Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	K. Kitao, Y. Tendow and A. Hashizume	NDS 96,241 (2002)	1-Dec-2001

Q(β^-)=−1581 *20*; S(n)=8.06×10^3 *4*; S(p)=3861 *18*; Q(α)=644 *17* 2012Wa38
Note: Current evaluation has used the following Q record −1960 408195 663899 20603 19 1995Au04.

^{120}I Levels

Cross Reference (XREF) Flags

A ^{120}Xe ε decay
B (HI,xnγ)

E(level)[&]	J$^\pi$	T$_{1/2}$[a]	XREF	Comments
0.0	2$^-$	81.6 min *2*	AB	%ε+%β^+=100 J$^\pi$: log $f^{1u}t$=9.27 to 0$^+$. T$_{1/2}$: weighted av of 81.0 min *6* (1965An05) and 81.7 min *2* (2000Ho19). 81.7 min *2* is that from 81.5 min *2* (511γ counting) and 81.9 min *2* (1523γ counting) (2000Ho19). Others: 78 min *3* (1965Bu03), 82.8 min *42* (1968La18), 85 min *5* (1970Ga32).
25.07 *8*	1$^+$	13.6 ns *7*	A	J$^\pi$: log *ft*=4.96 from 0$^+$.
72.61 *9*	1$^+$,2$^+$,3$^+$	228 ns *15*	A	J$^\pi$: E1 γ to 2$^-$.
89.82 *10*	0$^-$,1$^-$	2.0 ns *2*	A	J$^\pi$: E2(+M1) γ to 2$^-$, log *ft*=6.01 from 0$^+$.
102.25 *10*	1$^+$	1.35 ns *5*	A	J$^\pi$: M1+E2 γ to 1$^+$, log *ft*=6.2 from 0$^+$.
113.52 *9*	1$^+$,2$^+$,3$^+$		A	J$^\pi$: M1 γ to π=+.
153.77 *9*	1$^+$		A	J$^\pi$: M1 γ to 1$^+$, γ to 2$^-$, log *ft*=6.23 from 0$^+$.
158.63 *11*	1$^+$		A	J$^\pi$: γ to 2$^-$, M1+E2 γ to π=+, log *ft*=6.46 from 0$^+$.
171.86 *9*	1$^+$,2$^+$		A	J$^\pi$: M1+E2 γ to 1$^+$, γ to 2$^-$.
200.95 *12*	1$^+$		A	J$^\pi$: M1,E2 γ to 1$^+$, γ to 2$^-$, log *ft*=5.78 *12* from 0$^+$.
203.11 *11*	1$^+$		A	J$^\pi$: M1,E2 γ to 1$^+$, log *ft*=6.23 from 0$^+$.
212.37 *10*	1$^+$		A	J$^\pi$: (M1+E2) γ to π=+, log *ft*=5.87 *14* from 0$^+$.
278.42 *10*	1,2		A	J$^\pi$: γ to 1$^+$; γ to 0$^-$,1$^-$.
3.2×10^2 *15*	(7$^-$)	53 min *4*	B	%ε+%β^+=100 Additional information 1. J$^\pi$: log *ft* 6.41 to 6$^+$, M1 γ from (8$^-$). E(level): from Eβ from (600γ)(β^+)- and (612γ)(β^+)-coin in ^{120}I ε decay (53 min). T$_{1/2}$: from 1968La18. Other: 40 min *2* (1967La18).
334.63 *12*			A	
369.33 *16*	0$^-$,1		A	J$^\pi$: log *ft*=6.86 from 0$^+$, γ to 2$^-$.
375.35 *11*	1$^+$		A	J$^\pi$: M1,E2 γ to (1)$^+$; log *ft*=6.16 from 0$^+$.
396.30 *13*	0$^-$,1		A	J$^\pi$: log *ft*=6.69 from 0$^+$, γ to 2$^-$.
424.98 *19*	0,1,2$^-$		A	J$^\pi$: log *ft*=7.3 from 0$^+$, log $f^{1u}t$=8.2 *3*.
449.32 *10*	1$^+$		A	J$^\pi$: log *ft*=5.50 *6* from 0$^+$, γ to 2$^-$.
476.46 *17*	0,1		A	J$^\pi$: log *ft*=6.64 from 0$^+$.
488.6[†c] *3*	(8$^-$)[b]		B	J$^\pi$: from syst of head of the 8$^-$ band, based on the configuration=((π g$_{9/2}$)$^{-1}$(ν h$_{11/2}$)) in lighter even iodine-isotopes.
489.79 *14*	0,1		A	J$^\pi$: log *ft*=7.03 from 0$^+$, γ to 2$^-$.
529.52 *14*	0$^-$,1		A	J$^\pi$: log *ft*=5.90 *7* from 0$^+$, γ to 2$^-$.
580.66 *13*	0$^-$,1		A	J$^\pi$: log *ft*=5.79 *8* from 0$^+$, γ to 2$^-$.
658.75 *18*	0,1		A	J$^\pi$: log *ft*=6.35 from 0$^+$.
664.91 *15*	0$^-$,1		A	J$^\pi$: log *ft*=6.16 from 0$^+$, γ to 2$^-$.
677.29 *16*	0,1		A	J$^\pi$: log *ft*=6.51 from 0$^+$.
707.73 *14*	0$^-$,1		A	J$^\pi$: log *ft*=5.87 *6* from 0$^+$.

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

^{120}I Levels (continued)

E(level)[&]	J^π	XREF	Comments
765.0[†c] *4*	(9^-)[b]	B	
850.77 *12*	1^+	A	J^π: log *ft*=5.31 from 0^+.
897.83 *14*	0^-,1	A	J^π: log *ft*=5.84 *6* from 0^+, γ to 2^-.
965.62 *10*	1^+	A	J^π: log *ft*=4.71 *6* from 0^+, γ to 2^-.
1023.52 *11*	1^+	A	J^π: log *ft*=5.48 from 0^+, γ to 2^-.
1039.20 *17*	0^-,1	A	J^π: log *ft*=5.92 from 0^+.
1058.09 *18*	0^-,1	A	J^π: log *ft*=5.95 from 0^+, γ to 2^-.
1086.24 *17*	0^-,1	A	J^π: log *ft*=6.38 from 0^+, γ to 2^-.
1099.3[†c] *4*	(10^-)[b]	B	
1142.86 *15*	1^+	A	J^π: log *ft*=5.47 from 0^+.
1465.6[†c] *5*	(11^-)[b]	B	
1858.0[†c] *5*	(12^-)[b]	B	
2277.6[†c] *5*	(13^-)[b]	B	
2724.0[†c] *5*	(14^-)[b]	B	
3198.9[†c] *5*	(15^-)[b]	B	
3694.9[†c] *6*	(16^-)[b]	B	
x+0.0		B	Additional information 2.
x+56.3 *5*		B	
x+70.3 *8*		B	
x+151.0 *8*		B	
x+183.2 *3*		B	
x+274.8 *7*	(7^-)	B	J^π: (M1) γ from (8^-).
x+327.1 *5*	(5)	B	
x+382.4 *7*	(8^-)	B	J^π: E2 γ from (10^-), M1 γ from (9^-).
x+474.2 *7*		B	
x+530.0 *6*		B	
x+633.0 *8*		B	
x+663.2 *7*		B	
x+775.2 *6*	(7^-)	B	J^π: M1 γ from (8^-).
x+840.2 *7*	(8^-)	B	J^π: M1 γ from (9^-).
x+953.3[#] *7*	(9^-)[b]	B	J^π: from syst of the bandhead based on configuration=$((\pi\ g_{7/2})(\nu\ h_{11/2}))$ in lighter iodine isotopes.
x+1016.5[‡] *7*	(10^-)[b]	B	J^π: from syst of the bandhead based on configuration=$((\pi\ h_{11/2})(\nu\ d_{5/2}))$ in lighter iodine isotopes.
x+1271.8[@] *7*	(10^-)[b]	B	
x+1506.2[#] *7*	(11^-)[b]	B	
x+1730.3[‡] *8*	(12^-)[b]	B	
x+1860.8[@] *7*	(12^-)[b]	B	
x+2173.9[#] *8*	(13^-)[b]	B	
x+2541.9[‡] *9*	(14^-)[b]	B	
x+2580.3[@] *8*	(14^-)[b]	B	
x+2658.3? *22*		B	
x+2826.0[#] *8*	(15^-)[b]	B	
x+3038.0[@] *8*	(16^-)[b]	B	
x+3071.1 *8*		B	
x+3533.8[‡] *9*	(16^-)[b]	B	
x+3917.1[#] *8*	(17^-)[b]	B	
x+4011? *3*		B	
x+4090? *3*		B	
x+4606? *3*		B	

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

^{120}I Levels (continued)

E(level)[&]	J^{π}	XREF
x+4788.9[#] *9*	(19^-)[b]	B
x+5526? *4*		B
x+5856.1[#] *9*	(21^-)[b]	B
x+6361.8[#] *10*	(23^-)[b]	B

† Band(A): ΔJ=1 π=− band.
‡ Band(B): ΔJ=2 π=− band.
# Band(C): ΔJ=2 π=− band.
@ Band(D): ΔJ=2 π=+ signature partner of band (C).
& From a least-squares fit to the adopted E(γ′s) by the evaluators.
a From γγ(t) (1974Mu10), unless otherwise noted.
b From (HI,xgn).
c E(level) above at 488 keV should be added systematic uncertainty of 150 keV due to the (7^-) level at 320 keV.

Adopted Levels, Gammas (continued)

γ(^{120}I)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]	α[‡]	Comments
25.07	1$^+$	25.1 *2*	100	0.0	2$^-$	E1		1.54 *4*	B(E1)(W.u.)=0.00051 *4* Mult.: from L-subshell ratios (1974Mu10).
72.61	1$^+$,2$^+$,3$^+$	47.3[b] *3*	0.6[b] *1*	25.07	1$^+$	[M1,E2]		17 *10*	
		72.6 *2*	100	0.0	2$^-$	E1		0.500 *15*	B(E1)(W.u.)=2.01×10^{-6} *18*
89.82	0$^-$,1$^-$	64.8 *3*	4.0 *5*	25.07	1$^+$	[E1]		0.686 *7*	B(E1)(W.u.)=5.8×10^{-6} *12*
		89.8 *2*	100 *10*	0.0	2$^-$	E2(+M1)	>2.0	2.44 *16*	B(M1)(W.u.)<0.0010; B(E2)(W.u.)>2.5×10^2
102.25	1$^+$	77.2 *2*	100	25.07	1$^+$	M1+E2	0.41 *11*	2.00 *20*	B(M1)(W.u.)=0.0101 *12*; B(E2)(W.u.)=2.1×10^2 *10*
113.52	1$^+$,2$^+$,3$^+$	40.9[c] *2*	100[c] *30*	72.61	1$^+$,2$^+$,3$^+$	M1		10.1	
		88.7 *3*	27 *4*	25.07	1$^+$	[M1,E2]		1.9 *8*	
		113.7[b] *3*	5.4[b] *14*	0.0	2$^-$	[E1]		0.143	
153.77	1$^+$	51.5 *2*	27 *3*	102.25	1$^+$	M1		5.14	
		81.1 *2*	33 *3*	72.61	1$^+$,2$^+$,3$^+$	M1+E2	1.8 *5*	3.2 *4*	
		128.8 *2*	100 *9*	25.07	1$^+$	M1+E2	>0.7	0.60 *12*	
		153.8 *3*	2.9 *6*	0.0	2$^-$				
158.63	1$^+$	56.7 *4*	15 *3*	102.25	1$^+$				
		86.1 *2*	100 *8*	72.61	1$^+$,2$^+$,3$^+$	M1+E2	1.1 *+9−5*	2.2 *5*	
		133.5 *2*	43 *5*	25.07	1$^+$				
		159.0 *3*	4.6 *15*	0.0	2$^-$				
171.86	1$^+$,2$^+$	69.6 *2*	100 *14*	102.25	1$^+$	M1+E2	0.31 *8*	2.52 *20*	
		99.0[c] *2*	57[c] *11*	72.61	1$^+$,2$^+$,3$^+$				
		146.9 *2*	30 *3*	25.07	1$^+$				
		172.2[c] *2*	38[c] *8*	0.0	2$^-$				
200.95	1$^+$	47.3[bd] *3*	1.2[b] *2*	153.77	1$^+$				
		111.3 *3*	2.2 *4*	89.82	0$^-$,1$^-$				
		176.0[c] *3*	100[c] *20*	25.07	1$^+$	M1,E2		0.20 *5*	
		200.8 *2*	6.8 *8*	0.0	2$^-$				
203.11	1$^+$	49.4 *3*	1.2 *3*	153.77	1$^+$				
		101.3 *3*	1.7 *3*	102.25	1$^+$				
		113.7[bd] *3*	0.53[b] *13*	89.82	0$^-$,1$^-$				
		178.1 *2*	100 *8*	25.07	1$^+$	M1,E2		0.19 *4*	
		203.5[bd] *3*	3.3[b] *4*	0.0	2$^-$				
212.37	1$^+$	40.9[c] *2*	9[c] *3*	171.86	1$^+$,2$^+$				
		53.4 *3*	4.6 *11*	158.63	1$^+$				
		58.3 *4*	6.3 *11*	153.77	1$^+$				
		99.0[c] *2*	100[c] *20*	113.52	1$^+$,2$^+$,3$^+$	(M1+E2)	0.8 *+6−4*	1.2 *5*	
		139.9 *2*	42 *3*	72.61	1$^+$,2$^+$,3$^+$				
278.42	1,2	66.4 *3*	18 *3*	212.37	1$^+$				
		106.5 *3*	13 *3*	171.86	1$^+$,2$^+$				
		124.8 *3*	42 *5*	153.77	1$^+$				

$^{120}_{53}I_{67}$-4

$\gamma(^{120}I)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[†]	E_f	J^π_f	Mult.[&]	α[‡]
278.42	1,2	164.9 *2*	87 *8*	113.52	$1^+,2^+,3^+$		
		188.7 *3*	18 *3*	89.82	$0^-,1^-$		
		205.8 *3*	100 *11*	72.61	$1^+,2^+,3^+$		
		253.2 *3*	29 *3*	25.07	1^+		
334.63		176.0[c] *3*	100[c] *20*	158.63	1^+		
		232.5 *3*	8.6 *10*	102.25	1^+		
		262.0 *3*	6.7 *10*	72.61	$1^+,2^+,3^+$		
		309.6 *3*	62 *10*	25.07	1^+		
369.33	0^-,1	157.0 *3*	21 *2*	212.37	1^+		
		197.3 *3*	7.1 *24*	171.86	$1^+,2^+$		
		210.8 *3*	19 *5*	158.63	1^+		
		279.6 *3*	100 *10*	89.82	$0^-,1^-$		
375.35	1^+	97.0 *3*	19 *3*	278.42	1,2		
		172.2[c] *2*	100[c] *20*	203.11	1^+	M1,E2	0.21 *5*
		174.5 *4*	41 *14*	200.95	1^+		
		203.5[b] *3*	23[b] *3*	171.86	$1^+,2^+$		
		221.6 *2*	51 *5*	153.77	1^+		
		285.5 *3*	11 *1*	89.82	$0^-,1^-$		
		350.2 *3*	44 *5*	25.07	1^+		
		375.5[c] *4*	3.6[c] *9*	0.0	2^-		
396.30	0^-,1	184.2 *3*	35 *6*	212.37	1^+		
		195.3 *3*	82 *6*	200.95	1^+		
		224.7 *3*	35 *6*	171.86	$1^+,2^+$		
		242.4 *3*	24 *6*	153.77	1^+		
		282.9 *3*	88 *12*	113.52	$1^+,2^+,3^+$		
		323.7 *4*	100 *18*	72.61	$1^+,2^+,3^+$		
		396.3 *3*	41 *12*	0.0	2^-		
424.98	0,1,2^-	271.8 *3*	100 *13*	153.77	1^+		
		311.1 *3*	56 *6*	113.52	$1^+,2^+,3^+$		
		322.5 *4*	88 *13*	102.25	1^+		
449.32	1^+	246.3 *2*	14 *2*	203.11	1^+		
		295.6 *2*	68 *8*	153.77	1^+		
		335.9 *2*	63 *9*	113.52	$1^+,2^+,3^+$		
		346.9 *3*	33 *5*	102.25	1^+		
		359.5 *2*	57 *8*	89.82	$0^-,1^-$		
		376.5 *5*	7.6 *22*	72.61	$1^+,2^+,3^+$		
		424.2 *3*	73 *8*	25.07	1^+		
		449.2 *2*	100 *11*	0.0	2^-		
476.46	0,1	142.1 *3*	27 *3*	334.63			
		404.0 *3*	50 *7*	72.61	$1^+,2^+,3^+$		
		451.1 *3*	100 *17*	25.07	1^+		

$^{120}_{53}I_{67}$-5

Adopted Levels, Gammas (continued)

$\gamma(^{120}I)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]
488.6	(8⁻)	168.6[#] 3	100[#]	3.2×10²	(7⁻)	M1	
489.79	0,1	277.5 3	100 10	212.37	1⁺		
		331.4 4	44 5	158.63	1⁺		
		399.9 3	24 5	89.82	0⁻,1⁻		
		489.7 3	61 7	0.0	2⁻		
529.52	0⁻,1	317.2 3	15 1	212.37	1⁺		
		375.5[c] 4	17[c] 5	153.77	1⁺		
		439.7 3	14 1	89.82	0⁻,1⁻		
		504.5[c] 5	29[c] 9	25.07	1⁺		
		529.4 3	100 10	0.0	2⁻		
580.66	0⁻,1	302.3 3	7.3 6	278.42	1,2		
		426.9 3	24 3	153.77	1⁺		
		467.2 4	36 4	113.52	1⁺,2⁺,3⁺		
		478.4 3	22 3	102.25	1⁺		
		555.6 3	100 12	25.07	1⁺		
		580.6 3	52 5	0.0	2⁻		
658.75	0,1	182.4 3	14 2	476.46	0,1		
		446.4 4	29 5	212.37	1⁺		
		457.6 3	29 2	200.95	1⁺		
		569.0 3	100 12	89.82	0⁻,1⁻		
664.91	0⁻,1	462.1 3	18 2	203.11	1⁺		
		464.1 4	31 4	200.95	1⁺		
		551.4 3	31 4	113.52	1⁺,2⁺,3⁺		
		562.5 3	55 6	102.25	1⁺		
		664.7 4	100 12	0.0	2⁻		
677.29	0,1	342.1 3	78 11	334.63			
		519.0 3	22 3	158.63	1⁺		
		604.8 3	100 11	72.61	1⁺,2⁺,3⁺		
		652.4 3	33 6	25.07	1⁺		
707.73	0⁻,1	429.4 3	40 5	278.42	1,2		
		495.3 4	10 3	212.37	1⁺		
		504.5[c] 5	48[c] 15	203.11	1⁺		
		506.9 5	32 8	200.95	1⁺		
		535.9 3	34 3	171.86	1⁺,2⁺		
		594.2 3	97 11	113.52	1⁺,2⁺,3⁺		
		682.6 3	100 11	25.07	1⁺		
765.0	(9⁻)	276.3[#] 3	100[#]	488.6	(8⁻)	M1+E2	+0.24 1
850.77	1⁺	401.4 3	13 2	449.32	1⁺		
		516.2 4	18 3	334.63			
		572.4 4	20 3	278.42	1,2		
		638.5 3	18 2	212.37	1⁺		

$^{120}_{53}I_{67}$-6

$\gamma(^{120}I)$ (continued)

E_i(level)	J^π_i	E_γ†	I_γ†	E_f	J^π_f
850.77	1^+	647.8 *3*	24 *3*	203.11	1^+
		678.9 *2*	100 *9*	171.86	$1^+,2^+$
		697.0 *4*	10.4 *11*	153.77	1^+
		737.3 *3*	4.4 *6*	113.52	$1^+,2^+,3^+$
		748.4 *4*	65 *7*	102.25	1^+
		778.1 *5*	3.9 *6*	72.61	$1^+,2^+,3^+$
		825.4 *4*	21 *3*	25.07	1^+
		850.7 *4*	12.1 *11*	0.0	2^-
897.83	$0^-,1$	407.9 *3*	20 *2*	489.79	0,1
		619.5 *3*	18 *2*	278.42	1,2
		685.5 *3*	49 *6*	212.37	1^+
		694.7 *4*	25 *5*	203.11	1^+
		726.0 *3*	100 *9*	171.86	$1^+,2^+$
		744.1 *5*	29 *5*	153.77	1^+
		872.6 *3*	31 *4*	25.07	1^+
		898.0 *4*	7.3 *18*	0.0	2^-
965.62	1^+	300.8 *3*	1.0 *2*	664.91	$0^-,1$
		385.0 *3*	21 *2*	580.66	$0^-,1$
		436.1 *3*	1.8 *2*	529.52	$0^-,1$
		476.0 *3*	13 *1*	489.79	0,1
		540.8 *4*	5.6 *10*	424.98	$0,1,2^-$
		590.4 *3*	35 *4*	375.35	1^+
		596.4 *4*	5.6 *8*	369.33	$0^-,1$
		631.1 *3*	23 *3*	334.63	
		753.3 *3*	32 *3*	212.37	1^+
		762.5 *3*	100 *9*	203.11	1^+
		793.4 *3*	29 *4*	171.86	$1^+,2^+$
		811.7 *3*	16 *2*	153.77	1^+
		852.1 *4*	9.7 *12*	113.52	$1^+,2^+,3^+$
		863.4 *3*	13.5 *14*	102.25	1^+
		875.7 *3*	18.7 *20*	89.82	$0^-,1^-$
		893.0 *4*	1.0 *2*	72.61	$1^+,2^+,3^+$
		940.5 *3*	7.5 *10*	25.07	1^+
		965.5 *3*	26 *3*	0.0	2^-
1023.52	1^+	315.8 *3*	51 *5*	707.73	$0^-,1$
		493.8 *3*	27 *3*	529.52	$0^-,1$
		574.2 *4*	68 *14*	449.32	1^+
		627.7 *3*	54 *5*	396.30	$0^-,1$
		689.0 *3*	41 *5*	334.63	
		745.4 *5*	49 *8*	278.42	1,2
		820.4 *4*	65 *11*	203.11	1^+
		822.6 *4*	73 *11*	200.95	1^+

Adopted Levels, Gammas (continued)

γ(^{120}I) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]
1023.52	1+	869.7 *4*	32 *5*	153.77	1+		
		910.1 *4*	24 *3*	113.52	1+,2+,3+		
		921.1 *3*	86 *11*	102.25	1+		
		933.4 *4*	14 *3*	89.82	0−,1−		
		998.4 *3*	51 *5*	25.07	1+		
		1023.3 *3*	100 *14*	0.0	2−		
1039.20	0−,1	663.6 *5*	36 *8*	375.35	1+		
		704.7 *3*	31 *6*	334.63			
		867.1 *4*	72 *11*	171.86	1+,2+		
		880.9 *3*	17 *6*	158.63	1+		
		885.2 *4*	100 *14*	153.77	1+		
		925.5 *4*	14 *3*	113.52	1+,2+,3+		
1058.09	0−,1	779.8 *5*	17 *2*	278.42	1,2		
		855.2 *4*	21 *4*	203.11	1+		
		904.1 *4*	7.7 *20*	153.77	1+		
		944.6 *4*	13 *2*	113.52	1+,2+,3+		
		1033.2 *4*	100 *10*	25.07	1+		
		1057.8 *4*	3.9 *19*	0.0	2−		
1086.24	0−,1	807.7 *3*	90 *10*	278.42	1,2		
		984.1 *4*	50 *10*	102.25	1+		
		1013.4 *4*	30 *10*	72.61	1+,2+,3+		
		1061.3 *3*	100 *10*	25.07	1+		
		1086.3 *4*	30 *10*	0.0	2−		
1099.3	(10−)	334.3[#] *3*	100[#]	765.0	(9−)	M1+E2	+0.29 *2*
		610.7[#] *3*	18[#] *14*	488.6	(8−)	(E2)	
1142.86	1+	465.7 *4*	54 *6*	677.29	0,1		
		693.5 *4*	11 *3*	449.32	1+		
		930.4 *4*	37 *5*	212.37	1+		
		971.0 *3*	52 *6*	171.86	1+,2+		
		989.1 *3*	100 *9*	153.77	1+		
		1029.4 *4*	46 *6*	113.52	1+,2+,3+		
		1117.8 *4*	9.2 *15*	25.07	1+		
		1142.7 *4*	14 *3*	0.0	2−		
1465.6	(11−)	366.4[#] *3*	100[#]	1099.3	(10−)	M1+E2	
		700.6[#] *3*	35[#]	765.0	(9−)	E2	
1858.0	(12−)	392.4[#] *3*	100[#]	1465.6	(11−)	M1+E2	+0.28 *11*
		758.7[#] *3*	63[#]	1099.3	(10−)	E2	
2277.6	(13−)	419.6[#] *3*	100[#]	1858.0	(12−)	M1+E2	−0.02 *14*
		812.0[#] *3*	100[#]	1465.6	(11−)	E2	

$^{120}_{53}I_{67}$-8

Adopted Levels, Gammas (continued)

γ(^{120}I) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]
2724.0	(14$^-$)	446.4[#] *3*	100[#]	2277.6	(13$^-$)	
		866.1[#] *3*	100[#]	1858.0	(12$^-$)	E2
3198.9	(15$^-$)	475.0[#] *3*	100[#]	2724.0	(14$^-$)	M1
		921.1[#] *3*	100[#]	2277.6	(13$^-$)	(E2)
3694.9	(16$^-$)	496.0[#] *3*	100[#]	3198.9	(15$^-$)	(M1)
		971.0[#] *3*	100[#]	2724.0	(14$^-$)	(E2)
x+151.0		80.7[#] *3*	100[#]	x+70.3		(M1+E2)
x+183.2		126.9[#] *3*	100[#]	x+56.3		D
		183.2[#] *3*	31[#]	x+0.0		D
x+274.8	(7$^-$)	123.8[#] *3*	100[#]	x+151.0		M1+E2
x+327.1	(5)	143.9[#] *3*	100[#]	x+183.2		D
x+382.4	(8$^-$)	107.7[#] *3*	100[#]	x+274.8	(7$^-$)	(M1+E2)
x+474.2		199.5[#] *3*	100[#]	x+274.8	(7$^-$)	D+Q
x+530.0		202.9[#] *3*	100[#]	x+327.1	(5)	D+Q
x+633.0		158.8[#] *3*	100[#]	x+474.2		(D+Q)
x+663.2		388.4[#] *3*	100[#]	x+274.8	(7$^-$)	D
x+775.2	(7$^-$)	111.9[#@] *3*	100[#]	x+663.2		D
		245.2[#@] *3*	100[#]	x+530.0		D
x+840.2	(8$^-$)	65.1[#] *3*	41[#]	x+775.2	(7$^-$)	M1
		565.4[#] *3*	100[#]	x+274.8	(7$^-$)	M1+E2
x+953.3	(9$^-$)	113.1[#] *3*	100[#]	x+840.2	(8$^-$)	(M1+E2)
		178.0[#] *3*	10[#]	x+775.2	(7$^-$)	E2
		571.0[#] *3*	31[#]	x+382.4	(8$^-$)	M1
x+1016.5	(10$^-$)	383.5[#] *3*	50[#]	x+633.0		D+Q
		634.0[#] *3*	100[#]	x+382.4	(8$^-$)	E2
x+1271.8	(10$^-$)	318.4[#] *3*	100[#]	x+953.3	(9$^-$)	M1
x+1506.2	(11$^-$)	234.3[#] *3*	46[#]	x+1271.8	(10$^-$)	M1
		553.0[#] *3*	100[#]	x+953.3	(9$^-$)	E2
x+1730.3	(12$^-$)	713.8[#] *3*	100[#]	x+1016.5	(10$^-$)	E2
x+1860.8	(12$^-$)	354.5[#] *3*	100[#]	x+1506.2	(11$^-$)	M1
		589.1[#] *3*	44[#]	x+1271.8	(10$^-$)	E2
x+2173.9	(13$^-$)	313.1[#] *3*	46[#]	x+1860.8	(12$^-$)	M1
		667.7[#] *3*	100[#]	x+1506.2	(11$^-$)	E2
x+2541.9	(14$^-$)	811.6[#] *3*	100[#]	x+1730.3	(12$^-$)	E2
x+2580.3	(14$^-$)	406.3[#] *3*	100[#]	x+2173.9	(13$^-$)	M1
		719.5[#] *3*	90[#]	x+1860.8	(12$^-$)	E2
x+2658.3?		797.5[#d]	[#]	x+1860.8	(12$^-$)	
x+2826.0	(15$^-$)	245.5[#] *3*	50[#]	x+2580.3	(14$^-$)	M1
		652.1[#] *3*	100[#]	x+2173.9	(13$^-$)	E2
x+3038.0	(16$^-$)	212.0[#] *3*	100[#]	x+2826.0	(15$^-$)	(M1)
x+3071.1		897.2[#] *3*	100[#]	x+2173.9	(13$^-$)	
x+3533.8	(16$^-$)	991.9[#] *3*	100[#]	x+2541.9	(14$^-$)	E2
x+3917.1	(17$^-$)	846.0[#] *3*	50[#]	x+3071.1		E2
		1091.1[#] *3*	100[#]	x+2826.0	(15$^-$)	E2
x+4011?		477.3[#d]	100[#]	x+3533.8	(16$^-$)	
x+4090?		1052[#d]	100[#]	x+3038.0	(16$^-$)	
x+4606?		595.4[#d]	100[#]	x+4011?		
x+4788.9	(19$^-$)	871.8[#] *3*	100[#]	x+3917.1	(17$^-$)	E2
x+5526?		919.7[#d]	100[#]	x+4606?		
x+5856.1	(21$^-$)	1067.2[#] *3*	100[#]	x+4788.9	(19$^-$)	E2
x+6361.8	(23$^-$)	505.7[#] *3*	100[#]	x+5856.1	(21$^-$)	E2

[†] From ^{120}Xe β^+ decay, unless otherwise noted.
[‡] Uncertainties given for pure multipolarities are those due to the energy uncertainty.
[#] From (HI,xnγ).
[@] Doublet.
[&] From α(K)exp and α(L)exp in ^{120}Xe ε decay (1974Mu10). For γ's from (HI,xnγ) from DCO ratio and A_2,A_4 value in (HI,xnγ), and see the additional argument.

$\gamma(^{120}\mathrm{I})$ (continued)

[a] From (HI,xnγ).
[b] Multiply placed with undivided intensity.
[c] Multiply placed with intensity suitably divided.
[d] Placement of transition in the level scheme is uncertain.

$^{120}_{53}\mathrm{I}_{67}$-10

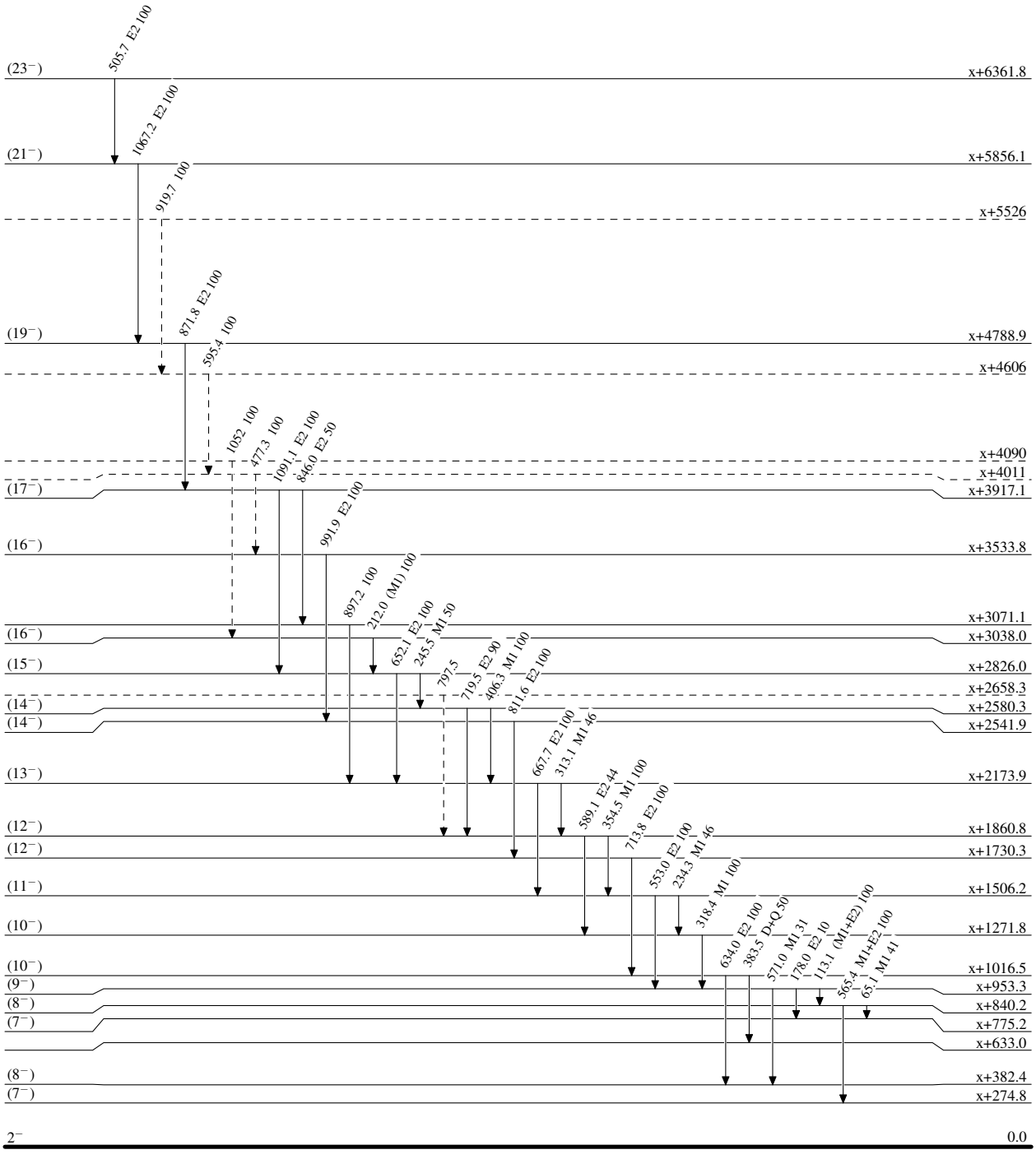
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

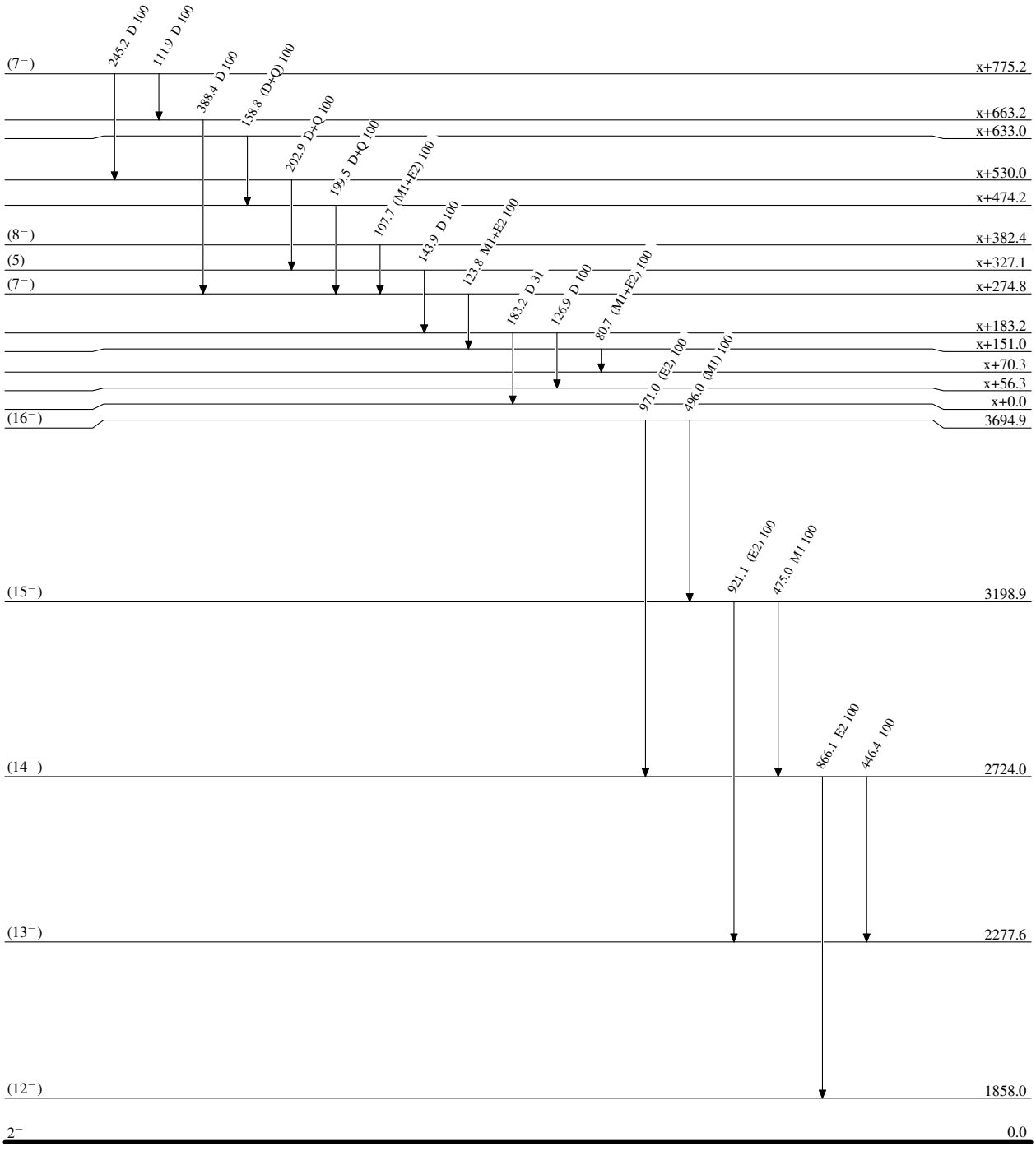


$^{120}_{53}I_{67}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

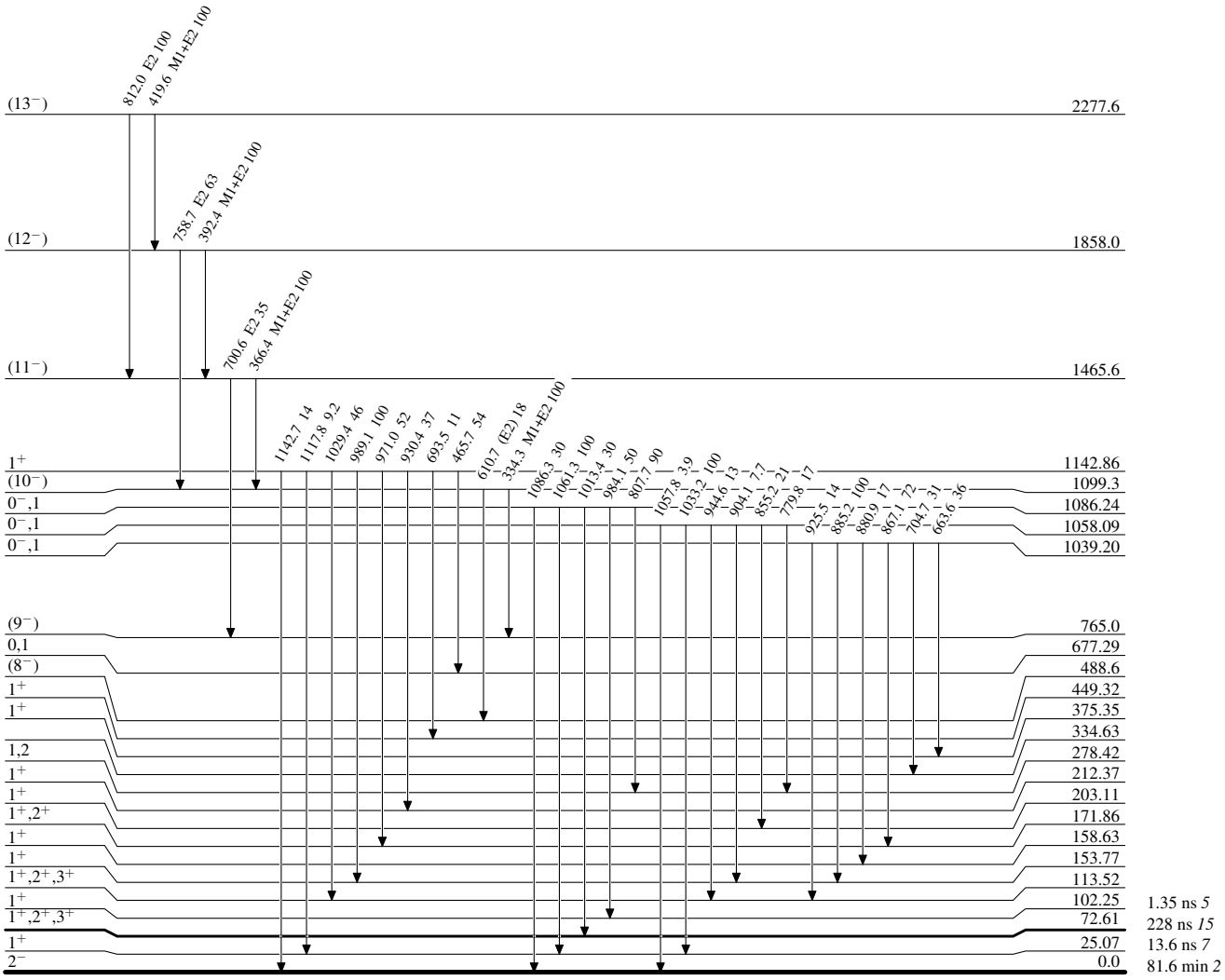


$^{120}_{53}I_{67}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

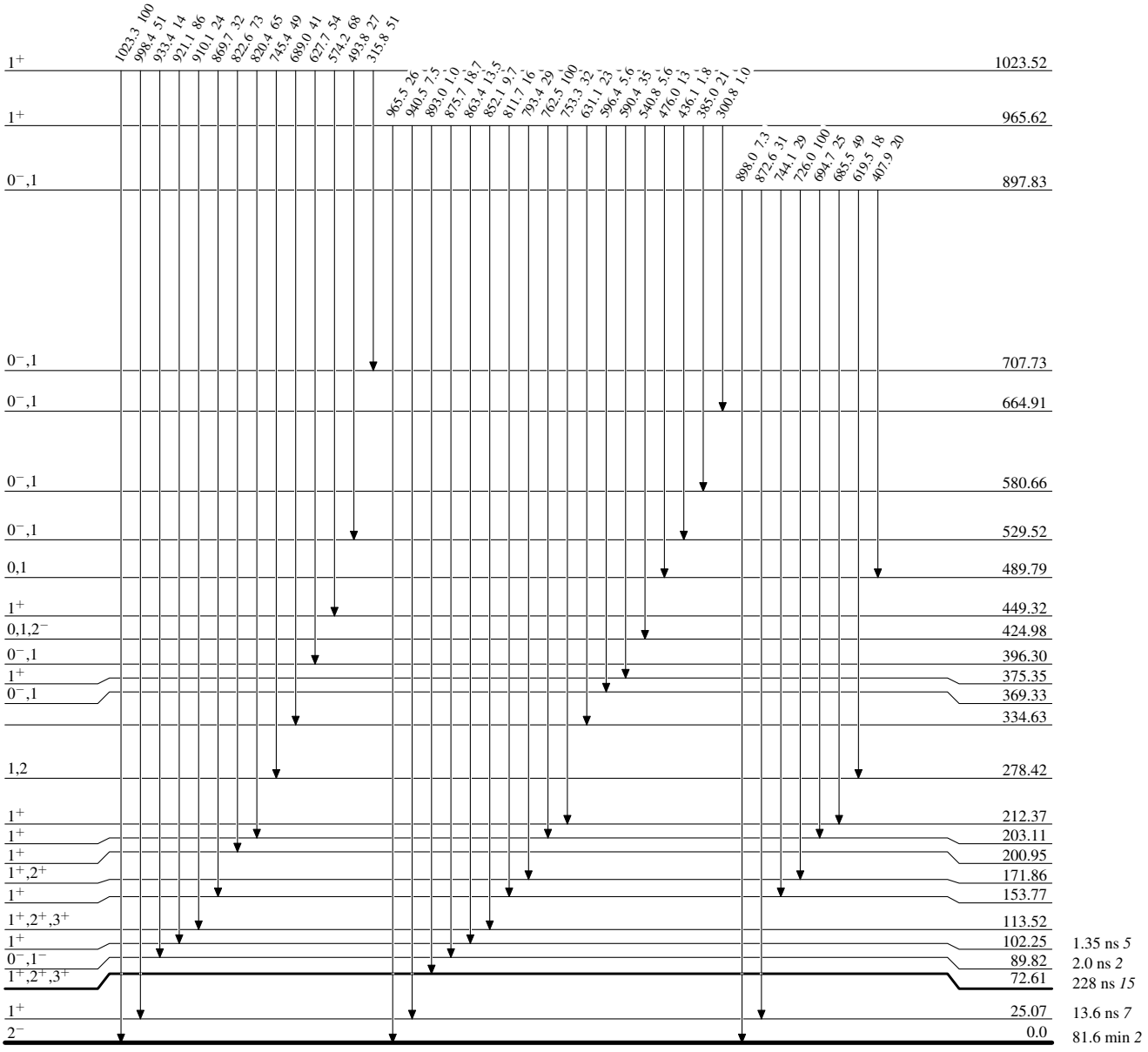


$^{120}_{53}I_{67}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

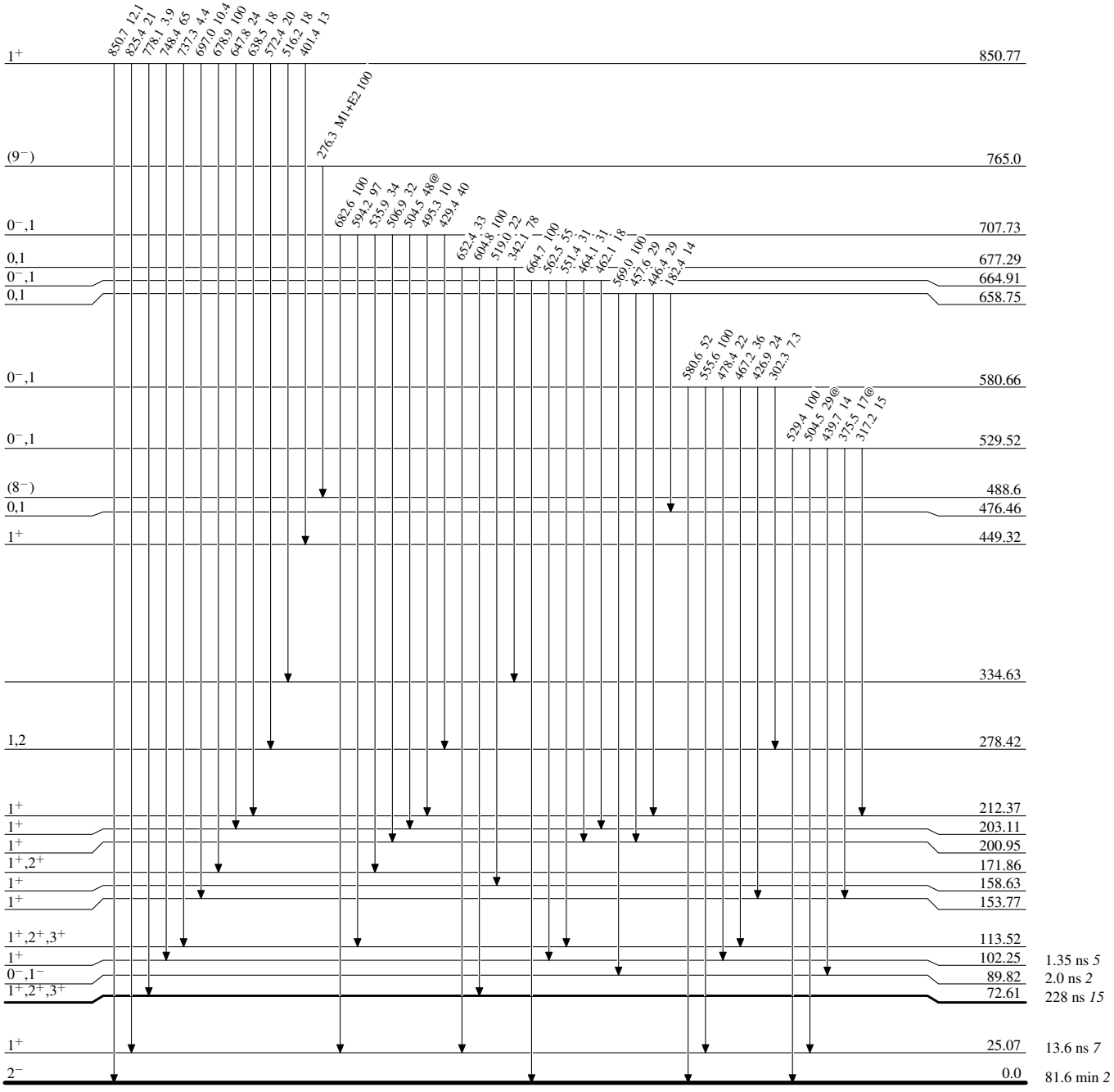


$^{120}_{53}I_{67}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
@ Multiply placed: intensity suitably divided

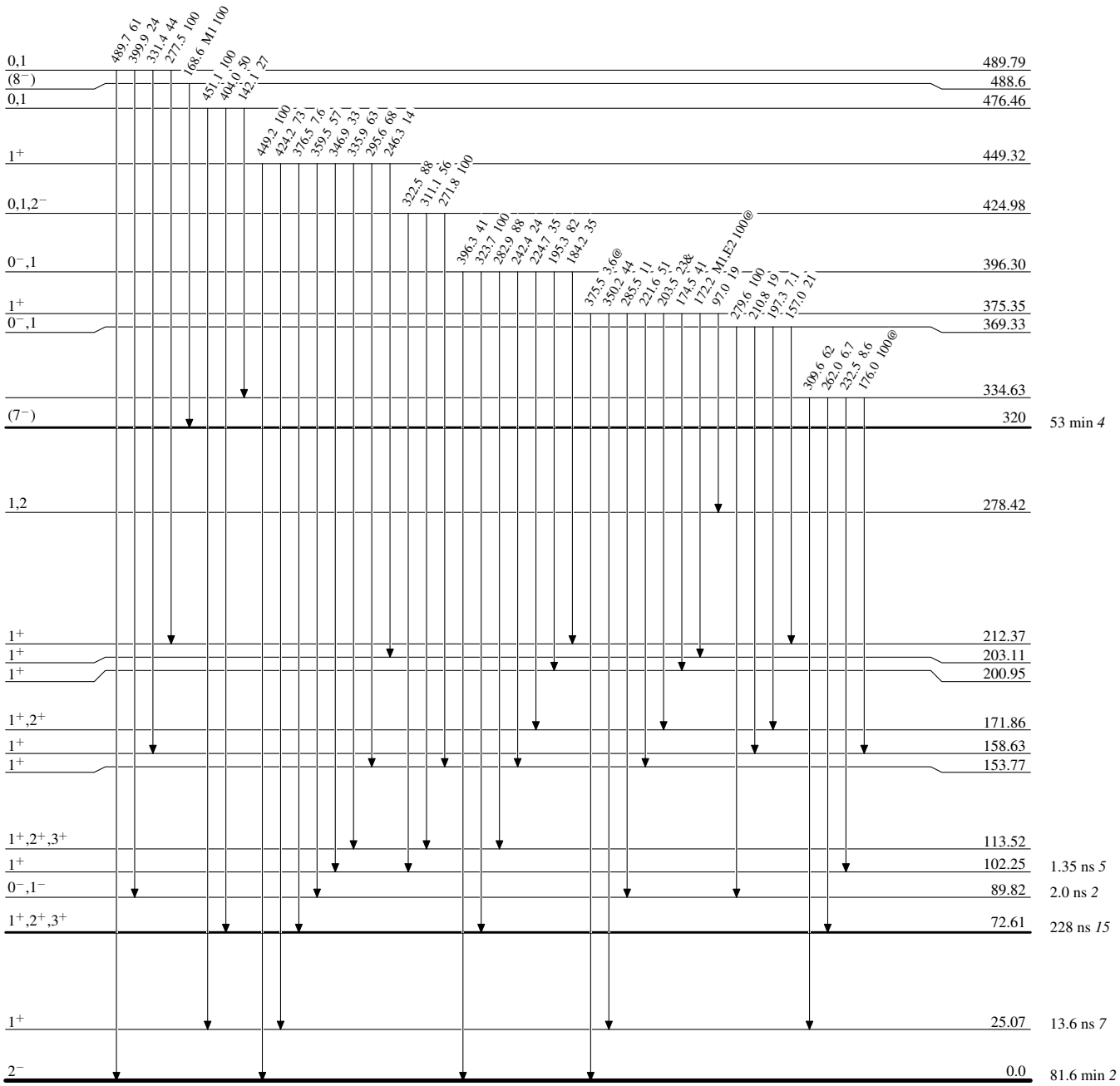


$^{120}_{53}I_{67}$

Adopted Levels, Gammas

Level Scheme (continued)

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



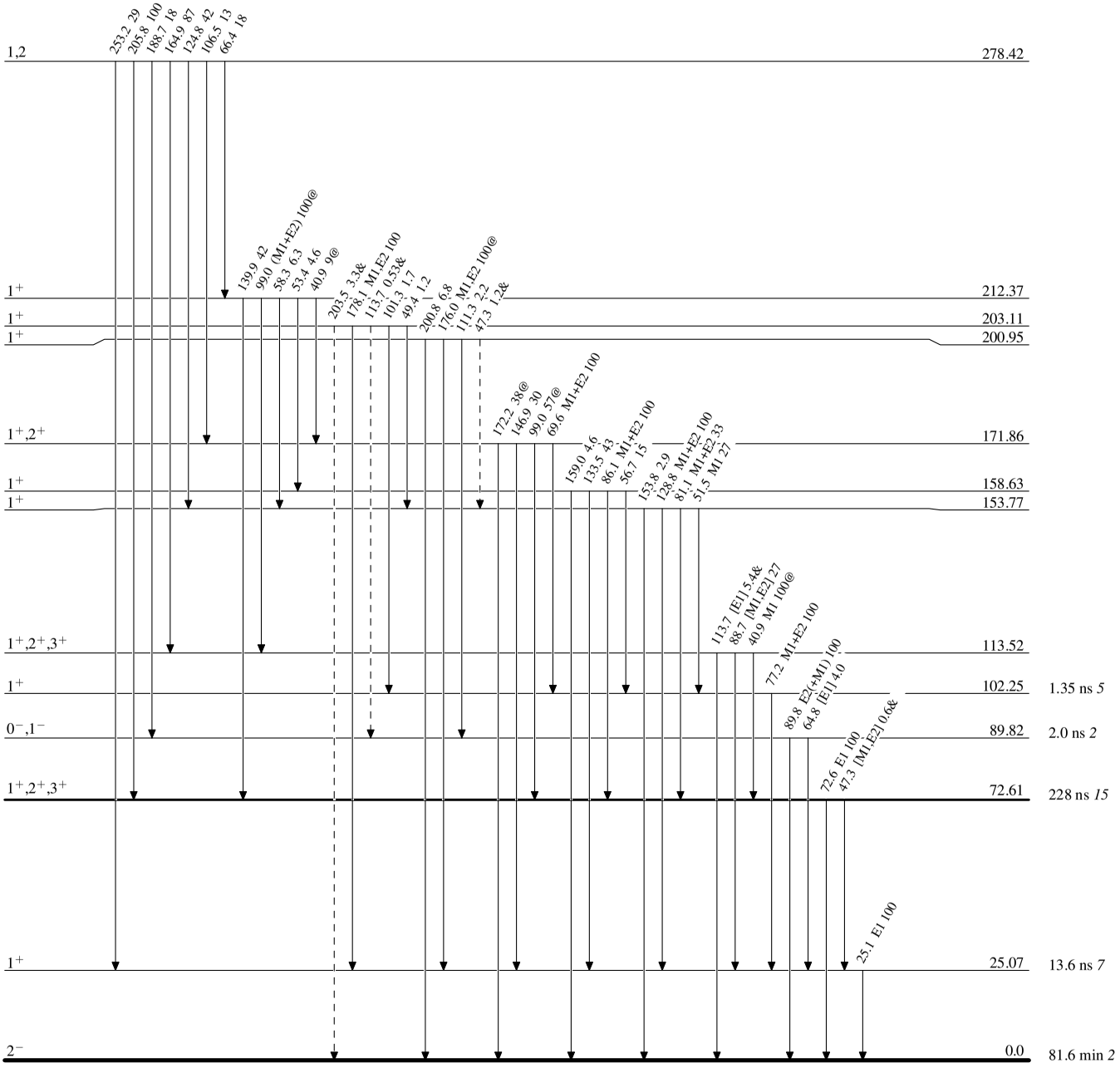
$^{120}_{53}I_{67}$

Adopted Levels, Gammas

Level Scheme (continued)

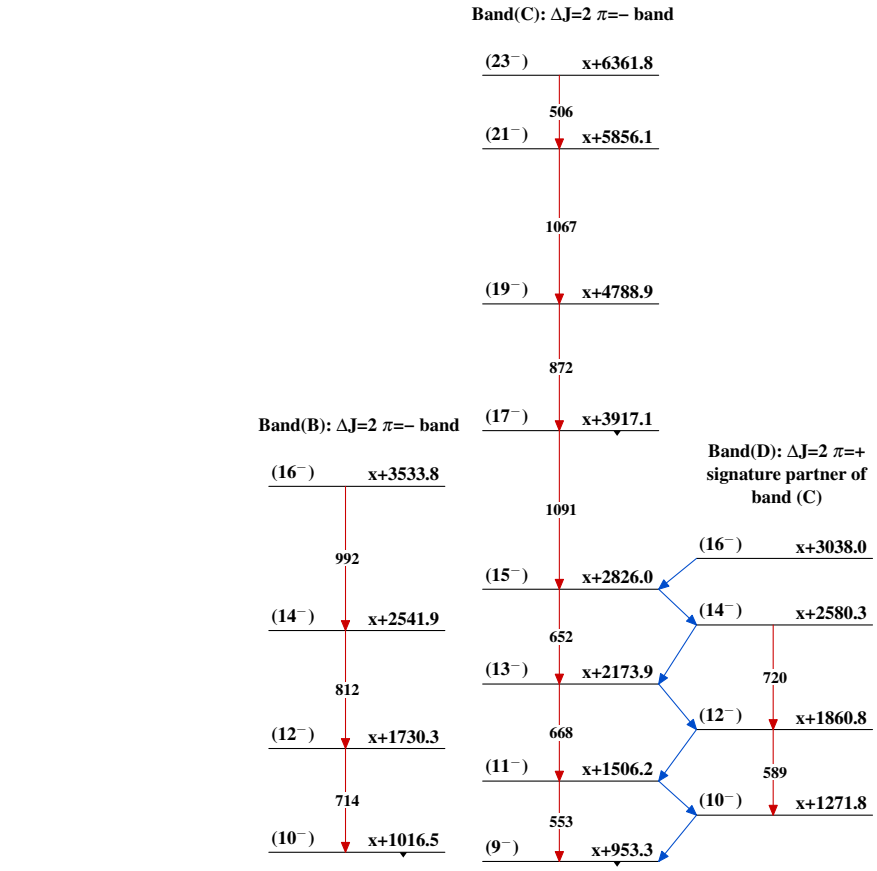
Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

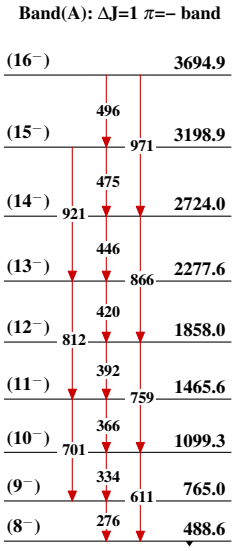
Legend
- - - - - - ► γ Decay (Uncertain)



$^{120}_{53}I_{67}$

Adopted Levels, Gammas





$^{120}_{53}I_{67}$