Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 187,355 (2023)	20-Sep-2022

Q(β^-)=−482 *14*; S(n)=6230.6 *6*; S(p)=7711 *27*; Q(α)=332.3 *8* 2021Wa16

^{201}Hg Levels

Cross Reference (XREF) Flags

A	^{201}Au β^- decay	F	^{201}Hg(d,d′),^{201}Hg(p,p′)
B	^{201}Hg IT decay	G	Coulomb excitation
C	^{201}Tl ε decay	H	^{202}Hg(d,t)
D	^{200}Hg(d,p)	I	^{203}Tl(μ,Xγ)
E	^{201}Hg(γ,γ')		

E(level)[†]	J$^\pi$	T$_{1/2}$	XREF	Comments
0[&]	3/2$^-$	stable	ABCDEFGHI	μ=−0.5580 *7* (1973Re04,2019StZV) Q=+0.387 *6* (2005Bi03,2021StZZ) J$^\pi$: Optical spectroscopy (1931Sc03,1935Sc04); π from μ and L(d,t)=1. μ: Measured using the nuclear magnetic resonance using optically pumped ions technique; Other: 0.560226 *3* (1961Ca21). Q: Measured using the muonic x-ray hyperfine structure technique; Others: 0.38 *4* (1986Ul02), 0.39 *5* or 0.27 *4* (1979Ha08), 0.41 *4* (1965Mu15), 0.46 *4* (1960Mc11) and 0.53 *4* (1975Ed01). Magnetic octupole moment=−0.15 (1976Fu06). Isotope shift studied by 1973BoVN, 1975Ge04. Hyperfine anomalies studied by 1973Re04.
1.5648[a] *10*	1/2$^-$	81 ns *5*	A C E G I	J$^\pi$: 1.5648γ M1+E2 to 3/2$^-$; $\gamma\gamma(\theta)$ in 1983Sc38 excludes J^π=3/2$^-$ and 5/2$^-$. T$_{1/2}$: From γ-ce(Δt) in 2007Me12. Other: 56 ns *19* from B(E2)↑=0.127 *20*, weighted average of 0.104 *25* and 0.145 *22* (1979Ha08). Since the uncertainties quoted in 1979Ha08 are only statistical and the Coulomb excitation contributions to the 26 keV level (J^π=5/2$^-$) were not taken into account, the value should be considered as approximate. B(E2)↑=0.104 *25* and 0.145 *22* (1979Ha08).
26.2738[b] *3*	5/2$^-$	629 ps *18*	ABCDE GHI	XREF: D(28)H(27). E(level): From nuclear resonant scattering in 2005Is19. J$^\pi$: 26.34γ M1+E2 to 3/2$^-$; L(d,t)=1+3; L(d,p)=1+3; J^π=5/2$^-$ from $\gamma(\theta)$ in Coulomb excitation (1980Bo05). T$_{1/2}$: From the time difference between the incident X-ray and the fluorescence signal from the ^{201}Hg atom in 2018Yo02. Other: 630 ps *50* from ce-γ(Δt) in 1983Sc38. B(E2)↑≤0.07 (1983Sc38), 0.00 *15* and 0.00 *18* (1979Ha08).
32.155 *13*	3/2$^-$	55 ps *24*	A CDEFGHI	J$^\pi$: 30.6γ M1+E2 to 1/2$^-$; 32.19γ M1+E2 to 3/2$^-$; $\gamma\gamma(\theta)$ in ^{201}Tl ε decay excludes J^π=1/2$^-$. T$_{1/2}$: From B(E2)↑=0.14 *5* (1983Sc38); others: 0.2 ns (1961Re12), ≤2 ns (1961Be29) and >0.1 ns (1971Wa17). B(E2)↑=0.14 *5* (1983Sc38) in Coulomb excitation; Others: 0.13 *15* and 0.10 *4* (1979Ha08). Q: 0.3 *15* or 0.09 *20* (1979Ha08) using muonic x-ray hyperfine structure technique.
167.48 *4*	1/2$^-$	<44 ps	A CD FGH	XREF: D(169)F(163)H(168). J$^\pi$: 165.88γ M1 to 1/2$^-$, 167.43γ M1+E2 to 3/2$^-$; L(d,t)=1; $\gamma\gamma(\theta)$ in 1975Ho08 and 1983Sc38 excludes J^π=3/2$^-$. T$_{1/2}$: From B(E2)↑=0.016 *3*, weighted average of 0.017 *4* (1983Sc38) and 0.014 *4* (1980Bo05). Other: <2 ns in 1961Be29.

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Adopted Levels, Gammas (continued)

^{201}Hg Levels (continued)

E(level)[†]	J^π	$T_{1/2}$	XREF	Comments
				B(E2)↑=0.017 *4* (1983Sc38) and 0.014 *4* (1980Bo05) in Coulomb excitation, and 0.017 *12* (1979Ha08).
384.604 *17*	(5/2)$^-$		A FG	XREF: F(382). J^π: 352.42γ M1(+E2) to 3/2$^-$; 358.36γ M1+E2 to 5/2$^-$; population in Coulomb excitation. B(E2)↑=0.085 *5* (1980Bo05) in Coulomb excitation.
414.543 *18*	7/2$^-$	21.0 ps *9*	D FG I	XREF: D(417)F(412). J^π: 414.49γ E2 to 3/2$^-$, 388.26γ M1+E2 to 5/2$^-$. $T_{1/2}$: From B(E2)↑=0.152 *6* (1980Bo05) in Coulomb excitation. B(E2)↑=0.152 *6* (1980Bo05) in Coulomb excitation.
464.41 *4*	5/2$^-$	2.6 ps *+10−11*	A D FGH	XREF: D(466)F(465). J^π: L(d,t)=3; 464.39γ M1+E2 to 3/2$^-$. B(E2)↑=0.209 *5* (1980Bo05) in Coulomb excitation. $T_{1/2}$: From B(E2)↑=0.209 *5* (1980Bo05) in Coulomb excitation.
542.81 *17*	1/2$^-$,3/2,5/2		A I	J^π: 517.0γ to 5/2$^-$; 542.6γ to 3/2$^-$; population in ^{201}Au β^- decay (J^π=3/2$^+$) argues against J^π=7/2$^-$.
547.32 *10*	9/2$^-$	<20 ns	B	J^π: 521.0γ E2 to 5/2$^-$; not population in ^{201}Au β^- decay (J^π=3/2$^+$) argues against J^π=1/2$^-$. $T_{1/2}$: Upper limit from 1964Br27.
553.01 *6*	1/2$^-$,3/2$^-$,5/2$^-$		A D G	XREF: D(550). J^π: 385.1γ to 1/2$^-$, 526.8γ to 5/2$^-$; population in Coulomb excitation would argue against J^π=3/2$^+$. B(E2)↑=0.035 *2* (1980Bo05) in Coulomb excitation.
645.4 *3*	(5/2)$^-$		A H	J^π: L(d,t)=3. The feeding of this level in ^{201}Au β^- decay (J^π=3/2$^+$) would argue against J^π=7/2$^-$.
732.3 *4*	1/2$^-$,3/2$^-$		A D H	XREF: D(735). J^π: L(d,t)=1.
766.22[c] *15*	13/2$^+$	94 μs *2*	B H	J^π: 218.9γ M2+E3 to 9/2$^-$; L(d,t)>4. $T_{1/2}$: Weighted average of 92 μs *3* (1961Kr01), 100 μs *6* (1962Eu01) and 94 μs *3* (1976Uy01) in ^{201}Hg IT decay.
953[‡] *4*			H	
1035[‡] *4*	1/2$^-$,3/2$^-$		H	J^π: L(d,t)=1.
1075[‡] *4*			H	
1187.8 *5*			A	
1287[‡] *5*	5/2$^-$,7/2$^-$		D H	XREF: D(1280). J^π: L(d,t)=3.
1336[#] *5*			D F	XREF: F(1325).
1360[‡] *5*			D H	XREF: D(1367).
1505[@] *6*			F	
1583[‡] *6*			H	
1591[‡] *6*			H	
1693[‡] *7*	5/2$^-$,7/2$^-$		H	J^π: L(d,t)=3.
1710[‡] *7*	(5/2$^-$,7/2$^-$)		F H	XREF: F(1707). J^π: L(d,t)=(3).
1737[‡] *7*	1/2$^-$,3/2$^-$		H	J^π: L(d,t)=1.
1946[#] *8*	(5/2$^-$,7/2,9/2$^+$)		D	J^π: L(d,p)=(4,3).
1971[‡] *8*	(1/2$^-$,3/2$^-$)		H	J^π: L(d,t)=(1).
2037[‡] *8*	($^-$)		H	J^π: L(d,t)=(3,5); J^π=5/2$^-$,7/2$^-$,9/2$^-$ or 11/2$^-$.
2081[#] *8*	(5/2$^-$,7/2,9/2$^+$)		D	J^π: L(d,p)=(4,3).

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Adopted Levels, Gammas (continued)

^{201}Hg Levels (continued)

E(level)[†]	J$^{\pi}$	XREF	Comments
2096[‡] 8	(−)	H	J$^{\pi}$: L(d,t)=(3,5); J^{π}=5/2−,7/2−,9/2− or 11/2−.
2103[#] 8	7/2+,9/2+	D	J$^{\pi}$: L(d,p)=4.
2478[‡] 10		H	
2526[@] 10		F	
2628[#] 11	7/2+,9/2+	D F	J$^{\pi}$: L(d,p)=4.
2663?[‡]		D H	XREF: D(2660).
2681[@] 11		F	
2795[#] 11	(+)	D	J$^{\pi}$: L(d,p)=(4,2). J^{π}=7/2+, 9/2+ or 3/2+, 5/2+.
2863[#] 12		D	
2890[#] 12		D F	XREF: F(2891).
2911[#] 12		D	
2938[#] 12		D	
2976[#] 12	(+)	D	J$^{\pi}$: L(d,p)=(4,2). J^{π}=7/2+, 9/2+ or 3/2+, 5/2+.
2995[#] 12	(+)	D	J$^{\pi}$: L(d,p)=(4,2). J^{π}=7/2+, 9/2+ or 3/2+, 5/2+.
3115[#] 13	(+)	D	J$^{\pi}$: L(d,p)=(2,4). J^{π}=3/2+, 5/2+ or 7/2+, 9/2+.
3172[#] 13		D	
3196[#] 13		D	
3233[#] 13		D	
3252[#] 13		D	
3270[#] 13		D	
3294[#] 13	(+)	D	J$^{\pi}$: L(d,p)=(2,4). J^{π}=3/2+, 5/2+ or 7/2+, 9/2+.
3539[#] 14	(+)	D	J$^{\pi}$: L(d,p)=(2,4). J^{π}=3/2+, 5/2+ or 7/2+, 9/2+.
3579[#] 14		D	
3712[#] 15		D	
3735[@] 15		F	
3768[#] 15		D	
3814[#] 15	(+)	D	J$^{\pi}$: L(d,p)=(4,2). J^{π}=7/2+, 9/2+ or 3/2+, 5/2+.
3837[#] 15	(+)	D	J$^{\pi}$: L(d,p)=(2,6). J^{π}=3/2+, 5/2+ or 11/2+, 13/2+.
3870[#] 15		D	
3884[#] 16		D	
3900[#] 16		D	
3921[#] 16		D	
3965[@] 16		F	
4007[#] 16	(+)	D	J$^{\pi}$: L(d,p)=(2,6). J^{π}=3/2+, 5/2+ or 11/2+, 13/2+. E(level): Complex peak.
4070[#] 16		D	
4095[#] 16		D	
4123[#] 16		D	
4233[#] 17		D	
4284[#] 17	(+)	D	J$^{\pi}$: L(d,p)=(2,4). J^{π}=3/2+, 5/2+ or 7/2+, 9/2+.
4313[#] 17	(+)	D	J$^{\pi}$: L(d,p)=(2,4). J^{π}=3/2+, 5/2+ or 7/2+, 9/2+.
4362[#] 17	(+)	D	J$^{\pi}$: L(d,p)=(4,0). J^{π}=7/2+, 9/2+ or 1/2+.
4381[#] 18		D	
4405[#] 18		D	

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Adopted Levels, Gammas (continued)

^{201}Hg Levels (continued)

E(level)[†]	J^π	XREF	Comments
4418?[#]		D	
4467?[#]		D	
4484[#] *18*		D	
4579[#] *18*		D	
4591[#] *18*	$(^+)$	D	J^π: L(d,p)=(4,2). J^π=7/2$^+$, 9/2$^+$ or 3/2$^+$, 5/2$^+$.
4649[#] *19*	$(^+)$	D	J^π: L(d,p)=(4,2). J^π=7/2$^+$, 9/2$^+$ or 3/2$^+$, 5/2$^+$.

[†] From a least-squares fit to Eγ, unless otherwise stated.
[‡] From ^{202}Hg(d,t). ΔE(level) determined by the evaluator from ΔE=0.4%, reported in 1972Mo12 for well-resolved peaks.
[#] From ^{200}Hg(d,p). ΔE(level) determined by the evaluator from ΔE=0.4%, reported in 1972Mo12 for well-resolved peaks.
[@] From ^{201}Hg(d,d′), ^{201}Hg(p,p′).
[&] Configuration=$\nu\ p_{3/2}^{-1}$.
[a] Configuration=$\nu\ p_{1/2}^{-1}$.
[b] Dominant configuration=$\nu\ f_{5/2}^{-1}$.
[c] Configuration=$\nu\ i_{13/2}^{-1}$.

$\gamma(^{201}$Hg)

E_i(level)	J^π_i	E_γ†	I_γ†	E_f	J^π_f	Mult.†	δ†	α&	Comments
1.5648	1/2⁻	1.5648 *10*	100	0	3/2⁻	M1+E2	0.0105 *14*	4.7×10⁴ *7*	B(M1)(W.u.)=0.00151 *+29−21*; B(E2)(W.u.)=25 *+9−7* E_γ: From 1997Ge09. Other: 1.565 keV *6* (1987Dr06). Mult.,δ: From 1987Dr06, based on N1/N2=1.2 *2*, N1/N3=1.1 *2*, N2/N3=0.92 *15*, N4/N3=0.03 *2* and N5/N3=0.04 *2*. Other: δ=0.0145 *+19−14* from N1/N2=0.94 *31*, N1/N3=0.60 *20*, N2/N3=0.64 *5*, N4/N3=0.042 *18*, N5/N3=0.043 *23*, N4/N5=0.98 *16*, O2/N3=0.158 *30*, O3/N3=0.20 *4*, O1/O3=0.64 *12*, *32*, O1/O2=0.81 O1/N3=0.128 *30* and O2/O3=0.79 *19* in 1997Ge09. α: 4.7E+4 7 from 1987Dr06.
26.2738	5/2⁻	26.2738 *3*	100	0	3/2⁻	M1+E2	0.012 *8*	72.9 *13*	B(M1)(W.u.)=0.0261 *9*; B(E2)(W.u.)=2.0 *+37−16* α(L)=55.9 *10*; α(M)=13.05 *24* α(N)=3.27 *6*; α(O)=0.618 *11*; α(P)=0.0470 *7* E_γ: From nuclear resonant scattering in 2005Is19. Other: 26.34 keV *7* in 1983Sc38. Mult.,δ: From M1:M2:M3=100:12.0 *20*:1.5 *7* in 1983Sc38 and the briccmixing program.
32.155	3/2⁻	(5.881 *13*)	≈0.03	26.2738	5/2⁻	[M1]		1451 *22*	α(M)=1114 *17* α(N)=281 *4*; α(O)=53.0 *8*; α(P)=4.04 *6* E_γ: Not observed directly, but required from the ce-γ coincidence data in 1983Sc38. Eγ from level energy differences.
		30.60 *3*	98.1 *19*	1.5648	1/2⁻	M1+E2	0.013 *5*	46.4 *7*	B(M1)(W.u.) ≈ 0.0067. α(L)=35.6 *5*; α(M)=8.30 *13* α(N)=2.082 *32*; α(O)=0.393 *6*; α(P)=0.0299 *4* Mult.: From L3:L1=0.0136 *21*, L2:L1=0.105 *11* and L3:L2=0.130 *24* in 1983Sc38; L1:L2:L3:M1:M2:N:O1=50.9 *40*:5.0 *6*:0.56 *8*:14.2 *15*:1.5 *5*:4.0 *5*:0.70 *15* in 1960He05; A_2(135.5γ-30.6γ(θ))=0.159 *26* in 1975Ho08. δ: From L3/L1, L2/L1 and L3/L2 in 1983Sc38 and the briccmixing program. Others: ≤0.03 from γγ(θ) in 1975Ho08; −0.0634≤δ≤+0.0515 from γγ(θ) in 1978No06; 0.006 *16* from from L1:L2:L3 in 1960He05 and the briccmixing program.
		32.19 *3*	100.0 *19*	0	3/2⁻	M1+E2	0.0204 *25*	40.2 *6*	B(M1)(W.u.) ≈ 0.16 *+12−5* $B(E2)(W.u.) ≈ 10 *+15−6*. α(L)=30.8 *4*; α(M)=7.20 *11* α(N)=1.804 *26*; α(O)=0.341 *5*; α(P)=0.0257 *4* Mult.: From L1:L2:L3=100:11.3 *5*:1.75 *15* in 1983Sc38; L3:L1=0.0130 *20*, L2:L1=0.094 *8*, L3:L2=0.138 *24*, L:M=3.9 *4*, M1:M2=8.4 *3*, M:N=4.6 *6* in 1960He05; A_2(135.5γ-32.2γ)(θ)=−0.193 *28* in 1975Ho08. δ: From L3/L1, L2/L1 and L3/L2 in 1983Sc38 and the briccmixing program. Others: ≤0.03 from γγ(θ) in 1975Ho08;

From ENSDF

$^{201}_{80}Hg_{121}$-5

Adopted Levels, Gammas (continued)

$\gamma(^{201}Hg)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[†]	δ[†]	α[&]	Comments
									$-0.0361\le\delta\le+0.0506$ from $\gamma\gamma(\theta)$ in 1978No06; 0.013 *11* from from L1:L2:L3 in 1960He05 and the briccmixing program. B(M1)(W.u.) ≈ 0.14 +*10*−*4* $B(E2)(W.u.) ≈ 20 +*17*−*7*.
167.48	1/2⁻	135.34 *4*	26.05 *18*	32.155	3/2⁻	M1+E2	−0.07 *4*	3.32 *5*	α(K)=2.71 *4*; α(L)=0.463 *7*; α(M)=0.1080 *18* α(N)=0.0271 *4*; α(O)=0.00512 *8*; α(P)=0.000388 *6* Mult.: From K:L1:L2:L3:M1:N1=56.0 *4*:7.9 *7*:0.77 *15*:0.07 *3*: 2.2 *3*:0.60 *9*; $\gamma\gamma(\theta)$ in 1975Ho08 and 1983Sc38. δ: From $\gamma\gamma(\theta)$ in 1975Ho08; other: 0.000 *4* from K:L1:L2:L3:M1:N1 in 1960He05 and the briccmixing program.
		141.1 *2*	≈0.03	26.2738	5/2⁻	[E2]		1.389 *21*	α(K)=0.374 *5*; α(L)=0.760 *12*; α(M)=0.1980 *30* α(N)=0.0491 *8*; α(O)=0.00821 *13*; α(P)=4.92×10⁻⁵ *7* E_γ: From 1983Sc38.
		165.88 *7*	1.47 *2*	1.5648	1/2⁻	M1		1.869 *26*	α(K)=1.532 *22*; α(L)=0.258 *4*; α(M)=0.0602 *8* α(N)=0.01509 *21*; α(O)=0.00286 *4*; α(P)=0.0002184 *31* Mult.: From K:L1=1.65 *20*:0.25 *5* in 1960He05.
		167.43 *7*	100	0	3/2⁻	M1+E2	0.07 *6*	1.815 *29*	α(K)=1.486 *25*; α(L)=0.252 *4*; α(M)=0.0588 *9* α(N)=0.01474 *23*; α(O)=0.00279 *4*; α(P)=0.000212 *4* Mult.: From K:L1:L2:L3:M1:N1:O1=100:14.6 *12*:1.6 *2*:0.18 *4*:4.0 *4*: 1.10 *15*:0.27 *6* in 1960He05. δ: From K:L1:L2:L3 in 1960He05 and the briccmixing program.
384.604	(5/2)⁻	352.42[‡] *5*	100.0[‡] *16*	32.155	3/2⁻	M1(+E2)	+0.07 *7*	0.232 *4*	α(K)=0.1909 *34*; α(L)=0.0318 *5*; α(M)=0.00739 *11* α(N)=0.001853 *28*; α(O)=0.000351 *5*; α(P)=2.69×10⁻⁵ *5* Mult.,δ: From $\gamma(\theta)$ (A_2=−0.047 *24*) in Coulomb excitation (1980Bo05). other (alternative): δ=−4.5 +*1.2*−*1.7* (1980Bo05).
		358.36[‡] *4*	54.4[‡] *9*	26.2738	5/2⁻	M1+E2		0.14 *8*	α(K)=0.11 *7*; α(L)=0.024 *7*; α(M)=0.0057 *14* α(N)=0.00142 *35*; α(O)=2.6×10⁻⁴ *8*; α(P)=1.6×10⁻⁵ *10* Mult.,δ: From $\gamma(\theta)$ (A_2=+0.08 *6*) in Coulomb excitation (1980Bo05); −0.3≤δ≤3.9 (1980Bo05).
		384.60[‡] *2*	79.2[‡] *14*	0	3/2⁻	M1+E2		0.12 *7*	α(K)=0.09 *6*; α(L)=0.019 *6*; α(M)=0.0046 *13* α(N)=0.00115 *32*; α(O)=2.1×10⁻⁴ *7*; α(P)=1.3×10⁻⁵ *8* Mult.,δ: From $\gamma(\theta)$ (A_2=−0.144 *22*) in Coulomb excitation (1980Bo05). δ=−0.23 *9* or −1.8 *3* (1980Bo05).
414.543	7/2⁻	382.45[‡] *3*	82.8[‡] *14*	32.155	3/2⁻	E2		0.0535 *7*	B(E2)(W.u.)=13.5 *6* α(K)=0.0355 *5*; α(L)=0.01357 *19*; α(M)=0.00339 *5* α(N)=0.000846 *12*; α(O)=0.0001481 *21*; α(P)=4.66×10⁻⁶ *7* Mult.: From $\gamma(\theta)$ (A_2=+0.202 *26*) in Coulomb excitation (1980Bo05).
		388.26[‡] *3*	89.6[‡] *14*	26.2738	5/2⁻	M1+E2	+1.5 +*5*−*7*	0.09 *4*	B(M1)(W.u.)=0.0017 +*14*−*6*; B(E2)(W.u.)=9.4 +*15*−*34* α(K)=0.069 *34*; α(L)=0.0165 *35*; α(M)=0.0040 *7*

From ENSDF

$^{201}_{80}Hg_{121}$-6

$\gamma(^{201}Hg)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[†]	δ[†]	α[&]	Comments
									α(N)=0.00099 *19*; α(O)=0.00018 *4*; α(P)=1.0×10^{-5} *5* Mult.,δ: From $\gamma(\theta)$ (A_2=+0.38 *3*) in Coulomb excitation (1980Bo05).
414.543	7/2$^-$	414.49[‡] *3*	100.0[‡] *19*	0	3/2$^-$	E2		0.0432 *6*	B(E2)(W.u.)=10.9 *5* α(K)=0.0295 *4*; α(L)=0.01033 *14*; α(M)=0.00257 *4* α(N)=0.000640 *9*; α(O)=0.0001127 *16*; α(P)=3.89×10^{-6} *5* Mult.: From $\gamma(\theta)$ (A_2=+0.187 *24*) in Coulomb excitation (1980Bo05).
464.41	5/2$^-$	432.32[‡] *7*	5.8[‡] *3*	32.155	3/2$^-$	M1+E2	+1.4 *6*	0.071 *26*	α(K)=0.055 *23*; α(L)=0.0121 *25*; α(M)=0.0029 *6* α(N)=0.00073 *14*; α(O)=0.000133 *28*; α(P)=7.6×10^{-6} *33* Mult.,δ: From $\gamma(\theta)$ (A_2=+0.183 *26*) in Coulomb excitation (1980Bo05).
		438.11[‡] *6*	100[‡] *3*	26.2738	5/2$^-$	M1(+E2)	≤0.1	0.1297 *19*	α(K)=0.1067 *15*; α(L)=0.01765 *25*; α(M)=0.00410 *6* α(N)=0.001028 *15*; α(O)=0.0001946 *28*; α(P)=1.495×10^{-5} *22* Mult.,δ: From $\gamma(\theta)$ (A_2=+0.077 *21*) in Coulomb excitation (1980Bo05).
		464.39[‡] *5*	31.6[‡] *10*	0	3/2$^-$	M1+E2	+1.4 *+13−6*	0.059 *22*	α(K)=0.046 *19*; α(L)=0.0098 *22*; α(M)=0.0024 *5* α(N)=0.00059 *12*; α(O)=0.000108 *24*; α(P)=6.3×10^{-6} *27* Mult.,δ: From $\gamma(\theta)$ (A_2=+0.20 *6*) in Coulomb excitation (1980Bo05).
542.81	1/2$^-$,3/2,5/2	517.0[#] *3*	69[#] *7*	26.2738	5/2$^-$				
		542.6[#] *2*	100[#]	0	3/2$^-$				
547.32	9/2$^-$	521.05[@] *10*	100[@]	26.2738	5/2$^-$	E2[@]		0.02440 *34*	B(E2)(W.u.)>0.010 α(K)=0.01782 *25*; α(L)=0.00499 *7*; α(M)=0.001222 *17* α(N)=0.000305 *4*; α(O)=5.45×10^{-5} *8*; α(P)=2.364×10^{-6} *33* E_γ: From 1976Uy01. Mult.: α(K)exp=0.027 *13*, K/L=3.4 *9* (1990Lo17).
553.01	1/2$^-$,3/2$^-$,5/2$^-$	385.1[#] *2*	37[#] *10*	167.48	1/2$^-$				
		520.9[‡] *1*	100[‡] *11*	32.155	3/2$^-$				
		526.8[‡] *1*	84[‡] *5*	26.2738	5/2$^-$				
		553.0[‡] *1*	87[‡] *5*	0	3/2$^-$				
645.4	(5/2)$^-$	613.2[#] *3*	100[#] *9*	32.155	3/2$^-$				

Adopted Levels, Gammas (continued)

$\gamma(^{201}Hg)$ (continued)

E_i(level)	J^{π}_i	E_γ[†]	I_γ[†]	E_f	J^{π}_f	Mult.[†]	δ[†]	α[&]	Comments
645.4	(5/2)$^-$	645.0[#a] *4*	55[#] *6*	0	3/2$^-$				
732.3	1/2$^-$,3/2$^-$	732.3[#] *4*	100[#]	0	3/2$^-$				
766.22	13/2$^+$	218.9[@] *1*	100[@]	547.32	9/2$^-$	M2+E3[@]	0.33 *20*	3.81 *22*	α(K)=2.69 *31*; α(L)=0.84 *8*; α(M)=0.211 *23* α(N)=0.053 *6*; α(O)=0.0098 *8*; α(P)=0.00057 *6* B(M2)(W.u.)=0.00359 *+31−53*; B(E3)(W.u.)=5 *+6−4* Mult.: α(K)exp=4 *2*, K/L=3.2 *6*, L/M+=3.4 *9* (1990Lo17). δ: From K/L=3.2 *6*, L/M+=3.4 *9* (1990Lo17) and the briccmixing program.
1187.8		645.0[#] *4*	100[#]	542.81	1/2$^-$,3/2,5/2				

[†] From ^{201}Tl ε decay, unless otherwise stated.
[‡] From Coulomb excitation.
[#] From ^{201}Au β^- decay.
[@] From ^{201}Hg IT decay.
[&] Additional information 1.
[a] Placement of transition in the level scheme is uncertain.

$^{201}_{80}Hg_{121}$-8

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level