^{107}Ag(n,γ) E=th: secondary 1985Ma54

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	ENSDF	1-Jul-2008

^{108}Ag Levels

E(level)†	Jπ‡	$T_{1/2}$#	E(level)†	Jπ‡	E(level)†	Jπ‡
0	1^+		598.654 *3*	3^-,4^-	880.598 *13*	2^+
79.139 *1*	2^-	1.2 ns *4*	606.531 *3*	1^-	899.941 *3*	1^-
109.466 *7*	6^+		611.659 *3*	2^+,3^+	942.334 *14*	3^-
155.876 *4*	5^+,6^+		615.706 *3*	3^+	960.149 *5*	2^-
193.075 *2*	1^+	<0.5 ns	616.943 *3*	2^-	967.455 *8*	(3,4^-)
206.612 *2*	2^+	<0.2 ns	645.498 *4*	$(3)^+$	974.331 *4*	2^-
215.382 *2*	3^+	50@ ns *3*	656.328 *21*	3^-	1001.804 *8*	1^+,2^-
294.561 *2*	2^+	<0.14 ns	656.652 *4*	3^+,4^+	1002.595 *10*	1^+,2^-
324.495 *2*	3^+		679.092 *5*	1^-	1012.55 *4*	1^+,2,3
338.419 *2*	3^-	<0.11 ns	703.583 *5*	3^-,4^-	1012.724 *4*	2^-,3^-
364.237 *3*	3^+,4^+		705.692 *5*	1^-,2^-	1013.210 *14*	1^+,2,3^+
379.242 *2*	1^-	<0.14 ns	708.845 *3*	$(2)^-$	1034.411 *8*	3^+
408.364 *2*	3^+	<0.14 ns	715.806 *6*	1^-,2^-	1051.566 *18*	(1^+)
465.641 *3*	0^-		719.365 *4*	1^-,2^-	1051.844 *13*	(2^-)
471.846 *3*	3^+,4^+		765.467 *3*	2^-	1079.203 *5*	2^-,3^-,4^-
485.056 *2*	4^-,5^-		779.727 *4*	$(2,3)^-$	1079.817 *14*	2
508.477 *2*	2^-	<0.2 ns	799.674 *3*	3^-	1096.844 *21*	$(3)^+$
516.843 *2*	3^-	<0.14 ns	803.733 *5*	2^-	1106.676 *18*	2^+
542.848 *3*	3^-		819.117 *7*	2^-	1109.309 *6*	3^+
563.812 *2*	2^+	<0.14 ns	858.367 *4*	$(2,3)^-$	1112.254 *22*	1^+
579.110 *5*	0^-,2^-		858.44 *3*	$(2,3,4^+)$	1143.94 *3*	1^+
587.361 *3*	$(4)^-$		869.302 *8*	3^+	1176.47 *5*	1,2

† Author's values from a least-squares fit to the Eγ.
‡ From Adopted Levels.
# From $\gamma\gamma$(t) of 1985Ma54, except where noted otherwise.
@ Weighted average of $\gamma\gamma$(t) values of 1968Ro06 (48 ns *4*), 1971Gu05 (54 ns *8*) and 1985Ma54 (53 ns *6*).

γ(^{108}Ag)

E_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[#]	α[&]	$I_{(\gamma+ce)}$ [‡]	Comments
[x]28.52 *5*								0.008 *2*	
30.08 *5*	1109.309	3^+	1079.203	$2^-,3^-,4^-$				0.012 *3*	
[x]44.22 *7*								0.040 *24*	
46.435 *3*	155.876	$5^+,6^+$	109.466	6^+	M1+E2	0.43 *10*	6.9 *12*	7.60 *15*	α(K)=4.6 *2*; α(L)=1.7 *6*; α(M)=0.34 *11*; α(N+..)=0.11 *3*
[x]74.523 *3*					M1(+E2)	≤0.2	1.04 *6*	4.40 *22*	α(K)=0.89 *4*; α(L)=0.124 *18*; α(M+..)=0.028 *4*
[x]74.831 *6*								0.27 *5*	
[x]78.520 *20*								3.7 *4*	
79.138 *3*	79.139	2^-	0	1^+	E1		0.313	61 *6*	α(K)=0.272; α(L)=0.0336; α(M+..)=0.0079 B(E1)(W.u.)=0.00038 *13* Mult.: from α(K)exp in ^{108}Ag IT decay.
87.944 *4*	294.561	2^+	206.612	2^+	M1(+E2)	≤0.2	0.64 *3*	0.18 *2*	B(M1)(W.u.)>0.0017
91.893 *3*	708.845	$(2)^-$	616.943	2^-	M1(+E2)	≤0.2	0.56 *3*	0.11 *4*	
101.483 *3*	294.561	2^+	193.075	1^+	M1		0.406	3.20 *16*	B(M1)(W.u.)>0.024
102.309 *3*	587.361	$(4)^-$	485.056	$4^-,5^-$	M1		0.397	1.27 *7*	
[x]103.013 *4*					M1			0.22 *2*	
110.179 *5*	708.845	$(2)^-$	598.654	$3^-,4^-$				0.094 *11*	
113.595 *4*	598.654	$3^-,4^-$	485.056	$4^-,5^-$	M1(+E2)	≤0.2	0.307 *12*	3.4 *3*	
113.800 *4*	408.364	3^+	294.561	2^+	M1		0.294	3.3 *2*	B(M1)(W.u.)>0.049
113.931 *2*	193.075	1^+	79.139	2^-	E1		0.110	0.40 *3*	B(E1)(W.u.)>8.5×10^{-6}
117.886 *4*	324.495	3^+	206.612	2^+	M1		0.266	10.0 *6*	
121.454 *6*	708.845	$(2)^-$	587.361	$(4)^-$					Mult.: M1(+E2)with δ≤0.4, but in conflict with $(2)^-$ to $(4)^-$ placement.
[x]126.368 *6*					M1(+E2)	≤0.8	0.30 *8*	0.066 *9*	
127.474 *6*	206.612	2^+	79.139	2^-				0.050 *6*	
129.232 *4*	508.477	2^-	379.242	1^-	M1(+E2)	≤0.4	0.23 *3*	0.250 *15*	B(M1)(W.u.)>0.0024
131.806 *6*	338.419	3^-	206.612	2^+				0.059 *7*	
134.469 *5*	899.941	1^-	765.467	2^-	M1+E2	0.5 *2*	0.25 *4*	0.150 *11*	
136.241 *6*	215.382	3^+	79.139	2^-	E1		0.066	0.210 *15*	B(E1)(W.u.)=4.7×10^{-8} *6*
137.498 *13*	1079.817	2	942.334	3^-				0.022 *7*	
140.895 *7*	606.531	1^-	465.641	0^-	M1		0.162	0.055 *6*	
143.911 *13*	1013.210	$1^+,2,3^+$	869.302	3^+				0.015 *6*	
147.349 *5*	471.846	$3^+,4^+$	324.495	3^+	M1			0.97 *6*	
148.524 *6*	765.467	2^-	616.943	2^-				0.034 *4*	
148.855 *5*	364.237	$3^+,4^+$	215.382	3^+	M1+E2	0.4 *1*	0.17 *1*	1.12 *7*	
149.159 *6*	1109.309	3^+	960.149	2^-				0.034 *4*	
155.448 *5*	563.812	2^+	408.364	3^+	M1		0.124	0.79 *5*	B(M1)(W.u.)>0.0055
[x]159.291 *8*								0.050 *8*	
160.460[a] *11*	869.302	3^+	708.845	$(2)^-$				0.019 *5*	
160.460[a] *11*	960.149	2^-	799.674	3^-				0.019 *5*	
[x]161.916 *14*								0.022 *7*	
[x]164.064 *9*								0.019 *4*	
[x]165.290 *11*								0.018 *7*	
165.997 *7*	708.845	$(2)^-$	542.848	3^-				0.047 *5*	

$^{108}_{47}$Ag$_{61}$-2

^{107}Ag(n,γ) E=th: secondary 1985Ma54 (continued)

$\gamma(^{108}Ag)$ (continued)

E_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[#]	α[&]	$I_{(\gamma+ce)}$ [‡]	Comments
170.058 *6*	508.477	2^-	338.419	3^-	M1(+E2)	≤0.2	0.100 *3*	0.46 *3*	B(M1)(W.u.)>0.0024
170.615 *8*	679.092	1^-	508.477	2^-				0.022 *4*	
[x]172.107 *9*								0.019 *4*	
172.625 *7*	379.242	1^-	206.612	2^+				0.031 *4*	
173.648 *8*	645.498	$(3)^+$	471.846	$3^+,4^+$				0.022 *4*	
174.657 *6*	974.331	2^-	799.674	3^-	M1		0.091	0.200 *14*	
178.424 *6*	516.843	3^-	338.419	3^-	M1		0.086	1.74 *12*	B(M1)(W.u.)>0.018
178.614 *13*	542.848	3^-	364.237	$3^+,4^+$				0.016 *5*	
[x]179.040 *11*								0.016 *4*	
[x]180.252 *8*								0.037 *4*	
180.582 *13*	899.941	1^-	719.365	$1^-,2^-$				0.019 *5*	
[x]182.391 *13*								0.016 *4*	
[x]185.922 *12*								0.019 *4*	
186.167 *7*	379.242	1^-	193.075	1^+				0.150 *11*	
[x]190.858 *10*								0.018 *3*	
192.005 *7*	708.845	$(2)^-$	516.843	3^-	E2(+M1)	≥1.4	0.131 *13*	0.120 *7*	
192.356 *10*	516.843	3^-	324.495	3^+				0.016 *3*	
193.077 *6*	193.075	1^+	0	1^+	M1+E2	−0.21 *5*	0.072 *2*	16.7 *9*	B(M1)(W.u.)>0.0052; B(E2)(W.u.)>2.9 δ: from $\gamma(\theta)$ in (p,nγ).
197.199[a] *14*	705.692	$1^-,2^-$	508.477	2^-				0.016 *3*	
197.199[a] *14*	803.733	2^-	606.531	1^-				0.016 *3*	
199.870 *8*	579.110	$0^-,2^-$	379.242	1^-				0.047 *5*	
200.358 *10*	708.845	$(2)^-$	508.477	2^-				0.022 *4*	
201.020 *9*	799.674	3^-	598.654	$3^-,4^-$	M1(+E2)	≤0.2	0.063 *2*	1.94 *14*	
201.752 *7*	408.364	3^+	206.612	2^+	M1(+E2)	≤0.2	0.063 *1*	2.03 *14*	B(M1)(W.u.)>0.0064
[x]202.145 *8*								0.069 *6*	
202.507 *9*	719.365	$1^-,2^-$	516.843	3^-				0.038 *4*	
203.289 *7*	611.659	$2^+,3^+$	408.364	3^+	M1(+E2)	≤0.6	0.068 *8*	0.300 *18*	
[x]203.456 *8*								0.048 *5*	
204.427 *7*	542.848	3^-	338.419	3^-	M1(+E2)	≤0.4	0.063 *4*	0.68 *5*	
206.612 *7*	206.612	2^+	0	1^+	M1		0.058	24.7 *17*	B(M1)(W.u.)>0.012
207.340 *7*	615.706	3^+	408.364	3^+	M1(+E2)	≤0.3	0.060 *3*	0.37 *3*	
208.566 *10*	616.943	2^-	408.364	3^+				0.025 *3*	
212.314 *8*	799.674	3^-	587.361	$(4)^-$	M1(+E2)	≤0.4	0.057 *3*	0.68 *5*	
[x]212.554 *8*					E2(+M1)	≥0.8	0.086 *14*	0.110 *7*	
213.052 *7*	1012.724	$2^-,3^-$	799.674	3^-	M1(+E2)	≤0.3	0.055 *2*	0.46 *3*	
[x]213.413 *8*					M1+E2	1.1 *6*	0.075 *13*	0.086 *6*	
213.911 *8*	508.477	2^-	294.561	2^+				0.064 *5*	
215.381 *7*	215.382	3^+	0	1^+	E2		0.096	9.7 *6*	B(E2)(W.u.)=0.71 *8* Mult.: E2(+M1) from α(exp), ΔJ rules out M1.
[x]215.543 *8*								0.120 *11*	
218.524 *12*	703.583	$3^-,4^-$	485.056	$4^-,5^-$				0.021 *3*	
[x]218.742 *16*								0.019 *6*	

$^{108}_{47}Ag_{61}$-3

^{107}Ag(n,γ) E=th: secondary 1985Ma54 (continued)

$\gamma(^{108}Ag)$ (continued)

E_γ †	E_i(level)	J_i^π	E_f	J_f^π	Mult.#	δ#	α&	$I_{(\gamma+ce)}$‡	Comments
x220.890 *8*								0.077 *6*	
222.607 *14*	765.467	2^-	542.848	3^-				0.016 *3*	
x222.990 *8*								0.050 *4*	
225.388 *8*	563.812	2^+	338.419	3^-				0.066 *5*	
x226.462 *9*								0.034 *3*	
227.291 *8*	606.531	1^-	379.242	1^-	M1+E2	0.6 *3*	0.054 *6*	0.220 *16*	
x227.960 *14*								0.018 *4*	
x229.233 *21*								0.013 *4*	
x229.805 *12*								0.014 *4*	
230.680 *10*	1034.411	3^+	803.733	2^-				0.019 *4*	
x231.445 *14*								0.017 *4*	
232.722 *14*	1051.844	(2^-)	819.117	2^-				0.016 *4*	
x233.515 *11*								0.022 *4*	
236.879 *9*	779.727	$(2,3)^-$	542.848	3^-				0.044 *5*	
237.133[a] *14*	645.498	$(3)^+$	408.364	3^+				0.030 *8*	
237.133[a] *14*	1002.595	$1^+,2^-$	765.467	2^-				0.030 *8*	
237.723 *19*	616.943	2^-	379.242	1^-				0.013 *4*	
x238.975 *12*								0.022 *4*	
239.319 *8*	563.812	2^+	324.495	3^+	M1(+E2)	≤0.3	0.040 *1*	2.14 *15*	B(M1)(W.u.)>0.0040
240.054 *11*	705.692	$1^-,2^-$	465.641	0^-				0.025 *3*	
240.785 *10*	960.149	2^-	719.365	$1^-,2^-$				0.031 *4*	
241.442 *19*	858.367	$(2,3)^-$	616.943	2^-				0.016 *4*	
244.337 *10*	960.149	2^-	715.806	$1^-,2^-$				0.054 *4*	
x244.684 *20*								0.022 *4*	
248.289 *9*	656.652	$3^+,4^+$	408.364	3^+	M1(+E2)	≤0.8	0.040 *5*	0.38 *3*	
248.628 *12*	765.467	2^-	516.843	3^-				0.027 *4*	
248.937 *9*	587.361	$(4)^-$	338.419	3^-				0.290 *20*	
250.14 *3*	715.806	$1^-,2^-$	465.641	0^-				0.015 *5*	
x251.007 *20*								0.016 *5*	
251.470 *11*	615.706	3^+	364.237	$3^+,4^+$				0.029 *4*	
x252.931 *10*								0.047 *4*	
x253.527 *14*								0.014 *4*	
x254.444 *10*					M1(+E2)	≤1.2	0.040 *6*	0.061 *5*	
254.73 *3*	1034.411	3^+	779.727	$(2,3)^-$				0.020 *8*	
x255.292 *9*					M1			0.270 *19*	
x256.768 *20*								0.017 *4*	
256.987 *9*	765.467	2^-	508.477	2^-				0.097 *7*	
x257.137 *10*								0.036 *4*	
259.279 *8*	338.419	3^-	79.139	2^-	M1(+E2)	≤0.6	0.034 *2*	9.4 *7*	B(M1)(W.u.)>0.0081
259.714 *9*	858.367	$(2,3)^-$	598.654	$3^-,4^-$	M1(+E2)	≤0.5	0.034 *2*	0.270 *19*	
260.239 *9*	598.654	$3^-,4^-$	338.419	3^-	M1			0.120 *8*	
261.756 *12*	967.455	$(3,4^-)$	705.692	$1^-,2^-$				0.022 *3*	
262.883 *9*	779.727	$(2,3)^-$	516.843	3^-	M1			0.100 *7*	

$^{108}_{47}Ag_{61}$-4

^{107}Ag(n,γ) E=th: secondary 1985Ma54 (continued)

$\gamma(^{108}Ag)$ (continued)

E_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[#]	α[&]	$I_{(\gamma+ce)}$ [‡]	Comments
[x]265.170 *20*								0.023 *4*	
[x]268.34 *4*								0.015 *7*	
268.642 *12*	974.331	2^-	705.692	$1^-,2^-$				0.029 *4*	
268.99 *3*	880.598	2^+	611.659	$2^+,3^+$				0.021 *8*	
269.249 *9*	563.812	2^+	294.561	2^+	M1(+E2)	≤0.6	0.031 *2*	1.07 *7*	B(M1)(W.u.)>0.0011
271.000 *10*	858.367	$(2,3)^-$	587.361	$(4)^-$				0.055 *4*	
272.565 *9*	465.641	0^-	193.075	1^+				0.210 *15*	
274.173 *12*	598.654	$3^-,4^-$	324.495	3^+				0.026 *3*	
274.66 *4*	1143.94	1^+	869.302	3^+				0.016 *8*	
[x]275.227 *10*					M1(+E2)	≤0.5	0.029 *2*	0.096 *7*	
277.32 *4*	615.706	3^+	338.419	3^-				0.013 *4*	
[x]278.239 *15*								0.035 *4*	
278.526 *9*	616.943	2^-	338.419	3^-	M1(+E2)	≤0.8	0.029 *3*	0.37 *3*	
279.530 *10*	1079.203	$2^-,3^-,4^-$	799.674	3^-	M1			0.220 *16*	
[x]279.831 *11*								0.037 *4*	
283.003 *9*	899.941	1^-	616.943	2^-	M1		0.0253	0.240 *17*	
[x]285.756 *17*								0.019 *4*	
285.977 *12*	1001.804	$1^+,2^-$	715.806	$1^-,2^-$				0.048 *4*	
[x]286.669 *13*								0.035 *4*	
286.891 *10*	803.733	2^-	516.843	3^-				0.094 *7*	
287.165 *10*	611.659	$2^+,3^+$	324.495	3^+	M1+E2	1.2 *+18−8*	0.031 *5*	0.170 *12*	
[x]290.227 *11*								0.062 *4*	
291.214 *10*	615.706	3^+	324.495	3^+	M1,E2		0.029 *6*	0.220 *16*	
292.10 *4*	656.328	3^-	364.237	$3^+,4^+$				0.012 *4*	
292.431 *12*	616.943	2^-	324.495	3^+				0.044 *4*	
294.563 *9*	294.561	2^+	0	1^+	M1(+E2)	+0.07 *5*	0.0229	10.9 *8*	B(M1)(W.u.)>0.0045 δ: from $\gamma(\theta)$ in (p,nγ).
295.246[a] *15*	803.733	2^-	508.477	2^-				0.030 *4*	
295.246[a] *15*	974.331	2^-	679.092	1^-				0.030 *4*	
[x]296.060 *13*								0.034 *5*	
[x]298.800 *20*								0.031 *6*	
299.89 *3*	679.092	1^-	379.242	1^-				0.070 *25*	
300.101 *9*	379.242	1^-	79.139	2^-	M1(+E2)	+0.11 *7*	0.022 *1*	6.3 *5*	B(M1)(W.u.)>0.0053 δ: from $\gamma(\theta)$ in (p,nγ).
[x]300.426 *18*								0.028 *7*	
[x]300.907 *15*								0.036 *6*	
301.841 *11*	508.477	2^-	206.612	2^+				0.160 *11*	
[x]302.221 *14*								0.050 *5*	
[x]303.882 *10*					M1,E2		0.025 *5*	0.260 *18*	
[x]304.93 *4*								0.023 *6*	
[x]305.418 *20*								0.027 *5*	
307.91 *4*	779.727	$(2,3)^-$	471.846	$3^+,4^+$				0.018 *6*	
[x]309.30 *5*								0.016 *5*	

$^{108}_{47}Ag_{61}$-5

^{107}Ag(n,γ) E=th: secondary 1985Ma54 (continued)

γ(^{108}Ag) (continued)

E_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	α[&]	$I_{(\gamma+ce)}$ [‡]
[x]309.88 *3*							0.043 *15*
310.223 *18*	516.843	3^-	206.612	2^+			0.039 *5*
310.818 *15*	967.455	$(3,4^-)$	656.652	$3^+,4^+$			0.055 *6*
311.962 *11*	606.531	1^-	294.561	2^+	E1		0.240 *17*
[x]313.224 *20*							
[x]315.413 *13*					M1,E2	0.023 *4*	0.073 *5*
317.104 *10*	611.659	$2^+,3^+$	294.561	2^+	M1	0.019	0.99 *7*
317.92 *4*	656.328	3^-	338.419	3^-			0.013 *4*
[x]319.28 *4*							0.012 *3*
320.999 *14*	645.498	$(3)^+$	324.495	3^+			0.038 *4*
322.38 *3*	616.943	2^-	294.561	2^+			0.021 *4*
322.709 *12*	1001.804	$1^+,2^-$	679.092	1^-			0.065 *6*
324.493 *12*	324.495	3^+	0	1^+	E2[@]		0.116 *8*
325.42 *3*	942.334	3^-	616.943	2^-			0.013 *3*
326.45 *4*	705.692	$1^-,2^-$	379.242	1^-			0.017 *4*
326.950 *20*	1106.676	2^+	779.727	$(2,3)^-$			0.022 *4*
327.457 *11*	542.848	3^-	215.382	3^+			0.180 *13*
329.179 *11*	485.056	$4^-,5^-$	155.876	$5^+,6^+$	E1		3.64 *26*
332.157 *12*	656.652	$3^+,4^+$	324.495	3^+	M1,E2	0.020 *3*	0.170 *12*
336.555 *16*	715.806	$1^-,2^-$	379.242	1^-			0.043 *4*
[x]336.88 *4*							0.017 *6*
[x]337.382 *16*							0.028 *4*
[x]337.978 *20*							0.028 *4*
[x]338.49 *3*							0.017 *4*
[x]339.52 *4*							
[x]341.722 *13*							0.074 *5*
[x]342.421 *18*							0.033 *5*
343.23 *7*	960.149	2^-	616.943	2^-			0.008 *4*
345.75 *10*	1051.566	(1^+)	705.692	$1^-,2^-$			0.013 *5*
[x]346.427 *14*							0.070 *5*
348.423 *13*	563.812	2^+	215.382	3^+	M1,E2		0.130 *9*
[x]349.269 *16*							0.041 *4*
349.908 *20*	858.367	$(2,3)^-$	508.477	2^-			0.035 *5*
350.522 *23*	967.455	$(3,4^-)$	616.943	2^-			0.026 *5*
350.941 *12*	645.498	$(3)^+$	294.561	2^+			0.48 *4*
[x]351.306 *19*							0.041 *6*
[x]351.50 *10*							0.038 *12*
353.482 *21*	819.117	2^-	465.641	0^-			0.031 *4*
[x]355.60 *3*							0.016 *3*
[x]357.160 *21*							0.035 *5*
357.410 *16*	974.331	2^-	616.943	2^-			0.048 *5*
[x]358.37 *4*							0.017 *6*
[x]359.99 *3*							0.035 *12*

$^{108}_{47}Ag_{61}$-6

^{107}Ag(n,γ) E=th: secondary 1985Ma54 (continued)

$\gamma(^{108}Ag)$ (continued)

E_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	α [&]	$I_{(\gamma+ce)}$ [‡]
[x]361.24 *3*							0.013 *4*
[x]362.440 *16*							0.052 *5*
365.165 *12*	703.583	3^-,4^-	338.419	3^-	M1,E2	0.015 *2*	0.232 *16*
[x]366.04 *4*							0.011 *4*
[x]368.55 *3*							0.020 *4*
370.416 *16*	708.845	$(2)^-$	338.419	3^-			0.052 *6*
370.742 *13*	563.812	2^+	193.075	1^+	M1,E2		0.340 *24*
[x]372.434 *15*							0.085 *6*
375.621 *16*	1079.203	2^-,3^-,4^-	703.583	3^-,4^-			0.045 *5*
[x]377.679 *21*							0.042 *4*
379.250 *14*	379.242	1^-	0	1^+			0.124 *9*
[x]379.80 *4*							0.015 *7*
380.949 *12*	719.365	1^-,2^-	338.419	3^-	E2 [@]		0.46 *3*
[x]381.76 *3*							0.026 *4*
384.355 *15*	708.845	$(2)^-$	324.495	3^+			0.166 *12*
386.034 *17*	579.110	0^-,2^-	193.075	1^+			0.112 *14*
386.218 *15*	765.467	2^-	379.242	1^-			0.140 *14*
386.505 *14*	465.641	0^-	79.139	2^-	E2 [@]		0.270 *19*
[x]387.70 *4*							0.032 *8*
388.06 *4*	1096.844	$(3)^+$	708.845	$(2)^-$			0.058 *20*
[x]388.195 *23*							0.046 *7*
[x]389.403 *23*							0.029 *4*
391.458 *23*	899.941	1^-	508.477	2^-			0.039 *5*
393.477 *16*	1109.309	3^+	715.806	1^-,2^-			0.090 *6*
395.30 *3*	1001.804	1^+,2^-	606.531	1^-			0.033 *6*
[x]395.886 *23*							0.040 *6*
396.277 *14*	611.659	2^+,3^+	215.382	3^+	M1,E2	0.012 *1*	0.340 *24*
397.418 *19*	869.302	3^+	471.846	3^+,4^+			0.063 *5*
[x]399.24 *3*							0.033 *6*
399.924 *14*	606.531	1^-	206.612	2^+	E1		0.46 *3*
[x]400.241 *23*							0.064 *10*
401.08 *6*	1012.724	2^-,3^-	611.659	2^+,3^+			0.024 *11*
401.58 [a] *5*	616.943	2^-	215.382	3^+			0.022 *6*
401.58 [a] *5*	1013.210	1^+,2,3^+	611.659	2^+,3^+			0.022 *6*
403.50 *8*	967.455	$(3,4^-)$	563.812	2^+			0.020 *6*
405.070 *22*	611.659	2^+,3^+	206.612	2^+			0.100 *12*
[x]405.28 *4*							0.037 *11*
406.17 *3*	1012.724	2^-,3^-	606.531	1^-			0.036 *6*
408.369 *16*	408.364	3^+	0	1^+			0.158 *11*
410.327 *17*	616.943	2^-	206.612	2^+			0.112 *9*
410.73 *9*	819.117	2^-	408.364	3^+			0.018 *9*
[x]411.86 *4*							0.020 *5*
[x]412.44 *4*							0.030 *8*

$^{108}_{47}Ag_{61}$-7

^{107}Ag(n,γ) E=th: secondary 1985Ma54 (continued)

γ(^{108}Ag) (continued)

E_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	$I_{(\gamma+ce)}$ [‡]
413.49 *4*	606.531	1^-	193.075	1^+		0.040 *7*
414.307 *24*	708.845	$(2)^-$	294.561	2^+		0.040 *5*
[x]416.74 *7*						0.017 *5*
[x]419.006 *24*						0.059 *5*
[x]419.79 *3*						0.035 *5*
[x]420.98 *5*						0.024 *4*
422.71[a] *5*	615.706	3^+	193.075	1^+		0.018 *5*
422.71[a] *5*	1034.411	3^+	611.659	$2^+,3^+$		0.018 *5*
423.879 *16*	616.943	2^-	193.075	1^+		0.220 *16*
425.56 *6*	942.334	3^-	516.843	3^-		0.020 *5*
427.051 *15*	765.467	2^-	338.419	3^-	M1,E2	0.58 *4*
429.353 *14*	508.477	2^-	79.139	2^-	M1,E2	1.21 *9*
430.06 *6*	645.498	$(3)^+$	215.382	3^+		0.036 *12*
[x]431.368 *20*						0.104 *10*
[x]431.86 *3*						0.057 *9*
[x]432.21 *3*						0.052 *8*
433.22 *8*	1112.254	1^+	679.092	1^-		0.020 *8*
434.28 *4*	1079.817	2	645.498	$(3)^+$		0.054 *14*
[x]435.269 *22*						0.111 *9*
436.17 *4*	1051.844	(2^-)	615.706	3^+		0.038 *8*
437.713 *15*	516.843	3^-	79.139	2^-	M1,E2	0.66 *5*
438.769 *24*	1002.595	$1^+,2^-$	563.812	2^+		0.23 *8*
438.892 *16*	645.498	$(3)^+$	206.612	2^+	M1,E2	0.88 *8*
439.872 *15*	819.117	2^-	379.242	1^-	M1,E2	0.58 *4*
[x]440.698 *19*					M1,E2	0.200 *18*
441.313 *18*	779.727	$(2,3)^-$	338.419	3^-		0.170 *14*
[x]441.58 *5*						0.053 *16*
442.83 *6*	598.654	$3^-,4^-$	155.876	$5^+,6^+$		0.023 *8*
443.40 *7*	960.149	2^-	516.843	3^-		0.031 *8*
[x]445.575 *22*						0.095 *7*
[x]446.16 *4*						0.032 *6*
448.73 *6*	1012.55	$1^+,2,3$	563.812	2^+		0.022 *6*
449.66 *5*	656.328	3^-	206.612	2^+		0.061 *11*
[x]451.15 *12*						0.026 *9*
452.98 *5*	1051.844	(2^-)	598.654	$3^-,4^-$		0.041 *6*
[x]456.14 *4*						0.082 *8*
457.49 *5*	974.331	2^-	516.843	3^-		0.054 *11*
[x]458.01 *5*						0.058 *10*
460.92 *3*	869.302	3^+	408.364	3^+		0.071 *11*
462.83 *9*	1079.817	2	616.943	2^-		0.044 *13*
463.725 *16*	542.848	3^-	79.139	2^-	M1,E2	0.51 *4*
465.313 *23*	803.733	2^-	338.419	3^-		0.15 *4*
465.650 *16*	465.641	0^-	0	1^+	E1	1.19 *8*

$^{108}_{47}Ag_{61}$-8

^{107}Ag(n,γ) E=th: secondary 1985Ma54 (continued)

γ(^{108}Ag) (continued)

E_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	$I_{(\gamma+ce)}$ [‡]	Comments
[x]466.12 *5*						0.067 *24*	
[x]471.45 *3*						0.043 *11*	
472.23 *3*	880.598	2^+	408.364	3^+	M1,E2	0.140 *24*	
472.50 *4*	679.092	1^-	206.612	2^+		0.104 *20*	
473.26 *6*	1079.817	2	606.531	1^-		0.064 *16*	
479.150 *24*	858.367	$(2,3)^-$	379.242	1^-	E2	0.141 *11*	
480.73 *6*	819.117	2^-	338.419	3^-		0.051 *13*	
482.372 *25*	967.455	$(3,4^-)$	485.056	$4^-,5^-$		0.128 *10*	
[x]484.20 *10*						0.044 *15*	
485.17 *4*	779.727	$(2,3)^-$	294.561	2^+		0.057 *10*	
485.98 *3*	679.092	1^-	193.075	1^+		0.188 *23*	
[x]486.18 *6*						0.10 *5*	
487.745 *25*	1051.566	(1^+)	563.812	2^+		0.147 *13*	
488.23 *4*	703.583	$3^-,4^-$	215.382	3^+		0.045 *11*	
[x]490.61 *4*						0.055 *8*	
491.99 *8*	1079.203	$2^-,3^-,4^-$	587.361	$(4)^-$		0.036 *11*	
492.57 *9*	1079.817	2	587.361	$(4)^-$		0.056 *11*	
493.43 *4*	708.845	$(2)^-$	215.382	3^+		0.094 *11*	
494.12 *5*	1002.595	$1^+,2^-$	508.477	2^-		0.052 *10*	
[x]494.696 *25*					M1,E2	0.188 *15*	
[x]495.14 *4*						0.095 *14*	
495.14 *4*	1112.254	1^+	616.943	2^-		0.095 *14*	
497.66 *3*	1109.309	3^+	611.659	$2^+,3^+$		0.101 *9*	
499.960 *19*	579.110	$0^-,2^-$	79.139	2^-	E2	0.51 *5*	
[x]500.26 *5*						0.11 *5*	
500.58 *3*	1112.254	1^+	611.659	$2^+,3^+$		0.185 *17*	
502.24 *4*	708.845	$(2)^-$	206.612	2^+		0.113 *10*	
504.30 *4*	1012.724	$2^-,3^-$	508.477	2^-		0.105 *13*	
508.466 *19*	508.477	2^-	0	1^+	E1	1.53 *12*	B(E1)(W.u.)>4.7×10^{-6}
509.27 *4*	715.806	$1^-,2^-$	206.612	2^+		0.17 *6*	
[x]511.54 *7*						0.098 *20*	
[x]517.04 *10*						0.044 *22*	
519.52 *4*	598.654	$3^-,4^-$	79.139	2^-		0.113 *17*	
520.04 *5*	858.44	$(2,3,4^+)$	338.419	3^-		0.085 *17*	
520.71 *3*	899.941	1^-	379.242	1^-		0.174 *14*	
[x]521.70 *3*						0.154 *14*	
522.71 *25*	715.806	$1^-,2^-$	193.075	1^+		0.033 *30*	
[x]524.115 *25*						0.250 *18*	
524.60 *8*	819.117	2^-	294.561	2^+		0.067 *23*	
[x]526.59 *7*						0.065 *23*	
527.380 *18*	606.531	1^-	79.139	2^-	M1,E2	1.38 *10*	
[x]530.61 *3*						0.161 *12*	
533.01 *4*	1096.844	$(3)^+$	563.812	2^+	M1,E2	0.157 *14*	
533.94 *4*	858.44	$(2,3,4^+)$	324.495	3^+		0.075 *11*	

$^{108}_{47}Ag_{61}$-9

^{107}Ag(n,γ) E=th: secondary 1985Ma54 (continued)

γ(^{108}Ag) (continued)

E_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	$I_{(\gamma+ce)}$ [‡]	Comments
536.21 *9*	1001.804	$1^+,2^-$	465.641	0^-		0.037 *9*	
537.782 *20*	616.943	2^-	79.139	2^-	M1,E2	0.65 *5*	
x542.60 *4*						0.107 *10*	
550.23 *8*	765.467	2^-	215.382	3^+		0.046 *12*	
x552.50 *4*						0.087 *9*	
558.86 *3*	765.467	2^-	206.612	2^+		0.220 *16*	Mult.: (M1,E2) given , but mult in conflict with 2^- to 2^+ placement.
563.818 *20*	563.812	2^+	0	1^+	M1,E2	0.82 *6*	
566.19 *12*	645.498	$(3)^+$	79.139	2^-		0.039 *10*	
x569.32 *18*						0.026 *12*	
571.26 *6*	1079.817	2	508.477	2^-		0.058 *10*	
572.37 *3*	765.467	2^-	193.075	1^+		0.36 *3*	
573.08 *8*	779.727	$(2,3)^-$	206.612	2^+		0.046 *12*	
574.76 *4*	869.302	3^+	294.561	2^+		0.177 *12*	
x576.33 *9*						0.039 *10*	
x579.19 *3*						0.44 *3*	
580.10 *4*	1143.94	1^+	563.812	2^+		0.138 *17*	
580.90 *5*	960.149	2^-	379.242	1^-		0.109 *13*	
x583.93 *14*						0.030 *11*	
586.00 *3*	880.598	2^+	294.561	2^+		0.172 *12*	
594.19[a] *12*	1002.595	$1^+,2^-$	408.364	3^+		0.050 *15*	
594.19[a] *12*	1079.203	$2^-,3^-,4^-$	485.056	$4^-,5^-$		0.050 *15*	
595.08 *5*	974.331	2^-	379.242	1^-		0.131 *12*	
597.37 *5*	1176.47	1,2	579.110	$0^-,2^-$		0.122 *15*	
599.964 *23*	679.092	1^-	79.139	2^-	M1,E2	1.53 *9*	
x602.89 *9*						0.070 *18*	
603.91 *4*	942.334	3^-	338.419	3^-		0.200 *20*	
606.47 *8*	606.531	1^-	0	1^+		0.087 *13*	
611.76[a] *6*	611.659	$2^+,3^+$	0	1^+		0.110 *17*	
611.76[a] *6*	1096.844	$(3)^+$	485.056	$4^-,5^-$		0.110 *17*	
x612.34 *8*						0.087 *16*	
616.94 *3*	616.943	2^-	0	1^+	E1	0.77 *6*	
621.76 *3*	960.149	2^-	338.419	3^-		0.34 *3*	
622.53 *6*	1001.804	$1^+,2^-$	379.242	1^-		0.127 *23*	
624.43 *5*	703.583	$3^-,4^-$	79.139	2^-		0.152 *19*	
626.01 *5*	1034.411	3^+	408.364	3^+		0.15 *6*	
626.560 *22*	705.692	$1^-,2^-$	79.139	2^-	M1,E2	1.85 *13*	
x628.63 *12*						0.084 *21*	
629.72 *3*	708.845	$(2)^-$	79.139	2^-	M1,E2	0.30 *3*	
635.94 *5*	974.331	2^-	338.419	3^-	E2	0.22 *3*	
636.664 *24*	715.806	$1^-,2^-$	79.139	2^-	M1,E2	1.32 *9*	
637.53 *8*	1001.804	$1^+,2^-$	364.237	$3^+,4^+$		0.106 *19*	
640.219 *14*	719.365	$1^-,2^-$	79.139	2^-	M1,E2	0.99 *7*	
x642.11 *15*						0.064 *21*	

$^{108}_{47}Ag_{61}$-10

^{107}Ag(n,γ) E=th: secondary 1985Ma54 (continued)

γ(^{108}Ag) (continued)

E_γ [†]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	$I_{(\gamma+ce)}$ [‡]
646.71 *7*	1112.254	1^+	465.641	0^-		0.104 *16*
[x]647.58 *9*						0.087 *18*
648.26 *9*	1012.55	1^+,2,3	364.237	3^+,4^+		0.070 *14*
651.83 *6*	858.44	(2,3,4^+)	206.612	2^+		0.125 *13*
656.33 *5*	656.328	3^-	0	1^+		0.180 *22*
[x]661.94 *12*						0.08 *3*
662.67 *6*	869.302	3^+	206.612	2^+		0.200 *20*
665.29 *7*	880.598	2^+	215.382	3^+		0.112 *14*
[x]668.02 *7*						0.126 *13*
671.45 *7*	1079.817	2	408.364	3^+		0.139 *21*
672.93 *12*	967.455	(3,4^-)	294.561	2^+		0.079 *20*
674.18 *6*	1012.724	2^-,3^-	338.419	3^-		0.230 *19*
[x]675.32 *8*						0.073 *22*
679.16 *8*	679.092	1^-	0	1^+		0.136 *17*
[x]680.56 *18*						0.069 *21*
686.31 *8*	765.467	2^-	79.139	2^-		0.16 *3*
687.52 *3*	880.598	2^+	193.075	1^+	M1,E2	0.68 *5*
688.61 *8*	1013.210	1^+,2,3^+	324.495	3^+		0.17 *3*
[x]690.82 *12*						0.126 *19*
693.28 *18*	899.941	1^-	206.612	2^+		0.054 *16*
[x]695.63 *8*						0.118 *18*
701.08 *18*	1109.309	3^+	408.364	3^+		0.054 *16*
708.13 *18*	1002.595	1^+,2^-	294.561	2^+		0.057 *17*
[x]709.33 *18*						0.050 *13*
713.60 *18*	1051.844	(2^-)	338.419	3^-		0.069 *17*
715.90 *15*	715.806	1^-,2^-	0	1^+		0.077 *16*
718.68 *12*	1013.210	1^+,2,3^+	294.561	2^+		0.14 *3*
[x]722.05 *13*						0.092 *19*
724.63 *3*	803.733	2^-	79.139	2^-	M1,E2	0.81 *6*
732.58 *9*	1096.844	$(3)^+$	364.237	3^+,4^+		0.133 *20*
[x]735.29 *15*						0.060 *18*
739.98 *7*	819.117	2^-	79.139	2^-		0.210 *20*
[x]744.49 *8*						0.188 *23*
747.97 *13*	1112.254	1^+	364.237	3^+,4^+		0.112 *23*
[x]749.59 *15*						0.097 *24*
[x]753.44 *12*						0.13 *3*
756.98 *20*	1051.566	(1^+)	294.561	2^+		0.13 *6*
[x]757.80 *15*						0.18 *6*
765.78 *18*	765.467	2^-	0	1^+		0.075 *23*
772.25 *12*	1096.844	$(3)^+$	324.495	3^+		0.116 *23*
782.17 *22*	1106.676	2^+	324.495	3^+		0.11 *4*
[x]790.79 *18*						0.11 *3*
[x]793.84 *25*						0.10 *4*
795.96 *6*	1002.595	1^+,2^-	206.612	2^+		0.59 *7*
797.0 *5*	1176.47	1,2	379.242	1^-		0.13 *9*
[x]802.73 *13*						0.15 *3*
[x]807.93 *13*						0.19 *3*
809.59 *22*	1002.595	1^+,2^-	193.075	1^+		0.11 *4*
812.08 *12*	1106.676	2^+	294.561	2^+		0.27 *4*
[x]817.91 *10*						0.34 *4*
819.04 *15*	819.117	2^-	0	1^+		0.26 *5*
[x]821.24 *12*						0.30 *5*
845.01 *8*	1051.566	(1^+)	206.612	2^+		0.32 *4*
[x]849.92 *22*						0.11 *3*
858.7 *3*	1051.844	(2^-)	193.075	1^+		0.13 *4*
[x]867.8 *4*						0.08 *4*
[x]876.2 *6*						0.08 *4*
880.86[a] *16*	880.598	2^+	0	1^+		0.22 *4*
880.86[a] *16*	960.149	2^-	79.139	2^-		0.22 *4*
887.0 *3*	1079.817	2	193.075	1^+		0.12 *4*
890.30 *13*	1096.844	$(3)^+$	206.612	2^+		0.27 *4*
895.19 *10*	974.331	2^-	79.139	2^-		0.48 *4*
902.7 *3*	1109.309	3^+	206.612	2^+		0.14 *4*
918.88 *22*	1112.254	1^+	193.075	1^+		0.69 *24*
923.70 *20*	1002.595	1^+,2^-	79.139	2^-		0.25 *5*
933.25 *25*	1012.724	2^-,3^-	79.139	2^-		0.20 *4*
937.34 *12*	1143.94	1^+	206.612	2^+		0.43 *5*
950.8 *3*	1143.94	1^+	193.075	1^+		0.22 *7*
[x]953.81 *25*						0.18 *5*
960.5 *4*	1176.47	1,2	215.382	3^+		0.23 *8*
970.2 *4*	1176.47	1,2	206.612	2^+		0.21 *8*
972.65 *18*	1051.844	(2^-)	79.139	2^-		0.31 *5*
1013.22 *16*	1013.210	1^+,2,3^+	0	1^+		0.63 *10*
[x]1020.30 *18*						0.64 *10*
1034.2 *4*	1034.411	3^+	0	1^+		0.27 *8*
1051.61 *20*	1051.566	(1^+)	0	1^+		0.48 *7*
1079.56 *25*	1079.817	2	0	1^+		0.53 *11*
1112.3 *6*	1112.254	1^+	0	1^+		0.32 *13*
[x]1136.7 *3*						0.45 *9*
[x]1140.7 *6*						0.42 *15*
[x]1231.61 *22*						0.37 *8*
[x]1310.8 *3*						0.25 *12*
[x]1355.44 *15*						0.30 *6*
[x]1462.64 *15*						0.37 *8*
[x]1568.30 *23*						0.29 *9*

$^{108}_{47}Ag_{61}$-11

^{107}Ag(n,γ) E=th: secondary 1985Ma54 (continued)

$\gamma(^{108}Ag)$ (continued)

† E(γ)<80 are Si(Li) and electron spectrometer data. 80<E(γ)<1141 are mainly curved crystal spectrometer data with some minor adjustments due to consideration of ce data. 1200<E(γ)<1570 are Ge(Li) data. Quoted energies are relative to Eγ=341.722 *10* for a contaminant ^{48}Ti(n,γ) line. The % uncertainty in this calibration line has been added (in quadrature) by the evaluator to the statistical and peak-fitting uncertainties given by the authors.

‡ Intensities per 100 n-captures in ^{107}Ag. Absolute values were obtained by normalizing to three transitions in the decay of ^{108}Ag g.s., 633γ (1.76% *10*), 619γ (0.26% *2*) and 434γ (0.50% *4*). Separate Iγ are not given by the authors. The uncertainty associated with this normalization procedure is not included in the uncertainties given in the γ listing but is included in the normalization factor. Note that, with this normalization procedure, ΣI(γ+ce to g.s.)= 130 *15* and ΣI(γ+ce to 109 keV, 127 y ^{108}Ag)=7.6 *8* of which 6.9 *7* decays via $\varepsilon+\beta^+$. There is thus a total excess intensity of 37 *15*.

From α(exp) data based on relative Ice and Iγ intensities normalized so that α(K)exp(79γ)=0.272 (E1 theory).

@ M1,E2 from α(exp), ΔJ rules out M1.

& 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.

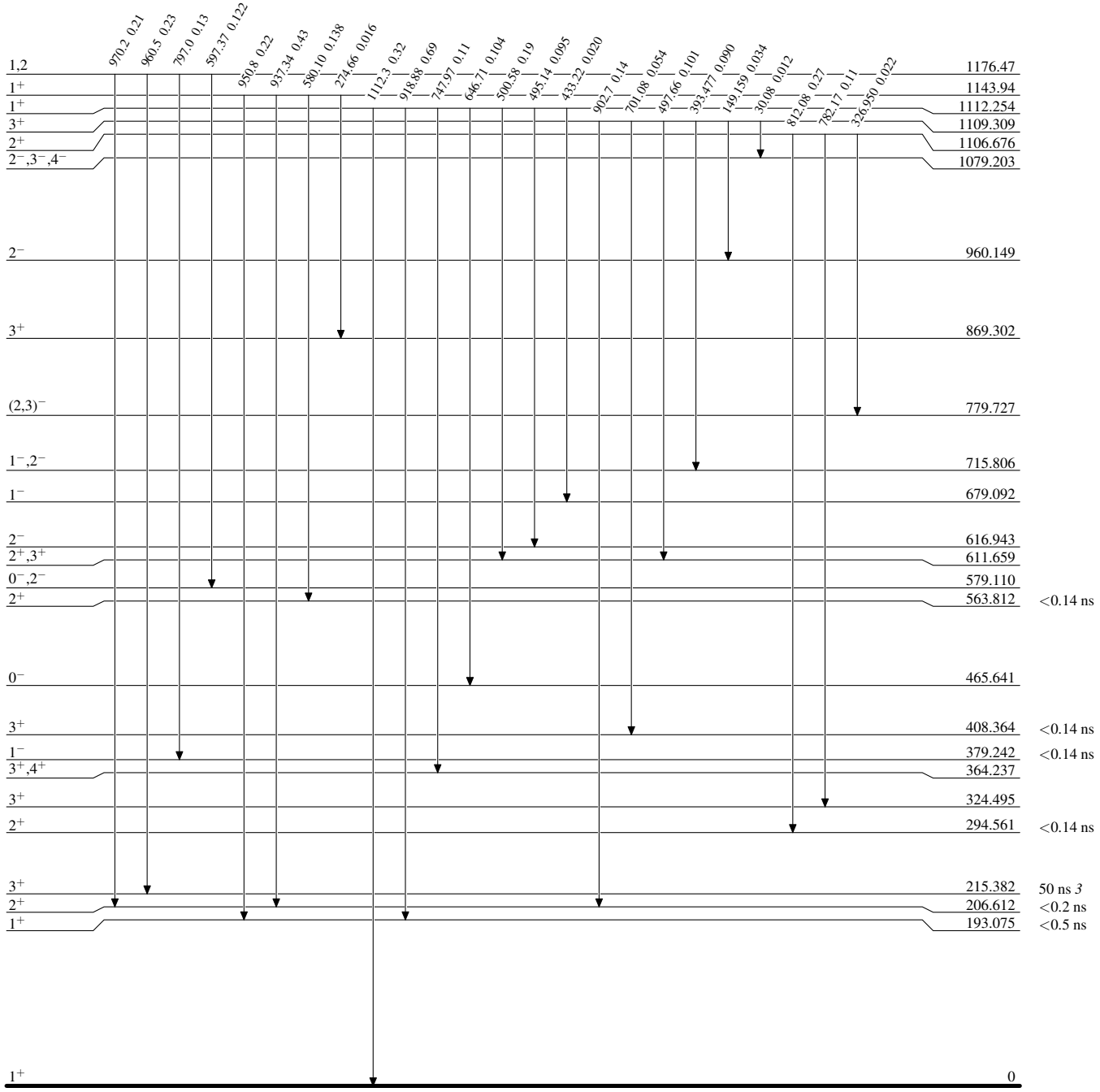
[a] Multiply placed with undivided intensity.

[x] γ ray not placed in level scheme.

$^{108}_{47}Ag_{61}$-12

^{107}Ag(n,γ) E=th: secondary 1985Ma54

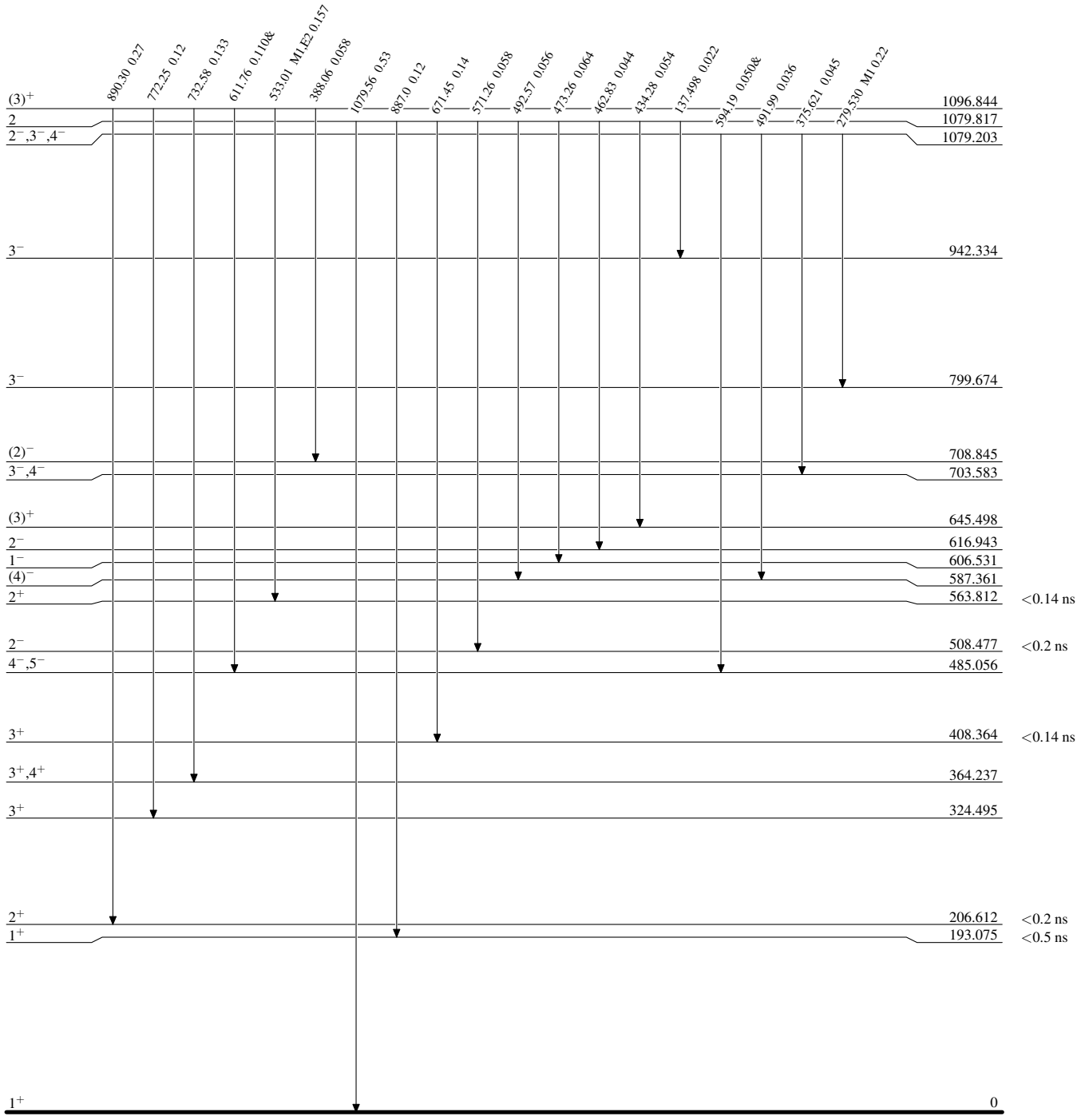
Level Scheme



^{107}Ag(n,γ) E=th: secondary 1985Ma54

Level Scheme (continued)

& Multiply placed: undivided intensity given

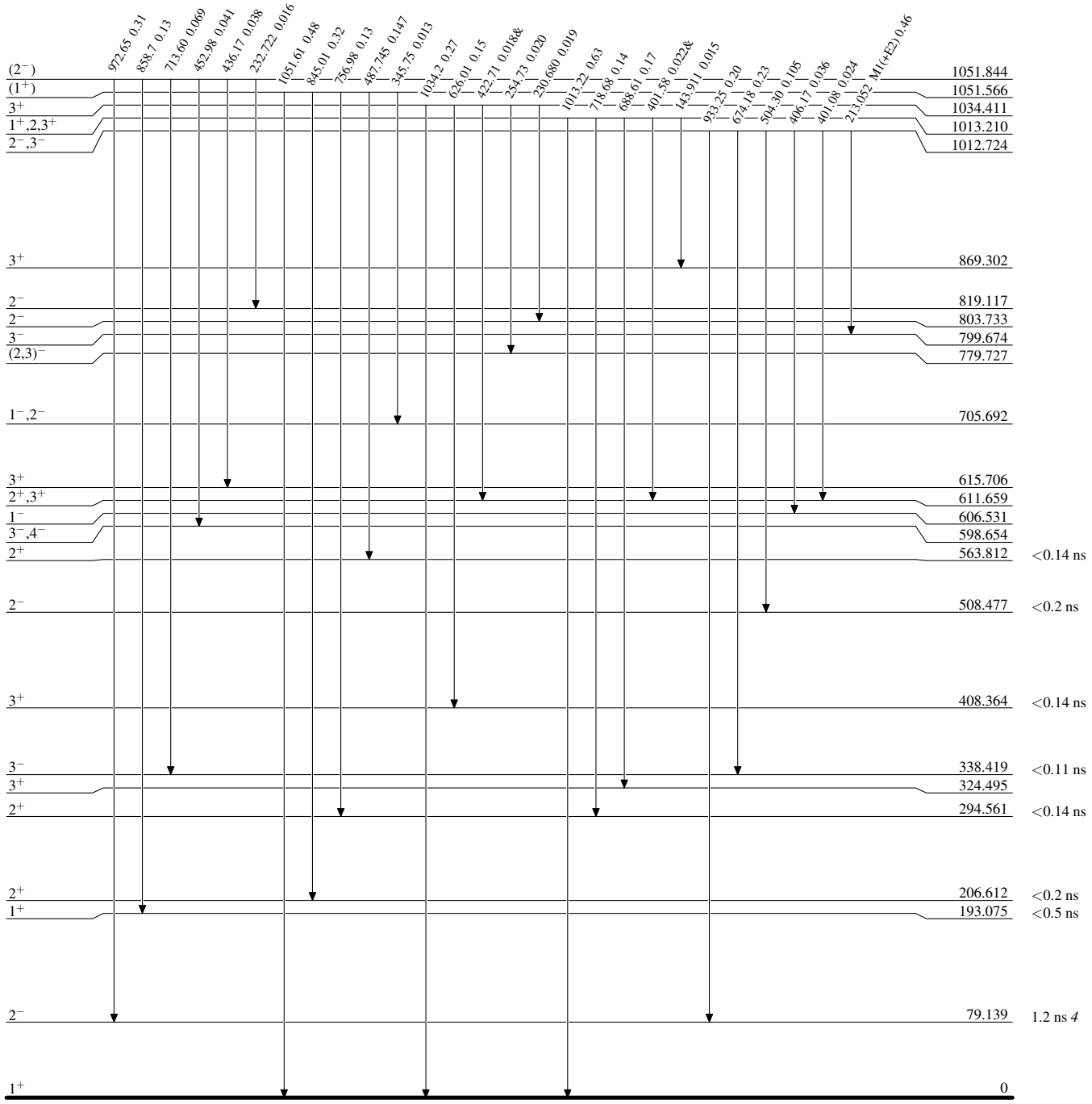


$^{108}_{47}Ag_{61}$

^{107}Ag(n,γ) E=th: secondary 1985Ma54

Level Scheme (continued)

& Multiply placed: undivided intensity given

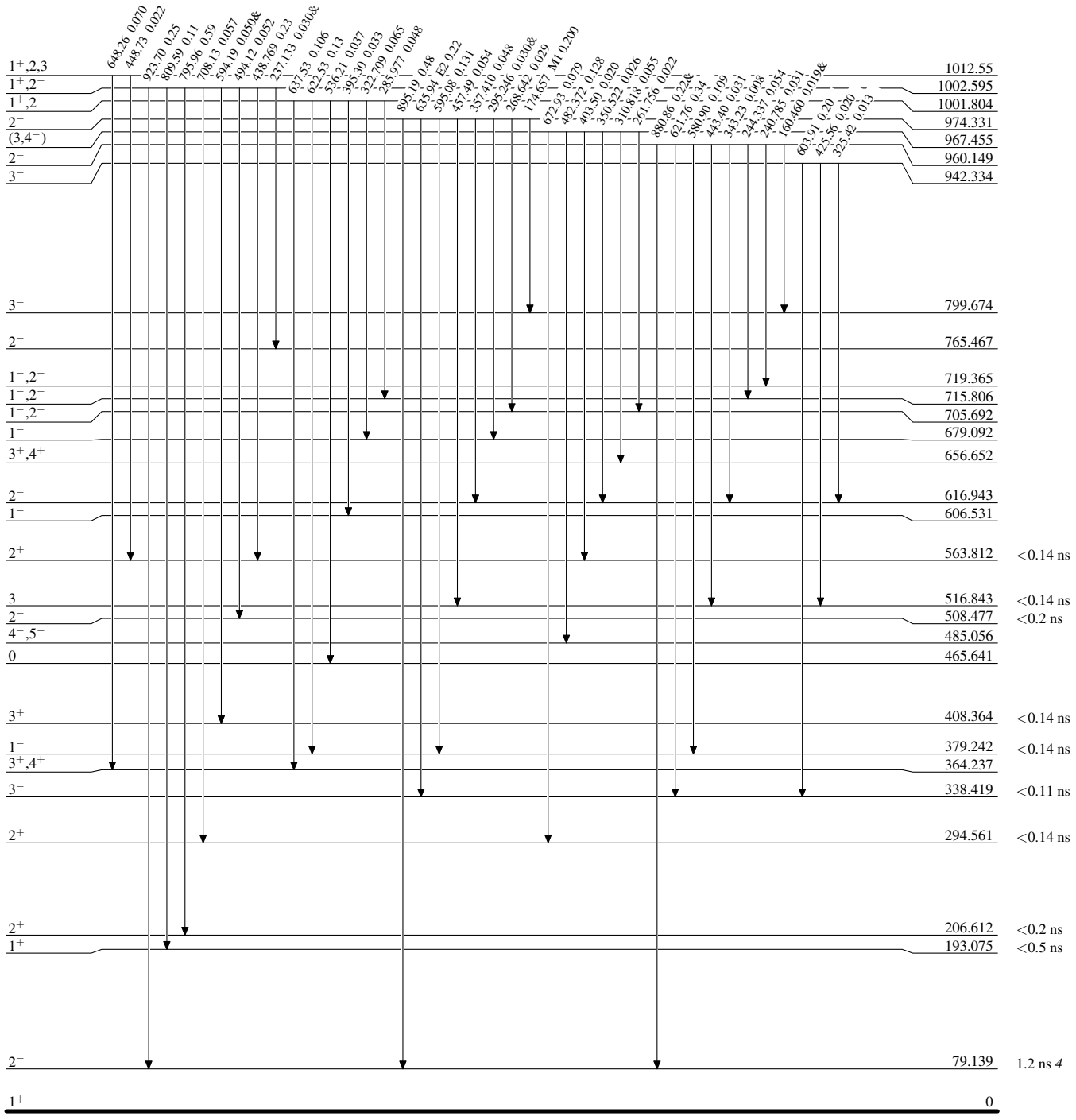


$^{108}_{47}Ag_{61}$

^{107}Ag(n,γ) E=th: secondary 1985Ma54

Level Scheme (continued)

& Multiply placed: undivided intensity given

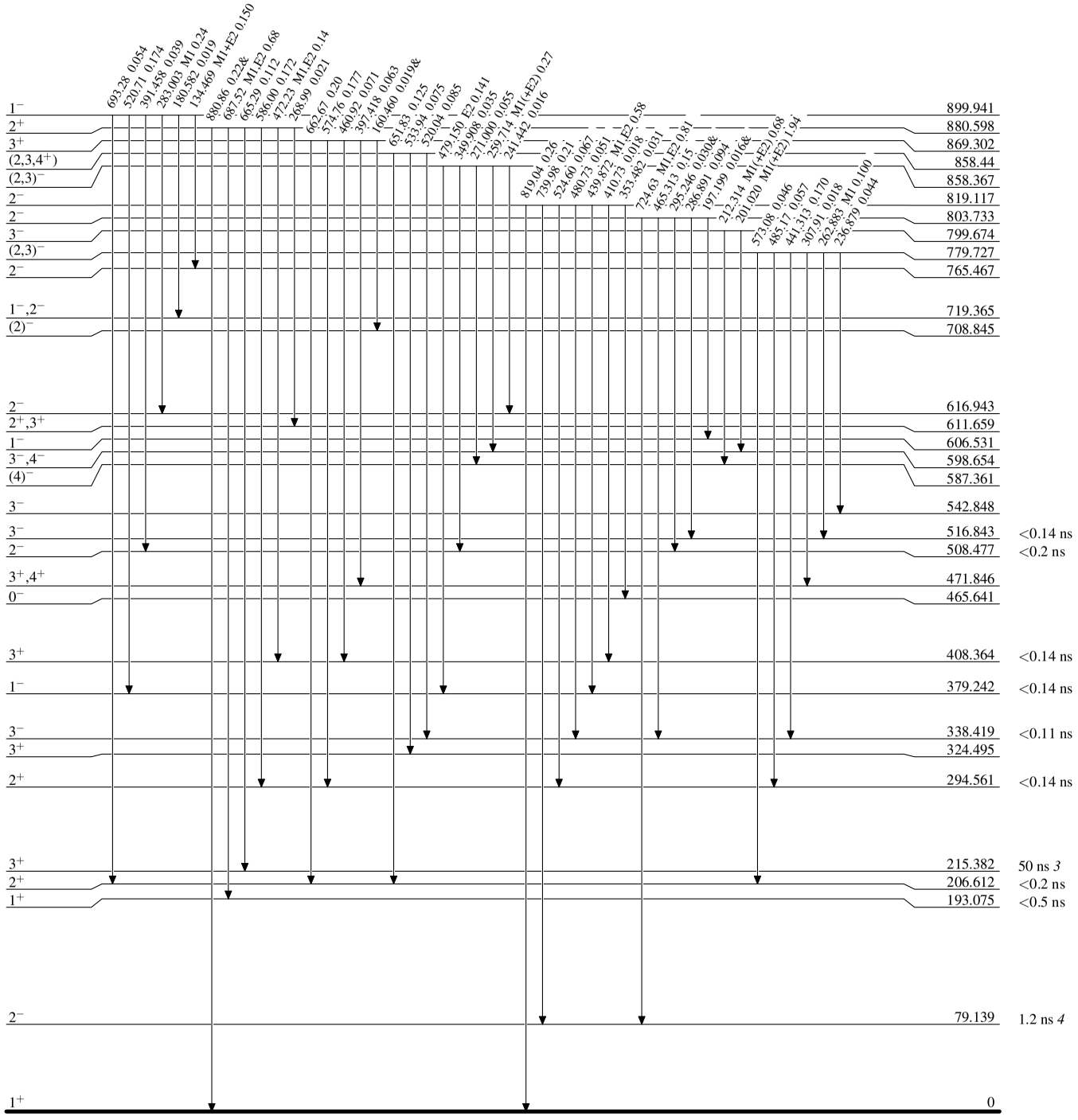


$^{108}_{47}Ag_{61}$

^{107}Ag(n,γ) E=th: secondary 1985Ma54

Level Scheme (continued)

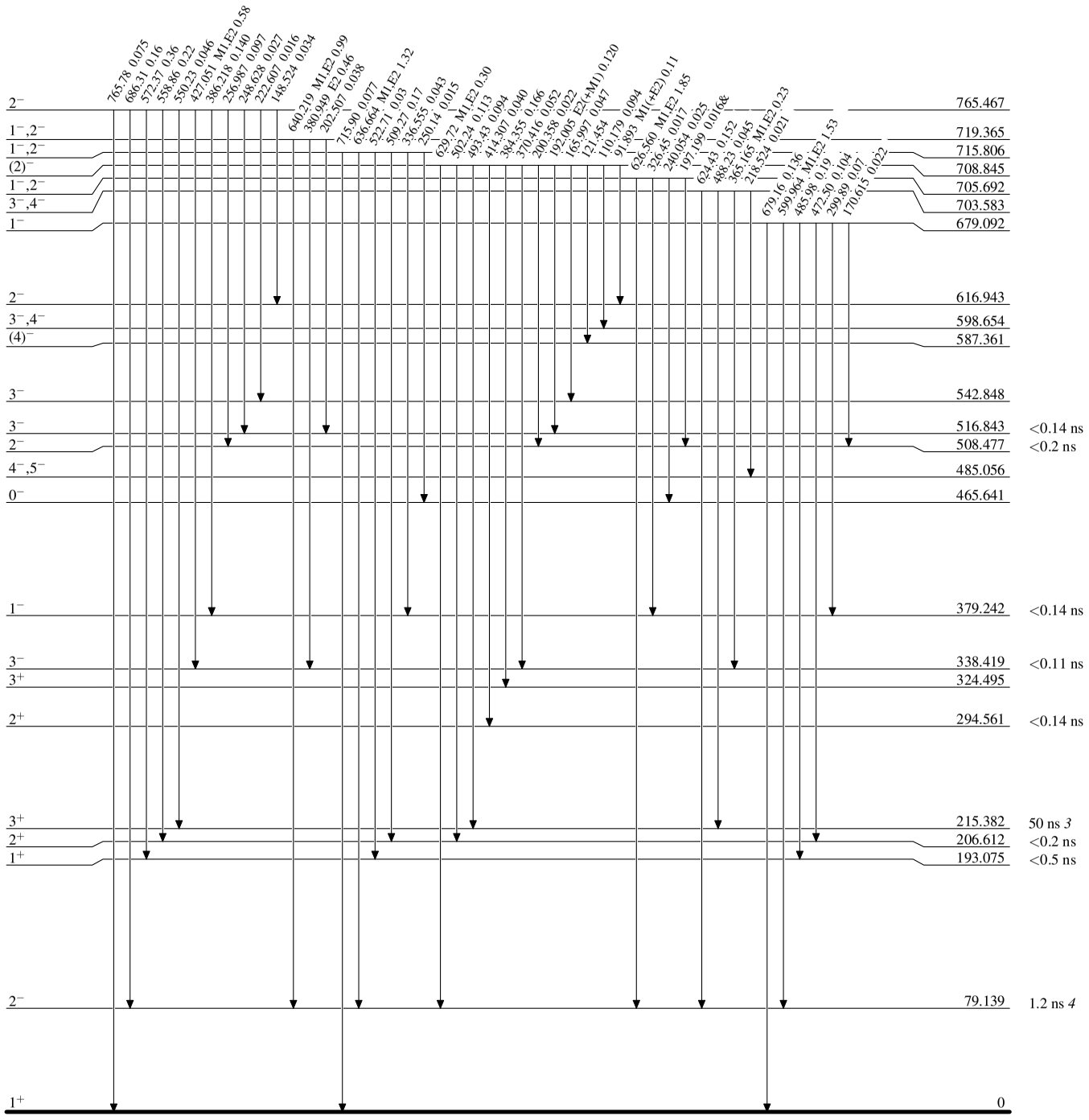
& Multiply placed: undivided intensity given



^{107}Ag(n,γ) E=th: secondary 1985Ma54

Level Scheme (continued)

& Multiply placed: undivided intensity given

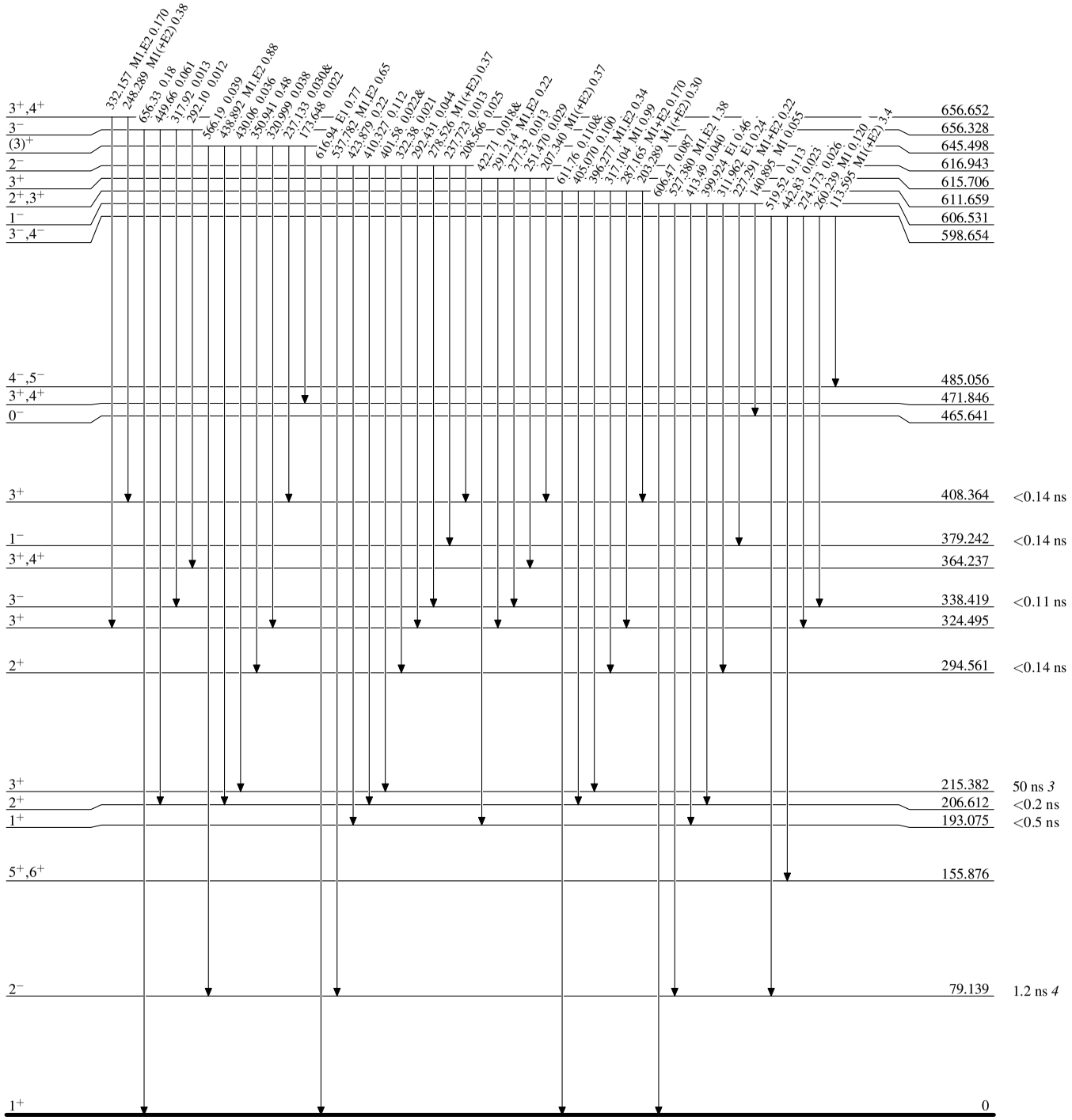


$^{108}_{47}Ag_{61}$

^{107}Ag(n,γ) E=th: secondary 1985Ma54

Level Scheme (continued)

& Multiply placed: undivided intensity given

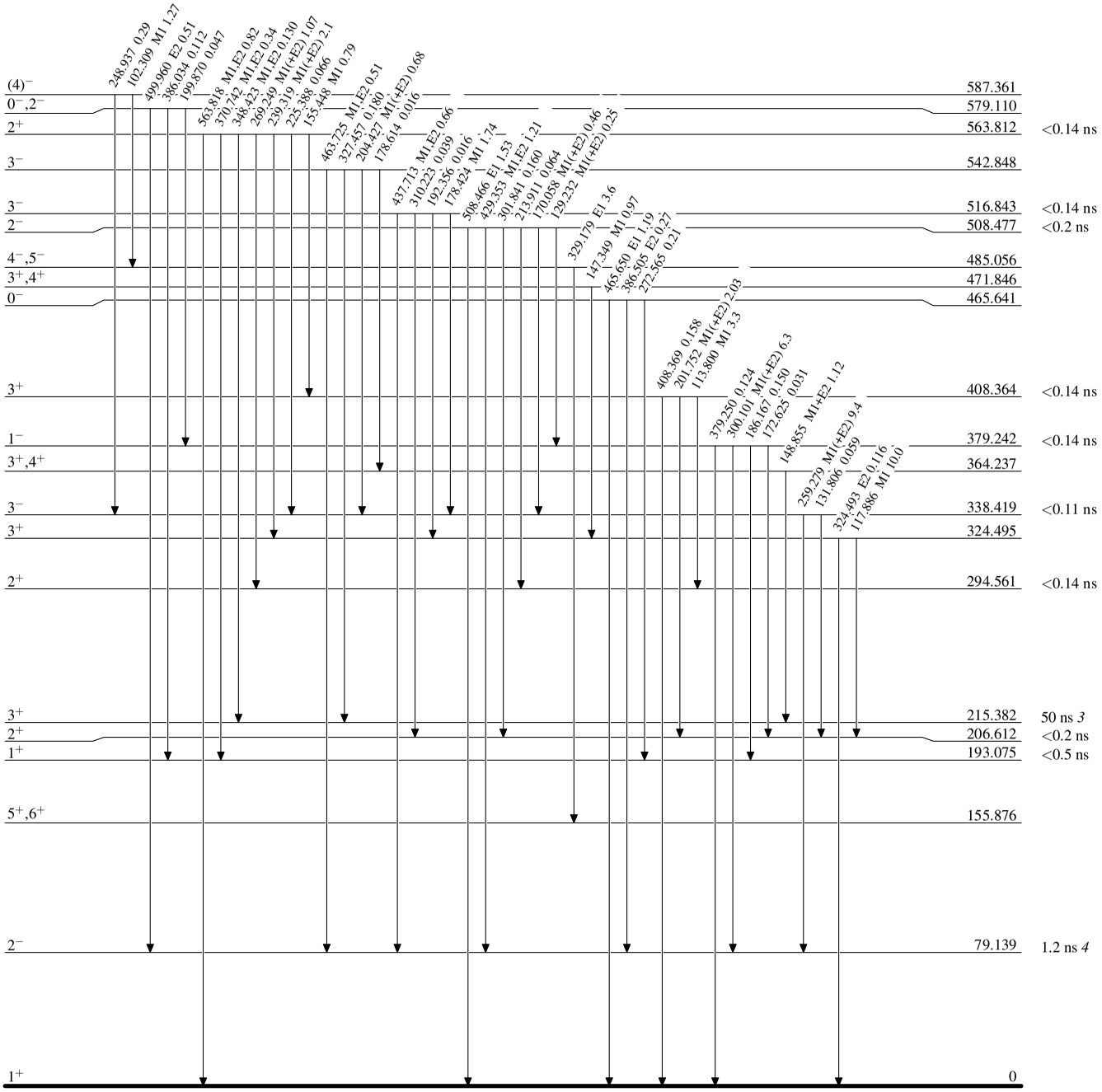


$^{108}_{47}Ag_{61}$

^{107}Ag(n,γ) E=th: secondary 1985Ma54

Level Scheme (continued)

& Multiply placed: undivided intensity given

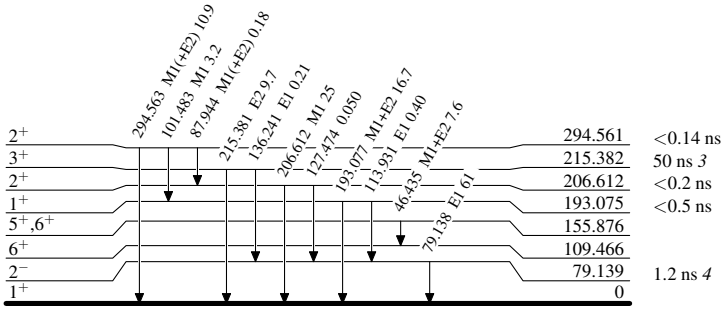


$^{108}_{47}Ag_{61}$

^{107}Ag(n,γ) E=th: secondary 1985Ma54

Level Scheme (continued)

& Multiply placed: undivided intensity given



$^{108}_{47}Ag_{61}$