^{93}Nb(n,γ) E=thermal:secondary 1985Bo48,1968Ju01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni	NDS 107, 2423 (2006)	1-Jan-2006

1985Bo48: measured γ (bent-crystal spectrometer, Ge(Li)), conversion coefficients ce measured with an iron-core electron spectrometer.

1968Ju01: Ge(Li), NaI. Measured Eγ, Iγ, $\gamma\gamma$.

1988Ke09: studied primary transitions using a pair spectrometer. The authors also studied E$\gamma\leq$3 MeV and find their results in excellent agreement with 1985Bo48 and therefore do not present those data. 1988Ke09 found that Eγ values of 1968Ju01 are sometimes higher by as much as 2 keV.

1965Gr10: bent-crystal spectrometer.

1971Ch16: Ge(Li). tof, FWHM=8 keV. Measured Eγ, Iγ, E(n).

1972De67: Si(Li), FWHM=290 eV at 6.4 keV.

The decay scheme up to 1281 level is from 1985Bo48 based on $\gamma\gamma$ work of 1968Ju01, 1976Fe10. Decay of higher levels (13 levels out of total of 52) is from 1968Ju01 with γ rays tentatively assigned.

^{94}Nb Levels

E(level)[†]	J$^\pi$[#]	T$_{1/2}$[‡]
0.0	6$^+$	
40.891 *12*	3$^+$	
58.708 *10*	(4)$^+$	
78.6683 *8*	(7)$^+$	
113.4009 *8*	(5)$^+$	<5 ns
140.298 *12*	(2)$^-$	30 ns *5*
301.558 *12*	(2)$^-$	
311.821 *10*	(4,5)$^+$	
334.102 *12*	(3)$^+$	
396.227 *12*	(3)$^-$	<5 ns
450.204 *14*	(3)$^-$	
631.533 *13*	(4)$^+$	
640.988 *10*	(5)$^+$	
666.11 *3*	(3)$^+$	
785.657 *25*	(3)$^+$	
792.595 *16*	(3,4)$^+$	
816.83 *3*	(3)$^-$	
895.650 *14*	(3$^+$,4$^-$)	
924.252 *25*	(2$^+$)	
932.70 *3*		
936.036 *20*	+	
957.36 *3*	(5)$^+$	
970.161 *15*		
976.76 *4*		
1010.8 *3*		
1023.35 *4*		
1030.190 *17*		
1061.223 *23*	4$^+$,5$^+$	
1085.954 *19*	(2$^+$,3,4)	
1158.71 *4*		
1169.88 *6*	4$^+$,5$^+$	
1179.61 *6*		
1230.10 *7*		
1231.92 *3*	(2,3,4)$^+$	
1247.26 *7*		
1256.85 *10*	+	
1262.82 *7*	(3,4$^-$)	
1272.83 *4*		
1281.44 *11*	4$^+$,5$^+$	
1323.41 *15*	4$^+$,5$^+$	
1332.6 *3*	(3$^+$,4,5$^+$)	
1346.69 *15*		
1519.0 *10*	−	
1655.09 *17*		
1731.4 *13*		
1779.72 *5*	+	
1859.75 *11*		
2033.6 *3*		
2284.9 *4*		
2355.3 *14*		
2401.1 *10*		
2442.3 *15*		

† From least-squares fit to Eγ(secondary and primary (1988Ke09)).

‡ From $\gamma\gamma$(t) (1971Gu05).

\# From Adopted Levels, which agree fairly well with values given by 1985Bo48 and 1968Ju01.

γ(^{94}Nb)

E_γ[a]	I_γ[†c]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[b]	δ[b]	α[d]	Comments
17.98 *7*	5.10 *17*	58.708	(4)$^+$	40.891	3$^+$	(M1)		4.31	α=4.31; α(L)=3.49; α(M)=0.617
40.90 *5*	0.045 *10*	40.891	3$^+$	0.0	6$^+$	M3		1.33×10^3	α(K)exp=789 *11* α=1.33×10^3; α(K)=764 *23*; α(L)=451 *14*; α(M)=88 *3*
45.89 *5*	0.015 *3*	970.161		924.252	(2$^+$)				
46.55 *5*	0.034 *3*	1023.35		976.76					
^{x}47.63 *5*	0.027 *3*								
^{x}48.03 *5*	0.026 *3*								
^{x}49.8 *5*	0.009 *2*								
^{x}54.425 *4*	0.38 *7*								
54.706 *13*	0.606 *4*	113.4009	(5)$^+$	58.708	(4)$^+$	M1+E2	0.31	2.05	α=2.05; α(K)=1.65 *5*; α(L)=0.329 *10*; α(M)=0.0587 *18*; α(N+..)=0.0095 *3*
^{x}56.486 *7*	0.555 *25*								
^{x}57.244 *10*	0.34 *17*								
^{x}57.544 *6*	0.90 *4*								
^{x}57.89 *5*	0.243 *16*								
^{x}59.21 *7*	0.190 *12*								
^{x}61.15[f] *5*	0.102 *9*								
^{x}64.99 *4*	0.160 *12*								
^{x}65.29 *4*	0.173 *12*								
^{x}67.533 *4*	0.146 *11*								
71.42 *10*	0.053 *7*	1230.10		1158.71					
^{x}71.842 *5*	0.200 *11*								
78.6683 *8*	2.42 *8*	78.6683	(7)$^+$	0.0	6$^+$	M1		0.445	α(K)exp=0.370 *10* α=0.445; α(K)=0.390 *12*; α(L)=0.0459 *14*; α(M)=0.00814 *25*; α(N+..)=0.00146 *5*
99.4074 *9*	20.3 *4*	140.298	(2)$^-$	40.891	3$^+$	E1		0.122	α(K)exp=0.108 *8* α=0.122; α(K)=0.107 *4*; α(L)=0.0122 *4*; α(M)=0.00214 *7*; α(N+..)=0.00037 *1*
^{x}103.41 *10*	0.071 *8*								
104.20 *10*	0.063 *7*	1262.82	(3,4$^-$)	1158.71					
^{x}108.108 *9*	0.116 *13*								
^{x}110.8510 *4*	0.147 *8*								
113.4007 *8*	10.65 *24*	113.4009	(5)$^+$	0.0	6$^+$	M1		0.160	α(K)exp=0.148 *7* α=0.160; α(K)=0.140 *5*; α(L)=0.0164 *5*; α(M)=0.00290 *9*; α(N+..)=0.00052 *2*
118.72 *8*	0.060 *5*	1179.61		1061.223	4$^+$,5$^+$				
125.183 *16*	0.034 *4*	1061.223	4$^+$,5$^+$	936.036	$^+$				
127.67[e] *15*	0.022[e] *5*	1023.35		895.650	(3$^+$,4$^-$)				
127.67[ef] *15*	0.022[e] *5*	1061.223	4$^+$,5$^+$	932.70					
134.54 *1*	0.187 *8*	1030.190		895.650	(3$^+$,4$^-$)				
135.34 *3*	0.30 *9*	1158.71		1023.35					
137.48[&#f] *4*	0.28[&]	1061.223	4$^+$,5$^+$	924.252	(2$^+$)				

From ENSDF

γ(^{94}Nb) (continued)

E$_γ$[a]	I$_γ$[†c]	E$_i$(level)	J^π_i	E$_f$	J^π_f	Mult.[b]	δ[b]	α[d]	Comments
138.614[#] *8*	0.92 *18*	924.252	(2$^+$)	785.657	(3)$^+$				
140.10 *3*	0.3 *2*	932.70		792.595	(3,4)$^+$				
142.65 *12*	0.029 *4*	936.036	$^+$	792.595	(3,4)$^+$				
145.90 *4*	0.143 *6*	1231.92	(2,3,4)$^+$	1085.954	(2$^+$,3,4)				
146.87 *15*	0.033 *8*	932.70		785.657	(3)$^+$				
148.69 *11*	0.008 *3*	450.204	(3)$^-$	301.558	(2)$^-$				
149.837[@f] *12*	0.14 *4*	1085.954	(2$^+$,3,4)	936.036	$^+$				
150.707 *24*	0.123 *6*	816.83	(3)$^-$	666.11	(3)$^+$				
153.64 *11*	0.020 *8*	1085.954	(2$^+$,3,4)	932.70					
^{x}156.13 *8*	0.034 *4*								
161.261 *2*	1.31 *8*	301.558	(2)$^-$	140.298	(2)$^-$				
190.42 *7*	0.064 *5*	1085.954	(2$^+$,3,4)	895.650	(3$^+$,4$^-$)				
194.1 *3*	0.011 *6*	1010.8		816.83	(3)$^-$				
229.90 *15*	0.044 *8*	895.650	(3$^+$,4$^-$)	666.11	(3)$^+$				
253.113 *5*	9.25 *6*	311.821	(4,5)$^+$	58.708	(4)$^+$	E2		0.0417	α(K)exp=0.033 *12* α=0.0417; α(K)=0.0356 *11*; α(L)=0.00462 *14*; α(N+..)=0.00014 *1*
^{x}254.85 *14*	0.5 *3*								
255.929 *2*	12.4 *4*	396.227	(3)$^-$	140.298	(2)$^-$	M1+E2	0.40	0.0216	α(K)exp=0.020 *18* α=0.0216; α(K)=0.0186 *6*; α(L)=0.00220 *7*
263.21 *7*	0.063 *7*	1158.71		895.650	(3$^+$,4$^-$)				
267.85 *7*	0.136 *25*	1061.223	4$^+$,5$^+$	792.595	(3,4)$^+$				
270.46 *7*	0.496 *17*	1247.26		976.76					
293.205 *4*	4.48 *16*	334.102	(3)$^+$	40.891	3$^+$	M1,E2		0.019 *6*	α(K)exp=0.019 *33* α=0.019 *6*; α(K)=0.016 *5*; α(L)=0.0020 *7*
303.43 *11*	0.142 *10*	936.036	$^+$	631.533	(4)$^+$				
309.914 *8*	4.64 *3*	450.204	(3)$^-$	140.298	(2)$^-$				
316.51 *3*	0.10 *8*	957.36	(5)$^+$	640.988	(5)$^+$				
319.62 *13*	0.204 *8*	631.533	(4)$^+$	311.821	(4,5)$^+$				
329.174[e] *13*	0.83[e] *3*	640.988	(5)$^+$	311.821	(4,5)$^+$				
329.174[ef] *13*	0.83[e] *3*	970.161		640.988	(5)$^+$				
^{x}330.98 *7*	0.033 *9*								
332.33 *15*	0.063 *6*	1256.85	$^+$	924.252	(2$^+$)				
337.529 *8*	4.09 *15*	396.227	(3)$^-$	58.708	(4)$^+$				
338.73 *7*	0.230 *12*	970.161		631.533	(4)$^+$				
355.36 *5*	0.473 *25*	396.227	(3)$^-$	40.891	3$^+$				
^{x}360.45 *6*	0.16 *4*								
366.10 *25*	0.029 *8*	1158.71		792.595	(3,4)$^+$				
367.11 *25*	0.042 *8*	1262.82	(3,4$^-$)	895.650	(3$^+$,4$^-$)				
^{x}374.03 *8*	0.036 *8*								
377.32[ef] *8*	0.101[e] *9*	1169.88	4$^+$,5$^+$	792.595	(3,4)$^+$				
377.32[ef] *8*	0.101[e] *9*	1272.83		895.650	(3$^+$,4$^-$)				

$^{94}_{41}$Nb$_{53}$-3

γ(^{94}Nb) (continued)

E_γ[a]	I_γ[†c]	E_i(level)	J_i^π	E_f	J_f^π
381.84 *25*	0.121 *9*	1023.35		640.988	$(5)^+$
396.4 *5*	0.052 *9*	792.595	$(3,4)^+$	396.227	$(3)^-$
399.1 *5*	0.053 *9*	1030.190		631.533	$(4)^+$
409.26 *15*	0.091 *12*	450.204	$(3)^-$	40.891	3^+
413.02 *18*	0.092 *9*	1230.10		816.83	$(3)^-$
437.73 *25*	0.067 *8*	1230.10		792.595	$(3,4)^+$
[x]443.55 *25*	0.072 *11*				
451.04[#f] *15*	0.202 *10*	1346.69		895.650	$(3^+,4^-)$
454.3[ef] *5*	0.184[e] *10*	1085.954	$(2^+,3,4)$	631.533	$(4)^+$
454.3[ef] *5*	0.184[e] *10*	1247.26		792.595	$(3,4)^+$
455.96 *4*	0.605 *9*	1272.83		816.83	$(3)^-$
458.464 *11*	1.64 *5*	792.595	$(3,4)^+$	334.102	$(3)^+$
482.64 *7*	0.145 *11*	816.83	$(3)^-$	334.102	$(3)^+$
484.36 *3*	0.44 *5*	785.657	$(3)^+$	301.558	$(2)^-$
[x]491.41 *17*	0.063 *11*				
499.426 *8*	4.42 *7*	895.650	$(3^+,4^-)$	396.227	$(3)^-$
518.117 *14*	4.07 *15*	631.533	$(4)^+$	113.4009	$(5)^+$
525.77 *5*	0.56 *5*	666.11	$(3)^+$	140.298	$(2)^-$
527.574 *24*	0.85 *5*	640.988	$(5)^+$	113.4009	$(5)^+$
[x]530.75 *25*	0.134 *10*				
[x]535.24 *25*	0.052 *11*				
538.34[ef] *25*	0.048[e] *10*	1169.88	$4^+,5^+$	631.533	$(4)^+$
538.34[ef] *25*	0.048[e] *10*	1179.61		640.988	$(5)^+$
547.76 *10*	0.299 *16*	1179.61		631.533	$(4)^+$
552.76[ef] *16*	0.084[e] *14*	631.533	$(4)^+$	78.6683	$(7)^+$
552.76[ef] *16*	0.084[e] *14*	666.11	$(3)^+$	113.4009	$(5)^+$
[x]561.93 *6*	0.227 *9*				
562.341 *14*	2.00 *2*	640.988	$(5)^+$	78.6683	$(7)^+$
572.8[ef] *5*	0.121[e] *12*	631.533	$(4)^+$	58.708	$(4)^+$
572.8[ef] *5*	0.121[e] *12*	1023.35		450.204	$(3)^-$
583.79 *12*	0.094 *10*	895.650	$(3^+,4^-)$	311.821	$(4,5)^+$
590.60 *5*	0.63 *4*	631.533	$(4)^+$	40.891	3^+
598.8[ef] *5*	0.144[e] *10*	932.70		334.102	$(3)^+$
598.8[ef] *5*	0.144[e] *10*	1230.10		631.533	$(4)^+$
600.5[@] *5*	0.217 *13*	1231.92	$(2,3,4)^+$	631.533	$(4)^+$
612.3 *5*	0.072 *12*	924.252	(2^+)	311.821	$(4,5)^+$
622.3 *10*	0.062 *10*	924.252	(2^+)	301.558	$(2)^-$
[x]624.1 *10*	0.075 *11*				
[x]627.64 *7*	0.126 *11*				
635.99[ef] *4*	0.445[e] *2*	970.161		334.102	$(3)^+$

E_γ[a]	I_γ[†c]	E_i(level)	J_i^π	E_f	J_f^π
635.99[ef] *4*	0.445[e] *2*	1085.954	$(2^+,3,4)$	450.204	$(3)^-$
[x]638.74 *7*	0.26 *6*				
641.05 *6*	0.345 *11*	640.988	$(5)^+$	0.0	6^+
642.59 *5*	0.444 *25*	976.76		334.102	$(3)^+$
645.19 *25*	0.153 *11*	785.657	$(3)^+$	140.298	$(2)^-$
[x]656.5 *5*	0.067 *10*				
658.2 *5*	0.096 *11*	970.161		311.821	$(4,5)^+$
[x]663.11 *15*	0.187 *14*				
672.5 *5*	0.173 *12*	785.657	$(3)^+$	113.4009	$(5)^+$
[x]683.03 *22*	0.35 *3*				
[x]685.56 *15*	0.161 *12*				
689.907 *24*	1.23 *6*	1085.954	$(2^+,3,4)$	396.227	$(3)^-$
693.76[#f] *5*	0.614 *2*	1779.72	$^+$	1085.954	$(2^+,3,4)$
696.17 *25*	0.101 *11*	1030.190		334.102	$(3)^+$
[x]705.86 *25*	0.123 *16*				
711.56 *18*	0.147 *11*	1023.35		311.821	$(4,5)^+$
718.4 *5*	0.057 *11*	1030.190		311.821	$(4,5)^+$
[x]721.20 *23*	0.202 *12*				
734.2 *4*	0.093 *10*	792.595	$(3,4)^+$	58.708	$(4)^+$
[x]735.2 *4*	0.200 *11*				
748.40 *25*	0.216 *13*	1061.223	$4^+,5^+$	311.821	$(4,5)^+$
751.78 *7*	0.932 *6*	792.595	$(3,4)^+$	40.891	3^+
755.28 *7*	0.85 *6*	895.650	$(3^+,4^-)$	140.298	$(2)^-$
[x]761.9 *3*	0.127 *18*				
[x]771.17 *10*	0.052 *13*				
775.99 *6*	1.10 *7*	816.83	$(3)^-$	40.891	3^+
782.57[ef] *25*	0.43[e] *4*	895.650	$(3^+,4^-)$	113.4009	$(5)^+$
782.57[ef] *25*	0.43[e] *4*	1179.61		396.227	$(3)^-$
[x]791.8 *5*	0.111 *12*				
801.7[#f] *3*	0.115 *13*	2033.6		1231.92	$(2,3,4)^+$
812.46 *13*	0.59 *5*	1262.82	$(3,4^-)$	450.204	$(3)^-$
[x]820.73 *15*	0.158 *11*				
822.5 *5*	0.128 *10*	1272.83		450.204	$(3)^-$
835.72 *3*	2.58 *13*	1231.92	$(2,3,4)^+$	396.227	$(3)^-$
[x]844.37 *25*	0.083 *13*				
[x]849.17 *15*	0.111 *14*				
851.3 *4*	0.142 *12*	1247.26		396.227	$(3)^-$
854.4 *4*	0.155 *13*	932.70		78.6683	$(7)^+$
[x]857.31 *21*	0.178 *12*				
876.41 *11*	0.50 *4*	936.036	$^+$	58.708	$(4)^+$

From ENSDF

$\gamma(^{94}Nb)$ (continued)

E_γ[a]	I_γ[†c]	E_i(level)	J_i^π	E_f	J_f^π
878.85 *10*	1.36 *8*	957.36	$(5)^+$	78.6683	$(7)^+$
[x]879.75 *14*	0.51 *4*				
883.8 *6*	1.34 *8*	924.252	(2^+)	40.891	3^+
[x]888.7 *4*	0.084 *19*				
[x]890.7 *4*	0.130 *18*				
894.24 *5*	1.32 *8*	936.036	$^+$	40.891	3^+
897.0[@f] *1*	0.99 *5*	957.36	$(5)^+$	58.708	$(4)^+$
[x]901.23 *25*	0.104 *19*				
911.56 *9*	1.23 *8*	970.161		58.708	$(4)^+$
932.9 *5*	0.13 *2*	932.70		0.0	6^+
[x]935.9 *5*	0.29 *3*				
944.55 *15*	0.52 *5*	1023.35		78.6683	$(7)^+$
[x]946.84 *3*	3.28 *17*				
950.9 *4*	0.172 *15*	1262.82	$(3,4^-)$	311.821	$(4,5)^+$
957.34 *5*	1.79 *10*	957.36	$(5)^+$	0.0	6^+
964.79 *15*	0.118 *20*	1023.35		58.708	$(4)^+$
977.1 *5*	0.12 *4*	976.76		0.0	6^+
982.39 *10*	0.10 *3*	1023.35		40.891	3^+
[x]984.7 *5*	0.21 *3*				
1001.75 *15*	0.25 *4*	1061.223	$4^+,5^+$	58.708	$(4)^+$
[x]1007.8 *5*	0.46 *6*				
1019.6 *4*	0.187 *16*	1061.223	$4^+,5^+$	40.891	3^+
1023.48 *22*	0.088 *14*	1023.35		0.0	6^+
[x]1026.7 *3*	0.054 *15*				
[x]1049.1 *5*	0.079 *15*				
[x]1052.9 *5*	0.45 *5*				
1056.39 *15*	0.11 *4*	1169.88	$4^+,5^+$	113.4009	$(5)^+$
[x]1061.45 *11*	0.18 *5*				
[x]1067.36 *17*	0.082 *12*				
[x]1071.6 *5*	0.10 *3*				
[x]1087.95 *25*	0.16 *4*				
1100.11 *15*	0.58 *6*	1158.71		58.708	$(4)^+$
1107.42 *25*	0.58 *6*	1247.26		140.298	$(2)^-$
1111.13 *17*	0.083 *14*	1169.88	$4^+,5^+$	58.708	$(4)^+$
1118.00 *25*	0.83 *7*	1158.71		40.891	3^+
1119.1 *4*	2.3 *6*	1231.92	$(2,3,4)^+$	113.4009	$(5)^+$
1120.4 *5*	0.64 *6*	1179.61		58.708	$(4)^+$
1122.65 *25*	0.45 *4*	1262.82	$(3,4^-)$	140.298	$(2)^-$
1129.02 *25*	1.11 *8*	1169.88	$4^+,5^+$	40.891	3^+
[x]1132.8 *10*	0.142 *13*				

E_γ[a]	I_γ[†c]	E_i(level)	J_i^π	E_f	J_f^π
1151.5 *5*	0.40 *7*	1230.10		78.6683	$(7)^+$
1160.0 *5*	0.47 *5*	1272.83		113.4009	$(5)^+$
[x]1180.2 *5*	0.162 *16*				
[x]1185.1 *3*	0.314 *15*				
1188.3 *4*	0.41 *3*	1247.26		58.708	$(4)^+$
1192.2[@f] *5*	0.88 *7*	1231.92	$(2,3,4)^+$	40.891	3^+
1206.52 *24*	1.53 *10*	1247.26		40.891	3^+
[x]1210.0 *5*	0.251 *16*				
1214.6 *5*	0.32 *5*	1272.83		58.708	$(4)^+$
1216.5 *5*	0.22 *4*	1256.85	$^+$	40.891	3^+
1220.1[@f] *5*	0.35 *5*	1332.6	$(3^+,4,5^+)$	113.4009	$(5)^+$
1222.98 *12*	0.73 *7*	1281.44	$4^+,5^+$	58.708	$(4)^+$
1228.21[#f] *11*	0.67 *7*	1859.75		631.533	$(4)^+$
1230.08 *15*	0.33 *4*	1230.10		0.0	6^+
[x]1234.3 *5*	0.34 *5*				
1239.38[@f] *25*	0.61 *7*	1281.44	$4^+,5^+$	40.891	3^+
1257.03 *14*	0.38 *5*	1256.85	$^+$	0.0	6^+
1258.85[#f] *17*	0.40 *8*	1655.09		396.227	$(3)^-$
1264.69[#f] *15*	0.161 *15*	1323.41	$4^+,5^+$	58.708	$(4)^+$
1273.4[@f] *5*	0.39 *5*	1332.6	$(3^+,4,5^+)$	58.708	$(4)^+$
[x]1279.7 *5*	0.165 *16*				
1281.7 *5*	0.12 *6*	1281.44	$4^+,5^+$	0.0	6^+
1291.3[@f] *5*	0.73 *5*	1332.6	$(3^+,4,5^+)$	40.891	3^+
[x]1300.5 *5*	0.108 *16*				
[x]1304.8 *5*	0.068 *15*				
1308.1[#f] *4*	0.45 *4*	2284.9		976.76	
[x]1319 *1*	0.070 *21*				
[x]1327.5 *5*	0.231 *17*				
[x]1334.6 *5*	0.39 *4*				
[x]1344.8 *5*	0.056 *13*				
[x]1347.1 *5*	0.055 *10*				
[x]1349.4 *5*	0.072 *17*				
1392.4[‡#f] *14*	0.6[‡]	2401.1		1010.8	
1419.6[‡f] *13*	1.24[‡]	1731.4		311.821	$(4,5)^+$
1441.2[e‡#f] *15*	0.7[e‡]	1519.0	$^-$	78.6683	$(7)^+$
1441.2[e‡#f] *15*	0.7[e‡]	2401.1		957.36	$(5)^+$
1459.6[e‡#f] *14*	1.0[e‡]	1519.0	$^-$	58.708	$(4)^+$
1459.6[e‡#f] *14*	1.0[e‡]	2355.3		895.650	$(3^+,4^-)$
1484.9[e‡#f] *15*	0.4[e‡]	2442.3		957.36	$(5)^+$

γ(^{94}Nb) (continued)

[†] Iγ for secondary gammas are per 100 n capture and are from 1985Bo48, unless given otherwise.
[‡] From 1968Ju01. Iγ normalized to the 99.407γ.
[#] Tentatively placed by the evaluator.
[@] Placement by 1968Ju01.
[&] From 1965Gr10, Iγ normalized to the 99.407γ.
[a] Unless stated otherwise, Eγ are from 1985Bo48.
[b] From 1985Bo48, unless stated otherwise.
[c] Intensity per 100 neutron captures.
[d] 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.
[e] Multiply placed with undivided intensity.
[f] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

$^{94}_{41}Nb_{53}$-6

^{93}Nb(n,γ) E=thermal:secondary 1985Bo48,1968Ju01

Level Scheme

Intensities: Relative I_γ

& Multiply placed: undivided intensity given

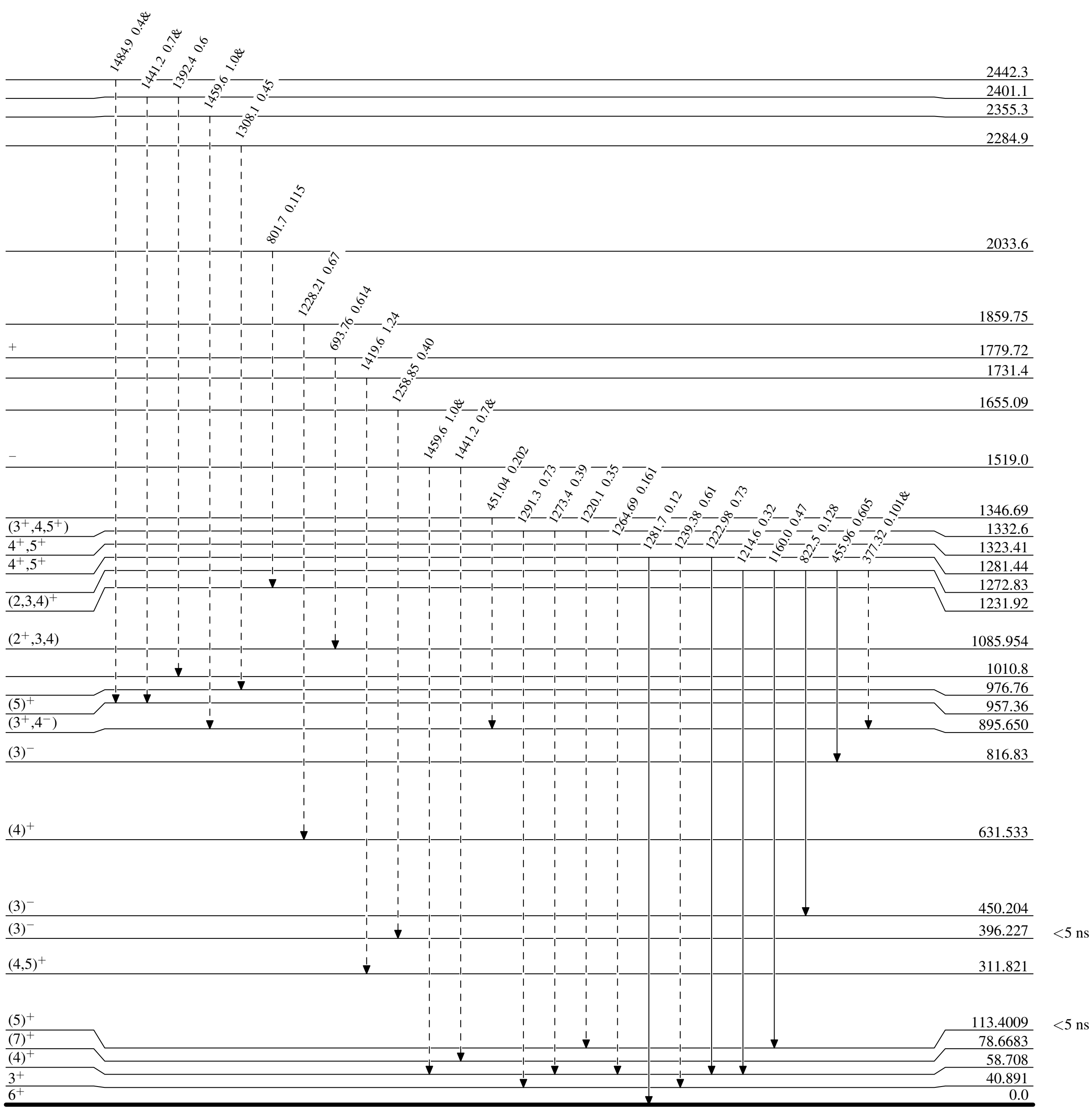
Legend

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

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

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

γ Decay (Uncertain)



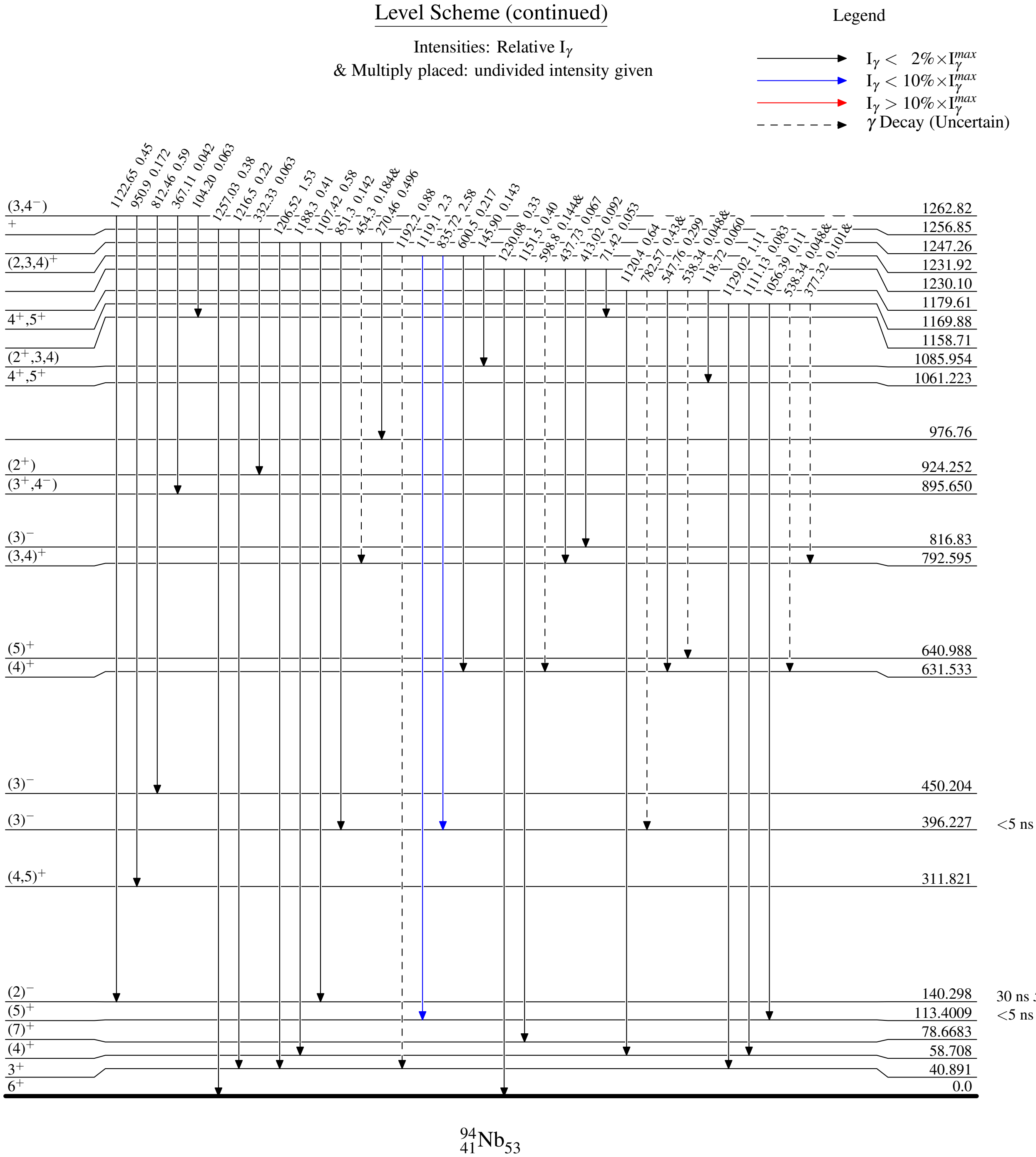
$^{94}_{41}Nb_{53}$

^{93}Nb(n,γ) E=thermal:secondary 1985Bo48,1968Ju01

Level Scheme (continued)

Intensities: Relative I_γ

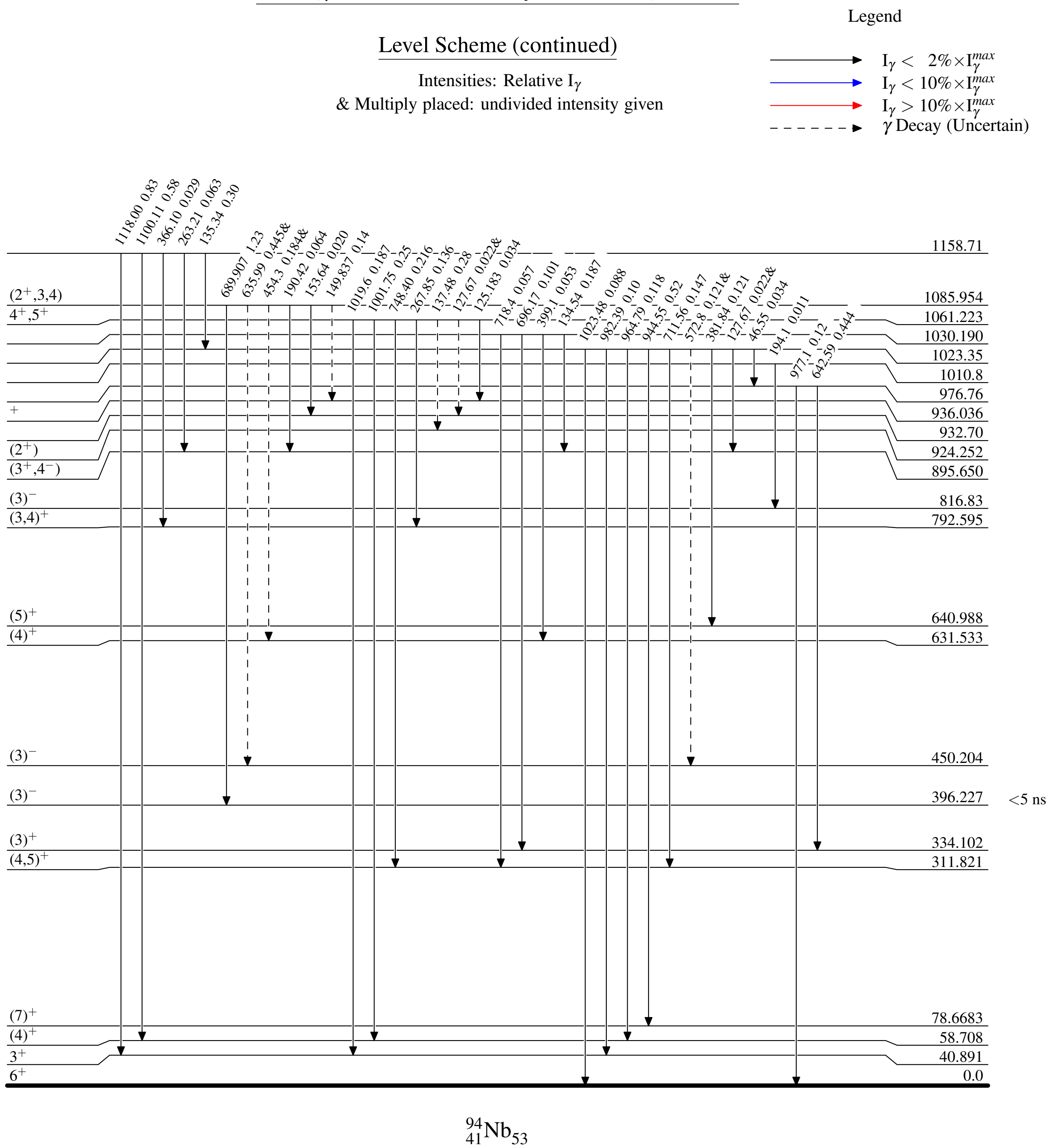
& Multiply placed: undivided intensity given



$^{93}Nb(n,\gamma)$ E=thermal:secondary 1985Bo48,1968Ju01

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

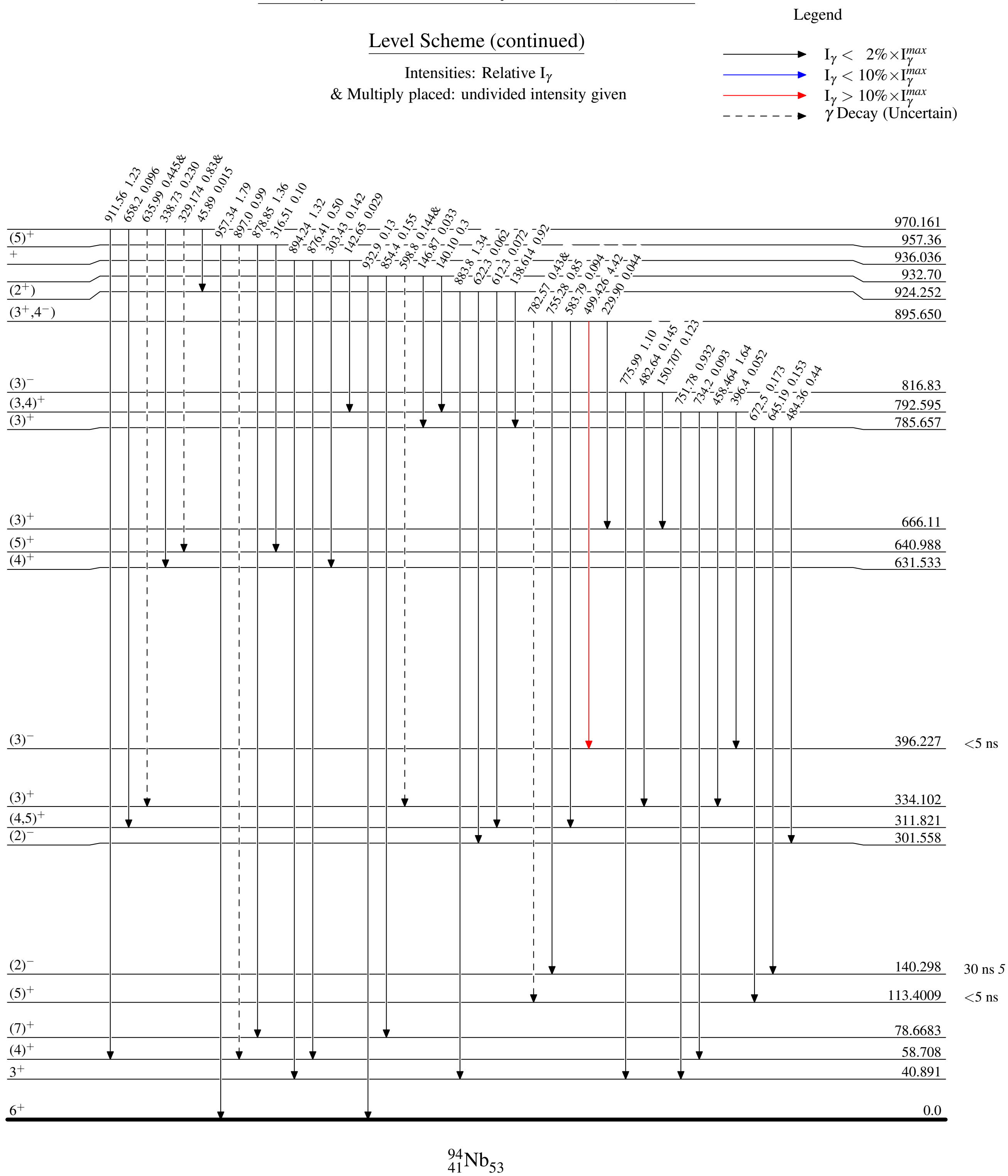


^{93}Nb(n,γ) E=thermal:secondary 1985Bo48,1968Ju01

Level Scheme (continued)

Intensities: Relative I_γ

& Multiply placed: undivided intensity given



^{93}Nb(n,γ) E=thermal:secondary 1985Bo48,1968Ju01

Level Scheme (continued)

Intensities: Relative I_γ

& Multiply placed: undivided intensity given

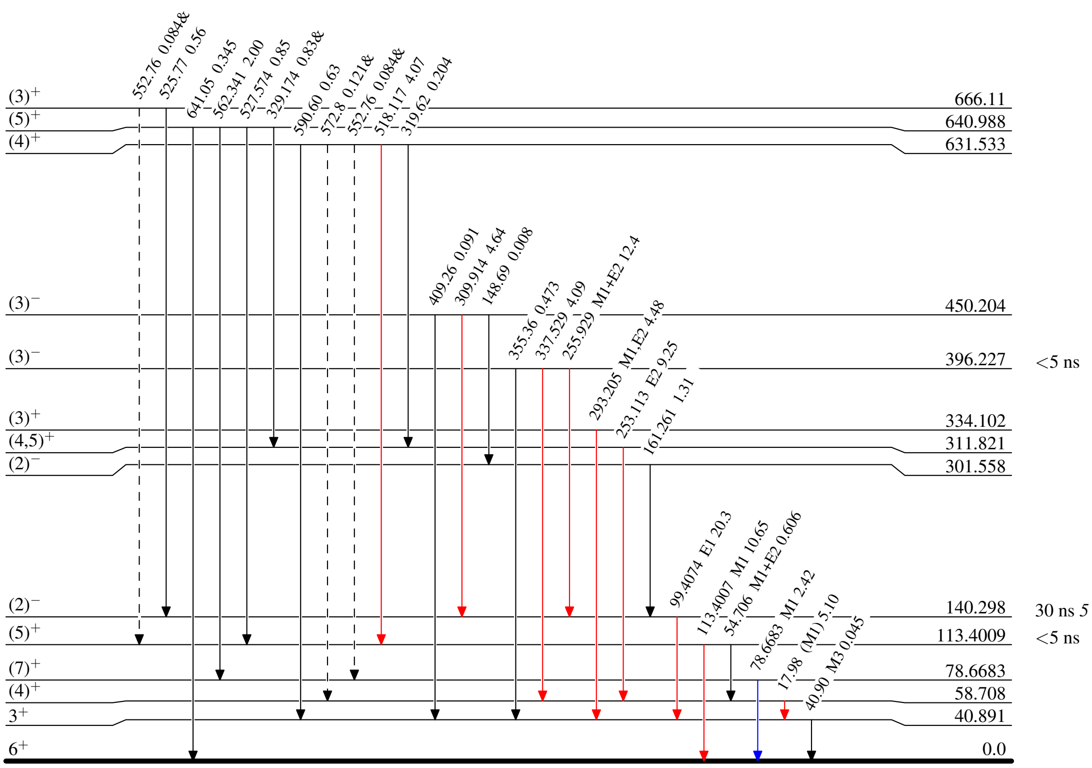
Legend

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

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

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

γ Decay (Uncertain)



$^{94}_{41}Nb_{53}$