

Adopted Levels, Gammas

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

Q(β^-)= -1.51×10^3 4; S(n)= 7.42×10^3 4; S(p)= 3.62×10^3 4; Q(α)= 3.14×10^3 4 [2012Wa38](#)

Note: Current evaluation has used the following Q record \$ -1856 syst 7484 syst 4012 SY2.88E3 9 [1995Au04](#).

¹⁷⁴Ta Levels

Only members of the g.s. rotational band observed in the ¹⁶⁹Tm(⁹Be,4n γ) reaction have been adopted.

Cross Reference (XREF) Flags

- A ¹⁶⁰Gd(¹⁹F,5n γ)
- B ¹⁶⁹Tm(⁹Be,4n γ)
- C ¹⁷⁴W ϵ decay

E(level) [‡]	J π [†]	T _{1/2}	XREF	Comments
0.0 [#]	3 ⁺	1.14 h 8	AB	$\% \epsilon + \% \beta^+ = 100$ T _{1/2} : weighted average (LRSW) ($\chi^2/\nu=3.45$) of 1.06 h 4 (1985Sz03), 1.04 h 6 (1975Ca11), 1.19 h 11 (1971Gi04), 1.2 h 1 (1965De25), 1.30 h 5 (1964Sa22), 1.3 h 1 (1961Bu13) and 1.3 h 1 (1960Fa03). β^+ was observed by 1971Ch26 . J π : ϵ to 2 ⁺ (log ft=6.9) and 4 ⁺ (log ft=6.3) in ¹⁷⁴ Hf. Coupling of 5/2 ⁻ , 1/2[541] proton (g.s. of ¹⁷³ Ta) with 1/2 ⁻ , 1/2[521] neutron (g.s. of ¹⁷³ Hf) suggests J π =3 ⁺ (1987Kr17).
0.0+x ^b	(5 ⁻)		A	
0.0+y ^c	(5 ⁻)		A	
4.79+x [@] 13	(7 ⁺)		A	
50.679+x ^b 20	(6 ⁻)		A	
59.73+x ^{&} 13	(7 ⁺)		A	
77.00 [#] 8	5 ⁺		AB	
98.30+y ^c 5	(6 ⁻)		A	
119.58+x ^b 3	(7 ⁻)		A	
141.87 [#] 18	(4 ⁺)		A	
157.09+x [@] 14	(8 ⁺)		A	
157.50+x ^a 13	(8 ⁻)		A	
163.94+x ^{&} 13	(8 ⁺)		A	
202.24+x ^b 4	(8 ⁻)		A	
219.60+y ^c 6	(7 ⁻)		A	
240.72 [#] 9	7 ⁺		AB	
249.97+x ^a 12	(9 ⁻)		A	
297.37+x ^{&} 14	(9 ⁺)		A	
302.28 [#] 15	6 ⁺		A	
312.44+x ^b 10	(9 ⁻)		A	
321.70+x [@] 14	(9 ⁺)		A	
365.98+y ^c 6	(8 ⁻)		A	
383.48+x ^a 12	(10 ⁻)		A	
428.76+x ^b 9	(10 ⁻)		A	

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Adopted Levels, Gammas (continued)

^{174}Ta Levels (continued)

E(level) [‡]	J ^π †	XREF	E(level) [‡]	J ^π †	XREF	E(level) [‡]	J ^π †	XREF
461.13+x ^{&} 14	(10 ⁺)	A	1750.54+x ^a 13	(16 ⁻)	A	3621.3+x [@]	(21 ⁺)	A
493.16 [#] 9	9 ⁺	AB	1758.97 [#] 12	15 ⁺	AB	3694.93 [#] 15	(21 ⁺)	A
502.26+x [@] 14	(10 ⁺)	A	1806.91 [#] 20	14 ⁺	A	3711.5 [#] 4	(20 ⁺)	A
534.59+y ^c 7	(9 ⁻)	A	1905.70+x ^{&} 16	(16 ⁺)	A	3770.4+x 3	(21 ⁺)	A
548.44+x ^a 12	(11 ⁻)	A	1953.93+x ^b 12	(17 ⁻)	A	3777.38 22	(21 ⁺)	A
549.74+x [#] 15	8 ⁺	A	1997.39+y ^c 12	(15 ⁻)	A	3802.90+x ^a 17	(22 ⁻)	A
590.06+x ^b 10	(11 ⁻)	A	2013.34+x [@] 18	(16 ⁺)	A	3861.60+x ^{&} 19	(22 ⁺)	A
650.37+x ^{&} 14	(11 ⁺)	A	2055.80+x ^a 13	(17 ⁻)	A	3886.2+y ^c 3	(21 ⁻)	A
703.79+x [@] 15	(11 ⁺)	A	2201.04+x ^b 12	(18 ⁻)	A	4000.01+x ^b 16	(23 ⁻)	A
726.93+y ^c 8	(10 ⁻)	A	2204.33+x ^{&} 16	(17 ⁺)	A	4198.34+x ^a 18	(23 ⁻)	A
739.31+x ^b 10	(12 ⁻)	A	2301.88+y ^c 14	(16 ⁻)	A	4220.74+x ^{&} 20	(23 ⁺)	A
742.21+x ^a 12	(12 ⁻)	A	2322.29+x [@] 20	(17 ⁺)	A	4233.0+y ^c 5	(22 ⁻)	A
832.83 [#] 10	11 ⁺	AB	2336.31 [#] 13	17 ⁺	AB	4246.57+x 23	(23 ⁺)	A
863.17+x ^{&} 14	(12 ⁺)	A	2374.73+x ^a 14	(18 ⁻)	A	4364.87+x ^b 16	(24 ⁻)	A
885.41 [#] 16	10 ⁺	A	2383.69 [#] 23	16 ⁺	A	4442.8 [#] 5	(22 ⁺)	A
927.42+x [@] 15	(12 ⁺)	A	2514.23+x ^{&} 16	(18 ⁺)	A	4456.46 [#] 17	(23 ⁺)	A
940.92+y ^c 8	(11 ⁻)	A	2569.62+x ^b 13	(19 ⁻)	A	4463.64 22	(23 ⁺)	A
956.82+x ^b 11	(13 ⁻)	A	2617.98+y ^c 15	(17 ⁻)	A	4569.55+x ^{&} 22	(24 ⁺)	A
960.90+x ^a 12	(13 ⁻)	A	2646.78+x [@] 22	(18 ⁺)	A	4585.42+x ^a 20	(24 ⁻)	A
1097.13+x ^{&} 14	(13 ⁺)	A	2715.68+x ^a 15	(19 ⁻)	A	4595.6+y ^c 4	(23 ⁻)	A
1140.13+x ^b 11	(14 ⁻)	A	2835.26+x ^{&} 17	(19 ⁺)	A	4605.78+x 24	(24 ⁺)	A
1170.91+x [@] 16	(13 ⁺)	A	2852.10+x ^b 13	(20 ⁻)	A	4801.40+x ^b 18	(25 ⁻)	A
1176.63+y ^c 9	(12 ⁻)	A	2927.68+y ^c 19	(18 ⁻)	A	4998.33+x ^a 23	(25 ⁻)	A
1201.92+x ^a 12	(14 ⁻)	A	2976.97+x [@] 24	(19 ⁺)	A	5216.32+x ^b 18	(26 ⁻)	A
1256.25 [#] 11	13 ⁺	AB	2983.70 [#] 14	(19 ⁺)	A	5218.4 [#] 6	(24 ⁺)	A
1305.91 [#] 17	12 ⁺	A	3025.2 [#] 3	(18 ⁺)	A	5274.16 [#] 20	(25 ⁺)	A
1350.24+x ^{&} 15	(14 ⁺)	A	3062.86+x ^a 15	(20 ⁻)	A	5408.78+x ^a 23	(26 ⁻)	A
1414.28+x ^b 12	(15 ⁻)	A	3166.59+x ^{&} 17	(20 ⁺)	A	5650.61+x ^b 21	(27 ⁻)	A
1431.41+y ^c 10	(13 ⁻)	A	3241.15+y ^c 24	(19 ⁻)	A	6127.79+x ^b 22	(28 ⁻)	A
1435.11+x [@] 16	(14 ⁺)	A	3254.00+x ^b 14	(21 ⁻)	A	6139.73 [#] 25	(27 ⁺)	A
1466.55+x ^a 12	(15 ⁻)	A	3307.1+x [@] 5	(20 ⁺)	A	6149.0 3	(27 ⁺)	A
1620.55+x ^{&} 15	(15 ⁺)	A	3433.90+x ^a 16	(21 ⁻)	A	6558.61+x ^b 23	(29 ⁻)	A
1628.42+x ^b 12	(16 ⁻)	A	3508.71+x ^{&} 18	(21 ⁺)	A	7096.7+x ^b 3	(30 ⁻)	A
1706.12+y ^c 11	(14 ⁻)	A	3558.9+y ^c 4	(20 ⁻)	A	7524.5+x ^b 3	(31 ⁻)	A
1714.81+x [@] 17	(15 ⁺)	A	3575.73+x ^b 14	(22 ⁻)	A			

† J^π assignments are based on rotational structure, coupled to specific configuration identification. Quasi-particle configuration assignments are based on a comparison of experimental ratios of γ-ray reduced transition probabilities (B(M1)/B(E2)) with theoretical values predicted for the expected configuration (1998Ba20).

‡ Deduced by evaluator from a least-squares fit to γ-ray energies from $^{160}\text{Gd}(^{19}\text{F},5n\gamma)$ (1998Ba20).

Band(A): g.s. rotational band configuration=(π 1/2[541])+(ν 1/2[521]).

@ Band(B): K^π=7⁺ rotational band configuration=(π 9/2[514])+(ν 5/2[512]).

& Band(C): K^π=7⁺ rotational band configuration=(π 7/2[404])+(ν 7/2[633]).

^a Band(D): K^π=8⁻ rotational band configuration=(π 9/2[514])+(ν 7/2[633]).

^b Band(E): K^π=4⁻ rotational band configuration=(π 1/2[541])+(ν 7/2[633]).

^c Band(F): K^π=5⁻ rotational band configuration=(π 5/2[402])+(ν 5/2[512]).

Adopted Levels, Gammas (continued)

$\gamma(^{174}\text{Ta})$							
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.†	δ
4.79+x	(7 ⁺)	7 4	100.0	0.0+x	(5 ⁻)		
50.679+x	(6 ⁻)	50.68 2	100.0	0.0+x	(5 ⁻)		
59.73+x	(7 ⁺)	55.00 2	100.0	4.79+x	(7 ⁺)		
77.00	5 ⁺	77.00 8	100.0	0.0	3 ⁺		
98.30+y	(6 ⁻)	98.29 5	100.0	0.0+y	(5 ⁻)		
119.58+x	(7 ⁻)	68.90 2	100.0	50.679+x	(6 ⁻)		
141.87	(4 ⁺)	(65)		77.00	5 ⁺		
		(142)		0.0	3 ⁺		
157.09+x	(8 ⁺)	152.31 4	100.0	4.79+x	(7 ⁺)		
157.50+x	(8 ⁻)	97.79 1	100.0	59.73+x	(7 ⁺)		
		152.48 4	10.80	4.79+x	(7 ⁺)		
163.94+x	(8 ⁺)	104.17 5	38 9	59.73+x	(7 ⁺)	D+Q	
		159.05 4	100 23	4.79+x	(7 ⁺)		
202.24+x	(8 ⁻)	82.66 2	100.0	119.58+x	(7 ⁻)	D+Q	
219.60+y	(7 ⁻)	121.27 4	100 9	98.30+y	(6 ⁻)		
		219.65 10	44 5	0.0+y	(5 ⁻)		
240.72	7 ⁺	163.72 3	100.0	77.00	5 ⁺	E2	
249.97+x	(9 ⁻)	92.47 4	100.0	157.50+x	(8 ⁻)	E2, D+Q	
297.37+x	(9 ⁺)	133.42 5	60 3	163.94+x	(8 ⁺)		
		140.13 6	36.9 23	157.09+x	(8 ⁺)		
		237.74 5	100 7	59.73+x	(7 ⁺)	E2	
302.28	6 ⁺	160.41 9	1.0×10 ² 4	141.87	(4 ⁺)	E2	
		225.35 20	49 20	77.00	5 ⁺		
312.44+x	(9 ⁻)	110.22 4	100 12	202.24+x	(8 ⁻)		
		192.82 24	32 4	119.58+x	(7 ⁻)		
321.70+x	(9 ⁺)	157.74 6	54 4	163.94+x	(8 ⁺)		
		164.73 5	100 7	157.09+x	(8 ⁺)		
		316.95 12	56 5	4.79+x	(7 ⁺)		
365.98+y	(8 ⁻)	146.38 4	100 5	219.60+y	(7 ⁻)		
		267.78 8	84 7	98.30+y	(6 ⁻)		
383.48+x	(10 ⁻)	133.53 3	100 5	249.97+x	(9 ⁻)	D+Q	
		226.50 54	18.52	157.50+x	(8 ⁻)		
428.76+x	(10 ⁻)	116.30 4	100 6	312.44+x	(9 ⁻)	D+Q	-0.02 [‡] +3-4
		226.43 9	91 7	202.24+x	(8 ⁻)	E2	
461.13+x	(10 ⁺)	163.46 6	42 3	297.37+x	(9 ⁺)	M1+E2	
		297.17 4	100 6	163.94+x	(8 ⁺)	E2	
		304.07 13	24.4 20	157.09+x	(8 ⁺)		
493.16	9 ⁺	252.45 3	100.0	240.72	7 ⁺	E2	
502.26+x	(10 ⁺)	180.59 4	100 5	321.70+x	(9 ⁺)		
		337.33 14	40 4	163.94+x	(8 ⁺)		
		345.17 11	46 3	157.09+x	(8 ⁺)		
534.59+y	(9 ⁻)	168.50 5	62 3	365.98+y	(8 ⁻)		
		314.86 8	100 6	219.60+y	(7 ⁻)		
548.44+x	(11 ⁻)	164.98 3	100 4	383.48+x	(10 ⁻)	D+Q	
		298.10 11	20.2 16	249.97+x	(9 ⁻)		
549.74+x	8 ⁺	247.47 6	100 12				
		308.76 17	44 8				
590.06+x	(11 ⁻)	161.23 5	82 4	428.76+x	(10 ⁻)		
		277.72 6	100 5	312.44+x	(9 ⁻)	E2	
650.37+x	(11 ⁺)	188.85 7	25.9 12	461.13+x	(10 ⁺)		
		353.11 4	100 4	297.37+x	(9 ⁺)	E2	
703.79+x	(11 ⁺)	201.42 4	98 5	502.26+x	(10 ⁺)		
		382.26 7	100 6	321.70+x	(9 ⁺)		
726.93+y	(10 ⁻)	192.67 7	56 3	534.59+y	(9 ⁻)		
		361.27 7	100 6	365.98+y	(8 ⁻)		

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Adopted Levels, Gammas (continued)

$\gamma(^{174}\text{Ta})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult. [†]	δ
739.31+x	(12 ⁻)	148.93 7	38.5 19	590.06+x	(11 ⁻)		
		190.94 5	54.0 25	548.44+x	(11 ⁻)		
		310.59 6	100 4	428.76+x	(10 ⁻)		
		356.03 14	28.6 25	383.48+x	(10 ⁻)		
742.21+x	(12 ⁻)	153.81 14	10.0 12	590.06+x	(11 ⁻)		
		193.67 4	100 4	548.44+x	(11 ⁻)		
		313.35 14	31.1 23	428.76+x	(10 ⁻)		
		358.96 11	35.0 23	383.48+x	(10 ⁻)		
832.83	11 ⁺	339.67 4	100.0	493.16	9 ⁺		
863.17+x	(12 ⁺)	212.41 16	9.1 10	650.37+x	(11 ⁺)		
		402.05 4	100 5	461.13+x	(10 ⁺)		
885.41	10 ⁺	335.64 6	100 6				
		392.9 3	21 3	493.16	9 ⁺		
927.42+x	(12 ⁺)	223.46 6	59 4	703.79+x	(11 ⁺)		
		425.35 7	100 5	502.26+x	(10 ⁺)		
940.92+y	(11 ⁻)	212.91 11	28.4 23	726.93+y	(10 ⁻)		
		405.85 6	100 5	534.59+y	(9 ⁻)		
956.82+x	(13 ⁻)	214.48 5	95 4	742.21+x	(12 ⁻)		
		217.1 5	7.7 16	739.31+x	(12 ⁻)		
		366.67 7	100 5	590.06+x	(11 ⁻)		
		408.25 12	45 3	548.44+x	(11 ⁻)		
960.90+x	(13 ⁻)	218.63 9	40 3	742.21+x	(12 ⁻)		
		221.44 5	100 4	739.31+x	(12 ⁻)		
		370.76 18	47 4	590.06+x	(11 ⁻)		
		412.58 8	82 4	548.44+x	(11 ⁻)		
1097.13+x	(13 ⁺)	233.82 14	7.8 8	863.17+x	(12 ⁺)		
		446.78 4	100 4	650.37+x	(11 ⁺)	E2	
1140.13+x	(14 ⁻)	179.54 18	6.0 9	960.90+x	(13 ⁻)		
		182.92 6	23.2 13	956.82+x	(13 ⁻)		
		398.22 8	38.2 18	742.21+x	(12 ⁻)		
		400.88 5	100 4	739.31+x	(12 ⁻)		
1170.91+x	(13 ⁺)	243.30 9	36.6 22	927.42+x	(12 ⁺)		
		467.16 7	100 6	703.79+x	(11 ⁺)		
1176.63+y	(12 ⁻)	235.86 7	41.0 20	940.92+y	(11 ⁻)		
		449.48 6	100 4	726.93+y	(10 ⁻)		
1201.92+x	(14 ⁻)	240.68 5	92 5	960.90+x	(13 ⁻)	D+Q	0.32 [‡] +8-6
		244.77 10	41 4	956.82+x	(13 ⁻)		
		460.08 9	100 6	742.21+x	(12 ⁻)		
		463.05 25	34 4	739.31+x	(12 ⁻)		
1256.25	13 ⁺	423.42 4	100.0	832.83	11 ⁺		
1305.91	12 ⁺	420.50 7	100.0	885.41	10 ⁺		
1350.24+x	(14 ⁺)	252.29 24	6.7 11	1097.13+x	(13 ⁺)		
		487.06 5	100 5	863.17+x	(12 ⁺)		
1414.28+x	(15 ⁻)	274.03 8	37.5 21	1140.13+x	(14 ⁻)		
		453.18 13	34.0 21	960.90+x	(13 ⁻)		
		457.62 6	100 5	956.82+x	(13 ⁻)		
1431.41+y	(13 ⁻)	254.19 16	20.4 21	1176.63+y	(12 ⁻)		
		490.59 6	100 4	940.92+y	(11 ⁻)		
1435.11+x	(14 ⁺)	263.65 13	28.1 21	1170.91+x	(13 ⁺)		
		507.76 7	100 5	927.42+x	(12 ⁺)		
1466.55+x	(15 ⁻)	264.28 5	100 4	1201.92+x	(14 ⁻)		
		505.88 5	100 5	960.90+x	(13 ⁻)		
		510.35 16	46 4	956.82+x	(13 ⁻)		
1620.55+x	(15 ⁺)	269.82 15	1.1 6	1350.24+x	(14 ⁺)		
		523.44 4	100 4	1097.13+x	(13 ⁺)		

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Adopted Levels, Gammas (continued) $\gamma(^{174}\text{Ta})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π
1628.42+x	(16 ⁻)	213.53 24	5.4 8	1414.28+x	(15 ⁻)
		488.27 4	100 4	1140.13+x	(14 ⁻)
1706.12+y	(14 ⁻)	274.9 3	12.6 23	1431.41+y	(13 ⁻)
		529.46 7	100 5	1176.63+y	(12 ⁻)
1714.81+x	(15 ⁺)	279.25 10	45 3	1435.11+x	(14 ⁺)
		544.02 8	100 6	1170.91+x	(13 ⁺)
1750.54+x	(16 ⁻)	283.86 6	82 5	1466.55+x	(15 ⁻)
		548.76 8	100 6	1201.92+x	(14 ⁻)
1758.97	15 ⁺	502.72 4	100.0	1256.25	13 ⁺
1806.91	14 ⁺	501.00 10	100.0	1305.91	12 ⁺
1905.70+x	(16 ⁺)	284.36 40	5.7 15	1620.55+x	(15 ⁺)
		555.47 5	100 5	1350.24+x	(14 ⁺)
1953.93+x	(17 ⁻)	325.40 10	31.7 17	1628.42+x	(16 ⁻)
		539.73 6	100 5	1414.28+x	(15 ⁻)
1997.39+y	(15 ⁻)	290.3 9	5 3	1706.12+y	(14 ⁻)
		566.01 8	100 6	1431.41+y	(13 ⁻)
2013.34+x	(16 ⁺)	297.82 17	30 3	1714.81+x	(15 ⁺)
		578.47 10	100 6	1435.11+x	(14 ⁺)
2055.80+x	(17 ⁻)	305.05 9	43 3	1750.54+x	(16 ⁻)
		589.32 7	100 5	1466.55+x	(15 ⁻)
2201.04+x	(18 ⁻)	246.4 3	5.5 6	1953.93+x	(17 ⁻)
		572.59 5	100 4	1628.42+x	(16 ⁻)
2204.33+x	(17 ⁺)	583.78 5	100.0	1620.55+x	(15 ⁺)
2301.88+y	(16 ⁻)	305.1 4	12 3	1997.39+y	(15 ⁻)
		595.74 9	100 6	1706.12+y	(14 ⁻)
2322.29+x	(17 ⁺)	607.48 12	100.0	1714.81+x	(15 ⁺)
2336.31	17 ⁺	577.33 5	100.0	1758.97	15 ⁺
2374.73+x	(18 ⁻)	318.70 9	44.2 24	2055.80+x	(17 ⁻)
		624.26 8	100 5	1750.54+x	(16 ⁻)
2383.69	16 ⁺	576.78 11	100.0	1806.91	14 ⁺
2514.23+x	(18 ⁺)	608.53 5	100.0	1905.70+x	(16 ⁺)
2569.62+x	(19 ⁻)	368.4 3	11.3 18	2201.04+x	(18 ⁻)
		615.75 6	100 5	1953.93+x	(17 ⁻)
2617.98+y	(17 ⁻)	316.6 5	10 3	2301.88+y	(16 ⁻)
		620.58 10	100 6	1997.39+y	(15 ⁻)
2646.78+x	(18 ⁺)	633.44 13	100.0	2013.34+x	(16 ⁺)
2715.68+x	(19 ⁻)	340.67 12	40 3	2374.73+x	(18 ⁻)
		660.02 9	100 6	2055.80+x	(17 ⁻)
2835.26+x	(19 ⁺)	630.93 6	100.0	2204.33+x	(17 ⁺)
2852.10+x	(20 ⁻)	651.02 5	100.0	2201.04+x	(18 ⁻)
2927.68+y	(18 ⁻)	309.9 3	27 6	2617.98+y	(17 ⁻)
		625.77 16	100 9	2301.88+y	(16 ⁻)
2976.97+x	(19 ⁺)	654.68 12	100.0	2322.29+x	(17 ⁺)
2983.70	(19 ⁺)	647.39 5	100.0	2336.31	17 ⁺
3025.2	(18 ⁺)	641.52 17	100.0	2383.69	16 ⁺
3062.86+x	(20 ⁻)	346.64 21	20.0 24	2715.68+x	(19 ⁻)
		688.16 8	100 5	2374.73+x	(18 ⁻)
3166.59+x	(20 ⁺)	652.36 6	100.0	2514.23+x	(18 ⁺)
3241.15+y	(19 ⁻)	313.8 5	23 7	2927.68+y	(18 ⁻)
		623.11 20	100 10	2617.98+y	(17 ⁻)
3254.00+x	(21 ⁻)	401.64 19	27.6 23	2852.10+x	(20 ⁻)
		684.46 7	100 5	2569.62+x	(19 ⁻)
3307.1+x	(20 ⁺)	660.35 46	100.0	2646.78+x	(18 ⁺)
3433.90+x	(21 ⁻)	371.07 20	24 4	3062.86+x	(20 ⁻)
		718.27 8	100 5	2715.68+x	(19 ⁻)

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued) $\gamma(^{174}\text{Ta})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π
3508.71+x	(21 ⁺)	673.45 6	100.0	2835.26+x	(19 ⁺)
3558.9+y	(20 ⁻)	631.2 3	100.0	2927.68+y	(18 ⁻)
3575.73+x	(22 ⁻)	723.20 6	100.0	2852.10+x	(20 ⁻)
3621.3+x	(21 ⁺)	644.30 13	100.0	2976.97+x	(19 ⁺)
3694.93	(21 ⁺)	711.23 6	100.0	2983.70	(19 ⁺)
3711.5	(20 ⁺)	686.33 29	100.0	3025.2	(18 ⁺)
3770.4+x	(21 ⁺)	793.68 17	100.0	2976.97+x	(19 ⁺)
3777.38	(21 ⁺)	793.68 17	100.0	2983.70	(19 ⁺)
3802.90+x	(22 ⁻)	368.29 25	26 4	3433.90+x	(21 ⁻)
		739.95 10	100 6	3062.86+x	(20 ⁻)
3861.60+x	(22 ⁺)	695.01 8	100.0	3166.59+x	(20 ⁺)
3886.2+y	(21 ⁻)	645.05 20	100.0	3241.15+y	(19 ⁻)
4000.01+x	(23 ⁻)	424.08 25	16.9 14	3575.73+x	(22 ⁻)
		746.07 8	100 6	3254.00+x	(21 ⁻)
4198.34+x	(23 ⁻)	393.6 3	16 3	3802.90+x	(22 ⁻)
		764.61 9	100 5	3433.90+x	(21 ⁻)
4220.74+x	(23 ⁺)	712.03 10	100.0	3508.71+x	(21 ⁺)
4233.0+y	(22 ⁻)	674.08 22	100.0	3558.9+y	(20 ⁻)
4246.57+x	(23 ⁺)	737.86 15	100.0	3508.71+x	(21 ⁺)
4364.87+x	(24 ⁻)	789.53 7	100.0	3575.73+x	(22 ⁻)
4442.8	(22 ⁺)	731.27 29	100.0	3711.5	(20 ⁺)
4456.46	(23 ⁺)	761.53 7	100.0	3694.93	(21 ⁺)
4463.64	(23 ⁺)	768.71 16	100.0	3694.93	(21 ⁺)
4569.55+x	(24 ⁺)	707.95 11	100.0	3861.60+x	(22 ⁺)
4585.42+x	(24 ⁻)	782.52 9	100.0	3802.90+x	(22 ⁻)
4595.6+y	(23 ⁻)	709.38 20	100.0	3886.2+y	(21 ⁻)
4605.78+x	(24 ⁺)	744.18 14	100.0	3861.60+x	(22 ⁺)
4801.40+x	(25 ⁻)	801.39 8	100.0	4000.01+x	(23 ⁻)
4998.33+x	(25 ⁻)	799.98 14	100.0	4198.34+x	(23 ⁻)
5216.32+x	(26 ⁻)	851.45 9	100.0	4364.87+x	(24 ⁻)
5218.4	(24 ⁺)	775.61 25	100.0	4442.8	(22 ⁺)
5274.16	(25 ⁺)	817.70 11	100.0	4456.46	(23 ⁺)
5408.78+x	(26 ⁻)	823.35 12	100.0	4585.42+x	(24 ⁻)
5650.61+x	(27 ⁻)	849.21 10	100.0	4801.40+x	(25 ⁻)
6127.79+x	(28 ⁻)	911.47 11	100.0	5216.32+x	(26 ⁻)
6139.73	(27 ⁺)	865.57 14	100.0	5274.16	(25 ⁺)
6149.0	(27 ⁺)	874.84 16	100.0	5274.16	(25 ⁺)
6558.61+x	(29 ⁻)	908.00 11	100.0	5650.61+x	(27 ⁻)
7096.7+x	(30 ⁻)	968.91 17	100.0	6127.79+x	(28 ⁻)
7524.5+x	(31 ⁻)	965.86 14	100.0	6558.61+x	(29 ⁻)

† From $^{169}\text{Tm}(^9\text{Be},4n\gamma)$ (1992Ho10).

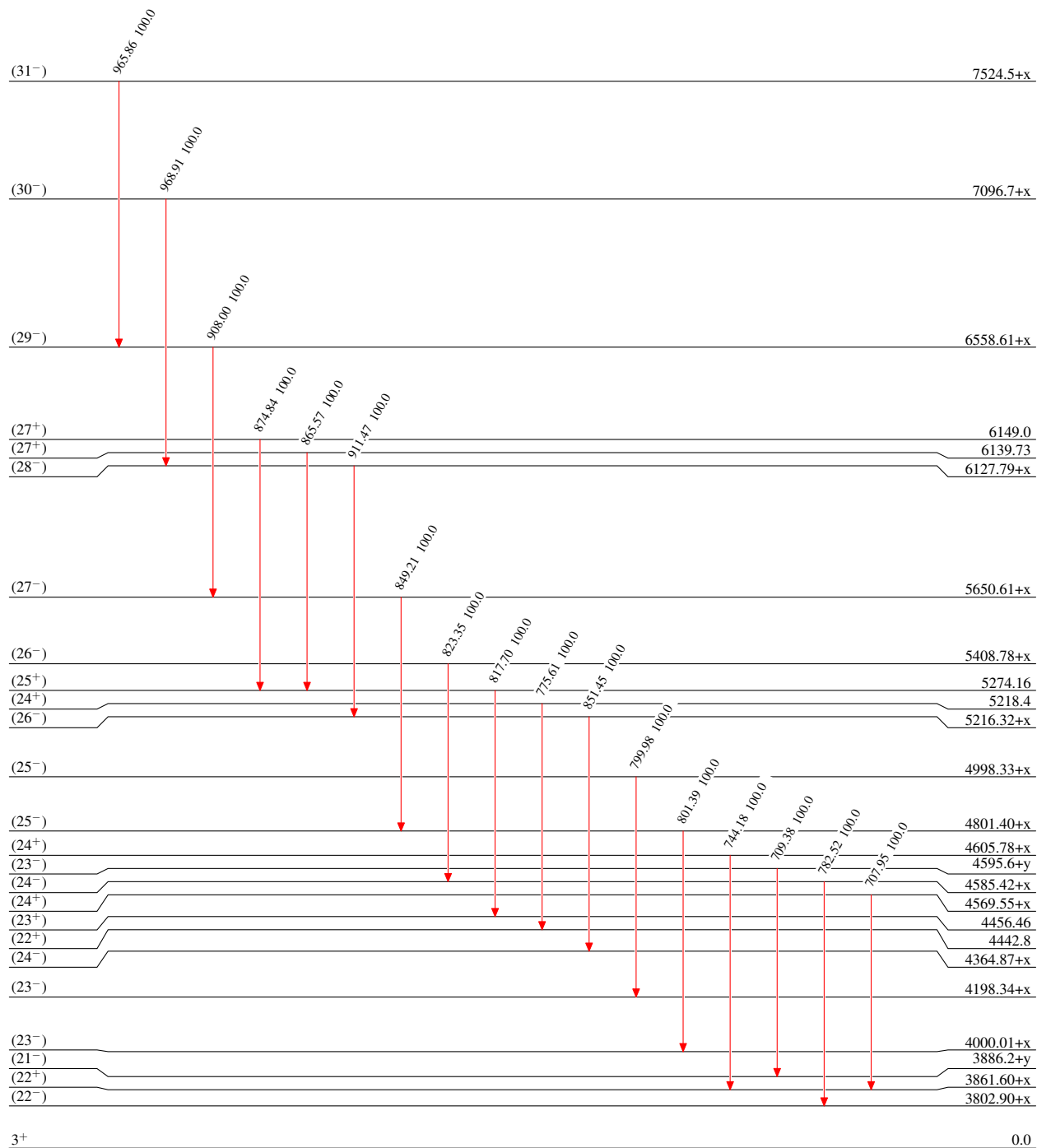
‡ From 1998Ba20.

Adopted Levels, Gammas**Level Scheme**

Intensities: Type not specified

Legend

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



1.14 h 8

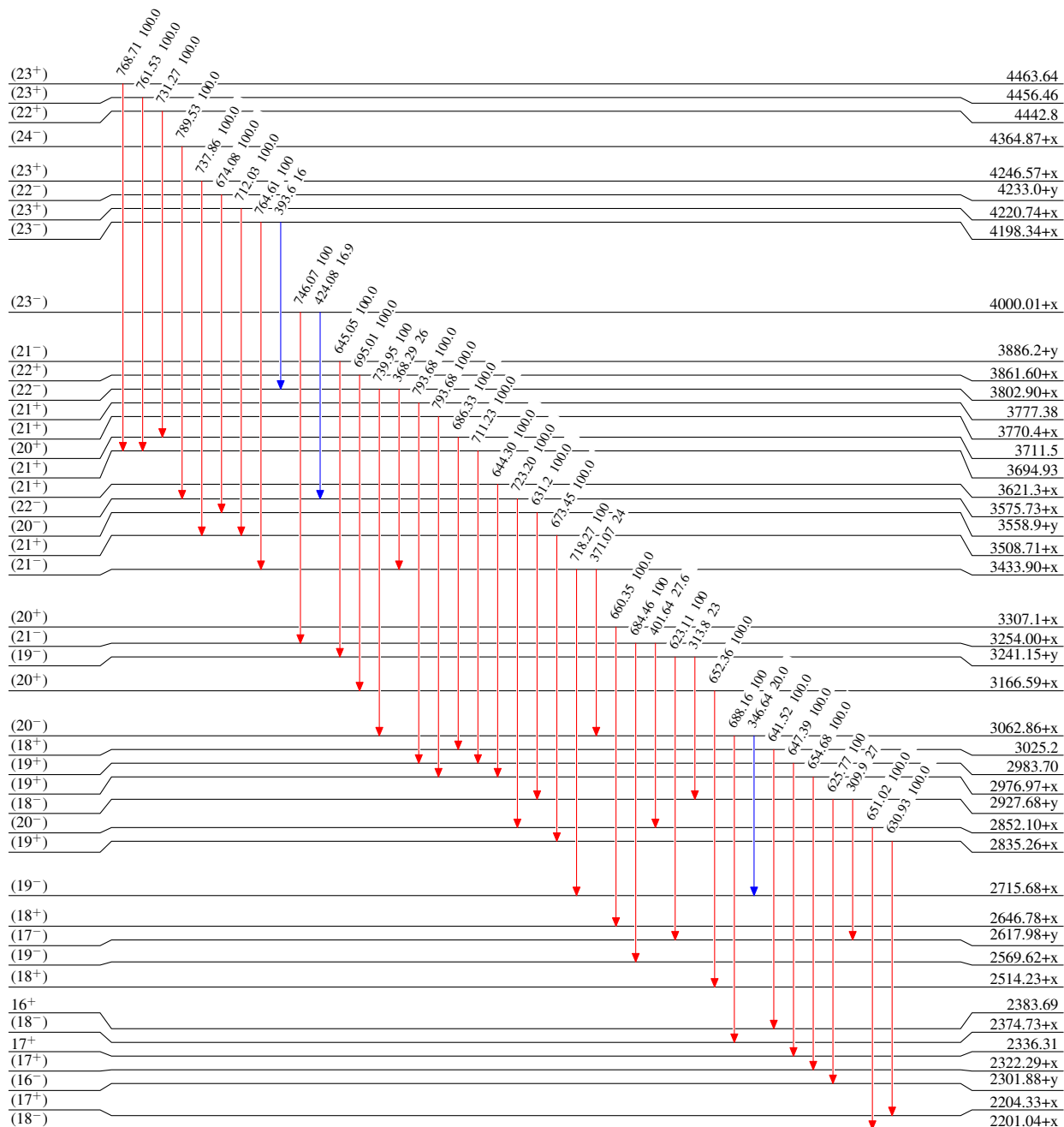
Adopted Levels, Gammas

Level Scheme (continued)

Legend

Intensities: Type not specified

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



3^+ 0.0

1.14 h 8

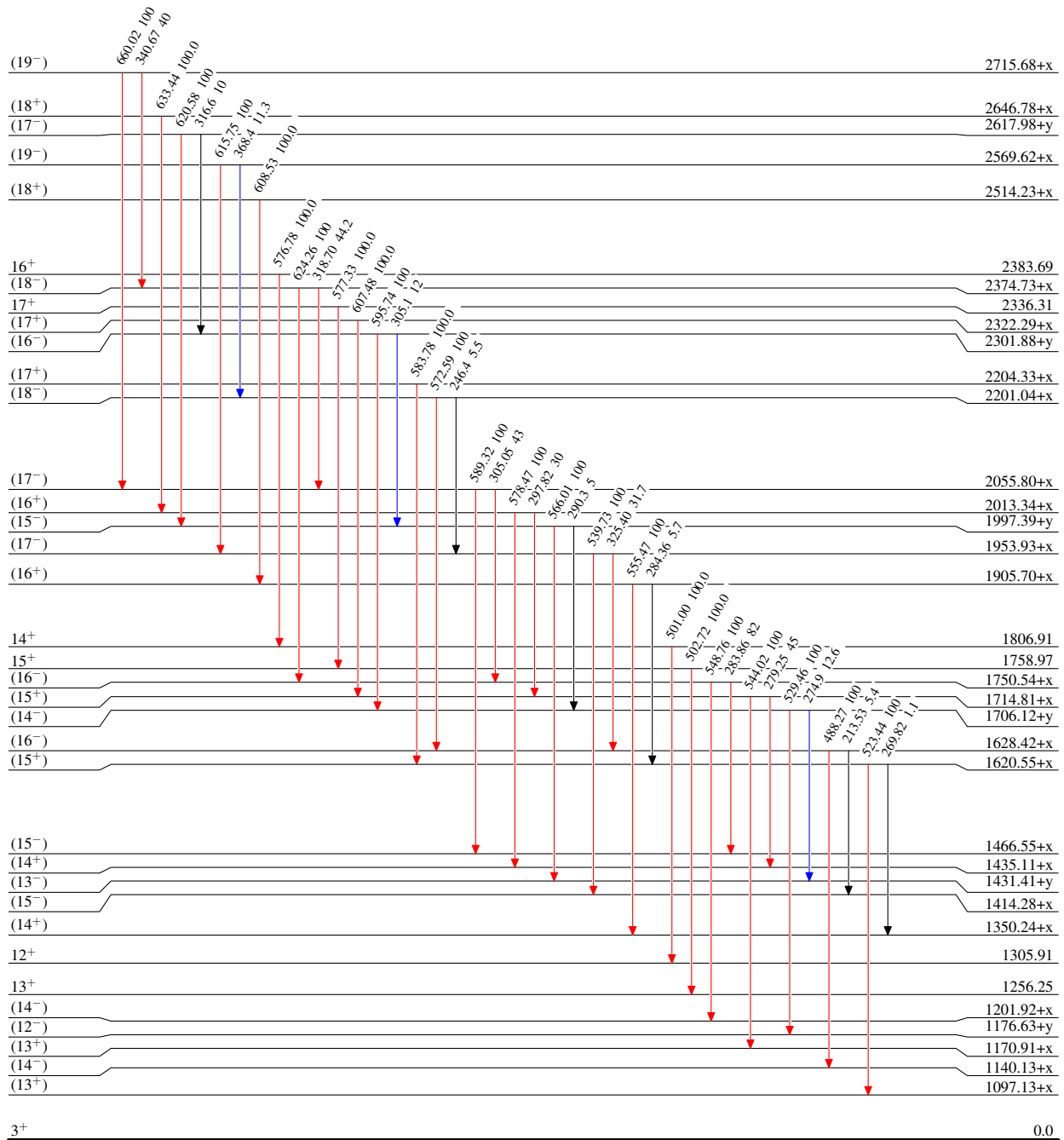
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

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



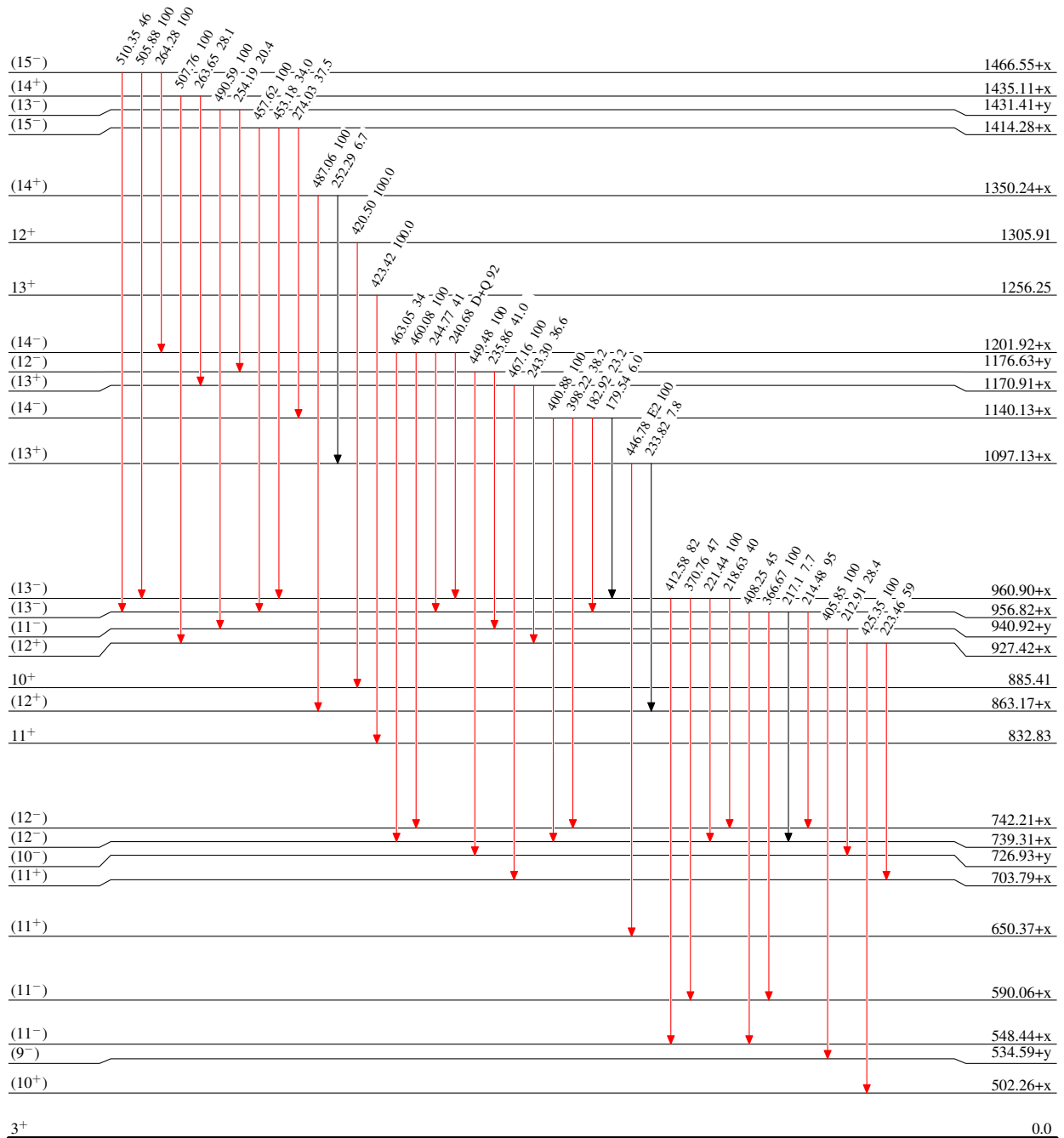
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

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



1.14 h 8

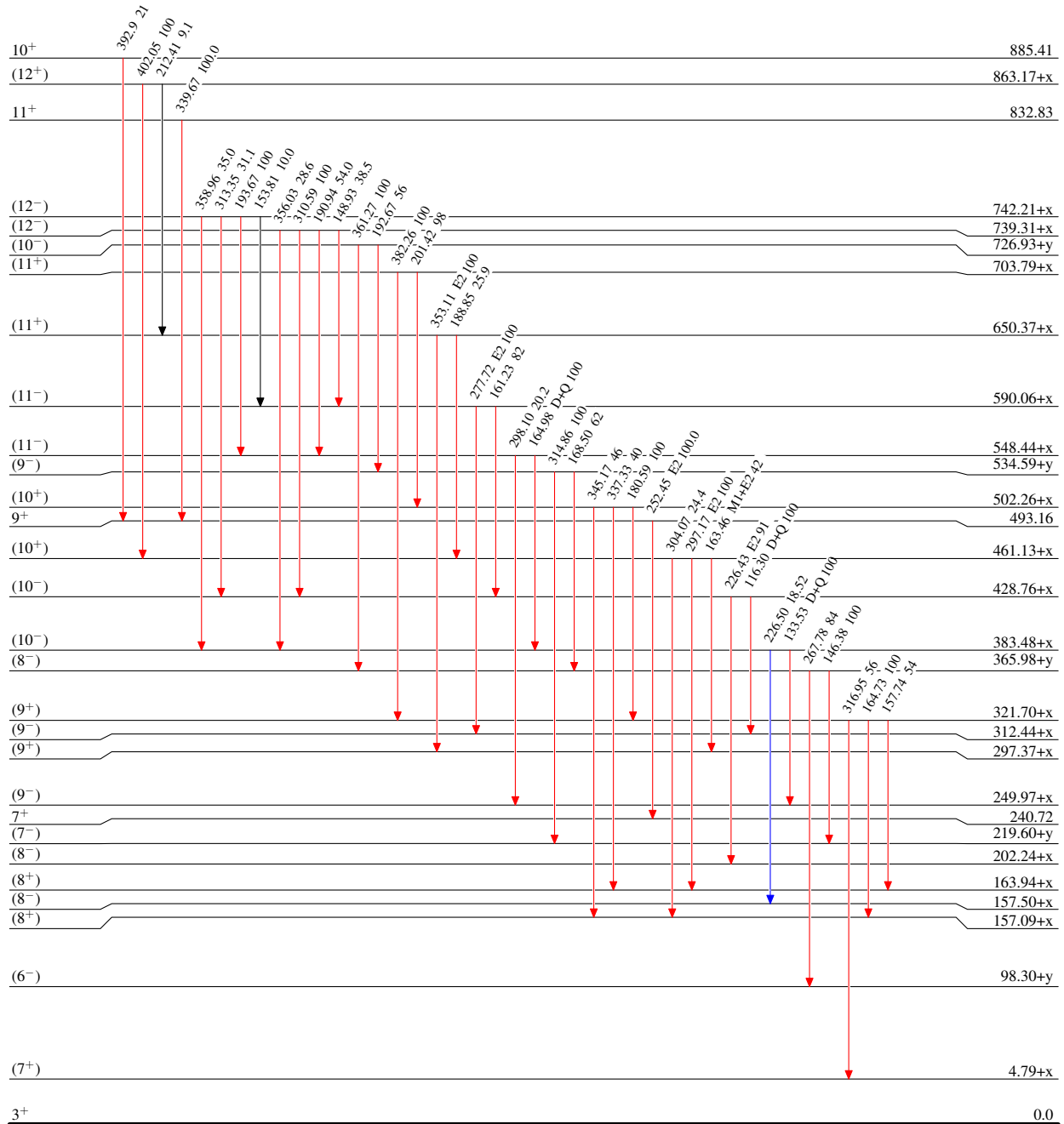
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

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



1.14 h 8

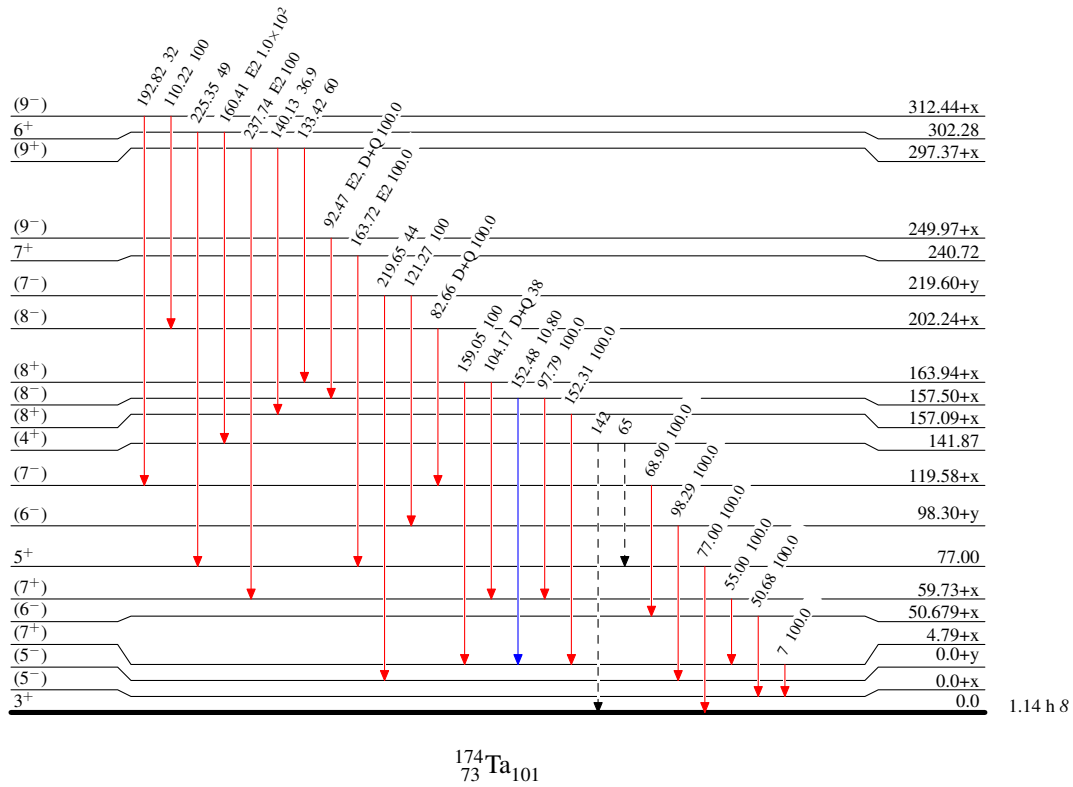
Adopted Levels, Gammas

Legend

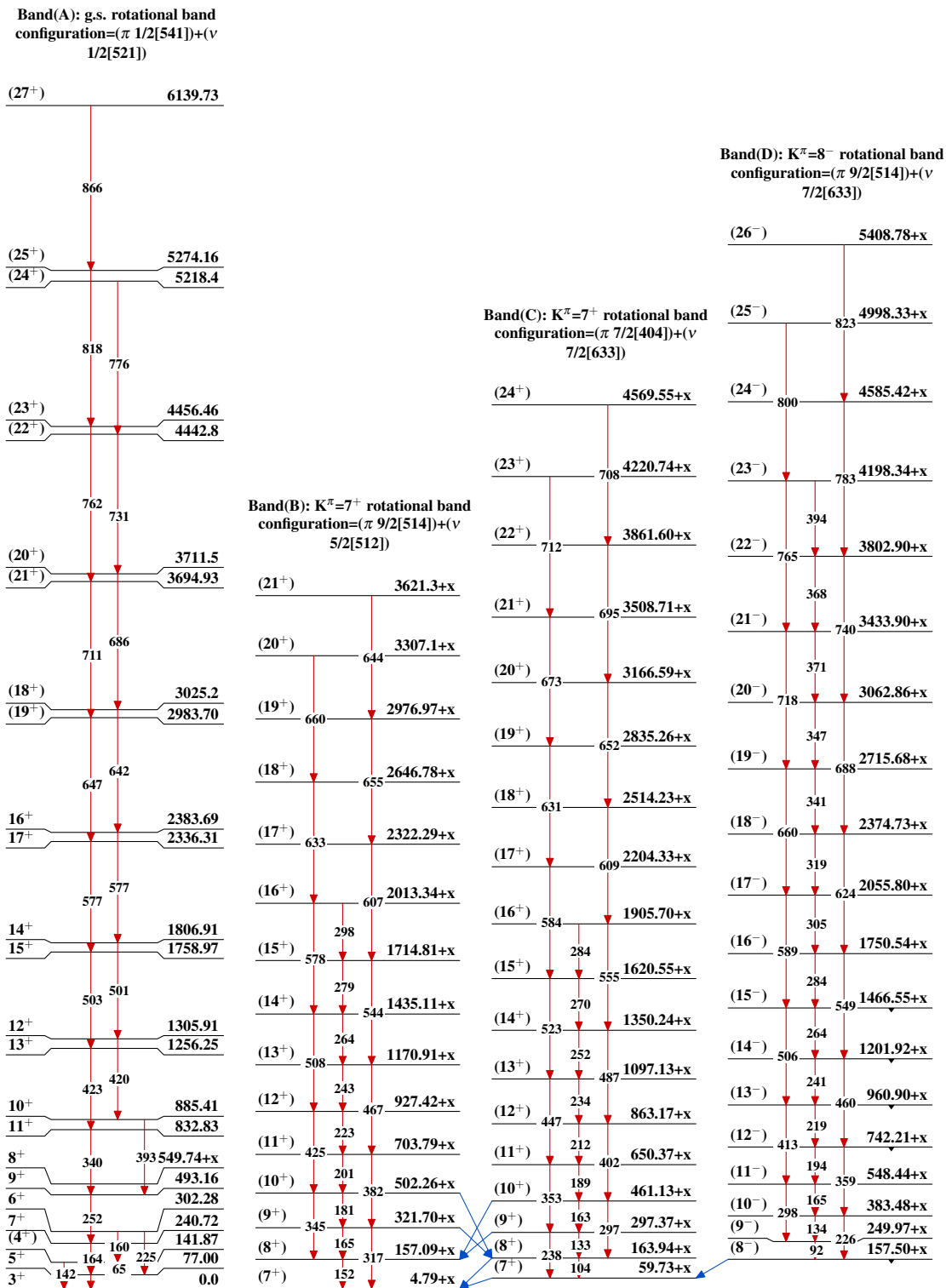
Level Scheme (continued)

Intensities: Type not specified

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



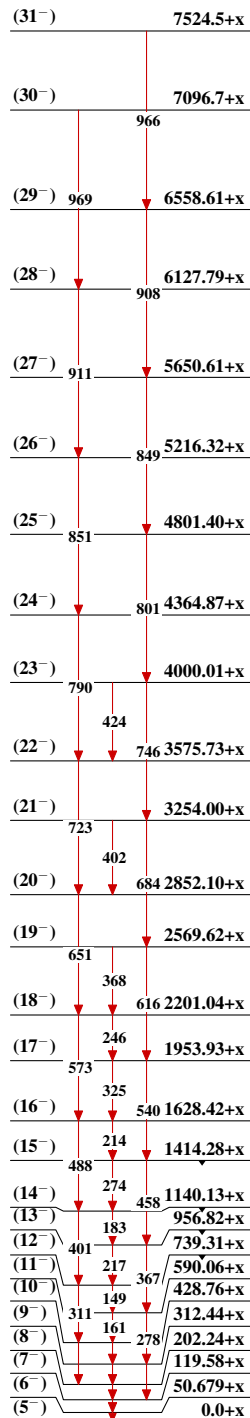
Adopted Levels, Gammas



$^{174}_{73}\text{Ta}_{101}$

Adopted Levels, Gammas (continued)

Band(E): $K^\pi=4^-$ rotational band
 configuration= $(\pi 1/2[541])+(\nu 7/2[633])$



Band(F): $K^\pi=5^-$ rotational band
 configuration= $(\pi 5/2[402])+(\nu 5/2[512])$

