Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 110, 1 (2009)	20-Nov-2008

Q(β^-)=−2871 *5*; S(n)=8589 *8*; S(p)=3149 *7*; Q(α)=3496 *4* 2017Wa10
Q(ε)=2565 *4*; S(2n)=16277 *8*; S(2p)=9760 *7* 2017Wa10
Additional information 1.
Isotope shift and hyperfine structure measurements: 1990Al36.
Mass measurement (Penning trap): 2000Be42.
Additional information 2.

^{151}Tb Levels

Configuration assignments for high-spin states are as proposed by 1994Pe17, based on authors′ model calculations.

Cross Reference (XREF) Flags

A	^{151}Tb IT decay (25 s)	D	^{130}Te(^{27}Al,6nγ)
B	^{151}Dy ε decay (17.9 min)	E	^{151}Eu(^{3}He,3nγ)
C	^{124}Sn(^{31}P,4nγ)	F	^{151}Eu(α,4nγ)

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$	XREF	Comments
0.0	1/2$^{(+)}$	17.609 h *14*	ABCDEF	%ε+%β^+=99.9905 *15*; %α=0.0095 *15* (1974To07) μ=0.919 *6* (1990Al36) %α= 0.009 *5* (evaluation by 1991Ry01). <r^2>$^{1/2}$=4.97 fm *15* (2004An14 evaluation). μ: from optical hyperfine structure studies (1990Al36). See also 2005St24 compilation of moments. J$^\pi$: spin from atomic beam (1970Ad09). Parity from systematics and shell-model considerations. T$_{1/2}$: from γ timing (1984Gr15). Others: 17.6 h *1* (1970Ch09), 16.5 h *3* (1971Go27), 18.1 h *4* (1963Mi11), 17.5 h *7* (1960To10), 1958Ba46, 1957Mi67, 1953Ra02.
22.922 *20*	3/2$^{(+)}$	4.05 ns *7*	AB F	J$^\pi$: M1+E2 γ to 1/2$^{(+)}$. T$_{1/2}$: from ceγ(t) and cece(t) (1978Al15).
72.39 *3*	(5/2$^+$)	0.92 ns *3*	AB F	J$^\pi$: M1+E2 γ to 3/2$^{(+)}$ and shell-model considerations. T$_{1/2}$: from ceγ(t) and cece(t) (1978Al15).
99.53[#] *5*	(11/2$^-$)	25 s *3*	AB F	%IT=93.4 *20*; %ε+%β^+=6.6 *20* Configuration=$\nu f^4_{7/2\ 0+}\otimes\pi h_{11/2}$. J$^\pi$: E3 γ to (5/2$^+$); systematics and shell-model considerations. T$_{1/2}$: from γ(t) (1978Ke12). %ε+%β^+: estimated from the Iγ(379γ) in ^{151}Gd and Ice(27 transition).
248.79 *3*	(5/2$^+$,7/2$^+$)	<0.26 ns	B	J$^\pi$: M1+E2 γ to (5/2$^+$) and γ from (7/2$^-$,9/2). T$_{1/2}$: from ceγ(t) and cece(t) (1978Al15).
276.42 *4*			B	J$^\pi$: γ to (5/2$^+$) suggests 1/2 to 9/2.
485.63 *5*	(7/2$^-$)		B	J$^\pi$: E2 γ to (11/2$^-$) and γ to (5/2$^+$).
548.85 *5*	(3/2$^+$,5/2$^+$,7/2$^+$)		B	J$^\pi$: M1 γ to (5/2$^+$).
583.98 *6*	(5/2$^+$)		B	J$^\pi$: γ to 1/2$^{(+)}$ and log *ft*=6.8 from 7/2$^{(-)}$.
646.00 *5*	(9/2$^-$)		B	J$^\pi$: M1 γ to (11/2$^-$) and log *ft*=5.9 from 7/2$^{(-)}$.
686.70 *7*	(5/2,7/2$^+$)		B	J$^\pi$: γ to 3/2$^{(+)}$ and log *ft*=6.7 from 7/2$^{(-)}$.
703.82[#] *11*	(15/2$^-$)		CDEF	J$^\pi$: ΔJ=2, (E2) γ to (11/2$^-$). Configuration=$\nu f^4_{7/2\ 2+}\otimes\pi h_{11/2}$.
711.93 *5*	(5/2$^+$)		B	J$^\pi$: M1(+E2) γ to (5/2$^+$,7/2$^+$); γ to 1/2$^{(+)}$ and log *ft*=5.9 from 7/2$^{(-)}$.

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Adopted Levels, Gammas (continued)

^{151}Tb Levels (continued)

E(level)†	Jπ‡	XREF	Comments
841.11 *9*	(5/2,7/2$^+$)	B	J$^\pi$: γ to 3/2$^{(+)}$ and log *ft*=6.5 from 7/2$^{(-)}$.
856.80 *6*	(5/2,7/2$^+$)	B	J$^\pi$: γ to 3/2$^{(+)}$ and log *ft*=6.4 from 7/2$^{(-)}$.
886.57 *8*	(5/2,7/2,9/2$^+$)	B	J$^\pi$: γ to (5/2$^+$) and log *ft*=6.4 from 7/2$^{(-)}$.
887.55 *13*	(13/2$^-$)	CDEF	J$^\pi$: ΔJ=1, D+Q γ to (11/2$^-$) and γ to (15/2$^-$). Configuration=$\nu f^4_{7/2\ 2+}\otimes\pi h_{11/2}$.
917.78 *7*	(5/2$^-$,7/2$^-$)	B	J$^\pi$: M1 γ to (7/2$^-$) and γ to (5/2$^+$).
949.05 *6*	(5/2$^-$,7/2$^+$)	B	J$^\pi$: γ's to 3/2$^{(+)}$ and (9/2$^-$).
1082.61 *8*	(7/2$^-$)	B	J$^\pi$: M1 γ to (9/2$^-$) and γ to (5/2$^+$).
1096.61@ *13*	(15/2$^+$)	CDEF	J$^\pi$: E1, ΔJ=(0) γ to (15/2$^-$) and ΔJ=1 γ to (13/2$^-$). Configuration=$\nu f^4_{7/2\ 0+}\otimes[\pi h_{11/2}\otimes^{150}Gd,3^-]_{15/2+}$.
1119.38 *8*	(7/2$^-$,9/2)	B	J$^\pi$: γ to (11/2$^-$) and log *ft*=5.9 from 7/2$^{(-)}$.
1202.09 *11*	(5/2$^-$,7/2,9/2$^+$)	B	J$^\pi$: γ's to (5/2$^+$) and (9/2$^-$).
1241.20 *10*	(7/2$^-$,9/2$^-$)	B	J$^\pi$: γ's to (11/2$^-$) and (7/2$^-$); log *ft*=5.7 from 7/2$^{(-)}$.
1319.4 *3*	(5/2,7/2,9/2)	B	J$^\pi$: log *ft*=6.2 from 7/2$^{(-)}$.
1319.68# *14*	(19/2$^-$)	CDEF	J$^\pi$: ΔJ=2, E2 γ to (15/2$^-$). Configuration=$((\nu\ f_{7/2})^{+2}_{0+}(\nu\ f_{7/2})^{+2}(\pi\ h_{11/2}))$.
1433.85 *8*	(7/2$^-$)	B	J$^\pi$: γ's to (5/2$^+$) and (11/2$^-$).
1582.27 *12*	(5/2$^-$,7/2,9/2)	B	J$^\pi$: γ to (9/2$^-$) and log *ft*=6.1 from 7/2$^{(-)}$.
1610.95 *12*	(5/2$^-$)	B	J$^\pi$: γ's to (7/2$^-$) and 1/2$^{(+)}$; log *ft*=5.5 from 7/2$^{(-)}$. 1611γ to 1/2$^{(+)}$ is weak (4% *1*), its mult could be M2.
1629.64 *8*	(7/2$^-$,9/2$^-$)	B	J$^\pi$: γ to (11/2$^-$) and log *ft*=5.3 from 7/2$^{(-)}$.
1663.18 *11*	(5/2$^-$,7/2$^-$,9/2$^-$)	B	J$^\pi$: log *ft*=5.4 from 7/2$^{(-)}$.
1693.41@ *18*	(19/2$^+$)	CDEF	J$^\pi$: ΔJ=2, (E2) γ to (15/2$^+$). Configuration=$((\nu\ f_{7/2})^{+4}_{2+}((^{150}Gd\ 3^-)(\pi\ h_{11/2}))\ _{15/2+})$.
1724.47 *15*	(5/2$^-$)	B	J$^\pi$: γ to 3/2$^{(+)}$ and log *ft*=5.0 from 7/2$^{(-)}$.
1741.78 *8*	(5/2$^-$)	B	J$^\pi$: γ's to 3/2$^{(+)}$ and (9/2$^-$); log *ft*=5.3 from 7/2$^{(-)}$.
1773.77 *8*	(5/2$^-$,7/2$^-$,9/2$^-$)	B	J$^\pi$: log *ft*=5.2 from 7/2$^{(-)}$.
1841.62 *11*	(5/2$^-$,7/2$^-$)	B	J$^\pi$: γ's to (5/2$^+$) and (9/2$^-$); log *ft*=5.1 from 7/2$^{(-)}$.
2002.20# *16*	(23/2$^-$)	CDEF	J$^\pi$: ΔJ=2, E2 γ to (19/2$^-$). Configuration=$((\nu\ f_{7/2})^{+2}_{0+}(\nu\ f_{7/2})^{+2}_{6+}(\pi\ h_{11/2}))$.
2045.69 *21*	(21/2$^+$)	DEF	J$^\pi$: ΔJ=1, D+Q to (19/2$^+$) and γ to (19/2$^-$). Configuration=$((\nu\ f_{7/2})^{+4}_{2+}((^{150}Gd\ 3^-)(\pi\ h_{11/2}))\ _{17/2+})$.
2120.3 *3*	(23/2$^-$)	CDEF	J$^\pi$: ΔJ=2 γ to (19/2$^-$). Configuration=$((\nu\ f_{7/2})^{+2}_{0+}(\nu\ f_{7/2})(\nu\ h_{9/2})(\pi\ h_{11/2}))$.
2180.61 *18*	(25/2$^-$)	CDEF	J$^\pi$: ΔJ=1, M1,E2 γ to (23/2$^-$). Configuration=$((\nu\ f_{7/2})^{+2}_{0+}(\nu\ f_{7/2})(\nu\ h_{9/2})(\pi\ h_{11/2}))$.
2219.89@ *19*	(23/2$^+$)	CDEF	J$^\pi$: ΔJ=2, (E2) γ to (19/2$^+$). Configuration=$((\nu\ f_{7/2})^{+4}_{4+}((^{150}Gd\ 3^-)(\pi\ h_{11/2}))\ _{15/2+})$.
2375.35 *20*	(27/2$^-$)	CD F	J$^\pi$: ΔJ=1, M1,E2 γ to (25/2$^-$). Configuration=$((\nu\ f_{7/2})^{+2}_{0+}((\nu\ f_{7/2})(\nu\ h_{9/2}))_{8+}\ (\pi\ h_{11/2})_{11/2})$.
2468.68 *18*	(25/2$^+$)	CDEF	J$^\pi$: ΔJ=1, (M1,E2) γ to (23/2$^+$) and γ to (25/2$^-$). Configuration=$((\nu\ f_{7/2})^{+4}_{4+}((^{150}Gd\ 3^-)(\pi\ h_{11/2}))\ _{17/2+})$.
2782.59@ *21*	(27/2$^+$)	CDEF	J$^\pi$: ΔJ=2, E2 γ to (23/2$^+$) and γ to (25/2$^+$). Configuration=$((\nu\ f_{7/2})^{+4}_{6+}((^{150}Gd\ 3^-)(\pi\ h_{11/2}))\ _{15/2+})$.
2847.35 *19*	(29/2$^+$)	CD F	J$^\pi$: ΔJ=2 γ to (25/2$^+$) and ΔJ=1, (M1) γ to (27/2$^+$). Configuration=$((\nu\ f_{7/2})^3_{5/2-}(\nu\ h_{9/2}))_{7+}\ ((^{150}Gd\ 3^-)(\pi\ h_{11/2}))_{15/2+}$.
3108.2? *4*		F	J$^\pi$: ΔJ=(1) γ to (27/2$^+$) suggests 25/2,29/2.
3115.76 *21*	(31/2$^+$)	CDEF	J$^\pi$: ΔJ=1, M1,E2 γ to (29/2$^+$). Configuration=$(((\nu\ f_{7/2})^3_{7/2}(\nu\ h_{9/2}))_{8+})\ ((^{150}Gd\ 3^-)(\pi\ h_{11/2}))_{15/2+}$.
3128.69 *24*	(31/2$^-$)	CDEF	J$^\pi$: ΔJ=2 γ to (27/2$^-$). Configuration=$((\nu\ f_{7/2})^{+3}(\nu\ h_{9/2})(\pi\ h_{11/2}))$.
3159.1? *4*	(29/2$^-$)	F	J$^\pi$: ΔJ=2 γ to (25/2$^-$).
3196.0 *5*	(31/2$^+$)	D F	J$^\pi$: ΔJ=1 γ to (29/2$^+$).

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Adopted Levels, Gammas (continued)

^{151}Tb Levels (continued)

E(level)[†]	J^{π}[‡]	XREF	Comments
			Configuration=$((\nu\ f_{7/2})^{+2}_{0+}((\nu\ f_{7/2})(\nu\ i_{13/2}))10(\pi\ h_{11/2})_{11/2-})$.
3274.07 *22*	$(33/2^+)$	CD F	J^{π}: $\Delta J=1$ γ to $(31/2^+)$. Configuration=$((\nu\ f_{7/2})^2_{0+}((\nu\ h_{9/2})(\nu\ i_{13/2}))_{11-}(\pi\ h_{11/2})_{11/2-})$.
3287.7? *4*		F	J^{π}: $\Delta J=1$, D+Q γ to $(29/2^+)$ suggests $31/2^+$.
3808.41 *25*	$(35/2^-)$	CD F	J^{π}: $\Delta J=2$ γ to $(31/2^-)$. Configuration=$((\nu\ f_{7/2})^3(\nu\ h_{9/2}))_{12+}(\pi\ h_{11/2})\ _{11/2-}$.
3900.68 *24*	$(35/2^+)$	CD F	J^{π}: $\Delta J=2$ γ to $(31/2^+)$. Configuration=$((\nu\ f_{7/2})^3_{11/2}(\nu\ h_{9/2}))_{10+}\ ((^{150}\mathrm{Gd}\ 3^-)(\pi\ h_{11/2}))_{15/2+}$.
4148.04 *23*	$(37/2^+)$	CD F	J^{π}: $\Delta J=1$ γ to $(35/2^+)$ and $\Delta J=(2)$ γ to $(33/2^+)$. Configuration=$((\nu\ f_{7/2})^3(\nu\ i_{13/2})(\pi\ h_{11/2}))$.
4564.82 *25*	$(39/2^+)$	CD F	J^{π}: $\Delta J=(2)$ γ to $(35/2^+)$. Configuration=$((\nu\ f_{7/2})^3_{15/2-}(\nu\ h_{9/2}))_{12+}\ ((^{150}\mathrm{Gd}\ 3^-)(\pi\ h_{11/2}))_{15/2+}$.
4765.4 *4*	$(39/2^-)$	D	J^{π}: γ to $(35/2^-)$. Configuration=$((\nu\ f_{7/2})^2_{0+}(\nu\ f_{7/2})(\nu\ i_{13/2})(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
4773.96 *24*	$(41/2^+)$	CD F	J^{π}: $\Delta J=(2)$ γ to $(37/2^+)$ and $\Delta J=(1)$ γ to $(39/2^+)$. Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2})(\pi\ h_{11/2}))$.
4840.2 *3*	$(39/2^-)$	CD	J^{π}: $\Delta J=(2)$ γ to $(35/2^-)$. Configuration=$((\nu\ f_{7/2})^{+2}(\nu\ h_{9/2})^2)_{14+}(\pi\ h_{11/2})_{11/2-}$.
5034.2 *4*	$(41/2^-)$	D	J^{π}: γ to $(37/2^+)$. Configuration=$((\nu\ f_{7/2})^2_{0+}(\nu\ f_{7/2})(\nu\ i_{13/2})(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
5162.48 *25*	$(45/2^+)$	CD F	J^{π}: $\Delta J=(2)$ γ to $(41/2^+)$. Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2}))_{17-}(\pi\ h_{11/2})_{11/2-}$.
5363.7 *5*		D	J^{π}: γ to $(39/2^-)$ suggests $39/2,41/2,43/2^-$.
5467.2 *3*	$(43/2^-)$	CD	J^{π}: $\Delta J=(2)$ γ to $(39/2^-)$. Configuration=$((\nu\ f_{7/2})^2_{0+}(\nu\ h_{9/2})(\nu\ i_{13/2})(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
5474.8 *3*	$(43/2^-)$	D	J^{π}: γ's to $(39/2^-)$ and $(41/2^+)$. Configuration=$((\nu\ f_{7/2})^2(\nu\ i_{13/2})^2(\pi\ h_{11/2}))$.
5656.4 *6*		D	J^{π}: γ to $(39/2^-)$ suggests $39/2,41/2,43/2^-$.
5818.8 *4*	$(45/2^-)$	D	J^{π}: $\Delta J=1$ γ to $(43/2^-)$. Configuration=$((\nu\ f_{7/2})^2(\nu\ i_{13/2})^2(\pi\ h_{11/2}))$.
5924.7 *4*	$(45/2^-)$	CD	J^{π}: $\Delta J=1$ γ to $(43/2^-)$. Configuration=$((\nu\ f_{7/2})^2_{0+}(\nu\ f_{7/2})\ (\nu\ i_{13/2}))_{10-}((\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)_{25/2+}$.
5985.1 *3*	$(47/2^-)$	CDEF	J^{π}: $\Delta J=1$ γ to $(45/2^+)$. Configuration=$(((\nu\ f_{7/2})^2(\nu\ i_{13/2})^2)_{18+}(\pi\ h_{11/2})$.
6165.3 *4*	$(49/2^-)$	CD	J^{π}: $\Delta J=(2)$ γ to $(45/2^-)$. Configuration=$((\nu\ f_{7/2})^3(\nu\ i_{13/2})(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
6170.0 *4*	$(49/2^-)$	D	J^{π}: γ to $(45/2^-)$. Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2(\pi\ h_{11/2}))$.
6485.1 *3*	$(49/2^+)$	CD	J^{π}: $\Delta J=(2)$ γ to $(45/2^+)$. Configuration=$((\nu\ f_{7/2})^2_{0+}((\nu\ h_{9/2})\ (\nu\ i_{13/2}))_{11-}(\pi\ d_{5/2})^{-2}_{0+}(\pi\ h_{11/2})^3_{27/2-})$.
6594.0 *3*	$(51/2^-)$	CD	J^{π}: $\Delta J=1$ γ to $(49/2^-)$. Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2)_{20+}(\pi\ h_{11/2})_{11/2-}$.
6673.6? *5*	$(49/2^-)$	D	J^{π}: γ to $(45/2^-)$.
6879.9 *3*	$(51/2^-)$	CD	J^{π}: $\Delta J=(2)$ γ to $(47/2^-)$. Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2})(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
7248.1 *3*	$(53/2^-)$	CD	J^{π}: $\Delta J=(1)$ γ to $(51/2^-)$. Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2})(\pi\ g_{7/2})^{-1}(\pi\ h_{11/2})^2)$.
7264.6 *3*	$(53/2^+)$	CD	J^{π}: $\Delta J=(2)$ γ to $(49/2^+)$ and γ to $(51/2^-)$. Configuration=$((\nu\ f_{7/2})^2(\nu\ i_{13/2})^2(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
7295.8 *4*	$(53/2^-)$	D	J^{π}: $\Delta J=1$ γ to $(51/2^-)$. Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2})(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
7304.3 *3*	$(53/2^+)$	CD	J^{π}: $\Delta J=(2)$ γ to $(49/2^+)$ and γ to $(51/2^-)$. Configuration=$((\nu\ f_{7/2})^2)(\nu\ h_{9/2})^2)_{28+}\ ((\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)_{25/2+}$.
7618.8 *4*	$(55/2^+)$	D	J^{π}: $\Delta J=1$ γ to $(53/2^-)$.

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Adopted Levels, Gammas (continued)

^{151}Tb Levels (continued)

E(level)†	J$^\pi$‡	XREF	Comments
			Configuration=$((\nu\ f_{7/2})^2(\nu\ i_{13/2})^2(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
7676.3 *4*	(55/2$^-$)	CD	J$^\pi$: ΔJ=1 γ to (53/2$^-$). Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2})(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
7764.6 *5*	(57/2$^-$)	D	J$^\pi$: γ to (55/2$^+$). Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2})(\pi\ g_{7/2})^{-1}(\pi\ h_{11/2})^2)$.
7882.4 *3*	(57/2$^-$)	CD	J$^\pi$: ΔJ=1 γ to (55/2$^-$) and γ to (57/2$^-$). Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2})(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
7901.6 *3*	(57/2$^+$)	CD	J$^\pi$: ΔJ=(2) γ to (53/2$^+$) and γ to (55/2$^+$). Configuration=$((\nu\ f_{7/2})^2(\nu\ i_{13/2})^{+2}(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
8283.1 *3*	(61/2$^+$)	CD	J$^\pi$: ΔJ=(2) γ to (57/2$^+$). Configuration=$((\nu\ f_{7/2})^{+2}(\nu\ h_{9/2})(\nu\ i_{13/2}))_{17-}\ (\pi\ d_{5/2})^{-2}_{0+}(\pi\ h_{11/2})^3_{27/2-}$ or configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
8335.8 *4*	(59/2$^-$)	D	J$^\pi$: γ to (55/2$^-$). Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2})(\pi\ g_{7/2})^{-1}(\pi\ h_{11/2})^2)$.
8802.5 *4*	(61/2$^-$)	CD	J$^\pi$: γ's to (57/2$^-$) and (59/2$^-$). Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2}))_{17-}\ ((\pi\ g7/2)^{-1}(\pi\ h_{11/2})^2)_{27/2+}$.
9035.0 *4*	(63/2)	D	J$^\pi$: ΔJ=(2) γ to (61/2$^+$).
9123.5 *4*	(63/2$^-$)	CD	J$^\pi$: ΔJ=1 γ to (61/2$^-$). Configuration=$((\nu\ f_{7/2})^2(\nu\ i_{13/2})^{+2})_{18+}\ ((\pi\ d_{5/2})^{-2}_{0+}(\pi\ h_{11/2})^3)_{27/2-}$.
9379.6 *3*	(65/2$^+$)	CD	J$^\pi$: ΔJ=(2) γ to (61/2$^+$) and ΔJ=1 γ to (63/2$^-$). Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2)_{20+}\ ((\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)_{25/2+}$.
9406.3 *4*	(65/2)	CD	J$^\pi$: ΔJ=(2) γ to (61/2$^+$).
9445.5 *4*	(63/2)	D	J$^\pi$: γ to (61/2$^+$).
9490.2 *3*	(65/2$^+$)	CD	J$^\pi$: ΔJ=(2) γ to (61/2$^+$) and γ to (63/2$^-$). Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2})(\pi\ d_{5/2})^{-2}(\pi\ h_{11/2})^3)$.
9530.3 *4*	(63/2$^-$)	D	J$^\pi$: γ to (61/2$^+$). Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})^2(\nu\ i_{13/2}))_{18-}\ ((\pi\ g7/2)^{-1}(\pi\ h_{11/2})^2)_{27/2+}$.
9708.8 *4*	(67/2)	CD	J$^\pi$: ΔJ=1 γ to (65/2).
9733.7 *4*	(65/2$^+$)	D	J$^\pi$: ΔJ=1 γ to (63/2) and γ to (61/2$^+$). Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2(\pi\ g_{7/2})^{-1}(\pi\ h_{11/2})^2)$.
9750.5 *3*	(67/2$^-$)	CD	J$^\pi$: ΔJ=(2) γ to (63/2$^-$) and ΔJ=1 γ to (65/2$^+$). Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2)_{20+}\ ((\pi\ d_{5/2})^{-2}_{0+}(\pi\ h_{11/2})^3)_{27/2-}$.
10032.3 *4*	(67/2$^+$)	CD	Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2)_{20+}\ ((\pi\ g7/2)^{-1}(\pi\ h_{11/2})^2)_{27/2+}$.
10296.8 *6*	(71/2)	D	
10350.5 *4*	(69/2$^+$)	CD	Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})(\nu\ i_{13/2}))_{17+}\ ((\pi\ d_{5/2})^{-2}(\pi\ h_{11/2})^3)_{35/2-}$.
10620.4 *5*		D	
10772.4 *6*	(71/2)	D	
10792.0 *3*	(71/2$^-$)	CD	Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2(\pi\ d_{5/2})^{-2}(\pi\ h_{11/2})^3)$.
10997.7 *5*	(69/2$^-$)	D	Configuration=$((\nu\ f_{7/2})^{+2}(\nu\ h_{9/2})(\nu\ i_{13/2})^2)\ (\nu\ d_{3/2})^{-1}(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
11200.5 *5*	(71/2)	D	
11201.9 *6*		D	
11274.8 *4*	(71/2$^-$)	D	Configuration=$((\nu\ f_{7/2})^{+2}(\nu\ h_{9/2})(\nu\ i_{13/2})^2\ (\nu\ d_{3/2})^{-1}(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^2)$.
11321.6? *25*		D	
11425.6? *25*		D	
11425.9 *6*	(73/2$^+$)	D	Configuration=$((\nu\ f_{7/2})^{+2}(\nu\ h_{9/2})(\nu\ i_{13/2})^2\ (\nu\ d_{3/2})^{-1}(\pi\ d_{5/2})^{-2}_{0+}(\pi\ h_{11/2})^3)$.
11593.0 *4*	(73/2$^-$)	CD	Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2(\pi\ d_{5/2})^{-2}(\pi\ h_{11/2})^3)$.
11726.4 *4*	(75/2$^-$)	CD	Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2)_{20+}\ ((\pi\ d_{5/2})^{-2}(\pi\ h_{11/2})^3)_{35/2-}$.
11756.6 *7*		D	
11760.7 *7*		D	
11830.0 *5*	(73/2)	D	
11956.8 *4*	(75/2$^-$)	D	Configuration=$((\nu\ f_{7/2})^3(\nu\ h_{9/2})(\nu\ i_{13/2})^{+2})_{24+}\ (\nu\ d_{3/2})^{-2}_{0+}(\pi\ d_{5/2})^{-2}_{0+}(\pi\ h_{11/2})^3_{27/2-}$.
12704.0 *4*	(75/2$^-$)	D	Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2\ (\pi\ g7/2)^{-1}(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^3)$.
12720.0 *4*	(79/2$^-$)	CD	Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2)_{20+}\ ((\pi\ g7/2)^{-1}(\pi\ d_{5/2})^{-1}(\pi\ h_{11/2})^3)_{39/2-}$.
12754.2 *5*	(79/2$^-$)	D	Configuration=$((\nu\ f_{7/2})^{+3}(\nu\ h_{9/2})(\nu\ i_{13/2})^2\ (\nu\ d_{3/2})^{-2}_{0+}(\pi\ d_{5/2})^{-2}(\pi\ h_{11/2})^3)$.

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Adopted Levels, Gammas (continued)

^{151}Tb Levels (continued)

E(level)[†]	J^{π}[‡]	XREF	Comments
12962[&] 3	(65/2+)	D	Additional information 3. J^{π}: from linking transitions in 2008Ro23. Other: 61/2 in 1995Kh06, 1993Ra07, 1993Cu06.
13019.5 5	(79/2−)	D	Configuration=$((\nu\ f_{7/2})^{+2}(\nu\ h_{9/2})^2(\nu\ i_{13/2})^2)\ _{26+}(\nu\ d_{3/2})^{-2}_{0+}(\pi\ d_{5/2})^{-2}_{0+}(\pi\ h_{11/2})^3\ _{27/2-}$.
13249.3 7		D	
13460.8 5	(81/2)	D	
13522.7 6		D	
13524.6 6		D	
13730.60[&] 10	(69/2+)	D	
13791.3 5	(83/2−)	D	Configuration=$((\nu\ f_{7/2})^3(\nu\ h_{9/2})(\nu\ i_{13/2})^2)_{24+}\ (\nu\ d_{3/2})^{-2}_{0+}((\pi\ d_{5/2})^{-2}(\pi\ h_{11/2})^3)_{35/2-}$.
13850.4 6	(79/2−)	D	Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})(\nu\ i_{13/2})^2)_{20+}\ ((\pi\ g7/2)^{-2})(\pi\ h_{11/2})^3)_{39/2-}$.
14539.0 7		D	
14541.39[&] 14	(73/2+)	D	
14900.4 7		D	
15316.9 7		D	
15343.4 7		D	
15395.30[&] 18	(77/2+)	D	
15641.3 7	(87/2−)	D	Configuration=$((\nu\ f_{7/2})^2(\nu\ h_{9/2})^2(\nu\ i_{13/2})^2)\ _{26+}(\nu\ d_{3/2})^{-2}_{0+}((\pi\ d_{5/2})^{-2}(\pi\ h_{11/2})^3)\ _{35/2-}$.
16293.00[&] 20	(81/2+)	D	
16589.1 8	(91/2−)	D	Configuration=$((\nu\ f_{7/2})(\nu\ h_{9/2})^2(\nu\ i_{13/2})^3)_{28+}\ (\nu\ d_{3/2})^{-2}_{0+}((\pi\ d_{5/2})^{-2}(\pi\ h_{11/2})^3)_{35/2-}$. This configuration gives π=+, but 1994Pe17 quote negative parity.
17235.60[&] 23	(85/2+)	D	
18223.81[&] 25	(89/2+)	D	
19258.5[&] 3	(93/2+)	D	
20340.3[&] 3	(97/2+)	D	
21470.1[&] 3	(101/2+)	D	
22648.6[&] 4	(105/2+)	D	
23876.5[&] 4	(109/2+)	D	
25154.5[&] 4	(113/2+)	D	
26482.9[&] 4	(117/2+)	D	
27862.4[&] 4	(121/2+)	D	
29293.6[&] 4	(125/2+)	D	
30776.9[&] 4	(129/2+)	D	
32312.4[&] 5	(133/2+)	D	
33901.5[&] 6	(137/2+)	D	
35544.1[&] 12	(141/2+)	D	
x[a]	J≈(45/2)	D	Additional information 4.
556.20+x[a] 20	J1+2	D	
1157.3+x[a] 4	J+4	D	
1803.5+x[a] 5	J+6	D	
2494.9+x[a] 5	J+8	D	
3231.9+x[a] 5	J+10	D	
4014.8+x[a] 5	J+12	D	
4843.2+x[a] 5	J+14	D	
5717.8+x[a] 5	J+16	D	
6639.2+x[a] 5	J+18	D	
7607.4+x[a] 6	J+20	D	

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Adopted Levels, Gammas (continued)

^{151}Tb Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
8622.8+x[a] *6*	J+22	D	
9685.8+x[a] *6*	J+24	D	
10796.5+x[a] *6*	J+26	D	
11955.2+x[a] *7*	J+28	D	
13162.1+x[a] *7*	J+30	D	
14417.1+x[a] *7*	J+32	D	
15720.5+x[a] *8*	J+34	D	
17071.9+x[a] *8*	J+36	D	
18471.7+x[a] *8*	J+38	D	
19919.9+x[a] *8*	J+40	D	
21416.2+x[a] *8*	J+42	D	
22960.3+x[a] *9*	J+44	D	
24554.5+x[a] *14*	J+46	D	
y[b]	J1≈(55/2)	D	Additional information 5.
681.2+y[b] *3*	J1+2	D	
1408.1+y[b] *5*	J1+4	D	
2181.6+y[b] *6*	J1+6	D	
3002.1+y[b] *6*	J1+8	D	
3869.9+y[b] *7*	J1+10	D	
4785.5+y[b] *8*	J1+12	D	
5749.4+y[b] *8*	J1+14	D	
6762.2+y[b] *9*	J1+16	D	
7824.0+y[b] *9*	J1+18	D	
8935.1+y[b] *10*	J1+20	D	
10095.4+y[b] *10*	J1+22	D	
11305.2+y[b] *11*	J1+24	D	
12564.6+y[b] *11*	J1+26	D	
13873.7+y[b] *12*	J1+28	D	
15232.4+y[b] *12*	J1+30	D	
16640.6+y[b] *12*	J1+32	D	
18098.3+y[b] *13*	J1+34	D	
19604.9+y[b] *13*	J1+36	D	
21160.7+y[b] *14*	J1+38	D	
22765.0+y[b] *17*	J1+40	D	
z[c]	J2≈(59/2)	D	Additional information 6.
691.7+z[c] *3*	J2+2	D	
1447.6+z[c] *5*	J2+4	D	
2263.2+z[c] *6*	J2+6	D	
3128.5+z[c] *7*	J2+8	D	
4041.9+z[c] *8*	J2+10	D	
5002.6+z[c] *8*	J2+12	D	
6011.1+z[c] *9*	J2+14	D	
7067.1+z[c] *9*	J2+16	D	
8171.1+z[c] *10*	J2+18	D	
9323.0+z[c] *10*	J2+20	D	
10523.3+z[c] *11*	J2+22	D	
11771.8+z[c] *11*	J2+24	D	
13068.7+z[c] *12*	J2+26	D	

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Adopted Levels, Gammas (continued)

^{151}Tb Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
14414.2+z[c] *12*	J2+28	D	
15808.5+z[c] *12*	J2+30	D	
17251.8+z[c] *13*	J2+32	D	
18746.4+z[c] *13*	J2+34	D	
20305.4+z?[c] *24*	J2+36	D	
u[d]	J3≈(53/2)	D	Additional information 7.
709.8+u[d] *3*	J3+2	D	
1470.4+u[d] *5*	J3+4	D	
2281.3+u[d] *6*	J3+6	D	
3143.6+u[d] *6*	J3+8	D	
4057.3+u[d] *7*	J3+10	D	
5022.9+u[d] *8*	J3+12	D	
6041.4+u[d] *8*	J3+14	D	
7112.4+u[d] *9*	J3+16	D	
8235.8+u[d] *9*	J3+18	D	
9412.0+u[d] *10*	J3+20	D	
10641.8+u[d] *10*	J3+22	D	
11924.2+u[d] *11*	J3+24	D	
13261.3+u[d] *11*	J3+26	D	
14652.6+u[d] *12*	J3+28	D	
16098.1+u[d] *12*	J3+30	D	
17597.7+u[d] *13*	J3+32	D	
19151.3+u[d] *14*	J3+34	D	
v[e]	J4≈(59/2)	D	Additional information 8.
790.6+v[e] *3*	J4+2	D	
1629.1+v[e] *5*	J4+4	D	
2518.2+v[e] *6*	J4+6	D	
3458.7+v[e] *6*	J4+8	D	
4450.6+v[e] *7*	J4+10	D	
5495.1+v[e] *8*	J4+12	D	
6592.2+v[e] *8*	J4+14	D	
7742.3+v[e] *9*	J4+16	D	
8945.3+v[e] *9*	J4+18	D	
10201.7+v[e] *10*	J4+20	D	
11511.6+v[e] *10*	J4+22	D	
12875.2+v[e] *11*	J4+24	D	
14292.5+v[e] *15*	J4+26	D	
15762.1+v[e] *15*	J4+28	D	
17281.7+v[e] *18*	J4+30	D	
18840.5+v[e] *21*	J4+32	D	
w[f]	J5≈(55/2)	D	Additional information 9.
754.3+w[f] *4*	J5+2	D	
1560.8+w[f] *6*	J5+4	D	
2417.8+w[f] *7*	J5+6	D	
3326.0+w[f] *8*	J5+8	D	
4285.6+w[f] *9*	J5+10	D	
5296.9+w[f] *10*	J5+12	D	

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Adopted Levels, Gammas (continued)

^{151}Tb Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
6360.4+w[f] *11*	J5+14	D	
7476.4+w[f] *12*	J5+16	D	
8645.2+w[f] *12*	J5+18	D	
9867.4+w[f] *13*	J5+20	D	
11142.6+w[f] *14*	J5+22	D	
12470.7+w[f] *14*	J5+24	D	
13852.7+w[f] *15*	J5+26	D	
15288.4+w[f] *15*	J5+28	D	
16777.6+w[f] *16*	J5+30	D	
18322.9+w?[f] *19*	J5+32	D	
s[g]	J6≈(61/2)	D	Additional information 10.
831.8+s[g] *3*	J6+2	D	
1714.2+s[g] *5*	J6+4	D	
2647.9+s[g] *6*	J6+6	D	
3633.3+s[g] *6*	J6+8	D	
4671.0+s[g] *7*	J6+10	D	
5760.7+s[g] *8*	J6+12	D	
6902.7+s[g] *8*	J6+14	D	
8097.7+s[g] *9*	J6+16	D	
9346.1+s[g] *9*	J6+18	D	
10647.6+s[g] *10*	J6+20	D	
12002.7+s[g] *11*	J6+22	D	
13411.7+s[g] *11*	J6+24	D	
14875.2+s[g] *12*	J6+26	D	
16392.8+s[g] *13*	J6+28	D	
t[h]	J7	D	Additional information 11.
824.4+t[h] *5*	J7+2	D	
1698.3+t[h] *6*	J7+4	D	
2622.5+t[h] *7*	J7+6	D	
3598.2+t[h] *8*	J7+8	D	
4624.8+t[h] *9*	J7+10	D	
5702.6+t[h] *10*	J7+12	D	
6832.9+t[h] *10*	J7+14	D	
8014.3+t[h] *11*	J7+16	D	
9248.0+t[h] *12*	J7+18	D	
10533.6+t[h] *12*	J7+20	D	
11872.0+t[h] *13*	J7+22	D	
13264.0+t[h] *14*	J7+24	D	
14708.2+t[h] *14*	J7+26	D	
16205.5+t[h] *16*	J7+28	D	
17753+t[h] *3*	J7+30	D	
a[i]	J8	D	Additional information 12.
1001.6+a[i] *4*	J8+2	D	
2052.8+a[i] *6*	J8+4	D	
3155.7+a[i] *7*	J8+6	D	
4310.9+a[i] *9*	J8+8	D	
5518.3+a[i] *10*	J8+10	D	

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Adopted Levels, Gammas (continued)

^{151}Tb Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	XREF
6778.1+a[i] *11*	J8+12	D
8090.1+a[i] *11*	J8+14	D
9453.5+a[i] *12*	J8+16	D
10870.0+a[i] *13*	J8+18	D
12339.2+a[i] *14*	J8+20	D

[†] from least-squares fit to Eγ's.

[‡] For levels populated in ^{151}Dy ε decay, the J^{π} assignments are based on selected multipolarities (from ce data), γ-ray deexcitations and log *ft* values. The arguments based on log *ft* values are considered weak since the decay scheme of ^{151}Dy is not well established. For levels populated in high spin studies, the J^{π}'s are from 1994Pe17 and are based on few γ-ray multipolarities (from ce data) and $\gamma(\theta)$ data. The ascending spins are assumed as the excitation energy increases. Many of the high J^{π}'s are from tentative (model based) configuration assignments by 1994Pe17. Above 5 MeV, most of the J^{π} values given are considered as tentative. For SD bands, all transitions are assumed as stretched quadrupoles. For SD-1 to SD-4 bands, starting spins are proposed by 1995Kh06, 1993Cu06 and 1993Ra07; and for the SD-5 to SD-8 bands by 1994KhZZ.

[#] Band(A): $\pi h_{11/2}\otimes(^{150}$Gd g.s.).

[@] Band(B): $\pi h_{11/2}\otimes(^{150}$Gd $3^-)$.

[&] Band(C): SD-1 (yrast) band. Band from 1989Fa02, 1993Cu06, 1995Kh06, 2000El10 and 2008Ro02. Intruder configuration=$\pi6^3\otimes\nu7^2$ (2008Ro02,1989Fa02,1993Cu06) or $\pi6^4(\pi[651]^{-1})\otimes\nu7^2$ (1998Fi01). Q(intrinsic)=16.8 *+7−6* (1997Ni01), 17.2 *4* (1998Fi01, systematic error increases the uncertainty to 0.7). Percent population=1.0 (1989Fa02). Other: 1.4 *4* (1992Mu10) in ^{124}Sn(^{33}S,p5nγ) at 170 MeV. a 726.5γ reported earlier by 1995Kh06 is not listed by 2008Ro02, thus it is omitted here. feedings of normal states by the decay of SD-1 band (1997Fi03): 5% 4 to 69/2$^+$, 8% 2 to 67/2$^-$, 8% 3 to 63/2$^-$, 26% 10 to 61/2$^+$, 5.5% 20 to 59/2$^-$, 12% 8 to 57/2$^-$ and 5% 2 to 55/2$^+$.

[a] Band(D): SD-2 band. Band from 1990By01, 1993Cu06, 1995Kh06, 2000El10 and 2008Ro02. Q(intrinsic)=18.4 *6* (1998Fi01, systematic error increases the uncertainty to 0.8). Intruder configuration=$\pi6^4(\pi1/2[301],\alpha=-1/2)^{-1}\otimes\nu7^2$ (2008Ro02,1990By01,1993Cu06,1998Fi01). Similarity with yrast SD band in ^{152}Dy (2008Ro02). Percent population=0.3 (1990By01). Other: 1.5 *5* (1992Mu10) in ^{124}Sn(^{33}S,p5nγ) E=170 MeV. Intensity relative to SD-1 (yrast) band=0.29 *3* (2008Ro02), 0.50 *5* (1995Kh06). feedings of normal states by the decay of SD-2 band (1997Fi03): 23% 5 to 47/2$^-$, 17% 6 to 45/2$^+$, 18% 9 to 41/2$^+$, 16% 10 to 39/2$^+$, 19% 8 to 37/2$^+$ and 12% 6 to 31/2$^+$. J^{π} assignment from 1993Cu06, 1993Ra07. 1993Ra07 also suggest J=53/2.

[b] Band(E): SD-3 band. Band from 1995Kh06 and 2008Ro02. Intruder configuration=$\pi6^4(\pi3/2[651],\alpha=+1/2)^{-1}\otimes\nu7^2$ (2008Ro02). Also interpreted as signature partner of SD-1 and as excitation from 3/2[651],$\alpha=-1/2$ ($\pi6^3$) to 3/2[651],$\alpha=+1/2$ ($\pi6^4$) (1995Kh06). Similarity with yrast SD band in ^{152}Dy (2008Ro02). Intensity relative to SD-1 (yrast) band=0.24 *3* (2008Ro02), 0.35 *5* (1995Kh06). feedings of normal states by the decay of SD-3 band (1997Fi03): 27% 17 to 47/2$^-$, 13% 15 to 45/2$^+$, 26% 20 to 41/2$^+$, 7% 7 to 39/2$^+$, 2% 2 to 37/2$^+$ and 2% 2 to 35/2$^+$.

[c] Band(F): SD-4 band. Band from 1995Kh06 and 2008Ro02. Intruder configuration=$\pi6^4(\pi1/2[301],\alpha=+1/2)^{-1}\otimes\nu7^2$ $(\nu1/2[411],\alpha=-1/2)^{-1}(\nu3/2[761],\alpha=+1/2)^1$ (2008Ro02). Possible signature partner of SD-2 (1995Kh06). Similarity with yrast SD band in ^{152}Dy (2008Ro02). Intensity relative to SD-1 (yrast) band=0.13 *2* (2008Ro02), 0.06 *2* (1995Kh06).

[d] Band(G): SD-5 band. Band from 1994De33 and 2008Ro02. Intruder configuration=$\pi6^3\otimes\nu7^1(\nu5/2[402],\alpha=+1/2)^1$ (2008Ro02). Signature partner of SD-6 band. Intensity relative to SD-1 (yrast) band=0.13 *3* (2008Ro02), 0.10 *2* (1995Kh06). Similarity with yrast SD band in ^{150}Tb (2008Ro02).

[e] Band(H): SD-6 band. Band from 1994De33 and 2008Ro02. a 739γ reported earlier by 1994De33 is not listed by 2008Ro02, thus it is omitted here. Intruder configuration=$\pi6^3\otimes\nu7^1(\nu5/2[402],\alpha=-1/2)^1$ (2008Ro02). Signature partner of SD-5 band. Intensity relative to SD-1 (yrast) band=0.14 *3* (2008Ro02), 0.09 *2* (1994De33). Similarity with yrast SD band in ^{150}Tb (2008Ro02).

[f] Band(I): SD-7 band. Band from 1994De33 and 2008Ro02. Intruder configuration=$\pi6^3\otimes\nu7^1(\nu3/2[521],\alpha=-1/2)^1$ (2008Ro02). Intensity relative to SD-1 (yrast) band=0.10 *3* (2008Ro02), 0.11 *2* (1994De33). Signature partner of SD-8 band. Similarity with yrast SD band in ^{150}Tb (2008Ro02).

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Adopted Levels, Gammas (continued)

^{151}Tb Levels (continued)

[g] Band(J): SD-8 band. Band from 1994De33 and 2008Ro02. a 785γ reported earlier by 1994De33 is not listed by 2008Ro02, thus it is omitted here. Intruder configuration=$\pi 6^3 \otimes \nu 7^1 (\nu 3/2[521],\alpha=+1/2)^1$ (2008Ro02). Intensity relative to SD-1 (yrast) band=0.10 *2* (2008Ro02), 0.07 *3* (1994De33). Signature partner of SD-7 band. Similarity with yrast SD band in ^{150}Tb (2008Ro02).

[h] Band(K): SD-9 band. Band from 2008Ro02. Intruder configuration=$\pi 6^3 \otimes \nu 7^1 (\nu 9/2[514],\alpha=-1/2)^1$ (2008Ro02). Signature partner of SD-10 band. Intensity relative to SD-1 (yrast) band=0.08 *2* (2008Ro02). Similarity with yrast SD band in ^{150}Tb (2008Ro02).

[i] Band(L): SD-10 band. Band from 2008Ro02. Intruder configuration=$\pi 6^3 \otimes \nu 7^1 (\nu 9/2[514],\alpha=+1/2)^1$ (2008Ro02). Signature partner of SD-9 band. Intensity relative to SD-1 (yrast) band=0.07 *2* (2008Ro02). Similarity with yrast SD band in ^{150}Tb (2008Ro02).

Adopted Levels, Gammas (continued)

$\gamma(^{151}Tb)$

E_i(level)	J^π_i	E_γ[†]	I_γ[†‡]	E_f	J^π_f	Mult.	δ	α[h]	Comments
22.922	$3/2^{(+)}$	22.92 2	100	0.0	$1/2^{(+)}$	M1+E2[@]	0.031 4	27.8 7	B(M1)(W.u.)=0.0152 8; B(E2)(W.u.)=15 4 α(L)=21.8 5; α(M)=4.78 11; α(N+..)=1.28 3 α(N)=1.10 3; α(O)=0.167 4; α(P)=0.01034 15 δ: from L1:L2 ratio (1978Al15).
72.39	$(5/2^+)$	49.46 2	100 1	22.922	$3/2^{(+)}$	M1+E2[@]	0.06 2	2.82 12	B(M1)(W.u.)=0.050 4; B(E2)(W.u.)=40 3 α(L)=2.21 9; α(M)=0.485 21; α(N+..)=0.130 6 α(N)=0.112 5; α(O)=0.0170 6; α(P)=0.001065 16 δ: from (L1+L2)/L3 ratio (1978Al15).
		72.50 10	0.5 1	0.0	$1/2^{(+)}$	(E2)		8.89	B(E2)(W.u.)=8.1 17 α(K)=2.31 4; α(L)=5.06 8; α(M)=1.207 19; α(N+..)=0.305 5 α(N)=0.270 5; α(O)=0.0345 6; α(P)=0.0001185 17 Mult.: ΔJ≥2 transition and RUL excludes M2 (B(M2)(W.u.)=694 if M2).
99.53	$(11/2^-)$	27.1 1		72.39	$(5/2^+)$	E3		8.74×10^4 23	B(E3)(W.u.)=0.035 5 α(L)=6.45×10^4 17; α(M)=1.83×10^4 5; α(N+..)=4.67×10^3 13 α(N)=4.17×10^3 12; α(O)=493 14; α(P)=0.261 7 E_γ: seen in ce spectra only. Mult.: from L1/L2 ratio (1978Al15).
248.79	$(5/2^+,7/2^+)$	176.40 1	100 2	72.39	$(5/2^+)$	M1+E2[@]	0.51 17	0.422 12	B(M1)(W.u.)>0.008; B(E2)(W.u.)>37.7 α(K)=0.343 17; α(L)=0.062 5; α(M)=0.0139 12; α(N+..)=0.0037 3 α(N)=0.00318 25; α(O)=0.00047 3; α(P)=2.46×10^{-5} 17 δ: from K/L ratio (1978Al15).
		226.3 3	2.3 5	22.922	$3/2^{(+)}$	M1,E2[@]		0.19 4	α(K)=0.15 4; α(L)=0.031 4; α(M)=0.0069 11; α(N+..)=0.00181 23 α(N)=0.00158 22; α(O)=0.000227 18; α(P)=1.0×10^{-5} 4 B(M1)(W.u.)>1.2×10^{-4} if M1 and B(E2)(W.u.)>1.2 if E2.
276.42		204.03 2	100	72.39	$(5/2^+)$				
485.63	$(7/2^-)$	386.10 2	100 2	99.53	$(11/2^-)$	E2[@]		0.0295	α(K)=0.0232 4; α(L)=0.00489 7; α(M)=0.001105 16; α(N+..)=0.000290 4 α(N)=0.000252 4; α(O)=3.61×10^{-5} 5; α(P)=1.508×10^{-6} 22
		413.27 13	2.1 2	72.39	$(5/2^+)$				
548.85	$(3/2^+,5/2^+,7/2^+)$	272.43 23	4.0 10	276.42					

$\gamma(^{151}Tb)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†‡]	E_f	J^π_f	Mult.	δ	α[h]	Comments
548.85	($3/2^+,5/2^+,7/2^+$)	300.00 *16*	2.9 *4*	248.79	($5/2^+,7/2^+$)				
		476.56 *10*	100 *2*	72.39	($5/2^+$)	M1[@]		0.0310	α(K)=0.0263 *4*; α(L)=0.00369 *6*; α(M)=0.000804 *12*; α(N+..)=0.000216 *3* α(N)=0.000186 *3*; α(O)=2.87×10^{-5} *4*; α(P)=1.92×10^{-6} *3*
583.98	($5/2^+$)	307.48 *8*	36 *3*	276.42					
		561.00 *10*	78 *6*	22.922	$3/2^{(+)}$				
		583.9 *1*	100 *5*	0.0	$1/2^{(+)}$				
646.00	($9/2^-$)	160.40 *2*	2.7 *2*	485.63	($7/2^-$)				
		546.31 *10*	100 *2*	99.53	($11/2^-$)	M1[@]		0.0219	α(K)=0.0186 *3*; α(L)=0.00260 *4*; α(M)=0.000565 *8*; α(N+..)=0.0001522 *22* α(N)=0.0001307 *19*; α(O)=2.02×10^{-5} *3*; α(P)=1.355×10^{-6} *19*
686.70	($5/2,7/2^+$)	614.30 *10*	61 *4*	72.39	($5/2^+$)				
		663.67 *10*	100 *5*	22.922	$3/2^{(+)}$				
703.82	($15/2^-$)	604.3 *1*	100	99.53	($11/2^-$)	(E2)[&]		0.00900	α(K)=0.00739 *11*; α(L)=0.001254 *18*; α(M)=0.000278 *4*; α(N+..)=7.38×10^{-5} *11* α(N)=6.38×10^{-5} *9*; α(O)=9.46×10^{-6} *14*; α(P)=5.02×10^{-7} *7*
711.93	($5/2^+$)	163.04 *4*	7.2 *17*	548.85	($3/2^+,5/2^+,7/2^+$)				
		463.20 *10*	94.8 *21*	248.79	($5/2^+,7/2^+$)	M1(+E2)[@]	<0.82	0.030 *4*	α(K)=0.025 *3*; α(L)=0.0037 *3*; α(M)=0.00081 *6*; α(N+..)=0.000219 *15* α(N)=0.000188 *13*; α(O)=2.88×10^{-5} *22*; α(P)=1.84×10^{-6} *23* δ: from α(K)exp in ^{151}Dy ε decay. α: for M1.
		639.50 *10*	54 *4*	72.39	($5/2^+$)				
		689.17 *10*	100.0 *24*	22.922	$3/2^{(+)}$				
		712.00[i] *20*	≤50[i]	0.0	$1/2^{(+)}$				
841.11	($5/2,7/2^+$)	292.16 *10*	42 *4*	548.85	($3/2^+,5/2^+,7/2^+$)				
		768.90 *20*	100 *5*	72.39	($5/2^+$)				
		818.6 *3*	40 *8*	22.922	$3/2^{(+)}$				
856.80	($5/2,7/2^+$)	371.07 *5*	35.0 *20*	485.63	($7/2^-$)				
		580.4 *3*	9.4 *24*	276.42					
		784.5 *6*	4.7 *16*	72.39	($5/2^+$)				
		833.9 *2*	100 *5*	22.922	$3/2^{(+)}$				
886.57	($5/2,7/2,9/2^+$)	337.80 *10*	48 *4*	548.85	($3/2^+,5/2^+,7/2^+$)				
		814.10 *10*	100 *9*	72.39	($5/2^+$)				
887.55	($13/2^-$)	183.9 *2*	7.0 *7*	703.82	($15/2^-$)				
		788.0 *2*	100 *5*	99.53	($11/2^-$)	D+Q			
917.78	($5/2^-,7/2^-$)	230.90 *13*	12.9 *15*	686.70	($5/2,7/2^+$)				

From ENSDF

$^{151}_{65}Tb_{86}$-12

γ(^{151}Tb) (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†‡]	E_f	J^π_f	Mult.	α[h]	Comments
917.78	(5/2$^-$,7/2$^-$)	333.17 *26*	4.7 *11*	583.98	(5/2$^+$)			
		432.16 *10*	100 *3*	485.63	(7/2$^-$)	M1[@]	0.0399	α(K)=0.0338 *5*; α(L)=0.00476 *7*; α(M)=0.001037 *15*; α(N+..)=0.000279 *4* α(N)=0.000240 *4*; α(O)=3.70×10^{-5} *6*; α(P)=2.47×10^{-6} *4*
		642.2 *6*	4.7 *15*	276.42				
		845.46 *10*	49.8 *24*	72.39	(5/2$^+$)			
949.05	(5/2$^-$,7/2$^+$)	303.00 *5*	75.4 *24*	646.00	(9/2$^-$)			
		400.67 *16*	16.4 *24*	548.85	(3/2$^+$,5/2$^+$,7/2$^+$)			
		700.32 *10*	100 *4*	248.79	(5/2$^+$,7/2$^+$)			
		926.0 *5*	26 *3*	22.922	3/2$^{(+)}$			
1082.61	(7/2$^-$)	436.86 *10*	25.0 *14*	646.00	(9/2$^-$)	M1[@]	0.0388	α(K)=0.0329 *5*; α(L)=0.00463 *7*; α(M)=0.001008 *15*; α(N+..)=0.000271 *4* α(N)=0.000233 *4*; α(O)=3.60×10^{-5} *5*; α(P)=2.41×10^{-6} *4*
		533.66 *18*	9.4 *14*	548.85	(3/2$^+$,5/2$^+$,7/2$^+$)			
		596.77 *10*	51.4 *20*	485.63	(7/2$^-$)			
		1010.4 *3*	100 *3*	72.39	(5/2$^+$)			
1096.61	(15/2$^+$)	209.1 *1*	58 *3*	887.55	(13/2$^-$)			
		392.8 *1*	100 *5*	703.82	(15/2$^-$)	E1[&]	0.00858	α(K)=0.00730 *11*; α(L)=0.001007 *15*; α(M)=0.000218 *3*; α(N+..)=5.82×10^{-5} *9* α(N)=5.02×10^{-5} *7*; α(O)=7.60×10^{-6} *11*; α(P)=4.71×10^{-7} *7*
1119.38	(7/2$^-$,9/2)	570.70 *10*	79.6 *25*	548.85	(3/2$^+$,5/2$^+$,7/2$^+$)			
		870.36 *10*	100 *6*	248.79	(5/2$^+$,7/2$^+$)			
		1020.4 *3*	60 *3*	99.53	(11/2$^-$)			
1202.09	(5/2$^-$,7/2,9/2$^+$)	345.13 *16*	10.3 *19*	856.80	(5/2,7/2$^+$)			
		556.40 *23*	13.3 *23*	646.00	(9/2$^-$)			
		653.20 *20*	27.0 *23*	548.85	(3/2$^+$,5/2$^+$,7/2$^+$)			
		1129.8[i] *3*	100[i] *4*	72.39	(5/2$^+$)			
1241.20	(7/2$^-$,9/2$^-$)	755.57 *10*	100 *4*	485.63	(7/2$^-$)			
		992.37 *22*	10.7 *17*	248.79	(5/2$^+$,7/2$^+$)			
		1141.8 *3*	99 *7*	99.53	(11/2$^-$)			
1319.4	(5/2,7/2,9/2)	1070.6 *3*	100	248.79	(5/2$^+$,7/2$^+$)			
1319.68	(19/2$^-$)	615.8 *1*	100	703.82	(15/2$^-$)	E2[&]	0.00860	α(K)=0.00707 *10*; α(L)=0.001191 *17*; α(M)=0.000264 *4*; α(N+..)=7.00×10^{-5} *10* α(N)=6.06×10^{-5} *9*; α(O)=8.99×10^{-6} *13*; α(P)=4.81×10^{-7} *7*
1433.85	(7/2$^-$)	515.9 *5*	13 *8*	917.78	(5/2$^-$,7/2$^-$)			
		788.07 *10*	95 *6*	646.00	(9/2$^-$)			
		849.60 *10*	100 *7*	583.98	(5/2$^+$)			
		1185.6 *3*	51 *7*	248.79	(5/2$^+$,7/2$^+$)			
		1334.3 *3*	49 *4*	99.53	(11/2$^-$)			
1582.27	(5/2$^-$,7/2,9/2)	936.27 *10*	100	646.00	(9/2$^-$)			
1610.95	(5/2$^-$)	528.40 *16*	12.3 *26*	1082.61	(7/2$^-$)			
		1062.5 *3*	51 *5*	548.85	(3/2$^+$,5/2$^+$,7/2$^+$)			

$^{151}_{65}$Tb$_{86}$-13

$\gamma(^{151}Tb)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†‡]	E_f	J^π_f	Mult.	α[h]	Comments
1610.95	(5/2⁻)	1361.9 *3*	12.3 *18*	248.79	(5/2⁺,7/2⁺)			
		1538.1 *3*	100 *3*	72.39	(5/2⁺)			
		1611.0 *3*	7.9 *26*	0.0	$1/2^{(+)}$			
1629.64	(7/2⁻,9/2⁻)	680.41 *10*	46.8 *21*	949.05	(5/2⁻,7/2⁺)			
		712.00[i] *20*	58[i] *3*	917.78	(5/2⁻,7/2⁻)			
		983.73 *10*	100	646.00	(9/2⁻)			
		1144.1 *3*	20 *5*	485.63	(7/2⁻)			
		1381.2 *3*	18.1 *21*	248.79	(5/2⁺,7/2⁺)			
		1530.2 *3*	40.1 *17*	99.53	(11/2⁻)			
1663.18	(5/2⁻,7/2⁻,9/2⁻)	745.40 *10*	45.6 *23*	917.78	(5/2⁻,7/2⁻)			
		1114.3 *3*	100 *4*	548.85	(3/2⁺,5/2⁺,7/2⁺)			
1693.41	(19/2⁺)	597.0 *2*	100	1096.61	(15/2⁺)	(E2)[&]	0.00927	α(K)=0.00761 *11*; α(L)=0.001297 *19*; α(M)=0.000288 *4*; α(N+..)=7.63×10^{-5} *11* α(N)=6.60×10^{-5} *10*; α(O)=9.78×10^{-6} *14*; α(P)=5.16×10^{-7} *8*
1724.47	(5/2⁻)	837.9 *5*	4.4 *15*	886.57	(5/2,7/2,9/2⁺)			
		1175.5 *3*	21.9 *15*	548.85	(3/2⁺,5/2⁺,7/2⁺)			
		1475.7 *3*	46.8 *19*	248.79	(5/2⁺,7/2⁺)			
		1652.1 *3*	31.4 *9*	72.39	(5/2⁺)			
		1701.6 *3*	100 *3*	22.922	$3/2^{(+)}$			
1741.78	(5/2⁻)	793.08 *10*	29.1 *25*	949.05	(5/2⁻,7/2⁺)			
		884.62 *10*	37 *3*	856.80	(5/2,7/2⁺)			
		1029.4 *3*	21.2 *25*	711.93	(5/2⁺)			
		1096.1 *3*	100 *3*	646.00	(9/2⁻)			
		1256.1 *3*	62 *3*	485.63	(7/2⁻)			
		1493.3 *3*	15.8 *25*	248.79	(5/2⁺,7/2⁺)			
		1718.4 *5*	7 *3*	22.922	$3/2^{(+)}$			
1773.77	(5/2⁻,7/2⁻,9/2⁻)	855.84 *10*	87 *5*	917.78	(5/2⁻,7/2⁻)			
		917.00 *10*	58 *6*	856.80	(5/2,7/2⁺)			
		932.5 *10*	19 *4*	841.11	(5/2,7/2⁺)			
		1190.6 *3*	28 *4*	583.98	(5/2⁺)			
		1288.2 *3*	53 *3*	485.63	(7/2⁻)			
		1525.1 *3*	100 *4*	248.79	(5/2⁺,7/2⁺)			
1841.62	(5/2⁻,7/2⁻)	891.92 *20*	27.0 *23*	949.05	(5/2⁻,7/2⁺)			
		1000.4 *3*	5.7 *17*	841.11	(5/2,7/2⁺)			
		1129.8[i] *3*	88[i] *3*	711.93	(5/2⁺)			
		1196.8 *3*	36.3 *23*	646.00	(9/2⁻)			E_γ: poor fit. Level energy difference=1195.6.
		1355.5 *3*	12.6 *13*	485.63	(7/2⁻)			
		1593.1 *3*	100 *3*	248.79	(5/2⁺,7/2⁺)			
		1769.7 *3*	12.0 *6*	72.39	(5/2⁺)			
2002.20	(23/2⁻)	682.5 *1*	100	1319.68	(19/2⁻)	E2[&]	0.00672	α(K)=0.00557 *8*; α(L)=0.000904 *13*; α(M)=0.000200 *3*;

$^{151}_{65}Tb_{86}$-14

Adopted Levels, Gammas (continued)

γ(^{151}Tb) (continued)

E_i(level)	J^π_i	E_γ†	I_γ†‡	E_f	J^π_f	Mult.	α[h]	Comments
								α(N+..)=5.31×10^{-5} *8* α(N)=4.59×10^{-5} *7*; α(O)=6.85×10^{-6} *10*; α(P)=3.81×10^{-7} *6*
2045.69	(21/2$^+$)	352.6 *3*	28 *9*	1693.41	(19/2$^+$)			
		726.0 *2*	100 *14*	1319.68	(19/2$^-$)			
2120.3	(23/2$^-$)	800.3 *4*	100	1319.68	(19/2$^-$)			
2180.61	(25/2$^-$)	59.7		2120.3	(23/2$^-$)			
		178.5 *1*	100 *7*	2002.20	(23/2$^-$)	M1,E2[&]	0.38 *5*	α(K)=0.29 *7*; α(L)=0.071 *19*; α(M)=0.016 *5*; α(N+..)=0.0042 *12* α(N)=0.0037 *11*; α(O)=0.00052 *12*; α(P)=2.0×10^{-5} *8*
2219.89	(23/2$^+$)	526.5 *1*	100	1693.41	(19/2$^+$)	(E2)[&]	0.01272	α(K)=0.01034 *15*; α(L)=0.00186 *3*; α(M)=0.000414 *6*; α(N+..)=0.0001094 *16* α(N)=9.48×10^{-5} *14*; α(O)=1.392×10^{-5} *20*; α(P)=6.95×10^{-7} *10*
2375.35	(27/2$^-$)	194.8 *1*	100	2180.61	(25/2$^-$)	M1,E2[&]	0.29 *5*	α(K)=0.23 *6*; α(L)=0.052 *11*; α(M)=0.012 *3*; α(N+..)=0.0031 *7* α(N)=0.0027 *6*; α(O)=0.00038 *7*; α(P)=1.5×10^{-5} *6*
2468.68	(25/2$^+$)	248.8 *1*	100 *5*	2219.89	(23/2$^+$)	(M1,E2)[&]	0.14 *3*	α(K)=0.11 *4*; α(L)=0.0222 *15*; α(M)=0.0050 *5*; α(N+..)=0.00132 *10* α(N)=0.00114 *10*; α(O)=0.000166 *5*; α(P)=8.E−6 *3*
		288.4 *4*	9 *4*	2180.61	(25/2$^-$)			
		348.1 *4*	7.9 *18*	2120.3	(23/2$^-$)			
		423.5 *4*	13 *4*	2045.69	(21/2$^+$)			
		466.0 *2*	3.9 *7*	2002.20	(23/2$^-$)			
2782.59	(27/2$^+$)	313.9[j] *3*	7.5	2468.68	(25/2$^+$)			
		562.7 *1*	100 *2*	2219.89	(23/2$^+$)	E2[&]	0.01074	α(K)=0.00878 *13*; α(L)=0.001532 *22*; α(M)=0.000341 *5*; α(N+..)=9.02×10^{-5} *13* α(N)=7.81×10^{-5} *11*; α(O)=1.152×10^{-5} *17*; α(P)=5.93×10^{-7} *9*
2847.35	(29/2$^+$)	64.8 *3*	25	2782.59	(27/2$^+$)	(M1)	7.68 *15*	α(K)=6.46 *13*; α(L)=0.951 *19*; α(M)=0.208 *4*; α(N+..)=0.0559 *11* α(N)=0.0480 *10*; α(O)=0.00739 *15*; α(P)=0.000484 *10* Mult.: from $\gamma(\theta)$ and intensity balance.
		378.6 *1*	100 *5*	2468.68	(25/2$^+$)			
		472.2 *2*	56 *6*	2375.35	(27/2$^-$)			
3108.2?		325.7[j] *3*	100	2782.59	(27/2$^+$)			
3115.76	(31/2$^+$)	268.4 *1*	100	2847.35	(29/2$^+$)	M1,E2[&]	0.11 *3*	α(K)=0.09 *3*; α(L)=0.0173 *5*; α(M)=0.00388 *20*; α(N+..)=0.00103 *4* α(N)=0.00089 *4*; α(O)=0.000130 *3*; α(P)=6.4×10^{-6} *24*
3128.69	(31/2$^-$)	753.4 *2*	100	2375.35	(27/2$^-$)			
3159.1?	(29/2$^-$)	978.5[j] *3*	100	2180.61	(25/2$^-$)			
3196.0	(31/2$^+$)	348.6 *4*	100	2847.35	(29/2$^+$)			
3274.07	(33/2$^+$)	77.5		3196.0	(31/2$^+$)			
		146.0 *4*	1.34 *14*	3128.69	(31/2$^-$)			
		158.3 *1*	100 *5*	3115.76	(31/2$^+$)			
3287.7?		440.4[j] *3*	100	2847.35	(29/2$^+$)			
3808.41	(35/2$^-$)	679.7 *1*	100	3128.69	(31/2$^-$)			
3900.68	(35/2$^+$)	784.9 *2*	100	3115.76	(31/2$^+$)			
4148.04	(37/2$^+$)	247.4 *1*	16 *2*	3900.68	(35/2$^+$)			

$^{151}_{65}Tb_{86}$-15

γ(^{151}Tb) (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†‡]	E_f	J^π_f	Mult.
4148.04	(37/2$^+$)	339.8 *4*	1.8 *2*	3808.41	(35/2$^-$)	
		874.0 *1*	100 *5*	3274.07	(33/2$^+$)	
4564.82	(39/2$^+$)	664.1 *1*	100	3900.68	(35/2$^+$)	
4765.4	(39/2$^-$)	957.0 *4*	100	3808.41	(35/2$^-$)	
4773.96	(41/2$^+$)	209.0 *2*	40 *2*	4564.82	(39/2$^+$)	
		626.0 *1*	100 *5*	4148.04	(37/2$^+$)	
4840.2	(39/2$^-$)	1031.7 *2*	100	3808.41	(35/2$^-$)	
5034.2	(41/2$^-$)	886.0 *4*	100	4148.04	(37/2$^+$)	
5162.48	(45/2$^+$)	388.5 *1*	100	4773.96	(41/2$^+$)	
5363.7		598.2 *4*	100	4765.4	(39/2$^-$)	
5467.2	(43/2$^-$)	627.0 *2*	100	4840.2	(39/2$^-$)	@
5474.8	(43/2$^-$)	440.5 *4*	16 *2*	5034.2	(41/2$^-$)	
		634.0 *4*	16 *8*	4840.2	(39/2$^-$)	
		701.1 *2*	100 *10*	4773.96	(41/2$^+$)	
5656.4		891.0 *4*	100	4765.4	(39/2$^-$)	
5818.8	(45/2$^-$)	343.9 *4*	100 *33*	5474.8	(43/2$^-$)	
		351.5 *4*	33 *8*	5467.2	(43/2$^-$)	
5924.7	(45/2$^-$)	457.5 *3*	100 *10*	5467.2	(43/2$^-$)	
		561.0 *4*	13 *2*	5363.7		
5985.1	(47/2$^-$)	166.6 *4*	11 *6*	5818.8	(45/2$^-$)	
		510.5 *4*	18 *10*	5474.8	(43/2$^-$)	
		822.7 *2*	100 *10*	5162.48	(45/2$^+$)	
6165.3	(49/2$^-$)	240.7 *3*	100 *24*	5924.7	(45/2$^-$)	
		346.4 *4*	35 *23*	5818.8	(45/2$^-$)	
6170.0	(49/2$^-$)	245.3 *4*	100 *10*	5924.7	(45/2$^-$)	
		351.1 *4*	100 *50*	5818.8	(45/2$^-$)	
6485.1	(49/2$^+$)	1322.6 *1*	100	5162.48	(45/2$^+$)	
6594.0	(51/2$^-$)	423.9 *4*	8 *2*	6170.0	(49/2$^-$)	
		428.7 *2*	100 *10*	6165.3	(49/2$^-$)	
6673.6?	(49/2$^-$)	855.1[j] *4*	100	5818.8	(45/2$^-$)	
6879.9	(51/2$^-$)	206.3 *4*	4 *1*	6673.6?	(49/2$^-$)	
		894.8 *1*	100 *10*	5985.1	(47/2$^-$)	
7248.1	(53/2$^-$)	368.2 *1*	100 *10*	6879.9	(51/2$^-$)	c
		654.6 *4*	24 *3*	6594.0	(51/2$^-$)	
7264.6	(53/2$^+$)	670.8 *4*	0.9 *1*	6594.0	(51/2$^-$)	
		779.6 *1*	100 *5*	6485.1	(49/2$^+$)	
7295.8	(53/2$^-$)	416.3 *4*	100 *38*	6879.9	(51/2$^-$)	
		700.7 *4*	100 *13*	6594.0	(51/2$^-$)	
7304.3	(53/2$^+$)	710.4 *4*	3.8 *4*	6594.0	(51/2$^-$)	
		819.1 *1*	100 *5*	6485.1	(49/2$^+$)	
7618.8	(55/2$^+$)	322.3 *4*	100	7295.8	(53/2$^-$)	
7676.3	(55/2$^-$)	428.2 *4*	100	7248.1	(53/2$^-$)	
7764.6	(57/2$^-$)	145.1 *4*	100	7618.8	(55/2$^+$)	
7882.4	(57/2$^-$)	117.2 *4*	4.2 *4*	7764.6	(57/2$^-$)	
		205.9 *2*	100 *10*	7676.3	(55/2$^-$)	
		634.6 *2*	42[d] *14*	7248.1	(53/2$^-$)	
7901.6	(57/2$^+$)	282.8 *4*	1.2 *6*	7618.8	(55/2$^+$)	
		597.2 *1*	44 *6*	7304.3	(53/2$^+$)	
		637.1 *1*	100 *2*	7264.6	(53/2$^+$)	
		653.2 *4*	2.1 *12*	7248.1	(53/2$^-$)	
8283.1	(61/2$^+$)	381.4 *1*	100 *2*	7901.6	(57/2$^+$)	
		400.5 *4*	3.2 *11*	7882.4	(57/2$^-$)	e
8335.8	(59/2$^-$)	659.7 *2*	100	7676.3	(55/2$^-$)	
8802.5	(61/2$^-$)	466.8 *2*	100 *10*	8335.8	(59/2$^-$)	
		919.9 *4*	28 *3*	7882.4	(57/2$^-$)	
9035.0	(63/2)	752.1 *4*	100	8283.1	(61/2$^+$)	
9123.5	(63/2$^-$)	321.2 *2*	100 *10*	8802.5	(61/2$^-$)	
		840.3 *4*	53 *12*	8283.1	(61/2$^+$)	
9379.6	(65/2$^+$)	256.2 *4*	2.6 *3*	9123.5	(63/2$^-$)	
		1096.5 *1*	100 *5*	8283.1	(61/2$^+$)	
9406.3	(65/2)	1123.2 *2*	100	8283.1	(61/2$^+$)	
9445.5	(63/2)	1162.4 *4*	100	8283.1	(61/2$^+$)	
9490.2	(65/2$^+$)	366.9 *4*	33 *3*	9123.5	(63/2$^-$)	
		455.3 *4*	43 *4*	9035.0	(63/2)	
		1207.0 *2*	100 *5*	8283.1	(61/2$^+$)	
9530.3	(63/2$^-$)	1247.3 *4*	100	8283.1	(61/2$^+$)	
9708.8	(67/2)	302.5 *2*	100	9406.3	(65/2)	
9733.7	(65/2$^+$)	288.2 *4*	78 *33*	9445.5	(63/2)	
		1450.6 *4*	100 *33*	8283.1	(61/2$^+$)	
9750.5	(67/2$^-$)	220.2 *4*	1.9 *2*	9530.3	(63/2$^-$)	
		260.3 *2*	11 *7*	9490.2	(65/2$^+$)	
		371.0 *1*	100 *5*	9379.6	(65/2$^+$)	
10032.3	(67/2$^+$)	298.6 *2*	75 *39*	9733.7	(65/2$^+$)	
		652.7 *2*	100 *10*	9379.6	(65/2$^+$)	f
10296.8	(71/2)	588.0 *4*	100	9708.8	(67/2)	
10350.5	(69/2$^+$)	318.2 *2*	100 *33*	10032.3	(67/2$^+$)	
		970.9 *2*	100 *10*	9379.6	(65/2$^+$)	
10620.4		1240.8 *4*	100	9379.6	(65/2$^+$)	
10772.4	(71/2)	1063.6 *4*	100	9708.8	(67/2)	
10792.0	(71/2$^-$)	441.3 *4*	3.4 *4*	10350.5	(69/2$^+$)	
		1041.5 *1*	100 *5*	9750.5	(67/2$^-$)	
10997.7	(69/2$^-$)	1247.0 *4*	100	9750.5	(67/2$^-$)	
11200.5	(71/2)	1450.0 *4*	100	9750.5	(67/2$^-$)	
11201.9		851.4 *4*	100	10350.5	(69/2$^+$)	
11274.8	(71/2$^-$)	276.9 *4*	100 *10*	10997.7	(69/2$^-$)	
		924.3 *4*	86 *9*	10350.5	(69/2$^+$)	

Adopted Levels, Gammas (continued)

$\gamma(^{151}Tb)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†‡]	E_f	J^π_f	Mult.
11274.8	(71/2$^-$)	1523.9 *4*	29 *7*	9750.5	(67/2$^-$)	
11321.6?		1942[j]	≈0.005[#]	9379.6	(65/2$^+$)	
11425.6?		1676[j]	≈0.005[#]	9750.5	(67/2$^-$)	
11425.9	(73/2$^+$)	1075.4 *4*	100	10350.5	(69/2$^+$)	
11593.0	(73/2$^-$)	317.6 *4*	30 *15*	11274.8	(71/2$^-$)	
		801.4 *2*	100 *10*	10792.0	(71/2$^-$)	
11726.4	(75/2$^-$)	134.3 *4*	1.2 *1*	11593.0	(73/2$^-$)	
		934.2 *2*	100 *10*	10792.0	(71/2$^-$)	
11756.6		330.7 *4*	100	11425.9	(73/2$^+$)	
11760.7		988.3 *4*	100	10772.4	(71/2)	
11830.0	(73/2)	1038.0 *4*	100	10792.0	(71/2$^-$)	
11956.8	(75/2$^-$)	1164.8 *2*	100	10792.0	(71/2$^-$)	
12704.0	(75/2$^-$)	1912.0 *2*	100	10792.0	(71/2$^-$)	
12720.0	(79/2$^-$)	763.0 *4*	21 *2*	11956.8	(75/2$^-$)	
		993.6 *2*	100 *10*	11726.4	(75/2$^-$)	
12754.2	(79/2$^-$)	1027.8 *4*	100	11726.4	(75/2$^-$)	
13019.5	(79/2$^-$)	1293.1 *4*	100	11726.4	(75/2$^-$)	
13249.3		1419.3 *4*	100	11830.0	(73/2)	
13460.8	(81/2)	706.6 *4*	60 *20*	12754.2	(79/2$^-$)	
		740.8 *4*	100 *20*	12720.0	(79/2$^-$)	
13522.7		818.7 *4*	100	12704.0	(75/2$^-$)	
13524.6		1798.2 *4*	100	11726.4	(75/2$^-$)	
13730.60	(69/2$^+$)	768.6 *1*	0.30[#] *2*	12962	(65/2$^+$)	
		2306[j]	≈0.005[#]	11425.6?		
		2409[j]	≈0.007	11321.6?		
13791.3	(83/2$^-$)	771.8 *4*	14 *2*	13019.5	(79/2$^-$)	
		1071.3 *4*	100 *14*	12720.0	(79/2$^-$)	
13850.4	(79/2$^-$)	1146.4 *4*	100	12704.0	(75/2$^-$)	
14539.0		747.7 *4*	100	13791.3	(83/2$^-$)	
14541.39	(73/2$^+$)	810.8 *1*	0.61[#] *3*	13730.60	(69/2$^+$)	
		2818 *3*	≈0.007[#]	11726.4	(75/2$^-$)	
		3748	≈0.009[#]	10792.0	(71/2$^-$)	(E1)[g]
14900.4		1050.0 *4*	100	13850.4	(79/2$^-$)	
15316.9		1466.5 *4*	100	13850.4	(79/2$^-$)	
15343.4		1493.0 *4*	100	13850.4	(79/2$^-$)	
15395.30	(77/2$^+$)	853.9 *1*	1.04[#] *5*	14541.39	(73/2$^+$)	
15641.3	(87/2$^-$)	1850.0 *4*	100	13791.3	(83/2$^-$)	
16293.00	(81/2$^+$)	897.7 *1*	0.97[#] *5*	15395.30	(77/2$^+$)	
16589.1	(91/2$^-$)	947.8 *4*	100	15641.3	(87/2$^-$)	
17235.60	(85/2$^+$)	942.6 *1*	1.00[#] *5*	16293.00	(81/2$^+$)	

$\gamma(^{151}Tb)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†‡]	E_f	J^π_f	Comments
18223.81	(89/2$^+$)	988.2 *1*	0.97[#] *5*	17235.60	(85/2$^+$)	
19258.5	(93/2$^+$)	1034.7 *1*	1.02[#] *6*	18223.81	(89/2$^+$)	
20340.3	(97/2$^+$)	1081.8 *1*	1.03[#] *5*	19258.5	(93/2$^+$)	
21470.1	(101/2$^+$)	1129.8 *1*	1.07[#] *6*	20340.3	(97/2$^+$)	
22648.6	(105/2$^+$)	1178.5 *1*	0.96[#] *5*	21470.1	(101/2$^+$)	
23876.5	(109/2$^+$)	1227.9 *1*	0.94[#] *5*	22648.6	(105/2$^+$)	
25154.5	(113/2$^+$)	1278.0 *1*	0.78[#] *4*	23876.5	(109/2$^+$)	
26482.9	(117/2$^+$)	1328.4 *1*	0.63[#] *4*	25154.5	(113/2$^+$)	
27862.4	(121/2$^+$)	1379.5 *1*	0.48[#] *4*	26482.9	(117/2$^+$)	
29293.6	(125/2$^+$)	1431.1 *1*	0.25[#] *2*	27862.4	(121/2$^+$)	
30776.9	(129/2$^+$)	1483.3 *1*	0.16[#] *2*	29293.6	(125/2$^+$)	
32312.4	(133/2$^+$)	1535.5 *2*	0.050[#] *15*	30776.9	(129/2$^+$)	
33901.5	(137/2$^+$)	1589.1 *4*		32312.4	(133/2$^+$)	
35544.1	(141/2$^+$)	1642.6 *10*		33901.5	(137/2$^+$)	
556.20+x	J1+2	556.2 *2*		x	J≈(45/2)	
1157.3+x	J+4	601.1 *3*	0.22[#] *7*	556.20+x	J1+2	
1803.5+x	J+6	646.2 *2*	0.39[#] *8*	1157.3+x	J+4	
2494.9+x	J+8	691.4 *1*	1.04[#] *15*	1803.5+x	J+6	
3231.9+x	J+10	737.0 *1*	1.04[#] *15*	2494.9+x	J+8	
4014.8+x	J+12	782.9 *1*	1.12[#] *15*	3231.9+x	J+10	
4843.2+x	J+14	828.4 *2*	0.91[#] *13*	4014.8+x	J+12	
5717.8+x	J+16	874.6 *1*	1.08[#] *13*	4843.2+x	J+14	
6639.2+x	J+18	921.4 *1*	0.96[#] *12*	5717.8+x	J+16	
7607.4+x	J+20	968.2 *2*	1.00[#] *13*	6639.2+x	J+18	
8622.8+x	J+22	1015.4 *1*	0.98[#] *12*	7607.4+x	J+20	
9685.8+x	J+24	1063.0 *1*	0.97[#] *13*	8622.8+x	J+22	
10796.5+x	J+26	1110.7 *2*	1.00[#] *14*	9685.8+x	J+24	
11955.2+x	J+28	1158.7 *2*	0.91[#] *13*	10796.5+x	J+26	
13162.1+x	J+30	1206.9 *2*	1.02[#] *17*	11955.2+x	J+28	
14417.1+x	J+32	1255.0 *2*	0.77[#] *10*	13162.1+x	J+30	
15720.5+x	J+34	1303.3 *2*	0.62[#] *13*	14417.1+x	J+32	
17071.9+x	J+36	1351.4 *1*	0.48[#] *7*	15720.5+x	J+34	
18471.7+x	J+38	1399.8 *2*	0.34[#] *6*	17071.9+x	J+36	Additional information 13.
19919.9+x	J+40	1448.2 *2*	0.21[#] *4*	18471.7+x	J+38	
21416.2+x	J+42	1496.3 *2*	0.13[#] *4*	19919.9+x	J+40	

Adopted Levels, Gammas (continued)

γ(^{151}Tb) (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†‡]	E_f	J^π_f
22960.3+x	J+44	1544.1 3		21416.2+x	J+42
24554.5+x	J+46	1594.2 10		22960.3+x	J+44
681.2+y	J1+2	681.2 3	0.31[#] 10	y	J1≈(55/2)
1408.1+y	J1+4	726.9 3	0.65[#] 6	681.2+y	J1+2
2181.6+y	J1+6	773.5 3	0.99[#] 8	1408.1+y	J1+4
3002.1+y	J1+8	820.5 3	0.92[#] 18	2181.6+y	J1+6
3869.9+y	J1+10	867.8 3	1.08[#] 14	3002.1+y	J1+8
4785.5+y	J1+12	915.6 3	0.99[#] 11	3869.9+y	J1+10
5749.4+y	J1+14	963.9 3	0.86[#] 10	4785.5+y	J1+12
6762.2+y	J1+16	1012.8 3	1.08[#] 13	5749.4+y	J1+14
7824.0+y	J1+18	1061.8 3	0.95[#] 12	6762.2+y	J1+16
8935.1+y	J1+20	1111.1 3	1.04[#] 12	7824.0+y	J1+18
10095.4+y	J1+22	1160.3 3	0.99[#] 12	8935.1+y	J1+20
11305.2+y	J1+24	1209.8 3	1.06[#] 11	10095.4+y	J1+22
12564.6+y	J1+26	1259.4 3	0.94[#] 11	11305.2+y	J1+24
13873.7+y	J1+28	1309.0 3	0.65[#] 8	12564.6+y	J1+26
15232.4+y	J1+30	1358.7 3	0.52[#] 7	13873.7+y	J1+28
16640.6+y	J1+32	1408.2 3	0.48[#] 6	15232.4+y	J1+30
18098.3+y	J1+34	1457.7 3	0.32[#] 5	16640.6+y	J1+32
19604.9+y	J1+36	1506.6 3	0.15[#] 7	18098.3+y	J1+34
21160.7+y	J1+38	1555.8 4		19604.9+y	J1+36
22765.0+y	J1+40	1604.3 10		21160.7+y	J1+38
691.7+z	J2+2	691.7 3		z	J2≈(59/2)
1447.6+z	J2+4	755.9[b] 3		691.7+z	J2+2
2263.2+z	J2+6	815.6 4	0.41[#] 8	1447.6+z	J2+4
3128.5+z	J2+8	865.3 3	0.61[#] 12	2263.2+z	J2+6
4041.9+z	J2+10	913.4 3	0.88[#] 10	3128.5+z	J2+8
5002.6+z	J2+12	960.7 3	0.95[#] 12	4041.9+z	J2+10
6011.1+z	J2+14	1008.5 3	1.04[#] 13	5002.6+z	J2+12
7067.1+z	J2+16	1056.0 3	0.99[#] 9	6011.1+z	J2+14
8171.1+z	J2+18	1104.0 3	1.01[#] 11	7067.1+z	J2+16
9323.0+z	J2+20	1151.9 3	0.83[#] 13	8171.1+z	J2+18
10523.3+z	J2+22	1200.3 3	1.12[#] 12	9323.0+z	J2+20
11771.8+z	J2+24	1248.5 3	1.10[#] 14	10523.3+z	J2+22
13068.7+z	J2+26	1296.9 3	1.08[#] 12	11771.8+z	J2+24
14414.2+z	J2+28	1345.4 3	0.77[#] 13	13068.7+z	J2+26

E_i(level)	J^π_i	E_γ[†]	I_γ[†‡]	E_f	J^π_f
15808.5+z	J2+30	1394.3 3	0.70[#] 7	14414.2+z	J2+28
17251.8+z	J2+32	1443.3 3	0.42[#] 6	15808.5+z	J2+30
18746.4+z	J2+34	1494.6[a] 4		17251.8+z	J2+32
20305.4+z?	J2+36	1559[j] 2		18746.4+z	J2+34
709.8+u	J3+2	709.8 3		u	J3≈(53/2)
1470.4+u	J3+4	760.6 3		709.8+u	J3+2
2281.3+u	J3+6	810.9 3		1470.4+u	J3+4
3143.6+u	J3+8	862.3 3		2281.3+u	J3+6
4057.3+u	J3+10	913.7 3		3143.6+u	J3+8
5022.9+u	J3+12	965.6 3		4057.3+u	J3+10
6041.4+u	J3+14	1018.5 3		5022.9+u	J3+12
7112.4+u	J3+16	1071.0 3		6041.4+u	J3+14
8235.8+u	J3+18	1123.4 3		7112.4+u	J3+16
9412.0+u	J3+20	1176.2 3		8235.8+u	J3+18
10641.8+u	J3+22	1229.8 3		9412.0+u	J3+20
11924.2+u	J3+24	1282.4 3		10641.8+u	J3+22
13261.3+u	J3+26	1337.1 3		11924.2+u	J3+24
14652.6+u	J3+28	1391.2 3		13261.3+u	J3+26
16098.1+u	J3+30	1445.5 4		14652.6+u	J3+28
17597.7+u	J3+32	1499.6 4		16098.1+u	J3+30
19151.3+u	J3+34	1553.6 5		17597.7+u	J3+32
790.6+v	J4+2	790.6 3		v	J4≈(59/2)
1629.1+v	J4+4	838.5 3		790.6+v	J4+2
2518.2+v	J4+6	889.1 3		1629.1+v	J4+4
3458.7+v	J4+8	940.5 3		2518.2+v	J4+6
4450.6+v	J4+10	991.9 3		3458.7+v	J4+8
5495.1+v	J4+12	1044.5 3		4450.6+v	J4+10
6592.2+v	J4+14	1097.1 3		5495.1+v	J4+12
7742.3+v	J4+16	1150.1 3		6592.2+v	J4+14
8945.3+v	J4+18	1203.0 3		7742.3+v	J4+16
10201.7+v	J4+20	1256.4 3		8945.3+v	J4+18
11511.6+v	J4+22	1309.9 3		10201.7+v	J4+20
12875.2+v	J4+24	1363.5 3		11511.6+v	J4+22
14292.5+v	J4+26	1417.3 10		12875.2+v	J4+24
15762.1+v	J4+28	1469.6 4		14292.5+v	J4+26
17281.7+v	J4+30	1519.6 10		15762.1+v	J4+28

γ(^{151}Tb) (continued)

E_i(level)	J^π_i	E_γ[†]	E_f	J^π_f	E_i(level)	J^π_i	E_γ[†]	E_f	J^π_f
18840.5+v	J4+32	1558.8 *11*	17281.7+v	J4+30	13411.7+s	J6+24	1408.9 *4*	12002.7+s	J6+22
754.3+w	J5+2	754.3 *4*	w	J5≈(55/2)	14875.2+s	J6+26	1463.5 *4*	13411.7+s	J6+24
1560.8+w	J5+4	806.5 *4*	754.3+w	J5+2	16392.8+s	J6+28	1517.6 *4*	14875.2+s	J6+26
2417.8+w	J5+6	857.0 *4*	1560.8+w	J5+4	824.4+t	J7+2	824.4 *5*	t	J7
3326.0+w	J5+8	908.2 *4*	2417.8+w	J5+6	1698.3+t	J7+4	873.9 *3*	824.4+t	J7+2
4285.6+w	J5+10	959.6 *4*	3326.0+w	J5+8	2622.5+t	J7+6	924.2 *4*	1698.3+t	J7+4
5296.9+w	J5+12	1011.3 *4*	4285.6+w	J5+10	3598.2+t	J7+8	975.7 *3*	2622.5+t	J7+6
6360.4+w	J5+14	1063.5 *4*	5296.9+w	J5+12	4624.8+t	J7+10	1026.6 *3*	3598.2+t	J7+8
7476.4+w	J5+16	1116.0 *4*	6360.4+w	J5+14	5702.6+t	J7+12	1077.8 *4*	4624.8+t	J7+10
8645.2+w	J5+18	1168.8 *4*	7476.4+w	J5+16	6832.9+t	J7+14	1130.3 *3*	5702.6+t	J7+12
9867.4+w	J5+20	1222.2 *4*	8645.2+w	J5+18	8014.3+t	J7+16	1181.4 *4*	6832.9+t	J7+14
11142.6+w	J5+22	1275.2 *4*	9867.4+w	J5+20	9248.0+t	J7+18	1233.7 *4*	8014.3+t	J7+16
12470.7+w	J5+24	1328.1 *4*	11142.6+w	J5+22	10533.6+t	J7+20	1285.6 *4*	9248.0+t	J7+18
13852.7+w	J5+26	1381.9 *4*	12470.7+w	J5+24	11872.0+t	J7+22	1338.4 *4*	10533.6+t	J7+20
15288.4+w	J5+28	1435.7 *4*	13852.7+w	J5+26	13264.0+t	J7+24	1391.9 *4*	11872.0+t	J7+22
16777.6+w	J5+30	1489.2 *4*	15288.4+w	J5+28	14708.2+t	J7+26	1444.2 *5*	13264.0+t	J7+24
18322.9+w?	J5+32	1545.3[j] *10*	16777.6+w	J5+30	16205.5+t	J7+28	1497.3 *6*	14708.2+t	J7+26
831.8+s	J6+2	831.8 *3*	s	J6≈(61/2)	17753+t	J7+30	1548 *2*	16205.5+t	J7+28
1714.2+s	J6+4	882.4 *3*	831.8+s	J6+2	1001.6+a	J8+2	1001.6 *4*	a	J8
2647.9+s	J6+6	933.7 *3*	1714.2+s	J6+4	2052.8+a	J8+4	1051.2 *4*	1001.6+a	J8+2
3633.3+s	J6+8	985.4 *3*	2647.9+s	J6+6	3155.7+a	J8+6	1102.9 *4*	2052.8+a	J8+4
4671.0+s	J6+10	1037.7 *3*	3633.3+s	J6+8	4310.9+a	J8+8	1155.2 *5*	3155.7+a	J8+6
5760.7+s	J6+12	1089.7 *3*	4671.0+s	J6+10	5518.3+a	J8+10	1207.4 *4*	4310.9+a	J8+8
6902.7+s	J6+14	1142.0 *3*	5760.7+s	J6+12	6778.1+a	J8+12	1259.8 *4*	5518.3+a	J8+10
8097.7+s	J6+16	1195.0 *3*	6902.7+s	J6+14	8090.1+a	J8+14	1312.0 *4*	6778.1+a	J8+12
9346.1+s	J6+18	1248.4 *3*	8097.7+s	J6+16	9453.5+a	J8+16	1363.4 *5*	8090.1+a	J8+14
10647.6+s	J6+20	1301.5 *4*	9346.1+s	J6+18	10870.0+a	J8+18	1416.5 *4*	9453.5+a	J8+16
12002.7+s	J6+22	1355.1 *3*	10647.6+s	J6+20	12339.2+a	J8+20	1469.1 *5*	10870.0+a	J8+18

[†] Mostly from ^{151}Dy ε decay for low-spin (J<11/2) states and from ^{130}Te(^{27}Al,6nγ) for high-spin (J>9/2) states. When a level is populated in different datasets, weighted averages are taken.

[‡] Relative photon branchings for γ rays from spherical and normal-deformed levels. For SD bands, values are relative γ-ray intensities within each SD band.

[#] Relative intensity within each SD band normalized to ≈1 for the most intense transition in an SD band.

[@] From ce data in ^{151}Dy ε decay.

[&] From ce data in in-beam γ-ray studies.

[a] 1485.5 *10* in 1995Kh06.

[b] 768.6 *5* in 1995Kh06.

[c] $\gamma(\theta)$ data are inconsistent: ΔJ=1 (1994Pe17), ΔJ=2 (1988CuZY).

[d] Other: 125 (1988CuZY).

$^{151}_{65}Tb_{86}$-20

$\gamma(^{151}Tb)$ (continued)

[e] $\gamma(\theta)$ data are inconsistent: $\Delta J=2$ (1994Pe17), $\Delta J=1$ (1988CuZY).
[f] $\gamma(\theta)$ data are inconsistent: $\Delta J=1$ (1994Pe17), $\Delta J=2$ (1988CuZY).
[g] DCO in $^{130}Te(^{27}Al,6n\gamma)$ gives $\Delta J=1$, dipole; E1 is assumed by from possible positive parity for the yrast SD band.
[h] 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.
[i] Multiply placed with undivided intensity.
[j] Placement of transition in the level scheme is uncertain.

$^{151}_{65}Tb_{86}$-21

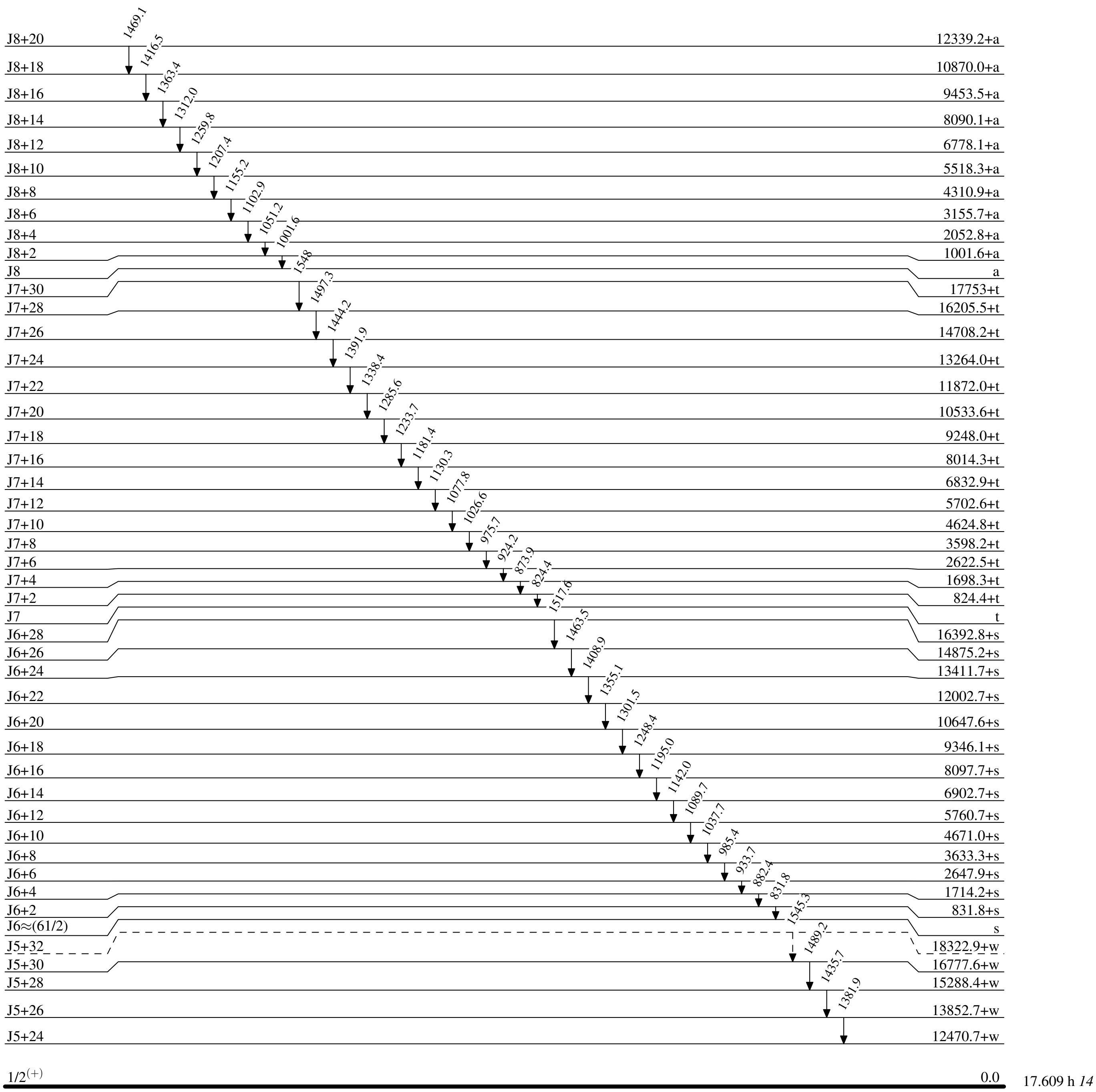
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

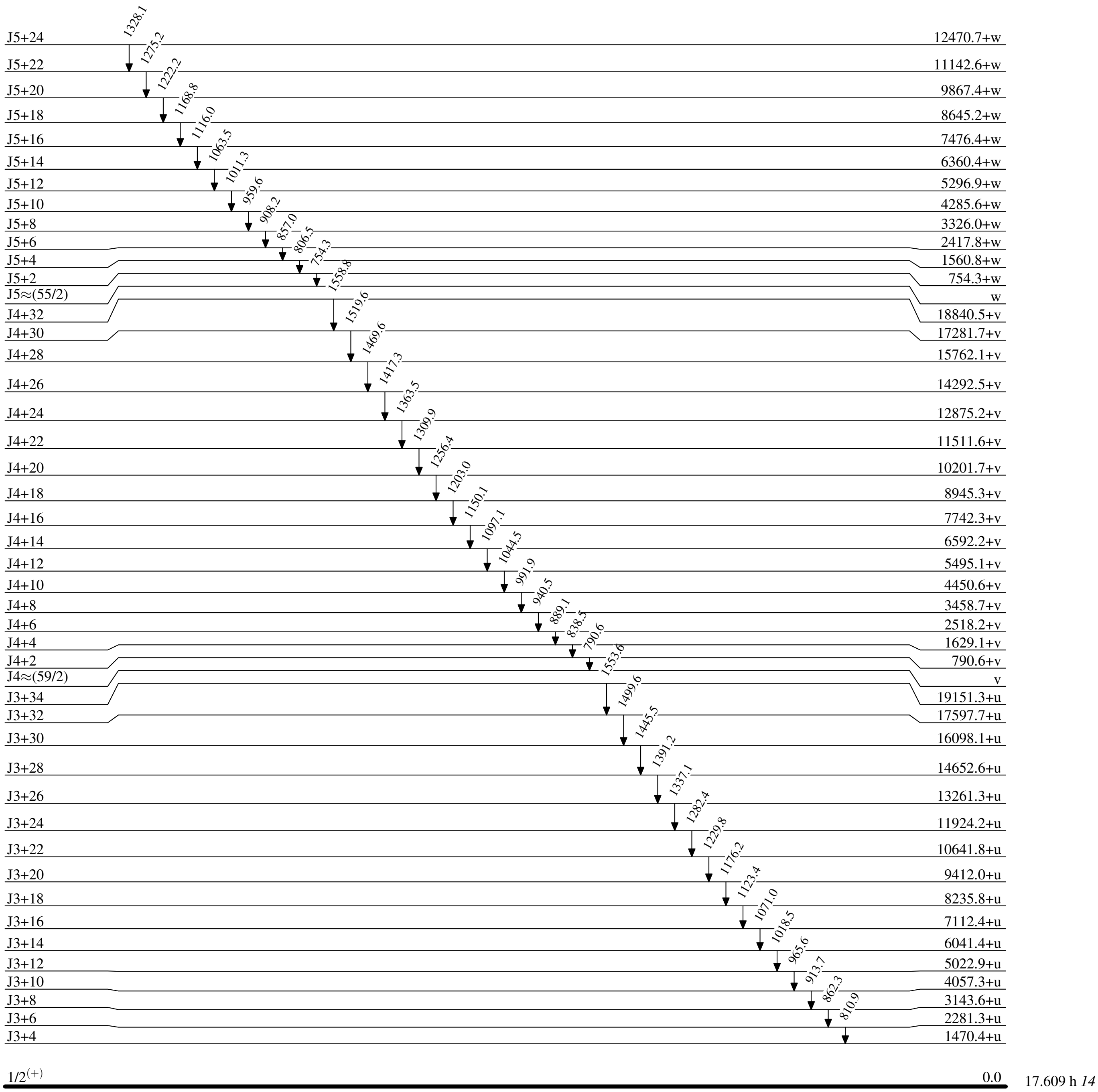


$^{151}_{65}Tb_{86}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{151}_{65}Tb_{86}$

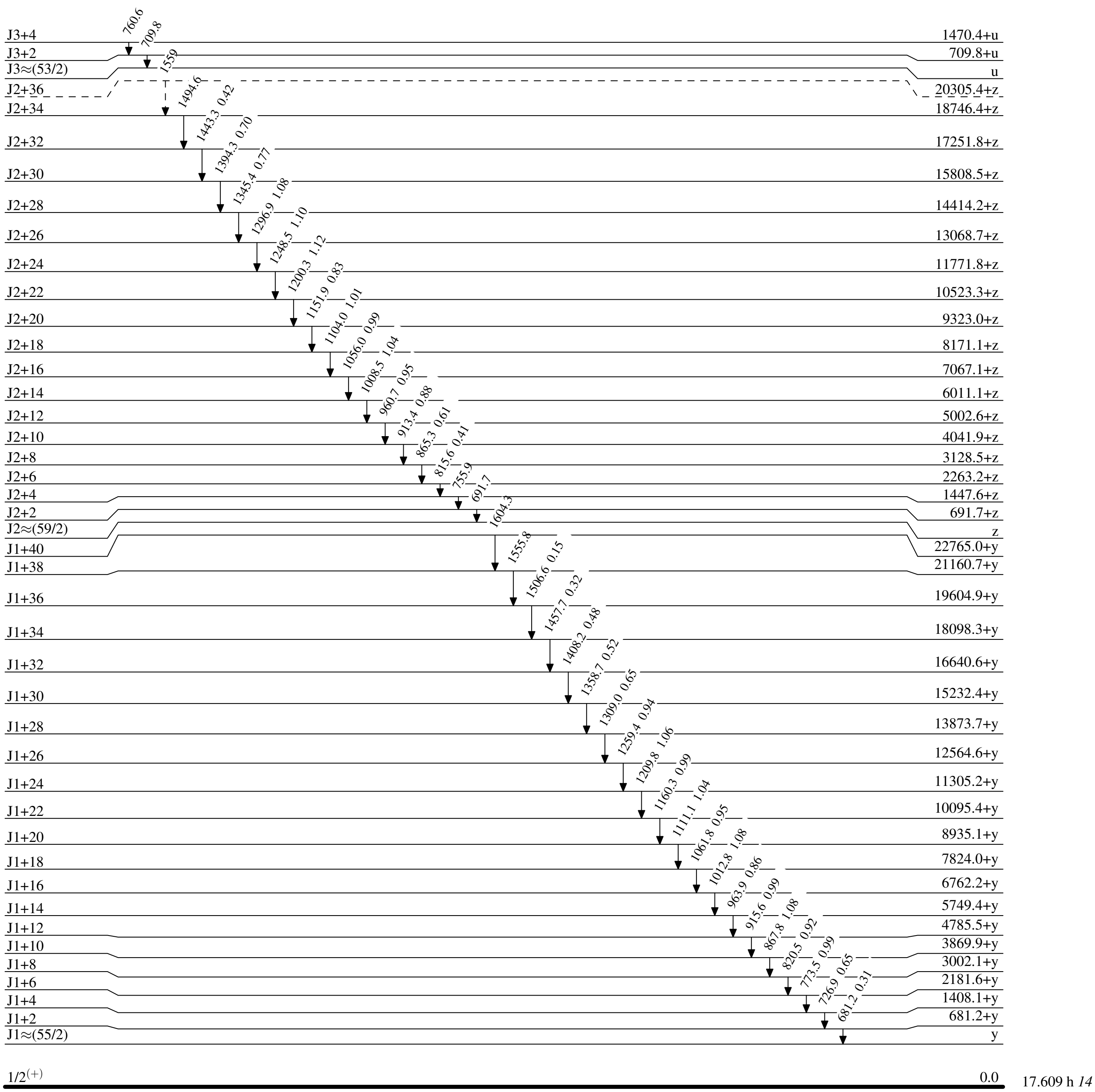
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

Legend

γ Decay (Uncertain)

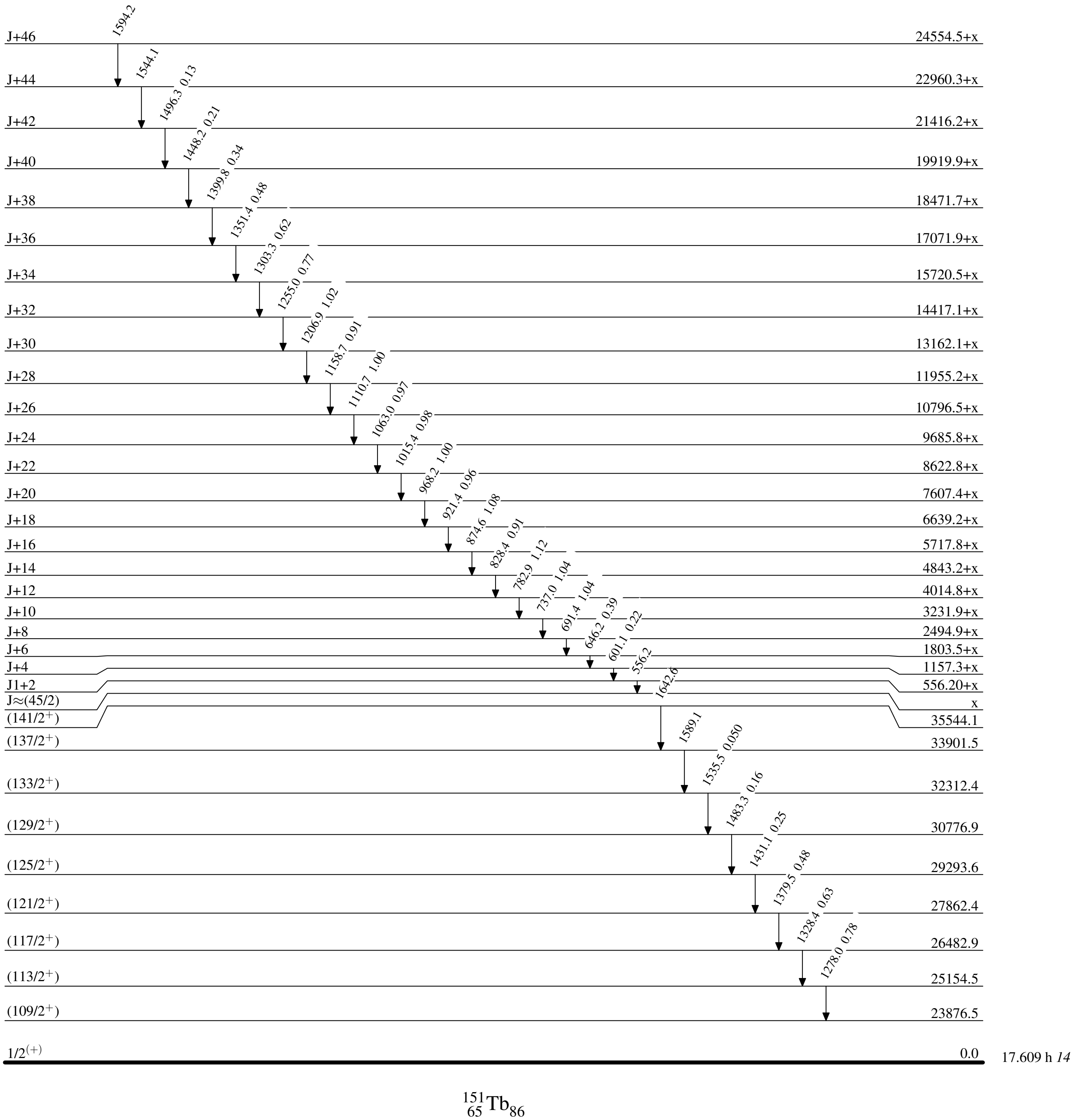


$^{151}_{65}Tb_{86}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



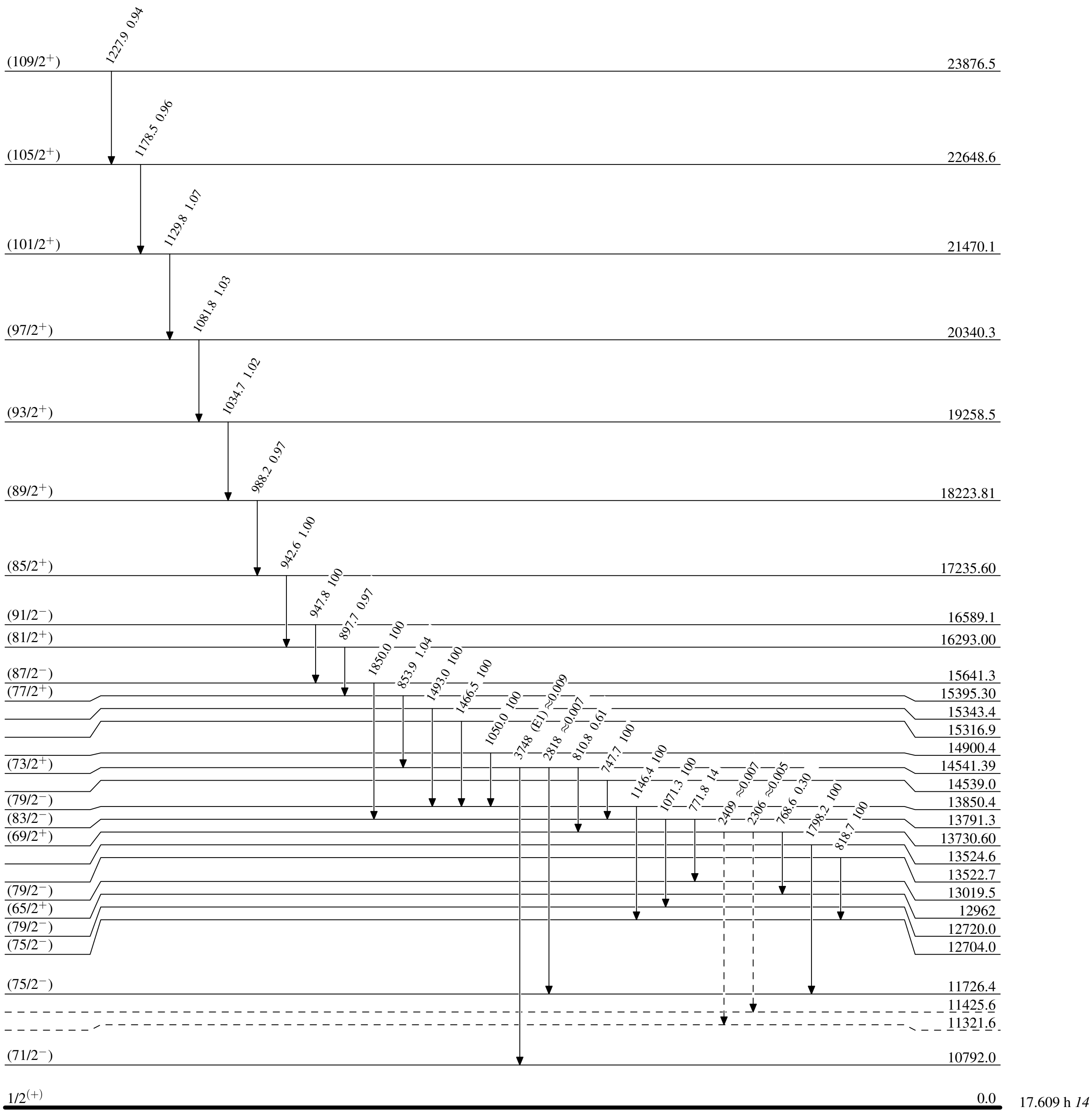
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{151}_{65}Tb_{86}$

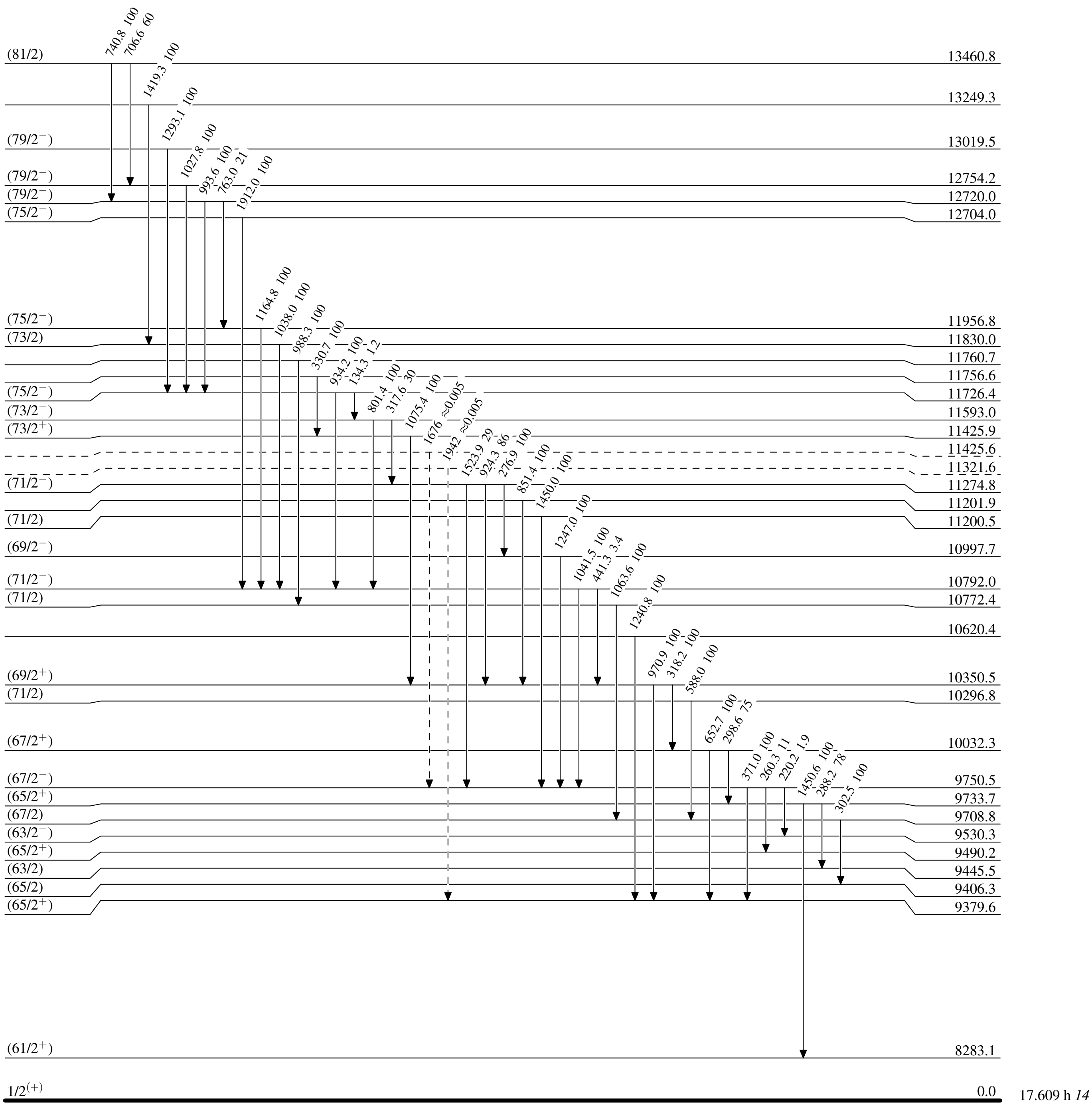
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

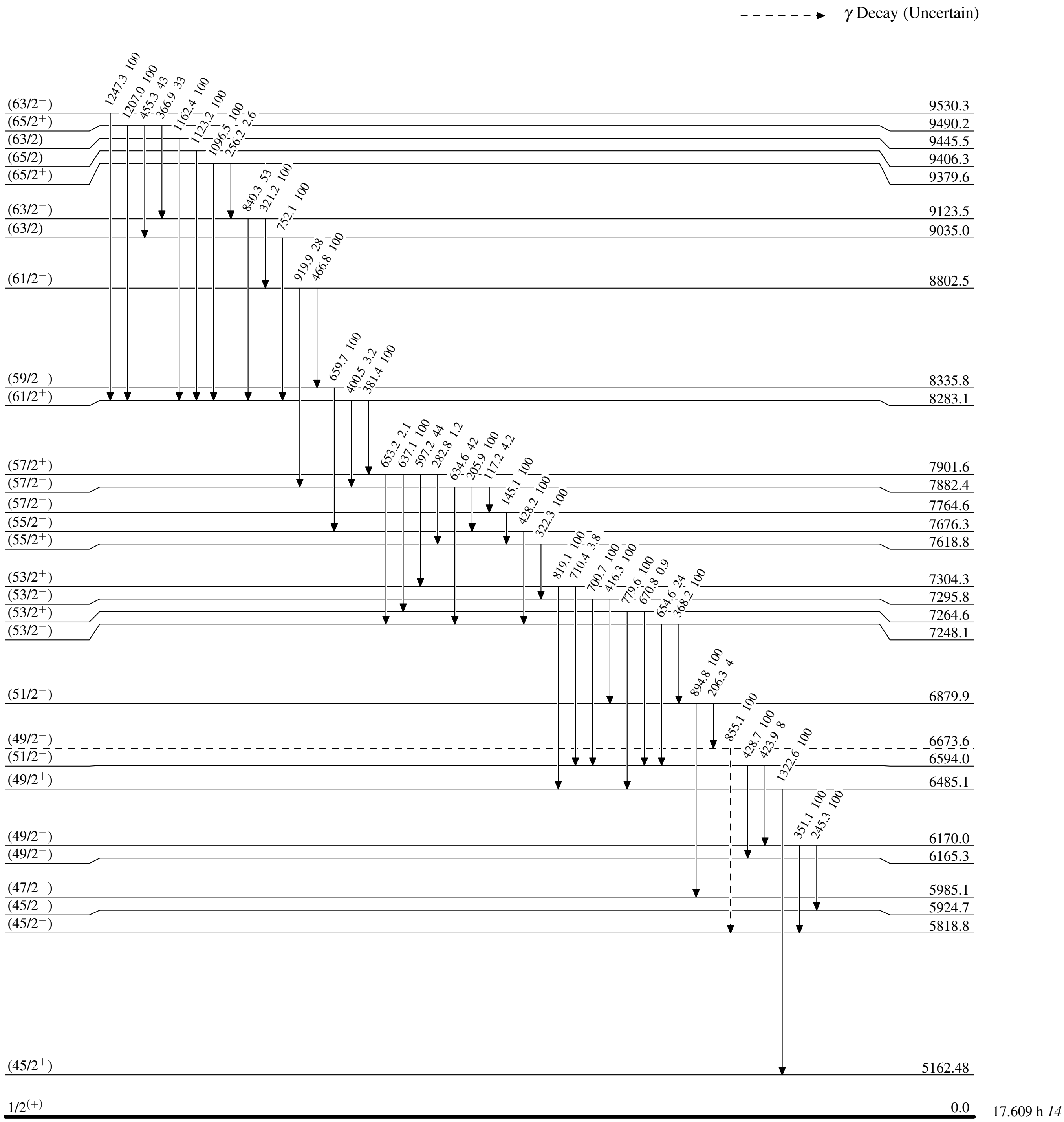


$^{151}_{65}Tb_{86}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

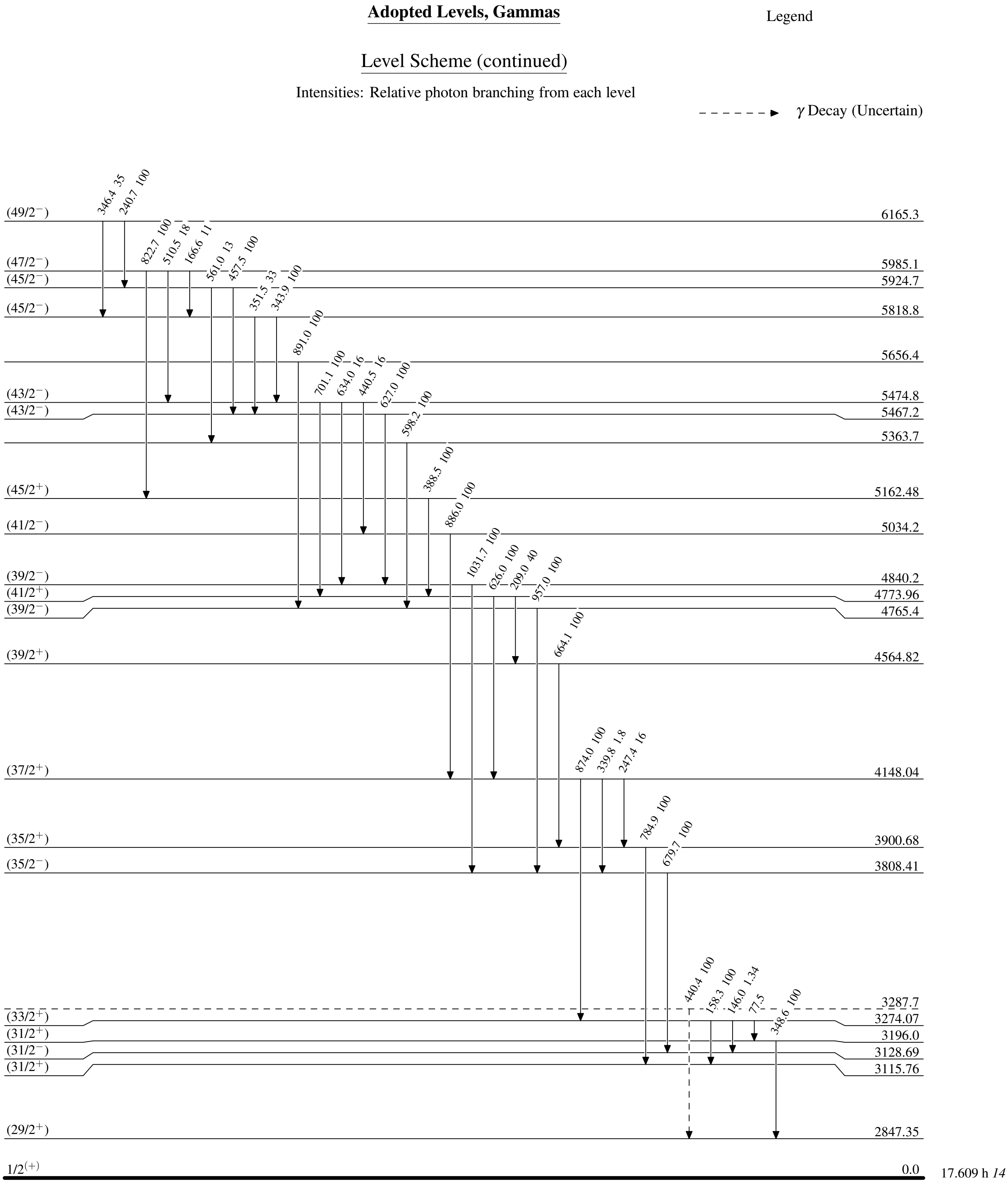


$^{151}_{65}Tb_{86}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

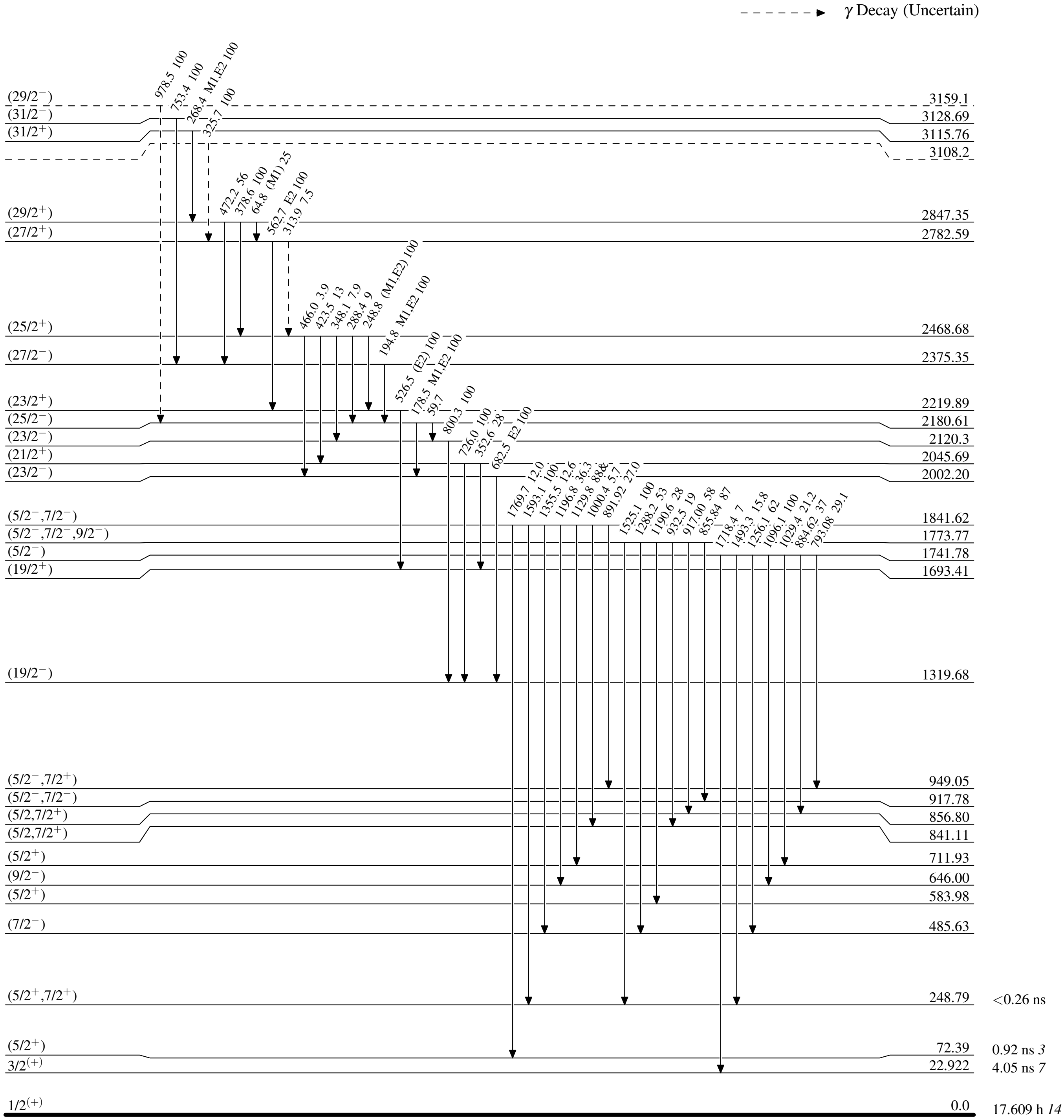


$^{151}_{65}Tb_{86}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

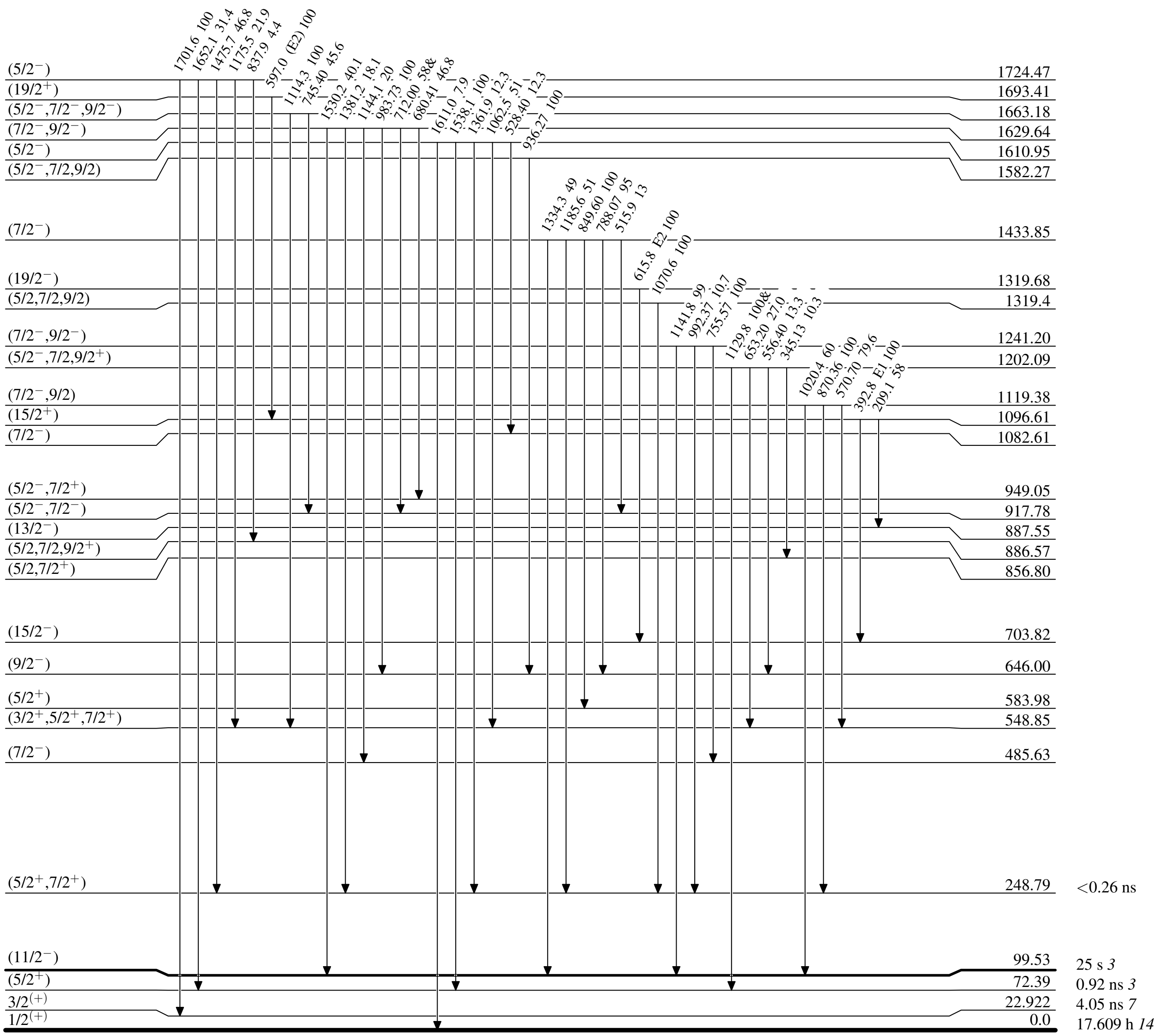


$^{151}_{65}Tb_{86}$

Adopted Levels, Gammas

Level Scheme (continued)

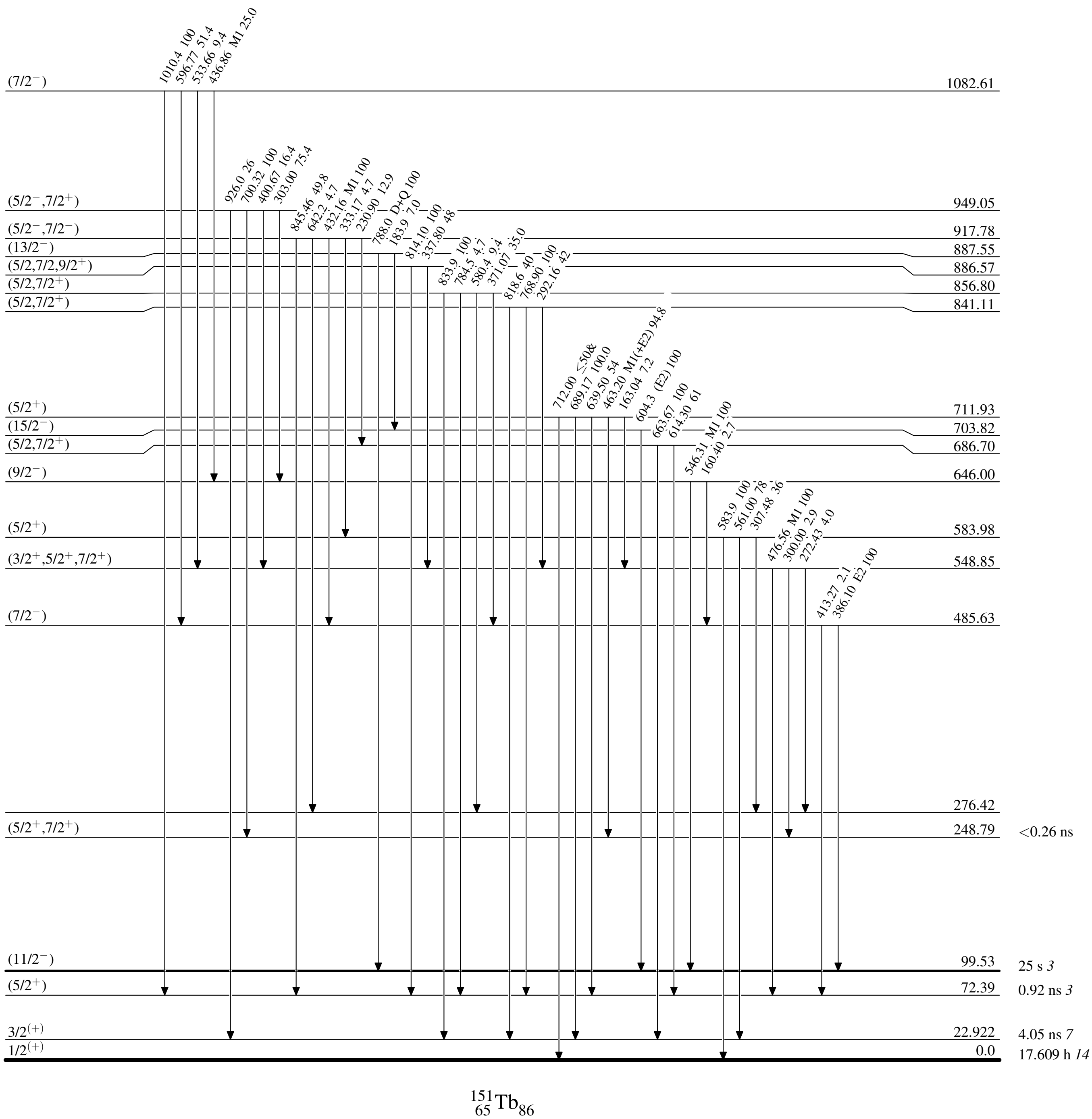
Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given



Adopted Levels, Gammas

Level Scheme (continued)

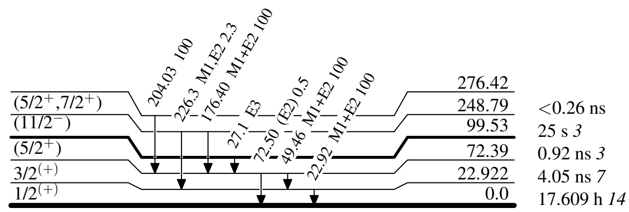
Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given



Adopted Levels, Gammas

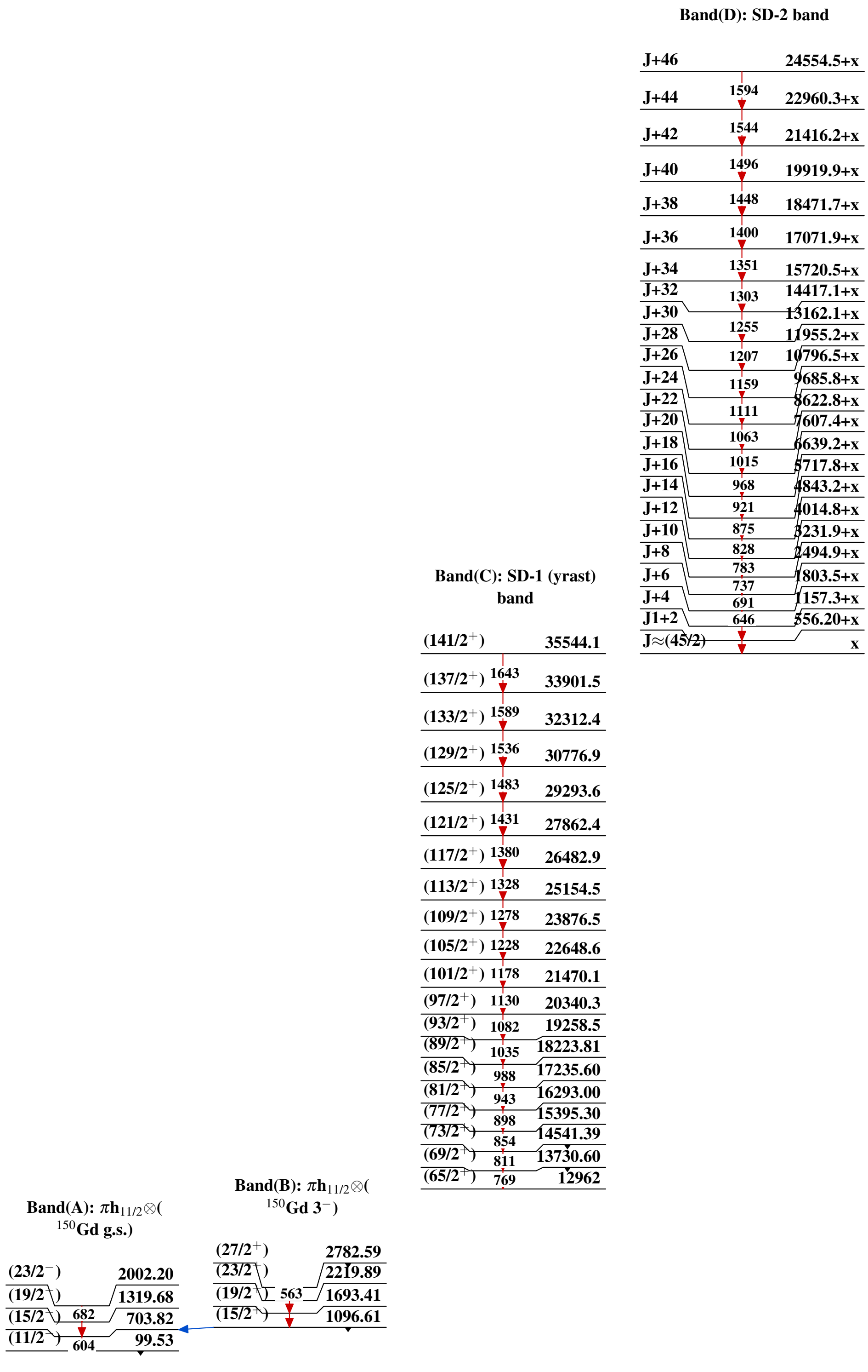
Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given



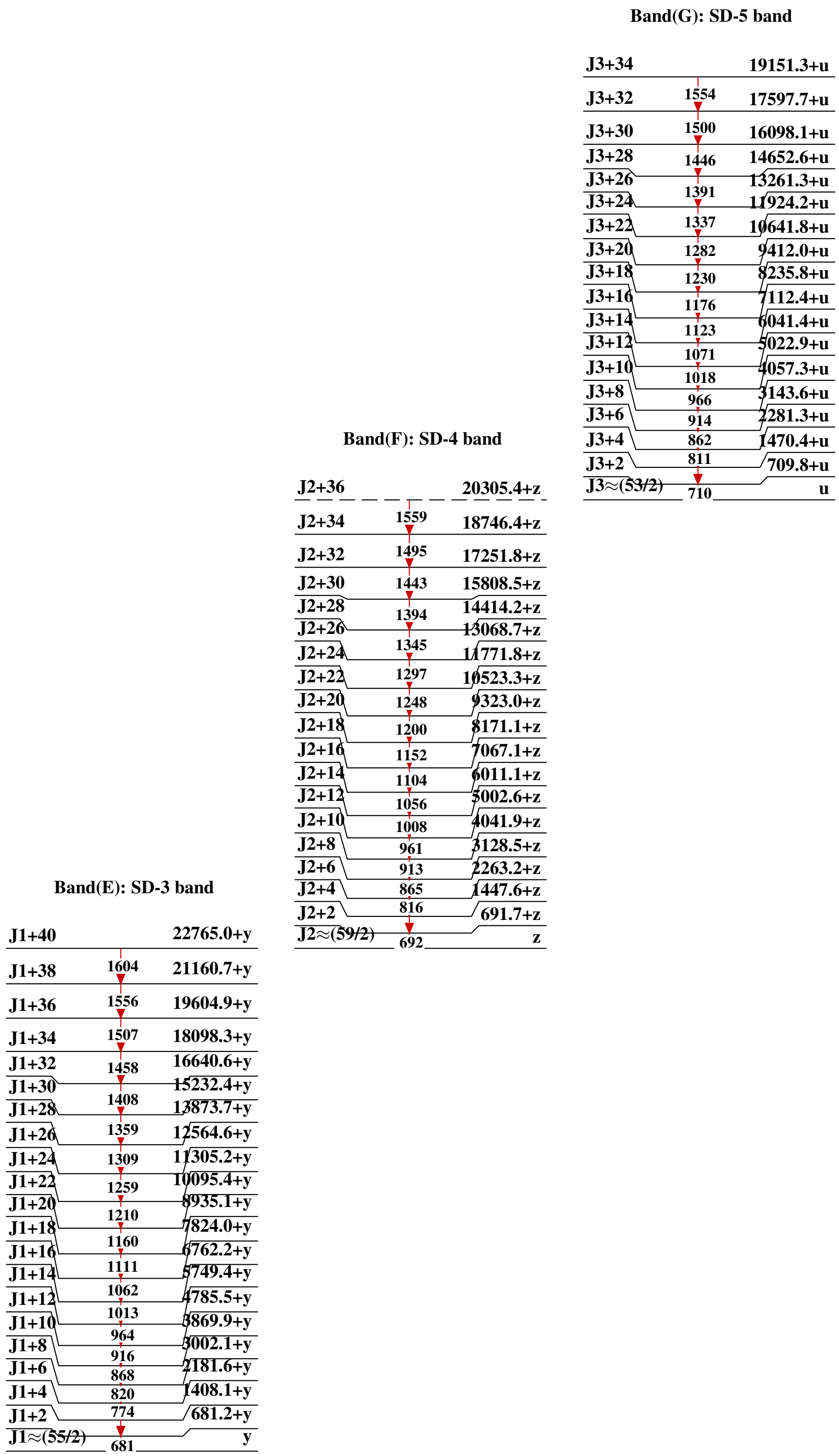
$^{151}_{65}Tb_{86}$

Adopted Levels, Gammas



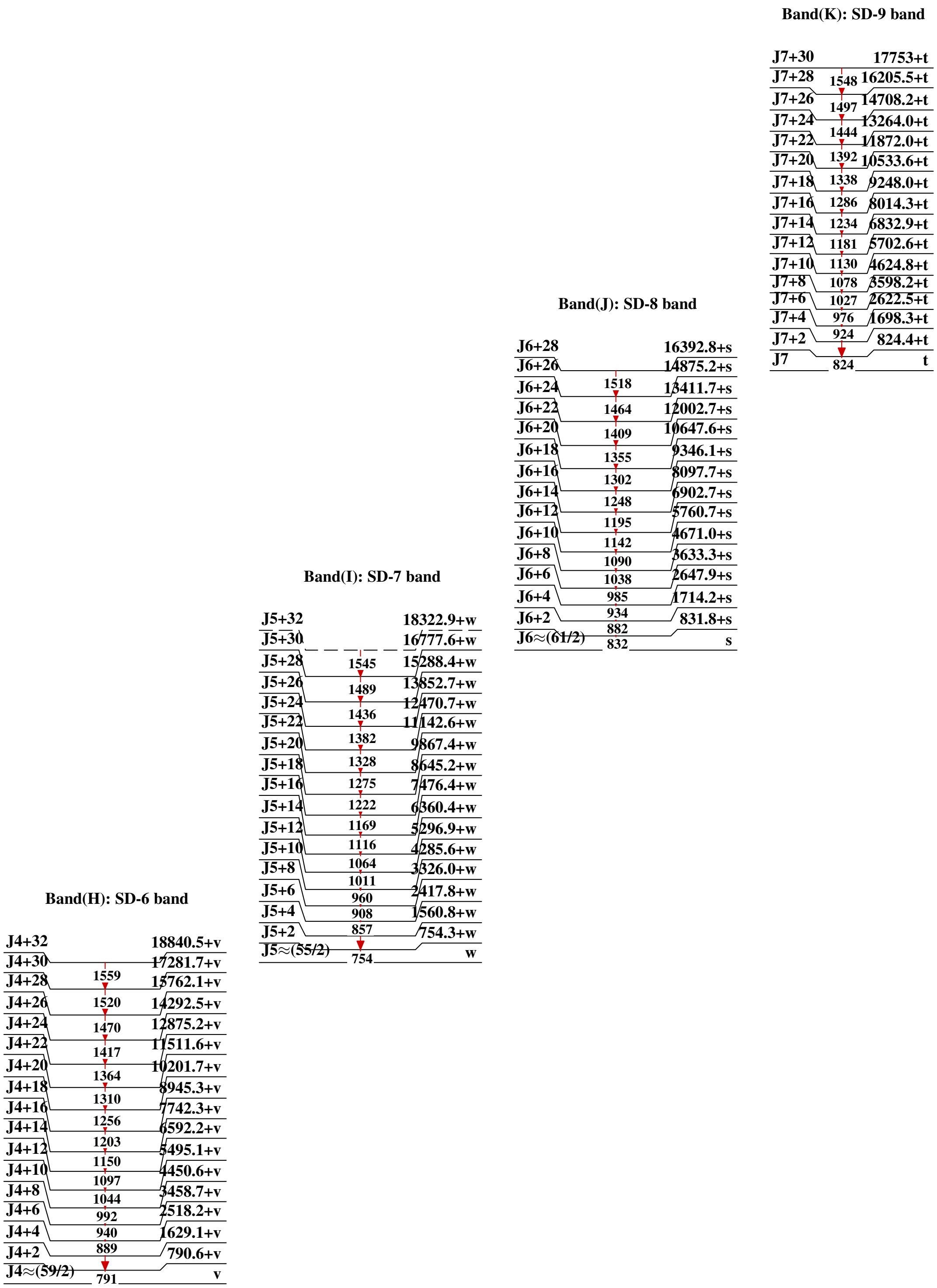
$^{151}_{65}Tb_{86}$

Adopted Levels, Gammas (continued)



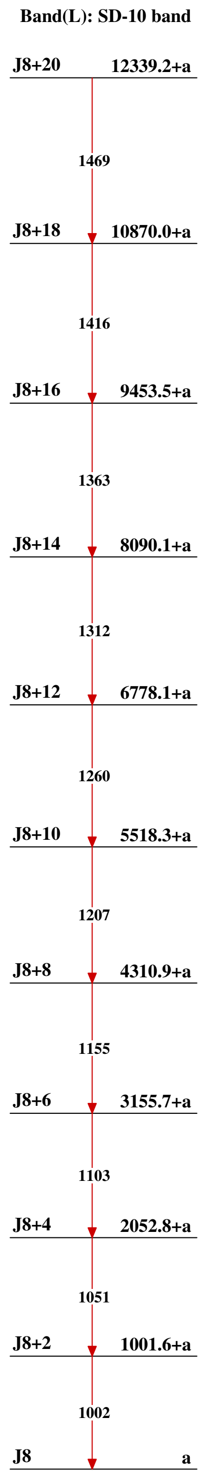
$^{151}_{65}Tb_{86}$

Adopted Levels, Gammas (continued)



$^{151}_{65}Tb_{86}$

Adopted Levels, Gammas (continued)



$^{151}_{65}Tb_{86}$