2119.9 4	0.89 20	2420.27	1/2,3/2	300.57	$3/2^-,5/2^-$
2123.9 7	0.24 20	2403.1	1/2,3/2	279.20	$3/2^-$
2140.97 20	4.6 4	2420.27	1/2,3/2	279.20	$3/2^-$
[x]2147.4 7	0.50 25				
2150.1 5	1.78 25	2428.79	1/2,3/2	279.20	$3/2^-$
[x]2172.3 7	0.44 20				
2177.9 4	1.94 25	2456.8	1/2,3/2	279.20	$3/2^-$
2193.2 4	0.52 20	2230.14	1/2,3/2	37.08	$3/2^-$
2202.5 7	0.67 35	2255.59	1/2,3/2	53.29	$5/2^-$
2207.2 7	0.38 30	2508.24	1/2,3/2	300.57	$3/2^-,5/2^-$
[x]2209.8 7	0.83 30				
2212.8 4	2.0 3	2513.23	$1/2^+,3/2^+$	300.57	$3/2^-,5/2^-$
2218.34 30	0.83 20	2255.59	1/2,3/2	37.08	$3/2^-$
2228.9 4	0.86 20	2508.24	1/2,3/2	279.20	$3/2^-$
2234.21 20	2.32 20	2513.23	$1/2^+,3/2^+$	279.20	$3/2^-$
2251.9 5	1.06 25	2305.02	1/2,3/2	53.29	$5/2^-$
2255.6 5	2.07 25	2255.59	1/2,3/2	0.0	$1/2^-$
2267.85 20	1.91 20	2305.02	1/2,3/2	37.08	$3/2^-$
2274.8 4	1.42 25	2311.5	1/2,3/2	37.08	$3/2^-$
2285[h]	5.8[hd] 5	2283.68	1/2,3/2	0.0	$1/2^-$
2285[h]	5.8[hd] 5	2338.4	1/2,3/2	53.29	$5/2^-$
2285[hj]	5.8[hd] 5	2339.6	1/2,3/2	53.29	$5/2^-$
2301.2 5	1.18 15	2338.4	1/2,3/2	37.08	$3/2^-$
[x]2322.8 7	0.35 10				
[x]2334.8 7	0.22 15				
2338.4 5	0.69 15	2338.4	1/2,3/2	0.0	$1/2^-$
2362.9 5	3.0 5	2363.1	1/2,3/2	0.0	$1/2^-$
2366.0 5	5.1 5	2403.1	1/2,3/2	37.08	$3/2^-$
2382.92 25	4.15 35	2420.27	1/2,3/2	37.08	$3/2^-$
[x]2388.0 5	1.64 25				

$^{195}_{80}$Hg$_{115}$-12

γ(^{195}Hg) (continued)

E_γ	I_γ[&af]	E_i(level)	J_i^π	E_f	J_f^π	E_γ	I_γ[&af]	E_i(level)
2391.75 *30*	2.47 *25*	2428.79	1/2,3/2	37.08	$3/2^-$	[x]2520.5 *5*	0.30 *7*	
2420.2[h]	1.42[hd] *15*	2420.27	1/2,3/2	0.0	$1/2^-$	[x]2533.1 *5*	0.41 *7*	
2420.2[hj]	1.42[hd] *15*	2456.8	1/2,3/2	37.08	$3/2^-$	[x]2557.1 *5*	0.25 *7*	
[x]2425.0 *5*	0.55 *20*					[x]2565.3 *7*	0.42 *10*	
2429.0 *7*	0.17 *15*	2428.79	1/2,3/2	0.0	$1/2^-$	[x]2569.4 *7*	0.50 *10*	
[x]2452.9 *7*	0.30 *20*					[x]2599.4 *5*	0.14 *7*	
2456.4 *5*	1.04 *20*	2456.8	1/2,3/2	0.0	$1/2^-$	[x]2606.1 *5*	0.23 *7*	
2459.8 *7*	0.39 *20*	2513.23	$1/2^+,3/2^+$	53.29	$5/2^-$	[x]2632.0 *7*	0.19 *7*	
2471.13 *25*	1.44 *15*	2508.24	1/2,3/2	37.08	$3/2^-$	[x]2645.5 *7*	0.19 *7*	
2476.12 *25*	1.68 *15*	2513.23	$1/2^+,3/2^+$	37.08	$3/2^-$	[x]2686.7 *7*	0.14 *5*	
[x]2488.1 *5*	0.54 *7*					[x]2811.2 *7*	0.13 *5*	
[x]2505.6 *7*	0.43 *20*					[x]2854.7 *7*	0.14 *5*	
2508.8 *7*	0.86 *30*	2508.24	1/2,3/2	0.0	$1/2^-$	[x]2959.0 *7*	0.14 *5*	
2513.28 *20*	4.4 *3*	2513.23	$1/2^+,3/2^+$	0.0	$1/2^-$			

† From adopted γ radiations.
‡ From 1969Ba42.
\# Iγ not given (1978Go15).
@ Unobserved transition with γ-ray intensity estimated as upper limit (1978Go15).
& Relative intensity normalized to Iγ(Eγ=563.52 keV)=100 *5*.
a I(Kα_1 x ray)=370 *70*, I(Kβ_1 x ray)=140 *30* (1978Go15,1977GoZQ).
b Multipolarities are deduced from α(K)exp (1978Go15,1977GoZQ) normalized to α(K)(563γ)=0.0573 (M1 theoretical calculation), except as noted.
c From ΔJ and $\Delta\pi$.
d From coin spectra data.
e Estimated from coincidence data.
f For absolute intensity per 100 decays, multiply by 0.112 *10*.
g 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.
h Multiply placed with undivided intensity.
i Multiply placed with intensity suitably divided.
j Placement of transition in the level scheme is uncertain.
x γ ray not placed in level scheme.

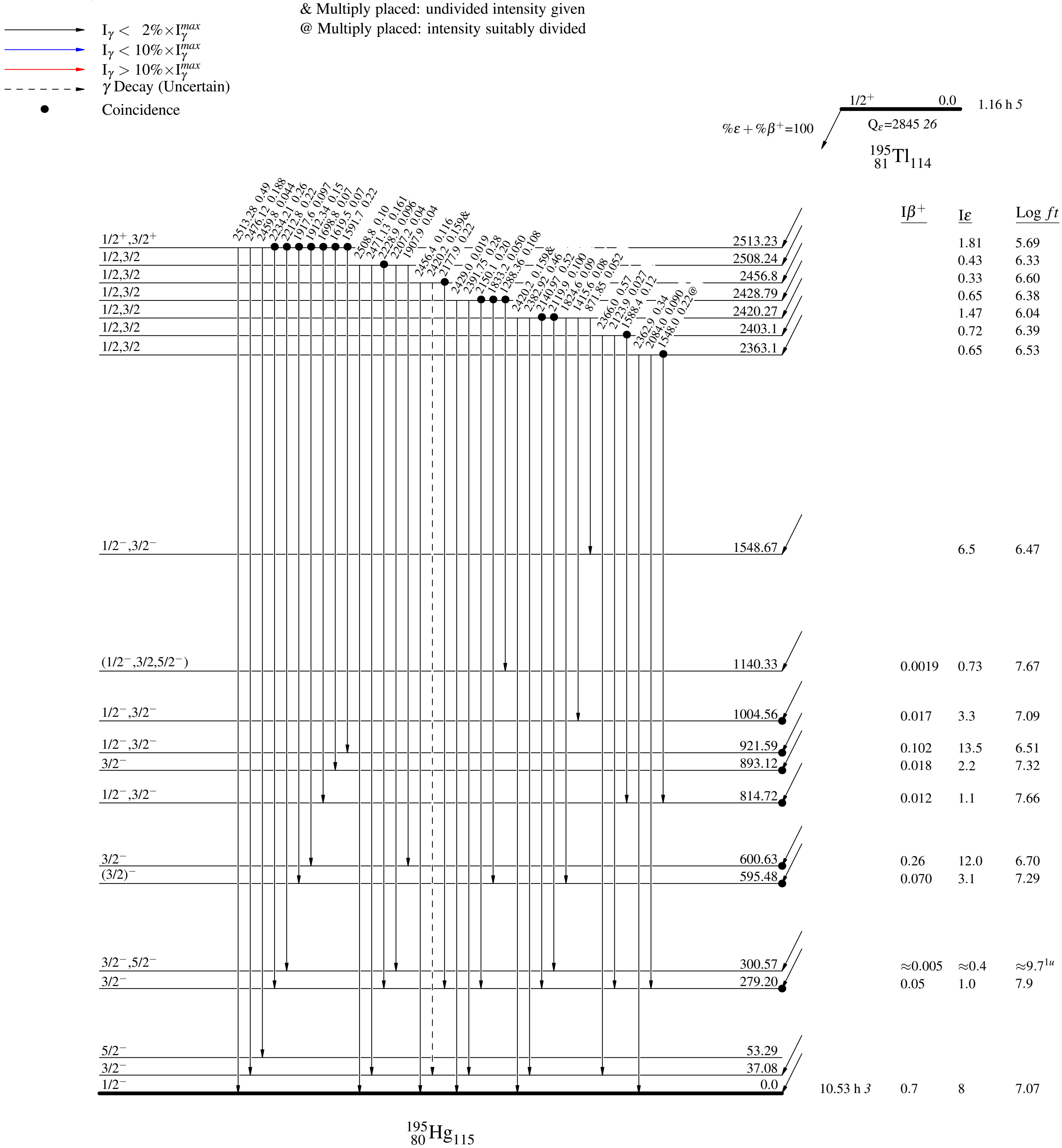
$^{195}_{80}Hg_{115}$-13

^{195}Tl ε decay 1978Go15,1977GoZQ

Decay Scheme

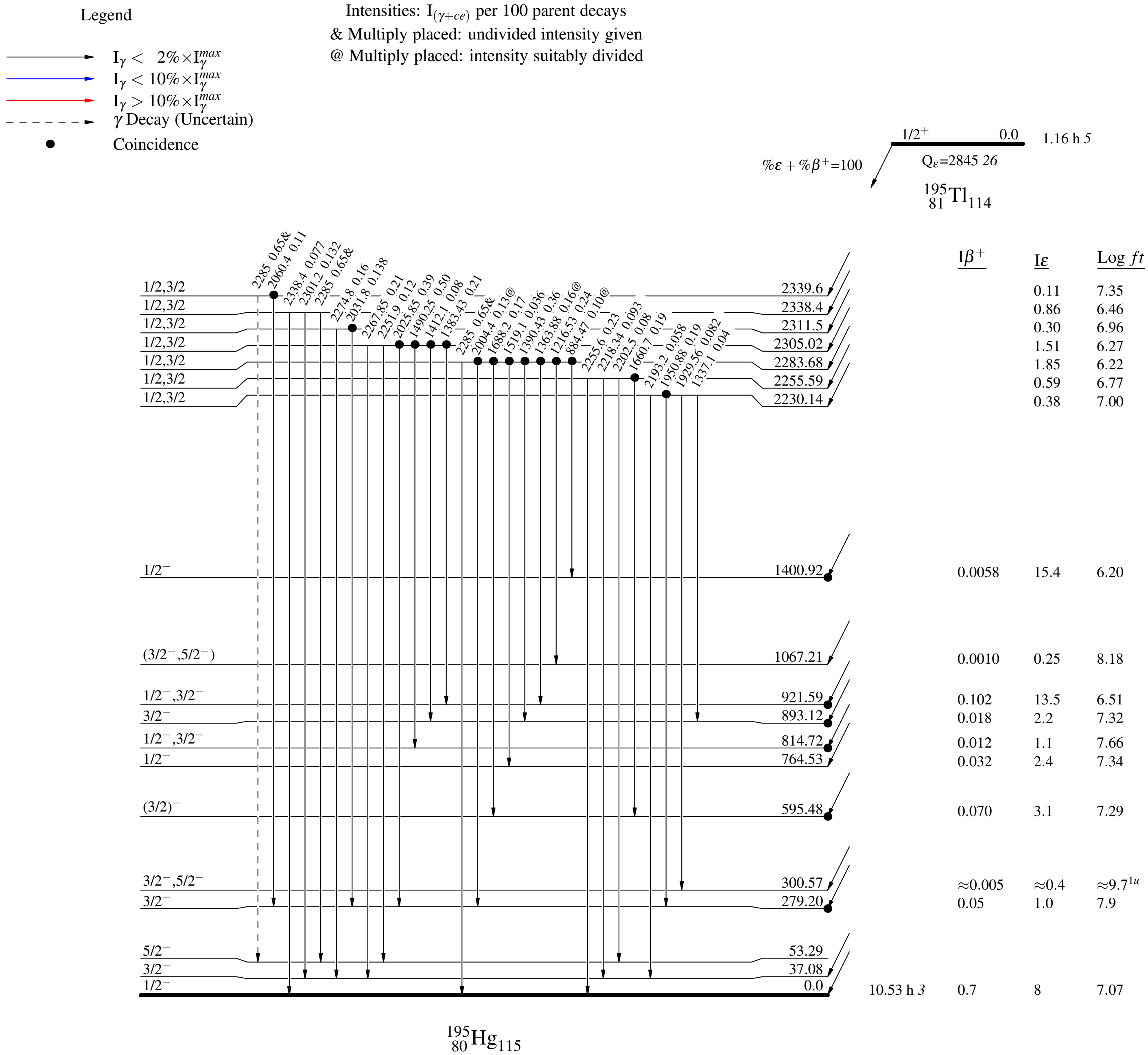
Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

Legend



^{195}Tl ε decay 1978Go15,1977GoZQ

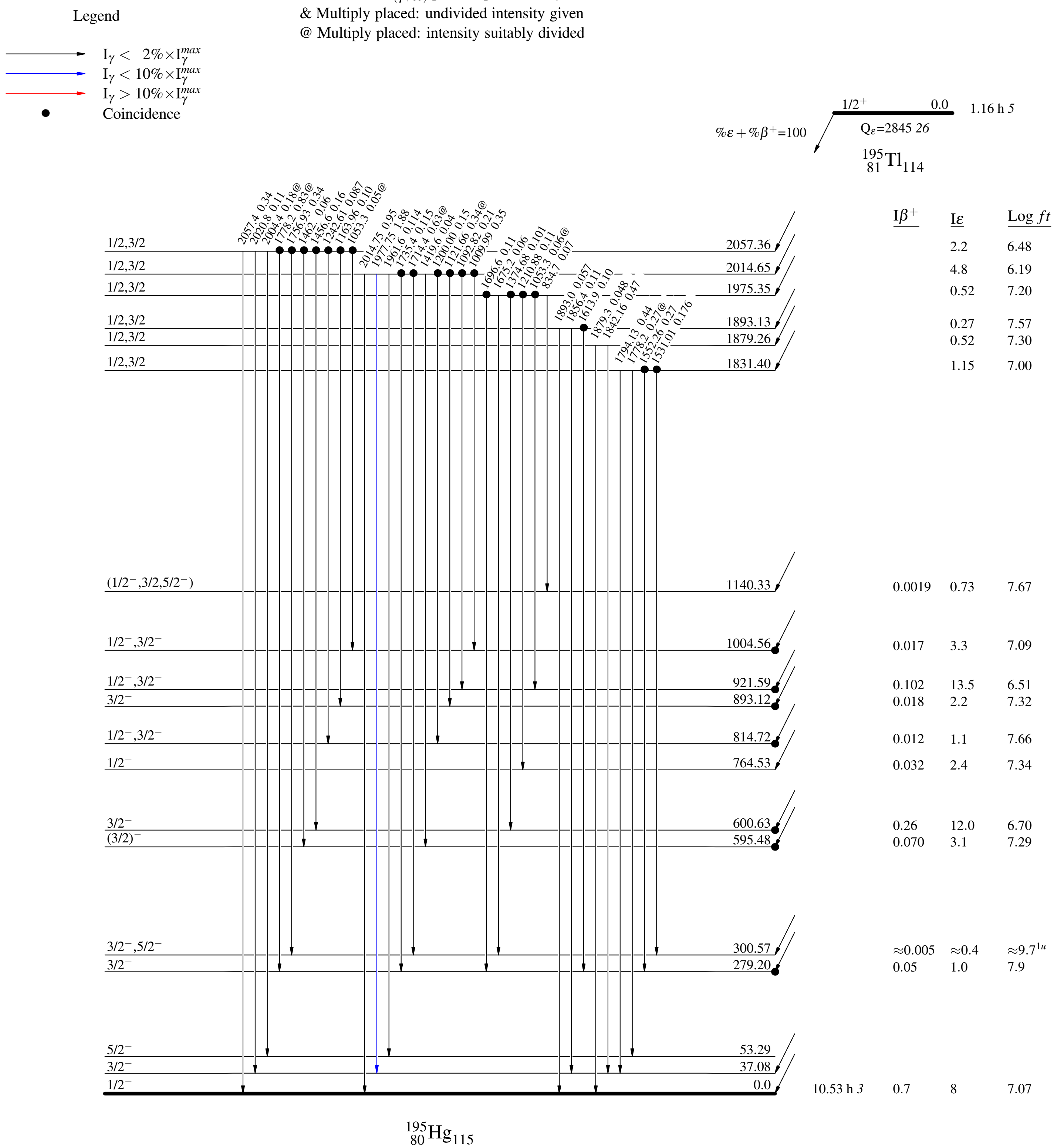
Decay Scheme (continued)



^{195}Tl ε decay 1978Go15,1977GoZQ

Decay Scheme (continued)

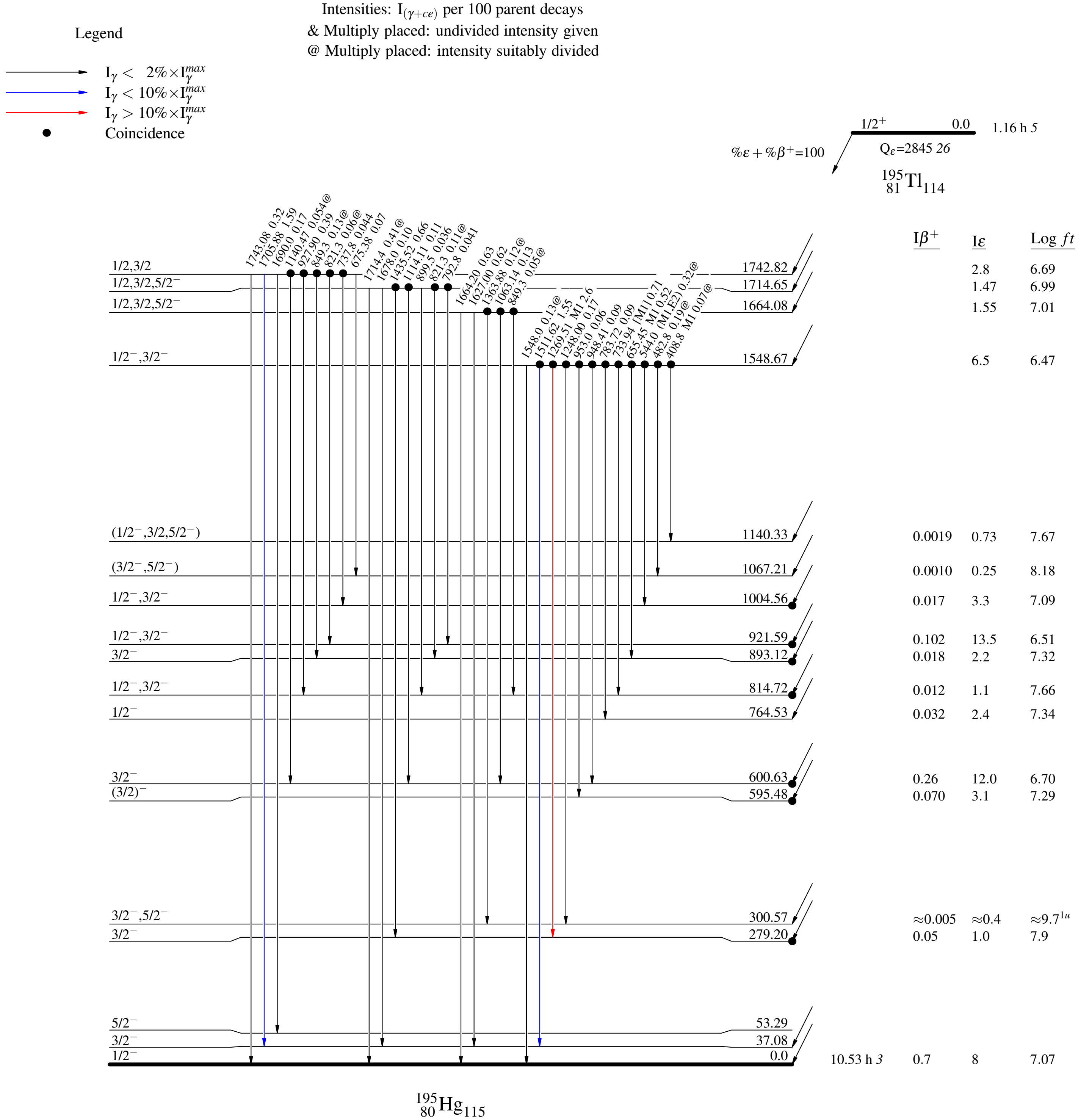
Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided



^{195}Tl ε decay 1978Go15,1977GoZQ

Decay Scheme (continued)

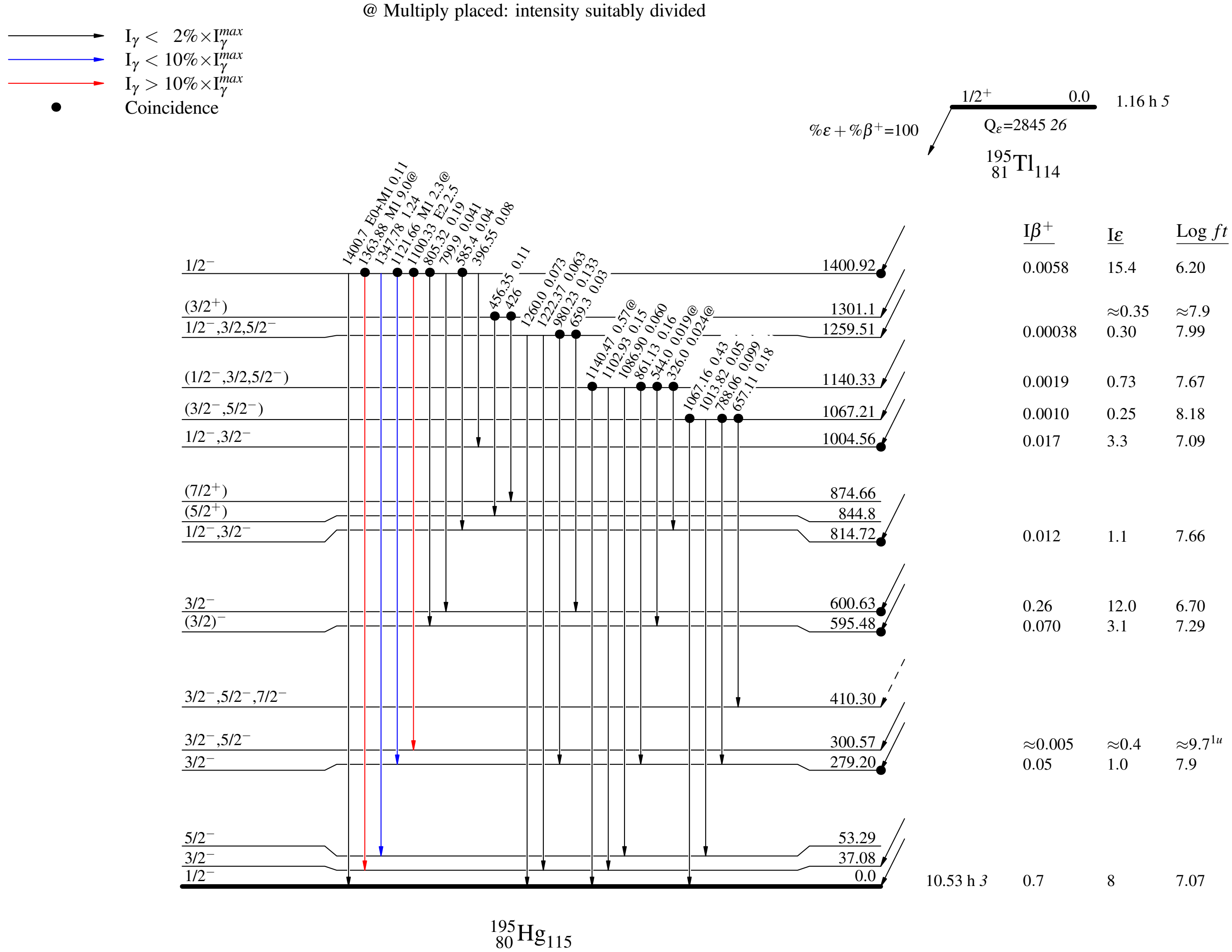
Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided



^{195}Tl ε decay 1978Go15,1977GoZQ

Decay Scheme (continued)

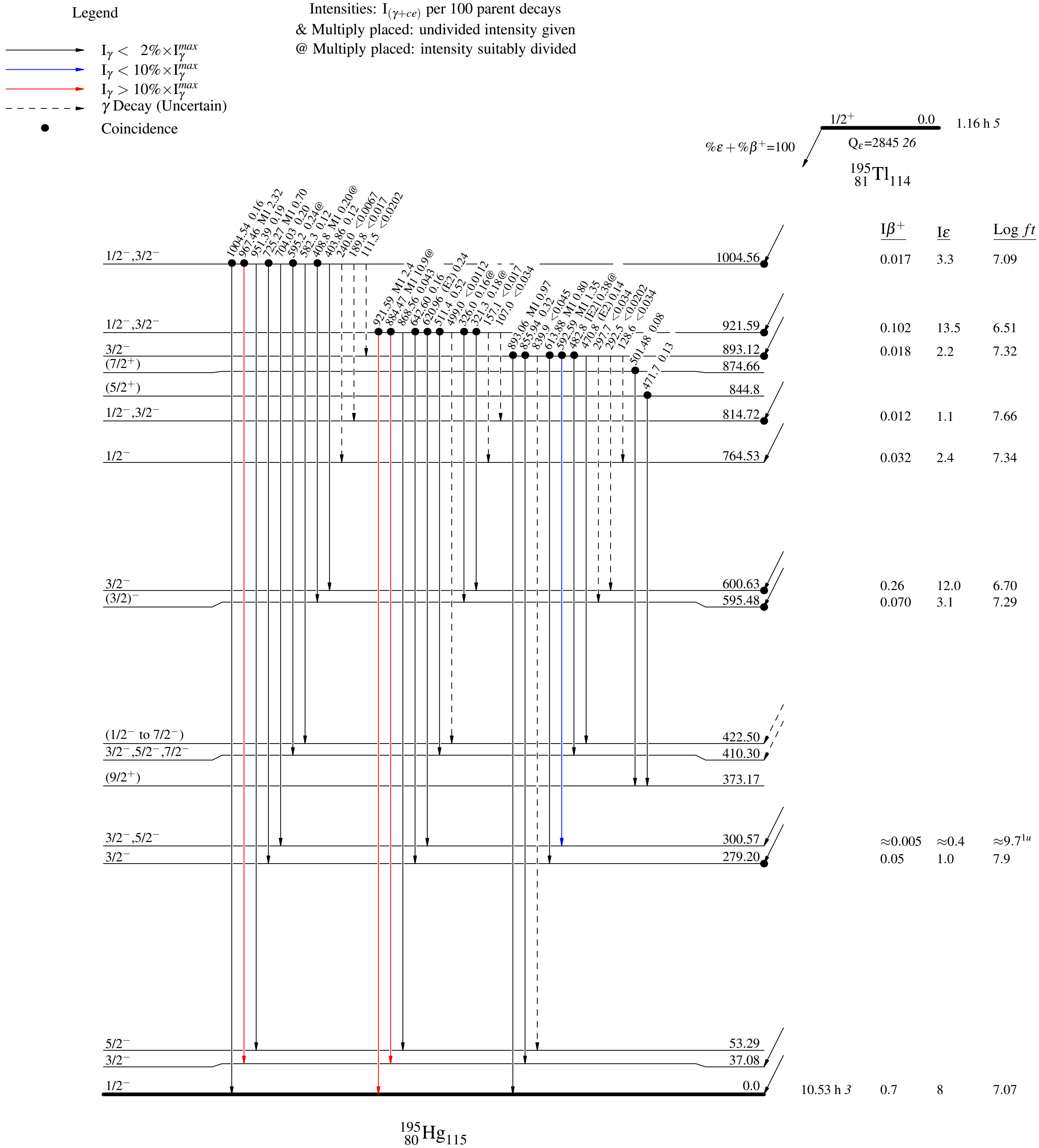
Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided



^{195}Tl ε decay 1978Go15,1977GoZQ

Decay Scheme (continued)

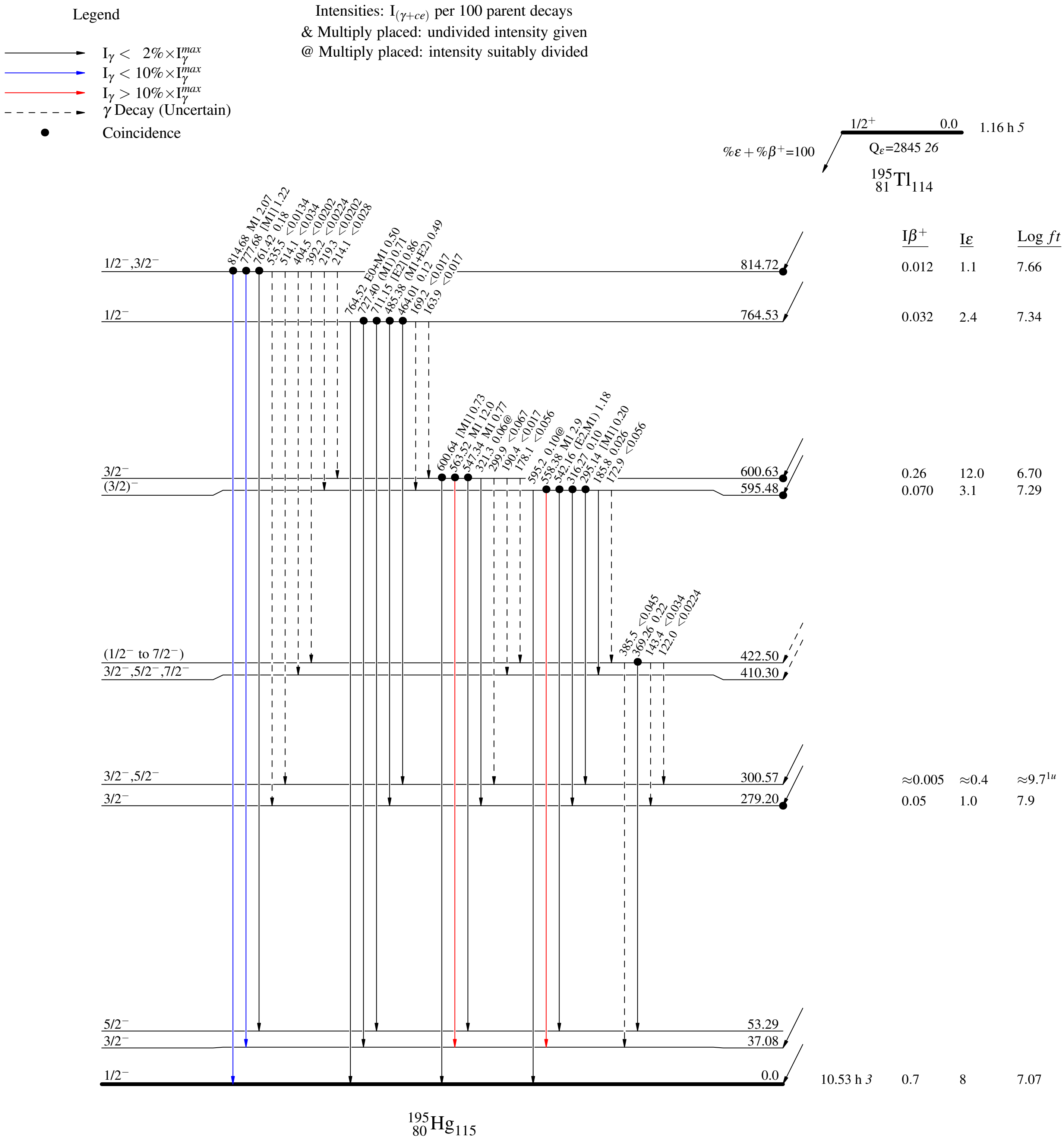
Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided



^{195}Tl ε decay 1978Go15,1977GoZQ

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided



^{195}Tl ε decay 1978Go15,1977GoZQ

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided