^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia	NDS 107, 791 (2006)	15-Sep-2005

This ^{175}Lu(n,γ) study (1991Kl02) supersedes that of 1972Ba80. Others: 1989Du03, 1975Ge11, 1972Ba80, 1972Fu06, 1965Ma18, 1963Gi03.

$J^{\pi}(^{175}Lu)=7/2^{+}$.

Target: 99.8% enriched ^{175}Lu. Measured secondary γ rays, Eγ, Iγ. Detector: bent-crystal spectrometer. Measured conversion electrons. Detector: magnetic spectrometer. Deduced conversion coefficients. Measured $\gamma\gamma$ coin, $\gamma\gamma$(t), Doppler-shift attenuation. Detectors: hyperpure germanium. Deduced $T_{1/2}$(lev). About 30 Nilsson-orbital configurations and corresponding rotational bands were identified. A comparison with model calculations suggests that this (n,γ) level scheme includes all excited states with spins between 2 and 7 up to 900 keV.

γ rays that decay to the g.s. and to the $J^{\pi}=1^{-}$ isomer have provided a very precise energy of 122.855 keV *6* for this isomer. This energy is important for the production of ^{176}Lu isomers in stellar environment.

A fractional population to the $J^{\pi}=1^{-}$ isomer was found to be 87.0% 25 (1991Kl02). This value agrees with 88.6% 43, determined from the total ^{175}Lu(n,γ) cross section to ^{176}Lu (1281 mb *44*), and that to the $J^{\pi}=1^{-}$ isomer for kT=25 keV (1135 mb *30*) (1991Zh12).

^{176}Lu Levels

E(level)[†]	J$^{\pi}$[‡]	$T_{1/2}$[2]	Comments
0.0[@]	7^{-}		
122.848[&] *4*	1^{-}		
184.1302[@] *10*	8^{-}		
194.357[b] *4*	1^{+}	35.0 ns *10*	$T_{1/2}$: from $\gamma\gamma$(t) (1974An12).
233.110[b] *4*	2^{+}		
235.770[&] *4*	3^{-}		
236.917[&] *5*	0^{-}		
299.354[b] *4*	3^{+}		
305.271[&] *4*	2^{-}		
338.852[a] *4*	1^{+}		
372.499[b] *4*	4^{+}		
381.342[a] *4*	2^{+}		
386.581[d] *4*	1^{-}		
388.877[@] *4*	9^{-}		
424.8907[u] *20*	8^{+}		
433.043[d] *4*	2^{-}		
437.349[&] *4*	5^{-}		
450.114[a] *4*	3^{+}		
463.781[&] *4*	4^{-}		
487.649[b] *4*	5^{+}		
487.840[v] *11*	8^{+}		
504.877[d] *4*	3^{-}		
533.095[a] *4*	4^{+}		
563.9385[j] *25*	6^{-}		
591.785[b] *5*	6^{+}		
595.754[d] *4*	4^{-}		
635.202[o] *4*	4^{+}	7.8 ns *4*	$T_{1/2}$: weighted average of 7.8 ns *5* (1991Kl02) and 8.0 ns *10* (1974An12).
637.782[e] *4*	1^{-}		
650.182[a] *4*	5^{+}		

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^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

^{176}Lu Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$[2]	Comments
657.147[q] *4*	5^+	<0.5 ns	E(level): Adopted as a member of $K^\pi=4^+$ band: configuration $\nu 7/2[514]+\pi 1/2[541]$, not as a bandhead of $K^\pi=5^+$ band.
658.441[h] *4*	3^-	6.3 ns *3*	$T_{1/2}$: weighted average of 6.5 ns *+3−10* (1991Kl02), 6.3 ns *5* (1974An12), and 6.3 ns *4* (1992Pe13).
687.856[e] *4*	2^-		
693.797[o] *4*	5^+		
709.226[w] *11*	7^+		
710.073[&] *5*	6^-		
715.429[d] *4*	5^-		
722.911[f] *4*	4^-	3.0 ns *7*	$T_{1/2}$: from 1992Pe13. Other value:<2 ns (1991Kl02).
724.710[&] *6*	7^-		
725.216[j] *5*	7^-		
734.033[x] *4*	7^+		
734.377[p] *4*	3^+		
751.903[h] *4*	4^-		
758.401[b] *6*	7^+		
763.645[e] *4*	3^-		
765.685[k] *5*	6^-		
772.058[a] *5*	6^+		
780.174[#] *24*	0^-		
786.258[p] *4*	4^+		
788.204[i] *4*	4^-		
792.245 *6*	2^+		
796.641[#] *8*	1^-		
832.408[#] *6*	2^-		
834.807[l] *4*	5^-		
838.607?[q] *5*	6^+		E(level): Not adopted, based on the questionable state and relocation of the bandhead 5^+ at 657.15 keV, in which this state was a band member, in Adopted Levels.
838.647[f] *3*	5^-	<0.3 ns	
843.420[g] *4*	3^-		
848.251[d] *6*	6^-		
851.230[p] *6*	5^+		
854.661[y] *6*	7^+		
860.570[e] *4*	4^-		
866.361[n] *5*	2^+		
868.109[h] *4*	5^-		
870.006[m] *6*	5^-		
871.269[t] *4*	4^+		
883.468[#] *5*	3^-		
908.251[s] *4*	4^-		
909.64?[1] *5*	(2^-)		
921.468[i] *5*	5^-	<0.2 ns	
930.768[n] *5*	3^+		
938.408[a] *7*	7^+		
941.080[k] *6*	7^-		
945.020[g] *5*	4^-		
957.740[#] *8*	4^-		
957.903[r] *4*	3^-		
960.195 *4*	3^-	0.7 ns *2*	

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^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

^{176}Lu Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$[2]	Comments
962.890[f] *16*	6⁻		
972.518[l] *7*	6⁻		
973.760 *5*	5⁺		
985.568[z] *4*	4⁺	1.2 ns *3*	
988.166[e] *7*	5⁻		
1000.851[m] *18*	6⁻		
1002.767[h] *8*	6⁻		
1015.349[n] *7*	4⁺		
1019.927 *5*	4⁺		
1029.670[c] *6*	2⁻		
1032.378 *7*	5⁻		
1042.529[#] *11*	5⁻		
1055.5 *11*			E(level): from primary γ ray (1969Mi21).
1067.408[r] *6*	4⁻		
1068.998[g] *6*	5⁻		
1100.419[c] *18*	3⁻		
6289.56 *20*	3⁺,4⁺		

[†] From a least-squares fit to γ-ray energies by the evaluator.
[‡] Spin and parity assignments were based on γ-ray multipolarities and rotational structure (1991Kl02).
[#] $K^\pi=0^-$. Configuration=((π 9/2(514))-(ν 9/2(924))).
[@] $K^\pi=7^-$ g.s. rotational band. Configuration=((π 7/2(404))+(ν 7/2(514))).
[&] $K^\pi=0^-$. Configuration=((π 7/2(404))-(ν 7/2(514))).
[a] $K^\pi=1^+$. Configuration=((π 7/2(404))-(ν 9/2(624))).
[b] $K^\pi=1^+$. Configuration=((π 9/2(514))-(ν 7/2(514))).
[c] $K^\pi=2^-$. Configuration=((π 7/2(404))-(ν 3/2(512))).
[d] $K^\pi=1^-$. Configuration=((π 5/2(402))-(ν 7/2(514))).
[e] $K^\pi=1^-$. Configuration=((π 7/2(404))-(ν 5/2(512))).
[f] $K^\pi=4^-$. Configuration=((π 1/2(411))+(ν 7/2(514))).
[g] $K^\pi=3^-$. Configuration=((π 1/2(411))-(ν 7/2(514))).
[h] $K^\pi=3^-$. Configuration=((π 7/2(404))-(ν 1/2(510))).
[i] $K^\pi=4^-$. Configuration=((π 7/2(404))+(ν 1/2(510))).
[j] $K^\pi=6^-$. Configuration=((π 5/2(402))+(ν 7/2(514))).
[k] $K^\pi=6^-$. Configuration=((π 7/2(404))+(ν 5/2(512))).
[l] $K^\pi=5^-$. Configuration=((π 7/2(404))+(ν 3/2(512))).
[m] $K^\pi=5^-$. γ-vibrational band.
[n] $K^\pi=2^+$. Configuration=((π 5/2(402))-(ν 9/2(624))).
[o] $K^\pi=4^+$. Configuration=((π 1/2(541))+(ν 7/2(514))).
[p] $K^\pi=3^+$. Configuration=((π 1/2(541))-(ν 7/2(514))).
[q] $K^\pi=5^+$. Configuration=((π 9/2(514))+(ν 1/2(510))).
[r] $K^\pi=3^-$. Configuration=((π 7/2(404))-(ν 1/2(521))).
[s] $K^\pi=4^-$. Configuration=((π 7/2(404))+(ν 1/2(521))).
[t] $K^\pi=4^+$. Configuration=((π 9/2(514))-(ν 1/2(510))).
[u] $K^\pi=8^+$. Configuration=((π 7/2(404))+(ν 9/2(624))).
[v] $K^\pi=8^+$. Configuration=((π 9/2(514))+(ν 7/2(514))).
[w] $K^\pi=7^+$. Configuration=((π 9/2(514))+(ν 5/2(512))).
[x] $K^\pi=7^+$. Configuration=((π 5/2(402))+(ν 9/2(624))).

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^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

^{176}Lu Levels (continued)

[y] $K^{\pi}=7^{+}$. Configuration=((π 7/2(404))+(ν 7/2(633))).
[z] $K^{\pi}=4^{+}$. Configuration=((π 1/2(411))-(ν 9/2(624))).
[1] $K^{\pi}=2^{-}$, γ-vibrational band.
[2] From 1991Kl02, unless otherwise specified.

γ(^{176}Lu)

E_γ [†]	I_γ [†i]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [@]	δ [h]	Comments
38.745 *1*	2.5 *7*	233.110	2^+	194.357	1^+	M1+E2	0.128 *4*	
46.458 *1*	1.7 *4*	433.043	2^-	386.581	1^-	M1+E2	0.07 *1*	
51.896 *1*	0.19 *3*	786.258	4^+	734.377	3^+	M1+E2	0.13 *1*	
58.597 *1*	0.140 *24*	693.797	5^+	635.202	4^+	M1(+E2)		
64.369[#k] *6*	0.09 *4*	930.768	3^+	866.361	2^+	(M1+E2)		
64.474 *1*	0.34 *4*	722.911	4^-	658.441	3^-	M1+E2	0.15 *2*	
64.970 *4*	0.13 *4*	851.230	5^+	786.258	4^+	M1		
65.353[#k] *5*	0.11 *4*	657.147	5^+	591.785	6^+	(M1+E2)		
66.238 *1*	1.84 *22*	299.354	3^+	233.110	2^+	M1+E2	0.13 *2*	
69.498 *2*	0.18 *4*	305.271	2^-	235.770	3^-	(M1)		
71.516 *1*	26 *3*	194.357	1^+	122.848	1^-	E1+M2	0.047 *2*	
71.840 *1*	0.69 *10*	504.877	3^-	433.043	2^-	M1		
73.140 *1*	1.05 *10*	372.499	4^+	299.354	3^+	M1+E2	0.16 *3*	
77.623[#k] *4*	0.100 *25*	450.114	3^+	372.499	4^+			
81.301 *4*	0.060 *20*	386.581	1^-	305.271	2^-	M1		
81.996[#k] *4*	0.080 *22*	381.342	2^+	299.354	3^+			
[x]88.862 *3*	0.140[‡] *21*							
[x]89.619[#k] *12*	0.070 *19*							
[x]90.614[#k] *8*	0.080 *18*							
90.867 *1*	0.57 *6*	595.754	4^-	504.877	3^-	M1(+E2)		
[x]91.018[#k] *9*	0.090 *25*							
[x]91.665 *4*	0.060[‡] *14*							
[x]93.193 *9*	0.19 *10*							E_γ,I_γ: from 1965Ma18.
93.449 *1*	0.38 *4*	751.903	4^-	658.441	3^-	M1		
[x]93.748[#k] *9*	0.090 *17*							
99.163 *1*	0.57 *7*	734.377	3^+	635.202	4^+	M1+E2	0.18 *4*	
104.985 *2*	0.43 *5*	299.354	3^+	194.357	1^+	E2		
105.738 *2*	0.17 *3*	338.852	1^+	233.110	2^+	M1		
[x]109.398[#k] *6*	0.060 *13*							
109.541 *6*	0.050 *10*	1067.408	4^-	957.903	3^-	M1		
[x]111.860 *3*	0.060 *10*							
[x]112.157[#k] *8*	0.030 *11*							
112.922 *1*	5.9 *9*	235.770	3^-	122.848	1^-	E2		
[x]113.945[#k] *12*	0.070 *18*							
114.070 *2*	0.110 *13*	236.917	0^-	122.848	1^-	M1		
114.593[k] *8*	0.040[‡] *11*	962.890	6^-	848.251	6^-			
115.144 *2*	0.62 *7*	487.649	5^+	372.499	4^+	M1(+E2)		
115.722 *3*	0.090 *14*	838.647	5^-	722.911	4^-	(M1)		
116.206 *1*	0.180 *20*	868.109	5^-	751.903	4^-	M1		
116.763[#k] *4*	0.060 *12*	960.195	3^-	843.420	3^-	(M1)		
118.190[#k] *21*	0.010 *8*	988.166	5^-	870.006	5^-			
118.295 *6*	0.040 *9*	504.877	3^-	386.581	1^-	(E2)		
[x]118.725 *2*	0.210 *21*							
119.678 *1*	0.39 *4*	715.429	5^-	595.754	4^-	M1		

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^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

γ(^{176}Lu) (continued)

E_γ [†]	I_γ [†i]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [@]	δ [h]
120.499 *1*	0.32 *3*	843.420	3⁻	722.911	4⁻	M1(+E2)	
x124.062 *1*	0.32 *4*						
125.350[#k] *17*	0.050 *11*	960.195	3⁻	834.807	5⁻		
x125.550 *7*	0.07 *3*						
x127.065 *9*	0.030[‡] *10*						
129.773 *1*	0.82 *8*	788.204	4⁻	658.441	3⁻	M1	
x130.322 *7*	0.030 *9*						
131.99[j#k] *3*	0.040[j] *14*	595.754	4⁻	463.781	4⁻		
131.99[j#k] *3*	0.040[j] *14*	866.361	2⁺	734.377	3⁺		
132.364 *9*	0.040 *16*	504.877	3⁻	372.499	4⁺		
132.815[k] *2*	0.100[‡] *13*	848.251	6⁻	715.429	5⁻		
133.252 *9*	0.030 *7*	921.468	5⁻	788.204	4⁻		
133.683 *2*	0.35 *4*	433.043	2⁻	299.354	3⁺	E1	
x133.937[#k] *9*	0.030 *10*						
134.679[#k] *19*	0.050 *13*	1002.767	6⁻	868.109	5⁻		
x136.742 *10*	0.040[‡] *8*						
136.887 *7*	0.040 *8*	871.269	4⁺	734.377	3⁺		
x137.215[#k] *20*	0.040 *13*						
137.712 *6*	0.040 *12*	972.518	6⁻	834.807	5⁻		
139.383 *1*	1.64 *20*	372.499	4⁺	233.110	2⁺	E2	
x140.497 *2*	0.140 *17*						
x141.983 *6*	0.030 *7*						
142.146[k] *9*	0.050[‡] *23*	985.568	4⁺	843.420	3⁻		
144.486 *2*	0.47 *5*	338.852	1⁺	194.357	1⁺	M1+E2	0.35 *7*
145.117[k] *7*	0.050[‡] *12*	860.570	4⁻	715.429	5⁻		
145.170 *7*	0.050 *12*	868.109	5⁻	722.911	4⁻		
147.518 *3*	0.22 *6*	1068.998	5⁻	921.468	5⁻		
147.553 *2*	0.76 *9*	635.202	4⁺	487.649	5⁺	M1	
148.241 *1*	0.230 *25*	381.342	2⁺	233.110	2⁺	M1	
148.676 *10*	0.040 *10*	1019.927	4⁺	871.269	4⁺		
150.763 *2*	0.170 *20*	450.114	3⁺	299.354	3⁺	M1	
150.815 *4*	0.100 *16*	386.581	1⁻	235.770	3⁻		
x152.30[#k] *3*	0.040 *11*						
153.466 *1*	2.7 *3*	386.581	1⁻	233.110	2⁺	E1	
153.557 *2*	0.27 *3*	658.441	3⁻	504.877	3⁻	M1	
156.362 *3*	0.110 *15*	908.251	4⁻	751.903	4⁻	(E2,M1)	
158.403[k] *6*	0.040[‡] *15*	595.754	4⁻	437.349	5⁻		
158.496 *5*	0.060 *14*	463.781	4⁻	305.271	2⁻		
160.589 *2*	0.090 *10*	533.095	4⁺	372.499	4⁺	(M1,E2)	
161.277 *4*	0.060 *10*	725.216	7⁻	563.9385	6⁻	(M1)	
162.713 *4*	0.080 *9*	595.754	4⁻	433.043	2⁻		
164.120[j] *7*	0.040[j] *11*	1002.767	6⁻	838.647	5⁻		
164.120[j] *7*	0.040[j] *11*	1015.349	4⁺	851.230	5⁺		
166.671[#k] *21*	0.020 *9*	758.401	7⁺	591.785	6⁺		
x166.973[#k] *16*	0.030 *9*						
167.876[k] *4*	0.160[‡] *18*	763.645	3⁻	595.754	4⁻		
169.500 *4*	0.100 *12*	657.147	5⁺	487.649	5⁺	(M1,E2)	
169.574 *5*	0.08 *3*	921.468	5⁻	751.903	4⁻		
169.671 *2*	0.29 *3*	957.903	3⁻	788.204	4⁻	M1	
x171.230 *19*	0.020[‡] *7*						
171.976 *2*	0.170 *17*	960.195	3⁻	788.204	4⁻		

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^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

γ(^{176}Lu) (continued)

E_γ †	I_γ †i	E_i(level)	J_i^π	E_f	J_f^π	Mult.@	δh	Comments
x172.785 15	0.070 15							
x174.867 11	0.040 7							
x175.057#k 12	0.030 6							
175.395 2	0.150 15	941.080	7−	765.685	6−	M1		
x177.889 7	0.040 11							
181.316 6	0.060 13	1019.927	4+	838.607?	6+	(E2)		
181.489 4	0.120 14	838.647	5−	657.147	5+			
x181.862 13	0.030 7							
x181.960 20	0.020 6							
x182.073 6	0.040 10							
182.422 1	1.69 17	305.271	2−	122.848	1−	M1		
182.981 2	0.180 18	687.856	2−	504.877	3−	M1		
184.130 1	0.46 5	184.1302	8−	0.0	7−	M1+E2	1.15 21	
184.980 2	0.28 3	843.420	3−	658.441	3−	M1		
185.080 3	0.120 24	635.202	4+	450.114	3+	(M1)		
185.331 1	0.51 5	908.251	4−	722.911	4−	M1+E2	0.50 23	
x186.897#k 8	0.080 13							
186.986 1	0.81 8	381.342	2+	194.357	1+	M1		
x188.240 3	0.20 3							
188.287 1	1.92 19	487.649	5+	299.354	3+	E2		
x189.963#k 16	0.030 6							
x190.057 18	0.060‡ 9							
192.212 1	7.1 7	386.581	1−	194.357	1+	E1		
194.258 6	0.040 14	957.903	3−	763.645	3−	M1		
194.656k 12	0.030‡ 8	658.441	3−	463.781	4−			
196.400k 11	0.030‡ 8	930.768	3+	734.377	3+			
197.265 1	0.88 9	433.043	2−	235.770	3−	M1		
197.547k 10	0.040 10	1032.378	5−	834.807	5−	(M1)		
x199.037 5	0.120 25							
x199.424 10	0.100‡ 13							
199.926 1	0.210 21	433.043	2−	233.110	2+			
201.567 1	2.8 3	437.349	5−	235.770	3−	E2		
201.742 5	0.100 11	765.685	6−	563.9385	6−	M1		
203.413 2	0.220 22	838.607?	6+	635.202	4+			E_γ: Adopted from 5− state at 838.64 keV.
204.746j 3	0.150j 17	388.877	9−	184.1302	8−	M1		
204.746j 3	0.150j 17	637.782	1−	433.043	2−	M1		
205.531 6	0.070 9	504.877	3−	299.354	3+			
206.994#k 13	0.060 11	657.147	5+	450.114	3+			
x208.928 7	0.040 6							
210.550 3	0.100 11	715.429	5−	504.877	3−	E2		
x212.529 4	0.100 16							
214.132 1	0.86 9	871.269	4+	657.147	5+	M1		
214.349 3	0.55 6	450.114	3+	235.770	3−	E1		
216.015j 9	0.060j 9	338.852	1+	122.848	1−			
216.015j 9	0.060j 9	851.230	5+	635.202	4+			
217.002 1	1.42 14	450.114	3+	233.110	2+	M1		
x217.922 12	0.030 9							
218.040 3	0.160 16	722.911	4−	504.877	3−			
219.282 2	1.01 10	591.785	6+	372.499	4+	E2		
221.386 4	0.120 13	709.226	7+	487.840	8+	M1		
222.106 2	0.52 5	945.020	4−	722.911	4−	M1		
225.403 1	7.0 7	658.441	3−	433.043	2−	M1+E2	0.27 8	
227.997 1	2.25 23	463.781	4−	235.770	3−	M1+E2	0.29 6	

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^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

γ(^{176}Lu) (continued)

E_γ [†]	I_γ [†i]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[@]	δ[h]
228.544 *18*	0.030 *6*	866.361	2^+	637.782	1^-		
233.741 *1*	1.64 *16*	533.095	4^+	299.354	3^+	M1	
[x]234.752 *3*	0.100 *11*						
234.977 *4*	0.080 *10*	957.903	3^-	722.911	4^-	(M1)	
236.075 *2*	0.27 *3*	871.269	4^+	635.202	4^+	M1,E2	
238.671 *1*	0.86 *9*	433.043	2^-	194.357	1^+	E1	
239.383[k] *11*	0.050[‡] *7*	973.760	5^+	734.377	3^+		
239.91 *5*	0.020 *9*	1100.419	3^-	860.570	4^-		
239.96 *3*	0.050 *24*	962.890	6^-	722.911	4^-		
240.760 *2*	0.32 *3*	424.8907	8^+	184.1302	8^-		
[x]242.362 *5*	0.090 *17*						
242.929[#k] *25*	0.020[‡] *6*	838.647	5^-	595.754	4^-		
[x]243.74[#] *4*	0.010[‡] *5*						
244.219 *18*	0.030 *11*	1032.378	5^-	788.204	4^-		
[x]245.290 *15*	0.050 *11*						
246.305 *5*	0.090 *10*	710.073	6^-	463.781	4^-		
246.994 *12*	0.050 *17*	751.903	4^-	504.877	3^-		
247.660 *5*	0.080 *9*	843.420	3^-	595.754	4^-	M1	
251.195[j] *2*	0.72[j] *7*	637.782	1^-	386.581	1^-	M1	
251.195[j] *2*	0.72[j] *7*	985.568	4^+	734.377	3^+	M1	
[x]252.256 *3*	0.220[‡] *22*						
252.524 *17*	0.060 *16*	848.251	6^-	595.754	4^-		
[x]253.36[#k] *5*	0.030 *6*						
253.858 *7*	0.100 *12*	635.202	4^+	381.342	2^+	E2	
254.824 *4*	0.150 *15*	687.856	2^-	433.043	2^-	M1	
[x]256.295 *13*	0.030[‡] *19*						
[x]256.638 *16*	0.040[‡] *7*						
[x]257.369[#k] *23*	0.030 *7*						
258.51[#k] *5*	0.030 *7*	381.342	2^+	122.848	1^-		
258.744 *8*	0.070 *8*	763.645	3^-	504.877	3^-	M1	
259.154[jk] *11*	0.080[j‡] *10*	722.911	4^-	463.781	4^-	(M1,E2)	
259.154[jk] *11*	0.080[j‡] *10*	792.245	2^+	533.095	4^+		
[x]262.670 *3*	0.77 *8*						
263.733 *2*	3.5 *3*	386.581	1^-	122.848	1^-	M1+E2	0.9 *2*
[x]264.735 *3*	0.32 *3*						
[x]265.008[#k] *20*	0.050 *11*						
[x]265.184 *6*	0.090 *10*						
[x]268.482 *5*	0.080 *10*						
269.125 *13*	0.040 *8*	504.877	3^-	235.770	3^-	(M1)	
270.035 *5*	0.070 *9*	957.903	3^-	687.856	2^-	(M1)	
[x]270.454 *19*	0.030[‡] *8*						
270.756 *4*	0.110 *13*	758.401	7^+	487.649	5^+		
270.869 *3*	0.130 *14*	834.807	5^-	563.9385	6^-	M1	
271.772[a] *6*	0.25 *3*	504.877	3^-	233.110	2^+		
271.863[a] *4*	0.57 *6*	658.441	3^-	386.581	1^-	(E2)	
272.729 *3*	0.33 *3*	710.073	6^-	437.349	5^-	M1	
274.702 *2*	0.44 *4*	838.647	5^-	563.9385	6^-	M1	
[x]276.43[#k] *3*	0.030 *8*						
277.683 *1*	0.88 *9*	650.182	5^+	372.499	4^+	M1	
284.418 *3*	0.28 *3*	772.058	6^+	487.649	5^+	M1	
284.641 *1*	2.9 *3*	657.147	5^+	372.499	4^+	M1	
285.571[j] *4*	0.110[j] *12*	722.911	4^-	437.349	5^-		

Continued on next page (footnotes at end of table)

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

γ(^{176}Lu) (continued)

E_γ [†]	I_γ [†i]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [@]
285.571[j] 4	0.110[j] 12	1019.927	4+	734.377	3+	
x285.685 4	0.11 5					
285.948 6	0.040 6	658.441	3−	372.499	4+	
286.56[#k] 5	0.020 8	945.020	4−	658.441	3−	
287.364 4	0.100 11	724.710	7−	437.349	5−	E2[d]
x292.00[#k] 4	0.030 7					
x292.537 3	0.150 15					
296.397 5	0.070 8	595.754	4−	299.354	3+	[e]
x299.147 16	0.040 8					
299.449 1	0.39 4	957.903	3−	658.441	3−	M1
x299.888 4	0.090 12					
301.284 2	0.49 5	687.856	2−	386.581	1−	M1
301.749 2	0.150 15	960.195	3−	658.441	3−	M1
303.06[k] 4	0.040 9	960.195	3−	657.147	5+	
303.793[k] 6	0.040 7	1067.408	4−	763.645	3−	
306.069 6	0.060 7	870.006	5−	563.9385	6−	(M1,E2)
309.142 3	0.29 3	734.033	7+	424.8907	8+	(M1)
309.421 8	0.090 11	1032.378	5−	722.911	4−	
310.188 2	5.4 5	433.043	2−	122.848	1−	M1
x310.785 18	0.13[‡] 6					
x310.890 3	0.39 4					
x311.251 18	0.060 8					
x312.37 4	0.040 9					
x315.585 9	0.060 8					
316.630 6	0.100 11	973.760	5+	657.147	5+	
317.099 16	0.050 9	1068.998	5−	751.903	4−	
x317.476 20	0.040[‡] 8					
x320.636 5	0.170 17					
x321.726 10	0.080 13					
x325.086 7	0.100 12					
327.099 12	0.050 8	985.568	4+	658.441	3−	
328.432 5	0.140 14	985.568	4+	657.147	5+	M1
x328.945 7	0.100 13					
330.597 2	0.64 6	763.645	3−	433.043	2−	M1(+E2)
332.462 12	0.050 7	1042.529	5−	710.073	6−	(M1,E2)
335.007 6	0.110 12	930.768	3+	595.754	4−	
335.851 1	4.7 5	635.202	4+	299.354	3+	M1+E2
x337.456 8	0.080 10					
338.556 3	0.43 4	973.760	5+	635.202	4+	M1
342.16 4	0.040 8	792.245	2+	450.114	3+	
342.923 11	0.070 9	715.429	5−	372.499	4+	
344.493 7	0.080 9	1067.408	4−	722.911	4−	(M1)
346.093 11	0.060 10	1068.998	5−	722.911	4−	(M1)
346.618 5	0.160 16	938.408	7+	591.785	6+	(M1)
350.364 2	0.42 4	985.568	4+	635.202	4+	M1
353.158 7	0.060 7	658.441	3−	305.271	2−	(M1)
355.682 2	0.41 4	860.570	4−	504.877	3−	M1+E2
357.539 10	0.070 8	921.468	5−	563.9385	6−	(M1)
359.083 3	0.28 3	658.441	3−	299.354	3+	
359.985 4	0.82 8	595.754	4−	235.770	3−	M1+E2
361.485 5	0.130 13	866.361	2+	504.877	3−	
x361.800 10	0.060 7					
362.789 4	0.26 3	1019.927	4+	657.147	5+	(M1,E2)
x364.303 15	0.090 11					

Continued on next page (footnotes at end of table)

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

γ(^{176}Lu) (continued)

E_γ [†]	I_γ [†i]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [@]	Comments
x366.185 16	0.060 10						
x368.540 11	0.110 12						
x375.936 16	0.080 10						
x377.017 9	0.070 8						
381.16[k] 3	0.050 7	945.020	4−	563.9385	6−	&	Mult.: Reported as (M1?) in 1991Kl02. Level scheme requires E2.
382.030 6	0.130 14	504.877	3−	122.848	1−	(E2)[f]	
x383.461 19	0.070 8						
384.726 9	0.080 10	1019.927	4+	635.202	4+	(M1,E2)	
x388.044 13	0.070 8						
388.901 19	0.060 7	388.877	9−	0.0	7−	(E2)	
x390.754 22	0.060‡ 10						
391.909[k] 22	0.060‡ 10	1029.670	2−	637.782	1−		
392.413 5	0.30 3	988.166	5−	595.754	4−	M1	
x392.635 10	0.160 19						
x394.141 8	0.080 15						
x395.165 24	0.050 7						
x395.80 3	0.040 7						
397.653[k] 13	0.040‡ 8	930.768	3+	533.095	4+		
398.942 18	0.040 6	962.890	6−	563.9385	6−		
399.56 9	0.020‡ 6	772.058	6+	372.499	4+		
402.109[k] 15	0.040‡ 7	635.202	4+	233.110	2+		
x402.816 2	0.26 3						
x403.758 12	0.060 10						
x405.53 3	0.050 6						
408.946 12	0.060 10	1067.408	4−	658.441	3−		
410.381 5	0.120 12	843.420	3−	433.043	2−	M1	
410.892[j] 5	0.120[j] 13	792.245	2+	381.342	2+	M1	
410.892[j] 5	0.120[j] 13	848.251	6−	437.349	5−	M1	
x412.73 3	0.030‡ 8						
x416.184 18	0.050 8						
x417.35 3	0.040 6						
x419.306 18	0.090 24						
419.701 3	0.34 3	883.468	3−	463.781	4−	M1	
421.01[k] 7	0.030‡ 5	871.269	4+	450.114	3+		
x421.71 4	0.030 9						
422.670 2	0.39 4	658.441	3−	235.770	3−	M1	
423.217 4	0.090 14	860.570	4−	437.349	5−	(M1)	
x424.569 8	0.090 11						
424.893 4	0.140 18	424.8907	8+	0.0	7−		
425.333 2	0.60 6	658.441	3−	233.110	2+		
x425.640 8	0.100‡ 11						
425.884 3	0.210 23	930.768	3+	504.877	3−		
x426.392 4	0.160‡ 16						
x429.368 5	0.090 15						
429.772 5	0.070 9	854.661	7+	424.8907	8+	(M1)	
x430.27 3	0.030‡ 7						
x430.928 8	0.080‡ 10						
x432.77 3	0.030 6						
433.325 3	0.32 4	866.361	2+	433.043	2−	E1	
435.07 3	0.060 16	734.377	3+	299.354	3+		
437.48[k] 4	0.040 7	437.349	5−	0.0	7−		

Continued on next page (footnotes at end of table)

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

γ(^{176}Lu) (continued)

E_γ [†]	I_γ [†i]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [@]	Comments
x439.04 4	0.030 6						
x439.630 3	0.230 23						
x440.397 17	0.080 10						
x443.486 23	0.060 8						
x444.532 9	0.060 8						
x446.074 9	0.100‡ 11						
x447.11 7	0.030 7						
x447.578 11	0.090 11						
x449.853 11	0.090 13						
452.105 8	0.070 8	687.856	2−	235.770	3−		
452.990 11	0.080 10	957.903	3−	504.877	3−	(M1)	
x453.47 3	0.040 6						
x457.425 15	0.100‡ 21						
x459.094 19	0.050 9						
x459.748 25	0.030‡ 8						
x460.967 10	0.100 11						
x461.671 12	0.050 8						
x463.396 22	0.040 9						
x464.007 18	0.080 17						
x465.03 7	0.020 4						
466.107 17	0.020 5	838.607?	6+	372.499	4+		E_γ: not adopted based on the placement from a questionable level, which is not adopted and 0.020 intensity, which is labeled as close to detector sensitivity limit for many γ-rays.
x467.372 24	0.050 10						
468.500 12	0.040 10	1032.378	5−	563.9385	6−		
x470.17 3	0.030 7						
x470.410 17	0.050 9						
471.652 16	0.040 6	1067.408	4−	595.754	4−		
x472.46 7	0.020 8						
473.28[k] 4	0.030‡ 7	1068.998	5−	595.754	4−		
x477.207 11	0.070 8						
x478.161 11	0.070 8						
479.756[k] 6	0.120 13	866.361	2+	386.581	1−		
480.661 13	0.080 9	930.768	3+	450.114	3+	(M1)	
485.006 6	0.110 11	866.361	2+	381.342	2+	M1	
487.15 3	0.050 7	722.911	4−	235.770	3−		
487.819 23	0.070 11	487.840	8+	0.0	7−		
x490.30 24	0.020‡ 5						
491.365 8	0.170 20	796.641	1−	305.271	2−	M1	
x492.59 7	0.040 6						
x493.710 6	0.210 21						
x495.44 3	0.030 7						
x495.568 12	0.060 9						
497.898[k] 11	0.060‡ 9	985.568	4+	487.649	5+		
x499.458 16	0.100‡ 11						
x514.70 3	0.090‡ 14						
520.40 4	0.150 18	957.740	4−	437.349	5−	(M1)	
524.817 13	0.160 18	1029.670	2−	504.877	3−	M1	
527.174[j] 20	0.17[j] 3	832.408	2−	305.271	2−	M1	
527.174[j] 20	0.17[j] 3	960.195	3−	433.043	2−	M1	
527.501 8	1.00 13	866.361	2+	338.852	1+	M1	
x528.65 4	0.120 19						
x539.691 25	0.070 10						

Continued on next page (footnotes at end of table)

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

γ(^{176}Lu) (continued)

E_γ †	I_γ †i	E_i(level)	J_i^π	E_f	J_f^π	Mult. @
x544.54 3	0.14‡ 3					
549.389 11	0.54 6	930.768	3^+	381.342	2^+	M1
x556.33 4	0.080 10					
558.237 19	0.210 23	930.768	3^+	372.499	4^+	(M1,E2)
559.16 3	0.090 12	792.245	2^+	233.110	2^+	
559.714 15	0.170 20	796.641	1^-	236.917	0^-	M1
561.25 3	0.080 13	860.570	4^-	299.354	3^+	
562.56 3	0.090 11	1067.408	4^-	504.877	3^-	
563.944 3	2.39 24	563.9385	6^-	0.0	7^-	M1(+E2)
565.241 9	0.28 3	1015.349	4^+	450.114	3^+	M1
566.990 15	0.41 5	866.361	2^+	299.354	3^+	(M1,E2)
x567.83 4	0.090 12					
573.56 3	0.080 10	960.195	3^-	386.581	1^-	
578.198 8	0.75 8	883.468	3^-	305.271	2^-	M1
578.743 17	0.25 3	1042.529	5^-	463.781	4^-	M1
581.61 5	0.080 17	765.685	6^-	184.1302	8^-	
x582.65 4	0.080 11					
x586.09 3	0.130 16					
x587.581 23	0.150 17					
x594.34#k 3	0.090 12					
595.57j 4	0.080j 11	832.408	2^-	236.917	0^-	
595.57j 4	0.080j 11	1100.419	3^-	504.877	3^-	
596.627j 6	0.40j 5	832.408	2^-	235.770	3^-	M1
596.627j 6	0.40j 5	1029.670	2^-	433.043	2^-	M1
597.88 3	0.110 13	792.245	2^+	194.357	1^+	
x599.488 24	0.130 16					
x604.145 20	0.10 3					
x617.894 25	0.110 14					
624.834 22	0.32 4	860.570	4^-	235.770	3^-	M1
x627.544 8	0.210 21					
631.396 13	0.31 3	930.768	3^+	299.354	3^+	M1
633.249 8	0.53 6	866.361	2^+	233.110	2^+	M1+E2
x636.281 23	0.110 19					
x637.02 3	0.130 16					
x639.836 20	0.07‡ 5					
x641.66 3	0.13 4					
642.890a 14	0.20 3	1015.349	4^+	372.499	4^+	(E2)
643.115a 10	0.28 4	1029.670	2^-	386.581	1^-	M1(+E2)
x646.17 3	0.120 22					
x650.65 4	0.080 12					
x651.49 8	0.050 11					
652.57k 4	0.090‡ 13	957.740	4^-	305.271	2^-	
x653.48 3	0.100 13					
657.334 23	0.160 18	780.174	0^-	122.848	1^-	(M1,E2)
658.38 4	0.110 14	957.740	4^-	299.354	3^+	
660.80 3	0.29 3	960.195	3^-	299.354	3^+	
667.356 21	0.33 3	1100.419	3^-	433.043	2^-	M1(+E2)
669.33 13	0.050 11	792.245	2^+	122.848	1^-	
x670.01 4	0.10 4					
671.992 7	0.48 5	866.361	2^+	194.357	1^+	M1(+E2)
672.66 10	0.070 12	909.64?	(2^-)	236.917	0^-	
673.88j 6	0.16j 4	796.641	1^-	122.848	1^-	
673.88j 6	0.16j 4	909.64?	(2^-)	235.770	3^-	
x675.11 4	0.17 5					

Continued on next page (footnotes at end of table)

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

γ(^{176}Lu) (continued)

E_γ [†]	I_γ [†i]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [@]
x675.79 5	0.18 4					
x680.96 4	0.100 14					
x683.21 4	0.090 13					
x688.635 10	0.31 7					
x691.056 18	0.18 4					
x691.872[a] 16	0.28 4					
x692.295[a] 22	0.22 4					
x696.023 25	0.20 3					
697.61 4	0.12 4	930.768	3+	233.110	2+	(M1)
x704.30 6	0.090 14					
x705.74 3	0.150 18					
709.230[a] 12	0.27 4	709.226	7+	0.0	7−	
709.555[a] 6	0.74 8	832.408	2−	122.848	1−	M1(+E2)
x712.817 21	0.150‡ 24					
x719.57 5	0.130‡ 17					
721.968 7	0.72 7	957.740	4−	235.770	3−	M1
724.64[k] 5	0.130 17	957.740	4−	233.110	2+	
727.094 13	0.40 6	960.195	3−	233.110	2+	
730.26 4	0.120 16	1029.670	2−	299.354	3+	
x730.58 7	0.14 3					
x730.94 4	0.43 9					
x732.46 8	0.100 16					
x735.40 3	0.12 4					
736.422 21	0.18 5	930.768	3+	194.357	1+	(E2)
x739.92 3	0.110 15					
x743.79 5	0.100 16					
x747.937 12	0.30 3					
765.684 9	0.52 5	765.685	6−	0.0	7−	M1
x777.57 3	0.090 12					
786.81 14	0.10 3	909.64?	(2−)	122.848	1−	
x787.420 19	0.24‡ 4					
792.75 5	0.100‡ 15	1029.670	2−	236.917	0−	
x794.50 4	0.08 3					
x796.40 5	0.100 14					
x812.32 7	0.200‡ 24					
x814.45 4	0.100‡ 20					
816.719 18	0.31 4	1000.851	6−	184.1302	8−	(E2,M1)
818.91[k] 11	0.100 17	1002.767	6−	184.1302	8−	&g
x821.25 7	0.11‡ 3					
x825.86 3	0.130 23					
x826.70 8	0.080 10					
834.810 7	0.91 9	834.807	5−	0.0	7−	E2
838.624 7	3.4 3	838.647	5−	0.0	7−	E2
x841.90 12	0.110 19					
x848.56 10	0.130 21					
x852.797 16	0.190 25					
x853.97 4	0.150 18					
854.614 23	0.33 3	854.661	7+	0.0	7−	E1
x855.21 7	0.090‡ 15					
x860.48 4	0.090 11					
x861.554 21	0.180 18					
x863.95 5	0.100‡ 25					
x866.4 1	0.050 13					

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^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

γ(^{176}Lu) (continued)

E_γ †	I_γ †i	E_i(level)	J_i^π	E_f	J_f^π	Mult.@
868.13k 12	0.070‡ 11	868.109	5−	0.0	7−	
869.994 11	0.84 8	870.006	5−	0.0	7−	E2
x873.30 4	0.110‡ 13					
x881.500 23	0.170 20					
x883.18 5	0.100 24					
x884.712 18	0.23 3					
x892.000 25	0.210‡ 23					
x893.3 1	0.090‡ 17					
x895.40a 16	0.15‡ 4					
x896.07a 4	0.35 13					
x902.718 21	0.26 3					
x903.71 7	0.22‡ 3					
906.78k 5	0.13‡ 4	1029.670	2−	122.848	1−	
x909.98 5	0.28 5					
x913.70 7	0.090 23					
x915.59 6	0.18 4					
921.464 13	0.62 6	921.468	5−	0.0	7−	
x925.17 5	0.110‡ 14					
x926.68 3	0.24 4					
x928.35 10	0.09‡ 3					
x931.20 7	0.110‡ 23					
938.36k 6	0.090 17	938.408	7+	0.0	7−	
x954.69 4	0.15‡ 3					
x957.82 4	0.15‡ 4					
x961.97 9	0.090 14					
972.48 4	0.22 4	972.518	6−	0.0	7−	
x975.801 22	0.38 5					
x977.25 6	0.24 3					
x980.33 20	0.080‡ 14					
x986.61 8	0.200 24					
x988.53 9	0.130 22					
x991.81 5	0.140 17					
x995.16 9	0.120 20					
x999.49 10	0.150‡ 23					
1000.75k 7	0.130‡ 18	1000.851	6−	0.0	7−	
1002.5k 3	0.070‡ 15	1002.767	6−	0.0	7−	
x1005.60 4	0.23 3					
x1009.64 10	0.23‡ 3					
x1019.19 8	0.21 2					
x1022.31 8	0.140‡ 17					
x1026.44 6	0.160‡ 19					
x1028.60 11	0.130 21					
1032.36 4	0.24 3	1032.378	5−	0.0	7−	
x1035.18 3	0.37 4					
x1038.69 10	0.59‡ 6					
x1042.14 5	0.23 5					
x1043.13 15	0.13 2					
x1048.83 6	0.24‡ 5					
x1052.16 7	0.34 9					
x1055.60 10	0.21 3					
x1091.94 10	0.23 3					

Continued on next page (footnotes at end of table)

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21 (continued)

γ(^{176}Lu) (continued)

E_γ †	I_γ †*i*	E_i(level)	J_i^π	E_f	J_f^π	E_γ †	I_γ †*i*	E_i(level)	J_i^π	E_f	J_f^π
[x]1093.98 *13*	0.20‡ *3*					5446.1	0.60	6289.56	$3^+,4^+$	843.420	3^-
[x]1120.05 *11*	0.21 *3*					5502.1	0.19	6289.56	$3^+,4^+$	788.204	4^-
[x]1130.37 *10*	0.37 *4*					5537.3	0.23	6289.56	$3^+,4^+$	751.903	4^-
(5189)		6289.56	$3^+,4^+$	1100.419	3^-	5555.9	0.10	6289.56	$3^+,4^+$	734.033	7^+
5234	0.20	6289.56	$3^+,4^+$	1055.5		5566.7	0.54	6289.56	$3^+,4^+$	722.911	4^-
5258	0.17	6289.56	$3^+,4^+$	1032.378	5^-	5630.5	0.23	6289.56	$3^+,4^+$	658.441	3^-
5268	0.07	6289.56	$3^+,4^+$	1019.927	4^+	5654.6[b]	0.07	6289.56	$3^+,4^+$	635.202	4^+
5302.4[b]	0.19	6289.56	$3^+,4^+$	988.166	5^-	5693.9	0.10	6289.56	$3^+,4^+$	595.754	4^-
5331.5	1.02	6289.56	$3^+,4^+$	957.903	3^-	5755.3[c]	0.06	6289.56	$3^+,4^+$	533.095	4^+
5345.0	0.16	6289.56	$3^+,4^+$	945.020	4^-	5785.0[b]	0.05	6289.56	$3^+,4^+$	504.877	3^-
5366.4	0.14	6289.56	$3^+,4^+$	921.468	5^-	5802.0	0.08	6289.56	$3^+,4^+$	487.649	5^+
5382.0	0.20	6289.56	$3^+,4^+$	908.251	4^-	5825.7	0.39	6289.56	$3^+,4^+$	463.781	4^-
5405.6	0.28	6289.56	$3^+,4^+$	883.468	3^-	5855.5	0.08	6289.56	$3^+,4^+$	433.043	2^-
5421.0[c]	0.04	6289.56	$3^+,4^+$	868.109	5^-	5909.5[c]	0.07	6289.56	$3^+,4^+$	381.342	2^+
5429.2	0.16	6289.56	$3^+,4^+$	860.570	4^-	5983.4	0.83	6289.56	$3^+,4^+$	305.271	2^-

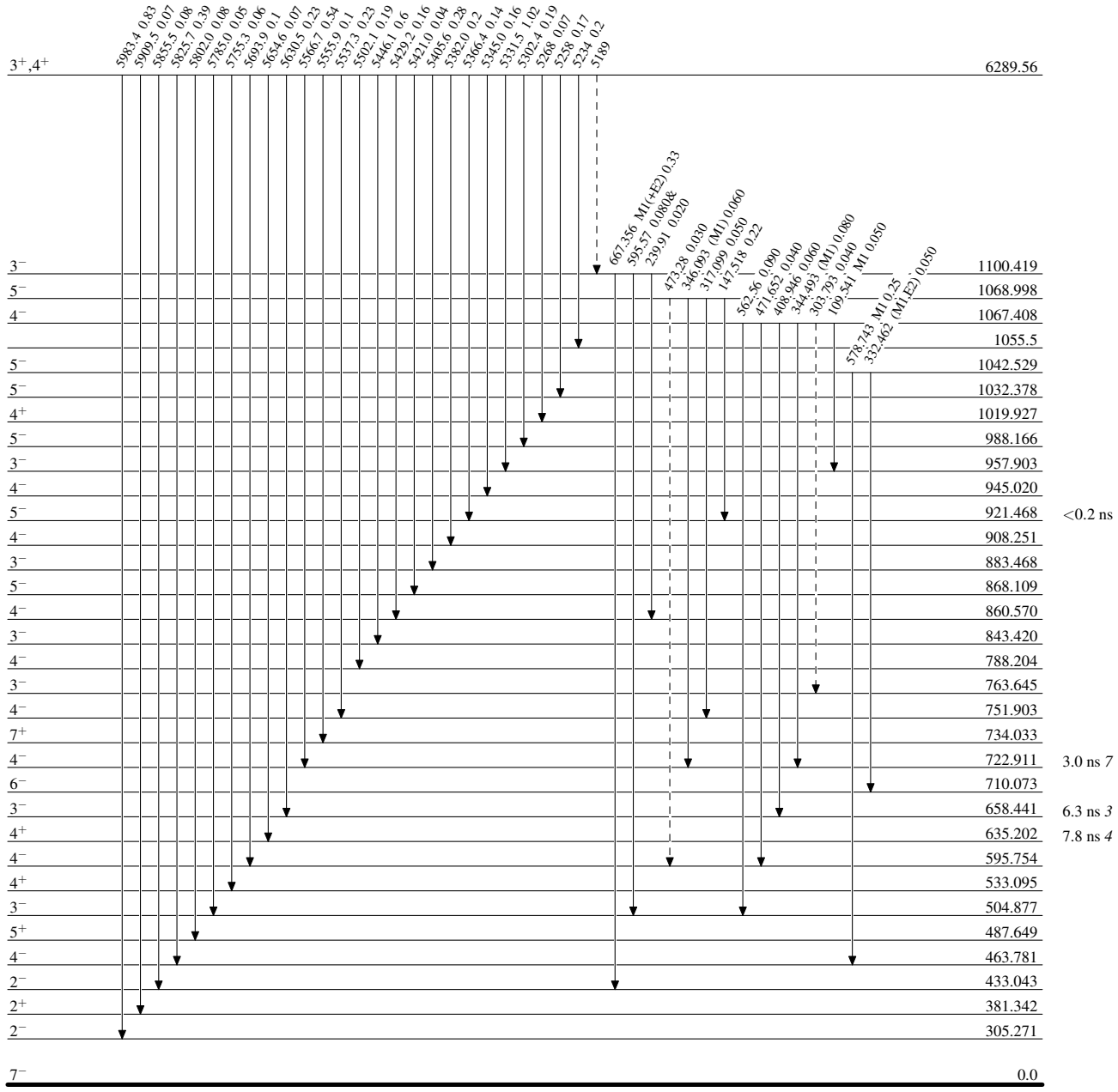
† Intensity per 100 neutron captures. Eγ and Iγ for primary γ rays are from bent crystal measurement (1969Mi21), unless otherwise specified.
‡ Intensity strongly affected by a line from a neighboring isotope, probably ^{177}Lu.
# Uncertain γ ray, close to detector sensitivity limit, statistically not significant.
@ From experimental conversion coefficients deduced from Ice and Iγ. The electron intensities were normalized to the γ-ray intensities using transitions of previously known multipolarities (1991Kl02).
& Measured (M1) multipolarity. Level scheme requires E2.
[a] Unresolved doublet.
[b] Observed by 1972Fu06 only.
[c] Possibly complex (1969Mi21).
[d] Measured M1,E2 multipolarity. Level scheme requires E2.
[e] Measured (M1,E2) multipolarity. Level scheme requires E1.
[f] Measured (M1,E2) multipolarity. Level scheme requires (E2).
[g] Reported as (M1?) in 1991Kl02. Level scheme requires E2.
[h] Deduced by the evaluator from reported %E2 of the M1+E2 multipolarities in 1991Kl02.
[i] Intensity per 100 neutron captures.
[j] Multiply placed with undivided intensity.
[k] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme

Intensities: Iγ per 100 neutron captures
& 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)



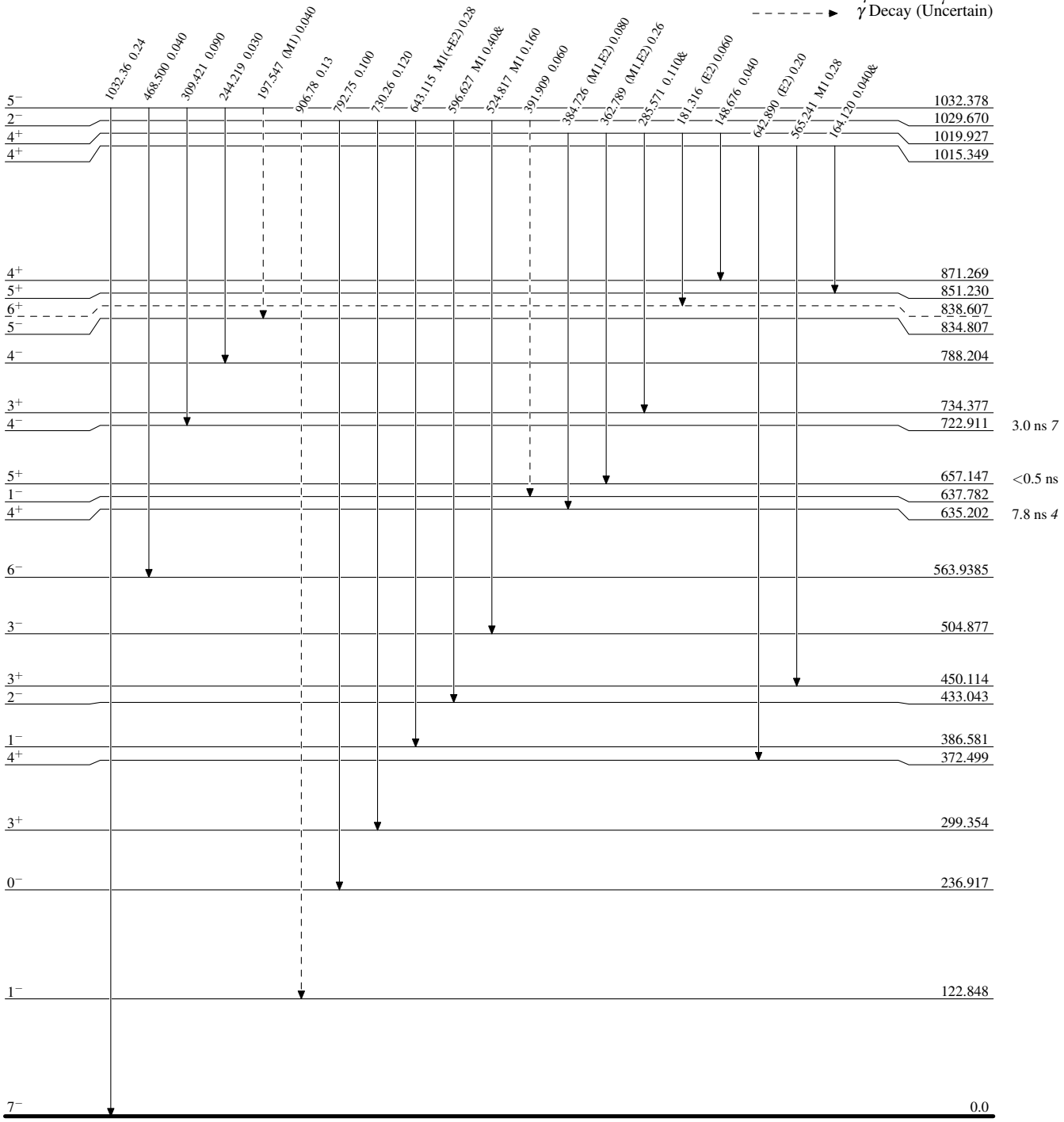
$^{176}_{71}Lu_{105}$

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures
& 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)

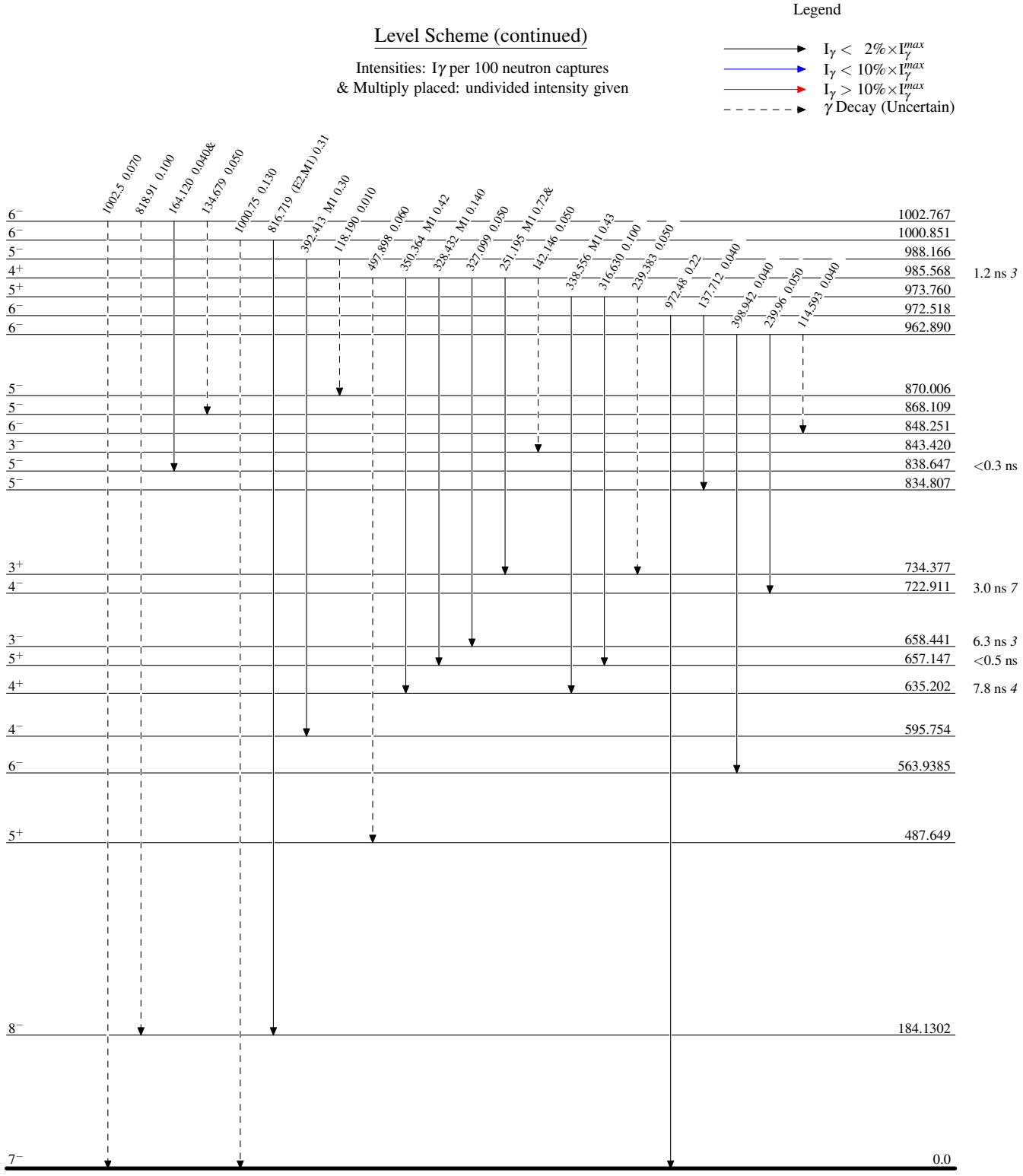


$^{176}_{71}Lu_{105}$

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures
& Multiply placed: undivided intensity given

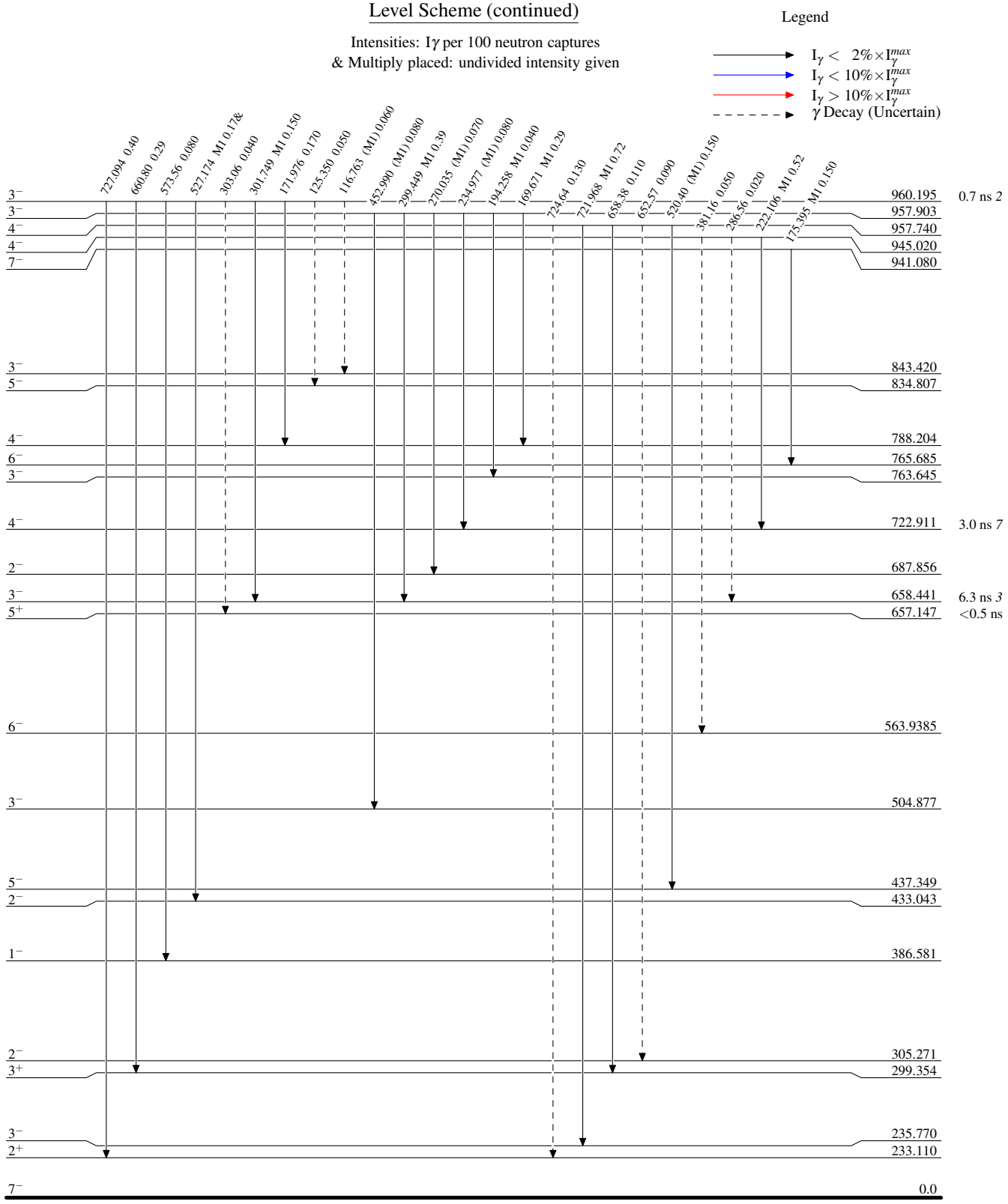


$^{176}_{71}Lu_{105}$

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures
& Multiply placed: undivided intensity given



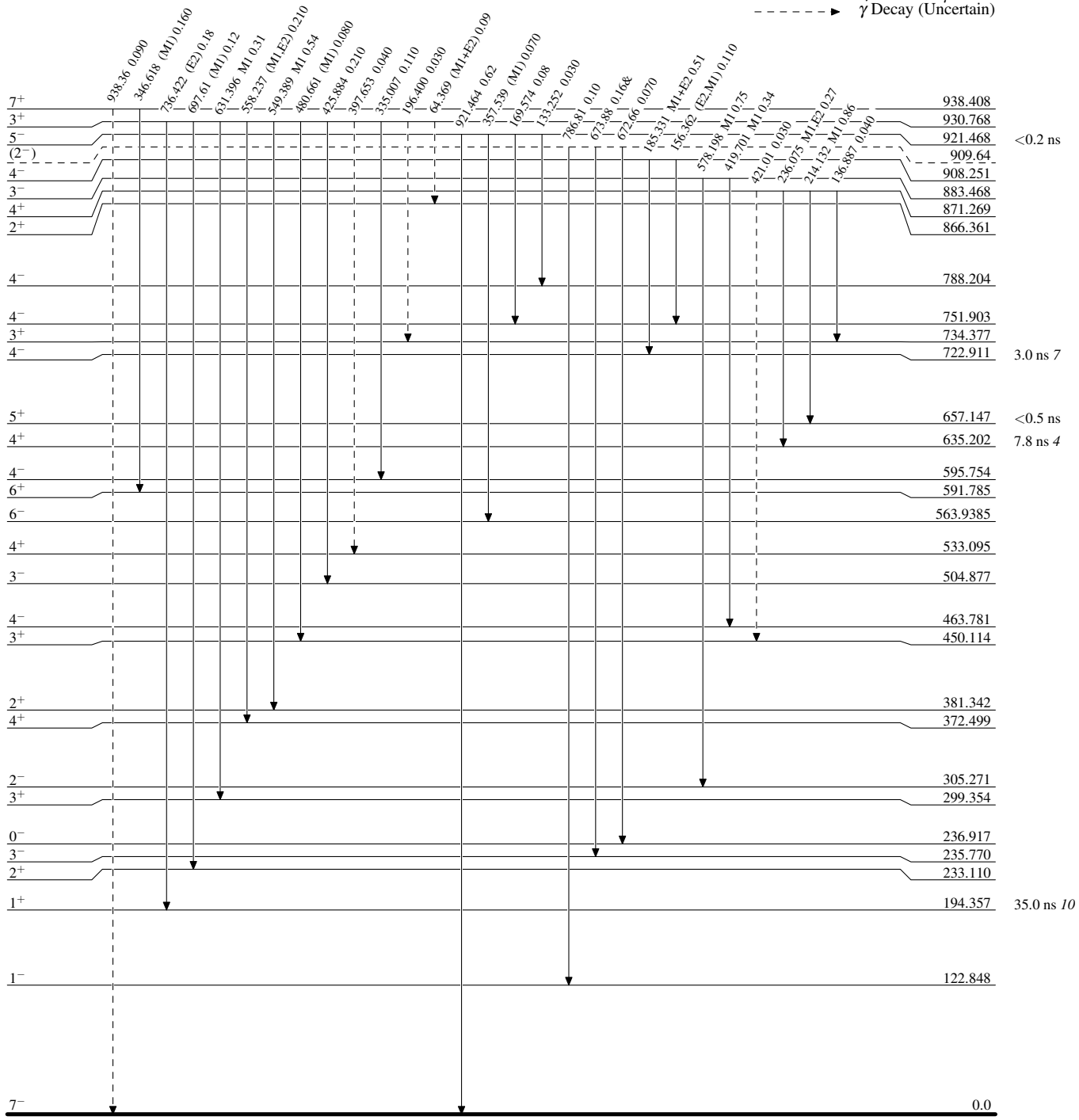
$^{176}_{71}Lu_{105}$

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures
& 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)



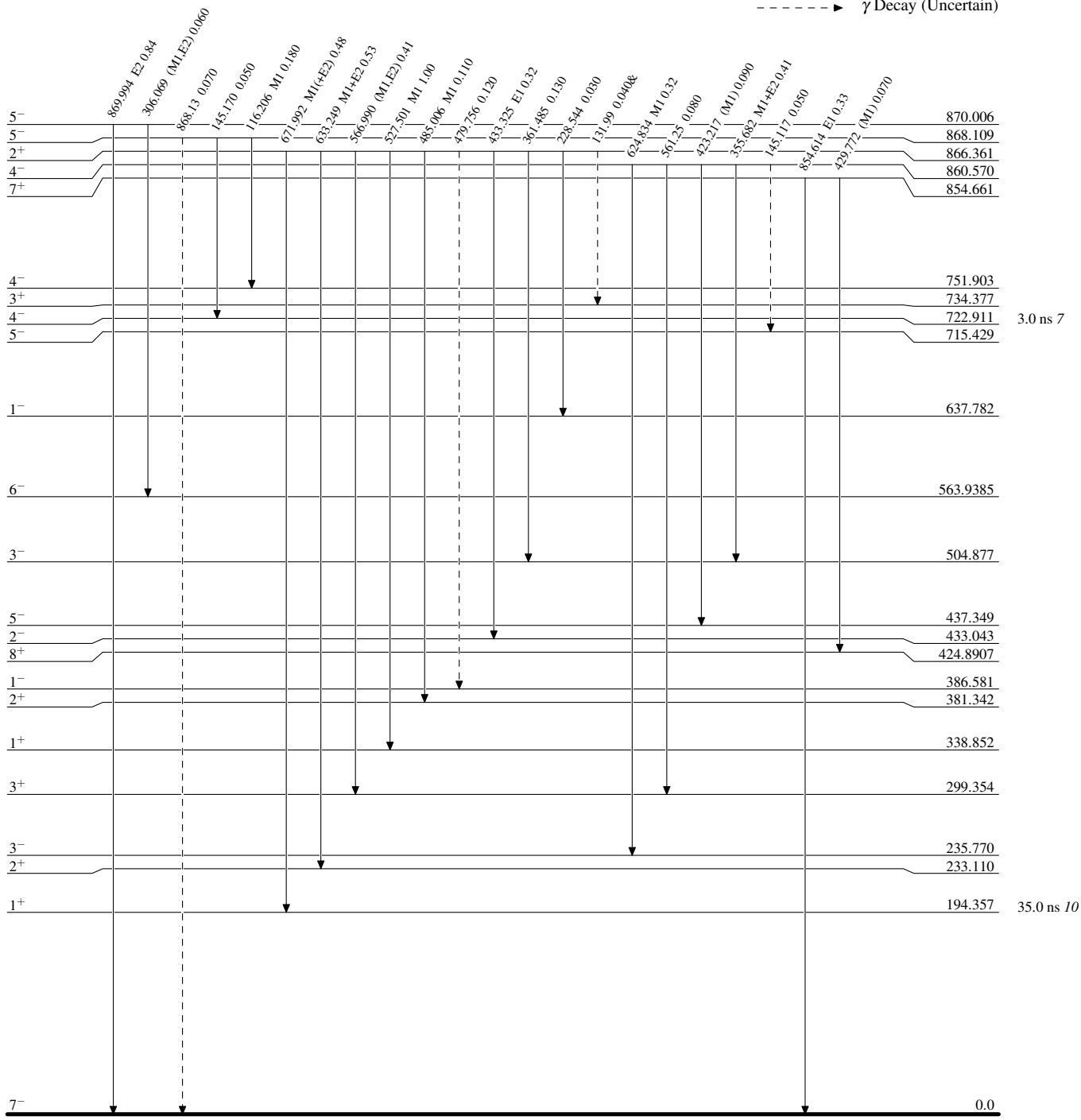
$^{176}_{71}Lu_{105}$

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures
& 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)



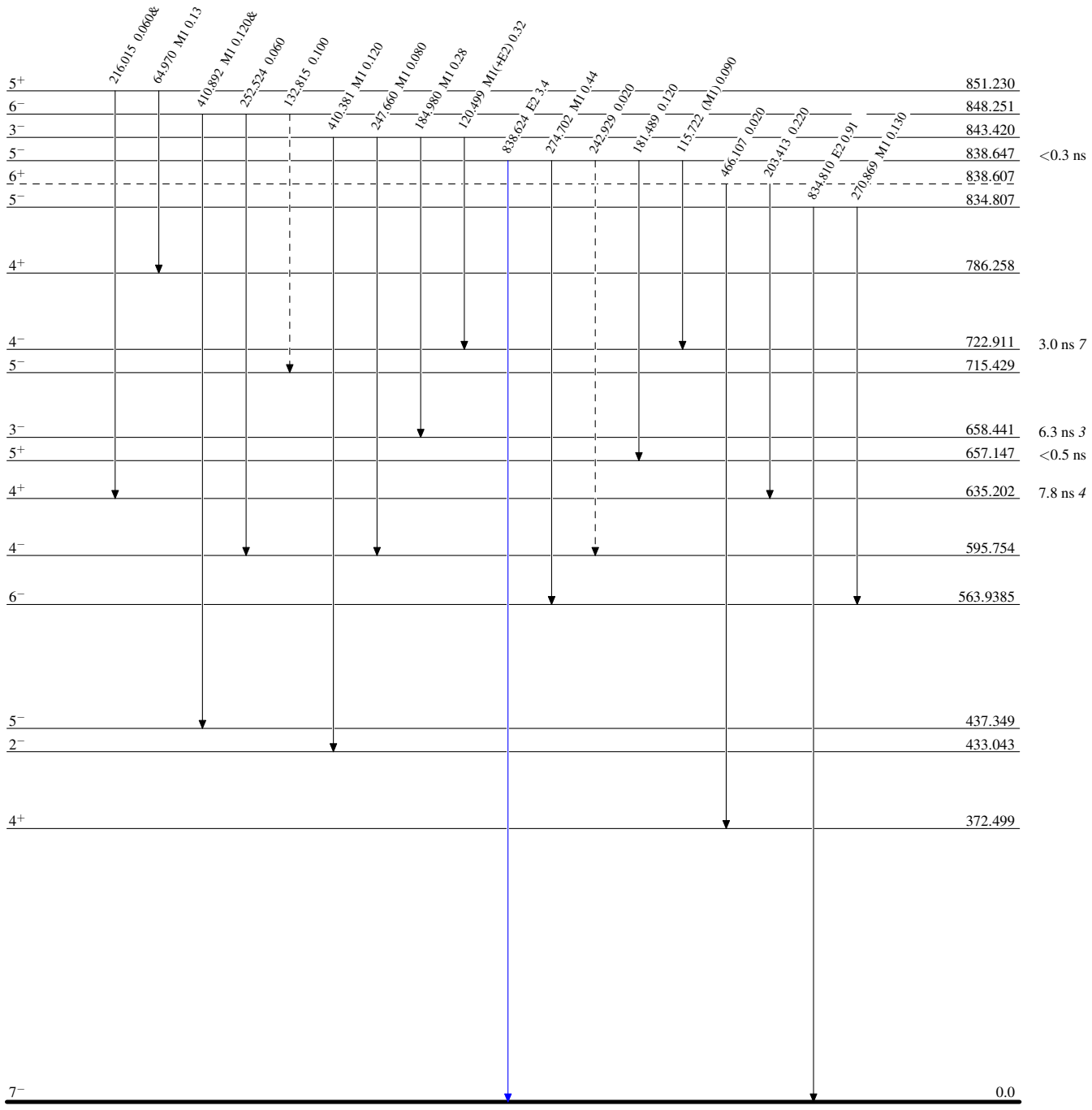
$^{176}_{71}Lu_{105}$

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures
& 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)

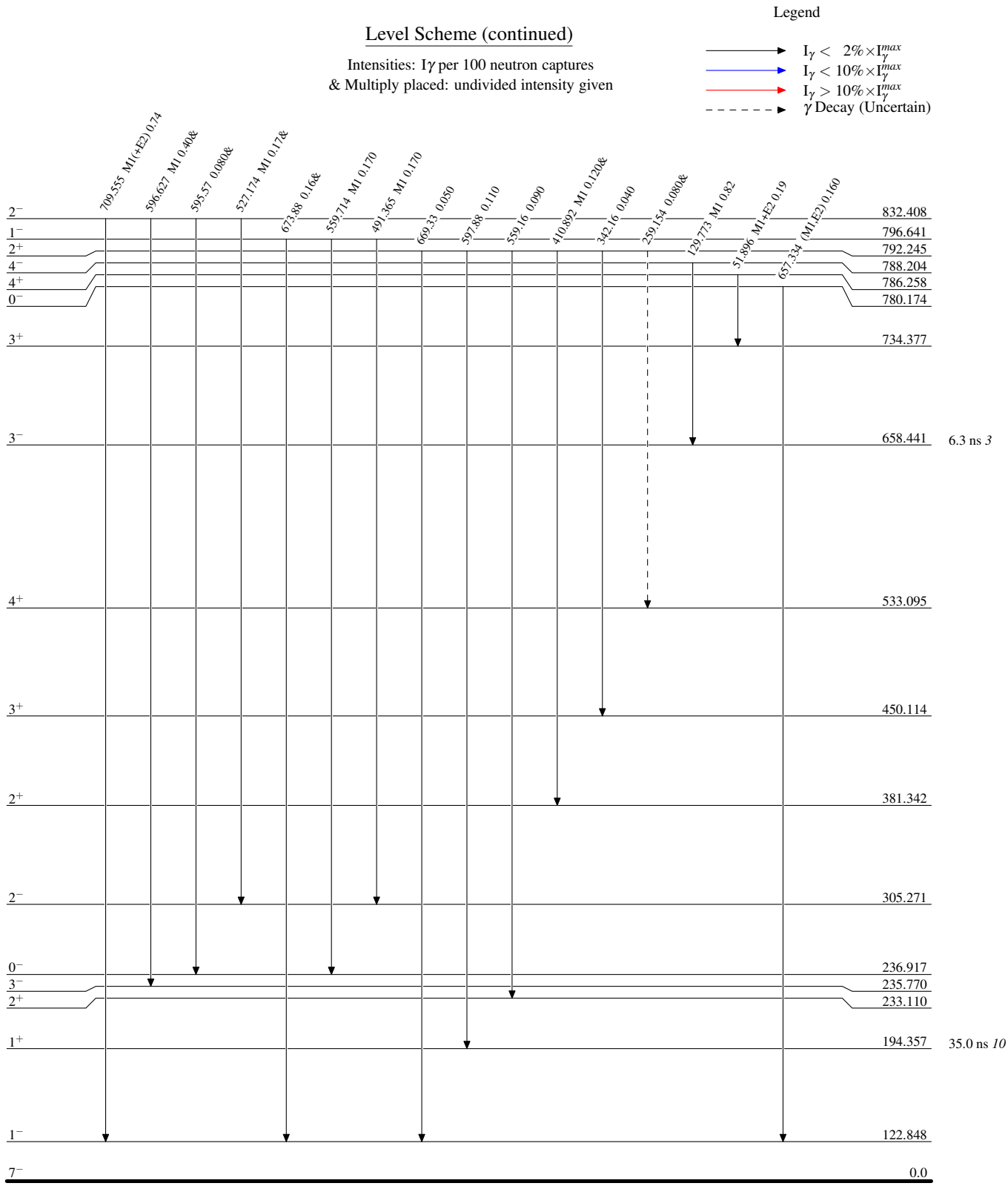


$^{176}_{71}Lu_{105}$

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures
& Multiply placed: undivided intensity given



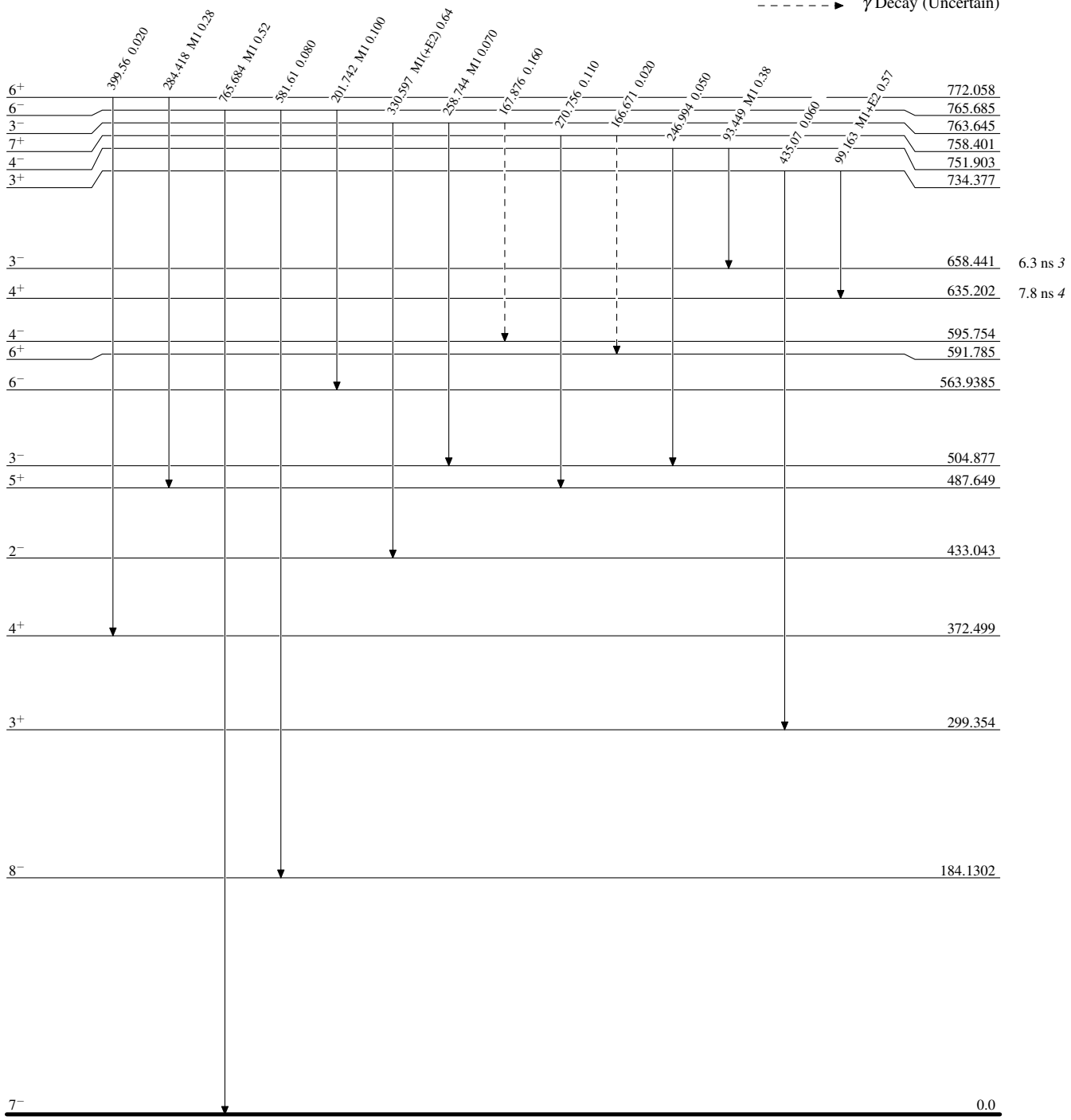
$^{176}_{71}Lu_{105}$

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures
& 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)



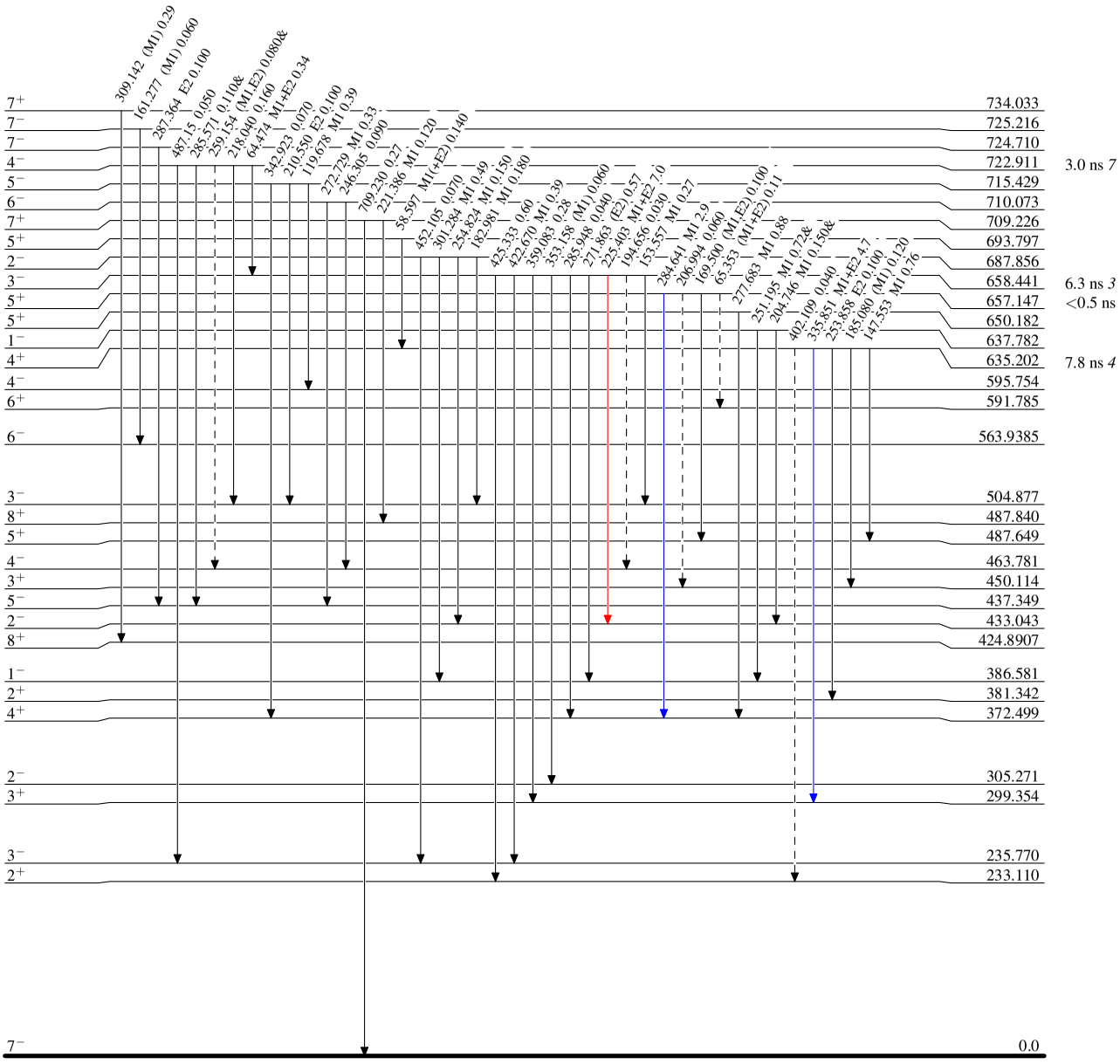
$^{176}_{71}Lu_{105}$

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures
& 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)

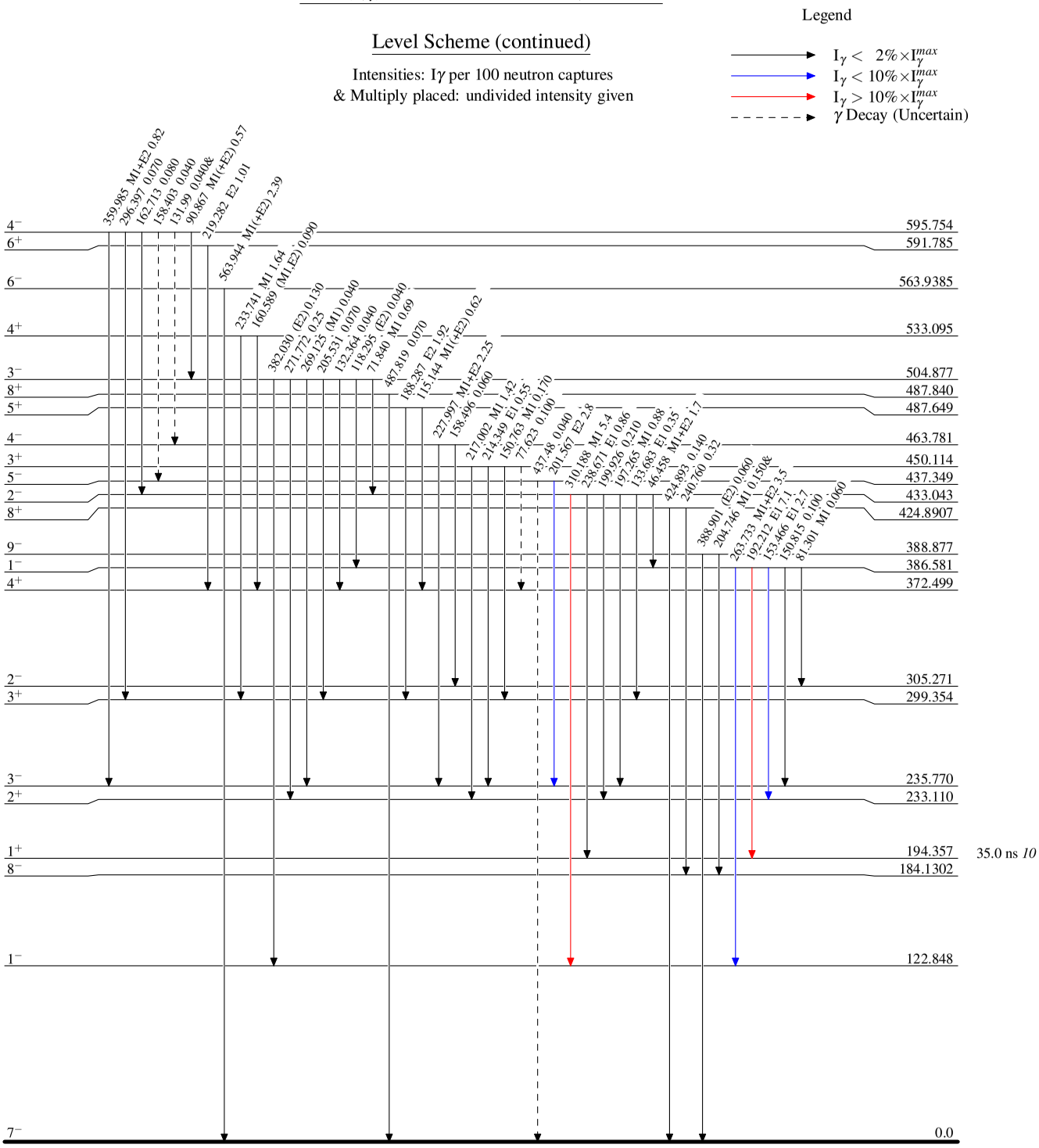


$^{176}_{71}Lu_{105}$

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures
& Multiply placed: undivided intensity given

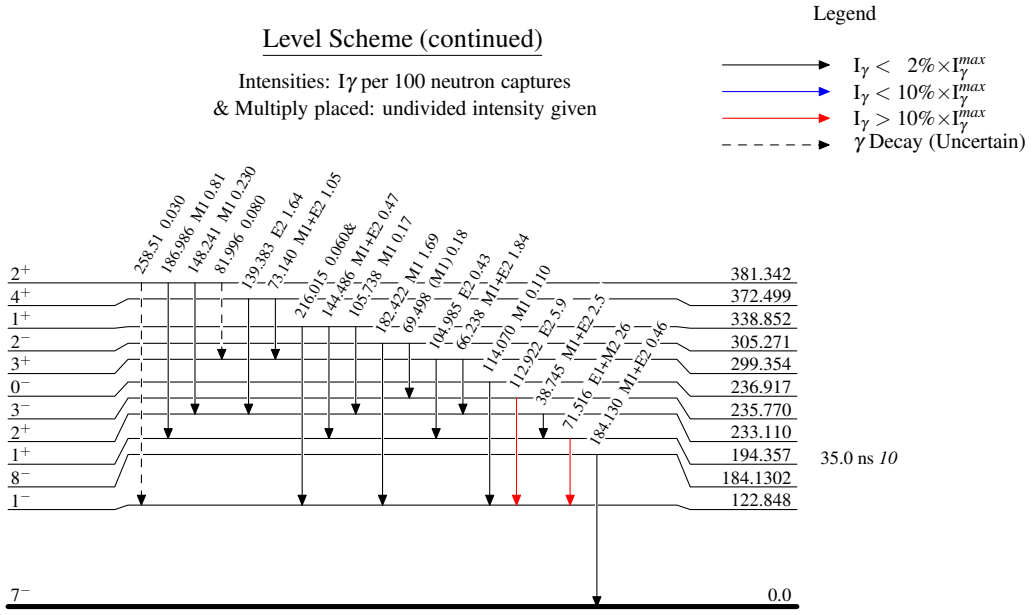


$^{176}_{71}Lu_{105}$

^{175}Lu(n,γ) E=thermal 1991Kl02,1969Mi21

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures
& Multiply placed: undivided intensity given



$^{176}_{71}Lu_{105}$