Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. -c. Wu	NDS 106,367 (2005)	31-Aug-2005

Q(β^-)=−2.97×10^3 *3*; S(n)=8755 *25*; S(p)=4171 *13*; Q(α)=2771 *13* 2012Wa38
Note: Current evaluation has used the following Q record −2960 30 *8743* 25 *4156* 13 *2787* 13 2003Au03.

^{181}Re Levels

Cross Reference (XREF) Flags

- A ^{181}Os ε decay (105 min)
- B ^{181}Os ε decay (2.7 min)
- C ^{181}Ta(α,4nγ),^{181}Ta(^{3}He,3nγ)
- D ^{176}Yb(^{11}B,6nγ)

E(level)†	J$^\pi$‡	T$_{1/2}$	XREF	Comments
0.0#	5/2$^+$	19.9 h *7*	ABCD	%ε+%β^+=100 μ=3.19 *7* (2001StZZ) μ: measured by radiative detection of NMR (1981Ha22). J$^\pi$: atomic beam, log *ft*=5.7 to 3/2$^+$, rotational band member. T$_{1/2}$: from 1968Sc27. Other measurements: 18 h *1* (1963Gr22) and 20.9 h *19* (1969Hu03).
117.96@ *3*	7/2$^+$		ABCD	J$^\pi$: M1 to 5/2$^+$, E1 from 9/2$^-$, rotational band member.
262.91& *11*	9/2$^-$	156.7 ns *19*	ABCD	J$^\pi$: 9/2$^-$[514] band head. log *ft*≈4.7 from 7/2$^-$ of ^{181}Os. T$_{1/2}$: weighted average of 157 ns *2* from ^{176}Yb(^{11}B,6nγ), 158 ns *10* from ^{181}Os ε decay (2.7 min) and 140 ns *14* from (α,4nγ).
266.39# *5*	9/2$^+$		A CD	J$^\pi$: M1 to 7/2$^+$, stretched E2 to 5/2$^+$, rotational band member.
356.72^o *7*	5/2$^-$	87.6 ns *12*	A CD	μ=+2.03 *10* (2001StZZ) μ: differential perturbed angular correlations (1978Be67). J$^\pi$: 599.6 keV level is directly fed by ε from 1/2$^-$ with log *ft*=7.02. It M1+E2 decays to the 356.7 keV state, which then E1 decays to the 118.0 keV state of J^π=7/2$^+$. The cascade uniquely determines the J^π of 356.7 keV as 5/2$^-$ and J^π of 599.6 keV as 3/2$^-$. T$_{1/2}$: From ^{176}Yb(^{11}B,6nγ). Others: 96 *4* ns from ^{181}Os ε decay (105 min); 98 ns from pγ(t) (1971IsZQ).
390.5^o *3*	9/2$^-$		A CD	J$^\pi$: E2 to 5/2$^-$, rotational band member.
427.02^a *12*	11/2$^-$		CD	J$^\pi$: D to 9/2$^-$, rotational band member.
432.43 *8*	1/2$^-$		A	J$^\pi$: member of strongly Coriolis coupled rotational band. Stretched E2 γ to 5/2$^-$, M1 γ from 3/2$^-$.
443.64@ *7*	11/2$^+$		CD	J$^\pi$: D to 9/2$^+$, stretched E2 to 7/2$^+$, rotational band member.
546.4^o *4*	13/2$^-$		CD	J$^\pi$: stretched E2 to 9/2$^-$, rotational band member.
599.62 *10*	3/2$^-$		A	J$^\pi$: See comment on the 356.7 keV level.
618.64& *12*	13/2$^-$		CD	J$^\pi$: stretched E2 to 9/2$^-$, D to 11/2$^-$, rotational band member.
646.25# *8*	13/2$^+$		CD	J$^\pi$: D to 11/2$^+$, stretched E2 to 9/2$^+$, rotational band member.
787.6 *4*	(1/2$^+$,3/2$^+$)		A	J$^\pi$: (E2) to 5/2$^+$, fed by ε from 1/2$^-$ with log *ft*=7.06.
822.5^o *4*	17/2$^-$		CD	J$^\pi$: stretched E2 to 13/2$^-$, rotational band member.
826.75 *22*	(1/2,3/2)$^+$		A	J$^\pi$: E2 to 5/2$^+$, fed by ε from 1/2$^-$ with log *ft*=6.64.
831.58 *23*	3/2$^+$		A	J$^\pi$: M1 to 5/2$^+$, fed by ε from 1/2$^-$ with log *ft*=7.22.
833.90^a *12*	15/2$^-$		CD	J$^\pi$: stretched E2 to 11/2$^-$, D to 13/2$^-$, rotational band member.
867.17 *14*	1/2$^-$, 3/2$^-$		A	J$^\pi$: M1 γ to 1/2$^-$.
872.71@ *9*	15/2$^+$		CD	J$^\pi$: D to 13/2$^+$, stretched E2 to 11/2$^+$, rotational band member.
931.6 *3*	(1/2$^+$,3/2$^+$)		A	J$^\pi$: (E2) γ's to 5/2$^+$, fed by ε from 1/2$^-$ with log *ft*=7.12.
1000.5? *6*			A	

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Adopted Levels, Gammas (continued)

^{181}Re Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	XREF	Comments
1059.9? *5*	(−)		A	Jπ: (E2) γ to (9/2)−.
1060.35 *22*	3/2+		A	Jπ: M1+E2 γ to 5/2+, fed by ε with log *ft*=7.12 from 1/2− parent.
1072.11[&] *13*	17/2−		CD	Jπ: stretched E2 to 13/2−, D to 15/2−, rotational band member.
1107.80 *23*	1/2−,3/2−		A	Jπ: M1 γ from 1/2−,3/2−, log *ft*=7.11 from 1/2−.
1116.35[#] *10*	17/2+		CD	Jπ: D to 15/2+, stretched E2 to 13/2+, rotational band member.
1191.60 *21*	1/2−,3/2−		A	Jπ: M1 γ to 1/2−.
1208.4[o] *4*	21/2−		CD	Jπ: stretched E2 to 17/2−, rotational band member.
1327.50[a] *13*	19/2−		CD	Jπ: stretched E2 to 15/2−, D to 17/2−, rotational band member.
1376.44[@] *10*	19/2+		CD	Jπ: D to 17/2+, stretched E2 to 15/2+, rotational band member.
1385.2 *4*	(1/2−,3/2)		A	Jπ: γ to 5/2−, fed by ε from 1/2− with log *ft*=7.44.
1434.2 *3*	(3/2−)		A	Jπ: (M1) γ to 1/2−,3/2−, γ to 5/2+, fed by ε from 1/2− with log *ft*=7.17.
1442.65 *19*	3/2−		A	Jπ: M1+E2 γ to 5/2−, fed by ε from 1/2− with log *ft*=6.86.
1475.5[n] *4*	15/2−		D	
1601.24[&] *15*	21/2−		CD	Jπ: stretched E2 to 17/2−, D to 19/2−, rotational band member.
1641.77[#] *11*	21/2+		CD	Jπ: D to 19/2+, stretched E2 to 17/2+, rotational band member.
1656.37[e] *14*	21/2−	250 ns *10*	CD	$T_{1/2}$: From ^{176}Yb(^{11}B,6nγ). Others: 7 μs *1* from 2002Pf01; >2 μs from (a,4nγ) (1974Si14). 1976Ne03 (a,4nγ) conclude that 45 ns < $T_{1/2}$ < 11.4 μs. Jπ: γ to 17/2− and 19/2− members of 9/2−[514] band.
1689.4[o] *4*	25/2−		CD	Jπ: stretched E2 to 21/2−, rotational band member.
1693.40[t] *13*	17/2+		CD	Jπ: (D) to 15/2− and 17/2− states of 9/2−[514] band; K^{π}=17/2+ band head. Probable configuration=π1/2[541]ν(9/2[624]7/2[514]).
1743.8[n] *4*	19/2−		D	
1809.14[t] *13*	19/2+		D	
1858.08[p] *13*	21/2+		D	Jπ: K^{π}=21/2+ band head. Probable configuration=π5/2[402]ν(9/2[624]7/2[633]).
1880.57[r] *16*	25/2+	11.5 μs *9*	CD	$T_{1/2}$: weighted average of 12 μs *2* from ^{176}Yb(^{11}B,6nγ) and 11.4 μs *10* from (a,4nγ). Jπ: M2 to 21/2− state. Band head of configuration π9/2[514]ν(9/2[624]7/2[514]).
1883.05[a] *15*	23/2−		CD	XREF: C(1882.1). Jπ: see discussion of 2000Pe18 for the degeneracy of the two 1883 keV states.
1883.10[d] *14*	23/2−		CD	XREF: C(1882.1). Jπ: γ to 21/2−; γ to 19/2− and 21/2− members of 9/2−[514] band.
1913.57[@] *11*	23/2+		CD	Jπ: stretched E2 to 19/2+, D to 21/2+, rotational band member.
1925.0 *4*	(3/2)−		A	Jπ: M1 to 1/2−, (M1) to 5/2−.
1937.6 *5*	1/2+,3/2+		A	Jπ: E2 γ to 5/2+, fed by ε from 1/2− with log *ft*=6.73.
1946.1 *4*	3/2−		A	Jπ: M1 γ to 5/2−, fed by ε from 1/2− with log *ft*=7.00.
1958.5 *7*	(1/2+,3/2+)		A	Jπ: (E2) γ to (1/2,3/2)+, fed by ε from 1/2− with log *ft*=7.20.
1986.87[q] *13*	23/2+		D	
2015.3 *6*	(1/2+,3/2+)		A	Jπ: (M1) γ to 3/2+, fed by ε from 1/2− with log *ft*=6.29.
2091.0 *6*	1/2+,3/2+		A	Jπ: M1 γ to 3/2+, fed by ε from 1/2− with log *ft*=6.54.
2104.0[n] *4*	23/2−		D	
2135.89[s] *18*	27/2+		D	
2136.35[e] *15*	25/2−		D	
2138.0 *3*	3/2−		A	Jπ: E1 γ to 5/2+, fed by ε from 1/2− with log *ft*=6.74.
2156.44[p] *12*	25/2+		D	
2172.4 *3*	3/2−		A	Jπ: M1+E2 γ to 1/2−; log *ft*=6.2 from ^{181}Os (J^{π}=1/2−) ε-decay.
2177.24[#] *12*	25/2+		CD	Jπ: D+Q to 23/2+, stretched E2 to 21/2+, rotational band member.
2177.52[&] *15*	25/2−		CD	Jπ: stretched E2 to 21/2−, (D) to 23/2−, rotational band member.
2225.12[b] *17*	25/2−		D	Jπ: K^{π}=25/2− band head. Probable configuration=π9/2[514]$\nu i^2_{13/2}$.

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Adopted Levels, Gammas (continued)

^{181}Re Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	XREF	Comments
2246.0[o] *4*	29/2⁻		CD	Jπ: stretched E2 to 25/2⁻, rotational band member.
2354.10[q] *14*	27/2⁺		D	
2411.72[d] *15*	27/2⁻		D	
2412.86[r] *17*	29/2⁺		D	
2425.9 *8*	(1/2⁻,3/2)		A	Jπ: γ's to 5/2⁻, fed by ε from 1/2⁻ with log *ft*=6.89.
2427.03[c] *16*	27/2⁻		D	
2449.31[@] *13*	27/2⁺		D	
2468.45[a] *16*	27/2⁻		CD	Jπ: stretched E2 to 23/2⁻, D to 23/2⁻, rotational band member.
2482.3 *3*	3/2⁻		A	Jπ: M1+E2 γ to 3/2⁻, γ to 5/2⁺, fed by ε from 1/2⁻ with log *ft*=6.34.
2549.8[n] *4*	27/2⁻		D	
2574.14[p] *16*	29/2⁺		D	
2632.86[b] *17*	29/2⁻		D	
2709.63[#] *14*	29/2⁺		D	
2710.66[s] *18*	31/2⁺		D	
2713.02[e] *16*	29/2⁻		D	
2763.17[&] *16*	29/2⁻		D	
2815.40[q] *17*	31/2⁺		D	
2854.71[c] *17*	31/2⁻		D	
2856.9[o] *4*	33/2⁻		CD	Jπ: stretched E2 to 29/2⁻, rotational band member.
2867.1 *3*	1/2⁻,3/2⁻		A	Jπ: M1 γ to 3/2⁻, fed by ε from 1/2⁻ with log *ft*=3.7. E(level): very low log *ft* value seems to indicate the configuration of the final level as 3 quasiparticle state with ν1/2[521]⊗ν7/2[514]⊗π9/2[514].
2990.60[@] *14*	31/2⁺		D	
3028.03[r] *18*	33/2⁺		D	
3031.12[d] *16*	31/2⁻		D	
3047.04[a] *16*	31/2⁻		D	
3074.04[p] *19*	33/2⁺		D	
3076.1[n] *4*	31/2⁻		D	
3093.13[b] *18*	33/2⁻		D	
3271.66[#] *15*	33/2⁺		D	
3332.56[&] *17*	33/2⁻		D	
3348.00[q] *20*	35/2⁺		D	
3348.45 *19*	(33/2)		D	
3348.84[c] *18*	35/2⁻		D	
3370.52[s] *19*	35/2⁺		D	
3371.07[e] *16*	33/2⁻		D	
3486.41 *17*	(33/2⁻)		D	
3508.1[o] *4*	37/2⁻		CD	
3512.78 *18*	(33/2⁺)		D	
3587.71[@] *16*	35/2⁺		D	
3618.32[a] *17*	35/2⁻		D	
3623.68[b] *19*	37/2⁻		D	
3642.44[p] *21*	37/2⁺		D	
3679.0[n] *4*	35/2⁻		D	
3711.38[d] *16*	35/2⁻		D	Jπ: γ to 31/2⁻ and 33/2⁻; γ to 31/2⁻ member of 9/2⁻[514] band.
3724.18[r] *20*	37/2⁺		D	
3869.40[l] *18*	(35/2⁻)	1.2 μs *2*	D	$T_{1/2}$: from ^{176}Yb(^{11}B,6nγ). Others: 0.8 μs *1* from 2002Pf01.
3903.51[#] *16*	37/2⁺		D	
3914.66[c] *19*	39/2⁻		D	

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Adopted Levels, Gammas (continued)

^{181}Re Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	XREF	Comments
3924.53[&] *18*	37/2⁻		D	
3963.00[q] *22*	39/2⁺		D	
3967.47 *17*	(37/2⁻)		D	
3990.02[f] *17*	(37/2⁻)	22.2 ns *5*	D	$T_{1/2}$: from ^{176}Yb(^{11}B,6nγ).
4201.8[o] *5*	41/2⁻		CD	
4226.1[m] *17*	(37/2⁻)		D	
4228.69[b] *20*	41/2⁻		D	
4230.29[h] *21*	(37/2)		D	
4237.74[a] *19*	39/2⁻		D	
4261.38[@] *17*	39/2⁺		D	
4288.34[p] *23*	41/2⁺		D	
4327.77[g] *19*	(39/2⁻)		D	
4354.4[n] *4*	39/2⁻		D	
4552.52[c] *21*	43/2⁻		D	
4571.36[i] *22*	(39/2)		D	
4583.40[&] *19*	41/2⁻		D	
4586.7[l] *17*	(39/2⁻)		D	
4612.17[#] *18*	41/2⁺		D	
4653.90[q] *25*	43/2⁺		D	
4678.05[f] *19*	(41/2⁻)		D	
4801.27[j] *21*	(41/2⁻)		D	
4909.91[b] *21*	45/2⁻		D	
4916.54[h] *22*	(41/2)		D	
4929.12[a] *20*	43/2⁻		D	
4948.1[o] *5*	45/2⁻		D	
5009.8[p] *3*	45/2⁺		D	
5009.93[@] *18*	43/2⁺		D	
5043.95[g] *19*	(43/2⁻)		D	
5097.2[n] *5*	43/2⁻		D	
5183.77[k] *23*	(43/2⁻)		D	
5260.00[c] *22*	47/2⁻		D	
5273.23[i] *23*	(43/2)		D	
5385.17[#] *20*	45/2⁺		D	
5421.5[q] *3*	47/2⁺		D	
5426.08[f] *20*	(45/2⁻)		D	
5578.27[j] *23*	(45/2⁻)		D	
5639.87[h] *25*	(45/2)		D	
5665.94[b] *23*	49/2⁻		D	
5759.1[o] *5*	49/2⁻		D	
5803.5[p] *3*	49/2⁺		D	
5824.19[g] *20*	(47/2⁻)		D	
5898.3[n] *5*	47/2⁻		D	
5985.37[k] *23*	(47/2⁻)		D	
6032.49[c] *24*	51/2⁻		D	
6238.34[f] *21*	(49/2⁻)		D	
6255.9[q] *3*	51/2⁺		D	
6402.27[j] *25*	(49/2⁻)		D	

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Adopted Levels, Gammas (continued)

^{181}Re Levels (continued)

E(level)†	Jπ‡	XREF	E(level)†	Jπ‡	XREF
6456.9[b] 6	53/2⁻	D	6665.68[g] 23	(51/2⁻)	D
6640.8[o] 5	53/2⁻	D	6740.7[n] 5	51/2⁻	D
6655.9[p] 3	53/2⁺	D	6862.1[c] 3	55/2⁻	D
			7590.7[o] 5	57/2⁻	D

† From least square fit to Eγ's by evaluator.
‡ From band structure. Specific arguments are given to individual levels.
# Band(A): 5/2[402] g.s. band, α=+1/2. A=17.1, B=−20.4, fit to levels J=5/2$^+$ to 17/2$^+$.
@ Band(a): 5/2[402] g.s. band, α=−1/2. A=17.1, B=−20.5, fit to levels J=7/2$^+$ to 19/2$^+$.
& Band(B): 9/2$^-$[514] band, α=+1/2. A=15.3, B=−12.6, fit to levels J=9/2$^-$ to 21/2$^-$.
[a] Band(b): 9/2$^-$[514] band, α=−1/2. A=15.3, B=−13.3, fit to levels J=11/2$^-$ to 23/2$^-$.
[b] Band(C): K^π=25/2$^-$ band, α=+1/2. A=7.2, B=0.43, fit to levels J=25/2$^-$ to 37/2$^-$. Probable configuration=π9/2[514]$\nu i^2_{13/2}$.
[c] Band(c): K^π=25/2$^-$ band, α=−1/2. A=7.0, B=1.17, fit to levels J=27/2$^-$ to 39/2$^-$. Probable configuration=π9/2[514]$\nu i^2_{13/2}$.
[d] Band(d): K^π=21/2$^-$ band, α=−1/2. A=10.4, B=−0.86, fit to levels J=23/2$^-$ to 35/2$^-$. Probable configuration=π5/2[402]ν(9/2[624]7/2[514]).
[e] Band(D): K^π=21/2$^-$ band, α=+1/2. A=10.0, B=1.11, fit to levels J=21/2$^-$ to 33/2$^-$. Probable configuration=π5/2[402]ν(9/2[624]7/2[514]).
[f] Band(E): K^π=(37/2$^-$) band, α=+1/2. Probable configuration=π9/2[514]ν(9/2[624]5/2[512]7/2[633]7/2[503]).
[g] Band(e): K^π=(37/2$^-$) band, α=−1/2. Probable configuration=π9/2[514]ν(9/2[624]5/2[512]7/2[633]7/2[503]).
[h] Band(F): (37/2) band, α=+1/2. Positive parity is given in the γ-table of 2000Pe18. Further clarification from one of the authors of 2000Pe18 (C.J. Pearson) suggests that the parity should not be adopted.
[i] Band(f): (37/2) band, α=−1/2. Positive parity is given in the γ-table of 2000Pe18. Further clarification from one of the authors of 2000Pe18 (C.J. Pearson) suggests that the parity should not be adopted.
[j] Band(G): (41/2$^-$) band, α=+1/2.
[k] Band(g): (41/2$^-$) band, α=−1/2.
[l] Band(H): (35/2$^-$) band, α=−1/2.
[m] Band(h): (35/2$^-$) band, α=+1/2.
[n] Band(I): 1/2[541], α=−1/2. A=17.7, B=3.13, a=−7.2, fit to levels J=15/2$^-$ to 31/2$^-$.
[o] Band(i): 1/2[541], α=+1/2. A=11.3, B=−22.1, a=8.1, fit to levels J=5/2$^-$ to 21/2$^-$.
[p] Band(J): K^π=21/2$^+$ band, α=+1/2. A=6.0, B=6.7, fit to levels J=21/2$^+$ to 33/2$^+$. Probable configuration=π5/2[402]ν(9/2[624]7/2[633]).
[q] Band(j): K^π=21/2$^+$ band, α=−1/2. A=6.8, B=3.0, fit to levels J=23/2$^+$ to 35/2$^+$. Probable configuration=π5/2[402]ν(9/2[624]7/2[633]).
[r] Band(K): K^π=25/2$^+$ band, α=+1/2. A=9.5, B=0.62, fit to levels J=25/2$^+$ to 37/2$^+$. Probable configuration=π9/2[514]ν(9/2[624]7/2[514]).
[s] Band(k): K^π=25/2$^+$ band, α=−1/2. A=9.4, B=0.97, fit to levels J=27/2$^+$ to 35/2$^+$. Probable configuration=π9/2[514]ν(9/2[624]7/2[514]).
[t] Band(L): K$^\pi$=17/2$^+$ band. Probable configuration=π1/2[541]ν(9/2[624]7/2[514]).

Adopted Levels, Gammas (continued)

γ(^{181}Re)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[#]	α[@]	Comments
117.96	7/2$^+$	118.02 *3*	100	0.0	5/2$^+$	M1+E2	0.22 *+3−2*	3.27 *2*	
262.91	9/2$^-$	144.76 *11*	100	117.96	7/2$^+$	E1		0.148	B(E1)(W.u.)=4.00×10^{-7} *22*
266.39	9/2$^+$	148.56 *5*	100 *5*	117.96	7/2$^+$	M1(+E2)	<0.13	1.71 *1*	
		265.91 *9*	39 *3*	0.0	5/2$^+$	E2		0.128	
356.72	5/2$^-$	238.75 *7*	100 *6*	117.96	7/2$^+$	E1		0.0416	B(E1)(W.u.)=1.50×10^{-7} *18*
		356.7 *2*	3.6 *7*	0.0	5/2$^+$	(E1)		0.0158	B(E1)(W.u.)=1.6×10^{-9} *4*
390.5	9/2$^-$	33.8[&] *3*	100	356.72	5/2$^-$	E2		633	E_γ: see ^{181}Os ε decay (105 min) for discussion of placement of this transition.
427.02	11/2$^-$	164.06 *6*	100	262.91	9/2$^-$	D			
432.43	1/2$^-$	75.73[#] *4*	100[#]	356.72	5/2$^-$	E2		13.3	
443.64	11/2$^+$	177.25 *8*	100 *5*	266.39	9/2$^+$	D			
		325.81 *8*	39 *13*	117.96	7/2$^+$	E2		0.0697	
546.4	13/2$^-$	155.93 *14*	100	390.5	9/2$^-$	E2		0.770	
599.62	3/2$^-$	167.23[#] *6*	50[#] *7*	432.43	1/2$^-$	M1+E2	≈1.1	≈0.89	
		242.74[#] *12*	100[#] *23*	356.72	5/2$^-$	M1+E2	0.53 *9*	0.379 *16*	
618.64	13/2$^-$	191.56 *6*	100 *4*	427.02	11/2$^-$	D			
		355.77 *13*	19 *3*	262.91	9/2$^-$	E2		0.0542	
646.25	13/2$^+$	202.71 *7*	100 *5*	443.64	11/2$^+$	D			
		379.81 *12*	61 *8*	266.39	9/2$^+$	E2		0.0452	
787.6	(1/2$^+$,3/2$^+$)	787.6[#] *4*	100[#]	0.0	5/2$^+$	(E2)		0.00780	
822.5	17/2$^-$	275.99 *17*	100	546.4	13/2$^-$	E2		0.114	
826.75	(1/2,3/2)$^+$	827.0[#] *4*	100[#]	0.0	5/2$^+$	E2		0.00704	
831.58	3/2$^+$	831.5[#] *4*	100[#]	0.0	5/2$^+$	M1		0.0173	
833.90	15/2$^-$	215.23 *6*	100 *4*	618.64	13/2$^-$	D			
		406.87 *8*	20.2 *13*	427.02	11/2$^-$	E2		0.0375	
867.17	1/2$^-$, 3/2$^-$	267.65[#] *15*	53[#] *11*	599.62	3/2$^-$	M1+E2	0.9 *2*	0.24 *3*	
		434.5[#] *2*	100[#] *20*	432.43	1/2$^-$	M1(+E2)	<0.7	0.081 *10*	
872.71	15/2$^+$	226.49 *7*	100 *6*	646.25	13/2$^+$	D			
		429.07 *9*	66 *3*	443.64	11/2$^+$	E2		0.0325	
931.6	(1/2$^+$,3/2$^+$)	100.5[#] *5*	37[#] *12*	831.58	3/2$^+$	[M1]		5.27	
		104.5[#] *5*	39[#] *12*	826.75	(1/2,3/2)$^+$	[M1]		4.71	
		931.7[#] *5*	100[#] *27*	0.0	5/2$^+$	(E2)		0.00551	
1000.5?		1000.5[#&] *6*	100[#]	0.0	5/2$^+$				
1059.9?	(−)	796.9[#&] *5*	100[#]	262.91	9/2$^-$	(E2)		0.00761	
1060.35	3/2$^+$	228.73[#] *12*	29[#] *7*	831.58	3/2$^+$	M1+E2	1.2 *+5−4*	0.33 *7*	
		233.63[#] *10*	32[#] *11*	826.75	(1/2,3/2)$^+$	M1+E2	1.3 *+3−2*	0.30 *3*	

$^{181}_{75}Re_{106}$-6

Adopted Levels, Gammas (continued)

γ(^{181}Re) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[#]	α[@]
1060.35	3/2$^+$	1060.4[#] *4*	100[#] *14*	0.0	5/2$^+$	M1+E2	1.3 *+6−4*	0.0062 *10*
1072.11	17/2$^-$	238.15 *14*	100 *11*	833.90	15/2$^-$	D		
		453.44 *8*	43 *7*	618.64	13/2$^-$	E2		0.0282
1107.80	1/2$^-$,3/2$^-$	509.0[#] *10*	6[#] *4*	599.62	3/2$^-$	[M1]		0.0605
		675.4[#] *4*	48[#] *11*	432.43	1/2$^-$	(M1)		0.0292
		751.4[#] *5*	100[#] *25*	356.72	5/2$^-$	(E2)		0.0086
1116.35	17/2$^+$	243.62 *11*	100 *6*	872.71	15/2$^+$	D		
		470.20 *9*	96 *21*	646.25	13/2$^+$	E2		0.0257
1191.60	1/2$^-$,3/2$^-$	324.4[#] *2*	20[#] *4*	867.17	1/2$^-$, 3/2$^-$	(M1)		0.199
		592.0[#] *7*	29[#] *11*	599.62	3/2$^-$	(M1)		0.0409
		759.5[#] *5*	100[#] *18*	432.43	1/2$^-$	M1		0.0217
1208.4	21/2$^-$	385.95 *8*	100	822.5	17/2$^-$	E2		0.0432
1327.50	19/2$^-$	255.40 *7*	100 *5*	1072.11	17/2$^-$	D		
		493.62 *8*	55 *7*	833.90	15/2$^-$	E2		0.0227
1376.44	19/2$^+$	260.16 *7*	100 *6*	1116.35	17/2$^+$	D		
		503.78 *9*	89 *24*	872.71	15/2$^+$	E2		0.0217
1385.2	(1/2$^-$,3/2)	786.0[#] *6*	63[#] *20*	599.62	3/2$^-$			
		1027.0[#] *10*	25[#] *17*	356.72	5/2$^-$			
		1385.3[#] *6*	100[#] *23*	0.0	5/2$^+$	(E2)		0.00253
1434.2	(3/2$^-$)	326.4[#] *2*	54[#] *42*	1107.80	1/2$^-$,3/2$^-$	(M1)		0.195
		567.2[#] *7*	85[#] *42*	867.17	1/2$^-$, 3/2$^-$			
		835.0[#] *10*	38[#] *19*	599.62	3/2$^-$			
		1077.3[#] *6*	77[#] *58*	356.72	5/2$^-$			
		1434.3[#] *10*	100[#] *38*	0.0	5/2$^+$			
1442.65	3/2$^-$	334.0[#] *6*	16[#] *6*	1107.80	1/2$^-$,3/2$^-$			
		842.5[#] *6*	64[#] *13*	599.62	3/2$^-$			
		1009.4[#] *6*	64[#] *19*	432.43	1/2$^-$			
		1086.2[#] *2*	100[#] *31*	356.72	5/2$^-$	M1+E2	1.1 *+5−3*	0.0062 *9*
		1442.0[#] *10*	53[#] *19*	0.0	5/2$^+$			
1475.5	15/2$^-$	929.2 *1*	100	546.4	13/2$^-$			
1601.24	21/2$^-$	273.86 *16*	100 *4*	1327.50	19/2$^-$	D		
		529.0 *3*	67 *8*	1072.11	17/2$^-$	E2		0.0192
1641.77	21/2$^+$	265.35 *9*	60 *12*	1376.44	19/2$^+$	D		
		525.40 *9*	100 *19*	1116.35	17/2$^+$	E2		0.0196
1656.37	21/2$^-$	328.84 *8*	100 *9*	1327.50	19/2$^-$			
		584.23 *9*	53 *9*	1072.11	17/2$^-$	(E2)		0.0152

$^{181}_{75}Re_{106}$-7

Adopted Levels, Gammas (continued)

γ(^{181}Re) (continued)

E_i(level)	J_i^π	E_γ [†]	I_γ [†]	E_f	J_f^π	Mult. [‡]	δ [#]	α [@]	Comments
1689.4	25/2$^-$	481.10 *9*	100	1208.4	21/2$^-$	E2		0.0242	
1693.40	17/2$^+$	621.25 *9*	39 *4*	1072.11	17/2$^-$	(D)			
		859.38 *10*	100 *4*	833.90	15/2$^-$	(D)			
1743.8	19/2$^-$	268.3 *1*	13	1475.5	15/2$^-$				
		921.2 *1*	100	822.5	17/2$^-$				
1809.14	19/2$^+$	115.6 *1*	100	1693.40	17/2$^+$	D			
1858.08	21/2$^+$	48.8 *1*		1809.14	19/2$^+$				
		164	100	1693.40	17/2$^+$				
1880.57	25/2$^+$	224.25 *12*	100	1656.37	21/2$^-$	M2		2.58	B(M2)(W.u.)=0.042 *4*
1883.05	23/2$^-$	281.9 *1*	100	1601.24	21/2$^-$	(D)			
		555.6 *1*	98	1327.50	19/2$^-$	E2		0.0171	
1883.10	23/2$^-$	226.7 *1*	8	1656.37	21/2$^-$				
		281.9 *1*	100	1601.24	21/2$^-$	(D)			
		555.6 *1*	99	1327.50	19/2$^-$	E2		0.0171	
1913.57	23/2$^+$	271.98 *9*	64 *13*	1641.77	21/2$^+$	D(+Q)			
		537.26 *9*	100 *28*	1376.44	19/2$^+$	E2		0.0185	
1925.0	(3/2)$^-$	1325.0[#] *6*	39[#] *14*	599.62	3/2$^-$	M1		0.00541	
		1491.8[#] *10*	100[#] *27*	432.43	1/2$^-$	M1		0.00404	
		1568.0[#] *8*	100[#] *29*	356.72	5/2$^-$	(M1)			
1937.6	1/2$^+$,3/2$^+$	1110.9[#] *5*	100[#] *20*	826.75	(1/2,3/2)$^+$				
		1937.0[#] *12*	10[#] *4*	0.0	5/2$^+$	E2			
1946.1	3/2$^-$	1345.2[#] *6*	100[#] *6*	599.62	3/2$^-$	M1+E2	≈1.6	≈0.00339	
		1514.0[#] *10*	15[#] *7*	432.43	1/2$^-$				
		1589.5[#] *10*	61[#] *19*	356.72	5/2$^-$	M1			
		1946.0[#] *12*	56[#] *19*	0.0	5/2$^+$	E1			
1958.5	(1/2$^+$,3/2$^+$)	1131.7[#] *6*	100[#]	826.75	(1/2,3/2)$^+$	(E2)		0.00374	
1986.87	23/2$^+$	129.2 *1*	100	1858.08	21/2$^+$				
2015.3	(1/2$^+$,3/2$^+$)	955.0[#] *5*	100[#] *16*	1060.35	3/2$^+$	(M1)		0.0122	
		2015.0[#] *15*	4[#] *2*	0.0	5/2$^+$				
2091.0	1/2$^+$,3/2$^+$	1030.5[#] *7*	100[#] *20*	1060.35	3/2$^+$	M1		0.0101	
		1159.0[#] *10*	32[#] *12*	931.6	(1/2$^+$,3/2$^+$)				
		1260.0[#] *10*	16[#] *9*	831.58	3/2$^+$				
2104.0	23/2$^-$	360.1 *1*	100	1743.8	19/2$^-$				
		895.6 *1*	89	1208.4	21/2$^-$				
2135.89	27/2$^+$	255.4 *1*	100	1880.57	25/2$^+$				
2136.35	25/2$^-$	253.3 *1*	100	1883.10	23/2$^-$				
		479.9 *1*	56	1656.37	21/2$^-$	E2		0.0244	

$^{181}_{75}Re_{106}$-8

Adopted Levels, Gammas (continued)

γ(^{181}Re) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[#]	α[@]
2138.0	3/2⁻	1537.5[#] *10*	19[#] *7*	599.62	3/2⁻			
		1704.9[#] *6*	100[#] *21*	432.43	1/2⁻	M1		
		1780.7[#] *5*	29[#] *10*	356.72	5/2⁻	M1		
		2138.0[#] *13*	54[#] *14*	0.0	5/2⁺	E1		
2156.44	25/2⁺	169.8 *1*	19	1986.87	23/2⁺			
		243.3 *1*	48	1913.57	23/2⁺	(D)		
		297.8 *1*	5	1858.08	21/2⁺	E2		0.091
		514.4 *1*	100	1641.77	21/2⁺	(E2)		0.0206
2172.4	3/2⁻	981.0[#] *6*	46[#] *13*	1191.60	1/2⁻,3/2⁻	M1+E2	1.1 *+8−4*	0.0079 *16*
		1064.0[#] *10*	17[#] *13*	1107.80	1/2⁻,3/2⁻			
		1305.0[#] *5*	100[#] *18*	867.17	1/2⁻, 3/2⁻	(E2)		0.00284
		1573.0[#] *8*	60[#] *17*	599.62	3/2⁻	(E2)		
		1740.6[#] *5*	69[#] *12*	432.43	1/2⁻	M1+E2	≈1	
2177.24	25/2⁺	263.60 *9*	67 *21*	1913.57	23/2⁺	D+Q		
		535.50 *9*	100 *24*	1641.77	21/2⁺	E2		0.0187
2177.52	25/2⁻	294.68 *9*	100 *17*	1883.05	23/2⁻	(D)		
		576.22 *9*	77 *31*	1601.24	21/2⁻	E2		0.0157
2225.12	25/2⁻	344.6 *1*	100	1880.57	25/2⁺			
2246.0	29/2⁻	556.59 *9*	100	1689.4	25/2⁻	E2		0.0170
2354.10	27/2⁺	197.5 *1*	37	2156.44	25/2⁺			
		367.4 *1*	100	1986.87	23/2⁺	E2		0.0496
2411.72	27/2⁻	275.4 *1*	100	2136.35	25/2⁻	(D)		
		528.6 *1*	90	1883.10	23/2⁻	E2		0.0193
2412.86	29/2⁺	277.0 *1*	100	2135.89	27/2⁺			
		532.2 *1*	33	1880.57	25/2⁺	E2		0.0190
2425.9	(1/2⁻,3/2)	1826.2[#] *10*	89[#] *33*	599.62	3/2⁻			
		1993.3[#] *15*	100[#] *44*	432.43	1/2⁻			
		2070.0[#] *20*	22[#] *11*	356.72	5/2⁻			
2427.03	27/2⁻	202.0 *1*	32	2225.12	25/2⁻			
		249.0 *5*	13	2177.52	25/2⁻			
		543.9 *1*	100	1883.05	23/2⁻	(E2)		0.0180
2449.31	27/2⁺	272.0 *1*	35	2177.24	25/2⁺	(D)		
		535.8 *1*	100	1913.57	23/2⁺	E2		0.0186
2468.45	27/2⁻	290.94 *9*	100 *25*	2177.52	25/2⁻	D		
		585.37 *9*	98 *19*	1883.05	23/2⁻	E2		0.0151
2482.3	3/2⁻	310.5[#] *5*	100[#] *28*	2172.4	3/2⁻			
		344.2[#] *2*	100[#] *17*	2138.0	3/2⁻	M1+E2	0.7 *3*	0.133 *21*

$^{181}_{75}Re_{106}$-9

Adopted Levels, Gammas (continued)

γ(^{181}Re) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	α[@]
2482.3	3/2$^-$	1552.0[#] *10*	39[#] *22*	931.6	(1/2$^+$,3/2$^+$)		
		2483.0[#] *20*	11[#] *6*	0.0	5/2$^+$		
2549.8	27/2$^-$	445.7 *1*	100	2104.0	23/2$^-$	E2	0.0294
		860.5 *1*	22	1689.4	25/2$^-$		
2574.14	29/2$^+$	220.3[&] *1*	7	2354.10	27/2$^+$		
		417.7 *1*	100	2156.44	25/2$^+$	E2	0.0349
2632.86	29/2$^-$	205.8 *1*	100	2427.03	27/2$^-$		
		407.7 *1*	43	2225.12	25/2$^-$	E2	0.0373
2709.63	29/2$^+$	260.2 *1*	50	2449.31	27/2$^+$	(D)	
		532.4 *1*	100	2177.24	25/2$^+$	E2	0.0189
2710.66	31/2$^+$	297.9 *1*	100	2412.86	29/2$^+$		
		574.8 *1*	86	2135.89	27/2$^+$	E2	0.0158
2713.02	29/2$^-$	301.3 *1*	45	2411.72	27/2$^-$		
		576.6 *1*	100	2136.35	25/2$^-$	E2	0.0157
2763.17	29/2$^-$	294.7 *1*	66	2468.45	27/2$^-$	(D)	
		585.8 *1*	100	2177.52	25/2$^-$	E2	0.0151
2815.40	31/2$^+$	241.6[&] *1*	9	2574.14	29/2$^+$		
		461.3 *1*	100	2354.10	27/2$^+$	E2	0.0269
2854.71	31/2$^-$	221.8 *1*	100	2632.86	29/2$^-$		
		427.7 *1*	27	2427.03	27/2$^-$	E2	0.0328
2856.9	33/2$^-$	610.9 *1*	100	2246.0	29/2$^-$	E2	0.0137
2867.1	1/2$^-$,3/2$^-$	728.6[#] *6*	78[#] *18*	2138.0	3/2$^-$	M1	0.0241
		920.3[#] *5*	100[#] *23*	1946.1	3/2$^-$		
		941.5[#] *5*	78[#] *20*	1925.0	(3/2)$^-$		
		1760.7[#] *5*	68[#] *15*	1107.80	1/2$^-$,3/2$^-$	M1	
		2000.4[#] *15*	14[#] *8*	867.17	1/2$^-$, 3/2$^-$		
		2267.3[#] *20*	3[#] *2*	599.62	3/2$^-$		
		2436.2[#] *15*	8[#] *5*	432.43	1/2$^-$		
2990.60	31/2$^+$	281.4 *1*	64	2709.63	29/2$^+$	(D)	
		541.4 *1*	100	2449.31	27/2$^+$	E2	0.0182
3028.03	33/2$^+$	317.6 *1*	63	2710.66	31/2$^+$		
		615.1 *1*	100	2412.86	29/2$^+$	E2	0.0135
3031.12	31/2$^-$	318.4 *1*	29	2713.02	29/2$^-$		
		619.4 *1*	100	2411.72	27/2$^-$	E2	0.0133
3047.04	31/2$^-$	284.3 *1*	92	2763.17	29/2$^-$	D	
		578.6 *1*	100	2468.45	27/2$^-$	E2	0.0155
3074.04	33/2$^+$	258.9[&] *1*	14	2815.40	31/2$^+$		
		499.9 *1*	100	2574.14	29/2$^+$	E2	0.0220

$^{181}_{75}Re_{106}$-10

Adopted Levels, Gammas (continued)

γ(^{181}Re) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	α[@]
3076.1	31/2⁻	526.3 *1*	100	2549.8	27/2⁻	E2	0.0195
3093.13	33/2⁻	238.4 *1*	100	2854.71	31/2⁻	(D)	
		460.3 *1*	48	2632.86	29/2⁻	E2	0.0271
3271.66	33/2⁺	281.4 *1*	30	2990.60	31/2⁺	(D)	
		561.5 *1*	100	2709.63	29/2⁺	E2	0.0167
3332.56	33/2⁻	285.7 *1*	100	3047.04	31/2⁻		
		569.1 *1*	89	2763.17	29/2⁻	E2	0.0161
3348.00	35/2⁺	532.6 *1*	100	2815.40	31/2⁺	E2	0.0189
3348.45	(33/2)	320.5 *1*	100	3028.03	33/2⁺	(D)	
		637.7 *1*	2	2710.66	31/2⁺		
3348.84	35/2⁻	255.7 *1*	100	3093.13	33/2⁻		
		494.1 *1*	93	2854.71	31/2⁻	E2	0.0226
3370.52	35/2⁺	342.5 *1*	75	3028.03	33/2⁺		
		659.8 *1*	100	2710.66	31/2⁺	E2	0.0115
3371.07	33/2⁻	340.6 *1*	38	3031.12	31/2⁻	D	
		657.7 *1*	100	2713.02	29/2⁻	E2	0.0116
3486.41	(33/2⁻)	853.5 *1*	100	2632.86	29/2⁻		
3508.1	37/2⁻	651.28 *9*	100	2856.9	33/2⁻	E2	0.0118
3512.78	(33/2⁺)	802.2 *1*	19	2710.66	31/2⁺		
		1099.8 *1*	100	2412.86	29/2⁺		
3587.71	35/2⁺	316.0 *1*	27	3271.66	33/2⁺	(D)	
		597.3 *1*	100	2990.60	31/2⁺	E2	0.0144
3618.32	35/2⁻	285.7 *1*	100	3332.56	33/2⁻		
		571.4 *1*	84	3047.04	31/2⁻	E2	0.0160
3623.68	37/2⁻	274.8 *1*	87	3348.84	35/2⁻		
		530.6 *1*	100	3093.13	33/2⁻	E2	0.0191
3642.44	37/2⁺	568.4 *1*	100	3074.04	33/2⁺	E2	0.0162
3679.0	35/2⁻	602.9 *1*	100	3076.1	31/2⁻	E2	0.0141
3711.38	35/2⁻	340.6 *1*	19	3371.07	33/2⁻	D	
		664.5 *1*	12	3047.04	31/2⁻		
		679.9 *1*	100	3031.12	31/2⁻	E2	0.0107
3724.18	37/2⁺	353.6 *1*	27	3370.52	35/2⁺		
		696.2 *1*	100	3028.03	33/2⁺	E2	0.0102
3869.40	(35/2⁻)	356.6 *1*	100	3512.78	(33/2⁺)		
3903.51	37/2⁺	316.0 *1*	29	3587.71	35/2⁺	(D)	
		631.7 *1*	100	3271.66	33/2⁺	E2	0.0127
3914.66	39/2⁻	291.0 *1*	87	3623.68	37/2⁻		
		565.8 *1*	100	3348.84	35/2⁻	E2	0.0164
3924.53	37/2⁻	306.5 *1*	100	3618.32	35/2⁻	D	
		591.9 *1*	79	3332.56	33/2⁻	E2	0.0147
3963.00	39/2⁺	615.0 *1*	100	3348.00	35/2⁺	E2	0.0135
3967.47	(37/2⁻)	256.2 *1*	100	3711.38	35/2⁻		

$^{181}_{75}Re_{106}$-11

Adopted Levels, Gammas (continued)

γ(^{181}Re) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	α[@]
3967.47	(37/2⁻)	481.0 *1*	5	3486.41	(33/2⁻)		
3990.02	(37/2⁻)	22.6 *1*		3967.47	(37/2⁻)		
		120.6 *1*	4	3869.40	(35/2⁻)	M1	3.12
		278.6 *1*	100	3711.38	35/2⁻	D	
4201.8	41/2⁻	693.7 *1*	100	3508.1	37/2⁻	E2	0.0103
4226.1	(37/2⁻)	357 *2*	100	3869.40	(35/2⁻)		
4228.69	41/2⁻	314.1 *1*	43	3914.66	39/2⁻		
		605.0 *1*	100	3623.68	37/2⁻	E2	0.0140
4230.29	(37/2)	360.9 *1*	100	3869.40	(35/2⁻)		
4237.74	39/2⁻	313.5 *1*	81	3924.53	37/2⁻	D	
		619.2 *1*	100	3618.32	35/2⁻	E2	0.0133
4261.38	39/2⁺	358.6 *1*	44	3903.51	37/2⁺		
		673.6 *1*	100	3587.71	35/2⁺	E2	0.0110
4288.34	41/2⁺	645.9 *1*	100	3642.44	37/2⁺	E2	0.0121
4327.77	(39/2⁻)	337.9 *1*	100	3990.02	(37/2⁻)		
4354.4	39/2⁻	675.4 *1*	100	3679.0	35/2⁻	E2	0.0109
4552.52	43/2⁻	323.9 *1*	37	4228.69	41/2⁻		
		637.8 *1*	100	3914.66	39/2⁻	E2	0.0124
4571.36	(39/2)	341.1 *1*	100	4230.29	(37/2)		
4583.40	41/2⁻	345.8 *1*	61	4237.74	39/2⁻		
		658.8 *1*	100	3924.53	37/2⁻	E2	0.0115
4586.7	(39/2⁻)	361 *2*	100	4226.1	(37/2⁻)		
		717 *2*	65	3869.40	(35/2⁻)		
4612.17	41/2⁺	351.6 *1*	7	4261.38	39/2⁺		
		708.0 *1*	100	3903.51	37/2⁺	E2	0.0098
4653.90	43/2⁺	690.9 *1*	100	3963.00	39/2⁺	E2	0.0104
4678.05	(41/2⁻)	350.5 *1*	100	4327.77	(39/2⁻)		
		687.9 *1*	17	3990.02	(37/2⁻)	E2	0.0105
4801.27	(41/2⁻)	473.5 *1*	100	4327.77	(39/2⁻)		
4909.91	45/2⁻	357.5 *1*	45	4552.52	43/2⁻		
		681.2 *1*	100	4228.69	41/2⁻	E2	0.0107
4916.54	(41/2)	345.3 *1*	100	4571.36	(39/2)		
		686.2 *1*	45	4230.29	(37/2)		
4929.12	43/2⁻	345.8 *1*	58	4583.40	41/2⁻		
		691.3 *1*	100	4237.74	39/2⁻	E2	0.0104
4948.1	45/2⁻	746.3 *1*	100	4201.8	41/2⁻	E2	0.0088
5009.8	45/2⁺	721.5 *1*	100	4288.34	41/2⁺	E2	0.0094
5009.93	43/2⁺	397.9 *1*	11	4612.17	41/2⁺		
		748.4 *1*	100	4261.38	39/2⁺	E2	0.0087
5043.95	(43/2⁻)	366.2 *1*	63	4678.05	(41/2⁻)	D	
		716.1 *1*	100	4327.77	(39/2⁻)	E2	0.0096
5097.2	43/2⁻	742.8 *1*	100	4354.4	39/2⁻	E2	0.0088
5183.77	(43/2⁻)	382.6 *1*	100	4801.27	(41/2⁻)		
5260.00	47/2⁻	350.2 *1*	35	4909.91	45/2⁻		
		707.4 *1*	100	4552.52	43/2⁻	E2	0.00780
5273.23	(43/2)	356.8 *1*	100	4916.54	(41/2)		
		701.8 *1*	37	4571.36	(39/2)		
5385.17	45/2⁺	773.0 *1*	100	4612.17	41/2⁺	E2	0.00812
5421.5	47/2⁺	767.6 *1*	100	4653.90	43/2⁺	E2	0.00824
5426.08	(45/2⁻)	382.1 *1*	14	5043.95	(43/2⁻)		
		747.8 *1*	100	4678.05	(41/2⁻)	E2	0.0087
5578.27	(45/2⁻)	394.6 *1*	4	5183.77	(43/2⁻)		
		776.9 *1*	100	4801.27	(41/2⁻)	E2	0.00803
5639.87	(45/2)	366.7 *1*	100	5273.23	(43/2)	D	
		722	14	4916.54	(41/2)		
5665.94	49/2⁻	406.0 *5*	21	5260.00	47/2⁻		
		756.0 *1*	100	4909.91	45/2⁻	E2	0.0085
5759.1	49/2⁻	811.0 *1*	100	4948.1	45/2⁻	E2	0.00734
5803.5	49/2⁺	793.7 *1*	100	5009.8	45/2⁺	E2	0.00768
5824.19	(47/2⁻)	398.0 *1*	25	5426.08	(45/2⁻)		
		780.5 *1*	100	5043.95	(43/2⁻)	E2	0.00796
5898.3	47/2⁻	801.1 *1*	100	5097.2	43/2⁻	E2	0.00753
5985.37	(47/2⁻)	407.1 *1*	100	5578.27	(45/2⁻)		
		801.6 *1*	25	5183.77	(43/2⁻)		
6032.49	51/2⁻	366.0 *5*	6	5665.94	49/2⁻		
		772.5 *1*	100	5260.00	47/2⁻	E2	0.00813
6238.34	(49/2⁻)	414.3 *1*	100	5824.19	(47/2⁻)		
		812.1 *1*	100	5426.08	(45/2⁻)	E2	0.00731
6255.9	51/2⁺	834.4 *1*	100	5421.5	47/2⁺	E2	0.00691
6402.27	(49/2⁻)	824.0 *1*	100	5578.27	(45/2⁻)	E2	0.00709
6456.9	53/2⁻	791	100	5665.94	49/2⁻	E2	0.00773
6640.8	53/2⁻	881.7 *1*	100	5759.1	49/2⁻	E2	0.00616
6655.9	53/2⁺	852.4 *1*	100	5803.5	49/2⁺	E2	0.00661
6665.68	(51/2⁻)	427.0 *5*	6	6238.34	(49/2⁻)		
		841.5 *1*	100	5824.19	(47/2⁻)	E2	0.00679
6740.7	51/2⁻	842.4 *1*	100	5898.3	47/2⁻	E2	0.00677
6862.1	55/2⁻	829.6 *1*	100	6032.49	51/2⁻	E2	0.00699
7590.7	57/2⁻	949.9 *1*	100	6640.8	53/2⁻	E2	0.00529

$^{181}_{75}Re_{106}$-12

Adopted Levels, Gammas (continued)

$\gamma(^{181}Re)$ (continued)

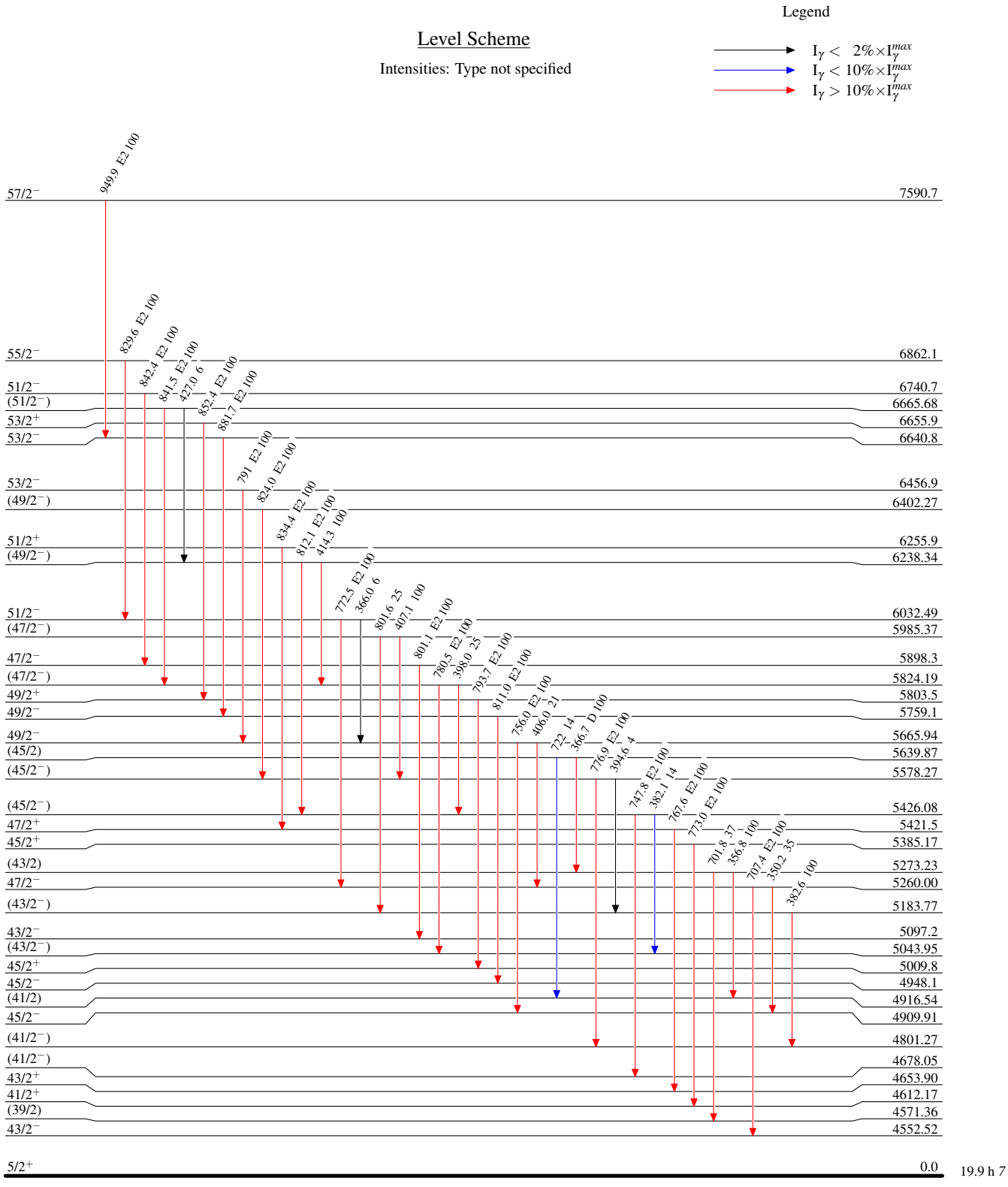
† Weighted average of values from ^{181}Re ε decay, ^{181}Ta(α,4nγ) and ^{176}Yb(^{11}B,6nγ).
‡ From ^{181}Re ε decay, ^{181}Ta(α,4nγ) and ^{176}Yb(^{11}B,6nγ).
# From ^{181}Re ε decay.
@ Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.
& Placement of transition in the level scheme is uncertain.

$^{181}_{75}Re_{106}$-13

Adopted Levels, Gammas

Level Scheme

Intensities: Type not specified

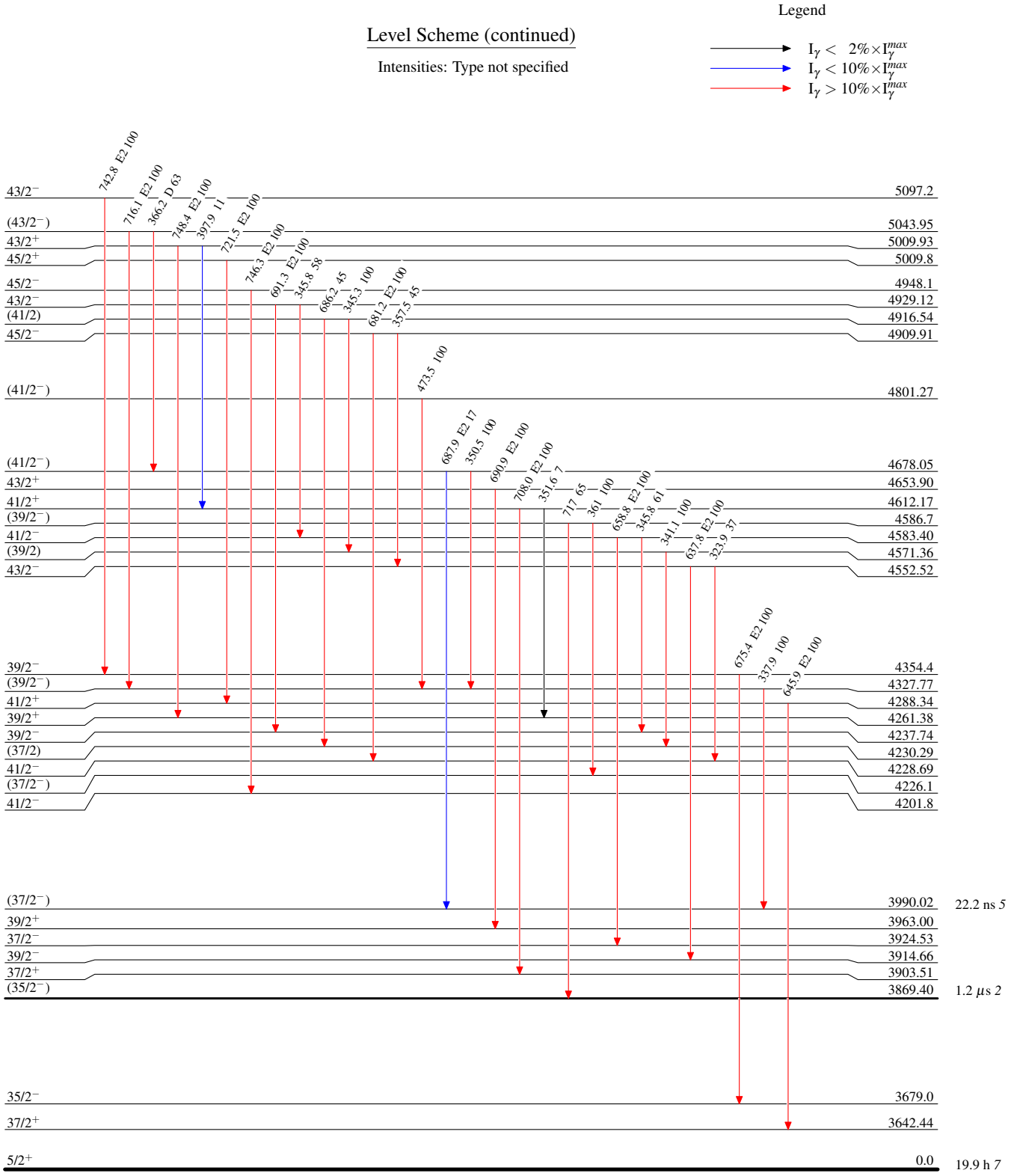


$^{181}_{75}Re_{106}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

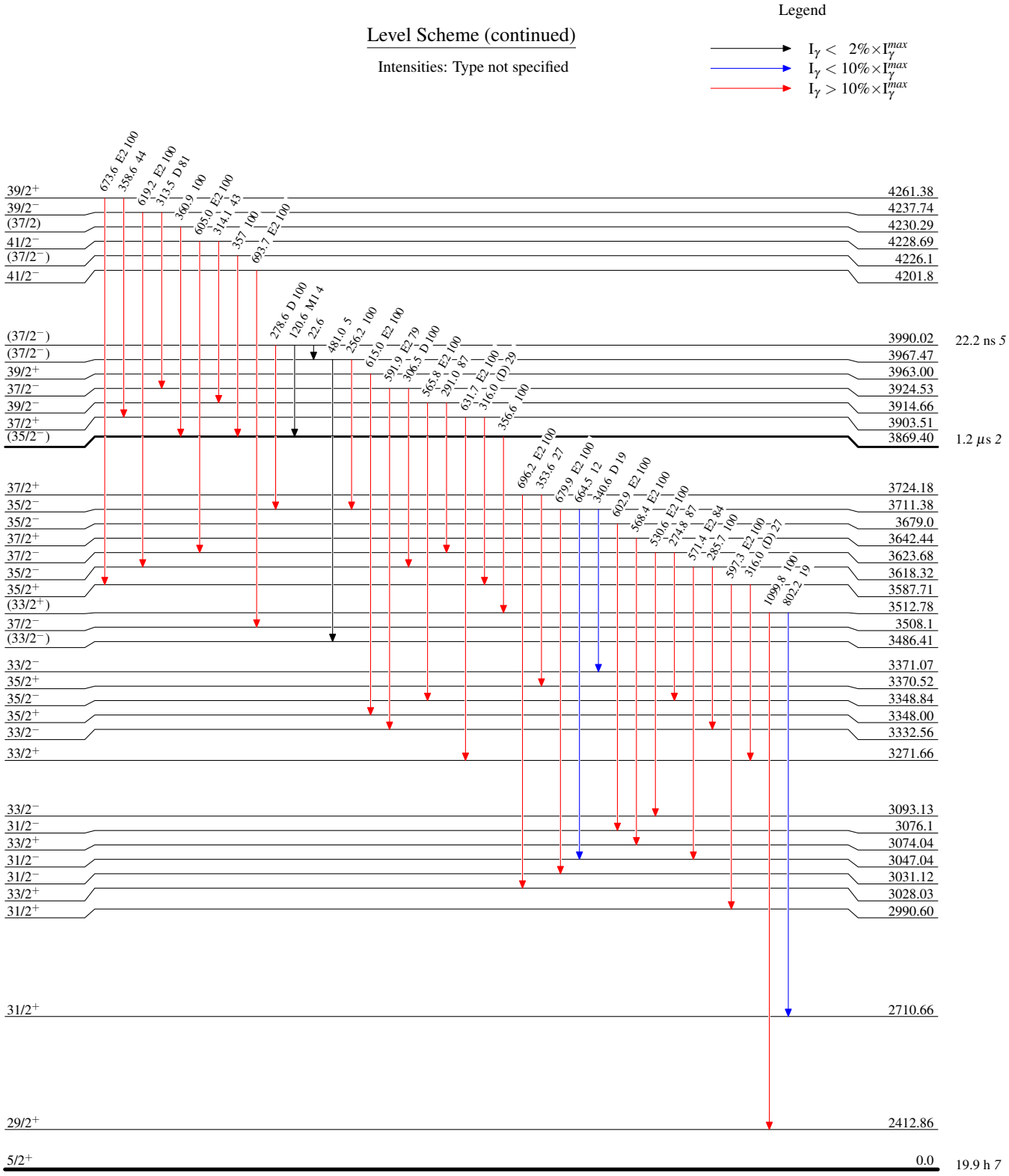


$^{181}_{75}Re_{106}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

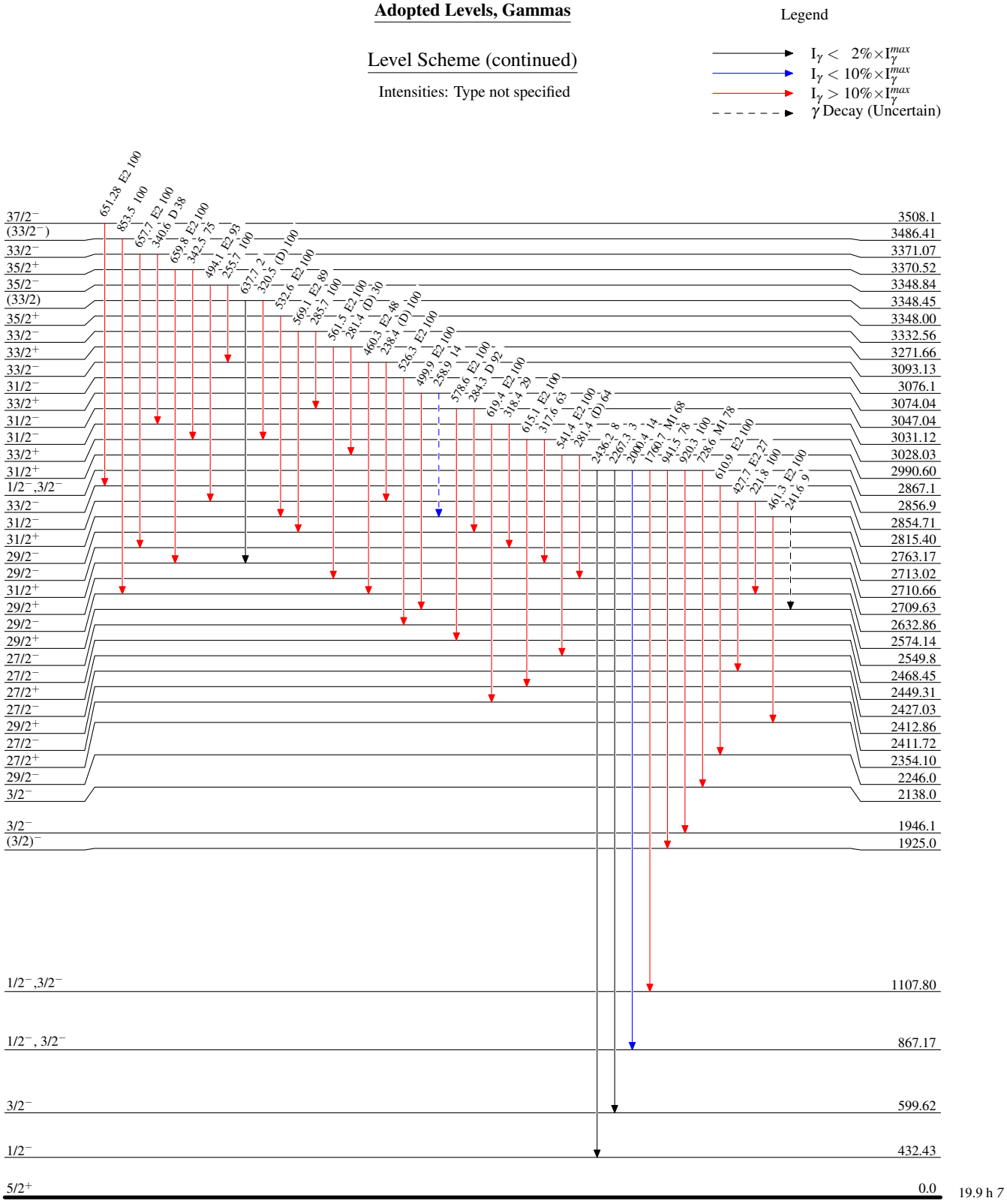


$^{181}_{75}Re_{106}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

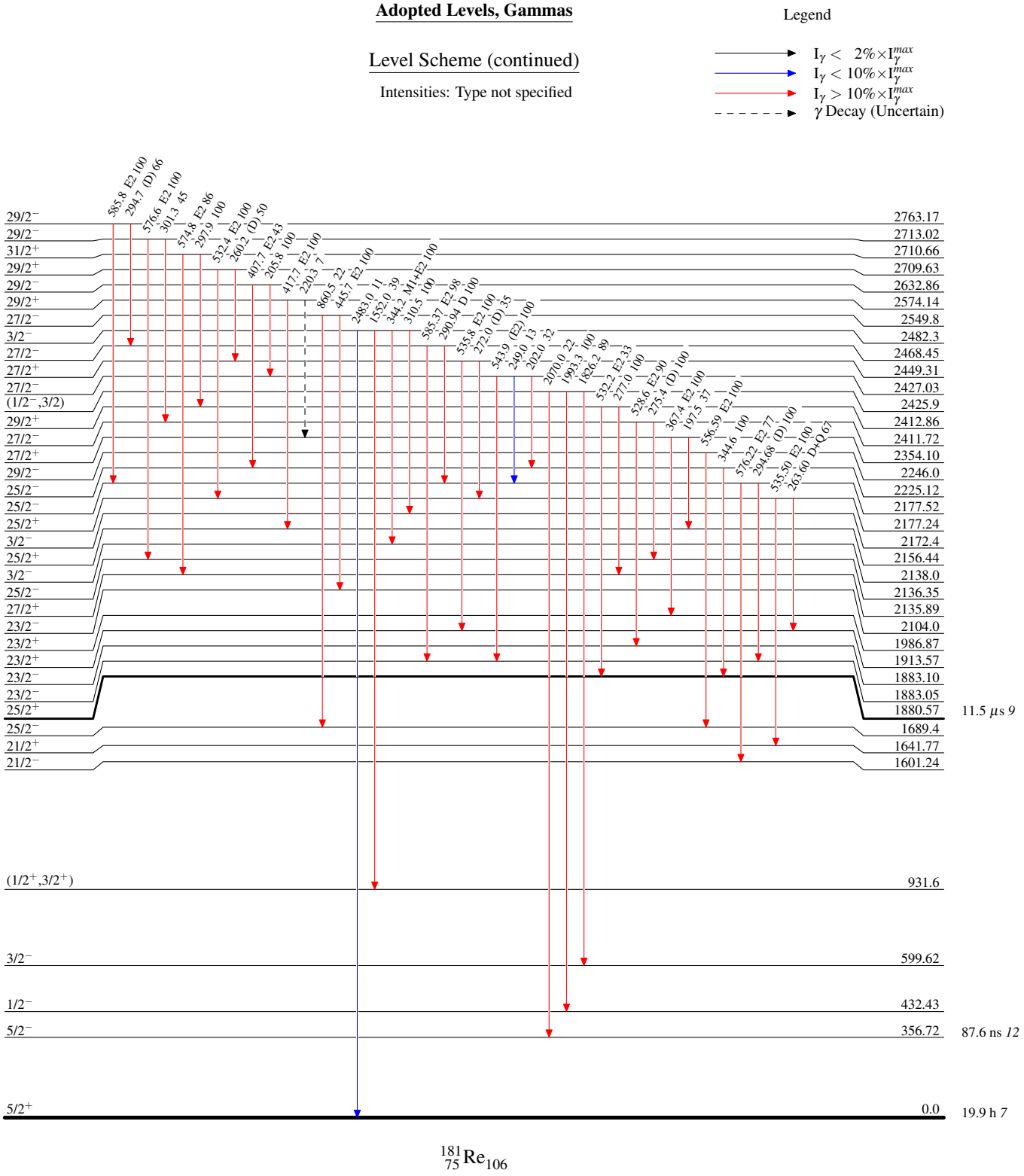


$^{181}_{75}Re_{106}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

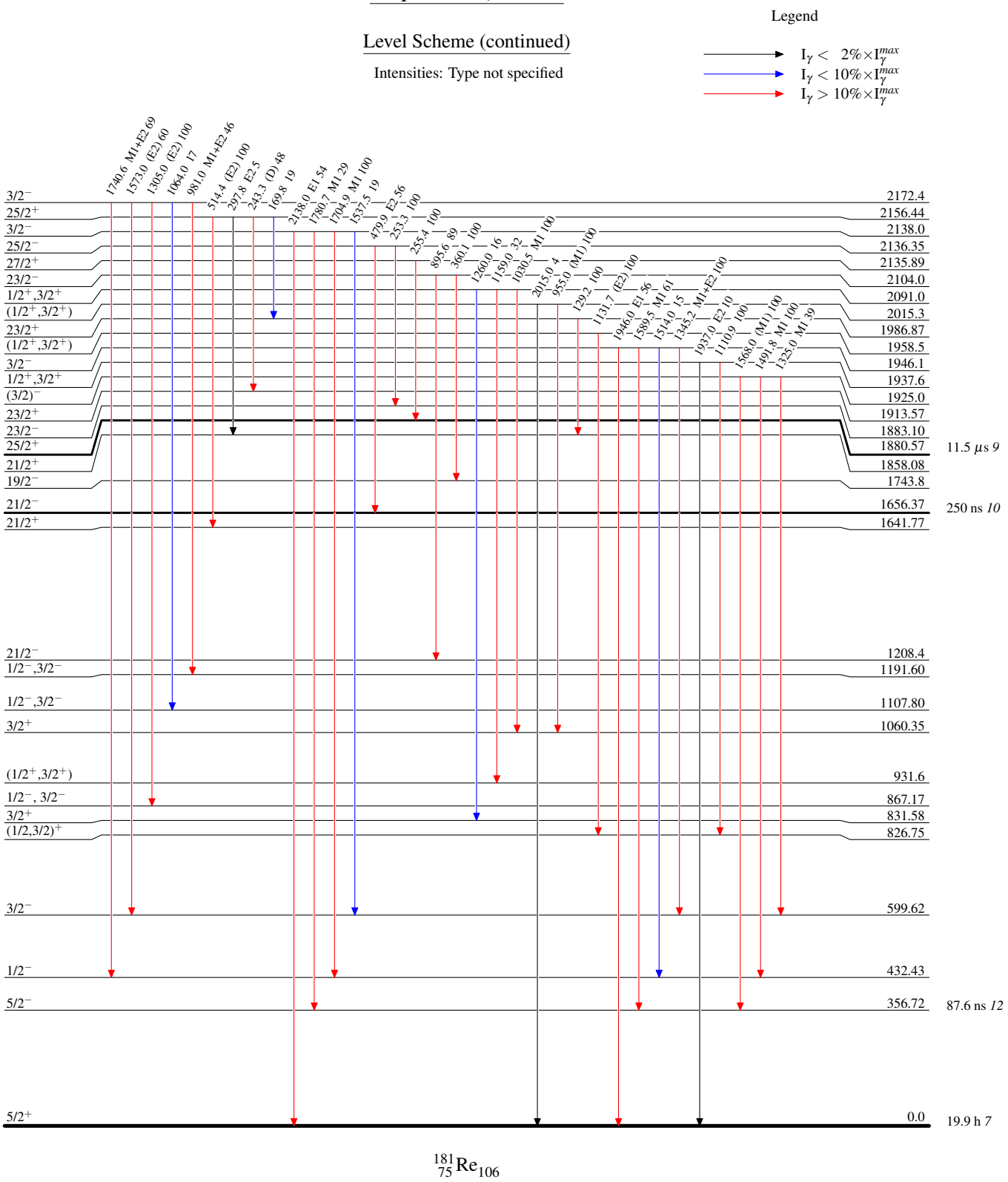


$^{181}_{75}Re_{106}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

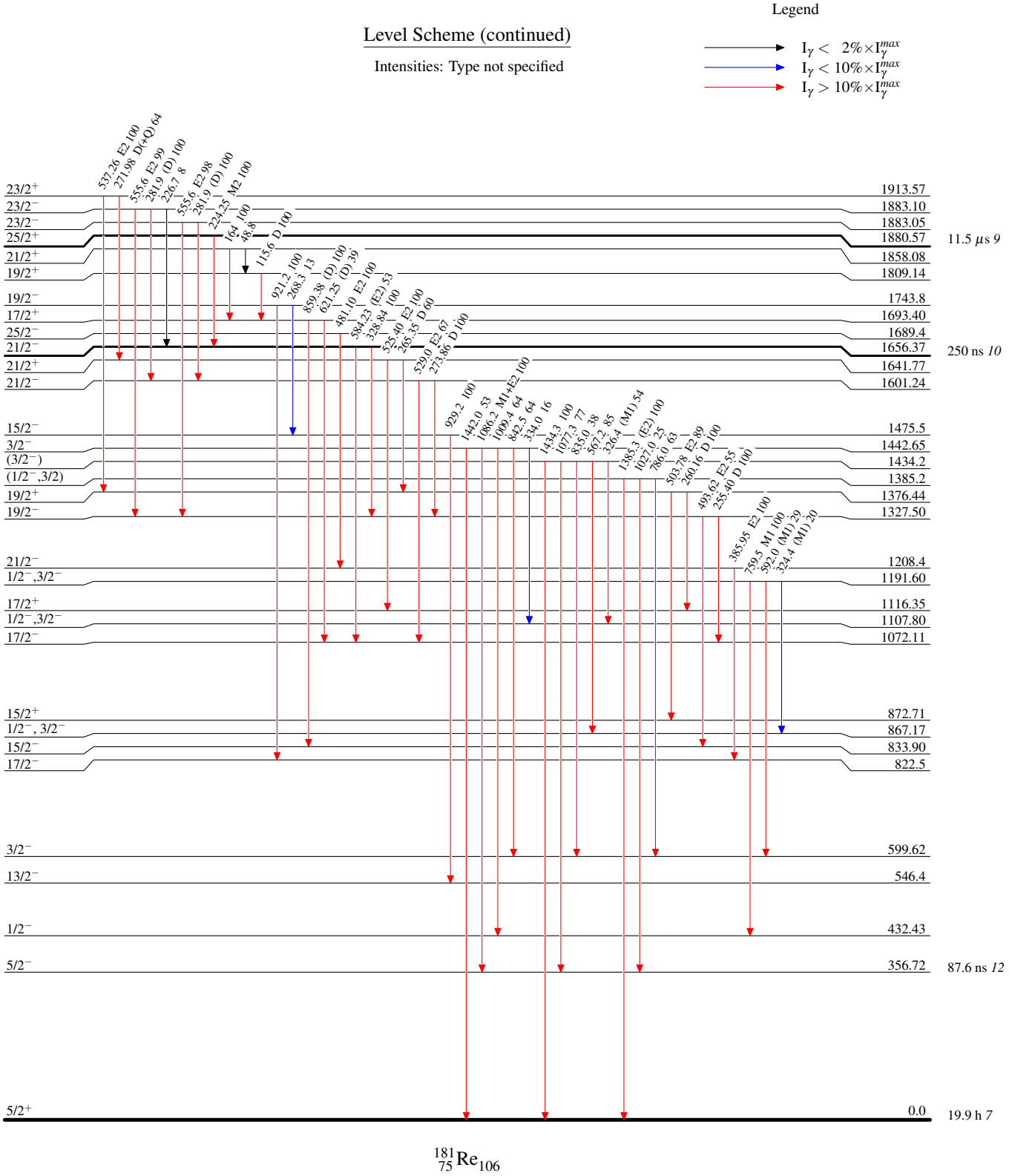


$^{181}_{75}Re_{106}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

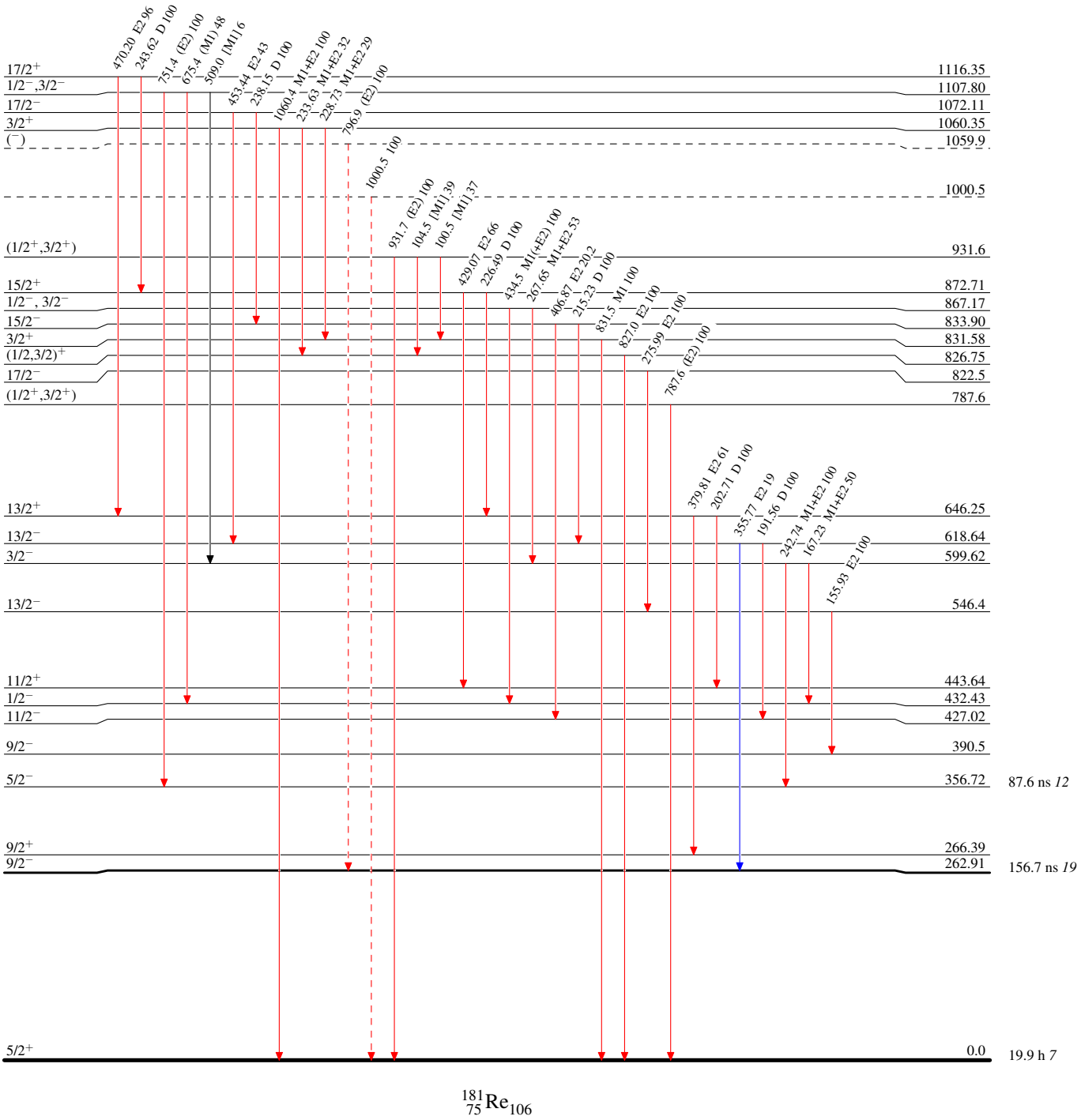


$^{181}_{75}Re_{106}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

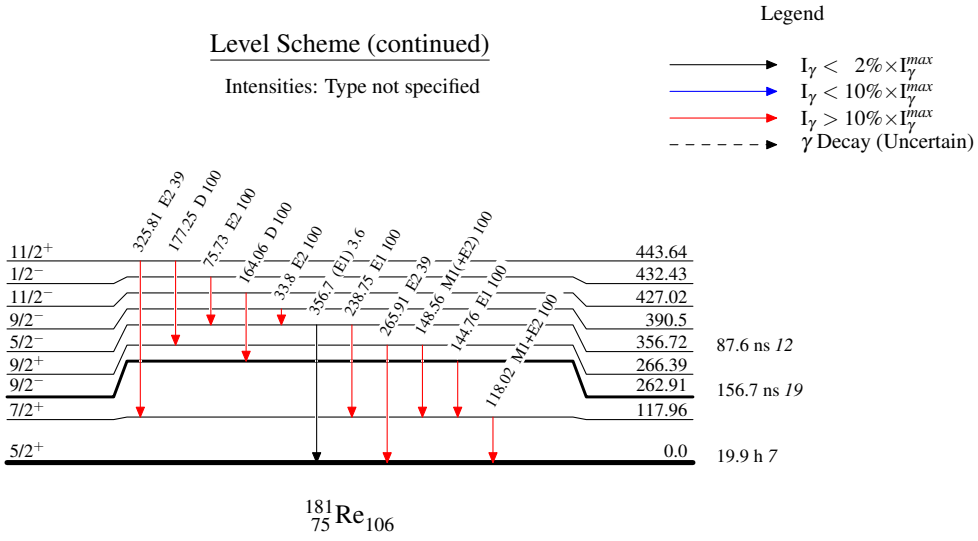


$^{181}_{75}Re_{106}$

Adopted Levels, Gammas

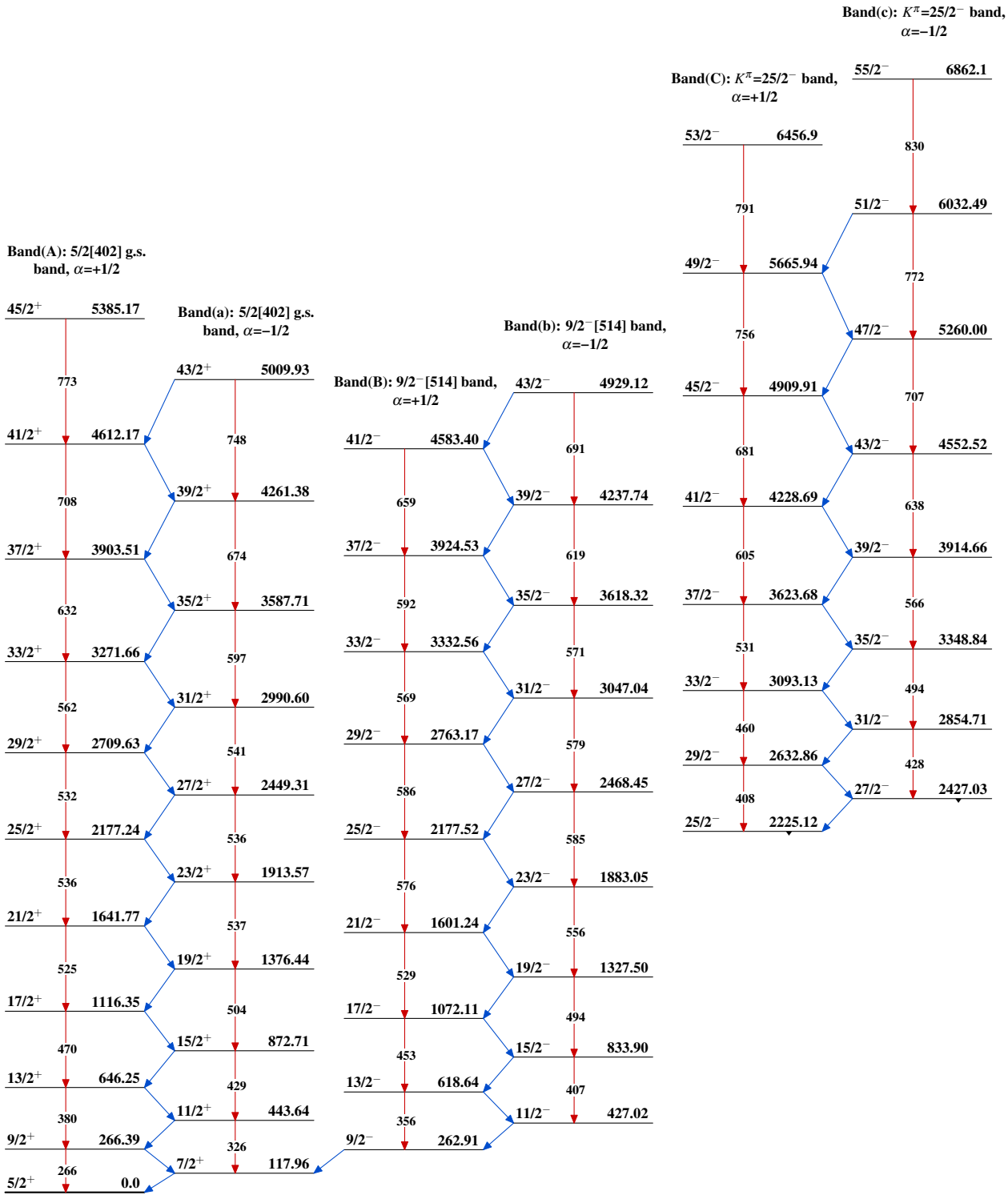
Level Scheme (continued)

Intensities: Type not specified



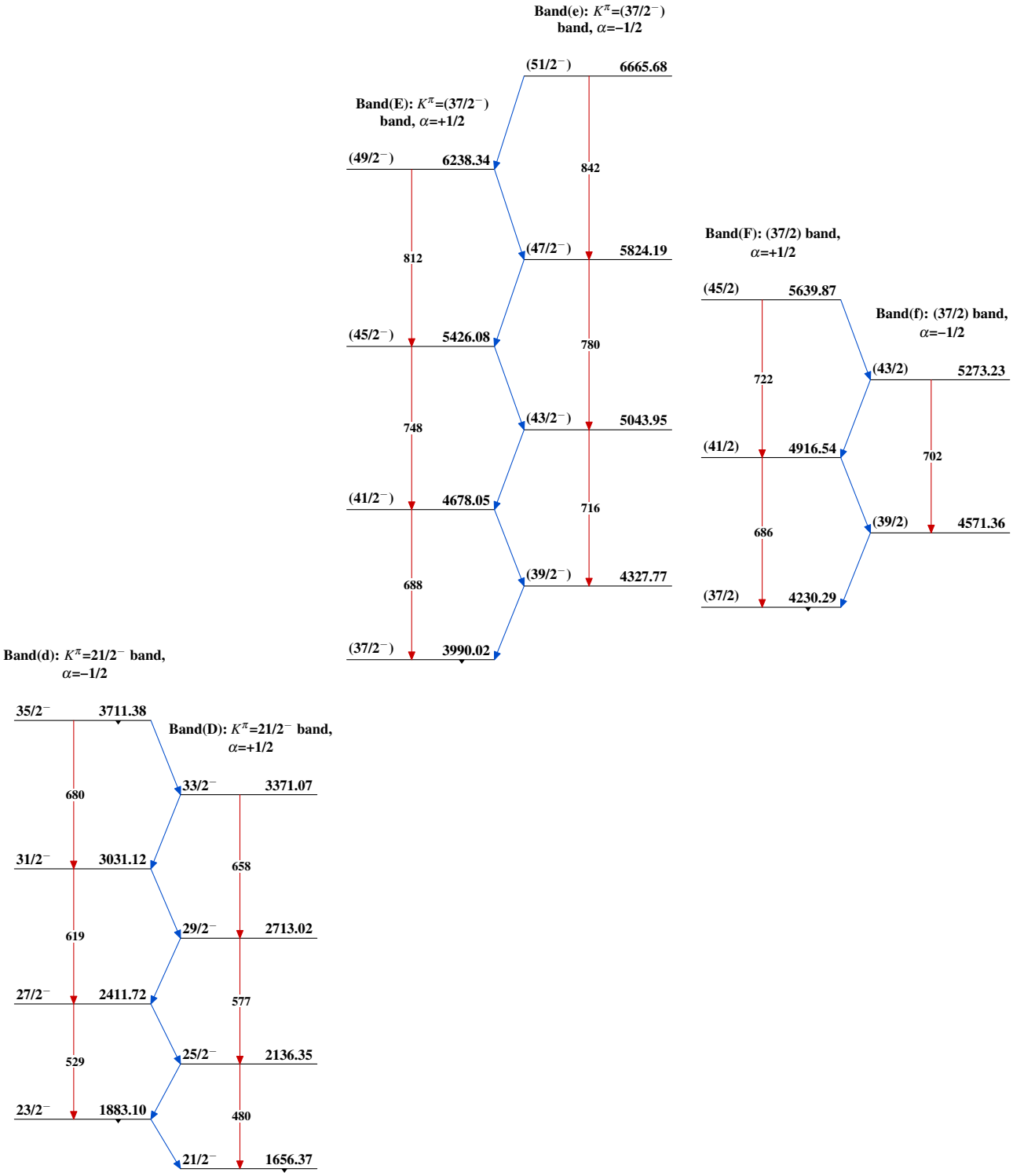
$^{181}_{75}Re_{106}$

Adopted Levels, Gammas



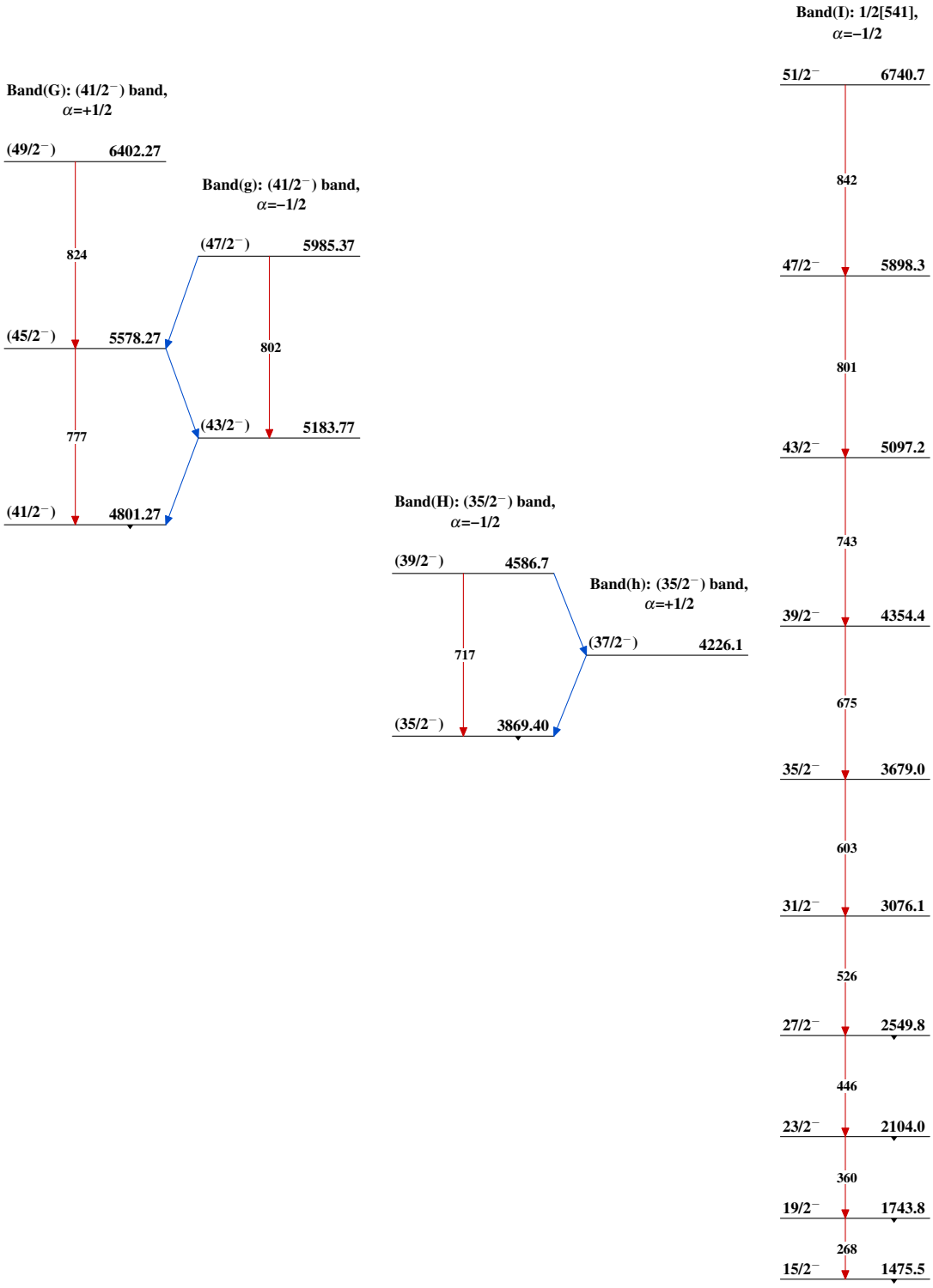
$^{181}_{75}Re_{106}$

Adopted Levels, Gammas (continued)



$^{181}_{75}Re_{106}$

Adopted Levels, Gammas (continued)



Adopted Levels, Gammas (continued)