^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. M. Baglin[1], E. A. Mccutchan[2], S. Basunia[1]	NDS 153, 1 (2018)	1-Oct-2018

Additional information 1.

2010Ag06: E=228 MeV; Gammasphere detector array (100 Compton-suppressed Ge detectors) at the ATLAS facility at Argonne National Laboratory; measured Eγ, Iγ, $\gamma\gamma$, $\gamma(\theta)$.

1985Ba48: E=230 MeV; Compton suppressed Ge(Li) detectors; measured Eγ, $\gamma\gamma$-coin and $\gamma(\theta)$; rotational band, cranked shell-model and semiclassical vector-coupling scheme analysis.

1985Ba48 reported an additional ΔJ=2 band, with tentative configuration=((π 1/2[541])+(ν $i_{13/2}$)), α=1, but it is not adopted here. Instead, its transitions have been reassigned to ^{170}Hf, based on γ excit and (K x ray)-(100γ+221γ) coin data from a subsequent ^{159}Tb(^{16}O,ypxnγ) study by 1998Zh08. The (E2) γ cascade reported by 1985Ba48 (viz., 707γ-655γ-615γ-583.3γ-549.7γ-509.5γ-461.8γ-399.5γ-320.5γ-221γ) closely resembles that known for the ^{170}Hf g.s. band.

^{170}Ta Levels

Nomenclature for quasiparticle orbitals:
A_p: π5/2[402],α=+1/2 from $d_{5/2}$ orbital.
B_p: π5/2[402],α=−1/2 from $d_{5/2}$ orbital.
C_p: π7/2[404],α=+1/2 from $g_{7/2}$ orbital.
D_p: π7/2[404],α=−1/2 from $g_{7/2}$ orbital.
E_p: π9/2[514],α=+1/2 from $h_{11/2}$ orbital.
F_p: π9/2[514],α=−1/2 from $h_{11/2}$ orbital.
G_p: π1/2[541],α=+1/2 from $h_{9/2}$ orbital.
H_p: π1/2[541],α=−1/2 from $h_{9/2}$ orbital.
I_p: π1/2[411],α=+1/2 from $d_{3/2}$ orbital.
J_p: π1/2[411],α=−1/2 from $d_{3/2}$ orbital.
A: ν5/2[642],α=+1/2 from $i_{13/2}$ orbital.
B: ν5/2[642],α=−1/2 from $i_{13/2}$ orbital.
C: α=+1/2 from $i_{13/2}$ orbital.
D: α=−1/2 from $i_{13/2}$ orbital.
E: ν5/2[523],α=+1/2 from $h_{9/2}$ orbital.
F: ν5/2[523],α=−1/2 from $h_{9/2}$ orbital.
Band assignments are based on alignments, band crossings, B(M1)/B(E2) ratios and additivity of Routhians.

E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡
0.0+x[g]	7+	268.3+x[@] 5	9−	473.17+x[n] 23	9+
32.6+x[n] 4	5+	291.31+x[i] 17	9+	496.6+x[@] 5	11−
46.1+x[&] 6	6−	312.04+x[o] 13	8+	536.37+x[g] 16	11+
56.7+x[@] 6	7−	322.4+x[a] 6	9−	584.62+x[o] 15	10+
89.23+x[f] 12	8+	323.95+x 14		595.6+x[a] 5	11−
110.8+x[m] 4	6+	328.2+x[m] 3	8+	614.51+x[i] 16	11+
131.8+x[a] 6	7−	339.66+x 19		626.21+x[m] 20	10+
145.6+x[#] 6	8−	362.59+x[f] 14	10+	626.59+x 24	
170.86+x[p] 16	7+	365.7+x[#] 5	10−	637.55+x 20	
180.84+x[h] 21	8+	394.0+x[&] 5	10−	663.5+x[#] 5	12−
182.6+x[&] 6	8−	395.02+x[p] 14	9+	698.7+x[&] 5	12−
206.7+x[b] 6	6(−)	434.8+x[b] 6	8(−)	719.2+x[b] 6	10(−)
210.83+x[g] 13	9+	436.67+x[h] 17	10+	723.74+x[p] 16	11+
211.2+x[n] 3	7+	462.59+x 20		739.48+x[f] 16	12+

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^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)

^{170}Ta Levels (continued)

E(level)†	Jπ‡	Comments
810.06+x[n] *18*	11+	
816.99+x *21*		
818.76+x[h] *17*	12+	
855.0+x[@] *5*	13−	
954.88+x[g] *18*	13+	
954.9+x[a] *5*	13−	
962.56+x[o] *18*	12+	
1010.67+x[m] *25*	12+	a 174.9γ from this level with Iγ=2.4 listed in table I of 2010Ag06 is non-existent according to e-mail reply of Aug 10, 2010 from one of the authors (D. Hartley) to B. Singh.
1047.50+x[i] *18*	13+	
1068.5+x[b] *6*	12(−)	
1078.5+x[#] *5*	14−	
1102.0+x[&] *5*	14−	
1145.43+x[p] *18*	13+	
1201.66+x[f] *20*	14+	
1223.36+x[n] *21*	13+	
1286.5+x *6*		
1297.07+x[h] *19*	14+	
1320.6+x[@] *5*	15−	
1395.3+x[a] *5*	15−	
1430.30+x[o] *24*	14+	
1450.41+x[g] *22*	15+	
1461.9+x[m] *3*	14+	
1491.0+x[b] *6*	14(−)	
1562.97+x[i] *21*	15+	
1587.6+x[#] *5*	16−	
1598.1+x[&] *5*	16−	
1645.03+x[p] *22*	15+	
1696.04+x[n] *23*	15+	
1728.6+x[e] *4*	13−	
1732.17+x[f] *23*	16+	
1846.62+x[h] *22*	16+	
1872.8+x[@] *5*	17−	
1904.6+x[d] *5*	14−	
1909.8+x[a] *5*	17−	
1956.8+x[o] *3*	16+	
1981.4+x[m] *3*	16+	
1987.3+x[b] *6*	16(−)	
2005.65+x[g] *24*	17+	
2137.30+x[i] *23*	17+	
2144.5+x[e] *5*	15−	
2170.4+x[#] *5*	18−	
2175.1+x[&] *5*	18−	
2203.01+x[p] *23*	17+	
2220.04+x[n] *23*	17+	
2312.56+x[f] *25*	18+	
2426.1+x[d] *5*	16−	
2444.34+x[h] *24*	18+	

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^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)

^{170}Ta Levels (continued)

E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡
2482.4+x[a] 5	19−	4231.0+x[f] 3	24+	6105.5+x[a] 6	29−	8623.2+x[j] 12	(34+)
2494.8+x[@] 5	19−	4280.8+x[&] 6	24−	6142.9+x[g] 4	29+	8753.2+x[&] 10	34−
2517.0+x[o] 3	18+	4324.6+x[h] 3	24+	6233.1+x[i] 4	29+	8807.6+x[l] 12	(34+)
2551.0+x[b] 6	18(−)	4434.7+x[j] 4	(24+)	6320.4+x[n] 5	29+	8844.4+x[o] 10	34+
2566.3+x[m] 4	18+	4469.7+x[m] 4	24+	6405.6+x[p] 10	29+	8901.7+x[a] 9	35−
2600.85+x[g] 25	19+	4475.9+x[d] 7	22−	6417.5+x[r] 7		8904.2+x[g] 5	35+
2737.1+x[e] 5	17−	4493.6+x[o] 4	24+	6430.6+x[k] 8	(29+)	8976.2+x[@] 9	35−
2747.94+x[i] 23	19+	4495.3+x[@] 6	25−	6467.9+x[#] 6	30−	8996.3+x[i] 8	35+
2782.82+x[n] 24	19+	4510.5+x[b] 7	24(−)	6595.5+x[f] 4	30+	9070.8+x[p] 13	35+
2801.8+x[#] 5	20−	4520.9+x[a] 6	25−	6681.1+x[h] 6	30+	9097.2+x[n] 10	35+
2810.2+x[p] 3	19+	4525.9+x[c] 7	(24−)	6767.3+x[c] 10	(30−)	9258.5+x[r] 11	
2821.7+x[&] 6	20−	4559.7+x[g] 3	25+	6814.0+x[j] 10	(30+)	9370.9+x[#] 11	36−
2924.6+x[f] 3	20+	4564.0+x[q] 7		6814.9+x[&] 7	30−	9459.4+x[f] 5	36+
3068.94+x[h] 24	20+	4578.9+x[t] 5		6863.7+x[s] 9		9513.1+x[c] 13	(36−)
3069.6+x[d] 6	18−	4673.9+x[i] 3	25+	6906.6+x[b] 11	30(−)	9587.7+x[h] 11	36+
3119.5+x[a] 5	21−	4777.5+x[n] 4	25+	6920.0+x[m] 10	30+	9810.9+x[&] 11	36−
3122.9+x[o] 4	20+	4794.2+x[k] 4	(25+)	6921.1+x[l] 10	(30+)	9864.8+x[o] 12	36+
3142.4+x[@] 5	21−	4835.1+x[p] 7	25+	6949.5+x[o] 7	30+	9906.9+x[g] 5	37+
3144.2+x[t] 4		4843.0+x[#] 6	26−	6960.4+x[@] 6	31−	9949.6+x[a] 10	37−
3153.6+x?[j] 5	(20+)	4958.1+x[f] 4	26+	6982.1+x[a] 6	31−	10084.3+x[@] 10	37−
3168.8+x[b] 6	20(−)	5040.2+x[h] 3	26+	7030.1+x[g] 4	31+	10164.1+x[n] 11	37+
3181.1+x[m] 4	20+	5081.5+x[&] 6	26−	7089.8+x[i] 4	31+	10430.5+x[#] 12	38−
3219.4+x[g] 3	21+	5188.8+x[j] 7	(26+)	7158.0+x[n] 7	31+	10500.9+x[f] 7	38+
3376.86+x[i] 24	21+	5207.4+x[m] 7	26+	7258.5+x[p] 11	31+	10549.8+x[c] 14	(38−)
3394.99+x[n] 25	21+	5229.1+x[c] 7	(26−)	7311.3+x[r] 8		10882.6+x[&] 12	38−
3416.5+x[e] 6	19−	5243.1+x[@] 6	27−	7331.9+x[k] 10	(31+)	10920.3+x[o] 13	38+
3420.0+x[k] 3	(21+)	5256.9+x[o] 5	26+	7380.4+x[#] 8	32−	10971.3+x[g] 7	39+
3449.5+x[p] 4	21+	5267.1+x[b] 9	26(−)	7499.6+x[f] 4	32+	11047.1+x[a] 11	39−
3457.4+x[#] 6	22−	5287.5+x[a] 6	27−	7602.1+x[h] 8	32+	11235.1+x[@] 11	39−
3526.0+x[&] 6	22−	5314.1+x[q] 9		7622.2+x[c] 11	(32−)	11277.5+x[n] 12	39+
3559.8+x[f] 3	22+	5318.2+x[g] 4	27+	7687.9+x[j] 11	(32+)	11519.7+x[#] 13	40−
3682.83+x[h] 25	22+	5389.4+x[t] 7		7756.3+x[&] 9	32−	11584.3+x[f] 9	40+
3742.9+x[j] 4	(22+)	5422.0+x[i] 3	27+	7757.2+x[s] 10		11648.5+x[c] 15	(40−)
3763.4+x[d] 6	20−	5542.2+x[n] 4	27+	7796.1+x[b] 12	32(−)	12092.2+x[g] 9	41+
3779.1+x[o] 4	22+	5578.2+x[k] 6	(27+)	7858.4+x[l] 11	(32+)	12193.6+x[a] 12	41−
3799.0+x[a] 6	23−	5599.5+x[p] 8	27+	7870.6+x[o] 9	32+	12446.9+x[n] 13	41+
3803.8+x[m] 4	22+	5620.9+x[#] 6	28−	7908.2+x[a] 7	33−	12639.7+x[#] 14	42−
3805.9+x[@] 6	23−	5747.3+x[f] 4	28+	7938.5+x[@] 7	33−	12712.9+x[f] 10	42+
3824.4+x[b] 7	22(−)	5826.2+x[h] 4	28+	7959.3+x[g] 4	33+	13260.9+x[g] 10	43+
3834.2+x[t] 4		5924.6+x[&] 7	28−	7994.7+x[i] 7	33+	13361.3+x?[a] 13	(43−)
3865.0+x[g] 3	23+	5973.0+x[c] 9	(28−)	8091.5+x[n] 9	33+	13793.1+x[#] 15	44−
3879.3+x[q] 4		5984.3+x[j] 8	(28+)	8150.4+x[p] 12	33+	13889.2+x[f] 12	44+
3996.62+x[i] 25	23+	6026.4+x[m] 8	28+	8260.7+x[r] 10		14458.2+x[g] 11	45+
4056.0+x[n] 3	23+	6027.3+x[l] 8	(28+)	8280.2+x[k] 11	(33+)	14977.2+x[#] 16	46−
4072.5+x[k] 3	(23+)	6052.4+x[s] 7		8351.5+x[#] 10	34−	15106.1+x?[f] 13	(46+)
4110.3+x[e] 6	21−	6064.9+x[@] 6	29−	8456.7+x[f] 5	34+	15688.9+x[g] 13	47+
4118.9+x[p] 4	23+	6068.3+x[b] 10	28(−)	8537.5+x[c] 13	(34−)	16196.2+x?[#] 17	(48−)
4129.4+x[#] 6	24−	6080.7+x[o] 5	28+	8583.6+x[h] 10	34+	16955.9+x?[g] 14	(49+)

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^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)

^{170}Ta Levels (continued)

† From least-squares fit to Eγ.
‡ Values proposed by 2010Ag06.
# Band(A): $K^\pi=7^-$ F_pA, $\alpha=0$ band. Spherical orbitals=$\pi h_{11/2}\otimes\nu i_{13/2}$. First band crossing at $\hbar\omega \approx 0.31$ MeV due to BC. At higher frequencies near $\hbar\omega \approx 0.52$ MeV; various scenarios are discussed by 2010AG06. Lower portion of band also reported by 1985Ba48, but several transitions shown As intraband transitions there have been placed differently by 2010Ag06.
@ Band(a): $K^\pi=7^-$ E_pA, $\alpha=1$ band. Spherical orbitals=$\pi h_{11/2}\otimes\nu i_{13/2}$. Band crossing at $\hbar\omega \approx 0.31$ MeV due to BC. Lower portion of band also reported by 1985Ba48 (but see comment on signature partner band).
& Band(B): $K^\pi=2^-$ G_pB, $\alpha=0$ band. Spherical orbitals=$\pi h_{9/2}\otimes\nu i_{13/2}$. Band crossing at $\hbar\omega\approx0.40$ MeV due to AD. Lower portion of band also reported by 1985Ba48.
a Band(b): $K^\pi=2^-$ G_pA, $\alpha=1$ band. Spherical orbitals=$\pi h_{9/2}\otimes\nu i_{13/2}$. Band crossing at $\hbar\omega\approx0.34$ MeV due to BC.
b Band(C): $K^\pi=3^-$ H_pA, $\alpha=0$ band. Spherical orbitals=$\pi h_{9/2}\otimes\nu i_{13/2}$. Delayed band crossing at $\hbar\omega\approx0.34$ MeV due to BC.
c Band(D): Band based on (24^-). No configuration proposed.
d Band(E): $K^\pi=13$- 4-quasiparticle band, $\alpha=0$. Configuration=π([5/2[402],7/2[404],9/2[514])$\otimes\nu$5/2[642]. Spherical orbitals=$\pi(h_{11/2},d_{5/2},g_{7/2})\otimes\nu i_{13/2}$. Band crossing at $\hbar\omega\approx0.3$ MeV due to BC.
e Band(e): $K^\pi=13$- 4-quasiparticle band, $\alpha=1$. Configuration=π([5/2[402],7/2[404],9/2[514])$\otimes\nu$5/2[642]. Spherical orbitals=$\pi(h_{11/2},d_{5/2},g_{7/2})\otimes\nu i_{13/2}$. Band crossing at $\hbar\omega\approx0.3$ MeV due to BC.
f Band(F): $K^\pi=5^+$ B_pA, $\alpha=0$ band. Spherical orbitals=$\pi d_{5/2}\otimes\nu i_{13/2}$. Band crossing at $\hbar\omega\approx0.30$ MeV due to BC. Second band crossing at $\hbar\omega\approx0.50$ MeV due to E_pF_p.
g Band(f): $K^\pi=5^+$ A_pA, $\alpha=1$ band. Spherical orbitals=$\pi d_{5/2}\otimes\nu i_{13/2}$. Band crossing at $\hbar\omega\approx0.30$ MeV due to BC. Second band crossing at $\hbar\omega\approx0.46$ MeV due possibly to E_pF_p.
h Band(G): D_pA, $\alpha=0$, $K^\pi=6^+$ band. Spherical orbitals=$\pi g_{7/2}\otimes\nu i_{13/2}$. Strongly coupled. Band crossing at $\hbar\omega\approx0.31$ MeV due to BC. Second band crossing at $\hbar\omega\approx0.5$ MeV due possibly to E_pF_p.
i Band(g): $K^\pi=6^+$ C_pA, $\alpha=1$ band. Spherical orbitals=$\pi g_{7/2}\otimes\nu i_{13/2}$. Band crossing at $\hbar\omega\approx0.31$ MeV due to BC. Second band crossing at $\hbar\omega\approx0.42$ MeV; E_pF_p is not likely.
j Band(H): Tentative F_pEAB,$\alpha=0$ band.
k Band(h): Tentative E_pEAB,$\alpha=1$ band.
l Band(I): Band based on (28^+). Side band of band #8 in fig. 2 from 2010Ag06.
m Band(J): $K^\pi=3^+$ G_pF, $\alpha=0$ band. Spherical orbitals=$\pi h_{9/2}\otimes\nu h_{9/2}$. Band crossing at $\hbar\omega\approx0.3$ MeV due to AB.
n Band(j): $K^\pi=3^+$ G_pE, $\alpha=1$ band. Spherical orbitals=$\pi h_{9/2}\otimes\nu h_{9/2}$. Band crossing at $\hbar\omega\approx0.3$ MeV due to AB. Second band crossing at $\hbar\omega\approx0.4$ MeV.
o Band(K): $K^\pi=2^+$ J_pA, $\alpha=0$ band. Spherical orbitals=$\pi d_{3/2}\otimes\nu i_{13/2}$. Band crossing at $\hbar\omega\approx0.3$ MeV due to BC. Second band crossing at $\hbar\omega\approx0.4$ MeV.
p Band(k): $K^\pi=2^+$ I_pA, $\alpha=1$ band. Spherical orbitals=$\pi d_{3/2}\otimes\nu i_{13/2}$. Band crossing at $\hbar\omega\approx0.3$ MeV due to BC. Second band crossing at $\hbar\omega\approx0.4$ MeV.
q Band(L): Side band 1. Feeds $K^\pi=3^+$, G_pF, $\alpha=0$ band.
r Band(M): Side band 2. Feeds $K^\pi=3^+$, G_pE, $\alpha=1$ band.
s Band(N): Side band 3. Feeds $K^\pi=2^+$ J_pA, $\alpha=0$ band.
t Band(O): Side band 4. Feeds $K^\pi=2^+$ I_pA, $\alpha=1$ band.

$\gamma(^{170}Ta)$

E_γ †	I_γ ‡	E_i(level)	J_i^π	E_f	J_f^π	Mult. #	Comments
50.8 *2*		182.6+x	8^-	131.8+x	7^-		
71.5 *2*	2.40 *24*	394.0+x	10^-	322.4+x	9^-		
83.0 *2*	5.9 *3*	395.02+x	9^+	312.04+x	8^+		
85.7 *2*	2.4 *3*	131.8+x	7^-	46.1+x	6^-		
88.9 *2*	5.9 *3*	145.6+x	8^-	56.7+x	7^-		
89.3 *2*	5.9 *3*	89.23+x	8^+	0.0+x	7^+	D	R_{ang}=0.69 *10*.
97.4 *2*	5.9 *3*	365.7+x	10^-	268.3+x	9^-	D	R_{ang}=0.52 *6*.
103.0 *2*	4.7 *5*	698.7+x	12^-	595.6+x	11^-		

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^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)

$\gamma(^{170}Ta)$ (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	Comments
110.4 *2*	2.9 *3*	291.31+x	9^+	180.84+x	8^+		
121.5 *2*	3.4 *3*	210.83+x	9^+	89.23+x	8^+	D	R_{ang}=0.61 *3*.
122.7 *2*	5.9 *3*	268.3+x	9^-	145.6+x	8^-		
123.0 *2*	1.20 *12*	462.59+x		339.66+x			
130.9 *2*	3.8 *4*	496.6+x	11^-	365.7+x	10^-	D	Mult.: R_{ang}=0.68 *3*. ΔJ=1 based on $\gamma(\theta)$ (1985Ba48).
133.4 *5*	0.60 *6*	473.17+x	9^+	339.66+x			
136.5 *2*	5.9 *3*	182.6+x	8^-	46.1+x	6^-		R_{ang}=0.63 *11*; very low for the Q transition implied by the level scheme.
139.1 *2*	1.80 *18*	723.74+x	11^+	584.62+x	10^+		
139.8 *2*	5.9 *3*	322.4+x	9^-	182.6+x	8^-	D	R_{ang}=0.54 *2*.
145.4 *2*	11.8 *6*	436.67+x	10^+	291.31+x	9^+		R_{ang}=0.94 *9*.
147.1 *2*	4.7 *5*	1102.0+x	14^-	954.9+x	13^-		
152.0 *2*	13.9 *7*	362.59+x	10^+	210.83+x	9^+	D+Q	R_{ang}=0.70 *2*.
156.3 *2*	1.50 *15*	855.0+x	13^-	698.7+x	12^-		
164.1 *2*	5.9 *3*	626.59+x		462.59+x			
167.0 *2*	18.8 *9*	663.5+x	12^-	496.6+x	11^-	D	R_{ang}=0.65 *2*.
170.8 *2*	5.9 *3*	170.86+x	7^+	0.0+x	7^+		R_{ang}=0.80 *10*.
172.6 *2*	2.9 *3*	810.06+x	11^+	637.55+x			
173.8 *2*	14.7 *7*	536.37+x	11^+	362.59+x	10^+	D+Q	R_{ang}=0.69 *2*.
174.9 *2*	1.20 *12*	637.55+x		462.59+x			
176.0 *2*	5.9 *3*	1904.6+x	14^-	1728.6+x	13^-		
177.9 *2*	8.8 *4*	614.51+x	11^+	436.67+x	10^+	D+Q	R_{ang}=0.79 *6*.
178.6 *2*	5.9 *3*	211.2+x	7^+	32.6+x	5^+		
179.3 *2*	5.9 *3*	816.99+x		637.55+x			
182.8 *2*	1.8 *2*	1145.43+x	13^+	962.56+x	12^+		
183.8 *2*	2.9 *3*	810.06+x	11^+	626.21+x	10^+		
190.5 *2*	5.9 *3*	816.99+x		626.59+x			
190.6 *2*	11.8 *6*	322.4+x	9^-	131.8+x	7^-		R_{ang}=0.88 *5*.
191.4 *2*	40.6 *20*	855.0+x	13^-	663.5+x	12^-	D	R_{ang}=0.67 *2*.
201.7 *2*	29.4 *15*	595.6+x	11^-	394.0+x	10^-	D	R_{ang}=0.50 *2*.
202.1 *2*	1.8 *2*	291.31+x	9^+	89.23+x	8^+		
203.1 *2*	17.6 *9*	739.48+x	12^+	536.37+x	11^+	D+Q	R_{ang}=0.70 *2*.
204.3 *2*	11.8 *6*	818.76+x	12^+	614.51+x	11^+		R_{ang}=1.04 *7*; ΔJ=1 implied by level scheme.
210.9 *2*	8.8 *5*	210.83+x	9^+	0.0+x	7^+		
211.3 *2*	5.9 *3*	394.0+x	10^-	182.6+x	8^-	Q	R_{ang}=1.02 *8*.
211.6 *2*	5.9 *3*	268.3+x	9^-	56.7+x	7^-		R_{ang}=0.67 *2*; suggests D transition, but ΔJ=2 from level scheme.
215.4 *2*	23.5 *12*	954.88+x	13^+	739.48+x	12^+	D	R_{ang}=0.64 *3*.
217.4 *2*	8.8 *4*	328.2+x	8^+	110.8+x	6^+		
218.6 *2*	1.20 *12*	1320.6+x	15^-	1102.0+x	14^-		
222.9 *2*	2.4 *3*	312.04+x	8^+	89.23+x	8^+	D(+Q)	R_{ang}=0.75 *7*.
222.9 *2*	3.5 *4*	962.56+x	12^+	739.48+x	12^+		
223.6 *2*	32.4 *16*	1078.5+x	14^-	855.0+x	13^-	D(+Q)	R_{ang}=0.71 *2*.
224.1 *2*	17.6 *9*	395.02+x	9^+	170.86+x	7^+		R_{ang}=0.78 *3*; low for Q transition implied by placement.
225.7 *2*	5.9 *3*	436.67+x	10^+	210.83+x	9^+	D+Q	R_{ang}=0.64 *7*.
228.1 *2*	11.8 *6*	434.8+x	$8^{(-)}$	206.7+x	$6^{(-)}$		
228.4 *2*	5.9 *3*	496.6+x	11^-	268.3+x	9^-		
228.7 *2*	7.6 *4*	1047.50+x	13^+	818.76+x	12^+		
234.8 *2*	5.9 *3*	323.95+x		89.23+x	8^+		
239.9 *2*	14.7 *7*	2144.5+x	15^-	1904.6+x	14^-		
240.1 *5*	0.30 *3*	4520.9+x	25^-	4280.8+x	24^-		
242.3 *2*	35.3 *18*	1320.6+x	15^-	1078.5+x	14^-	D	R_{ang}=0.68 *3*.
246.8 *2*	20.6 *10*	1201.66+x	14^+	954.88+x	13^+	D	R_{ang}=0.66 *2*.
247.0 *2*	3.1 *3*	1102.0+x	14^-	855.0+x	13^-		
248.7 *2*	18.8 *9*	1450.41+x	15^+	1201.66+x	14^+		R_{ang}=0.82 *16*.
249.6 *2*	8.8 *4*	1297.07+x	14^+	1047.50+x	13^+		

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^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)

$\gamma(^{170}Ta)$ (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	Comments
250.5 *2*	5.9 *3*	339.66+x		89.23+x	8^+		
252.0 *2*	4.7 *5*	614.51+x	11^+	362.59+x	10^+		
255.9 *2*	35.3 *18*	436.67+x	10^+	180.84+x	8^+		R_{ang}=0.72 *6*; low for Q transition implied by placement.
256.2 *2*	24.7 *12*	954.9+x	13^-	698.7+x	12^-	D	R_{ang}=0.45 *2*.
260.7 *2*	5.9 *3*	584.62+x	10^+	323.95+x		D+Q	R_{ang}=0.72 *4*.
262.0 *2*	5.9 *3*	473.17+x	9^+	211.2+x	7^+		R_{ang}=0.76 *6*; low for Q transition implied by placement.
263.6 *2*	5.9 *3*	626.21+x	10^+	362.59+x	10^+		
265.9 *2*	5.9 *3*	1562.97+x	15^+	1297.07+x	14^+		
266.9 *2*	26.5 *13*	1587.6+x	16^-	1320.6+x	15^-	D	R_{ang}=0.68 *3*.
272.6 *2*	23.5 *12*	584.62+x	10^+	312.04+x	8^+	(Q)	R_{ang}=0.84 *2*.
273.0 *2*	1.40 *14*	3799.0+x	23^-	3526.0+x	22^-		
273.2 *2*	24.1 *12*	595.6+x	11^-	322.4+x	9^-		R_{ang}=0.84 *2*; low for Q transition implied by placement.
273.3 *2*	11.8 *6*	362.59+x	10^+	89.23+x	8^+	Q	R_{ang}=0.90 *4*.
273.4 *2*	17.6 *9*	2005.65+x	17^+	1732.17+x	16^+	D+Q	R_{ang}=0.76 *3*.
273.7 *2*	1.20 *12*	810.06+x	11^+	536.37+x	11^+		
274.7 *2*	1.40 *14*	1872.8+x	17^-	1598.1+x	16^-		
277.5 *2*	2.9 *3*	1598.1+x	16^-	1320.6+x	15^-		
281.6 *2*	10.6 *5*	2426.1+x	16^-	2144.5+x	15^-		
281.7 *2*	17.6 *9*	1732.17+x	16^+	1450.41+x	15^+	D+Q	R_{ang}=0.74 *5*.
282.3 *2*	5.3 *3*	818.76+x	12^+	536.37+x	11^+	D	R_{ang}=0.67 *6*.
283.8 *2*	2.40 *24*	1846.62+x	16^+	1562.97+x	15^+		
284.4 *2*	11.8 *6*	719.2+x	$10^{(-)}$	434.8+x	$8^{(-)}$	Q	R_{ang}=0.93 *4*.
285.1 *2*	17.6 *9*	1872.8+x	17^-	1587.6+x	16^-	D	R_{ang}=0.66 *5*.
288.2 *2*	11.8 *6*	2600.85+x	19^+	2312.56+x	18^+	D+Q	R_{ang}=0.72 *4*.
290.7 *2*	2.40 *24*	2137.30+x	17^+	1846.62+x	16^+		
293.3 *2*	17.6 *9*	1395.3+x	15^-	1102.0+x	14^-		
294.8 *2*	8.2 *4*	3219.4+x	21^+	2924.6+x	20^+	D+Q	R_{ang}=0.72 *3*.
297.6 *2*	14.7 *7*	2170.4+x	18^-	1872.8+x	17^-	D	Mult.: ΔJ=1 based on $\gamma(\theta)$ (1985Ba48).
297.7 *2*	5.9 *3*	663.5+x	12^-	365.7+x	10^-	Q	Mult.: ΔJ=2 based on $\gamma(\theta)$ (1985Ba48).
297.8 *2*	2.40 *24*	3119.5+x	21^-	2821.7+x	20^-		
297.9 *2*	2.9 *3*	637.55+x		339.66+x			
298.0 *2*	14.1 *7*	626.21+x	10^+	328.2+x	8^+		R_{ang}=0.80 *3*; low for Q transition implied by placement.
303.0 *2*	1.80 *18*	434.8+x	$8^{(-)}$	131.8+x	7^-		
303.6 *2*	1.10 *11*	2747.94+x	19^+	2444.34+x	18^+		
304.7 *2*	100.0 *10*	698.7+x	12^-	394.0+x	10^-	Q	Mult.: R_{ang}=0.86 *2*. ΔJ=2 based on $\gamma(\theta)$ (1985Ba48).
305.0 *2*	4.1 *4*	3865.0+x	23^+	3559.8+x	22^+	D	R_{ang}=0.60 *5*.
305.8 *2*	8.8 *4*	395.02+x	9^+	89.23+x	8^+	D+Q	R_{ang}=0.76 *6*.
306.0 *2*	2.10 *21*	3682.83+x	22^+	3376.86+x	21^+		
306.8 *2*	11.5 *6*	2312.56+x	18^+	2005.65+x	17^+	D	R_{ang}=0.66 *3*.
307.0 *2*	5.9 *3*	2801.8+x	20^-	2494.8+x	19^-		
307.2 *5*	0.3 *1*	2444.34+x	18^+	2137.30+x	17^+		
307.3 *2*	5.9 *3*	2482.4+x	19^-	2175.1+x	18^-		
307.9 *2*	1.20 *12*	3376.86+x	21^+	3068.94+x	20^+		
308.2 *2*	1.50 *15*	1047.50+x	13^+	739.48+x	12^+		
311.0 *2*	8.8 *4*	2737.1+x	17^-	2426.1+x	16^-		
311.7 *2*	13.5 *7*	1909.8+x	17^-	1598.1+x	16^-		
312.0 *2*	1.8 *2*	312.04+x	8^+	0.0+x	7^+	D	R_{ang}=0.58 *5*.
312.1 *2*	5.9 *3*	2482.4+x	19^-	2170.4+x	18^-		
313.9 *2*	1.20 *12*	3996.62+x	23^+	3682.83+x	22^+		
315.0 *2*	6.9 *3*	3457.4+x	22^-	3142.4+x	21^-	D	R_{ang}=0.60 *4*.
316.9 *5*	0.2 *1*	1395.3+x	15^-	1078.5+x	14^-		
317.8 *5*	0.2 *1*	3119.5+x	21^-	2801.8+x	20^-		
319.3 *2*	5.9 *3*	2801.8+x	20^-	2482.4+x	19^-	D	R_{ang}=0.58 *3*.
321.0 *2*	1.20 *12*	3068.94+x	20^+	2747.94+x	19^+		
322.3 *2*	3.1 *3*	1909.8+x	17^-	1587.6+x	16^-		

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^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)

γ(^{170}Ta) (continued)

E_γ †	I_γ ‡	E_i(level)	J_i^π	E_f	J_f^π	Mult.#	Comments
323.1 *2*	29.4 *15*	614.51+x	11^+	291.31+x	9^+	Q	R_{ang}=1.03 *6*.
323.6 *2*	4.7 *5*	2924.6+x	20^+	2600.85+x	19^+		
323.6 *2*	3.8 *4*	4129.4+x	24^-	3805.9+x	23^-	D+Q	R_{ang}=0.73 *6*.
323.9 *2*	5.9 *3*	323.95+x		0.0+x	7^+		
324.2 *2*	5.9 *3*	2494.8+x	19^-	2170.4+x	18^-		E_γ: possibly the ΔJ=1 324.0γ or 323γ reported by 1985Ba48.
325.4 *2*	14.7 *7*	536.37+x	11^+	210.83+x	9^+		
328.0 *2*	1.20 *12*	4324.6+x	24^+	3996.62+x	23^+		
328.7 *2*	20.6 *10*	723.74+x	11^+	395.02+x	9^+		R_{ang}=0.86 *3*; low for Q transition implied by placement.
328.7 *2*	3.5 *4*	4559.7+x	25^+	4231.0+x	24^+		
332.5 *2*	7.1 *4*	3069.6+x	18^-	2737.1+x	17^-		
337.0 *2*	8.8 *4*	810.06+x	11^+	473.17+x	9^+		R_{ang}=0.81 *4*; low for Q transition implied by placement.
340.4 *2*	6.5 *3*	3559.8+x	22^+	3219.4+x	21^+	D	R_{ang}=0.61 *3*.
340.5 *2*	7.9 *4*	3142.4+x	21^-	2801.8+x	20^-	D	R_{ang}=0.64 *2*.
342.2 *2*	5.3 *3*	1297.07+x	14^+	954.88+x	13^+		
343.7 *2*	5.9 *3*	816.99+x		473.17+x	9^+		
346.9 *2*	3.5 *4*	3416.5+x	19^-	3069.6+x	18^-		
346.9 *2*	2.40 *24*	3763.4+x	20^-	3416.5+x	19^-		
346.9 *2*	1.80 *18*	4110.3+x	21^-	3763.4+x	20^-		
347.3 *2*	11.8 *6*	810.06+x	11^+	462.59+x			R_{ang}=0.83 *4*.
347.7 *2*	3.0 *3*	4843.0+x	26^-	4495.3+x	25^-		
348.5 *2*	5.9 *3*	3805.9+x	23^-	3457.4+x	22^-	D	R_{ang}=0.63 *3*.
349.2 *2*	8.8 *4*	1068.5+x	$12^{(-)}$	719.2+x	$10^{(-)}$	(Q)	R_{ang}=0.88 *6*.
349.3 *2*	1.20 *12*	4673.9+x	25^+	4324.6+x	24^+		
354.6 *2*	5.9 *3*	816.99+x		462.59+x			
358.3 *2*	20.6 *10*	855.0+x	13^-	496.6+x	11^-	Q	R_{ang}=0.96 *6*.
359.2 *2*	32.9 *16*	954.9+x	13^-	595.6+x	11^-	Q	R_{ang}=0.92 *3*.
360.0 *2*	2.40 *24*	5318.2+x	27^+	4958.1+x	26^+		
361.2 *2*	2.9 *3*	723.74+x	11^+	362.59+x	10^+		
365.6 *2*	1.80 *18*	4475.9+x	22^-	4110.3+x	21^-		
366.1 *2*	5.0 *5*	4231.0+x	24^+	3865.0+x	23^+	D	R_{ang}=0.68 *4*.
366.1 *2*	5.9 *3*	4495.3+x	25^-	4129.4+x	24^-	D	R_{ang}=0.59 *4*.
366.2 *2*	1.20 *12*	5040.2+x	26^+	4673.9+x	25^+		
376.9 *2*	17.6 *9*	739.48+x	12^+	362.59+x	10^+	Q	R_{ang}=0.97 *3*.
377.7 *2*	1.80 *18*	5620.9+x	28^-	5243.1+x	27^-		
378.0 *2*	20.6 *10*	962.56+x	12^+	584.62+x	10^+	Q	R_{ang}=0.96 *3*.
381.8 *2*	1.20 *12*	5422.0+x	27^+	5040.2+x	26^+		
382.0 *2*	30.0 *15*	818.76+x	12^+	436.67+x	10^+		R_{ang}=0.87 *3*.
384.5 *2*	12.9 *6*	1010.67+x	12^+	626.21+x	10^+		R_{ang}=0.89 *3*.
395.4 *5*	0.90 *9*	6142.9+x	29^+	5747.3+x	28^+		
396.8 *2*	4.1 *4*	719.2+x	$10^{(-)}$	322.4+x	9^-	D	R_{ang}=0.51 *4*.
398.4 *2*	2.9 *3*	4958.1+x	26^+	4559.7+x	25^+		
400.0 *2*	2.10 *21*	5243.1+x	27^-	4843.0+x	26^-		
403.3 *2*	79 *4*	1102.0+x	14^-	698.7+x	12^-	Q	R_{ang}=0.94 *4*.
403.7 *2*	5.9 *3*	614.51+x	11^+	210.83+x	9^+	Q	R_{ang}=1.04 *10*.
404.3 *5*	0.60 *6*	5826.2+x	28^+	5422.0+x	27^+		
406.0 *2*	1.8 *2*	1145.43+x	13^+	739.48+x	12^+		
406.4 *2*	5.9 *3*	1223.36+x	13^+	816.99+x			
413.3 *2*	21.2 *11*	1223.36+x	13^+	810.06+x	11^+	Q	R_{ang}=0.93 *4*.
415.0 *2*	17.6 *9*	1078.5+x	14^-	663.5+x	12^-	Q	R_{ang}=0.98 *4*.
415.9 *5*	0.60 *6*	2144.5+x	15^-	1728.6+x	13^-		
418.5 *2*	38.2 *19*	954.88+x	13^+	536.37+x	11^+	Q	R_{ang}=1.00 *4*.
421.7 *2*	17.6 *9*	1145.43+x	13^+	723.74+x	11^+	Q	R_{ang}=0.98 *3*.
422.6 *2*	11.8 *6*	1491.0+x	$14^{(-)}$	1068.5+x	$12^{(-)}$	Q	R_{ang}=0.98 *4*.
428.9 *2*	1.80 *18*	5747.3+x	28^+	5318.2+x	27^+		

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^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)

γ(^{170}Ta) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	Comments
433.0 *2*	26.5 *13*	1047.50+x	13^+	614.51+x	11^+	Q	R_{ang}=0.95 *4*.
434.6 *2*	1.0 *1*	7030.1+x	31^+	6595.5+x	30^+		
440.4 *2*	32.4 *16*	1395.3+x	15^-	954.9+x	13^-	Q	R_{ang}=0.93 *9*.
442.1 *5*	0.60 *6*	1728.6+x	13^-	1286.5+x			
444.0 *2*	1.80 *18*	6064.9+x	29^-	5620.9+x	28^-		
451.3 *2*	12.4 *6*	1461.9+x	14^+	1010.67+x	12^+	Q	R_{ang}=0.95 *2*.
452.8 *5*	0.90 *9*	6595.5+x	30^+	6142.9+x	29^+		
462.1 *2*	38.2 *19*	1201.66+x	14^+	739.48+x	12^+	Q	R_{ang}=0.97 *4*.
465.6 *2*	29.4 *15*	1320.6+x	15^-	855.0+x	13^-	Q	R_{ang}=0.92 *5*.
467.7 *2*	17.6 *9*	1430.30+x	14^+	962.56+x	12^+	Q	R_{ang}=0.96 *4*.
469.8 *5*	0.40 *4*	7499.6+x	32^+	7030.1+x	31^+		
472.7 *2*	17.6 *9*	1696.04+x	15^+	1223.36+x	13^+	Q	R_{ang}=0.92 *3*.
472.9 *2*	3.5 *4*	1068.5+x	$12^{(-)}$	595.6+x	11^-	D	R_{ang}=0.50 *4*.
478.2 *2*	29.4 *15*	1297.07+x	14^+	818.76+x	12^+	Q	R_{ang}=0.92 *4*.
494.8 *2*	5.9 *3*	1956.8+x	16^+	1461.9+x	14^+		R_{ang}=0.81 *7*.
495.5 *2*	35.3 *18*	1450.41+x	15^+	954.88+x	13^+	Q	R_{ang}=0.96 *2*.
496.1 *2*	58.8 *29*	1598.1+x	16^-	1102.0+x	14^-	Q	R_{ang}=1.00 *5*.
496.4 *2*	8.8 *4*	1987.3+x	$16^{(-)}$	1491.0+x	$14^{(-)}$	Q	R_{ang}=1.08 *5*.
499.6 *2*	14.7 *7*	1645.03+x	15^+	1145.43+x	13^+	Q	R_{ang}=0.99 *3*.
507.0 *2*	1.40 *14*	2203.01+x	17^+	1696.04+x	15^+		
509.1 *2*	26.5 *13*	1587.6+x	16^-	1078.5+x	14^-	Q	R_{ang}=0.88 *3*. ΔJ=2 from $\gamma(\theta)$ (1985Ba48).
514.5 *2*	29.4 *15*	1909.8+x	17^-	1395.3+x	15^-		R_{ang}=0.84 *2*.
515.6 *2*	23.5 *12*	1562.97+x	15^+	1047.50+x	13^+	Q	R_{ang}=1.11 *4*.
519.5 *2*	11.8 *6*	1981.4+x	16^+	1461.9+x	14^+	Q	$_{ang}$=1.08 *6*.
521.5 *5*	0.60 *6*	2426.1+x	16^-	1904.6+x	14^-		
524.0 *2*	13.5 *7*	2220.04+x	17^+	1696.04+x	15^+	Q	R_{ang}=1.12 *4*.
526.5 *2*	14.7 *7*	1956.8+x	16^+	1430.30+x	14^+	Q	R_{ang}=0.98 *3*.
529.3 *5*	0.60 *6*	3682.83+x	22^+	3153.6+x?	(20^+)		
530.5 *2*	35.3 *18*	1732.17+x	16^+	1201.66+x	14^+	Q	R_{ang}=1.04 *3*.
535.6 *2*	1.50 *15*	2517.0+x	18^+	1981.4+x	16^+		
536.0 *2*	2.40 *24*	1491.0+x	$14^{(-)}$	954.9+x	13^-	D+Q	R_{ang}=0.61 *7*.
549.5 *2*	21.2 *11*	1846.62+x	16^+	1297.07+x	14^+	Q	R_{ang}=0.96 *4*.
551.0 *2*	6.5 *3*	1981.4+x	16^+	1430.30+x	14^+	Q	R_{ang}=1.06 *5*.
552.2 *2*	26.5 *13*	1872.8+x	17^-	1320.6+x	15^-	Q	R_{ang}=1.12 *7*.
555.2 *2*	32.4 *16*	2005.65+x	17^+	1450.41+x	15^+	Q	R_{ang}=0.93 *3*.
558.0 *2*	11.8 *6*	2203.01+x	17^+	1645.03+x	15^+	Q	R_{ang}=1.00 *3*.
560.3 *2*	11.8 *6*	2517.0+x	18^+	1956.8+x	16^+	Q	R_{ang}=1.14 *5*.
562.8 *2*	9.4 *5*	2782.82+x	19^+	2220.04+x	17^+	Q	R_{ang}=0.99 *4*.
563.7 *2*	7.1 *4*	2551.0+x	$18^{(-)}$	1987.3+x	$16^{(-)}$	Q	R_{ang}=0.91 *5*.
572.6 *2*	15.3 *8*	2482.4+x	19^-	1909.8+x	17^-	Q	R_{ang}=1.04 *3*.
574.3 *2*	20.6 *10*	2137.30+x	17^+	1562.97+x	15^+	Q	R_{ang}=1.08 *5*.
575.0 *2*	1.10 *11*	2220.04+x	17^+	1645.03+x	15^+		
577.0 *2*	35.3 *18*	2175.1+x	18^-	1598.1+x	16^-	Q	R_{ang}=0.97 *5*.
579.8 *2*	3.8 *4*	2782.82+x	19^+	2203.01+x	17^+	Q	R_{ang}=1.00 *5*.
580.4 *2*	29.4 *15*	2312.56+x	18^+	1732.17+x	16^+	Q	R_{ang}=0.94 *3*.
582.8 *2*	25.9 *13*	2170.4+x	18^-	1587.6+x	16^-	Q	R_{ang}=0.99 *4*.
585.0 *2*	8.8 *4*	2566.3+x	18^+	1981.4+x	16^+	Q	R_{ang}=1.05 *3*.
585.1 *2*	16.5 *8*	2494.8+x	19^-	1909.8+x	17^-	Q	R_{ang}=1.10 *3*.
589.3[@] *2*	1.20 *12*	3742.9+x	(22^+)	3153.6+x?	(20^+)		
590.1 *2*	2.9 *3*	2810.2+x	19^+	2220.04+x	17^+		
592.0 *2*	1.20 *12*	1987.3+x	$16^{(-)}$	1395.3+x	15^-		
592.6 *5*	0.60 *6*	2737.1+x	17^-	2144.5+x	15^-		
595.2 *2*	29.4 *15*	2600.85+x	19^+	2005.65+x	17^+	Q	R_{ang}=0.91 *3*.
597.8 *2*	14.7 *7*	2444.34+x	18^+	1846.62+x	16^+	Q	R_{ang}=1.05 *4*.
601.6 *5*	0.60 *6*	3996.62+x	23^+	3394.99+x	21^+		

Continued on next page (footnotes at end of table)

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)

γ(^{170}Ta) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	Comments
605.8 *2*	8.8 *5*	3122.9+x	20^+	2517.0+x	18^+	Q	R_{ang}=0.98 *5*.
607.2 *2*	4.4 *4*	2810.2+x	19^+	2203.01+x	17^+	Q	R_{ang}=1.07 *6*.
609.6 *2*	14.1 *7*	2482.4+x	19^-	1872.8+x	17^-		R_{ang}=0.82 *4*. E_γ: possibly the ΔJ=2 608.5γ reported by 1985Ba48.
610.6 *2*	11.8 *6*	2747.94+x	19^+	2137.30+x	17^+	Q	R_{ang}=1.24 *10*.
612.0 *2*	20.0 *10*	2924.6+x	20^+	2312.56+x	18^+	Q	R_{ang}=0.94 *3*.
612.2 *2*	8.5 *4*	3394.99+x	21^+	2782.82+x	19^+	Q	R_{ang}=0.99 *5*.
614.0 *2*	2.9 *3*	3682.83+x	22^+	3068.94+x	20^+		
614.8 *2*	5.9 *3*	3181.1+x	20^+	2566.3+x	18^+	Q	R_{ang}=1.11 *4*.
617.8 *2*	5.0 *5*	3168.8+x	$20^{(-)}$	2551.0+x	$18^{(-)}$	Q	R_{ang}=0.94 *5*.
618.6 *2*	22.9 *11*	3219.4+x	21^+	2600.85+x	19^+	Q	R_{ang}=1.13 *4*.
619.7 *2*	2.40 *24*	3996.62+x	23^+	3376.86+x	21^+		
622.1 *2*	11.8 *6*	2494.8+x	19^-	1872.8+x	17^-		
622.7 *2*	2.9 *3*	3803.8+x	22^+	3181.1+x	20^+	Q	R_{ang}=1.22 *5*.
624.6 *2*	3.2 *3*	3119.5+x	21^-	2494.8+x	19^-		
624.7 *2*	7.6 *4*	3068.94+x	20^+	2444.34+x	18^+	Q	R_{ang}=1.00 *5*.
626.6 *2*	1.0 *1*	2801.8+x	20^-	2175.1+x	18^-		
627.2 *2*	1.20 *12*	3144.2+x		2517.0+x	18^+		
628.9 *2*	6.5 *3*	3376.86+x	21^+	2747.94+x	19^+	Q	R_{ang}=1.09 *6*.
631.4 *2*	21.2 *11*	2801.8+x	20^-	2170.4+x	18^-		E_γ: possibly the ΔJ=2 631.7γ reported by 1985Ba48.
635.2 *2*	9.7 *5*	3559.8+x	22^+	2924.6+x	20^+	Q	R_{ang}=1.14 *4*.
637.1 *2*	14.7 *7*	3119.5+x	21^-	2482.4+x	19^-	Q	R_{ang}=1.18 *7*.
639.3 *2*	2.9 *3*	3449.5+x	21^+	2810.2+x	19^+	Q	R_{ang}=1.17 *9*.
641.8 *2*	1.60 *16*	4324.6+x	24^+	3682.83+x	22^+		
643.5 *5*	0.60 *6*	3069.6+x	18^-	2426.1+x	16^-		
645.6 *2*	13.5 *7*	3865.0+x	23^+	3219.4+x	21^+	Q	R_{ang}=1.14 *4*.
646.6 *2*	17.6 *9*	2821.7+x	20^-	2175.1+x	18^-	Q	R_{ang}=1.04 *6*.
647.7 *2*	9.4 *5*	3142.4+x	21^-	2494.8+x	19^-		E_γ: possibly the ΔJ=2 646.5γ reported by 1985Ba48 but placed differently within the same band.
650.2 *5*	0.50 *5*	1728.6+x	13^-	1078.5+x	14^-		
652.5 *2*	0.60 *6*	4072.5+x	(23^+)	3420.0+x	(21^+)		
655.4 *2*	12.9 *6*	3457.4+x	22^-	2801.8+x	20^-	Q	R_{ang}=1.03 *4*.
655.6 *2*	3.4 *3*	3824.4+x	$22^{(-)}$	3168.8+x	$20^{(-)}$	Q	R_{ang}=0.97 *6*.
656.2 *2*	6.5 *3*	3779.1+x	22^+	3122.9+x	20^+	Q	R_{ang}=1.08 *7*.
660.2 *2*	2.9 *3*	3142.4+x	21^-	2482.4+x	19^-		
661.0 *2*	2.9 *3*	4056.0+x	23^+	3394.99+x	21^+	Q	R_{ang}=1.19 *10*.
663.5 *2*	6.5 *3*	3805.9+x	23^-	3142.4+x	21^-		
666.0 *2*	1.20 *12*	4469.7+x	24^+	3803.8+x	22^+	Q	R_{ang}=0.93 *6*.
669.4 *2*	2.20 *22*	4118.9+x	23^+	3449.5+x	21^+	Q	R_{ang}=1.09 *14*.
671.3 *2*	7.5 *4*	4231.0+x	24^+	3559.8+x	22^+	Q	R_{ang}=0.97 *4*.
671.9 *2*	6.8 *3*	4129.4+x	24^-	3457.4+x	22^-	Q	R_{ang}=1.11 *5*.
672.0 *2*	1.20 *12*	3420.0+x	(21^+)	2747.94+x	19^+		
674.0 *2*	2.9 *3*	3742.9+x	(22^+)	3068.94+x	20^+		
677.2 *2*	2.9 *3*	4673.9+x	25^+	3996.62+x	23^+		
677.5 *2*	1.80 *18*	4072.5+x	(23^+)	3394.99+x	21^+		
679.1 *2*	1.8 *2*	4056.0+x	23^+	3376.86+x	21^+		
679.4 *5*	0.60 *6*	3416.5+x	19^-	2737.1+x	17^-		
679.5 *2*	11.2 *6*	3799.0+x	23^-	3119.5+x	21^-	Q	R_{ang}=1.07 *6*.
684.7 *5*	0.60 *6*	4564.0+x		3879.3+x			
686.1 *2*	1.60 *16*	4510.5+x	$24^{(-)}$	3824.4+x	$22^{(-)}$	Q	R_{ang}=1.07 *7*.
689.4 *2*	4.1 *4*	4495.3+x	25^-	3805.9+x	23^-		
689.6 *5*	0.50 *5*	4493.6+x	24^+	3803.8+x	22^+		
690.0 *2*	1.20 *12*	3834.2+x		3144.2+x			
690.5 *2*	1.20 *12*	4469.7+x	24^+	3779.1+x	22^+		
691.8 *2*	1.90 *19*	4434.7+x	(24^+)	3742.9+x	(22^+)		

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^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)

γ(^{170}Ta) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	Comments
693.8 *5*	0.60 *6*	3763.4+x	20^-	3069.6+x	18^-		
693.8 *5*	0.60 *6*	4110.3+x	21^-	3416.5+x	19^-		
694.6 *2*	10.6 *5*	4559.7+x	25^+	3865.0+x	23^+	Q	R_{ang}=1.16 *6*.
695.6 *5*	0.90 *9*	4072.5+x	(23^+)	3376.86+x	21^+		
698.2 *2*	1.20 *12*	3879.3+x		3181.1+x	20^+		
701.5 *2*	1.80 *18*	4525.9+x	(24^-)	3824.4+x	$22^{(-)}$		
703.2 *2*	1.20 *12*	5229.1+x	(26^-)	4525.9+x	(24^-)		
704.3 *2*	7.6 *4*	3526.0+x	22^-	2821.7+x	20^-	Q	R_{ang}=1.04 *6*.
709.4[@] *5*	0.60 *6*	3153.6+x?	(20^+)	2444.34+x	18^+		
712.5 *5*	0.60 *6*	4475.9+x	22^-	3763.4+x	20^-		
713.6 *2*	5.9 *3*	4843.0+x	26^-	4129.4+x	24^-		
714.5 *2*	3.8 *4*	4493.6+x	24^+	3779.1+x	22^+	Q	R_{ang}=1.09 *12*.
715.7 *2*	1.20 *12*	5040.2+x	26^+	4324.6+x	24^+		
716.2 *5*	0.60 *6*	4835.1+x	25^+	4118.9+x	23^+		
721.5 *2*	2.6 *3*	4777.5+x	25^+	4056.0+x	23^+	Q	R_{ang}=1.04 *9*.
721.7 *2*	1.50 *15*	4794.2+x	(25^+)	4072.5+x	(23^+)		
721.9 *2*	8.2 *4*	4520.9+x	25^-	3799.0+x	23^-		
727.1 *2*	6.1 *3*	4958.1+x	26^+	4231.0+x	24^+	Q	R_{ang}=1.02 *7*.
737.7 *5*	0.50 *5*	5207.4+x	26^+	4469.7+x	24^+		
743.9 *5*	0.60 *6*	5973.0+x	(28^-)	5229.1+x	(26^-)		
744.7 *2*	1.20 *12*	4578.9+x		3834.2+x			
747.8 *2*	3.5 *4*	5243.1+x	27^-	4495.3+x	25^-		
748.1 *2*	1.80 *18*	5422.0+x	27^+	4673.9+x	25^+		
750.1 *5*	0.30 *3*	5314.1+x		4564.0+x			
754.1 *5*	0.80 *8*	5188.8+x	(26^+)	4434.7+x	(24^+)		
754.8 *2*	5.3 *3*	4280.8+x	24^-	3526.0+x	22^-	Q	R_{ang}=1.10 *7*.
756.6 *5*	0.90 *9*	5267.1+x	$26^{(-)}$	4510.5+x	$24^{(-)}$		
758.6 *2*	7.6 *4*	5318.2+x	27^+	4559.7+x	25^+	Q	R_{ang}=1.02 *8*.
763.3 *2*	2.50 *25*	5256.9+x	26^+	4493.6+x	24^+	Q	R_{ang}=0.89 *8*.
764.4 *5*	0.40 *4*	5599.5+x	27^+	4835.1+x	25^+		
764.7 *2*	1.60 *16*	5542.2+x	27^+	4777.5+x	25^+		
766.6 *2*	6.5 *3*	5287.5+x	27^-	4520.9+x	25^-		
773.8 *5*	0.40 *4*	1728.6+x	13^-	954.88+x	13^+		
777.1 *2*	1.80 *18*	3996.62+x	23^+	3219.4+x	21^+		
777.9 *2*	3.6 *4*	5620.9+x	28^-	4843.0+x	26^-		
778.2 *2*	1.00 *10*	6320.4+x	29^+	5542.2+x	27^+		
784.0 *5*	0.50 *5*	5578.2+x	(27^+)	4794.2+x	(25^+)		
786.0 *2*	1.10 *11*	5826.2+x	28^+	5040.2+x	26^+		
789.2 *2*	4.4 *4*	5747.3+x	28^+	4958.1+x	26^+	Q	R_{ang}=0.97 *9*.
794.3 *5*	0.60 *6*	6767.3+x	(30^-)	5973.0+x	(28^-)		
795.4 *5*	0.30 *3*	5984.3+x	(28^+)	5188.8+x	(26^+)		
795.5 *5*	0.50 *5*	6052.4+x		5256.9+x	26^+		
800.7 *2*	3.2 *3*	5081.5+x	26^-	4280.8+x	24^-	Q	R_{ang}=0.98 *7*.
801.2 *5*	0.40 *4*	6068.3+x	$28^{(-)}$	5267.1+x	$26^{(-)}$		
806.1 *5*	0.2 *1*	6405.6+x	29^+	5599.5+x	27^+		
810.5 *5*	0.90 *9*	5389.4+x		4578.9+x			
811.1 *2*	1.20 *12*	6233.1+x	29^+	5422.0+x	27^+		
811.3 *5*	0.30 *3*	6863.7+x		6052.4+x			
818.1 *2*	3.2 *3*	6105.5+x	29^-	5287.5+x	27^-		
819.0 *5*	0.40 *4*	6026.4+x	28^+	5207.4+x	26^+		
821.8 *2*	3.4 *3*	6064.9+x	29^-	5243.1+x	27^-		
823.8 *2*	1.30 *13*	6080.7+x	28^+	5256.9+x	26^+		
824.7 *2*	5.0 *5*	6142.9+x	29^+	5318.2+x	27^+		
829.7 *5*	0.10 *5*	6814.0+x	(30^+)	5984.3+x	(28^+)		
837.6 *5*	0.70 *7*	7158.0+x	31^+	6320.4+x	29^+		

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^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)

$\gamma(^{170}Ta)$ (continued)

E_γ †	I_γ ‡	E_i(level)	J_i^π	E_f	J_f^π	Mult.#	Comments
838.3 *5*	0.30 *3*	6906.6+x	$30^{(-)}$	6068.3+x	$28^{(-)}$		
838.4 *5*	0.2 *1*	6027.3+x	(28^+)	5188.8+x	(26^+)		
843.1 *2*	2.10 *21*	5924.6+x	28^-	5081.5+x	26^-	(Q)	R_{ang}=0.87 *7*.
847.0 *2*	1.80 *18*	6467.9+x	30^-	5620.9+x	28^-		
848.2 *2*	4.2 *4*	6595.5+x	30^+	5747.3+x	28^+		
852.4 *5*	0.40 *4*	6430.6+x	(29^+)	5578.2+x	(27^+)		
852.9 *5*	0.1 *1*	7258.5+x	31^+	6405.6+x	29^+		
854.9 *5*	0.60 *6*	6681.1+x	30^+	5826.2+x	28^+		
854.9 *5*	0.50 *5*	7622.2+x	(32^-)	6767.3+x	(30^-)		
856.7 *2*	1.20 *12*	7089.8+x	31^+	6233.1+x	29^+		
868.8 *5*	0.60 *6*	6949.5+x	30^+	6080.7+x	28^+		
869.5 *5*	0.30 *3*	7959.3+x	33^+	7089.8+x	31^+		
873.6 *5*	0.40 *4*	1728.6+x	13^-	855.0+x	13^-		
873.9 *5*	<0.1	7687.9+x	(32^+)	6814.0+x	(30^+)		
875.3 *5*	0.2 *1*	6417.5+x		5542.2+x	27^+		
876.6 *2*	1.20 *12*	6982.1+x	31^-	6105.5+x	29^-		
887.2 *2*	3.1 *3*	7030.1+x	31^+	6142.9+x	29^+		
889.5 *5*	0.1 *1*	7796.1+x	$32^{(-)}$	6906.6+x	$30^{(-)}$		
890.3 *2*	1.80 *18*	6814.9+x	30^-	5924.6+x	28^-		
891.9 *5*	<0.1	8150.4+x	33^+	7258.5+x	31^+		
893.5 *5*	0.1 *1*	7757.2+x		6863.7+x			
893.6 *5*	0.30 *3*	6920.0+x	30^+	6026.4+x	28^+		
893.8 *5*	0.1 *1*	6921.1+x	(30^+)	6027.3+x	(28^+)		
893.8 *5*	0.2 *1*	7311.3+x		6417.5+x			
895.5 *2*	1.90 *19*	6960.4+x	31^-	6064.9+x	29^-		
901.3 *5*	0.40 *4*	7331.9+x	(31^+)	6430.6+x	(29^+)		
904.0 *2*	2.40 *24*	7499.6+x	32^+	6595.5+x	30^+		
904.9 *5*	0.40 *4*	7994.7+x	33^+	7089.8+x	31^+		
912.5 *5*	0.70 *7*	7380.4+x	32^-	6467.9+x	30^-		
915.2 *5*	0.50 *5*	8537.5+x	(34^-)	7622.2+x	(32^-)		
920.4 *5*	<0.1	9070.8+x	35^+	8150.4+x	33^+		
920.7 *5*	≈0.5	1286.5+x		365.7+x	10^-		E_γ,I_γ: from e-mail reply of Aug 10, 2010 from one of the authors (D. Hartley) of 2010Ag06.
921.0 *5*	0.2 *1*	7602.1+x	32^+	6681.1+x	30^+		
921.1 *5*	0.60 *6*	7870.6+x	32^+	6949.5+x	30^+		
926.1 *5*	0.90 *9*	7908.2+x	33^-	6982.1+x	31^-		
929.2 *2*	2.20 *22*	7959.3+x	33^+	7030.1+x	31^+		
933.5 *5*	0.50 *5*	8091.5+x	33^+	7158.0+x	31^+		
935.3 *5*	<0.1	8623.2+x	(34^+)	7687.9+x	(32^+)		
937.3 *5*	<0.1	7858.4+x	(32^+)	6921.1+x	(30^+)		
941.4 *5*	0.90 *9*	7756.3+x	32^-	6814.9+x	30^-		
944.9 *2*	1.50 *15*	8904.2+x	35^+	7959.3+x	33^+		
947.7 *5*	0.60 *6*	7908.2+x	33^-	6960.4+x	31^-		
948.3 *5*	0.2 *1*	8280.2+x	(33^+)	7331.9+x	(31^+)		
949.2 *5*	<0.1	8807.6+x	(34^+)	7858.4+x	(32^+)		
949.4 *5*	0.2 *1*	8260.7+x		7311.3+x			
956.4 *5*	0.30 *3*	7938.5+x	33^-	6982.1+x	31^-		
957.1 *2*	1.50 *15*	8456.7+x	34^+	7499.6+x	32^+		
971.1 *5*	0.40 *4*	8351.5+x	34^-	7380.4+x	32^-		
973.8 *5*	0.50 *5*	8844.4+x	34^+	7870.6+x	32^+		
975.6 *5*	0.2 *1*	9513.1+x	(36^-)	8537.5+x	(34^-)		
978.0 *5*	0.60 *6*	7938.5+x	33^-	6960.4+x	31^-		
981.5 *5*	0.2 *1*	8583.6+x	34^+	7602.1+x	32^+		
989.1 *5*	0.90 *9*	1728.6+x	13^-	739.48+x	12^+		
993.5 *5*	0.90 *9*	8901.7+x	35^-	7908.2+x	33^-		

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^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)

$\gamma(^{170}Ta)$ (continued)

E_γ [†]	I_γ [‡]	E_i(level)	J_i^π	E_f	J_f^π
996.9 *5*	0.30 *3*	8753.2+x	34^-	7756.3+x	32^-
997.8 *5*	0.1 *1*	9258.5+x		8260.7+x	
1001.6 *5*	0.2 *1*	8996.3+x	35^+	7994.7+x	33^+
1002.7 *2*	1.20 *12*	9459.4+x	36^+	8456.7+x	34^+
1002.7 *2*	1.0 *1*	9906.9+x	37^+	8904.2+x	35^+
1004.1 *5*	0.1 *1*	9587.7+x	36^+	8583.6+x	34^+
1005.7 *5*	0.2 *1*	9097.2+x	35^+	8091.5+x	33^+
1019.4 *5*	0.60 *6*	9370.9+x	36^-	8351.5+x	34^-
1020.4 *5*	0.3 *1*	9864.8+x	36^+	8844.4+x	34^+
1036.7 *5*	0.1 *1*	10549.8+x	(38^-)	9513.1+x	(36^-)
1037.7 *5*	0.2 *1*	8976.2+x	35^-	7938.5+x	33^-
1041.5 *5*	0.70 *7*	10500.9+x	38^+	9459.4+x	36^+
1047.9 *5*	0.60 *6*	9949.6+x	37^-	8901.7+x	35^-
1055.5 *5*	0.2 *1*	10920.3+x	38^+	9864.8+x	36^+
1057.7 *5*	0.2 *1*	9810.9+x	36^-	8753.2+x	34^-
1059.6 *5*	0.50 *5*	10430.5+x	38^-	9370.9+x	36^-
1064.4 *5*	0.50 *5*	10971.3+x	39^+	9906.9+x	37^+
1065.2 *5*	0.30 *3*	1728.6+x	13^-	663.5+x	12^-
1066.9 *5*	0.1 *1*	10164.1+x	37^+	9097.2+x	35^+
1071.7 *5*	0.1 *1*	10882.6+x	38^-	9810.9+x	36^-
1083.4 *5*	0.40 *4*	11584.3+x	40^+	10500.9+x	38^+
1089.2 *5*	0.2 *1*	11519.7+x	40^-	10430.5+x	38^-
1097.5 *5*	0.3 *1*	11047.1+x	39^-	9949.6+x	37^-
1098.7 *5*	0.1 *1*	11648.5+x	(40^-)	10549.8+x	(38^-)
1108.1 *5*	0.1 *1*	10084.3+x	37^-	8976.2+x	35^-
1113.4 *5*	<0.1	11277.5+x	39^+	10164.1+x	37^+
1120.0 *5*	0.1 *1*	12639.7+x	42^-	11519.7+x	40^-
1120.9 *5*	0.30 *3*	12092.2+x	41^+	10971.3+x	39^+
1128.6 *5*	0.2 *1*	12712.9+x	42^+	11584.3+x	40^+
1146.5 *5*	0.1 *1*	12193.6+x	41^-	11047.1+x	39^-
1150.8 *5*	0.1 *1*	11235.1+x	39^-	10084.3+x	37^-
1153.4 *5*	<0.1	13793.1+x	44^-	12639.7+x	42^-
1167.7[@] *5*	0.1 *1*	13361.3+x?	(43^-)	12193.6+x	41^-
1168.7 *5*	0.2 *1*	13260.9+x	43^+	12092.2+x	41^+
1169.4 *5*	<0.1	12446.9+x	41^+	11277.5+x	39^+
1176.3 *5*	0.1 *1*	13889.2+x	44^+	12712.9+x	42^+
1184.1 *5*	<0.1	14977.2+x	46^-	13793.1+x	44^-
1197.3 *5*	0.1 *1*	14458.2+x	45^+	13260.9+x	43^+
1216.9[@] *5*	<0.1	15106.1+x?	(46^+)	13889.2+x	44^+
1219.0[@] *5*	<0.1	16196.2+x?	(48^-)	14977.2+x	46^-
1230.7 *5*	<0.1	15688.9+x	47^+	14458.2+x	45^+
1267.0[@] *5*	<0.1	16955.9+x?	(49^+)	15688.9+x	47^+

[†] 2010Ag06 report uncertainties of 0.2 keV for most transitions but 0.5 keV when Iγ<1.

[‡] 2010Ag06 report uncertainties of <5% for Iγ>5,≈10% for Iγ≤5. The evaluators assign 5% for γ rays with Iγ>5, 10% or larger for Iγ≤5. Listed intensities are photon intensities as per e-mail reply of Aug 10, 2010 from one of the authors (F.G. Kondev) of 2010Ag06.

[#] Based on $R_{ang}=W(\theta_f,\Phi)/W(\theta_{90^\circ},\Phi)$ from 2010Ag06, where $W(\theta_f,\Phi)$ is the intensity observed in the forward detectors (θ=122°, 130°, 143°, 148°, and 163°) and $W(\theta_{90^\circ},\Phi)$ is the intensity observed in the detectors near 90° (θ=79°, 81°, 90°, 99°, and 101°). Expected values are≈1.0 for ΔJ=2, Q transitions (normalized using known E2 transitions), and≈0.5 for ΔJ=1, (mainly) D transitions. 1985Ba48 deduced consistent ΔJ for a number of transitions based on their unstated $\gamma(\theta)$ data.

[@] Placement of transition in the level scheme is uncertain.

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme

Intensities: Relative I_γ

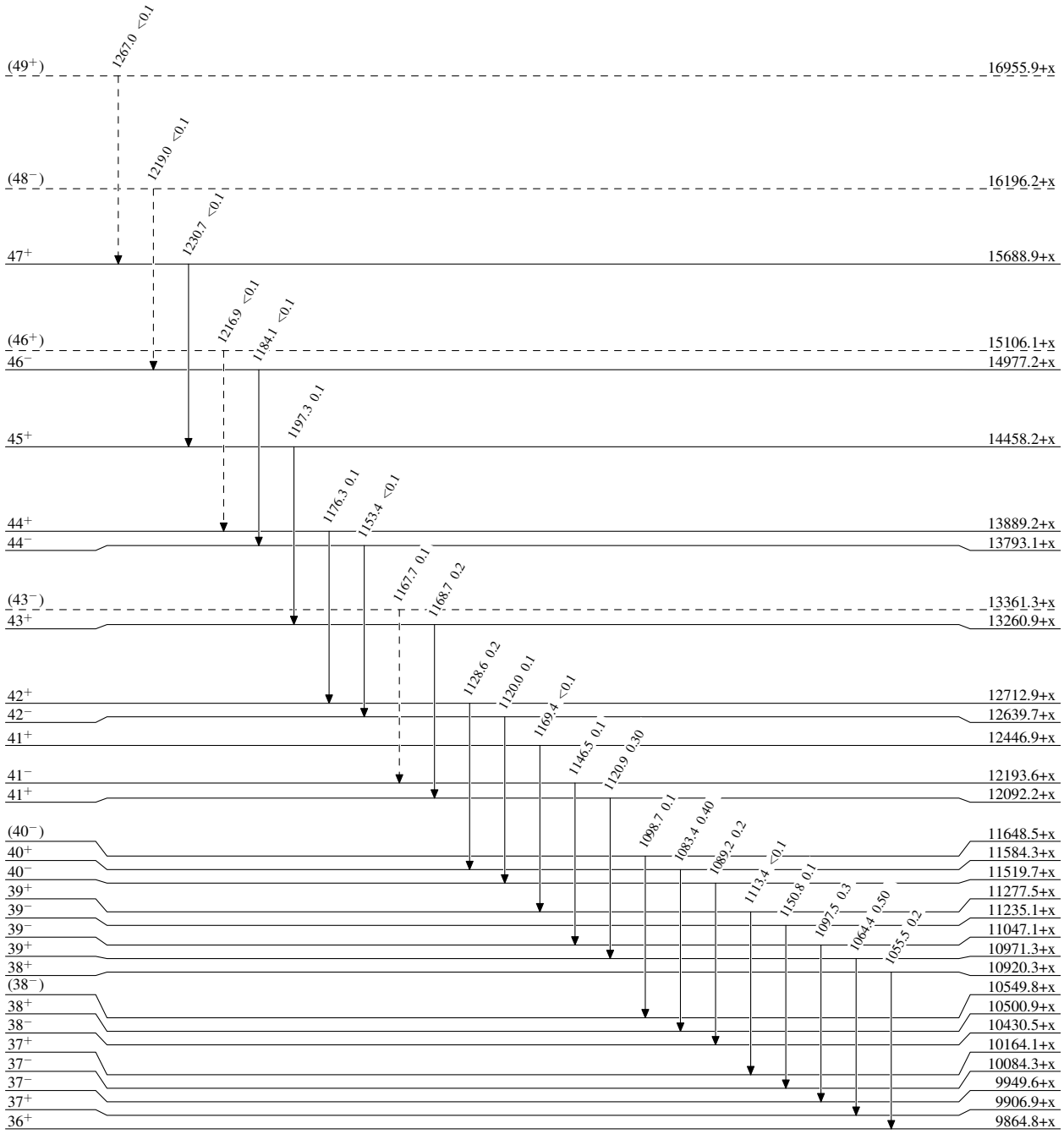
Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$

γ Decay (Uncertain)



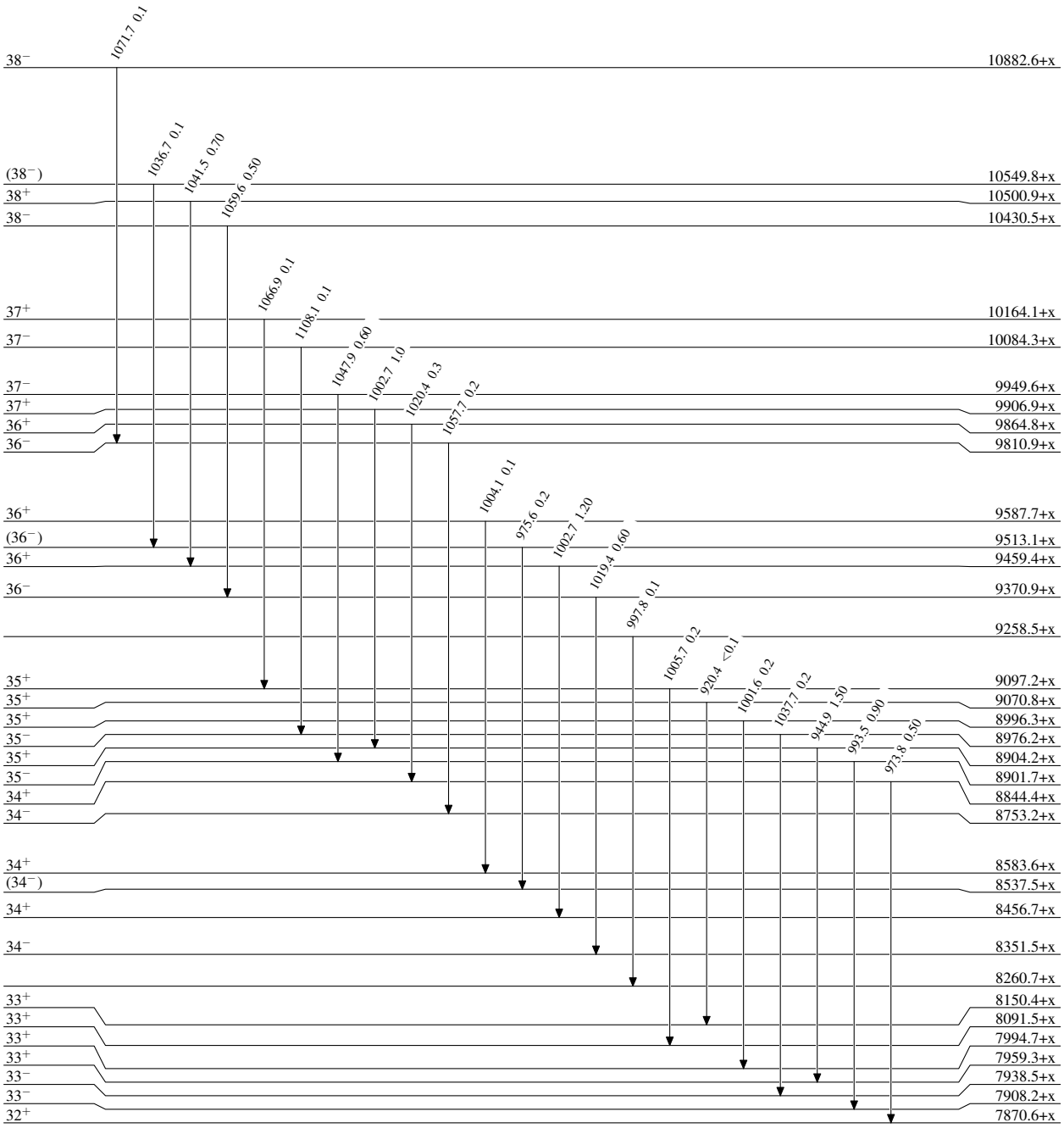
$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ

Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$



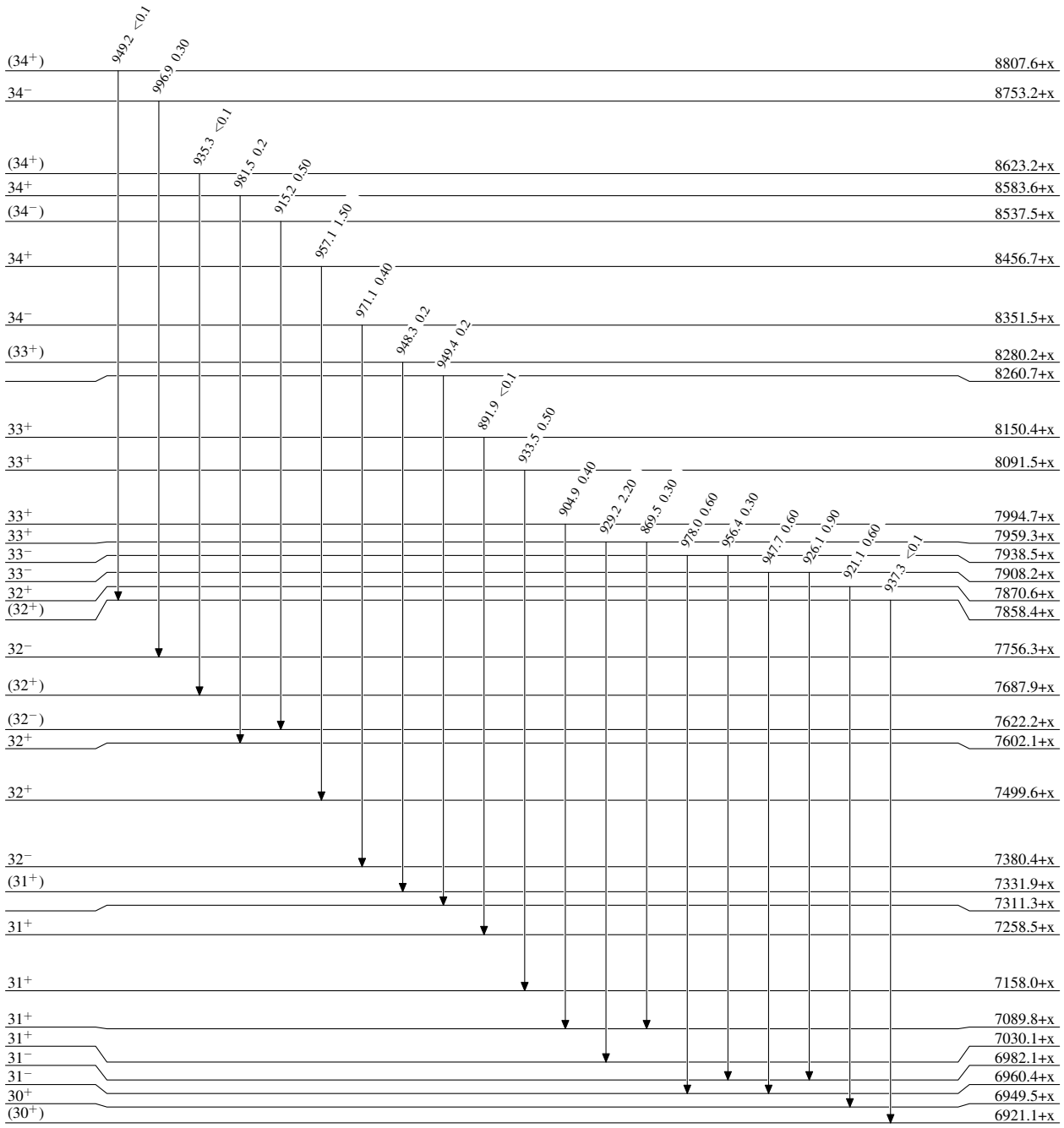
$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ

Legend
- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$



$^{170}_{73}Ta_{97}$

$^{124}Sn(^{51}V,5n\gamma)$ 2010Ag06,1985Ba48

Level Scheme (continued)

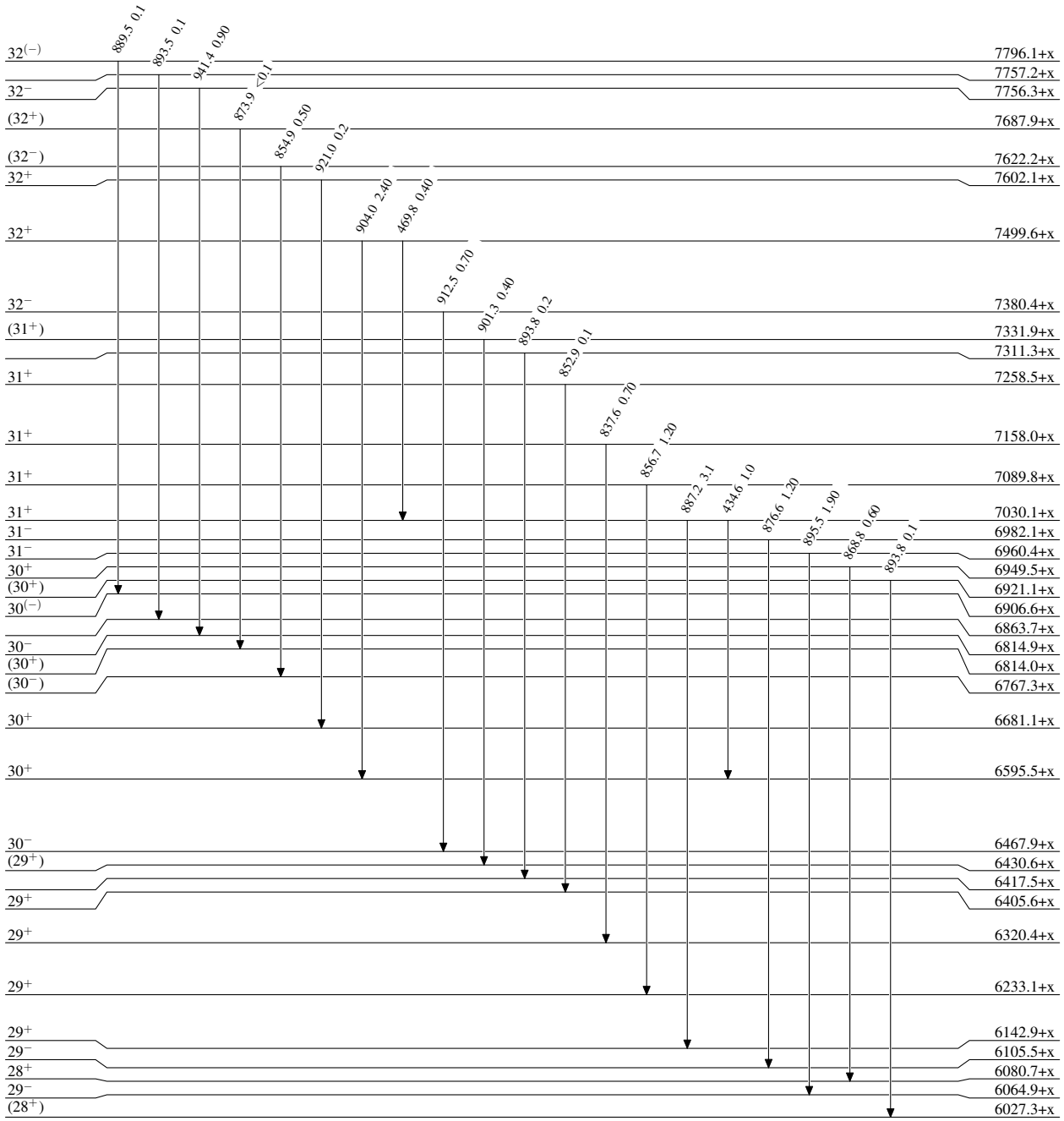
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



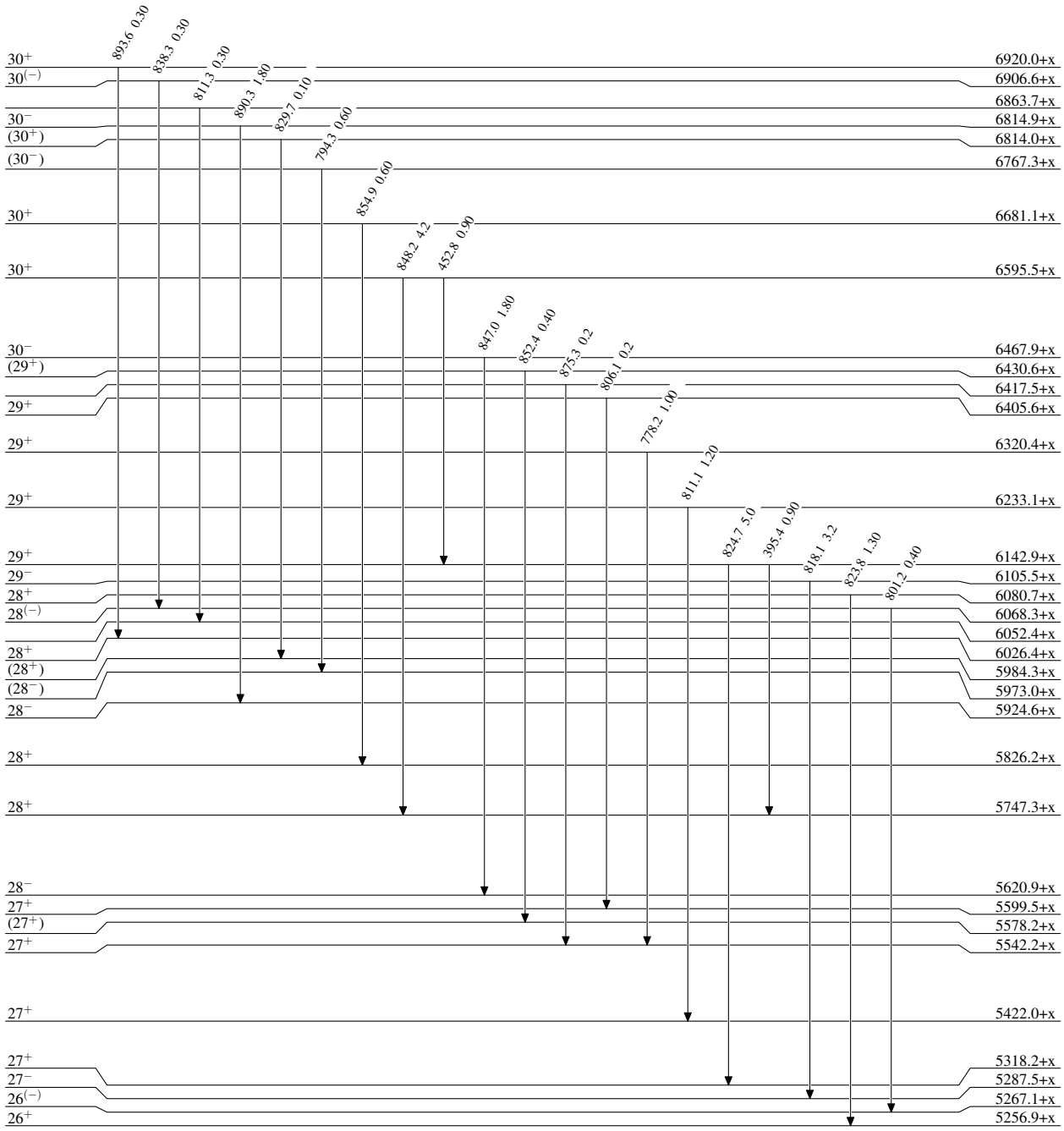
$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ

Legend
- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$



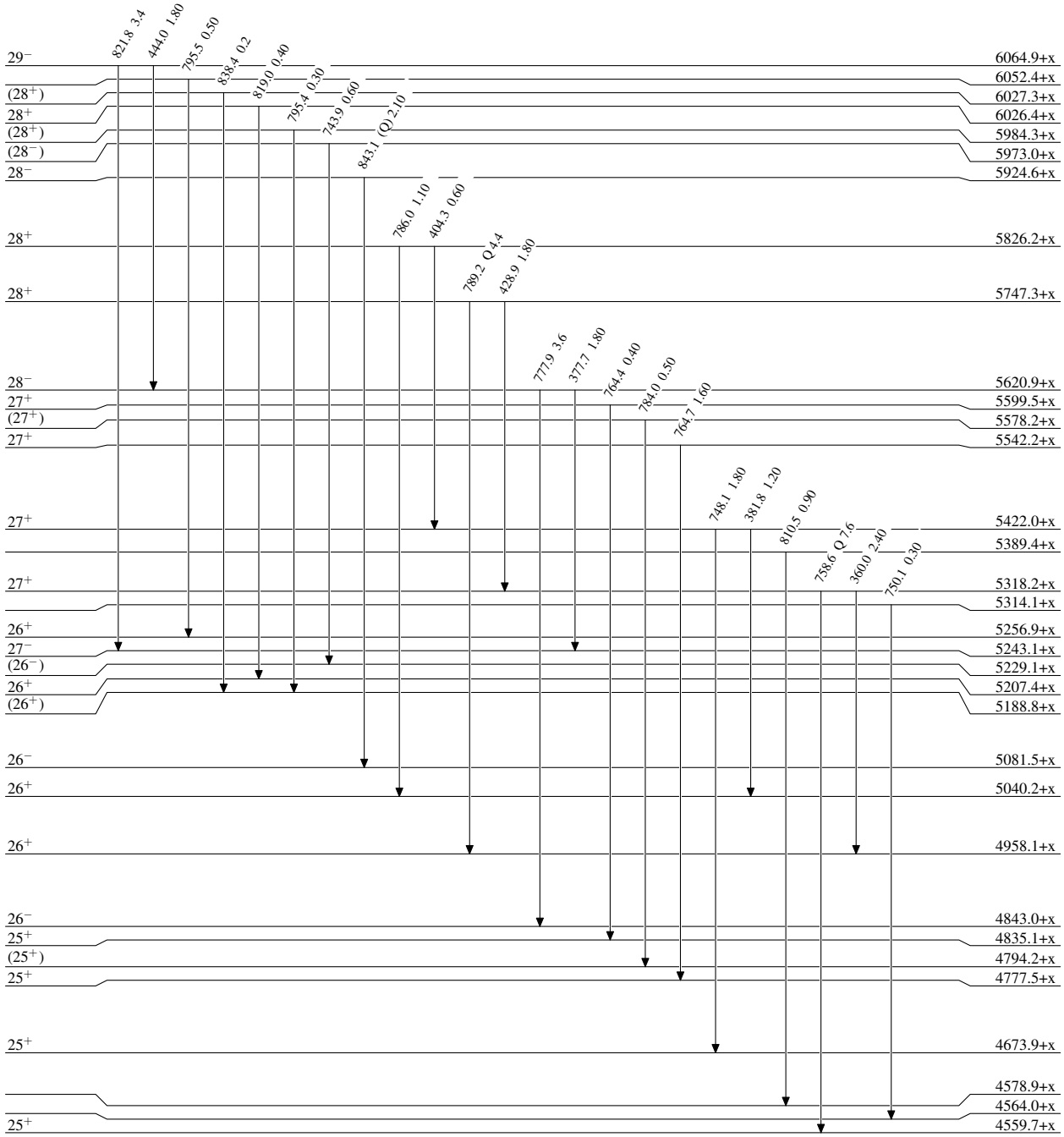
$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ

Legend
- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$

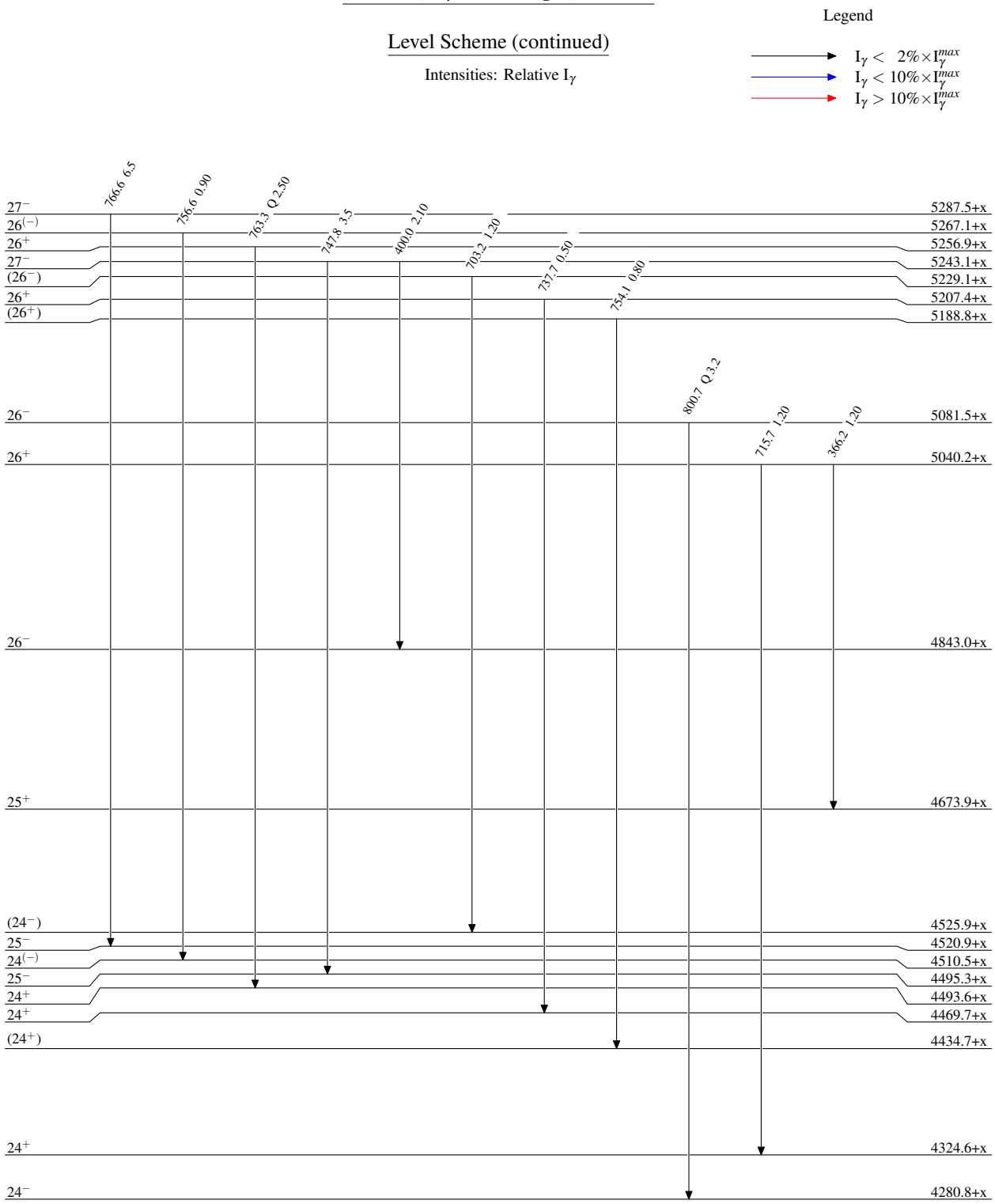


$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ

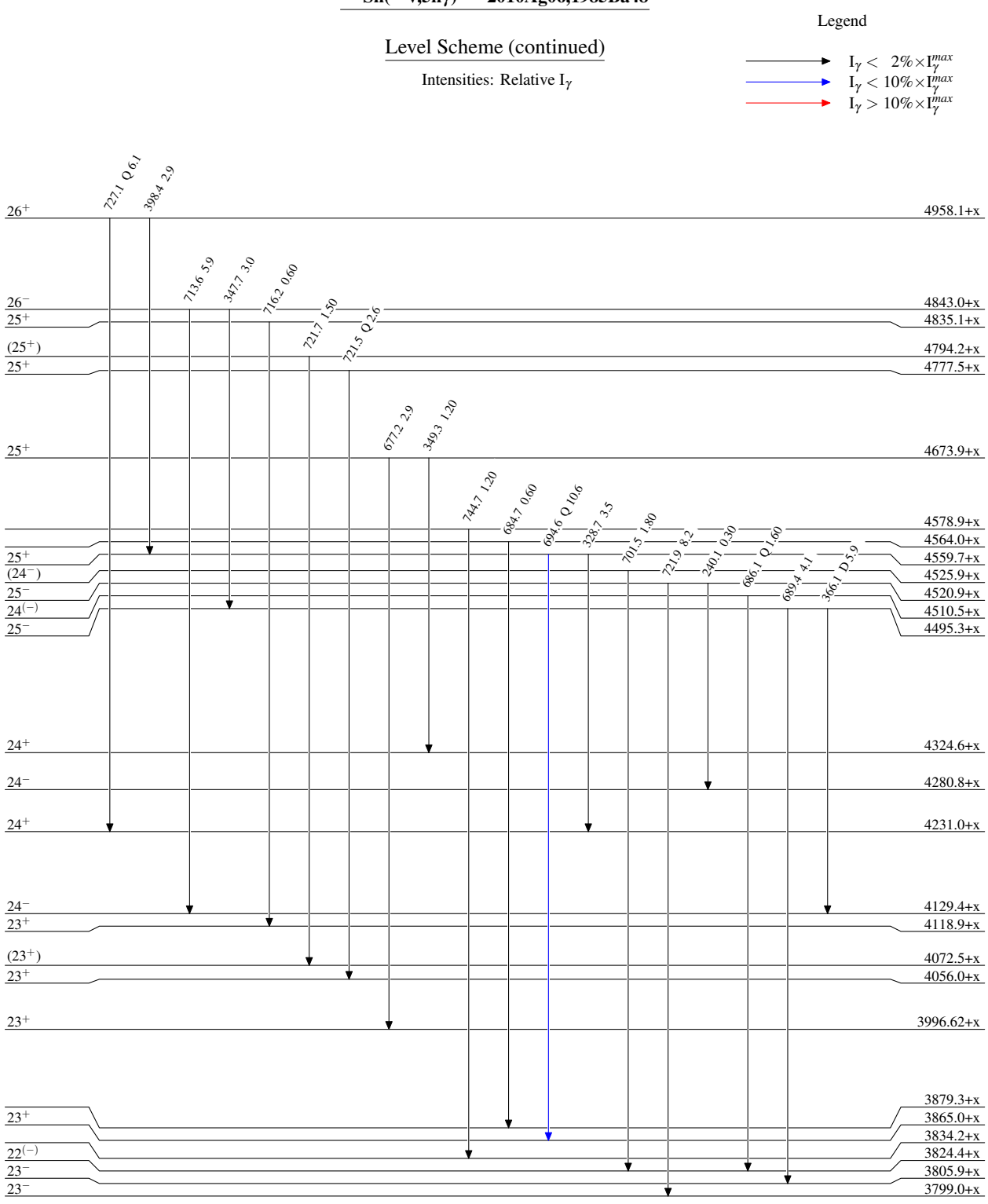


$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ

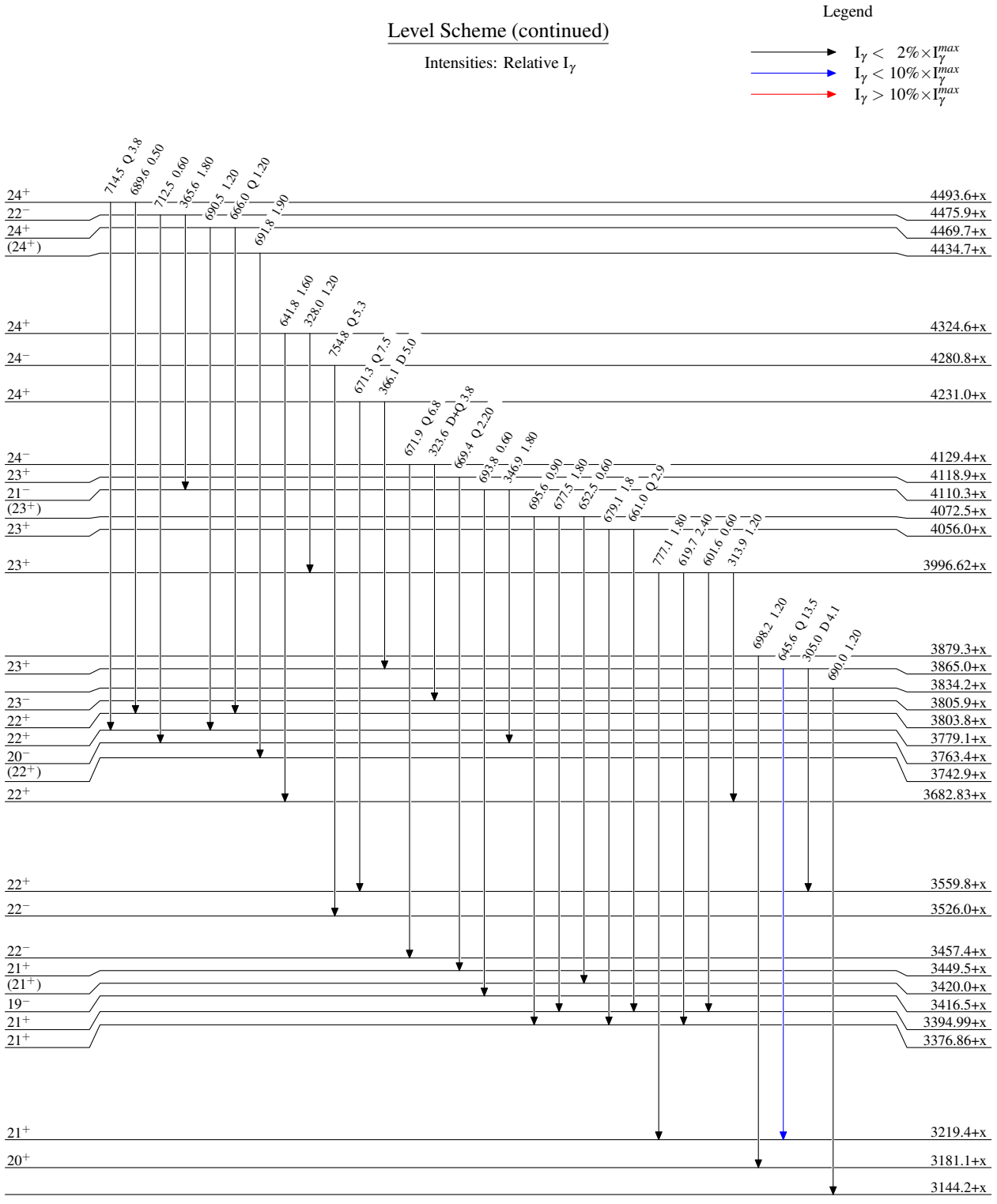


$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ



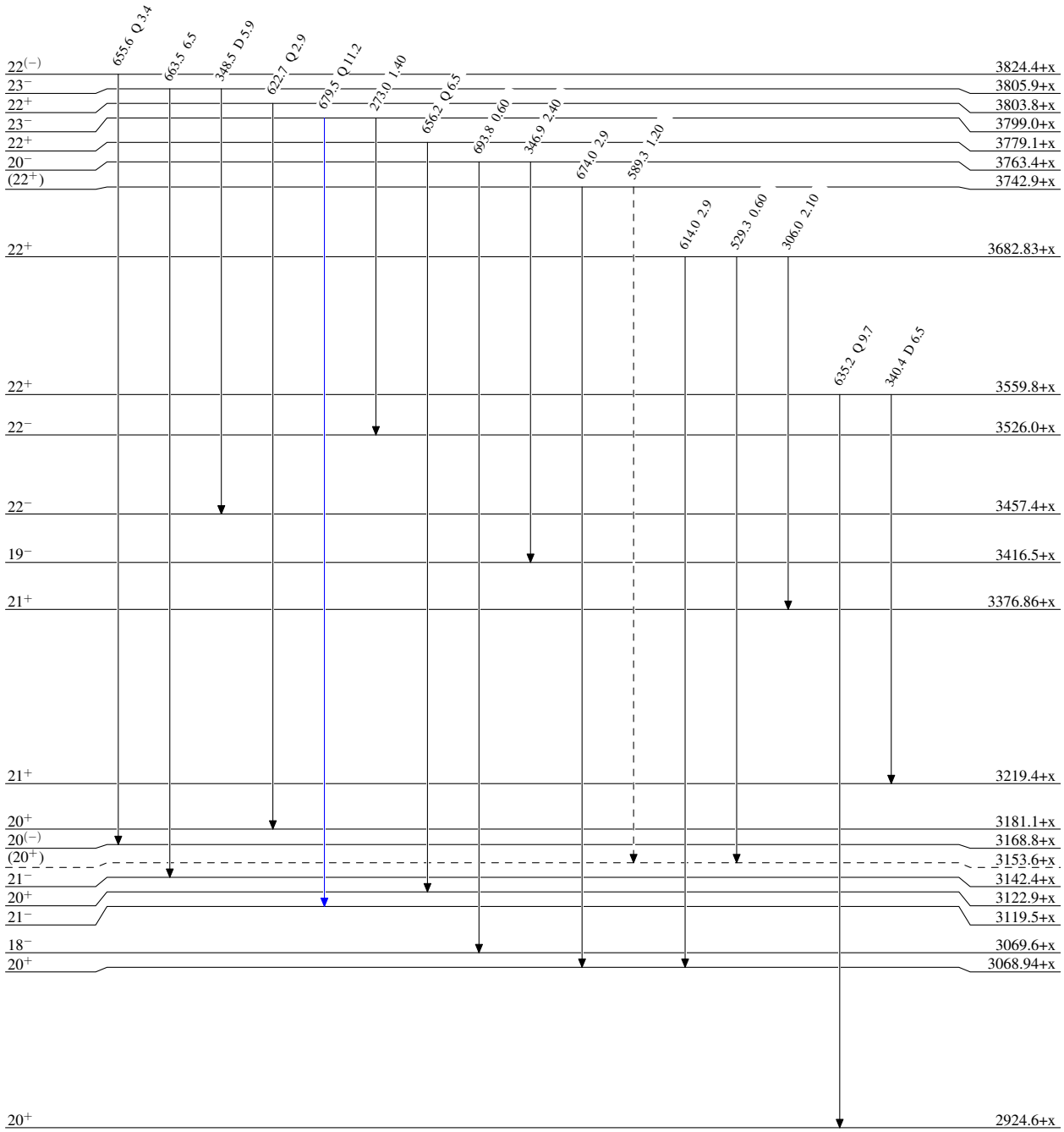
$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ

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)



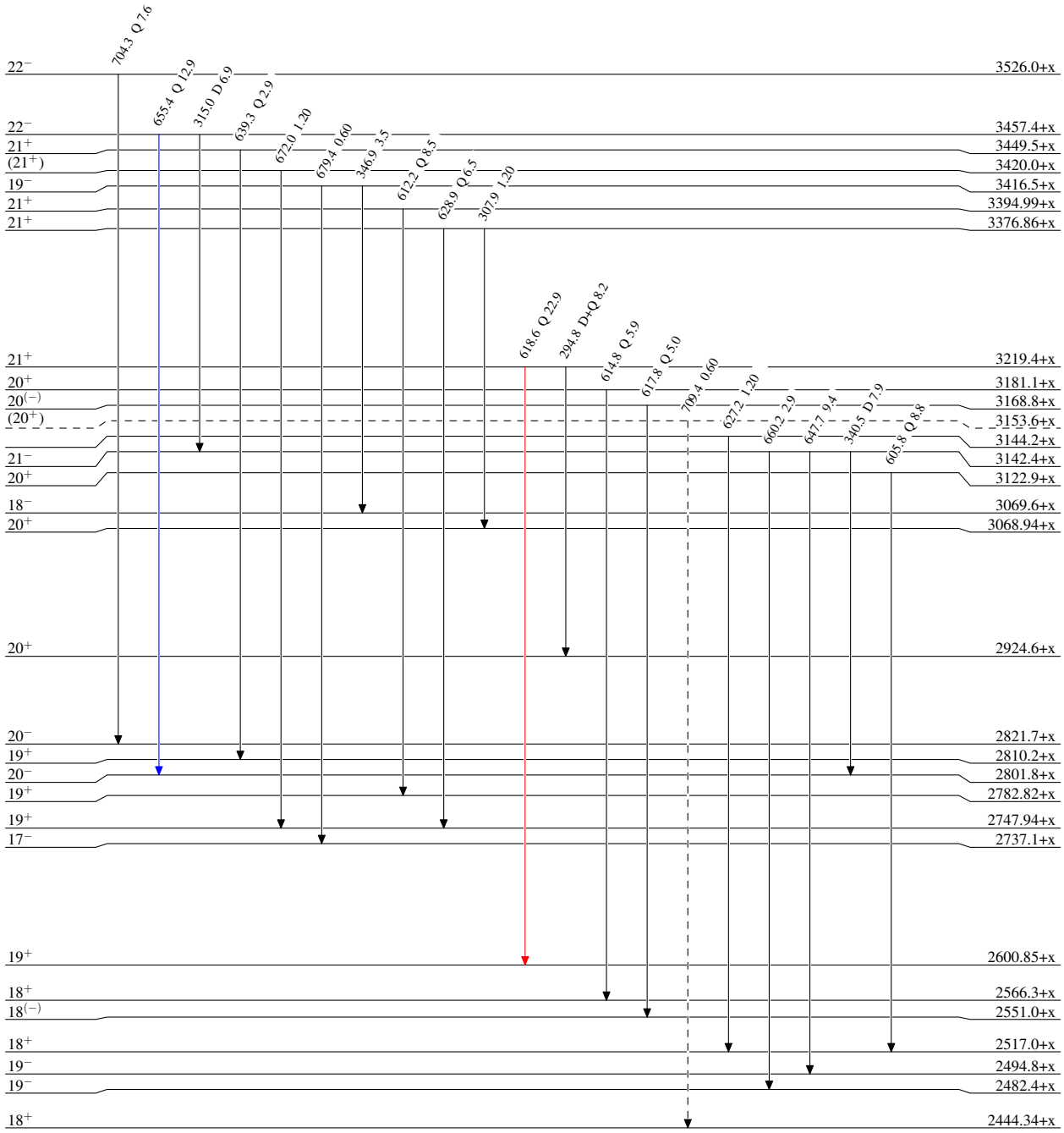
$^{170}_{73}Ta_{97}$

$^{124}Sn(^{51}V,5n\gamma)$ **2010Ag06,1985Ba48**

Level Scheme (continued)

Intensities: Relative I_γ

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)



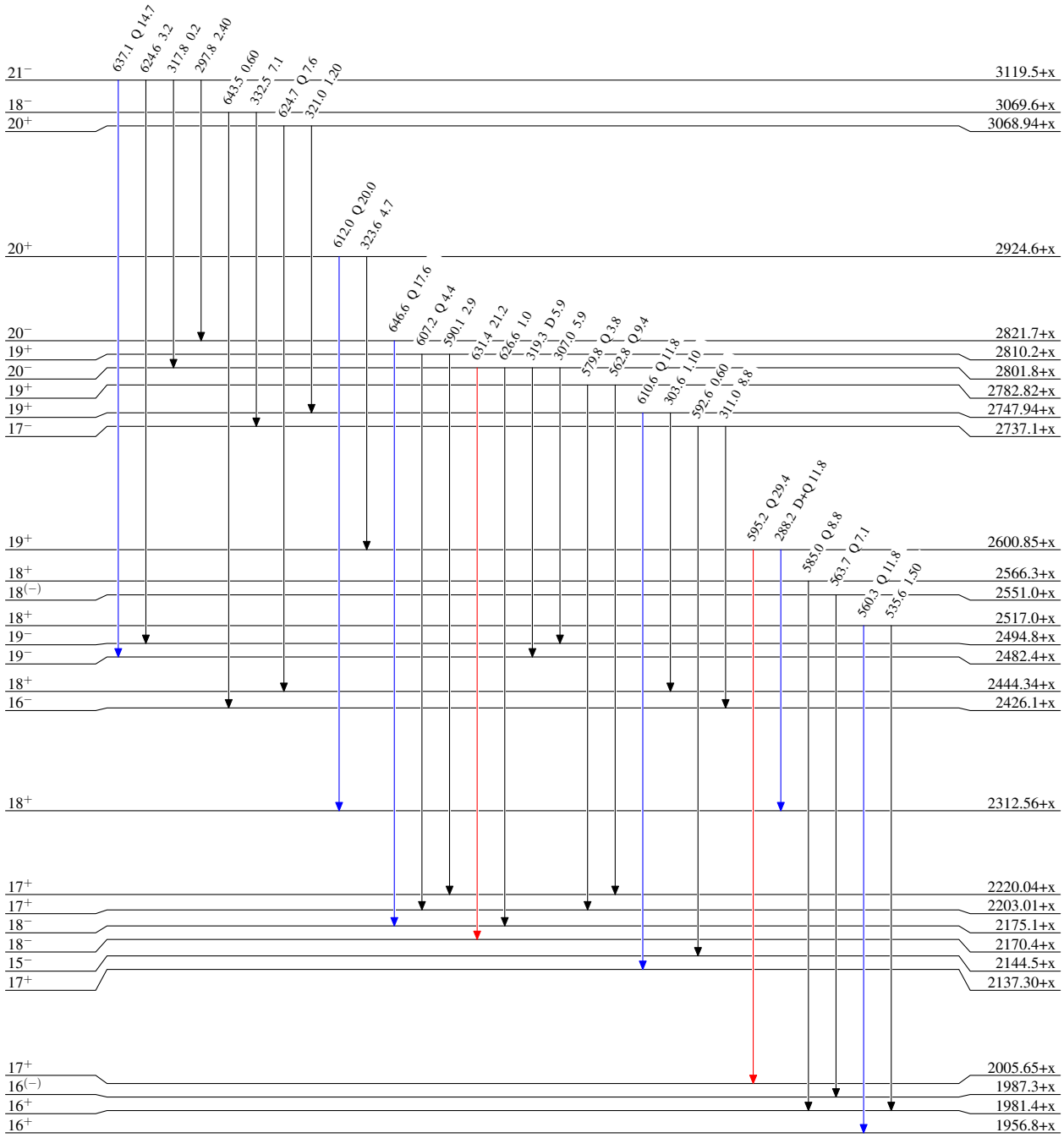
$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ

Legend
- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$



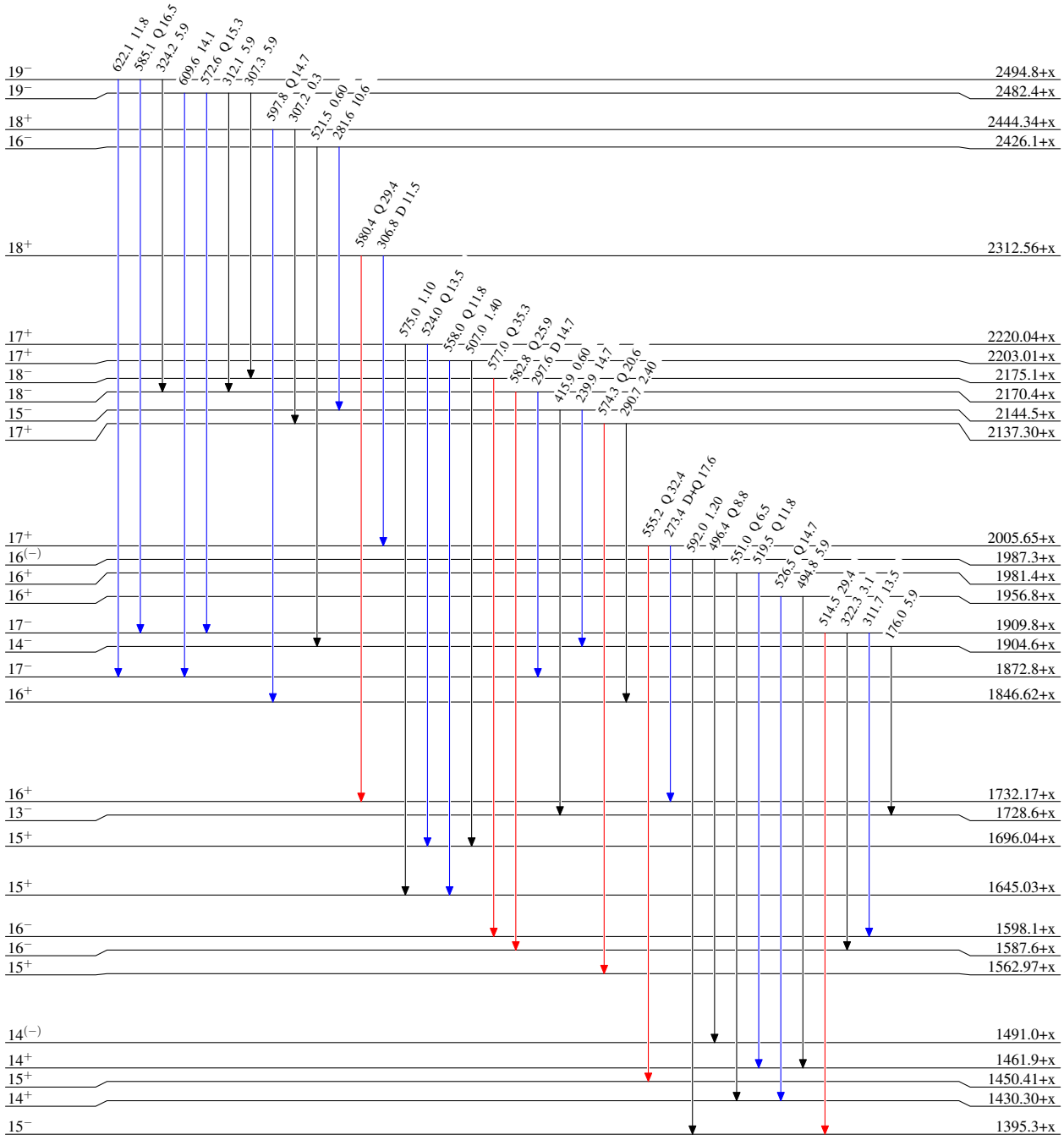
$^{170}_{73}Ta_{97}$

$^{124}Sn(^{51}V,5n\gamma)$ 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ

Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$



$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

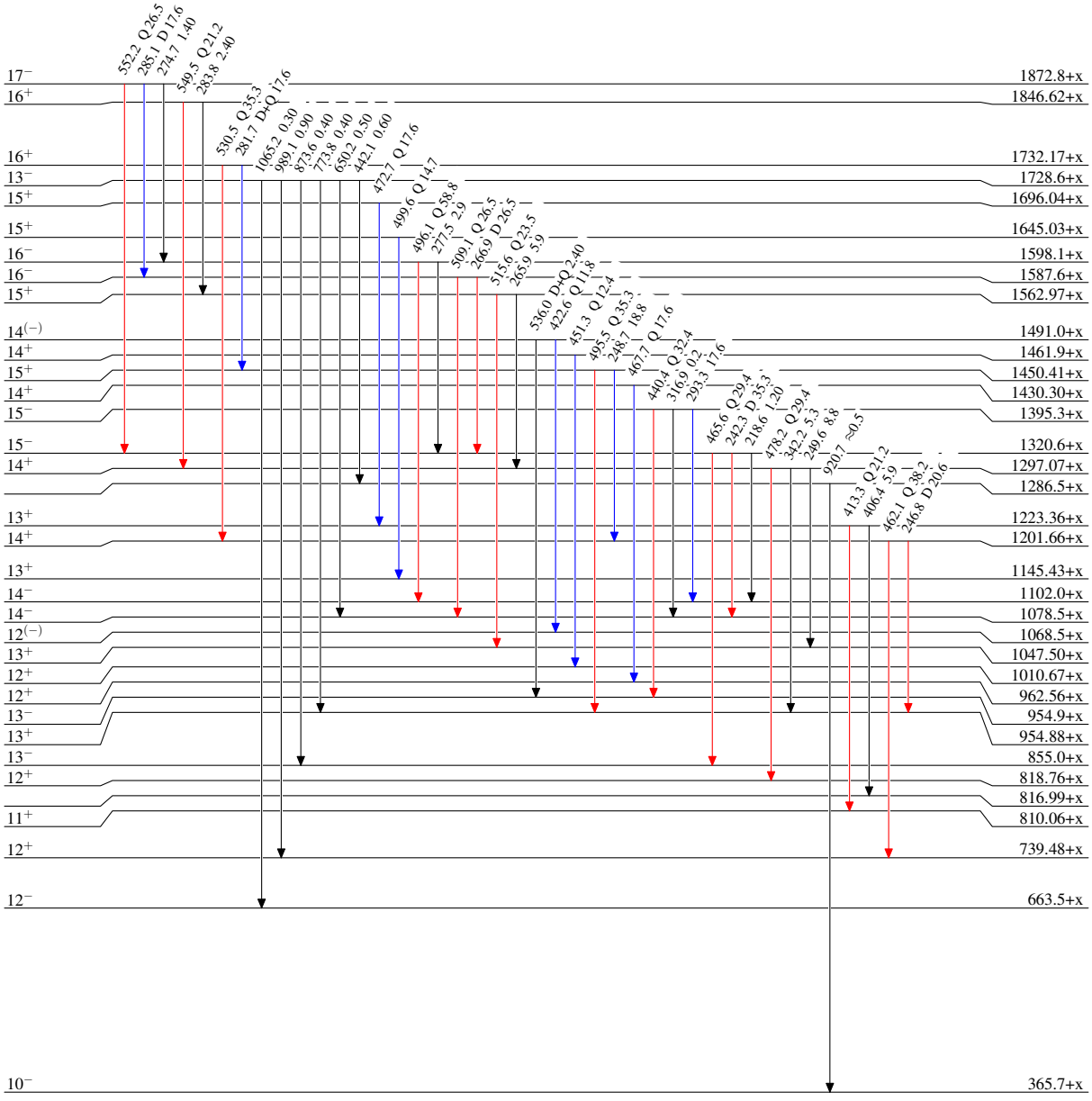
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$

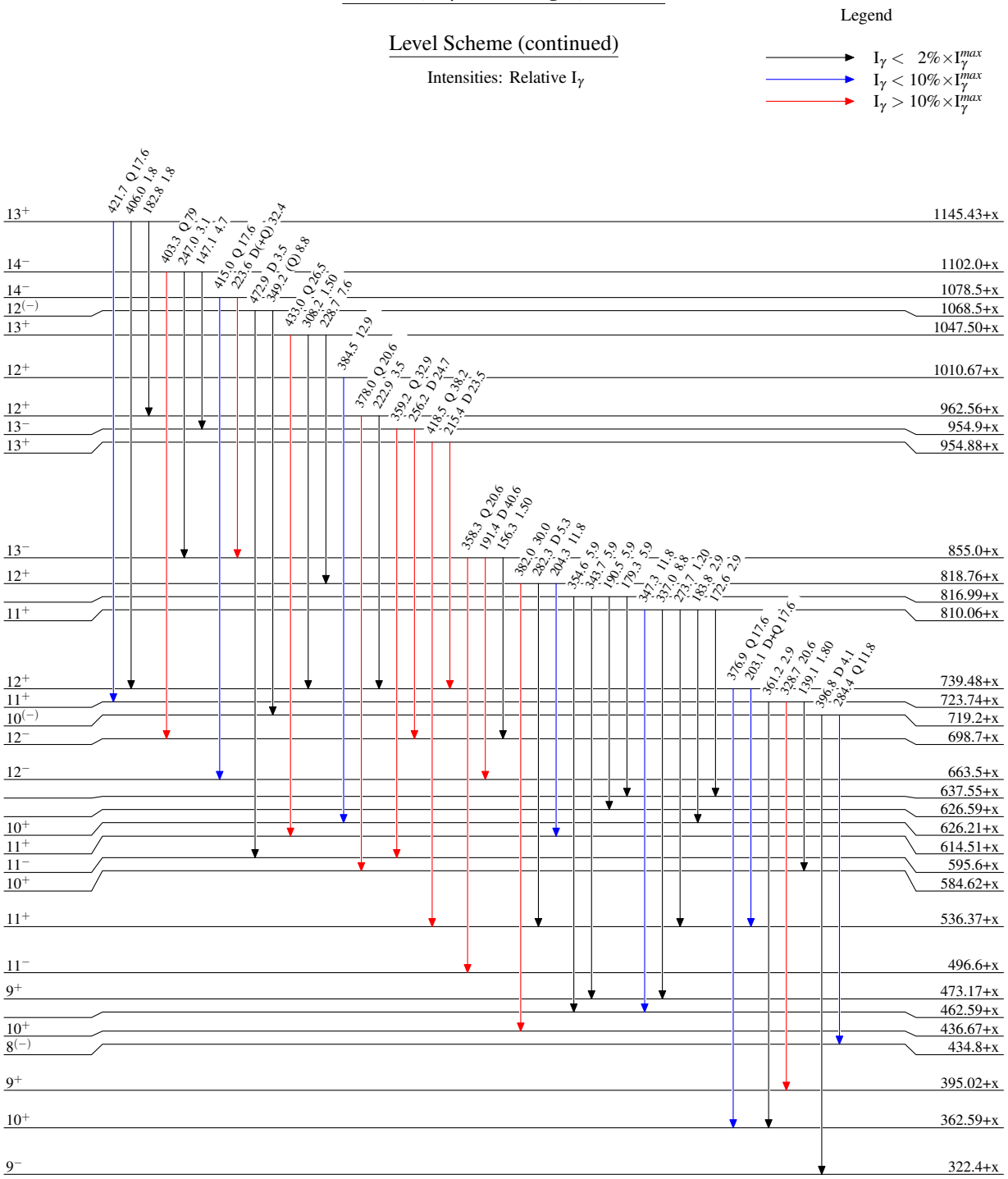


$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ



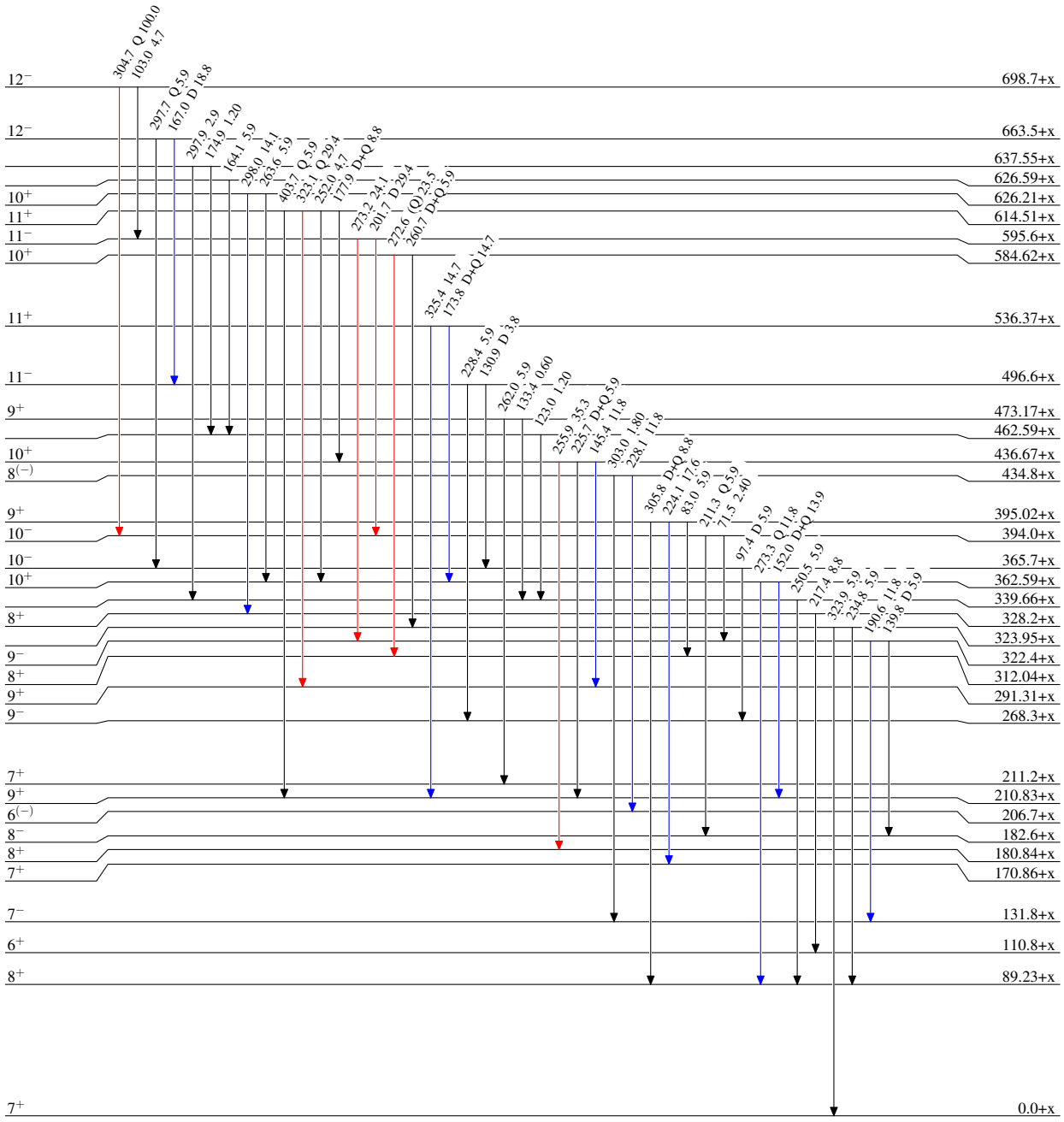
$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

Intensities: Relative I_γ

Legend
- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$



$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48

Level Scheme (continued)

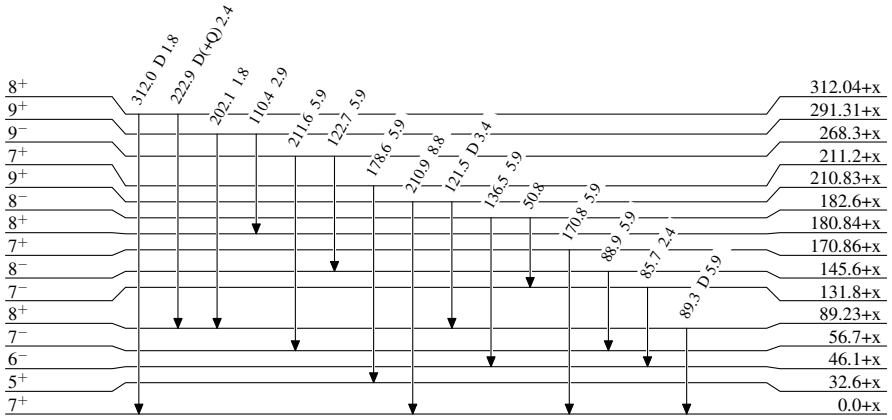
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

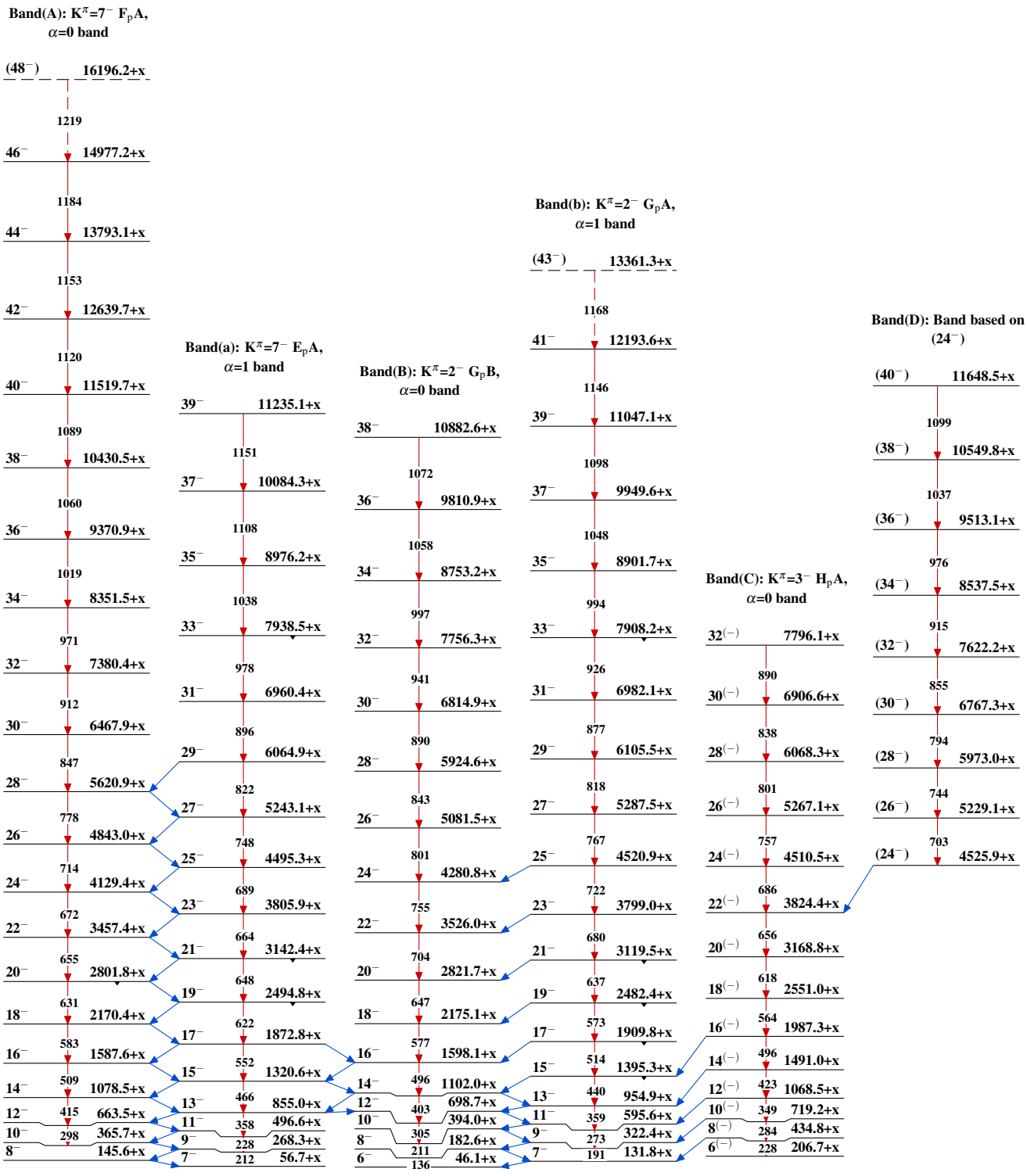
$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



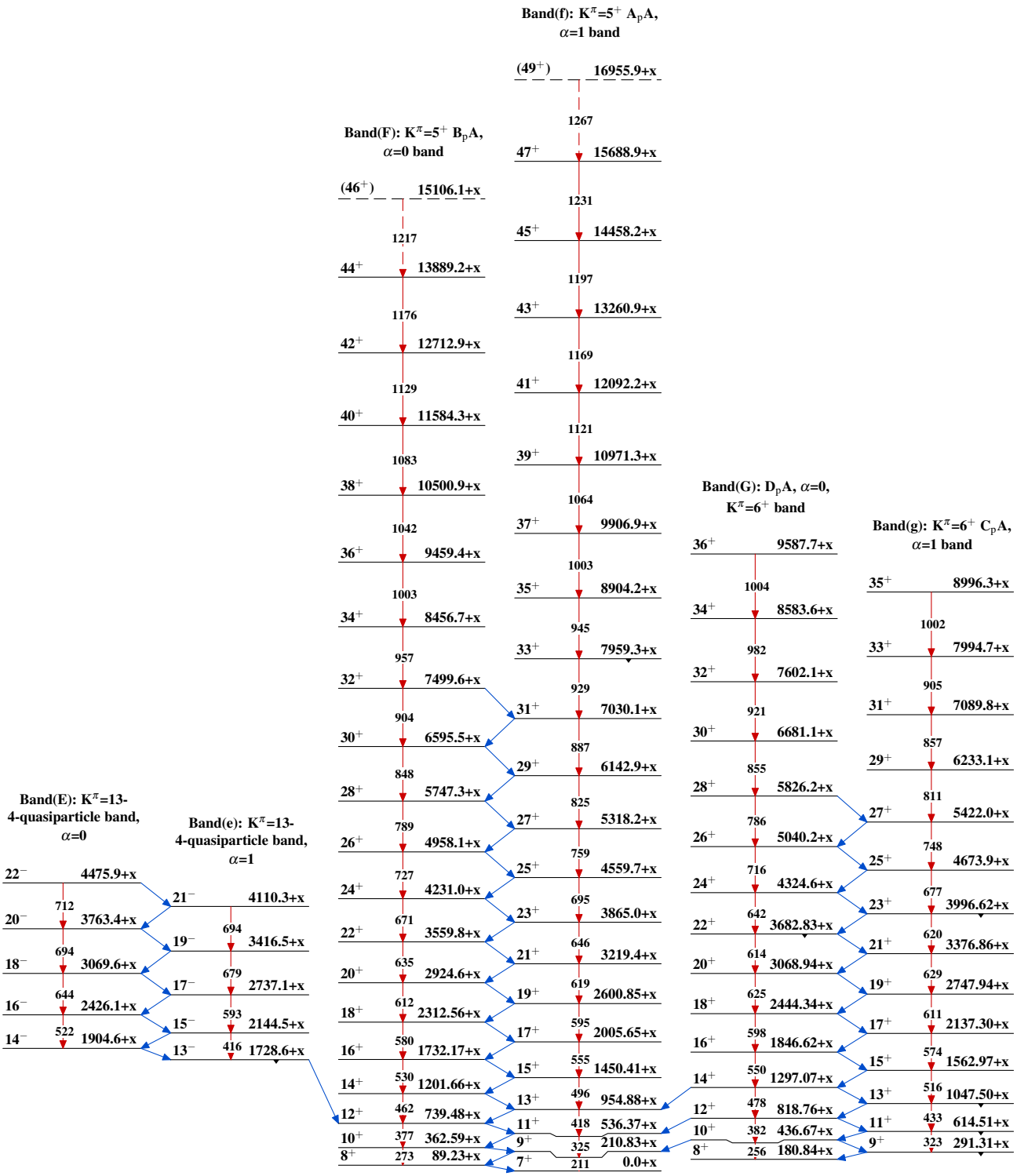
$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48



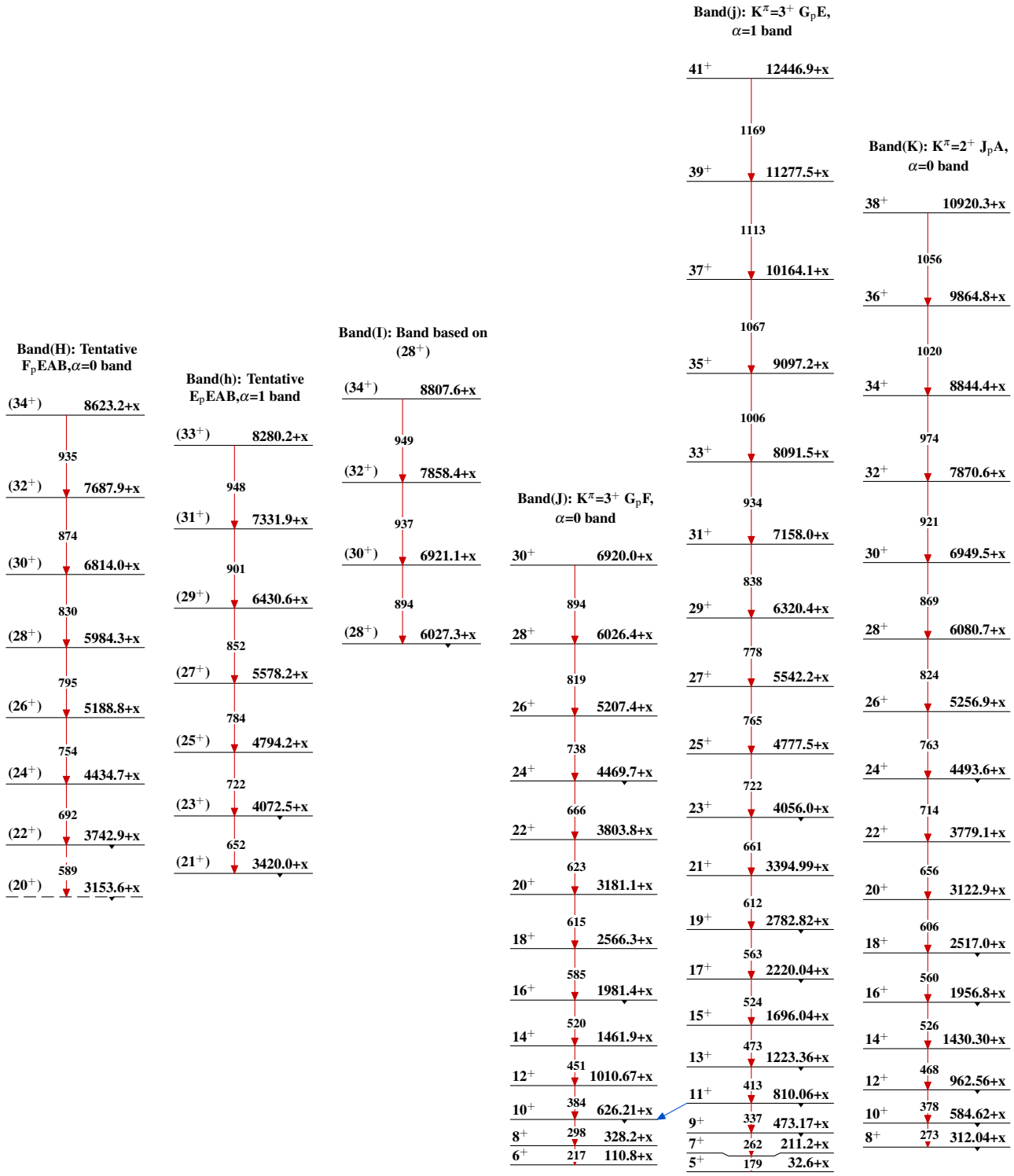
$^{170}_{73}Ta_{97}$

^{124}Sn(^{51}V,5nγ) 2010Ag06,1985Ba48 (continued)



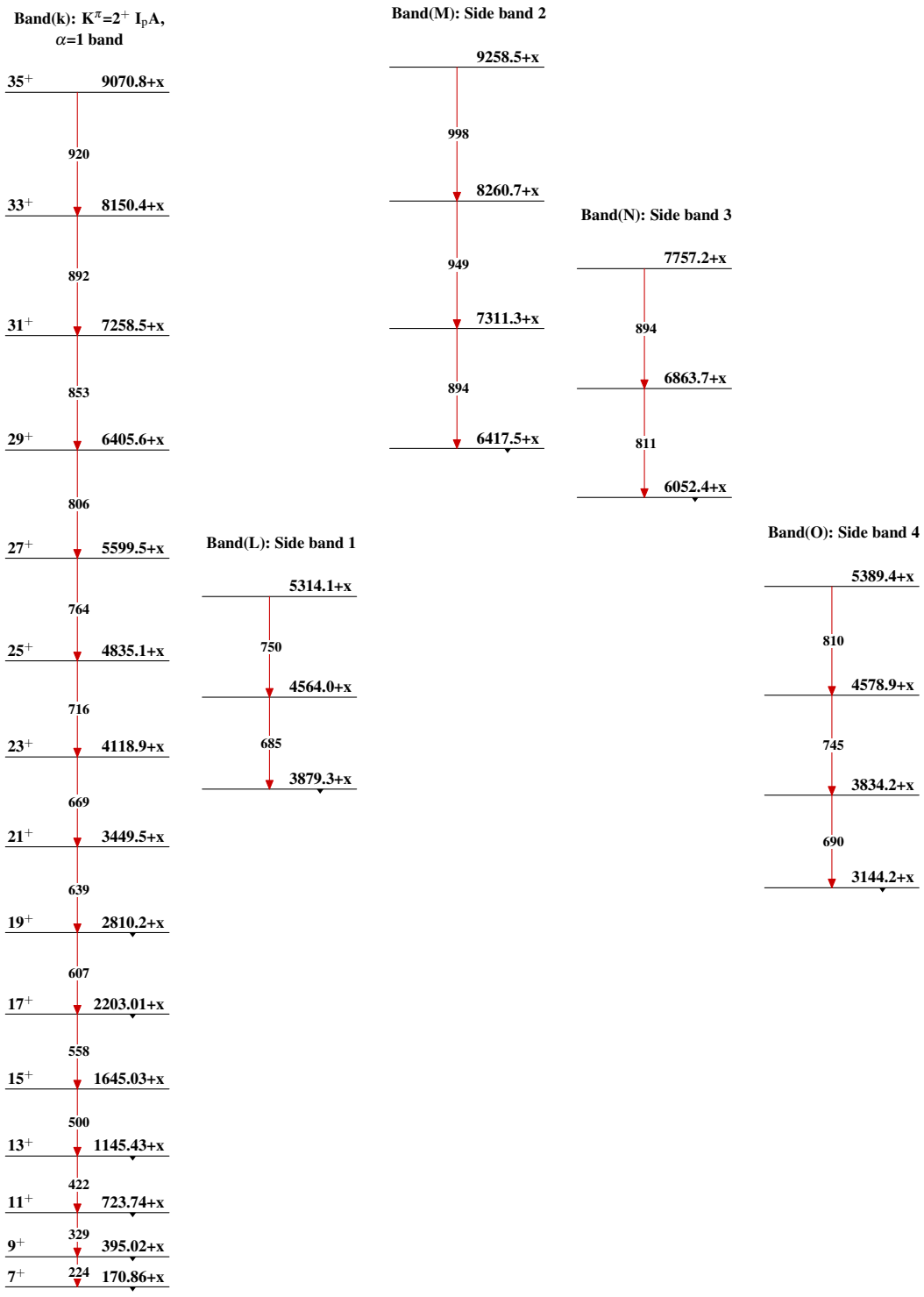
$^{170}_{73}Ta_{97}$

$^{124}Sn(^{51}V,5n\gamma)$ 2010Ag06,1985Ba48 (continued)



$^{170}_{73}Ta_{97}$

$^{124}Sn(^{51}V,5n\gamma)$ 2010Ag06,1985Ba48 (continued)



$^{170}_{73}Ta_{97}$