^{195}Hg ε decay (41.6 h) 1973Vi09,1974Fa06,1971Fr03

History

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

Parent: ^{195}Hg: E=176.07 *4*; $J^{\pi}=13/2^{+}$; $T_{1/2}$=41.6 h *8*; Q(ε)=1570 *23*; %ε+%$β^{+}$ decay=45.8 *20*

Others: 1958Br88, 1961Ju06, 1966Ha47, 1970Ca07, 1970Fo08, 1967Fr05.

Sources produced by ^{194}Pt(^{3}He,2n) (1971Fr03), and ^{197}Au(p,3n) (1973Vi09).

Energy balance: total decay energy of 764 keV *10* deduced (using RADLIST code) from proposed decay scheme is in agreement with the expected value of 800 keV *36*, suggesting that the decay scheme is reasonably complete.

1973Vi09: measured Eγ, I(ce)/1×10^{4}(ε+IT decay) isomer decays in radioactive equilibrium with ^{195}Hg g.s. ms by using a double focusing spectrometer and Si(Li) or Ge(Li).

1974Fa06: measured Eγ, Iγ, and γ singles and γγ coin with Ge(Li) and Si(Li); scheme interpreted with core-excitation model.

1971Fr03: measured Eγ, Iγ, E(ce), Ice, α, γγ coin with Si(Li) and Ge(Li).

^{195}Au Levels

See decay scheme for γγ-coin results of 1973Vi09 and 1971Fr03.

E(level)†	Jπ‡	$T_{1/2}$‡	Comments
0.0	$3/2^{+}$	186.01 d *6*	
61.44 *3*	$1/2^{+}$	3.0 ns *2*	
261.79 *3*	$5/2^{+}$	54 ps *10*	$T_{1/2}$: from (ce(L) 57γ)(ce(K) 262γ)(t) (1970Fo08). Other: 1961Re08.
318.59 *4*	$11/2^{-}$	30.5 s *2*	
525.65 *5*	$7/2^{-}$		
549.38 *9*	$(7/2)^{+}$		
706.48 *6*	$15/2^{-}$		
818.52 *19*	$(9/2^{+})$		
878.86 *5*	$13/2^{-}$		
894.16 *6*	$9/2^{-}$		
946.83? *16*			
955.08 *15*	$(9/2^{+})$		
1068.01 *11*	$9/2^{-}$		
1280.52 *7*	$11/2^{-}$		
1346.20 *6*	$11/2^{-}$		
1396.63 *14*	$(11/2^{+})$		
1404.61 *7*	$13/2^{-}$,$15/2^{-}$		
1406.18 *15*	$9/2^{-}$,11/2,$13/2^{-}$		
1487.01 *12*	$9/2^{-}$,$11/2^{-}$		
1559.60 *6*	$13/2^{-}$		
1605.57 *14*	$11/2^{-}$,$13/2^{-}$,$15/2^{-}$		

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

‡ From Adopted Levels, except as noted.

ε,$β^{+}$ radiations

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

E(decay)	E(level)	Iε†‡	Log *ft*	I(ε+$β^{+}$)†‡	Comments
(141 *23*)	1605.57	0.110 *13*	7.4 *3*	0.110 *13*	εK=0.49 *14*; εL=0.37 *10*; εM+=0.14 *5*
(186 *23*)	1559.60	1.40 *12*	6.65 *19*	1.40 *12*	εK=0.62 *5*; εL=0.28 *4*; εM+=0.100 *15*

Continued on next page (footnotes at end of table)

^{195}Hg ε decay (41.6 h) 1973Vi09,1974Fa06,1971Fr03 (continued)

ε,β+ radiations (continued)

E(decay)	E(level)	Iβ+ ‡	Iε†‡	Log *ft*	I(ε+β+)†‡	Comments
(259 *23*)	1487.01		0.069 *8*	8.36 *13*	0.069 *8*	εK=0.702 *18*; εL=0.221 *13*; εM+=0.077 *5*
(340 *23*)	1406.18		0.032 *6*	9.00 *12*	0.032 *6*	εK=0.738 *8*; εL=0.195 *6*; εM+=0.0664 *23*
(341 *23*)	1404.61		0.65 *6*	7.69 *9*	0.65 *6*	εK=0.739 *8*; εL=0.195 *6*; εM+=0.0662 *23*
(349 *23*)	1396.63		0.096 *13*	8.55 *10*	0.096 *13*	εK=0.741 *8*; εL=0.193 *6*; εM+=0.0655 *21*
(400 *23*)	1346.20		0.66 *6*	7.85 *8*	0.66 *6*	εK=0.754 *6*; εL=0.184 *4*; εM+=0.0620 *15*
(466 *23*)	1280.52		0.41 *7*	8.22 *10*	0.41 *7*	εK=0.765 *4*; εL=0.1763 *25*; εM+=0.0588 *10*
(867 *23*)	878.86		6.5 *5*	7.62 *5*	6.5 *5*	εK=0.7927 *8*; εL=0.1563 *6*; εM+=0.05100 *23*
(1040 *23*)	706.48		1.77 *16*	8.36 *6*	1.77 *16*	εK=0.7975 *6*; εL=0.1528 *4*; εM+=0.04966 *15*
(1427 *23*)	318.59	0.011 *3*	32 *3*	7.39 *6*	32 *3*	av Eβ=203 *11*; εK=0.8035 *2*; εL=0.14828 *21*; εM+=0.04791 *8*

† From I(γ+ce) intensity imbalance from each level. Iε/I(ε+β+) is calculated by using log *ft* code.
‡ Absolute intensity per 100 decays.

^{195}Hg ε decay (41.6 h) 1973Vi09,1974Fa06,1971Fr03 (continued)

γ(^{195}Au)

Iγ normalization: From I(γ+ce) to g.s.=45.8 *20*. %ε+%β$^+$=45.8 *20* from Iγ(Eγ=37)/Iγ(Eγ=560)=0.247 *14* (1966Ha47,1973Vi09). Other %ε+%β$^+$: 45.5 *21* from Ice(Eγ=122.8)/Ice(Eγ=56.8)=1.21 *7* (1973Vi09), 49 (1971Fr03), 51 (1970Ca07), 52.2 *5* (1967Fr05), 44.6 *24* (1973Vi09); see also 1961Ju06.
α(K)exp, α(L)exp, ce-ratio data are from 1973Vi09; except as noted.
See decay scheme for γγ-coin results of 1973Vi09 and 1971Fr03.

E_γ[†]	I_γ[@c]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[a]	δ	α[d]	$I_{(\gamma+ce)}$[c]	Comments
56.80 *3*	0.181 *7*	318.59	11/2$^-$	261.79	5/2$^+$	E3		3.29×10^3	608 *25*	ce(L)/(γ+ce)=0.722 *8*; ce(M)/(γ+ce)=0.215 *4*; ce(N+)/(γ+ce)=0.0625 *13* I$_\gamma$: from ce(L)=436 *18* (1973Vi09), α(L)=2416. Others: Iγ=0.187 calc from I(γ+ce) balance at 262 level, 0.31 *10* (1974Fa06). α: measured total I(ce)=598 *29* (1973Vi09), α(L1)exp:α(L2)exp:α(L3)exp:α(M2)exp:α(M3)exp:3α(N):α(O+...)exp=1.8 *2*:100 *4*:91 *4*:28 *2*:25 *2*:12.8 *9*:4.5 4 (1973Vi09).
61.46 *3*	1.21 *20*	61.44	1/2$^+$	0.0	3/2$^+$	M1+E2	0.45 *1*	12.2 *3*		α(L)=9.26 *23*; α(M)=2.31 *6*; α(N+..)=0.668 *17* α: α(L1)exp:α(L2)exp:α(L3)exp=100:99 *6*:87 *4* (1970Fo08), 100:96 *10*:75 *10* (1971Fr03), 100 *6*:92 *6*:94 *6* (1973Vi09). α(M1)exp:α(M2)exp:α(M3)exp=89 *11*:100:91 *9* (1971Fr03), 97 *7*:100 *8*:92 *7* (1973Vi09). α(L)exp:α(M)exp:α(N)exp:α(O+...)exp=100 *6*:24.4 *19*:6.5 *5*:2.3 *3* (1973Vi09). δ: from L-subshell ratios (1970Fo08).
90.42[‡] *23*	0.009 *3*	1487.01	9/2$^-$,11/2$^-$	1396.63	(11/2$^+$)	[E1][b]		0.533 *9*		α(K)=0.425 *7*; α(L)=0.0832 *13*; α(M)=0.0194 *3*; α(N+..)=0.00559 *9*
172.31 *11*	0.76 *11*	878.86	13/2$^-$	706.48	15/2$^-$	M1		1.543		α(K)=1.268 *18*; α(L)=0.211 *3*; α(M)=0.0490 *7*; α(N+..)=0.01462 *21* α(K)exp=1.36 *20*, α(L1)exp=0.25 *4*.
200.38 *4*	11.3 *11*	261.79	5/2$^+$	61.44	1/2$^+$	E2		0.372		α(K)=0.1690 *24*; α(L)=0.1526 *22*; α(M)=0.0392 *6*; α(N+..)=0.01125 *16* α: α(L)exp=0.151 *23*, α(L1)exp:α(L2)exp:α(L3)exp=37 *13*:100 *9*:58 *9*. Other α(L1)exp:α(L2)exp:α(L3)exp=45 *19*:100 *31*:70 *31* (1970Fo08,1971Fr03,1958Br88).
207.10 *4*	5.2 *10*	525.65	7/2$^-$	318.59	11/2$^-$	E2		0.333		α(K)=0.1557 *22*; α(L)=0.1329 *19*; α(M)=0.0341 *5*; α(N+..)=0.00979 *14*

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^{195}Hg ε decay (41.6 h) 1973Vi09,1974Fa06,1971Fr03 (continued)

γ(^{195}Au) (continued)

E_γ[†]	I_γ[@ c]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[a]	δ	α[d]	Comments
261.75 *4*	441 *35*	261.79	$5/2^+$	0.0	$3/2^+$	M1+E2	0.51 *1*	0.415 *7*	α(K)exp=0.153 *18*, α(L)exp=0.149 *20*; α(L1)exp:α(L2)exp:α(L3)exp=34 *4*:100 *8*:58 *5* (1973Vi09), 29 *5*:100:56 *8* (1971Fr03). α(K)=0.333 *5*; α(L)=0.0627 *9*; α(M)=0.01477 *21*; α(N+..)=0.00438 *7* I_γ: from 1974Fa06. Others: 436 *27* (1973Vi09), 434 *40* (1971Fr03), 430 *25* (1966Ha47). α: α(K)exp=0.352 *24*; α(L)exp=0.073 *7*; α(L1)exp:α(L2)exp:α(L3)exp=100 *5*:19.9 *14*:6.2 *5* (1973Vi09), 100:19.5 *20*:7.0 *15* (1971Fr03), 100 *8*:20 *6*:6.5 *14* (1970Fo08). δ: from L-subshell ratios (1973Vi09,1971Fr03).
279.25 *10*	2.0 *5*	1559.60	$13/2^-$	1280.52	$11/2^-$	M1		0.404	α(K)=0.332 *5*; α(L)=0.0549 *8*; α(M)=0.01272 *18*; α(N+..)=0.00379 *6* α(K)exp=0.35 *7*, α(L1)exp=0.062 *17*.
287.4 *3*	0.11 *6*	549.38	$(7/2)^+$	261.79	$5/2^+$	[M1][b]		0.373	α(K)=0.307 *5*; α(L)=0.0507 *8*; α(M)=0.01175 *17*; α(N+..)=0.00350 *5* I_γ: other: 0.15 *3* (1973Vi09).
[x]308.5 *3*	0.084[&] *20*								
318.60 *10*	0.251 *28*	318.59	$11/2^-$	0.0	$3/2^+$	M4		11.67	α(K)=6.21 *9*; α(L)=4.02 *6*; α(M)=1.105 *16*; α(N+..)=0.331 *5* I_γ: others: 0.30 *4* (1973Vi09), 0.24 *3* (1971Fr03,1966Ha47). α: α(K)exp=5.4 *11*, α(L)exp=4.1 *10*, α(L1)exp:α(L2)exp:α(L3)exp=100 *11*:31 *4*:67 *8*. Other α(K)exp: 6.5 *10* (1970Ca07), 8 *2* (1971Fr03).
324.55 *25*	0.11 *5*	1605.57	$11/2^-$,$13/2^-$,$15/2^-$	1280.52	$11/2^-$				
338.17 *10*	0.45[&] *7*	1406.18	$9/2^-$,11/2,$13/2^-$	1068.01	$9/2^-$				
368.55 *5*	4.72 *18*	894.16	$9/2^-$	525.65	$7/2^-$	M1		0.190	α(K)=0.1568 *22*; α(L)=0.0257 *4*; α(M)=0.00596 *9*; α(N+..)=0.001776 *25* α(K)exp=0.17 *3*, α(L1)exp+α(L2)exp=0.030 *6* (1973Vi09). Other α(K)exp: 0.135 *26* (1971Fr03), 0.11 *1* (1970Ca07), 0.15 *2* (1966Ha47).
386.40 *15*	3.9 *4*	1280.52	$11/2^-$	894.16	$9/2^-$	M1		0.1676	α(K)=0.1381 *20*; α(L)=0.0226 *4*; α(M)=0.00524 *8*; α(N+..)=0.001563 *22* α(K)exp=0.16 *4*, α(L1)exp+α(L2)exp=0.029 *9* (1973Vi09). Other α(K)exp: 0.18 *4* (1971Fr03).
387.87 *5*	30.7 *11*	706.48	$15/2^-$	318.59	$11/2^-$	E2		0.0494	α(K)=0.0335 *5*; α(L)=0.01205 *17*; α(M)=0.00299 *5*; α(N+..)=0.000870 *13* α: α(K)exp=0.031 *5*, α(L)exp=0.0124 *24*, α(L1)exp:α(L2)exp:α(L3)exp=78 *10*:100 *11*:42 *7*; other α(K)exp: 0.042 *8* (1971Fr03).

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^{195}Hg ε decay (41.6 h) 1973Vi09,1974Fa06,1971Fr03 (continued)

γ(^{195}Au) (continued)

E_γ[†]	I_γ[@ c]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[a]	δ	α[d]	Comments
401.92[‡] *18*	0.21 *5*	1280.52	11/2$^-$	878.86	13/2$^-$	[M1+E2][b]		0.10 *6*	α(K)=0.08 *5*; α(L)=0.016 *5*; α(M)=0.0037 *11*; α(N+..)=0.0011 *4*
419.00 *5*	0.87 *7*	1487.01	9/2$^-$,11/2$^-$	1068.01	9/2$^-$	E2+M1	≈2.4	0.0543	α(K)=0.0404; α(L)=0.01061; α(M)=0.00258; α(N+..)=0.000755 α(K)exp=0.042 *9* (1973Vi09), 0.037 *18* (1971Fr03). δ: from α(K)exp=0.042 *9*.
441.50 *20*	0.52 *8*	1396.63	(11/2$^+$)	955.08	(9/2$^+$)	M1		0.1175	α(K)=0.0969 *14*; α(L)=0.01582 *23*; α(M)=0.00366 *6*; α(N+..)=0.001091 *16* α(K)exp=0.108 *26*.
452.04 *5*	2.91 *19*	1346.20	11/2$^-$	894.16	9/2$^-$	M1		0.1104	α(K)=0.0910 *13*; α(L)=0.01486 *21*; α(M)=0.00344 *5*; α(N+..)=0.001025 *15* α(K)exp=0.105 *15*.
462.13[‡] *38*	0.06 *2*	1280.52	11/2$^-$	818.52	(9/2$^+$)	[E1][b]		0.01015	α(K)=0.00843 *12*; α(L)=0.001322 *19*; α(M)=0.000304 *5*; α(N+..)=8.97×10^{-5} *13*
467.36 *5*	4.03 *23*	1346.20	11/2$^-$	878.86	13/2$^-$	M1		0.1010	α(K)=0.0834 *12*; α(L)=0.01359 *19*; α(M)=0.00314 *5*; α(N+..)=0.000937 *14* α(K)exp=0.096 *9*, α(L1)exp+α(L2)exp=0.015 *2* (1973Vi09). Other α(K)exp: 0.11 *3* (1971Fr03), 0.083 *12* (1966Ha47).
518.45 *20*	0.38 *8*	1068.01	9/2$^-$	549.38	(7/2)$^+$	[E1][b]		0.00795	α(K)=0.00661 *10*; α(L)=0.001027 *15*; α(M)=0.000236 *4*; α(N+..)=6.97×10^{-5} *10*
525.75 *4*	7.0 *4*	1404.61	13/2$^-$,15/2$^-$	878.86	13/2$^-$	M1		0.0741	α(K)=0.0612 *9*; α(L)=0.00994 *14*; α(M)=0.00230 *4*; α(N+..)=0.000685 *10* α(K)exp=0.068 *6*, α(L1)exp+α(L2)exp=0.012 *2* (1973Vi09). Other α(K)exp: 0.064 *12* (1971Fr03), 0.063 *6* (1970Ca07,1966Ha47).
531.72[‡] *35*	0.013 *5*	1487.01	9/2$^-$,11/2$^-$	955.08	(9/2$^+$)				
540.32[‡] *27*	0.027 *8*	1487.01	9/2$^-$,11/2$^-$	946.83?					
542.40 *20*	0.21 *5*	1068.01	9/2$^-$	525.65	7/2$^-$	[M1+E2][b]		0.045 *24*	α(K)=0.036 *21*; α(L)=0.007 *3*; α(M)=0.0016 *6*; α(N+..)=0.00046 *17*
549.40 *10*	0.71 *7*	549.38	(7/2)$^+$	0.0	3/2$^+$	(E2)		0.0206	α(K)=0.01538 *22*; α(L)=0.00398 *6*; α(M)=0.000967 *14*; α(N+..)=0.000283 *4* α(K)exp=0.021 *8*.
556.64[‡] *32*	0.63 *21*	818.52	(9/2$^+$)	261.79	5/2$^+$	[E2][b]		0.0200	α(K)=0.01496 *21*; α(L)=0.00383 *6*; α(M)=0.000930 *14*; α(N+..)=0.000272 *4*
560.27 *4*	100	878.86	13/2$^-$	318.59	11/2$^-$	M1		0.0627	α(K)=0.0518 *8*; α(L)=0.00840 *12*; α(M)=0.00194 *3*; α(N+..)=0.000579 *9* α(K)exp=0.055 *5*, α(L1)exp+α(L2)exp=0.0095 *10* (1973Vi09). Other α(K)exp: 0.055 *5* (1971Fr03), 0.049 *5* (1970Ca07,1966Ha47).
575.52 *5*	3.0 *3*	894.16	9/2$^-$	318.59	11/2$^-$	M1+E2	0.65 *30*	0.047 *8*	α(K)=0.038 *7*; α(L)=0.0065 *9*; α(M)=0.00152 *19*;

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^{195}Hg ε decay (41.6 h) 1973Vi09,1974Fa06,1971Fr03 (continued)

γ(^{195}Au) (continued)

E_γ[†]	I_γ[@ c]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[a]	α[d]	Comments
								α(N+..)=0.00045 *6* α(K)exp=0.039 *7*, α(L1)exp+α(L2)exp=0.0055 *12* (1973Vi09). Other α(K)exp: 0.031 *5* (1966Ha47), 0.04 *1* (1970Ca07), 0.05 *2* (1971Fr03). δ: from α(K)exp=0.039 *7*.
578.02 *22*	0.45 *8*	1396.63	(11/2$^+$)	818.52	(9/2$^+$)	(M1)	0.0578	α(K)=0.0478 *7*; α(L)=0.00774 *11*; α(M)=0.00179 *3*; α(N+..)=0.000533 *8* α(K)exp=0.052 *22*.
628.30 *20*	0.12 *5*	946.83?		318.59	11/2$^-$			I_γ: other: 0.27 *4* (1973Vi09).
[x]637.8 *3*	0.08[&] *3*							
658.7 *3*	0.08[&] *3*	1605.57	11/2$^-$,13/2$^-$,15/2$^-$	946.83?				
665.42 *12*	0.78 *7*	1559.60	13/2$^-$	894.16	9/2$^-$	[E2][b]	0.01335	α(K)=0.01031 *15*; α(L)=0.00232 *4*; α(M)=0.000558 *8*; α(N+..)=0.0001637 *23*
680.68 *5*	3.1 *3*	1559.60	13/2$^-$	878.86	13/2$^-$	M1	0.0378	α(K)=0.0313 *5*; α(L)=0.00504 *7*; α(M)=0.001164 *17*; α(N+..)=0.000347 *5* α(K)exp=0.035 *4*, α(L1)exp+α(L2)exp=0.0069 *13* (1973Vi09). Other α(K)exp: 0.038 *19* (1971Fr03), 0.023 *3* (1966Ha47).
693.17 *20*	0.62 *9*	955.08	(9/2$^+$)	261.79	5/2$^+$	(E2)	0.01222	α(K)=0.00949 *14*; α(L)=0.00208 *3*; α(M)=0.000499 *7*; α(N+..)=0.0001466 *21* α(K)exp=0.0080 *36*.
698.06 *15*	0.92 *9*	1404.61	13/2$^-$,15/2$^-$	706.48	15/2$^-$	M1	0.0354	α(K)=0.0293 *5*; α(L)=0.00472 *7*; α(M)=0.001090 *16*; α(N+..)=0.000325 *5* α(K)exp=0.037 *8*.
[x]701.1[#] *6*	0.11[#] *5*							
[x]703.4[#] *6*	0.05[#] *2*							
[x]710.9[#] *4*	0.032[#] *13*							
[x]720.8[#] *5*	0.013[#] *7*							
727.20 *25*	0.68 *7*	1605.57	11/2$^-$,13/2$^-$,15/2$^-$	878.86	13/2$^-$	M1	0.0319	α(K)=0.0264 *4*; α(L)=0.00424 *6*; α(M)=0.000980 *14*; α(N+..)=0.000292 *4* α(K)exp=0.026 *7*. Other α(K)exp: 0.033 *16* (1971Fr03,1970Ca07).
749.50 *20*	0.38 *6*	1068.01	9/2$^-$	318.59	11/2$^-$	M1	0.0295	α(K)=0.0244 *4*; α(L)=0.00392 *6*; α(M)=0.000906 *13*; α(N+..)=0.000270 *4* α(K)exp=0.034 *14*.
754.86 *15*	0.79 *7*	1280.52	11/2$^-$	525.65	7/2$^-$	E2	0.01018	α(K)=0.00800 *12*; α(L)=0.001672 *24*; α(M)=0.000398 *6*; α(N+..)=0.0001172 *17* α(K)exp=0.010 *4*.
[x]792.0 *2*	0.22[&] *4*							
847.40 *20*	0.31 *8*	1396.63	(11/2$^+$)	549.38	(7/2)$^+$			
853.05 *10*	3.8 *4*	1559.60	13/2$^-$	706.48	15/2$^-$	M1	0.0212	α(K)=0.01754 *25*; α(L)=0.00280 *4*; α(M)=0.000647 *9*; α(N+..)=0.000193 *3* α(K)exp=0.021 *4*.
[x]897.3 *4*	0.14[&] *4*							

$^{195}_{79}Au_{116}$-6

^{195}Hg ε decay (41.6 h) 1973Vi09,1974Fa06,1971Fr03 (continued)

γ(^{195}Au) (continued)

E_γ [†]	I_γ [@ c]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [a]	α [d]	Comments
899.5 *3*	0.56[&] *10*	1605.57	11/2$^-$,13/2$^-$,15/2$^-$	706.48	15/2$^-$	(E2)	0.00710	α(K)=0.00568 *8*; α(L)=0.001088 *16*; α(M)=0.000257 *4*; α(N+..)=7.58×10^{-5} *11* α(K)=0.00571; α(L)=0.00110 E_γ,I_γ: Iγ=0.61 *22* for Eγ=898.8 *3* corresponds to 897-899 doublet (1973Vi09). α(K)exp=0.0067 *36*.
[x]946.3[‡e] *3*	0.09 *4*							
961.92 *8*	3.01 *25*	1280.52	11/2$^-$	318.59	11/2$^-$	M1	0.01559	α(K)=0.01292 *18*; α(L)=0.00206 *3*; α(M)=0.000475 *7*; α(N+..)=0.0001416 *20* α(K)exp=0.012 *3*. Other α(K)exp: 0.012 *2* (1966Ha47), 0.015 *2* (1970Ca07), 0.011 *3* (1971Fr03).
1027.45 *15*	1.63 *18*	1346.20	11/2$^-$	318.59	11/2$^-$	M1	0.01319	α(K)=0.01093 *16*; α(L)=0.001738 *25*; α(M)=0.000401 *6*; α(N+..)=0.0001195 *17* α(K)exp=0.012 *4*.
[x]1040.6 *4*	0.025[&] *10*							
1086.20 *20*	0.68 *10*	1404.61	13/2$^-$,15/2$^-$	318.59	11/2$^-$			
1241.17 *10*	8.92 *9*	1559.60	13/2$^-$	318.59	11/2$^-$	M1	0.00820	α(K)=0.00679 *10*; α(L)=0.001073 *15*; α(M)=0.000247 *4*; α(N+..)=8.72×10^{-5} *13* α(K)exp=0.0087 *16*, α(L1)exp+α(L2)exp=0.0015 *3*.
1286.4 *4*	0.091 *18*	1605.57	11/2$^-$,13/2$^-$,15/2$^-$	318.59	11/2$^-$			

[†] From high-resolution ce studies (s) ms source (1973Vi09), except as noted.
[‡] From 1974Fa06.
[#] ^{195}Hg isomer or g.s. decay; Iγ from 1973Vi09.
[@] Relative photon intensity normalized to Iγ(Eγ=560.18)=100; values are from γ-singles, γγ-coin (1974Fa06); except as noted.
[&] From 1973Vi09.
[a] Deduced from α(K)exp, α(L)exp, L- and M-subshell ratio data (1973Vi09), except as noted.
[b] Deduced from ΔJ and Δπ.
[c] For absolute intensity per 100 decays, multiply by 0.071 *5*.
[d] 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.
[e] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

$^{195}_{79}Au_{116}$-7

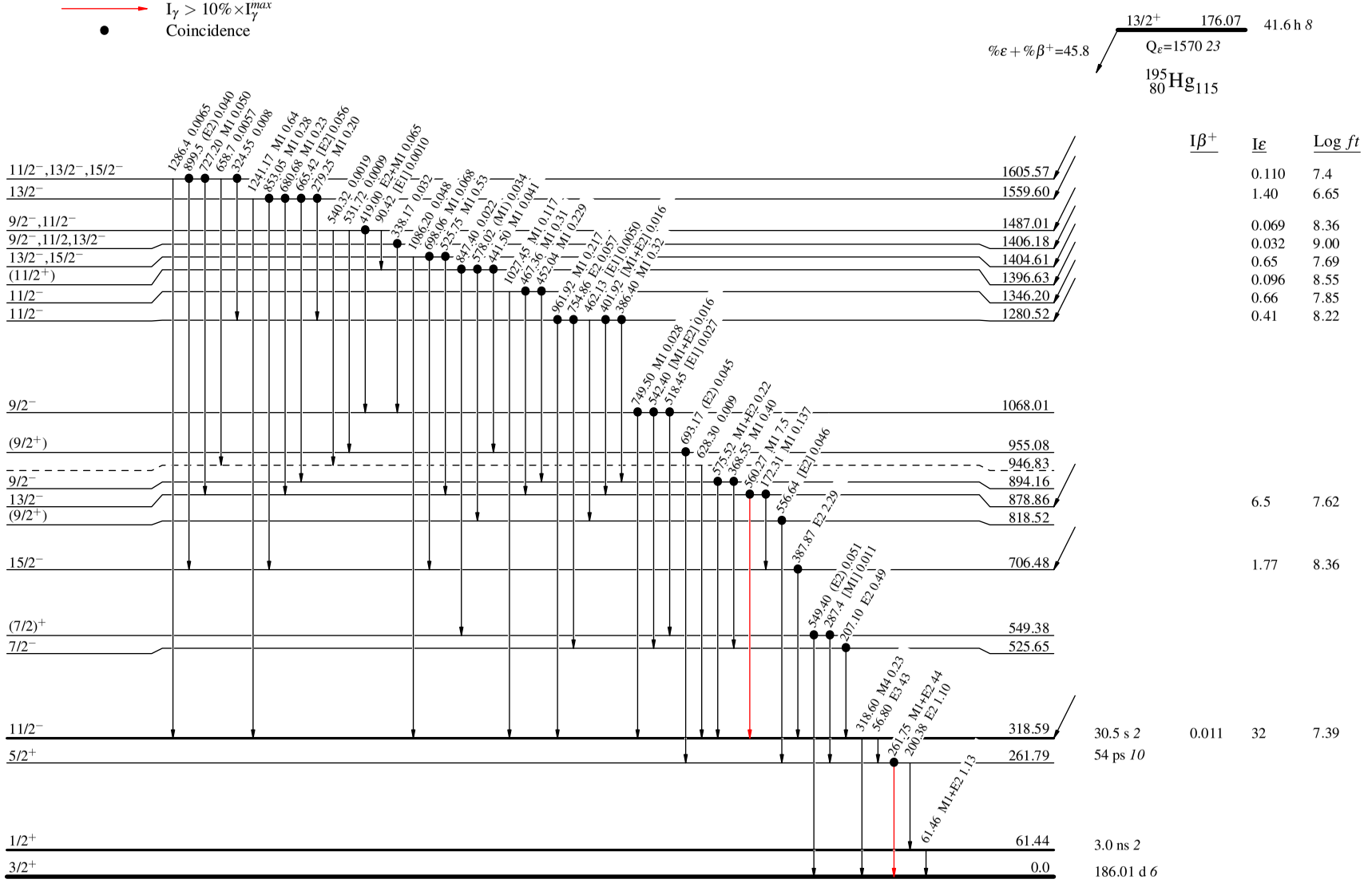
^{195}Hg ε decay (41.6 h) 1973Vi09,1974Fa06,1971Fr03

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- Coincidence



$^{195}_{79}Au_{116}$

$^{195}_{79}Au_{116}$-8