Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 160, 1 (2019)	21-Oct-2019

Q(β^-)=−2094.5 *19*; S(n)=9.17×10^3 *5*; S(p)=4833 *10*; Q(α)=978 *10* 2017Wa10
Q(ε)=820 *10*; S(2n)=16079 *5*; S(2p)=12461 *10* 2017Wa10
Additional information 1.
From ^{155}Dy ε decay, 1998AdZX report the following new levels (with J^π values in parentheses): 614 ($3/2^+$,5/2,7/2$^-$); 726 ($5/2^+$,7/2,9/2$^-$); 937; 940 ($5/2^+$,7/2,9/2$^-$); 1086; 1316; 1709; 1722; and 1773. These are not otherwise included in this data set. See the comment in the ^{155}Dy ε Decay data set.

^{155}Tb Levels

Cross Reference (XREF) Flags

- A ^{155}Dy ε decay
- B ^{153}Eu(α,2nγ),^{155}Gd(d,2nγ),
- C ^{154}Gd(^{3}He,d), ^{154}Gd(α,t)
- D (HI,xnγ)

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$	XREF	Comments
0.0[#]	3/2$^+$	5.32 d *6*	ABCD	%ε=100 μ=+2.01 *2*; Q=+1.41 *6* T$_{1/2}$: from 1970Ch09, γ(t). Others: 1960To10, 1958Dz03, 1958An38, 1957Mi67. J$^\pi$: atomic beam (1970Ad09). π=+ from identification of the g.s. band with configuration=(π 3/2[411]) based upon measured cross sections in (^{3}He,d) and (α,t). Equality of the μ value with that of the ^{159}Tb g.s., which has J^π=3/2$^+$ and configuration=(π 3/2[411]), supports both the J^π and the configuration assignments for the ^{155}Tb g.s. μ: Value reported by 1990Al36, from optical isotope-shift measurements, using resonance-ionization spectroscopy. This value is that listed in the compilation of 2014StZZ. Q: Value reported by 1990Al36, from optical isotope-shift measurements, using resonance-ionization spectroscopy. This is the value given in the compilation of 2016St14. 1990Al36 report λ(^{159}Tb-^{155}Tb)=0.204 fm^2 *9*, from measured optical isotope shifts. (The nuclear parameter λ is approximately equal to δ<r^2>.) In an evaluation of nuclear rms charge radii, 2013An02 report <r^2>$^{1/2}$=5.0391 fm *1500*.
65.4622[@] *24*	5/2$^+$	0.25 ns *3*	ABCD	J$^\pi$: M1+E2 to 3/2$^+$ g.s. Large B(E2) value of 65.4 γ, characteristic of collective intraband transitions, and level energy support the identification of this level as the 5/2$^+$ member of the ground-state band. T$_{1/2}$: from the ^{155}Dy ε decay.
155.785[#] *3*	7/2$^+$	≤0.2 ns	ABCD	J$^\pi$: M1+E2 to 5/2$^+$ state and E2 to 3/2$^+$ g.s. The large B(E2) values of the 90.3 and 155.7 γ's, characteristic of collective intraband transitions, and the level energy indicate that this is the 7/2$^+$ member of the ground-state band. This interpretation is further supported by the observation that the δ values of the 65.4 and 90.3 γ's are nearly the same, as expected for ΔJ=1 transitions within the same rotational band. T$_{1/2}$: from the ^{155}Dy ε decay.
226.918[b] *3*	5/2$^-$	0.35 ns *3*	AB D	T$_{1/2}$: from the ^{155}Dy ε decay. J$^\pi$: E1 transitions to 3/2$^+$ and 7/2$^+$ states.
250.030[c] *4*	7/2$^-$	0.56 ns *5*	ABCD	T$_{1/2}$: from the ^{155}Dy ε decay. J$^\pi$: M1+E2 to 5/2$^-$. Assigned as the 7/2$^-$ member of the indicated band through

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Adopted Levels, Gammas (continued)

^{155}Tb Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
			level-energy considerations.
271.045[&] *4*	5/2$^+$	ABc	XREF: c(272). Jπ: M1 components in transitions to 3/2$^+$ and 7/2$^+$ states.
274.075[@] *8*	9/2$^+$	ABcD	XREF: c(272). Jπ: M1 and E2 transitions, respectively, to the 7/2$^+$ and 5/2$^+$ members of the ground-state band. Level energy indicates that this is the 9/2$^+$ member of this band.
317.047[b] *10*	9/2$^-$	ABCD	Jπ: E1 transitions to 7/2$^+$ and 9/2$^+$ states require J^π=7/2$^-$ or 9/2$^-$. Level energy and the population pattern in in-beam γ-ray studies indicate that this is the 9/2$^-$ member of the indicated rotational band. This interpretation is supported by the observation that the δ values of the 23.1 and 67.0 γ's are nearly equal, as expected for ΔJ=1 transitions within a band.
334.849[a] *8*	7/2$^+$	ABCD	Jπ: M1+E2 transitions to 5/2$^+$ states require J^π=3/2$^+$ through 7/2$^+$. Level energy supports assignment as the 7/2$^+$ member of the indicated band.
397.36[c] *14*	11/2$^-$	BCD	Jπ: L=5 in (^{3}He,d) and (α,t) requires J^π=9/2$^-$ or 11/2$^-$. Level energy is consistent with assignment as the 11/2$^-$ member of the indicated band.
408.67[#] *22*	11/2$^+$	B D	Jπ: E2 to 7/2$^+$ and γ to 9/2$^+$ members of the ground-state band, together with the level energy, indicate that this is the 11/2$^+$ member of this band.
452.4[&] *3*	9/2$^+$	BCD	Jπ: level energy, together with γ-decay and feeding patterns, indicate that this is the 9/2$^+$ member of the indicated band.
466.802[f] *12*	7/2$^+$	ABC	Jπ: L=4 in (^{3}He,d) and (α,t) require J^π=7/2$^+$ or 9/2$^+$. M1 to 5/2$^+$ eliminates 9/2$^+$. This is probably the 7/2[404] Nilsson state.
498.640[e] *9*	5/2$^+$	A C	Jπ: M1 to 3/2$^+$ and M1 component in transition to 7/2$^+$. Strong population of this level in (^{3}He,d) and (α,t) via transitions whose cross-section ratio is consistent with L=2 provides evidence that this is the 5/2[402] Nilsson state.
508.395 *19*	1/2$^+$,3/2$^+$,5/2$^+$	A	Jπ: M1 component in the transition to 3/2$^+$.
517.542 *15*	3/2$^+$,5/2$^+$,7/2$^+$	A	Jπ: M1 component in the transition to 5/2$^+$. Possible 7/2$^+$ member of the 5/2[402] band.
544.891[d] *15*	7/2$^-$	AB	Jπ: M1's to 5/2$^-$ and 7/2$^-$ require J^π=5/2$^-$ or 7/2$^-$. Identification of the 11/2$^-$ level in (^{3}He,d) and (α,t) at higher energies, together with rotational-band-structure considerations, indicate that this is the 7/2[523] Nilsson state.
549.604[h] *10*	3/2$^+$	A C	Jπ: L=2 in (^{3}He,d) and (α,t); 5/2$^+$ less likely if band member.
555.18[b] *15*	13/2$^-$	B D	Jπ: γ's to 9/2$^-$ and 11/2$^-$ members of the "5/2[532]" band, together with band-structure considerations, indicate that this is the 13/2$^-$ member of that band.
576.03[@] *17*	13/2$^+$	B D	Jπ: γ's to the 9/2$^+$ and 11/2$^+$ members of the g.s. band, together with the level energy, indicate that this is the 13/2$^+$ member of that band.
595.80[a] *22*	11/2$^+$	B D	Jπ: level energy and γ deexcitation pattern indicate that this is the 11/2$^+$ member of the 5/2[413] band.
616 *3*		C	
652.033[h] *13*	5/2$^+$	A C	Jπ: L=2 in (^{3}He,d) and (α,t) requires J^π=3/2$^+$ or 5/2$^+$. E1 to 7/2$^-$ rules out 3/2$^+$.
673.03[c] *17*	15/2$^-$	B D	Jπ: γ's to 11/2$^-$ and 13/2$^-$ members of the "5/2[532]" band, together with the level energy, indicate that this is the 15/2$^-$ member of that band.
727 *3*	(1/2$^+$)	C	Jπ: the rotational-energy spacings and cross-section population pattern (spectroscopic "fingerprint") in (^{3}He,d) and (α,t) of this level and the 760.6 and 809.5 levels are similar to those in ^{157}Tb and ^{159}Tb, where a fragment of the 1/2[411] Nilsson orbital has been identified. The 727 level, in this interpretation, would be the bandhead. The ratio of (^{3}He,d) and (α,t) cross sections is also consistent with J^π=1/2$^+$.
743.92 *3*	7/2$^+$	A C	Jπ: E0 component in transition to 7/2$^+$ state.
747.52[#] *20*	15/2$^+$	B D	Jπ: E2 to 11/2$^+$ and γ to 13/2$^+$ members of the g.s. band, together with the level energy, indicate that this is the 15/2$^+$ member of the g.s. band.
760.628 *21*	3/2$^+$	A C	Jπ: E0 component in the transition to a 3/2$^+$ state.
766.8[&] *3*	13/2$^+$	B D	Jπ: E1 transition to 11/2$^-$ and γ to the 9/2$^+$ member of the 5/2[413] band, together with level-energy considerations, indicate that this is the 13/2$^+$ member of this band.
809.526 *17*	5/2$^+$	A C	Jπ: E0 component in the transition to a 5/2$^+$ state.

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Adopted Levels, Gammas (continued)

^{155}Tb Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
834[d] *3*	11/2⁻	C	Jπ: population via an L=5 transition in (^{3}He,d) and (α,t) requires J^π=9/2⁻ or 11/2⁻. Band-structure considerations indicate that this is the 11/2⁻ member of the 7/2[523] band.
861.87 *7*	3/2⁺,5/2⁺	A	Jπ: M1′s to 3/2⁺ and 5/2⁺ states.
863[g] *3*	(1/2⁻)	C	Jπ: tentatively assigned (1972Ti05) as the 1/2⁻ member of the 1/2[541] band, based on the similarity of the level spacings and the spectroscopic "fingerprints" in (^{3}He,d) and (α,t) to those of states in ^{157}Tb and ^{159}Tb.
891.138 *10*	3/2⁻	A	Jπ: E1 to 3/2⁺ and M1 to 5/2⁻ indicate π=− and J=3/2,5/2. From γγ(θ) involving the 664-226 γ cascade, J=3/2.
906.43[g] *5*	(5/2⁻)	A C	Jπ: M2 to 9/2⁺ state indicates π=−, with J=5/2 being most likely (one would expect some E1 admixture if J were 7/2⁻ through 11/2⁻ and J=13/2 would probably not be excited in the ^{155}Dy decay). However, as discussed in the ^{155}Dy ε data set, there are concerns about the multipolarity of this, and other, transitions which cast doubt on an M2 assignment for the 632.4 γ. 1972Ti05 tentatively assign this level as the 5/2⁻ member of the 1/2[541] band, based on the similarity of the level spacings and spectroscopic "fingerprint" in (^{3}He,d) and (α,t) to those of states in ^{157}Tb and ^{159}Tb.
916.87[b] *18*	17/2⁻	B D	Jπ: E2 to the 13/2⁻ and γ to the 15/2⁻ members of the "5/2[532]" band, together with level-energy considerations, indicate that this is the 17/2⁻ member of this band.
926 *3*		C	
950.38[g] *8*	3/2⁻	A C	Jπ: M1 component in transition to 5/2⁻ state indicates π=− and J=3/2 through 7/2. 1972Ti05 tentatively assign this as the 3/2⁻ member of the 1/2[541] band, based on the similarity of the level spacings and the spectroscopic "fingerprint" in (^{3}He,d) and (α,t) to those of states in ^{157}Tb and ^{159}Tb. γγ(θ) yields J=3/2 and possible values for δ(723γ).
955.33[a] *22*	15/2⁺	B D	
958.95[@] *20*	17/2⁺	B D	Jπ: γ′s to the 13/2⁺ and 15/2⁺ members of the g.s. band, together with the the level energy, indicate that this is the 17/2⁺ member of the g.s. band.
1041[g] *3*	(9/2)⁻	C	Jπ: L=5 in (^{3}He,d) and (α,t) requires J^π=9/2⁻ or 11/2⁻. 1972Ti05 tentatively assign this as the 9/2⁻ member of the 1/2[541] band, based on the similarity of the level spacings and the spectroscopic "fingerprint" in these reactions to those of states in ^{157}Tb and ^{159}Tb.
1056.25[c] *20*	19/2⁻	B D	Jπ: γ′s to the 15/2⁻ and 17/2⁻ members of the "5/2[532]" band, together with level-energy considerations, indicate that this is the 19/2⁻ member of this band.
1062.075 *18*	5/2⁻	A C	Jπ: E1 transition to 3/2⁺ and M1 to 7/2⁻.
1068.371 *16*	3/2⁻	A	Jπ: E1 to 5/2⁺ indicates π=−. From γγ(θ), 1977Al30 report J=(3/2), but nonetheless give a unique value for δ(841γ).
1085 *3*		C	
1119 *3*		C	E(level): this level is most probably distinct from the 7/2⁺, 1120.0 level in ^{155}Tb ε decay. See the comment in the (^{3}He,d) data set.
1120.003 *23*	7/2⁺	A	Jπ: M1 components in transitions to 5/2⁺ and 9/2⁺ states.
1131 *5*		C	
1155.484 *12*	5/2⁻	A	Jπ: E1 transitions to 3/2⁺ and 7/2⁺ states.
1161.59[#] *22*	19/2⁺	B D	Jπ: E2 to 15/2⁺ and γ to 17/2⁺ members of the g.s. band, together with the level energy, indicate that this is the 19/2⁺ member of the g.s. band.
1170.07[&] *25*	17/2⁺	B D	
1205 *5*		C	1972Ti05 report a level at 1218 *3* which they tentatively assign as the 7/2⁻ member of the 1/2[541] band. It is not clear to which of the 1205 and 1229 levels reported by 1972Bo47 this level corresponds.
1229 *10*		C	1972Ti05 report a level at 1218 *3* which they tentatively assign as the 7/2⁻ member of the 1/2[541] band. It is not clear to which of the 1205 and 1229 levels reported by 1972Bo47 this level corresponds.
1251 *3*		C	
1255.85 *3*	7/2⁻	A	Jπ: E1 transition to 9/2⁺ and E1 component in transition to 5/2⁺.
1294.961 *25*	5/2⁻	A	Jπ: E2 to 9/2⁻ and E1 component in transition to 3/2⁺.
1307 *3*		C	
1354 *3*		C	

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Adopted Levels, Gammas (continued)

^{155}Tb Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	XREF	Comments
1376.33[b] *22*	21/2$^-$	B D	J$^{\pi}$: E2 transition to the 17/2$^-$ and γ to the 19/2$^-$ members of the "5/2[532]" band, together with level-energy considerations, indicate that this is the 21/2$^-$ member of this band.
1394.06[a] *23*	19/2$^+$	B D	
1411.59[@] *23*	21/2$^+$	B D	J$^{\pi}$: E2 transition to the 17/2$^+$ and γ to the 19/2$^+$ members of the g.s. band, together with the level energy, indicate that this is the 21/2$^+$ member of the g.s. band.
1452.00 *3*	3/2$^-$,5/2$^-$	A C	XREF: C(1455). J$^{\pi}$: E1 transitions to 3/2$^+$ and 5/2$^+$ states.
1470.99 *4*	3/2$^+$,5/2$^+$	A	J$^{\pi}$: M1 to 5/2$^+$ requires π=+ and J=3/2,5/2,7/2. log *ft*=8.1 (log $f^{1u}t$=8.2) from 3/2$^-$ rules out 7/2$^+$.
1480 *3*		C	
1492.636 *17*	5/2$^-$	A	J$^{\pi}$: E1 to 3/2$^+$ and M1 to 7/2$^-$ states.
1528.22[c] *24*	23/2$^-$	B D	J$^{\pi}$: E2 transition to the 19/2$^-$ and γ to the 21/2$^-$ members of the "5/2[532]" band, together with level-energy considerations, indicate that this is the 23/2$^-$ member of this band.
1548 *3*		C	
1581 *3*		C	
1616 *3*		C	
1638.853 *16*	5/2$^-$	A	J$^{\pi}$: M1 transitions to 5/2$^-$ and 7/2$^-$ states indicate J^{π}=5/2$^-$ or 7/2$^-$. log *ft*=6.3 from 3/2$^-$ rules out 7/2$^-$.
1641.3[#] *3*	23/2$^+$	B D	J$^{\pi}$: E2 transition to the 19/2$^+$ and γ to the 21/2$^+$ members of the g.s. band, together with the level energy, indicate that this is the 23/2$^+$ member of the g.s. band.
1645.1[&] *3*	21/2$^+$	B D	
1656.39 *6*	5/2$^-$	A C	J$^{\pi}$: E1 to 7/2$^+$ indicates J^{π}=5/2$^-$,7/2$^-$ or 9/2$^-$. log *ft*=7.3 from 3/2$^-$ rules out 7/2$^-$ and 9/2$^-$.
1664.915 *13*	5/2$^-$	A	J$^{\pi}$: E1 transitions to 3/2$^+$ and 7/2$^+$ states.
1685 *3*		C	
1721 *3*		C	
1750.099 *17*	5/2$^-$	A	J$^{\pi}$: E1 transitions to 5/2$^+$ states indicate J^{π}=3/2$^-$,5/2$^-$ or 7/2$^-$. log *ft*=6.15 from 3/2$^-$ rules out 7/2$^-$. From nuclear-orientation studies, 1984ShZN report J=5/2.
1793.645 *24*	5/2$^+$	A	J$^{\pi}$: M1 transition to 7/2$^+$ and E1 to 3/2$^-$.
1835.82 *6*	3/2,5/2	A	J$^{\pi}$: log *ft*=7.2 from 3/2$^-$, γ's to 5/2$^+$ and 5/2$^-$.
1860.95 *7*	1/2$^+$,3/2,5/2	A	J$^{\pi}$: log *ft*=7.5 from 3/2$^-$, γ to 5/2$^+$.
1865.82 *3*	5/2$^-$	A	J$^{\pi}$: E1 transition to 3/2$^+$,5/2$^+$ indicates π=−. γ's to 7/2$^-$ and 9/2$^-$ rule out J^{π}=1/2$^-$ and 3/2$^-$, while log *ft*=6.5 from 3/2$^-$ rules out $J^{\pi}\geq$7/2$^-$.
1868.95 *5*	3/2$^+$,5/2$^+$	A	J$^{\pi}$: E1+M2 to 5/2$^-$ indicates that π=+ and J=3/2,5/2,7/2. log *ft*=7.0 (log $f^{1u}t$=6.2) from 3/2$^-$ rules out 7/2$^+$.
1897.4[a] *3*	23/2$^+$	D	
1911.20 *4*	(5/2)$^-$	A	J$^{\pi}$: M1+E2 to 3/2$^-$,5/2$^-$ state indicates π=− and J=1/2 through 7/2. γ to 7/2$^+$ rules out 1/2 (and probably 3/2), while log *ft*=6.7 from 3/2$^-$ rules out 7/2.
1911.37[b] *25*	25/2$^-$	D	
1913.60 *4*	5/2$^-$	A	J$^{\pi}$: M1 to 5/2$^-$ gives π=−. γ's to 3/2$^+$ and 7/2$^+$ indicate J=5/2.
1923.9[@] *3*	25/2$^+$	D	
1954.72 *4*	3/2$^-$,5/2$^-$	A	J$^{\pi}$: M1+E2 to 5/2$^-$ indicates π=−. γ's to 3/2$^+$ and 5/2$^+$ give preference to J=3/2, 5/2 over J=1/2 and 7/2. log *ft*=6.5 from 3/2$^-$ rules out J=7/2.
1991.78 *6*	3/2$^-$	A	J$^{\pi}$: M2 to 7/2$^+$ indicates π=− and J=3/2 through 11/2. log *ft*=6.4 from 3/2$^-$ rules out J=7/2, 9/2 and 11/2. If J^{π} were 5/2$^-$, an E1 component would be expected in the 871.99 γ to the 7/2$^+$ level.
2071.1[c] *3*	27/2$^-$	D	
2176.2[#] *3*	27/2$^+$	D	
2177.2[&] *3*	25/2$^+$	D	
2452.8[a] *4*	27/2$^+$	D	
2485.7[@] *4*	29/2$^+$	D	
2498.8[b] *3*	29/2$^-$	D	
2662.3[c] *3*	31/2$^-$	D	
2745.2[i] *4*	27/2$^{(+)}$	D	J$^{\pi}$: ΔJ=1 transition to J^{π}=25/2$^-$ level (1998Ha54, (HI,xnγ)). Positive parity suggested by

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Adopted Levels, Gammas (continued)

^{155}Tb Levels (continued)

E(level)†	Jπ‡	XREF	Comments
			these authors, based on an assumed similarity with the situation in ^{153}Tb.
2748.6& 4	29/2+	D	
2756.5# 4	31/2+	D	
3058.4a 6	31/2+	D	
3069.4b 3	33/2−	D	
3084.5@ 4	33/2+	D	
3104.5i 4	31/2(+)	D	
3246.6c 4	35/2−	D	
3358.3& 7	(33/2+)	D	
3367.6# 4	35/2+	D	
3533.2b 4	37/2−	D	
3571.7i 5	35/2(+)	D	
3681.4@ 4	37/2+	D	
3777.3c 4	39/2−	D	
3967.1# 5	39/2+	D	
4056.5b 4	41/2−	D	
4130.1i 5	(39/2+)	D	
4259.8@ 5	41/2+	D	
4349.6c 4	43/2−	D	
4572.5# 5	43/2+	D	
4669.5b 4	45/2−	D	
4762.1i 6	(43/2+)	D	
4895.6@ 5	(45/2+)	D	
4995.0c 5	(47/2−)	D	
5239.1# 6	(47/2+)	D	
5368.0b 5	(49/2−)	D	
5453.1i 12	(47/2+)	D	
5597.6@ 12	(49/2+)	D	
5712.8c 8	(51/2−)	D	
5970.1# 12	(51/2+)	D	
6146.5b 9	(53/2−)	D	
6190.1i 15	(51/2+)	D	
6364.6@ 15	(53/2+)	D	
6497.6c 10	(55/2−)	D	
6765.1# 15	(55/2+)	D	
6970.1i 18	(55/2+)	D	
6997.6b 11	(57/2−)	D	
7190.6@ 18	(57/2+)	D	
7340.6c 12	(59/2−)	D	
7618.1# 18	(59/2+)	D	
7793.1i 21	(59/2+)	D	
7913.6b 15	(61/2−)	D	
8053.6@ 21	(61/2+)	D	
8233.6c 16	(63/2−)	D	
8520.1# 21	(63/2+)	D	
8662.1i 23	(63/2+)	D	
8886.6b 18	(65/2−)	D	

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Adopted Levels, Gammas (continued)

^{155}Tb Levels (continued)

E(level)†	Jπ‡	XREF	E(level)†	Jπ‡	XREF	E(level)†	Jπ‡	XREF
8956.6[@] 23	(65/2+)	D	10503[i] 3	(71/2+)	D	12513?[i] 3	(79/2+)	D
9166.6[c] 19	(67/2−)	D	10978.6[b] 23	(73/2−)	D	13223[b] 3	(81/2−)	D
9467.1[#] 23	(67/2+)	D	11130.6[c] 24	(75/2−)	D	13284[c] 3	(83/2−)	D
9569[i] 3	(67/2+)	D	11481[i] 3	(75/2+)	D	14469[c] 3	(87/2−)	D
9909.6[b] 21	(69/2−)	D	11482?[#] 3	(75/2+)	D	15734[c] 3	(91/2−)	D
10132.6[c] 21	(71/2−)	D	12088.6[b] 25	(77/2−)	D	17070?[c] 4	(95/2−)	D
10453[#] 3	(71/2+)	D	12174[c] 3	(79/2−)	D			

† Computed from a least-squares fit using the listed γ-ray energies. χ^2 norm = 7.1 greater than χ^2 critical = 1.3.

‡ Values for those levels populated only in (HI,xnγ) are those proposed by 1998Ha54. See the comment in that data set. They are listed here without further comment.

Band(A): 3/2[411] band, signature=−1/2 portion. A=13.06 keV, B=−2.6 eV, A_3=+8.8 eV (from the 3/2+ through the 9/2+ levels). For the crossing of other bands with this one, see the comments for this band in the (HI,xnγ) Data Set.

@ Band(B): 3/2[411] band, signature=+1/2 portion. See the signature=−1/2 portion for relevant comments.

& Band(C): 5/2[413] band, signature=+1/2 portion. A=13.1 keV (from the 7/2+ and 9/2+ levels) (from the 5/2+, 7/2+ level energies, A=9.1 keV is calculated). Band observed by 1998Ha54 only in the (^{7}Li,4nγ) reaction. For the crossing of other bands with this one, see the comments for this band in the (HI,xnγ) Data Set.

a Band(D): 5/2[413] band, signature=−1/2 portion. See the signature=−1/2 portion for relevant comments.

b Band(e): "5/2[532]" band, signature=+1/2 portion. The listed configuration is intended as a label only. It is expected to be the largest component in the makeup of this band only at lowest spins. The band is strongly Coriolis mixed with other orbitals associated with the $h_{11/2}$ shell-model state. For the crossing of other bands with this one, see the comments for this band in the (HI,xnγ) Data Set.

c Band(f): "5/2[532]" band, signature=−1/2 portion. See the signature=−1/2 portion for relevant comments.

d Band(E): 7/2[523] band. A=14.4 keV (from the 7/2− and 11/2− levels).

e Band(G): Bandhead of 5/2[402].

f Band(H): Probable 7/2[404] bandhead.

g Band(F): K^π=1/2− band?. Conf=1/2(541). A=10.0 keV, B=+26 eV, a=+1.9 (from the 1/2−, 3/2−, 5/2− and 9/2− levels). The energies of the members of this band are not particularly well described by the rotational-energy expression with these parameters.

h Band(I): Member of a probable K^π=1/2+ band. The 1/2[411] Nilsson State is likely a major component of this band, but other configurations are probably present as well.

i Band(J): Decoupled band, signature=−1/2. Probable three-quasiparticle state. For a discussion of the probable configuration, together with crossings with other bands, see the comments for this band in the (HI,xnγ) Data Set.

Adopted Levels, Gammas (continued)

$\gamma(^{155}Tb)$

Where a level is seen in ^{155}Dy ε decay, the listed γ-ray properties are generally taken from that data set. See footnotes and comments for the other γ rays.

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ[†]	α[#]	Comments
65.4622	5/2$^+$	65.459 *3*	100	0.0	3/2$^+$	M1+E2	0.144 *5*	7.58	α(K)=6.20 *9*; α(L)=1.072 *19*; α(M)=0.238 *5* α(N)=0.0546 *10*; α(O)=0.00816 *14*; α(P)=0.000464 *7* B(M1)(W.u.)=0.0359 *+49−39*; B(E2)(W.u.)=90 *+14−12*
155.785	7/2$^+$	90.326 *2*	100 *2*	65.4622	5/2$^+$	M1+E2	0.140 *4*	2.96	α(K)=2.46 *4*; α(L)=0.390 *6*; α(M)=0.0859 *13* α(N)=0.0198 *3*; α(O)=0.00300 *5*; α(P)=0.000183 *3* B(M1)(W.u.)=0.07 *+8−4*; B(E2)(W.u.)=9×10^1 *+11−5*
		155.765 *9*	19.4 *8*	0.0	3/2$^+$	E2		0.536	α(K)=0.331 *5*; α(L)=0.1585 *23*; α(M)=0.0372 *6* α(N)=0.00838 *12*; α(O)=0.001113 *16*; α(P)=1.780×10^{-5} *25* B(E2)(W.u.)=6×10^1 *+7−3*
226.918	5/2$^-$	71.157 *10*	0.064 *4*	155.785	7/2$^+$	E1		0.743	B(E1)(W.u.)=1.14×10^{-6} *12* α(K)=0.615 *9*; α(L)=0.0999 *14*; α(M)=0.0218 *3* α(N)=0.00493 *7*; α(O)=0.000697 *10*; α(P)=3.26×10^{-5} *5*
		161.443 *4*	1.68 *3*	65.4622	5/2$^+$	E1		0.0830	B(E1)(W.u.)=2.54×10^{-6} *+24−21* α(K)=0.0700 *10*; α(L)=0.01019 *15*; α(M)=0.00222 *4* α(N)=0.000506 *7*; α(O)=7.48×10^{-5} *11*; α(P)=4.15×10^{-6} *6*
		226.918 *4*	100 *2*	0.0	3/2$^+$	E1		0.0338	B(E1)(W.u.)=5.49×10^{-5} *48* α(K)=0.0286 *4*; α(L)=0.00406 *6*; α(M)=0.000883 *13* α(N)=0.000202 *3*; α(O)=3.02×10^{-5} *5*; α(P)=1.762×10^{-6} *25*
250.030	7/2$^-$	23.132 *29*	0.77 *20*	226.918	5/2$^-$	M1+E2	0.118 *5*	49.3 *22*	α(L)=38.3 *17*; α(M)=8.7 *4* α(N)=1.97 *9*; α(O)=0.275 *12*; α(P)=0.00997 *15* B(M1)(W.u.)=0.0166 *35*; B(E2)(W.u.)=2.3×10^2 *5*
		184.564 *4*	100.0 *18*	65.4622	5/2$^+$	E1		0.0581	B(E1)(W.u.)=4.7×10^{-5} *6* α(K)=0.0491 *7*; α(L)=0.00708 *10*; α(M)=0.001538 *22* α(N)=0.000352 *5*; α(O)=5.22×10^{-5} *8*; α(P)=2.96×10^{-6} *5*
271.045	5/2$^+$	21.005 *5*	1.2 *5*	250.030	7/2$^-$	[E1]		3.85	α(L)=3.01 *5*; α(M)=0.671 *10* α(N)=0.1468 *21*; α(O)=0.0179 *3*; α(P)=0.000547 *8*
		115.268 *7*	8.0 *5*	155.785	7/2$^+$	M1+E2	0.19 *1*	1.466	α(K)=1.218 *18*; α(L)=0.194 *4*; α(M)=0.0428 *7* α(N)=0.00985 *16*; α(O)=0.001491 *23*; α(P)=9.00×10^{-5} *13*
		205.583 *9*	29.4 *11*	65.4622	5/2$^+$	M1+E2	0.59 *5*	0.268 *5*	α(K)=0.218 *5*; α(L)=0.0390 *8*; α(M)=0.00870 *18* α(N)=0.00200 *4*; α(O)=0.000295 *5*; α(P)=1.56×10^{-5} *4*
		271.056 *9*	100 *6*	0.0	3/2$^+$	M1+E2	+0.55 *3*	0.1245 *20*	α(K)=0.1032 *18*; α(L)=0.01663 *24*; α(M)=0.00367 *6* α(N)=0.000845 *12*; α(O)=0.0001272 *18*; α(P)=7.44×10^{-6} *14*
274.075	9/2$^+$	118.304 *10*	100 *6*	155.785	7/2$^+$	M1		1.359	α(K)=1.146 *16*; α(L)=0.1666 *24*; α(M)=0.0364 *5* α(N)=0.00842 *12*; α(O)=0.001296 *19*; α(P)=8.53×10^{-5} *12*
		208.583 *14*	25.5 *21*	65.4622	5/2$^+$	E2		0.199	α(K)=0.1382 *20*; α(L)=0.0473 *7*; α(M)=0.01097 *16* α(N)=0.00248 *4*; α(O)=0.000337 *5*; α(P)=7.98×10^{-6} *12*
317.047	9/2$^-$	42.964 *18*	112	274.075	9/2$^+$	[E1]		0.525	α(L)=0.412 *6*; α(M)=0.0903 *13* α(N)=0.0202 *3*; α(O)=0.00273 *4*; α(P)=0.0001096 *16*

$^{155}_{65}Tb_{90}$-7

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	$\delta^\dagger$	$\alpha^\#$	Comments
317.047	9/2$^-$	67.029 *10*	54 *4*	250.030	7/2$^-$	M1+E2	0.13 *3*	7.05 *11*	α(K)=5.81 *9*; α(L)=0.97 *6*; α(M)=0.214 *14* α(N)=0.049 *3*; α(O)=0.0074 *4*; α(P)=0.000434 *7*
		161.3	100 *7*	155.785	7/2$^+$	(E1)		0.0832	α(K)=0.0702 *10*; α(L)=0.01021 *15*; α(M)=0.00222 *4* α(N)=0.000507 *8*; α(O)=7.50×10^{-5} *11*; α(P)=4.16×10^{-6} *6*
334.849	7/2$^+$	63.781 *15*	10 *2*	271.045	5/2$^+$	M1+E2	0.19 *3*	8.27 *14*	α(K)=6.62 *11*; α(L)=1.29 *10*; α(M)=0.288 *23* α(N)=0.066 *6*; α(O)=0.0097 *7*; α(P)=0.000495 *8*
		84.83 *4*	13 *3*	250.030	7/2$^-$	[E1]		0.466	α(K)=0.389 *6*; α(L)=0.0610 *9*; α(M)=0.01330 *19* α(N)=0.00301 *5*; α(O)=0.000432 *6*; α(P)=2.11×10^{-5} *3*
		107.925 *15*	28 *2*	226.918	5/2$^-$	E1		0.245	α(K)=0.205 *3*; α(L)=0.0311 *5*; α(M)=0.00677 *10* α(N)=0.001539 *22*; α(O)=0.000223 *4*; α(P)=1.150×10^{-5} *17*
		178.93 *5*	11 *4*	155.785	7/2$^+$	[M1,E2]		0.38 *5*	α(K)=0.29 *7*; α(L)=0.070 *19*; α(M)=0.0160 *47* α(N)=0.0036 *11*; α(O)=0.00051 *12*; α(P)=1.94×10^{-5} *72*
		269.358 *24*	100 *4*	65.4622	5/2$^+$	M1+E2		0.11 *3*	α(K)=0.091 *27*; α(L)=0.0171 *5*; α(M)=0.00384 *19* α(N)=0.00088 *4*; α(O)=0.000129 *3*; α(P)=6.3×10^{-6} *24*
		334.963 *19*	17	0.0	3/2$^+$	E2		0.0447	α(K)=0.0345 *5*; α(L)=0.00794 *12*; α(M)=0.00181 *3* α(N)=0.000411 *6*; α(O)=5.82×10^{-5} *9*; α(P)=2.19×10^{-6} *3*
397.36	11/2$^-$	80.4	100	317.047	9/2$^-$				I$_\gamma$: computed from Iγ(334γ)/Iγ(269γ) as measured in (α,2nγ). E$_\gamma$,I$_\gamma$: from (α,2nγ).
		123.3 *5*	22	274.075	9/2$^+$	E1		0.171 *3*	α(K)=0.144 *3*; α(L)=0.0214 *4*; α(M)=0.00467 *9* α(N)=0.001063 *20*; α(O)=0.000155 *3*; α(P)=8.21×10^{-6} *15* E$_\gamma$: from (HI,xnγ). I$_\gamma$,Mult.: from (α,2nγ).
		147.4 *2*	27	250.030	7/2$^-$	E2		0.649	α(K)=0.389 *6*; α(L)=0.201 *3*; α(M)=0.0472 *8* α(N)=0.01063 *17*; α(O)=0.001407 *22*; α(P)=2.07×10^{-5} *3* E$_\gamma$: from (HI,xnγ). I$_\gamma$,Mult.: from (α,2nγ).
408.67	11/2$^+$	134.6	100 *5*	274.075	9/2$^+$				E$_\gamma$,I$_\gamma$: from (HI,xnγ). In (α,2nγ), Iγ=112. I$_\gamma$: from (^{36}S,4pnγ) in (HI,xnγ), Iγ=89 *11*, relative to Iγ(253.0)=100.
		253.0	63 *5*	155.785	7/2$^+$	E2		0.1063	α(K)=0.0777 *11*; α(L)=0.0222 *4*; α(M)=0.00511 *8* α(N)=0.001157 *17*; α(O)=0.0001599 *23*; α(P)=4.68×10^{-6} *7* E$_\gamma$,I$_\gamma$: from (HI,xnγ). Mult.: from (α,2nγ).
452.4	9/2$^+$	181.5[@]	≈39	271.045	5/2$^+$	[E2]		0.317	α(K)=0.210 *3*; α(L)=0.0833 *12*; α(M)=0.0194 *3* α(N)=0.00439 *7*; α(O)=0.000590 *9*; α(P)=1.171×10^{-5} *17* E$_\gamma$: γ not reported in (HI,xnγ), where it should have been observed. The evaluator has chosen to show it as questionably placed. I$_\gamma$: from Iγ(181.5)/Iγ(296.7) in (α,2nγ) and Iγ(296.7) in (HI,xnγ).
		202.6 *5*	100 *7*	250.030	7/2$^-$	[E1]		0.0454	α(K)=0.0384 *6*; α(L)=0.00550 *9*; α(M)=0.001196 *19* α(N)=0.000274 *5*; α(O)=4.08×10^{-5} *7*; α(P)=2.34×10^{-6} *4* E$_\gamma$,I$_\gamma$: from (HI,xnγ). Note, γ is doubly placed in (α,2nγ).
		296.7 *5*	63 *4*	155.785	7/2$^+$				E$_\gamma$,I$_\gamma$: from (HI,xnγ). The γ-decay pattern is quite different from that reported in (α,2nγ).

$^{155}_{65}Tb_{90}$-8

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	α#	Comments
466.802	7/2+	131.946 *11*	16 *5*	334.849	7/2+	[M1,E2]		0.977 *24*	α(K)=0.69 *16*; α(L)=0.22 *11*; α(M)=0.052 *25* α(N)=0.0117 *56*; α(O)=0.00161 *66*; α(P)=4.5×10^{-5} *18*
		195.68 *4*	16 *4*	271.045	5/2+	M1		0.331	α(K)=0.280 *4*; α(L)=0.0403 *6*; α(M)=0.00881 *13* α(N)=0.00204 *3*; α(O)=0.000314 *5*; α(P)=2.07×10^{-5} *3*
		216.85 *4*	100 *21*	250.030	7/2−	E1		0.0380	α(K)=0.0322 *5*; α(L)=0.00459 *7*; α(M)=0.000997 *14* α(N)=0.000228 *4*; α(O)=3.41×10^{-5} *5*; α(P)=1.97×10^{-6} *3*
		311.18 *16*	25 *3*	155.785	7/2+	E2		0.0558	α(K)=0.0425 *6*; α(L)=0.01031 *15*; α(M)=0.00235 *4* α(N)=0.000534 *8*; α(O)=7.52×10^{-5} *11*; α(P)=2.67×10^{-6} *4*
		466.95 *6*	15 *5*	0.0	3/2+				
498.640	5/2+	342.67 *6*	2.7 *2*	155.785	7/2+	E2		0.0418	α(K)=0.0323 *5*; α(L)=0.00734 *11*; α(M)=0.001666 *24* α(N)=0.000379 *6*; α(O)=5.38×10^{-5} *8*; α(P)=2.06×10^{-6} *3*
		433.150 *13*	40.6 *12*	65.4622	5/2+	M1		0.0396	α(K)=0.0336 *5*; α(L)=0.00473 *7*; α(M)=0.001031 *15* α(N)=0.000238 *4*; α(O)=3.68×10^{-5} *6*; α(P)=2.46×10^{-6} *4*
		498.617 *15*	100 *2*	0.0	3/2+	M1+E2	+0.21 *5*	0.0271 *5*	α(K)=0.0229 *4*; α(L)=0.00324 *5*; α(M)=0.000705 *11* α(N)=0.000163 *3*; α(O)=2.52×10^{-5} *4*; α(P)=1.67×10^{-6} *3*
508.395	1/2+,3/2+,5/2+	352.47 *11*	1.2 *2*	155.785	7/2+				
		508.44 *4*	100 *4*	0.0	3/2+	M1+E2		0.0201 *62*	α(K)=0.0168 *55*; α(L)=0.0026 *6*; α(M)=0.00057 *11* α(N)=0.00013 *3*; α(O)=2.0×10^{-5} *5*; α(P)=1.19×10^{-6} *44*
517.542	3/2+,5/2+,7/2+	452.248 *24*	100 *4*	65.4622	5/2+	M1+E2		0.0272 *83*	α(K)=0.0226 *75*; α(L)=0.0036 *7*; α(M)=0.00079 *14* α(N)=0.00018 *4*; α(O)=2.7×10^{-5} *6*; α(P)=1.60×10^{-6} *60*
		517.62 *5*	47 *7*	0.0	3/2+	E2		0.01329	α(K)=0.01079 *16*; α(L)=0.00195 *3*; α(M)=0.000436 *6* α(N)=9.97×10^{-5} *14*; α(O)=1.462×10^{-5} *21*; α(P)=7.24×10^{-7} *11*
544.891	7/2−	294.89 *5*	23 *2*	250.030	7/2−	M1+E2		0.087 *22*	α(K)=0.071 *22*; α(L)=0.0128 *4*; α(M)=0.00286 *4* α(N)=0.000656 *11*; α(O)=9.7×10^{-5} *6*; α(P)=4.9×10^{-6} *19*
		317.947 *18*	100 *4*	226.918	5/2−	M1		0.0890	α(K)=0.0753 *11*; α(L)=0.01072 *15*; α(M)=0.00234 *4* α(N)=0.000541 *8*; α(O)=8.34×10^{-5} *12*; α(P)=5.55×10^{-6} *8*
549.604	3/2+	322.27 *4*	2.6 *3*	226.918	5/2−	[E1]		0.01386	α(K)=0.01177 *17*; α(L)=0.001640 *23*; α(M)=0.000356 *5* α(N)=8.17×10^{-5} *12*; α(O)=1.233×10^{-5} *18*; α(P)=7.49×10^{-7} *11*
		484.158 *13*	100 *3*	65.4622	5/2+	M1		0.0298	α(K)=0.0252 *4*; α(L)=0.00354 *5*; α(M)=0.000771 *11* α(N)=0.0001784 *25*; α(O)=2.76×10^{-5} *4*; α(P)=1.85×10^{-6} *3*
		549.643 *14*	89.7 *19*	0.0	3/2+	M1		0.0216	α(K)=0.0183 *3*; α(L)=0.00256 *4*; α(M)=0.000556 *8* α(N)=0.0001286 *18*; α(O)=1.99×10^{-5} *3*; α(P)=1.334×10^{-6} *19*

$^{155}_{65}Tb_{90}$-9

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	α[#]	Comments
555.18	13/2$^-$	146.4[@]	3.1	408.67	11/2$^+$	(E1)	0.1078	α(K)=0.0908 *13*; α(L)=0.01333 *19*; α(M)=0.00290 *4* α(N)=0.000662 *10*; α(O)=9.74×10^{-5} *14*; α(P)=5.31×10^{-6} *8* E_γ: questionable placement in (α,2nγ). γ not reported in (HI,xnγ).
		157.9 *2*	100 *5*	397.36	11/2$^-$			E_γ,I_γ: from (HI,xnγ).
		238.2 *2*	43 *2*	317.047	9/2$^-$	[E2]	0.1290	α(K)=0.0929 *14*; α(L)=0.0280 *4*; α(M)=0.00646 *10* α(N)=0.001462 *21*; α(O)=0.000201 *3*; α(P)=5.53×10^{-6} *8* E_γ,I_γ: from (HI,xnγ). From (α,2nγ), Iγ=49.
576.03	13/2$^+$	167.4 *2*	75 *3*	408.67	11/2$^+$			E_γ,I_γ: from (HI,xnγ). In (α,2nγ), Iγ=85. Iγ from (^{36}S,4pnγ) in (HI,xnγ), Iγ=66 *6*.
		301.8 *2*	100 *5*	274.075	9/2$^+$	E2	0.0612	α(K)=0.0464 *7*; α(L)=0.01151 *17*; α(M)=0.00263 *4* α(N)=0.000597 *9*; α(O)=8.38×10^{-5} *12*; α(P)=2.90×10^{-6} *4* E_γ,I_γ: from (HI,xnγ). Mult.: from (α,2nγ).
595.80	11/2$^+$	260.9 *5*	64 *3*	334.849	7/2$^+$	[E2]	0.0964 *15*	α(K)=0.0710 *11*; α(L)=0.0197 *4*; α(M)=0.00454 *8* α(N)=0.001028 *17*; α(O)=0.0001425 *23*; α(P)=4.30×10^{-6} *7* E_γ,I_γ: from (HI,xnγ). In (α,2nγ), Iγ=104.
		278.7 *5*	100 *8*	317.047	9/2$^-$	[E1]	0.0199	α(K)=0.01690 *25*; α(L)=0.00237 *4*; α(M)=0.000515 *8* α(N)=0.0001182 *18*; α(O)=1.78×10^{-5} *3*; α(P)=1.063×10^{-6} *16* E_γ,I_γ: from (HI,xnγ).
		321.6 *5*	83 *6*	274.075	9/2$^+$			E_γ: from (HI,xnγ). In (α,2nγ), Iγ=137.
652.033	5/2$^+$	134.552 *14*	7.9 *25*	517.542	3/2$^+$,5/2$^+$,7/2$^+$	[M1,E2]	0.92 *3*	α(K)=0.65 *15*; α(L)=0.207 *92*; α(M)=0.048 *23* α(N)=0.0108 *50*; α(O)=0.00149 *60*; α(P)=4.3×10^{-5} *17*
		153.37 *3*	28 *4*	498.640	5/2$^+$	E2	0.565	α(K)=0.346 *5*; α(L)=0.1694 *24*; α(M)=0.0398 *6* α(N)=0.00896 *13*; α(O)=0.001189 *17*; α(P)=1.86×10^{-5} *3*
		401.96 *11*	21 *3*	250.030	7/2$^-$	(E1+M2)[‡]	0.0097 *17*	α(K)=0.0082 *14*; α(L)=0.00118 *23*; α(M)=0.00026 *5* α(N)=5.9×10^{-5} *12*; α(O)=9.0×10^{-6} *18*; α(P)=5.6×10^{-7} *12* δ: computed to be 0.69 *15* from α(K)exp and mult in ^{155}Dy ε decay.
		425.03 *3*	37 *2*	226.918	5/2$^-$	(E1+M2)[‡]	0.0085 *14*	α(K)=0.0072 *12*; α(L)=0.00102 *19*; α(M)=0.00022 *5* α(N)=5.1×10^{-5} *10*; α(O)=7.8×10^{-6} *15*; α(P)=4.9×10^{-7} *10* δ: computed to be 0.34 *+6−7* from α(K)exp and mult in ^{155}Dy ε decay.
		496.22 *4*	88 *4*	155.785	7/2$^+$	M1	0.0280	α(K)=0.0237 *4*; α(L)=0.00333 *5*; α(M)=0.000724 *11* α(N)=0.0001674 *24*; α(O)=2.59×10^{-5} *4*; α(P)=1.732×10^{-6} *25*
		586.44 *3*	100 *4*	65.4622	5/2$^+$	M1	0.0183	α(K)=0.01554 *22*; α(L)=0.00217 *3*; α(M)=0.000471 *7* α(N)=0.0001090 *16*; α(O)=1.685×10^{-5} *24*; α(P)=1.132×10^{-6} *16*
673.03	15/2$^-$	118.0 *2*	66 *3*	555.18	13/2$^-$			E_γ,I_γ: from (HI,xnγ). From (α,2nγ), Iγ=91.
		275.6 *2*	100 *4*	397.36	11/2$^-$	[E2]	0.0811	α(K)=0.0604 *9*; α(L)=0.01607 *23*; α(M)=0.00368 *6* α(N)=0.000836 *12*; α(O)=0.0001164 *17*; α(P)=3.70×10^{-6} *6* E_γ,I_γ: from (HI,xnγ).

$^{155}_{65}Tb_{90}$-10

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	α[#]	Comments
743.92	7/2$^+$	588.16 *8*	26 *2*	155.785	7/2$^+$	(M1+E2+E0)[‡]	0.0139 *43*	α(K)=0.0117 *38*; α(L)=0.0018 *4*; α(M)=0.00038 *9* α(N)=8.9×10^{-5} *20*; α(O)=1.3×10^{-5} *4*; α(P)=8.3×10^{-7} *30*
		678.38 *5*	100 *5*	65.4622	5/2$^+$	M1	0.01272	α(K)=0.01081 *16*; α(L)=0.001499 *21*; α(M)=0.000326 *5* α(N)=7.54×10^{-5} *11*; α(O)=1.166×10^{-5} *17*; α(P)=7.85×10^{-7} *11*
		743.9	69 *14*	0.0	3/2$^+$	[E2]	0.00551	α(K)=0.00458 *7*; α(L)=0.000724 *11*; α(M)=0.0001596 *23* α(N)=3.67×10^{-5} *6*; α(O)=5.50×10^{-6} *8*; α(P)=3.14×10^{-7} *5*
747.52	15/2$^+$	171.4 *2*	46 *1*	576.03	13/2$^+$			E$_\gamma$,I$_\gamma$: from (HI,xnγ). In (α,2nγ), Iγ=52.
		338.8 *2*	100 *4*	408.67	11/2$^+$	E2	0.0432	α(K)=0.0334 *5*; α(L)=0.00763 *11*; α(M)=0.001734 *25* α(N)=0.000395 *6*; α(O)=5.60×10^{-5} *8*; α(P)=2.12×10^{-6} *3* E$_\gamma$,I$_\gamma$: from (HI,xnγ). Mult.: from (α,2nγ).
760.628	3/2$^+$	695.138 *22*	100 *6*	65.4622	5/2$^+$	M1+E2	0.0092 *28*	α(K)=0.0078 *25*; α(L)=0.0011 *3*; α(M)=0.00025 *6* α(N)=5.7×10^{-5} *14*; α(O)=8.7×10^{-6} *23*; α(P)=5.5×10^{-7} *19*
		760.70 *12*	41 *5*	0.0	3/2$^+$	M1+E2+E0	0.0074 *22*	α(K)=0.0063 *19*; α(L)=0.00091 *22*; α(M)=0.00020 *5* α(N)=4.6×10^{-5} *11*; α(O)=7.0×10^{-6} *18*; α(P)=4.4×10^{-7} *15*
766.8	13/2$^+$	314.6 *5*	100 *6*	452.4	9/2$^+$	[E2]	0.0539	α(K)=0.0412 *6*; α(L)=0.00991 *15*; α(M)=0.00226 *4* α(N)=0.000514 *8*; α(O)=7.24×10^{-5} *11*; α(P)=2.59×10^{-6} *4* E$_\gamma$,I$_\gamma$: from (HI,xnγ).
		358.5[@] *5*	62 *3*	408.67	11/2$^+$			E$_\gamma$,I$_\gamma$: from (HI,xnγ). In (α,2nγ), Iγ≈34.
		369.7 *5*	65 *3*	397.36	11/2$^-$	(E1)	0.00992	α(K)=0.00843 *13*; α(L)=0.001166 *17*; α(M)=0.000253 *4* α(N)=5.81×10^{-5} *9*; α(O)=8.80×10^{-6} *13*; α(P)=5.42×10^{-7} *8* E$_\gamma$,I$_\gamma$: from (HI,xnγ). In (α,2nγ), Iγ=79. Mult.: from (α,2nγ).
809.526	5/2$^+$	264.621 *18*	100 *19*	544.891	7/2$^-$	[E1]	0.0227	α(K)=0.0193 *3*; α(L)=0.00271 *4*; α(M)=0.000590 *9* α(N)=0.0001352 *19*; α(O)=2.03×10^{-5} *3*; α(P)=1.206×10^{-6} *17*
		653.92 *6*	84 *6*	155.785	7/2$^+$	M1+E2	0.0107 *33*	α(K)=0.0090 *29*; α(L)=0.0013 *4*; α(M)=0.00029 *7* α(N)=6.7×10^{-5} *16*; α(O)=1.02×10^{-5} *26*; α(P)=6.4×10^{-7} *22*
		743.64 *5*	≈0	65.4622	5/2$^+$	M1+E2+E0	0.0078 *24*	α(K)=0.0066 *21*; α(L)=0.00096 *24*; α(M)=0.00021 *5* α(N)=4.8×10^{-5} *12*; α(O)=7.4×10^{-6} *19*; α(P)=4.7×10^{-7} *16* I$_\gamma$: see the corresponding comment in ε decay dataset.
861.87	3/2$^+$,5/2$^+$	705.87 *22*	37 *10*	155.785	7/2$^+$			
		796.44 *7*	100 *11*	65.4622	5/2$^+$	M1+E2	0.0066 *20*	α(K)=0.0056 *17*; α(L)=0.00081 *20*; α(M)=0.00018 *5* α(N)=4.1×10^{-5} *10*; α(O)=6.2×10^{-6} *16*; α(P)=4.0×10^{-7} *13*
		861.74 *23*	73 *18*	0.0	3/2$^+$	M1	0.00706	α(K)=0.00601 *9*; α(L)=0.000827 *12*; α(M)=0.000180 *3* α(N)=4.15×10^{-5} *6*; α(O)=6.43×10^{-6} *9*; α(P)=4.34×10^{-7} *6*
891.138	3/2$^-$	382.772 *20*	8.0 *3*	508.395	1/2$^+$,3/2$^+$,5/2$^+$	E1(+M2)[‡]	0.0110 *19*	α(K)=0.0093 *16*; α(L)=0.0013 *3*; α(M)=0.00029 *6* α(N)=6.7×10^{-5} *14*; α(O)=1.02×10^{-5} *22*; α(P)=6.3×10^{-7} *14*

$^{155}_{65}Tb_{90}$-11

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	α#	Comments
891.138	3/2⁻	641.072 *15*	56 *1*	250.030	7/2⁻	E2		0.00780	α(K)=0.00643 *9*; α(L)=0.001068 *15*; α(M)=0.000236 *4* α(N)=5.43×10^{-5} *8*; α(O)=8.07×10^{-6} *12*; α(P)=4.38×10^{-7} *7*
		664.173 *18*	100 *2*	226.918	5/2⁻	M1+E2	+0.31 *4*	0.01286 *23*	α(K)=0.01091 *20*; α(L)=0.00153 *3*; α(M)=0.000333 *6* α(N)=7.69×10^{-5} *13*; α(O)=1.186×10^{-5} *20*; α(P)=7.90×10^{-7} *15*
		825.60 *4*	5.8 *3*	65.4622	5/2⁺				
		891.13 *3*	26.2 *9*	0.0	3/2⁺	E1		1.48×10^{-3}	α(K)=0.001268 *18*; α(L)=0.0001677 *24*; α(M)=3.62×10^{-5} *5* α(N)=8.35×10^{-6} *12*; α(O)=1.283×10^{-6} *18*; α(P)=8.46×10^{-8} *12*
906.43	(5/2⁻)	356.87 *10*	31 *6*	549.604	3/2⁺				
		439.56 *6*	100 *7*	466.802	7/2⁺				
		632.4 *10*	30 *10*	274.075	9/2⁺	(M2)‡		0.0438	α(K)=0.0365 *6*; α(L)=0.00571 *9*; α(M)=0.001260 *19* α(N)=0.000292 *5*; α(O)=4.48×10^{-5} *7*; α(P)=2.91×10^{-6} *5*
916.87	17/2⁻	243.8 *2*	100 *4*	673.03	15/2⁻				E$_\gamma$,I$_\gamma$: from (HI,xnγ).
		361.7 *2*	89 *4*	555.18	13/2⁻	E2		0.0356	α(K)=0.0278 *4*; α(L)=0.00609 *9*; α(M)=0.001381 *20* α(N)=0.000314 *5*; α(O)=4.48×10^{-5} *7*; α(P)=1.79×10^{-6} *3* E$_\gamma$,I$_\gamma$: from (HI,xnγ). From (α,2nγ), Iγ=90. Mult.: from (α,2nγ).
950.38	3/2⁻	723.46 *8*	100	226.918	5/2⁻	M1+E2		0.0084 *25*	α(K)=0.0070 *22*; α(L)=0.00103 *25*; α(M)=0.00022 *6* α(N)=5.2×10^{-5} *13*; α(O)=7.9×10^{-6} *21*; α(P)=5.0×10^{-7} *17* δ: from γγ(θ), 1977Al30 find δ=−7 *3* or δ=−0.43 *13*.
955.33	15/2⁺	359.5 *2*	100 *5*	595.80	11/2⁺				E$_\gamma$,I$_\gamma$: from (HI,xnγ).
		379.4 *5*	33 *3*	576.03	13/2⁺				E$_\gamma$,I$_\gamma$: from (HI,xnγ).
		400.1 *5*	41 *2*	555.18	13/2⁻				E$_\gamma$,I$_\gamma$: from (HI,xnγ). From (α,2nγ), Iγ=38.
958.95	17/2⁺	211.4 *2*	43 *2*	747.52	15/2⁺	(M1)		0.268	α(K)=0.226 *4*; α(L)=0.0326 *5*; α(M)=0.00711 *11* α(N)=0.001644 *24*; α(O)=0.000253 *4*; α(P)=1.676×10^{-5} *24* E$_\gamma$,I$_\gamma$: from (HI,xnγ). From (α,2nγ), Iγ=58. Mult.: from (α,2nγ).
		382.9 *2*	100 *5*	576.03	13/2⁺	[E2]		0.0302	α(K)=0.0238 *4*; α(L)=0.00503 *7*; α(M)=0.001137 *16* α(N)=0.000259 *4*; α(O)=3.71×10^{-5} *6*; α(P)=1.541×10^{-6} *22* E$_\gamma$,I$_\gamma$: from (HI,xnγ).
1056.25	19/2⁻	139.4 *2*	22 *1*	916.87	17/2⁻				E$_\gamma$,I$_\gamma$: from (HI,xnγ). From (α,2nγ), Iγ=20.
		383.3 *2*	100 *4*	673.03	15/2⁻	[E2]		0.0301	α(K)=0.0237 *4*; α(L)=0.00501 *7*; α(M)=0.001133 *16* α(N)=0.000258 *4*; α(O)=3.70×10^{-5} *6*; α(P)=1.537×10^{-6} *22* E$_\gamma$,I$_\gamma$: from (HI,xnγ).
1062.075	5/2⁻	811.98 *4*	100 *5*	250.030	7/2⁻	M1+E2		0.0063 *19*	α(K)=0.0054 *16*; α(L)=0.00077 *19*; α(M)=0.00017 *4* α(N)=3.9×10^{-5} *10*; α(O)=5.9×10^{-6} *15*; α(P)=3.8×10^{-7} *13*

$^{155}_{65}Tb_{90}$-12

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	α#	Comments
1062.075	5/2−	835.16 *3*	62.7 *22*	226.918	5/2−	M1(+E2+E0)	−0.62 *38*	0.0067 *8*	α(K)=0.0057 *7*; α(L)=0.00080 *8*; α(M)=0.000173 *17* α(N)=4.0×10^{-5} *4*; α(O)=6.2×10^{-6} *7*; α(P)=4.1×10^{-7} *5*
		996.70 *7*	67 *4*	65.4622	5/2+	E1		1.20×10^{-3}	α(K)=0.001026 *15*; α(L)=0.0001351 *19*; α(M)=2.92×10^{-5} *4* α(N)=6.72×10^{-6} *10*; α(O)=1.034×10^{-6} *15*; α(P)=6.86×10^{-8} *10*
		1062.09 *3*	96 *3*	0.0	3/2+	E1		1.07×10^{-3}	α(K)=0.000912 *13*; α(L)=0.0001198 *17*; α(M)=2.58×10^{-5} *4* α(N)=5.96×10^{-6} *9*; α(O)=9.18×10^{-7} *13*; α(P)=6.11×10^{-8} *9*
1068.371	3/2−	841.53 *3*	48.6 *18*	226.918	5/2−	M1+E2	−0.25 *8*	0.00729 *17*	α(K)=0.00620 *15*; α(L)=0.000857 *18*; α(M)=0.000186 *4* α(N)=4.30×10^{-5} *9*; α(O)=6.65×10^{-6} *15*; α(P)=4.48×10^{-7} *11*
		1003.03 *10*	28.5 *25*	65.4622	5/2+	E1		1.18×10^{-3}	α(K)=0.001014 *15*; α(L)=0.0001335 *19*; α(M)=2.88×10^{-5} *4* α(N)=6.64×10^{-6} *10*; α(O)=1.022×10^{-6} *15*; α(P)=6.78×10^{-8} *10*
		1068.18 *3*	100 *4*	0.0	3/2+	E1+M2	0.15 *+4−6*	0.00126 *14*	α(K)=0.00108 *11*; α(L)=0.000144 *17*; α(M)=3.1×10^{-5} *4* α(N)=7.2×10^{-6} *9*; α(O)=1.11×10^{-6} *13*; α(P)=7.4×10^{-8} *9*
1120.003	7/2+	802.87 *6*	9.6 *12*	317.047	9/2−				
		845.78 *7*	27 *3*	274.075	9/2+	M1+E2		0.0058 *17*	α(K)=0.0049 *15*; α(L)=0.00070 *17*; α(M)=0.00015 *4* α(N)=3.5×10^{-5} *9*; α(O)=5.4×10^{-6} *14*; α(P)=3.5×10^{-7} *11*
		848.98 *3*	100 *6*	271.045	5/2+	M1+E2	−3.3 *+15−59*	0.0044 *5*	α(K)=0.0037 *5*; α(L)=0.00055 *6*; α(M)=0.000121 *11* α(N)=2.8×10^{-5} *3*; α(O)=4.2×10^{-6} *5*; α(P)=2.5×10^{-7} *4*
		1120.11 *5*	42 *6*	0.0	3/2+	E2		0.00229	α(K)=0.00194 *3*; α(L)=0.000278 *4*; α(M)=6.07×10^{-5} *9* α(N)=1.399×10^{-5} *20*; α(O)=2.13×10^{-6} *3*; α(P)=1.340×10^{-7} *19*; α(IPF)=6.10×10^{-7} *9*
1155.484	5/2−	394.54 *8*	1.2 *5*	760.628	3/2+				
		610.62 *12*		544.891	7/2−				
		820.40 *12*	1.3 *2*	334.849	7/2+				
		838.48 *5*	5.3 *3*	317.047	9/2−	E2		0.00422	α(K)=0.00353 *5*; α(L)=0.000539 *8*;

$^{155}_{65}Tb_{90}$-13

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	α#	Comments
									α(M)=0.0001184 *17* α(N)=2.72×10^{-5} *4*; α(O)=4.11×10^{-6} *6*; α(P)=2.43×10^{-7} *4*
1155.484	5/2$^-$	884.42 *5*	2.4 *2*	271.045	5/2$^+$				
		905.515 *21*	100 *2*	250.030	7/2$^-$	M1+E2	−0.15 *4*	0.00620 *10*	α(K)=0.00528 *8*; α(L)=0.000726 *11*; α(M)=0.0001576 *24* α(N)=3.64×10^{-5} *6*; α(O)=5.64×10^{-6} *9*; α(P)=3.81×10^{-7} *6*
		928.535 *21*	29.3 *8*	226.918	5/2$^-$	M1+E2	−0.31 *15*	0.00567 *24*	α(K)=0.00482 *20*; α(L)=0.000665 *25*; α(M)=0.000144 *6* α(N)=3.34×10^{-5} *13*; α(O)=5.17×10^{-6} *20*; α(P)=3.48×10^{-7} *16*
		999.68 *3*	99 *3*	155.785	7/2$^+$	E1		1.19×10^{-3}	α(K)=0.001021 *15*; α(L)=0.0001343 *19*; α(M)=2.90×10^{-5} *4* α(N)=6.68×10^{-6} *10*; α(O)=1.028×10^{-6} *15*; α(P)=6.83×10^{-8} *10*
		1090.0		65.4622	5/2$^+$				I_γ: ≤115 relative to I(905γ).
		1155.47 *3*	74.2 *17*	0.0	3/2$^+$	E1		9.23×10^{-4}	α(K)=0.000783 *11*; α(L)=0.0001025 *15*; α(M)=2.21×10^{-5} *3* α(N)=5.10×10^{-6} *8*; α(O)=7.85×10^{-7} *11*; α(P)=5.25×10^{-8} *8*; α(IPF)=9.62×10^{-6} *14*
1161.59	19/2$^+$	202.6 *2*	28.4 *13*	958.95	17/2$^+$				E_γ,I_γ: from (HI,xnγ). From (α,2nγ), Iγ=31.
		414.0 *2*	100 *5*	747.52	15/2$^+$	E2		0.0242	α(K)=0.0192 *3*; α(L)=0.00389 *6*; α(M)=0.000877 *13* α(N)=0.000200 *3*; α(O)=2.89×10^{-5} *4*; α(P)=1.261×10^{-6} *18* E_γ,I_γ: from (HI,xnγ). Mult.: from (α,2nγ),
1170.07	17/2$^+$	403.4 *2*	100 *8*	766.8	13/2$^+$				E_γ,I_γ: from (HI,xnγ).
		422.3 *5*	26 *1*	747.52	15/2$^+$				E_γ,I_γ: from (HI,xnγ).
		497.4 *5*	26 *2*	673.03	15/2$^-$				E_γ,I_γ: from (HI,xnγ).
1255.85	7/2$^-$	445.84 *8*	10 *2*	809.526	5/2$^+$	(E1+M2)‡		0.0075 *12*	α(K)=0.0064 *10*; α(L)=0.00091 *17*; α(M)=0.00020 *4* α(N)=4.5×10^{-5} *9*; α(O)=6.9×10^{-6} *13*; α(P)=4.3×10^{-7} *8* δ: computed to Be 0.70 *15* from α(K)exp and mult in ^{155}Dy ε decay.
		981.82 *3*	100 *3*	274.075	9/2$^+$	E1		1.23×10^{-3}	α(K)=0.001055 *15*; α(L)=0.0001390 *20*; α(M)=3.00×10^{-5} *5* α(N)=6.92×10^{-6} *10*; α(O)=1.064×10^{-6} *15*; α(P)=7.06×10^{-8} *10*
		1100.1	≤106	155.785	7/2$^+$				
1294.961	5/2$^-$	403.57 *4*	61 *3*	891.138	3/2$^-$	M1		0.0476	α(K)=0.0403 *6*; α(L)=0.00570 *8*; α(M)=0.001241

$^{155}_{65}Tb_{90}$-14

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	α#	Comments
									18 α(N)=0.000287 *4*; α(O)=4.43×10^{-5} *7*; α(P)=2.96×10^{-6} *5*
1294.961	5/2$^-$	745.2	100 *20*	549.604	3/2$^+$	[E1]		0.00211	α(K)=0.00180 *3*; α(L)=0.000240 *4*; α(M)=5.19×10^{-5} *8* α(N)=1.196×10^{-5} *17*; α(O)=1.83×10^{-6} *3*; α(P)=1.197×10^{-7} *17*
		750.07 *7*	24.8 *18*	544.891	7/2$^-$	E2		0.00541	α(K)=0.00450 *7*; α(L)=0.000709 *10*; α(M)=0.0001563 *22* α(N)=3.59×10^{-5} *5*; α(O)=5.39×10^{-6} *8*; α(P)=3.09×10^{-7} *5*
		978.87 *10*	11.8 *10*	317.047	9/2$^-$	E2		0.00303	α(K)=0.00255 *4*; α(L)=0.000375 *6*; α(M)=8.21×10^{-5} *12* α(N)=1.89×10^{-5} *3*; α(O)=2.87×10^{-6} *4*; α(P)=1.758×10^{-7} *25*
		1024.00 *18*	7.8 *16*	271.045	5/2$^+$				
		1295.00 *4*	52.4 *8*	0.0	3/2$^+$	E1+M2	0.23 *+6−7*	0.00109 *15*	α(K)=0.00087 *13*; α(L)=0.000117 *19*; α(M)=2.5×10^{-5} *4* α(N)=5.9×10^{-6} *10*; α(O)=9.1×10^{-7} *15*; α(P)=6.1×10^{-8} *10*; α(IPF)=6.52×10^{-5} *20*
1376.33	21/2$^-$	320.2 *2*	66 *2*	1056.25	19/2$^-$				E$_\gamma$,I$_\gamma$: from (HI,xnγ). From (α,2nγ), Iγ=72.
		459.4 *2*	100 *5*	916.87	17/2$^-$	E2		0.0182	α(K)=0.01462 *21*; α(L)=0.00280 *4*; α(M)=0.000628 *9* α(N)=0.0001435 *21*; α(O)=2.09×10^{-5} *3*; α(P)=9.70×10^{-7} *14*
1394.06	19/2$^+$	435.3 *5*	15.0 *8*	958.95	17/2$^+$				E$_\gamma$,I$_\gamma$: from (HI,xnγ).
		438.7 *2*	100 *5*	955.33	15/2$^+$				
		477.2 *5*	32 *3*	916.87	17/2$^-$				
1411.59	21/2$^+$	249.8 *2*	30.2 *13*	1161.59	19/2$^+$				E$_\gamma$,I$_\gamma$: from (HI,xnγ). From (α,2nγ), Iγ=21.
		452.6 *2*	100 *4*	958.95	17/2$^+$	E2		0.0190	α(K)=0.01520 *22*; α(L)=0.00293 *5*; α(M)=0.000658 *10* α(N)=0.0001504 *22*; α(O)=2.18×10^{-5} *3*; α(P)=1.007×10^{-6} *15*
1452.00	3/2$^-$,5/2$^-$	1117.0		334.849	7/2$^+$				E$_\gamma$,I$_\gamma$: from (HI,xnγ). Mult.: from (α,2nγ). I$_\gamma$: ≤248 relative to I(1451γ).
		1201.87 *8*	21.6 *2*	250.030	7/2$^-$				
		1386.37 *6*	64 *1*	65.4622	5/2$^+$	E1		7.86×10^{-4}	α(K)=0.000568 *8*; α(L)=7.39×10^{-5} *11*; α(M)=1.592×10^{-5} *23* α(N)=3.67×10^{-6} *6*; α(O)=5.67×10^{-7} *8*; α(P)=3.82×10^{-8} *6*; α(IPF)=0.0001233 *18*
		1451.83 *4*	100 *2*	0.0	3/2$^+$	E1		7.80×10^{-4}	α(K)=0.000525 *8*; α(L)=6.82×10^{-5} *10*; α(M)=1.469×10^{-5} *21*

$^{155}_{65}Tb_{90}$-15

Adopted Levels, Gammas (continued)

$\gamma(^{155}Tb)$ (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ[†]	α[#]	Comments
									α(N)=3.39×10^{-6} *5*; α(O)=5.23×10^{-7} *8*; α(P)=3.53×10^{-8} *5*; α(IPF)=0.0001683 *24*

$^{155}_{65}Tb_{90}$-16

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	α#	Comments
1470.99	3/2+,5/2+	408.80 *10*	12 *3*	1062.075	5/2−	(M2)‡		0.1621	α(K)=0.1333 *19*; α(L)=0.0225 *4*; α(M)=0.00502 *7* α(N)=0.001162 *17*; α(O)=0.0001777 *25*; α(P)=1.123×10^{-5} *16* Mult.: that an M2 transition of this energy would compete with an M1 of much higher energy is unexpected. See the comment in the ^{155}Dy ε decay data set.
		972.36 *4*	100 *10*	498.640	5/2+	M1		0.00527	α(K)=0.00449 *7*; α(L)=0.000615 *9*; α(M)=0.0001335 *19* α(N)=3.09×10^{-5} *5*; α(O)=4.78×10^{-6} *7*; α(P)=3.24×10^{-7} *5*
1492.636	5/2−	1221.52 *6*	10.5 *24*	271.045	5/2+	E1		8.60×10^{-4}	α(K)=0.000709 *10*; α(L)=9.26×10^{-5} *13*; α(M)=2.00×10^{-5} *3* α(N)=4.61×10^{-6} *7*; α(O)=7.10×10^{-7} *10*; α(P)=4.76×10^{-8} *7*; α(IPF)=3.33×10^{-5} *5*
		1242.63 *4*	15.4 *2*	250.030	7/2−	M1		0.00295	α(K)=0.00250 *4*; α(L)=0.000340 *5*; α(M)=7.38×10^{-5} *11* α(N)=1.707×10^{-5} *24*; α(O)=2.64×10^{-6} *4*; α(P)=1.80×10^{-7} *3*; α(IPF)=1.209×10^{-5} *17*
		1265.69 *16*	2.6 *7*	226.918	5/2−				
		1336.83 *3*	86 *3*	155.785	7/2+	E1		7.97×10^{-4}	α(K)=0.000605 *9*; α(L)=7.88×10^{-5} *11*; α(M)=1.698×10^{-5} *24* α(N)=3.92×10^{-6} *6*; α(O)=6.04×10^{-7} *9*; α(P)=4.06×10^{-8} *6*; α(IPF)=9.17×10^{-5} *13*
		1427.19 *3*	73 *1*	65.4622	5/2+	E1		7.81×10^{-4}	α(K)=0.000541 *8*; α(L)=7.02×10^{-5} *10*; α(M)=1.513×10^{-5} *22* α(N)=3.49×10^{-6} *5*; α(O)=5.39×10^{-7} *8*; α(P)=3.63×10^{-8} *5*; α(IPF)=0.0001511 *22*
		1492.61 *4*	100.0 *4*	0.0	3/2+	E1		7.81×10^{-4}	α(K)=0.000501 *7*; α(L)=6.50×10^{-5} *9*; α(M)=1.400×10^{-5} *20* α(N)=3.23×10^{-6} *5*; α(O)=4.99×10^{-7} *7*; α(P)=3.37×10^{-8} *5*; α(IPF)=0.000197 *3*
1528.22	23/2−	151.9 *2*	9.6 *5*	1376.33	21/2−				Eγ,Iγ: from (HI,xnγ). In (α,2nγ), Iγ=17.
		471.9 *2*	100	1056.25	19/2−	E2		0.01695	α(K)=0.01364 *20*; α(L)=0.00258 *4*; α(M)=0.000577 *9* α(N)=0.0001320 *19*; α(O)=1.92×10^{-5} *3*; α(P)=9.08×10^{-7} *13* Eγ,Iγ: from (HI,xnγ). Mult.: from (α,2nγ).

$^{155}_{65}Tb_{90}$-17

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	α#	Comments
1638.853	5/2⁻	570.449 *20*	23.8 *7*	1068.371	3/2⁻	M1+E2	+0.37 *+22−17*	0.0185 *13*	α(K)=0.0157 *12*; α(L)=0.00222 *13*; α(M)=0.00048 *3* α(N)=0.000112 *6*; α(O)=1.72×10^{-5} *10*; α(P)=1.14×10^{-6} *9*
		576.82 *11*		1062.075	5/2⁻				
		878.23 *8*	4.9 *4*	760.628	3/2⁺				
		1089.8		549.604	3/2⁺				
		1093.70 *10*	1.3 *1*	544.891	7/2⁻				I_γ: ≤351 relative to I(1367γ).
		1304.05 *4*	21.7 *6*	334.849	7/2⁺	E1(+M2)	0.16 *+7−16*	0.00094 *14*	α(K)=0.00075 *12*; α(L)=9.9×10^{-5} *17*; α(M)=2.1×10^{-5} *4* α(N)=4.9×10^{-6} *9*; α(O)=7.6×10^{-7} *14*; α(P)=5.1×10^{-8} *9*; α(IPF)=7.15×10^{-5} *20*
		1367.77 *3*	100.0 *18*	271.045	5/2⁺	E1+M2	0.16 *+6−10*	0.00091 *11*	α(K)=0.00068 *9*; α(L)=9.0×10^{-5} *13*; α(M)=1.9×10^{-5} *3* α(N)=4.5×10^{-6} *7*; α(O)=6.9×10^{-7} *10*; α(P)=4.7×10^{-8} *7*; α(IPF)=0.000109 *3*
		1388.82 *6*	12.6 *3*	250.030	7/2⁻	M1		0.00231	α(K)=0.00193 *3*; α(L)=0.000261 *4*; α(M)=5.66×10^{-5} *8* α(N)=1.310×10^{-5} *19*; α(O)=2.03×10^{-6} *3*; α(P)=1.383×10^{-7} *20*; α(IPF)=4.56×10^{-5} *7*
		1412.08 *7*	8.9 *4*	226.918	5/2⁻	M1		0.00223	α(K)=0.00186 *3*; α(L)=0.000251 *4*; α(M)=5.45×10^{-5} *8* α(N)=1.259×10^{-5} *18*; α(O)=1.95×10^{-6} *3*; α(P)=1.330×10^{-7} *19*; α(IPF)=5.30×10^{-5} *8*
		1573.56 *5*	12.3 *5*	65.4622	5/2⁺				
1641.3	23/2⁺	229.4	19 *1*	1411.59	21/2⁺				E_γ,I_γ: from (HI,xnγ). In (α,2nγ), Iγ=24.
		479.5	100 *4*	1161.59	19/2⁺	E2		0.01624	α(K)=0.01309 *19*; α(L)=0.00245 *4*; α(M)=0.000549 *8* α(N)=0.0001256 *18*; α(O)=1.83×10^{-5} *3*; α(P)=8.72×10^{-7} *13* E_γ,I_γ: from (HI,xnγ). Mult.: from (α,2nγ).
1645.1	21/2⁺	475.1 *2*	100 *5*	1170.07	17/2⁺				
		484.1 *5*	21 *1*	1161.59	19/2⁺				
		589.2 *5*	21 *2*	1056.25	19/2⁻				
1656.39	5/2⁻	912.47 *6*	100 *9*	743.92	7/2⁺	E1		1.42×10^{-3}	α(K)=0.001212 *17*; α(L)=0.0001601 *23*; α(M)=3.46×10^{-5} *5* α(N)=7.97×10^{-6} *12*; α(O)=1.225×10^{-6} *18*; α(P)=8.09×10^{-8} *12*
		1429.50 *10*	10 *1*	226.918	5/2⁻				
		1656.05 *24*	12 *2*	0.0	3/2⁺				
1664.915	5/2⁻	596.22 *12*	2.5 *4*	1068.371	3/2⁻	M1+E2		0.0134 *42*	α(K)=0.0113 *37*; α(L)=0.0017 *4*;

$^{155}_{65}Tb_{90}$-18

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	α#	Comments
									α(M)=0.00037 *9* α(N)=8.5×10^{-5} *20*; α(O)=1.3×10^{-5} *4*; α(P)=8.0×10^{-7} *29*
1664.915	5/2$^-$	602.95 *10*	1.4 *2*	1062.075	5/2$^-$	M1+E2		0.0131 *41*	α(K)=0.0110 *36*; α(L)=0.0016 *4*; α(M)=0.00036 *8* α(N)=8.3×10^{-5} *19*; α(O)=1.3×10^{-5} *3*; α(P)=7.8×10^{-7} *28*
		773.57 *5*	6.0 *4*	891.138	3/2$^-$	E2		0.00504	α(K)=0.00420 *6*; α(L)=0.000657 *10*; α(M)=0.0001446 *21* α(N)=3.32×10^{-5} *5*; α(O)=4.99×10^{-6} *7*; α(P)=2.89×10^{-7} *4*
		920.94 *4*	6.4 *3*	743.92	7/2$^+$	E1		1.39×10^{-3}	α(K)=0.001191 *17*; α(L)=0.0001573 *22*; α(M)=3.40×10^{-5} *5* α(N)=7.83×10^{-6} *11*; α(O)=1.203×10^{-6} *17*; α(P)=7.95×10^{-8} *12*
		1012.89 *4*	17.6 *8*	652.033	5/2$^+$	E1		1.16×10^{-3}	α(K)=0.000996 *14*; α(L)=0.0001310 *19*; α(M)=2.83×10^{-5} *4* α(N)=6.52×10^{-6} *10*; α(O)=1.003×10^{-6} *14*; α(P)=6.66×10^{-8} *10*
		1115.2	≤24	549.604	3/2$^+$				
		1166.22 *3*	100 *1*	498.640	5/2$^+$	E1(+M2)	0.06 *12*	0.00094 *21*	α(K)=0.00079 *18*; α(L)=0.00010 *3*; α(M)=2.2×10^{-5} *6* α(N)=5.2×10^{-6} *13*; α(O)=8.0×10^{-7} *20*; α(P)=5.3×10^{-8} *14*; α(IPF)=1.24×10^{-5} *4*
		1198.14 *9*	1.7 *2*	466.802	7/2$^+$				
		1329.85 *11*	1.2 *2*	334.849	7/2$^+$				
		1393.83 *4*	15.5 *1*	271.045	5/2$^+$	E1+M2	0.23 *+6−8*	0.00101 *13*	α(K)=0.00076 *11*; α(L)=0.000101 *16*; α(M)=2.2×10^{-5} *4* α(N)=5.1×10^{-6} *8*; α(O)=7.8×10^{-7} *13*; α(P)=5.2×10^{-8} *9*; α(IPF)=0.000123 *4*
		1414.93 *4*	14.6 *5*	250.030	7/2$^-$	M1		0.00222	α(K)=0.00185 *3*; α(L)=0.000250 *4*; α(M)=5.42×10^{-5} *8* α(N)=1.253×10^{-5} *18*; α(O)=1.94×10^{-6} *3*; α(P)=1.324×10^{-7} *19*; α(IPF)=5.39×10^{-5} *8*
		1437.97 *4*	16.9 *2*	226.918	5/2$^-$	M1		0.00215	α(K)=0.001778 *25*; α(L)=0.000241 *4*; α(M)=5.22×10^{-5} *8* α(N)=1.207×10^{-5} *17*; α(O)=1.87×10^{-6} *3*; α(P)=1.275×10^{-7} *18*; α(IPF)=6.17×10^{-5} *9*
		1509.27 *4*	14.8 *5*	155.785	7/2$^+$	E1(+M2)	−0.13 *7*	0.00084 *8*	α(K)=0.00054 *7*; α(L)=7.1×10^{-5} *10*; α(M)=1.54×10^{-5} *22* α(N)=3.5×10^{-6} *5*; α(O)=5.5×10^{-7} *8*; α(P)=3.7×10^{-8} *6*; α(IPF)=0.000206 *5*
		1599.57 *4*	15.7 *4*	65.4622	5/2$^+$	E1		7.96×10^{-4}	α(K)=0.000446 *7*; α(L)=5.77×10^{-5} *8*;

$^{155}_{65}Tb_{90}$-19

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	α#	Comments
									α(M)=1.244×10^{-5} *18* α(N)=2.87×10^{-6} *4*; α(O)=4.43×10^{-7} *7*; α(P)=3.00×10^{-8} *5*; α(IPF)=0.000276 *4*
1664.915	5/2$^-$	1664.98 *6*	51 *2*	0.0	3/2$^+$	E1+M2	0.09 *6*	0.00083 *4*	α(K)=0.00044 *4*; α(L)=5.7×10^{-5} *5*; α(M)=1.22×10^{-5} *11* α(N)=2.82×10^{-6} *25*; α(O)=4.4×10^{-7} *4*; α(P)=3.0×10^{-8} *3*; α(IPF)=0.000323 *6*
1750.099	5/2$^-$	688.4 *7*	0.9 *7*	1062.075	5/2$^-$	M1(+E2+E0)		0.0094 *29*	α(K)=0.0079 *25*; α(L)=0.0012 *3*; α(M)=0.00025 *6* α(N)=5.9×10^{-5} *14*; α(O)=9.0×10^{-6} *23*; α(P)=5.6×10^{-7} *20*
		940.516 *25*	32.2 *9*	809.526	5/2$^+$	E1		1.34×10^{-3}	α: α(K)exp=0.0167. α(K)=0.001144 *16*; α(L)=0.0001510 *22*; α(M)=3.26×10^{-5} *5* α(N)=7.52×10^{-6} *11*; α(O)=1.155×10^{-6} *17*; α(P)=7.64×10^{-8} *11*
		1098.2	≤24	652.033	5/2$^+$				
		1232.34 *12*	4.8 *6*	517.542	3/2$^+$,5/2$^+$,7/2$^+$				
		1251.24 *3*	100.0 *4*	498.640	5/2$^+$	E1(+M2)	0.14 *30*	9.6×10^{-4} *87*	α(K)=7.8×10^{-4} *74*; α(L)=1.0×10^{-4} *11*; α(M)=2.2×10^{-5} *24* α(N)=5.1×10^{-6} *54*; α(O)=7.9×10^{-7} *84*; α(P)=5.3×10^{-8} *56*; α(IPF)=4.6×10^{-5} *7*
		1283.32 *14*	2.40 *9*	466.802	7/2$^+$				
		1479.22 *4*	57.4 *2*	271.045	5/2$^+$	E1		7.81×10^{-4}	α(K)=0.000509 *8*; α(L)=6.60×10^{-5} *10*; α(M)=1.422×10^{-5} *20* α(N)=3.28×10^{-6} *5*; α(O)=5.07×10^{-7} *7*; α(P)=3.42×10^{-8} *5*; α(IPF)=0.000188 *3*
		1594.52 *6*	5.8 *3*	155.785	7/2$^+$				
		1684.80 *5*	11.8 *4*	65.4622	5/2$^+$	E1		8.17×10^{-4}	α(K)=0.000409 *6*; α(L)=5.29×10^{-5} *8*; α(M)=1.139×10^{-5} *16* α(N)=2.63×10^{-6} *4*; α(O)=4.06×10^{-7} *6*; α(P)=2.75×10^{-8} *4*; α(IPF)=0.000340 *5*
		1750.45 *6*	3.05 *14*	0.0	3/2$^+$				
1793.645	5/2$^+$	537.1 *3*	4.2 *18*	1255.85	7/2$^-$				
		725.24 *4*	100 *4*	1068.371	3/2$^-$	E1(+M2)		0.0025 *3*	α(K)=0.00213 *23*; α(L)=0.00029 *4*; α(M)=6.3×10^{-5} *8* α(N)=1.44×10^{-5} *18*; α(O)=2.2×10^{-6} *3*; α(P)=1.44×10^{-7} *19*
		1050.0 *3*	9 *4*	743.92	7/2$^+$				
		1459.00 *23*	16 *2*	334.849	7/2$^+$	M1		0.00209	α(K)=0.001720 *24*; α(L)=0.000233 *4*; α(M)=5.04×10^{-5} *7*

$^{155}_{65}Tb_{90}$-20

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	α#	Comments
									α(N)=1.166×10^{-5} *17*; α(O)=1.81×10^{-6} *3*; α(P)=1.232×10^{-7} *18*; α(IPF)=6.92×10^{-5} *10*
1793.645	5/2$^+$	1522.51 *9*	16 *1*	271.045	5/2$^+$				
		1543.78 *9*	5.4 *5*	250.030	7/2$^-$				
		1567.04 *10*	10 *1*	226.918	5/2$^-$				
		1637.87 *5*	42 *1*	155.785	7/2$^+$				
		1728.02 *7*	21 *1*	65.4622	5/2$^+$				
		1793.64 *6*	25 *1*	0.0	3/2$^+$				
1835.82	3/2,5/2	767.6 *1*	≤108	1068.371	3/2$^-$				
		944.24 *11*	100 *12*	891.138	3/2$^-$				
		1184.05 *10*	70 *10*	652.033	5/2$^+$				
		1609.14 *14*	52 *6*	226.918	5/2$^-$				
		1769.60 *20*	6.2 *10*	65.4622	5/2$^+$				
1860.95	1/2$^+$,3/2,5/2	1590.04 *9*	100 *7*	271.045	5/2$^+$				
		1795.30 *10*	51 *5*	65.4622	5/2$^+$				
1865.82	5/2$^-$	609.94 *4*	51 *3*	1255.85	7/2$^-$	M1(+E2)	<2.4	0.0133 *34*	α(K)=0.0112 *30*; α(L)=0.0016 *4*; α(M)=0.00036 *7*; α(N)=8.3×10^{-5} *16*; α(O)=1.3×10^{-5} *3*; α(P)=8.0×10^{-7} *23*
		1213.1 *5*	21 *10*	652.033	5/2$^+$				
		1316.28 *4*	100 *3*	549.604	3/2$^+$	E1		8.05×10^{-4}	α(K)=0.000622 *9*; α(L)=8.10×10^{-5} *12*; α(M)=1.746×10^{-5} *25*; α(N)=4.03×10^{-6} *6*; α(O)=6.21×10^{-7} *9*; α(P)=4.17×10^{-8} *6*; α(IPF)=7.98×10^{-5} *12*
		1348.39 *7*	40 *3*	517.542	3/2$^+$,5/2$^+$,7/2$^+$	E1+M2	0.91 *16*	0.0030 *5*	α(K)=0.0025 *4*; α(L)=0.00035 *6*; α(M)=7.7×10^{-5} *13*; α(N)=1.8×10^{-5} *3*; α(O)=2.8×10^{-6} *5*; α(P)=1.8×10^{-7} *3*; α(IPF)=5.9×10^{-5} *9*
		1356.85 *10*	16 *4*	508.395	1/2$^+$,3/2$^+$,5/2$^+$				
		1548.73 *16*	3.4 *6*	317.047	9/2$^-$				
		1710.08 *11*	8.2 *6*	155.785	7/2$^+$				
		1866.17 *25*	7.7 *11*	0.0	3/2$^+$				
1868.95	3/2$^+$,5/2$^+$	962.44 *7*	100 *11*	906.43	(5/2$^-$)	E1+M2	0.24 *+6−7*	0.0020 *4*	α(K)=0.0017 *3*; α(L)=0.00023 *5*; α(M)=5.0×10^{-5} *10*; α(N)=1.15×10^{-5} *23*; α(O)=1.8×10^{-6} *4*; α(P)=1.17×10^{-7} *23*
		1641.9 *3*	12.1 *20*	226.918	5/2$^-$				
		1713.09 *9*	29.8 *20*	155.785	7/2$^+$				

$^{155}_{65}Tb_{90}$-21

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	α[#]	Comments
1868.95	3/2$^+$,5/2$^+$	1803.60 *8*	24.3 *16*	65.4622	5/2$^+$			
		1869.00 *10*	0.69 *11*	0.0	3/2$^+$			
1897.4	23/2$^+$	485.9 *5*	13.6 *8*	1411.59	21/2$^+$			
		503.3 *2*	100 *5*	1394.06	19/2$^+$			
		520.9 *5*	18.6 *8*	1376.33	21/2$^-$			
1911.20	(5/2)$^-$	459.05 *3*	100 *9*	1452.00	3/2$^-$,5/2$^-$	M1+E2	0.0262 *80*	α(K)=0.0218 *72*; α(L)=0.0034 *7*; α(M)=0.00076 *13* α(N)=0.00017 *3*; α(O)=2.6×10^{-5} *6*; α(P)=1.54×10^{-6} *58*
		1577.90 *10*	6.9 *13*	334.849	7/2$^+$			
		1846.2 *3*	3.7 *11*	65.4622	5/2$^+$			
1911.37	25/2$^-$	383.1 *2*	69 *3*	1528.22	23/2$^-$			
		535.1 *2*	100 *3*	1376.33	21/2$^-$			
1913.60	5/2$^-$	618.59 *4*	100 *5*	1294.961	5/2$^-$	M1	0.01601	α(K)=0.01360 *19*; α(L)=0.00189 *3*; α(M)=0.000412 *6* α(N)=9.52×10^{-5} *14*; α(O)=1.472×10^{-5} *21*; α(P)=9.89×10^{-7} *14*
		1758.10 *10*	2.5 *3*	155.785	7/2$^+$			
		1913.60 *10*	0.48 *7*	0.0	3/2$^+$			
1923.9	25/2$^+$	282.8 *2*	21 *1*	1641.3	23/2$^+$			I_γ: Iγ=32 *6* from (^{36}S,4pnγ).
		512.1 *2*	100 *6*	1411.59	21/2$^+$			
1954.72	3/2$^-$,5/2$^-$	289.81 *4*	62 *23*	1664.915	5/2$^-$	[M1,E2]	0.092 *23*	α(K)=0.074 *23*; α(L)=0.0136 *3*; α(M)=0.00303 *5* α(N)=0.000693 *10*; α(O)=0.000102 *6*; α(P)=5.2×10^{-6} *20*
		462.06 *8*	100 *13*	1492.636	5/2$^-$	M1+E2	0.0257 *79*	α(K)=0.0214 *71*; α(L)=0.0034 *7*; α(M)=0.00074 *13* α(N)=0.00017 *3*; α(O)=2.6×10^{-5} *6*; α(P)=1.52×10^{-6} *57*
		1889.22 *8*	61 *5*	65.4622	5/2$^+$			
		1954.76 *11*	39 *4*	0.0	3/2$^+$			
1991.78	3/2$^-$	871.90 *8*	100 *14*	1120.003	7/2$^+$	M2	0.01782	α(K)=0.01496 *21*; α(L)=0.00224 *4*; α(M)=0.000491 *7* α(N)=0.0001137 *16*; α(O)=1.752×10^{-5} *25*; α(P)=1.153×10^{-6} *17*
		1764.86 *9*	23 *9*	226.918	5/2$^-$			
		1835.55 *15*	32 *3*	155.785	7/2$^+$			
2071.1	27/2$^-$	159.7 *2*	6.5 *4*	1911.37	25/2$^-$			
		542.8 *2*	100 *4*	1528.22	23/2$^-$			
2176.2	27/2$^+$	252.2 *2*	17 *9*	1923.9	25/2$^+$			
		535.0 *2*	100 *15*	1641.3	23/2$^+$			
2177.2	25/2$^+$	532.4 *2*	100 *6*	1645.1	21/2$^+$			
		534.2 *5*	22 *3*	1641.3	23/2$^+$			
2452.8	27/2$^+$	555.4 *2*	100	1897.4	23/2$^+$			
2485.7	29/2$^+$	309.4 *2*	20 *9*	2176.2	27/2$^+$			
		561.7 *2*	100 *5*	1923.9	25/2$^+$			
2498.8	29/2$^-$	427.6 *2*	57 *3*	2071.1	27/2$^-$			
		587.4 *2*	100 *5*	1911.37	25/2$^-$			
2662.3	31/2$^-$	163.3 *2*	5.6 *5*	2498.8	29/2$^-$			
		591.3 *2*	100 *5*	2071.1	27/2$^-$			
2745.2	27/2$^{(+)}$	674.0[@] *5*	<17	2071.1	27/2$^-$			
		833.8 *2*	100 *5*	1911.37	25/2$^-$			Mult.: assigned ΔJ=1 in (HI,xnγ).
2748.6	29/2$^+$	571.4 *2*	100	2177.2	25/2$^+$			

$^{155}_{65}Tb_{90}$-22

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Comments
2756.5	31/2$^+$	270.7 *5*	12.4 *5*	2485.7	29/2$^+$	
		580.4 *2*	100 *3*	2176.2	27/2$^+$	
3058.4	31/2$^+$	605.6 *5*	100	2452.8	27/2$^+$	
3069.4	33/2$^-$	407.1 *2*	81 *4*	2662.3	31/2$^-$	
		570.8 *2*	100 *5*	2498.8	29/2$^-$	
3084.5	33/2$^+$	328.0 *5*	16.5 *8*	2756.5	31/2$^+$	
		598.8 *2*	100 *5*	2485.7	29/2$^+$	
3104.5	31/2$^{(+)}$	359.3 *2*	100	2745.2	27/2$^{(+)}$	
3246.6	35/2$^-$	177.2 *2*	7.8 *5*	3069.4	33/2$^-$	Iγ: Iγ=10.0 *15* from (^{36}S,p4nγ).
		584.3 *2*	100 *5*	2662.3	31/2$^-$	
3358.3	(33/2$^+$)	609.7 *5*	100	2748.6	29/2$^+$	
3367.6	35/2$^+$	283.1 *5*	12 *1*	3084.5	33/2$^+$	
		611.1 *2*	100 *4*	2756.5	31/2$^+$	
3533.2	37/2$^-$	286.5 *2*	92 *4*	3246.6	35/2$^-$	Iγ: from (^{36}S,p4nγ), Iγ=100 *10*, relative to Iγ(463.7)=97 *19*.
		463.7 *2*	100 *5*	3069.4	33/2$^-$	
3571.7	35/2$^{(+)}$	467.2 *2*	100	3104.5	31/2$^{(+)}$	
3681.4	37/2$^+$	314.0 *5*	17 *1*	3367.6	35/2$^+$	
		596.9 *2*	100 *5*	3084.5	33/2$^+$	
3777.3	39/2$^-$	244.0 *2*	33 *3*	3533.2	37/2$^-$	Iγ: Iγ=44 *5* from (^{36}S,p4nγ).
		530.9 *2*	100 *6*	3246.6	35/2$^-$	
3967.1	39/2$^+$	599.5 *2*	100	3367.6	35/2$^+$	
4056.5	41/2$^-$	279.1 *2*	52 *2*	3777.3	39/2$^-$	
		523.3 *2*	100 *4*	3533.2	37/2$^-$	
4130.1	(39/2$^+$)	558.4 *2*	100	3571.7	35/2$^{(+)}$	
4259.8	41/2$^+$	578.4 *2*	100	3681.4	37/2$^+$	
4349.6	43/2$^-$	293.2 *2*	39 *3*	4056.5	41/2$^-$	Iγ: Iγ=53 *6* is reported in (^{36}S,p4nγ).
		572.3 *2*	100 *6*	3777.3	39/2$^-$	
4572.5	43/2$^+$	605.4 *2*	100	3967.1	39/2$^+$	
4669.5	45/2$^-$	320.0 *2*	31 *3*	4349.6	43/2$^-$	
		612.9 *2*	100 *3*	4056.5	41/2$^-$	
4762.1	(43/2$^+$)	632.0 *2*	100	4130.1	(39/2$^+$)	
4895.6	(45/2$^+$)	635.8 *2*	100	4259.8	41/2$^+$	
4995.0	(47/2$^-$)	325.4[@] *2*	53 *6*	4669.5	45/2$^-$	
		645.4 *2*	100 *13*	4349.6	43/2$^-$	
5239.1	(47/2$^+$)	666.6 *2*	100	4572.5	43/2$^+$	
5368.0	(49/2$^-$)	373 *1*	22 *5*	4995.0	(47/2$^-$)	
		698.5 *2*	100 *22*	4669.5	45/2$^-$	
5453.1	(47/2$^+$)	691 *1*	100	4762.1	(43/2$^+$)	
5597.6	(49/2$^+$)	702 *1*	100	4895.6	(45/2$^+$)	
5712.8	(51/2$^-$)	345 *1*	45 *10*	5368.0	(49/2$^-$)	
		718 *1*	100 *16*	4995.0	(47/2$^-$)	
5970.1	(51/2$^+$)	731 *1*	100	5239.1	(47/2$^+$)	
6146.5	(53/2$^-$)	434 *1*	<15	5712.8	(51/2$^-$)	

$^{155}_{65}Tb_{90}$-23

Adopted Levels, Gammas (continued)

γ(^{155}Tb) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π
6146.5	(53/2$^-$)	778 *1*	100 *12*	5368.0	(49/2$^-$)	8956.6	(65/2$^+$)	903 *1*	100	8053.6	(61/2$^+$)
6190.1	(51/2$^+$)	737 *1*	100	5453.1	(47/2$^+$)	9166.6	(67/2$^-$)	933 *1*	100	8233.6	(63/2$^-$)
6364.6	(53/2$^+$)	767 *1*	100	5597.6	(49/2$^+$)	9467.1	(67/2$^+$)	947 *1*	100	8520.1	(63/2$^+$)
6497.6	(55/2$^-$)	351 *1*	26 *10*	6146.5	(53/2$^-$)	9569	(67/2$^+$)	907 *1*	100	8662.1	(63/2$^+$)
		785 *1*	100 *13*	5712.8	(51/2$^-$)	9909.6	(69/2$^-$)	1023 *1*	100	8886.6	(65/2$^-$)
6765.1	(55/2$^+$)	795 *1*	100	5970.1	(51/2$^+$)	10132.6	(71/2$^-$)	966 *1*	100	9166.6	(67/2$^-$)
6970.1	(55/2$^+$)	780 *1*	100	6190.1	(51/2$^+$)	10453	(71/2$^+$)	986 *1*	100	9467.1	(67/2$^+$)
6997.6	(57/2$^-$)	500 *1*	<21	6497.6	(55/2$^-$)	10503	(71/2$^+$)	934 *1*	100	9569	(67/2$^+$)
		851 *1*	100 *17*	6146.5	(53/2$^-$)	10978.6	(73/2$^-$)	1069 *1*	100	9909.6	(69/2$^-$)
7190.6	(57/2$^+$)	826 *1*	100	6364.6	(53/2$^+$)	11130.6	(75/2$^-$)	998 *1*	100	10132.6	(71/2$^-$)
7340.6	(59/2$^-$)	343 *1*	18 *7*	6997.6	(57/2$^-$)	11481	(75/2$^+$)	978 *1*	100	10503	(71/2$^+$)
		843 *1*	100 *15*	6497.6	(55/2$^-$)	11482?	(75/2$^+$)	1029[@] *1*	100	10453	(71/2$^+$)
7618.1	(59/2$^+$)	853 *1*	100	6765.1	(55/2$^+$)	12088.6	(77/2$^-$)	1110 *1*	100	10978.6	(73/2$^-$)
7793.1	(59/2$^+$)	823 *1*	100	6970.1	(55/2$^+$)	12174	(79/2$^-$)	1043 *1*	100	11130.6	(75/2$^-$)
7913.6	(61/2$^-$)	916 *1*	100	6997.6	(57/2$^-$)	12513?	(79/2$^+$)	1032[@] *1*	100	11481	(75/2$^+$)
8053.6	(61/2$^+$)	863 *1*	100	7190.6	(57/2$^+$)	13223	(81/2$^-$)	1134[@] *1*	100	12088.6	(77/2$^-$)
8233.6	(63/2$^-$)	893 *1*	100	7340.6	(59/2$^-$)	13284	(83/2$^-$)	1110 *1*	100	12174	(79/2$^-$)
8520.1	(63/2$^+$)	902 *1*	100	7618.1	(59/2$^+$)	14469	(87/2$^-$)	1185 *1*	100	13284	(83/2$^-$)
8662.1	(63/2$^+$)	869 *1*	100	7793.1	(59/2$^+$)	15734	(91/2$^-$)	1265 *1*	100	14469	(87/2$^-$)
8886.6	(65/2$^-$)	973 *1*	100	7913.6	(61/2$^-$)	17070?	(95/2$^-$)	1336[@] *1*	100	15734	(91/2$^-$)

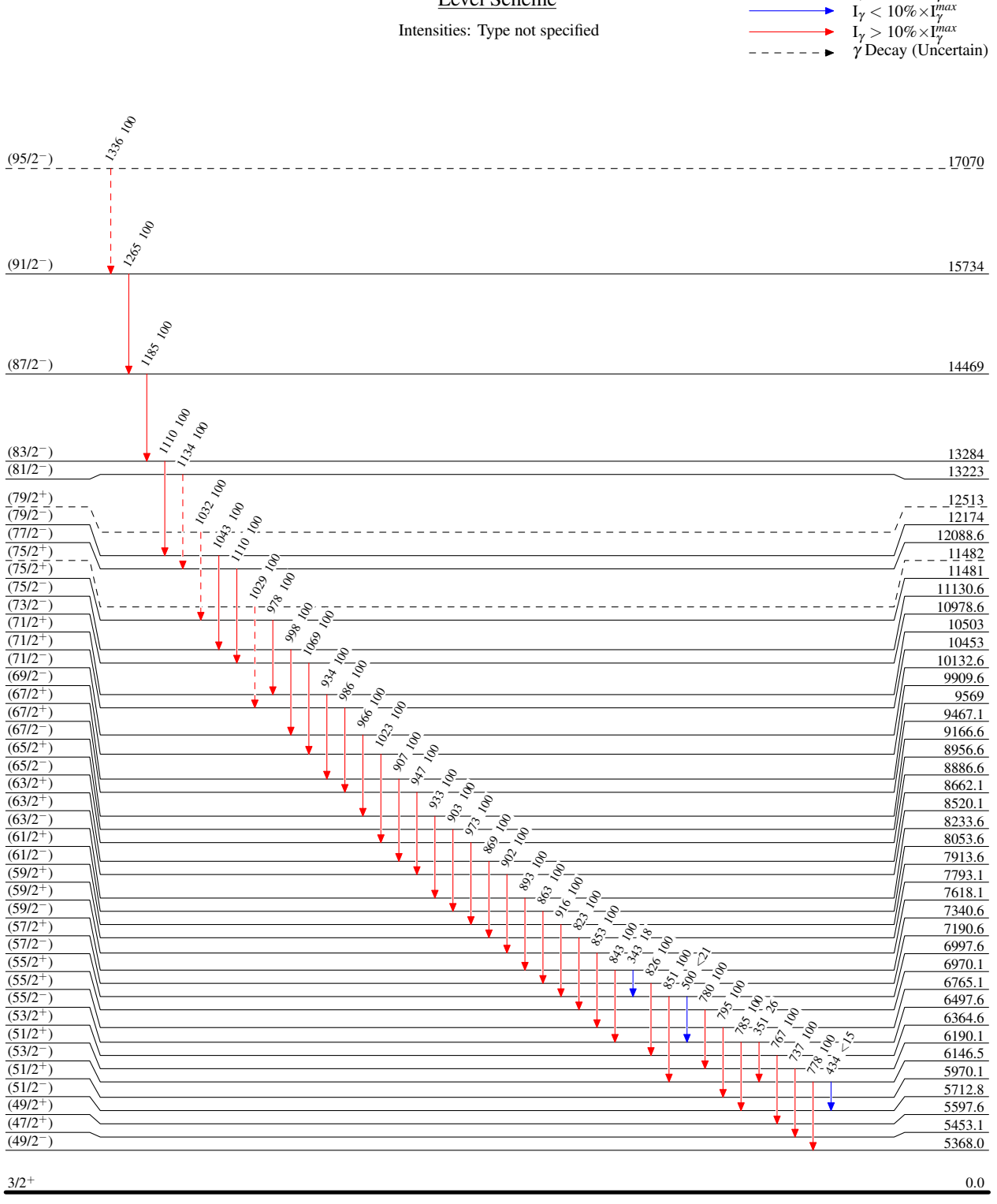
† From ^{155}Dy ε decay, unless noted otherwise.
‡ See the comment in the ^{155}Dy ε Decay dataset regarding the questionable basis for this assignment.
# Additional information 2.
@ Placement of transition in the level scheme is uncertain.

$^{155}_{65}Tb_{90}$-24

Adopted Levels, Gammas

Level Scheme

Intensities: Type not specified



$^{155}_{65}Tb_{90}$

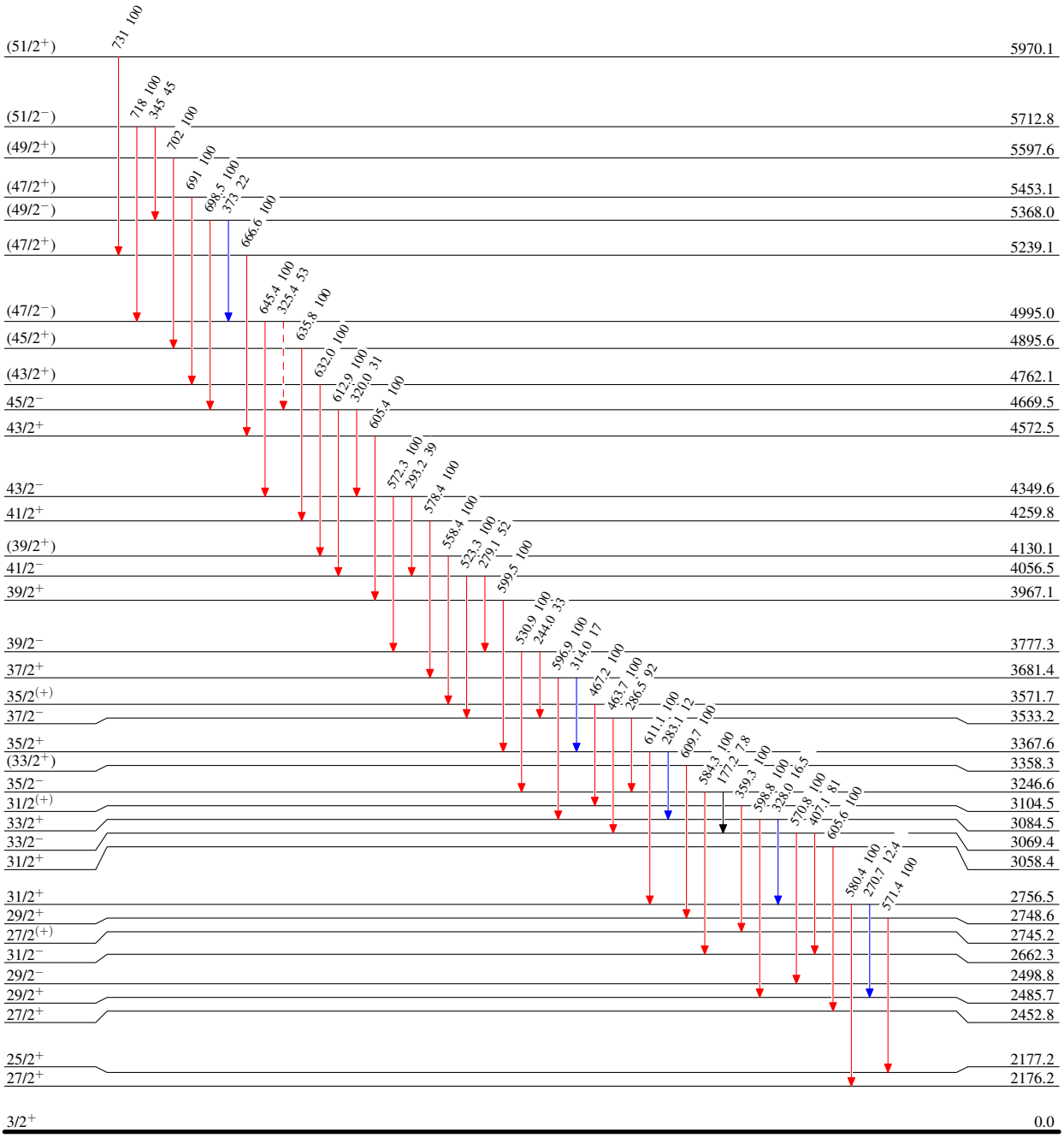
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)

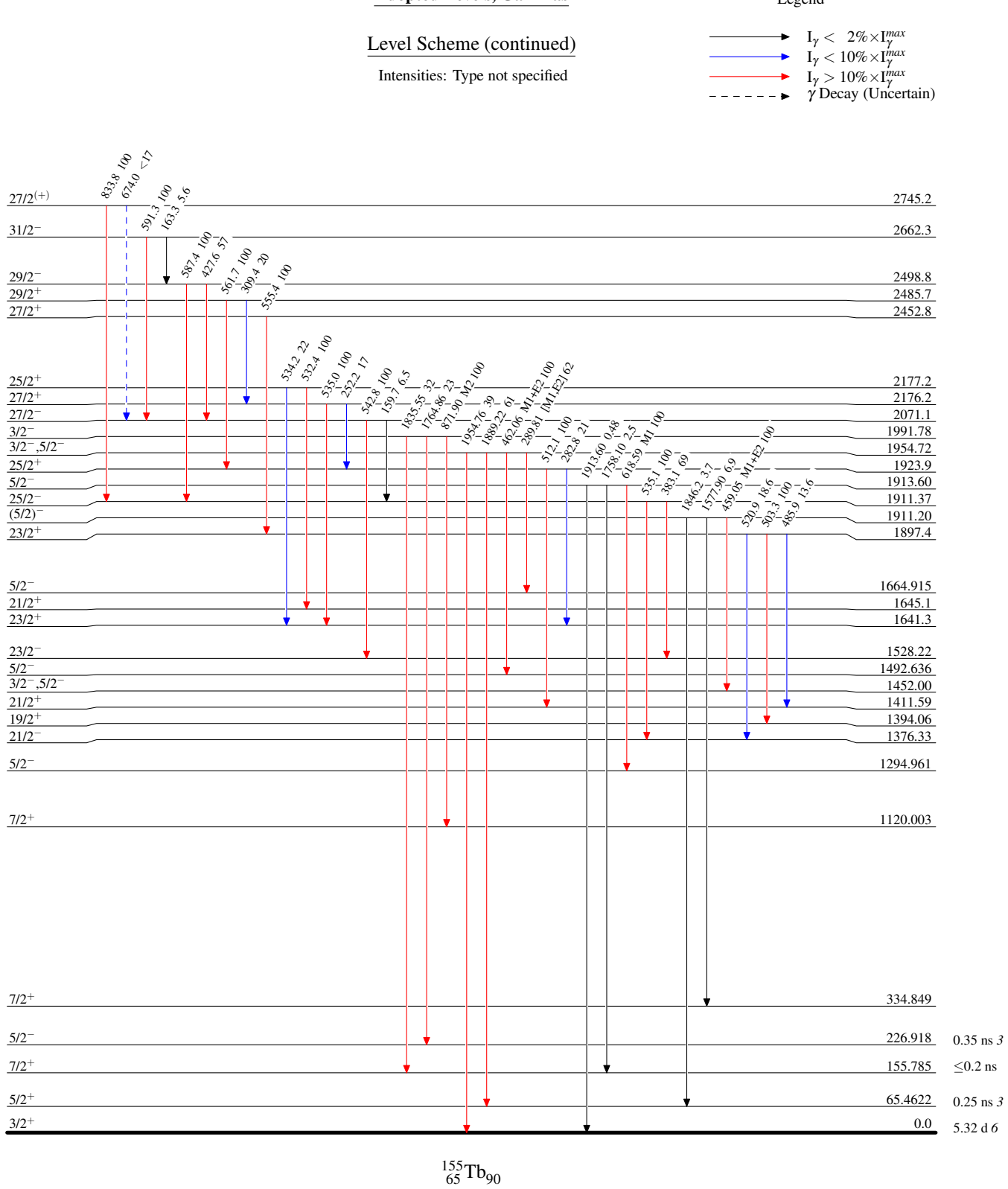


$^{155}_{65}Tb_{90}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

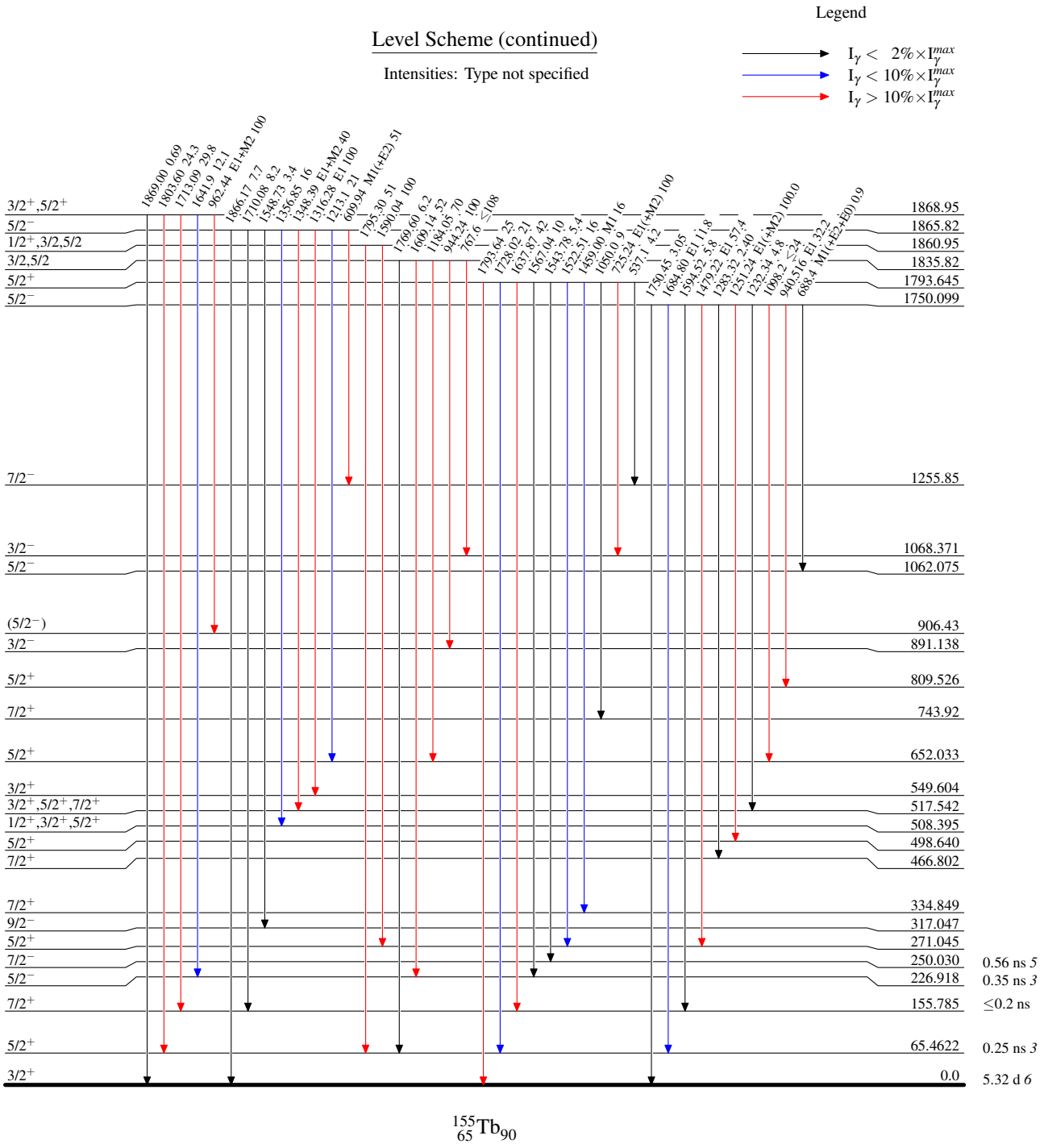


$^{155}_{65}Tb_{90}$

Adopted Levels, Gammas

Level Scheme (continued)

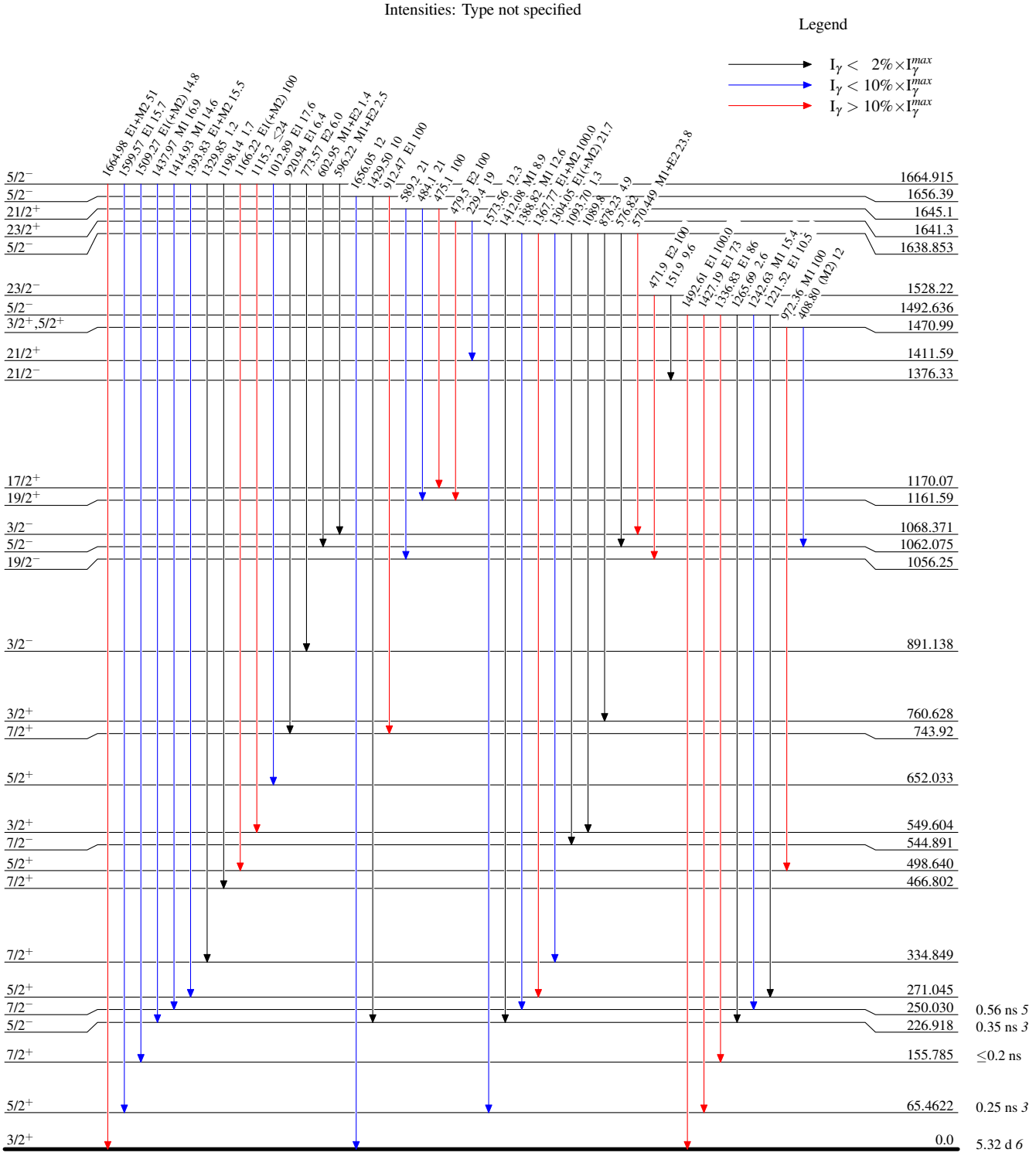
Intensities: Type not specified



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

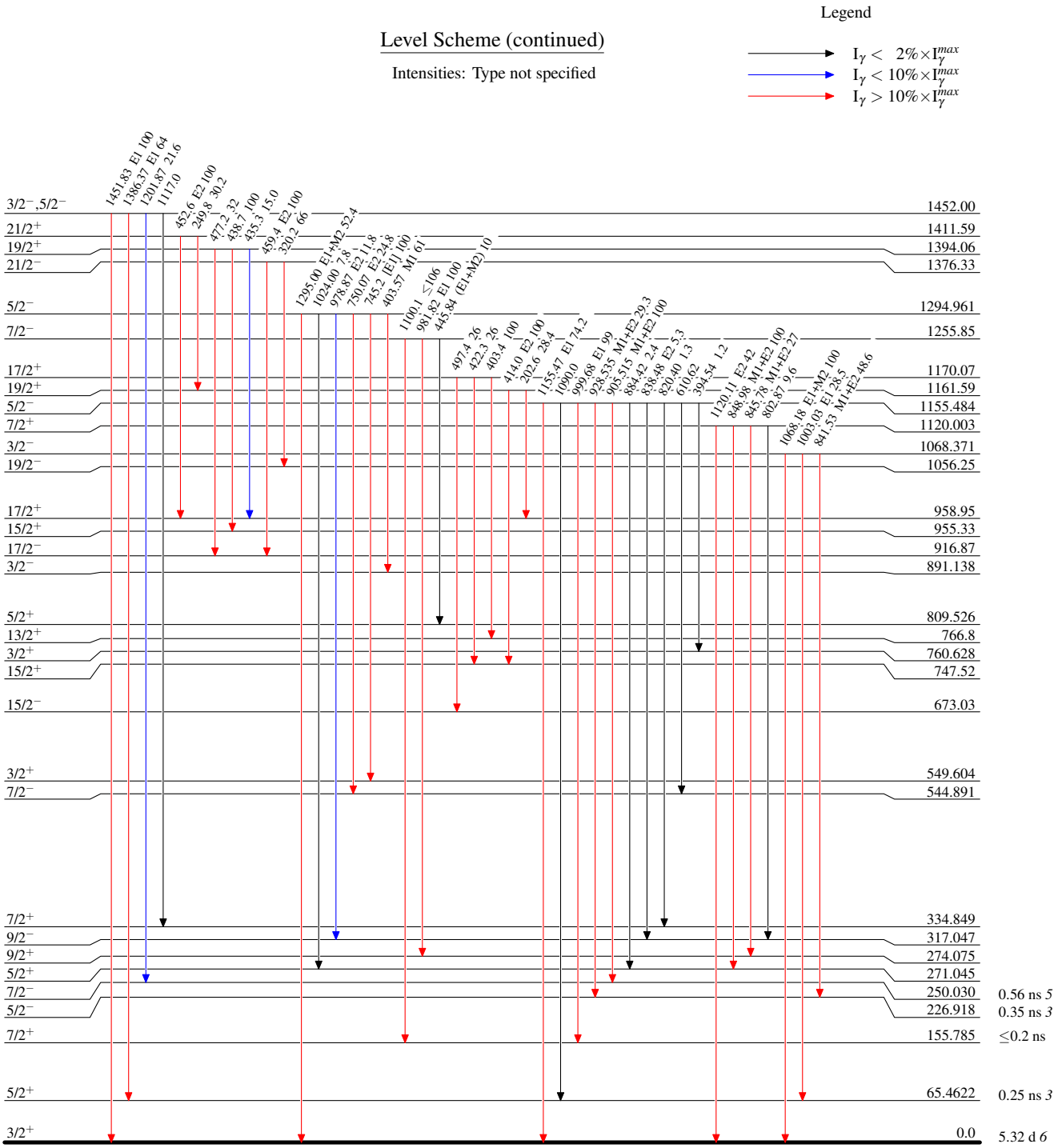


$^{155}_{65}Tb_{90}$

Adopted Levels, Gammas

Level Scheme (continued)

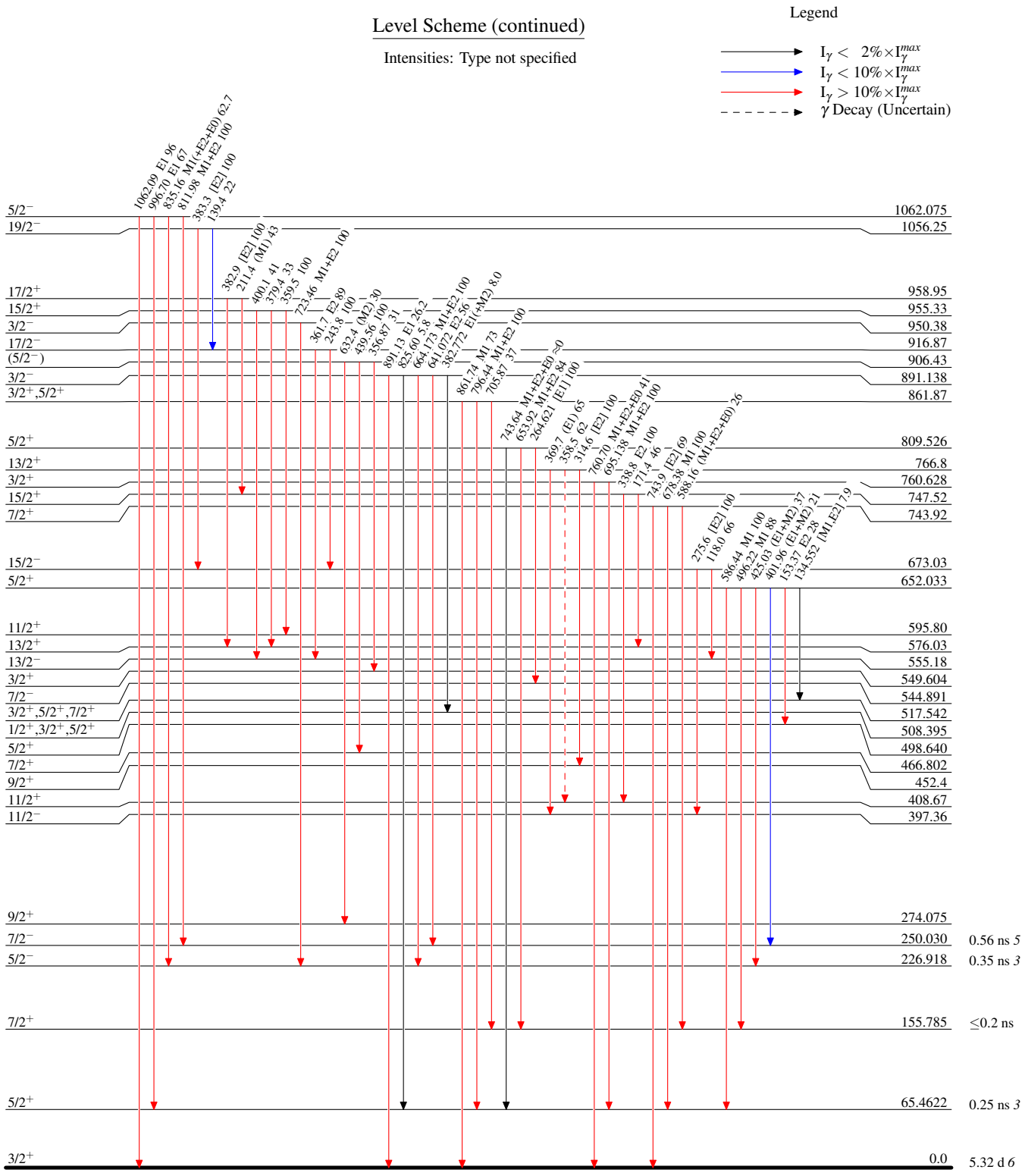
Intensities: Type not specified



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

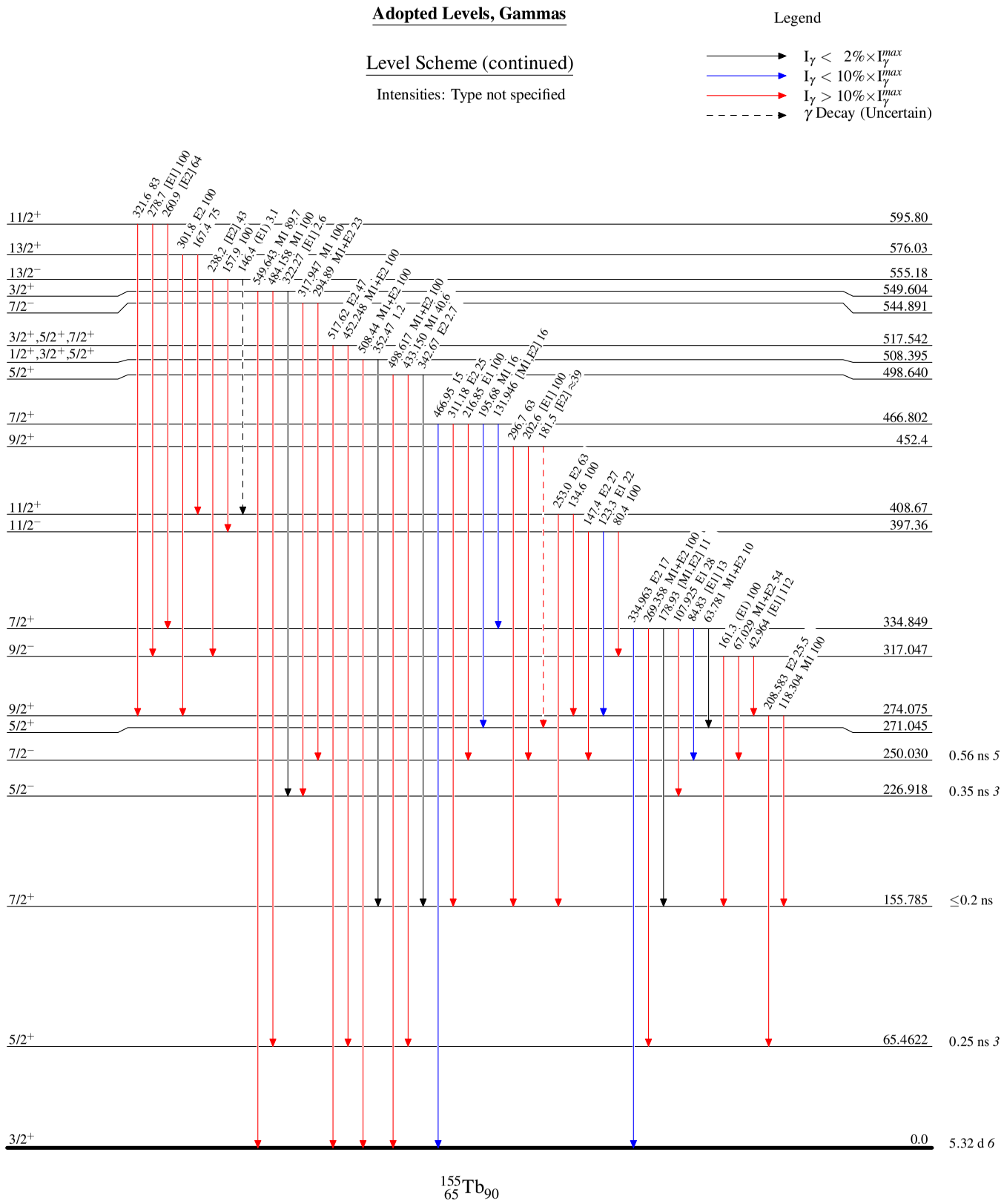


$^{155}_{65}Tb_{90}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

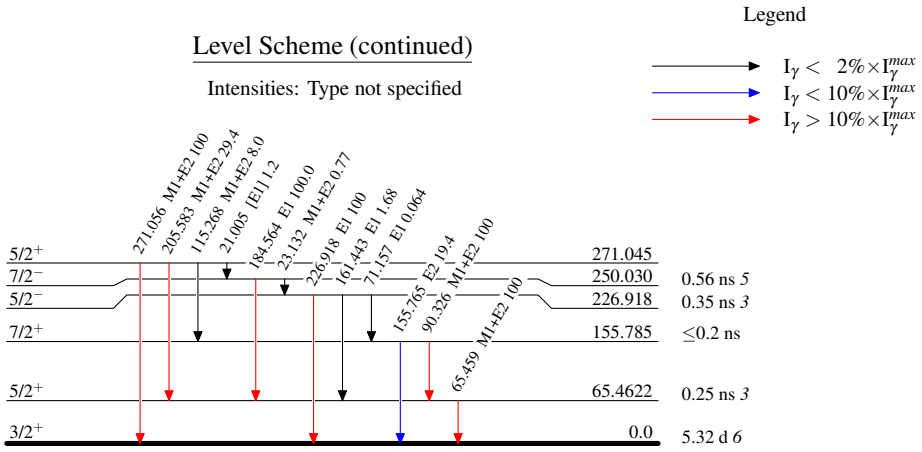


$^{155}_{65}Tb_{90}$

Adopted Levels, Gammas

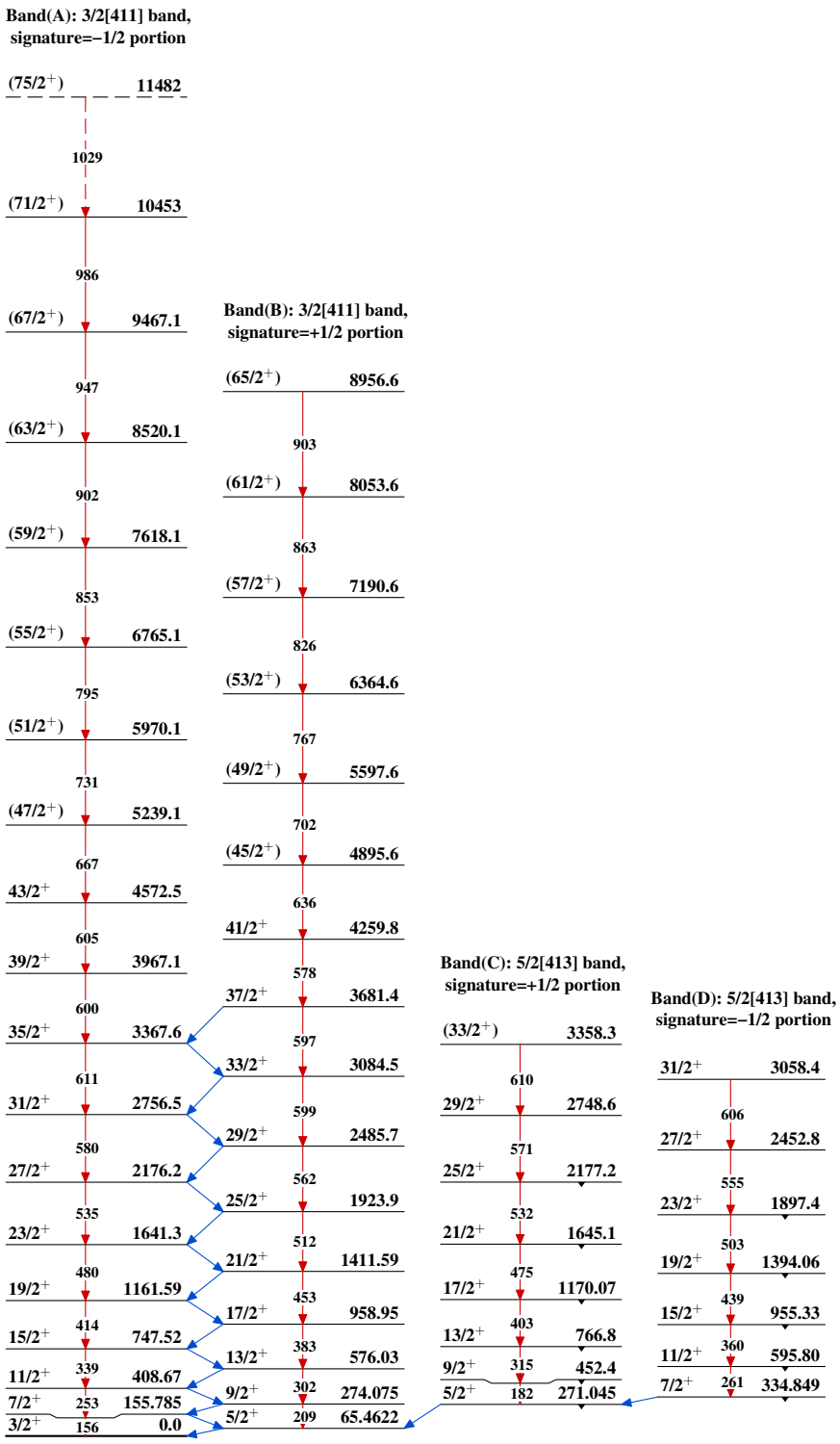
Level Scheme (continued)

Intensities: Type not specified



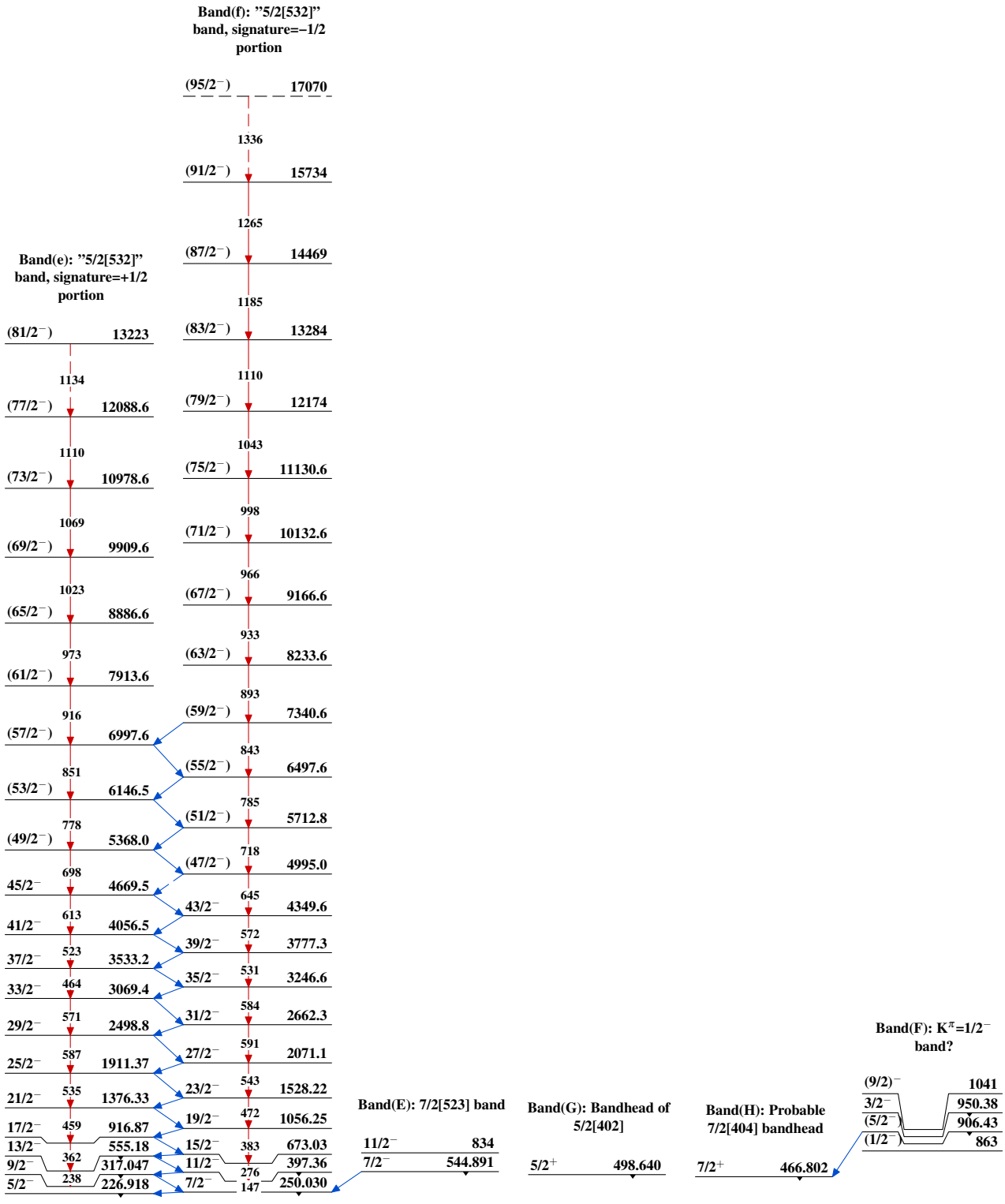
$^{155}_{65}Tb_{90}$

Adopted Levels, Gammas



$^{155}_{65}Tb_{90}$

Adopted Levels, Gammas (continued)



$^{155}_{65}Tb_{90}$

Adopted Levels, Gammas (continued)