^{188}Hg ε decay (3.25 min) 1985Ab03

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Juutinen, D. J. Hartley	NDS 150, 1 (2018)	1-Feb-2018

Parent: ^{188}Hg: E=0.0; J$^\pi$=0$^+$; T$_{1/2}$=3.25 min *15*; Q(ε)=2169 *13*; %ε+%β^+ decay=100.0

^{188}Hg-%ε+%β^+ decay: %ε+%β^+=99.999963 *8*, %α=3.7×10^{-5} *8*.

1985Ab03: Mass separated source from ^{197}Au(p,xn) reaction at 200 MeV. Measured γ, $\gamma\gamma$, ce, γ x, ce ce(t), ce γ(t). Magnetic spectrometer used for ce data for γ's below 350 keV. Others (from the same laboratory): 1972HuZL, 1971JoZK.

Others: 1984DaZJ, 1978CoYZ, 1971Hu02, 1970Fi16, 1960Al20, 1960Po07.

^{188}Au Levels

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$	Comments
0.0	1$^-$	8.84 min *6*	T$_{1/2}$: From β-265.6γ(t) and β-339.9γ(t) in 1972Fi12,1970Fi16.
16.0 *1*	(2)$^-$	0.67 ns *8*	T$_{1/2}$: From (ce(M) 16γ)(ce(L) 66γ, ce(L) 98γ, ce(K) 190γ)(t) (1985Ab03).
82.7 *1*	1$^+$	1.4 ns *2*	T$_{1/2}$: From (ce(L) 66γ)(KLL Auger)(t) (1985Ab03).
114.2 *1*	(1)$^-$		
114.8 *1*	(2)$^-$	0.22 ns *2*	T$_{1/2}$: From (ce(K) 115γ)(ce(K) 190γ, γ)(t) (1985Ab03).
172.0 *1*	(1,2)$^-$		
217.5 *1*	(1)$^+$		
297.1 *3*	(0,1)$^-$		
304.9 *1*	(1)$^-$		
442.7 *4*	(0,1)$^+$		
447.1 *2*	(0,1)$^+$		
566.6 *3*	(1$^-$)		
567.3 *2*	(0,1)$^-$		
606.0 *2*	(2)$^+$		
859.8 *3*	(2)$^+$		
961.3 *1*	(0$^-$,1)		
1012.1 *3*	(1)$^+$		
1047.8 *2*	(1)		
1103.0 *3*	(1)$^+$		
1123.4 *3*	(1)		
1205.0 *3*	(1)$^+$		

† From least-squares fit to Eγ's.

‡ From Adopted Levels.

ε,β^+ radiations

β^++ε decay strength measurements using total absorption technique (1975Ho03,1970Du09) suggest that >98% of the strength is below 600 keV, implying that the main β^++ε feedings proceed to levels below 600 keV.

E(decay)	E(level)	Iβ^+ [†]	Iε[†]	Log *ft*	I($\varepsilon+\beta^+$)[†]	Comments
(964 *13*)	1205.0		1.02 *15*	5.64 *7*	1.02 *15*	εK=0.7956 *4*; εL=0.1542 *3*; εM+=0.05018 *10*
(1046 *13*)	1123.4		0.198 *22*	6.43 *6*	0.198 *22*	εK=0.7976 *3*; εL=0.15273 *22*; εM+=0.04963 *9*
(1121 *13*)	1047.8		0.64 *6*	5.98 *5*	0.64 *6*	εK=0.7992 *3*; εL=0.15160 *19*; εM+=0.04919 *7*
(1157 *13*)	1012.1		0.24 *8*	6.44 *15*	0.24 *8*	εK=0.7999 *3*; εL=0.15112 *17*; εM+=0.04901 *7*
(1208 *13*)	961.3		0.23 *5*	6.50 *10*	0.23 *5*	εK=0.8007 *3*; εL=0.15050 *16*; εM+=0.04876 *6*
(1309[‡] *13*)	859.8		≤0.08	≥7.0	≤0.08	εK=0.8022 *2*; εL=0.1494 *2*; εM+=0.04833 *6*
(1563 *13*)	606.0	≤0.0002	≤0.2	≥6.8	≤0.2	av Eβ=264.1 *58*; εK=0.8042; εL=0.1471 *1*; εM+=0.04748 *4*
(1602 *13*)	567.3	0.00181 *19*	1.19 *6*	6.04 *3*	1.19 *6*	av Eβ=281.3 *58*; εK=0.8043; εL=0.1468 *1*;

Continued on next page (footnotes at end of table)

^{188}Hg ε decay (3.25 min) 1985Ab03 (continued)

ϵ,β^+ radiations (continued)

E(decay)	E(level)	Iβ^+ †	Iε†	Log *ft*	I($\varepsilon+\beta^+$)†	Comments
						εM+=0.04736 *4*
(1602 *13*)	566.6	0.00073 *9*	0.48 *4*	6.44 *5*	0.48 *4*	av Eβ=281.6 *58*; εK=0.8043; εL=0.1468 *1*; εM+=0.04736 *4*
(1722 *13*)	447.1	0.0022 *2*	0.69 *6*	6.34 *5*	0.69 *6*	av Eβ=334.5 *58*; εK=0.80395 *9*; εL=0.1459 *1*; εM+=0.04701 *4*
(1726 *13*)	442.7	0.00075 *20*	0.23 *6*	6.82 *12*	0.23 *6*	av Eβ=336.5 *58*; εK=0.80392 *9*; εL=0.1458 *1*; εM+=0.04700 *4*
(1864 *13*)	304.9	0.046 *4*	7.2 *4*	5.40 *4*	7.2 *4*	av Eβ=397.1 *57*; εK=0.8024 *3*; εL=0.1447 *2*; εM+=0.04658 *4*
(1872 *13*)	297.1	0.0031 *4*	0.47 *5*	6.59 *5*	0.47 *5*	av Eβ=400.5 *57*; εK=0.8023 *3*; εL=0.1446 *2*; εM+=0.04656 *4*
(1952 *13*)	217.5	0.0109 *14*	1.20 *14*	6.22 *6*	1.21 *14*	av Eβ=435.4 *57*; εK=0.8008 *3*; εL=0.1439 *2*; εM+=0.04631 *5*
(1997 *13*)	172.0	0.0143 *23*	1.33 *20*	6.19 *7*	1.34 *20*	av Eβ=455.4 *57*; εK=0.7997 *4*; εL=0.1435 *2*; εM+=0.04616 *5*
(2054 *13*)	114.8	≤0.002	≤0.6	≥7.7^{1u}	≤0.6	av Eβ=490.8 *56*; εK=0.7946; εL=0.1528 *2*; εM+=0.04974 *6*
(2055 *13*)	114.2	0.033 *4*	2.5 *3*	5.95 *6*	2.5 *3*	av Eβ=480.7 *57*; εK=0.7980 *4*; εL=0.1429 *2*; εM+=0.04596 *5*
(2086 *13*)	82.7	0.94 *7*	64 *4*	4.55 *4*	65 *4*	av Eβ=494.5 *57*; εK=0.7970 *5*; εL=0.1426 *2*; εM+=0.04585 *5*
(2169 *13*)	0.0	0.32 *23*	17 *12*	5.2 *3*	17 *12*	av Eβ=530.7 *57*; εK=0.7940 *6*; εL=0.14169 *15*; εM+=0.04554 *5* I($\varepsilon+\beta^+$): From Auger electron and K x ray intensities in 1985Ab03.

† Absolute intensity per 100 decays.
‡ Existence of this branch is questionable.

γ(^{188}Au)

Iγ normalization: From I(ε+β^+)(g.s.)=17% *12* (1985Ab03).

E_γ	I_γ[&]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[#]	α[@]	Comments
16.0 *1*	5.5 *4*	16.0	(2)$^-$	0.0	1$^-$	M1+E2	0.044 *3*	352 *13*	%Iγ=0.20 *3* α(L)=268 *10*; α(M)=64.2 *25* α(N)=15.9 *6*; α(O)=2.85 *10*; α(P)=0.158 *4* I_γ: From I(γ+ce)=1940 (1985Ab03). The value of Iγ=11, also quoted by 1985Ab03, would give I(γ+ce)=3509, implying a large β^++ε feeding to the 16.0 level. Mult.,δ: From M1/M2/M3=100/21/17 in 1985Ab03.
[x]54.9 *1*	0.066 *7*					M2		285 *5*	%Iγ=0.0024 *5* α(L)=212 *4*; α(M)=55.8 *9* α(N)=14.14 *23*; α(O)=2.51 *4*; α(P)=0.1331 *22* I_γ: from I(ce)=19 2 (1985Ab03) and the assumed transition multipolarity. Mult.: from L1/L2/L3=100/11/39 (1985Ab03).
66.7 *1*	1430 *70*	82.7	1$^+$	16.0	(2)$^-$	(E1)		0.248	%Iγ=52 *8* α(L)=0.190 *3*; α(M)=0.0446 *7* α(N)=0.01086 *16*; α(O)=0.00182 *3*; α(P)=7.01×10^{-5} *11* I_γ: from I(γ+ce)=1790 *90* (1985Ab03) and α for E1 Mult. Mult.: L1/L2/L3=100/54/68 in 1985Ab03 allows E1 or M1+E2 with δ=0.38 2.
82.7 *1*	59 *6*	82.7	1$^+$	0.0	1$^-$	(E1)		0.659	%Iγ=2.1 *4* α(K)=0.521 *8*; α(L)=0.1060 *16*; α(M)=0.0248 *4* α(N)=0.00605 *9*; α(O)=0.001027 *15*; α(P)=4.27×10^{-5} *6* Mult.: L1/L2/L3=100/41/34 in 1985Ab03 allows E1 or M1+E2 with δ=0.36 2.
98.2 *1*	3.3 *8*	114.2	(1)$^-$	16.0	(2)$^-$	M1+E2	<0.03	7.64	%Iγ=0.12 *4* α(K)=6.27 *9*; α(L)=1.058 *16*; α(M)=0.246 *4* α(N)=0.0612 *9*; α(O)=0.01124 *17*; α(P)=0.000758 *11* Mult.,δ: from α(K)exp=7.6 (1985Ab03). Other: α(L)exp=0.51 (1970Fi16).
98.8 *1*	8.7 *9*	114.8	(2)$^-$	16.0	(2)$^-$	M1+E2	<0.17	7.48	%Iγ=0.31 *6* α(K)=6.08 *12*; α(L)=1.07 *4*; α(M)=0.251 *11* α(N)=0.062 *3*; α(O)=0.0114 *4*; α(P)=0.000736 *14* Mult.,δ: from α(K)exp=8.3 (1985Ab03).
102.0 *1*	2.0 *5*	1205.0	(1)$^+$	1103.0	(1)$^+$	M1+E2	<0.2	6.82 *11*	%Iγ=0.072 *22* α(K)=5.53 *13*; α(L)=0.99 *5*; α(M)=0.231 *12* α(N)=0.058 *3*; α(O)=0.0105 *5*; α(P)=0.000668 *15* Mult.,δ: from α(K)exp=6.9 in 1985Ab03.
114.2 *1*	13.8 *8*	114.2	(1)$^-$	0.0	1$^-$	M1+E2	2.02 *+18−12*	3.40 *7*	%Iγ=0.50 *9* α(K)=1.26 *10*; α(L)=1.61 *4*; α(M)=0.415 *11*

γ(^{188}Au) (continued)

E_γ	I_γ [&]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [‡]	δ [#]	α [@]	Comments
									α(N)=0.1021 *25*; α(O)=0.0166 *4*; α(P)=0.000151 *11* I_γ: from Ice=61 *3* (1985Ab03) and α. Mult.,δ: from K/L3=2.0 (1985Ab03).
114.8 *1*	27.4 *12*	114.8	(2)$^-$	0.0	1$^-$	M1+E2	0.34 *2*	4.69	%Iγ=0.99 *17* α(K)=3.65 *7*; α(L)=0.790 *17*; α(M)=0.188 *5* α(N)=0.0468 *11*; α(O)=0.00832 *18*; α(P)=0.000440 *8* I_γ: from Ice=156 *7* (1985Ab03) and α. Mult.,δ: from K/L3=44.5 (1985Ab03).
^{x}126.5 *1*	1.7 *4*					M1+E2		3.70	%Iγ=0.061 *18* α(K)=3.04 *5*; α(L)=0.510 *8*; α(M)=0.1183 *17* α(N)=0.0295 *5*; α(O)=0.00542 *8*; α(P)=0.000366 *6* Mult.: from α(K)exp=1.1 in 1985Ab03.
134.8 *1*	14.2 *9*	217.5	(1)$^+$	82.7	1$^+$	M1+E2	0.68 *2*	2.61 *5*	%Iγ=0.51 *9* α(K)=1.87 *4*; α(L)=0.563 *10*; α(M)=0.138 *3* α(N)=0.0342 *7*; α(O)=0.00589 *10*; α(P)=0.000223 *5* I_γ: from Ice=51 *3* (1985Ab03). Mult.,δ: from K/L3=10.4 (1985Ab03); α(L)exp=0.20 (1970Fi16).
^{x}141.4 *1*	3.2 *8*					M1+E2		2.70	%Iγ=0.12 *4* α(K)=2.22 *4*; α(L)=0.371 *6*; α(M)=0.0860 *13* α(N)=0.0214 *3*; α(O)=0.00394 *6*; α(P)=0.000266 *4* Mult.: from α(K)exp=1.0 in 1985Ab03.
^{x}142.4 *1*	5.5 *6*					M1+E2		2.64	%Iγ=0.20 *4* α(K)=2.17 *3*; α(L)=0.363 *6*; α(M)=0.0843 *12* α(N)=0.0210 *3*; α(O)=0.00386 *6*; α(P)=0.000261 *4* Mult.: from α(K)exp=1.85 in 1985Ab03.
152.3 *1*	2.2 *5*	1012.1	(1)$^+$	859.8	(2)$^+$	M1+E2	1.08 *16*	1.54 *10*	%Iγ=0.079 *22* α(K)=1.00 *12*; α(L)=0.408 *17*; α(M)=0.102 *5* α(N)=0.0251 *13*; α(O)=0.00425 *17*; α(P)=0.000117 *15* Mult.,δ: from α(K)exp=1.0 in 1985Ab03.
155.8[†] *1*	13 *2*	172.0	(1,2)$^-$	16.0	(2)$^-$	M1+E2	0.94 *18*	1.52 *12*	%Iγ=0.47 *11* α(K)=1.04 *15*; α(L)=0.361 *19*; α(M)=0.089 *6* α(N)=0.0221 *14*; α(O)=0.00377 *18*; α(P)=0.000122 *18* Mult.,δ: from α(K)exp=1.15 in 1985Ab03. Other: α(L)exp=0.59 in 1970Fi16.
^{x}167.0 *1*	2.8 *7*					(M1+E2)		1.685	%Iγ=0.10 *3* α(K)=1.385 *20*; α(L)=0.231 *4*; α(M)=0.0536 *8* α(N)=0.01335 *19*; α(O)=0.00245 *4*; α(P)=0.0001658 *24* Mult.: from α(K)exp<1.0 in 1985Ab03.
172.1[†] *1*	1.8 *4*	172.0	(1,2)$^-$	0.0	1$^-$	M1+E2	<0.3	1.51 *5*	%Iγ=0.065 *18* α(K)=1.23 *5*; α(L)=0.215 *5*; α(M)=0.0503 *13* α(N)=0.0125 *4*; α(O)=0.00229 *5*; α(P)=0.000147 *6* Mult.: from α(K)exp=1.4 in 1985Ab03.
182.9 *3*	7.8 *8*	297.1	(0,1)$^-$	114.2	(1)$^-$	M1+E2	1.9 +*3*−*2*	0.68 *4*	%Iγ=0.28 *6* α(K)=0.40 *4*; α(L)=0.215 *4*; α(M)=0.0543 *12*

$^{188}_{79}$Au$_{109}$-4

$\gamma(^{188}Au)$ (continued)

E_γ	I_γ &	E_i(level)	J_i^π	E_f	J_f^π	Mult.‡	δ#	α@	Comments
									α(N)=0.0134 *3*; α(O)=0.00223 *4*; α(P)=4.5×10^{-5} *5* Mult.,δ: from α(K)exp=0.4 in 1985Ab03.
^{x}185.8 *1*	9.4 *10*					M1+E2		1.249	%Iγ=0.34 *7* α(K)=1.026 *15*; α(L)=0.1709 *24*; α(M)=0.0396 *6* α(N)=0.00988 *14*; α(O)=0.00182 *3*; α(P)=0.0001227 *18* Mult.: from α(L)exp=0.20 in 1970Fi16.
190.1 *1*	100 *5*	304.9	(1)$^-$	114.8	(2)$^-$	M1+E2	0.06 *3*	1.168	%Iγ=3.6 *6* α(K)=0.960 *14*; α(L)=0.1603 *23*; α(M)=0.0372 *6* α(N)=0.00927 *14*; α(O)=0.001704 *24*; α(P)=0.0001147 *17* Mult.,δ: from α(K)exp=1.0, L12/L3=104 (1985Ab03), α(L)exp=0.10 (1970Fi16).
190.7 *1*	4.5 *11*	304.9	(1)$^-$	114.2	(1)$^-$	M1+E2	>0.7	0.68 *25*	%Iγ=0.16 *5* α(K)=0.45 *26*; α(L)=0.178 *11*; α(M)=0.045 *4* α(N)=0.0110 *10*; α(O)=0.00186 *9*; α(P)=5.1×10^{-5} *32* Mult.,δ: from L2/L3=1.7 in 1985Ab03.
192.9 *1*	2.1 *5*	1205.0	(1)$^+$	1012.1	(1)$^+$	[M1+E2]		1.124	%Iγ=0.076 *22* α(K)=0.924 *13*; α(L)=0.1538 *22*; α(M)=0.0357 *5* α(N)=0.00889 *13*; α(O)=0.001634 *23*; α(P)=0.0001104 *16*
^{x}196.6 *1*	3.3 *8*								%Iγ=0.12 *4*
^{x}220.7 *3*	2.6 *7*								%Iγ=0.09 *3*
^{x}223.1 *3*	4.0 *10*					M1+E2		0.750	%Iγ=0.14 *5* α(K)=0.616 *9*; α(L)=0.1023 *15*; α(M)=0.0237 *4* α(N)=0.00591 *9*; α(O)=0.001087 *16*; α(P)=7.35×10^{-5} *11* Mult.: from α(K)exp=0.28 in 1985Ab03.
225.2 *3*	3.7 *9*	442.7	(0,1)$^+$	217.5	(1)$^+$	M1+E2	<0.2	0.721 *14*	%Iγ=0.13 *4* α(K)=0.592 *13*; α(L)=0.0996 *15*; α(M)=0.0231 *4* α(N)=0.00576 *9*; α(O)=0.001057 *16*; α(P)=7.05×10^{-5} *16* Mult.,δ: from α(K)exp=0.73 in 1985Ab03.
^{x}226.3 *3*	2.2 *5*					M1+E2		0.721 *11*	%Iγ=0.079 *22* α(K)=0.593 *9*; α(L)=0.0983 *15*; α(M)=0.0228 *4* α(N)=0.00568 *9*; α(O)=0.001045 *16*; α(P)=7.07×10^{-5} *11* Mult.: from α(K)exp=0.77 in 1985Ab03.
229.6 *3*	6.7 *7*	447.1	(0,1)$^+$	217.5	(1)$^+$	M1+E2	<0.18	0.685 *13*	%Iγ=0.24 *5* α(K)=0.562 *11*; α(L)=0.0943 *14*; α(M)=0.0219 *4* α(N)=0.00546 *8*; α(O)=0.001002 *15*; α(P)=6.70×10^{-5} *13* Mult.,δ: from α(K)exp=0.94 in 1985Ab03.
243.2 *3*	2.4 *6*	1103.0	(1)$^+$	859.8	(2)$^+$	M1+E2	<0.21	0.582 *12*	%Iγ=0.09 *3* α(K)=0.478 *11*; α(L)=0.0802 *12*; α(M)=0.0186 *3* α(N)=0.00464 *7*; α(O)=0.000852 *13*; α(P)=5.69×10^{-5} *13* Mult.,δ: from α(K)exp=0.63 in 1985Ab03.
253.8 *3*	12 *1*	859.8	(2)$^+$	606.0	(2)$^+$	M1+E2	0.57 *19*	0.44 *5*	%Iγ=0.43 *8* α(K)=0.35 *5*; α(L)=0.0682 *19*; α(M)=0.0161 *4* α(N)=0.00401 *9*; α(O)=0.000721 *22*; α(P)=4.1×10^{-5} *5* Mult.,δ: from α(K)exp=0.35 in 1985Ab03.

$^{188}_{79}Au_{109}$-5

γ(^{188}Au) (continued)

E_γ	I_γ[&]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[‡]	δ[#]	α[@]	Comments
262.4 3	21 1	567.3	(0,1)$^-$	304.9	(1)$^-$	E2(+M1)	3.5 +12−7	0.178 13	%Iγ=0.76 13 α(K)=0.110 12; α(L)=0.0520 10; α(M)=0.01308 21 α(N)=0.00323 6; α(O)=0.000541 10; α(P)=1.19×10^{-5} 15 Mult.,δ: from α(K)exp=0.11 in 1985Ab03.
263.5 3		1123.4	(1)	859.8	(2)$^+$				E_γ: placement is from γ-γ coin. Iγ not available.
^{x}268.4 3	5.4 6								%Iγ=0.19 4
^{x}281.8 3	3.4 9								%Iγ=0.12 4
297.1[b] 3	4.6 9	297.1	(0,1)$^-$	0.0	1$^-$	[M1+E2]		0.341	%Iγ=0.17 5 α(K)=0.281 4; α(L)=0.0463 7; α(M)=0.01073 16 α(N)=0.00267 4; α(O)=0.000492 7; α(P)=3.33×10^{-5} 5
^{x}299.6 3	3.1 8								%Iγ=0.11 4
304.9[b] 3	1.1 3	304.9	(1)$^-$	0.0	1$^-$	[M1+E2]		0.318	%Iγ=0.040 13 α(K)=0.262 4; α(L)=0.0431 7; α(M)=0.00999 15 α(N)=0.00249 4; α(O)=0.000458 7; α(P)=3.10×10^{-5} 5
^{x}332.4 3	9.4 10								%Iγ=0.34 7
345.2 3	6.6 7	1205.0	(1)$^+$	859.8	(2)$^+$	[M1+E2]		0.227	%Iγ=0.24 5 α(K)=0.187 3; α(L)=0.0307 5; α(M)=0.00712 11 α(N)=0.00177 3; α(O)=0.000326 5; α(P)=2.21×10^{-5} 4
364.4 3	6.6 7	447.1	(0,1)$^+$	82.7	1$^+$	M1+E2	<0.6	0.178 19	%Iγ=0.24 5 α(K)=0.145 17; α(L)=0.0250 16; α(M)=0.0058 4 α(N)=0.00145 9; α(O)=0.000265 17; α(P)=1.71×10^{-5} 20 Mult.,δ: from α(K)exp=0.15 in 1985Ab03.
^{x}398.1 3	3.6 9								%Iγ=0.13 4
406.1 3	4.9 12	1012.1	(1)$^+$	606.0	(2)$^+$	(M1+E2)		0.1467	%Iγ=0.18 6 α(K)=0.1210 18; α(L)=0.0198 3; α(M)=0.00458 7 α(N)=0.001142 17; α(O)=0.000210 3; α(P)=1.428×10^{-5} 21 Mult.: from α(K)exp<0.2 in 1985Ab03.
451.8 3	12 1	566.6	(1$^-$)	114.8	(2)$^-$	M1+E2	<0.3	0.107 4	%Iγ=0.43 8 α(K)=0.088 3; α(L)=0.0146 4; α(M)=0.00337 9 α(N)=0.000840 21; α(O)=0.000154 4; α(P)=1.04×10^{-5} 4 Mult.,δ: from α(K)exp=0.10 in 1985Ab03.
^{x}459.7 3	4.7 12								%Iγ=0.17 5
^{x}479.1 3	4.5 11								%Iγ=0.16 5
^{x}489.4 3	3.0 7								%Iγ=0.11 3
523.3 3	15 2	606.0	(2)$^+$	82.7	1$^+$	M1+E2	<0.5	0.070 6	%Iγ=0.54 12 α(K)=0.057 5; α(L)=0.0095 6; α(M)=0.00221 13 α(N)=0.00055 4; α(O)=0.000101 6; α(P)=6.7×10^{-6} 6 Mult.,δ: from α(K)exp=0.06 in 1985Ab03.
^{x}544.2 3	6.7 7					(M1+E2)		0.0677	%Iγ=0.24 5 α(K)=0.0559 8; α(L)=0.00907 13; α(M)=0.00210 3 α(N)=0.000522 8; α(O)=9.62×10^{-5} 14; α(P)=6.56×10^{-6} 10 Mult.: from α(K)exp<0.07 in 1985Ab03.
^{x}554.0 3	3.1 8								%Iγ=0.11 4

$^{188}_{79}Au_{109}$-6

^{188}Hg ε decay (3.25 min) 1985Ab03 (continued)

$\gamma(^{188}$Au) (continued)

E_γ	I_γ[&]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[‡]	δ[#]	α[@]	Comments
567.2 *3*	8 *1*	567.3	(0,1)$^-$	0.0	1$^-$	M1+E2	<0.5	0.057 *5*	%Iγ=0.29 *6* α(K)=0.047 *4*; α(L)=0.0077 *5*; α(M)=0.00178 *11* α(N)=0.00044 *3*; α(O)=8.1×10^{-5} *5*; α(P)=5.5×10^{-6} *5* Mult.,δ: from α(K)exp=0.05 in 1985Ab03.
[x]576.5 *3*	2.9 *7*								%Iγ=0.10 *3*
[x]599.4 *3*	8.5 *9*					M1(+E2)		0.0526	%Iγ=0.31 *6* α(K)=0.0435 *7*; α(L)=0.00703 *10*; α(M)=0.001625 *23* α(N)=0.000405 *6*; α(O)=7.45×10^{-5} *11*; α(P)=5.09×10^{-6} *8* Mult.: from α(K)exp=0.05 in 1985Ab03.
606.0 *3*	9 *1*	606.0	(2)$^+$	0.0	1$^-$	E1		0.00576	%Iγ=0.32 *7* α(K)=0.00481 *7*; α(L)=0.000737 *11*; α(M)=0.0001691 *24* α(N)=4.19×10^{-5} *6*; α(O)=7.61×10^{-6} *11*; α(P)=4.82×10^{-7} *7* Mult.,δ: from α(K)exp<0.006 in 1985Ab03.
[x]614.3 *3*	3.8 *9*								%Iγ=0.14 *4*
[x]764.9 *3*	2.9 *7*								%Iγ=0.10 *3*
[x]792.2 *3*	2.7 *7*								%Iγ=0.10 *3*
[x]830.8 *3*	4.6 *11*								%Iγ=0.17 *5*
[x]835.6 *3*	1.8 *4*								%Iγ=0.065 *18*
[x]849.4 *3*	4.1 *10*								%Iγ=0.15 *5*
[x]851.1 *3*	5.1 *5*								%Iγ=0.18 *4*
944.9[†] *3*	2.4 *6*	961.3	(0$^-$,1)	16.0	(2)$^-$				%Iγ=0.09 *3*
961.3[†] *3*	4.1 *10*	961.3	(0$^-$,1)	0.0	1$^-$				%Iγ=0.15 *5*
[x]964.9 *3*	2.9 *7*								%Iγ=0.10 *3*
[x]988.2 *3*	4.0 *10*								%Iγ=0.14 *5*
1031.8 *3*	4.7 *12*	1047.8	(1)	16.0	(2)$^-$				%Iγ=0.17 *5*
1040.7 *3*	5.5 *6*	1123.4	(1)	82.7	1$^+$				%Iγ=0.20 *4*
[x]1046.9[a] *3*	13[a] *1*								%Iγ=0.47 *9* I_γ: for 1046.9γ + 1047.7γ.
1047.7[a] *3*	13[a] *1*	1047.8	(1)	0.0	1$^-$				%Iγ=0.47 *9* I_γ: for 1046.9γ+1047.7γ.
[x]1125.2 *3*	3.2 *8*								%Iγ=0.12 *4*
[x]1214.2 *3*	3.6 *9*								%Iγ=0.13 *4*
[x]1242.1 *3*	5.6 *6*								%Iγ=0.20 *4*
[x]1284.4 *3*	5.6 *6*								%Iγ=0.20 *4*
[x]1304.5 *3*	6.7 *7*								%Iγ=0.24 *5*
[x]1311.3 *3*	12 *1*								%Iγ=0.43 *8*

† Placement in the level scheme made by the evaluators, based on the observed γ-ray decay pattern.

‡ From ce data in 1985Ab03, normalized to 266γ, E2 in ^{188}Pt. The uncertainties were not reported, but probably about 10% for strong lines and ≈25% for weak and unresolved lines.

γ(^{188}Au) (continued)

[#] From least square fits to experimental I(ce) and α(K) data (1985Ab03) using the BrIccMixing code. 10% uncertainty was assumed to the experimental values, as those were not reported in 1985Ab03.

[@] Additional information 1.

[&] For absolute intensity per 100 decays, multiply by 0.036 *6*.

[a] Multiply placed with undivided intensity.

[b] Placement of transition in the level scheme is uncertain.

[x] γ ray not placed in level scheme.

^{188}Hg ε decay (3.25 min) 1985Ab03