^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, Huo Junde	NDS 87, 15 (1999)	1-Nov-1998

1995Gj01: enriched ^{130}Te. E(^{48}Ca)=198 MeV. Measured Eγ, Iγ $\gamma\gamma$ coin, using the recoil-shadow method combined with the TESSA-30 detector array, 30 Compton-suppressed Ge detectors.

1986Wa07: enriched ^{130}Te. E(^{48}Ca)=200 MeV. Measured Eγ, Iγ at θ=30° and 90°, $\gamma\gamma$ coin. Detector: 50-element bismuth germinate ball (BGO) with an array of six Compton-suppressed Ge detectors (tessa2). Several rotational bands were observed, but authors presented data only for the g.s.-rotational and β-vibrational bands. These bands have revealed an anomaly in their rotational level spacings for a spin value of J=22.

Other: 1990Wa09.

^{174}Hf Levels

E(level)	J^{π}[†]	$T_{1/2}$	Comments
0.0[‡]	0^+		
90.998[‡] *10*	2^+		
297.440[‡] *20*	4^+		
608.24[‡] *3*	6^+		
827.9[#] *4*	0^+		
900.26[#] *14*	2^+		
1009.56[‡] *4*	8^+		
1062.65[#] *9*	4^+		
1227.0[i] *5*	2^+		
1304.0[&] *4*	(3^+)		
1307.24[#] *8*	6^+		
1394.54[&] *5*	(4^+)		
1425.61[@] *12*	(4^-)		
1449.10[i] *11*	4^+		
1486.08[‡] *6*	10^+		
1508.14[&] *9*	(5^+)		
1549.26[a] *4*	6^+	138 ns *4*	$T_{1/2}$: measured in a perturbed Ag(θ,H,t) angular correlation experiment (1980Wa23). Other value: 133 ns (1983Wa21,1976KhZR). But 2.1 μs (1969EjZZ) and>200 ns (1971Ej01) probably correspond to the 1797.5-keV level. g-factor=0.892 *8* (1980Wa23).
1561.72[e] *14*	4^-		
1627.45[e] *16*	5^-		
1630.35[#] *8*	8^+		
1634.22[@] *10*	6^-		
1642.15[&] *9*	6^+		
1648.77[f] *10*	4^-		
1651.06[@] *14*	7^-		
1713.49[b] *7*	6^-		
1722.43[e] *19*	6^-		
1737.35[a] *4*	7^+		
1767.66[f] *11*	5^-		
1797.59[c] *7*	8^-	2.39 μs *4*	$T_{1/2}$: from 1974KhZW.
1797.83[&] *9*	(7^+)		
1827.61[b] *11*	7^-		
1838.14[e] *17*	7^-		

Continued on next page (footnotes at end of table)

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07 (continued)

^{174}Hf Levels (continued)

E(level)	J^{π}[†]
1910.0[g] 3	(6$^-$)
1928.27[@] 10	8$^-$
1937.46[f] 14	6$^-$
1944.27[@] 14	9$^-$
1948.03[a] 5	8$^+$
1963.51[b] 8	8$^-$
1972.06[&] 10	8$^+$
1981.50[e] 21	8$^-$
2016.7 3	6$^-$
2020.74[‡] 6	12$^+$
2026.49[#] 7	10$^+$
2028.01[c] 7	9$^-$
2084.35[f] 9	7$^-$
2118.92[b] 9	9$^-$
2124.56[g] 20	(8$^-$)
2135.43[e] 25	9$^-$
2166.93[&] 9	(9$^+$)
2180.06[a] 5	9$^+$
2276.87[f] 9	8$^-$
2278.95[c] 7	10$^-$
2295.73[b] 8	10$^-$
2299.38[@] 12	10$^-$
2319.56[@] 12	11$^-$
2331.5[e] 4	10$^-$
2379.22[&] 10	10$^+$
2429.6[g] 3	(10$^-$)
2431.57[a] 5	10$^+$
2447.41[f] 14	9$^-$
2487.73[b] 10	11$^-$
2489.35[#] 8	12$^+$
2515.6[e] 3	11$^-$
2554.66[c] 8	11$^-$
2597.88[‡] 12	14$^+$
2609.08[&] 14	(11$^+$)
2653.82[f] 8	10$^-$
2684.85[h] 9	(12$^+$)
2700.65[b] 6	12$^-$
2700.68[a] 6	11$^+$
2744.06[@] 17	12$^-$
2767.9[e] 5	12$^-$
2772.80[@] 16	13$^-$
2792.98[k] 8	10$^-$
2823.6[g] 4	(12$^-$)
2846.97[c] 13	12$^-$
2854.35[&] 10	12$^+$
2859.21[f] 16	11$^-$
2932.76[b] 9	13$^-$

Continued on next page (footnotes at end of table)

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07 (continued)

^{174}Hf Levels (continued)

E(level)	J$^{\pi}$[†]	T$_{1/2}$	Comments
2958.72 *7*	(11$^-$)		Other K$^{\pi}$=(11$^-$) band head, see 1995Gj01.
2972.4[e] *3*	13$^-$		
2983.71[a] *6*	12$^+$		
2993.27[#] *14*	14$^+$		
3046.24[j] *11*	(11$^-$)		
3090.16[l] *7*	12$^-$		
3117.14[&] *22*	(13$^+$)		
3157.02[c] *11*	(13$^-$)		
3179.9[b] *4*	14$^-$		
3209.1[‡] *6*	16$^+$		
3230.06[j] *16*	12$^-$		
3258.6[@] *4*	14$^-$		
3269.38[a] *6*	13$^+$		
3280.2[e] *4*	14$^-$		
3296.34[@] *22*	15$^-$		
3300.24[l] *13*	13$^-$		
3301.8[g] *5*	(14$^-$)		
3312.07[d] *6*	14$^+$	3.7 μs *2*	T$_{1/2}$: from 1974KhZW.
3501.2[#] *6*	(16$^+$)		
3857.3[‡] *9*	18$^+$		
4048.2[#] *10*	(18$^+$)		
4550.7[‡] *10*	20$^+$		
4656.2[#] *12*	(20$^+$)		
5291.7[‡] *13*	(22$^+$)		
5359.7[#] *13*	(22$^+$)		
6062.7[‡] *15*	(24$^+$)		
6164.7[#] *15*	(24$^+$)		
6890?[‡]	(26$^+$)		
7027?[#]	(26$^+$)		

[†] Spin, band, and quasiparticle configuration assignments are based on rotational structure and on γ ray multipolarities determined from experimental conversion coefficients and $\gamma(\theta)$.
[‡] Band(A): K$^{\pi}$=0$^+$ g.s.-rotational band.
[#] Band(B): K$^{\pi}$=0$^+$ β-vibrational band.
[@] Band(C): K$^{\pi}$=(1$^-$) octupole-vibrational band.
[&] Band(D): K$^{\pi}$=3$^+$ band. Probable Configuration=(ν 1/2[521])+(ν 5/2[512]).
[a] Band(E): K$^{\pi}$=6$^+$ band. Dominate Configuration=(π 7/2[404])+(π 5/2[402]).
[b] Band(F): K$^{\pi}$=6$^-$ band. Configuration=(ν 7/2[633])+(ν 5/2[512]).
[c] Band(G): K$^{\pi}$=8$^-$ band. Configuration=(π 9/2[514])+(π 7/2[404]).
[d] Band(H): K$^{\pi}$=14$^+$ band.
[e] Band(I): K$^{\pi}$=4$^-$ band.
[f] Band(J): K$^{\pi}$=(2$^-$) band.
[g] Band(K): K$^{\pi}$=(6$^-$) band.
[h] Band(L): K$^{\pi}$=(12$^+$) band.
[i] Band(M): K$^{\pi}$=2$^+$ γ-vibrational band.

Continued on next page (footnotes at end of table)

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07 (continued)

^{174}Hf Levels (continued)

[j] Band(N): $K^\pi=(11^-)$ band.
[k] Band(O): $K^\pi=10^-$ band.
[l] Band(P): $K^\pi=12^-$ band.

$\gamma(^{174}Hf)$

E_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	$I_{(\gamma+ce)}$
10.3[#] *10*	3312.07	14^+	3301.8	(14^-)	0.08 *5*
11.87[#] *25*	3312.07	14^+	3300.24	13^-	18.4 *7*
15.7[#] *7*	3312.07	14^+	3296.34	15^-	0.15 *7*
31.9[#] *5*	3312.07	14^+	3280.2	14^-	0.08 *4*
42.69[#] *14*	3312.07	14^+	3269.38	13^+	55.8 *6*
54[#] *5*	3312.07	14^+	3258.6	14^-	0.08 *8*
60.18 *13*	1797.59	8^-	1737.35	7^+	124 *5*
82.0[#] *3*	3312.07	14^+	3230.06	12^-	0.08 *5*
87.6 *4*	3046.24	(11^-)	2958.72	(11^-)	6.1 *21*
90.92 *4*	90.998	2^+	0.0	0^+	211 *6*
100.10 *22*	1549.26	6^+	1449.10	4^+	3.7 *18*
113.8 *5*	1508.14	(5^+)	1394.54	(4^+)	0.38 *12*
114.14 *22*	1827.61	7^-	1713.49	6^-	2.6 *5*
131.46 *10*	3090.16	12^-	2958.72	(11^-)	32.2 *15*
132.4[#] *14*	3312.07	14^+	3179.9	14^-	0.35 *9*
133.9 *3*	1642.15	6^+	1508.14	(5^+)	0.3 *3*
135.87 *19*	1963.51	8^-	1827.61	7^-	3.5 *4*
151.8 *4*	1713.49	6^-	1561.72	4^-	0.11 *5*
154.71 *13*	1549.26	6^+	1394.54	(4^+)	5.0 *19*
155.09 *16*	3312.07	14^+	3157.02	(13^-)	1.30 *13*
155.39 *10*	2118.92	9^-	1963.51	8^-	3.0 *4*
155.8 *4*	1797.83	(7^+)	1642.15	6^+	0.3 *3*
160.0 *3*	2278.95	10^-	2118.92	9^-	1.08 *21*
160.7 *19*	1722.43	6^-	1561.72	4^-	0.03 *3*
164.22 *16*	1713.49	6^-	1549.26	6^+	0.57 *8*
165.75 *13*	2958.72	(11^-)	2792.98	10^-	19.4 *8*
174.1 *3*	1972.06	8^+	1797.83	(7^+)	0.24 *9*
176.78 *15*	2295.73	10^-	2118.92	9^-	1.96 *22*
183.8 *3*	3230.06	12^-	3046.24	(11^-)	1.7 *3*
188.10 *4*	1737.35	7^+	1549.26	6^+	210 *4*
192.01 *23*	2487.73	11^-	2295.73	10^-	1.37 *10*
192.5 *3*	2276.87	8^-	2084.35	7^-	0.25 *7*
194.8 *12*	3312.07	14^+	3117.14	(13^+)	0.03 *3*
195.0 *5*	2166.93	(9^+)	1972.06	8^+	0.19 *10*
195.5 *5*	2684.85	(12^+)	2489.35	12^+	0.15 *5*
204.2 *9*	1508.14	(5^+)	1304.0	(3^+)	0.09 *5*
206.4 *12*	2653.82	10^-	2447.41	9^-	0.67 *5*
206.45 *3*	297.440	4^+	90.998	2^+	193 *8*
209 *5*	1634.22	6^-	1425.61	(4^-)	0.11 *6*
210.10 *22*	3300.24	13^-	3090.16	12^-	18.4 *7*
210.68 *5*	1948.03	8^+	1737.35	7^+	68.1 *15*
210.7 *6*	1838.14	7^-	1627.45	5^-	1.0 *3*
212.2 *4*	2379.22	10^+	2166.93	(9^+)	0.36 *13*
212.7 *4*	2700.65	12^-	2487.73	11^-	1.13 *15*
214.6 *5*	2124.56	(8^-)	1910.0	(6^-)	0.17 *10*
221.97 *22*	3312.07	14^+	3090.16	12^-	24.9 *10*

Continued on next page (footnotes at end of table)

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07 (continued)

$\gamma(^{174}Hf)$ (continued)

E_γ †	E_i(level)	J_i^π	E_f	J_f^π	$I_{(\gamma+ce)}$
222.2 *11*	1449.10	4^+	1227.0	2^+	0.05 *2*
223.2 *11*	1648.77	4^-	1425.61	(4^-)	0.13 *9*
229.9 *4*	2609.08	(11^+)	2379.22	10^+	0.42 *25*
230.41 *5*	2028.01	9^-	1797.59	8^-	45.3 *14*
230.9 *5*	3090.16	12^-	2859.21	11^-	0.50 *6*
232.03 *5*	2180.06	9^+	1948.03	8^+	56.5 *10*
232.33 *25*	2932.76	13^-	2700.65	12^-	1.58 *15*
238.3 *5*	2792.98	10^-	2554.66	11^-	0.42 *11*
241.97 *19*	1549.26	6^+	1307.24	6^+	1.6 *3*
243.2 *5*	3090.16	12^-	2846.97	12^-	1.27 *17*
245.2 *8*	2854.35	12^+	2609.08	(11^+)	0.20 *12*
247.0 *9*	3179.9	14^-	2932.76	13^-	0.26 *7*
247.7 *4*	1642.15	6^+	1394.54	(4^+)	0.29 *11*
248.3 *5*	1797.59	8^-	1549.26	6^+	17.7 *25*
250.0 *3*	1963.51	8^-	1713.49	6^-	0.66 *11*
250.93 *5*	2278.95	10^-	2028.01	9^-	30.2 *12*
251.52 *4*	2431.57	10^+	2180.06	9^+	42.3 *8*
259.0 *3*	2554.66	11^-	2295.73	10^-	0.73 *17*
259.1 *3*	1981.50	8^-	1722.43	6^-	0.18 *9*
260.2 *5*	2276.87	8^-	2016.7	6^-	0.09 *2*
261.2 *10*	1910.0	(6^-)	1648.77	4^-	0.04 *1*
262.9 *7*	3117.14	(13^+)	2854.35	12^+	0.04 *3*
267.70 *17*	2295.73	10^-	2028.01	9^-	3.0 *3*
269.10 *4*	2700.68	11^+	2431.57	10^+	36.4 *6*
271.4 *7*	3230.06	12^-	2958.72	(11^-)	0.89 *18*
275.74 *23*	2554.66	11^-	2278.95	10^-	11.2 *6*
283.04 *4*	2983.71	12^+	2700.68	11^+	33.9 *5*
285.68 *5*	3269.38	13^+	2983.71	12^+	26.0 *4*
288.7 *4*	1937.46	6^-	1648.77	4^-	0.39 *9*
289.70 *16*	1797.83	(7^+)	1508.14	(5^+)	0.7 *7*
291.3 *3*	2118.92	9^-	1827.61	7^-	0.40 *8*
292.32 *19*	2846.97	12^-	2554.66	11^-	1.93 *19*
293.2 *5*	1944.27	9^-	1651.06	7^-	0.11 *4*
294.07 *21*	1928.27	8^-	1634.22	6^-	0.81 *14*
297.2 *4*	3090.16	12^-	2792.98	10^-	0.62 *14*
297.3 *4*	2135.43	9^-	1838.14	7^-	0.54 *12*
305.07 *25*	2429.6	(10^-)	2124.56	(8^-)	0.26 *12*
310.1 *3*	3157.02	(13^-)	2846.97	12^-	1.48 *15*
310.80 *3*	608.24	6^+	297.440	4^+	163.7 *20*
316.71 *18*	2084.35	7^-	1767.66	5^-	0.38 *14*
318.8 *3*	3312.07	14^+	2993.27	14^+	0.24 *24*
323.23 *18*	1630.35	8^+	1307.24	6^+	0.60 *9*
328.36 *5*	3312.07	14^+	2983.71	12^+	36.2 *5*
329.91 *15*	1972.06	8^+	1642.15	6^+	1.2 *3*
332.2 *3*	2295.73	10^-	1963.51	8^-	0.72 *16*
339.4 *3*	2276.87	8^-	1937.46	6^-	0.60 *11*
339.7 *5*	3312.07	14^+	2972.4	13^-	0.10 *10*
346.1 *4*	3090.16	12^-	2744.06	12^-	0.19 *5*
348.6 *4*	2276.87	8^-	1928.27	8^-	0.27 *5*
350.0 *5*	2331.5	10^-	1981.50	8^-	0.19 *13*
354.4 *3*	2653.82	10^-	2299.38	10^-	0.24 *7*
363.08 *21*	2447.41	9^-	2084.35	7^-	0.69 *19*
367 *3*	2276.87	8^-	1910.0	(6^-)	0.02 *1*
367.9 *13*	2016.7	6^-	1648.77	4^-	0.05 *1*
368.79 *18*	2487.73	11^-	2118.92	9^-	0.96 *21*
369.08 *15*	2166.93	(9^+)	1797.83	(7^+)	1.0 *3*

Continued on next page (footnotes at end of table)

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07 (continued)

$\gamma(^{174}Hf)$ (continued)

E_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	$I_{(\gamma+ce)}$
371.10 *15*	2299.38	10^-	1928.27	8^-	0.56 *11*
375.28 *25*	2319.56	11^-	1944.27	9^-	0.40 *7*
376.95 *11*	2653.82	10^-	2276.87	8^-	2.22 *17*
379.38 *12*	3312.07	14^+	2932.76	13^-	3.15 *20*
380.2 *3*	2515.6	11^-	2135.43	9^-	0.48 *7*
394.0 *3*	2823.6	(12^-)	2429.6	(10^-)	0.12 *4*
395.4 *5*	2993.27	14^+	2597.88	14^+	0.09 *2*
396.04 *16*	2026.49	10^+	1630.35	8^+	1.05 *7*
398.79 *7*	1948.03	8^+	1549.26	6^+	9.7 *3*
401.35 *5*	1009.56	8^+	608.24	6^+	15.9 *5*
404.05 *10*	2958.72	(11^-)	2554.66	11^-	9.7 *4*
404.7 *3*	2700.65	12^-	2295.73	10^-	0.74 *9*
407.16 *12*	2379.22	10^+	1972.06	8^+	0.93 *18*
411.8 *3*	2859.21	11^-	2447.41	9^-	0.28 *6*
436.33 *8*	3090.16	12^-	2653.82	10^-	4.0 *3*
436.4 *7*	2767.9	12^-	2331.5	10^-	0.12 *6*
442.12 *19*	2609.08	(11^+)	2166.93	(9^+)	0.55 *18*
442.72 *6*	2180.06	9^+	1737.35	7^+	18.0 *4*
444.67 *23*	2744.06	12^-	2299.38	10^-	0.39 *8*
445.06 *14*	2932.76	13^-	2487.73	11^-	1.65 *17*
453.25 *25*	2772.80	13^-	2319.56	11^-	0.18 *6*
456.80 *24*	2972.4	13^-	2515.6	11^-	0.31 *6*
457.70 *14*	3312.07	14^+	2854.35	12^+	0.76 *22*
462.85 *19*	2489.35	12^+	2026.49	10^+	0.38 *4*
468.62 *15*	2489.35	12^+	2020.74	12^+	0.58 *4*
475.11 *12*	2854.35	12^+	2379.22	10^+	1.2 *3*
476.53 *7*	1486.08	10^+	1009.56	8^+	6.84 *17*
478.2 *7*	3301.8	(14^-)	2823.6	(12^-)	0.08 *5*
479.3 *13*	3179.9	14^-	2700.65	12^-	0.09 *6*
481.35 *21*	2278.95	10^-	1797.59	8^-	2.7 *3*
483.55 *5*	2431.57	10^+	1948.03	8^+	22.3 *5*
486.61 *25*	1549.26	6^+	1062.65	4^+	0.9 *5*
497.3 *3*	2792.98	10^-	2295.73	10^-	0.90 *9*
503.93 *24*	2993.27	14^+	2489.35	12^+	0.18 *2*
508.0 *3*	3117.14	(13^+)	2609.08	(11^+)	0.21 *14*
508[‡]	3501.2	(16^+)	2993.27	14^+	
512.4 *12*	3280.2	14^-	2767.9	12^-	0.08 *4*
514.04 *15*	2792.98	10^-	2278.95	10^-	8.2 *4*
514.4 *5*	3258.6	14^-	2744.06	12^-	0.08 *8*
520.62 *6*	2700.68	11^+	2180.06	9^+	27.2 *4*
523.5 *3*	3296.34	15^-	2772.80	13^-	0.11 *6*
526.67 *20*	2554.66	11^-	2028.01	9^-	2.41 *22*
534.66 *9*	2020.74	12^+	1486.08	10^+	3.51 *10*
535.51 *22*	3090.16	12^-	2554.66	11^-	3.11 *24*
539.3 *6*	3312.07	14^+	2772.80	13^-	0.13 *5*
539.67 *25*	1549.26	6^+	1009.56	8^+	3.27 *20*
540.44 *14*	2026.49	10^+	1486.08	10^+	1.38 *11*
547[‡]	4048.2	(18^+)	3501.2	(16^+)	
552.14 *6*	2983.71	12^+	2431.57	10^+	26.9 *4*
568.1 *6*	2846.97	12^-	2278.95	10^-	1.0 *3*
568.72 *6*	3269.38	13^+	2700.68	11^+	29.8 *4*
577.13 *18*	2597.88	14^+	2020.74	12^+	1.38 *8*
602.4 *3*	3157.02	(13^-)	2554.66	11^-	0.72 *14*
608[‡]	4656.2	(20^+)	4048.2	(18^+)	
611[‡]	3209.1	16^+	2597.88	14^+	

Continued on next page (footnotes at end of table)

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07 (continued)

$\gamma(^{174}Hf)$ (continued)

E_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	$I_{(\gamma+ce)}$	Comments
620.92 *14*	1630.35	8^+	1009.56	8^+	1.39 *9*	
625.8 *5*	2276.87	8^-	1651.06	7^-	0.12 *3*	
627.22 *14*	3312.07	14^+	2684.85	(12^+)	0.71 *8*	
648[‡]	3857.3	18^+	3209.1	16^+		
663.02 *16*	2958.72	(11^-)	2295.73	10^-	2.51 *22*	
664.10 *18*	2684.85	(12^+)	2020.74	12^+	0.74 *8*	
679.79 *9*	2958.72	(11^-)	2278.95	10^-	13.0 *6*	
693[‡]	4550.7	20^+	3857.3	18^+		
698.5 *10*	3296.34	15^-	2597.88	14^+	0.04 *4*	
699.05 *18*	1307.24	6^+	608.24	6^+	1.94 *15*	
703[‡@]	5359.7	(22^+)	4656.2	(20^+)		
705 *4*	1767.66	5^-	1062.65	4^+	0.01 *1*	
709.5 *3*	2653.82	10^-	1944.27	9^-	0.24 *8*	
714.2 *3*	3312.07	14^+	2597.88	14^+	1.04 *6*	
726.7 *3*	3046.24	(11^-)	2319.56	11^-	0.48 *11*	
736[‡]	827.9	0^+	90.998	2^+		
741[‡]	5291.7	(22^+)	4550.7	20^+		
752.1 *4*	2772.80	13^-	2020.74	12^+	0.08 *4*	
764.97 *14*	2792.98	10^-	2028.01	9^-	8.9 *6*	
765.21 *19*	1062.65	4^+	297.440	4^+	1.61 *7*	
770.6 *4*	3090.16	12^-	2319.56	11^-	0.16 *6*	
771[‡]	6062.7	(24^+)	5291.7	(22^+)		
777.1 *4*	2084.35	7^-	1307.24	6^+	0.15 *15*	
788.0 *12*	1797.59	8^-	1009.56	8^+	0.16 *7*	
805[‡]	6164.7	(24^+)	5359.7	(22^+)		
809[‡]	5359.7	(22^+)	4550.7	20^+		
811.25 *25*	3090.16	12^-	2278.95	10^-	0.82 *17*	
816.9 *5*	2447.41	9^-	1630.35	8^+	0.20 *10*	
818.0 *4*	1827.61	7^-	1009.56	8^+	0.20 *4*	
822.70 *15*	3312.07	14^+	2489.35	12^+	0.59 *14*	
828[‡@]	6890?	(26^+)	6062.7	(24^+)		
828.6 *6*	1838.14	7^-	1009.56	8^+	0.27 *6*	
832.7 *3*	2859.21	11^-	2026.49	10^+	0.24 *8*	
833.5 *3*	2319.56	11^-	1486.08	10^+	0.52 *7*	
840.9 *3*	1449.10	4^+	608.24	6^+	0.78 *4*	
863[‡@]	7027?	(26^+)	6164.7	(24^+)		
900.1 *20*	1508.14	(5^+)	608.24	6^+	0.04 *4*	
918.69 *17*	1928.27	8^-	1009.56	8^+	0.63 *12*	
932.12 *22*	2958.72	(11^-)	2026.49	10^+	0.58 *19*	
941.02 *5*	1549.26	6^+	608.24	6^+	148.4 *11*	
945 *6*	2431.57	10^+	1486.08	10^+	0.01 *1*	
962.96 *25*	2983.71	12^+	2020.74	12^+	0.23 *9*	
971.7 *3*	1062.65	4^+	90.998	2^+	0.95 *14*	
971.9 *4*	1981.50	8^-	1009.56	8^+	0.14 *3*	
995.4 *4*	2792.98	10^-	1797.59	8^-	6.1 *7*	
1006.7 *7*	1304.0	(3^+)	297.440	4^+	0.02 *2*	I_γ: authors' entry of 0.02 *0* is assumed by the evaluator to be a typo.
1009.8 *6*	1307.24	6^+	297.440	4^+	0.28 *6*	
1019.2 *4*	1627.45	5^-	608.24	6^+	0.39 *6*	
1019.71 *17*	3046.24	(11^-)	2026.49	10^+	0.95 *25*	
1022 *5*	1630.35	8^+	608.24	6^+		
1025.97 *16*	1634.22	6^-	608.24	6^+	1.10 *10*	
1034.0 *3*	1642.15	6^+	608.24	6^+	0.09 *3*	

Continued on next page (footnotes at end of table)

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07 (continued)

$\gamma(^{174}Hf)$ (continued)

E_γ †	E_i(level)	J_i^π	E_f	J_f^π	$I_{(\gamma+ce)}$	E_γ †	E_i(level)	J_i^π	E_f	J_f^π	$I_{(\gamma+ce)}$
1042.83 *23*	1651.06	7^-	608.24	6^+	0.18 *6*	1229.9 *3*	1838.14	7^-	608.24	6^+	0.45 *15*
1074.79 *16*	2084.35	7^-	1009.56	8^+	0.38 *19*	1251.81 *7*	1549.26	6^+	297.440	4^+	106.5 *16*
1097.10 *10*	1394.54	(4^+)	297.440	4^+	0.55 *5*	1264.28 *21*	1561.72	4^-	297.440	4^+	0.11 *11*
1102.0 *4*	3046.24	(11^-)	1944.27	9^-	0.20 *15*	1267.3 *4*	2276.87	8^-	1009.56	8^+	0.35 *6*
1105.24 *12*	1713.49	6^-	608.24	6^+	0.49 *4*	1291.32 *24*	3312.07	14^+	2020.74	12^+	0.27 *12*
1114.2 *3*	1722.43	6^-	608.24	6^+	0.33 *5*	1301.7 *5*	1910.0	(6^-)	608.24	6^+	0.13 *1*
1115.0 *3*	2124.56	(8^-)	1009.56	8^+	0.18 *18*	1303.55 *14*	1394.54	(4^+)	90.998	2^+	0.6 *4*
1125.9 *9*	2135.43	9^-	1009.56	8^+	0.06 *2*	1329.2 *3*	1937.46	6^-	608.24	6^+	0.34 *3*
1128.17 *17*	1425.61	(4^-)	297.440	4^+	0.43 *14*	1330.0 *3*	1627.45	5^-	297.440	4^+	0.46 *7*
1136.0 *8*	1227.0	2^+	90.998	2^+	0.30 *10*	1344.77 *18*	1642.15	6^+	297.440	4^+	0.11 *5*
1151.7 *4*	1449.10	4^+	297.440	4^+	0.26 *3*	1351.32 *15*	1648.77	4^-	297.440	4^+	0.26 *10*
1159.42 *18*	1767.66	5^-	608.24	6^+	0.10 *3*	1358.2 *4*	1449.10	4^+	90.998	2^+	0.3 *3*
1167.7 *4*	2653.82	10^-	1486.08	10^+	0.12 *12*	1408.5 *6*	2016.7	6^-	608.24	6^+	0.05 *2*
1210.88 *19*	1508.14	(5^+)	297.440	4^+	0.23 *1*	1472.6 *5*	2958.72	(11^-)	1486.08	10^+	0.09 *3*
1213 *3*	1304.0	(3^+)	90.998	2^+	0.02 *1*	1476.1 *4*	2084.35	7^-	608.24	6^+	0.08 *3*
1219.4 *11*	1827.61	7^-	608.24	6^+	0.12 *3*	1560.2 *4*	3046.24	(11^-)	1486.08	10^+	0.08 *2*

† From 1995Gj01, except as noted. Authors give I(γ+ce) where the internal conversion contribution is for pure transition for the lowest multipole order allowed by ΔJ^π.

‡ From 1986Wa07.

Transition inferred from isomer feeding to lower-lying levels. The total intensity is calculated from the measured intensity of lower-lying transitions.

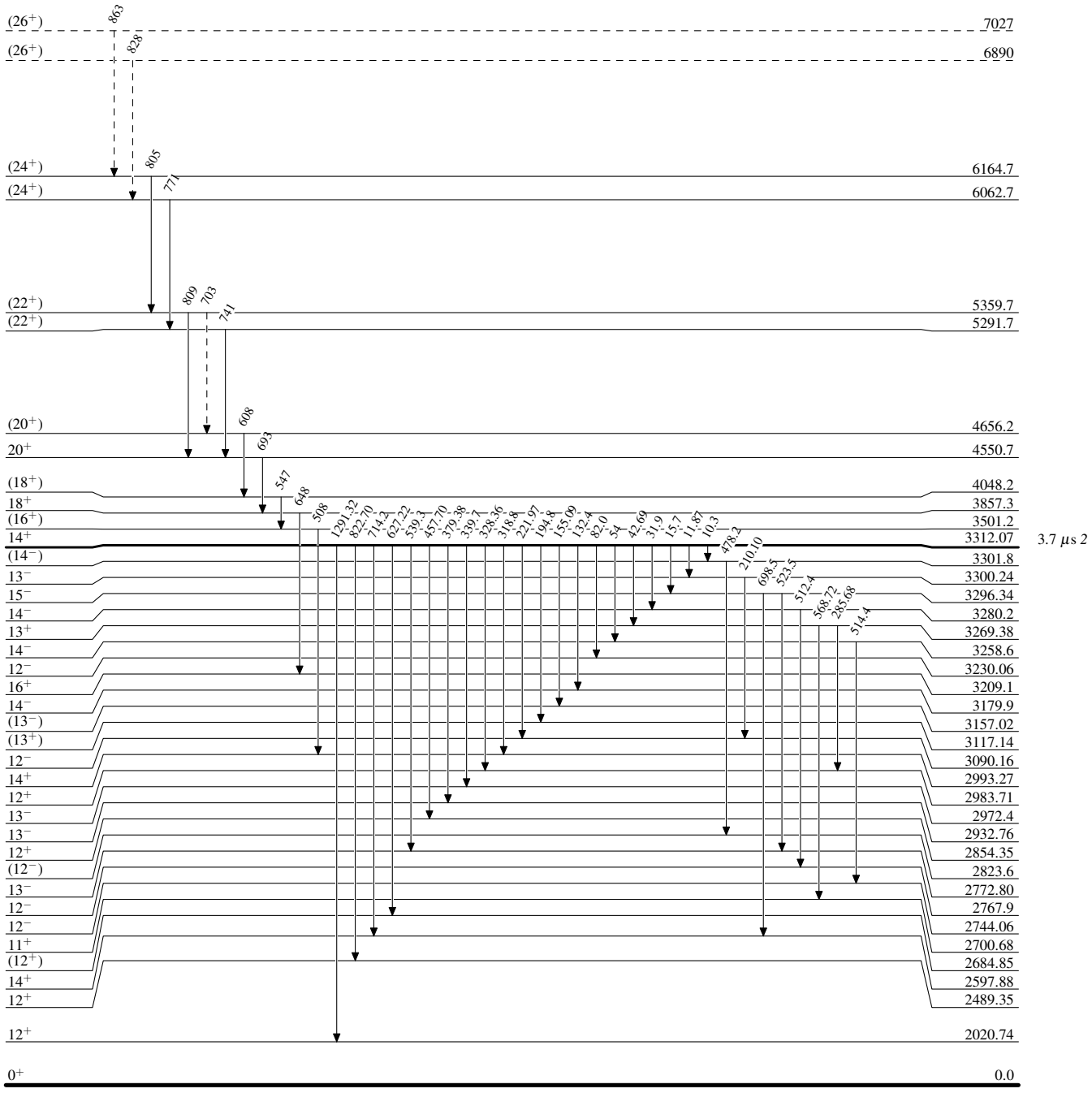
@ Placement of transition in the level scheme is uncertain.

Legend

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07

Level Scheme

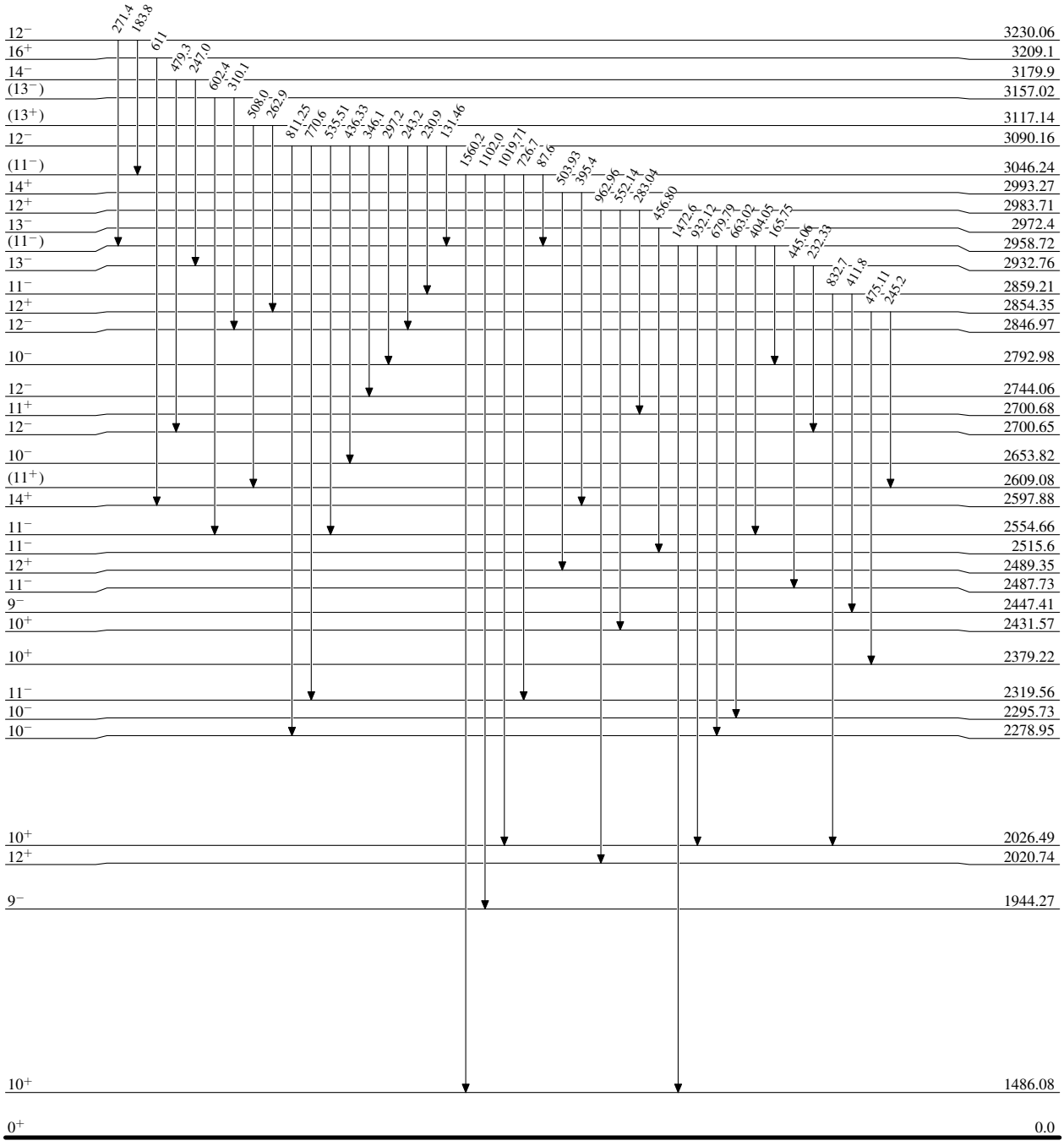
γ Decay (Uncertain)



$^{174}_{72}Hf_{102}$

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07

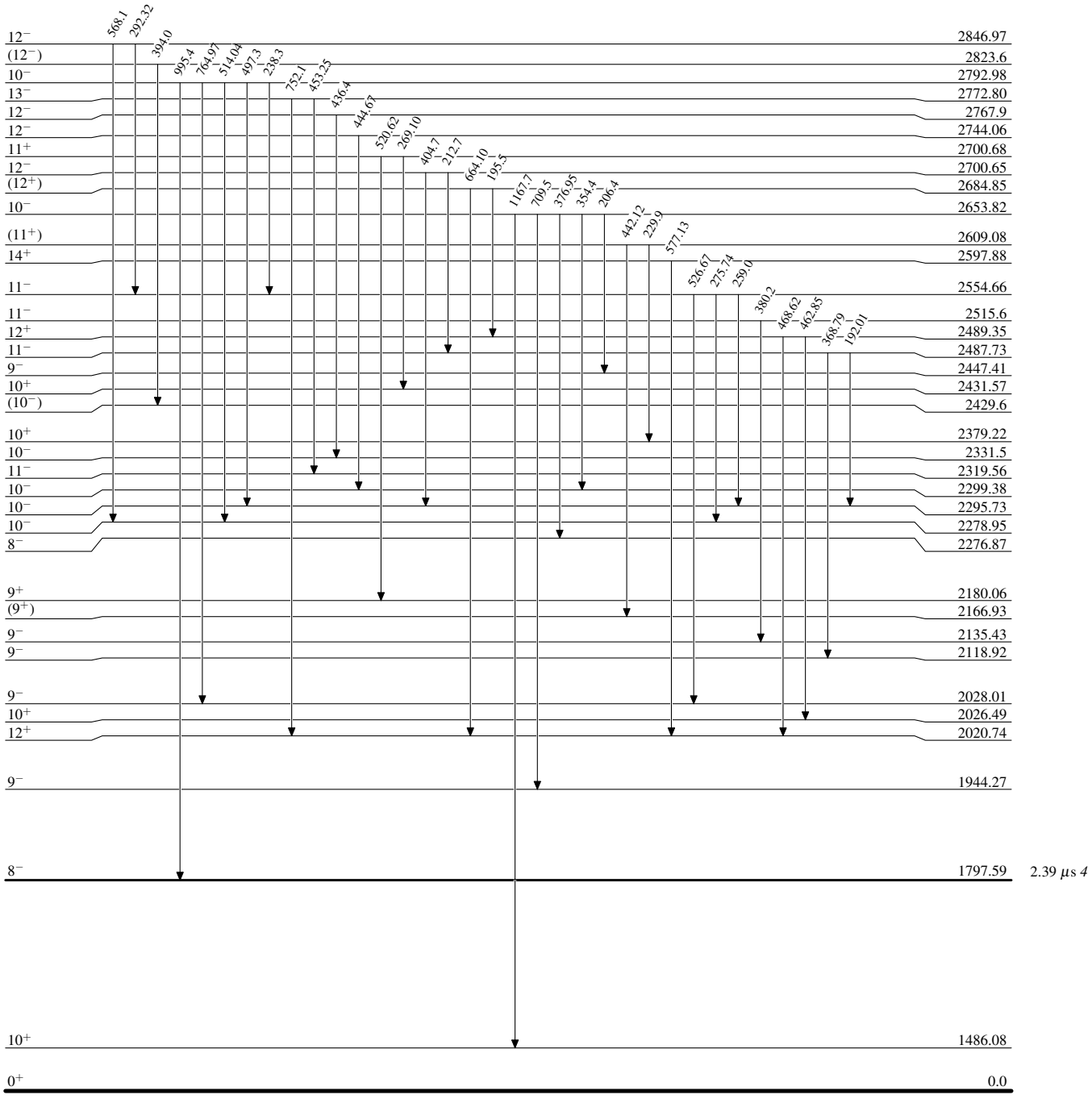
Level Scheme (continued)



$^{174}_{72}Hf_{102}$

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07

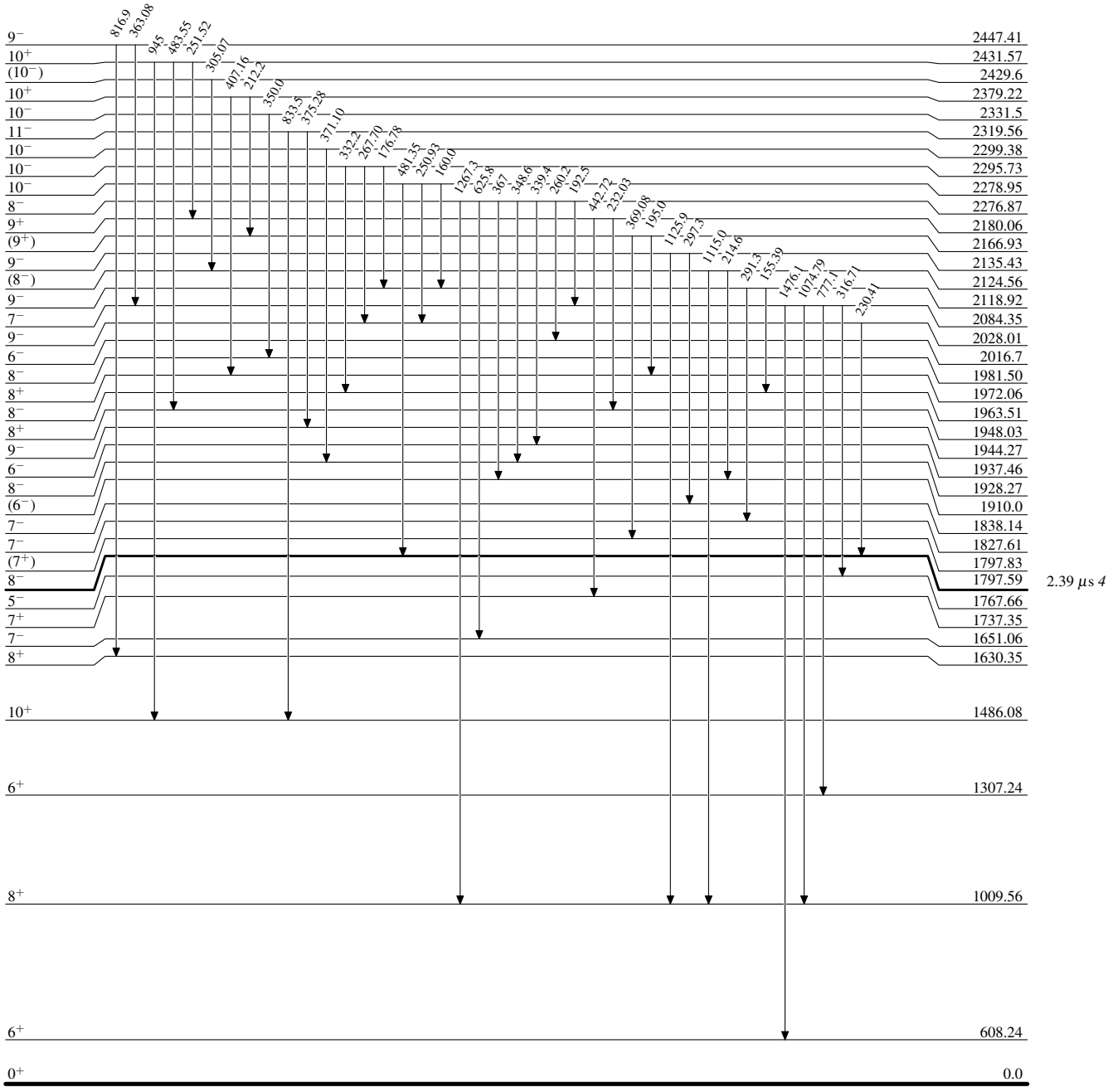
Level Scheme (continued)



$^{174}_{72}Hf_{102}$

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07

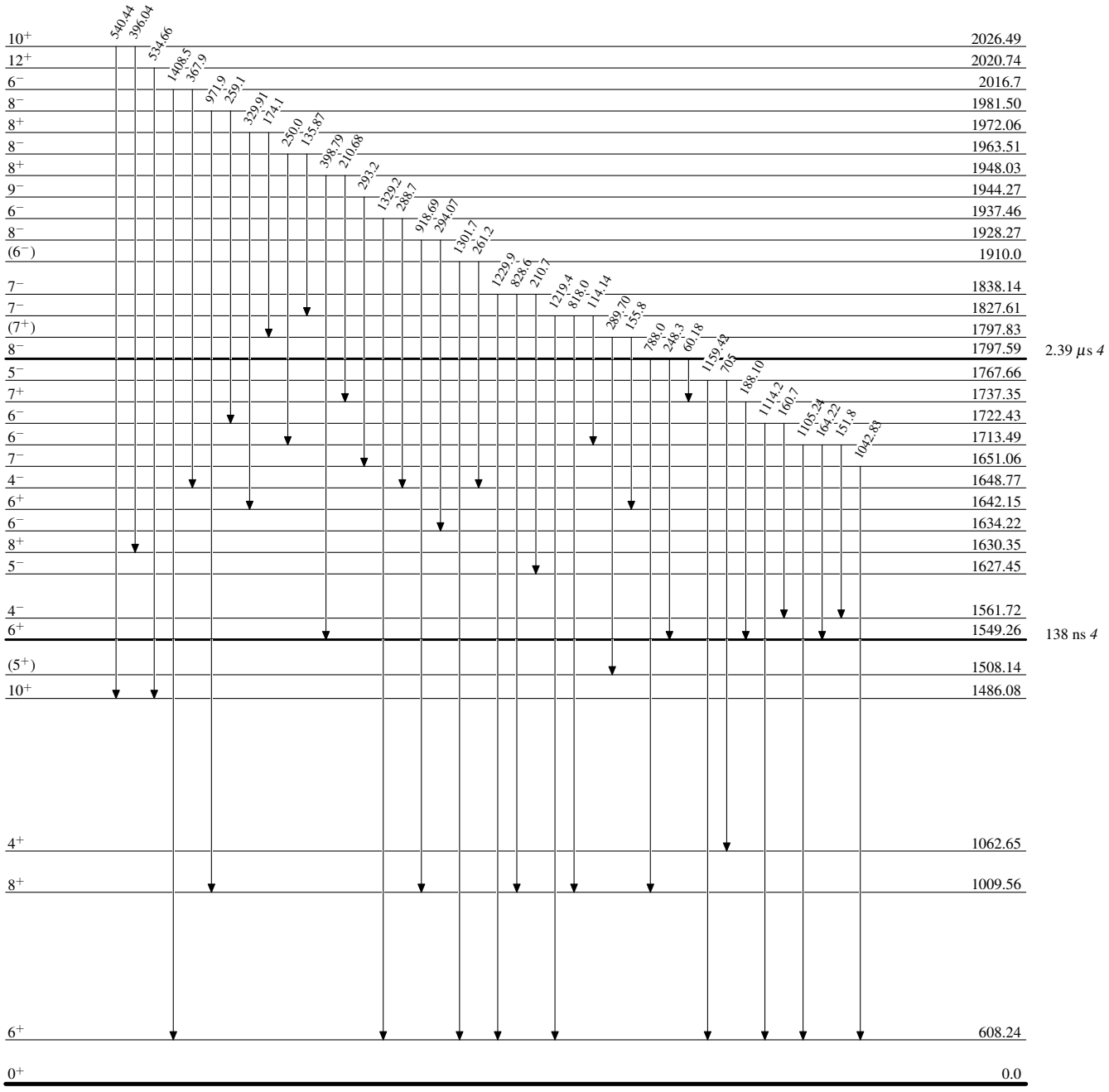
Level Scheme (continued)



$^{174}_{72}Hf_{102}$

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07

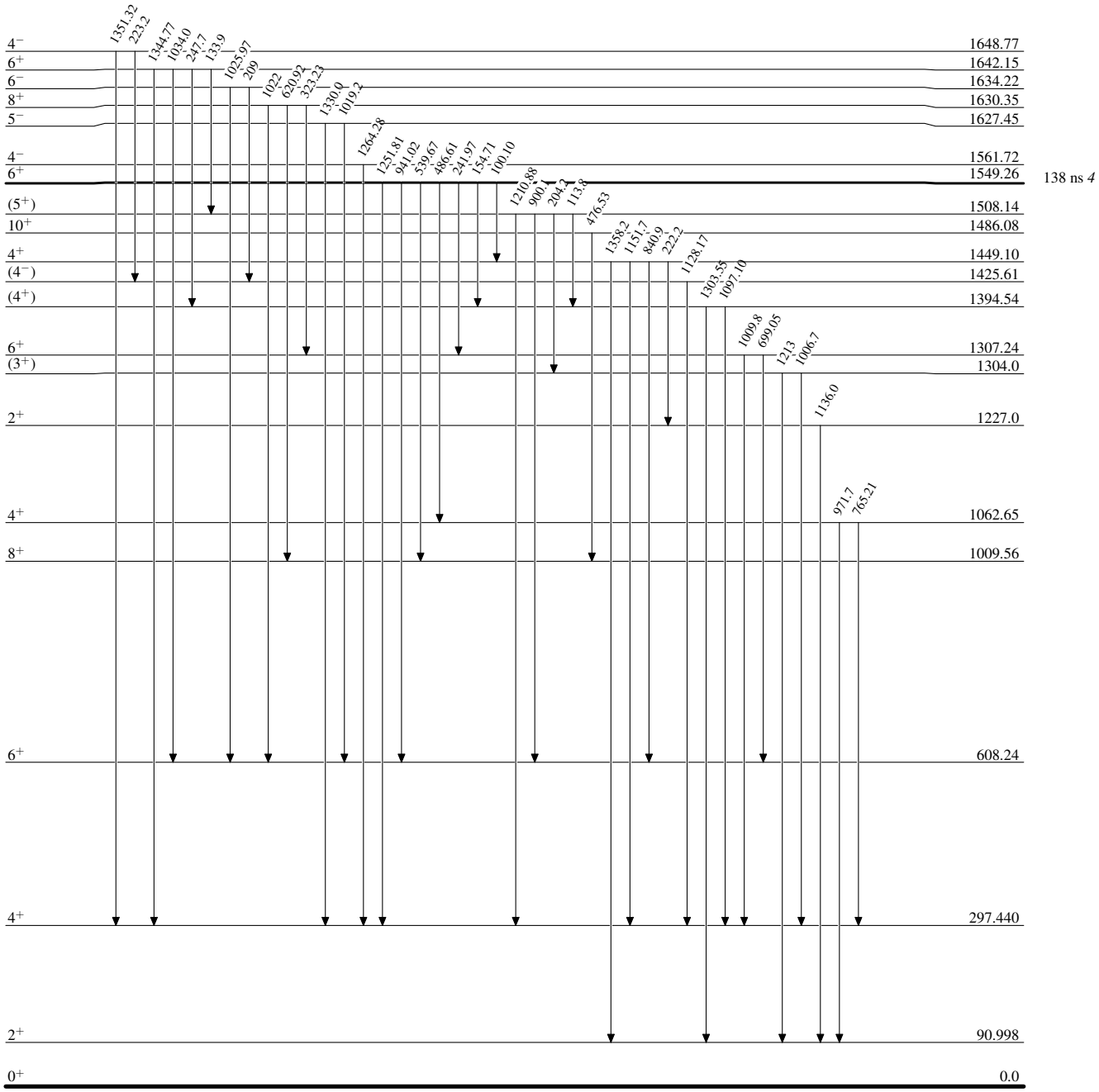
Level Scheme (continued)



$^{174}_{72}Hf_{102}$

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07

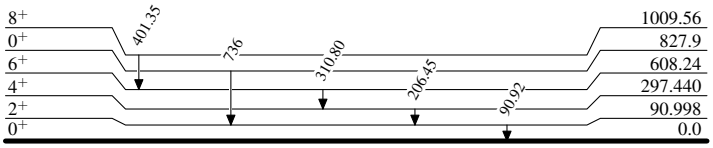
Level Scheme (continued)



$^{174}_{72}Hf_{102}$

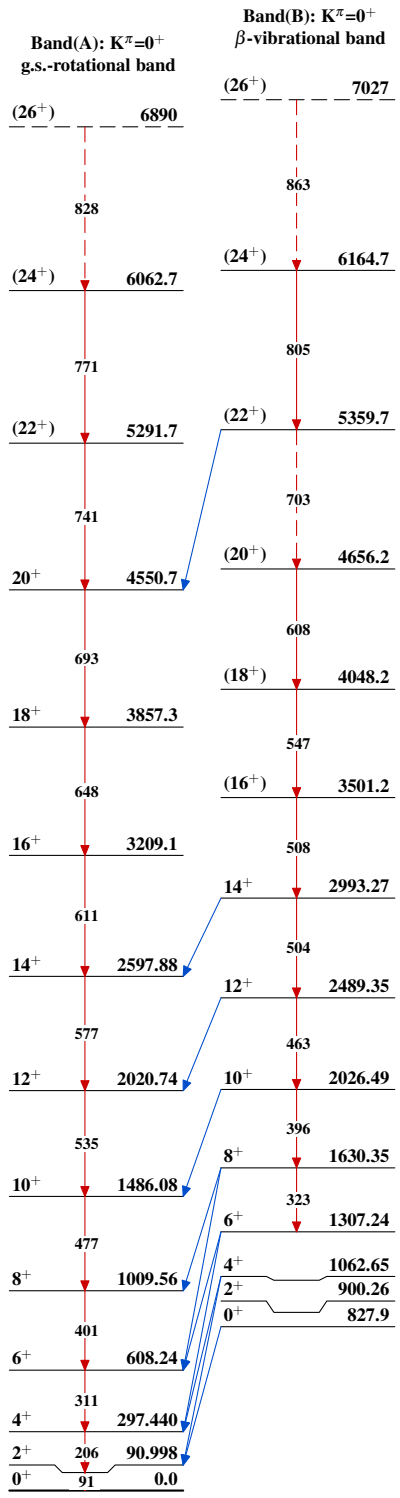
^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07

Level Scheme (continued)



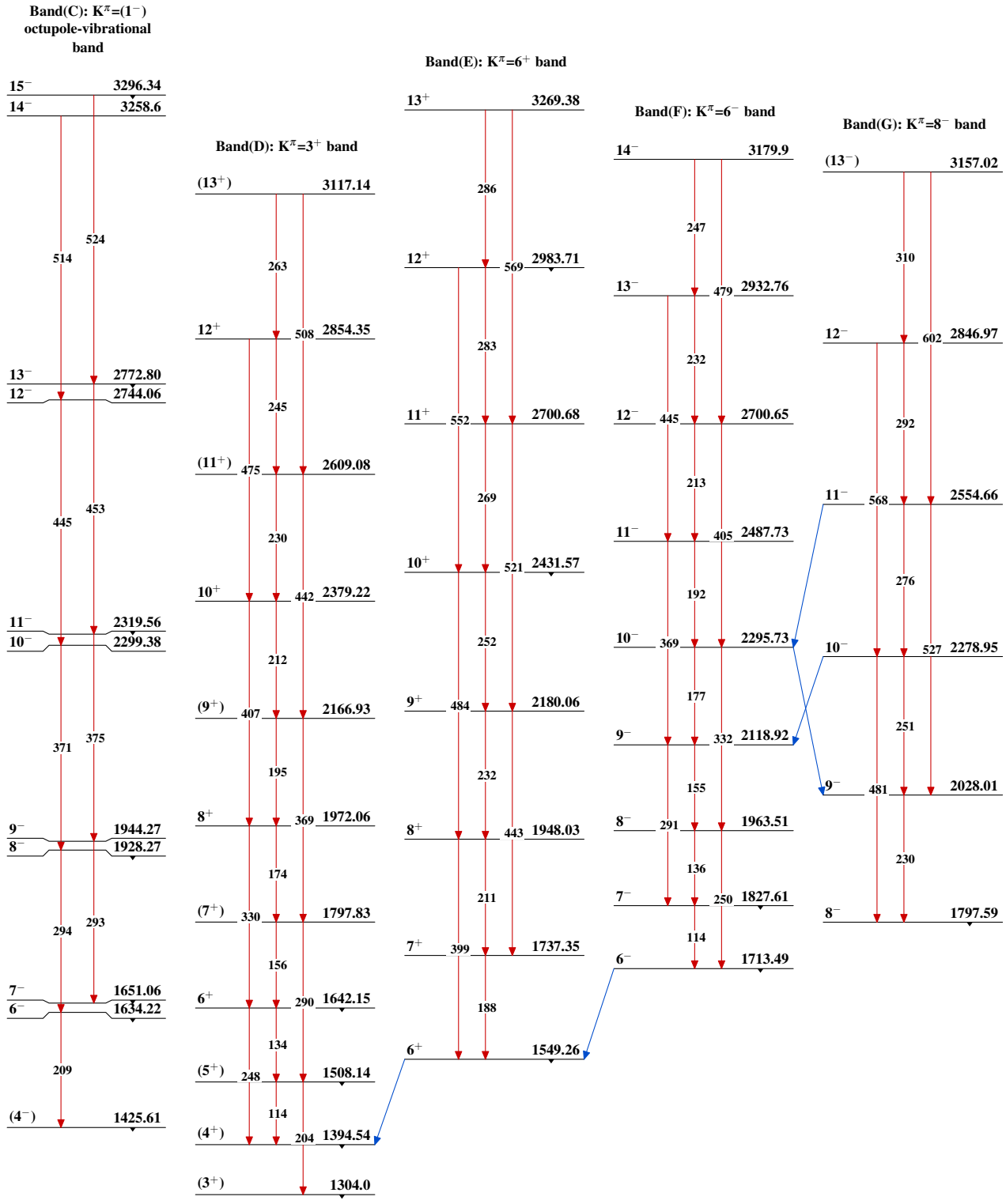
$^{174}_{72}Hf_{102}$

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07



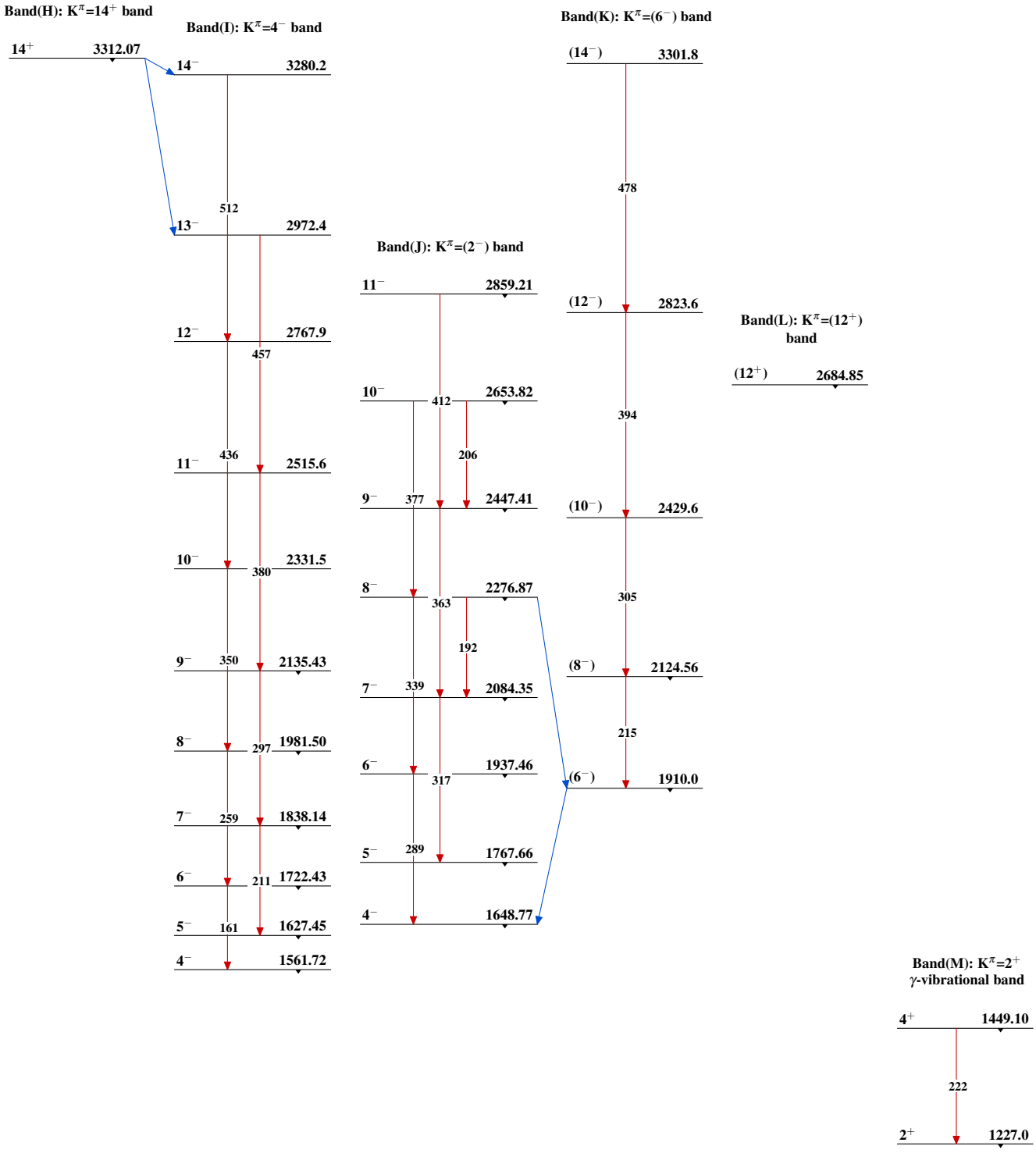
$^{174}_{72}Hf_{102}$

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07 (continued)



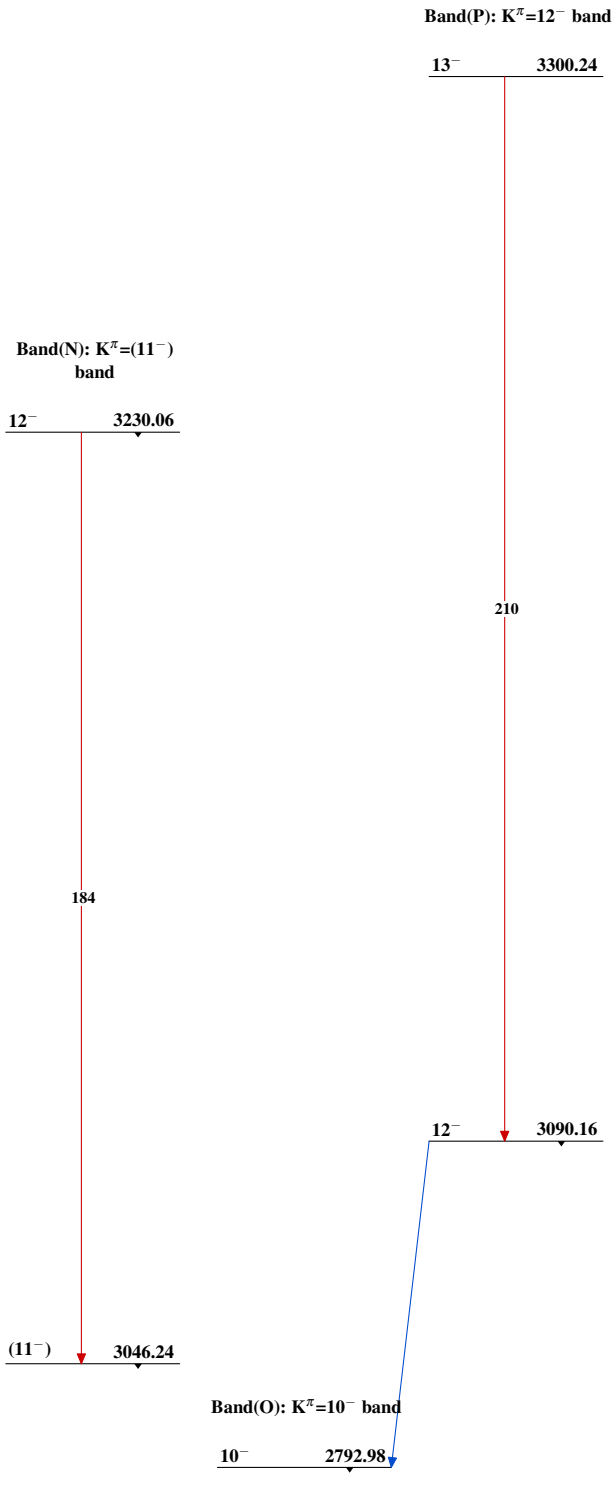
$^{174}_{72}Hf_{102}$

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07 (continued)



$^{174}_{72}Hf_{102}$

^{130}Te(^{48}Ca,4nγ) 1995Gj01,1986Wa07 (continued)



$^{174}_{72}Hf_{102}$