Adopted Levels, Gammas

History

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

Q(β^-)=−4442 *26*; S(n)=9289 *18*; S(p)=3260 *11*; Q(α)=323×10[1] *4* 2012Wa38

^{195}Tl Levels

For configuration analysis, see 1987Se03, 1982Hi04, and 1978Li10.

Cross Reference (XREF) Flags

A	^{195}Tl IT decay (3.6 s)	D	^{197}Au(α,6nγ)
B	^{195}Pb ε decay (≈15 min)	E	^{199}Bi α decay (24.70 min)
C	^{195}Pb ε decay (15.0 min)	F	(HI,xnγ):SD

E(level)†	Jπ‡	$T_{1/2}$	XREF	Comments
0.0	1/2$^+$	1.16 h *5*	ABCDEF	%ε+%β^+=100 μ=+1.58 *4* (1969Go21,2011StZZ) Jπ: optical spectroscopy and μ analysis (1976Fu06,1978LeZA). configuration=π 1/2$^+$[402] (1982Hi04). μ: from ^{205}Tl standard and optical spectroscopy (1969Go21). Others: measured μ=+1.66 *13* for ^{195}Tl-^{205}Tl J=1/2 g.s. (1976Ek03), +1.59 *9* (1984Be40). $T_{1/2}$: from γ(t) measurement (1961Ju06). Others: 1.2 h *1* (1955Kn34, 1957An53), 1.13 h *6* (1978Go15), 1.05 h *6* (1977WeZM). Change of the mean-square charge radius $\Delta\langle r^2\rangle$=−0.462 (fm)^2 49 (1989MeZZ).
383.66 *12*	3/2$^+$		ABCD	Jπ: γ to 1/2$^+$ is M1+E2. configuration=π 3/2$^+$[402] (1982Hi04).
482.63@ *17*	9/2$^-$	3.6 s *4*	A CD	%IT=100 μ=3.869 *39* (2012Ba32) Jπ: J=9/2 from $\gamma(\theta)$ in (α,6nγ), π from E3 γ to 3/2$^+$. configuration=π 9/2$^-$[505] (1982Hi04). $T_{1/2}$: from γ(t) measurement in ^{195}Tl IT decay (3.6 s). μ: hyperfine structure with HFA correction (2012Ba32).
777.55# *17*	(5/2$^+$)		B	Jπ: from systematics for ^{197}Tl-^{201}Tl in ^{195}Pb ε decay (≈15 min).
811.1# *6*			B	
876.69@ *19*	11/2$^-$		CD	Jπ: J=11/2 from $\gamma(\theta)$ in (α,6nγ), π from M1+(E2) γ to 9/2$^-$.
1079.7# *8*			B	
1173.79 *20*	9/2$^-$,11/2$^-$		C	Jπ: γ to 9/2$^-$ is M1 and log *ft*≠7.31 from 13/2$^+$.
1190.12@ *19*	13/2$^-$		CD	Jπ: J=13/2 from $\gamma(\theta)$ in (α,6nγ), π from E2 γ to 9/2$^-$.
1267.0# *3*	(1/2$^+$,3/2$^+$,5/2$^+$)		B	Jπ: γ to 3/2$^+$ is (E2) and log *ft*=7.0 from (3/2$^-$) in ^{195}Pb ε decay (≈15 min,1982Hi04).
1285.3# *4*			B	
1360.95c *22*	11/2$^-$		C	Jπ: γ to 9/2$^-$ is M1(+E2) and log *ft*=6.23 from 13/2$^+$.
1378?			B	
1410.68c *20*	11/2$^-$,13/2$^-$		C	Jπ: γ to 11/2$^-$ is M1 and log *ft*=6.8 from 13/2$^+$.
1434.7 *7*			B	
1484.04c *21*	13/2$^-$		CD	Jπ: J=13/2 from $\gamma(\theta)$ in (α,6nγ), π from M1+E2 γ to 11/2$^-$.
1612.7# *9*	(3/2$^+$,5/2$^+$,7/2$^+$)		B	Jπ: γ to (5/2$^+$) is M1.
1616.42 *21*	9/2$^-$,11/2$^-$,13/2$^-$		C	Jπ: γ to 9/2$^-$,11/2$^-$ is M1 and log *ft*≠7.14 from 13/2$^+$.

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Adopted Levels, Gammas (continued)

^{195}Tl Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	XREF	Comments
1618.74[@] *20*	15/2$^-$	CD	J$^{\pi}$: J=15/2 from $\gamma(\theta)$ in (α,6nγ), π from E2 γ to 11/2$^-$.
1648.6[#] *5*		B	
1687.9[#] *7*		B	
1725.26 *23*	(13/2)$^+$	C	J$^{\pi}$: Nilsson-model analysis, configuration=π 13/2$^+$[606] (1982Hi04); E1 γ to 11/2$^-$.
1843.7[#] *10*		B	
1844.8[#] *4*		B	
1924.46 *22*	17/2$^-$	CD	J$^{\pi}$: J=17/2 from $\gamma(\theta)$ in (α,6nγ), π from E2 γ to 13/2$^-$.
1944.61[c] *21*	13/2$^-$	C	J$^{\pi}$: γ's to 11/2$^-$,13/2$^-$,15/2$^-$ are M1(+E2),M1,M1+E2, respectively.
1991.47[c] *22*	11/2$^-$,13/2$^-$	C	J$^{\pi}$: γ's to 11/2$^-$,13/2$^-$ are M1(+E2),M1, respectively.
2011.5[@c] *3*	17/2$^-$	CD	J$^{\pi}$: J=17/2 from $\gamma(\theta)$ in (α,6nγ), π from K^{π}=9/2$^-$ band member.
2023.5[c] *3*	11/2$^-$,13/2$^-$,15/2$^-$	C	J$^{\pi}$: γ to 13/2$^-$ is M1.
2033.7? *5*		C	
2037.1[&c] *3*	15/2$^+$	CD	J$^{\pi}$: J=15/2 from $\gamma(\theta)$ to 13/2$^-$ and π=+ from 15/2$^+$ rotational band.
2115.1? *5*		C	
2145.1 *3*	(11/2,13/2,15/2)$^+$	C	J$^{\pi}$: γ to (13/2)$^+$ is M1.
2212.9[&] *4*	17/2$^+$	D	J$^{\pi}$: $\gamma(\theta)$ to 15/2$^+$ and K^{π}=15/2$^+$ band member.
2361.9 *4*	(11/2,13/2,15/2)	C	J$^{\pi}$: γ to 13/2$^-$ and log ft≠7.22 from 13/2$^+$.
2367.9? *5*		C	
2470.1[@] *3*	19/2$^-$	D	J$^{\pi}$: $\gamma(\theta)$ to 15/2$^-$ and K^{π}=9/2$^-$ band member.
2529.6[&] *4*	19/2$^+$	D	J$^{\pi}$: $\gamma(\theta)$ to 17/2$^+$ and K^{π}=15/2$^+$ band member.
2581.5? *5*		C	
2587.4[@] *3*	21/2$^-$	D	J$^{\pi}$: $\gamma(\theta)$ to 17/2$^-$ and K^{π}=9/2$^-$ band member.
2840.7[&] *5*	21/2$^+$	D	J$^{\pi}$: $\gamma(\theta)$ to 19/2$^+$ and K^{π}=15/2$^+$ band member.
2861.1[@] *4*	23/2$^-$	D	J$^{\pi}$: $\gamma(\theta)$ to 21/2$^-$ and K^{π}=9/2$^-$ band member.
3059.8[@] *4*	25/2$^-$	D	J$^{\pi}$: $\gamma(\theta)$ to 21/2$^-$ and K^{π}=9/2$^-$ band member.
3157.1[@] *5*	27/2$^{(-)}$	D	J$^{\pi}$: $\gamma(\theta)$ to 25/2$^-$ and K^{π}=9/2$^-$ band member.
3201.9[&] *5*	23/2$^+$	D	J$^{\pi}$: $\gamma(\theta)$ to 21/2$^+$ and K^{π}=15/2$^+$ band member.
3513.9[&] *5*	25/2$^+$	D	J$^{\pi}$: $\gamma(\theta)$ to 23/2$^+$ and K^{π}=15/2$^+$ band member.
3729.6[&] *5*	27/2$^+$	D	J$^{\pi}$: $\gamma(\theta)$ to 25/2$^+$ and K^{π}=15/2$^+$ band member.
3885.3[&] *6*	29/2$^{(+)}$	D	J$^{\pi}$: $\gamma(\theta)$ to 27/2$^+$ and K^{π}=15/2$^+$ band member.
4002.8[&] *8*	31/2$^{(+)}$	D	J$^{\pi}$: $\gamma(\theta)$ to 29/2$^{(+)}$ and K^{π}=15/2$^+$ band member.
4174.8[&] *9*	33/2$^{(+)}$	D	J$^{\pi}$: $\gamma(\theta)$ to 31/2$^{(+)}$ and K^{π}=15/2$^+$ band member.
4393.3[&] *9*	35/2$^{(+)}$	D	J$^{\pi}$: $\gamma(\theta)$ to 33/2$^{(+)}$ and K^{π}=15/2$^+$ band member.
x[a]	J≈(11/2$^+$)	F	
67.8+x[b] *10*	J+1	F	
146.2+x[a] *5*	J+2	F	
235.3+x[b] *8*	J+3	F	
334.4+x[a] *7*	J+4	F	
443.6+x[b] *8*	J+5	F	
563.2+x[a] *8*	J+6	F	
692.6+x[b] *9*	J+7	F	
832.9+x[a] *9*	J+8	F	
982.0+x[b] *9*	J+9	F	
1143.4+x[a] *9*	J+10	F	
1311.7+x[b] *9*	J+11	F	
1492.9+x[a] *9*	J+12	F	
1680.8+x[b] *10*	J+13	F	
1882.7+x[a] *10*	J+14	F	

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Adopted Levels, Gammas (continued)

^{195}Tl Levels (continued)

E(level)[†]	Jπ[‡]	XREF	E(level)[†]	Jπ[‡]	XREF	E(level)[†]	Jπ[‡]	XREF
2088.3+x[b] *10*	J+15	F	4089.3+x[b] *12*	J+23	F	6635.3+x[b] *13*	J+31	F
2311.6+x[a] *10*	J+16	F	4400.6+x[a] *12*	J+24	F	7050.6+x[a] *14*	J+32	F
2534.0+x[b] *11*	J+17	F	4677.1+x[b] *12*	J+25	F	7350.8+x[b] *14*	J+33	F
2778.8+x[a] *11*	J+18	F	5012.6+x[a] *12*	J+26	F	7796.4+x[a] *15*	J+34	F
3016.5+x[b] *11*	J+19	F	5298.1+x[b] *13*	J+27	F	8096.8+x[b] *15*	J+35	F
3283.3+x[a] *11*	J+20	F	5658.4+x[a] *13*	J+28	F	8573.6+x[a] *16*	J+36	F
3535.5+x[b] *11*	J+21	F	5951.1+x[b] *13*	J+29	F	8874.3+x[b] *16*	J+37	F
3824.1+x[a] *12*	J+22	F	6337.8+x[a] *13*	J+30	F			

[†] From level scheme E(level)≤2362 from ^{195}Pb ε decay and E(level)≥2470 from ^{197}Au(α,6nγ) and transition γ rays using least-squares fit to data.

[‡] For γ(θ) arguments see ^{197}Au(α,6nγ); for mult of γ see ^{195}Pb ε decay (15.0 min) and ^{197}Au(α,6nγ). For SD band, J^{π} from band assignments and similar assignments in neighboring nuclei.

[#] From level scheme of the ^{195}Pb ε decay (≈15 min).

[@] Band(A): $K^{\pi}=9/2^{-}$ band. Band configuration=(π $1h_{9/2-}$) coupling to (p,h11/2,−2,8^{+},10^{+}) in the core nuclei ^{194}Hg. Members of the band: $9/2^{-}$ to $27/2^{-}$.

[&] Band(B): $K^{\pi}=15/2^{+}$ band. Configuration from the coupling of a h9/2 proton to broken neutron pair. The pair consists of a rotation-aligned i13/2 neutron and a low-J neutron in p1/2, p3/2 or f5/2 shell. Members of the band: 15/2 to 35/2.

[a] Band(C): SD-1 band (1994Du16,1991Az04). α=+1/2 member of 5/2[642] proton orbital (1994Du16,1991Az04). Percent population=0.5 (1991Az04). Experimental g_K=1.4 *4* (1994Du16).

[b] Band(D): SD-2 band (1994Du16,1991Az04). α=−1/2 member of 5/2[642] proton orbital (1994Du16,1991Az04). Percent population=0.25 (1991Az04). Experimental g_K=1.4 *4* (1994Du16). SD-1 and SD-2 bands are proposed (1991Az04) as signature partners with a splitting that is probably due to i13/2 (ω=5/2) proton orbital.

[c] Interpreted as 3 quasiparticle (π ν ν) state (1982Hi04).

Adopted Levels, Gammas (continued)

$\gamma(^{195}Tl)$

For unplaced γ's, see ^{195}Pb ε decay (15.0 min).

E_i(level)	J_i^π	E_γ[†]	I_γ[†‡]	E_f	J_f^π	Mult.[&]	δ[&]	α[a]	Comments
383.66	3/2$^+$	383.64 *12*	100	0.0	1/2$^+$	M1+E2	1.8 *+4−3*	0.090 *11*	
482.63	9/2$^-$	98.97 *12*	100	383.66	3/2$^+$	E3		157.5	B(E3)(W.u.)=0.0101 *12*
777.55	(5/2$^+$)	393.7[#] *3*	100.0[#] *89*	383.66	3/2$^+$				
		777.6[#] *2*	71.1[#] *89*	0.0	1/2$^+$				
811.1		427.4[#] *5*	100[#]	383.66	3/2$^+$				
876.69	11/2$^-$	394.21 *12*	100	482.63	9/2$^-$	M1(+E2)[@]	0.42[@] *13*	0.167 *12*	
1079.7		696.0[#] *8*	100[#]	383.66	3/2$^+$				
1173.79	9/2$^-$,11/2$^-$	691.17 *15*	100	482.63	9/2$^-$	M1		0.0426	
1190.12	13/2$^-$	313.22 *12*	50 *3*	876.69	11/2$^-$	M1+E2[@]	0.38[@] *10*	0.317 *16*	
		707.67 *15*	100 *6*	482.63	9/2$^-$	E2		0.01281	
1267.0	(1/2$^+$,3/2$^+$,5/2$^+$)	883.1[#] *3*	100[#]	383.66	3/2$^+$	(E2)[#]		0.00811	
1285.3		507.8[#] *3*	100[#]	777.55	(5/2$^+$)				
1360.95	11/2$^-$	878.40 *16*	100	482.63	9/2$^-$	M1(+E2)		0.016 *8*	
1378?		994.3[#b] *8*	100[#]	383.66	3/2$^+$				
1410.68	11/2$^-$,13/2$^-$	236.60 *23*	1.12 *11*	1173.79	9/2$^-$,11/2$^-$	M1		0.754	
		534.11 *14*	≈44.9	876.69	11/2$^-$	M1		0.0836	
		928.02 *16*	100 *15*	482.63	9/2$^-$	(E2)		0.00734	
1434.7		1051.0[#] *8*	100[#]	383.66	3/2$^+$				
1484.04	13/2$^-$	294.2 *5*	65 *48*	1190.12	13/2$^-$				
		607.64 *15*	100 *11*	876.69	11/2$^-$	M1+E2[@]	0.66[@] *19*	0.047 *6*	
		1000.92 *18*	16.6 *14*	482.63	9/2$^-$				
1612.7	(3/2$^+$,5/2$^+$,7/2$^+$)	346.0[#b] *5*	18[#] *12*	1267.0	(1/2$^+$,3/2$^+$,5/2$^+$)				
		835.2[#] *8*	100[#] *15*	777.55	(5/2$^+$)	M1[#]		0.0261	
1616.42	9/2$^-$,11/2$^-$,13/2$^-$	442.74 *14*	100 *10*	1173.79	9/2$^-$,11/2$^-$	M1		0.1374	
		739.47 *23*	47 *8*	876.69	11/2$^-$				
		1133.73 *21*	98.9 *11*	482.63	9/2$^-$				
1618.74	15/2$^-$	428.44 *13*	100 *6*	1190.12	13/2$^-$	M1+E2[@]	0.34[@] *6*	0.139 *5*	
		742.19 *15*	93 *6*	876.69	11/2$^-$	E2		0.01159	
1648.6		871.0[#] *5*	100[#]	777.55	(5/2$^+$)				
1687.9		253.2[#] *5*	29[#] *12*	1434.7					
		1304.2[#] *8*	100[#] *15*	383.66	3/2$^+$				
1725.26	(13/2)$^+$	848.66 *16*	100 *25*	876.69	11/2$^-$	E1(+M2)		0.0038 *6*	
		1242.24 *32*	11.3 *25*	482.63	9/2$^-$				
1843.7		1461.1[#] *8*	100[#]	383.66	3/2$^+$				
1844.8		196.1[#] *5*	73[#] *14*	1648.6					

Adopted Levels, Gammas (continued)

γ(^{195}Tl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†‡]	E_f	J_f^π	Mult.[&]	δ[&]	α[a]
1844.8		578.0[#] *5*	36[#] *18*	1267.0	(1/2$^+$,3/2$^+$,5/2$^+$)			
		1067.0[#] *8*	100[#] *18*	777.55	(5/2$^+$)			
1924.46	17/2$^-$	305.67 *15*	58 *6*	1618.74	15/2$^-$	M1+E2	0.11 *+3–4*	0.369
		734.43 *15*	100 *25*	1190.12	13/2$^-$	E2		0.01184
1944.61	13/2$^-$	325.85 *14*	10.6 *13*	1618.74	15/2$^-$	M1+E2		0.20 *12*
		534.11	≈8.39	1410.68	11/2$^-$,13/2$^-$			
		754.73 *32*	13 *3*	1190.12	13/2$^-$	M1		0.0339
		1067.88 *17*	100 *6*	876.69	11/2$^-$	M1(+E2)		0.010 *5*
1991.47	11/2$^-$,13/2$^-$	630.58 *14*	100 *8*	1360.95	11/2$^-$	M1(+E2)		0.035 *19*
		801.26 *17*	62 *6*	1190.12	13/2$^-$	M1		0.0291
2011.5	17/2$^-$	392.8 *5*	100 *47*	1618.74	15/2$^-$	(M1+E2)	0.42 *13*	0.169 *12*
		821.3 *3*	82 *47*	1190.12	13/2$^-$	E2		0.00939
2023.5	11/2$^-$,13/2$^-$,15/2$^-$	539.50 *15*	100	1484.04	13/2$^-$	M1		0.0814
2033.7?		843.2 *5*	100	1190.12	13/2$^-$			
2037.1	15/2$^+$	418.5[@] *3*	20[@] *3*	1618.74	15/2$^-$	(E1)		0.01350
		552.9[@] *3*	24[@] *4*	1484.04	13/2$^-$	(E1)		0.00749
		847.1[@] *5*	100[@] *35*	1190.12	13/2$^-$	(E1)		0.00326
		1161.6[b] *5*		876.69	11/2$^-$			
2115.1?		630.58 *14*	100 *8*	1484.04	13/2$^-$			
2145.1	(11/2,13/2,15/2)$^+$	419.81 *16*	100	1725.26	(13/2)$^+$	M1		0.1583
2212.9	17/2$^+$	175.7[@] *3*	100[@]	2037.1	15/2$^+$	M1+E2[@]	0.13[@] *5*	1.71 *3*
2361.9	(11/2,13/2,15/2)	877.9 *3*	100	1484.04	13/2$^-$			
2367.9?		748.8 *5*	100	1618.74	15/2$^-$			
2470.1	19/2$^-$	458.7 *3*	100 *13*	2011.5	17/2$^-$	M1+E2	0.75 *15*	0.093 *9*
		545.7 *3*	21 *5*	1924.46	17/2$^-$	M1+E2	0.57 *16*	0.065 *6*
		851.3 *3*	17 *8*	1618.74	15/2$^-$	E2		0.00873
2529.6	19/2$^+$	316.8 *3*	100 *12*	2212.9	17/2$^+$	M1+E2	0.21 *4*	0.328 *7*
		492.6 *3*	16 *5*	2037.1	15/2$^+$	E2		0.0292
2581.5?		466.4 *5*	32 *14*	2115.1?				
		1391.0 *5*	100 *32*	1190.12	13/2$^-$			
2587.4	21/2$^-$	117.3 *5*	26 *9*	2470.1	19/2$^-$	(M1+E2)		4.2 *12*
		575.8 *3*	42 *6*	2011.5	17/2$^-$	E2		0.0202
		663.1 *3*	100 *11*	1924.46	17/2$^-$	E2		0.01474
2840.7	21/2$^+$	311.4 *5*	100 *31*	2529.6	19/2$^+$	M1+E2	0.23 *5*	0.341 *8*
		627.7 *3*	50 *8*	2212.9	17/2$^+$	E2		0.01663
2861.1	23/2$^-$	273.7 *3*	100	2587.4	21/2$^-$	M1(+E2)	≤0.14	0.501 *8*
3059.8	25/2$^-$	198.8 *3*	100 *25*	2861.1	23/2$^-$	(M1+E2)		0.8 *4*
		472.3 *3*	64 *21*	2587.4	21/2$^-$	E2		0.0323
3157.1	27/2$^{(-)}$	97.3 *3*	100	3059.8	25/2$^-$	(M1+E2)		8.0 *14*
3201.9	23/2$^+$	361.1 *3*	69 *8*	2840.7	21/2$^+$	M1+E2	0.23 *4*	0.229 *5*
		672.3 *5*	<100	2529.6	19/2$^+$	E2		0.01430

$^{195}_{81}Tl_{114}$-5

Adopted Levels, Gammas (continued)

$\gamma(^{195}Tl)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†‡]	E_f	J^π_f	Mult.[&]	δ[&]	α[a]
3513.9	25/2$^+$	312.3 *5*	70 *22*	3201.9	23/2$^+$	M1+E2	0.27 *6*	0.334 *9*
		673.2 *5*	<100	2840.7	21/2$^+$	(E2)		0.01426
3729.6	27/2$^+$	215.8 *3*	100 *10*	3513.9	25/2$^+$	M1(+E2)	≤0.14	0.967 *16*
		527.6 *3*	60 *12*	3201.9	23/2$^+$	E2		0.0247
3885.3	29/2$^{(+)}$	155.7 *3*	100	3729.6	27/2$^+$	(M1+E2)		1.7 *8*
4002.8	31/2$^{(+)}$	117.5 *5*	100	3885.3	29/2$^{(+)}$	(M1+E2)		4.2 *12*
4174.8	33/2$^{(+)}$	172.0 *3*	100	4002.8	31/2$^{(+)}$	(M1+E2)		1.3 *6*
4393.3	35/2$^{(+)}$	218.5 *3*	100	4174.8	33/2$^{(+)}$	(M1+E2)		0.6 *4*
146.2+x	J+2	146.2 *5*		x	J≈(11/2$^+$)			
235.3+x	J+3	167.5 *5*		67.8+x	J+1			
334.4+x	J+4	99.0 *5*		235.3+x	J+3			
		188.2 *5*		146.2+x	J+2			
443.6+x	J+5	109.0 *5*		334.4+x	J+4			
		208.4 *5*		235.3+x	J+3			
563.2+x	J+6	119.5 *5*		443.6+x	J+5			
		228.8 *5*		334.4+x	J+4			
692.6+x	J+7	129.5 *5*		563.2+x	J+6			
		249.1 *5*		443.6+x	J+5			
832.9+x	J+8	140.5 *5*		692.6+x	J+7			
		269.7 *3*		563.2+x	J+6			
982.0+x	J+9	149.0 *5*		832.9+x	J+8			
		289.5 *3*		692.6+x	J+7			
1143.4+x	J+10	161.5 *5*		982.0+x	J+9			
		310.5 *3*		832.9+x	J+8			
1311.7+x	J+11	168.0 *5*		1143.4+x	J+10			
		329.6 *3*		982.0+x	J+9			
1492.9+x	J+12	181.0 *5*		1311.7+x	J+11			
		349.6 *3*		1143.4+x	J+10			
1680.8+x	J+13	369.1 *3*		1311.7+x	J+11			
1882.7+x	J+14	389.8 *3*		1492.9+x	J+12			
2088.3+x	J+15	407.5 *3*		1680.8+x	J+13			
2311.6+x	J+16	428.9 *3*		1882.7+x	J+14			
2534.0+x	J+17	445.7 *3*		2088.3+x	J+15			
2778.8+x	J+18	467.2 *3*		2311.6+x	J+16			
3016.5+x	J+19	482.5 *3*		2534.0+x	J+17			
3283.3+x	J+20	504.5 *3*		2778.8+x	J+18			
3535.5+x	J+21	519.0 *3*		3016.5+x	J+19			
3824.1+x	J+22	540.8 *3*		3283.3+x	J+20			
4089.3+x	J+23	553.8 *3*		3535.5+x	J+21			
4400.6+x	J+24	576.5 *3*		3824.1+x	J+22			
4677.1+x	J+25	587.8 *3*		4089.3+x	J+23			
5012.6+x	J+26	612.0 *3*		4400.6+x	J+24			
5298.1+x	J+27	621.0 *3*		4677.1+x	J+25			
5658.4+x	J+28	645.7 *3*		5012.6+x	J+26			

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Adopted Levels, Gammas (continued)

$\gamma(^{195}Tl)$ (continued)

E_i(level)	J_i^π	E_γ †	E_f	J_f^π	E_i(level)	J_i^π	E_γ †	E_f	J_f^π	E_i(level)	J_i^π	E_γ †	E_f	J_f^π
5951.1+x	J+29	653.0 *3*	5298.1+x	J+27	7050.6+x	J+32	712.8 *5*	6337.8+x	J+30	8096.8+x	J+35	746.0 *5*	7350.8+x	J+33
6337.8+x	J+30	679.4 *3*	5658.4+x	J+28	7350.8+x	J+33	715.5 *5*	6635.3+x	J+31	8573.6+x	J+36	777.2 *5*	7796.4+x	J+34
6635.3+x	J+31	684.2 *3*	5951.1+x	J+29	7796.4+x	J+34	745.8 *5*	7050.6+x	J+32	8874.3+x	J+37	777.5 *5*	8096.8+x	J+35

† Transitions from E(level)≤2362 are from ^{195}Pb ε decay (15.0 min), the others (from E(level)≥2470) are from ^{197}Au(α,6nγ), except as noted.
‡ Relative photon branching renormalized to 100 for the strongest transition from each level.
# From ^{195}Pb ε decay (≈15 min).
@ From ^{197}Au(α,6nγ).
& From ^{195}Pb ε decay (15.0 min), except as noted.
[a] 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.
[b] Placement of transition in the level scheme is uncertain.

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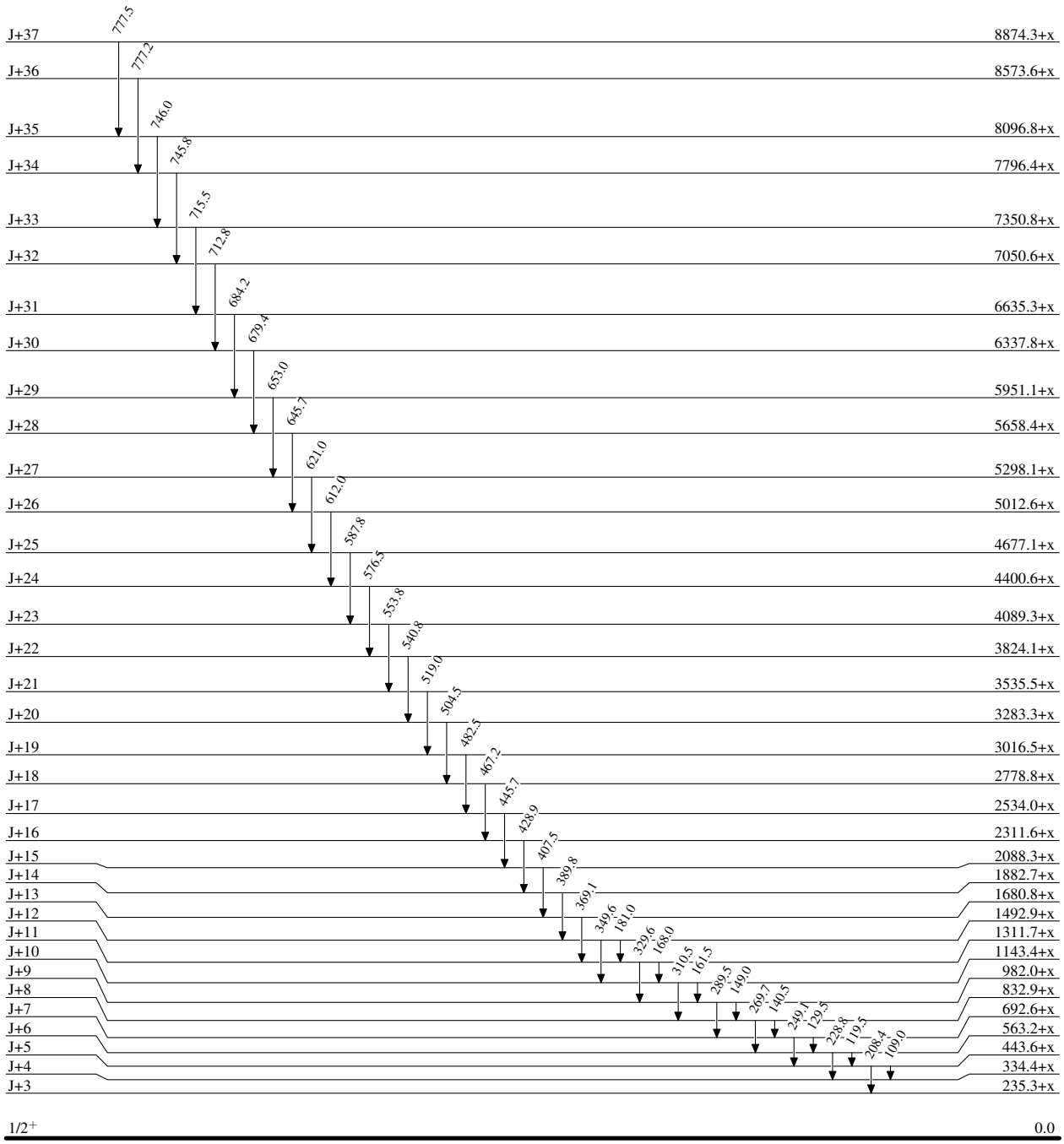
Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level



$^{195}_{81}Tl_{114}$

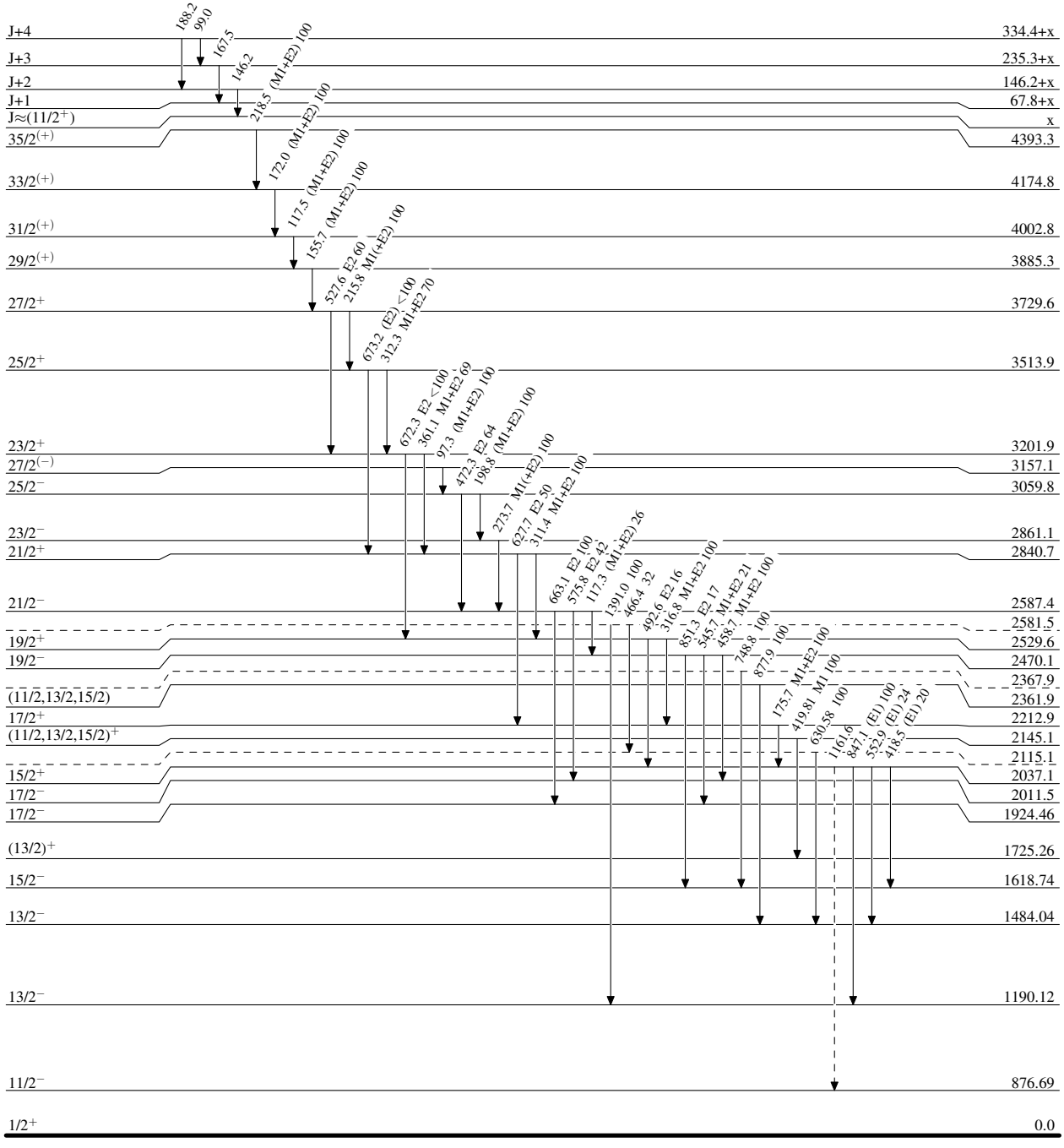
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{195}_{81}Tl_{114}$

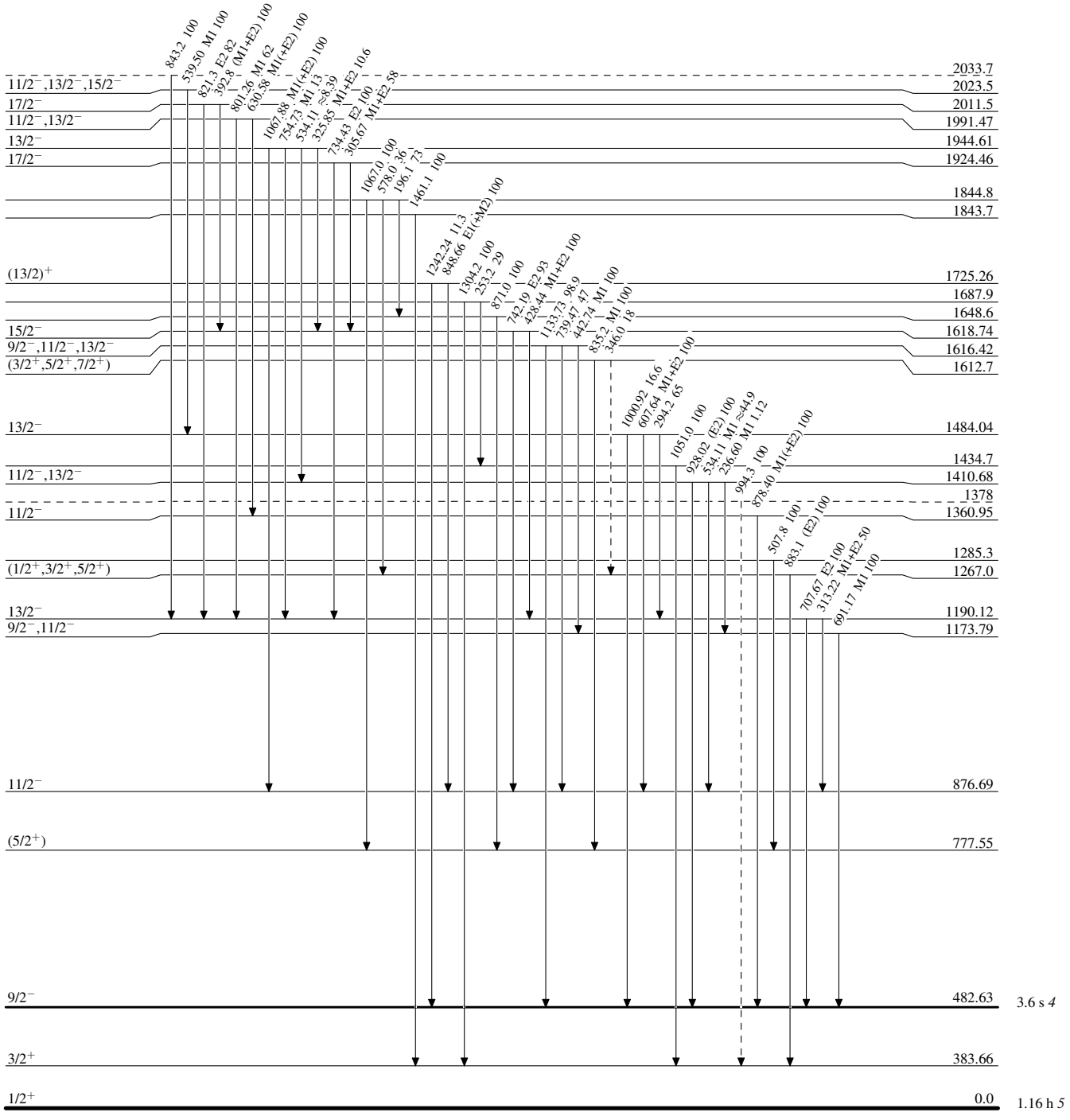
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

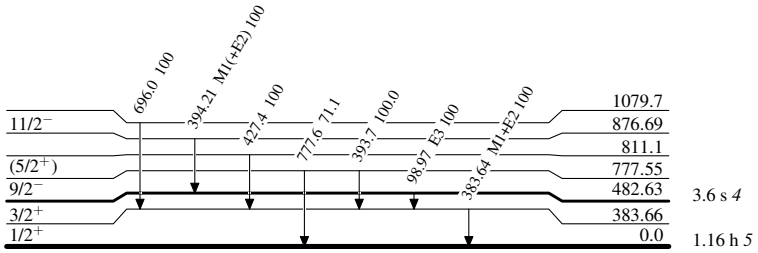


$^{195}_{81}Tl_{114}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{195}_{81}Tl_{114}$

Adopted Levels, Gammas