^{170}Er(^{16}O,4nγ) 1982Fa01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	11-Jul-2022

1982Fa01 (also 1981Dr06, 1980Dr11, 1980Dr10): E=77, 81, 86 MeV. Measured Eγ, Iγ, $\gamma\gamma$, delayed $\gamma\gamma$, $\gamma\gamma(\theta)$ using a large-volume Ge(Li) detector in conjunction with another large-volume detector, a thin-window planar intrinsic Ge detector or a Compton-suppressed Ge(Li) spectrometer. Conversion data with a mini-orange magnetic filter and Si(Li) detector were measured but no useful results were deduced due to complexity of low-energy spectrum and weak intensity of high-energy transitions.

The 5^- band starts at 1896 according to 1982Fa01 but in 1982Li04 and in Adopted Levels, the band starts at 1801 with 4^-. The level energies for this band starting at 2119, 7^- should be adjusted downward by 94 keV and the level spins should be adjusted downward by one unit The 1896, 5^- member of this band is at right energy but the 1990, 6^- level should be omitted. The 94.0γ from this level is placed from 1896 level instead.

^{182}Os Levels

E(level)	J^π[†]	$T_{1/2}$	E(level)	J^π[†]	E(level)	J^π[†]
0.0[&]	0^+		2220.5[a] *5*	10^-	3265.4[a] *5*	14^-
127.06[&] *19*	2^+		2235.4[g] *5*		3291.6[k] *5*	14^+
400.50[&] *25*	4^+		2246.3[j] *6*	9^+	3305.3[j] *5*	(15^+)
794.3[&] *3*	6^+		2276.2[f] *6*	$8^{(-)}$	3319.9[&] *5*	16^+
891.0[h] *3*	2^+		2346.2[&] *5*	12^+	3339.3[e] *5*	(13)
1039.7[h] *3*	3^+		2375.3[i] *5*	10^+	3490.2[c] *5*	(14^-)
1190.8[h] *3*	4^+		2382.0[e] *4*	(9)	3573.7[b] *6*	15^-
1278.1[&] *4*	8^+		2420.3[c] *4*	10^-	3617.3[i] *6*	16^+
1400.0[h] *3*	5^+		2449.7[b] *5*	11^-	3640.3[d] *6*	15^-
1472.4[d] *3*	3^-		2465.6[f] *6*	$9^{(-)}$	3709.8[f] *7*	$14^{(-)}$
1589.1[h] *4*	(6^+)		2527.5[j] *5*	11^+	3850.6[k] *7*	(16^+)
1654.7[d] *3*	5^-		2592.1[d] *4*	11^-	3856.7[&] *6*	18^+
1735.2[e] *4*	(5)		2652.3[g] *5*		3904.1[a] *6*	16^-
1757.1[c] *4*	6^-		2672.4[i] *5*	12^+	3906.5[e] *7*	(15)
1812.2[&] *4*	10^+		2677.6[f] *6*	$10^{(-)}$	4059.2[c]	(16^-)
1831.6[#a] *4*	8^-	0.78[@] ms *7*	2700.9[a] *5*	12^-	4237.5[b] *7*	17^-
1853.5[h] *4*	7^+		2803.6[k] *5*	12^+	4274.7[i] *7*	(18^+)
1879.4[d] *4*	7^-		2825.3[e] *5*	(11)	4276.8?[f] *10*	(16^-)
1891.8[g] *5*			2840.6[&] *5*	14^+	4294.1[d] *8*	17^-
1896.1[f] *4*	$5^{(-)}$		2870.9[j] *5*	(13^+)	4467.6[e] *8*	(17)
1990.1[‡f] *5*	$6^{(-)}$		2909.4[c] *5*	12^-	4467.9[k]	(18^+)
2014.4[b] *5*	9^-		2913.2[f] *6*	$11^{(-)}$	4479.6[&] *7*	20^+
2017.9[e] *4*	(7)		2972.9[b] *5*	13^-	4598.6[a] *6*	18^-
2036.1[c] *4*	8^-		3072.6[d] *5*	13^-	4940.4[b] *8*	(19^-)
2113.1[i] *5*	8^+		3073.6[i] *5*	14^+	5023.8[i] *8*	(20^+)
2119.4[f] *5*	$7^{(-)}$		3166.2[f] *6*	$12^{(-)}$	5191.0[&] *8*	(22^+)
2194.1[d] *4*	9^-		3189.6[g] *7*		5986.3[&] *9*	(24^+)

[†] As proposed by 1982Fa01 based on $\gamma(\theta)$ data and band assignments. The assignments in Adopted Levels are consistent but many are placed in parentheses there.

[‡] This level is not included in Adopted Levels since 94.0γ is placed from 1896 level.

[#] %IT=100.

[@] From Adopted Levels.

Continued on next page (footnotes at end of table)

^{170}Er(^{16}O,4nγ) 1982Fa01 (continued)

^{182}Os Levels (continued)

[&] Band(A): $K^{\pi}=0^{+}$ g.s. band.
[a] Band(B): $K^{\pi}=8^{-}$, $\alpha=0$.
[b] Band(b): $K^{\pi}=8^{-}$, $\alpha=1$.
[c] Band(C): Band based on 3^{-}.
[d] Band(c): Band based on 6^{-}.
[e] Band(D): Band based on (5).
[f] Band(E): Band based on $5^{(-)}$.
[g] Seq.(I): γ sequence.
[h] Band(F): $K^{\pi}=2^{+}$ γ band.
[i] Band(G): Band based on 8^{+}.
[j] Band(g): Band based on 9^{+}.
[k] Band(H): Band based on 12^{+}.

γ(^{182}Os)

E_γ[@]	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[&]	δ[&]	Comments
94.0[c] 4	2.5[#d] 5	1990.1	$6^{(-)}$	1896.1	$5^{(-)}$			
102.1 4	2.3 5	1757.1	6^-	1654.7	5^-	D+Q		A_2=−0.51 14; A_4=+0.20 20
122.3 4	1.6 7	1879.4	7^-	1757.1	6^-	D+Q		A_2=−0.60 14; A_4=+0.08 20
127.0 2	45 3	127.06	2^+	0.0	0^+	Q		A_2=+0.15 2; A_4=−0.04 2
129.5 4	1.4 4	2119.4	$7^{(-)}$	1990.1	$6^{(-)}$	D+Q	+0.17 8	A_2=+0.01 9; A_4=−0.01 14
133.2 4	1.3 6	2246.3	9^+	2113.1	8^+	(D)		A_2=−0.07 4; A_4=−0.05 5
152.4 4	2.6 9	2527.5	11^+	2375.3	10^+	D		A_2=−0.16 5; A_4=+0.06 6
156.8 4	1.8[#] 10	2276.2	$8^{(-)}$	2119.4	$7^{(-)}$			
156.9 4	2.7[#] 15	2036.1	8^-	1879.4	7^-			
158.0 4	1.1 4	2194.1	9^-	2036.1	8^-	D+Q		A_2=−0.83 17; A_4=−0.02 29
172.2 4	1.1 2	2592.1	11^-	2420.3	10^-			
182.5 4	2.7[#] 7	1654.7	5^-	1472.4	3^-			
182.7 2	11.7[#] 9	2014.4	9^-	1831.6	8^-			
189.9[†] 4	2.1 3	2465.6	$9^{(-)}$	2276.2	$8^{(-)}$	(D+Q)		A_2=−0.07 12; A_4=−0.11 19
198.3 4	2.8[#] 7	2870.9	(13^+)	2672.4	12^+			
206.2 2	4.1 3	2220.5	10^-	2014.4	9^-	D+Q	−0.9 4	A_2=−0.93 2; A_4=+0.07 2
212.2 4	1.6 2	2677.6	$10^{(-)}$	2465.6	$9^{(-)}$	(D+Q)	+0.27 5	A_2=+0.15 6; A_4=−0.08 7
223.4 4	≤0.8[#]	2119.4	$7^{(-)}$	1896.1	$5^{(-)}$			
224.7 4	1.4 3	1879.4	7^-	1654.7	5^-	Q		A_2=+0.45 9; A_4=−0.18 10
226.5[†] 4	1.3 3	2420.3	10^-	2194.1	9^-	(D)		A_2=−0.03 7; A_4=+0.03 8
229.2 2	3.3 3	2449.7	11^-	2220.5	10^-	D+Q	−0.56 +34−22	A_2=−0.79 2; A_4=+0.04 3
231.8 4	≤1.6[#]	3305.3	(15^+)	3073.6	14^+			
235.2 4	1.9 4	2913.2	$11^{(-)}$	2677.6	$10^{(-)}$	(D+Q)	+0.23 8	A_2=+0.10 10; A_4=−0.02 12
251.4 4	2.2 2	2700.9	12^-	2449.7	11^-	D+Q	−0.42 +28−15	A_2=−0.73 2; A_4=+0.11 3
253.1[†] 4	2.1 3	3166.2	$12^{(-)}$	2913.2	$11^{(-)}$	(D)		A_2=−0.07 5; A_4=−0.01 6
255.0 4	1.4 3	1654.7	5^-	1400.0	5^+	(D)[a]		A_2=+0.08 7; A_4=−0.01 8
271.8 4	1.6[#] 4	2972.9	13^-	2700.9	12^-			
273.5 2	100 5	400.50	4^+	127.06	2^+	Q		A_2=+0.23 1; A_4=−0.08 2
278.8 2	3.9[‡] 9	2036.1	8^-	1757.1	6^-	Q		A_2=+0.20 3; A_4=−0.09 3
281.1 4	2.0[#] 12	2527.5	11^+	2246.3	9^+			
282.6 4	≤1.1[#]	2017.9	(7)	1735.2	(5)			
285.9 4	2.2 3	2276.2	$8^{(-)}$	1990.1	$6^{(-)}$	(Q)		A_2=+0.20 6; A_4=−0.08 7
292.0[†] 4	1.2 2	3265.4	14^-	2972.9	13^-	(D)		A_2=−0.34 9; A_4=−0.03 10
308.6 4	≤1.6	3573.7	15^-	3265.4	14^-			
314.8 2	3.9 4	2194.1	9^-	1879.4	7^-	Q		A_2=+0.34 4; A_4=−0.09 5
317.8 4	1.4[#] 2	2909.4	12^-	2592.1	11^-			
326.2 2	5.8 6	2672.4	12^+	2346.2	12^+	(D)[a]		A_2=+0.34 3; A_4=+0.01 3
329.6[h] 4	0.6 3	3904.1	16^-	3573.7	15^-			

γ(^{182}Os) (continued)

Eγ[@]	Iγ	Ei(level)	J_i^π	Ef	J_f^π	Mult.[&]	Comments
343.5[f] *2*	3.9[f‡] *6*	2235.4		1891.8			
343.5[f] *2*	3.9[f‡] *6*	2870.9	(13$^+$)	2527.5	11$^+$		
346.4 *4*	2.0 *3*	2465.6	9$^{(-)}$	2119.4	7$^{(-)}$	(Q)	A_2=+0.10 *7*; A_4=−0.03 *8*
360.5 *4*	≤0.5[#]	1400.0	5$^+$	1039.7	3$^+$		
364.1 *2*	5.3[‡] *22*	2382.0	(9)	2017.9	(7)	(Q)	A_2=+0.27 *13*; A_4=−0.13 *15*
382.0 *4*	≤1.1	2235.4		1853.5	7$^+$		
384.2 *2*	3.7 *4*	2420.3	10$^-$	2036.1	8$^-$	Q	A_2=+0.26 *5*; A_4=−0.12 *6*
389.2 *4*	3.0[‡] *7*	2220.5	10$^-$	1831.6	8$^-$	(Q)	A_2=+0.30 *11*; A_4=−0.07 *12*
393.9 *2*	85 *6*	794.3	6$^+$	400.50	4$^+$	Q	A_2=+0.25 *2*; A_4=−0.07 *2*
398.0 *2*	5.0 *5*	2592.1	11$^-$	2194.1	9$^-$	Q	A_2=+0.35 *4*; A_4=−0.08 *4*
401.2[g] *2*	3.1[g#] *14*	2677.6	10$^{(-)}$	2276.2	8$^{(-)}$	Q	A_2=+0.24 *4*, A_4=−0.13 *5*.
401.2[g] *4*	≈0.5[g#]	3073.6	14$^+$	2672.4	12$^+$		
416.9 *2*	6.7[b] *6*	2652.3		2235.4		(Q)	A_2=+0.13 *3*, A_4=−0.04 *3* for 416.9+417.2.
417.2[h] *2*	6.7[b] *6*	3490.2	(14$^-$)	3072.6	13$^-$		A_2=+0.13 *3*; A_4=−0.04 *3* for doublet.
428.3[†] *4*	0.9 *3*	2017.9	(7)	1589.1	(6$^+$)	(D)	A_2=−0.22 *21*; A_4=+0.06 *24*
432.4 *4*	2.0 *6*	1472.4	3$^-$	1039.7	3$^+$	(D)[a]	A_2=+0.18 *8*; A_4=+0.01 *9*
434.4 *2*	3.8[#] *20*	3305.3	(15$^+$)	2870.9	(13$^+$)		
435.1 *2*	3.7 *5*	2449.7	11$^-$	2014.4	9$^-$		
443.3 *2*	5.5 *5*	2825.3	(11)	2382.0	(9)	Q	A_2=+0.09 *6*; A_4=−0.15 *7*
447.7 *2*	4.0 *5*	2913.2	11$^{(-)}$	2465.6	9$^{(-)}$	Q	A_2=+0.35 *6*; A_4=−0.32 *8*
453.8 *4*	≤0.3[#]	1853.5	7$^+$	1400.0	5$^+$		
457.2 *4*	1.1 *3*	2803.6	12$^+$	2346.2	12$^+$	Q	A_2=+0.71 *10*; A_4=−0.39 *11*
463.7 *4*	2.2[‡] *10*	1654.7	5$^-$	1190.8	4$^+$		
479.3 *2*	20 *2*	3319.9	16$^+$	2840.6	14$^+$	Q	A_2=+0.34 *3*; A_4=−0.10 *3*
480.4 *2*	3.1 *8*	2700.9	12$^-$	2220.5	10$^-$		
480.5 *2*	3.1 *8*	3072.6	13$^-$	2592.1	11$^-$		
483.8 *2*	72 *5*	1278.1	8$^+$	794.3	6$^+$	Q	A_2=+0.25 *2*; A_4=−0.07 *2*
487.9 *4*	≤0.5	3291.6	14$^+$	2803.6	12$^+$		
488.6 *2*	4.1 *10*	3166.2	12$^{(-)}$	2677.6	10$^{(-)}$		
488.9 *2*	3.1 *12*	2909.4	12$^-$	2420.3	10$^-$		
491.7 *4*	≤0.9[#]	1891.8		1400.0	5$^+$		
494.4 *2*	18 *2*	2840.6	14$^+$	2346.2	12$^+$	Q	A_2=+0.33 *3*; A_4=−0.11 *4*
514.0 *2*	5.1[#] *24*	3339.3	(13)	2825.3	(11)		
523.1 *2*	4.2 *4*	2972.9	13$^-$	2449.7	11$^-$	Q	A_2=+0.37 *3*; A_4=−0.06 *3*
534.0[f] *2*	70[f] *5*	1812.2	10$^+$	1278.1	8$^+$	Q	A_2=+0.33 *2*; A_4=−0.10 *2*
534.0[f] *2*	70[f] *5*	2346.2	12$^+$	1812.2	10$^+$	Q	
536.8 *2*	8.6 *9*	3856.7	18$^+$	3319.9	16$^+$	Q	A_2=+0.42 *4*, A_4=−0.10 *5* for 536.8+537.3.
537.3 *4*	1.6 *9*	3189.6		2652.3		(Q)	A_2=+0.42 *4*, A_4=−0.10 *5* for 536.8+537.3.
543.6 *4*	1.6 *8*	3709.8	14$^{(-)}$	3166.2	12$^{(-)}$		

γ(^{182}Os) (continued)

E_γ[@]	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[&]	α[e]	Comments
543.8 *4*	≤1.5	3617.3	16^+	3073.6	14^+			
553.5 *2*	17 *2*	1831.6	8^-	1278.1	8^+	[a]		A_2=−0.01 *1*; A_4=−0.02 *2*
559.0 *4*	≈1.0[‡]	3850.6	(16^+)	3291.6	14^+			
561.1 *4*	≈1.0[‡]	4467.6	(17)	3906.5	(15)			
562.7[†] *4*	1.6 *3*	2375.3	10^+	1812.2	10^+	(D)[a]		A_2=+0.36 *11*; A_4=−0.04 *13*
564.7 *2*	3.6[‡] *6*	3265.4	14^-	2700.9	12^-			
567[h]		4276.8?	(16^-)	3709.8	$14^{(-)}$			Tentative placement, γ not seen in all coin gates.
567.2 *4*	2.7[#] *13*	3906.5	(15)	3339.3	(13)			
567.7 *4*	2.1[#] *9*	3640.3	15^-	3072.6	13^-			
568.7[h] *4*	≤2.5	4059.2	(16^-)	3490.2	(14^-)			
580.8 *2*	3.8 *12*	3490.2	(14^-)	2909.4	12^-	(Q)		A_2=+0.25 *4*, A_4=−0.07 *4* for 580.8+581.2.
581.2[†] *4*	2.2 *10*	1472.4	3^-	891.0	2^+			A_2=+0.25 *4*, A_4=−0.07 *4* for 580.8+581.2. A_2 and A_4 are inconsistent with ΔJ=1, E1 expected for 581.2γ.
600.8 *2*	5.5[#] *8*	3573.7	15^-	2972.9	13^-	Q		A_2=+0.25 *8*; A_4=−0.11 *5* I_γ: corrected for contamination.
617.6[h] *4*	2.3 *12*	4467.9	(18^+)	3850.6	(16^+)			
622.9 *4*	2.8 *4*	4479.6	20^+	3856.7	18^+	(Q)		A_2=+0.26 *7*; A_4=−0.09 *8*
638.7 *2*	3.7 *4*	3904.1	16^-	3265.4	14^-	Q		A_2=+0.23 *7*; A_4=−0.12 *8*
653.8 *4*	1.0 *3*	4294.1	17^-	3640.3	15^-	(Q)		A_2=+0.73 *13*; A_4=−0.13 *15*
657.4 *4*	0.3[#] *3*	4274.7	(18^+)	3617.3	16^+			
663.8 *4*	2.4 *3*	4237.5	17^-	3573.7	15^-	(Q)		A_2=+0.33 *6*; A_4=+0.04 *6*
694.5 *2*	4.0 *25*	4598.6	18^-	3904.1	16^-			
702.9 *4*	≈1.0	4940.4	(19^-)	4237.5	17^-			
705.3 *4*	2.8 *4*	1896.1	$5^{(-)}$	1190.8	4^+	(E1)	0.00378	A_2=−0.17 *10*; A_4=+0.01 *12* Mult.: from estimated α(K)exp.
711.4 *4*	1.0 *3*	5191.0	(22^+)	4479.6	20^+			
727.3 *4*	2.7 *4*	3073.6	14^+	2346.2	12^+	(Q)		A_2=+0.32 *5*; A_4=−0.05 *6*
749.0 *4*	1.6 *5*	5023.8	(20^+)	4274.7	(18^+)			
763.4 *4*	1.9 *3*	891.0	2^+	127.06	2^+	(D+Q)[a]		A_2=−0.12 *8*; A_4=+0.03 *9*
776.7 *4*	1.3 *3*	3617.3	16^+	2840.6	14^+	Q		A_2=+0.43 *9*; A_4=−0.14 *11*
790.2 *2*	3.6 *4*	1190.8	4^+	400.50	4^+			A_2=+0.08 *4*; A_4=−0.07 *5*
794.7 *4*	1.3[b] *5*	1589.1	(6^+)	794.3	6^+			
795.3 *4*	1.3[b] *5*	5986.3	(24^+)	5191.0	(22^+)			
834.9 *4*	2.9 *4*	2113.1	8^+	1278.1	8^+	(D)[a]		A_2=+0.22 *6*; A_4=+0.03 *6*
860.1 *2*	5.5 *20*	2672.4	12^+	1812.2	10^+	(Q)		A_2=+0.08 *3*, A_4=+0.01 *4* for 860.1+860.2.
860.2 *4*	1.8 *11*	1654.7	5^-	794.3	6^+			A_2=+0.08 *3*, A_4=+0.01 *4* for 860.1+860.2.
891.2 *4*	2.3 *3*	891.0	2^+	0.0	0^+	(Q)		A_2=+0.31 *9*; A_4=−0.02 *10*
912.6 *2*	3.7 *4*	1039.7	3^+	127.06	2^+			A_2=+0.04 *5*; A_4=+0.06 *5*
945.5 *4*	1.3 *3*	3291.6	14^+	2346.2	12^+	Q		A_2=+0.24 *13*; A_4=−0.17 *15*
962.7 *4*	2.0 *3*	1757.1	6^-	794.3	6^+	(D)[a]		A_2=+0.15 *9*; A_4=+0.13 *10*

$^{182}_{76}$Os$_{106}$-5

γ(^{182}Os) (continued)

E_γ[@]	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[&]	α[e]	Comments
991.3 *4*	1.1 *2*	2803.6	12^+	1812.2	10^+	(Q)		A_2=+0.26 *8*; A_4=−0.07 *9*
999.5 *2*	3.4 *4*	1400.0	5^+	400.50	4^+	D+Q		A_2=−0.06 *5*; A_4=+0.14 *6*
1059.1 *4*	1.5 *3*	1853.5	7^+	794.3	6^+	D+Q		A_2=−0.38 *6*; A_4=+0.26 *7*
1063.8 *4*	2.3 *3*	1190.8	4^+	127.06	2^+			A_2=+0.03 *6*; A_4=+0.01 *7*
1072.6 *4*	0.5 *2*	1472.4	3^-	400.50	4^+	(D)		A_2=−0.30 *23*; A_4=+0.12 *26*
1085.4 *4*	0.6 *3*	1879.4	7^-	794.3	6^+	D		A_2=−0.31 *15*; A_4=+0.03 *17*
1097.7 *4*	2.4 *3*	2375.3	10^+	1278.1	8^+	(Q)		A_2=+0.34 *8*; A_4=−0.02 *9*
1101.7 *4*	1.4 *3*	1896.1	$5^{(-)}$	794.3	6^+	(D)		A_2=−0.17 *13*; A_4=+0.02 *16*
1188.3 *4*	0.9[#] *3*	1589.1	(6^+)	400.50	4^+			
1223.7 *2*	≤6.4[#]	2017.9	(7)	794.3	6^+			
1254.2 *2*	5.7 *6*	1654.7	5^-	400.50	4^+	(E1)	1.34×10^{-3}	A_2=−0.11 *4*; A_4=+0.00 *4* α(K)exp<0.0038 α(K)=0.001096 *16*; α(L)=0.0001564 *22*; α(M)=3.53×10^{-5} *5* α(N)=8.59×10^{-6} *12*; α(O)=1.482×10^{-6} *21*; α(P)=1.108×10^{-7} *16*; α(IPF)=3.87×10^{-5} *6*
1334.6 *4*	0.8 *4*	1735.2	(5)	400.50	4^+	(D)		A_2=−0.26 *14*; A_4=−0.09 *15*

[†] A_2 and A_4 are uncertain due to low intensity, contamination or background correction problems.

[‡] Corrected for contamination from ^{183}Os or ^{181}Os.

[#] Estimated from coincidence data; contaminated in singles data.

[@] $\Delta(E\gamma)$ assigned as 0.2 keV for Iγ>3 and 0.4 keV for Iγ<3, based on a general statement by 1982Fa01 that it ranges from 0.15 keV for strong lines to 0.4 keV for weaker lines.

[&] From $\gamma(\theta)$, mult=Q corresponds to ΔJ=2, stretched quadrupole (most likely E2) transition, mult=D or D+Q corresponds to ΔJ=1, dipole or D+Q (most likely M1+E2) transition.

[a] ΔJ=0, dipole transition.

[b] Combined intensities for 416.9+417.2; 794.7+795.3.

[c] In other in-beam studies, a 94.0γ is placed from 1896 level.

[d] 1982Fa01 obtained intensity from $\gamma\gamma$ coin data. In other studies 94.0γ, 705.3γ and 1101.7γ deexcite the same level at 1896 keV. Comparison of branching ratios in other studies suggests that Iγ=2.5 quoted by 1982Fa01 seems to represent Iγ+ce, assuming M1 for 94γ for which α=6.7.

[e] 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.

[f] Multiply placed with undivided intensity.

[g] Multiply placed with intensity suitably divided.

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

$^{182}_{76}$Os$_{106}$-6

$^{170}Er(^{16}O,4n\gamma)$ 1982Fa01

Level Scheme

Intensities: Relative I_γ

@ Multiply placed: intensity suitably divided

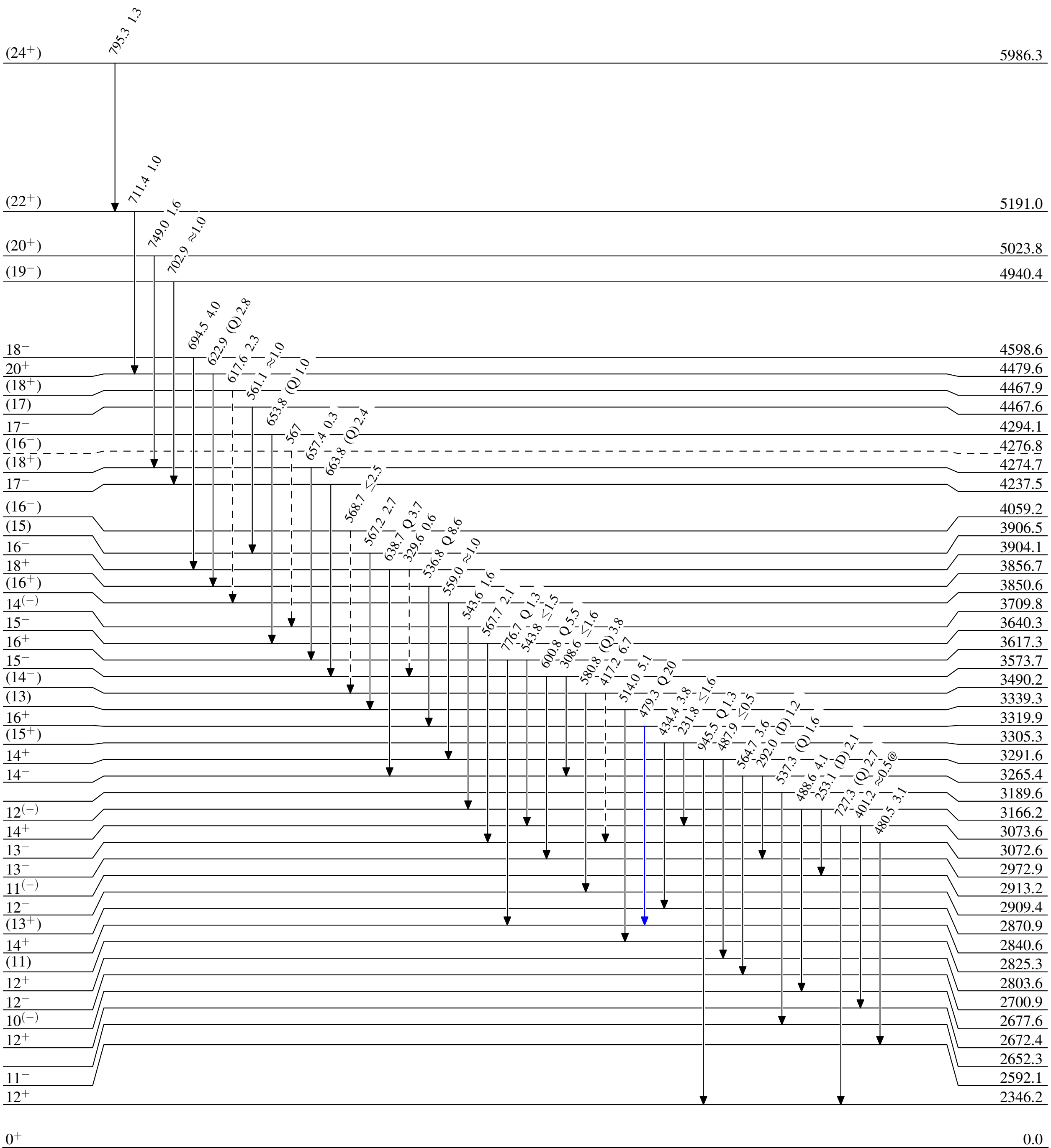
Legend

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

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

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

γ Decay (Uncertain)



$^{182}_{76}Os_{106}$

$^{170}Er(^{16}O,4n\gamma)$ 1982Fa01

Level Scheme (continued)

Intensities: Relative I_γ

& Multiply placed: undivided intensity given

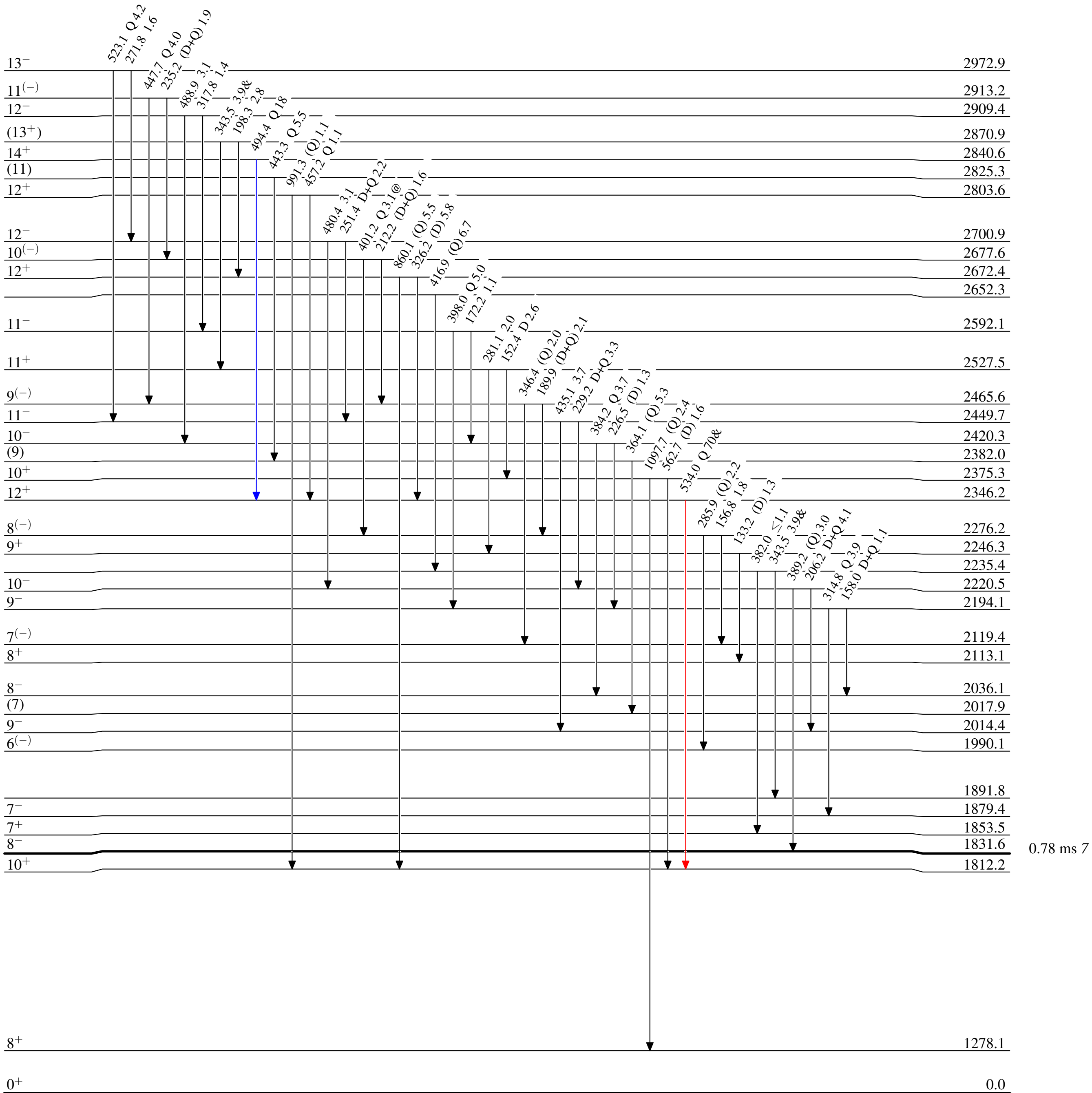
@ Multiply placed: intensity suitably divided

Legend

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

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

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



$^{182}_{76}Os_{106}$

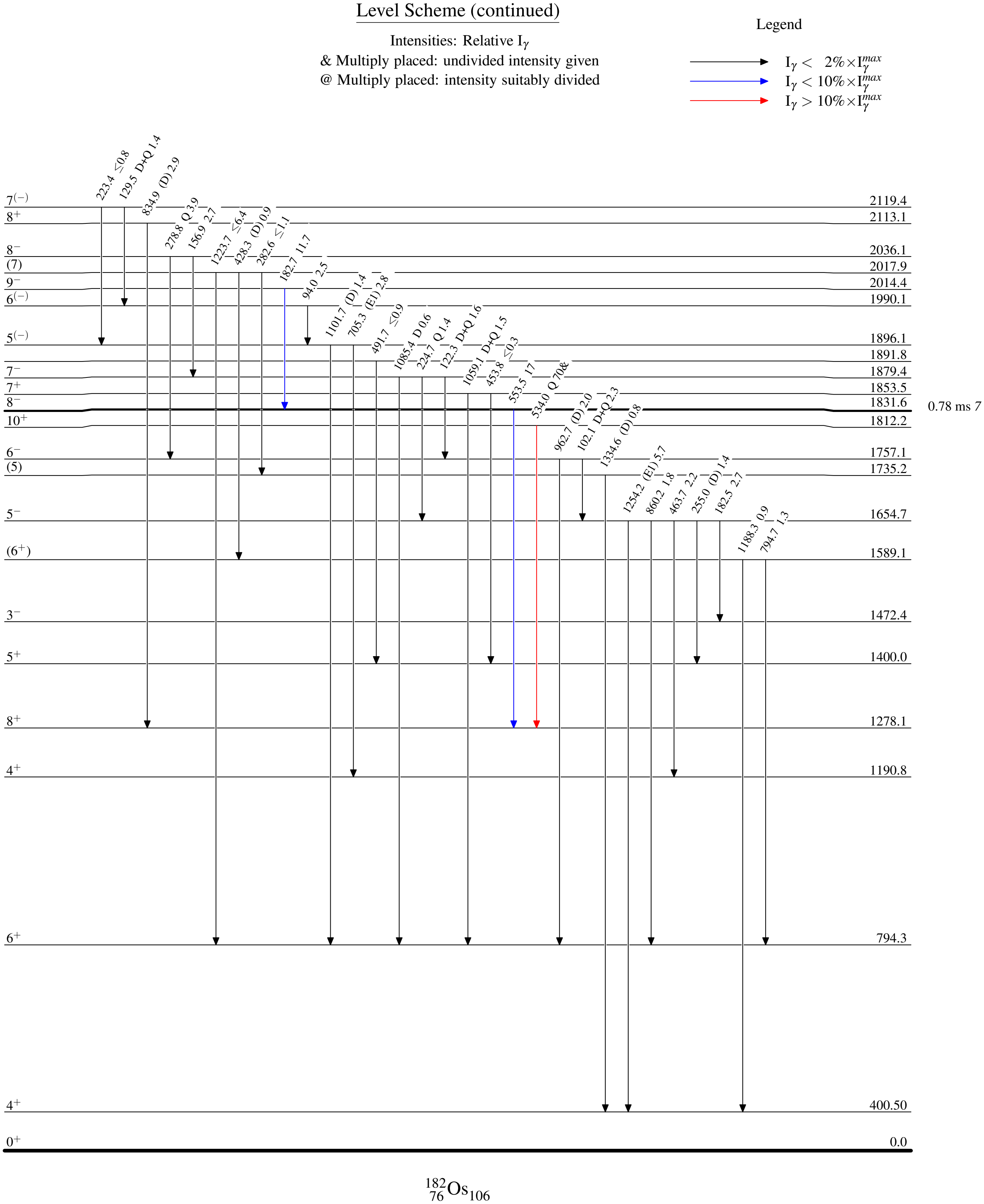
^{170}Er(^{16}O,4nγ) 1982Fa01

Level Scheme (continued)

Intensities: Relative I_γ

& Multiply placed: undivided intensity given

@ Multiply placed: intensity suitably divided



^{170}Er(^{16}O,4nγ) 1982Fa01

Level Scheme (continued)

Intensities: Relative I_γ

& Multiply placed: undivided intensity given

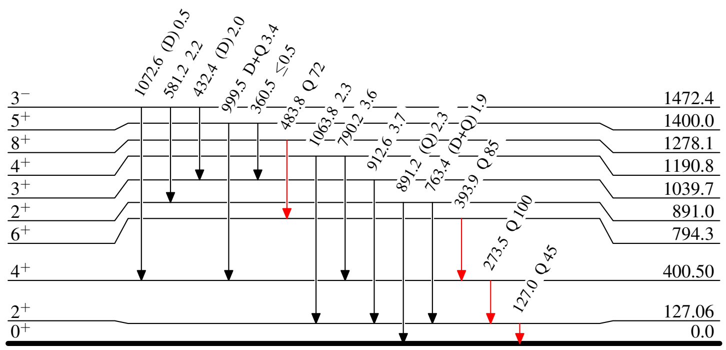
@ Multiply placed: intensity suitably divided

Legend

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

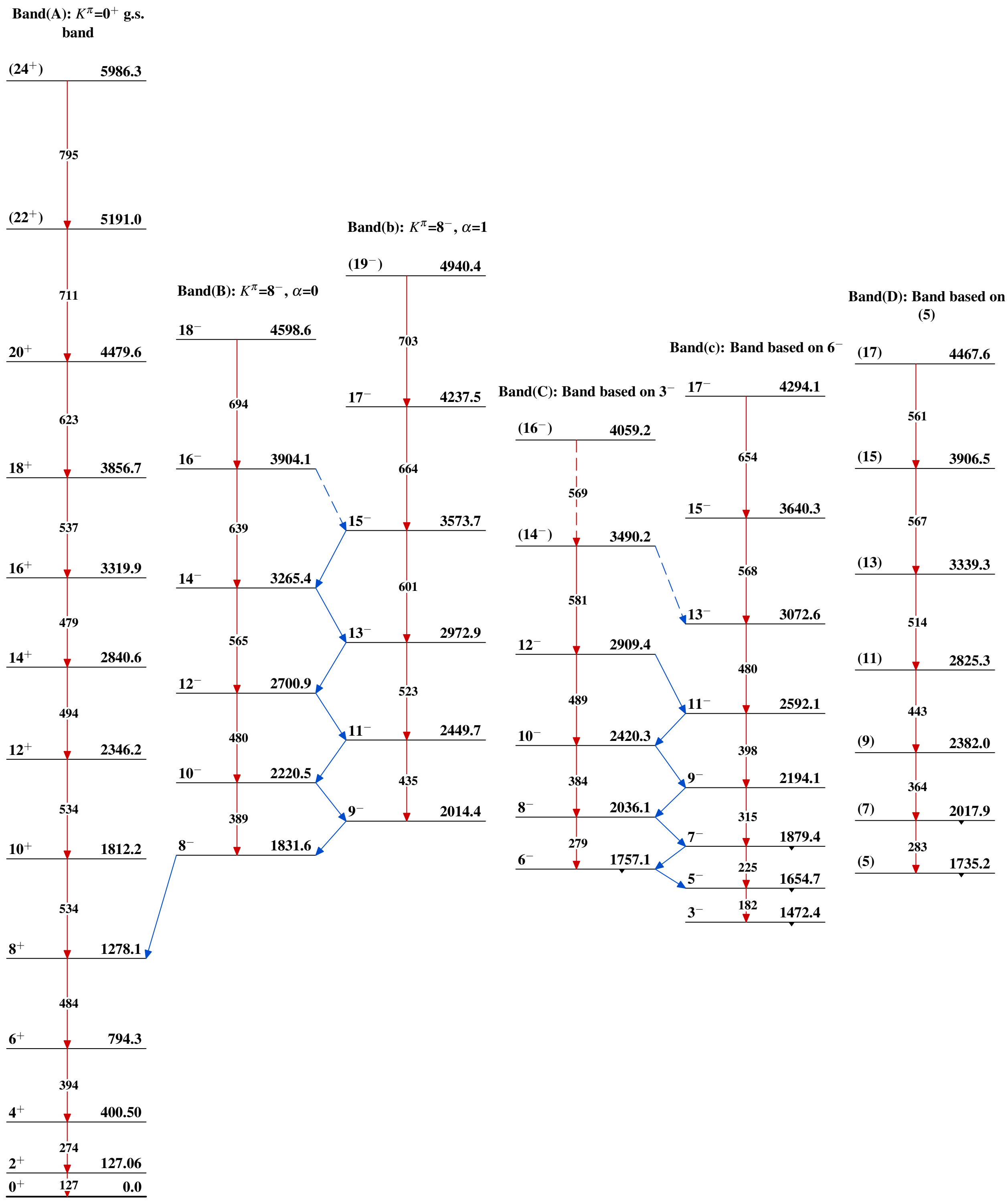
$I_\gamma < 10\% \times I_\gamma^{max}$

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



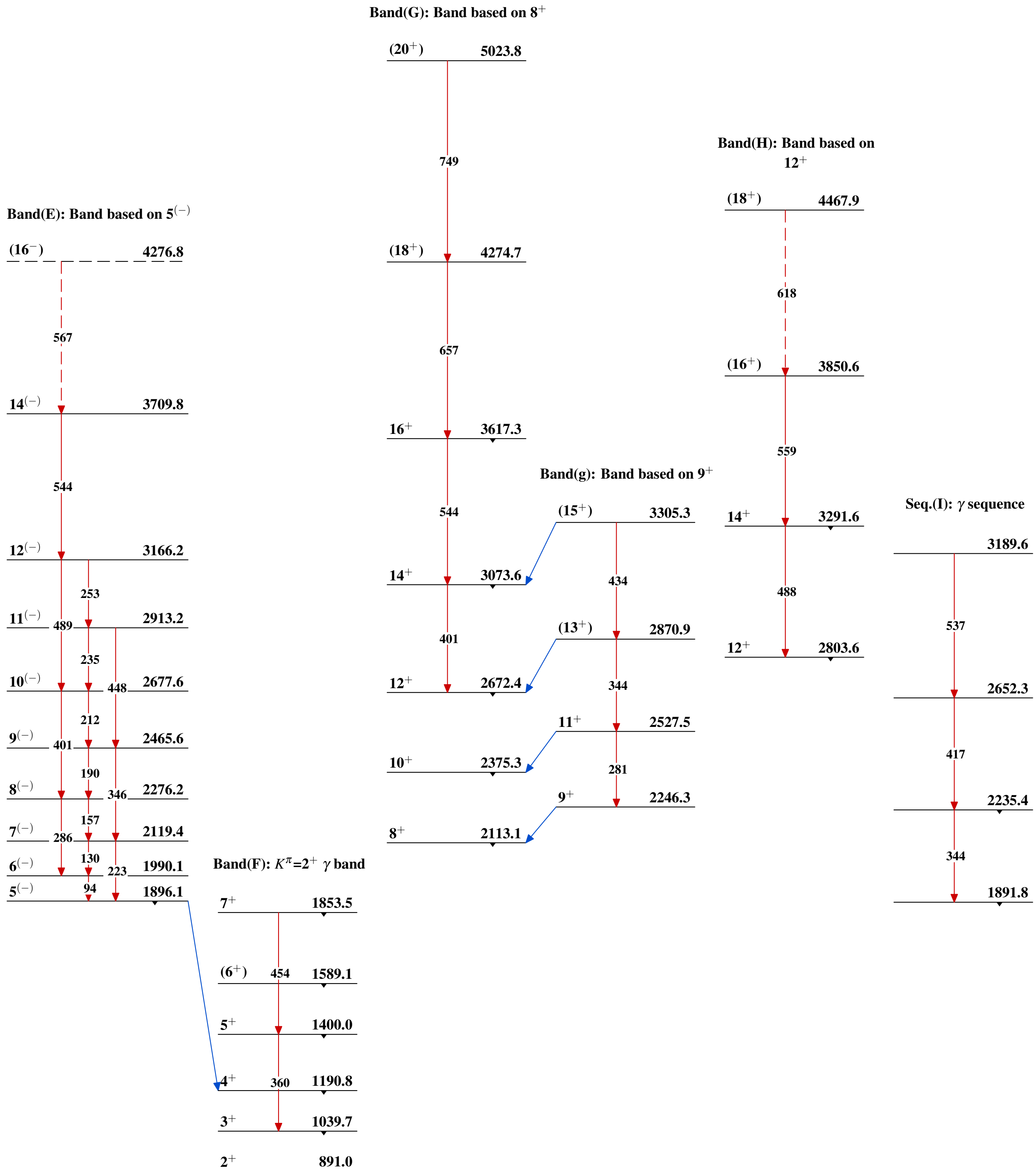
$^{182}_{76}Os_{106}$

$^{170}Er(^{16}O,4n\gamma)$ 1982Fa01



$^{182}_{76}Os_{106}$

$^{170}Er(^{16}O,4n\gamma)$ 1982Fa01 (continued)



$^{182}_{76}Os_{106}$