Adopted Levels, Gammas

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

Q(β^-)=−1910 *19*; S(n)=8205 *15*; S(p)=4966 *14*; Q(α)=1534 *14* 2021Wa16

^{201}Tl Levels

Cross Reference (XREF) Flags

A	^{201}Pb ε decay	E	^{9}Be(^{238}U,Xγ)
B	^{201}Tl IT decay	F	^{203}Tl(p,t)
C	^{202}Hg(d,3nγ)	G	^{204}Pb(p,α)
D	^{198}Pt(^{7}Li,4nγ)	H	^{207}Pb(μ,Xγ)

E(level)†	J$^\pi$	T$_{1/2}$	XREF	Comments
0[@]	1/2$^+$	3.0420 d *16*	ABCDEFGH	%ε=100 μ=+1.599 *3* (1987Bo44,2019StZV) J$^\pi$: Atomic beam (1958Li45,1958Ma21); L(p,t)=0; μ. T$_{1/2}$: Weighted average of 3.0408 d *13* (1982La25, original uncertainty of *0.0040* d is 3σ), 3.0400 d *28* (1994Si26), 3.0380 d *17* (2004De02), 3.0486 d *30* (2004Sc04, supersedes 3.0380 d *7* (1979De42) and 3.043 d *3* (1989Sc17)) and 3.0456 d *15* (2014Un01, corrected in 2020, supersedes 3.0447 d *9* (1982HoZJ), 3.0456 d *15* (1992Un01,2002Un02,2012Fi12) and 3.046 d *6* (2014Un01)). Others: 3.00 d *13* (1950Ne77) and 3.063 d *33* (1960He05). A value of 3.0422 d *17* was evaluated in 2004Wo02. μ: Using collinear fast beam laser spectroscopy technique. Other: 1.60 *7* (1984Be40,2014StZZ).
331.17[&] *3*	3/2$^+$	70 ps *20*	ABCDEFGH	XREF: F(330)G(334). T$_{1/2}$: From 360ce-331ce(Δt) in 1960Li08. J$^\pi$: L(p,t)=2; 331.15γ M1+E2 to 1/2$^+$.
692.52[a] *4*	5/2$^+$		A C FG	XREF: F(695)G(699). J$^\pi$: L(p,t)=2; 692.41γ E2 to 1/2$^+$; $\gamma\gamma(\theta)$ in ^{201}Pb ε decay.
919.47 *11*	(9/2$^-$)	2.11 ms *11*	BCDE	%IT=100 J$^\pi$: 588.3γ to 3/2$^+$; systematics of similar isomers in ^{197,199}Tl. T$_{1/2}$: Unweighted average of 1.8 ms *1* (1962Mo19), 2.3 ms *2* (1963De38), 2.1 ms *2* (1964Br27), 1.8 ms *1* (1965Gr04), 2.65 ms *20* (1967Co20), 2.1 ms *1* (1975Uy01) and 2.035 ms *7* (1977KoZH). Others: >60 ns 1977Sl01. configuration: π 9/2[505] (h$_{9/2}$) Nilsson orbital at oblate deformation.
1098.50 *4*	5/2$^+$		A F H	XREF: F(1106). J$^\pi$: L(p,t)=2; 1098.52γ E2 to 1/2$^+$.
1134.86 *6*	7/2$^+$		A C G	XREF: G(1131). J$^\pi$: 803.66γ E2 to 3/2$^+$.
1157.43 *4*	3/2$^+$,5/2$^+$		A F	XREF: F(1159). J$^\pi$: 826.26γ M1+E2 to 3/2$^+$; log *ft* in ^{201}Pb ε decay excludes 1/2$^+$. Note that L(p,t)=(0) is inconsistent with the adopted here assignment.
1238.46[b] *15*	(11/2$^-$)		CDE	J$^\pi$: 319.0γ M1+E2 to (9/2$^-$). $\gamma(\theta)$ in 1977Sl01 does not support ΔJ=0 assignment, and hence, 9/2$^-$ possibility can be excluded. Strong population of this level in ^{202}Hg(d,3nγ) would favor 11/2$^-$ compared to 7/2$^-$.
1238.83 *5*	3/2$^+$		A F	J$^\pi$: L(p,t)=(2); 546.28γ M1+E2 to 5/2$^+$, 1238.76γ M1+E2 to 1/2$^+$.
1277.12 *4*	3/2$^+$,5/2$^+$		A	J$^\pi$: 945.96γ M1+E2 to 3/2$^+$, 1277.11γ to 1/2$^+$; log *ft* in ^{201}Pb ε decay excludes 1/2$^+$.

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Adopted Levels, Gammas (continued)

^{201}Tl Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$	XREF	Comments
1290.13 *7*	$(9/2)^+$		A C FG	XREF: F(1294)G(1286). Jπ: L(p,t)=4; 597.60γ E2 to $5/2^+$.
1330.42 *5*	$3/2^+,5/2^+$		A FG	XREF: F(1335)G(1331). Jπ: L(p,t)=2; log *ft* in ^{201}Pb ε decay rules out $1/2^+$.
1401.26 *5*	$3/2^+,5/2^+$		A	Jπ: 708.75γ M1 to $5/2^+$, 1401.30γ to $1/2^+$.
1413.43 *12*	11/2		C G	XREF: G(1419). Jπ: 493.9γ D to $(9/2^-)$; γ(θ) in ^{202}Hg(d,3nγ) does not support ΔJ=0 assignment, and hence, J=9/2 possibility can be excluded. Strong population of this level in ^{202}Hg(d,3nγ) would favor J=11/2 over 7/2.
1420.04 *6*	$7/2^+$		A F	XREF: F(1423). Jπ: L(p,t)=4; 1088.85γ to $3/2^+$.
1445.87 *6*	$(5/2)^+$		A F	XREF: F(1440). Jπ: L(p,t)=2; 753.35γ (E0+M1) to $5/2^+$.
1479.85 *4*	$5/2^+$		A F	XREF: F(1472). Jπ: 344.95γ M1(+E2) to $7/2^+$, 1148.75γ M1+E2 to $3/2^+$.
1550.59? *15*	$1/2,3/2,5/2^+$		A	Jπ: 1219.4γ to $3/2^+$, 1550.5γ to $1/2^+$.
1571.86 *17*	$(13/2^-)$		CDE	Jπ: 333.4γ M1+E2 to $(11/2^-)$, 652.0γ E2 to $(9/2^-)$.
1575.1 *10*	$(7/2)^+$		A FG	XREF: F(1572)G(1579). Jπ: L(p,t)=4; log *ft* in ^{201}Pb ε decay excludes J=9/2.
1617.46 *15*	$1/2,3/2,5/2^+$		A	Jπ: 1286.3γ to $3/2^+$, 1617.45γ to $1/2^+$;
1639.36 *4*	$3/2^+,5/2^+$		A Fg	XREF: F(1636)g(1655). Jπ: 1308.32γ M1(+E2) to $3/2^+$; log *ft* in ^{201}Pb ε decay rules out $1/2^+$.
1671.96 *5*	$3/2^+,5/2^+$		A fg	XREF: f(1699)g(1655). Jπ: 394.86γ M1(+E2) to $3/2^+,5/2^+$, 1672.02γ to $1/2^+$; log *ft* in ^{201}Pb ε decay rules out $1/2^+$.
1712.45 *22*	$3/2,5/2,7/2^+$		A f	XREF: f(1699). Jπ: 1019.8γ to $5/2^+$, 1381.4γ to $3/2^+$; log *ft* in ^{201}Pb ε decay rules out J=1/2.
1725[‡] *15*	(7/2,9/2)		FG	XREF: F(1729). Jπ: σ(θ) in ^{204}Pb(p,α).
1755.33 *7*	$3/2,5/2^+$		A	Jπ: 1062.79γ to $5/2^+$, 1755.32γ to $1/2^+$; log *ft* in ^{201}Pb ε decay rules out J=1/2.
1763[‡] *15*	(7/2,9/2)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
1834[‡] *15*	$3/2^+,5/2^+$		FG	XREF: F(1829). Jπ: L(p,t)=2.
1908[‡] *15*	$(13/2,15/2^-)$		G	Jπ: σ(θ) in ^{204}Pb(p,α).
1913[#]			F	
1940[‡] *15*	(7/2,9/2)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
1962.76 *17*	$(15/2^-)$		CDE	Jπ: 390.9γ M1+E2 to $(13/2^-)$, 724.3γ E2 to $(11/2^-)$.
1987.96 *18*	$(13/2^-)$		CD g	XREF: g(1996). Jπ: 749.5γ M1 to $(11/2^-)$.
2015.2 *9*	$(17/2^-)$	2.9 ns *+19−5*	CDE g	XREF: E(2016)g(1996). Jπ: 443.3γ E2 to $(13/2^-)$. $T_{1/2}$: From 443.3γ(t) in 1977Sl01.
2041.3 *3*	$(15/2^+)$		CD G	XREF: G(2045). Jπ: 469.4γ E1 to $(13/2^-)$.
2103[‡] *20*	(9/2)		FG	XREF: F(2098). Jπ: σ(θ) in ^{204}Pb(p,α).
2145[‡] *20*	(9/2)		FG	XREF: F(2147). Jπ: σ(θ) in ^{204}Pb(p,α).
2182.0 *9*	$(19/2^-)$		CD F	XREF: F(2183).

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Adopted Levels, Gammas (continued)

^{201}Tl Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$	XREF	Comments
				Jπ: 166.9γ M1+E2 to (17/2⁻).
2196[‡] *20*	(15/2⁺)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
2254[‡] *20*	(15/2⁻)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
2271[#]			F	
2343[#]			F	
2379[‡] *20*	(15/2⁺)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
2442.0 *9*	(21/2⁻)		CD G	XREF: G(2449). Jπ: 260.1γ to (19/2⁻), 426.8γ E2 to (17/2⁻).
2486.5 *8*	(17/2)		D	
2534[‡] *20*	(9/2)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
2622[‡] *20*	(15/2⁺)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
2669[‡] *20*	(5/2)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
2672.1 *9*	(23/2⁺)		D	Jπ: 230.2γ E1 to (21/2⁻).
2713.66 *19*	(15/2⁻)		DE G	Jπ: 1141.8γ M1(+E2) to (13/2⁻).
2748.0 *5*	(17/2⁺)		CDE	Jπ: 785.2γ E1 to (15/2⁻).
2748.0+x *5*		95 ns *+39−21*	E	Additional information 1. E(level): From 2013Bo18. The observed 148, 158, 314 and 853 keV delayed gammas are expected above the 2748.0-keV level, but their ordering is unknown. Jπ: Tentative J=(33/2) in 2013Bo18. $T_{1/2}$: From sum of (148,158,314,319,333,444,726,785,853)γ(t) in 2012BoZQ, 2013BoZT.
2762[‡] *20*	(7/2,9/2)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
2853[‡] *20*	(11/2⁻)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
2883.7 *9*	(23/2⁻)		D	Jπ: 441.1γ M1(+E2) to (21/2⁻).
2897.6 *9*	(25/2⁺)		D	Jπ: 225.5γ M1(+E2) to (23/2⁺).
2899[‡] *20*	(15/2⁺)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
2976[‡] *20*	(15/2⁺)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
2985.1 *9*	(21/2⁺)		D	Jπ: 803.1γ E1 to (19/2⁻).
3011.7 *5*	(19/2⁺)		D G	XREF: G(3030). Jπ: 263.7γ M1(+E2) to (17/2⁺).
3044.9 *9*	(25/2⁻)		D	Jπ: 161.2γ M1(+E2) to (23/2⁻).
3056.6 *6*	(19/2⁺)		D	Jπ: 308.8γ M1(+E2) to (17/2⁺).
3083[‡] *20*	(9/2,11/2)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
3133[‡] *20*			G	
3201[‡] *20*			G	
3303[‡] *20*	(9/2,11/2)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
3314.7 *6*	(21/2⁺)		D	Jπ: 258.0γ M1(+E2) to (19/2⁺).
3362[‡] *20*	(15/2⁺)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
3371.8 *9*	(23/2⁺)		D	Jπ: 386.7γ M1(+E2) to (21/2⁺), 326.7γ to (25/2⁻).
3401[‡] *20*	(17/2⁺)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
3431.7 *9*	(27/2⁻)		D	Jπ: 386.8γ to (25/2⁻).
3434.5 *6*	(23/2⁺)		D	Jπ: 422.8γ E2 to (19/2⁺), 119.8γ M1(+E2) to (21/2⁺).
3441[‡] *20*	(9/2)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
3499[‡] *20*	(15/2)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
3530.6 *6*	(25/2)		D	Jπ: 96.1γ D to (23/2⁺).
3552[‡] *20*	(15/2)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
3615[‡] *20*	(17/2⁻,19/2⁻)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
3648[‡] *20*	(15/2⁺)		G	Jπ: σ(θ) in ^{204}Pb(p,α).
3674[‡] *20*	(17/2,19/2⁻)		G	Jπ: σ(θ) in ^{204}Pb(p,α).

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Adopted Levels, Gammas (continued)

^{201}Tl Levels (continued)

E(level)[†]	J$^{\pi}$	XREF	Comments
3706.8 *6*	(27/2)	D	J$^{\pi}$: 176.2γ D to (25/2).
3727[‡] *20*		G	
3864.3 *6*	(29/2)	D	J$^{\pi}$: 157.5γ D to (27/2).
3936.1 *9*	(29/2)	D	J$^{\pi}$: 504.4γ D to (27/2^{-}).
3950.9 *9*	(25/2)	D	J$^{\pi}$: 579.1γ D to (23/2^{+}).

[†] From a least-squares fit to Eγ, unless otherwise stated.

[‡] From ^{204}Pb(p,α), but values were lowered by 15 keV to account for differences between excitation energies in ^{204}Pb(p,α) and these in the Adopted Levels for E(levels) below 1600 keV.

[#] From ^{203}Tl(p,t).

[@] Configuration=Dominant π $s^{-1}_{1/2}$.

[&] Configuration=Dominant π $d^{-1}_{3/2}$.

[a] Configuration=Dominant π $(s^{-1}_{1/2})\otimes 2^{+}$.

[b] Configuration=π $h^{-1}_{11/2}$.

Adopted Levels, Gammas (continued)

$\gamma(^{201}Tl)$

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[@]	δ[†]	α[&]	Comments
331.17	$3/2^+$	331.15 *6*	100	0	$1/2^+$	M1+E2	+1.33 *6*	0.161 *5*	B(M1)(W.u.)=0.0027 *+11−6*; B(E2)(W.u.)=16 *+6−4* α(K)=0.121 *5*; α(L)=0.0305 *6*; α(M)=0.00743 *13* α(N)=0.001870 *32*; α(O)=0.000348 *6*; α(P)=2.59×10^{-5} *7* Mult.: α(K)exp=0.1069 *21*, α(L3)exp=0.00365 *12*, K/L=3.76 *6* (1974Ha18); K/L=3.9 *3*, L12/L3=7.1 *9* (1964Aa01); α(K)exp=0.113 *8* (1961Pe05); K/L12=4.2 *2*, L12/L3=6.5 *5* (1960Li08); $\gamma\gamma(\theta)$ in 1961Pe05; α(K)exp=0.113 *8* (1979Do09), normalized value adopted by the authors from the data of 1961Pe05; α(K)exp=0.111 *16* (1971Hn04); A_2=0.012 *15*, A_4=−0.008 *18* (1977Sl01). δ: From 1974Ha18, by taking into account the penetration effect and using λ=+4.0 *10*.
692.52	$5/2^+$	361.25 *6*	100 *5*	331.17	$3/2^+$	M1+E2	0.14 *7*	0.234 *5*	α(K)=0.191 *4*; α(L)=0.0324 *6*; α(M)=0.00755 *13* α(N)=0.001907 *32*; α(O)=0.000370 *7*; α(P)=3.49×10^{-5} *7* Mult.: α(K)exp=0.193 *4*, α(L3)exp=0.00029 *7* (1974Ha18); K/L=5.9 *6*, L12/L3=7.1 *9* (1964Aa01); α(K)exp=0.210 *25* and $\gamma\gamma(\theta)$ (1961Pe05); α(K)exp=0.22 *2* (1979Do09); A_2=−0.099 *26*, A_4=0.026 *38* (1977Sl01). δ: From 1974Ha18, by taking into account the penetration effect and using λ=+0.5 *5*.
		692.41 *8*	45.4 *21*	0	$1/2^+$	E2		0.01342 *19*	α(K)=0.01029 *14*; α(L)=0.002385 *33*; α(M)=0.000577 *8* α(N)=0.0001451 *20*; α(O)=2.71×10^{-5} *4*; α(P)=2.089×10^{-6} *29* Mult.: α(K)exp=0.010 *1* (1979Do09); α(K)exp=0.017 *5* (1971Hn04).
919.47	$(9/2^-)$	588.3[‡] *1*	100[‡]	331.17	$3/2^+$	[E3]		0.0567 *8*	B(E3)(W.u.)=0.00931 *+50−47* α(K)=0.0345 *5*; α(L)=0.01666 *23*; α(M)=0.00426 *6* α(N)=0.001074 *15*; α(O)=0.0001953 *27*; α(P)=1.250×10^{-5} *18*
1098.50	$5/2^+$	405.96 *7*	62 *3*	692.52	$5/2^+$	M1(+E2)	<0.4	0.164 *9*	α(K)=0.134 *8*; α(L)=0.0230 *9*; α(M)=0.00537 *19* α(N)=0.00136 *5*; α(O)=0.000263 *10*; α(P)=2.46×10^{-5} *13* Mult.,δ: α(K)exp=0.14 *2* (1979Do09); α(K)exp=0.15 *3* (1971Hn04).
		767.26 *8*	100 *5*	331.17	$3/2^+$	M1+E2	0.33 *19*	0.0304 *25*	α(K)=0.0250 *21*; α(L)=0.00415 *30*; α(M)=0.00097 *7* α(N)=0.000244 *17*; α(O)=4.73×10^{-5} *34*; α(P)=4.5×10^{-6} *4* Mult.,δ: α(K)exp=0.024 *3* (1979Do09); α(K)exp=0.026 *3* (1971Hn04).
		1098.52 *7*	57 *3*	0	$1/2^+$	E2		0.00528 *7*	α(K)=0.00426 *6*; α(L)=0.000784 *11*; α(M)=0.0001849 *26* α(N)=4.66×10^{-5} *7*; α(O)=8.89×10^{-6} *12*; α(P)=7.68×10^{-7} *11* Mult.,δ: α(K)exp=0.0055 *11* (1979Do09); α(K)exp=0.0061 *15* (1971Hn04).
1134.86	$7/2^+$	803.66 *7*	100	331.17	$3/2^+$	E2		0.00982 *14*	α(K)=0.00768 *11*; α(L)=0.001627 *23*; α(M)=0.000390 *5* α(N)=9.81×10^{-5} *14*; α(O)=1.850×10^{-5} *26*; α(P)=1.490×10^{-6} *21*

$^{201}_{81}Tl_{120}$-5

Adopted Levels, Gammas (continued)

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

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[@]	δ[†]	α[&]	Comments
									Mult.: α(K)exp=0.0074 *16* (1979Do09); α(K)exp=0.0079 *16* (1971Hn04); A_2=0.136 *19*, A_4=−0.050 *44* (1977Sl01).
1157.43	$3/2^+,5/2^+$	58.92 *5*	≈3.5	1098.50	$5/2^+$				
		464.90 *8*	14.0 *7*	692.52	$5/2^+$				
		826.26 *8*	100 *5*	331.17	$3/2^+$	M1+E2	1.98 *+43−29*	0.0129 *10*	α(K)=0.0103 *8*; α(L)=0.00195 *12*; α(M)=0.000461 *28* α(N)=0.000116 *7*; α(O)=2.22×10^{-5} *14*; α(P)=1.92×10^{-6} *15* Mult.,δ: α(K)exp=0.010 *1* (1979Do09); α(K)exp=0.0110 *15* (1971Hn04).
		1157.45 *9*	5.1 *3*	0	$1/2^+$				
1238.46	$(11/2^-)$	319.0[‡] *1*	100[‡]	919.47	$(9/2^-)$	M1+E2	−0.34 *+11−8*	0.307 *13*	α(K)=0.250 *12*; α(L)=0.0440 *11*; α(M)=0.01032 *24* α(N)=0.00260 *6*; α(O)=0.000503 *13*; α(P)=4.63×10^{-5} *19* Mult.,δ: From A_2=−0.451 *13*, A_4=−0.045 *18*, $\gamma(\theta)$ in 1977Sl01; DCO=1.56 *4* (2013Da15).
1238.83	$3/2^+$	546.28 *9*	4.6 *3*	692.52	$5/2^+$	M1+E2	0.31 *24*	0.074 *8*	α(K)=0.061 *7*; α(L)=0.0102 *9*; α(M)=0.00238 *20* α(N)=0.00060 *5*; α(O)=0.000117 *10*; α(P)=1.10×10^{-5} *12* Mult.,δ: α(K)exp=0.059 *8* (1979Do09); α(K)exp=0.065 *14* (1971Hn04).
		907.67 *8*	100 *6*	331.17	$3/2^+$	M1+E2	0.43 *+23−34*	0.0190 *20*	α(K)=0.0156 *17*; α(L)=0.00259 *24*; α(M)=0.00060 *6* α(N)=0.000152 *14*; α(O)=2.95×10^{-5} *28*; α(P)=2.78×10^{-6} *29* Mult.,δ: α(K)exp=0.015 *2* (1979Do09); α(K)exp=0.017 *3* (1971Hn04).
		1238.82 *7*	18.8 *11*	0	$1/2^+$	M1+E2	1.17 *+57−35*	0.0065 *9*	α(K)=0.0053 *8*; α(L)=0.00089 *12*; α(M)=0.000207 *27* α(N)=5.2×10^{-5} *7*; α(O)=1.01×10^{-5} *14*; α(P)=9.3×10^{-7} *14*; α(IPF)=1.02×10^{-5} *10* Mult.,δ: α(K)exp=0.0053 *9* (1979Do09); α(K)exp=0.0053 *15* (1971Hn04).
1277.12	$3/2^+,5/2^+$	120.0 *2*	0.28 *7*	1157.43	$3/2^+,5/2^+$				
		584.60 *8*	49.8 *24*	692.52	$5/2^+$	M1(+E2)	<0.5	0.061 *5*	α(K)=0.050 *4*; α(L)=0.0085 *5*; α(M)=0.00198 *12* α(N)=0.000499 *30*; α(O)=9.7×10^{-5} *6*; α(P)=9.1×10^{-6} *7* Mult.,δ: α(K)exp=0.051 *6* (1979Do09); α(K)exp=0.049 *10* (1971Hn04); α(K)exp=0.06 *1* and $\gamma\gamma(\theta)$ (1961Pe05).
		945.96 *8*	100 *7*	331.17	$3/2^+$	M1(+E2)	<0.6	0.0174 *16*	α(K)=0.0143 *13*; α(L)=0.00236 *20*; α(M)=0.00055 *4*

$^{201}_{81}Tl_{120}$-6

Adopted Levels, Gammas (continued)

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

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[@]	δ[†]	α[&]	Comments
									α(N)=0.000139 *11*; α(O)=2.69×10^{-5} *22*; α(P)=2.55×10^{-6} *23* Mult.,δ: α(K)exp=0.014 *2* (1979Do09); α(K)exp=0.0160 *25* (1971Hn04).
1277.12	3/2$^+$,5/2$^+$	1277.11 *7*	23.6	0	1/2$^+$				
1290.13	(9/2)$^+$	155.31 *10*	43 *5*	1134.86	7/2$^+$				
		597.60 *9*	100 *5*	692.52	5/2$^+$	E2		0.01856 *26*	α(K)=0.01385 *19*; α(L)=0.00357 *5*; α(M)=0.000872 *12* α(N)=0.0002194 *31*; α(O)=4.07×10^{-5} *6*; α(P)=2.97×10^{-6} *4*
1330.42	3/2$^+$,5/2$^+$	231.87 *10*	17.0 *21*	1098.50	5/2$^+$				
		637.90 *9*	57 *3*	692.52	5/2$^+$				
		999.23 *7*	100 *5*	331.17	3/2$^+$				
		1330.50 *15*	2.3 *4*	0	1/2$^+$				
1401.26	3/2$^+$,5/2$^+$	124.2 *2*	3.5 *7*	1277.12	3/2$^+$,5/2$^+$				
		302.7 *4*	0.90 *21*	1098.50	5/2$^+$				
		708.75 *9*	64 *3*	692.52	5/2$^+$	M1		0.0399 *6*	α(K)=0.0329 *5*; α(L)=0.00541 *8*; α(M)=0.001259 *18* α(N)=0.000318 *4*; α(O)=6.18×10^{-5} *9*; α(P)=5.87×10^{-6} *8* Mult.: α(K)exp=0.044 *7* (1979Do09); α(K)exp=0.049 *10* (1971Hn04).
		1070.04 *8*	100 *6*	331.17	3/2$^+$	E2+M1	1.8 *+10−5*	0.0075 *11*	α(K)=0.0061 *9*; α(L)=0.00107 *14*; α(M)=0.000252 *32* α(N)=6.3×10^{-5} *8*; α(O)=1.22×10^{-5} *16*; α(P)=1.10×10^{-6} *16* Mult.,δ: α(K)exp=0.0057 *10* (1979Do09);α(K)exp=0.0069 *15* (1971Hn04).
		1401.30 *8*	11.0 *6*	0	1/2$^+$				
1413.43	11/2	123.3[‡] *1*	20[‡] *3*	1290.13	(9/2)$^+$				
		493.9[‡a] *1*	100[‡] *14*	919.47	(9/2$^-$)	D			Mult.: A_2=−0.203 *18*, A_4=0.055 *26*.
1420.04	7/2$^+$	129.95 *10*	12.1 *11*	1290.13	(9/2)$^+$				
		285.18 *13*	≈9.8	1134.86	7/2$^+$				
		727.50 *9*	13.4 *13*	692.52	5/2$^+$				
		1088.85 *9*	100 *6*	331.17	3/2$^+$				
1445.87	(5/2)$^+$	753.35 *9*	90 *8*	692.52	5/2$^+$	(E0+M1)			Mult.: α(K)exp=0.087 *16* (1979Do0.
		1114.73 *8*	100 *6*	331.17	3/2$^+$	M1(+E2)	<0.3	0.01218 *35*	α(K)=0.01004 *29*; α(L)=0.00164 *4*; α(M)=0.000380 *10* α(N)=9.58×10^{-5} *26*; α(O)=1.86×10^{-5} *5*; α(P)=1.77×10^{-6} *5*; α(IPF)=4.97×10^{-7} *12*

$^{201}_{81}Tl_{120}$-7

Adopted Levels, Gammas (continued)

γ(^{201}Tl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[@]	δ[†]	α[&]	Comments
									α(K)=0.01004 *29*; α(L)=0.00164 *4*; α(M)=0.000380 *10* α(N)=9.58×10^{-5} *26*; α(O)=1.86×10^{-5} *5*; α(P)=1.77×10^{-6} *5*; α(IPF)=4.97×10^{-7} *12* Mult.,δ: α(K)exp=0.010 *2* (1979Do09); α(K)exp=0.011 *3* (1971Hn04).
1445.87	(5/2)$^+$	1445.80 *10*	21.4 *10*	0	1/2$^+$				
1479.85	5/2$^+$	202.79 *10*	8.5 *11*	1277.12	3/2$^+$,5/2$^+$				
		241.02 *8*	21.1 *21*	1238.83	3/2$^+$				
		322.42 *15*	9.3 *13*	1157.43	3/2$^+$,5/2$^+$				
		344.95 *7*	39 *3*	1134.86	7/2$^+$	M1(+E2)	<0.6	0.243 *26*	α(K)=0.197 *23*; α(L)=0.0349 *22*; α(M)=0.0082 *5* α(N)=0.00207 *12*; α(O)=0.000399 *25*; α(P)=3.7×10^{-5} *4* Mult.,δ: α(K)exp=0.21 *11* (1979Do09); α(K)exp=0.23 *6* (1971Hn04).
		381.29 *8*	27.3 *15*	1098.50	5/2$^+$	M1(+E2)	<0.5	0.190 *15*	α(K)=0.155 *13*; α(L)=0.0269 *14*; α(M)=0.00629 *30* α(N)=0.00159 *8*; α(O)=0.000307 *16*; α(P)=2.85×10^{-5} *21* Mult.,δ: α(K)exp=0.17 *3* (1979Do09); α(K)exp=0.16 *4* (1971Hn04).
		787.29 *10*	72 *9*	692.52	5/2$^+$				
		1148.75 *8*	100 *5*	331.17	3/2$^+$	M1+E2	1.1 *+4−3*	0.0079 *11*	α(K)=0.0065 *9*; α(L)=0.00109 *13*; α(M)=0.000254 *30* α(N)=6.4×10^{-5} *8*; α(O)=1.24×10^{-5} *15*; α(P)=1.15×10^{-6} *16*; α(IPF)=1.34×10^{-6} *12* Mult.,δ: α(K)exp=0.0065 *10* (1979Do09); α(K)exp=0.0076 *20* (1971Hn04).
		1479.91 *10*	22.2 *11*	0	1/2$^+$				
1550.59?	1/2,3/2,5/2$^+$	1219.40[a] *15*	100 *7*	331.17	3/2$^+$				
		1550.5[a] *4*	19 *3*	0	1/2$^+$				
1571.86	(13/2$^-$)	333.4[#] *1*	100[#] *5*	1238.46	(11/2$^-$)	M1+E2	−0.21 *+14−9*	0.285 *9*	α(K)=0.233 *8*; α(L)=0.0399 *9*; α(M)=0.00933 *19* α(N)=0.00236 *5*; α(O)=0.000457 *10*; α(P)=4.28×10^{-5} *13* Mult.: A_2=−0.383 *29*, A_4=0.052 *46* (1977Sl01); DCO=1.13 *3*, POL=−0.026 *19* (2013Da15). δ: From γ(θ) in ^{202}Hg(d,3nγ) (1977Sl01).
		652.2[#] *5*	44[#] *3*	919.47	(9/2$^-$)	E2		0.01528 *22*	α(K)=0.01159 *16*; α(L)=0.00280 *4*;

$^{201}_{81}Tl_{120}$-8

Adopted Levels, Gammas (continued)

γ(^{201}Tl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[@]	δ[†]	α[&]	Comments
									α(M)=0.000680 *10* α(N)=0.0001711 *24*; α(O)=3.19×10^{-5} *5*; α(P)=2.404×10^{-6} *34* I_γ: Other: Iγ=29 *3* in ^{202}Hg(d,3nγ) (1977Sl01). Mult.: A_2=0.204 *50*, A_4=−0.062 *77* (1977Sl01); DCO=0.53 *4*, POL=+0.117 *24* (2013Da15).
1575.1	(7/2)$^+$	285.0 *10*	100	1290.13	(9/2)$^+$	(M1)		0.451 *8*	α(K)=0.370 *6*; α(L)=0.0625 *11*; α(M)=0.01458 *25* α(N)=0.00368 *6*; α(O)=0.000715 *12*; α(P)=6.76×10^{-5} *12* Mult.: α(K)exp=0.37 *8* in in ^{201}Pb ε decay (1979Do09), but the transition is multiple placed.
1617.46	1/2,3/2,5/2$^+$	1286.3[a] *2*	100 *5*	331.17	3/2$^+$				
		1617.45 *15*	37 *3*	0	1/2$^+$				
1639.36	3/2$^+$,5/2$^+$	308.93 *15*	7.1 *9*	1330.42	3/2$^+$,5/2$^+$	(M1)		0.362 *5*	α(K)=0.297 *4*; α(L)=0.0500 *7*; α(M)=0.01168 *16* α(N)=0.00295 *4*; α(O)=0.000573 *8*; α(P)=5.42×10^{-5} *8* Mult.: α(K)exp=0.67 *15* (1979Do09), indicating E0 admixtures, but α(K)exp=0.37 *13* (1971Hn04), consistent with M1.
		481.98 *9*	9.8 *18*	1157.43	3/2$^+$,5/2$^+$				
		540.90 *9*	50 *3*	1098.50	5/2$^+$				
		946.78 *4*	86 *31*	692.52	5/2$^+$				
		1308.32 *8*	100 *5*	331.17	3/2$^+$	M1(+E2)	<0.6	0.0077 *6*	α(K)=0.0064 *5*; α(L)=0.00103 *8*; α(M)=0.000240 *18* α(N)=6.1×10^{-5} *4*; α(O)=1.18×10^{-5} *9*; α(P)=1.12×10^{-6} *9*; α(IPF)=2.77×10^{-5} *16* Mult.,δ: α(K)exp=0.009 *4* (1979Do09); α(K)exp=0.010 *3* (1971Hn04).
		1639.1 *5*	0.61 *15*	0	1/2$^+$				
1671.96	3/2$^+$,5/2$^+$	341.51 *8*	25 *3*	1330.42	3/2$^+$,5/2$^+$				
		394.86 *9*	40 *3*	1277.12	3/2$^+$,5/2$^+$	M1+(E2)	<0.4	0.177 *10*	α(K)=0.145 *8*; α(L)=0.0248 *9*; α(M)=0.00579 *20* α(N)=0.00146 *5*; α(O)=0.000283 *11*; α(P)=2.65×10^{-5} *14* Mult.,δ: α(K)exp=0.17 *5* (1979Do09); α(K)exp=0.22 *7* (1971Hn04).
		514.38 *9*	34 *7*	1157.43	3/2$^+$,5/2$^+$				
		979.4 *3*	4.1 *11*	692.52	5/2$^+$				
		1340.88 *9*	100 *6*	331.17	3/2$^+$				
		1672.02 *10*	5.4 *4*	0	1/2$^+$				
1712.45	3/2,5/2,7/2$^+$	1019.8 *3*	82 *36*	692.52	5/2$^+$				
		1381.4 *3*	100 *18*	331.17	3/2$^+$				
1755.33	3/2,5/2$^+$	1062.79 *15*	69 *9*	692.52	5/2$^+$				
		1424.16 *9*	100 *5*	331.17	3/2$^+$				
		1755.32 *10*	11.2 *10*	0	1/2$^+$				

$^{201}_{81}Tl_{120}$-9

Adopted Levels, Gammas (continued)

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

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[@]	δ[†]	α[&]	Comments
1962.76	(15/2$^-$)	390.9[#] *1*	100[#] *6*	1571.86	(13/2$^-$)	M1+E2	−0.20 *+8−7*	0.186 *5*	α(K)=0.152 *4*; α(L)=0.0259 *5*; α(M)=0.00604 *12* α(N)=0.001525 *30*; α(O)=0.000296 *6*; α(P)=2.78×10^{-5} *7* Mult.: A_2=−0.407 *26*, A_4=0.010 *37* (1977Sl01); DCO=1.48 *4*, POL=−0.016 *28* (2013Da15). δ: From $\gamma(\theta)$ in ^{202}Hg(d,3nγ).
		724.3[#] *1*	88[#] *7*	1238.46	(11/2$^-$)	E2		0.01220 *17*	α(K)=0.00941 *13*; α(L)=0.002119 *30*; α(M)=0.000511 *7* α(N)=0.0001286 *18*; α(O)=2.411×10^{-5} *34*; α(P)=1.883×10^{-6} *26* I_γ: Other: Iγ=38 *7* in ^{202}Hg(d,3nγ) (1977Sl01). Mult.: A_2=0.33 *15* with A_4 set to zero (1977Sl01); DCO=0.54 *2*, POL=+0.062 *32* (2013Da15).
1987.96	(13/2$^-$)	749.5[#] *1*	100[#]	1238.46	(11/2$^-$)	M1		0.0345 *5*	α(K)=0.0284 *4*; α(L)=0.00468 *7*; α(M)=0.001088 *15* α(N)=0.000275 *4*; α(O)=5.34×10^{-5} *7*; α(P)=5.07×10^{-6} *7* Mult.: DCO=1.41 *18*, POL=−0.07 *5* (2013Da15).
2015.2	(17/2$^-$)	443.3[#] *8*	100[#]	1571.86	(13/2$^-$)	E2		0.0379 *6*	α(K)=0.0261 *4*; α(L)=0.00887 *13*; α(M)=0.002211 *34* α(N)=0.000555 *8*; α(O)=0.0001012 *15*; α(P)=6.46×10^{-6} *10* B(E2)(W.u.)=0.157 *+33−49* Mult.: DCO=1.01 *3*, POL=+0.077 *30* (2013Da15); interpreted as Mult.=(M1+E2) and $\delta \approx 0.3$ in 1977Sl01 (A_2=0.162 *10*, A_4=0.002 *15*).
2041.3	(15/2$^+$)	469.4[#] *2*	100[#]	1571.86	(13/2$^-$)	E1		0.01054 *15*	α(K)=0.00872 *12*; α(L)=0.001396 *20*; α(M)=0.000323 *5* α(N)=8.11×10^{-5} *11*; α(O)=1.549×10^{-5} *22*; α(P)=1.336×10^{-6} *19* Mult.: DCO=1.8 *7*, POL=+0.13 *7* (2013Da15).
2182.0	(19/2$^-$)	166.9[#] *1*	100[#]	2015.2	(17/2$^-$)	M1+E2		2.000 *28*	α(K)=1.636 *23*; α(L)=0.279 *4*; α(M)=0.0652 *9* α(N)=0.01646 *23*; α(O)=0.00320 *5*; α(P)=0.000302 *4* Mult.: DCO=1.43 *4* (2013Da15).
2442.0	(21/2$^-$)	260.1[#] *1*	9[#] *5*	2182.0	(19/2$^-$)				
		426.8[#] *1*	100[#] *6*	2015.2	(17/2$^-$)	E2		0.0417 *6*	α(K)=0.0284 *4*; α(L)=0.01005 *14*; α(M)=0.002510 *35* α(N)=0.000630 *9*; α(O)=0.0001146 *16*; α(P)=7.18×10^{-6} *10* Mult.: DCO=1.06 *2*, POL=+0.143 *23* (2013Da15).
2486.5	(17/2)	445.2[#] *7*	100[#]	2041.3	(15/2$^+$)	D			Mult.: DCO=0.71 *5* (2013Da15).
2672.1	(23/2$^+$)	230.2[#] *1*	100[#]	2442.0	(21/2$^-$)	E1		0.0539 *8*	α(K)=0.0440 *6*; α(L)=0.00756 *11*; α(M)=0.001763 *25* α(N)=0.000441 *6*; α(O)=8.27×10^{-5} *12*; α(P)=6.54×10^{-6} *9* Mult.: DCO=1.30 *4*, POL=+0.07 *6* (2013Da15).
2713.66	(15/2$^-$)	1141.8[#] *1*	100[#]	1571.86	(13/2$^-$)	M1(+E2)		0.01174 *16*	α(K)=0.00969 *14*; α(L)=0.001573 *22*; α(M)=0.000365 *5* α(N)=9.22×10^{-5} *13*; α(O)=1.793×10^{-5} *25*;

$^{201}_{81}Tl_{120}$-10

Adopted Levels, Gammas (continued)

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

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[@]	α[&]	Comments
								α(P)=1.709×10^{-6} *24*; α(IPF)=1.397×10^{-6} *20* Mult.: DCO=2.13 *13*, POL=−0.032 *25* (2013Da15).
2748.0	(17/2$^+$)	(34.3[#] *7*)	[#]	2713.66	(15/2$^-$)			E_γ: From level energy differences. Not observed directly, but required by the coincidence relationship (2013Da15).
		785.2[#] *6*	100[#]	1962.76	(15/2$^-$)	E1	0.00375 *5*	α(K)=0.00313 *4*; α(L)=0.000480 *7*; α(M)=0.0001106 *16* α(N)=2.78×10^{-5} *4*; α(O)=5.35×10^{-6} *8*; α(P)=4.83×10^{-7} *7* Mult.: DCO=2.13 *13*, POL=−0.032 *25* (2013Da15).
2883.7	(23/2$^-$)	211.8[#] *2*	10.3[#] *22*	2672.1	(23/2$^+$)			
		441.1[#] *7*	100[#] *38*	2442.0	(21/2$^-$)	M1(+E2)	0.1387 *20*	α(K)=0.1139 *17*; α(L)=0.01903 *28*; α(M)=0.00444 *6* α(N)=0.001120 *16*; α(O)=0.0002176 *32*; α(P)=2.062×10^{-5} *30* Mult.: DCO=1.92 *7*, POL=−0.059 *29* (2013Da15).
		700.9[#] *3*	27[#] *9*	2182.0	(19/2$^-$)	E2	0.01308 *18*	α(K)=0.01004 *14*; α(L)=0.002310 *32*; α(M)=0.000558 *8* α(N)=0.0001404 *20*; α(O)=2.63×10^{-5} *4*; α(P)=2.030×10^{-6} *28* Mult.: DCO=1.09 *12* (2013Da15).
2897.6	(25/2$^+$)	225.5[#] *1*	100[#]	2672.1	(23/2$^+$)	M1(+E2)	0.861 *12*	α(K)=0.705 *10*; α(L)=0.1196 *17*; α(M)=0.0279 *4* α(N)=0.00705 *10*; α(O)=0.001370 *19*; α(P)=0.0001295 *18* Mult.: DCO=1.42 *7*, POL=−0.05 *10* (2013Da15).
2985.1	(21/2$^+$)	543.2[#] *4*	11[#] *3*	2442.0	(21/2$^-$)			
		803.1[#] *1*	100[#] *8*	2182.0	(19/2$^-$)	E1	0.00360 *5*	α(K)=0.00300 *4*; α(L)=0.000459 *6*; α(M)=0.0001059 *15* α(N)=2.66×10^{-5} *4*; α(O)=5.12×10^{-6} *7*; α(P)=4.63×10^{-7} *6* Mult.: DCO=1.90 *16*, POL=+0.066 *21* (2013Da15).
3011.7	(19/2$^+$)	263.7[#] *1*	100[#]	2748.0	(17/2$^+$)	M1(+E2)	0.559 *8*	α(K)=0.457 *6*; α(L)=0.0774 *11*; α(M)=0.01807 *25* α(N)=0.00456 *6*; α(O)=0.000886 *12*; α(P)=8.38×10^{-5} *12* Mult.: DCO=1.14 *5*, POL=−0.30 *5* (2013Da15).
3044.9	(25/2$^-$)	161.2[#] *1*	100[#]	2883.7	(23/2$^-$)	M1(+E2)	2.206 *31*	α(K)=1.804 *25*; α(L)=0.308 *4*; α(M)=0.0719 *10* α(N)=0.01816 *26*; α(O)=0.00353 *5*; α(P)=0.000333 *5* Mult.: DCO=1.30 *4* (2013Da15).
3056.6	(19/2$^+$)	308.8[#] *9*	100[#]	2748.0	(17/2$^+$)	M1(+E2)	0.362 *6*	α(K)=0.297 *5*; α(L)=0.0501 *8*; α(M)=0.01169 *19* α(N)=0.00295 *5*; α(O)=0.000573 *9*; α(P)=5.42×10^{-5} *9* Mult.: DCO=1.29 *10*, POL=−0.24 *4* (2013Da15).
3314.7	(21/2$^+$)	258.0[#] *1*	57[#] *29*	3056.6	(19/2$^+$)	M1(+E2)	0.593 *8*	α(K)=0.486 *7*; α(L)=0.0822 *12*; α(M)=0.01920 *27* α(N)=0.00485 *7*; α(O)=0.000942 *13*; α(P)=8.90×10^{-5} *13* Mult.: DCO=1.17 *14* (2013Da15).
		566.8[#] *3*	100[#] *12*	2748.0	(17/2$^+$)	E2	0.02093 *29*	α(K)=0.01544 *22*; α(L)=0.00416 *6*; α(M)=0.001019 *14* α(N)=0.000256 *4*; α(O)=4.74×10^{-5} *7*; α(P)=3.38×10^{-6} *5* Mult.: DCO=0.43 *8* (2013Da15).
3371.8	(23/2$^+$)	326.7[#] *3*	44[#] *9*	3044.9	(25/2$^-$)			

$^{201}_{81}Tl_{120}$-11

Adopted Levels, Gammas (continued)

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

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[@]	α[&]	Comments
3371.8	(23/2$^+$)	386.7[#] *1*	100[#] *15*	2985.1	(21/2$^+$)	M1(+E2)	0.1972 *28*	α(K)=0.1618 *23*; α(L)=0.0271 *4*; α(M)=0.00633 *9* α(N)=0.001598 *22*; α(O)=0.000310 *4*; α(P)=2.94×10^{-5} *4* Mult.: DCO=1.03 *4*, POL=−0.09 *5* (2013Da15).
3431.7	(27/2$^-$)	386.8[#] *1*	100[#]	3044.9	(25/2$^-$)			
3434.5	(23/2$^+$)	119.8[#] *2*	36[#] *8*	3314.7	(21/2$^+$)	M1(+E2)	5.13 *8*	α(K)=4.19 *6*; α(L)=0.719 *11*; α(M)=0.1680 *25* α(N)=0.0424 *6*; α(O)=0.00824 *12*; α(P)=0.000778 *12* Mult.: DCO=0.96 *14* (2013Da15).
		377.9[#] *1*	93[#] *10*	3056.6	(19/2$^+$)	E2	0.0575 *8*	α(K)=0.0374 *5*; α(L)=0.01519 *21*; α(M)=0.00382 *5* α(N)=0.000960 *13*; α(O)=0.0001732 *24*; α(P)=1.018×10^{-5} *14* Mult.: DCO=0.46 *4* (2013Da15).
		422.8[#] *2*	100[#] *19*	3011.7	(19/2$^+$)	E2	0.0427 *6*	α(K)=0.0290 *4*; α(L)=0.01037 *15*; α(M)=0.00259 *4* α(N)=0.000651 *9*; α(O)=0.0001182 *17*; α(P)=7.37×10^{-6} *10* Mult.: DCO=0.52 *4*, POL=+0.13 *5* (2013Da15).
3530.6	(25/2)	96.1[#] *1*	100[#]	3434.5	(23/2$^+$)	D		Mult.: DCO=0.61 *6* (2013Da15).
3706.8	(27/2)	176.2[#] *1*	100[#]	3530.6	(25/2)	D		Mult.: DCO=0.85 *4* (2013Da15).
3864.3	(29/2)	157.5[#] *1*	100[#]	3706.8	(27/2)	D		Mult.: DCO=0.86 *4* (2013Da15).
3936.1	(29/2)	504.4[#] *1*	100[#]	3431.7	(27/2$^-$)	D		Mult.: DCO=2.01 *1* (2013Da15).
3950.9	(25/2)	579.1[#] *1*	100[#]	3371.8	(23/2$^+$)	D		Mult.: DCO=0.68 *4* (2013Da15).

[†] From ^{201}Pb ε decay, unless otherwise stated.
[‡] From ^{202}Hg(d,3nγ).
[#] From ^{198}Pt(^{7}Li,4nγ).
[@] From α(K)exp, α(L)exp, K/L and $\gamma\gamma(\theta)$ in ^{201}Pb ε decay, $\gamma(\theta)$ in ^{202}Hg(d,3nγ), DCO and POL in ^{198}Pt(^{7}Li,4nγ), unless otherwise stated.
[&] Additional information 2.
[a] Placement of transition in the level scheme is uncertain.

$^{201}_{81}Tl_{120}$-12

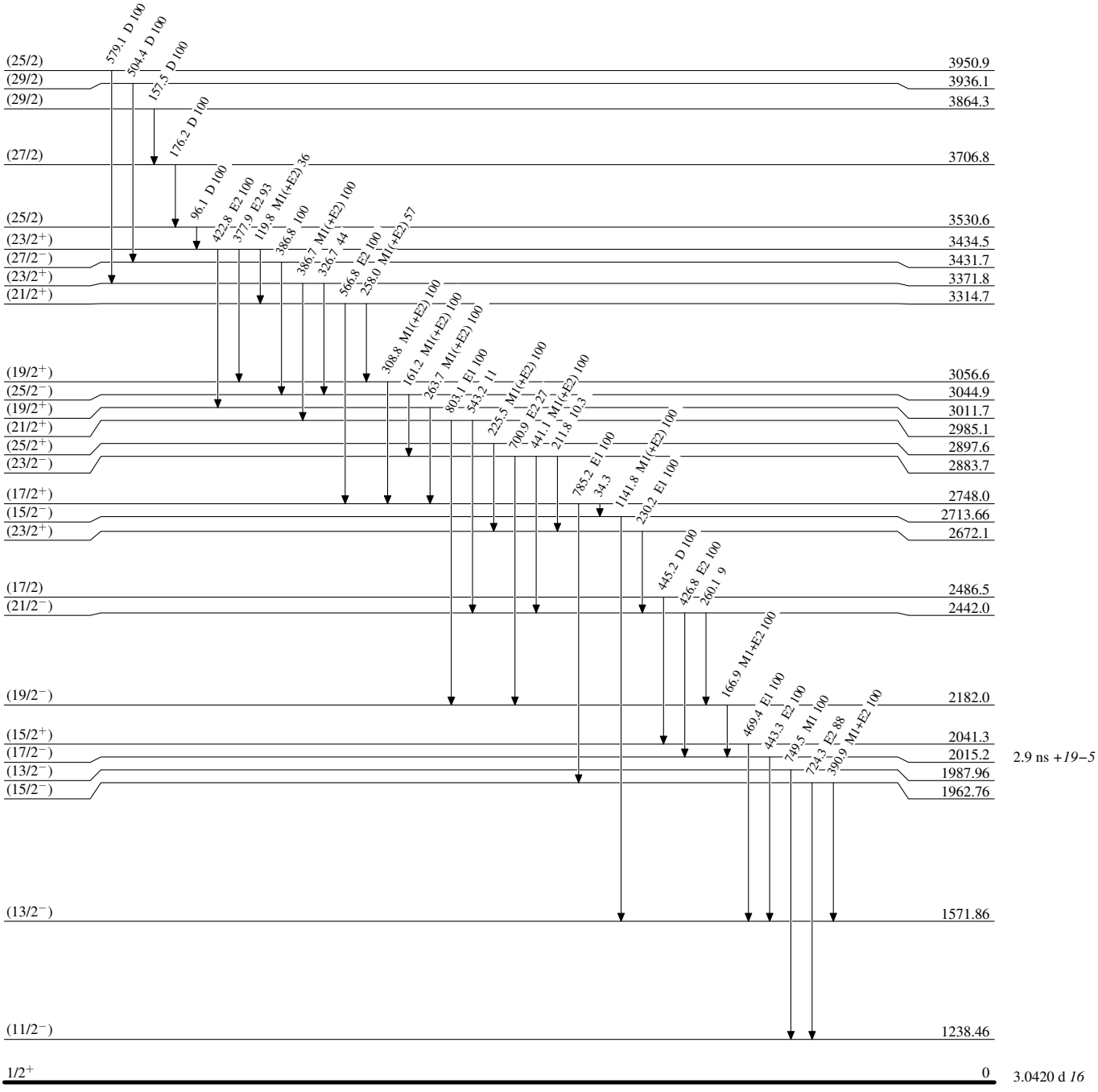
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{201}_{81}Tl_{120}$

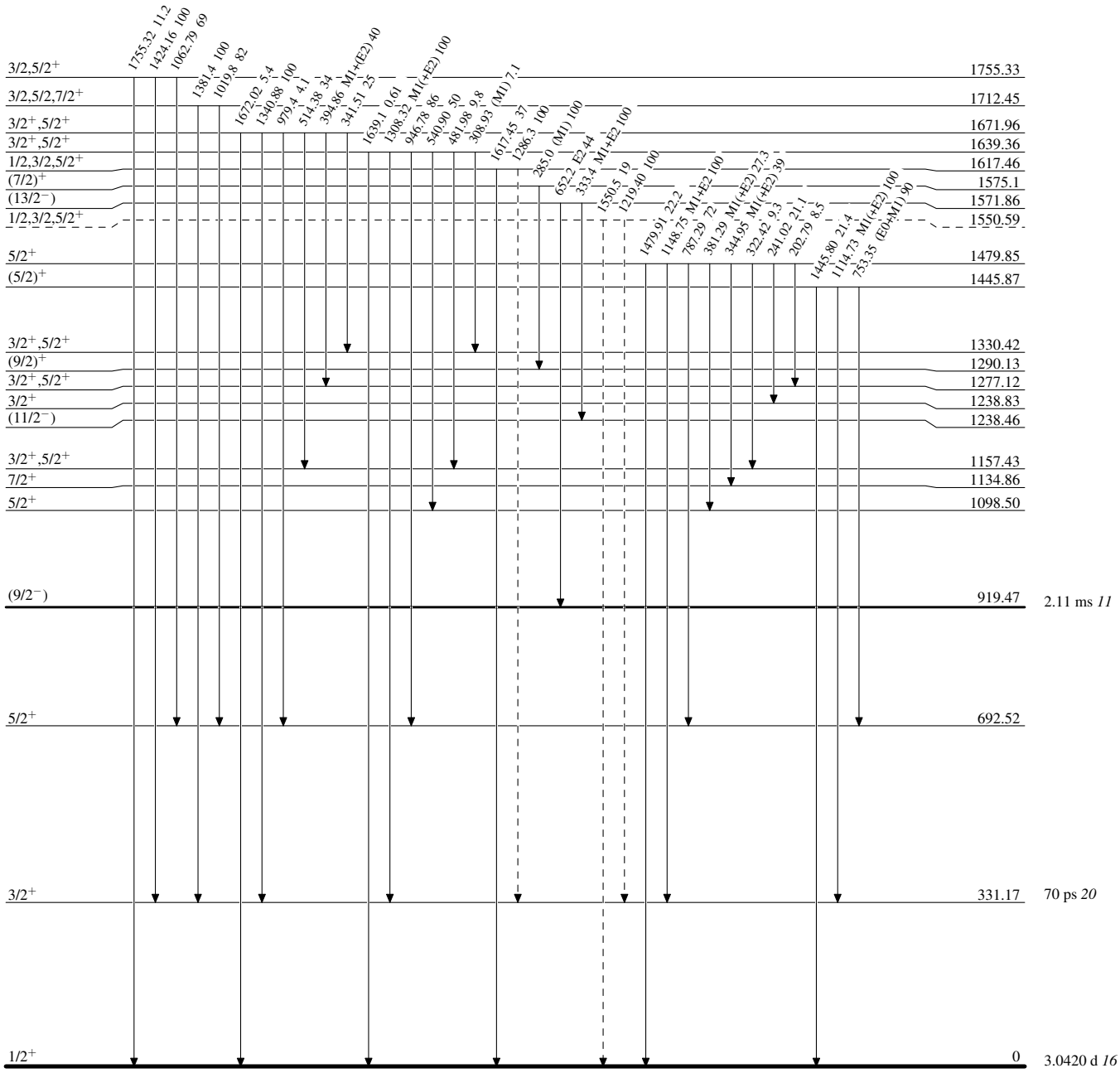
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{201}_{81}Tl_{120}$

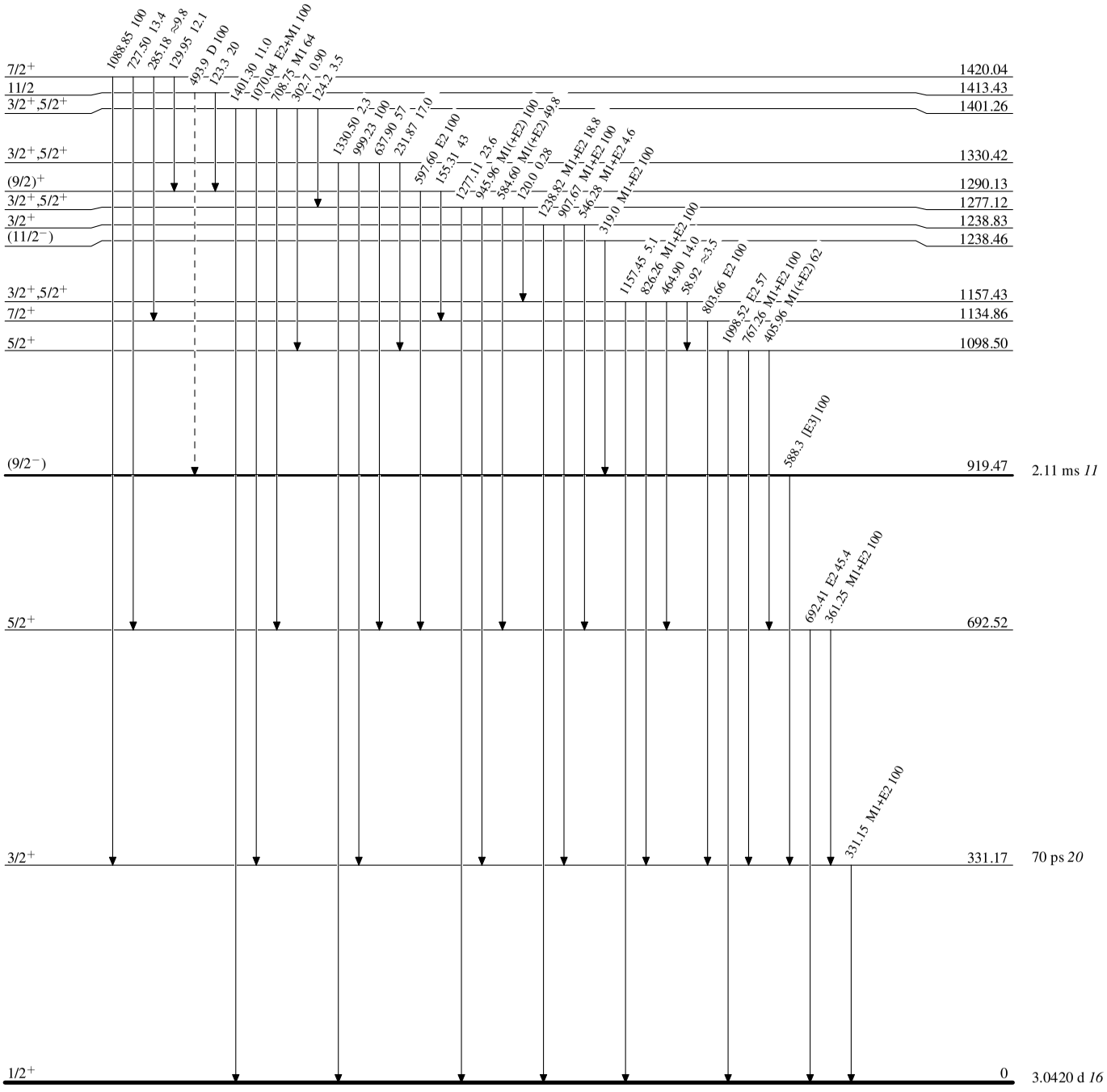
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{201}_{81}Tl_{120}$