^{120}Xe ε decay 1974Mu10

History

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

Parent: ^{120}Xe: E=0.0; $J^\pi=0^+$; $T_{1/2}$=40 min *1*; Q(ε)=1960 *40*; %ε+%β^+ decay=100.0

1974Mu10: Ce(p,5pxnγ) E=600 MeV, on-line mass separation; semi γ, ce, $\gamma\gamma$, $\gamma\gamma$(t), (ce)(γ)(t).

The decay scheme, Eγ and Iγ values are the same as given in the previous evaluation (1987Ha32); however, mult and δ values for some γ's have changed and recalculated values based on revised spin-parity assignments are given.

^{120}I Levels

E(level)†	J^π‡	$T_{1/2}$#	Comments
0.0	2^-	81.6 min *2*	$T_{1/2}$: from Adopted Levels.
25.07 *8*	1^+	13.6 ns *7*	
72.61 *9*	$1^+,2^+,3^+$	228 ns *15*	
89.81 *10*	$0^-,1^-$	2.0 ns *2*	
102.25 *10*	1^+	1.35 ns *5*	
113.52 *9*	$1^+,2^+,3^+$		
153.77 *9*	1^+		
158.63 *11*	1^+		
171.86 *9*	$1^+,2^+$		
200.95 *12*	1^+		
203.11 *11*	1^+		
212.37 *10*	1^+		
278.42 *10*	1,2		
334.63 *12*			
369.33 *16*	0^-,1		
375.35 *11*	1^+		
396.30 *13*	0^-,1		
424.98 *19*	0,1,2^-		
449.32 *10*	1^+		
476.46 *17*	0,1		
489.79 *14*	0,1		
529.52 *14*	0^-,1		
580.66 *13*	0^-,1		
658.75 *18*	0,1		
664.91 *15*	0^-,1		
677.29 *16*	0,1		
707.73 *14*	0^-,1		
850.77 *12*	1^+		
897.83 *14*	0^-,1		
965.62 *10*	1^+		
1023.52 *11*	1^+		
1039.20 *17*	0^-,1		
1058.09 *18*	0^-,1		
1086.24 *17*	0^-,1		
1142.86 *15*	1^+		

† From a least-squares fit to E(γ's) by the evaluators.

‡ From Adopted Levels.

From $\gamma\gamma$(t) (1974Mu10), unless otherwise noted.

^{120}Xe ε decay 1974Mu10 (continued)

ε,β^+ radiations

E(decay)	E(level)	Iβ^+ †‡	Iε‡	Log *ft*	I(ε+β^+)‡	Comments
(8.2×10^2 *4*)	1142.86		1.85 *19*	5.47 *7*	1.85 *19*	εK=0.8495 *5*; εL=0.1186 *4*; εM+=0.03193 *12*
(8.7×10^2 *4*)	1086.24		0.26 *4*	6.38 *8*	0.26 *4*	εK=0.8501 *5*; εL=0.1181 *4*; εM+=0.03179 *11*
(9.0×10^2 *4*)	1058.09		0.75 *9*	5.95 *7*	0.75 *9*	εK=0.8504 *4*; εL=0.1179 *3*; εM+=0.03172 *10*
(9.2×10^2 *4*)	1039.20		0.85 *11*	5.92 *7*	0.85 *11*	εK=0.8505 *4*; εL=0.1178 *3*; εM+=0.03168 *9*
(9.4×10^2 *4*)	1023.52		2.39 *24*	5.48 *6*	2.39 *24*	εK=0.8507 *4*; εL=0.1177 *3*; εM+=0.03165 *9*
(9.9×10^2 *4*)	965.62		15.9 *16*	4.71 *6*	15.9 *16*	εK=0.8512 *4*; εL=0.11731 *25*; εM+=0.03153 *8*
(1.06×10^3 *4*)	897.83		1.36 *14*	5.84 *6*	1.36 *14*	εK=0.8516 *3*; εL=0.11694 *22*; εM+=0.03142 *7*
(1.11×10^3 *4*)	850.77		5.0 *5*	5.31 *6*	5.0 *5*	εK=0.8519 *3*; εL=0.11671 *20*; εM+=0.03135 *6*
(1.25×10^3 *4*)	707.73		1.80 *21*	5.87 *6*	1.80 *21*	εK=0.8524 *1*; εL=0.11609 *18*; εM+=0.03115 *6*
(1.28×10^3 *4*)	677.29		0.43 *8*	6.51 *9*	0.43 *8*	εK=0.8524 *3*; εL=0.11595 *19*; εM+=0.03111 *6*
(1.30×10^3 *4*)	664.91		0.97 *11*	6.16 *6*	0.97 *11*	εK=0.8523 *3*; εL=0.11590 *20*; εM+=0.03109 *6*
(1.30×10^3 *4*)	658.75		0.64 *8*	6.35 *7*	0.64 *8*	εK=0.8523 *4*; εL=0.11587 *20*; εM+=0.03108 *6*
(1.38×10^3 *4*)	580.66	0.006 *3*	2.6 *4*	5.79 *8*	2.6 *4*	av Eβ=169 *18*; εK=0.8514 *9*; εL=0.11546 *25*; εM+=0.03096 *8*
(1.43×10^3 *4*)	529.52	0.008 *4*	2.2 *3*	5.90 *7*	2.2 *3*	av Eβ=192 *18*; εK=0.8503 *13*; εL=0.1151 *3*; εM+=0.03087 *9*
(1.47×10^3 *4*)	489.79	0.0009 *6*	0.17 *9*	7.03 *24*	0.17 *9*	av Eβ=209 *18*; εK=0.8491 *17*; εL=0.1148 *4*; εM+=0.03079 *10*
(1.48×10^3 *4*)	476.46	0.0026 *11*	0.43 *7*	6.64 *8*	0.43 *7*	av Eβ=215 *18*; εK=0.8486 *18*; εL=0.1147 *4*; εM+=0.03076 *10*
(1.51×10^3 *4*)	449.32	0.046 *17*	6.2 *7*	5.50 *6*	6.2 *7*	av Eβ=227 *18*; εK=0.8474 *21*; εL=0.1145 *4*; εM+=0.03069 *11*
(1.54×10^3 *4*)	424.98	0.0009 *6*	0.10 *6*	7.3 *3*	0.10 *6*	av Eβ=237 *18*; εK=0.8462 *24*; εL=0.1143 *5*; εM+=0.03062 *12*
(1.56×10^3 *4*)	396.30	0.0047 *16*	0.43 *6*	6.69 *7*	0.43 *6*	av Eβ=250 *18*; εK=0.844 *3*; εL=0.1140 *5*; εM+=0.03054 *14*
(1.58×10^3 *4*)	375.35	0.019 *8*	1.5 *4*	6.16 *12*	1.5 *4*	av Eβ=259 *18*; εK=0.843 *3*; εL=0.1137 *5*; εM+=0.03047 *14*
(1.59×10^3 *4*)	369.33	0.0040 *14*	0.30 *6*	6.86 *9*	0.30 *6*	av Eβ=261 *18*; εK=0.843 *4*; εL=0.1136 *6*; εM+=0.03045 *15*
(1.75×10^3 *4*)	212.37	0.11 *4*	3.5 *11*	5.87 *14*	3.6 *11*	av Eβ=330 *18*; εK=0.827 *6*; εL=0.1112 *9*; εM+=0.02978 *23*
(1.76×10^3 *4*)	203.11	0.06 *3*	1.6 *9*	6.20 *24*	1.7 *9*	av Eβ=334 *18*; εK=0.826 *6*; εL=0.1110 *9*; εM+=0.02973 *23*
(1.76×10^3 *4*)	200.95	0.15 *5*	4.3 *12*	5.78 *12*	4.5 *12*	av Eβ=335 *18*; εK=0.826 *6*; εL=0.1110 *9*; εM+=0.02972 *23*
(1.80×10^3 *4*)	158.63	0.041 *18*	1.0 *4*	6.46 *18*	1.0 *4*	av Eβ=353 *18*; εK=0.820 *7*; εL=0.1101 *10*; εM+=0.0295 *3*
(1.81×10^3 *4*)	153.77	0.07 *3*	1.6 *6*	6.23 *16*	1.7 *6*	av Eβ=355 *18*; εK=0.819 *7*; εL=0.1100 *10*; εM+=0.0294 *3*
(1.86×10^3 *4*)	102.25	0.09 *7*	1.7 *12*	6.2 *4*	1.8 *13*	av Eβ=378 *18*; εK=0.810 *8*; εL=0.1087 *11*; εM+=0.0291 *3*
(1.87×10^3 *4*)	89.81	0.17 *5*	2.9 *8*	6.01 *12*	3.1 *8*	av Eβ=383 *18*; εK=0.808 *8*; εL=0.1084 *11*; εM+=0.0290 *3*
(1.93×10^3 *4*)	25.07	2.6 *7*	35 *8*	4.96 *11*	38 *9*	av Eβ=412 *18*; εK=0.796 *9*; εL=0.1066 *13*; εM+=0.0285 *4* Authors deduced I(β^+)/I(ε)=7% 1 for decay to 25.1 level.

† %Iβ=3 *1* (1975Ho03).
‡ Absolute intensity per 100 decays.

$\gamma(^{120}I)$

Iγ normalization: based on assumption of no decay to ^{120}I g.s., since I($\varepsilon+\beta^+$)(g.s.)<0.1% for log $f^{1u}t$>8.5.

E$_\gamma$[†]	I$_\gamma$[@]	E$_i$(level)	J$^\pi_i$	E$_f$	J$^\pi_f$	Mult.[#]	δ[#]	α[‡]	Comments
25.1 *2*	330 *35*	25.07	1$^+$	0.0	2$^-$	E1		1.54 *4*	α(L)=1.21; α(M)=0.242 α(L)exp=1.23 *10*; L1/(L2+L3)=0.90 *15*; L1:L2:L3=1:0.42:0.69 Mult.: from L-subshell ratios.
40.9[a] *2*	7.4[a] *22*	113.52	1$^+$,2$^+$,3$^+$	72.61	1$^+$,2$^+$,3$^+$	M1		10.1	α(K)=8.7 *3*; α(L)=1.15 *4*; α(M)=0.230 *7* α(L)exp=1.18 *20* given for a doubly placed G.
40.9[a] *2*	1.6[a] *5*	212.37	1$^+$	171.86	1$^+$,2$^+$	[M1]		10.1	α(K)=8.7 *3*; α(L)=1.15 *4*; α(M)=0.230 *7*
47.3[&] *3*	0.6[&] *1*	72.61	1$^+$,2$^+$,3$^+$	25.07	1$^+$	[M1,E2]		17 *11*	α(K)=7.4 *18*; α(L)=7 *7*; α(M)=1.6 *15*
47.3[&b] *3*	0.6[&] *1*	200.95	1$^+$	153.77	1$^+$				
49.4 *3*	0.9 *2*	203.11	1$^+$	153.77	1$^+$	[M1]		5.82	α(K)=4.99 *15*; α(L)=0.657 *20*; α(M)=0.132 *4*
51.5 *2*	4.8 *5*	153.77	1$^+$	102.25	1$^+$	M1		5.14	α(K)exp=4.1 *6* α(K)=4.42 *14*; α(L)=0.581 *18*; α(M)=0.117 *4*; α(N+..)=0.0286 *9*
53.4 *3*	0.8 *2*	212.37	1$^+$	158.63	1$^+$	[M1]		4.63	α(K)=3.97 *12*; α(L)=0.523 *16*; α(M)=0.105 *4*; α(N+..)=0.0257 *8*
56.7 *4*	1.0 *2*	158.63	1$^+$	102.25	1$^+$	[M1]		3.89	α(K)=3.34 *10*; α(L)=0.439 *14*; α(M)=0.088 *3*; α(N+..)=0.0216 *7*
58.3 *4*	1.1 *2*	212.37	1$^+$	153.77	1$^+$	[M1]		3.58	α(K)=3.08 *10*; α(L)=0.405 *13*; α(M)=0.0811 *25*; α(N+..)=0.0199 *6*
64.8 *3*	0.8 *1*	89.81	0$^-$,1$^-$	25.07	1$^+$	[E1]		0.686	α(K)=0.586 *18*; α(L)=0.0803 *24*; α(M)=0.0159 *5*; α(N+..)=0.00367 *11*
66.4 *3*	0.7 *1*	278.42	1,2	212.37	1$^+$				
69.6 *2*	10.5 *15*	171.86	1$^+$,2$^+$	102.25	1$^+$	M1+E2	0.31 *8*	2.52 *20*	α(K)exp=2.1 *3*; α(L)exp=0.42 *8* α(K)=1.99 *8*; α(L)=0.42 *10*; α(M)=0.087 *20*; α(N+..)=0.021 *5*
72.6 *2*	100	72.61	1$^+$,2$^+$,3$^+$	0.0	2$^-$	E1		0.500	α(K)exp=0.54 *10*; α(L)exp=0.089 *20* α(K)=0.428 *13*; α(L)=0.0579 *18*; α(M)=0.0115 *4*; α(N+..)=0.00266 *8*
77.2 *2*	44.0 *30*	102.25	1$^+$	25.07	1$^+$	M1+E2	0.41 *11*	2.00 *20*	α(K)exp=1.77 *25*; α(L)exp=0.34 *8* α(K)=1.55 *9*; α(L)=0.36 *9*; α(M)=0.074 *19*; α(N+..)=0.017 *5*
81.1 *2*	5.8 *5*	153.77	1$^+$	72.61	1$^+$,2$^+$,3$^+$	M1+E2	1.8 *5*	3.2 *4*	α(K)exp=1.90 *20*; α(L)exp=1.00 *20* α(K)=2.04 *16*; α(L)=0.91 *14*; α(M)=0.19 *3*; α(N+..)=0.044 *7* δ: deduced from >1.3 from α(L)exp and <2.3 from α(K)exp.
86.1 *2*	6.5 *5*	158.63	1$^+$	72.61	1$^+$,2$^+$,3$^+$	M1+E2	1.1 *+9−4*	2.2 *5*	α(K)exp=1.48 *25* α(K)=1.50 *24*; α(L)=0.54 *19*; α(M)=0.11 *4*; α(N+..)=0.026 *9*
88.7 *3*	2.0 *3*	113.52	1$^+$,2$^+$,3$^+$	25.07	1$^+$	[M1,E2]		1.9 *9*	α(K)=1.3 *5*; α(L)=0.4 *4*; α(M)=0.09 *7*; α(N+..)=0.021 *16*

γ(^{120}I) (continued)

E_γ[†]	I_γ[@]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[#]	δ[#]	α[‡]	Comments
89.8 2	19.9 20	89.81	0⁻,1⁻	0.0	2⁻	E2(+M1)	>2.0	2.44 16	α(K)exp=1.57 25; α(L)exp=0.69 10 α(K)=1.61 8; α(L)=0.66 6; α(M)=0.139 13; α(N+..)=0.032 3
97.0 3	2.1 3	375.35	1⁺	278.42	1,2				
99.0[a] 2	6.0[a] 12	171.86	1⁺,2⁺	72.61	1⁺,2⁺,3⁺	[M1+E2]		1.3 6	α(K)=1.0 3; α(L)=0.28 19; α(M)=0.06 4; α(N+..)=0.013 10
99.0[a] 2	17.5[a] 35	212.37	1⁺	113.52	1⁺,2⁺,3⁺	(M1+E2)	0.8 +6−4	1.2 3	α(K)=0.89 16; α(L)=0.24 11; α(M)=0.049 22; α(N+..)=0.011 5 α(K)exp=0.89 15, α(L)exp=0.25 7 given for a doubly placed G.
101.3 3	1.3 2	203.11	1⁺	102.25	1⁺	[M1+E2]		1.2 5	α(K)=0.9 3; α(L)=0.25 17; α(M)=0.05 4; α(N+..)=0.012 9
[x]105.0 3	0.3 1								
106.5 3	0.5 1	278.42	1,2	171.86	1⁺,2⁺				
111.3 3	1.1 2	200.95	1⁺	89.81	0⁻,1⁻	[E1]		0.151	α(K)=0.130 4; α(L)=0.0170 5; α(M)=0.00336 10; α(N+..)=0.00079 2
113.7[&] 3	0.4[&] 1	113.52	1⁺,2⁺,3⁺	0.0	2⁻	[E1]		0.143	α(K)=0.123 4; α(L)=0.0160 5; α(M)=0.00316 10; α(N+..)=0.00074 2
113.7[&b] 3	0.4[&] 1	203.11	1⁺	89.81	0⁻,1⁻				
124.8 3	1.6 2	278.42	1,2	153.77	1⁺				
128.8 2	17.5 15	153.77	1⁺	25.07	1⁺	M1+E2	>0.7	0.60 12	α(K)exp=0.49 10 α(K)=0.46 8; α(L)=0.11 4; α(M)=0.024 8; α(N+..)=0.0055 18
133.5 2	2.8 3	158.63	1⁺	25.07	1⁺	[M1+E2]		0.49 16	α(K)=0.38 10; α(L)=0.08 5; α(M)=0.017 10; α(N+..)=0.0041 23
139.9 2	7.3 6	212.37	1⁺	72.61	1⁺,2⁺,3⁺	[M1+E2]		0.42 13	α(K)=0.33 8; α(L)=0.07 4; α(M)=0.014 8; α(N+..)=0.0034 18
142.1 3	0.8 1	476.46	0,1	334.63		[M1+E2]		0.40 12	α(K)=0.31 8; α(L)=0.07 4; α(M)=0.014 8; α(N+..)=0.0032 17
146.9 2	3.1 3	171.86	1⁺,2⁺	25.07	1⁺	[M1+E2]		0.36 10	α(K)=0.28 7; α(L)=0.06 3; α(M)=0.012 7; α(N+..)=0.0028 14
153.8 3	0.5 1	153.77	1⁺	0.0	2⁻	[E1]		0.0612	α(K)=0.0528 16; α(L)=0.00673 21; α(M)=0.00134 4; α(N+..)=0.00032 1
157.0 3	0.9 1	369.33	0⁻,1	212.37	1⁺				
159.0 3	0.3 1	158.63	1⁺	0.0	2⁻	[E1]		0.0558	α(K)=0.0482 15; α(L)=0.00612 19; α(M)=0.00122 4; α(N+..)=0.00029 1
164.9 2	3.3 3	278.42	1,2	113.52	1⁺,2⁺,3⁺				
172.2[a] 2	4.0[a] 8	171.86	1⁺,2⁺	0.0	2⁻	[E1]		0.0447	α(K)=0.0386 12; α(L)=0.00488 15; α(M)=0.00098 3; α(N+..)=0.00023 1
172.2[a] 2	11.0[a] 22	375.35	1⁺	203.11	1⁺	M1,E2		0.21 5	α(K)=0.17 4; α(L)=0.032 14; α(M)=0.007 3; α(N+..)=0.0016 7 α(K)exp=0.17 4 given for a doubly placed G.
174.5 4	4.5 15	375.35	1⁺	200.95	1⁺	[M1+E2]		0.20 5	α(K)=0.17 3; α(L)=0.030 13; α(M)=0.006 3; α(N+..)=0.0015 6
176.0[a] 3	50[a] 10	200.95	1⁺	25.07	1⁺	M1,E2		0.20 5	α(K)=0.16 3; α(L)=0.030 13; α(M)=0.006 3;

γ(^{120}I) (continued)

Eγ[†]	Iγ[@]	Ei(level)	J^π_i	E_f	J^π_f	Mult.[#]	α[‡]	Comments
								α(N+..)=0.0014 6 α(K)exp=0.15 4 given for a doubly placed G.
176.0[a] 3	10.5[a] 21	334.63		158.63	1+			
178.1 2	75 6	203.11	1+	25.07	1+	M1,E2	0.19 4	α(K)exp=0.16 4 α(K)=0.16 3; α(L)=0.028 12; α(M)=0.0058 25; α(N+..)=0.0014 6
182.4 3	0.6 1	658.75	0,1	476.46	0,1	[M1+E2]	0.18 4	α(K)=0.145 24; α(L)=0.026 11; α(M)=0.0053 22; α(N+..)=0.0013 5
184.2 3	0.6 1	396.30	0−,1	212.37	1+			
188.7 3	0.7 1	278.42	1,2	89.81	0−,1−			
195.3 3	1.4 1	396.30	0−,1	200.95	1+			
197.3 3	0.3 1	369.33	0−,1	171.86	1+,2+			
200.8 2	3.4 4	200.95	1+	0.0	2−	[E1]	0.0292	α(K)=0.0253 8; α(L)=0.00317 10; α(M)=0.00063 2; α(N+..)=0.00015 1
203.5[&b] 3	2.5[&] 3	203.11	1+	0.0	2−			
203.5[&] 3	2.5[&] 3	375.35	1+	171.86	1+,2+	[M1+E2]	0.126 21	α(K)=0.104 14; α(L)=0.018 6; α(M)=0.0036 13; α(N+..)=0.0009 3
205.8 3	3.8 4	278.42	1,2	72.61	1+,2+,3+			
[x]208.8 3	1.2 3							
210.8 3	0.8 2	369.33	0−,1	158.63	1+			
221.6 2	5.6 6	375.35	1+	153.77	1+	[M1+E2]	0.097 14	α(K)=0.080 9; α(L)=0.013 4; α(M)=0.0027 9; α(N+..)=0.00064 19
224.7 3	0.6 1	396.30	0−,1	171.86	1+,2+			
232.5 3	0.9 1	334.63		102.25	1+			
[x]236.3 3	0.6 1							
242.4 3	0.4 1	396.30	0−,1	153.77	1+			
246.3 2	2.6 3	449.32	1+	203.11	1+			
253.2 3	1.1 1	278.42	1,2	25.07	1+			
262.0 3	0.7 1	334.63		72.61	1+,2+,3+			
271.8 3	1.6 2	424.98	0,1,2−	153.77	1+			
277.5 3	4.1 4	489.79	0,1	212.37	1+			
279.6 3	4.2 4	369.33	0−,1	89.81	0−,1−			
282.9 3	1.5 2	396.30	0−,1	113.52	1+,2+,3+			
285.5 3	1.2 1	375.35	1+	89.81	0−,1−			
295.6 2	12.5 15	449.32	1+	153.77	1+			
300.8 3	0.5 1	965.62	1+	664.91	0−,1			
302.3 3	1.2 1	580.66	0−,1	278.42	1,2			
309.6 3	6.5 10	334.63		25.07	1+			
311.1 3	0.9 1	424.98	0,1,2−	113.52	1+,2+,3+			
315.8 3	1.9 2	1023.52	1+	707.73	0−,1			
317.2 3	2.3 2	529.52	0−,1	212.37	1+			
322.5 4	1.4 2	424.98	0,1,2−	102.25	1+			
323.7 4	1.7 3	396.30	0−,1	72.61	1+,2+,3+			
331.4 4	1.8 2	489.79	0,1	158.63	1+			
335.9 2	11.6 16	449.32	1+	113.52	1+,2+,3+			
342.1 3	2.8 4	677.29	0,1	334.63				
346.9 3	6.0 10	449.32	1+	102.25	1+			
350.2 3	4.8 5	375.35	1+	25.07	1+			

From ENSDF

γ(^{120}I) (continued)

E_γ[†]	I_γ[@]	E_i(level)	J_i^π	E_f	J_f^π
359.5 2	10.5 15	449.32	1^+	89.81	$0^-,1^-$
[x]365.7 3	1.2 1				
375.5[a] 4	0.4[a] 1	375.35	1^+	0.0	2^-
375.5[a] 4	2.6[a] 8	529.52	$0^-,1$	153.77	1^+
376.5 5	1.4 4	449.32	1^+	72.61	$1^+,2^+,3^+$
385.0 3	10.5 12	965.62	1^+	580.66	$0^-,1$
[x]390.6 3	0.8 1				
396.3 3	0.7 2	396.30	$0^-,1$	0.0	2^-
399.9 3	1.0 2	489.79	0,1	89.81	$0^-,1^-$
401.4 3	2.4 3	850.77	1^+	449.32	1^+
404.0 3	1.5 2	476.46	0,1	72.61	$1^+,2^+,3^+$
407.9 3	1.1 1	897.83	$0^-,1$	489.79	0,1
[x]412.4 3	0.5 1				
424.2 3	13.5 15	449.32	1^+	25.07	1^+
426.9 3	3.9 5	580.66	$0^-,1$	153.77	1^+
429.4 3	2.5 3	707.73	$0^-,1$	278.42	1,2
436.1 3	0.9 1	965.62	1^+	529.52	$0^-,1$
439.7 3	2.1 2	529.52	$0^-,1$	89.81	$0^-,1^-$
446.4 4	1.2 2	658.75	0,1	212.37	1^+
449.2 2	18.4 20	449.32	1^+	0.0	2^-
451.1 3	3.0 5	476.46	0,1	25.07	1^+
457.6 3	1.2 1	658.75	0,1	200.95	1^+
462.1 3	0.9 1	664.91	$0^-,1$	203.11	1^+
464.1 4	1.5 2	664.91	$0^-,1$	200.95	1^+
465.7 4	3.5 4	1142.86	1^+	677.29	0,1
467.2 4	5.9 6	580.66	$0^-,1$	113.52	$1^+,2^+,3^+$
[x]472.4 3	0.5 1				
476.0 3	6.4 7	965.62	1^+	489.79	0,1
478.4 3	3.7 5	580.66	$0^-,1$	102.25	1^+
[x]481.4 3	1.7 2				
489.7 3	2.5 3	489.79	0,1	0.0	2^-
493.8 3	1.0 1	1023.52	1^+	529.52	$0^-,1$
495.3 4	0.6 2	707.73	$0^-,1$	212.37	1^+
504.5[a] 5	4.5[a] 14	529.52	$0^-,1$	25.07	1^+
504.5[a] 5	3.0[a] 9	707.73	$0^-,1$	203.11	1^+
506.9 5	2.0 5	707.73	$0^-,1$	200.95	1^+
516.2 4	3.3 5	850.77	1^+	334.63	
519.0 3	0.8 1	677.29	0,1	158.63	1^+
529.4 3	15.3 16	529.52	$0^-,1$	0.0	2^-
535.9 3	2.1 2	707.73	$0^-,1$	171.86	$1^+,2^+$
540.8 4	2.8 5	965.62	1^+	424.98	$0,1,2^-$
551.4 3	1.5 2	664.91	$0^-,1$	113.52	$1^+,2^+,3^+$
555.6 3	16.5 20	580.66	$0^-,1$	25.07	1^+
562.5 3	2.7 3	664.91	$0^-,1$	102.25	1^+
569.0 3	4.2 5	658.75	0,1	89.81	$0^-,1^-$
572.4 4	3.7 6	850.77	1^+	278.42	1,2
574.2 4	2.5 5	1023.52	1^+	449.32	1^+
[x]576.9 4	1.0 3				
580.6 3	8.6 9	580.66	$0^-,1$	0.0	2^-
590.4 3	17.5 20	965.62	1^+	375.35	1^+
594.2 3	6.0 7	707.73	$0^-,1$	113.52	$1^+,2^+,3^+$
596.4 4	2.8 4	965.62	1^+	369.33	$0^-,1$
604.8 3	3.6 4	677.29	0,1	72.61	$1^+,2^+,3^+$
619.5 3	1.0 1	897.83	$0^-,1$	278.42	1,2
627.7 3	2.0 2	1023.52	1^+	396.30	$0^-,1$
631.1 3	11.6 14	965.62	1^+	334.63	
638.5 3	3.3 4	850.77	1^+	212.37	1^+
647.8 3	4.3 6	850.77	1^+	203.11	1^+
652.4 3	1.2 2	677.29	0,1	25.07	1^+
[x]656.7 3	2.7 3				
663.6 5	1.3 3	1039.20	$0^-,1$	375.35	1^+
664.7 4	4.9 6	664.91	$0^-,1$	0.0	2^-
678.9 2	18.2 17	850.77	1^+	171.86	$1^+,2^+$
682.6 3	6.2 7	707.73	$0^-,1$	25.07	1^+
685.5 3	2.7 3	897.83	$0^-,1$	212.37	1^+
689.0 3	1.5 2	1023.52	1^+	334.63	
693.5 4	0.7 2	1142.86	1^+	449.32	1^+
694.7 4	1.4 3	897.83	$0^-,1$	203.11	1^+
697.0 4	1.9 2	850.77	1^+	153.77	1^+
704.7 3	1.1 2	1039.20	$0^-,1$	334.63	
[x]707.0 3	0.4 1				
726.0 3	5.5 5	897.83	$0^-,1$	171.86	$1^+,2^+$
737.3 3	0.8 1	850.77	1^+	113.52	$1^+,2^+,3^+$
744.1 5	1.6 3	897.83	$0^-,1$	153.77	1^+
745.4 5	1.8 3	1023.52	1^+	278.42	1,2
748.4 4	11.8 12	850.77	1^+	102.25	1^+
753.3 3	16.1 13	965.62	1^+	212.37	1^+
762.5 3	50.4 45	965.62	1^+	203.11	1^+
778.1 5	0.7 1	850.77	1^+	72.61	$1^+,2^+,3^+$
779.8 5	0.9 1	1058.09	$0^-,1$	278.42	1,2
793.4 3	14.5 17	965.62	1^+	171.86	$1^+,2^+$
[x]803.4 4	0.9 1				
807.7 3	0.9 1	1086.24	$0^-,1$	278.42	1,2
811.7 3	8.1 9	965.62	1^+	153.77	1^+
820.4 4	2.4 4	1023.52	1^+	203.11	1^+
822.6 4	2.7 4	1023.52	1^+	200.95	1^+

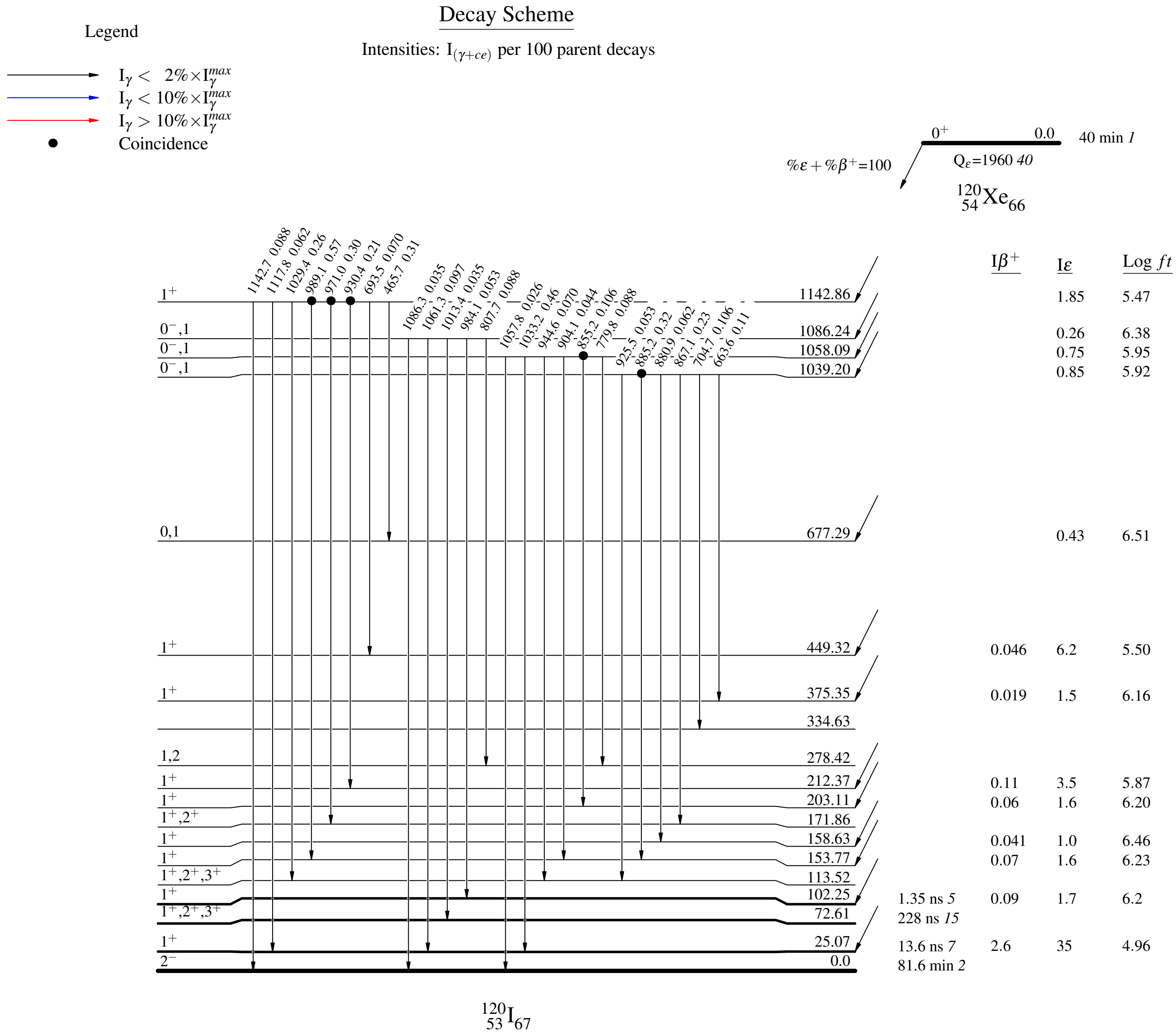
^{120}Xe ε decay 1974Mu10 (continued)

γ(^{120}I) (continued)

E_γ[†]	I_γ[@]	E_i(level)	J_i^π	E_f	J_f^π
825.4 *4*	3.9 *5*	850.77	1^+	25.07	1^+
850.7 *4*	2.2 *2*	850.77	1^+	0.0	2^-
852.1 *4*	4.9 *6*	965.62	1^+	113.52	$1^+,2^+,3^+$
855.2 *4*	1.1 *2*	1058.09	0^-,1	203.11	1^+
863.4 *3*	6.8 *7*	965.62	1^+	102.25	1^+
867.1 *4*	2.6 *4*	1039.20	0^-,1	171.86	$1^+,2^+$
869.7 *4*	1.2 *2*	1023.52	1^+	153.77	1^+
872.6 *3*	1.7 *2*	897.83	0^-,1	25.07	1^+
875.7 *3*	9.4 *10*	965.62	1^+	89.81	$0^-,1^-$
880.9 *3*	0.6 *2*	1039.20	0^-,1	158.63	1^+
[x]884.0 *4*	1.2 *2*				
885.2 *4*	3.6 *5*	1039.20	0^-,1	153.77	1^+
893.0 *4*	0.5 *1*	965.62	1^+	72.61	$1^+,2^+,3^+$
898.0 *4*	0.4 *1*	897.83	0^-,1	0.0	2^-
[x]900.1 *4*	0.5 *1*				
904.1 *4*	0.4 *1*	1058.09	0^-,1	153.77	1^+
910.1 *4*	0.9 *1*	1023.52	1^+	113.52	$1^+,2^+,3^+$
921.1 *3*	3.2 *4*	1023.52	1^+	102.25	1^+
925.5 *4*	0.5 *1*	1039.20	0^-,1	113.52	$1^+,2^+,3^+$
930.4 *4*	2.4 *3*	1142.86	1^+	212.37	1^+
933.4 *4*	0.5 *1*	1023.52	1^+	89.81	$0^-,1^-$
940.5 *3*	3.8 *5*	965.62	1^+	25.07	1^+
944.6 *4*	0.7 *1*	1058.09	0^-,1	113.52	$1^+,2^+,3^+$
965.5 *3*	13.3 *13*	965.62	1^+	0.0	2^-
971.0 *3*	3.4 *4*	1142.86	1^+	171.86	$1^+,2^+$
984.1 *4*	0.5 *1*	1086.24	0^-,1	102.25	1^+
989.1 *3*	6.5 *6*	1142.86	1^+	153.77	1^+
998.4 *3*	1.9 *2*	1023.52	1^+	25.07	1^+
1013.4 *4*	0.3 *1*	1086.24	0^-,1	72.61	$1^+,2^+,3^+$
1023.3 *3*	3.7 *5*	1023.52	1^+	0.0	2^-
1029.4 *4*	3.0 *4*	1142.86	1^+	113.52	$1^+,2^+,3^+$
1033.2 *4*	5.2 *5*	1058.09	0^-,1	25.07	1^+
1057.8 *4*	0.2 *1*	1058.09	0^-,1	0.0	2^-
1061.3 *3*	1.0 *1*	1086.24	0^-,1	25.07	1^+
1086.3 *4*	0.3 *1*	1086.24	0^-,1	0.0	2^-
1117.8 *4*	0.6 *1*	1142.86	1^+	25.07	1^+
1142.7 *4*	0.9 *2*	1142.86	1^+	0.0	2^-

[†] From 1974Mu10.
[‡] All α(L)exp and α(K)exp are renormalized to α(L)(E1)=1.21 for 25.1γ.
[#] From α(K)exp and/or α(L)exp.
[@] For absolute intensity per 100 decays, multiply by 0.088 *8*.
[&] Multiply placed with undivided intensity.
[a] Multiply placed with intensity suitably divided.
[b] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

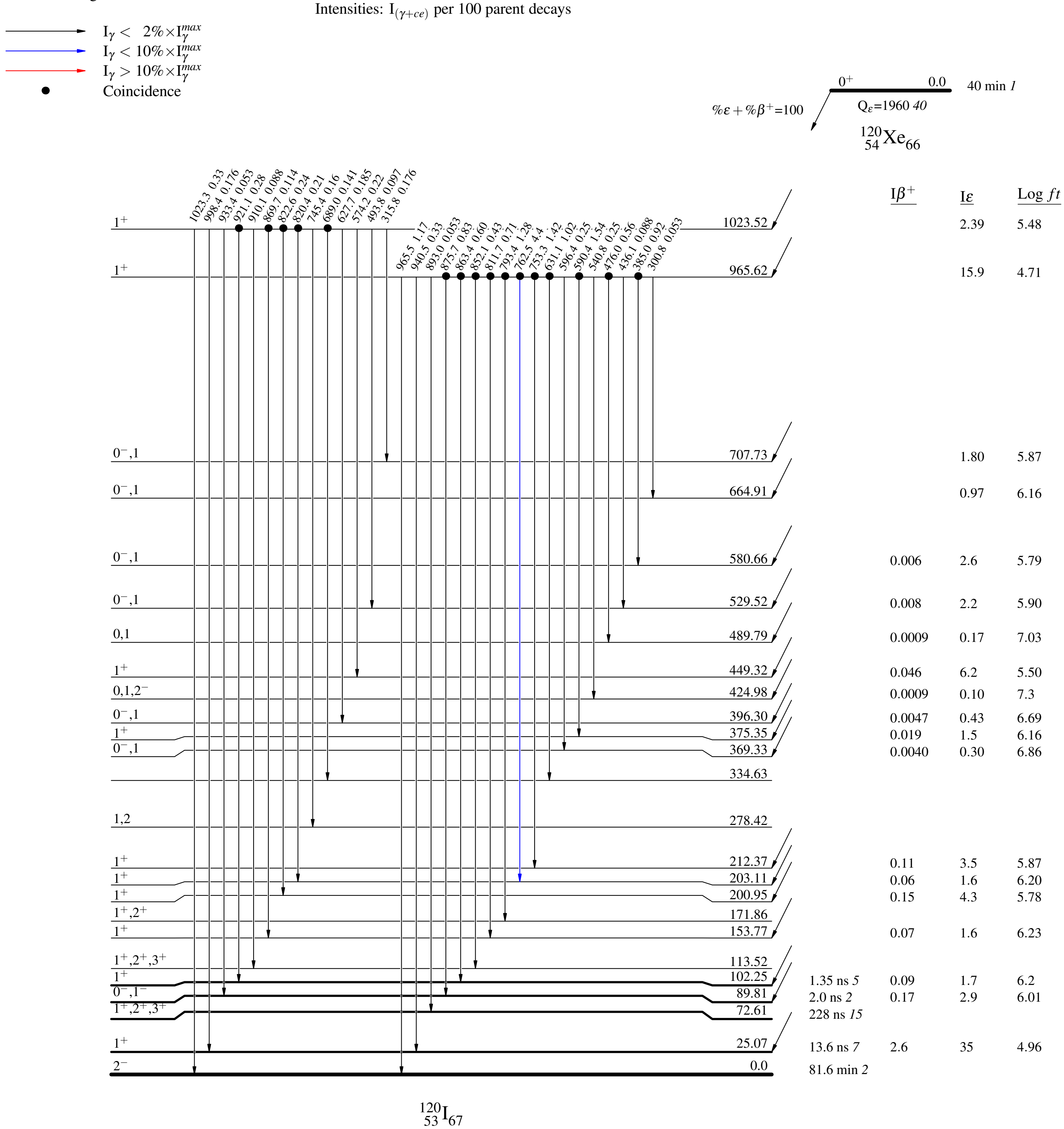
^{120}Xe ε decay 1974Mu10



^{120}Xe ε decay 1974Mu10

Decay Scheme (continued)

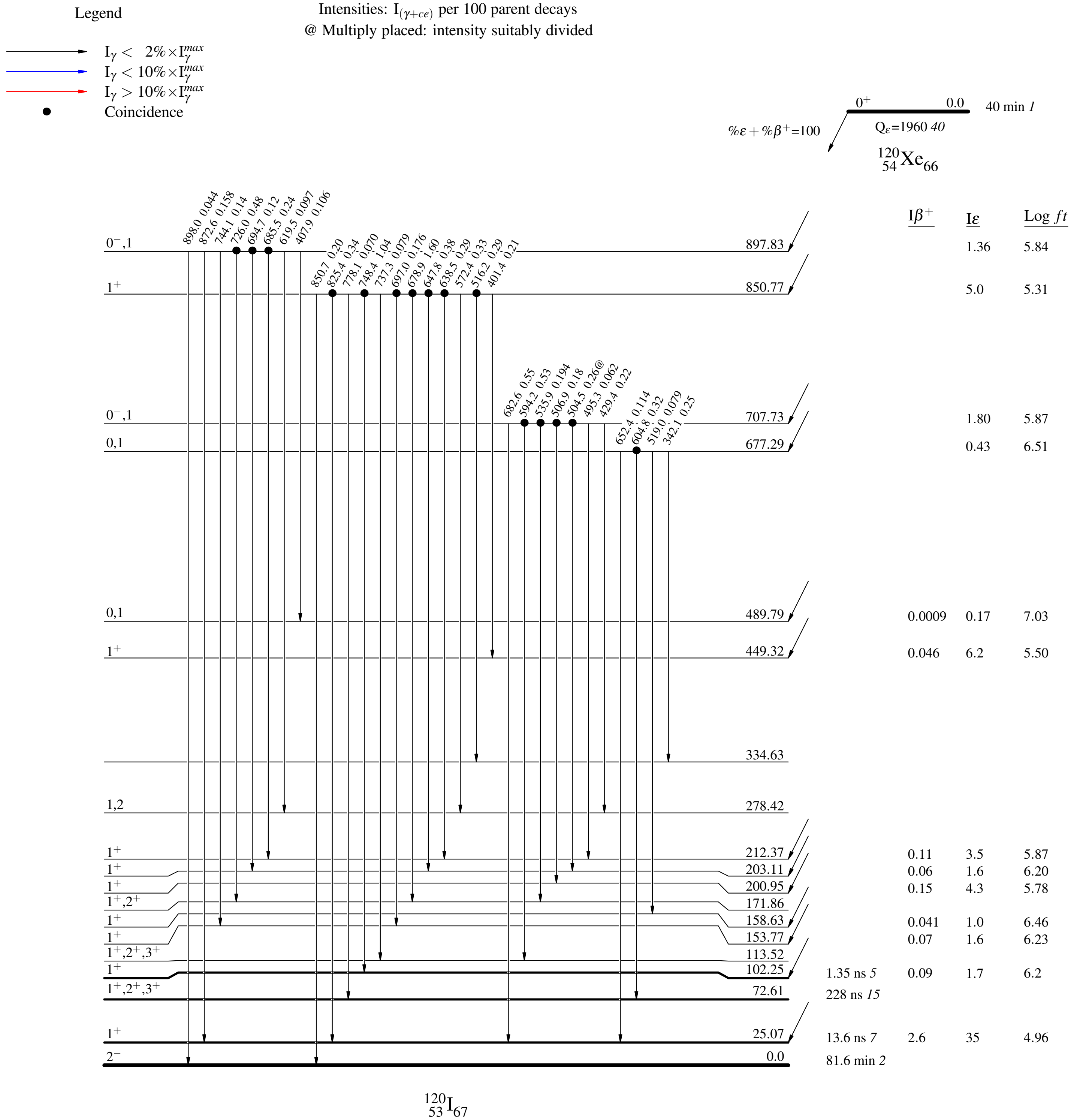
Intensities: $I_{(\gamma+ce)}$ per 100 parent decays



^{120}Xe ε decay 1974Mu10

Decay Scheme (continued)

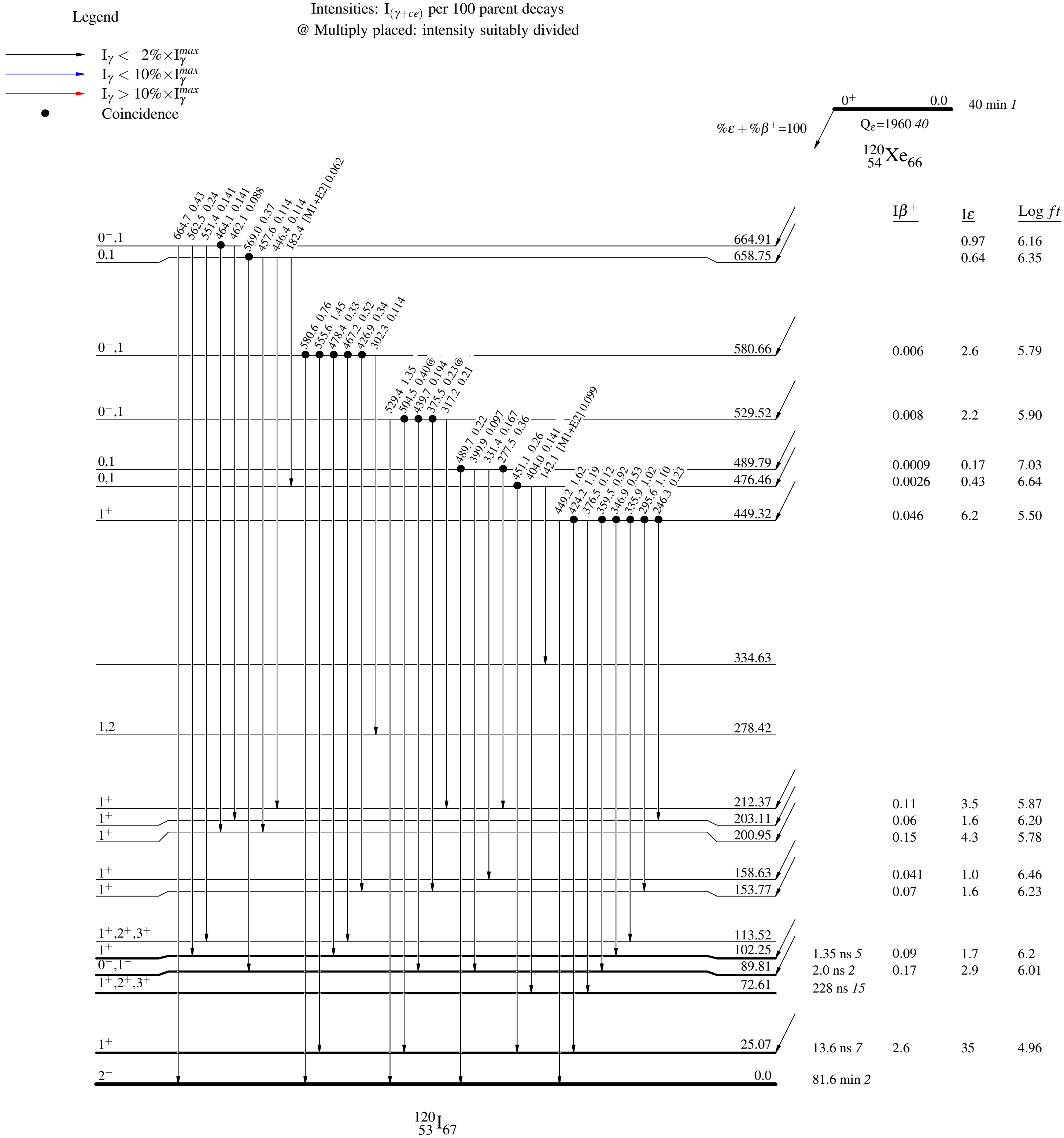
Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
@ Multiply placed: intensity suitably divided



^{120}Xe ε decay 1974Mu10

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
@ Multiply placed: intensity suitably divided



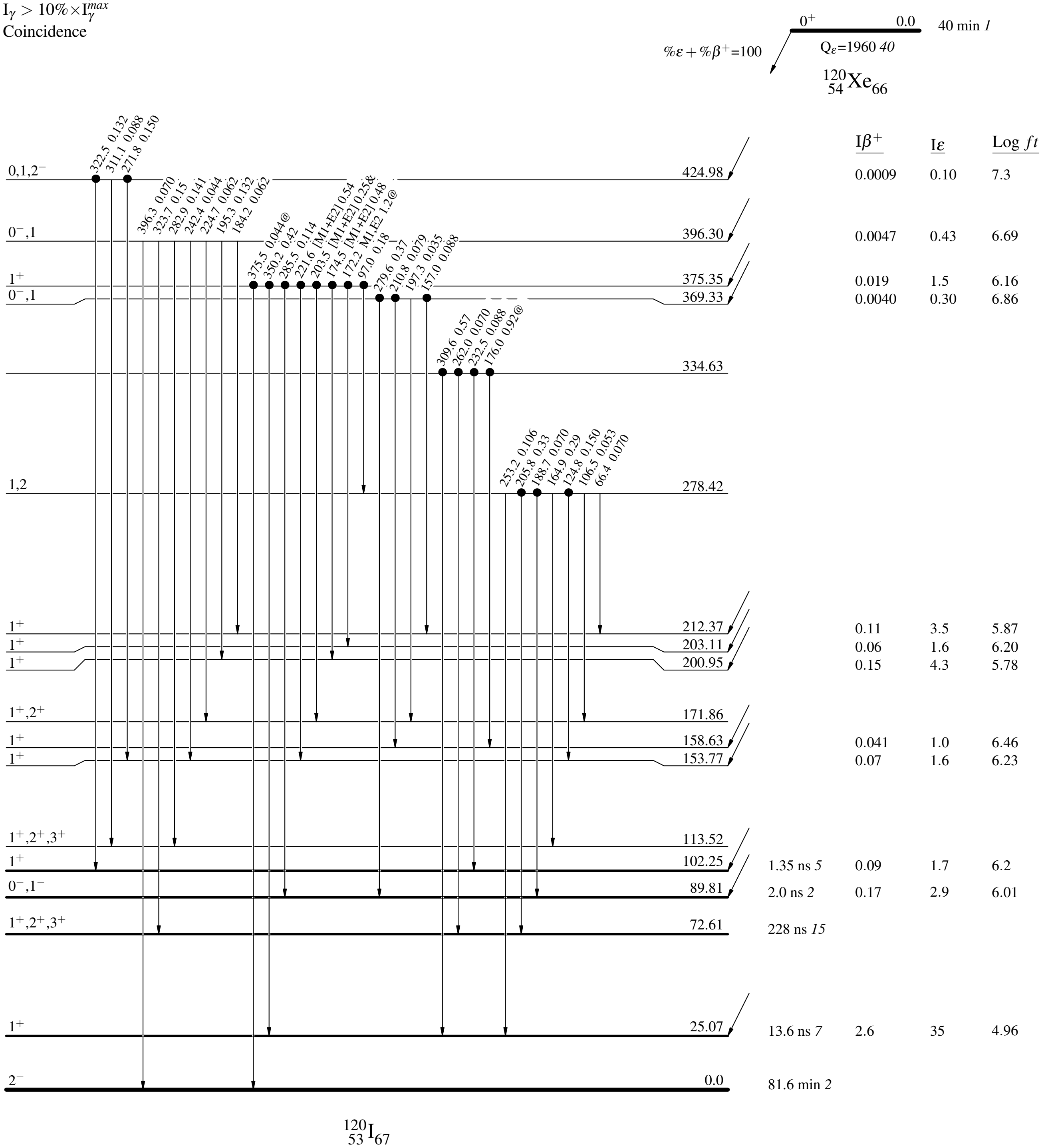
^{120}Xe ε decay 1974Mu10

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

Legend

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



^{120}Xe ε decay 1974Mu10

Decay Scheme (continued)