

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113,1871 (2012)	15-Jun-2012

Q(β⁻)=-6.14×10³ 4; S(n)=9.49×10³ 3; S(p)=5.49×10³ 4; Q(α)=3393 17 [2012Wa38](#)

Note: Current evaluation has used the following Q record -6140 35 9490 27 5490 40 3392 17 [2003Au03,2011AuZZ](#).

Q(β⁻), Q(α): from [2011AuZZ](#) (cf. -6140 40 and 3387 16 from [2003Au03](#)).

[Additional information 1](#).

3×10⁻⁵% limit set for population of ¹⁹²Hg by ¹⁹⁶Pb α decay ([1963Ka17](#)).

See [1985KI09](#), [1986UI02](#) for hfs and isotope shift data.

Theory (partial list only):

Calculations using Coulomb and proximity potential model: T_{1/2} for g.s. α and cluster decay ([2010Sa39](#)).

¹⁹²Hg Levels

Cross Reference (XREF) Flags

A	¹⁹² Tl ε decay (9.6 min+10.8 min)	D	(HI,xny)
B	¹⁹² Pt(α,4nγ), ¹⁹⁴ Pt(α,6nγ)	E	¹⁶⁰ Gd(³⁶ S,4nγ)
C	¹⁹⁷ Au(p,6nγ)	F	(HI,xny):SD

E(level) [†]	J ^π [‡]	T _{1/2} [#]	XREF	Comments
0.0 ^a	0 ⁺ ^b	4.85 h 20	ABCDEF	%ε=100 Δ<r ² >(¹⁹² Hg- ¹⁹⁸ Hg)=-0.2405 14 (1986UI02). <r ² > ^{1/2} (charge)=5.423 4 (2004An14). %α<4×10 ⁻⁶ (1963Ka17). Other: 1961Fo06 . T _{1/2} : from 1961Ja10 . Other value: 5.7 h 5 (1952Fi06).
422.79 ^a 10	2 ⁺ ^b		ABCDEF	J ^π : E2 423γ to 0 ⁺ g.s.
1057.58 ^a 14	4 ⁺ ^b		ABCDEF	J ^π : E2 635γ to 2 ⁺ 423; member of g.s. band.
1113.60 14	(2) ⁺		A	J ^π : M1+E2 691γ to 2 ⁺ ; D,E2 1113γ to 0 ⁺ g.s.; J=2 favored by analogy with ¹⁹⁴ Hg.
1535.2 4	(3) ⁺		A	J ^π : M1(+E2) 478γ to 4 ⁺ 1058; M1,E2 1113γ to 2 ⁺ 423; J=3 favored by analogy with ¹⁹⁴ Hg.
1732.98 16	(4) ⁺		A	J ^π : M1+E2 675γ to 4 ⁺ 1058; E2 619γ to (2) ⁺ 1114.
1803.05 ^a 16	6 ⁺ ^b		ABCDEF	J ^π : E2 746γ to 4 ⁺ 1058; member of g.s. band.
1831.62 21	(2 ⁺ ,3,4 ⁺)		A	J ^π : 718γ to (2) ⁺ 1114, 774γ to 4 ⁺ 1058.
1843.90 ^c 16	(5) ⁻		ABCDEF	J ^π : E1 786γ to 4 ⁺ 1058; J=5 required by band assignment and by analogy to ¹⁹⁴ Hg.
1844.59 23	(3,4)		A	J ^π : 1422γ to 2 ⁺ 423; J=3,4 favored by I(1421γ, low-J decay):I(1421γ, high-J decay) in ¹⁹² Tl ε decay (1981So09).
1908.58 25	1,2 ⁺		A	J ^π : 1908γ to 0 ⁺ g.s.; 1486γ to 2 ⁺ 423.
1977.03 ^c 17	(7) ⁻	1.04 ns 6	AB DEF	J ^π : E1 174γ to 6 ⁺ 1803; stretched Q 133γ to (5) ⁻ 1844. T _{1/2} : (α)(ce)(t) in (α,4nγ), (α,6nγ) (1978Me11). Other value: 2.5 ns 10 (1975Li16) in (α,xnγ).
1986.97 ^d 11	(6) ⁻		E	J ^π : D intraband 143γ to (5) ⁻ 1844; band assignment.
2056.29 23	(1,2 ⁺)		A	J ^π : 1633γ to 2 ⁺ 423; possible 2056γ to 0 ⁺ g.s.
2081.69 23	(1,2 ⁺)		A	J ^π : 1659γ to 2 ⁺ 423; possible 2082γ to 0 ⁺ g.s.
2186.98 21	(6) ⁻		A	J ^π : E1 384γ to 6 ⁺ 1803; M1 343γ to (5) ⁻ 1844; J=6 favored in (³⁶ S,4nγ).
2216.20 ^d 24	(8) ⁻	0.92 ns 5	AB DEF	J ^π : M1+E2 239γ to (7) ⁻ 1977; band assignment. T _{1/2} : (α)(ce)(t) in (α,4nγ), (α,6nγ) (1978Me11).
2223.85 ^c 24	(9) ⁻		AB DEF	J ^π : E2 247γ to (7) ⁻ 1977; band assignment.
2276.9 4	1,2 ⁺		A	J ^π : 2277γ to 0 ⁺ g.s., 1854γ to 2 ⁺ 423.
2284.7 5			A	J ^π : 1171γ to (2) ⁺ so J≤(4).

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Adopted Levels, Gammas (continued)

^{192}Hg Levels (continued)

E(level) [†]	J ^π [‡]	T _{1/2} [#]	XREF	Comments
2300.7 3	(6,7,8) ⁻		A	J ^π : M1+E2 324γ to (7) ⁻ 1977.
2447.2 ^a 3	8 ⁺ ^b		AB DEF	
2507.3 3	(10) ⁺	3.6 ns 5	B DEF	J ^π : E2 60γ to 8 ⁺ 2447; D 283γ to (9) ⁻ 2224. T _{1/2} : ce(t), γγ(t) in (α,4nγ), (α,6nγ) (1983Gu05). Other values: 16 ns 3 (1975Li16), 15.9 ns 10 (1978Me11) in (α,xnγ) (superposition of T _{1/2} for 2507 and 2535 levels).
2534.2? 5			A	J ^π : possible 999γ to (3) ⁺ .
2535.5 ^e 4	(12 ⁺)	11.1 ns 5	B DE	T _{1/2} : ce(t), γγ(t) in $^{192}\text{Pt}(\alpha,4n\gamma)$, $^{194}\text{Pt}(\alpha,6n\gamma)$ (1983Gu05). See also comment on T _{1/2} for 2507 level.
2632.7 ^d 3	(10 ⁻)		B DE	
2657.1? 11			C	
2756.7 ^c 3	(11 ⁻)		B DE	
2902.3 11	(10 ⁺)		E	
2951.7 ^e 4	(14 ⁺)		B DE	
3047.0 ^f 4	(12 ⁺)		DE	
3261.9 ^d 3	(12 ⁻)		B DE	
3449.6 ^c 4	(13 ⁻)		B DE	
3608.6 ^e 5	(16 ⁺)		B DE	
3669.8 ^f 4	(14 ⁺)		DE	
3725.6 5	(14 ⁺)		DE	
3894.9 ^g 4	(14 ⁻)		B DE	
3984.9 ^d 8	(14 ⁻)		E	
4010.5 ^h 4	(15 ⁻)		B DE	
4089.9 ^g 4	(16 ⁻)	0.39 ns 4	B DE	T _{1/2} : (α)(ce)(t) in $^{192}\text{Pt}(\alpha,4n\gamma)$, $^{194}\text{Pt}(\alpha,6n\gamma)$ (1978Me11).
4130.6 ^f 5	(16 ⁺)		DE	
4216.9 ^h 4	(17 ⁻)		B DE	
4387.7 ^g 5	(18 ⁻)		B DE	
4389.4 ^e 5	(18 ⁺)		B DE	
4519.8 ^m 10	(17 ⁻)		E	
4588.4 ^h 4	(19 ⁻)		DE	
4741.6 ^f 5	(18 ⁺)		DE	
4950.5 ^g 5	(20 ⁻)		DE	
5021.6 ^m 10	(19 ⁻)		E	
5130.7 ⁱ 5	(20 ⁺)		B DE	
5216.0 ^h 5	(21 ⁻)		DE	
5271.6 ^e 6	(20 ⁺)		DE	
5316.5 ^f 6	(20 ⁺)		DE	
5543.5 ^m 7	(21 ⁻)		E	
5587.1 8	(20 ⁺)		E	
5655.2 ^g 6	(22) ⁻		DE	
5700.6 ⁱ 6	(22) ⁺		DE	
5787.9 ^f 6	(22 ⁺)		DE	
6012.2 ^h 6	(23 ⁻)		DE	
6112.6 ^e 9	(22 ⁺)		E	
6125.5 ^m 8	(23 ⁻)		E	
6233.6 12	(22 ⁺)		E	
6294.6 10	(22 ⁺)		E	
6303.3 ⁿ 9	(22 ⁺)		E	
6428.1 ⁱ 6	(24) ⁺		DE	

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Adopted Levels, Gammas (continued)

^{192}Hg Levels (continued)

E(level) [†]	J ^π [‡]	T _{1/2} [#]	XREF	Comments
6432.8 ⁿ 11	(23 ⁺)	10 ps +4 -3	E	
6437.6 ^g 7	(24 ⁻)		DE	
6709.4 ⁿ 11	(24 ⁺)	14 ps +3-4	E	
6855.0 ^h 6	(25 ⁻)		DE	
6878.4 ^o 11	(23 ⁻)		E	
6949.2 ^m 10	(25 ⁻)		E	
7035.3 ^o 10	(24 ⁻)		E	
7043.3 ⁿ 12	(25 ⁺)	0.7 ps +7-11	E	T _{1/2} : this value appears to have been misprinted.
7267.6 ^g 12	(26 ⁻)		E	
7272.5 ^o 8	(25 ⁻)		E	
7320.1 ⁱ 12	(26 ⁺)		E	
7434.9 ⁿ 13	(26 ⁺)	2.5 ps +13-7	E	
7516.1 ^o 9	(26 ⁻)		E	
7684.9 9	(25 ⁻ ,26 ⁻)		E	J ^π : Q 1247γ to (24 ⁻) 6438; 413γ to (25 ⁻) 7273; 103γ from (27 ⁻) 7788.
7722.0 ^h 12	(27 ⁻)		E	
7787.8 ^o 8	(27 ⁻)		E	
7819.6 ^m 10	(27 ⁻)		E	
7838.4 11	(27 ⁻)		E	J ^π : Q 889γ to (25 ⁻) 6949; γ from (28 ⁻).
7926.7 ^o 10	(28 ⁻)		E	
7959.0 ⁿ 14	(27 ⁺)	1.2 ps 10	E	
8180.7 16	(28 ⁺)		E	
8194.6 ^g 16	(28 ⁻)		E	
8207.6 16	(28 ⁻)		E	
8224.3 11	(28 ⁻)		E	
8263.5 ^o 11	(29 ⁻)		E	
8302.6 ⁿ 14	(28 ⁺)	0.5 ps 5	E	
8331.1 ⁱ 16	(28 ⁺)		E	
8543.2 ^o 12	(30 ⁻)		E	
8631.0 ^h 16	(29 ⁻)		E	
8693.0 16	(29 ⁻)		E	
8712.6 ⁿ 15	(29 ⁺)	0.14 ps +49-14	E	
8961.3 ⁿ 15	(30 ⁺)	0.9 ps 4	E	
8990.2 ^o 13	(31 ⁻)		E	
9196.0 ⁿ 16	(31 ⁺)	2.4 ps +4-3	E	
9375.9 ⁿ 17	(32 ⁺)	1.5 ps 3	E	
9443.4 ^o 13	(32 ⁻)		E	
9666.0 ⁿ 18	(33 ⁺)		E	
9932.8 ^o 14	(33 ⁻)		E	
10038.0 ⁿ 20	(34 ⁺)		E	
10464.4 ^o 17	(34 ⁻)		E	
x ^j	J≈(8) [@]		F	E(level): x=5586 500 (see comment for 214.4+x level).
214.4+x ^j 3	J+2 [@]	<77 ps	F	E(level),J ^π : From the study of quasi-continuum γ-ray spectra, 2000La31 estimate level energy as 5800 500 and J=9.7 10 using data for ^{194}Hg SD-1 band as a reference. T _{1/2} : from RDDS (1994Wi06) in (HI,xny):SD. Q(transition)>6 (1994Wi06) in (HI,xny):SD.
472.2+x ^j 4	J+4 [@]	3.7 ps +8-6	F	T _{1/2} : RDDS (1994Wi06). Others: 3.1 ps +10-6 (RDDS, 1994Le24); 3.1 ps 10 (RDDS, 1993De35). From (HI,xny):SD. Q(transition)=18.3 16 (1994Wi06), 19.3 +50-25 (1993De35) in (HI,xny):SD.

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Adopted Levels, Gammas (continued) ^{192}Hg Levels (continued)

E(level) [†]	J ^{π‡}	T _{1/2} [#]	XREF	Comments
772.3+x ^j 4	J+6 [@]	1.74 ps +22-17	F	Q(transition)=18.3 16 (1994Wi06), 19.3 +50-25 (1993De35) in (HI,xny):SD. T _{1/2} : RDDS (1994Wi06). Others: 2.0 ps +8-6 (RDDS, 1994Le24); 2.1 ps 12 (RDDS, 1993De35). From (HI,xny):SD.
1113.7+x ^j 4	J+8 [@]	0.84 ps +22-20	F	Q(transition)=18.5 10 (1994Wi06), 17.5 +35-25 (1994Le24), 17 +11-3 (1993De35) in (HI,xny):SD. T _{1/2} : from RDDS (1994Wi06) in (HI,xny):SD.
1495.3+x ^j 4	J+10 [@]	0.48 ps +62-13	F	Q(transition)=19.2 +24-21 (1994Wi06) in (HI,xny):SD. T _{1/2} : from RDDS (1994Wi06) in (HI,xny):SD.
1916.4+x ^j 5	J+12 [@]		F	Q(transition)=20 +4-7 (1994Wi06) in (HI,xny):SD.
2375.2+x ^j 5	J+14 [@]	0.18 ps +5-4	F	T _{1/2} : DSAM (1994Wi06). Other: 0.16 ps 5 (1990Mo16). From (HI,xny):SD.
2871.2+x ^j 5	J+16 [@]	0.137 ps +17-21	F	Q(transition)=20.7 +31-25 (1994Wi06) in (HI,xny):SD. T _{1/2} : DSAM (1994Wi06). Others: 0.13 ps 3 (1990Mo16), 0.19 3 (1998Bu03). From (HI,xny):SD.
3403.3+x ^j 6	J+18 [@]	0.093 ps +10-14	F	Q(transition)=19.3 +17-11 (1994Wi06), 19.9 +31-25 (1998Bu03). From (HI,xny):SD. T _{1/2} : DSAM (1994Wi06). Others: 0.089 ps 31 (1990Mo16); 0.13 +2-3 (1998Bu03). From (HI,xny):SD.
3970.7+x ^j 6	J+20 [@]	0.068 ps +10-11	F	Q(transition)=19.6 +17-11 (1994Wi06), 20.3 +31-21 (1998Bu03). From (HI,xny):SD. T _{1/2} : DSAM (1994Wi06). Other: 0.058 ps 17 (1990Mo16). From (HI,xny):SD.
4572.4+x ^j 6	J+22 [@]	0.062 ps +10-7	F	Q(transition)=19.6 +19-13 (1994Wi06) in (HI,xny):SD. T _{1/2} : DSAM (1994Wi06). Other: 0.055 ps 14 (1990Mo16). From (HI,xny):SD.
5207.3+x ^j 7	J+24 [@]	0.050 ps +10-12	F	Q(transition)=17.7 12 (1994Wi06) in (HI,xny):SD. T _{1/2} : DSAM (1994Wi06). Other: 0.042 ps 17 (1990Mo16). From (HI,xny):SD.
5875.4+x ^j 7	J+26 [@]	0.031 ps +9-8	F	Q(transition)=17.4 +24-15 (1994Wi06) in (HI,xny):SD. T _{1/2} : DSAM (1994Wi06). Other: 0.034 ps 9 (1990Mo16). From (HI,xny):SD.
6575.5+x ^j 7	J+28 [@]	0.032 ps +9-8	F	Q(transition)=19.3 +29-23 (1994Wi06) in (HI,xny):SD. T _{1/2} : DSAM (1994Wi06). Other: 0.032 ps 14 (1990Mo16). From (HI,xny):SD.
7307.0+x ^j 8	J+30 [@]	0.021 ps +11-21	F	Q(transition)=16.9 +15-20 (1994Wi06) in (HI,xny):SD. T _{1/2} : from DSAM (1994Wi06) in (HI,xny):SD.
8069.3+x ^j 8	J+32 [@]	0.019 ps +18-19	F	Q(transition)=19 +∞-4 (1994Wi06) in (HI,xny):SD. T _{1/2} : DSAM (1994Wi06). Other: <0.03 ps (1990Mo16). From (HI,xny):SD.
8862.0+x ^j 9	J+34 [@]		F	Q(transition)=18 +∞-6 (1994Wi06) in (HI,xny):SD.
9684.9+x ^j 10	J+36 [@]		F	
10538.0+x ^j 11	J+38 [@]		F	
11426.7+x ^j 13	J+40 [@]		F	
y ^k	J1≈(10)&		F	
241.2+y ^k 10	J1+2&		F	
523.6+y ^k 11	J1+4&		F	
845.7+y ^k 11	J1+6&		F	

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Adopted Levels, Gammas (continued)

^{192}Hg Levels (continued)				
E(level) [†]	$J^{\pi\ddagger}$	$T_{1/2}^{\#}$	XREF	Comments
1207.0+y ^k 11	J1+8&		F	
1607.2+y ^k 11	J1+10&		F	
2045.2+y ^k 11	J1+12&		F	
2520.4+y ^k 12	J1+14&	0.14 ps 4	F	$T_{1/2}$: from DSAM (1995Ko17) in (HI,xn γ):SD. Q(transition)=22.1 +29-30 (1995Ko17) in (HI,xn γ):SD.
3031.4+y ^k 12	J1+16&	0.15 ps +5-3	F	$T_{1/2}$: from DSAM (1995Ko17) in (HI,xn γ):SD. Q(transition)=17.8 +28-20 (1995Ko17) in (HI,xn γ):SD.
3578.1+y ^k 12	J1+18&	0.100 ps 14	F	$T_{1/2}$: from DSAM (1995Ko17) in (HI,xn γ):SD. Q(transition)=18.2 13 (1995Ko17) in (HI,xn γ):SD.
4156.9+y ^k 12	J1+20&	0.064 ps 8	F	$T_{1/2}$: from DSAM (1995Ko17) in (HI,xn γ):SD. Q(transition)=19.4 13 (1995Ko17) in (HI,xn γ):SD.
4761.3+y ^k 12	J1+22&	0.052 ps +6-7	F	$T_{1/2}$: from DSAM (1995Ko17) in (HI,xn γ):SD. Q(transition)=19.4 13 (1995Ko17) in (HI,xn γ):SD.
5385.5+y ^k 13	J1+24&	0.044 ps 6	F	$T_{1/2}$: from DSAM (1995Ko17) in (HI,xn γ):SD. Q(transition)=19.5 13 (1995Ko17) in (HI,xn γ):SD.
6037.7+y ^k 13	J1+26&		F	
6722.0+y ^k 13	J1+28&		F	
7439.7+y ^k 14	J1+30&		F	
8189.5+y ^k 14	J1+32&		F	
8972.6+y ^k 15	J1+34&		F	
9791.6+y ^k 18	J1+36&		F	
z ^l	J2		F	
333.1+z ^l 3	J2+2		F	
705.9+z ^l 4	J2+4		F	
1118.0+z ^l 5	J2+6		F	
1568.6+z ^l 5	J2+8		F	
2056.9+z ^l 6	J2+10		F	
2582.4+z ^l 8	J2+12		F	
3144.1+z ^l 9	J2+14		F	
3741.4+z ^l 10	J2+16		F	
4371.5+z ^l 11	J2+18		F	
5030.5+z ^l 14	J2+20		F	
5711.5+z ^l 20	J2+22		F	

[†] From least-squares fit to adopted E_{γ} , allowing $\Delta E_{\gamma}=1$ keV whenever authors failed to state the uncertainty in E_{γ} .

[‡] From γ -ray multiplicities, coincidence data, and band structure in (HI,xn γ) and $^{192}\text{Pt}(\alpha,4n\gamma)$, $^{194}\text{Pt}(\alpha,6n\gamma)$, except where noted; continuing J^{π} patterns established.

[#] For SD bands, values are from recoil distance Doppler shift (RDDS) and/or DSAM data in (HI,xn γ):SD. Values for other levels are from Doppler-shift recoil distance in $^{160}\text{Gd}(\alpha,4n\gamma)$, unless noted to the contrary.

[@] From fit to expansions relating second moment of inertia and angular frequency (1990Be01).

[&] From fit to expansions relating second moment of inertia and angular frequency (1995Ko17), $J_{\approx}(10)$ for E(level)=y.

^a Band(A): g.s. band, $\pi=+, \alpha=0$.

^b Based on smooth progression of level energies and independently established J^{π} (g.s.) and mult(423 γ), definite J^{π} has been assigned to all members of the g.s. band.

^c Band(B): Band AE, $\pi=-, \alpha=1$. 2-quasineutron band involving 1/2[660] and 1/2[521] Nilsson orbitals (1986Hu02).

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Adopted Levels, Gammas (continued) ^{192}Hg Levels (continued)

- ^d Band(C): Band AF, $\pi=-, \alpha=0$. 2-quasineutron band involving 1/2[660] and 1/2[521] Nilsson orbitals (1986Hu02).
- ^e Band(D): Band AB, $\pi=+, \alpha=0$. 2-quasineutron band involving 1/2[660] Nilsson orbital (1986Hu02).
- ^f Band(E): $\pi=+, \alpha=0$ vibrational band (1986Hu02,1994Le08). Quasivibrational terminating band.
- ^g Band(F): Band ABCF, $\pi=-, \alpha=0$. 4-quasineutron band involving 1/2[660], 3/2[651], 1/2[521] Nilsson orbitals (1986Hu02).
- ^h Band(G): Band ABCE, $\pi=-, \alpha=1$. 4-quasineutron band involving 1/2[660], 3/2[651], 1/2[521] Nilsson orbitals (1986Hu02).
- ⁱ Band(H): Band ABCD, $\pi=+, \alpha=0$ (1995Le33). 4-quasineutron band involving 1/2[660] and 3/2[651] Nilsson orbitals (1986Hu02).
- ^j Band(I): SD-1 band (1992La07,1994Ga07,1995Fa03,1997Mo12,1998Bu03). Percent population ≈ 2.0 (1992La07, 1995Fa03), ≈ 1.6 (1995Ko17). Average Q(transition)=20.2 (DSAM data, 1990Mo16), 18.6 (1994Wi06, low-J states), 17.6 (1997Mo12 text; 10%–15% uncertainty in stopping power not included), 20.2 (1998Bu03). From experimental data, the bandhead (J=0 state) is estimated to lie at 5.2–6.2 MeV (1992La19); 1997Mo22 estimate that band lies 4.3 MeV above yrast line at point of decay and that the average number of steps from SD states to yrast line is 3.2. Band exhibits integer alignment relative to SD-1 and SD-3 bands of ^{194}Hg for $\hbar\omega \approx 0.2$ MeV (1990St12) (identical bands). From the study of quasi-continuum γ -ray spectra, 2000La31 estimate level energy of 5800–500 for the second member and J=9.7. Band exhibits integer alignment relative to SD-1 and SD-3 bands of ^{194}Hg for $\hbar\omega \approx 0.2$ MeV (1990St12) (identical bands). From the study of quasi-continuum γ -ray spectra, 2000La31 estimate level energy of 5800–500 for the second member and J=9.7.
- ^k Band(J): SD-2 band (1995Fa03,1995Ko17). Percent population=0.11 (1995Ko17), 0.2 (1995Fa03). Average Q(transition)=19.5 (1995Ko17). Transition energies in this band are within 3 keV of those for the SD-2 band of ^{194}Hg for $E_\gamma \leq 550$; a band crossing occurs near $\hbar\omega=0.3$.
- ^l Band(K): SD-3 band (1995Fa03). Percent population=0.1 (1995Fa03). Note that transition energies in this band lie within 0.3 keV of those for transitions in the SD-2 band of ^{191}Hg for $\hbar\omega \leq 0.31$.
- ^m Band(L): Band ABDE (1994Le08,1995Le33). Possibly $((\nu i_{13/2})^3(\nu p_{3/2}))$.
- ⁿ Band(M): $\pi=(+)$ dipole band (1994Le08,1995Le33). Possibly $((\pi h_{9/2})^2)K=8$ coupled with $((\nu i_{13/2})^4)J=20$ or with $((\nu i_{13/2})^2)J=12((\pi h_{11/2})^2)J=10$.
- ^o Band(N): $\pi=(-)$ dipole band (1994Le08,1995Le33). Possibly $((\pi h_{11/2})(\pi i_{13/2}))K=11$ coupled with $((\nu i_{13/2})^4)J=20$ or with $((\nu i_{13/2})^2)J=12((\pi h_{11/2})^2)J=10$.

Adopted Levels, Gammas (continued)

E _i (level)	J ^π _i	γ(¹⁹² Hg)							Comments
		E _γ [†]	I _γ [‡]	E _f	J ^π _f	Mult. [†]	δ [†]	α ⁱ	
422.79	2 ⁺	422.8 1	100	0.0	0 ⁺	E2		0.0410	Mult.: stretched Q from γ(θ) in (HI,xny):SD; not M2 from K/L in (p,6ny) and ¹⁹² Tl ε decay.
1057.58	4 ⁺	634.8 1	100	422.79	2 ⁺	E2		0.01550	
1113.60	(2) ⁺	690.8 1	100 6	422.79	2 ⁺	M1+E2	1.7 +5-3	0.0197 23	
		1113.0 2	≈24 2	0.0	0 ⁺	(E2)			
1535.2	(3) ⁺	477.6 3	≈23	1057.58	4 ⁺	M1(+E2)	0.4 +5-4	0.093 23	
		1113.0 2	≈100 2	422.79	2 ⁺	M1,E2			
1732.98	(4) ⁺	619.4 2	80 12	1113.60	(2) ⁺	E2		0.01637	
		675.4 1	100 6	1057.58	4 ⁺	M1+E2	0.7 +3-2	0.032 5	
1803.05	6 ⁺	745.5 1	100	1057.58	4 ⁺	E2		0.01095	
1831.62	(2 ⁺ ,3,4 ⁺)	717.9 3	100.0 ^e 14	1113.60	(2) ⁺				Other I _γ (774)/I _γ (718): 82 12 from high-J ¹⁹² Tl ε decay.
		774.1 2	71 ^e 6	1057.58	4 ⁺				
1843.90	(5) ⁻	786.3 1	100	1057.58	4 ⁺	E1			
1844.59	(3,4)	1421.8 2	100	422.79	2 ⁺				
1908.58	1,2 ⁺	1486.1 4	67 ^e 8	422.79	2 ⁺				Other I _γ (1486):I _γ (1908)=104 20:100 16 from ¹⁹² Tl ε decay.
		1908.4 3	100 ^e 8	0.0	0 ⁺				
1977.03	(7) ⁻	133.1 1	42.4 27	1843.90	(5) ⁻	E2		1.740	B(E2)(W.u.)≈84
		174.0 1	100 4	1803.05	6 ⁺	E1		0.1048	B(E1)(W.u.)≈3.7×10 ⁻⁵
1986.9?	(6) ⁻	143 ^{gk}	100 ^g	1843.90	(5) ⁻	(M1) ^g		2.84	
2056.29	(1,2 ⁺)	1633.5 2	100 ^e 8	422.79	2 ⁺				
		2056.0 ^k 6	<58 ^e	0.0	0 ⁺				
2081.69	(1,2 ⁺)	1658.9 2	100 ^e 8	422.79	2 ⁺				
		2081.9 ^k 6	3.5 ^e 13	0.0	0 ⁺				
2186.98	(6) ⁻	343.1 2	35 ^e 13	1843.90	(5) ⁻	M1		0.251	
		383.9 2	100 ^e 13	1803.05	6 ⁺	E1		0.01579	Mult.: E1,M1 from K/L in (α,4ny); E1,E2 from α(K)exp in ε decay.
2216.20	(8) ⁻	239.2 2	100	1977.03	(7) ⁻	M1+E2	0.64 11	0.54 4	B(M1)(W.u.)=0.00081 10; B(E2)(W.u.)=2.3 6 δ: weighted average of 0.81 15, 1.1 3 from ¹⁹² Tl ε decay (9.6 min+10.8 min) and 0.88 16, 0.50 8 from ¹⁹² Pt(α,4ny), ¹⁹⁴ Pt(α,6ny).
2223.85	(9) ⁻	246.8 2	100	1977.03	(7) ⁻	E2		0.194	
2276.9	1,2 ⁺	1854.0 4	100 9	422.79	2 ⁺				
		2277.0 6	56 9	0.0	0 ⁺				
2284.7		1171.1 4	100	1113.60	(2) ⁺				
2300.7	(6,7,8) ⁻	323.7 2	100	1977.03	(7) ⁻	M1+E2	0.75 +17-16	0.218 22	
2447.2	8 ⁺	470 ^h		1977.03	(7) ⁻				Not observed in ε decay.

Adopted Levels, Gammas (continued)

$\gamma(^{192}\text{Hg})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult. ‡	α^i	Comments
2447.2	8 ⁺	644.1 2	100 18	1803.05	6 ⁺	(E2)	0.01501	Mult.: M1 from $\alpha(\text{K})\text{exp}$ in ^{192}Tl ε decay, but stretched Q from $\gamma(\theta)$ in $^{170}\text{Er}(\text{Mg},\text{xny})$; establishes $\Delta\pi=\text{no.}$
2507.3	(10) ⁺	60.1	≤ 3	2447.2	8 ⁺	E2	55.7	B(E2)(W.u.)=24 +27-24 E $_\gamma$: from (α,xny) . ΔE_γ unstated by authors; uncertainty in level energy difference is ≈ 0.4 keV. I $_\gamma$: from I($\gamma+\text{ce}$) and α in $^{192}\text{Pt}(\alpha,4\text{n}\gamma)$, $^{194}\text{Pt}(\alpha,6\text{n}\gamma)$. Mult.: from (α,xny) .
2534.2?		283.4 ^b 2	100 ^c 20	2223.85	(9) ⁻	(E1) ^d	0.0318	B(E1)(W.u.)=1.3 $\times 10^{-6}$ 7
2535.5	(12) ⁺	999.0 ^k 3	100	1535.2	(3) ⁺			
2535.5	(12) ⁺	28.4	100	2507.3	(10) ⁺	(E2)	2.20 $\times 10^3$	B(E2)(W.u.)=19 4 E $_\gamma$,Mult.: from $^{192}\text{Pt}(\alpha,4\text{n}\gamma)$, $^{194}\text{Pt}(\alpha,6\text{n}\gamma)$. E $_\gamma$: uncertainty unstated by authors; E $_\gamma=28.2$ 5 from level energy difference.
2632.7	(10) ⁻	408.8 ^b 2	38 ^{&}	2223.85	(9) ⁻	D [@]		
		416.5 ^b 2	100 ^{&}	2216.20	(8) ⁻			
2657.1?		854 ^k	100	1803.05	6 ⁺			E $_\gamma$: from (p,6n γ).
2756.7	(11) ⁻	532.9 ^b 2	100	2223.85	(9) ⁻	(E2) ^a	0.0231	
2902.3	(10) ⁺	395 ^h		2507.3	(10) ⁺			
2951.7	(14) ⁺	416.3 ^b 2	100	2535.5	(12) ⁺	(E2) ^a	0.0427	
3047.0	(12) ⁺	144 ^h		2902.3	(10) ⁺			
		511.3 ^{&} 3		2535.5	(12) ⁺			E $_\gamma$: complex peak (wider than normal).
		539.7 ^{&} 3		2507.3	(10) ⁺	(E2) ^{&}	0.0224	
3261.9	(12) ⁻	505.2 ^{&} 3	3.8 ^{&}	2756.7	(11) ⁻			
		629.2 2	100	2632.7	(10) ⁻	(E2)	0.01581	E $_\gamma$: Complex peak (wider than normal). Order of 629 γ and 633 γ in $(\alpha,4\text{n}\gamma)$ is the reverse of that adopted here.
3449.6	(13) ⁻	692.9 ^b 2	100	2756.7	(11) ⁻	(E2) ^a	0.01280	
3608.6	(16) ⁺	656.8 ^b 2	100	2951.7	(14) ⁺	(E2) ^a	0.01438	
3669.8	(14) ⁺	622.7 3	100	3047.0	(12) ⁺	(E2)	0.01618	E $_\gamma$,I $_\gamma$,Mult.: from $^{170}\text{Er}(\text{Mg},\text{xny})$; complex peak (wider than normal).
		718.4 ^{&} 3	63 ^{&}	2951.7	(14) ⁺			
		1134 ^h		2535.5	(12) ⁺	Q [@]		
3725.6	(14) ⁺	678.7 ^{&} 3	100	3047.0	(12) ⁺	(E2) ^{&}	0.01339	
		1190 ^h		2535.5	(12) ⁺	Q [@]		
3894.9	(14) ⁻	445.2 ^{&} 3	3.8 ^{&}	3449.6	(13) ⁻	D [@]		
		633.0 ^b 2	100 ^{&}	3261.9	(12) ⁻	(E2) ^a	0.01560	Order of 629 γ and 633 γ in $(\alpha,4\text{n}\gamma)$ is the reverse of that adopted here.
3984.9	(14) ⁻	723 ^g	100 ^g	3261.9	(12) ⁻	(E2) ^g	0.01169	

Adopted Levels, Gammas (continued)

$\gamma(^{192}\text{Hg})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult. [†]	α^i	Comments
4010.5	(15 ⁻)	560.9 ^b 2	100 ^{&}	3449.6 (13 ⁻)		(E2) ^a	0.0205	
		1058.7 ^{&} 3	24 ^{&}	2951.7 (14 ⁺)		D		Mult.: from $\gamma(\theta)$ in (HI,xn γ).
4089.9	(16 ⁻)	105 ^h		3984.9 (14 ⁻)				
		195.0 ^b 2		3894.9 (14 ⁻)		E2 ^a	0.427	
4130.6	(16 ⁺)	405.0 3	26	3725.6 (14 ⁺)		(E2)	0.0459	$E_\gamma, I_\gamma, \text{Mult.}$: from ¹⁷⁰ Er(Mg,xn γ).
		460.9 3	100	3669.8 (14 ⁺)		(E2)	0.0329	$E_\gamma, I_\gamma, \text{Mult.}$: from ¹⁷⁰ Er(Mg,xn γ).
		521.9 ^{&} 3	30 ^{&}	3608.6 (16 ⁺)				
		1179 ^h		2951.7 (14 ⁺)		Q [@]		
4216.9	(17 ⁻)	126.9 ^{&} 3	33 ^{&}	4089.9 (16 ⁻)		D		Mult.: from $\gamma(\theta)$ in (HI,xn γ).
		206.5 ^b 2	100 ^{&}	4010.5 (15 ⁻)		(E2) ^a	0.350	
4387.7	(18 ⁻)	297.7 ^b 2	100	4089.9 (16 ⁻)		(E2) ^a	0.1089	
4389.4	(18 ⁺)	780.8 ^b 2	100	3608.6 (16 ⁺)		(E2) ^{&}		
4519.8	(17 ⁻)	303 ^h		4216.9 (17 ⁻)				
4588.4	(19 ⁻)	200.7 ^{&} 3	8.2 ^{&}	4387.7 (18 ⁻)		(M1)	1.095	Mult.: D from $\gamma(\theta)$ in ¹⁷⁰ Er(Mg,xn γ).
		371.5 ^{&} 2	100 ^{&}	4216.9 (17 ⁻)		(E2)	0.0579	Mult.: Q from $\gamma(\theta)$ in ¹⁷⁰ Er(Mg,xn γ) for cascade γ .
4741.6	(18 ⁺)	611.0 ^{&} 2	100	4130.6 (16 ⁺)				
4950.5	(20 ⁻)	562.8 ^{&} 3	100	4387.7 (18 ⁻)		(E2)	0.0204	Mult.: Q from $\gamma(\theta)$ in ¹⁷⁰ Er(Mg,xn γ) for cascade γ .
5021.6	(19 ⁻)	502 ^g	100 ^g	4519.8 (17 ⁻)		(E2) ^g	0.0267	
5130.7	(20 ⁺)	741.3 ^b 2	100	4389.4 (18 ⁺)		(E2) ^a	0.01108	
5216.0	(21 ⁻)	627.6 ^{&} 2	100	4588.4 (19 ⁻)				
5271.6	(20 ⁺)	882.2 ^{&} 3	100	4389.4 (18 ⁺)		(E2) [@]		
5316.5	(20 ⁺)	574.8 ^{&} 3	100	4741.6 (18 ⁺)		(E2) ^{&}	0.0194	
5543.5	(21 ⁻)	522 ^h		5021.6 (19 ⁻)		[E2]	0.0243	
		593 ^h		4950.5 (20 ⁻)				
		955 ^h		4588.4 (19 ⁻)				
5587.1	(20 ⁺)	270 ^h		5316.5 (20 ⁺)				
		846 ^h		4741.6 (18 ⁺)		Q [@]		
5655.2	(22 ⁻)	704.7 ^{&} 3	100	4950.5 (20 ⁻)		(E2) ^{&}	0.01234	
5700.6	(22 ⁺)	569.9 ^{&} 2	100	5130.7 (20 ⁺)		(E2) ^{&}	0.0198	
5787.9	(22 ⁺)	471.4 ^{&} 3	100	5316.5 (20 ⁺)		(E2) [@]	0.0311	
6012.2	(23 ⁻)	796.2 ^{&} 3	100	5216.0 (21 ⁻)		(E2) ^{&}		
6112.6	(22 ⁺)	841 ^h		5271.6 (20 ⁺)		(E2) [@]		
		982 ^h		5130.7 (20 ⁺)		Q [@]		

Adopted Levels, Gammas (continued)

$\gamma(^{192}\text{Hg})$ (continued)								
$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult. [†]	α^i	Comments
6125.5	(23 ⁻)	582 ^h		5543.5 (21 ⁻)		(E2) [@]	0.0188	
		910 ^h		5216.0 (21 ⁻)		(E2) [@]		
6233.6	(22 ⁺)	962 ^g	100 ^g	5271.6 (20 ⁺)		(Q) ^g		
6294.6	(22 ⁺)	978 ^g	100 ^g	5316.5 (20 ⁺)		(E2) ^g		
6303.3	(22 ⁺)	716 ^h		5587.1 (20 ⁺)				
		987 ^h		5316.5 (20 ⁺)		Q [@]		
6428.1	(24 ⁺)	640 ^h		5787.9 (22 ⁺)				
		727.5& 3	100	5700.6 (22 ⁺)		(E2) ^{&}	0.01153	
6432.8	(23 ⁺)	129.8 ^h		6303.3 (22 ⁺)		(M1) [@]	3.75	
		138 ^h		6294.6 (22 ⁺)				
6437.6	(24 ⁻)	782.3& 3	100	5655.2 (22 ⁻)				
6709.4	(24 ⁺)	276.3 ^g	100 ^g	6432.8 (23 ⁺)		(M1) ^g	0.452	B(M1)(W.u.)=0.042 +13-10
		405.9 ^g	29 ^g	6303.3 (22 ⁺)		E2 ^g	0.0456	B(E2)(W.u.)=9.2 +27-20
6855.0	(25 ⁻)	842.8& 3	100	6012.2 (23 ⁻)		(E2) [@]		E _γ : complex peak (wider than normal) in ¹⁷⁰ Er(Mg,xny).
6949.2	(25 ⁻)	823 ^g	100 ^g	6125.5 (23 ⁻)		(E2) ^g		
7035.3	(24 ⁻)	157 ^h	100	6878.4 (23 ⁻)		(M1)	2.18	
7043.3	(25 ⁺)	333.6 ^g	35 ^g	6709.4 (24 ⁺)		(M1) ^g	0.270	B(M1)(W.u.)=0.20 +32-20
		611.0 ^g	100 ^g	6432.8 (23 ⁺)		(E2) ^g	0.01688	B(E2)(W.u.)=1.0×10 ² +16-10
7267.6	(26 ⁻)	830 ^g	100 ^g	6437.6 (24 ⁻)		(E2) ^g		
7272.5	(25 ⁻)	237 ^h		7035.3 (24 ⁻)				
		394 ^h		6878.4 (23 ⁻)				
		1148 ^h		6125.5 (23 ⁻)				
		1260 ^h		6012.2 (23 ⁻)		(E2) [@]		
7320.1	(26 ⁺)	892 ^h	100	6428.1 (24 ⁺)		(E2)		
7434.9	(26 ⁺)	391.9 ^g	89 ^g	7043.3 (25 ⁺)		(M1) ^g	0.1752	B(M1)(W.u.)=0.063 +18-33
		725.3 ^g	100 ^g	6709.4 (24 ⁺)		[E2] ^g	0.01161	B(E2)(W.u.)=8.3 +24-44
7516.1	(26 ⁻)	244 ^h		7272.5 (25 ⁻)		(M1) [@]	0.636	
		481 ^h		7035.3 (24 ⁻)		(E2) [@]	0.0296	
7684.9	(25 ⁻ ,26 ⁻)	413 ^h		7272.5 (25 ⁻)				
		1247 ^h		6437.6 (24 ⁻)		Q [@]		
7722.0	(27 ⁻)	867 ^h		6855.0 (25 ⁻)				
7787.8	(27 ⁻)	103 ^h		7684.9 (25 ⁻ ,26 ⁻)				
		272 ^h		7516.1 (26 ⁻)		(M1) [@]	0.472	
		515 ^h		7272.5 (25 ⁻)				

Adopted Levels, Gammas (continued)

							$\gamma(^{192}\text{Hg})$ (continued)			
$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult. [†]	α^i	Comments		
7787.8	(27 ⁻)	933 ^h		6855.0	(25 ⁻)	Q [@]				
7819.6	(27 ⁻)	304 ^h		7516.1	(26 ⁻)					
		870 ^h		6949.2	(25 ⁻)	(E2) [@]				
7838.4	(27 ⁻)	889 ^g	100 ^g	6949.2	(25 ⁻)	Q ^g				
7926.7	(28 ⁻)	88 ^h		7838.4	(27 ⁻)					
		107 ^h		7819.6	(27 ⁻)	D [@]				
		139 ^h		7787.8	(27 ⁻)					
		410 ^{hk}		7516.1	(26 ⁻)					
7959.0	(27 ⁺)	524.4 ^g	100 ^g	7434.9	(26 ⁺)	(M1) ^g	0.0809	B(M1)(W.u.)=0.08 7		
		915.6 ^g	60 ^g	7043.3	(25 ⁺)	(E2) ^g		B(E2)(W.u.)=4 4		
8180.7	(28 ⁺)	222 ^h		7959.0	(27 ⁺)					
8194.6	(28 ⁻)	927 ^g	100 ^g	7267.6	(26 ⁻)	(E2) ^g				
8207.6	(28 ⁻)	940 ^g	100 ^g	7267.6	(26 ⁻)	Q ^g				
8224.3	(28 ⁻)	386 ^h		7838.4	(27 ⁻)					
		405 ^h		7819.6	(27 ⁻)	D [@]				
		708 ^h		7516.1	(26 ⁻)					
8263.5	(29 ⁻)	337 ^h		7926.7	(28 ⁻)					
		476 ^h		7787.8	(27 ⁻)	(E2) [@]	0.0304			
8302.6	(28 ⁺)	343.4 ^g	59 ^g	7959.0	(27 ⁺)	(M1) ^g	0.250	B(M1)(W.u.)=0.4 4		
		867.6 ^g	100 ^g	7434.9	(26 ⁺)	[E2] ^g		B(E2)(W.u.)=20 +21-20		
8331.1	(28 ⁺)	1011 ^g	100 ^g	7320.1	(26 ⁺)	(E2) ^g				
8543.2	(30 ⁻)	280 ^h		8263.5	(29 ⁻)	(M1) [@]	0.436			
		616 ^h		7926.7	(28 ⁻)	(E2) [@]	0.01657			
8631.0	(29 ⁻)	909 ^h		7722.0	(27 ⁻)					
8693.0	(29 ⁻)	971 ^g	100 ^g	7722.0	(27 ⁻)	(Q) ^g				
8712.6	(29 ⁺)	409.1 ^g	100 ^g	8302.6	(28 ⁺)	(M1) ^g	0.1562	B(M1)(W.u.)=1.3 13		
		753.7 ^g	66 ^g	7959.0	(27 ⁺)	(E2) ^g	0.01070	B(E2)(W.u.)=9.E+1 +10-9		
8961.3	(30 ⁺)	248.1 ^g	100 ^g	8712.6	(29 ⁺)	[M1] ^g	0.607	B(M1)(W.u.)=0.6 3 if 781 branch negligible.		
		659.2 ^g	90 ^g	8302.6	(28 ⁺)	[E2] ^g	0.01426	B(E2)(W.u.)=27 13 if 781 branch negligible.		
		781 ^h		8180.7	(28 ⁺)					
8990.2	(31 ⁻)	447 ^h		8543.2	(30 ⁻)	(M1) [@]	0.1234			
		727 ^h		8263.5	(29 ⁻)					
9196.0	(31 ⁺)	234.8 ^g	100 ^g	8961.3	(30 ⁺)	(M1) ^g	0.707	B(M1)(W.u.)=0.38 +5-7		
		483.2 ^g	16 ^g	8712.6	(29 ⁺)	(E2) ^g	0.0293	B(E2)(W.u.)=11.6 +15-20		
9375.9	(32 ⁺)	179.8 ^g	100 ^g	9196.0	(31 ⁺)	(M1) ^g	1.489	B(M1)(W.u.)=0.94 19		

Adopted Levels, Gammas (continued)

$\gamma(^{192}\text{Hg})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult. [†]	α^i	$I_{(\gamma+ce)}^\#$	Comments
9375.9	(32 ⁺)	414.6 ^g	18 ^g	8961.3	(30 ⁺)	[E2] ^g	0.0431		B(E2)(W.u.)=31 7
9443.4	(32 ⁻)	454 ^h				(M1) [@]	0.1184		
		900 ^h		8543.2	(30 ⁻)	(E2) [@]			
9666.0	(33 ⁺)	290 ^h		9375.9	(32 ⁺)	(M1) [@]	0.396		
		470 ^h		9196.0	(31 ⁺)				
9932.8	(33 ⁻)	490 ^h		9443.4	(32 ⁻)	(M1) [@]	0.0967		
		942 ^h		8990.2	(31 ⁻)	(E2) [@]			
10038.0	(34 ⁺)	372 ^h		9666.0	(33 ⁺)				
10464.4	(34 ⁻)	532 ^{hk}		9932.8	(33 ⁻)				
		1021 ^h		9443.4	(32 ⁻)	(E2) [@]			
214.4+x	J+2	214.4 ^f 3		x	J \approx (8)	(E2) ^f	0.309	0.08 2	B(E2)(W.u.)>190 E γ : 214.9 2 (1994Ga07) in (HL,xny):SD.
472.2+x	J+4	257.8 ^f 1		214.4+x	J+2	(E2) ^f	0.1693	0.88 5	B(E2)(W.u.)=1.7 \times 10 ³ +3-4 E γ : 258.2 1 (1994Ga07) in (HL,xny):SD.
772.3+x	J+6	300.1 ^f 1		472.2+x	J+4	(E2) ^f	0.1063	1.01 5	B(E2)(W.u.)=1.84 \times 10 ³ +18-24 Other E γ : 300.4 1 (1994Ga07) in (HL,xny):SD.
1113.7+x	J+8	341.4 ^f 1		772.3+x	J+6	(E2) ^f	0.0732	1.07 6	B(E2)(W.u.)=2.1 \times 10 ³ +5-6 Other E γ : 341.7 1 (1994Ga07) in (HL,xny):SD.
1495.3+x	J+10	381.6 ^f 1		1113.7+x	J+8	(E2) ^f	0.0538	1.04 5	B(E2)(W.u.)=2.1 \times 10 ³ +6-21 Other E γ : 382.0 1 (1994Ga07) in (HL,xny):SD.
1916.4+x	J+12	421.1 ^f 2		1495.3+x	J+10	(E2) ^f	0.0414		Other E γ : 421.2 1 (1994Ga07) in (HL,xny):SD.
2375.2+x	J+14	458.8 ^f 2		1916.4+x	J+12	(E2) ^f	0.0333	1.08 6	B(E2)(W.u.)=2.3 \times 10 ³ +5-7 Other E γ : 459.5 1 (1994Ga07) in (HL,xny):SD.
2871.2+x	J+16	496.0 ^f 2		2375.2+x	J+14	(E2) ^f	0.0275	0.94 6	B(E2)(W.u.)=2.0 \times 10 ³ +4-3 Other E γ : 496.8 1 (1994Ga07) in (HL,xny):SD.
3403.3+x	J+18	532.1 ^f 2		2871.2+x	J+16	(E2) ^f	0.0232	0.88 5	B(E2)(W.u.)=2.12 \times 10 ³ +32-23 Other E γ : 532.8 1 (1994Ga07) in (HL,xny):SD.
3970.7+x	J+20	567.4 ^f 2		3403.3+x	J+18	(E2) ^f	0.0200	0.69 4	B(E2)(W.u.)=2.1 \times 10 ³ 4 Other E γ : 568.0 1 (1994Ga07) in (HL,xny):SD.
4572.4+x	J+22	601.7 ^f 2		3970.7+x	J+20	(E2) ^f	0.01747	0.71 4	B(E2)(W.u.)=1.73 \times 10 ³ +20-28 Other E γ : 602.5 1 (1994Ga07) in (HL,xny):SD.
5207.3+x	J+24	634.9 ^f 2		4572.4+x	J+22	(E2) ^f	0.01549		B(E2)(W.u.)=1.6 \times 10 ³ 4 Other E γ : 636.1 1 (1994Ga07) in (HL,xny):SD.
5875.4+x	J+26	668.1 ^f 2		5207.3+x	J+24	(E2) ^f	0.01385	0.55 5	B(E2)(W.u.)=2.1 \times 10 ³ 6 Other E γ : 669.0 2 (1994Ga07) in (HL,xny):SD.
6575.5+x	J+28	700.1 ^f 2		5875.4+x	J+26	(E2) ^f	0.01252	0.49 6	B(E2)(W.u.)=1.6 \times 10 ³ +4-5 Other E γ : 700.9 2 (1994Ga07) in (HL,xny):SD.

Adopted Levels, Gammas (continued)

$\gamma(^{192}\text{Hg})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	E_f	J_f^π	Mult. [†]	α^i	$I_{(\gamma+ce)}^\#$	Comments
7307.0+x	J+30	731.5 ^f 2	6575.5+x	J+28	(E2) ^f	0.01140	0.42 6	B(E2)(W.u.)=1.9×10 ³ +20-11 Other E _γ : 732.2 1 (1994Ga07) in (HI,xn _γ):SD.
8069.3+x	J+32	762.3 ^f 3	7307.0+x	J+30	(E2) ^f	0.01045	0.31 5	B(E2)(W.u.)=1.7×10 ³ +18-17 Other E _γ : 762.8 4 (1994Ga07) in (HI,xn _γ):SD.
8862.0+x	J+34	792.7 ^f 4	8069.3+x	J+32	(E2) ^f		0.29 4	Other E _γ : 793.0 3 (1994Ga07) in (HI,xn _γ):SD.
9684.9+x	J+36	822.9 ^f 4	8862.0+x	J+34	(E2) ^f		0.06 2	Other E _γ : 822.5 4 (1994Ga07) in (HI,xn _γ):SD.
10538.0+x	J+38	853.1 ^f 5	9684.9+x	J+36			0.03 1	Other E _γ : 852.1 6 (1994Ga07) in (HI,xn _γ):SD.
11426.7+x?	J+40	888.7 ^{fk} 7	10538.0+x	J+38			≤0.05	Other E _γ : 882 (1994Ga07) in (HI,xn _γ):SD.
241.2+y	J1+2	241.2 ^f	y	J1≈(10)				E _γ : from 1995Ko17 only in (HI,xn _γ):SD.
523.6+y	J1+4	282.4 ^f 2	241.2+y	J1+2	[E2]	0.1277	0.71 8	
845.7+y	J1+6	322.1 ^f 2	523.6+y	J1+4			1.03 8	
1207.0+y	J1+8	361.3 ^f 2	845.7+y	J1+6			1.00 7	
1607.2+y	J1+10	400.2 ^f 2	1207.0+y	J1+8			0.99 6	
2045.2+y	J1+12	438.0 ^f 2	1607.2+y	J1+10			0.96 6	
2520.4+y	J1+14	475.2 ^f 2	2045.2+y	J1+12	[E2]	0.0305	0.97 7	B(E2)(W.u.)=2500 700
3031.4+y	J1+16	511.0 ^f 2	2520.4+y	J1+14	[E2]	0.0256	1.08 7	B(E2)(W.u.)=1.6×10 ³ +4-6
3578.1+y	J1+18	546.7 ^f 2	3031.4+y	J1+16	[E2]	0.0218	1.03 6	B(E2)(W.u.)=1720 250 Other E _γ : 547.5 (1995Ko17) in (HI,xn _γ):SD.
4156.9+y	J1+20	578.8 ^f 2	3578.1+y	J1+18	[E2]	0.0191	0.91 7	B(E2)(W.u.)=2000 300 Other E _γ : 579.9 (1995Ko17) in (HI,xn _γ):SD.
4761.3+y	J1+22	604.4 ^f 2	4156.9+y	J1+20	[E2]	0.01730	0.82 7	B(E2)(W.u.)=2.02×10 ³ +28-24
5385.5+y	J1+24	624.2 ^f 3	4761.3+y	J1+22	[E2]	0.01609	0.55 8	B(E2)(W.u.)=2000 300
6037.7+y	J1+26	652.2 ^f 3	5385.5+y	J1+24			0.65 8	
6722.0+y	J1+28	684.3 ^f 3	6037.7+y	J1+26			0.50 8	Other E _γ : 685.5 (1995Ko17) in (HI,xn _γ):SD.
7439.7+y	J1+30	717.7 ^f 3	6722.0+y	J1+28			0.30 7	
8189.5+y	J1+32	749.8 ^f 4	7439.7+y	J1+30			0.19 4	Other E _γ : 750.7 (1995Ko17) in (HI,xn _γ):SD.
8972.6+y	J1+34	783.1 ^f 5	8189.5+y	J1+32			0.12 3	Other E _γ : 782 (1995Ko17) in (HI,xn _γ):SD.
9791.6+y?	J1+36	819 ^{fk} 1	8972.6+y	J1+34				E _γ : not reported by 1995Ko17 in (HI,xn _γ):SD.
333.1+z	J2+2	333.1 ^f 3	z	J2			0.66 7	
705.9+z	J2+4	372.8 ^f 2	333.1+z	J2+2			1.13 8	
1118.0+z	J2+6	412.1 ^f 2	705.9+z	J2+4			0.90 9	
1568.6+z	J2+8	450.6 ^f 3	1118.0+z	J2+6			0.95 8	
2056.9+z	J2+10	488.3 ^f 3	1568.6+z	J2+8			0.97 8	
2582.4+z	J2+12	525.5 ^f 4	2056.9+z	J2+10			0.80 8	

Adopted Levels, Gammas (continued)

$\gamma(^{192}\text{Hg})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger		E_f	J_f^π	$I_{(\gamma+ce)}^\#$
3144.1+z	J2+14	561.7 ^f	4	2582.4+z	J2+12	0.44 7
3741.4+z	J2+16	597.3 ^f	4	3144.1+z	J2+14	0.50 7
4371.5+z	J2+18	630.1 ^f	5	3741.4+z	J2+16	
5030.5+z	J2+20	659.0 ^f	8	4371.5+z	J2+18	0.20 4
5711.5+z	J2+22	681.0 ^f	15	5030.5+z	J2+20	0.15 8

[†] From ¹⁹²Tl ϵ decay (9.6 min+10.8 min), except where noted.

[‡] Relative photon branching from each level; values are weighted averages from the two mixtures of ¹⁹²Tl isomers in ¹⁹²Tl ϵ decay (9.6 min+10.8 min), except as noted.

[#] Relative intensities within a given SD band are given; data are from (HI,xn γ):SD and are for the ¹⁶⁰Gd(³⁶S,4n γ) reaction at E(³⁶S)=159 MeV.

[@] From γ asymmetry in (³⁶S,4n γ), assigning $\Delta\pi=(\text{no})$ for intraband transitions.

[&] From ¹⁷⁰Er(Mg,xn γ).

^a From ¹⁹²Pt(α ,4n γ), ¹⁹⁴Pt(α ,6n γ) and ¹⁷⁰Er(Mg,xn γ).

^b Weighted average from ¹⁹²Pt(α ,4n γ), ¹⁹⁴Pt(α ,6n γ) and ¹⁷⁰Er(Mg,xn γ), rounded to the nearest tenth of a keV.

^c Deduced from I($\gamma+ce$) in ¹⁹²Pt(α ,4n γ), ¹⁹⁴Pt(α ,6n γ) and α .

^d From ce data in ¹⁹²Pt(α ,4n γ), ¹⁹⁴Pt(α ,6n γ).

^e From ¹⁹²Tl ϵ decay using source enhanced in (2⁻) ¹⁹²Tl.

^f From (HI,xn γ):SD.

^g From ¹⁶⁰Gd(³⁶S,4n γ). Authors do not state uncertainties in E_γ or I_γ . Multipolarity is based on γ anisotropy assigning $\Delta\pi=(\text{no})$ for intraband transitions.

^h From ¹⁶⁰Gd(³⁶S,4n γ); ΔE_γ unstated by authors.

ⁱ 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.

^j Multiply placed with intensity suitably divided.

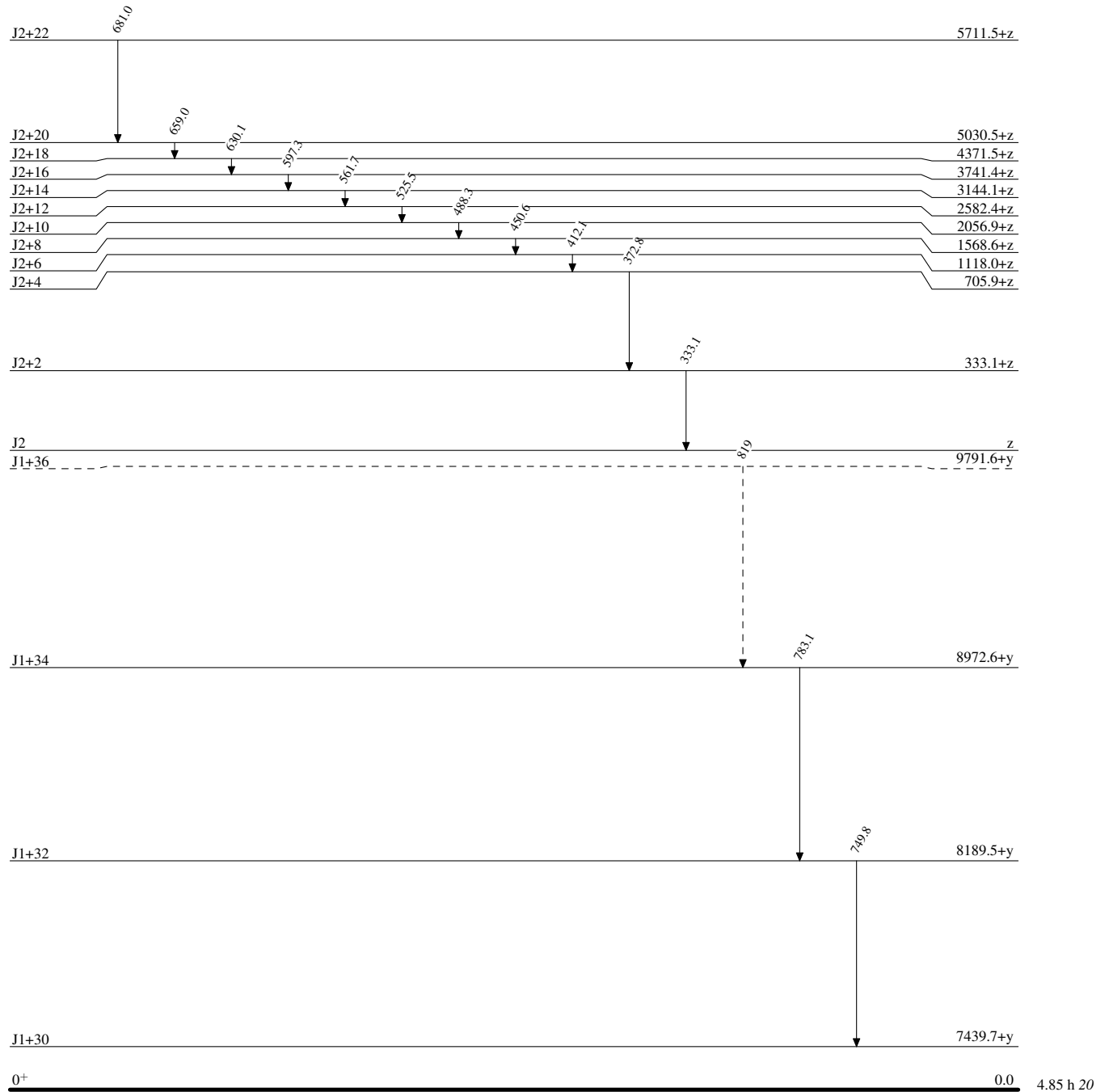
^k Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)

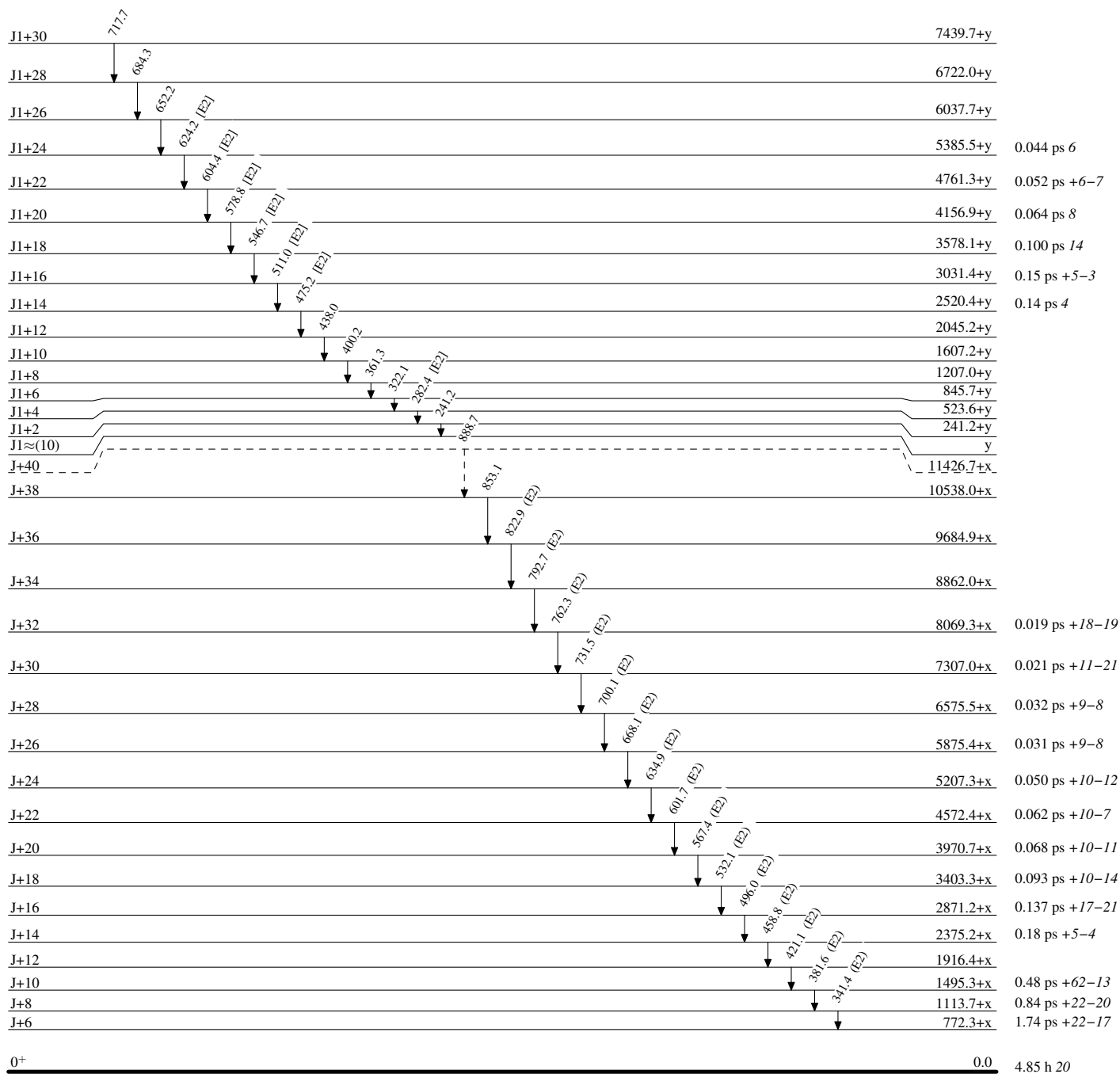
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)

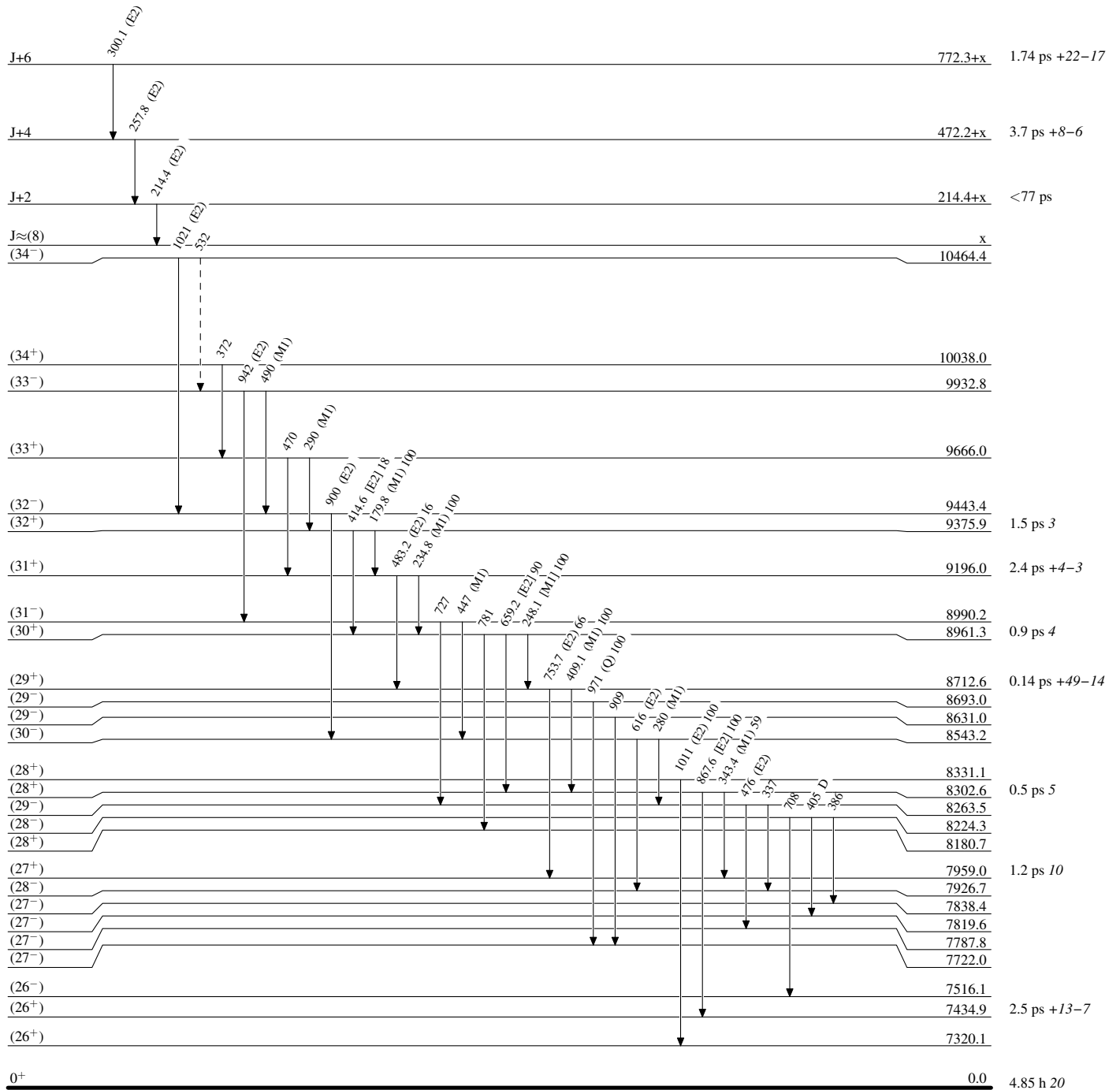


Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

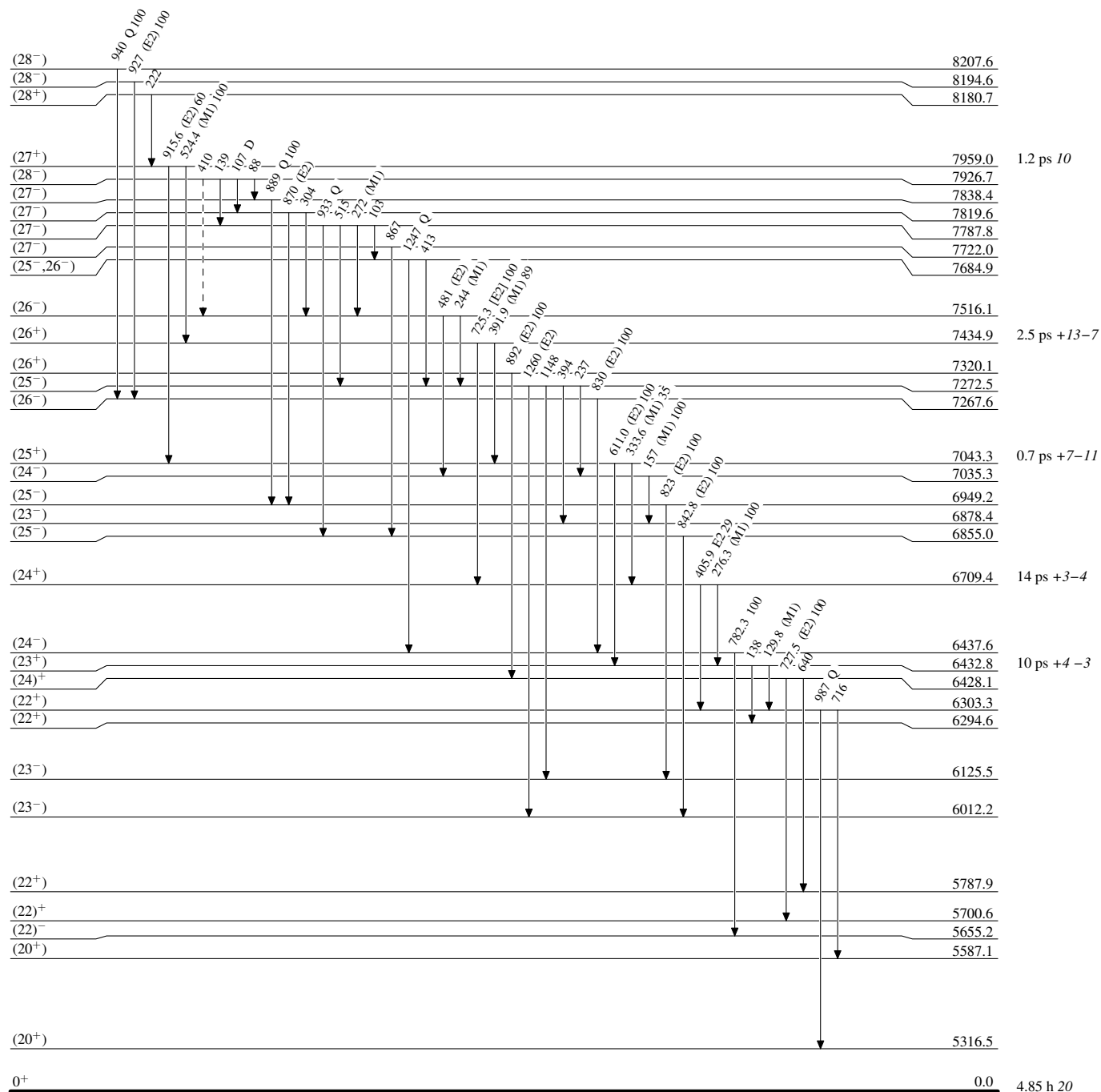
-----▶ γ Decay (Uncertain) $^{192}_{80}\text{Hg}_{112}$

Adopted Levels, Gammas

Legend

Level Scheme (continued)

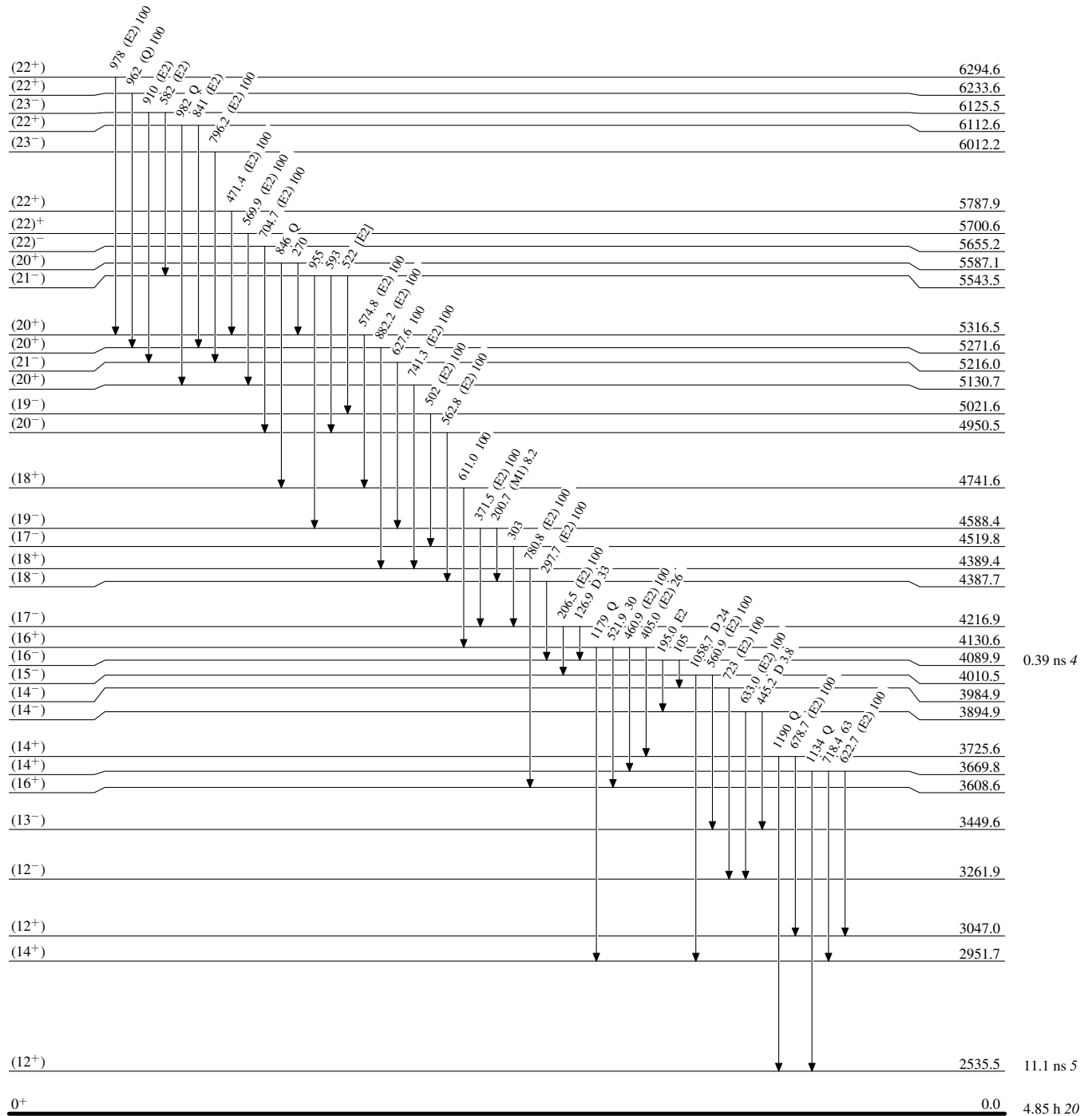
Intensities: Relative photon branching from each level

-----> γ Decay (Uncertain)

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



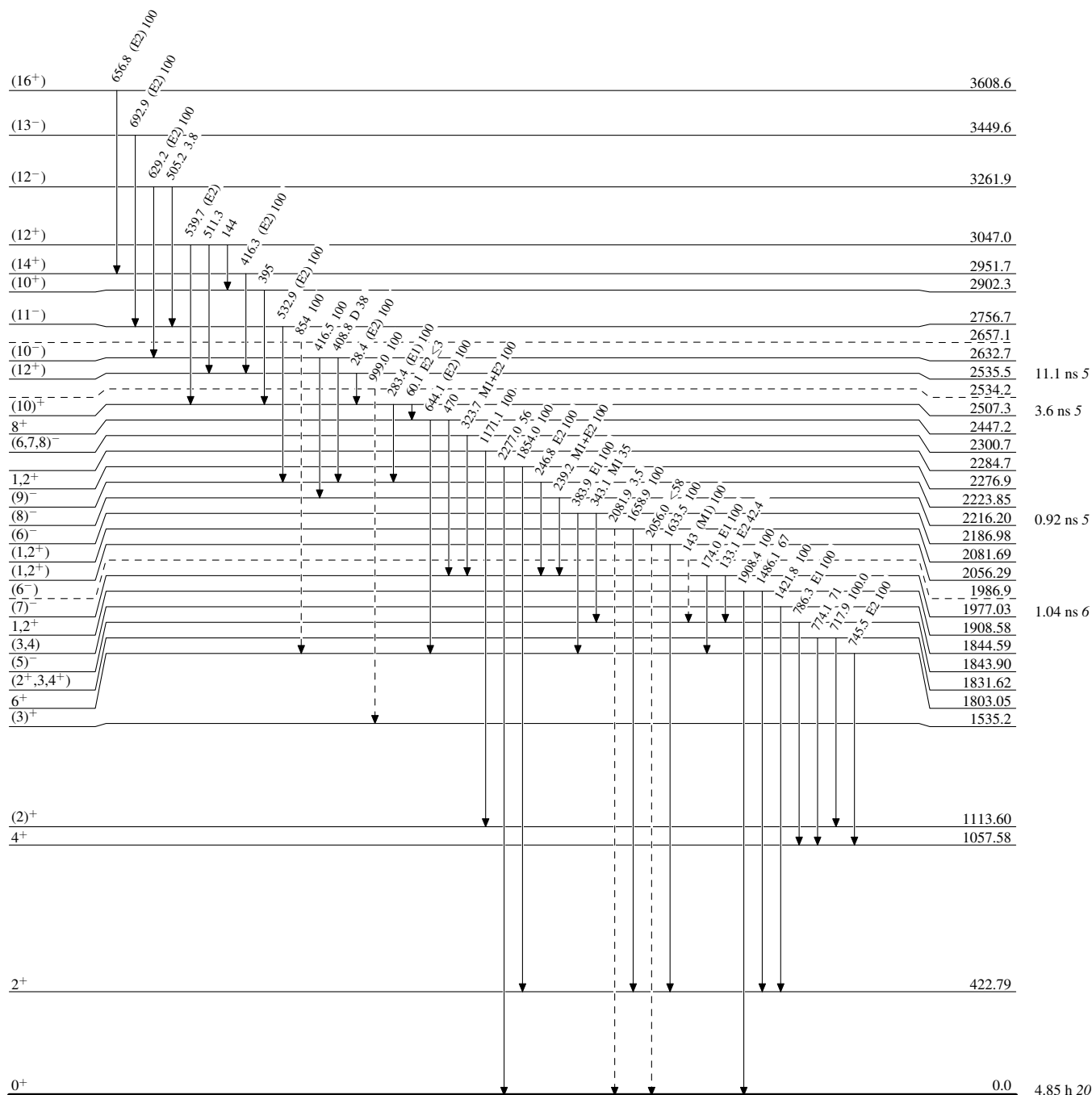
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

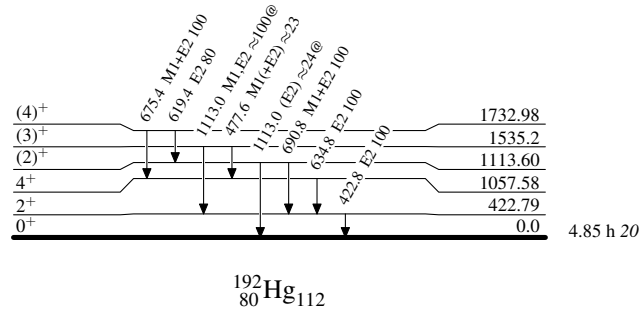
-----▶ γ Decay (Uncertain)



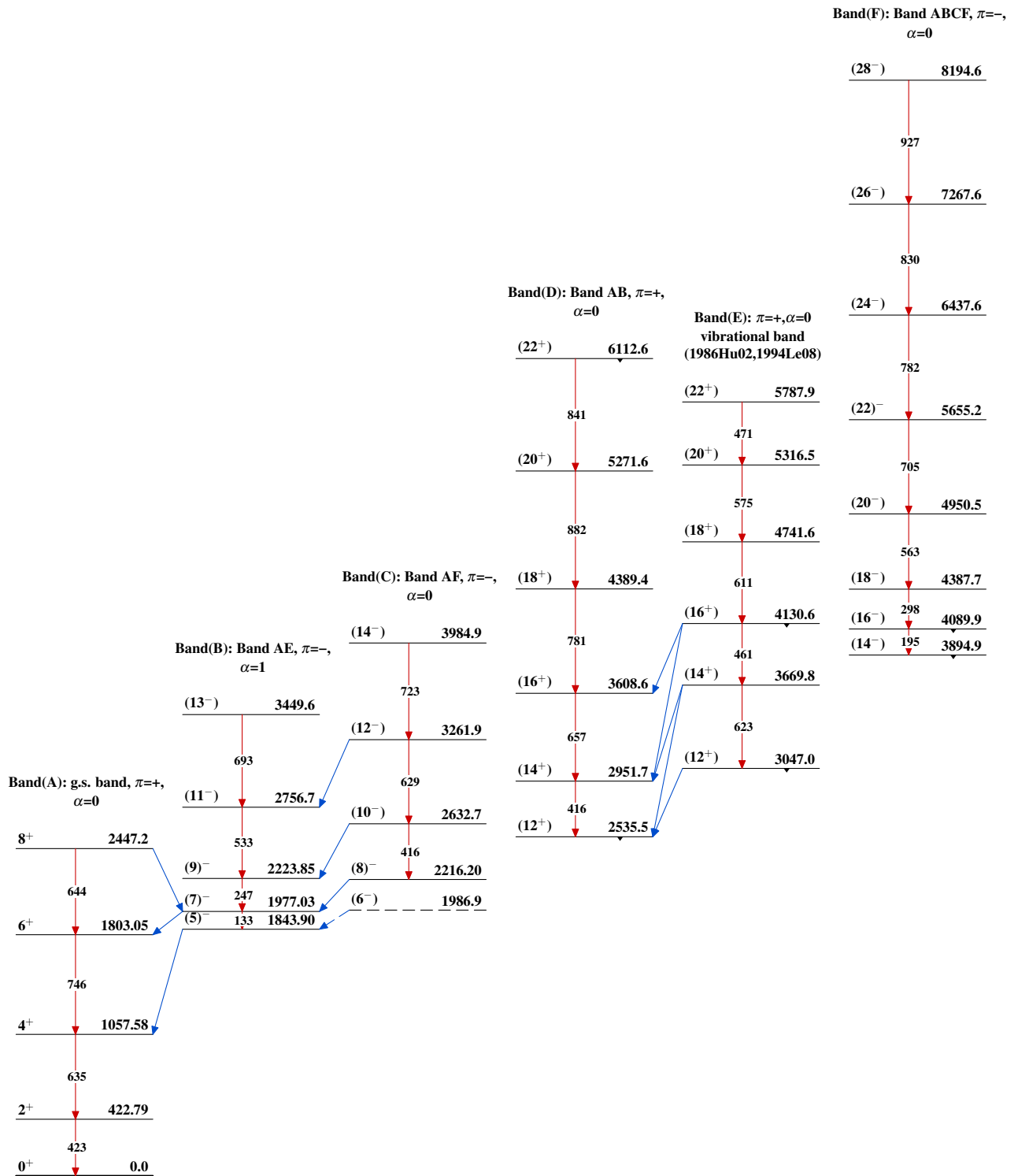
$^{192}_{80}\text{Hg}_{112}$

Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level
@ Multiply placed: intensity suitably divided

 $^{192}_{80}\text{Hg}_{112}$

Adopted Levels, Gammas

 $^{192}_{80}\text{Hg}_{112}$

Adopted Levels, Gammas (continued)

		Band(J): SD-2 band (1995Fa03,1995Ko17)	
		J1+36	9791.6+y
		J1+34	819 ↓ 8972.6+y
		J1+32	783 ↓ 8189.5+y
		J1+30	750 ↓ 7439.7+y
		J1+28	718 ↓ 6722.0+y
		J1+26	684 ↓ 6037.7+y
		J1+24	652 ↓ 5385.5+y
		J1+22	624 ↓ 4761.3+y
		J1+20	604 ↓ 4156.9+y
		J1+18	579 ↓ 3578.1+y
		J1+16	547 ↓ 3031.4+y
		J1+14	511 ↓ 2520.4+y
		J1+12	475 ↓ 2045.2+y
		J1+10	438 ↓ 1607.2+y
		J1+8	400 ↓ 1207.0+y
		J1+6	361 ↓ 845.7+y
		J1+4	322 ↓ 523.6+y
		J1+2	282 ↓ 241.2+y
		J1≈(10)	241 y
		J+40	11426.7+x
		J+38	889 ↓ 10538.0+x
		J+36	853 ↓ 9684.9+x
		J+34	823 ↓ 8862.0+x
		J+32	793 ↓ 8069.3+x
		J+30	762 ↓ 7307.0+x
		J+28	732 ↓ 6575.5+x
		J+26	700 ↓ 5875.4+x
		J+24	668 ↓ 5207.3+x
		J+22	635 ↓ 4572.4+x
		J+20	602 ↓ 3970.7+x
		J+18	567 ↓ 3403.3+x
		J+16	532 ↓ 2871.2+x
		J+14	496 ↓ 2375.2+x
		J+12	459 ↓ 1916.4+x
		J+10	421 ↓ 1495.3+x
		J+8	382 ↓ 1113.7+x
		J+6	341 ↓ 772.3+x
		J+4	300 ↓ 472.2+x
		J+2	x
		J≈(8)	x
		Band(I): SD-1 band (1992La07,1994Ga07, 1995Fa03,1997Mo12, 1998Bu03)	
		J+40	11426.7+x
		J+38	889 ↓ 10538.0+x
		J+36	853 ↓ 9684.9+x
		J+34	823 ↓ 8862.0+x
		J+32	793 ↓ 8069.3+x
		J+30	762 ↓ 7307.0+x
		J+28	732 ↓ 6575.5+x
		J+26	700 ↓ 5875.4+x
		J+24	668 ↓ 5207.3+x
		J+22	635 ↓ 4572.4+x
		J+20	602 ↓ 3970.7+x
		J+18	567 ↓ 3403.3+x
		J+16	532 ↓ 2871.2+x
		J+14	496 ↓ 2375.2+x
		J+12	459 ↓ 1916.4+x
		J+10	421 ↓ 1495.3+x
		J+8	382 ↓ 1113.7+x
		J+6	341 ↓ 772.3+x
		J+4	300 ↓ 472.2+x
		J+2	x
		J≈(8)	x
		Band(G): Band ABCE, π=-, α=1	
(29 ⁻)	8631.0		
(27 ⁻)	909 ↓ 7722.0		
(25 ⁻)	867 ↓ 6855.0		
(23 ⁻)	843 ↓ 6012.2		
(21 ⁻)	796 ↓ 5216.0		
(19 ⁻)	628 ↓ 4588.4		
(17 ⁻)	372 ↓ 4216.9		
(15 ⁻)	206 ↓ 4010.5		
		Band(H): Band ABCD, π=+, α=0 (1995Le33)	
(28 ⁺)	8331.1		
(26 ⁺)	1011 ↓ 7320.1		
(24 ⁺)	892 ↓ 6428.1		
(22 ⁺)	728 ↓ 5700.6		
(20 ⁺)	570 ↓ 5130.7		

Adopted Levels, Gammas (continued)**Band(K): SD-3 band
(1995Fa03)**

J2+22	5711.5+z
↓ 681	
J2+20	5030.5+z
↓ 659	
J2+18	4371.5+z
↓ 630	
J2+16	3741.4+z
↓ 597	
J2+14	3144.1+z
↓ 562	
J2+12	2582.4+z
↓ 526	
J2+10	2056.9+z
↓ 488	
J2+8	1568.6+z
↓ 451	
J2+6	1118.0+z
↓ 412	
J2+4	705.9+z
↓ 373	
J2+2	333.1+z
↓ 333	
J2	z

**Band(L): Band ABDE
(1994Le08,1995Le33)**

(27 ⁻)	7819.6
↓ 870	
(25 ⁻)	6949.2
↓ 823	
(23 ⁻)	6125.5
↓ 582	
(21 ⁻)	5543.5
↓ 522	
(19 ⁻)	5021.6
↓ 502	
(17 ⁻)	4519.8

**Band(M): $\pi=+$ dipole band
(1994Le08,1995Le33)**

(34 ⁺)	10038.0
↓ 372	
(33 ⁺)	9666.0
↓ 290	
(32 ⁺)	9375.9
↓ 180	
(31 ⁺)	9196.0
↓ 415	
(30 ⁺)	8961.3
↓ 235	
(29 ⁺)	8712.6
↓ 248	
↓ 659	
(28 ⁺)	8302.6
↓ 409	
(27 ⁺)	7959.0
↓ 343	
↓ 868	
(26 ⁺)	7434.9
↓ 524	
(25 ⁺)	7043.3
↓ 392	
(24 ⁺)	6709.4
↓ 725	
(23 ⁺)	6432.8
↓ 334	
(22 ⁺)	6303.3
↓ 611	
↓ 130	

**Band(N): $\pi=-$ dipole band
(1994Le08,1995Le33)**

(34 ⁻)	10464.4
↓ 532	
(33 ⁻)	9932.8
↓ 1021	
(32 ⁻)	9443.4
↓ 942	
↓ 490	
(31 ⁻)	8990.2
↓ 900	
(30 ⁻)	8543.2
↓ 727	
↓ 447	
(29 ⁻)	8263.5
↓ 280	
(28 ⁻)	7926.7
↓ 616	
(27 ⁻)	7787.8
↓ 476	
↓ 337	
(26 ⁻)	7516.1
↓ 515	
(25 ⁻)	7272.5
↓ 244	
(24 ⁻)	7035.3
↓ 481	
(23 ⁻)	6878.4
↓ 157	