

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 108,79 (2007)	15-Oct-2006

$Q(\beta^-) = -1.49 \times 10^3$ 3; $S(n) = 6662.9$ 6; $S(p) = 7253.4$ 7; $Q(\alpha) = 825.0$ 10 [2012Wa38](#)

Note: Current evaluation has used the following Q record -1488 28 6663.9 3 7253.9 6 824.9 9 [2003Au03](#).

Nuclear structure calculations:

Particle-core coupling: [1983Gu02](#), [1979St04](#).

Supersymmetries: [2004Jo11](#) ($1/2^-$, $3/2^-$, $5/2^-$ states interpreted below 500 keV), [1984Va36](#), [1983Su03](#).

Asymmetric rotor: [1979Wu12](#) (asymmetric rotor).

Intermediate coupling: [1975Ma05](#).

[Additional information 1](#).

Schiff moments calculations: [2005Dm02](#), [2005De51](#).

RMS charge radius and deformation: [1986U102](#), [1974Pr09](#).

L1 subshell fluorescent yield: [1985Ma50](#).

Electric dipole moment: [1987La22](#). The null result, 0.7×10^{-26} 15 e cm, improves by an order of magnitude the limits on several possible interactions which violate time-reversal symmetry.

[2005Os02](#): electric quadrupole moment measurement of $^{199}\text{Hg}^+ 5d^9 6s^2 \ ^2D_{5/2}$ atomic state.

Mass measurement: [2003Ba49](#).

Other reactions:

$^{201}\text{Hg}(p,t)$ E=25 MeV: [1988BeZT](#): measured $\sigma(\theta)$; DWBA analysis with DWUCK. Observed splitting of L=0 strength. No details available.

For neutron resonances (total of 73 from 23 eV to 12 keV) see $^{198}\text{Hg}(n,\gamma)$:resonances dataset.

¹⁹⁹Hg Levels

Cross Reference (XREF) Flags

A	$^{199}\text{Au} \beta^-$ decay (3.139 d)	F	$^{198}\text{Hg}(n,\gamma)$ E=23.1 eV	K	$^{199}\text{Hg}(e,e')$
B	^{199}Hg IT decay (42.67 min)	G	$^{198}\text{Hg}(n,\gamma)$ E=89.9 eV	L	$^{199}\text{Hg}(n,n'\gamma)$
C	Muonic atom	H	$^{198}\text{Hg}(d,p)$	M	Coulomb excitation
D	$^{199}\text{Tl} \ \varepsilon$ decay (7.42 h)	I	$^{199}\text{Hg}(\gamma,\gamma)$:Mossbauer	N	$^{200}\text{Hg}(p,d)$
E	$^{198}\text{Pt}(\alpha,3n\gamma)$	J	$^{199}\text{Hg}(\gamma,\gamma')$	O	$^{200}\text{Hg}(d,t)$

E(level) [†]	J ^π [‡]	T _{1/2}	XREF	Comments
0.0	1/2 ⁻	stable	ABCDEFGHIJKLMNO	$\mu = +0.5058855$ 9 (1989Ra17 , 1961Ca21) Electric dipole moment (d) < 2.1×10^{-28} e cm (2001Ro05). $\langle r^2 \rangle^{1/2} = 5.448$ fm 3 (2004An14 , evaluation) Others: 1995Ja22 , 1993Ja13 , 0.7×10^{-26} 15 e cm (1987La22 , 1989La24). T _{1/2} : measured (1990Bu28) lower limits for cluster decay: $> 2.2 \times 10^{21}$ y (for ^{24}Ne decay mode), $> 2.5 \times 10^{21}$ y (for ^{28}Mg decay mode). Additional information 2 . J ^π : spin from optical spectroscopy (1931Sc03) and NMR (1951Pr02); parity from L(d,t)=1. Isotope shifts from K x ray energies (1978Le09); charge parameters (1985K109 , 1983Gu02); charge radius, deformation deduced from isotope shifts (1986U102). μ: NMR using optically pumped ions (1961Ca21). Others: optical spectroscopy: 0.547 2 (1940Mr10), +0.532 (1957B110), +0.51 (1961Ag03), +0.454 (1963Sc34), 0.506 3 (1967Dr09). Others: 1959Pe33 , 1960Mc11 , 1961Hi16 , 1963St15 , 1977Ei02 . NMR studies: 1996Su17 , 1996Ju04 , 1994Su30 . Compilation: 2005St24 . $\mu = +0.88$ 3 (1989Ra17 , 1977Kr11)
158.37859 10	5/2 ⁻	2.45 ns 3	ABCDEFGHI LMNO	

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Adopted Levels, Gammas (continued) ^{199}Hg Levels (continued)

E(level) [†]	J ^π [‡]	T _{1/2}	XREF		Comments
					Q=+0.95 7 (1989Ra17,1979Ha08) J ^π : E2 γ to 1/2 ⁻ , L(d,t)=L(p,d)=3. T _{1/2} : weighted average of 2.47 ns 5 (1975Ed01), 2.49 ns 3 (1971Si20), 2.38 ns 7 (1967Ba27), 2.37 ns 7 (1966Ra28), 2.42 ns 15 (1963Li08), 2.32 ns 8 (1961Gr29,1962Ba37), 2.53 ns 15 (1961Re12), 2.35 ns 20 (1952Be26). See datasets: ^{199}Au β ⁻ decay, ^{199}Hg IT decay and ^{199}Tl ε decay. μ: TDPAC (1977Kr11). Others: +0.91 9 (IPAC,1977Kr11), +0.60 15 (transient-field technique,1986Ko02), 1961Gr29, 1956Po14. Compilation: 2005St24. Q: Muonic x rays (1979Ha08). Others: 0.70 9 (TDPAC, 1973Ha61), +0.85 12 (muonic x rays,1983Gu02), +0.8 4 (Mössbauer effect,1985La21,1979Wu12). Compilation: 2005St24. Isomer shift (1985La21,1983Gu02). μ=-0.56 9 (1990Ba40) Q=+0.50 12 (1989Ra17,1983Gu02) J ^π : M1+E2 γ to 1/2 ⁻ ; L(d,t)=1. T _{1/2} : from ^{199}Au β ⁻ decay. Other: 70 ps 5 from Coul ex, 60 ps 9 from (γ,γ). μ: transient-field technique (1990Ba40). Others: -0.29 15 (transient-field,1986Ko02,1989Ra17), -0.47 8 (IMPAC,1986Ko02), 1974Do01, 1973Ka17. Compilation: 2005St24. Q: muonic x rays (1983Gu02). other: +0.62 15 (1979Ha08). Compilation: 2005St24.
208.20494 10	3/2 ⁻	69 ps 3	A CD FGHI	LMNO	J ^π : M1+E2 γ to 1/2 ⁻ ; L(d,t)=1. T _{1/2} : from B(E2)↑=0.113 13 in Coul ex. μ=+0.80 9 (1990Ba40) J ^π : E2 γ to 1/2 ⁻ ; L(p,d)=(3); γγ(θ) in Coul ex. T _{1/2} : from B(E2)↑=0.097 16 in Coul ex. μ: transient-field technique. Other: -0.70 25 (1986Ko02,1989Ra17). Compilation: 2005St24.
403.51 3	3/2 ⁻	5.8 ps 12	D FGH	MNO	XREF: L(?). J ^π : M1 γ's to 1/2 ⁻ and 3/2 ⁻ . J ^π : M1+E2 γ to 5/2 ⁻ ; M1 γ to 1/2 ⁻ . %IT=100 μ=-1.014703 3 (1989Ra17,1973Re04) Q=+1.2 5 (1989Ra17,1986U102) J ^π : M4+E5 γ to 5/2 ⁻ ; L(d,t)=6; μ consistent with configuration=νi _{13/2} . T _{1/2} : timing of 374γ and 158γ from isomer produced in (γ,γ') (2001Li17). Others: 42.6 min 2 (1969Kl06), 39.7 min 6 (1968Bo28), 43.0 min 5 (1965Sm02), 42 min 1 (1955Bo29), 44.4 min 5 (1948Mo33). Weighted average of all the values is: 42.66 min 22. %IT: %ε<0.1% from log ft syst. Isomer shift (1979St04,1985Kl09). μ,Q: NMR of nuclei polarized by optical pumping with β asymmetry detection. Other: 1972Co10. Compilation: 2005St24.
413.84 5	5/2 ⁻	115 ps 23	B D FG	MNO	XREF: L(?). XREF: n(670). J ^π : L(d,t)=3.
455.462 17	1/2 ⁻ ,3/2 ⁻		D FG	L NO	XREF: n(670). E(level): level in (n,γ) is possibly different from that in particle-transfer reactions since 5/2,7/2 ⁻ level is not expected to
492.297 18	3/2 ⁻		D FG	NO	
532.48 & 10	13/2 ⁺	42.67 min 9	B E	NO	
638 3				L NO	
667 3	5/2 ⁻ ,7/2 ⁻		H	nO	
667.4 9	1/2,3/2 [#]		FG	n	
695? 3			FG		

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Adopted Levels, Gammas (continued)

^{199}Hg Levels (continued)				
E(level) [†]	J ^π [‡]	XREF		Comments
699 3	5/2 ⁻ , 7/2 ⁻	H	NO	Be populated in (n,γ). J ^π : L(d,t)=3.
711.4? 25		FG		
736 5	1/2, 3/2, 5/2 ⁺ #	FG		XREF: F(?).
750.40 3	1/2 ⁻ , 3/2 ⁻	D FG	NO	J ^π : L(d,t)=1.
759 3		H		
822 4			0	
823.88& 23	(17/2 ⁺)@	E		
969 4	7/2 ⁻ , 5/2 ⁻		1 NO	J ^π : L(d,t)=3.
1004.1? 7		FG J 1		XREF: J(1000).
1036 3	1/2, 3/2, 5/2 ⁺ #	FG		XREF: G(?).
1104 4			0	
1221.17 4	1/2 ⁽⁻⁾ , 3/2 ⁽⁻⁾	D FGH	NO	XREF: G(?). J ^π : γ's to 1/2 ⁻ and 5/2 ⁻ ; log ft=6.1 from 1/2 ⁺ ; L(d,t)=L(d,p)=(3,1). E(level): probable doublet in (d,t) and (d,p).
1267.7 8	1/2, 3/2, 5/2 ⁺ #	FG L		
1274.1?b 4	(15/2 ⁺)@	E		
1317.7 15	1/2, 3/2, 5/2 ⁺ #	FG		XREF: G(?).
1327.8 9	1/2 ⁻ , 3/2 ⁻	FGH J	0	XREF: J(1340). J ^π : L(d,t)=1.
1357.2& 3	(21/2 ⁺)@	E		
1358.9 9	1/2, 3/2 [#]	FG J	0	XREF: G(?)J(1380).
1439.5 16	1/2 ⁻ , 3/2 ⁻	FG J	0	XREF: J(1420). J ^π : L(d,t)=1.
1456 6	(7/2 ⁻ , 5/2 ⁻)	H	0	J ^π : L(d,t)=L(d,p)=(3).
1517.8 25	1/2, 3/2 [#]	FG JK		XREF: F(?)J(1530)K(1490).
1561? 6			0	
1572.8 12	1/2, 3/2 [#]	FG		
1595.3 5	1/2, 3/2 [#]	FG k	0	XREF: G(?)O(?).
1614.4? 9		FG k		
1653.2 8	1/2 ⁽⁻⁾ , 3/2 ⁽⁻⁾ #	FGH	0	J ^π : L(d,t)=L(d,p)=(1).
1686 7			0	
1731.8 7	1/2, 3/2 [#]	FG J		XREF: J(1700).
1744.2 5	1/2, 3/2 [#]	FG		XREF: G(?).
1769.3b 3	(19/2 ⁺)@	E		
1780.9 5	1/2, 3/2 [#]	FG	0	
1800.1 12	1/2, 3/2, 5/2 ⁺ #	FG		XREF: G(?).
1822.2 16	1/2, 3/2 [#]	FG	1	
1853 7			1 0	
1927.3? 15		FG		
1953 8			0	
1971.4 5	1/2, 3/2 [#]	FG		
1988.3 20	1/2, 3/2 [#]	FG		
2038 8			0	
2067 3	1/2, 3/2, 5/2 ⁺ #	FG		XREF: G(?).
2094.0 12	1/2, 3/2 [#]	FG	0	XREF: G(?)O(?).
2107.3& 4	(25/2 ⁺)@	E		
2144.3 16	1/2, 3/2, 5/2 ⁺ #	FG		
2175 9			0	
2218 9			0	

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Adopted Levels, Gammas (continued) ^{199}Hg Levels (continued)

E(level) [†]	J ^π [‡]	XREF	Comments
2228.4 11	1/2,3/2 [#]	FG	0 XREF: O(?).
2241 4	1/2,3/2 [#]	FG	XREF: F(?).
2265 3	1/2,3/2 [#]	FG	
2279 9			0
2290.6 10	1/2,3/2 [#]	FG	
2332.0 ^a 4	(21/2 ⁻) [@]	E	
2345.3 12	1/2,3/2 [#]	FG	0 XREF: G(?)O(2360).
2399 3	1/2,3/2,5/2 ⁺ [#]	FGH	0 XREF: O(2384).
2412 3	1/2,3/2,5/2 ⁺ [#]	FGH	0 XREF: H(2424)O(?).
2425.6 ^a 4	(23/2 ⁻) [@]	E	
2451.4 15	1/2,3/2,5/2 ⁺ [#]	FG	XREF: F(?).
2462.1 25	1/2,3/2 [#]	FGH	
2487.8 ^a 4	(25/2 ⁻) [@]	E	
2494 3	1/2,3/2 [#]	FG	
2521? 10			0
2629.7 ^a 4	(27/2 ⁻) [@]	E	
2765.9 ^a 5	(29/2 ⁻) [@]	E	
3068.4 ^a 5	(31/2 ⁻) [@]	E	
3133? 13		H	
3199 13		H	
3245 13		H	
3273 13		H	
3338 13		H	
3413 14		H	
3431 14		H	
3511 14		H	
3582 14		H	
3604 14		H	
3626 15		H	
3648 15		H	
3930? 16		H	
3988 16		H	
4052 16		H	
4098 16		H	
4491? 18		H	
4808? 19		H	

[†] From least squares adjustment to adopted E γ 's where possible; from E γ of primary γ 's for levels seen in (n, γ) reactions only; and from (d,p), (d,t) or (p,d) for levels seen only in particle reactions.

[‡] Low-lying states are expected to have negative parity based on neutron hole in 3p_{1/2}, 2f_{5/2}, 3p_{3/2} coupled to 2⁺ core vibrations. The lowest high spin states have positive parity based on neutron hole in 1i_{13/2}.

[#] 1/2,3/2 is from strong population through a primary γ from 1/2⁺ resonance in (n, γ) (negative parity favored from syst of transition strengths), 1/2,3/2,5/2⁺ is from weak population from 1/2⁺ resonance.

[@] From proposed rotational band structure in (α ,3n γ).

[&] Band(A): Decoupled band built on $\nu_{13/2}$. Oblate deformation is expected in rotation-alignment model (1974Pr09). Search (by 1978Me11) for the 29/2⁺ member of this band was unsuccessful. For E γ <1 MeV, I γ (29/2 to 25/2) is <5. This supports the idea that the g.s. bands in even-even Hg change their character from configuration= $\pi h_{11/2}^{-2}$ for A $\leq$ 196 to configuration= $\nu_{13/2}^{-2}$ for

A $\geq$ 198, thus changing the blocking pattern in the neighboring odd-A Hg.

^a Band(B): $\nu_{13/2}^{-1} \otimes (5^-, 7^-, 9^-, \dots ^{198}\text{Hg core})$ (?).

^b Band(C): unfavored band built on $\nu_{13/2}$.

Adopted Levels, Gammas (continued)

$\gamma(^{199}\text{Hg})$										
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. [†]	δ	$\alpha^\&$	$I_{(\gamma+ce)}$	Comments
158.37859	5/2 ⁻	158.37851 [‡] 10	100	0.0	1/2 ⁻	E2 [‡]		0.914		B(E2)(W.u.)=17.6 3 $\alpha(K)=0.296$; $\alpha(L)=0.461$; $\alpha(M)=0.119$; $\alpha(N+..)=0.0374$
208.20494	3/2 ⁻	49.82635 [‡] 12	4.13 [‡] 11	158.37859	5/2 ⁻	M1+E2 [‡]	-0.044 [‡] 4	11.7		B(M1)(W.u.)=0.043 4; B(E2)(W.u.)=12.5 25 $\alpha(L)=8.92$ 4; $\alpha(M)=2.08$ 1
		208.20481 [‡] 12	100.0 [‡] 13	0.0	1/2 ⁻	M1+E2 [‡]	-0.388 [‡] 9	0.937		B(M1)(W.u.)=0.0125 7; B(E2)(W.u.)=16.1 11 $\alpha(K)=0.751$ 4; $\alpha(L)=0.142$; $\alpha(M)=0.0334$ 2; $\alpha(N+..)=0.0106$
403.51	3/2 ⁻	195.30 5	15 2	208.20494	3/2 ⁻	M1		1.23		B(M1)(W.u.)=0.051 13 $\alpha(K)=1.007$; $\alpha(L)=0.170$; $\alpha(M)=0.0394$; $\alpha(N+..)=0.0126$
		245.1 10	≤ 2.2	158.37859	5/2 ⁻	[M1,E2]		0.43 23		
		403.50 4	100 5	0.0	1/2 ⁻	M1+E2	+0.32 2	0.157		B(M1)(W.u.)=0.035 8; B(E2)(W.u.)=8.1 20 $\alpha(K)=0.129$ 1; $\alpha(L)=0.0219$ 2; $\alpha(M)=0.00510$ 3; $\alpha(N+..)=0.00162$ Mult., δ : from Coul ex. $I_{(\gamma+ce)}$: from ¹⁹⁹ Tl ε decay.
413.84	5/2 ⁻	(10.4 2)		403.51	3/2 ⁻	[M1,E2]			≈ 5	
		205.6 1	5 2	208.20494	3/2 ⁻	[M1,E2]		0.7 4		
		255.5 1	6 2	158.37859	5/2 ⁻	[M1,E2]		0.38 20		
		413.85 8	100 13	0.0	1/2 ⁻	E2		0.0437		B(E2)(W.u.)=4.8 10 $\alpha(K)=0.0298$; $\alpha(L)=0.0105$; $\alpha(M)=0.00261$; $\alpha(N+..)=0.00082$ Mult.: from $\gamma\gamma(\theta)$ Coul ex. $\alpha(L)=7.74$; $\alpha(M)=1.80$; $\alpha(N+..)=0.579$ $\alpha(K)=0.523$; $\alpha(L)=0.0877$; $\alpha(M)=0.0204$; $\alpha(N+..)=0.00650$ $\alpha(K)=0.0651$; $\alpha(L)=0.0343$; $\alpha(M)=0.00870$; $\alpha(N+..)=0.00272$ $\alpha(K)=0.1004$; $\alpha(L)=0.0166$; $\alpha(M)=0.00385$; $\alpha(N+..)=0.00123$ $\alpha(L)=21.31$; $\alpha(M)=4.97$ $\alpha(K)=0.357$; $\alpha(L)=0.597$; $\alpha(M)=0.0139$; $\alpha(N+..)=0.00442$ $\alpha(K)=0.222$ 2; $\alpha(L)=0.376$ 1; $\alpha(M)=0.00875$ 3; $\alpha(N+..)=0.00279$ δ : $\gamma\gamma(\theta)$ data in ¹⁹⁹ Tl ε decay. $\alpha(K)=0.0818$; $\alpha(L)=0.0135$; $\alpha(M)=0.00313$; $\alpha(N+..)=0.00100$
455.462	1/2 ⁻ ,3/2 ⁻	51.93 6	0.19 6	403.51	3/2 ⁻	(M1)		10.1		
		247.26 3	75 4	208.20494	3/2 ⁻	M1		0.637		
		297.07 6	2.8 3	158.37859	5/2 ⁻	(E2)		0.111		
		455.46 3	100 5	0.0	1/2 ⁻	M1		0.122		
492.297	3/2 ⁻	36.83 3	0.51 11	455.462	1/2 ⁻ ,3/2 ⁻	M1		27.9		
		284.09 3	100 5	208.20494	3/2 ⁻	M1		0.435		
		333.93 4	80 4	158.37859	5/2 ⁻	M1+E2	+0.22 2	0.271		
		492.30 4	69 3	0.0	1/2 ⁻	M1		0.0994		

Adopted Levels, Gammas (continued)

 $\gamma(^{199}\text{Hg})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. [†]	δ	$\alpha^\&$	Comments
532.48	13/2 ⁺	(118.6 [#])	$\approx 8 \times 10^{-5\#}$	413.84	5/2 ⁻	[M4]		2310	$\alpha(\text{K})=175$; $\alpha(\text{L})=1523$; $\alpha(\text{M})=499$; $\alpha(\text{N}+..)=174$
		374.1 [#] 1	100 [#] 8	158.37859	5/2 ⁻	M4+E5	+0.092 15	6.0	B(M4)(W.u.)=2.01 5; B(E5)(W.u.)=143 25 $\alpha(\text{K})=3.55$; $\alpha(\text{L})=1.95$; $\alpha(\text{M})=0.527$; $\alpha(\text{N}+..)=0.171$ Mult., δ : from ^{199}Hg IT decay. The B(E5)(W.u.) value is considerably higher than the syst (1973Ra32) values.
750.40	1/2 ⁻ , 3/2 ⁻	258.14 11	6.9 7	492.297	3/2 ⁻	[M1,E2]		0.37 20	
		294.94 10	5.0 5	455.462	1/2 ⁻ , 3/2 ⁻	[M1,E2]		0.25 14	
		336.5 1	13.6 13	413.84	5/2 ⁻	[M1,E2]		0.18 10	
		346.89 8	12.7 13	403.51	3/2 ⁻	[M1,E2]		0.16 9	
		542.21 5	25 2	208.20494	3/2 ⁻	[M1,E2]		0.05 3	
		592.0 1	10 4	158.37859	5/2 ⁻	[M1,E2]		0.040 22	
		750.4 1	100 5	0.0	1/2 ⁻	[M1,E2]		0.022 11	
823.88	(17/2 ⁺)	291.4 [@] 2	100	532.48	13/2 ⁺	(E2) [@]		0.117	$\alpha(\text{K})=0.0682$; $\alpha(\text{L})=0.0369$; $\alpha(\text{M})=0.00937$; $\alpha(\text{N}+..)=0.00293$
1221.17	1/2 ⁽⁻⁾ , 3/2 ⁽⁻⁾	470.77 13	2.2 4	750.40	1/2 ⁻ , 3/2 ⁻	[M1,E2]		0.07 4	
		728.86 11	2.5 3	492.297	3/2 ⁻	[M1,E2]		0.024 12	
		765.7 2	≈ 0.7	455.462	1/2 ⁻ , 3/2 ⁻	[M1,E2]		0.021 11	
		807.3 1	2.8 3	413.84	5/2 ⁻	[M1,E2]		0.019 9	
		817.67 10	23.2 14	403.51	3/2 ⁻	[M1,E2]		0.018 9	
		1012.95 10	100 5	208.20494	3/2 ⁻	[M1,E2]		0.011 5	
		1062.8 1	14.1 14	158.37859	5/2 ⁻	[M1,E2]		0.010 4	
		1221.16 10	1.7 2	0.0	1/2 ⁻	[M1,E2]		0.007 3	
1274.1?	(15/2 ⁺)	741.6 2	100	532.48	13/2 ⁺	M1+E2	-1.3 5	0.020 6	$\alpha(\text{K})=0.016 5$; $\alpha(\text{L})=0.0029 7$ δ : $\gamma(\theta)$ and ce data in ($\alpha, 3\text{ny}$).
1357.2	(21/2 ⁺)	533.3 2	100	823.88	(17/2 ⁺)	(E2)			
1769.3	(19/2 ⁺)	945.4 2	100	823.88	(17/2 ⁺)	(M1+E2)		0.013 6	
2107.3	(25/2 ⁺)	749.9 2	100	1357.2	(21/2 ⁺)	(E2)		0.0109	$\alpha(\text{K})=0.00849$; $\alpha(\text{L})=0.00183$
2332.0	(21/2 ⁻)	974.8 2	100	1357.2	(21/2 ⁺)	(E1)			
2425.6	(23/2 ⁻)	1068.6 2	100	1357.2	(21/2 ⁺)	(E1)			
2487.8	(25/2 ⁻)	155.8 5	≈ 10	2332.0	(21/2 ⁻)				
		380.5 2	100 24	2107.3	(25/2 ⁺)	E1		0.0161	$\alpha(\text{K})=0.0133$; $\alpha(\text{L})=0.00215$; $\alpha(\text{M})=0.00050$; $\alpha(\text{N}+..)=0.00016$
2629.7	(27/2 ⁻)	141.6	<40	2487.8	(25/2 ⁻)				
		204.3 2	20 4	2425.6	(23/2 ⁻)				
		522.3 2	100 20	2107.3	(25/2 ⁺)				

Adopted Levels, Gammas (continued)

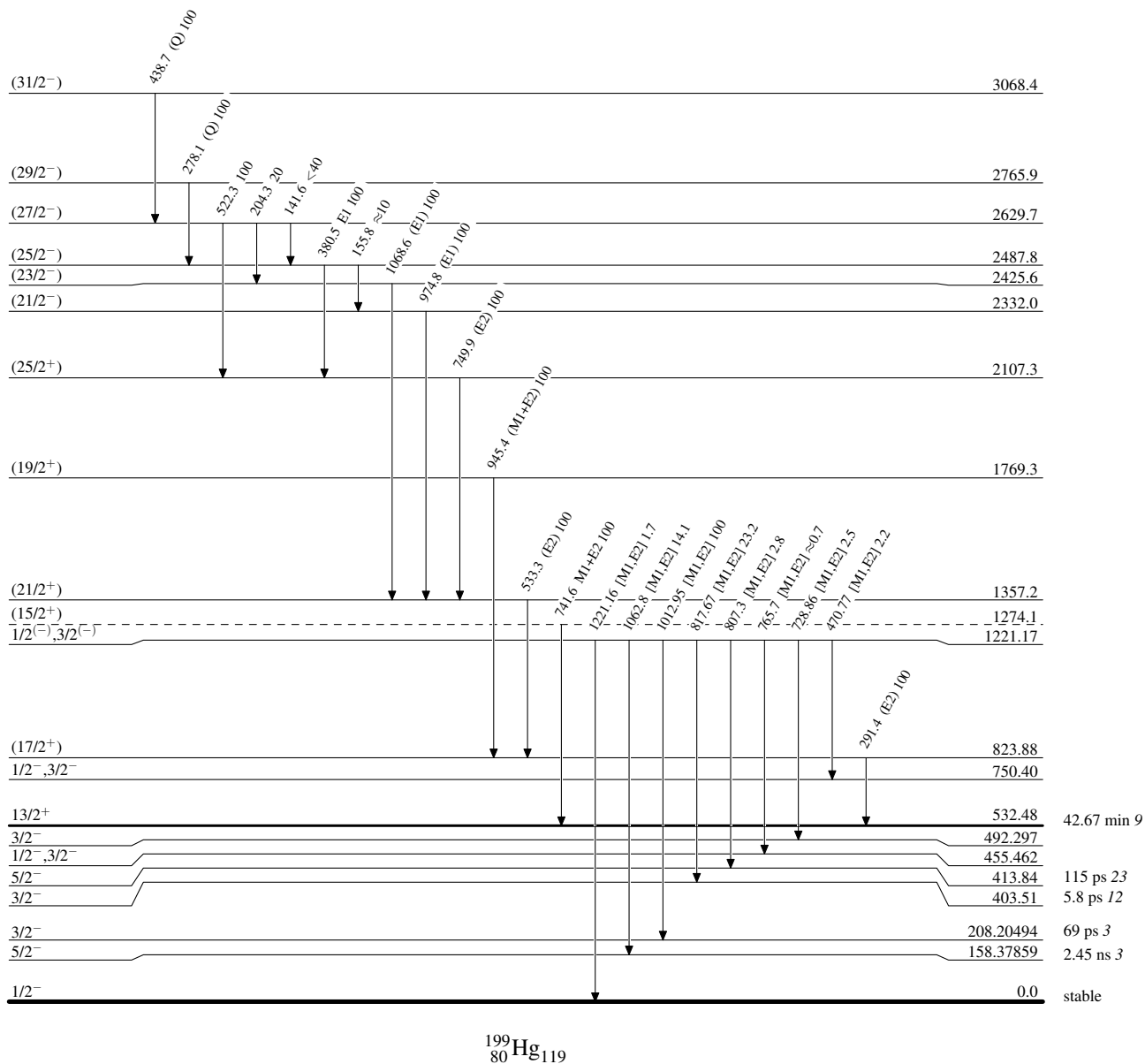
$\gamma(^{199}\text{Hg})$ (continued)

<u>E_i(level)</u>	<u>J^{π}_i</u>	<u>E_{γ}[†]</u>	<u>I_{γ}[†]</u>	<u>E_f</u>	<u>J^{π}_f</u>	<u>Mult.[†]</u>
2765.9	(29/2 ⁻)	278.1 2	100	2487.8	(25/2 ⁻)	(Q)
3068.4	(31/2 ⁻)	438.7 2	100	2629.7	(27/2 ⁻)	(Q)

† From ¹⁹⁹Tl ε decay for gammas deexciting levels with E≤1221.17, from (α ,3n γ) for levels with E>1221.17, unless otherwise noted.
‡ From ¹⁹⁹Au β^- decay.
From ¹⁹⁹Hg IT decay.
@ From (α ,3n γ).
& 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.

Adopted Levels, GammasLevel Scheme

Intensities: Relative photon branching from each level



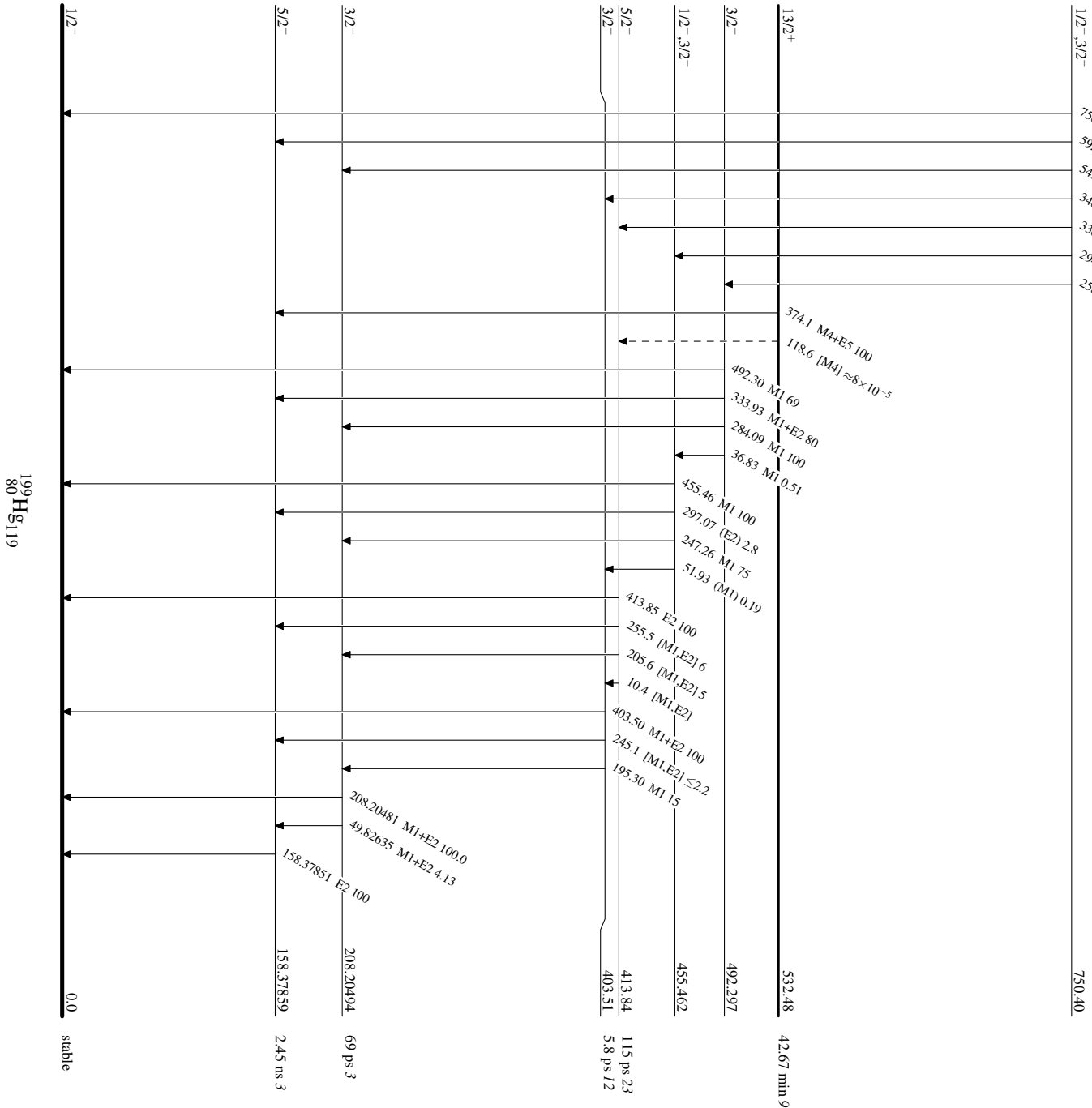
Adopted Levels, Gammas

Level Scheme (continued)

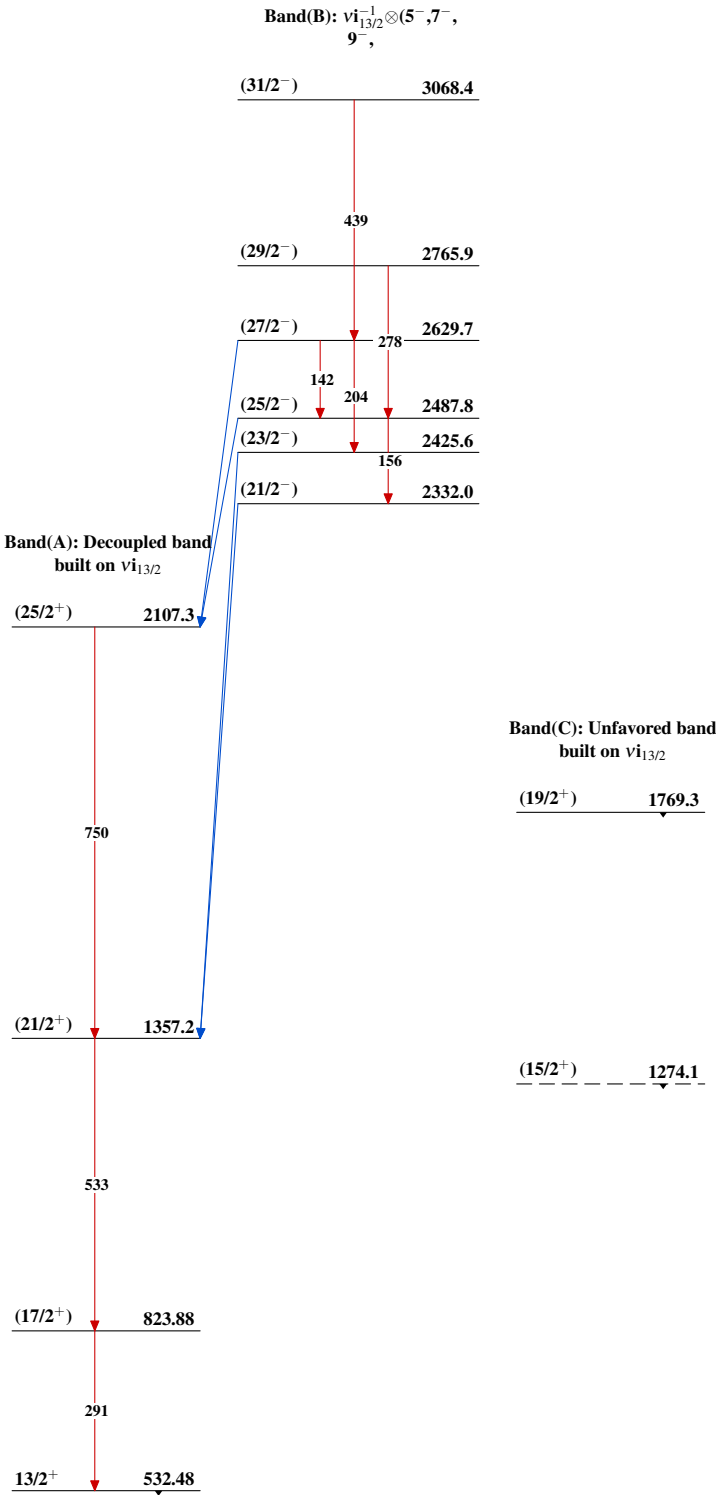
Legend

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)



Adopted Levels, Gammas



$^{199}_{80}\text{Hg}_{119}$