

Adopted Levels, Gammas

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. Katakura, Z. D. Wu		NDS 109,1655 (2008)	1-Apr-2008

Q(β⁻)=295 3; S(n)=7493 4; S(p)=5482.5 19; Q(α)=-1373 8 [2012Wa38](#)
 Note: Current evaluation has used the following Q record 295 3 7493 4 5482.0 19-1365 8 [2003Au03](#).

¹²⁴I Levels

Cross Reference (XREF) Flags

- A ¹²⁴Te(p,nγ)
- B ¹²⁵Te(p,2nγ)
- C (HI,xnγ)

E(level) [†]	J ^{π‡}	T _{1/2} [#]	XREF	Comments
0.0	2 ⁻	4.1760 d 3	ABC	%ε+%β ⁺ =100 μ=1.444 4 T _{1/2} : from γ(t) with ionization chamber (1992Wo03); others: 4.24 d 5 (1958Dy88), 4.1 d 1 (1959Gi59), 4.2 d 2 (1959Mi22), 4.15 d 3 (1968An05), 4.30 d 8 (1967Ru04), 4.1 d 2 (1968Jo02), 4.15 d 8 (1973Ka45). J ^π : atomic beam (1976Fu06); 2-yes β to ¹²⁴ Te g.s. μ: From nuclear magnetic resonance on oriented nuclei (1992Oh01); Other: 1.14 Π (1983De55,1989Ra17). See also 2005St24 . Configuration=(π g _{7/2})(ν h _{11/2}) (1982Bu12). J ^π : γ(θ) and (E1) γ to 2 ⁻ . T _{1/2} : from γγ(t) (1982Bu12); others: 26 ns 2 (1986LuZW), 62 ns (2003MoZQ).
55.48 5	(3 ⁺)	52 ns 5	ABC	J ^π : γ(θ) and (E1) γ to 2 ⁻ . T _{1/2} : from γγ(t) (1982Bu12); others: 26 ns 2 (1986LuZW), 62 ns (2003MoZQ).
105.40 25			B	
123.04 6	(4 ⁻)	9.6 ns 10	ABC	J ^π : from (HI,xnγ). (HI,xnγ) gave no arguments, but A ₂ value in (p,nγ) is consistent with ΔJ = 2, although 1982Bu12 gave 2 ⁻ or 3 ⁻ . T _{1/2} : from γγ(t) (1982Bu12); others: 9.7 ns 8 (1986LuZW), 10 ns (2003MoZQ).
150.55 9	(⁺)		A	J ^π : (M1,E2) γ to (3 ⁺).
163.39 9	(⁺)		A C	J ^π : (M1,E2) γ to (3 ⁺).
169.59 15	(⁺)		A	J ^π : (M1,E2) γ to (3 ⁺).
184.20 7	(3 ⁻)		A	J ^π : ΔJ=1, (M1,E2) γ to 2 ⁻ and γ to (4 ⁻).
213.27 25			B	
246.92 13			A	
250.54 13		14 ns	A C	T _{1/2} : From γγ(t) in (HI,xnγ).
255.90 11			A	
265.96 10			A	
275.39 16	(5 ⁻)		ABC	J ^π : (M1) γ to (4 ⁻), (HI,xnγ) suggested (5 ⁻).
287.36 23	(6 ⁻)	1.6 ns 3	ABC	
289.02 13	(2,4)		A	J ^π : ΔJ=1 γ to (3 ⁺).
291.14 16	(3 ⁻ ,4 ⁻ ,5 ⁻)		A	J ^π : (M1) γ to (4 ⁻).
297.03 9	(3 ⁻)		A	J ^π : ΔJ=1, (M1,E2) γ to 2 ⁻ , (M1) γ to (4 ⁻).
300.6 3			B	
311.4 8	(7 ⁻)	3 ns	C	
323.6 6			A	
336.79 15			A	
345.56 21			A	
353.55 19			A	
361.91 14	(2 ⁻ ,3 ⁻ ,4 ⁻)		A	J ^π : (M1,E2) γ to 2 ⁻ , γ to (4 ⁻).
369.60 14			A	
380.17 13			A	
397.1 5		10.0 ns 7	B	

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Adopted Levels, Gammas (continued) ^{124}I Levels (continued)

E(level) [†]	J^{π} [‡]	$T_{1/2}$ [#]	XREF	Comments
404.56 20	(4 ⁻ ,5 ⁻ ,6 ⁻)		A	J^{π} : (M1,E2) γ to (4 ⁻), γ to (6 ⁻).
426.7 ^e 10	(5 ⁺)		C	
442.76 16	(4 ⁻)		A	
443.35 18			A	
446.87 12	(1 ⁻ ,3 ⁻)		A	J^{π} : $\Delta J=1$, (M1) γ to 2 ⁻ .
448.73 18			A	
454.0 ^a 9	(8 ⁻)		C	
466.8 5	(6 ⁻)		A C	
492.95 16	(⁻)		A	J^{π} : (M1,E2) γ to (3 ⁻).
496.69 13	(1 ⁻ ,2 ⁻ ,3 ⁻)		A	J^{π} : (M1(+E2)) γ to 2 ⁻ .
535.5 7	(7 ⁻)		C	
543.40 17			A	
557.1 ^b 9	(8 ⁻)		C	
591.7 3			A	
596.38 16	(1 ⁻ ,2 ⁻ ,3 ⁻)		A	J^{π} : (M1(+E2)) γ to 2 ⁻ .
604.88 17			A	
609.4 4			A	
622.8 7			A	
654.20 21			A	
664.86 22			A	
689.7 ^c 10	(8 ⁻)	14 ns	C	
724.8 ^f 15	(6 ⁺)		C	
748.0 6			A	
755.9 ^{&} 9	(9 ⁻)		C	
761.6 11			A	
765.1 4			A	
766.3 7			A	
781.72 18			A	
783.0 6			A	
880.4 10	(8 ⁻)		C	
909.7 4			A	
926.08? 21			A	
936.3 8			C	
947.2 ^c 12	(9 ⁻)		C	
985.4 6			A	
1078.9 10	(9 ⁻)		C	
1081.0 ^e 15	(7 ⁺)		C	
1134.9 ^a 10	(10 ⁻)		C	
1245.3 9	(9 ⁻)		C	
1296.9 [@] 10	(10 ⁺)		C	
1304.3 ^b 12	(10 ⁻)		C	
1304.9 ^c 12	(10 ⁻)		C	
1432.6 ^f 18	(8 ⁺)		C	
1490.3 ^{&} 11	(11 ⁻)		C	
1681.8 [@] 13	(11 ⁺)		C	
1705.8 ^c 12	(11 ⁻)		C	
1810.4 ^e 18	(9 ⁺)		C	
1893.5 ^a 11	(12 ⁻)		C	
1986.0 [@] 13	(12 ⁺)		C	
2116.7 ^b 12	(12 ⁻)		C	
2130.0 ^c 13	(12 ⁻)		C	
2172.0 ^f 20	(10 ⁺)		C	

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Adopted Levels, Gammas (continued)

^{124}I Levels (continued)

E(level) [†]	J ^π [‡]	XREF	E(level) [†]	J ^π [‡]	XREF	E(level) [†]	J ^π [‡]	XREF
2343.7 [@] 14	(13 ⁺)	C	3022.9 ^c 14	(14 ⁻)	C	4366.0 [@] 17	(18 ⁺)	C
2359.2 ^{&} 13	(13 ⁻)	C	3100.2 ^b 16	(14 ⁻)	C	4396.2 ^{&} 18	(17 ⁻)	C
2562.2 ^e 20	(11 ⁺)	C	3205.8 [@] 16	(16 ⁺)	C	4652.3 ^a 20	(18 ⁻)	C
2569.7 ^c 13	(13 ⁻)	C	3382.7 ^{&} 15	(15 ⁻)	C	4863.8 ^d 19	(19 ⁻)	C
2682.1 [@] 15	(14 ⁺)	C	3485.1 ^d 12	(15 ⁻)	C	4967.6 [@] 18	(19 ⁺)	C
2735.7 12		C	3745.3 ^a 17	(16 ⁻)	C	5342.7 [@] 18	(20 ⁺)	C
2746.3 ^a 13	(14 ⁻)	C	3860.1 15		C	5515.6 20		C
2763.8 12		C	3887.9 [@] 16	(17 ⁺)	C	5555.5 ^d 21	(21 ⁻)	C
2788.8 13		C	4093.8 17	(17 ⁺)	C			
2907.7 [@] 15	(15 ⁺)	C	4211.5 ^d 16	(17 ⁻)	C			

[†] From a least-squares fit to E γ 's.

[‡] From $\gamma(\theta)$ and multipolarity of γ 's in (p, $\eta\gamma$) and assumed band structure in (HI,x $\eta\gamma$).

From the delay between beam bursts and γ rays in $^{125}\text{Te}(p,2n\gamma)$, unless otherwise indicated.

@ Band(A): band 1 Configuration= $((\pi h_{11/2})(\nu h_{11/2}))$.

& Band(B): Band 2 Configuration= $((\pi g_{7/2})(\nu h_{11/2}))$, favored (P, $g_{7/2}$) coupled favored (n,h11/2).

^a Band(C): Band 3 Configuration= $((\pi g_{7/2})(\nu h_{11/2}))$, unfavored (P, $g_{7/2}$) coupled favored (n,h11/2).

^b Band(D): Band 4 Configuration= $((\pi g_{7/2})(\nu h_{11/2}))$, favored (P, $g_{7/2}$) coupled unfavored (n,h11/2).

^c Band(E): band 5 Configuration= $((\pi g_{9/2})(\nu h_{11/2}))$.

^d Band(F): band 6 Configuration= $((\pi g_{7/2})(\nu h_{11/2})(\pi 11/2)^2)$.

^e Band(G): band 7 Configuration= $((\pi g_{7/2})(\nu d_{3/2}))$.

^f Band(H): band 8 Configuration= $((\pi g_{7/2})(\nu d_{3/2}))$.

$\gamma(^{124}\text{I})$

E(C),M(G) From 1997DaZY.

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Mult.#	α^a	Comments
55.48	(3 ⁺)	55.50 5	100	0.0	2 ⁻	(E1)	1.05	B(E1)(W.u.)=1.49×10 ⁻⁵ 15
105.40		49.9 [@] 3	100	55.48	(3 ⁺)			
123.04	(4 ⁻)	123.05 7	100	0.0	2 ⁻	(M1,E2)	0.63 22	
150.55	(⁺)	95.10 10	100	55.48	(3 ⁺)	(M1,E2)	1.5 7	
163.39	(⁺)	107.92 10	100	55.48	(3 ⁺)	(M1,E2)	1.0 4	
169.59	(⁺)	114.2 2	100	55.48	(3 ⁺)	(M1,E2)	0.8 3	
184.20	(3 ⁻)	61.18 7	45 4	123.04	(4 ⁻)			
		184.18 10	100 6	0.0	2 ⁻	(M1,E2)	0.17 4	
213.27		107.9 [@] 3		105.40				
		157.8 [@] 3		55.48	(3 ⁺)			
246.92		96.37 15	100	150.55	(⁺)			
250.54		87.15 20	48 16	163.39	(⁺)			
		194.6 ^{&}		55.48	(3 ⁺)			
		250.3 3	100 16	0.0	2 ⁻			
255.90		71.72 20	7 3	184.20	(3 ⁻)			
		92.52 10	100 11	163.39	(⁺)			
265.96		210.50 10	100 7	55.48	(3 ⁺)			
		265.80 25	9 4	0.0	2 ⁻			
275.39	(5 ⁻)	152.5 3	100	123.04	(4 ⁻)	(M1)	0.231	

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Adopted Levels, Gammas (continued)

$\gamma(^{124}\text{I})$ (continued)							
$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult.#	a^a
287.36	(6 ⁻)	12.0@ 3		275.39	(5 ⁻)		
		164.3@ 3		123.04	(4 ⁻)		
289.02	(2,4)	138.60 20	34 4	150.55	(⁺)		
		233.40 20	100 8	55.48	(3 ⁺)		
291.14	(3 ⁻ ,4 ⁻ ,5 ⁻)	168.10 15	100	123.04	(4 ⁻)	(M1)	
297.03	(3 ⁻)	50.10 15	24 4	246.92			
		112.90	14 2	184.20	(3 ⁻)		
		133.74 20	4.3 20	163.39	(⁺)		
		173.90 15	39 8	123.04	(4 ⁻)	(M1)	0.161
		297.06 15	100 16	0.0	2 ⁻	(M1,E2)	0.0401 15
300.6		87.4@ 3		213.27			
		195.2@ 3		105.40			
311.4	(7 ⁻)	24&		287.36	(6 ⁻)		
323.6		200.45		123.04	(4 ⁻)		
336.79		80.90 15	100	255.90			
345.56		290.08 20	100	55.48	(3 ⁺)		
353.55		298.11 20	100	55.48	(3 ⁺)		
361.91	(2 ⁻ ,3 ⁻ ,4 ⁻)	238.9 3	30 8	123.04	(4 ⁻)		
		361.86 20	100 10	0.0	2 ⁻	(M1,E2)	0.0228 5
369.60		219.07 20	100 20	150.55	(⁺)		
		369.6 3	13 7	0.0	2 ⁻		
380.17		129.60 15	91 15	250.54			
		216.7 4	66 20	163.39	(⁺)		
		380.15 20	100 30	0.0	2 ⁻		
397.1		96.5@ 3		300.6			
404.56	(4 ⁻ ,5 ⁻ ,6 ⁻)	117.20	0.16 8	287.36	(6 ⁻)		
		281.6 3	100	123.04	(4 ⁻)	(M1,E2)	
426.7	(5 ⁺)	176.2&		250.54			
442.76	(4 ⁻)	62.5 ^b 2	<133 ^b	380.17			
		119.15	43 3	323.6			
		145.91	68 5	297.03	(3 ⁻)		
		167.3 3	100 33	275.39	(5 ⁻)	(M1)	0.179
		258.74 25	83 50	184.20	(3 ⁻)	(M1,E2)	0.060 5
		319.80	32 6	123.04	(4 ⁻)		
443.35		154.3 5	73 13	289.02	(2,4)		
		273.80 15	100 27	169.59	(⁺)		
446.87	(1 ⁻ ,3 ⁻)	77.28 15	5.1 18	369.60			
		110.10 20	3.7 15	336.79			
		446.85 15	100 10	0.0	2 ⁻	(M1)	0.0137
448.73		159.8 3	17 9	289.02	(2,4)		
		393.20 20	100 17	55.48	(3 ⁺)		
454.0	(8 ⁻)	142.6&		311.4	(7 ⁻)		
466.8	(6 ⁻)	191.6&		275.39	(5 ⁻)		
		200.8 5	100	265.96			
492.95	(⁻)	203.9 2	14 7	289.02	(2,4)		
		217.60 20	75 7	275.39	(5 ⁻)		
		309.30	100	184.20	(3 ⁻)	(M1,E2)	0.0356 9
496.69	(1 ⁻ ,2 ⁻ ,3 ⁻)	200.0 5	100 36	297.03	(3 ⁻)		
		312.42 15	80 8	184.20	(3 ⁻)	(M1,E2)	0.0346 8
		496.7 3	32 14	0.0	2 ⁻	(M1(+E2))	0.0096 9
535.5	(7 ⁻)	68.6&		466.8	(6 ⁻)		
		248.2&		287.36	(6 ⁻)		

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Adopted Levels, Gammas (continued)

$\gamma(^{124}\text{I})$ (continued)							
$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult. #	α^a
543.40		181.44 20 373.83 15	15 4 100 11	361.91 169.59	(2 ⁻ ,3 ⁻ ,4 ⁻) (⁺)		
557.1	(8 ⁻)	245.7&		311.4	(7 ⁻)		
591.7		238.4 4	100	353.55			
596.38	(1 ⁻ ,2 ⁻ ,3 ⁻)	234.60 299.20 25 412.27 20 596.4 4	14 5 58 21 82 15 100 33	361.91 297.03 184.20 0.0	(2 ⁻ ,3 ⁻ ,4 ⁻) (3 ⁻) (3 ⁻) 2 ⁻	(M1,E2) (M1(+E2))	0.0159 9
604.88		111.94 10 242.92 25	87 25 100 50	492.95 361.91	(⁻) (2 ⁻ ,3 ⁻ ,4 ⁻)		
609.4		553.9 4	100	55.48	(3 ⁺)		
622.8		499.90 622.70	28 7 100	123.04 0.0	(4 ⁻) 2 ⁻		
654.20		62.5 ^b 2 388.16 25 598.7 4	<27 ^b 100 17 83 43	591.7 265.96 55.48	 (3 ⁺)		
664.86		399.0 3 541.8 4 664.7 4	73 18 100 36 86 50	265.96 123.04 0.0	(4 ⁻) 2 ⁻		
689.7	(8 ⁻)	132.6& 235.7& 378.3&		557.1 454.0 311.4	(8 ⁻) (8 ⁻) (7 ⁻)		
724.8	(6 ⁺)	298.1&		426.7	(5 ⁺)		
748.0		343.04 424.30 451.20 564.00	100 27 6 55 10 85 15	404.56 323.6 297.03 184.20	(4 ⁻ ,5 ⁻ ,6 ⁻) (3 ⁻) (3 ⁻) (3 ⁻)		
755.9	(9 ⁻)	198.8& 301.9&		557.1 454.0	(8 ⁻) (8 ⁻)		
761.6		486.20		275.39	(5 ⁻)		
765.1		318.2 4 411.5 5	100 15 84 30	446.87 353.55	(1 ⁻ ,3 ⁻) (1 ⁻ ,3 ⁻)		
766.3		319.30 766.40	100 79 14	446.87 0.0	(1 ⁻ ,3 ⁻) 2 ⁻		
781.72		284.96 20 377.5 3 531.0 3	41 14 27 11 100 36	496.69 404.56 250.54	(1 ⁻ ,2 ⁻ ,3 ⁻) (4 ⁻ ,5 ⁻ ,6 ⁻) (4 ⁻ ,5 ⁻ ,6 ⁻)		
783.0		290.10 340.10 598.80	33 8 17 6 100	492.95 442.76 184.20	(⁻) (4 ⁻) (3 ⁻)		
880.4	(8 ⁻)	344.9&		535.5	(7 ⁻)		
909.7		547.9 4 740.0 5	100 38 86 57	361.91 169.59	(2 ⁻ ,3 ⁻ ,4 ⁻) (⁺)		
926.08?		482.8 2 521.3 3 650.8 4	43 9 17 13 100 52	443.35 404.56 275.39	(4 ⁻ ,5 ⁻ ,6 ⁻) (5 ⁻)		
936.3		482.4& 625.0& 649.0&		454.0 311.4 287.36	(8 ⁻) (7 ⁻) (6 ⁻)		
947.2	(9 ⁻)	257.5&		689.7	(8 ⁻)		
985.4		389.0 5	100	596.38	(1 ⁻ ,2 ⁻ ,3 ⁻)		
1078.9	(9 ⁻)	521.8&		557.1	(8 ⁻)		

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Adopted Levels, Gammas (continued)

					$\gamma(^{124}\text{I})$ (continued)				
$E_i(\text{level})$	J_i^π	E_γ^\dagger	E_f	J_f^π	$E_i(\text{level})$	J_i^π	E_γ^\dagger	E_f	J_f^π
1078.9	(9 ⁻)	767.5 ^{&}	311.4	(7 ⁻)	2735.7		842.2 ^{&}	1893.5	(12 ⁻)
1081.0	(7 ⁺)	654.3 ^{&}	426.7	(5 ⁺)	2746.3	(14 ⁻)	387.1 ^{&}	2359.2	(13 ⁻)
1134.9	(10 ⁻)	379.0 ^{&}	755.9	(9 ⁻)			852.8 ^{&}	1893.5	(12 ⁻)
		680.9 ^{&}	454.0	(8 ⁻)	2763.8		647.1 ^{&}	2116.7	(12 ⁻)
1245.3	(9 ⁻)	309 ^{&}	936.3				870.3 ^{&}	1893.5	(12 ⁻)
		364.8 ^{&}	880.4	(8 ⁻)	2788.8		895.3 ^{&}	1893.5	(12 ⁻)
		489.4 ^{&}	755.9	(9 ⁻)	2907.7	(15 ⁺)	225.5 ^{&}	2682.1	(14 ⁺)
		688.2 ^{&}	557.1	(8 ⁻)			564.2 ^{&}	2343.7	(13 ⁺)
		791.3 ^{&}	454.0	(8 ⁻)	3022.9	(14 ⁻)	453.2 ^{&}	2569.7	(13 ⁻)
1296.9	(10 ⁺)	51.6 ^{&}	1245.3	(9 ⁻)			892.9 ^{&}	2130.0	(12 ⁻)
		218.0 ^{&}	1078.9	(9 ⁻)	3100.2	(14 ⁻)	983.5 ^{&}	2116.7	(12 ⁻)
		541.0 ^{&}	755.9	(9 ⁻)	3205.8	(16 ⁺)	298.1 ^{&}	2907.7	(15 ⁺)
1304.3	(10 ⁻)	747.2 ^{&}	557.1	(8 ⁻)			523.6 ^{&}	2682.1	(14 ⁺)
1304.9	(10 ⁻)	357.7 ^{&}	947.2	(9 ⁻)	3382.7	(15 ⁻)	1023.5 ^{&}	2359.2	(13 ⁻)
		615.2 ^{&}	689.7	(8 ⁻)	3485.1	(15 ⁻)	696.3 ^{&}	2788.8	
1432.6	(8 ⁺)	707.8 ^{&}	724.8	(6 ⁺)			721.3 ^{&}	2763.8	
1490.3	(11 ⁻)	355.4 ^{&}	1134.9	(10 ⁻)			749.4 ^{&}	2735.7	
		734.4 ^{&}	755.9	(9 ⁻)			915.4 ^{&}	2569.7	(13 ⁻)
1681.8	(11 ⁺)	384.9 ^{&}	1296.9	(10 ⁺)	3745.3	(16 ⁻)	999.0 ^{&}	2746.3	(14 ⁻)
1705.8	(11 ⁻)	400.9 ^{&}	1304.9	(10 ⁻)	3860.1		477.4 ^{&}	3382.7	(15 ⁻)
		758.6 ^{&}	947.2	(9 ⁻)			1113.8 ^{&}	2746.3	(14 ⁻)
1810.4	(9 ⁺)	729.4 ^{&}	1081.0	(7 ⁺)	3887.9	(17 ⁺)	682.1 ^{&}	3205.8	(16 ⁺)
1893.5	(12 ⁻)	403.2 ^{&}	1490.3	(11 ⁻)			980.2 ^{&}	2907.7	(15 ⁺)
		758.6 ^{&}	1134.9	(10 ⁻)	4093.8	(17 ⁺)	888.0 ^{&}	3205.8	(16 ⁺)
1986.0	(12 ⁺)	304.3 ^{&}	1681.8	(11 ⁺)			1186.1 ^{&}	2907.7	(15 ⁺)
		689.1 ^{&}	1296.9	(10 ⁺)	4211.5	(17 ⁻)	726.4 ^{&}	3485.1	(15 ⁻)
2116.7	(12 ⁻)	812.4 ^{&}	1304.3	(10 ⁻)	4366.0	(18 ⁺)	272.2 ^{&}	4093.8	(17 ⁺)
2130.0	(12 ⁻)	424.2 ^{&}	1705.8	(11 ⁻)			478.1 ^{&}	3887.9	(17 ⁺)
		825.1 ^{&}	1304.9	(10 ⁻)			1160.2 ^{&}	3205.8	(16 ⁺)
2172.0	(10 ⁺)	739.4 ^{&}	1432.6	(8 ⁺)	4396.2	(17 ⁻)	1013.5 ^{&}	3382.7	(15 ⁻)
2343.7	(13 ⁺)	357.6 ^{&}	1986.0	(12 ⁺)	4652.3	(18 ⁻)	907.0 ^{&}	3745.3	(16 ⁻)
		661.8 ^{&}	1681.8	(11 ⁺)	4863.8	(19 ⁻)	652.3 ^{&}	4211.5	(17 ⁻)
2359.2	(13 ⁻)	868.9 ^{&}	1490.3	(11 ⁻)	4967.6	(19 ⁺)	601.6 ^{&}	4366.0	(18 ⁺)
2562.2	(11 ⁺)	751.8 ^{&}	1810.4	(9 ⁺)			1079.7 ^{&}	3887.9	(17 ⁺)
2569.7	(13 ⁻)	439.7 ^{&}	2130.0	(12 ⁻)	5342.7	(20 ⁺)	375.1 ^{&}	4967.6	(19 ⁺)
		863.9 ^{&}	1705.8	(11 ⁻)			976.7 ^{&}	4366.0	(18 ⁺)
2682.1	(14 ⁺)	338.1 ^{&}	2343.7	(13 ⁺)	5515.6		1149.6 ^{&}	4366.0	(18 ⁺)
		696.3 ^{&}	1986.0	(12 ⁺)	5555.5	(21 ⁻)	691.7 ^{&}	4863.8	(19 ⁻)
2735.7		619.0 ^{&}	2116.7	(12 ⁻)					

[†] From $^{124}\text{Te}(\text{p},\text{n}\gamma)$, unless otherwise indicated.

[‡] From $^{124}\text{Te}(\text{p},\text{n}\gamma)$.

[#] From γ +ce intensity imbalance and $\alpha(\text{K})\text{exp}$ in $^{124}\text{Te}(\text{p},\text{n}\gamma)$, unless otherwise indicated.

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued) **$\gamma(^{124}\text{I})$ (continued)**

@ From [1986LuZW](#), uncertainty is assumed to 0.3 keV.

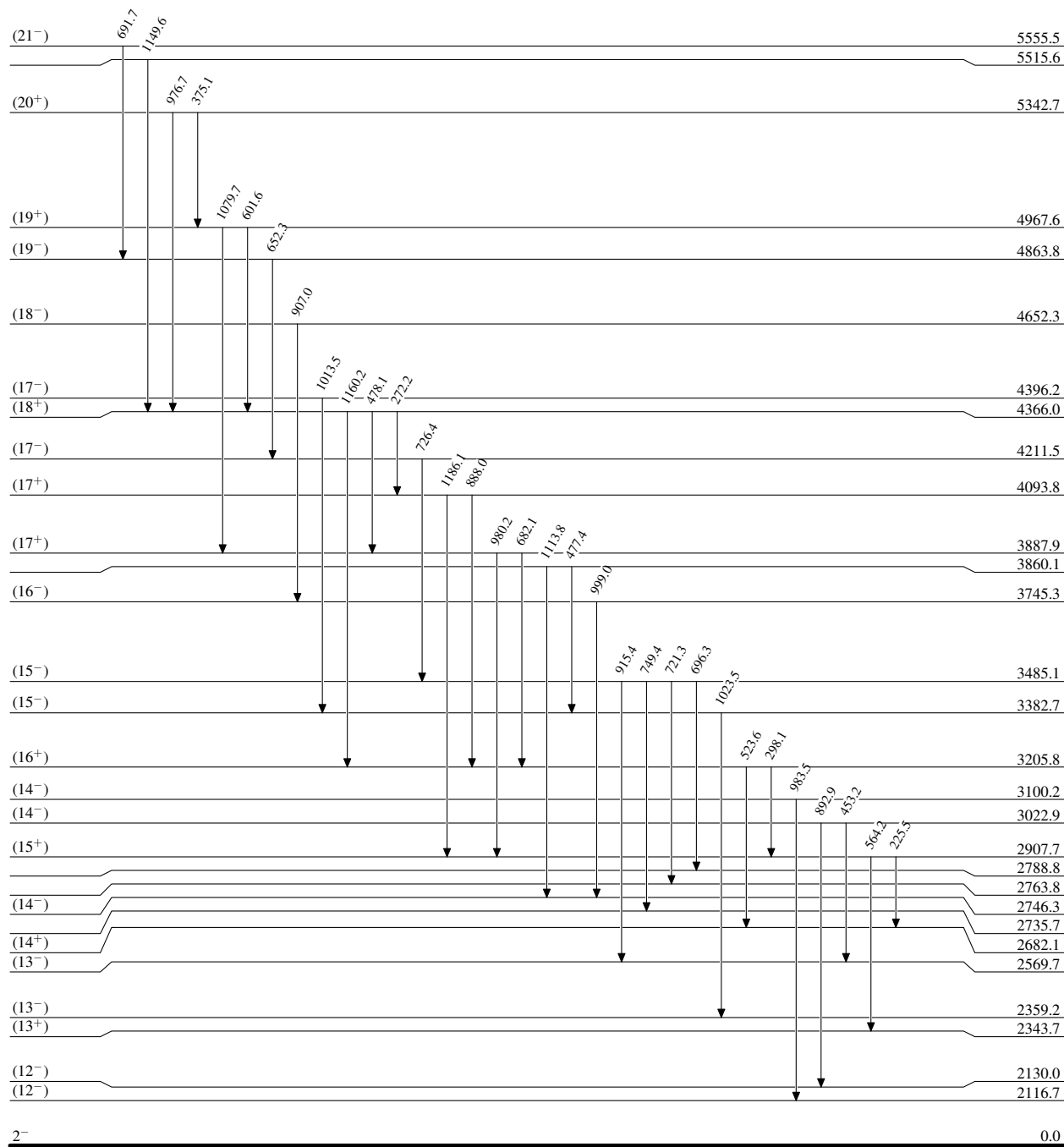
& From [2003MoZQ](#).

^a 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.

^b Multiply placed with undivided intensity.

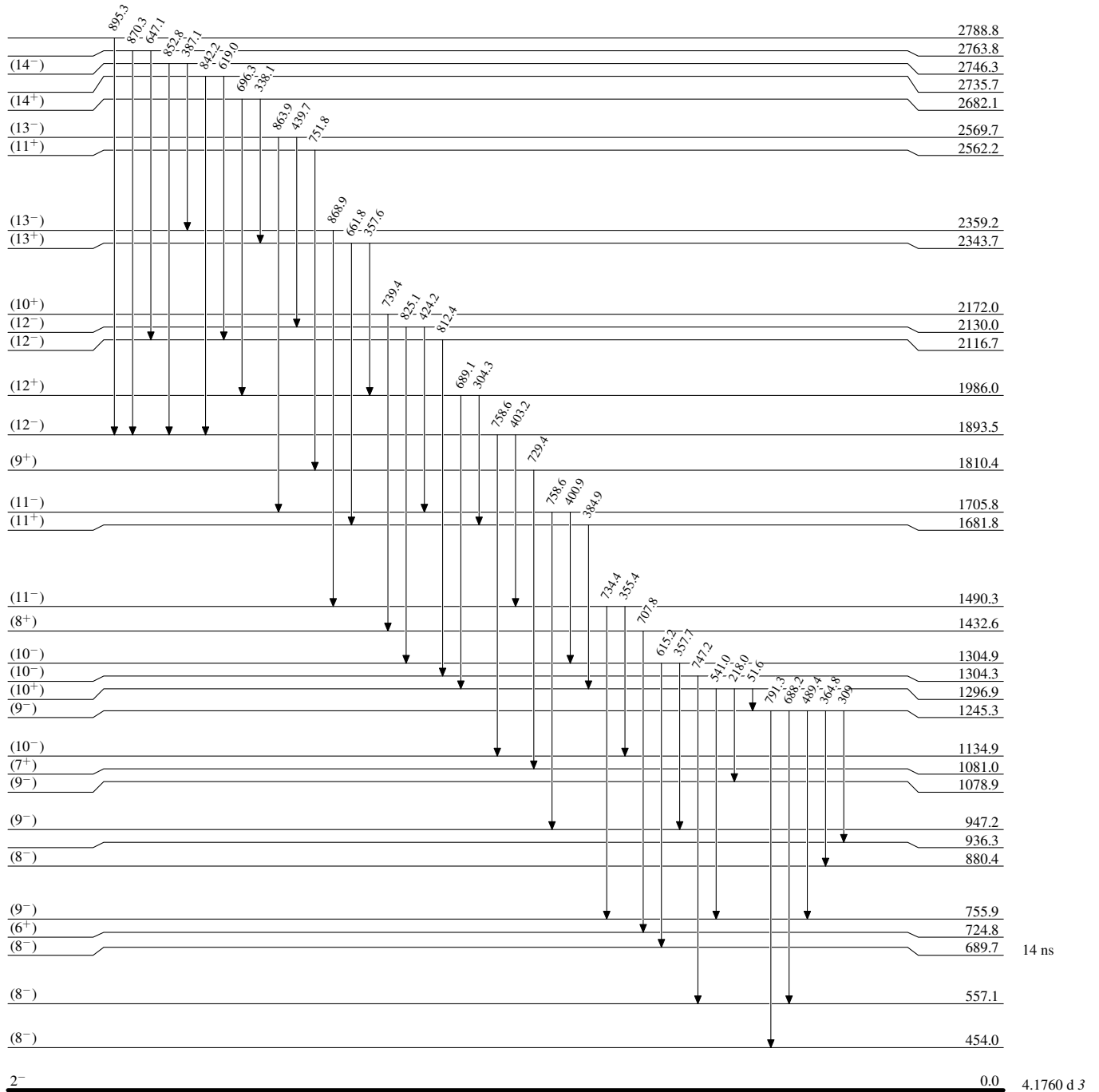
Adopted Levels, GammasLevel Scheme

Intensities: Relative photon branching from each level



Adopted Levels, GammasLevel Scheme (continued)

Intensities: Relative photon branching from each level



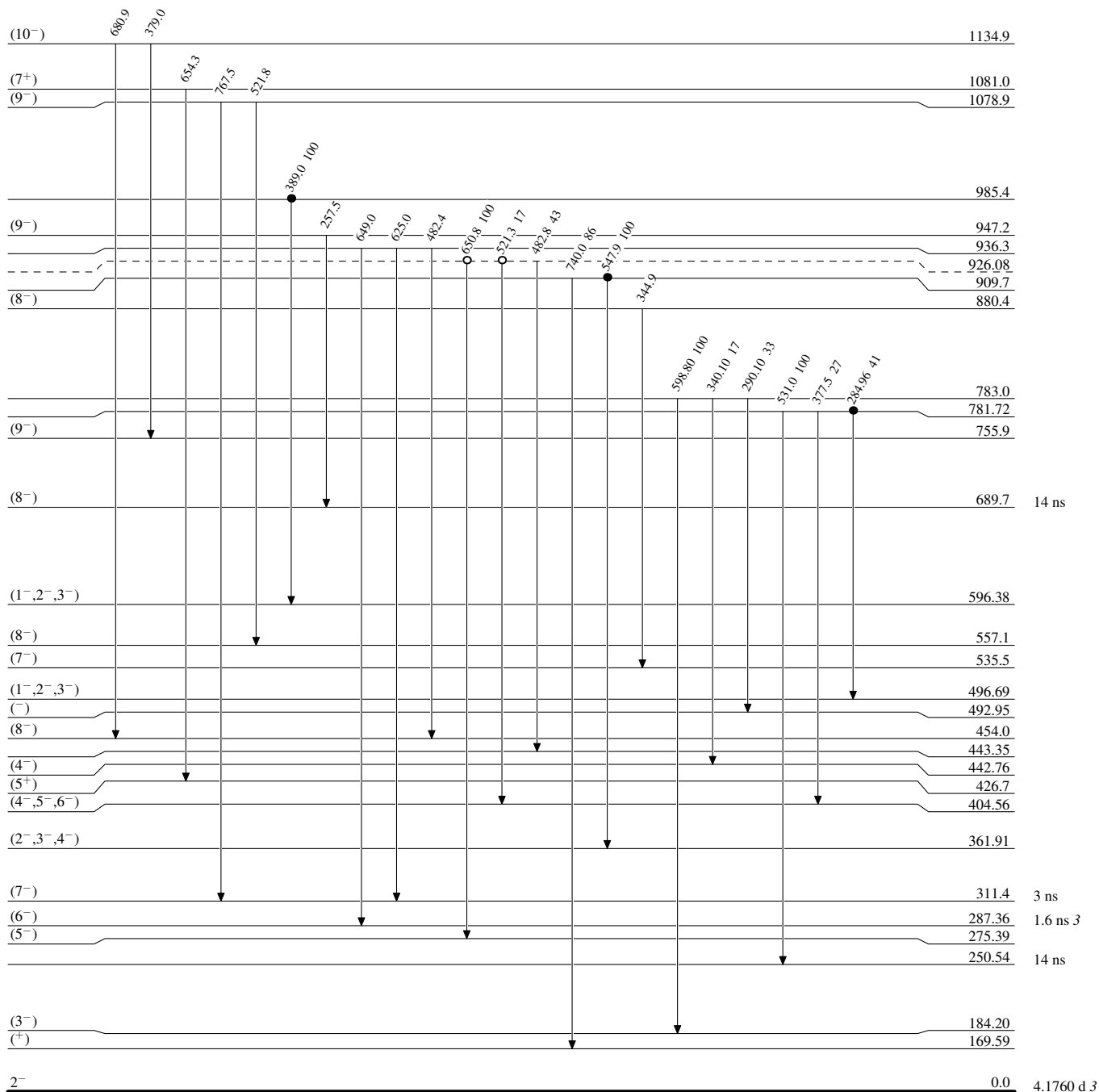
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

- Coincidence
- Coincidence (Uncertain)



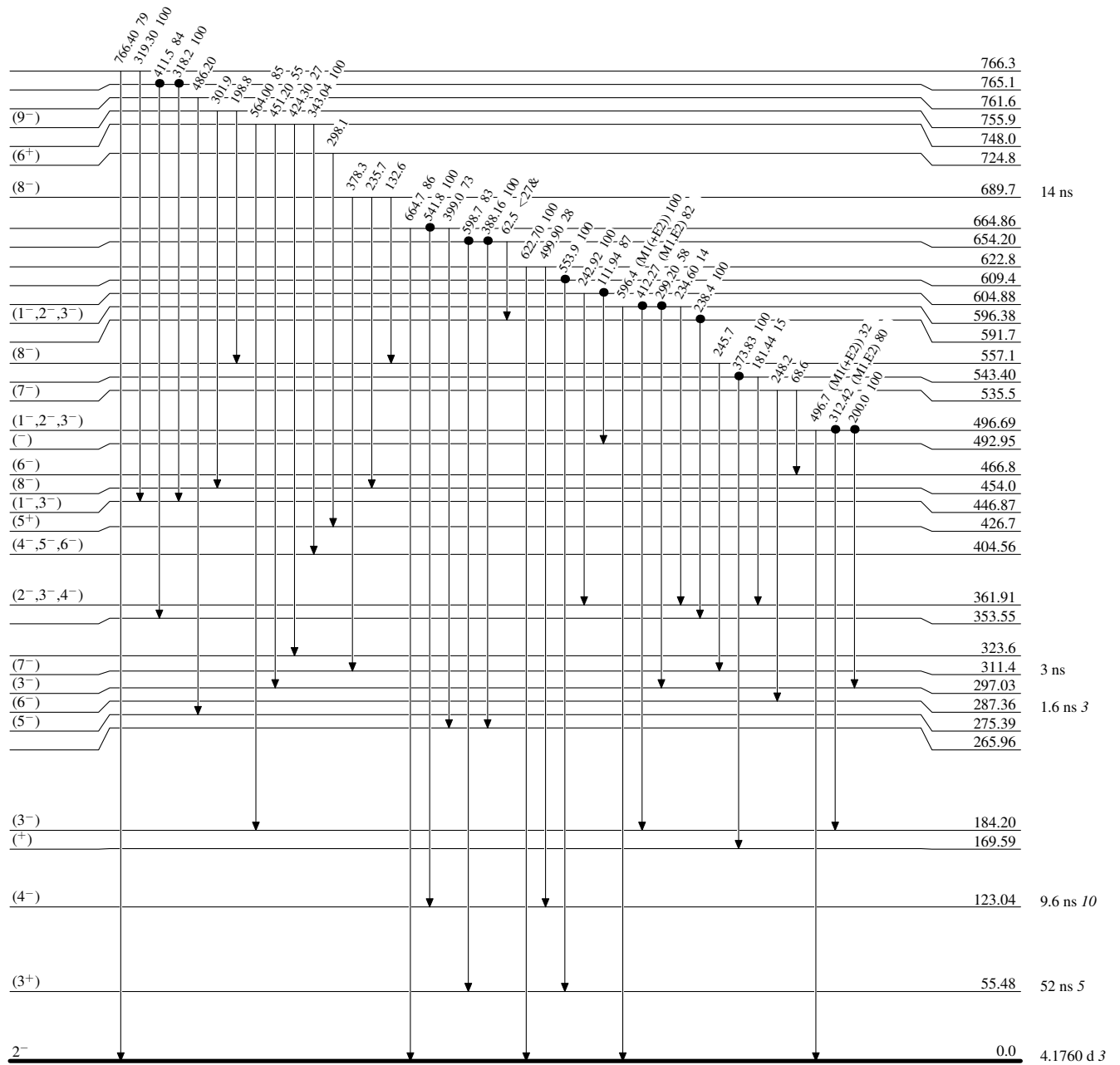
Adopted Levels, Gammas

Level Scheme (continued)

Legend

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

● Coincidence



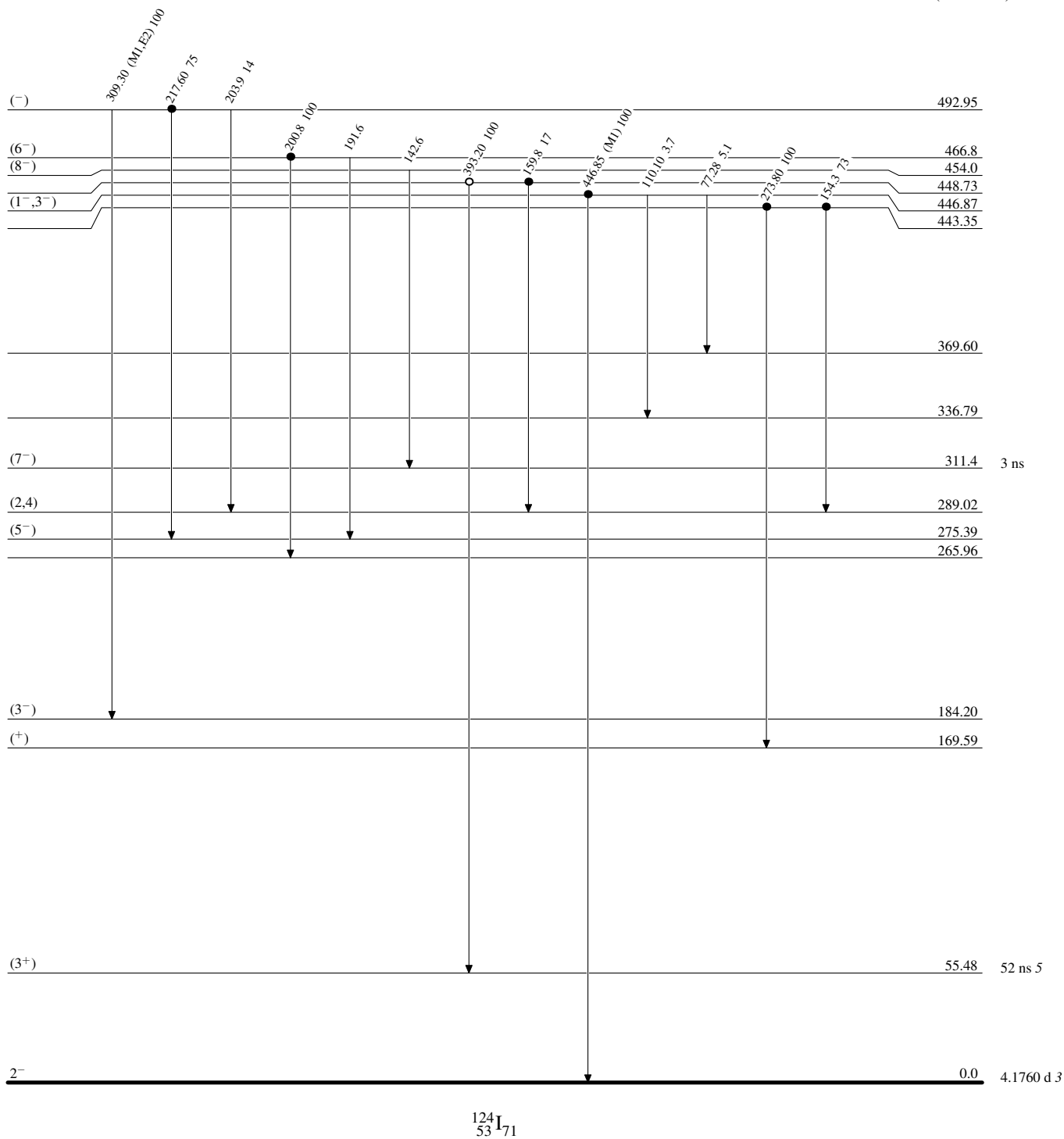
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiplied: undivided intensity given

- Coincidence
- Coincidence (Uncertain)



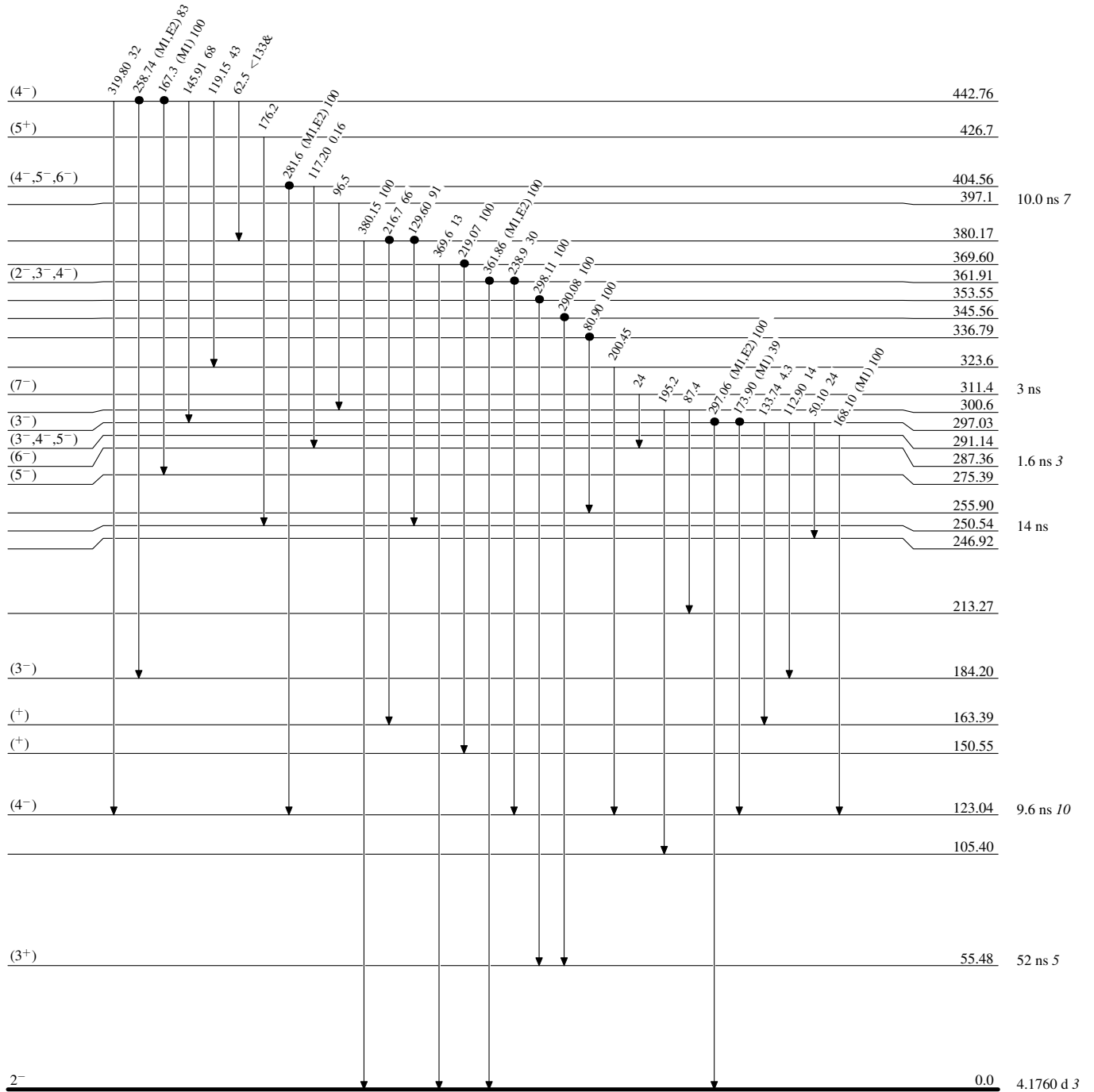
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiplied: undivided intensity given

● Coincidence



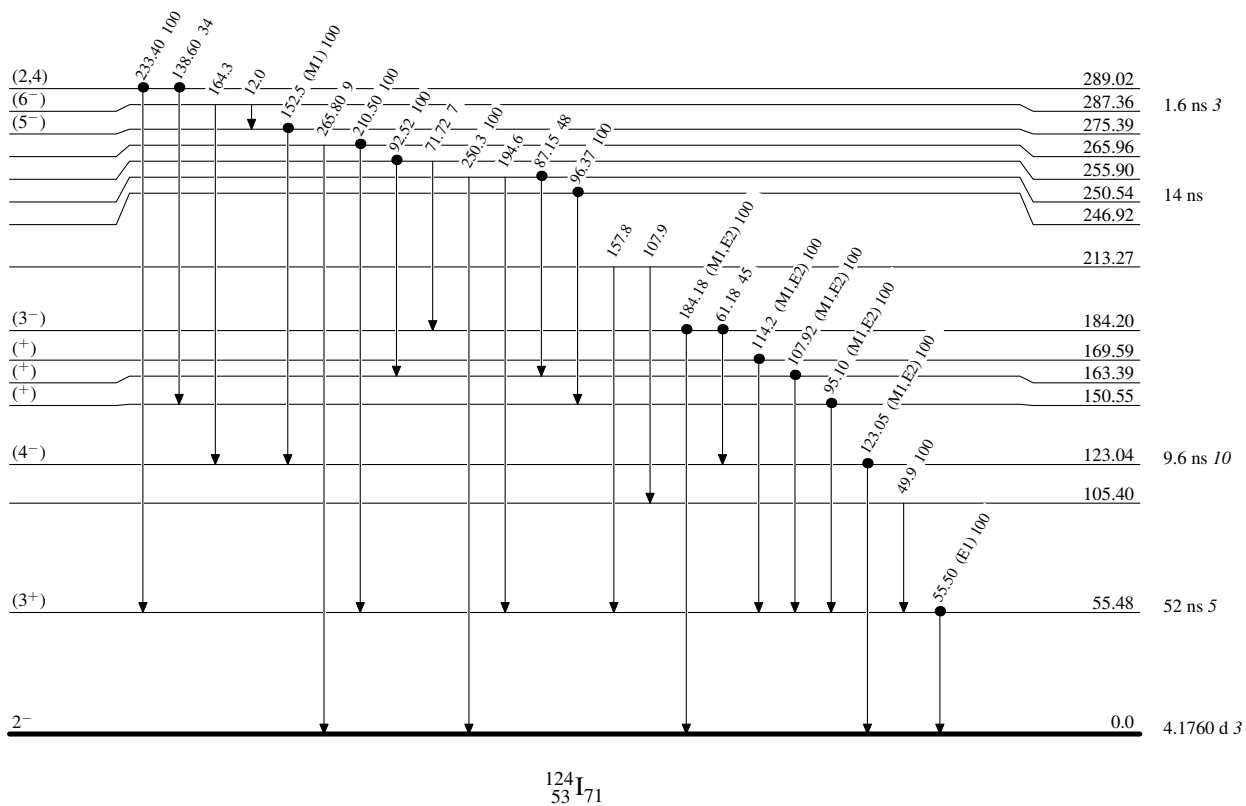
$^{124}_{53}\text{I}_{71}$

Adopted Levels, GammasLevel Scheme (continued)

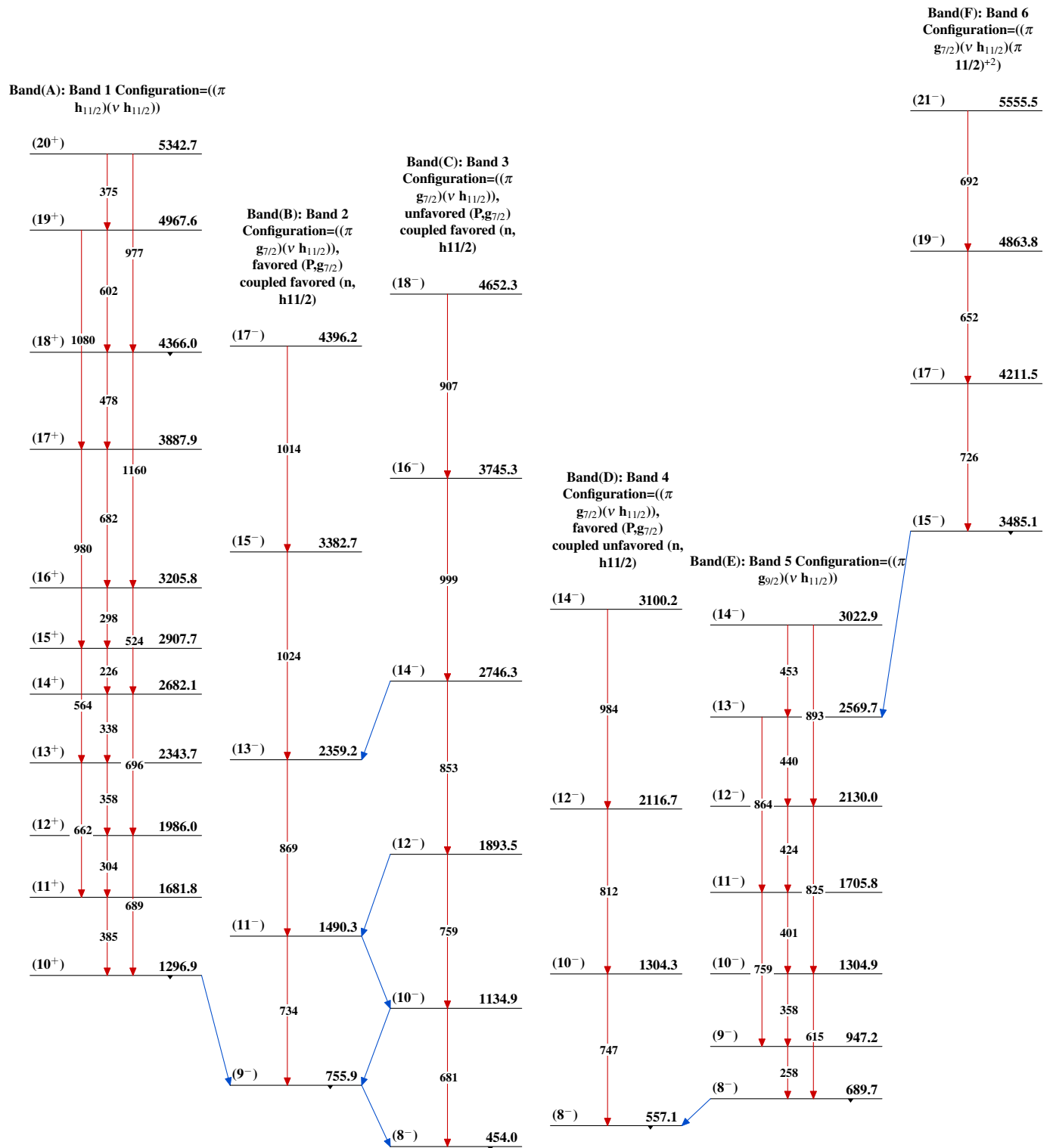
Legend

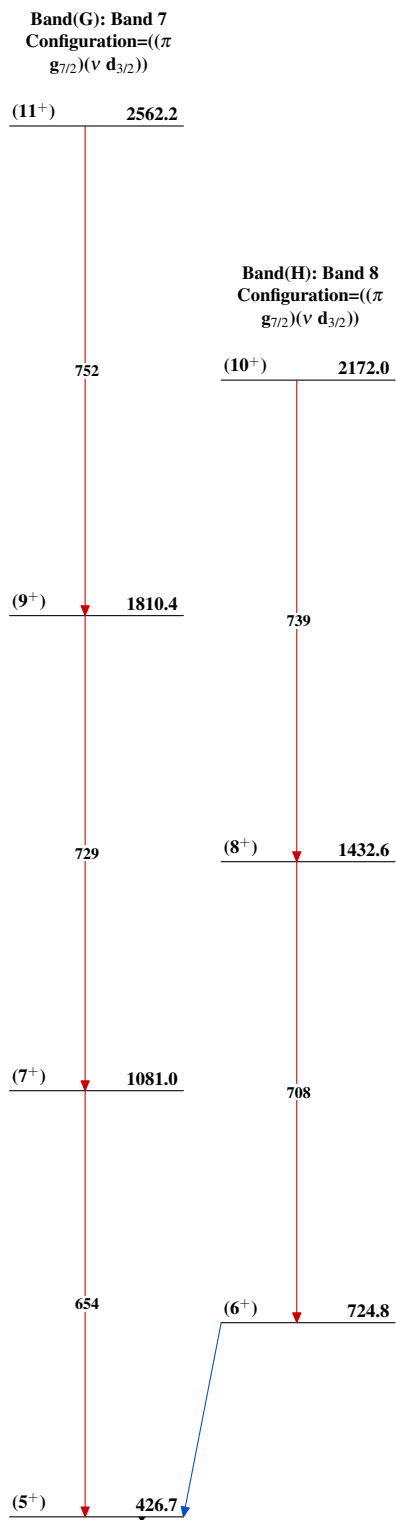
Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

● Coincidence



Adopted Levels, Gammas



Adopted Levels, Gammas (continued) $^{124}_{53}\text{I}_{71}$