

$^{197}\text{Au}(n,\gamma)$ E=thermal 1996Ma70,1996Ma75,1993Pe04

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong and Kang Mengxiao		NDS 133, 221 (2016)	1-Dec-2015

Others: 1975Mi05, 1978Li22, 1961Ha10, 1966Pe14, 1966Bo14, 1966Eg01, 1970Lo05, 1970Or05.

Target $J^\pi=3/2^+$.

New measurements were performed with bent-crystal spectrometers GAMS for (n, γ), and with conversion-electron spectrometer

BILL for (n,e) reaction (1996Ma70,1996Ma75).

Polarized beam and target, $\gamma(\theta)$, circular polarization (CP)(γ) (1978Li22).

$\gamma\gamma(t)$ measurements, see 1993Pe04.

$\gamma\gamma$ -coin measurements, see 1995Bo41, 1995BoZY, 1978Li22, and 1975Mi05.

 ^{198}Au Levels

E(level) [†]	J^π [@]	$T_{1/2}$ [‡]	Comments
0.0	2 ⁻	2.6941 [#] d 2	
55.1812 6	1 ⁻		$T_{1/2}$: 0.28 ns 14 (1968Na21) $\gamma\gamma(t)$ scin; uncertain assignment.
91.0057 8	0 ⁻		
192.9440 6	1 ⁻	0.7 ns 2	
214.9715 9	4 ⁻	0.4 ns 2	
236.0453 8	3 ⁻	≤ 0.15 ns	
247.5731 10	1 ⁻	0.4 ns 1	
259.3404 9	1 ⁻	≤ 0.2 ns	
261.4047 7	2 ⁻	≤ 0.2 ns	
312.2227 20	5 ⁺	124 ns 4	$T_{1/2}$: From $\gamma\gamma(t)$ (1975Mi05).
328.4833 16	3 ⁻	≤ 0.15 ns	
339.2909 16	1 ⁻	≤ 0.4 ns	
346.9062 7	2 ⁻	≤ 0.15 ns	
362.8994 10	2 ⁻	≤ 0.15 ns	
368.2549 11	1 ⁻	≤ 0.15 ns	
381.2003 10	3 ⁺	2.3 ns 2	
406.0081 8	2 ⁻		
449.5703 13	3 ⁻		
453.8249 9	2 ⁻		
482.3273 21	4 ⁺		
495.5114 14	1 ⁻		
511.5173 18	3 ⁻		
516.3848 22	6 ⁺		
529.1687 12	3 ⁻		
530.4782 10	1 ⁻		
544.0095 21	4 ⁻		
548.9343 13	2 ⁻		
571.2430 10	1 ⁻		
625.4303 14	3 ⁻		
632.4818 13	1 ⁻ , 2 ⁻		
637.125 3	4 ⁺		
646.411 5	0 ⁺		
672.6549 10	1 ⁻ , 2 ⁻		
696.702 4	8 ⁺		
702.4811 20	2 ⁻		
703.7299 15	1 ⁻		
728.672 5	0 ⁻		
745.2188 21	1 ⁻ , 2 ⁻		
758.398 3	4 ⁺		
764.483 3	4 ⁻		
786.5357 12	2 ⁻		

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$^{197}\text{Au}(n,\gamma)$ E=thermal 1996Ma70,1996Ma75,1993Pe04 (continued) ^{198}Au Levels (continued)

E(level) [†]	J ^π @
789.2973 16	1 ⁻
800.0391 19	2 ⁻
801.7064 12	1 ⁻ ,2 ⁻
810.426 3	3 ⁺
824.609 4	3 ⁺
835.366 3	3 ⁻
868.7736 20	3 ⁻
891.616 3	1 ⁻ ,2 ⁻
894.2718 25	3 ⁻
896.5723 25	1 ⁻ ,2 ⁻
916.4440 25	1 ⁻ ,2 ⁻
918.5890 16	1 ⁻ ,2 ⁻
931.948 3	3 ⁻
951.443 5	3 ⁺
956.9534 20	1 ⁻ ,2 ⁻
960.633 3	3 ⁺
971.8210 20	3 ⁻
983.0869 25	2 ⁺
987.5746 19	3 ⁻
999.213 4	1 ⁻ ,2 ⁻
1018.430 3	1 ⁻ ,2 ⁻
1032.254 3	3 ⁻
1038.2745 21	3 ⁻
1047.124 3	1 ⁻ ,2 ⁻
1056.719 3	2 ⁻
1061.285 3	3 ⁻
1075.560 4	1 ⁻ ,2 ⁻ ,3 ⁻
1092.876 5	0 ⁻
1095.499 4	3 ⁺
1104.847 4	0 ⁻ ,1 ⁻ ,2 ⁻
1108.873 4	1 ⁻ ,2 ⁻
1115.266 3	3 ⁻
1124.883 4	2 ⁻
1157.2384 22	3 ⁻
1160.018 4	3 ⁻
1191.566 4	1 ⁺ ,2 ⁺ ,3 ⁺
1202.268 3	2 ⁻
1209.370 4	3 ⁻
1232.8022 25	3 ⁻
1240.385 4	3 ⁻
1256.018 5	1 ⁻ ,2 ⁻
1265.524 6	1 ⁻ ,2 ⁻ ,3 ⁻
1272.1512 25	3 ⁻
1286.747 4	2 ⁻
1293.902 6	1 ⁻ ,2 ⁻
1297.133 5	1 ⁻ ,2 ⁻ ,3 ⁻
1301.045 5	2 ⁻
1304.8246 23	3 ⁻
1306.859 3	2 ⁻
1318.628 8	1 ⁻ ,2 ⁻
1325.834 4	2 ⁻
1335.543 4	1 ⁻ ,2 ⁻ ,3 ⁻
1338.171 4	3 ⁻
1359.038 4	1 ⁻ ,2 ⁻ ,3 ⁻
1363.350 4	1 ⁻ ,2 ⁻ ,3 ⁻
1371.502 3	1 ⁻ ,2 ⁻

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$^{197}\text{Au}(n,\gamma)$ E=thermal [1996Ma70](#),[1996Ma75](#),[1993Pe04](#) (continued) ^{198}Au Levels (continued)

E(level) [†]	J ^π [@]	Comments
1375.989 4	1 ⁻ ,2 ⁻	
1380.885 4	3 ⁻	
1390.227 4	2 ⁻	
1396.142 6	3 ⁻	
1399.342 5	2 ⁻ ,3 ⁻	
1402.086 5	1 ⁻ ,2 ⁻	
1404.893 8	2 ⁻ ,3 ⁻	
1409.399 4	3 ⁻	
1418.687 4	3 ⁺ ,4 ⁺	
1423.795 5	3 ⁻	
1431.645 3	2 ⁻ ,3 ⁻	
1434.584 5	1 ⁻ ,2 ⁻	
1444.396 22	3 ⁻	
1453.858 3	3 ⁻	
1458.988 4	3 ⁻	
1472.097 4	3 ⁻	
1475.622 4	2 ⁻	
1487.136 4	1 ⁻ ,2 ⁻	
1496.201 5	3 ⁻	
1505.178 4	1 ⁻ ,2 ⁻	
1513.565 4	1 ⁻ ,2 ⁻	
1530.702 5	1 ⁻ ,2 ⁻	
1536.380 3	1 ⁻ ,2 ⁻ ,3 ⁻	
1542.793 5	3 ⁻	
1554.429 4	1 ⁻ ,2 ⁻	
1560.407 6	3 ⁻	
(6512.34 9)	1 ⁺	Observed de-excitation intensity is 17.74% of g.s. feeding. J ^π : E1 γ to g.s.

[†] Below 1560.4 keV, energies are from a least-squares fit to γ -ray energies.

[‡] From $\gamma\gamma(t)$ ([1993Pe04](#)), except as noted.

From Adopted Levels.

[@] J^π are from circular polarization of primary γ -rays due to capture of polarized neutrons by unoriented ^{197}Au nuclei and $\gamma(\theta)$ of γ -rays observed after capture of polarized neutrons by polarized ^{197}Au nuclei in $^{197}\text{Au}(n,\gamma)$ E=thermal ([1978Li22](#)) and multipolarity from internal conversion electron measurements ([1996Ma70](#),[1996Ma75](#)) and L-transfer in $^{197}\text{Au}(d,p)$, except as noted.

γ(¹⁹⁸Au)

I_γ normalization: From I(γ+ce)(to g.s.)=100. Uncertainty from 20% systematic error.

All data are from **1996Ma70** and **1996Ma75**, except as noted.

E _γ	I _γ ^{#@}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	δ [‡]	α&	Comments
35.819 3	0.56 2	91.0057	0 ⁻	55.1812	1 ⁻	M1		26.3	α(L)=20.2 3; α(M)=4.70 7; α(N+..)=1.400 20
55.181 1	2.64 13	55.1812	1 ⁻	0.0	2 ⁻	M1+E2	0.23 2	10.9 7	α(L)=8.3 5; α(M)=2.01 13; α(N+..)=0.59 4 L1:L2:L3=100 15:48 7:43 6 (1966Eg01), 100:53:43 (1966Bo14).
66.391 3	0.57 14	259.3404	1 ⁻	192.9440	1 ⁻				
^x 75.208 4	0.12 3					M1		2.98	α(L)=2.29 4; α(M)=0.532 8; α(N+..)=0.1585 23
82.356 1	3.09 34	1453.858	3 ⁻	1371.502	1 ⁻ ,2 ⁻	E2 [‡]		11.94	α(K)=0.608 9; α(L)=8.49 12; α(M)=2.21 3; α(N+..)=0.630 9 α(K)=0.544; α(L)=0.108; α(M)=0.0252; α(N+..)=0.00763 E1 (1996Ma70,1996Ma75).
82.524 1	1.92 35	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	1453.858	3 ⁻				
83.142 8	0.230 92	1240.385	3 ⁻	1157.2384	3 ⁻				
91.002 2	0.64 13	91.0057	0 ⁻	0.0	2 ⁻	E2		7.75	α(K)=0.686 10; α(L)=5.30 8; α(M)=1.378 20; α(N+..)=0.393 6 α(K)=0.699; α(L)=5.36; α(M)=1.39; α(N+..)=0.434 Mult.: From L2:L3:M=2:2:1 (1966Bo14), α(L3)exp=2.0.
97.249 2	7.1 12	312.2227	5 ⁺	214.9715	4 ⁻	E1		0.445	α(K)=0.356 5; α(L)=0.0683 10; α(M)=0.01593 23; α(N+..)=0.00459 7
99.330 5	0.160 48	346.9062	2 ⁻	247.5731	1 ⁻	M1		7.40	α(K)=6.07 9; α(L)=1.022 15; α(M)=0.237 4; α(N+..)=0.0707 10
^x 101.495 6	0.16 6					M1		6.95	α(K)=5.70 8; α(L)=0.960 14; α(M)=0.223 4; α(N+..)=0.0664 10
101.936 1	5.09 25	192.9440	1 ⁻	91.0057	0 ⁻	M1		6.87	α(K)=5.63 8; α(L)=0.948 14; α(M)=0.220 3; α(N+..)=0.0656 10
103.560 1	1.54 22	362.8994	2 ⁻	259.3404	1 ⁻	M1		6.57	α(K)=5.39 8; α(L)=0.906 13; α(M)=0.210 3; α(N+..)=0.0627 9
106.909 4	0.220 55	453.8249	2 ⁻	346.9062	2 ⁻	M1		5.99	α(K)=4.92 7; α(L)=0.827 12; α(M)=0.192 3; α(N+..)=0.0572 8
^x 107.485 1	2.03 18								
108.911 2	1.28 17	368.2549	1 ⁻	259.3404	1 ⁻	M1		5.68	α(K)=4.66 7; α(L)=0.784 11; α(M)=0.182 3; α(N+..)=0.0542 8
113.511 7	0.12 4	328.4833	3 ⁻	214.9715	4 ⁻	M1+E2		4.1 10	α(K)=2.4 18; α(L)=1.3 6; α(M)=0.33 17; α(N+..)=0.09 5
^x 118.022 2	0.91 12								
121.084 6	0.150 45	449.5703	3 ⁻	328.4833	3 ⁻	M1		4.20	α(K)=3.45 5; α(L)=0.578 8; α(M)=0.1341 19; α(N+..)=0.0400 6
122.652 1	1.100 99	1409.399	3 ⁻	1286.747	2 ⁻				
^x 123.227 1	1.44 10								
123.786 1	1.12 10	1487.136	1 ⁻ ,2 ⁻	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻				
125.346 9	0.100 40	453.8249	2 ⁻	328.4833	3 ⁻	M1		3.80	α(K)=3.12 5; α(L)=0.523 8; α(M)=0.1214 17; α(N+..)=0.0362 5
^x 130.699 1	0.95 8								
131.952 7	0.230 69	346.9062	2 ⁻	214.9715	4 ⁻	E2		1.706	α(K)=0.439 7; α(L)=0.950 14; α(M)=0.246 4; α(N+..)=0.0705 10

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¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

E _γ	I _γ #@	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α&	Comments
132.851 4	0.140 27	1496.201	3 ⁻	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻			
135.615 6	0.130 33	1375.989	1 ⁻ ,2 ⁻	1240.385	3 ⁻			
137.450 ^a 6	0.180 ^a 56	1434.584	1 ⁻ ,2 ⁻	1297.133	1 ⁻ ,2 ⁻ ,3 ⁻			
137.450 ^a 6	0.180 ^a 56	1475.622	2 ⁻	1338.171	3 ⁻			
137.763 1	0.950 38	192.9440	1 ⁻	55.1812	1 ⁻	M1	2.91	α(K)=2.39 4; α(L)=0.399 6; α(M)=0.0926 13; α(N+..)=0.0276 4
138.014 4	0.230 58	544.0095	4 ⁻	406.0081	2 ⁻			
^x 142.242 6	0.07 2					M1	2.65	α(K)=2.18 3; α(L)=0.364 6; α(M)=0.0846 12; α(N+..)=0.0252 4
142.918 3	0.460 51	548.9343	2 ⁻	406.0081	2 ⁻	M1	2.62	α(K)=2.15 3; α(L)=0.360 5; α(M)=0.0834 12; α(N+..)=0.0249 4
144.605 3	0.250 40	406.0081	2 ⁻	261.4047	2 ⁻	M1	2.53	α(K)=2.08 3; α(L)=0.348 5; α(M)=0.0807 12; α(N+..)=0.0240 4
145.154 1	0.630 44	381.2003	3 ⁺	236.0453	3 ⁻	E1	0.1615	α(K)=0.1312 19; α(L)=0.0233 4; α(M)=0.00541 8; α(N+..)=0.001571 22
146.343 2	0.420 38	339.2909	1 ⁻	192.9440	1 ⁻	M1	2.45	α(K)=2.01 3; α(L)=0.336 5; α(M)=0.0780 11; α(N+..)=0.0232 4
146.670 3	0.380 38	406.0081	2 ⁻	259.3404	1 ⁻	M1	2.43	α(K)=2.00 3; α(L)=0.334 5; α(M)=0.0775 11; α(N+..)=0.0231 4
148.589 ^a 14	0.050 ^a 25	495.5114	1 ⁻	346.9062	2 ⁻	M1	2.34	α(K)=1.93 3; α(L)=0.322 5; α(M)=0.0747 11; α(N+..)=0.0223 4
148.589 ^a 14	0.050 ^a 25	511.5173	3 ⁻	362.8994	2 ⁻	M1	2.34	α(K)=1.93 3; α(L)=0.322 5; α(M)=0.0747 11; α(N+..)=0.0223 4
153.962 8	0.08 2	346.9062	2 ⁻	192.9440	1 ⁻	(M1)	2.12	α(K)=1.741 25; α(L)=0.291 4; α(M)=0.0675 10; α(N+..)=0.0201 3
154.057 9	0.060 17	786.5357	2 ⁻	632.4818	1 ⁻ ,2 ⁻	(M1)	2.12	α(K)=1.738 25; α(L)=0.290 4; α(M)=0.0674 10; α(N+..)=0.0201 3
154.793 ^a 2	0.520 ^a 36	637.125	4 ⁺	482.3273	4 ⁺	M1	2.09	α(K)=1.715 24; α(L)=0.286 4; α(M)=0.0665 10; α(N+..)=0.0198 3
154.793 ^a 2	0.520 ^a 36	703.7299	1 ⁻	548.9343	2 ⁻	M1	2.09	α(K)=1.715 24; α(L)=0.286 4; α(M)=0.0665 10; α(N+..)=0.0198 3
156.561 4	0.120 24	247.5731	1 ⁻	91.0057	0 ⁻	M1	2.02	α(K)=1.661 24; α(L)=0.277 4; α(M)=0.0644 9; α(N+..)=0.0192 3
158.520 24	0.910 36	983.0869	2 ⁺	824.609	3 ⁺	M1	1.95	α(K)=1.604 23; α(L)=0.268 4; α(M)=0.0621 9; α(N+..)=0.0185 3
159.281 6	0.120 24	1191.566	1 ⁺ ,2 ⁺ ,3 ⁺	1032.254	3 ⁻			
164.713 1	0.280 28	1061.285	3 ⁻	896.5723	1 ⁻ ,2 ⁻			
166.229 2	0.480 29	381.2003	3 ⁺	214.9715	4 ⁻	E1	0.1146	α(K)=0.0935 13; α(L)=0.01625 23; α(M)=0.00377 6; α(N+..)=0.001099 16
167.012 ^a 15	0.030 ^a 6	1061.285	3 ⁻	894.2718	3 ⁻	M1	1.685	α(K)=1.384 20; α(L)=0.231 4; α(M)=0.0536 8; α(N+..)=0.01597 23
167.012 ^a 15	0.030 ^a 5	1505.178	1 ⁻ ,2 ⁻	1338.171	3 ⁻	M1	1.685	α(K)=1.384 20; α(L)=0.231 4; α(M)=0.0536 8; α(N+..)=0.01597 23
168.334 1	6.92 7	259.3404	1 ⁻	91.0057	0 ⁻	M1	1.648	α(K)=1.354 19; α(L)=0.226 4; α(M)=0.0524 8; α(N+..)=0.01562 22
169.225 8	0.100 20	801.7064	1 ⁻ ,2 ⁻	632.4818	1 ⁻ ,2 ⁻	M1	1.623	α(K)=1.334 19; α(L)=0.222 4; α(M)=0.0516 8; α(N+..)=0.01538 22
169.964 ^a 8	0.170 ^a 26	362.8994	2 ⁻	192.9440	1 ⁻			
169.964 ^a 8	0.170 ^a 26	406.0081	2 ⁻	236.0453	3 ⁻			
170.103 1	2.250 45	482.3273	4 ⁺	312.2227	5 ⁺	M1	1.600	α(K)=1.315 19; α(L)=0.219 3; α(M)=0.0509 8; α(N+..)=0.01516 22
170.395 3	0.510 26	261.4047	2 ⁻	91.0057	0 ⁻			
170.789 13	0.050 22	1475.622	2 ⁻	1304.8246	3 ⁻			
173.355 10	0.050 15	918.5890	1 ⁻ ,2 ⁻	745.2188	1 ⁻ ,2 ⁻			
175.309 6	0.140 22	368.2549	1 ⁻	192.9440	1 ⁻			
175.858 15	0.030 13	625.4303	3 ⁻	449.5703	3 ⁻			
180.317 3	0.050 4	696.702	8 ⁺	516.3848	6 ⁺	E2	0.537	α(K)=0.219 3; α(L)=0.239 4; α(M)=0.0616 9; α(N+..)=0.01766 25
180.863 1	0.850 26	236.0453	3 ⁻	55.1812	1 ⁻	E2	0.531	α(K)=0.217 3; α(L)=0.236 4; α(M)=0.0608 9; α(N+..)=0.01743 25
181.966 9	0.080 21	1306.859	2 ⁻	1124.883	2 ⁻	M1	1.324	α(K)=1.088 16; α(L)=0.181 3; α(M)=0.0420 6; α(N+..)=0.01253 18
182.283 11	0.070 20	529.1687	3 ⁻	346.9062	2 ⁻			
184.998 14	0.040 13	810.426	3 ⁺	625.4303	3 ⁻	E1	0.0876	α(K)=0.0716 10; α(L)=0.01228 18; α(M)=0.00285 4; α(N+..)=0.000831 12

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¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04 (continued)**

									<u>γ(¹⁹⁸Au) (continued)</u>	
<u>E_γ</u>	<u>I_γ^{#@}</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[†]</u>	<u>δ[†]</u>	<u>α^{&}</u>	<u>Comments</u>	
188.166 2	0.860 26	449.5703	3 ⁻	261.4047	2 ⁻	M1		1.205	α(K)=0.990 14; α(L)=0.1649 23; α(M)=0.0382 6; α(N+..)=0.01140 16	
^x 189.148 6	0.030 4									
191.182 4	0.240 22	530.4782	1 ⁻	339.2909	1 ⁻	M1		1.153	α(K)=0.947 14; α(L)=0.1577 22; α(M)=0.0366 6; α(N+..)=0.01090 16	
192.392 1	5.210 52	247.5731	1 ⁻	55.1812	1 ⁻	M1		1.132	α(K)=0.931 13; α(L)=0.1549 22; α(M)=0.0359 5; α(N+..)=0.01071 15	
192.946 1	2.300 23	192.9440	1 ⁻	0.0	2 ⁻	E2		0.424	α(K)=0.185 3; α(L)=0.179 3; α(M)=0.0460 7; α(N+..)=0.01321 19	
^x 194.341 6	0.040 8									
^x 197.171 20	0.010 4									
201.015 12	0.030 9	1293.902	1 ⁻ ,2 ⁻	1092.876	0 ⁻	M1		1.002	α(K)=0.824 12; α(L)=0.1370 20; α(M)=0.0318 5; α(N+..)=0.00947 14	
202.006 3	0.120 13	1306.859	2 ⁻	1104.847	0 ⁻ ,1 ⁻ ,2 ⁻	M1		0.988	α(K)=0.812 12; α(L)=0.1351 19; α(M)=0.0313 5; α(N+..)=0.00934 13	
202.866 ^a 14	0.040 ^a 17	835.366	3 ⁻	632.4818	1 ⁻ ,2 ⁻					
202.866 ^a 14	0.040 ^a 17	1038.2745	3 ⁻	835.366	3 ⁻					
202.987 1	0.350 14	571.2430	1 ⁻	368.2549	1 ⁻	M1		0.975	α(K)=0.801 12; α(L)=0.1333 19; α(M)=0.0309 5; α(N+..)=0.00921 13	
204.162 1	0.800 80	516.3848	6 ⁺	312.2227	5 ⁺	M1		0.959	α(K)=0.789 11; α(L)=0.1311 19; α(M)=0.0304 5; α(N+..)=0.00906 13	
206.227 1	0.300 15	261.4047	2 ⁻	55.1812	1 ⁻	M1		0.933	α(K)=0.767 11; α(L)=0.1275 18; α(M)=0.0296 5; α(N+..)=0.00881 13	
206.741 9	0.020 3	1513.565	1 ⁻ ,2 ⁻	1306.859	2 ⁻					
208.33 4	0.00 81	571.2430	1 ⁻	362.8994	2 ⁻					
213.066 3	0.130 12	406.0081	2 ⁻	192.9440	1 ⁻	M1		0.852	α(K)=0.700 10; α(L)=0.1164 17; α(M)=0.0270 4; α(N+..)=0.00804 12	
213.545 9	0.020 4	449.5703	3 ⁻	236.0453	3 ⁻	M1		0.846	α(K)=0.696 10; α(L)=0.1156 17; α(M)=0.0268 4; α(N+..)=0.00799 12	
214.852 4	0.260 52	918.5890	1 ⁻ ,2 ⁻	703.7299	1 ⁻					
214.971 1	12.19 39	214.9715	4 ⁻	0.0	2 ⁻	E2		0.293	α(K)=0.1420 20; α(L)=0.1138 16; α(M)=0.0291 4; α(N+..)=0.00838 12	
									α(K)=0.143; α(L)=0.115; α(M)=0.0294; α(N+..)=0.0092	
									Mult.: From K:L1:L2:L3:M=100 5:7 3:45 4:23 5:18 3 (1966Eg01).	
215.295 2	0.260 18	786.5357	2 ⁻	571.2430	1 ⁻	M1		0.827	α(K)=0.680 10; α(L)=0.1130 16; α(M)=0.0262 4; α(N+..)=0.00781 11	
215.535 5	0.060 11	544.0095	4 ⁻	328.4833	3 ⁻					
218.045 5	0.080 17	789.2973	1 ⁻	571.2430	1 ⁻	M1		0.799	α(K)=0.657 10; α(L)=0.1091 16; α(M)=0.0253 4; α(N+..)=0.00754 11	
218.830 3	0.190 17	672.6549	1 ⁻ ,2 ⁻	453.8249	2 ⁻	(M1)		0.791	α(K)=0.650 10; α(L)=0.1080 16; α(M)=0.0250 4; α(N+..)=0.00746 11	
218.907 8	0.060 12	1554.429	1 ⁻ ,2 ⁻	1335.543	1 ⁻ ,2 ⁻ ,3 ⁻	(M1)		0.790	α(K)=0.650 9; α(L)=0.1079 16; α(M)=0.0250 4; α(N+..)=0.00746 11	
^x 219.352 1	0.400 16									

¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04 (continued)

γ(¹⁹⁸Au) (continued)

E _γ	I _γ #@	E _i (level)	J _i ^π	E _f	J _f ^π	Mult.†	δ [‡]	α&	Comments
223.078 8	0.040 8	672.6549	1 ⁻ ,2 ⁻	449.5703	3 ⁻				
224.341 4	0.090 15	571.2430	1 ⁻	346.9062	2 ⁻				
226.471 6	0.060 11	632.4818	1 ⁻ ,2 ⁻	406.0081	2 ⁻				
227.826 15	0.030 10	1038.2745	3 ⁻	810.426	3 ⁺				
^x 229.979 6	0.020 3								
230.212 6	0.020 3	1390.227	2 ⁻	1160.018	3 ⁻				
^x 232.899 7	0.020 3								
234.109 3	0.110 10	495.5114	1 ⁻	261.4047	2 ⁻	M1		0.656	α(K)=0.539 8; α(L)=0.0895 13; α(M)=0.0207 3; α(N+..)=0.00618 9
234.607 ^a 7	0.060 ^a 13	449.5703	3 ⁻	214.9715	4 ⁻				
234.607 ^a 7	0.060 ^a 13	1191.566	1 ⁺ ,2 ⁺ ,3 ⁺	956.9534	1 ⁻ ,2 ⁻				
^x 234.763 12	0.020 3								
235.28 ^a 3	0.020 ^a 10	764.483	4 ⁻	529.1687	3 ⁻				
235.28 ^a 3	0.020 ^a 10	1475.622	2 ⁻	1240.385	3 ⁻				
235.28 ^a 3	0.020 ^a 10	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	1301.045	2 ⁻				
236.047 2	5.54 6	236.0453	3 ⁻	0.0	2 ⁻	M1+E2	1.0 4	0.43 10	α(K)=0.32 10; α(L)=0.083 3; α(M)=0.0200 3; α(N+..)=0.00587 12
236.160 4	0.350 70	495.5114	1 ⁻	259.3404	1 ⁻				
237.611 12	0.030 7	786.5357	2 ⁻	548.9343	2 ⁻				
238.477 16	0.060 14	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	1124.883	2 ⁻				
^x 239.077 4	0.09 1								
239.634 ^a 15	0.020 ^a 7	1286.747	2 ⁻	1047.124	1 ⁻ ,2 ⁻				
239.634 ^a 15	0.020 ^a 7	1505.178	1 ⁻ ,2 ⁻	1265.524	1 ⁻ ,2 ⁻ ,3 ⁻				
^x 240.945 10	0.020 3								
241.672 17	0.030 10	1202.268	2 ⁻	960.633	3 ⁺				
242.773 ^a 11	0.030 ^a 7	571.2430	1 ⁻	328.4833	3 ⁻				
242.773 ^a 11	0.030 ^a 7	1475.622	2 ⁻	1232.8022	3 ⁻				
243.343 17	0.030 9	868.7736	3 ⁻	625.4303	3 ⁻				
245.305 3	0.150 15	1202.268	2 ⁻	956.9534	1 ⁻ ,2 ⁻				
245.977 17	0.0100 23	918.5890	1 ⁻ ,2 ⁻	672.6549	1 ⁻ ,2 ⁻				
247.570 3	7.51 45	247.5731	1 ⁻	0.0	2 ⁻	M1		0.562	α(K)=0.462 7; α(L)=0.0766 11; α(M)=0.01776 25; α(N+..)=0.00529 8
247.928 5	0.090 10	495.5114	1 ⁻	247.5731	1 ⁻				
248.740 3	0.150 9	1209.370	3 ⁻	960.633	3 ⁺				
249.239 18	0.010 2	1505.178	1 ⁻ ,2 ⁻	1256.018	1 ⁻ ,2 ⁻				
249.715 ^a 14	0.020 ^a 6	745.2188	1 ⁻ ,2 ⁻	495.5114	1 ⁻				
249.715 ^a 14	0.020 ^a 6	1232.8022	3 ⁻	983.0869	2 ⁺				
249.715 ^a 14	0.020 ^a 6	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	1286.747	2 ⁻				
250.118 7	0.070 9	511.5173	3 ⁻	261.4047	2 ⁻				
252.828 8	0.050 13	1240.385	3 ⁻	987.5746	3 ⁻				
^x 252.941 4	0.10 1								
253.203 9	0.020 3	956.9534	1 ⁻ ,2 ⁻	703.7299	1 ⁻				

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¹⁹⁸Au₁₁₉⁻⁷

From ENSDF

¹⁹⁸Au₁₁₉⁻⁷

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

E _γ	I _γ ^{#@}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. †	α&	Comments
255.882 10	0.030 6	346.9062	2 ⁻	91.0057	0 ⁻			
^x 256.886 4	0.080 9							
^x 258.022 10	0.020 2							
^x 258.444 8	0.020 2							
259.348 9	0.030 3	259.3404	1 ⁻	0.0	2 ⁻	M1	0.495	α(K)=0.407 6; α(L)=0.0673 10; α(M)=0.01561 22; α(N+..)=0.00465 7
259.467 9	0.030 3	495.5114	1 ⁻	236.0453	3 ⁻			
260.882 1	1.12 9	453.8249	2 ⁻	192.9440	1 ⁻	M1	0.487	α(K)=0.400 6; α(L)=0.0663 10; α(M)=0.01536 22; α(N+..)=0.00458 7
261.402 1	6.76 20	261.4047	2 ⁻	0.0	2 ⁻	M1	0.484	α(K)=0.398 6; α(L)=0.0659 10; α(M)=0.01527 22; α(N+..)=0.00455 7
^x 262.059 12	0.010 1							
262.535 6	0.070 12	625.4303	3 ⁻	362.8994	2 ⁻			
262.712 14	0.020 8	1472.097	3 ⁻	1209.370	3 ⁻			
264.062 9	0.020 2	896.5723	1 ⁻ ,2 ⁻	632.4818	1 ⁻ ,2 ⁻			
264.210 ^a 3	0.080 ^a 8	632.4818	1 ⁻ ,2 ⁻	368.2549	1 ⁻			
264.210 ^a 3	0.080 ^a 8	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	1272.1512	3 ⁻			
^x 264.981 10	0.020 2							
266.271 8	0.050 11	1475.622	2 ⁻	1209.370	3 ⁻			
266.647 1	0.320 10	672.6549	1 ⁻ ,2 ⁻	406.0081	2 ⁻	M1	0.458	α(K)=0.377 6; α(L)=0.0624 9; α(M)=0.01445 21; α(N+..)=0.00431 6
267.774 3	0.100 8	529.1687	3 ⁻	261.4047	2 ⁻			
269.081 2	0.210 17	530.4782	1 ⁻	261.4047	2 ⁻	M1	0.447	α(K)=0.368 6; α(L)=0.0608 9; α(M)=0.01410 20; α(N+..)=0.00420 6
269.574 7	0.050 11	632.4818	1 ⁻ ,2 ⁻	362.8994	2 ⁻			
270.160 10	0.020 2	1056.719	2 ⁻	786.5357	2 ⁻			
270.639 5	0.050 17	1542.793	3 ⁻	1272.1512	3 ⁻			
271.144 ^a 4	0.140 ^a 11	530.4782	1 ⁻	259.3404	1 ⁻	(M1)	0.438	α(K)=0.360 5; α(L)=0.0596 9; α(M)=0.01380 20; α(N+..)=0.00411 6
271.144 ^a 4	0.140 ^a 11	896.5723	1 ⁻ ,2 ⁻	625.4303	3 ⁻	(M1)	0.438	α(K)=0.360 5; α(L)=0.0596 9; α(M)=0.01380 20; α(N+..)=0.00411 6
271.144 ^a 4	0.140 ^a 11	1375.989	1 ⁻ ,2 ⁻	1104.847	0 ⁻ ,1 ⁻ ,2 ⁻	(M1)	0.438	α(K)=0.360 5; α(L)=0.0596 9; α(M)=0.01380 20; α(N+..)=0.00411 6
271.229 3	0.230 12	801.7064	1 ⁻ ,2 ⁻	530.4782	1 ⁻	(M1)	0.437	α(K)=0.360 5; α(L)=0.0595 9; α(M)=0.01379 20; α(N+..)=0.00411 6
271.895 2	0.270 11	362.8994	2 ⁻	91.0057	0 ⁻			
272.564 5	0.090 7	1304.8246	3 ⁻	1032.254	3 ⁻			
273.286 15	0.050 17	328.4833	3 ⁻	55.1812	1 ⁻			
273.519 10	0.020 2	1108.873	1 ⁻ ,2 ⁻	835.366	3 ⁻			
275.470 ^a 7	0.060 ^a 11	511.5173	3 ⁻	236.0453	3 ⁻			
275.470 ^a 7	0.060 ^a 11	1293.902	1 ⁻ ,2 ⁻	1018.430	1 ⁻ ,2 ⁻			
^x 275.656 3	0.090 6					M1	0.418	α(K)=0.344 5; α(L)=0.0569 8; α(M)=0.01319 19; α(N+..)=0.00393 6
276.071 3	0.300 24	758.398	4 ⁺	482.3273	4 ⁺	M1	0.417	α(K)=0.343 5; α(L)=0.0567 8; α(M)=0.01313 19; α(N+..)=0.00391 6
277.246 2	0.350 56	368.2549	1 ⁻	91.0057	0 ⁻	M1	0.412	α(K)=0.339 5; α(L)=0.0560 8; α(M)=0.01298 19; α(N+..)=0.00387 6
^x 279.500 12	0.010 1							
281.432 7	0.050 14	1338.171	3 ⁻	1056.719	2 ⁻			
282.893 22	0.020 5	530.4782	1 ⁻	247.5731	1 ⁻	M1	0.390	α(K)=0.321 5; α(L)=0.0530 8; α(M)=0.01228 18; α(N+..)=0.00366 6
283.076 22	0.020 4	1375.989	1 ⁻ ,2 ⁻	1092.876	0 ⁻	M1	0.389	α(K)=0.320 5; α(L)=0.0529 8; α(M)=0.01226 18; α(N+..)=0.00365 6
^x 283.316 11	0.040 11							
283.944 15	0.090 17	916.4440	1 ⁻ ,2 ⁻	632.4818	1 ⁻ ,2 ⁻			
284.111 3	0.210 29	339.2909	1 ⁻	55.1812	1 ⁻	M1	0.385	α(K)=0.317 5; α(L)=0.0524 8; α(M)=0.01213 17; α(N+..)=0.00362 5
285.838 9	0.020 2	1202.268	2 ⁻	916.4440	1 ⁻ ,2 ⁻			

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γ(¹⁹⁸Au) (continued)

<u>E_γ</u>	<u>I_γ^{#@}</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[†]</u>	<u>α&</u>	<u>Comments</u>
^x 288.627 8	0.020 2							
290.183 20	0.020 6	801.7064	1 ⁻ ,2 ⁻	511.5173	3 ⁻			
291.025 ^a 19	0.020 ^a 5	786.5357	2 ⁻	495.5114	1 ⁻			
291.025 ^a 19	0.020 ^a 5	916.4440	1 ⁻ ,2 ⁻	625.4303	3 ⁻			
291.025 ^a 19	0.020 ^a 5	1338.171	3 ⁻	1047.124	1 ⁻ ,2 ⁻			
291.722 1	1.42 14	346.9062	2 ⁻	55.1812	1 ⁻	M1	0.358	α(K)=0.295 5; α(L)=0.0487 7; α(M)=0.01128 16; α(N+..)=0.00336 5
^x 292.173 12	0.030 6							
292.258 10	0.050 6	1056.719	2 ⁻	764.483	4 ⁻			
293.117 4	0.110 26	529.1687	3 ⁻	236.0453	3 ⁻	M1	0.354	α(K)=0.291 4; α(L)=0.0481 7; α(M)=0.01114 16; α(N+..)=0.00332 5
^x 293.476 14	0.030 6							
^x 294.313 11	0.030 7					M1	0.350	α(K)=0.288 4; α(L)=0.0475 7; α(M)=0.01101 16; α(N+..)=0.00328 5
^x 295.109 13	0.040 6							
296.025 ^a 22	0.010 ^a 2	1371.502	1 ⁻ ,2 ⁻	1075.560	1 ⁻ ,2 ⁻ ,3 ⁻			
296.025 ^a 22	0.010 ^a 2	1404.893	2 ⁻ ,3 ⁻	1108.873	1 ⁻ ,2 ⁻			
296.025 ^a 22	0.010 ^a 2	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	1240.385	3 ⁻			
296.528 9	0.030 3	511.5173	3 ⁻	214.9715	4 ⁻			
^x 297.134 14	0.020 3							
297.720 5	0.080 4	703.7299	1 ⁻	406.0081	2 ⁻	M1	0.339	α(K)=0.279 4; α(L)=0.0460 7; α(M)=0.01067 15; α(N+..)=0.00318 5
299.161 ^a 12	0.030 ^a 4	971.8210	3 ⁻	672.6549	1 ⁻ ,2 ⁻			
299.161 ^a 12	0.030 ^a 4	1286.747	2 ⁻	987.5746	3 ⁻			
300.646 7	0.040 3	1396.142	3 ⁻	1095.499	3 ⁺			
300.845 12	0.020 2	1232.8022	3 ⁻	931.948	3 ⁻			
^x 301.118 9	0.020 2							
301.365 10	0.020 2	548.9343	2 ⁻	247.5731	1 ⁻			
302.608 9	0.020 2	495.5114	1 ⁻	192.9440	1 ⁻			
304.419 7	0.030 2	1560.407	3 ⁻	1256.018	1 ⁻ ,2 ⁻			
306.199 ^a 4	0.070 ^a 2	801.7064	1 ⁻ ,2 ⁻	495.5114	1 ⁻	M1	0.314	α(K)=0.259 4; α(L)=0.0426 6; α(M)=0.00988 14; α(N+..)=0.00294 5
306.199 ^a 4	0.070 ^a 2	835.366	3 ⁻	529.1687	3 ⁻	M1	0.314	α(K)=0.259 4; α(L)=0.0426 6; α(M)=0.00988 14; α(N+..)=0.00294 5
307.723 3	0.590 18	362.8994	2 ⁻	55.1812	1 ⁻	M1+E2	0.20 11	α(K)=0.16 10; α(L)=0.035 8; α(M)=0.0083 14; α(N+..)=0.0025 5
311.905 ^a 3	0.640 ^a 13	571.2430	1 ⁻	259.3404	1 ⁻	M1	0.299	α(K)=0.246 4; α(L)=0.0405 6; α(M)=0.00939 14; α(N+..)=0.00280 4
311.905 ^a 3	0.640 ^a 13	1359.038	1 ⁻ ,2 ⁻ ,3 ⁻	1047.124	1 ⁻ ,2 ⁻	M1	0.299	α(K)=0.246 4; α(L)=0.0405 6; α(M)=0.00939 14; α(N+..)=0.00280 4
312.793 14	0.030 4	1209.370	3 ⁻	896.5723	1 ⁻ ,2 ⁻			
313.065 4	0.070 4	368.2549	1 ⁻	55.1812	1 ⁻			
313.20 5	0.020 9	824.609	3 ⁺	511.5173	3 ⁻			
313.82 ^a 3	0.010 ^a 2	1409.399	3 ⁻	1095.499	3 ⁺			
313.82 ^a 3	0.010 ^a 2	1418.687	3 ⁺ ,4 ⁺	1104.847	0 ⁻ ,1 ⁻ ,2 ⁻			
314.181 9	0.040 4	529.1687	3 ⁻	214.9715	4 ⁻			
314.916 4	0.360 7	764.483	4 ⁻	449.5703	3 ⁻	M1	0.291	α(K)=0.240 4; α(L)=0.0395 6; α(M)=0.00915 13; α(N+..)=0.00273 4
315.240 ^a 17	0.040 ^a 10	1115.266	3 ⁻	800.0391	2 ⁻			
315.240 ^a 17	0.040 ^a 10	1272.1512	3 ⁻	956.9534	1 ⁻ ,2 ⁻			
^x 316.158 7	0.010 2							
317.271 10	0.120 24	1304.8246	3 ⁻	987.5746	3 ⁻			

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

E _γ	I _γ ^{#@}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α ^{&}	Comments
319.597 13	0.020 3	1380.885	3 ⁻	1061.285	3 ⁻			
320.329 17	0.020 3	891.616	1 ⁻ ,2 ⁻	571.2430	1 ⁻			
^x 321.079 7	0.060 4					M1	0.276	α(K)=0.227 4; α(L)=0.0374 6; α(M)=0.00867 13; α(N+..)=0.00259 4
322.77 ^a 6	0.020 ^a 9	728.672	0 ⁻	406.0081	2 ⁻			
322.77 ^a 6	0.020 ^a 9	1191.566	1 ⁺ ,2 ⁺ ,3 ⁺	868.7736	3 ⁻			
322.77 ^a 6	0.020 ^a 9	1431.645	2 ⁻ ,3 ⁻	1108.873	1 ⁻ ,2 ⁻			
324.916 4	0.140 4	637.125	4 ⁺	312.2227	5 ⁺			
325.319 7	0.010 1	896.5723	1 ⁻ ,2 ⁻	571.2430	1 ⁻			
325.751 3	0.120 3	672.6549	1 ⁻ ,2 ⁻	346.9062	2 ⁻	M1	0.265	α(K)=0.219 3; α(L)=0.0360 5; α(M)=0.00834 12; α(N+..)=0.00249 4
^x 326.162 4	0.020 2							
^x 327.215 8	0.010 1							
328.087 8	0.020 2	810.426	3 ⁺	482.3273	4 ⁺			
328.484 3	2.00 2	328.4833	3 ⁻	0.0	2 ⁻	M1	0.260	α(K)=0.214 3; α(L)=0.0352 5; α(M)=0.00815 12; α(N+..)=0.00243 4
328.706 4	0.150 2	1115.266	3 ⁻	786.5357	2 ⁻	M1	0.259	α(K)=0.213 3; α(L)=0.0351 5; α(M)=0.00814 12; α(N+..)=0.00242 4
329.021 8	0.020 1	544.0095	4 ⁻	214.9715	4 ⁻			
331.558 12	0.010 2	956.9534	1 ⁻ ,2 ⁻	625.4303	3 ⁻			
^x 332.038 15	0.010 2							
^x 332.297 6	0.010 1							
^x 332.548 10	0.010 2							
332.713 2	0.040 3	786.5357	2 ⁻	453.8249	2 ⁻	M1	0.251	α(K)=0.206 3; α(L)=0.0340 5; α(M)=0.00787 11; α(N+..)=0.00235 4
333.839 2	0.150 3	1409.399	3 ⁻	1075.560	1 ⁻ ,2 ⁻ ,3 ⁻	M1	0.248	α(K)=0.205 3; α(L)=0.0337 5; α(M)=0.00780 11; α(N+..)=0.00232 4
333.970 4	0.040 2	548.9343	2 ⁻	214.9715	4 ⁻			
334.113 ^a 11	0.010 ^a 1	1458.988	3 ⁻	1124.883	2 ⁻			
334.113 ^a 11	0.010 ^a 1	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	1202.268	2 ⁻			
334.235 14	0.0100 13	702.4811	2 ⁻	368.2549	1 ⁻			
335.192 8	0.020 10	571.2430	1 ⁻	236.0453	3 ⁻			
335.297 4	0.040 2	1286.747	2 ⁻	951.443	3 ⁺	E1 [‡]	0.0208	α(K)=0.01717 24; α(L)=0.00277 4; α(M)=0.000639 9; α(N+..)=0.000188 3 α(K)=0.210; α(L)=0.0346; α(M)=0.00798; α(N+..)=0.00249 M1 (1996Ma70,1996Ma75).
^x 335.495 2	0.080 2					M1	0.245	α(K)=0.202 3; α(L)=0.0332 5; α(M)=0.00769 11; α(N+..)=0.00229 4
^x 335.936 16	0.010 3							
336.054 18	0.010 2	1431.645	2 ⁻ ,3 ⁻	1095.499	3 ⁺			
336.320 3	0.040 4	1335.543	1 ⁻ ,2 ⁻ ,3 ⁻	999.213	1 ⁻ ,2 ⁻			
337.533 1	0.240 5	530.4782	1 ⁻	192.9440	1 ⁻	M1	0.241	α(K)=0.199 3; α(L)=0.0327 5; α(M)=0.00757 11; α(N+..)=0.00226 4
338.055 10	0.010 2	1399.342	2 ⁻ ,3 ⁻	1061.285	3 ⁻			
339.131 8	0.010 1	1530.702	1 ⁻ ,2 ⁻	1191.566	1 ⁺ ,2 ⁺ ,3 ⁺			
339.328 5	0.060 4	971.8210	3 ⁻	632.4818	1 ⁻ ,2 ⁻			
339.596 ^a 3	0.030 ^a 2	702.4811	2 ⁻	362.8994	2 ⁻			
339.596 ^a 3	0.030 ^a 2	868.7736	3 ⁻	529.1687	3 ⁻			
^x 339.921 8	0.010 1							
340.19 5	0.040 12	1297.133	1 ⁻ ,2 ⁻ ,3 ⁻	956.9534	1 ⁻ ,2 ⁻			
^x 341.365 3	0.040 2							

γ(¹⁹⁸Au) (continued)

E _γ	I _γ # [@]	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α ^{&}	Comments
341.693 8	0.110 19	1434.584	1 ⁻ ,2 ⁻	1092.876	0 ⁻			
342.217 20	0.020 6	824.609	3 ⁺	482.3273	4 ⁺			
342.81 3	0.020 4	1325.834	2 ⁻	983.0869	2 ⁺			
^x 343.629 1	1.04 1					E2	0.0690	α(K)=0.0447 7; α(L)=0.0184 3; α(M)=0.00461 7; α(N+..)=0.001337 19
344.172 ^a 4	0.030 ^a 2	672.6549	1 ⁻ ,2 ⁻	328.4833	3 ⁻			
344.172 ^a 4	0.030 ^a 2	1304.8246	3 ⁻	960.633	3 ⁺			
^x 344.847 5	0.040 3							
345.21 ^a 5	0.020 ^a 8	894.2718	3 ⁻	548.9343	2 ⁻			
345.21 ^a 5	0.020 ^a 8	916.4440	1 ⁻ ,2 ⁻	571.2430	1 ⁻			
345.21 ^a 5	0.020 ^a 8	1505.178	1 ⁻ ,2 ⁻	1160.018	3 ⁻			
346.394 3	0.040 2	971.8210	3 ⁻	625.4303	3 ⁻	M1	0.225	α(K)=0.185 3; α(L)=0.0305 5; α(M)=0.00705 10; α(N+..)=0.00210 3
346.909 1	0.590 6	346.9062	2 ⁻	0.0	2 ⁻	M1	0.224	α(K)=0.184 3; α(L)=0.0303 5; α(M)=0.00702 10; α(N+..)=0.00209 3
347.877 ^a 2	0.150 ^a 3	801.7064	1 ⁻ ,2 ⁻	453.8249	2 ⁻	M1	0.222	α(K)=0.183 3; α(L)=0.0301 5; α(M)=0.00697 10; α(N+..)=0.00208 3
347.877 ^a 2	0.150 ^a 3	1304.8246	3 ⁻	956.9534	1 ⁻ ,2 ⁻	M1	0.222	α(K)=0.183 3; α(L)=0.0301 5; α(M)=0.00697 10; α(N+..)=0.00208 3
350.115 2	0.050 4	1458.988	3 ⁻	1108.873	1 ⁻ ,2 ⁻			
350.494 8	0.010 2	800.0391	2 ⁻	449.5703	3 ⁻			
350.828 1	1.290 13	406.0081	2 ⁻	55.1812	1 ⁻	M1	0.217	α(K)=0.179 3; α(L)=0.0294 5; α(M)=0.00681 10; α(N+..)=0.00203 3
^x 351.843 5	0.020 1							
^x 354.553 7	0.010 4							
355.100 ^a 5	0.020 ^a 3	987.5746	3 ⁻	632.4818	1 ⁻ ,2 ⁻			
355.100 ^a 5	0.020 ^a 3	1338.171	3 ⁻	983.0869	2 ⁺			
355.530 2	0.420 9	1157.2384	3 ⁻	801.7064	1 ⁻ ,2 ⁻	M1	0.210	α(K)=0.1727 25; α(L)=0.0284 4; α(M)=0.00657 10; α(N+..)=0.00196 3
356.077 7	0.010 1	1431.645	2 ⁻ ,3 ⁻	1075.560	1 ⁻ ,2 ⁻ ,3 ⁻			
357.91 ^a 3	0.020 ^a 4	1318.628	1 ⁻ ,2 ⁻	960.633	3 ⁺			
357.91 ^a 3	0.020 ^a 4	1390.227	2 ⁻	1032.254	3 ⁻			
357.91 ^a 3	0.020 ^a 4	1396.142	3 ⁻	1038.2745	3 ⁻			
358.472 7	0.020 2	764.483	4 ⁻	406.0081	2 ⁻			
^x 359.688 2	0.090 3							
^x 360.208 9	0.010 1							
360.399 3	0.040 2	1124.883	2 ⁻	764.483	4 ⁻			
360.859 4	0.030 2	810.426	3 ⁺	449.5703	3 ⁻			
361.745 6	0.050 7	1256.018	1 ⁻ ,2 ⁻	894.2718	3 ⁻			
^x 361.907 12	0.050 14							
362.141 8	0.070 6	987.5746	3 ⁻	625.4303	3 ⁻			
362.453 ^a 5	0.050 ^a 6	891.616	1 ⁻ ,2 ⁻	529.1687	3 ⁻			
362.453 ^a 5	0.050 ^a 6	1380.885	3 ⁻	1018.430	1 ⁻ ,2 ⁻			
362.857 5	0.040 3	1554.429	1 ⁻ ,2 ⁻	1191.566	1 ⁺ ,2 ⁺ ,3 ⁺			
364.019 ^a 3	0.140 ^a 4	625.4303	3 ⁻	261.4047	2 ⁻	M1	0.197	α(K)=0.1621 23; α(L)=0.0266 4; α(M)=0.00616 9; α(N+..)=0.00184 3
364.019 ^a 3	0.140 ^a 4	1232.8022	3 ⁻	868.7736	3 ⁻	M1	0.197	α(K)=0.1621 23; α(L)=0.0266 4; α(M)=0.00616 9; α(N+..)=0.00184 3
364.421 6	0.020 3	703.7299	1 ⁻	339.2909	1 ⁻			
^x 364.933 10	0.020 2							
365.620 2	0.100 3	1038.2745	3 ⁻	672.6549	1 ⁻ ,2 ⁻			

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

E _γ	I _γ #@	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. †	α&	Comments
^x 365.970 13	0.010 2							
366.095 3	0.070 5	625.4303	3 ⁻	259.3404	1 ⁻			
366.332 9	0.010 1	1338.171	3 ⁻	971.8210	3 ⁻			
366.963 ^a 11	0.010 ^a 1	1191.566	1 ⁺ ,2 ⁺ ,3 ⁺	824.609	3 ⁺			
366.963 ^a 11	0.010 ^a 2	1202.268	2 ⁻	835.366	3 ⁻			
368.249 7	0.180 2	368.2549	1 ⁻	0.0	2 ⁻	M1	0.191	α(K)=0.1571 22; α(L)=0.0258 4; α(M)=0.00597 9; α(N+..)=0.001780 25
^x 369.280 7	0.010 1							
369.636 5	0.020 2	918.5890	1 ⁻ ,2 ⁻	548.9343	2 ⁻			
371.080 2	0.600 6	632.4818	1 ⁻ ,2 ⁻	261.4047	2 ⁻	M1	0.187	α(K)=0.1539 22; α(L)=0.0253 4; α(M)=0.00585 9; α(N+..)=0.001744 25
373.150 11	0.100 15	632.4818	1 ⁻ ,2 ⁻	259.3404	1 ⁻	M1	0.184	α(K)=0.1517 22; α(L)=0.0249 4; α(M)=0.00576 8; α(N+..)=0.001718 24
373.37 3	0.040 12	1434.584	1 ⁻ ,2 ⁻	1061.285	3 ⁻			
373.765 5	0.040 2	999.213	1 ⁻ ,2 ⁻	625.4303	3 ⁻			
^x 374.234 16	0.010 1							
374.922 ^a 3	0.070 ^a 6	1306.859	2 ⁻	931.948	3 ⁻			
374.922 ^a 3	0.070 ^a 6	1335.543	1 ⁻ ,2 ⁻ ,3 ⁻	960.633	3 ⁺			
374.922 ^a 3	0.070 ^a 6	1431.645	2 ⁻ ,3 ⁻	1056.719	2 ⁻			
^x 375.189 9	0.010 1							
^x 375.708 17	0.010 2							
376.154 7	0.020 2	1104.847	0 ⁻ ,1 ⁻ ,2 ⁻	728.672	0 ⁻			
376.795 17	0.040 13	1375.989	1 ⁻ ,2 ⁻	999.213	1 ⁻ ,2 ⁻			
^x 377.043 2	0.480 11							
377.874 2	0.080 6	1272.1512	3 ⁻	894.2718	3 ⁻			
378.302 2	0.240 5	571.2430	1 ⁻	192.9440	1 ⁻	M1	0.1774	α(K)=0.1462 21; α(L)=0.0240 4; α(M)=0.00555 8; α(N+..)=0.001655 24
^x 378.756 8	0.020 1							
381.205 2	4.02 4	381.2003	3 ⁺	0.0	2 ⁻	E1 ‡	0.01550	α(K)=0.01284 18; α(L)=0.00205 3; α(M)=0.000472 7; α(N+..)=0.0001390 20 α(K)=0.0351; α(L)=0.0129; α(M)=0.00322; α(N+..)=0.00100 E2 (1996Ma70,1996Ma75).
381.565 9	0.110 2	835.366	3 ⁻	453.8249	2 ⁻	M1	0.1733	α(K)=0.1429 20; α(L)=0.0234 4; α(M)=0.00542 8; α(N+..)=0.001617 23
382.327 3	0.050 2	745.2188	1 ⁻ ,2 ⁻	362.8994	2 ⁻	M1	0.1724	α(K)=0.1421 20; α(L)=0.0233 4; α(M)=0.00540 8; α(N+..)=0.001608 23
382.992 8	0.020 2	931.948	3 ⁻	548.9343	2 ⁻			
383.295 2	0.320 3	789.2973	1 ⁻	406.0081	2 ⁻			
^x 383.488 5	0.030 1							
^x 383.699 9	0.010 1							
^x 384.856 13	0.010 2							
385.553 ^a 15	0.010 ^a 2	1423.795	3 ⁻	1038.2745	3 ⁻			
385.553 ^a 15	0.010 ^a 2	1542.793	3 ⁻	1157.2384	3 ⁻			
385.726 8	0.020 5	956.9534	1 ⁻ ,2 ⁻	571.2430	1 ⁻			
^x 385.991 8	0.010 1							
386.193 13	0.010 2	1304.8246	3 ⁻	918.5890	1 ⁻ ,2 ⁻			

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

E _γ	I _γ # [@]	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α&	Comments
386.420 ^a 2	10.00 ^a 29	868.7736	3 ⁻	482.3273	4 ⁺			
386.420 ^a 2	10.000 ^a 29	1418.687	3 ⁺ ,4 ⁺	1032.254	3 ⁻			
387.284 3	0.060 6	916.4440	1 ⁻ ,2 ⁻	529.1687	3 ⁻	M1	0.1666	α(K)=0.1373 20; α(L)=0.0225 4; α(M)=0.00521 8; α(N+..)=0.001553 22
387.900 22	0.010 2	931.948	3 ⁻	544.0095	4 ⁻			
389.335 19	0.030 8	625.4303	3 ⁻	236.0453	3 ⁻			
389.421 4	0.040 2	918.5890	1 ⁻ ,2 ⁻	529.1687	3 ⁻			
^x 391.297 3	0.060 4							
^x 393.453 5	0.030 2							
393.881 2	0.300 6	1325.834	2 ⁻	931.948	3 ⁻	M1	0.1592	α(K)=0.1313 19; α(L)=0.0215 3; α(M)=0.00498 7; α(N+..)=0.001484 21
^x 394.120 6	0.020 1							
394.361 8	0.020 2	449.5703	3 ⁻	55.1812	1 ⁻			
395.703 3	0.090 6	801.7064	1 ⁻ ,2 ⁻	406.0081	2 ⁻	M1	0.1573	α(K)=0.1296 19; α(L)=0.0212 3; α(M)=0.00492 7; α(N+..)=0.001465 21
^x 396.139 4	0.030 3							
396.426 14	0.010 2	632.4818	1 ⁻ ,2 ⁻	236.0453	3 ⁻			
^x 397.020 16	0.010 2							
397.330 14	0.010 2	1293.902	1 ⁻ ,2 ⁻	896.5723	1 ⁻ ,2 ⁻			
397.672 13	0.010 2	1458.988	3 ⁻	1061.285	3 ⁻			
398.293 2	0.130 4	1513.565	1 ⁻ ,2 ⁻	1115.266	3 ⁻			
398.650 5	0.070 4	453.8249	2 ⁻	55.1812	1 ⁻			
398.844 12	0.020 2	1157.2384	3 ⁻	758.398	4 ⁺			
400.703 ^a 11	0.030 ^a 5	1047.124	1 ⁻ ,2 ⁻	646.411	0 ⁺			
400.703 ^a 11	0.030 ^a 5	1496.201	3 ⁻	1095.499	3 ⁺			
^x 400.880 18	0.020 2							
401.567 11	0.030 2	764.483	4 ⁻	362.8994	2 ⁻			
402.297 20	0.010 3	1293.902	1 ⁻ ,2 ⁻	891.616	1 ⁻ ,2 ⁻			
403.141 7	0.050 2	1560.407	3 ⁻	1157.2384	3 ⁻			
^x 403.444 6	0.300 15							
404.547 4	0.040 4	495.5114	1 ⁻	91.0057	0 ⁻	M1	0.1483	α(K)=0.1222 18; α(L)=0.0200 3; α(M)=0.00463 7; α(N+..)=0.001381 20
405.102 12	0.010 2	1191.566	1 ⁺ ,2 ⁺ ,3 ⁺	786.5357	2 ⁻			
405.514 8	0.020 2	1297.133	1 ⁻ ,2 ⁻ ,3 ⁻	891.616	1 ⁻ ,2 ⁻			
406.009 3	0.050 5	406.0081	2 ⁻	0.0	2 ⁻			
406.397 ^a 8	0.010 ^a 1	1108.873	1 ⁻ ,2 ⁻	702.4811	2 ⁻			
406.397 ^a 8	0.010 ^a 1	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	956.9534	1 ⁻ ,2 ⁻			
406.757 ^a 18	0.010 ^a 2	1032.254	3 ⁻	625.4303	3 ⁻			
406.757 ^a 18	0.010 ^a 2	1301.045	2 ⁻	894.2718	3 ⁻			
406.757 ^a 18	0.010 ^a 2	1453.858	3 ⁻	1047.124	1 ⁻ ,2 ⁻			
408.558 8	0.030 1	1396.142	3 ⁻	987.5746	3 ⁻			
^x 409.802 13	0.020 5							
^x 411.010 8	0.020 2							

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

<u>E_γ</u>	<u>I_γ^{#@}</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[†]</u>	<u>α^{&}</u>	<u>Comments</u>
^x 411.293 8	0.020 2							
^x 412.757 18	0.050 8							
413.289 5	0.070 2	672.6549	1 ⁻ ,2 ⁻	259.3404	1 ⁻			
^x 413.485 2	0.320 3							
414.583 17	0.010 2	1371.502	1 ⁻ ,2 ⁻	956.9534	1 ⁻ ,2 ⁻			
414.955 6	0.030 3	868.7736	3 ⁻	453.8249	2 ⁻			
418.321 13	0.030 2	786.5357	2 ⁻	368.2549	1 ⁻			
418.840 2	0.950 10	800.0391	2 ⁻	381.2003	3 ⁺	E1 [‡]	0.01257	α(K)=0.01043 15; α(L)=0.001649 23; α(M)=0.000380 6; α(N+..)=0.0001119 16 α(K)=0.0283; α(L)=0.0094; α(M)=0.00232; α(N+..)=0.00072 E2 (1996Ma70,1996Ma75).
419.199 5	0.100 2	868.7736	3 ⁻	449.5703	3 ⁻	M1	0.1348	α(K)=0.1112 16; α(L)=0.0182 3; α(M)=0.00421 6; α(N+..)=0.001254 18
^x 419.802 10	0.030 2							
421.646 6	0.040 3	1453.858	3 ⁻	1032.254	3 ⁻			
^x 422.994 19	0.040 14							
423.100 7	0.030 2	918.5890	1 ⁻ ,2 ⁻	495.5114	1 ⁻			
423.641 8	0.020 1	786.5357	2 ⁻	362.8994	2 ⁻			
424.220 4	0.060 3	1056.719	2 ⁻	632.4818	1 ⁻ ,2 ⁻	M1	0.1306	α(K)=0.1077 15; α(L)=0.01761 25; α(M)=0.00408 6; α(N+..)=0.001215 17
425.081 8	0.030 1	672.6549	1 ⁻ ,2 ⁻	247.5731	1 ⁻			
^x 427.176 6	0.050 2							
^x 428.197 10	0.020 1							
^x 430.361 4	0.070 3							
432.169 11	0.010 1	1104.847	0 ⁻ ,1 ⁻ ,2 ⁻	672.6549	1 ⁻ ,2 ⁻			
^x 432.700 3	0.110 3							
432.96 10	0.020 11	1232.8022	3 ⁻	800.0391	2 ⁻			
433.457 6	0.030 2	801.7064	1 ⁻ ,2 ⁻	368.2549	1 ⁻			
^x 434.395 16	0.250 75							
435.861 24	0.010 2	1061.285	3 ⁻	625.4303	3 ⁻			
436.037 8	0.020 2	1304.8246	3 ⁻	868.7736	3 ⁻			
436.614 4	0.040 2	672.6549	1 ⁻ ,2 ⁻	236.0453	3 ⁻			
437.127 6	0.020 2	800.0391	2 ⁻	362.8994	2 ⁻			
^x 437.805 4	0.040 2							
438.805 10	0.010 1	801.7064	1 ⁻ ,2 ⁻	362.8994	2 ⁻			
^x 439.507 3	0.860 9							
439.63 4	0.100 35	786.5357	2 ⁻	346.9062	2 ⁻			
440.11 4	0.100 35	1487.136	1 ⁻ ,2 ⁻	1047.124	1 ⁻ ,2 ⁻			
440.331 3	1.240 12	495.5114	1 ⁻	55.1812	1 ⁻	M1	0.1183	α(K)=0.0976 14; α(L)=0.01594 23; α(M)=0.00369 6; α(N+..)=0.001099 16
441.065 7	0.120 3	702.4811	2 ⁻	261.4047	2 ⁻	M1	0.1178	α(K)=0.0972 14; α(L)=0.01587 23; α(M)=0.00367 6; α(N+..)=0.001094 16
442.081 14	0.020 2	891.616	1 ⁻ ,2 ⁻	449.5703	3 ⁻			
442.379 ^a 5	0.050 ^a 2	789.2973	1 ⁻	346.9062	2 ⁻			

γ(¹⁹⁸Au) (continued)

E _γ	I _γ ^{#@}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α ^{&}	Comments
442.379 ^a 5	0.050 ^a 2	1399.342	2 ⁻ ,3 ⁻	956.9534	1 ⁻ ,2 ⁻			
^x 443.774 4	0.080 2							
443.85 ^a 3	0.120 ^a 18	1335.543	1 ⁻ ,2 ⁻ ,3 ⁻	891.616	1 ⁻ ,2 ⁻			
443.85 ^a 3	0.120 ^a 18	1338.171	3 ⁻	894.2718	3 ⁻			
443.85 ^a 3	0.120 ^a 18	1505.178	1 ⁻ ,2 ⁻	1061.285	3 ⁻			
444.393 3	0.760 8	703.7299	1 ⁻	259.3404	1 ⁻	M1	0.1155	α(K)=0.0952 14; α(L)=0.01555 22; α(M)=0.00360 5; α(N+..)=0.001073 15
444.754 6	0.070 2	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	918.5890	1 ⁻ ,2 ⁻			
446.177 4	0.080 3	758.398	4 ⁺	312.2227	5 ⁺	M1	0.1142	α(K)=0.0942 14; α(L)=0.01538 22; α(M)=0.00356 5; α(N+..)=0.001061 15
446.997 ^a 11	0.020 ^a 2	896.5723	1 ⁻ ,2 ⁻	449.5703	3 ⁻			
446.997 ^a 11	0.020 ^a 2	1434.584	1 ⁻ ,2 ⁻	987.5746	3 ⁻			
447.522 ^a 5	0.050 ^a 2	810.426	3 ⁺	362.8994	2 ⁻			
447.522 ^a 5	0.050 ^a 2	1272.1512	3 ⁻	824.609	3 ⁺			
448.004 17	0.010 1	1404.893	2 ⁻ ,3 ⁻	956.9534	1 ⁻ ,2 ⁻			
448.566 3	0.160 3	1431.645	2 ⁻ ,3 ⁻	983.0869	2 ⁺			
448.924 8	0.030 2	1380.885	3 ⁻	931.948	3 ⁻			
449.572 3	0.670 7	449.5703	3 ⁻	0.0	2 ⁻	M1	0.1120	α(K)=0.0924 13; α(L)=0.01508 22; α(M)=0.00349 5; α(N+..)=0.001040 15
451.359 18	0.010 1	1286.747	2 ⁻	835.366	3 ⁻			
451.944 12	0.020 2	1423.795	3 ⁻	971.8210	3 ⁻			
453.147 9	0.040 2	800.0391	2 ⁻	346.9062	2 ⁻			
^x 453.385 17	0.020 2							
453.810 4	0.080 2	453.8249	2 ⁻	0.0	2 ⁻			
454.887 ^a 6	0.040 ^a 2	702.4811	2 ⁻	247.5731	1 ⁻			
454.887 ^a 6	0.040 ^a 2	1487.136	1 ⁻ ,2 ⁻	1032.254	3 ⁻			
456.172 8	0.190 17	703.7299	1 ⁻	247.5731	1 ⁻	M1	0.1077	α(K)=0.0889 13; α(L)=0.01450 21; α(M)=0.00335 5; α(N+..)=0.001000 14
456.290 4	0.630 6	1160.018	3 ⁻	703.7299	1 ⁻			
457.090 ^a 15	0.010 ^a 3	987.5746	3 ⁻	530.4782	1 ⁻			
457.090 ^a 15	0.010 ^a 3	1202.268	2 ⁻	745.2188	1 ⁻ ,2 ⁻			
457.090 ^a 15	0.010 ^a 3	1325.834	2 ⁻	868.7736	3 ⁻			
457.65 ^a 7	0.050 ^a 18	672.6549	1 ⁻ ,2 ⁻	214.9715	4 ⁻			
457.65 ^a 7	0.050 ^a 18	1160.018	3 ⁻	702.4811	2 ⁻			
458.049 ^a 3	0.390 ^a 4	786.5357	2 ⁻	328.4833	3 ⁻	M1	0.1066	α(K)=0.0879 13; α(L)=0.01434 20; α(M)=0.00332 5; α(N+..)=0.000989 14
458.049 ^a 3	0.390 ^a 4	1418.687	3 ⁺ ,4 ⁺	960.633	3 ⁺	M1	0.1066	α(K)=0.0879 13; α(L)=0.01434 20; α(M)=0.00332 5; α(N+..)=0.000989 14
458.049 ^a 3	0.390 ^a 4	1505.178	1 ⁻ ,2 ⁻	1047.124	1 ⁻ ,2 ⁻	M1	0.1066	α(K)=0.0879 13; α(L)=0.01434 20; α(M)=0.00332 5; α(N+..)=0.000989 14
458.369 4	0.220 22	1095.499	3 ⁺	637.125	4 ⁺	M1	0.1064	α(K)=0.0878 13; α(L)=0.01431 20; α(M)=0.00331 5; α(N+..)=0.000987 14

γ(¹⁹⁸Au) (continued)

E _γ	I _γ #@	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. †	α&	Comments
459.514	12	0.030 2	1375.989	1 ⁻ ,2 ⁻	916.4440	1 ⁻ ,2 ⁻		
460.385	5	0.080 3	1092.876	0 ⁻	632.4818	1 ⁻ ,2 ⁻		
461.715 ^a	21	0.020 ^a 2	824.609	3 ⁺	362.8994	2 ⁻		
461.715 ^a	21	0.020 ^a 2	1272.1512	3 ⁻	810.426	3 ⁺		
461.715 ^a	21	0.020 ^a 2	1297.133	1 ⁻ ,2 ⁻ ,3 ⁻	835.366	3 ⁻		
461.715 ^a	21	0.020 ^a 2	1418.687	3 ⁺ ,4 ⁺	956.9534	1 ⁻ ,2 ⁻		
464.21 ^a	3	0.010 ^a 2	1209.370	3 ⁻	745.2188	1 ⁻ ,2 ⁻		
464.21 ^a	3	0.010 ^a 2	1396.142	3 ⁻	931.948	3 ⁻		
464.754	21	0.230 78	918.5890	1 ⁻ ,2 ⁻	453.8249	2 ⁻		
466.459	7	0.080 3	1513.565	1 ⁻ ,2 ⁻	1047.124	1 ⁻ ,2 ⁻		
^x 466.712	13	0.040 2						
469.027	7	0.040 2	918.5890	1 ⁻ ,2 ⁻	449.5703	3 ⁻		
469.294	12	0.110 8	728.672	0 ⁻	259.3404	1 ⁻	M1	0.0999 α(K)=0.0825 12; α(L)=0.01344 19; α(M)=0.00311 5; α(N+..)=0.000927 13
^x 469.701	15	0.020 2						
^x 471.122	13	0.010 1						
471.739	8	0.030 2	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	891.616	1 ⁻ ,2 ⁻		
^x 471.983	8	0.030 2						
^x 472.425	10	0.050 2						
473.219	8	0.020 3	801.7064	1 ⁻ ,2 ⁻	328.4833	3 ⁻		
473.978	7	0.060 1	529.1687	3 ⁻	55.1812	1 ⁻		
476.24	9	0.020 2	1286.747	2 ⁻	810.426	3 ⁺		
^x 476.855	11	0.030 11						
^x 477.211	19	0.010 1						
478.323	24	0.010 1	960.633	3 ⁺	482.3273	4 ⁺		
478.83	3	0.020 2	1554.429	1 ⁻ ,2 ⁻	1075.560	1 ⁻ ,2 ⁻ ,3 ⁻		
480.196	22	0.040 3	571.2430	1 ⁻	91.0057	0 ⁻		
481.945	9	0.080 4	810.426	3 ⁺	328.4833	3 ⁻		
483.305	15	0.020 2	1318.628	1 ⁻ ,2 ⁻	835.366	3 ⁻		
483.41 ^a	5	0.010 ^a 1	1032.254	3 ⁻	548.9343	2 ⁻		
483.41 ^a	5	0.010 ^a 1	1108.873	1 ⁻ ,2 ⁻	625.4303	3 ⁻		
483.41 ^a	5	0.010 ^a 1	1402.086	1 ⁻ ,2 ⁻	918.5890	1 ⁻ ,2 ⁻		
484.536 ^a	15	0.020 ^a 2	1157.2384	3 ⁻	672.6549	1 ⁻ ,2 ⁻		
484.536 ^a	15	0.020 ^a 2	1472.097	3 ⁻	987.5746	3 ⁻		
485.638	5	0.220 20	1402.086	1 ⁻ ,2 ⁻	916.4440	1 ⁻ ,2 ⁻		
485.891	18	0.050 4	745.2188	1 ⁻ ,2 ⁻	259.3404	1 ⁻		
487.167	7	0.080 4	1458.988	3 ⁻	971.8210	3 ⁻		
487.589 ^a	3	0.090 ^a 7	983.0869	2 ⁺	495.5114	1 ⁻		
487.589 ^a	3	0.090 ^a 7	1232.8022	3 ⁻	745.2188	1 ⁻ ,2 ⁻		
488.043	8	0.040 4	1475.622	2 ⁻	987.5746	3 ⁻		
489.273 ^a	5	0.050 ^a 4	1018.430	1 ⁻ ,2 ⁻	529.1687	3 ⁻		
489.273 ^a	5	0.050 ^a 4	1380.885	3 ⁻	891.616	1 ⁻ ,2 ⁻		

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04 (continued)**

						$\gamma(^{198}\text{Au})$ (continued)			
E_γ	I_γ #@	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. †	α &	Comments	
489.273 ^a 5	0.050 ^a 4	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	1047.124	1 ⁻ ,2 ⁻				
^x 490.329 5	0.050 6								
490.616 7	0.050 2	1301.045	2 ⁻	810.426	3 ⁺				
^x 490.948 12	0.040 4								
492.063 3	0.110 3	987.5746	3 ⁻	495.5114	1 ⁻				
495.955 4	0.050 6	1390.227	2 ⁻	894.2718	3 ⁻				
^x 496.538 8	0.030 4								
^x 496.97 4	0.010 2								
497.687 11	0.030 2	1554.429	1 ⁻ ,2 ⁻	1056.719	2 ⁻				
^x 498.049 9	0.020 1								
^x 498.461 4	0.470 9					M1	0.0852	$\alpha(\text{K})=0.0704$ 10; $\alpha(\text{L})=0.01145$ 16; $\alpha(\text{M})=0.00265$ 4; $\alpha(\text{N}+..)=0.000789$ 11	
^x 498.882 2	0.310 6								
499.562 ^a 19	0.020 ^a 2	1396.142	3 ⁻	896.5723	1 ⁻ ,2 ⁻				
499.562 ^a 19	0.020 ^a 2	1487.136	1 ⁻ ,2 ⁻	987.5746	3 ⁻				
502.030 6	0.030 11	1458.988	3 ⁻	956.9534	1 ⁻ ,2 ⁻				
502.463 13	0.220 48	1453.858	3 ⁻	951.443	3 ⁺				
^x 503.890 11	0.020 3								
504.105 6	0.080 5	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	1032.254	3 ⁻				
^x 506.145 10	0.020 3								
^x 507.481 20	0.030 5								
^x 509.72 6	0.130 3								
510.405 11	0.260 83	916.4440	1 ⁻ ,2 ⁻	406.0081	2 ⁻	M1	0.0801	$\alpha(\text{K})=0.0661$ 10; $\alpha(\text{L})=0.01075$ 15; $\alpha(\text{M})=0.00249$ 4; $\alpha(\text{N}+..)=0.000741$ 11	
510.785 11	0.040 5	703.7299	1 ⁻	192.9440	1 ⁻				
511.103 18	0.150 23	960.633	3 ⁺	449.5703	3 ⁻				
511.517 2	0.920 83	511.5173	3 ⁻	0.0	2 ⁻	M1	0.0796	$\alpha(\text{K})=0.0657$ 10; $\alpha(\text{L})=0.01069$ 15; $\alpha(\text{M})=0.00247$ 4; $\alpha(\text{N}+..)=0.000737$ 11	
512.581 8	0.230 60	918.5890	1 ⁻ ,2 ⁻	406.0081	2 ⁻	M1	0.0792	$\alpha(\text{K})=0.0654$ 10; $\alpha(\text{L})=0.01063$ 15; $\alpha(\text{M})=0.00246$ 4; $\alpha(\text{N}+..)=0.000733$ 11	
^x 513.44 6	0.110 2								
515.140 ^a 4	0.140 ^a 7	1409.399	3 ⁻	894.2718	3 ⁻				
515.140 ^a 4	0.140 ^a 5	1472.097	3 ⁻	956.9534	1 ⁻ ,2 ⁻				
516.061 2	0.470 10	571.2430	1 ⁻	55.1812	1 ⁻	M1	0.0778	$\alpha(\text{K})=0.0642$ 9; $\alpha(\text{L})=0.01044$ 15; $\alpha(\text{M})=0.00241$ 4; $\alpha(\text{N}+..)=0.000720$ 10	
516.891 ^a 18	0.020 ^a 2	764.483	4 ⁻	247.5731	1 ⁻				
516.891 ^a 18	0.020 ^a 2	1318.628	1 ⁻ ,2 ⁻	801.7064	1 ⁻ ,2 ⁻				
^x 517.932 8	0.030 2								
^x 518.790 6	0.050 4								
^x 519.17 3	0.28 11								
^x 519.50 3	0.25 11								
520.62 ^a 4	0.26 ^a 10	1032.254	3 ⁻	511.5173	3 ⁻				
520.62 ^a 4	0.26 ^a 10	1472.097	3 ⁻	951.443	3 ⁺				
521.878 ^a 13	0.020 ^a 4	868.7736	3 ⁻	346.9062	2 ⁻				
521.878 ^a 13	0.020 ^a 4	1453.858	3 ⁻	931.948	3 ⁻				
522.247 3	0.110 8	971.8210	3 ⁻	449.5703	3 ⁻				
522.35 3	0.130 1	758.398	4 ⁺	236.0453	3 ⁻				
^x 522.648 12	0.070 3								

γ(¹⁹⁸Au) (continued)

<u>E_γ</u>	<u>I_γ^{#@}</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[†]</u>	<u>α&</u>	<u>Comments</u>
522.917 9	0.040 4	1018.430	1 ⁻ ,2 ⁻	495.5114	1 ⁻			
524.744 20	0.36 10	1157.2384	3 ⁻	632.4818	1 ⁻ ,2 ⁻			
525.124 2	0.450 16	786.5357	2 ⁻	261.4047	2 ⁻			
525.838 7	0.060 6	1325.834	2 ⁻	800.0391	2 ⁻			
527.169 6	0.070 9	786.5357	2 ⁻	259.3404	1 ⁻			
^x 527.842 4	0.150 14					M1	0.0733	α(K)=0.0606 9; α(L)=0.00983 14; α(M)=0.00227 4; α(N+..)=0.000678 10
529.170 2	2.45 7	529.1687	3 ⁻	0.0	2 ⁻	M1	0.0729	α(K)=0.0602 9; α(L)=0.00977 14; α(M)=0.00226 4; α(N+..)=0.000673 10
529.948 3	0.530 21	789.2973	1 ⁻	259.3404	1 ⁻	M1	0.0726	α(K)=0.0599 9; α(L)=0.00973 14; α(M)=0.00225 4; α(N+..)=0.000671 10
530.476 6	0.070 2	530.4782	1 ⁻	0.0	2 ⁻			
532.20 ^a 5	0.020 ^a 2	1061.285	3 ⁻	529.1687	3 ⁻			
532.20 ^a 5	0.020 ^a 2	1318.628	1 ⁻ ,2 ⁻	786.5357	2 ⁻			
532.20 ^a 5	0.020 ^a 2	1423.795	3 ⁻	891.616	1 ⁻ ,2 ⁻			
533.748 4	0.080 4	987.5746	3 ⁻	453.8249	2 ⁻			
535.77 3	0.020 5	728.672	0 ⁻	192.9440	1 ⁻			
^x 537.598 3	0.150 3					M1	0.0699	α(K)=0.0577 8; α(L)=0.00937 14; α(M)=0.00217 3; α(N+..)=0.000646 9
538.011 ^a 17	0.030 ^a 2	987.5746	3 ⁻	449.5703	3 ⁻			
538.011 ^a 17	0.030 ^a 2	1434.584	1 ⁻ ,2 ⁻	896.5723	1 ⁻ ,2 ⁻			
538.991 19	0.020 4	786.5357	2 ⁻	247.5731	1 ⁻			
540.298 2	0.660 13	801.7064	1 ⁻ ,2 ⁻	261.4047	2 ⁻	M1	0.0690	α(K)=0.0570 8; α(L)=0.00925 13; α(M)=0.00214 3; α(N+..)=0.000637 9
^x 540.915 3	0.190 17					M1	0.0688	α(K)=0.0568 8; α(L)=0.00922 13; α(M)=0.00213 3; α(N+..)=0.000635 9
542.373 ^a 8	0.140 ^a 3	801.7064	1 ⁻ ,2 ⁻	259.3404	1 ⁻			
542.373 ^a 8	0.140 ^a 3	1306.859	2 ⁻	764.483	4 ⁻			
544.002 3	0.670 20	544.0095	4 ⁻	0.0	2 ⁻	E2	0.0211	α(K)=0.01571 22; α(L)=0.00410 6; α(M)=0.000996 14; α(N+..)=0.000291 4
^x 546.143 9	0.040 4							
^x 547.199 9	0.030 3							
548.246 10	0.030 5	1505.178	1 ⁻ ,2 ⁻	956.9534	1 ⁻ ,2 ⁻			
548.930 2	0.900 27	548.9343	2 ⁻	0.0	2 ⁻	M1	0.0662	α(K)=0.0547 8; α(L)=0.00887 13; α(M)=0.00205 3; α(N+..)=0.000611 9
^x 549.34 3	0.27 11							
549.512 12	0.050 2	764.483	4 ⁻	214.9715	4 ⁻			
549.68 ^a 3	0.020 ^a 4	896.5723	1 ⁻ ,2 ⁻	346.9062	2 ⁻			
549.68 ^a 3	0.020 ^a 4	999.213	1 ⁻ ,2 ⁻	449.5703	3 ⁻			
549.68 ^a 3	0.020 ^a 4	1061.285	3 ⁻	511.5173	3 ⁻			
^x 550.227 15	0.040 4							
550.527 18	0.050 7	786.5357	2 ⁻	236.0453	3 ⁻			
550.748 22	0.030 5	931.948	3 ⁻	381.2003	3 ⁺			
550.939 14	0.050 6	956.9534	1 ⁻ ,2 ⁻	406.0081	2 ⁻			
^x 551.699 9	0.710 43					M1	0.0653	α(K)=0.0539 8; α(L)=0.00875 13; α(M)=0.00202 3; α(N+..)=0.000603 9
^x 552.127 7	0.170 3							
552.490 9	0.140 3	800.0391	2 ⁻	247.5731	1 ⁻	M1	0.0651	α(K)=0.0537 8; α(L)=0.00872 13; α(M)=0.00202 3; α(N+..)=0.000601 9
552.98 ^a 15	0.030 ^a 15	789.2973	1 ⁻	236.0453	3 ⁻			
552.98 ^a 15	0.030 ^a 15	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	810.426	3 ⁺			

γ(¹⁹⁸Au) (continued)

E _γ	I _γ ^{#@}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α&	Comments
552.98 ^a 15	0.030 ^a 15	1444.396	3 ⁻	891.616	1 ⁻ ,2 ⁻			
552.98 ^a 15	0.030 ^a 15	1513.565	1 ⁻ ,2 ⁻	960.633	3 ⁺			
552.98 ^a 15	0.030 ^a 15	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	983.0869	2 ⁺			
554.144 14	0.020 2	801.7064	1 ⁻ ,2 ⁻	247.5731	1 ⁻			
555.691 3	0.170 5	918.5890	1 ⁻ ,2 ⁻	362.8994	2 ⁻	M1	0.0641	α(K)=0.0529 8; α(L)=0.00858 12; α(M)=0.00198 3; α(N+..)=0.000592 9
^x 556.598 6	0.060 2							
557.036 18	0.030 3	1475.622	2 ⁻	918.5890	1 ⁻ ,2 ⁻			
^x 557.63 3	0.020 4							
^x 559.343 18	0.030 1							
563.97 ^a 3	0.030 ^a 4	800.0391	2 ⁻	236.0453	3 ⁻			
563.97 ^a 3	0.030 ^a 4	1075.560	1 ⁻ ,2 ⁻ ,3 ⁻	511.5173	3 ⁻			
563.97 ^a 3	0.030 ^a 4	1399.342	2 ⁻ ,3 ⁻	835.366	3 ⁻			
564.71 3	0.030 4	1458.988	3 ⁻	894.2718	3 ⁻			
565.777 5	0.520 5	894.2718	3 ⁻	328.4833	3 ⁻	M1	0.0612	α(K)=0.0505 7; α(L)=0.00819 12; α(M)=0.00189 3; α(N+..)=0.000564 8
566.32 ^a 3	0.030 ^a 5	1095.499	3 ⁺	529.1687	3 ⁻			
566.32 ^a 3	0.030 ^a 5	1115.266	3 ⁻	548.9343	2 ⁻			
566.80 ^a 4	0.030 ^a 5	1402.086	1 ⁻ ,2 ⁻	835.366	3 ⁻			
566.80 ^a 4	0.030 ^a 5	1554.429	1 ⁻ ,2 ⁻	987.5746	3 ⁻			
567.33 5	0.020 5	1458.988	3 ⁻	891.616	1 ⁻ ,2 ⁻			
568.116 11	0.040 7	896.5723	1 ⁻ ,2 ⁻	328.4833	3 ⁻			
570.02 10	0.030 2	1371.502	1 ⁻ ,2 ⁻	801.7064	1 ⁻ ,2 ⁻			
571.694 5	0.670 27	918.5890	1 ⁻ ,2 ⁻	346.9062	2 ⁻	M1	0.0595	α(K)=0.0492 7; α(L)=0.00796 12; α(M)=0.00184 3; α(N+..)=0.000549 8
^x 572.742 13	0.040 4							
573.27 ^a 8	0.170 ^a 5	1318.628	1 ⁻ ,2 ⁻	745.2188	1 ⁻ ,2 ⁻			
573.27 ^a 8	0.170 ^a 5	1505.178	1 ⁻ ,2 ⁻	931.948	3 ⁻			
573.750 8	0.130 8	1530.702	1 ⁻ ,2 ⁻	956.9534	1 ⁻ ,2 ⁻			
573.953 24	0.450 9	835.366	3 ⁻	261.4047	2 ⁻			
574.373 13	0.200 6	1104.847	0 ⁻ ,1 ⁻ ,2 ⁻	530.4782	1 ⁻	M1	0.0588	α(K)=0.0486 7; α(L)=0.00787 11; α(M)=0.00182 3; α(N+..)=0.000542 8
574.83 5	0.140 3	1399.342	2 ⁻ ,3 ⁻	824.609	3 ⁺			
^x 574.993 9	0.060 4							
575.536 11	0.050 4	1472.097	3 ⁻	896.5723	1 ⁻ ,2 ⁻			
577.287 4	0.360 7	632.4818	1 ⁻ ,2 ⁻	55.1812	1 ⁻	M1	0.0580	α(K)=0.0479 7; α(L)=0.00776 11; α(M)=0.00179 3; α(N+..)=0.000535 8
578.959 14	0.050 4	1061.285	3 ⁻	482.3273	4 ⁺			
579.296 9	0.710 50	918.5890	1 ⁻ ,2 ⁻	339.2909	1 ⁻			
^x 579.826 12	0.060 4							
^x 581.469 23	0.020 1							
^x 584.160 10	0.100 2					M1	0.0563	α(K)=0.0465 7; α(L)=0.00752 11; α(M)=0.001739 25; α(N+..)=0.000518 8
584.73 8	0.060 24	1115.266	3 ⁻	530.4782	1 ⁻			
^x 585.359 21	0.030 2							
588.419 6	0.090 2	1423.795	3 ⁻	835.366	3 ⁻			
591.228 6	0.110 2	646.411	0 ⁺	55.1812	1 ⁻			
591.625 ^a 16	0.040 ^a 5	1380.885	3 ⁻	789.2973	1 ⁻			

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

<u>E_γ</u>	<u>I_γ^{#@}</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[†]</u>	<u>α&</u>	<u>Comments</u>
591.625 ^a 16	0.040 ^a 5	1402.086	1 ⁻ ,2 ⁻	810.426	3 ⁺			
593.177 13	0.200 13	999.213	1 ⁻ ,2 ⁻	406.0081	2 ⁻	M1	0.0541	α(K)=0.0447 7; α(L)=0.00723 11; α(M)=0.001670 24; α(N+..)=0.000498 7
^x 593.982 20	0.030 4							
594.19 ^a 5	0.060 ^a 10	956.9534	1 ⁻ ,2 ⁻	362.8994	2 ⁻			
594.19 ^a 5	0.060 ^a 10	1418.687	3 ⁺ ,4 ⁺	824.609	3 ⁺			
595.423 14	0.030 4	810.426	3 ⁺	214.9715	4 ⁻			
597.49 ^a 3	0.030 ^a 6	1047.124	1 ⁻ ,2 ⁻	449.5703	3 ⁻			
597.49 ^a 3	0.030 ^a 6	1554.429	1 ⁻ ,2 ⁻	956.9534	1 ⁻ ,2 ⁻			
597.71 ^a 5	0.050 ^a 4	960.633	3 ⁺	362.8994	2 ⁻			
597.71 ^a 5	0.050 ^a 4	1399.342	2 ⁻ ,3 ⁻	801.7064	1 ⁻ ,2 ⁻			
598.846 17	0.030 4	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	764.483	4 ⁻			
^x 602.271 4	0.830 8					M1	0.0520	α(K)=0.0429 6; α(L)=0.00694 10; α(M)=0.001605 23; α(N+..)=0.000478 7
607.20 4	0.030 8	1056.719	2 ⁻	449.5703	3 ⁻			
607.914 13	0.040 4	1240.385	3 ⁻	632.4818	1 ⁻ ,2 ⁻			
608.83 4	0.020 5	801.7064	1 ⁻ ,2 ⁻	192.9440	1 ⁻			
^x 609.396 5	0.160 8							
^x 609.815 22	0.030 5							
^x 611.025 7	0.120 6					M1	0.0500	α(K)=0.0414 6; α(L)=0.00669 10; α(M)=0.001545 22; α(N+..)=0.000461 7
612.125 9	0.060 4	1530.702	1 ⁻ ,2 ⁻	918.5890	1 ⁻ ,2 ⁻			
612.724 6	0.140 4	703.7299	1 ⁻	91.0057	0 ⁻	M1	0.0497	α(K)=0.0411 6; α(L)=0.00664 10; α(M)=0.001534 22; α(N+..)=0.000457 7
612.93 ^a 7	0.130 ^a 25	1399.342	2 ⁻ ,3 ⁻	786.5357	2 ⁻			
612.93 ^a 7	0.130 ^a 25	1402.086	1 ⁻ ,2 ⁻	789.2973	1 ⁻			
613.844 9	0.060 4	1359.038	1 ⁻ ,2 ⁻ ,3 ⁻	745.2188	1 ⁻ ,2 ⁻			
614.98 ^a 6	0.020 ^a 7	983.0869	2 ⁺	368.2549	1 ⁻			
614.98 ^a 6	0.020 ^a 7	1240.385	3 ⁻	625.4303	3 ⁻			
614.98 ^a 6	0.020 ^a 7	1318.628	1 ⁻ ,2 ⁻	703.7299	1 ⁻			
615.582 ^a 9	0.070 ^a 4	1402.086	1 ⁻ ,2 ⁻	786.5357	2 ⁻			
615.582 ^a 9	0.070 ^a 4	1404.893	2 ⁻ ,3 ⁻	789.2973	1 ⁻			
616.386 10	0.060 8	1380.885	3 ⁻	764.483	4 ⁻			
617.04 ^a 3	0.030 ^a 5	1418.687	3 ⁺ ,4 ⁺	801.7064	1 ⁻ ,2 ⁻			
617.04 ^a 3	0.030 ^a 5	1513.565	1 ⁻ ,2 ⁻	896.5723	1 ⁻ ,2 ⁻			
619.105 8	0.100 4	1265.524	1 ⁻ ,2 ⁻ ,3 ⁻	646.411	0 ⁺			
620.398 ^a 21	0.040 ^a 5	835.366	3 ⁻	214.9715	4 ⁻			
620.398 ^a 21	0.040 ^a 5	1191.566	1 ⁺ ,2 ⁺ ,3 ⁺	571.2430	1 ⁻			
^x 621.570 9	0.060 3							
^x 623.148 12	0.050 4							
623.757 12	0.060 5	1423.795	3 ⁻	800.0391	2 ⁻	M1	0.0474	α(K)=0.0392 6; α(L)=0.00633 9; α(M)=0.001464 21; α(N+..)=0.000436 7
625.429 3	0.550 33	625.4303	3 ⁻	0.0	2 ⁻	M1	0.0471	α(K)=0.0389 6; α(L)=0.00629 9; α(M)=0.001453 21; α(N+..)=0.000433 6

γ(¹⁹⁸Au) (continued)

E _γ	I _γ #@	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α ^{&}	Comments
^x 628.715 14	0.050 5							
630.235 14	0.060 5	891.616	1 ⁻ ,2 ⁻	261.4047	2 ⁻	M1	0.0462	α(K)=0.0382 6; α(L)=0.00616 9; α(M)=0.001424 20; α(N+..)=0.000425 6
630.945 17	0.040 7	999.213	1 ⁻ ,2 ⁻	368.2549	1 ⁻			
632.281 ^a 7	0.230 ^a 9	891.616	1 ⁻ ,2 ⁻	259.3404	1 ⁻	M1	0.0458	α(K)=0.0378 6; α(L)=0.00611 9; α(M)=0.001412 20; α(N+..)=0.000421 6
632.281 ^a 7	0.230 ^a 9	1038.2745	3 ⁻	406.0081	2 ⁻	M1	0.0458	α(K)=0.0378 6; α(L)=0.00611 9; α(M)=0.001412 20; α(N+..)=0.000421 6
632.502 13	0.110 8	632.4818	1 ⁻ ,2 ⁻	0.0	2 ⁻			
^x 633.822 7	0.180 7					M1	0.0455	α(K)=0.0376 6; α(L)=0.00607 9; α(M)=0.001403 20; α(N+..)=0.000418 6
635.197 10	0.320 13	896.5723	1 ⁻ ,2 ⁻	261.4047	2 ⁻	M1	0.0452	α(K)=0.0374 6; α(L)=0.00604 9; α(M)=0.001395 20; α(N+..)=0.000416 6
635.848 7	0.110 4	1554.429	1 ⁻ ,2 ⁻	918.5890	1 ⁻ ,2 ⁻	M1	0.0451	α(K)=0.0373 6; α(L)=0.00602 9; α(M)=0.001392 20; α(N+..)=0.000415 6
636.285 18	0.030 6	999.213	1 ⁻ ,2 ⁻	362.8994	2 ⁻			
^x 638.834 11	0.060 5							
639.04 ^a 3	0.060 ^a 3	1092.876	0 ⁻	453.8249	2 ⁻			
639.04 ^a 3	0.060 ^a 3	1530.702	1 ⁻ ,2 ⁻	891.616	1 ⁻ ,2 ⁻			
639.201 12	0.060 5	951.443	3 ⁺	312.2227	5 ⁺			
639.662 11	0.070 5	1272.1512	3 ⁻	632.4818	1 ⁻ ,2 ⁻			
640.071 13	0.060 5	1265.524	1 ⁻ ,2 ⁻ ,3 ⁻	625.4303	3 ⁻			
640.665 6	0.810 65	987.5746	3 ⁻	346.9062	2 ⁻	M1	0.0443	α(K)=0.0366 6; α(L)=0.00590 9; α(M)=0.001364 19; α(N+..)=0.000407 6
642.06 6	0.010 2	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	894.2718	3 ⁻			
^x 643.223 19	0.060 2							
644.039 9	0.080 3	891.616	1 ⁻ ,2 ⁻	247.5731	1 ⁻			
^x 645.477 22	0.050 3							
647.307 ^a 6	0.170 ^a 9	702.4811	2 ⁻	55.1812	1 ⁻	M1	0.0431	α(K)=0.0356 5; α(L)=0.00575 8; α(M)=0.001328 19; α(N+..)=0.000396 6
647.307 ^a 6	0.170 ^a 9	1375.989	1 ⁻ ,2 ⁻	728.672	0 ⁻	M1	0.0431	α(K)=0.0356 5; α(L)=0.00575 8; α(M)=0.001328 19; α(N+..)=0.000396 6
^x 647.652 7	0.160 18					M1	0.0430	α(K)=0.0356 5; α(L)=0.00574 8; α(M)=0.001326 19; α(N+..)=0.000395 6
648.573 ^a 22	0.040 ^a 5	703.7299	1 ⁻	55.1812	1 ⁻			
648.573 ^a 22	0.040 ^a 5	1458.988	3 ⁻	810.426	3 ⁺			
648.573 ^a 22	0.040 ^a 5	1542.793	3 ⁻	894.2718	3 ⁻			
648.959 19	0.080 4	896.5723	1 ⁻ ,2 ⁻	247.5731	1 ⁻	M1	0.0428	α(K)=0.0354 5; α(L)=0.00571 8; α(M)=0.001319 19; α(N+..)=0.000393 6
^x 649.617 11	0.070 4							
653.23 4	0.030 5	1325.834	2 ⁻	672.6549	1 ⁻ ,2 ⁻			
653.801 ^a 13	0.060 ^a 5	868.7736	3 ⁻	214.9715	4 ⁻			
653.801 ^a 13	0.060 ^a 5	1453.858	3 ⁻	800.0391	2 ⁻			
654.206 7	0.120 8	1418.687	3 ⁺ ,4 ⁺	764.483	4 ⁻	E1 [‡]	0.00494	α(K)=0.00413 6; α(L)=0.000629 9; α(M)=0.0001443 21; α(N+..)=4.27×10 ⁻⁵ 6 α(K)=0.0360; α(L)=0.00582 M1 (1996Ma70,1996Ma75).
655.009 8	0.100 5	916.4440	1 ⁻ ,2 ⁻	261.4047	2 ⁻	M1	0.0418	α(K)=0.0345 5; α(L)=0.00557 8; α(M)=0.001287 18; α(N+..)=0.000384 6
655.529 6	0.280 8	1018.430	1 ⁻ ,2 ⁻	362.8994	2 ⁻	M1	0.0417	α(K)=0.0345 5; α(L)=0.00556 8; α(M)=0.001285 18; α(N+..)=0.000383 6
^x 656.23 7	0.020 8							
657.84 ^a 7	0.030 ^a 9	1444.396	3 ⁻	786.5357	2 ⁻			
657.84 ^a 6	0.030 ^a 9	1554.429	1 ⁻ ,2 ⁻	896.5723	1 ⁻ ,2 ⁻			
659.229 7	0.340 7	918.5890	1 ⁻ ,2 ⁻	259.3404	1 ⁻	M1	0.0411	α(K)=0.0340 5; α(L)=0.00548 8; α(M)=0.001266 18; α(N+..)=0.000377 6

¹⁹⁷Au(n, γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

$\gamma(^{198}\text{Au})$ (continued)

E_γ	I_γ #@	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. †	α &	Comments
^x 659.541 16	0.10 1							
660.322 13	0.090 6	1418.687	3 ⁺ ,4 ⁺	758.398	4 ⁺			
^x 663.42 3	0.050 6							
664.152 24	0.070 6	1409.399	3 ⁻	745.2188	1 ⁻ ,2 ⁻			
^x 664.476 11	0.190 8					M1	0.0403	$\alpha(\text{K})=0.0333$ 5; $\alpha(\text{L})=0.00537$ 8; $\alpha(\text{M})=0.001240$ 18; $\alpha(\text{N}+..)=0.000370$ 6
666.17 6	0.070 20	1560.407	3 ⁻	894.2718	3 ⁻			
^x 667.522 24	0.050 6							
^x 668.336 16	0.120 8							
668.572 7	0.220 11	1301.045	2 ⁻	632.4818	1 ⁻ ,2 ⁻			
670.58 3	0.040 6	931.948	3 ⁻	261.4047	2 ⁻			
^x 670.856 18	0.090 6							
^x 671.933 22	0.070 13					M1	0.0391	$\alpha(\text{K})=0.0323$ 5; $\alpha(\text{L})=0.00521$ 8; $\alpha(\text{M})=0.001204$ 17; $\alpha(\text{N}+..)=0.000359$ 5
672.654 3	0.750 3	672.6549	1 ⁻ ,2 ⁻	0.0	2 ⁻	M1	0.0390	$\alpha(\text{K})=0.0322$ 5; $\alpha(\text{L})=0.00520$ 8; $\alpha(\text{M})=0.001201$ 17; $\alpha(\text{N}+..)=0.000358$ 5
673.460 8	0.170 12	728.672	0 ⁻	55.1812	1 ⁻	M1	0.0389	$\alpha(\text{K})=0.0321$ 5; $\alpha(\text{L})=0.00518$ 8; $\alpha(\text{M})=0.001197$ 17; $\alpha(\text{N}+..)=0.000357$ 5
^x 674.700 22	0.070 6							
^x 674.99 4	0.140 14					M1	0.0387	$\alpha(\text{K})=0.0320$ 5; $\alpha(\text{L})=0.00515$ 8; $\alpha(\text{M})=0.001190$ 17; $\alpha(\text{N}+..)=0.000355$ 5
678.29 4	0.56 15	1513.565	1 ⁻ ,2 ⁻	835.366	3 ⁻			
679.135 9	0.100 9	1018.430	1 ⁻ ,2 ⁻	339.2909	1 ⁻			
679.84 3	0.030 5	1444.396	3 ⁻	764.483	4 ⁻			
680.365 16	0.130 8	916.4440	1 ⁻ ,2 ⁻	236.0453	3 ⁻			
681.40 4	0.020 4	1306.859	2 ⁻	625.4303	3 ⁻			
682.805 6	0.150 6	1472.097	3 ⁻	789.2973	1 ⁻			
^x 683.728 14	0.070 5							
^x 684.614 21	0.050 6							
^x 686.970 5	0.330 7					M1	0.0369	$\alpha(\text{K})=0.0305$ 5; $\alpha(\text{L})=0.00492$ 7; $\alpha(\text{M})=0.001136$ 16; $\alpha(\text{N}+..)=0.000339$ 5
688.967 5	0.210 17	1513.565	1 ⁻ ,2 ⁻	824.609	3 ⁺			
690.037 4	0.530 21	745.2188	1 ⁻ ,2 ⁻	55.1812	1 ⁻	M1	0.0365	$\alpha(\text{K})=0.0302$ 5; $\alpha(\text{L})=0.00486$ 7; $\alpha(\text{M})=0.001123$ 16; $\alpha(\text{N}+..)=0.000335$ 5
^x 691.056 9	0.110 6					M1	0.0364	$\alpha(\text{K})=0.0301$ 5; $\alpha(\text{L})=0.00484$ 7; $\alpha(\text{M})=0.001119$ 16; $\alpha(\text{N}+..)=0.000334$ 5
^x 692.498 18	0.050 3							
^x 692.934 21	0.050 6							
^x 694.041 24	0.050 3							
695.654 14	0.070 4	1399.342	2 ⁻ ,3 ⁻	703.7299	1 ⁻			
696.415 15	0.060 3	1240.385	3 ⁻	544.0095	4 ⁻	M1	0.0357	$\alpha(\text{K})=0.0295$ 5; $\alpha(\text{L})=0.00475$ 7; $\alpha(\text{M})=0.001097$ 16; $\alpha(\text{N}+..)=0.000327$ 5
697.628 13	0.100 7	956.9534	1 ⁻ ,2 ⁻	259.3404	1 ⁻			
698.304 7	0.200 10	789.2973	1 ⁻	91.0057	0 ⁻	M1	0.0354	$\alpha(\text{K})=0.0293$ 4; $\alpha(\text{L})=0.00471$ 7; $\alpha(\text{M})=0.001089$ 16; $\alpha(\text{N}+..)=0.000325$ 5
^x 698.939 8	0.180 6							
700.29 4	0.050 7	1047.124	1 ⁻ ,2 ⁻	346.9062	2 ⁻			
^x 701.545 6	0.300 18							
702.467 4	0.690 7	702.4811	2 ⁻	0.0	2 ⁻	M1	0.0349	$\alpha(\text{K})=0.0288$ 4; $\alpha(\text{L})=0.00464$ 7; $\alpha(\text{M})=0.001072$ 15; $\alpha(\text{N}+..)=0.000320$ 5
703.78 ^a 3	0.050 ^a 5	703.7299	1 ⁻	0.0	2 ⁻	M1	0.0347	$\alpha(\text{K})=0.0287$ 4; $\alpha(\text{L})=0.00462$ 7; $\alpha(\text{M})=0.001067$ 15; $\alpha(\text{N}+..)=0.000318$ 5
703.78 ^a 3	0.050 ^a 5	1032.254	3 ⁻	328.4833	3 ⁻			
705.10 4	0.060 8	1505.178	1 ⁻ ,2 ⁻	800.0391	2 ⁻			
^x 705.358 18	0.130 7					M1	0.0345	$\alpha(\text{K})=0.0285$ 4; $\alpha(\text{L})=0.00459$ 7; $\alpha(\text{M})=0.001061$ 15; $\alpha(\text{N}+..)=0.000316$ 5

¹⁹⁷Au(n, γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

$\gamma(^{198}\text{Au})$ (continued)

E_γ	I_γ #@	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. †	$\alpha\&$	Comments
707.447 24	0.070 6	1542.793	3 ⁻	835.366	3 ⁻			
^x 708.54 3	0.040 5							
709.39 3	0.060 8	956.9534	1 ⁻ ,2 ⁻	247.5731	1 ⁻			
^x 709.724 16	0.250 8					M1	0.0340	$\alpha(\text{K})=0.0281$ 4; $\alpha(\text{L})=0.00452$ 7; $\alpha(\text{M})=0.001044$ 15; $\alpha(\text{N}+..)=0.000311$ 5
710.708 18	0.070 6	801.7064	1 ⁻ ,2 ⁻	91.0057	0 ⁻			
^x 711.674 21	0.060 5							
712.70 ^a 3	0.050 ^a 6	1075.560	1 ⁻ ,2 ⁻ ,3 ⁻	362.8994	2 ⁻			
712.70 ^a 3	0.050 ^a 6	1338.171	3 ⁻	625.4303	3 ⁻			
712.70 ^a 3	0.050 ^a 6	1359.038	1 ⁻ ,2 ⁻ ,3 ⁻	646.411	0 ⁺			
713.567 23	0.060 6	1513.565	1 ⁻ ,2 ⁻	800.0391	2 ⁻			
^x 716.12 3	0.150 29							
717.32 ^a 4	0.100 ^a 22	1056.719	2 ⁻	339.2909	1 ⁻			
717.32 ^a 4	0.100 ^a 22	1475.622	2 ⁻	758.398	4 ⁺			
717.66 5	0.050 10	1390.227	2 ⁻	672.6549	1 ⁻ ,2 ⁻			
^x 718.518 18	0.060 6							
720.935 11	0.090 4	956.9534	1 ⁻ ,2 ⁻	236.0453	3 ⁻	M1	0.0326	$\alpha(\text{K})=0.0270$ 4; $\alpha(\text{L})=0.00434$ 6; $\alpha(\text{M})=0.001002$ 14; $\alpha(\text{N}+..)=0.000299$ 5
^x 722.446 23	0.050 4							
^x 723.362 9	0.130 4							
^x 724.795 10	0.170 9							
725.747 15	0.090 5	1256.018	1 ⁻ ,2 ⁻	530.4782	1 ⁻			
726.15 3	0.060 20	987.5746	3 ⁻	261.4047	2 ⁻			
^x 727.269 11	0.120 16					M1	0.0319	$\alpha(\text{K})=0.0264$ 4; $\alpha(\text{L})=0.00424$ 6; $\alpha(\text{M})=0.000979$ 14; $\alpha(\text{N}+..)=0.000292$ 4
728.995 15	0.150 18	1530.702	1 ⁻ ,2 ⁻	801.7064	1 ⁻ ,2 ⁻	M1	0.0317	$\alpha(\text{K})=0.0262$ 4; $\alpha(\text{L})=0.00421$ 6; $\alpha(\text{M})=0.000973$ 14; $\alpha(\text{N}+..)=0.000290$ 4
^x 730.125 21	0.150 12					M1	0.0316	$\alpha(\text{K})=0.0261$ 4; $\alpha(\text{L})=0.00420$ 6; $\alpha(\text{M})=0.000969$ 14; $\alpha(\text{N}+..)=0.000289$ 4
730.83 ^a 3	0.090 ^a 28	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	632.4818	1 ⁻ ,2 ⁻			
730.83 ^a 3	0.090 ^a 28	1434.584	1 ⁻ ,2 ⁻	703.7299	1 ⁻			
732.20 ^a 3	0.140 ^a 6	1404.893	2 ⁻ ,3 ⁻	672.6549	1 ⁻ ,2 ⁻	M1	0.0313	$\alpha(\text{K})=0.0259$ 4; $\alpha(\text{L})=0.00417$ 6; $\alpha(\text{M})=0.000962$ 14; $\alpha(\text{N}+..)=0.000287$ 4
732.20 ^a 3	0.140 ^a 6	1434.584	1 ⁻ ,2 ⁻	702.4811	2 ⁻	M1	0.0313	$\alpha(\text{K})=0.0259$ 4; $\alpha(\text{L})=0.00417$ 6; $\alpha(\text{M})=0.000962$ 14; $\alpha(\text{N}+..)=0.000287$ 4
^x 733.076 12	0.250 13							
734.132 15	0.090 6	789.2973	1 ⁻	55.1812	1 ⁻	M1	0.0311	$\alpha(\text{K})=0.0257$ 4; $\alpha(\text{L})=0.00414$ 6; $\alpha(\text{M})=0.000956$ 14; $\alpha(\text{N}+..)=0.000285$ 4
^x 736.90 5	0.070 7							
^x 738.21 5	0.63 18							
^x 739.960 3	2.05 10					M1+E2	0.021 10	$\alpha(\text{K})=0.017$ 9; $\alpha(\text{L})=0.0029$ 12; $\alpha(\text{M})=0.0007$ 3; $\alpha(\text{N}+..)=0.00020$ 8
^x 741.54 3	0.100 8							
742.91 ^a 10	0.060 ^a 22	1272.1512	3 ⁻	529.1687	3 ⁻			

γ(¹⁹⁸Au) (continued)

E _γ	I _γ ^{#@}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α&	Comments
742.91 ^a 10	0.060 ^a 22	1286.747	2 ⁻	544.0095	4 ⁻			
742.91 ^a 10	0.060 ^a 22	1542.793	3 ⁻	800.0391	2 ⁻			
744.857 ^a 24	0.140 ^a 8	800.0391	2 ⁻	55.1812	1 ⁻			
744.857 ^a 24	0.140 ^a 8	1240.385	3 ⁻	495.5114	1 ⁻			
745.21 3	0.200 14	745.2188	1 ⁻ ,2 ⁻	0.0	2 ⁻			
746.061 ^a 19	0.180 ^a 9	1371.502	1 ⁻ ,2 ⁻	625.4303	3 ⁻			
746.061 ^a 19	0.180 ^a 9	1418.687	3 ⁺ ,4 ⁺	672.6549	1 ⁻ ,2 ⁻			
^x 748.03 3	0.050 9							
^x 748.86 3	0.070 8							
^x 749.602 7	0.420 17					M1	0.0295	α(K)=0.0244 4; α(L)=0.00392 6; α(M)=0.000905 13; α(N+..)=0.000270 4
^x 750.067 22	0.080 7							
^x 751.085 14	0.300 12					M1	0.0294	α(K)=0.0243 4; α(L)=0.00390 6; α(M)=0.000901 13; α(N+..)=0.000268 4
751.56 ^a 4	0.080 ^a 15	987.5746	3 ⁻	236.0453	3 ⁻			
751.56 ^a 4	0.080 ^a 15	999.213	1 ⁻ ,2 ⁻	247.5731	1 ⁻			
^x 754.99 3	0.090 8							
756.999 ^a 18	0.080 ^a 6	1018.430	1 ⁻ ,2 ⁻	261.4047	2 ⁻			
756.999 ^a 18	0.080 ^a 6	1301.045	2 ⁻	544.0095	4 ⁻			
^x 759.40 3	0.110 15							
759.70 3	0.110 14	1209.370	3 ⁻	449.5703	3 ⁻			
762.91 6	0.040 6	1306.859	2 ⁻	544.0095	4 ⁻			
763.998 8	0.340 10	956.9534	1 ⁻ ,2 ⁻	192.9440	1 ⁻	M1	0.0281	α(K)=0.0232 4; α(L)=0.00373 6; α(M)=0.000862 12; α(N+..)=0.000257 4
^x 764.96 3	0.160 21							
765.123 16	0.220 11	1554.429	1 ⁻ ,2 ⁻	789.2973	1 ⁻			
^x 765.322 24	0.150 20							
^x 766.09 4	0.040 14							
766.73 4	0.040 14	1297.133	1 ⁻ ,2 ⁻ ,3 ⁻	530.4782	1 ⁻			
^x 767.61 3	0.060 13							
767.92 ^a 4	0.130 ^a 10	1297.133	1 ⁻ ,2 ⁻ ,3 ⁻	529.1687	3 ⁻			
767.92 ^a 4	0.130 ^a 10	1554.429	1 ⁻ ,2 ⁻	786.5357	2 ⁻			
^x 768.62 4	0.030 7							
^x 768.95 6	0.030 11							
769.63 ^a 3	0.060 ^a 12	1108.873	1 ⁻ ,2 ⁻	339.2909	1 ⁻			
769.63 ^a 3	0.060 ^a 12	1318.628	1 ⁻ ,2 ⁻	548.9343	2 ⁻			
769.63 ^a 3	0.060 ^a 12	1402.086	1 ⁻ ,2 ⁻	632.4818	1 ⁻ ,2 ⁻			
769.63 ^a 3	0.060 ^a 12	1472.097	3 ⁻	702.4811	2 ⁻			
^x 770.21 3	0.130 14							
770.828 7	0.290 17	1032.254	3 ⁻	261.4047	2 ⁻	E2	0.00974	α(K)=0.00767 11; α(L)=0.001586 23; α(M)=0.000377 6; α(N+..)=0.0001110
^x 771.34 3	0.080 10							
^x 772.12 4	0.040 8							
772.56 3	0.050 7	987.5746	3 ⁻	214.9715	4 ⁻			
773.82 6	0.070 18	1560.407	3 ⁻	786.5357	2 ⁻			

¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04 (continued)

γ(¹⁹⁸Au) (continued)

E _γ	I _γ ^{#@}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α&	Comments
774.07 6	0.080 12	1399.342	2 ⁻ ,3 ⁻	625.4303	3 ⁻			
^x 775.05 4	0.070 13							
^x 775.719 15	0.130 10							
776.627 ^a 22	0.160 ^a 16	1272.1512	3 ⁻	495.5114	1 ⁻			
776.627 ^a 22	0.160 ^a 16	1402.086	1 ⁻ ,2 ⁻	625.4303	3 ⁻			
777.696 14	0.120 14	1306.859	2 ⁻	529.1687	3 ⁻	M1	0.0268	α(K)=0.0222 4; α(L)=0.00356 5; α(M)=0.000823 12; α(N+..)=0.000245 4
778.28 7	0.030 15	1542.793	3 ⁻	764.483	4 ⁻			
779.03 ^a 4	0.060 ^a 8	1038.2745	3 ⁻	259.3404	1 ⁻			
779.03 ^a 4	0.060 ^a 8	1232.8022	3 ⁻	453.8249	2 ⁻			
^x 780.96 5	0.090 10							
^x 782.01 3	0.080 20							
783.19 3	0.150 24	1232.8022	3 ⁻	449.5703	3 ⁻	M1	0.0264	α(K)=0.0218 3; α(L)=0.00350 5; α(M)=0.000808 12; α(N+..)=0.000241 4
^x 783.73 3	0.110 39							
784.36 4	0.040 19	1542.793	3 ⁻	758.398	4 ⁺			
785.37 ^a 6	0.050 ^a 12	1431.645	2 ⁻ ,3 ⁻	646.411	0 ⁺			
785.37 ^a 6	0.050 ^a 12	1530.702	1 ⁻ ,2 ⁻	745.2188	1 ⁻ ,2 ⁻			
786.19 ^a 6	0.080 ^a 12	1418.687	3 ⁺ ,4 ⁺	632.4818	1 ⁻ ,2 ⁻			
786.19 ^a 6	0.080 ^a 12	1458.988	3 ⁻	672.6549	1 ⁻ ,2 ⁻			
788.162 18	0.140 18	1318.628	1 ⁻ ,2 ⁻	530.4782	1 ⁻	M1	0.0259	α(K)=0.0215 3; α(L)=0.00344 5; α(M)=0.000795 12; α(N+..)=0.000237 4
^x 788.813 14	0.200 20					M1	0.0259	α(K)=0.0214 3; α(L)=0.00343 5; α(M)=0.000793 12; α(N+..)=0.000236 4
^x 790.137 24	0.090 9							
793.38 ^a 5	0.030 ^a 9	1304.8246	3 ⁻	511.5173	3 ⁻			
793.38 ^a 5	0.030 ^a 9	1418.687	3 ⁺ ,4 ⁺	625.4303	3 ⁻			
794.174 10	0.240 12	1338.171	3 ⁻	544.0095	4 ⁻	M1	0.0254	α(K)=0.0210 3; α(L)=0.00337 5; α(M)=0.000779 11; α(N+..)=0.000232 4
796.221 9	0.200 14	1032.254	3 ⁻	236.0453	3 ⁻			
^x 796.93 4	0.140 45							
797.102 20	0.080 14	1160.018	3 ⁻	362.8994	2 ⁻			
798.417 ^a 16	0.110 ^a 12	1293.902	1 ⁻ ,2 ⁻	495.5114	1 ⁻	M1	0.0251	α(K)=0.0208 3; α(L)=0.00333 5; α(M)=0.000768 11; α(N+..)=0.000229 4
798.417 ^a 16	0.110 ^a 12	1423.795	3 ⁻	625.4303	3 ⁻	M1	0.0251	α(K)=0.0208 3; α(L)=0.00333 5; α(M)=0.000768 11; α(N+..)=0.000229 4
800.05 4	0.090 18	800.0391	2 ⁻	0.0	2 ⁻			
800.31 5	0.040 11	1371.502	1 ⁻ ,2 ⁻	571.2430	1 ⁻			
801.713 10	0.260 10	801.7064	1 ⁻ ,2 ⁻	0.0	2 ⁻	M1	0.0248	α(K)=0.0205 3; α(L)=0.00329 5; α(M)=0.000760 11; α(N+..)=0.000227 4
^x 802.42 4	0.060 10					(M1)	0.0248	α(K)=0.0205 3; α(L)=0.00329 5; α(M)=0.000758 11; α(N+..)=0.000226 4
^x 803.510 13	0.200 10					M1	0.0247	α(K)=0.0204 3; α(L)=0.00327 5; α(M)=0.000756 11; α(N+..)=0.000225 4
^x 804.188 20	0.230 23					M1	0.0246	α(K)=0.0204 3; α(L)=0.00327 5; α(M)=0.000754 11; α(N+..)=0.000225 4
806.13 3	0.090 10	1431.645	2 ⁻ ,3 ⁻	625.4303	3 ⁻			
807.04 5	0.060 10	1318.628	1 ⁻ ,2 ⁻	511.5173	3 ⁻			
810.119 6	0.350 7	1359.038	1 ⁻ ,2 ⁻ ,3 ⁻	548.9343	2 ⁻	M1	0.0242	α(K)=0.0200 3; α(L)=0.00321 5; α(M)=0.000740 11; α(N+..)=0.000221 3
811.710 14	0.110 7	1265.524	1 ⁻ ,2 ⁻ ,3 ⁻	453.8249	2 ⁻			
^x 812.576 7	0.200 16					(M1)	0.0240	α(K)=0.0199 3; α(L)=0.00318 5; α(M)=0.000734 11; α(N+..)=0.000219 3
813.57 ^a 7	0.030 ^a 9	868.7736	3 ⁻	55.1812	1 ⁻			
813.57 ^a 7	0.030 ^a 9	1061.285	3 ⁻	247.5731	1 ⁻			

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

<u>E_γ</u>	<u>I_γ#@</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.†</u>	<u>α&</u>	<u>Comments</u>
^x 815.56 5	0.060 14							
815.964 17	0.140 21	1265.524	1 ⁻ ,2 ⁻ ,3 ⁻	449.5703	3 ⁻	M1	0.0237	α(K)=0.0196 3; α(L)=0.00315 5; α(M)=0.000726 11; α(N+..)=0.000216 3
816.63 4	0.060 13	1453.858	3 ⁻	637.125	4 ⁺			
^x 817.16 3	0.090 13							
^x 817.835 19	0.120 12							
818.29 3	0.100 14	1272.1512	3 ⁻	453.8249	2 ⁻			
^x 819.399 11	0.260 18					M1	0.0235	α(K)=0.0194 3; α(L)=0.00311 5; α(M)=0.000718 10; α(N+..)=0.000214 3
^x 820.49 4	0.110 11							
^x 821.63 5	0.86 23					E1	0.00320	α(K)=0.00267; α(L)=0.00040
822.539 ^a 20	0.140 ^a 15	1272.1512	3 ⁻	449.5703	3 ⁻			
822.539 ^a 20	0.140 ^a 15	1304.8246	3 ⁻	482.3273	4 ⁺			
^x 822.983 18	0.120 11							
824.12 7	0.040 13	1335.543	1 ⁻ ,2 ⁻ ,3 ⁻	511.5173	3 ⁻			
824.58 4	0.080 14	824.609	3 ⁺	0.0	2 ⁻			
825.472 6	0.420 42	1018.430	1 ⁻ ,2 ⁻	192.9440	1 ⁻	M1	0.0230	α(K)=0.0191 3; α(L)=0.00305 5; α(M)=0.000705 10; α(N+..)=0.000210 3
^x 826.567 15	0.120 11					M1	0.0230	α(K)=0.0190 3; α(L)=0.00304 5; α(M)=0.000702 10; α(N+..)=0.000209 3
^x 827.31 4	0.060 13							
827.99 9	0.050 34	1209.370	3 ⁻	381.2003	3 ⁺			
^x 828.316 18	0.150 15							
828.85 ^a 6	0.070 ^a 14	1157.2384	3 ⁻	328.4833	3 ⁻			
828.85 ^a 6	0.070 ^a 14	1191.566	1 ⁺ ,2 ⁺ ,3 ⁺	362.8994	2 ⁻			
829.32 8	0.040 14	1475.622	2 ⁻	646.411	0 ⁺			
830.78 3	0.100 13	1402.086	1 ⁻ ,2 ⁻	571.2430	1 ⁻	M1	0.0227	α(K)=0.0188 3; α(L)=0.00300 5; α(M)=0.000693 10; α(N+..)=0.000207 3
^x 831.31 5	0.080 13							
^x 831.815 16	0.170 14							
833.915 13	0.140 13	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	702.4811	2 ⁻			
^x 835.339 14	0.550 22							
^x 835.726 5	1.32 15							
836.405 9	0.640 83	891.616	1 ⁻ ,2 ⁻	55.1812	1 ⁻	M1	0.0223	α(K)=0.0184 3; α(L)=0.00295 5; α(M)=0.000681 10; α(N+..)=0.000203 3
^x 837.46 4	0.120 52							
838.23 4	0.170 27	1409.399	3 ⁻	571.2430	1 ⁻			
839.53 4	0.99 24	1075.560	1 ⁻ ,2 ⁻ ,3 ⁻	236.0453	3 ⁻			
840.78 8	0.080 25	1513.565	1 ⁻ ,2 ⁻	672.6549	1 ⁻ ,2 ⁻			
^x 844.468 10	0.330 66					M1	0.0217	α(K)=0.0180 3; α(L)=0.00288 4; α(M)=0.000664 10; α(N+..)=0.000198 3
846.15 5	0.140 27	1390.227	2 ⁻	544.0095	4 ⁻			
849.56 5	0.110 21	1108.873	1 ⁻ ,2 ⁻	259.3404	1 ⁻	M1	0.0214	α(K)=0.01772 25; α(L)=0.00283 4; α(M)=0.000654 10; α(N+..)=0.000195 3

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

<u>E_γ</u>	<u>I_γ^{#@}</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[†]</u>	<u>α^{&}</u>	<u>Comments</u>
^x 851.374 10	0.270 16					(E2)	0.00802	α(K)=0.00635; α(L)=0.00125
^x 853.222 14	0.340 78					M1	0.0212	α(K)=0.01753 25; α(L)=0.00280 4; α(M)=0.000647 9; α(N+..)=0.000193 3
854.60 3	0.200 22	1487.136	1 ⁻ ,2 ⁻	632.4818	1 ⁻ ,2 ⁻	M1	0.0211	α(K)=0.01745 25; α(L)=0.00279 4; α(M)=0.000644 9; α(N+..)=0.000192 3
856.58 6	0.110 21	1560.407	3 ⁻	703.7299	1 ⁻			
857.19 ^a 7	0.100 ^a 22	1104.847	0 ⁻ ,1 ⁻ ,2 ⁻	247.5731	1 ⁻			
857.19 ^a 7	0.100 ^a 22	1306.859	2 ⁻	449.5703	3 ⁻			
857.86 6	0.100 21	1560.407	3 ⁻	702.4811	2 ⁻			
863.01 ^a 3	0.200 ^a 22	1191.566	1 ⁺ ,2 ⁺ ,3 ⁺	328.4833	3 ⁻			
863.01 ^a 3	0.200 ^a 22	1202.268	2 ⁻	339.2909	1 ⁻			
^x 864.04 10	0.060 19							
864.77 3	0.100 17	1318.628	1 ⁻ ,2 ⁻	453.8249	2 ⁻			
^x 866.54 8	0.070 20							
^x 867.38 6	0.110 25							
^x 867.98 5	0.170 26					M1	0.0203	α(K)=0.01678 24; α(L)=0.00268 4; α(M)=0.000619 9; α(N+..)=0.000184 3
868.757 9	0.570 57	868.7736	3 ⁻	0.0	2 ⁻	M1	0.0202	α(K)=0.01674 24; α(L)=0.00268 4; α(M)=0.000618 9; α(N+..)=0.000184 3
^x 871.42 3	0.120 12					M1	0.0201	α(K)=0.01661 24; α(L)=0.00265 4; α(M)=0.000613 9; α(N+..)=0.000183 3
872.86 ^a 4	0.130 ^a 17	1108.873	1 ⁻ ,2 ⁻	236.0453	3 ⁻			
872.86 ^a 4	0.130 ^a 17	1402.086	1 ⁻ ,2 ⁻	529.1687	3 ⁻			
^x 876.87 3	0.210 32							
^x 877.07 3	0.250 48							
877.33 3	0.290 61	1124.883	2 ⁻	247.5731	1 ⁻	M1	0.0197	α(K)=0.01633 23; α(L)=0.00261 4; α(M)=0.000602 9; α(N+..)=0.000179 3
^x 879.47 3	0.190 21					M1	0.0196	α(K)=0.01622 23; α(L)=0.00259 4; α(M)=0.000598 9; α(N+..)=0.0001783 25
881.04 ^a 6	0.100 ^a 20	1209.370	3 ⁻	328.4833	3 ⁻			
881.04 ^a 6	0.100 ^a 20	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	482.3273	4 ⁺			
881.04 ^a 6	0.100 ^a 20	1513.565	1 ⁻ ,2 ⁻	632.4818	1 ⁻ ,2 ⁻			
^x 881.99 7	0.080 19							
885.647 16	0.230 25	1434.584	1 ⁻ ,2 ⁻	548.9343	2 ⁻	M1	0.0192	α(K)=0.01594 23; α(L)=0.00255 4; α(M)=0.000588 9; α(N+..)=0.0001751 25
^x 886.143 14	1.42 7					E1	0.00277	α(K)=0.00232; α(L)=0.00035
^x 887.34 4	0.130 25					M1	0.0192	α(K)=0.01586 23; α(L)=0.00253 4; α(M)=0.000585 9; α(N+..)=0.0001743 25
888.60 ^a 11	0.080 ^a 29	1124.883	2 ⁻	236.0453	3 ⁻			
888.60 ^a 11	0.080 ^a 29	1338.171	3 ⁻	449.5703	3 ⁻			
889.53 9	0.100 22	1418.687	3 ⁺ ,4 ⁺	529.1687	3 ⁻			
891.16 4	0.110 44	1297.133	1 ⁻ ,2 ⁻ ,3 ⁻	406.0081	2 ⁻			
891.600 23	0.130 26	891.616	1 ⁻ ,2 ⁻	0.0	2 ⁻			

γ(¹⁹⁸Au) (continued)

<u>E_γ</u>	<u>I_γ^{#@}</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[†]</u>	<u>α^{&}</u>	<u>Comments</u>
^x 891.97 6	0.240 77							
^x 895.20 4	0.190 23							
^x 896.74 6	0.160 30							
^x 897.733 21	0.160 61							
898.53 ^a 5	0.200 ^a 30	1160.018	3 ⁻	261.4047	2 ⁻			
898.53 ^a 5	0.200 ^a 30	1380.885	3 ⁻	482.3273	4 ⁺			
902.500 15	0.520 47	1431.645	2 ⁻ ,3 ⁻	529.1687	3 ⁻			
^x 902.78 3	0.320 42							
^x 906.108 17	0.280 22					M1	0.0182	α(K)=0.01504 21; α(L)=0.00240 4; α(M)=0.000554 8; α(N+..)=0.0001651 24
909.61 ^a 4	0.120 ^a 16	1157.2384	3 ⁻	247.5731	1 ⁻			
909.61 ^a 4	0.120 ^a 16	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	453.8249	2 ⁻			
^x 910.57 5	0.100 15					M1	0.0179	α(K)=0.01485 21; α(L)=0.00237 4; α(M)=0.000547 8; α(N+..)=0.0001630 23
^x 913.588 16	0.300 24							
913.752 16	0.410 57	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	449.5703	3 ⁻	M1	0.01777	α(K)=0.01472 21; α(L)=0.00235 4; α(M)=0.000542 8; α(N+..)=0.0001616 23
^x 913.994 21	0.200 32							
915.91 ^a 3	0.090 ^a 15	1108.873	1 ⁻ ,2 ⁻	192.9440	1 ⁻			
915.91 ^a 3	0.090 ^a 15	1297.133	1 ⁻ ,2 ⁻ ,3 ⁻	381.2003	3 ⁺			
915.91 ^a 3	0.090 ^a 15	1487.136	1 ⁻ ,2 ⁻	571.2430	1 ⁻			
916.406 11	0.340 17	916.4440	1 ⁻ ,2 ⁻	0.0	2 ⁻	M1	0.01764	α(K)=0.01461 21; α(L)=0.00233 4; α(M)=0.000538 8; α(N+..)=0.0001604 23
917.39 6	0.050 11	1542.793	3 ⁻	625.4303	3 ⁻	M1	0.01759	α(K)=0.01457 21; α(L)=0.00233 4; α(M)=0.000537 8; α(N+..)=0.0001599 23
920.10 6	0.110 25	1431.645	2 ⁻ ,3 ⁻	511.5173	3 ⁻	M1	0.01746	α(K)=0.01446 21; α(L)=0.00231 4; α(M)=0.000532 8; α(N+..)=0.0001587 23
^x 920.89 5	0.150 27					M1	0.01742	α(K)=0.01443 21; α(L)=0.00230 4; α(M)=0.000531 8; α(N+..)=0.0001584 23
921.78 6	0.120 25	1554.429	1 ⁻ ,2 ⁻	632.4818	1 ⁻ ,2 ⁻	M1	0.01738	α(K)=0.01440 21; α(L)=0.00230 4; α(M)=0.000530 8; α(N+..)=0.0001580 23
^x 922.77 4	0.090 17							
923.86 ^a 7	0.110 ^a 9	1160.018	3 ⁻	236.0453	3 ⁻			
923.86 ^a 7	0.110 ^a 9	1286.747	2 ⁻	362.8994	2 ⁻			
926.60 ^a 12	0.040 ^a 4	1375.989	1 ⁻ ,2 ⁻	449.5703	3 ⁻			
926.60 ^a 12	0.040 ^a 4	1475.622	2 ⁻	548.9343	2 ⁻			
927.39 ^a 7	0.42 ^a 16	1018.430	1 ⁻ ,2 ⁻	91.0057	0 ⁻			
927.39 ^a 7	0.42 ^a 16	1256.018	1 ⁻ ,2 ⁻	328.4833	3 ⁻			
929.03 4	0.170 20	1554.429	1 ⁻ ,2 ⁻	625.4303	3 ⁻	M1	0.01704	α(K)=0.01411 20; α(L)=0.00225 4; α(M)=0.000519 8; α(N+..)=0.0001548 22
^x 930.46 6	0.100 19							
^x 931.370 15	0.320 35					M1	0.01693	α(K)=0.01402 20; α(L)=0.00224 4; α(M)=0.000516 8; α(N+..)=0.0001538 22

γ(¹⁹⁸Au) (continued)

E _γ	I _γ ^{#@}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α ^{&}	Comments
933.89 7	0.64 17	1505.178	1 ⁻ ,2 ⁻	571.2430	1 ⁻			
934.33 4	0.070 5	1297.133	1 ⁻ ,2 ⁻ ,3 ⁻	362.8994	2 ⁻			
^x 935.18 3	0.110 6							
936.10 4	0.060 10	1431.645	2 ⁻ ,3 ⁻	495.5114	1 ⁻			
938.70 3	0.110 6	1306.859	2 ⁻	368.2549	1 ⁻	M1	0.01659	α(K)=0.01375 20; α(L)=0.00219 3; α(M)=0.000506 7; α(N+..)=0.0001508 22
^x 939.60 4	0.090 7					M1	0.01655	α(K)=0.01371 20; α(L)=0.00219 3; α(M)=0.000504 7; α(N+..)=0.0001504 21
^x 941.22 3	0.130 14					M1	0.01648	α(K)=0.01365 20; α(L)=0.00218 3; α(M)=0.000502 7; α(N+..)=0.0001497 21
^x 942.51 3	0.090 15					M1	0.01642	α(K)=0.01361 19; α(L)=0.00217 3; α(M)=0.000500 7; α(N+..)=0.0001492 21
^x 943.22 3	0.090 13							
^x 944.484 9	0.460 18					M1	0.01634	α(K)=0.01353 19; α(L)=0.00216 3; α(M)=0.000498 7; α(N+..)=0.0001484 21
946.45 3	0.130 5	1475.622	2 ⁻	529.1687	3 ⁻			
947.56 6	0.090 24	1458.988	3 ⁻	511.5173	3 ⁻			
947.94 3	0.430 13	1209.370	3 ⁻	261.4047	2 ⁻	M1	0.01619	α(K)=0.01341 19; α(L)=0.00214 3; α(M)=0.000493 7; α(N+..)=0.0001470 21
^x 949.59 7	0.060 11							
950.38 5	0.080 9	1318.628	1 ⁻ ,2 ⁻	368.2549	1 ⁻	M1	0.01608	α(K)=0.01332 19; α(L)=0.00212 3; α(M)=0.000490 7; α(N+..)=0.0001460 21
952.485 19	0.260 18	1402.086	1 ⁻ ,2 ⁻	449.5703	3 ⁻	(E2)	0.00640	α(K)=0.00512; α(L)=0.00096
^x 953.38 4	0.120 40							
^x 953.75 5	0.390 20					M1	0.01594	α(K)=0.01320 19; α(L)=0.00210 3; α(M)=0.000485 7; α(N+..)=0.0001447 21
^x 955.11 3	0.130 10							
^x 957.18 3	0.170 10					M1	0.01579	α(K)=0.01308 19; α(L)=0.00208 3; α(M)=0.000481 7; α(N+..)=0.0001434 20
960.47 4	0.100 8	1472.097	3 ⁻	511.5173	3 ⁻			
^x 962.774 12	0.290 29							
^x 963.958 24	0.180 11					E2	0.00625	α(K)=0.00501; α(L)=0.00093
965.14 4	0.110 5	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	571.2430	1 ⁻			
^x 971.20 7	0.160 10							
^x 973.207 20	0.420 17					M1	0.01514	α(K)=0.01254 18; α(L)=0.00200 3; α(M)=0.000461 7; α(N+..)=0.0001374 20
^x 975.186 20	0.200 12							
976.48 ^a 7	0.080 ^a 18	1191.566	1 ⁺ ,2 ⁺ ,3 ⁺	214.9715	4 ⁻			
976.48 ^a 7	0.080 ^a 18	1304.8246	3 ⁻	328.4833	3 ⁻			
976.48 ^a 7	0.080 ^a 18	1458.988	3 ⁻	482.3273	4 ⁺			
976.48 ^a 7	0.080 ^a 18	1472.097	3 ⁻	495.5114	1 ⁻			
978.85 5	0.190 13	1325.834	2 ⁻	346.9062	2 ⁻			
979.46 7	0.100 19	1318.628	1 ⁻ ,2 ⁻	339.2909	1 ⁻			

¹⁹⁷Au(n, γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

$\gamma(^{198}\text{Au})$ (continued)

E_γ	$I_\gamma^{\#\@}$	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [†]	$\alpha\&$	Comments
983.00 ^a 4	0.130 ^a 10	983.0869	2 ⁺	0.0	2 ⁻			
983.00 ^a 4	0.130 ^a 10	1038.2745	3 ⁻	55.1812	1 ⁻			
983.00 ^a 4	0.130 ^a 10	1513.565	1 ⁻ ,2 ⁻	530.4782	1 ⁻			
984.92 8	0.140 29	1434.584	1 ⁻ ,2 ⁻	449.5703	3 ⁻			
^x 986.03 5	0.190 10							
^x 989.49 3	0.170 31					M1	0.01451	$\alpha(\text{K})=0.01203$ 17; $\alpha(\text{L})=0.00191$ 3; $\alpha(\text{M})=0.000442$ 7; $\alpha(\text{N+..})=0.0001316$ 19
990.60 6	0.090 29	1444.396	3 ⁻	453.8249	2 ⁻	(M1)	0.01447	$\alpha(\text{K})=0.01199$ 17; $\alpha(\text{L})=0.00191$ 3; $\alpha(\text{M})=0.000440$ 7; $\alpha(\text{N+..})=0.0001313$ 19
^x 993.191 14	0.560 34					M1+E2	0.010 5	$\alpha(\text{K})=0.009$ 4; $\alpha(\text{L})=0.0014$ 6
993.72 3	0.280 50	1505.178	1 ⁻ ,2 ⁻	511.5173	3 ⁻			
^x 995.77 6	0.130 7							
996.10 ^a 6	0.120 ^a 22	1359.038	1 ⁻ ,2 ⁻ ,3 ⁻	362.8994	2 ⁻			
996.10 ^a 6	0.120 ^a 22	1402.086	1 ⁻ ,2 ⁻	406.0081	2 ⁻			
999.74 3	0.310 16	1380.885	3 ⁻	381.2003	3 ⁺	E1+M2 [‡]	0.018 17	$\alpha(\text{K})=0.015$ 14; $\alpha(\text{L})=0.0026$ 24; $\alpha(\text{M})=0.0006$ 6; $\alpha(\text{N+..})=0.00018$ 17 $\alpha(\text{K})=0.008$ 4; $\alpha(\text{L})=0.0014$ 6 M1+E2 (1996Ma70,1996Ma75).
1000.40 5	0.140 24	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	362.8994	2 ⁻			
^x 1003.66 6	0.110 8					M1	0.01400	$\alpha(\text{K})=0.01160$ 17; $\alpha(\text{L})=0.00185$ 3; $\alpha(\text{M})=0.000426$ 6; $\alpha(\text{N+..})=0.0001269$ 18
1005.36 5	0.180 22	1554.429	1 ⁻ ,2 ⁻	548.9343	2 ⁻			
^x 1005.71 5	0.180 9							
1006.32 ^a 8	0.130 ^a 12	1061.285	3 ⁻	55.1812	1 ⁻			
1006.32 ^a 8	0.130 ^a 12	1265.524	1 ⁻ ,2 ⁻ ,3 ⁻	259.3404	1 ⁻			
^x 1008.26 3	0.240 19					M1	0.01384	$\alpha(\text{K})=0.01147$ 16; $\alpha(\text{L})=0.00182$ 3; $\alpha(\text{M})=0.000421$ 6; $\alpha(\text{N+..})=0.0001254$ 18
^x 1009.507 21	0.290 32					M1+E2	0.010 4	$\alpha(\text{K})=0.008$ 4; $\alpha(\text{L})=0.0013$ 5; $\alpha(\text{M})=0.00031$ 12; $\alpha(\text{N+..})=9.E-5$ 4
^x 1011.11 6	0.200 8							
1012.79 ^a 13	0.080 ^a 7	1272.1512	3 ⁻	259.3404	1 ⁻			
1012.79 ^a 13	0.080 ^a 7	1375.989	1 ⁻ ,2 ⁻	362.8994	2 ⁻			
1012.79 ^a 13	0.080 ^a 7	1380.885	3 ⁻	368.2549	1 ⁻			
1012.79 ^a 13	0.080 ^a 7	1418.687	3 ⁺ ,4 ⁺	406.0081	2 ⁻			
1016.34 ^a 16	0.050 ^a 8	1209.370	3 ⁻	192.9440	1 ⁻			
1016.34 ^a 16	0.050 ^a 8	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	346.9062	2 ⁻			
1016.34 ^a 16	0.050 ^a 8	1560.407	3 ⁻	544.0095	4 ⁻			
1018.02 8	0.150 29	1399.342	2 ⁻ ,3 ⁻	381.2003	3 ⁺			
1018.36 3	0.250 15	1018.430	1 ⁻ ,2 ⁻	0.0	2 ⁻			
^x 1018.75 6	0.210 29							
^x 1024.25 3	0.210 8					M1	0.01330	$\alpha(\text{K})=0.01102$ 16; $\alpha(\text{L})=0.001752$ 25; $\alpha(\text{M})=0.000404$ 6; $\alpha(\text{N+..})=0.0001205$ 17
1025.48 ^a 13	0.060 ^a 5	1240.385	3 ⁻	214.9715	4 ⁻			
1025.48 ^a 13	0.060 ^a 5	1286.747	2 ⁻	261.4047	2 ⁻			

γ(¹⁹⁸Au) (continued)

E _γ	I _γ ^{#@}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α&	Comments
1025.48 ^a 13	0.060 ^a 5	1431.645	2 ⁻ ,3 ⁻	406.0081	2 ⁻			
1025.48 ^a 13	0.060 ^a 5	1554.429	1 ⁻ ,2 ⁻	529.1687	3 ⁻			
1027.12 9	0.090 5	1390.227	2 ⁻	362.8994	2 ⁻			
1028.19 5	0.140 34	1409.399	3 ⁻	381.2003	3 ⁺			
1028.613 14	0.620 43	1434.584	1 ⁻ ,2 ⁻	406.0081	2 ⁻	M1	0.01315	α(K)=0.01090 16; α(L)=0.001733 25; α(M)=0.000400 6; α(N+..)=0.0001192 17
^x 1030.83 3	0.170 5					M1	0.01308	α(K)=0.01084 16; α(L)=0.001724 25; α(M)=0.000398 6; α(N+..)=0.0001185 17
1033.08 ^a 10	0.070 ^a 5	1396.142	3 ⁻	362.8994	2 ⁻	M1	0.01301	α(K)=0.01078 15; α(L)=0.001714 24; α(M)=0.000395 6; α(N+..)=0.0001179 17
1033.08 ^a 10	0.070 ^a 5	1487.136	1 ⁻ ,2 ⁻	453.8249	2 ⁻	M1	0.01301	α(K)=0.01078 15; α(L)=0.001714 24; α(M)=0.000395 6; α(N+..)=0.0001179 17
1034.48 8	0.080 5	1293.902	1 ⁻ ,2 ⁻	259.3404	1 ⁻			
^x 1036.94 8	0.070 12							
^x 1037.95 3	0.230 9					M1	0.01286	α(K)=0.01066 15; α(L)=0.001694 24; α(M)=0.000391 6; α(N+..)=0.0001164 17
1040.77 ^a 11	0.120 ^a 6	1256.018	1 ⁻ ,2 ⁻	214.9715	4 ⁻			
1040.77 ^a 11	0.120 ^a 6	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	495.5114	1 ⁻			
^x 1042.25 4	0.260 8					(E2)	0.00536	α(K)=0.00432; α(L)=0.00078
^x 1045.01 3	0.280 50					M1	0.01264	α(K)=0.01047 15; α(L)=0.001665 24; α(M)=0.000384 6; α(N+..)=0.0001144 16
1046.16 8	0.150 9	1293.902	1 ⁻ ,2 ⁻	247.5731	1 ⁻			
1047.09 ^a 7	0.210 ^a 6	1047.124	1 ⁻ ,2 ⁻	0.0	2 ⁻			
1047.09 ^a 7	0.210 ^a 6	1542.793	3 ⁻	495.5114	1 ⁻			
1047.72 7	0.130 8	1453.858	3 ⁻	406.0081	2 ⁻			
1049.23 5	0.140 14	1396.142	3 ⁻	346.9062	2 ⁻	M1	0.01251	α(K)=0.01037 15; α(L)=0.001648 23; α(M)=0.000380 6; α(N+..)=0.0001133 16
1050.728 16	0.380 42	1286.747	2 ⁻	236.0453	3 ⁻	M1	0.01246	α(K)=0.01033 15; α(L)=0.001642 23; α(M)=0.000379 6; α(N+..)=0.0001128 16
^x 1053.53 3	0.420 21					E2	0.00525	α(K)=0.00423; α(L)=0.00076
1053.93 5	0.210 36	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	482.3273	4 ⁺			
^x 1059.59 5	0.120 6							
1060.937 21	0.260 16	1423.795	3 ⁻	362.8994	2 ⁻	M1	0.01216	α(K)=0.01008 15; α(L)=0.001601 23; α(M)=0.000369 6; α(N+..)=0.0001101 16
1062.55 8	0.110 6	1409.399	3 ⁻	346.9062	2 ⁻			
1064.45 7	0.130 7	1325.834	2 ⁻	261.4047	2 ⁻			
1064.78 ^a 9	0.200 ^a 40	1301.045	2 ⁻	236.0453	3 ⁻			
1064.78 ^a 9	0.200 ^a 40	1560.407	3 ⁻	495.5114	1 ⁻			
^x 1065.867 24	0.400 16					M1	0.01202	α(K)=0.00996 14; α(L)=0.001583 23; α(M)=0.000365 6; α(N+..)=0.0001088 16
1068.52 ^a 11	0.070 ^a 5	1304.8246	3 ⁻	236.0453	3 ⁻			
1068.52 ^a 11	0.070 ^a 5	1431.645	2 ⁻ ,3 ⁻	362.8994	2 ⁻			
^x 1074.93 4	0.200 18							

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

<u>E_γ</u>	<u>I_γ^{#@}</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[†]</u>	<u>α^{&}</u>	<u>Comments</u>
^x 1075.71 5	0.160 45					M1	0.01174	α(K)=0.00974 14; α(L)=0.001546 22; α(M)=0.000356 5; α(N+..)=0.0001063 15
1076.38 ^a 10	0.090 ^a 14	1335.543	1 ⁻ ,2 ⁻ ,3 ⁻	259.3404	1 ⁻			
1076.38 ^a 10	0.090 ^a 14	1404.893	2 ⁻ ,3 ⁻	328.4833	3 ⁻			
1076.38 ^a 10	0.090 ^a 14	1444.396	3 ⁻	368.2549	1 ⁻			
1076.81 ^a 5	0.150 ^a 20	1338.171	3 ⁻	261.4047	2 ⁻			
1076.81 ^a 5	0.150 ^a 20	1423.795	3 ⁻	346.9062	2 ⁻			
1076.81 ^a 5	0.150 ^a 20	1530.702	1 ⁻ ,2 ⁻	453.8249	2 ⁻			
^x 1078.40 13	0.100 28							
1079.191 17	0.320 26	1272.1512	3 ⁻	192.9440	1 ⁻	(E2)	0.00495 7	α(K)=0.00402 6; α(L)=0.000718 10; α(M)=0.0001679 24; α(N+..)=4.97×10 ⁻⁵ 7 α(K)=0.007 3; α(L)=0.0012 5 Mult.: (M1,E2) (1996Ma70,1996Ma75).
1081.60 5	0.130 30	1444.396	3 ⁻	362.8994	2 ⁻			
^x 1082.037 23	0.220 40							
^x 1083.58 7	0.080 26							
1085.49 5	0.260 10	1453.858	3 ⁻	368.2549	1 ⁻			
^x 1088.54 5	0.090 18							
1090.05 8	0.120 22	1496.201	3 ⁻	406.0081	2 ⁻	M1	0.01136	α(K)=0.00941 14; α(L)=0.001494 21; α(M)=0.000345 5; α(N+..)=0.0001027 15
^x 1091.41 4	0.180 18							
^x 1092.57 4	0.160 13							
^x 1099.592 24	0.400 12					M1	0.01111	α(K)=0.00921 13; α(L)=0.001461 21; α(M)=0.000337 5; α(N+..)=0.0001004 14
1101.86 4	0.230 9	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	261.4047	2 ⁻	M1	0.01105	α(K)=0.00916 13; α(L)=0.001454 21; α(M)=0.000335 5; α(N+..)=0.0001002 14
1107.01 4	0.260 39	1453.858	3 ⁻	346.9062	2 ⁻	M1	0.01092	α(K)=0.00906 13; α(L)=0.001437 21; α(M)=0.000331 5; α(N+..)=9.91×10 ⁻⁵ 14
1107.67 5	0.700 98	1513.565	1 ⁻ ,2 ⁻	406.0081	2 ⁻	E2	0.00476	α(K)=0.00385; α(L)=0.00068
1109.29 5	0.66 11	1472.097	3 ⁻	362.8994	2 ⁻	M1+E2	0.008 3	α(K)=0.006 3; α(L)=0.0011 4; α(M)=0.00024 9; α(N+..)=7.E-5 3
1111.64 7	0.500 45	1359.038	1 ⁻ ,2 ⁻ ,3 ⁻	247.5731	1 ⁻			
1114.51 5	0.240 12	1375.989	1 ⁻ ,2 ⁻	261.4047	2 ⁻			
^x 1117.93 3	0.290 20							
1120.54 10	0.100 10	1335.543	1 ⁻ ,2 ⁻ ,3 ⁻	214.9715	4 ⁻			
^x 1122.40 9	0.080 19					M1	0.01055	α(K)=0.00875 13; α(L)=0.001387 20; α(M)=0.000320 5; α(N+..)=9.60×10 ⁻⁵ 14
^x 1123.70 5	0.190 8					M1	0.01052	α(K)=0.00872 13; α(L)=0.001383 20; α(M)=0.000319 5; α(N+..)=9.58×10 ⁻⁵ 14
^x 1126.11 4	0.200 16					M1	0.01046	α(K)=0.00867 13; α(L)=0.001375 20; α(M)=0.000317 5; α(N+..)=9.53×10 ⁻⁵ 14
1132.93 3	0.340 44	1325.834	2 ⁻	192.9440	1 ⁻	M1	0.01030	α(K)=0.00854 12; α(L)=0.001354 19; α(M)=0.000312 5; α(N+..)=9.41×10 ⁻⁵ 14

¹⁹⁷Au(n, γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

$\gamma(^{198}\text{Au})$ (continued)

E_γ	$I_\gamma^{\#\@}$	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. \dagger	$\alpha\&$	Comments
^x 1139.516 15	0.640 96					M1	0.01015	$\alpha(\text{K})=0.00842$ 12; $\alpha(\text{L})=0.001334$ 19; $\alpha(\text{M})=0.000308$ 5;
^x 1141.83 5	0.150 11					M1	0.01010	$\alpha(\text{N}+..)=9.30\times 10^{-5}$ 13 $\alpha(\text{K})=0.00837$ 12; $\alpha(\text{L})=0.001327$ 19; $\alpha(\text{M})=0.000306$ 5;
1148.65 5	0.360 14	1396.142	3 ⁻	247.5731	1 ⁻	E2 \ddagger	0.00439 7	$\alpha(\text{N}+..)=9.26\times 10^{-5}$ 13 $\alpha(\text{K})=0.00358$ 5; $\alpha(\text{L})=0.000626$ 9; $\alpha(\text{M})=0.0001461$ 21;
1150.55 8	0.340 24	1513.565	1 ⁻ ,2 ⁻	362.8994	2 ⁻	M1	0.00991 14	$\alpha(\text{N}+..)=4.43\times 10^{-5}$ 7 $\alpha(\text{K})=0.0086$; $\alpha(\text{L})=0.00137$ M1 (1996Ma70,1996Ma75).
1157.25 6	0.180 49	1157.2384	3 ⁻	0.0	2 ⁻	M1	0.00977	$\alpha(\text{K})=0.00822$ 12; $\alpha(\text{L})=0.001302$ 19; $\alpha(\text{M})=0.000300$ 5;
^x 1161.38 6	0.23 30					M1	0.00968 14	$\alpha(\text{N}+..)=9.13\times 10^{-5}$ 13 $\alpha(\text{K})=0.00810$ 12; $\alpha(\text{L})=0.001283$ 18; $\alpha(\text{M})=0.000296$ 5;
^x 1163.80 13	0.140 8							$\alpha(\text{N}+..)=9.04\times 10^{-5}$ 13
^x 1164.10 11	0.240 50							$\alpha(\text{K})=0.00802$ 12; $\alpha(\text{L})=0.001271$ 18; $\alpha(\text{M})=0.000293$ 5;
^x 1167.32 5	0.280 64					M1	0.00955 14	$\alpha(\text{N}+..)=8.99\times 10^{-5}$ 13 $\alpha(\text{K})=0.00792$ 11; $\alpha(\text{L})=0.001255$ 18; $\alpha(\text{M})=0.000289$ 4;
^x 1170.95 5	0.56 12					M1+E2	0.007 3	$\alpha(\text{N}+..)=8.93\times 10^{-5}$ 13 $\alpha(\text{K})=0.0058$ 24; $\alpha(\text{L})=0.0010$ 4
1179.90 7	0.160 62	1542.793	3 ⁻	362.8994	2 ⁻	M1+E2	0.007 3	$\alpha(\text{K})=0.0057$ 24; $\alpha(\text{L})=0.0009$ 4
^x 1181.60 5	0.250 35					M1	0.00927 13	$\alpha(\text{K})=0.00768$ 11; $\alpha(\text{L})=0.001216$ 17; $\alpha(\text{M})=0.000280$ 4;
^x 1183.42 8	0.450 77					(M1,E2)	0.007 3	$\alpha(\text{N}+..)=8.80\times 10^{-5}$ 13 $\alpha(\text{K})=0.0057$ 23; $\alpha(\text{L})=0.0009$ 4
1183.79 4	0.430 30	1530.702	1 ⁻ ,2 ⁻	346.9062	2 ⁻	(M1,E2)	0.007 3	$\alpha(\text{K})=0.0057$ 23; $\alpha(\text{L})=0.0009$ 4
^x 1184.70 8	0.340 65					E2		$\alpha(\text{K})=0.00339$; $\alpha(\text{L})=0.00059$
^x 1185.89 10	0.180 14							
1186.31 10	0.220 55	1554.429	1 ⁻ ,2 ⁻	368.2549	1 ⁻			
1187.32 ^a 12	0.210 ^a 11	1402.086	1 ⁻ ,2 ⁻	214.9715	4 ⁻			
1187.32 ^a 12	0.210 ^a 11	1434.584	1 ⁻ ,2 ⁻	247.5731	1 ⁻			
1187.73 ^a 9	0.200 ^a 44	1380.885	3 ⁻	192.9440	1 ⁻			
1187.73 ^a 9	0.200 ^a 44	1423.795	3 ⁻	236.0453	3 ⁻			
1189.3 3	0.110 9	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	346.9062	2 ⁻			
1189.77 7	0.140 31	1404.893	2 ⁻ ,3 ⁻	214.9715	4 ⁻			
1195.50 7	0.200 14	1431.645	2 ⁻ ,3 ⁻	236.0453	3 ⁻		0.00394	$\alpha(\text{K})=0.00321$ 5; $\alpha(\text{L})=0.000553$ 8; $\alpha(\text{M})=0.0001288$ 18;
^x 1196.60 6	0.270 16					M1		$\alpha(\text{N}+..)=4.38\times 10^{-5}$ 7 $\alpha(\text{K})=0.00777$; $\alpha(\text{L})=0.00123$
1200.75 12	0.140 11	1256.018	1 ⁻ ,2 ⁻	55.1812	1 ⁻	M1	0.0093	$\alpha(\text{K})=0.00771$; $\alpha(\text{L})=0.00122$
^x 1203.81 4	0.940 38					M1		$\alpha(\text{K})=0.00766$; $\alpha(\text{L})=0.00121$
^x 1205.68 4	0.860 69							
1210.72 7	0.270 24	1472.097	3 ⁻	261.4047	2 ⁻			
1216.62 ^a 8	0.290 ^a 17	1409.399	3 ⁻	192.9440	1 ⁻	E2	0.00397	$\alpha(\text{K})=0.00323$; $\alpha(\text{L})=0.00056$
1216.62 ^a 8	0.290 ^a 17	1431.645	2 ⁻ ,3 ⁻	214.9715	4 ⁻	E2	0.00397	$\alpha(\text{K})=0.00323$; $\alpha(\text{L})=0.00056$

γ(¹⁹⁸Au) (continued)

E _γ	I _γ # [@]	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α&	Comments
^x 1217.39 9	0.240 34							
^x 1219.05 5	0.330 63					E2		α(K)=0.00322; α(L)=0.00055
^x 1225.51 4	1.08 14					(E1,E2)		α(K)=0.0022 10; α(L)=0.00037 18
1226.01 3	0.370 15	1554.429	1 ⁻ ,2 ⁻	328.4833	3 ⁻	M1+E2	0.0064 25	α(K)=0.0052 21; α(L)=0.0009 3
^x 1230.35 6	0.150 18							
^x 1232.49 6	0.160 32					M1	0.0087	α=0.0087; α(K)=0.00722; α(L)=0.00114
^x 1234.36 6	0.190 11					M1	0.0087	α=0.0087; α(K)=0.00719; α(L)=0.00114
1239.590 ^a 19	0.660 ^a 73	1475.622	2 ⁻	236.0453	3 ⁻	E2	0.00383	α(K)=0.00312; α(L)=0.00054
1239.590 ^a 19	0.660 ^a 73	1487.136	1 ⁻ ,2 ⁻	247.5731	1 ⁻	E2	0.00383	α(K)=0.00312; α(L)=0.00054
1252.12 10	0.170 22	1513.565	1 ⁻ ,2 ⁻	261.4047	2 ⁻			
^x 1253.24 8	0.220 22							
^x 1254.06 6	0.66 12					E1	0.00148	α=0.00148; α(K)=0.00124; α(L)=0.00018
^x 1256.36 10	0.53 13					(E1,E2)	0.0026 12	α=0.0026 12; α(K)=0.0021 9; α(L)=0.00035 17
^x 1258.83 6	0.230 37					M1	0.00829	α=0.00829; α(K)=0.00685; α(L)=0.00108
^x 1262.946 16	1.50 15							
1272.16 ^a 11	0.130 ^a 14	1272.1512	3 ⁻	0.0	2 ⁻			
1272.16 ^a 11	0.130 ^a 14	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	91.0057	0 ⁻			
1272.16 ^a 11	0.130 ^a 14	1487.136	1 ⁻ ,2 ⁻	214.9715	4 ⁻			
^x 1273.48 7	0.88 7							
1275.05 6	0.350 35	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	261.4047	2 ⁻	M1	0.00803	α(K)=0.00663; α(L)=0.00105
^x 1276.75 4	0.660 86					M1	0.00800	α=0.00800; α(K)=0.00661; α(L)=0.00105
1281.55 9	0.66 14	1542.793	3 ⁻	261.4047	2 ⁻	(E2)	0.0025 11	α(K)=0.0021 9; α(L)=0.00034 17 Mult.: (E1,E2) (1996Ma70,1996Ma75).
1283.47 13	0.47 14	1542.793	3 ⁻	259.3404	1 ⁻			
^x 1285.39 8	0.260 57					M1	0.00787	α=0.00787; α(K)=0.00650; α(L)=0.00103
^x 1291.15 13	0.50 13					E2	0.00354	α=0.00354; α(K)=0.00289; α(L)=0.00049
^x 1291.69 5	0.270 30							
1297.137 17	0.58 12	1297.133	1 ⁻ ,2 ⁻ ,3 ⁻	0.0	2 ⁻	M1	0.00769	α(K)=0.00635; α(L)=0.00101
1300.92 7	0.200 82	1301.045	2 ⁻	0.0	2 ⁻			
1304.76 6	0.340 54	1304.8246	3 ⁻	0.0	2 ⁻			
1308.45 17	0.160 27	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	55.1812	1 ⁻	M1	0.00719	α(K)=0.00622; α(L)=0.00098
1316.52 9	0.290 29	1371.502	1 ⁻ ,2 ⁻	55.1812	1 ⁻			
^x 1318.51 4	1.180 24					E2	0.00340	α=0.00340; α(K)=0.00278; α(L)=0.00047
1324.41 6	0.260 29	1560.407	3 ⁻	236.0453	3 ⁻	M1	0.00730	α(K)=0.00603; α(L)=0.00095
^x 1326.82 7	0.240 26					M1	0.00727	α=0.00727; α(K)=0.00600; α(L)=0.00095
1335.51 5	0.220 44	1335.543	1 ⁻ ,2 ⁻ ,3 ⁻	0.0	2 ⁻	M1	0.00715	α(K)=0.00591; α(L)=0.00093
1338.09 8	0.160 22	1338.171	3 ⁻	0.0	2 ⁻	M1	0.00711	α(K)=0.00588; α(L)=0.00093
1344.26 7	0.220 31	1399.342	2 ⁻ ,3 ⁻	55.1812	1 ⁻	M1	0.00703	α(K)=0.00581; α(L)=0.00092
^x 1352.13 12	0.160 27							
^x 1354.286 24	0.840 59					M1	0.00690	α=0.00690; α(K)=0.00570; α(L)=0.00090
^x 1355.71 10	0.250 30					M1	0.00689	α=0.00689; α(K)=0.00569; α(L)=0.00090
1361.41 5	0.360 29	1554.429	1 ⁻ ,2 ⁻	192.9440	1 ⁻	M1	0.00681	α(K)=0.00563; α(L)=0.00089
1363.39 6	0.350 25	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	0.0	2 ⁻	M1	0.0065	α(K)=0.00561; α(L)=0.00089

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

E _γ	I _γ ^{#@}	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [†]	α ^{&}	Comments
^x 1365.18 12	0.270 32							
^x 1365.51 10	0.240 19							
^x 1373.59 9	0.230 28							
^x 1377.70 10	0.190 21							
1379.35 8	0.190 17	1434.584	1 ⁻ ,2 ⁻	55.1812	1 ⁻	M1	0.00659	α(K)=0.00545; α(L)=0.00086
^x 1383.74 17	0.110 20							
^x 1388.44 9	0.250 23							
^x 1389.04 4	0.25 13					M1	0.00648	α=0.00648; α(K)=0.00536; α(L)=0.00085
^x 1394.01 4	0.520 31					(M1)	0.00642	α=0.00642; α(K)=0.00531; α(L)=0.00084
^x 1395.58 9	0.280 28							
1396.09 ^a 15	0.190 ^a 17	1396.142	3 ⁻	0.0	2 ⁻	M1	0.00640	α(K)=0.00529; α(L)=0.00084
1396.09 ^a 15	0.190 ^a 17	1487.136	1 ⁻ ,2 ⁻	91.0057	0 ⁻	M1	0.00640	α(K)=0.00529; α(L)=0.00084
^x 1397.73 16	0.130 7					M1	0.00638	α=0.00638; α(K)=0.00527; α(L)=0.00083
^x 1407.903 24	1.09 14							
^x 1411.54 20	0.090 23							
^x 1411.90 12	0.130 36							
^x 1413.18 17	0.110 15							
^x 1415.73 21	0.070 26							
1422.65 15	0.100 20	1513.565	1 ⁻ ,2 ⁻	91.0057	0 ⁻			
^x 1430.99 9	0.280 22					M1	0.00602	α=0.00602; α(K)=0.00497; α(L)=0.00079
1431.42 13	0.200 42	1431.645	2 ⁻ ,3 ⁻	0.0	2 ⁻			
1432.04 14	0.310 31	1487.136	1 ⁻ ,2 ⁻	55.1812	1 ⁻			
^x 1434.04 11	0.130 14							
^x 1437.53 14	0.120 23							
^x 1441.60 10	0.180 22					M1	0.00591	α=0.00591; α(K)=0.00488; α(L)=0.00077
^x 1443.98 13	0.150 23							
1445.50 10	0.190 32	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	91.0057	0 ⁻			
^x 1450.90 10	0.180 22							
^x 1452.33 10	0.300 57							
^x 1454.22 6	0.250 25					M1	0.00578	α=0.00578; α(K)=0.00478; α(L)=0.00075
^x 1460.22 7	0.280 70							
^x 1460.84 17	0.150 17							
^x 1461.65 22	0.090 32							
^x 1462.12 18	0.140 24							
^x 1466.58 6	0.40 11							
^x 1467.96 10	0.480 38							
^x 1470.00 12	0.160 14							
^x 1474.580 19	0.89 23					M1	0.00558	α=0.00558; α(K)=0.00462; α(L)=0.00073
^x 1477.95 9	0.230 55							
1487.31 ^a 12	0.270 ^a 32	1487.136	1 ⁻ ,2 ⁻	0.0	2 ⁻	M1	0.00547	α(K)=0.00452; α(L)=0.00071
1487.31 ^a 12	0.270 ^a 32	1542.793	3 ⁻	55.1812	1 ⁻	E2 [‡]	0.00547	α(K)=0.00452; α(L)=0.00071 M1 (1996Ma70,1996Ma75).
^x 1488.77 8	0.520 36							

¹⁹⁷Au(n,γ) E=thermal **1996Ma70,1996Ma75,1993Pe04** (continued)

γ(¹⁹⁸Au) (continued)

<u>E_γ</u>	<u>I_γ#@</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.†</u>	<u>α&</u>	<u>Comments</u>
^x 1490.88 19	0.130 22							
^x 1500.58 5	0.26 16							
^x 1504.44 14	0.170 22							
1505.50 ^a 23	0.110 ^a 15	1505.178	1 ⁻ ,2 ⁻	0.0	2 ⁻			
1505.50 ^a 23	0.110 ^a 15	1560.407	3 ⁻	55.1812	1 ⁻			
^x 1513.31 5	0.910 27					M1+E2	0.0032 11	α=0.0032 11; α(K)=0.0032 11
^x 1514.8 4	0.430 52							
^x 1516.19 10	0.350 18							
^x 1516.68 18	0.360 40							
^x 1519.42 4	0.64 20					M1	0.00429	α=0.00429; α(K)=0.00429
^x 1524.40 14	0.100 50							
^x 1526.5 3	0.120 29							
1530.60 8	0.410 33	1530.702	1 ⁻ ,2 ⁻	0.0	2 ⁻			
^x 1533.14 4	0.64 19					(M1,E2)	0.0031 11	α=0.0031 11; α(K)=0.0031 11
^x 1537.72 15	0.320 42							
^x 1539.96 16	0.270 41							
^x 1547.10 11	0.360 36							
^x 1550.49 8	0.490 34							
1554.51 7	0.34 12	1554.429	1 ⁻ ,2 ⁻	0.0	2 ⁻			
^x 1566.79 16	0.170 17							
^x 1567.13 6	0.590 24					M1	0.00397	α=0.00397; α(K)=0.00397
^x 1574.89 7	0.360 22							
^x 1578.47 11	0.270 24							
^x 1597.91 20	0.220 26							
^x 1604.01 7	0.670 47							
^x 1611.43 15	0.440 40							
^x 1615.96 22	0.130 30							
^x 1620.35 15	0.210 40							
^x 1630.61 20	0.180 40							
^x 1633.36 19	0.70 17							
^x 1634.06 7	0.500 80							
^x 1638.5 3	0.190 40							
^x 1642.7 3	0.280 39							
^x 1645.12 10	0.810 49							
^x 1651.1 4	0.130 42							
^x 1656.72 7	0.900 63							
^x 1660.15 16	0.380 61							
^x 1669.2 3	0.73 25							
^x 1693.314 23	7.1 12							
^x 1706.0 3	0.58 20							
^x 4897.4 14	0.360 94							
^x 4905.5 10	0.420 97							
^x 4931.6 10	0.230 97							
^x 4940.3 16	0.080 54							

γ(¹⁹⁸Au) (continued)

<u>E_γ</u>	<u>I_γ#[@]</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>E_γ</u>	<u>I_γ#[@]</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[†]</u>
4958.2 10	0.85 10	(6512.34)	1 ⁺	1554.429	1 ⁻ ,2 ⁻	5474.4 24	0.28 7	(6512.34)	1 ⁺	1032.254	3 ⁻	
4973.1 15	0.080 45	(6512.34)	1 ⁺	1536.380	1 ⁻ ,2 ⁻ ,3 ⁻	5493.7 8	0.57 12	(6512.34)	1 ⁺	1018.430	1 ⁻ ,2 ⁻	
4980.5 15	0.120 43	(6512.34)	1 ⁺	1530.702	1 ⁻ ,2 ⁻	5524.4 10	1.08 12	(6512.34)	1 ⁺	987.5746	3 ⁻	
4999.1 10	0.420 11	(6512.34)	1 ⁺	1513.565	1 ⁻ ,2 ⁻	5539.9 10	0.230 69	(6512.34)	1 ⁺	971.8210	3 ⁻	
5007.5 15	0.080 54	(6512.34)	1 ⁺	1505.178	1 ⁻ ,2 ⁻	^x 5594.75 7	0.610 37					
5024.6 10	0.130 78	(6512.34)	1 ⁺	1487.136	1 ⁻ ,2 ⁻	5620.6 9	0.46 11	(6512.34)	1 ⁺	891.616	1 ⁻ ,2 ⁻	
5035.2 9	0.250 95	(6512.34)	1 ⁺	1475.622	2 ⁻	5643.4 9	0.080 45	(6512.34)	1 ⁺	868.7736	3 ⁻	
5042.5 12	0.250 95	(6512.34)	1 ⁺	1472.097	3 ⁻	5677.3 9	0.070 44	(6512.34)	1 ⁺	835.366	3 ⁻	
5053.7 14	0.080 26	(6512.34)	1 ⁺	1458.988	3 ⁻	5710.70 6	1.710 86	(6512.34)	1 ⁺	801.7064	1 ⁻ ,2 ⁻	
5080.9 10	0.330 53	(6512.34)	1 ⁺	1431.645	2 ⁻ ,3 ⁻	5724.3 8	0.74 20	(6512.34)	1 ⁺	789.2973	1 ⁻	
5086.3 9	0.670 53	(6512.34)	1 ⁺	1423.795	3 ⁻	5766.5 12	0.120 43	(6512.34)	1 ⁺	745.2188	1 ⁻ ,2 ⁻	
5103.0 9	1.180 83	(6512.34)	1 ⁺	1409.399	3 ⁻	5783.7 11	0.10 5	(6512.34)	1 ⁺	728.672	0 ⁻	
5109.5 14	0.210 44	(6512.34)	1 ⁺	1402.086	1 ⁻ ,2 ⁻	5808.2 9	0.33 11	(6512.34)	1 ⁺	703.7299	1 ⁻	
5118.7 16	0.250 43	(6512.34)	1 ⁺	1390.227	2 ⁻	5839.7 8	0.21 10	(6512.34)	1 ⁺	672.6549	1 ⁻ ,2 ⁻	
5141.1 10	0.470 80	(6512.34)	1 ⁺	1371.502	1 ⁻ ,2 ⁻	5880.0 8	0.40 10	(6512.34)	1 ⁺	632.4818	1 ⁻ ,2 ⁻	
5149.9 10	0.620 74	(6512.34)	1 ⁺	1363.350	1 ⁻ ,2 ⁻ ,3 ⁻	5941.32 7	0.620 37	(6512.34)	1 ⁺	571.2430	1 ⁻	
5153.5 11	0.78 44	(6512.34)	1 ⁺	1359.038	1 ⁻ ,2 ⁻ ,3 ⁻	5983.19 6	1.380 69	(6512.34)	1 ⁺	529.1687	3 ⁻	
5174.7 8	0.30 10	(6512.34)	1 ⁺	1338.171	3 ⁻	6106.43 14	0.630 44	(6512.34)	1 ⁺	406.0081	2 ⁻	
5206.4 10	0.210 80	(6512.34)	1 ⁺	1306.859	2 ⁻	6145.3 10	0.39 22	(6512.34)	1 ⁺	368.2549	1 ⁻	
5217.8 10	0.210 80	(6512.34)	1 ⁺	1293.902	1 ⁻ ,2 ⁻	6149.55 7	1.00 5	(6512.34)	1 ⁺	362.8994	2 ⁻	
^x 5223.1 14	0.180 52					6165.5 9	0.230 69	(6512.34)	1 ⁺	346.9062	2 ⁻	
5226.1 8	0.570 97	(6512.34)	1 ⁺	1286.747	2 ⁻	6251.05 17	1.94 31	(6512.34)	1 ⁺	261.4047	2 ⁻	
5244.4 14	0.69 26	(6512.34)	1 ⁺	1265.524	1 ⁻ ,2 ⁻ ,3 ⁻	6253.11 13	3.28 33	(6512.34)	1 ⁺	259.3404	1 ⁻	
5272.1 14	0.52 26	(6512.34)	1 ⁺	1240.385	3 ⁻	6264.9 10	0.61 12	(6512.34)	1 ⁺	247.5731	1 ⁻	
5279.5 8	0.49 12	(6512.34)	1 ⁺	1232.8022	3 ⁻	6276.8 8	1.19 18	(6512.34)	1 ⁺	236.0453	3 ⁻	
5303.0 14	0.26 7	(6512.34)	1 ⁺	1209.370	3 ⁻	^x 6319.23 6	3.24 16					E1
5418.8 9	0.130 43	(6512.34)	1 ⁺	1092.876	0 ⁻	6457.37 6	2.66 13	(6512.34)	1 ⁺	55.1812	1 ⁻	E1
5456.0 12	0.10 5	(6512.34)	1 ⁺	1056.719	2 ⁻	6512.63 7	1.82 9	(6512.34)	1 ⁺	0.0	2 ⁻	E1
^x 5462.9 8	0.300 69											

[†] From internal-conversion electron measurements (1996Ma70,1996Ma75). The conversion electron intensities not given in 1996Ma70.

[‡] From J^π between transition levels.

Photons per 100 neutron captures given by authors (1996Ma70,1996Ma75). For absolute intensities, a systematic error of 20% has to be added.

@ For intensity per 100 neutron captures, multiply by 0.88 18.

& 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.

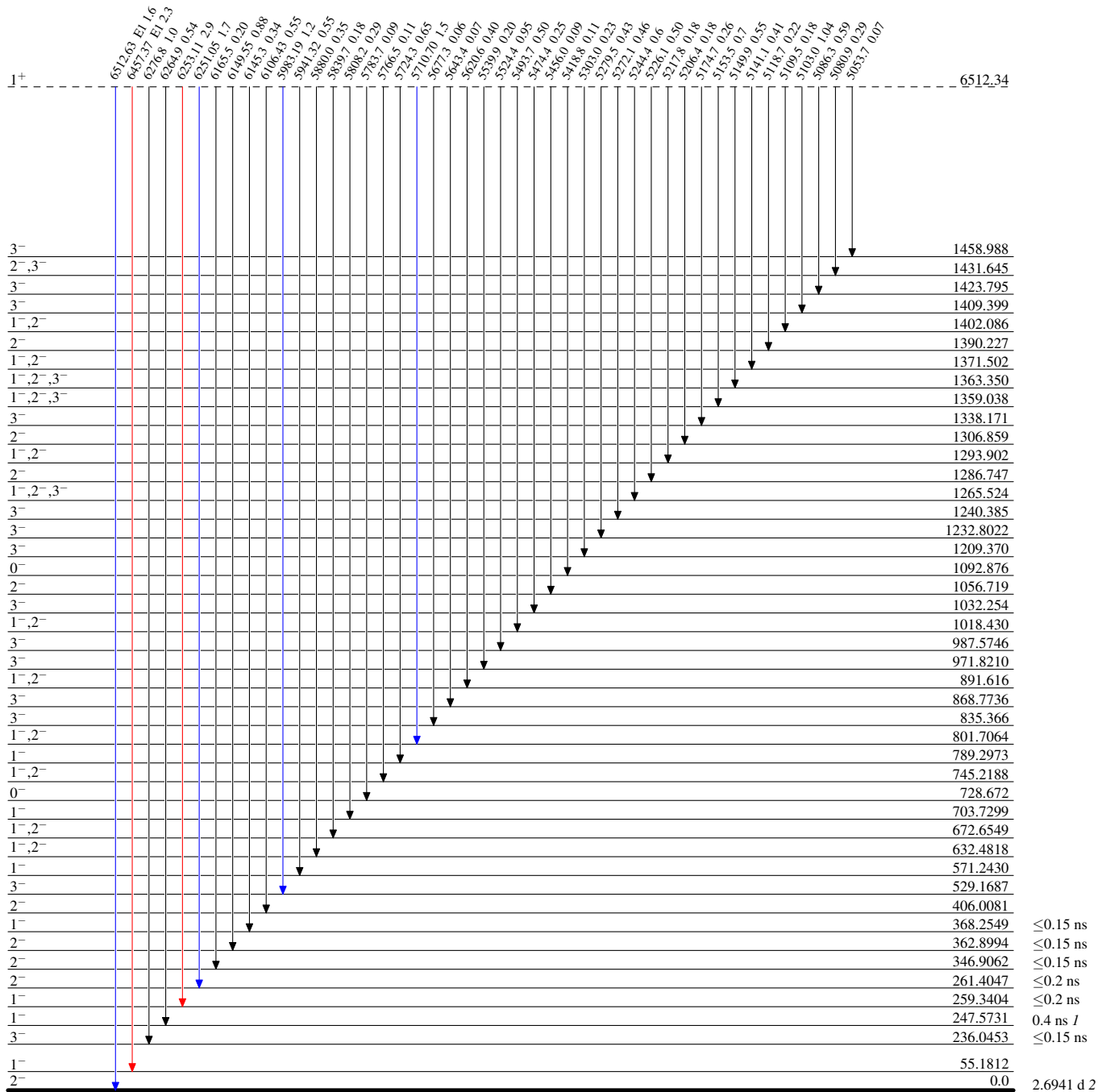
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Legend

Level Scheme

Intensities: I_γ per 100 neutron captures

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



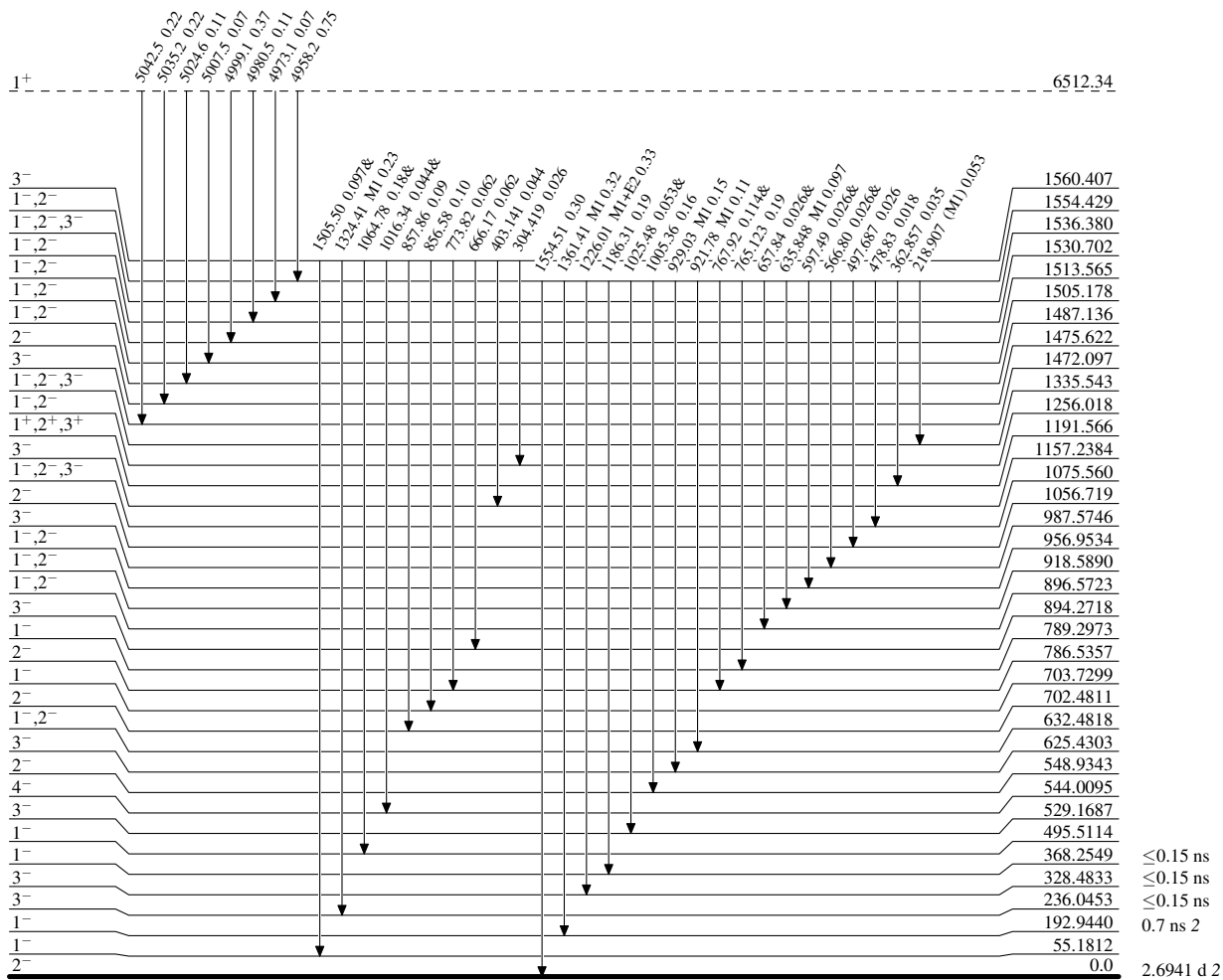
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

Legend

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

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹⁹⁸Au₁₁₉

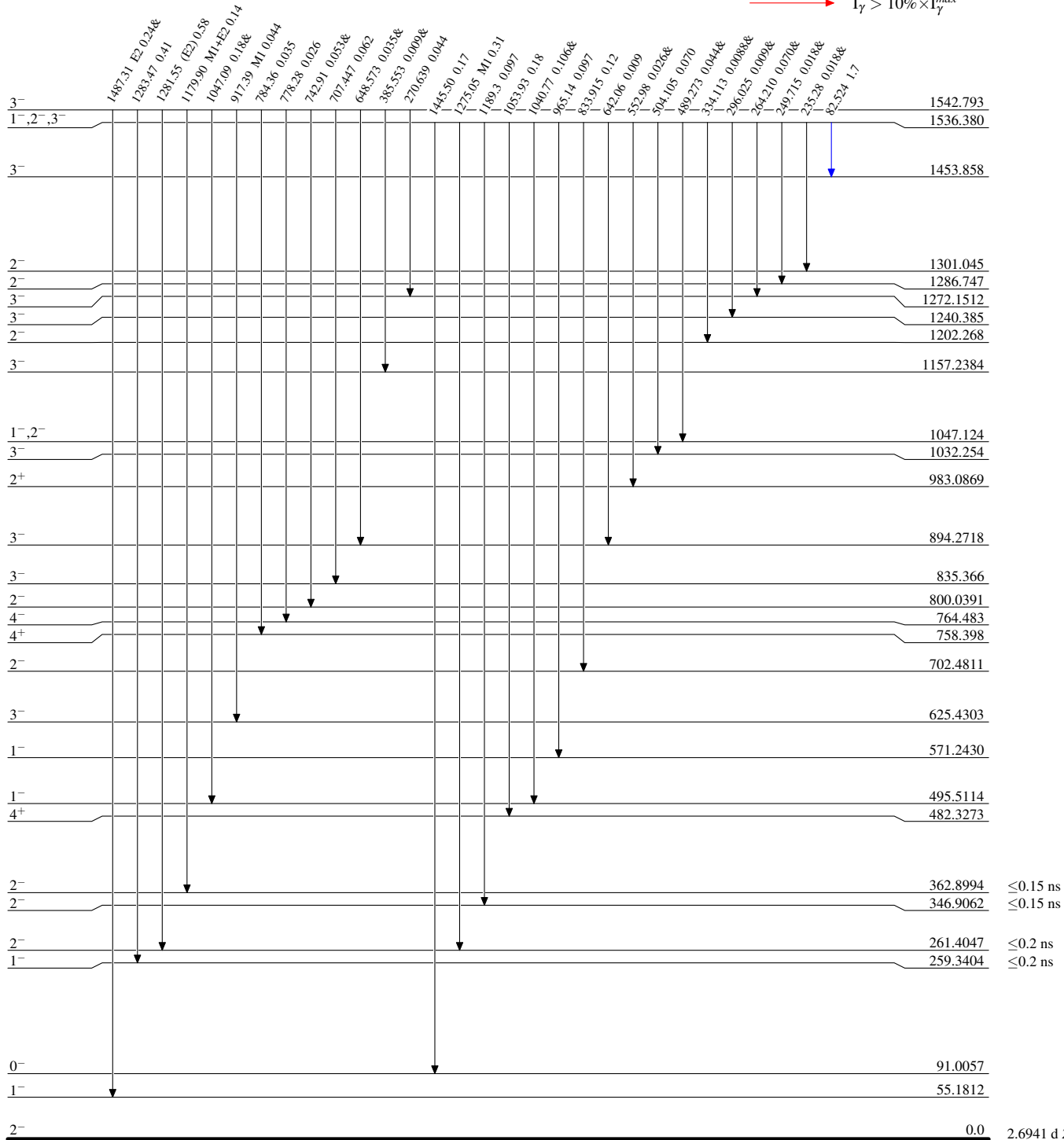
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

Legend

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

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



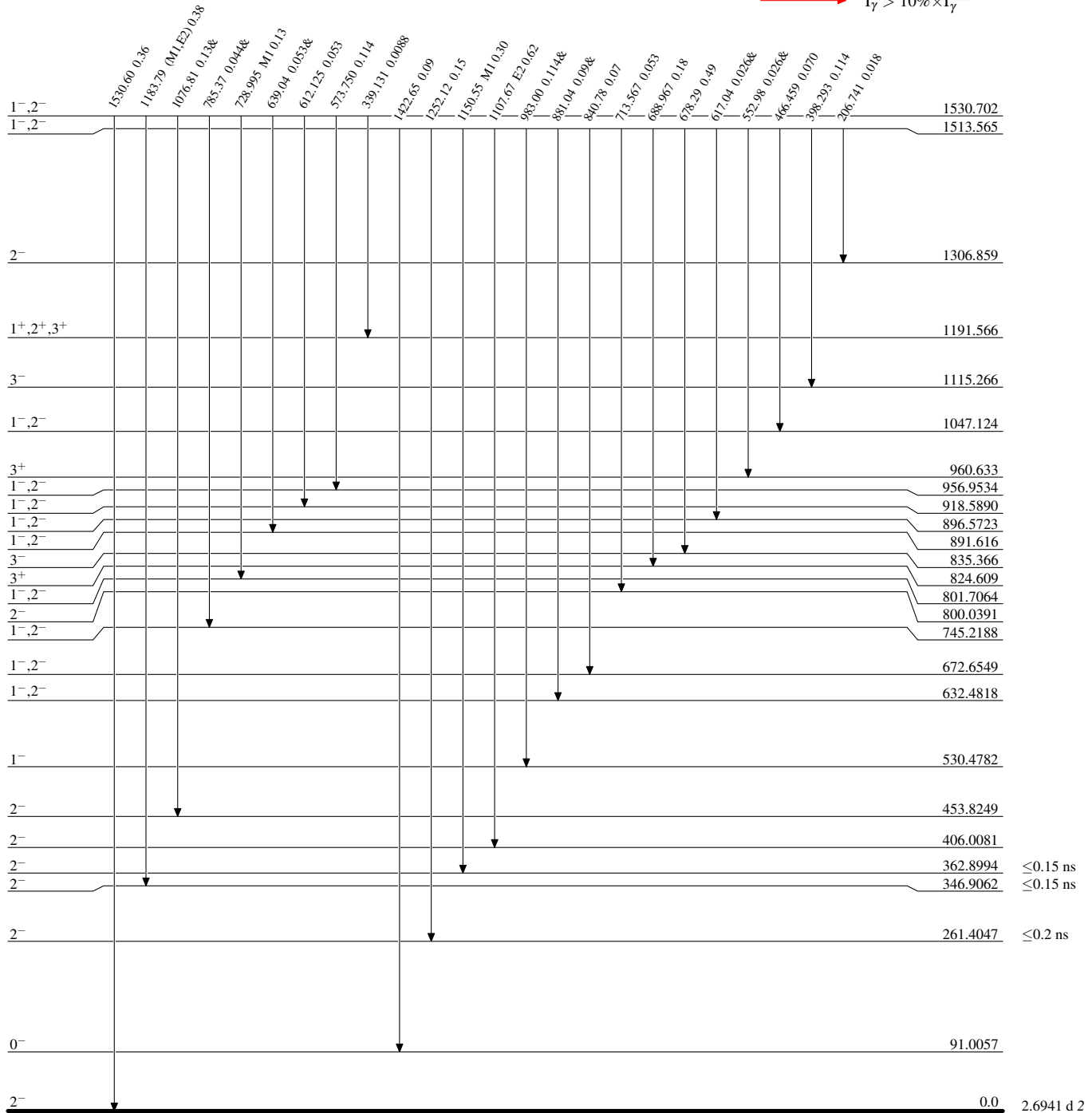
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

Legend

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

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹⁹⁸Au₁₁₉

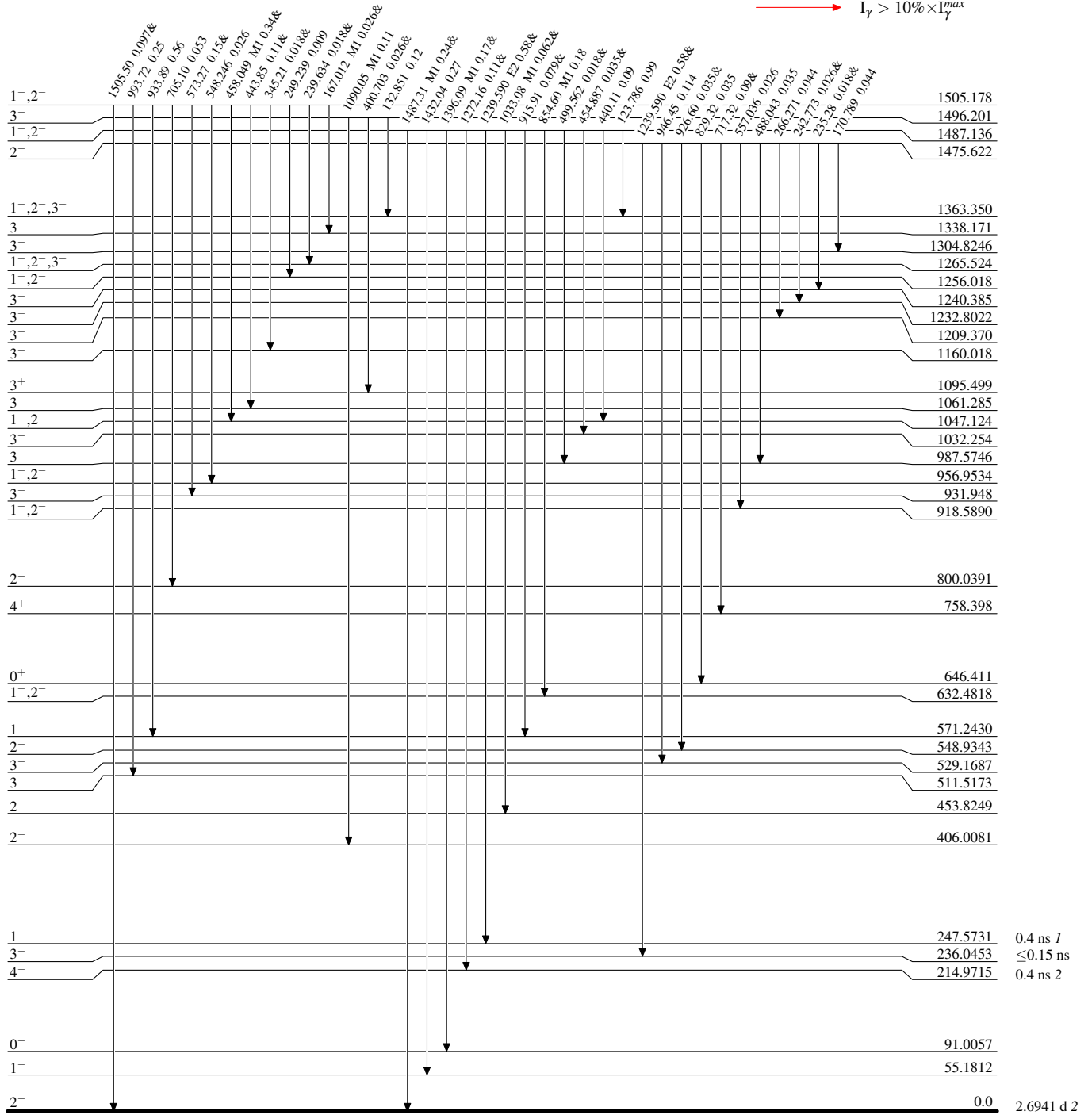
$^{197}\text{Au}(n,\gamma) E=\text{thermal}$ 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

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



$^{198}_{79}\text{Au}_{119}$

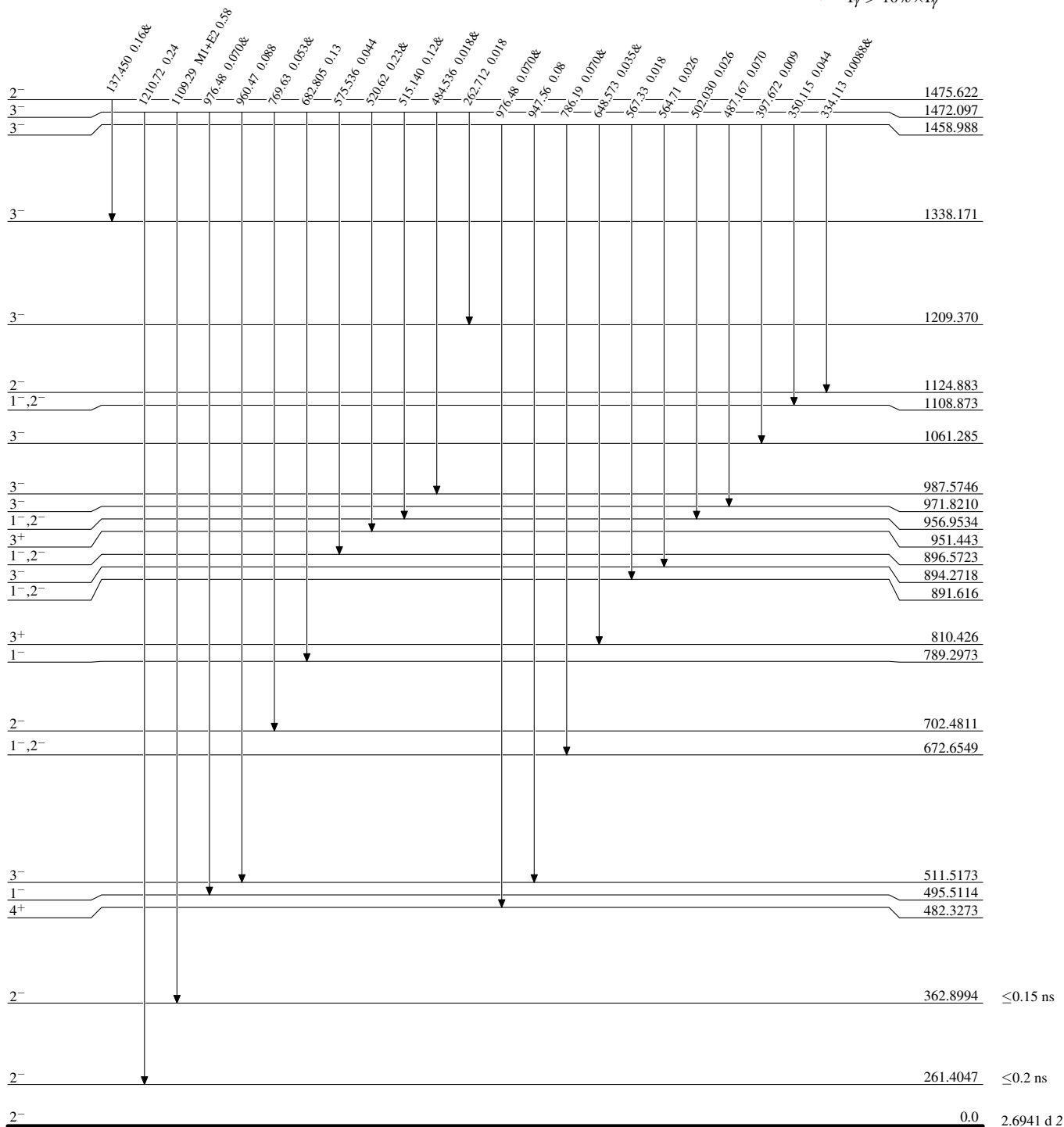
$^{197}\text{Au}(n,\gamma)$ E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

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



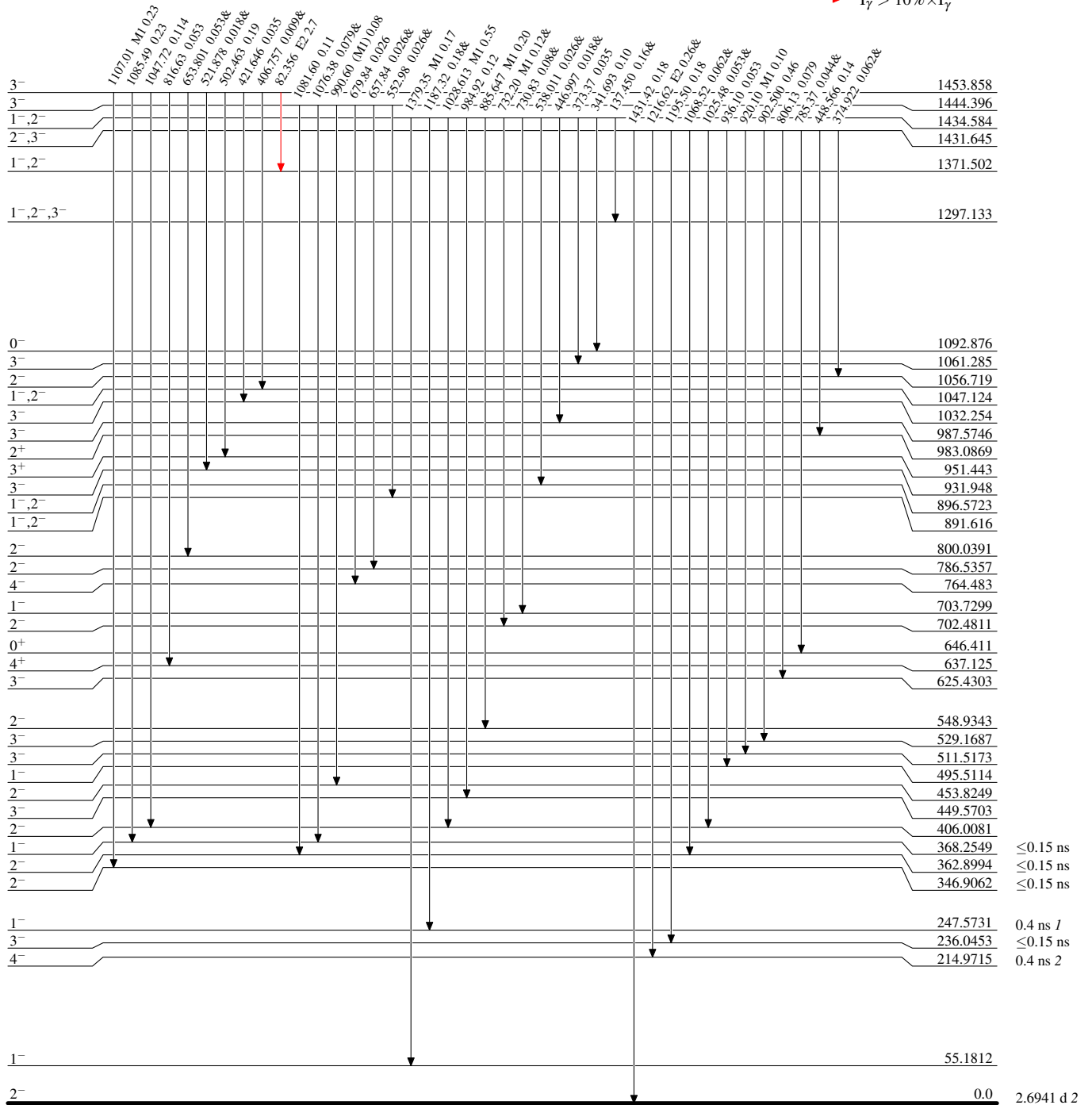
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹⁹⁸Au₁₁₉

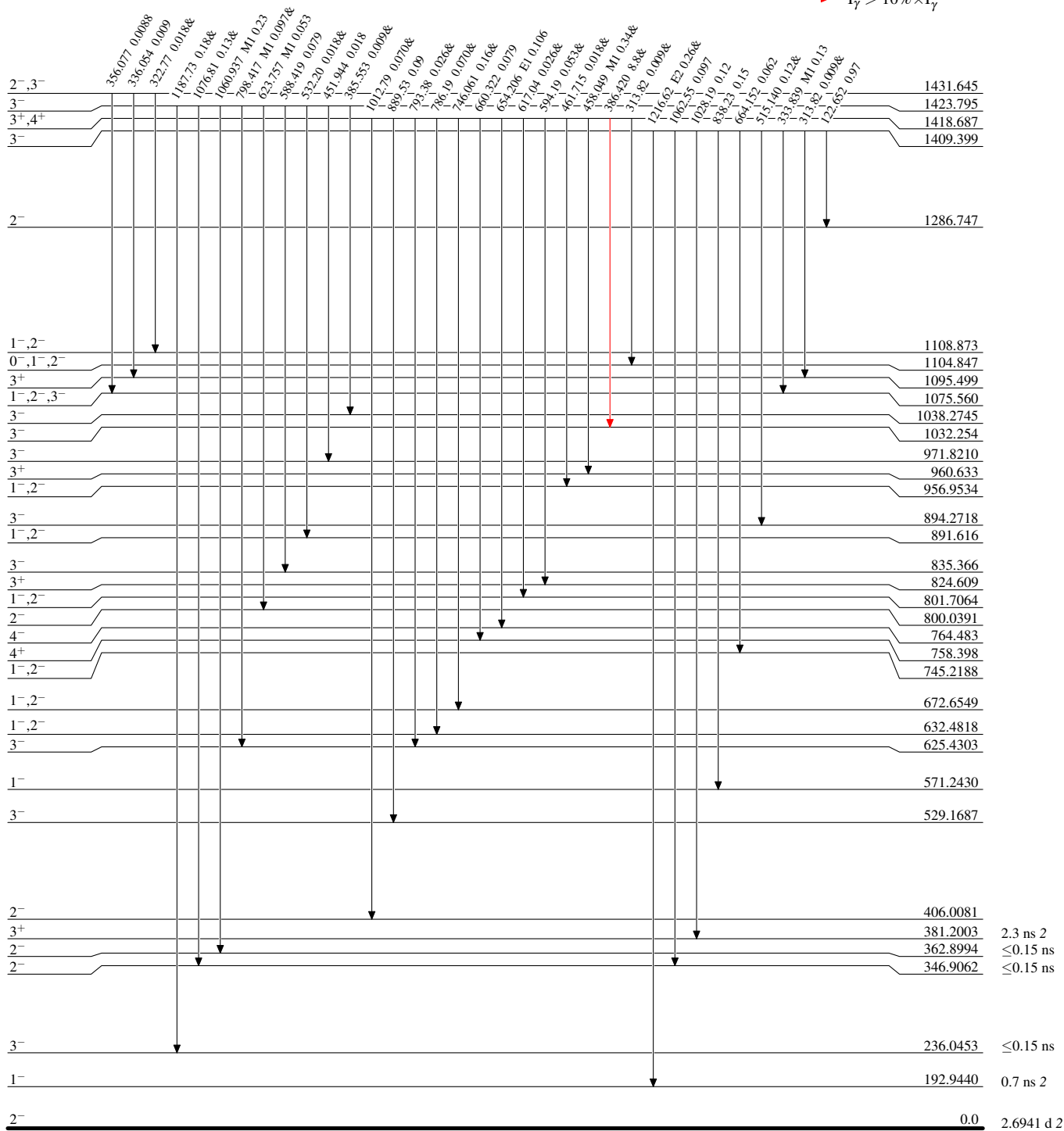
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



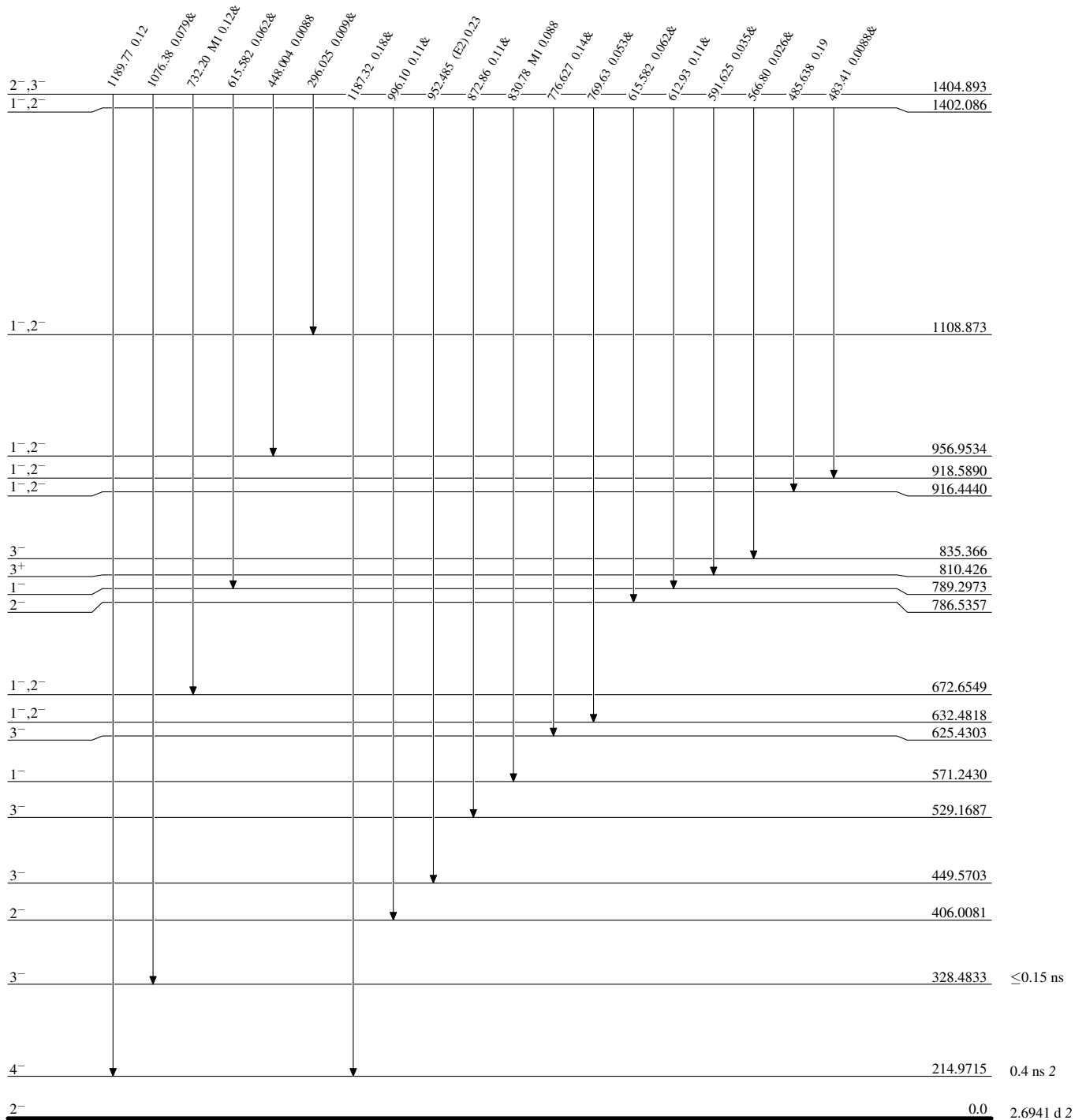
$^{197}\text{Au}(n,\gamma)$ E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

Legend

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

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



$^{198}_{79}\text{Au}_{119}$

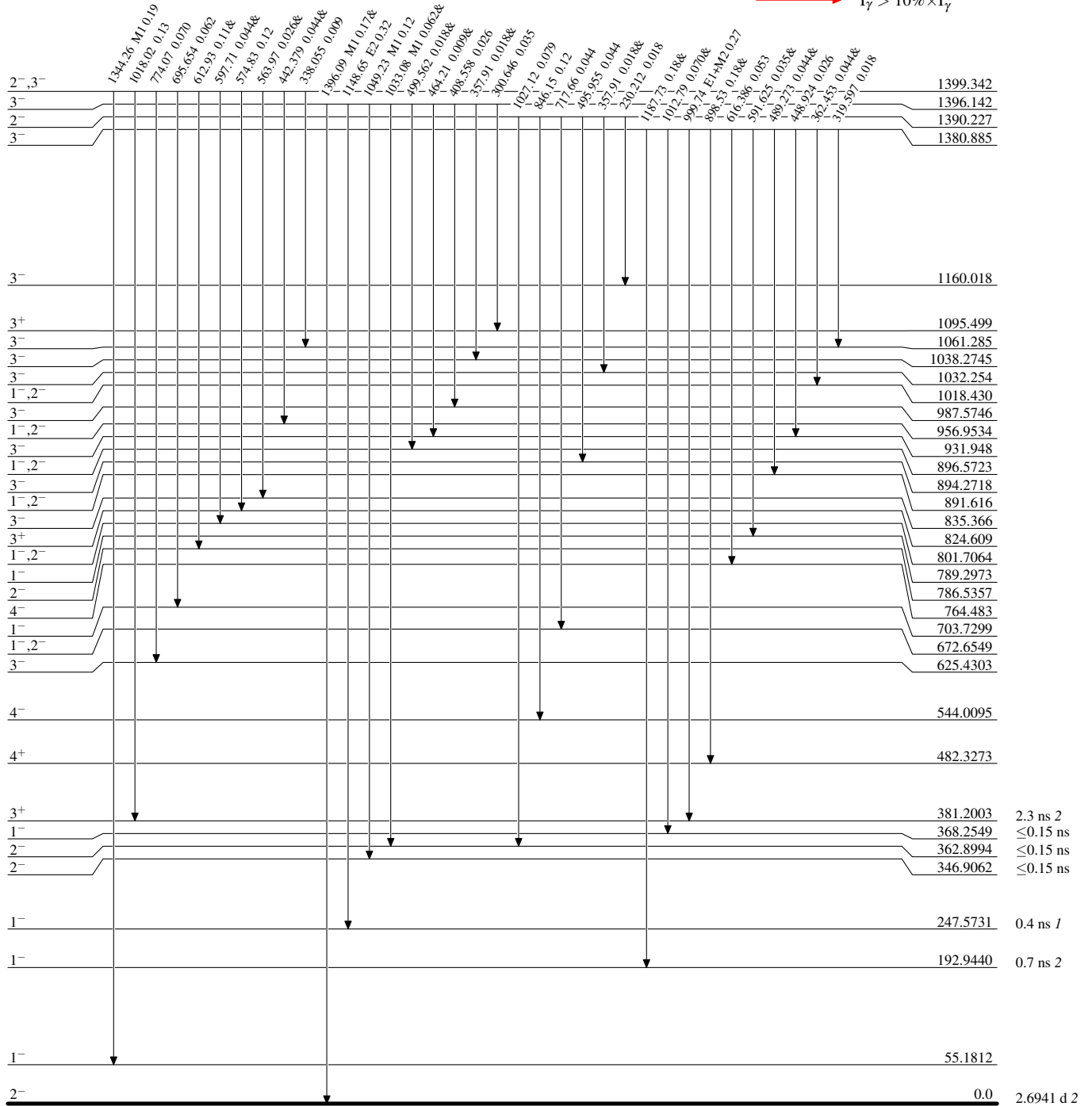
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹⁹⁸Au₁₁₉

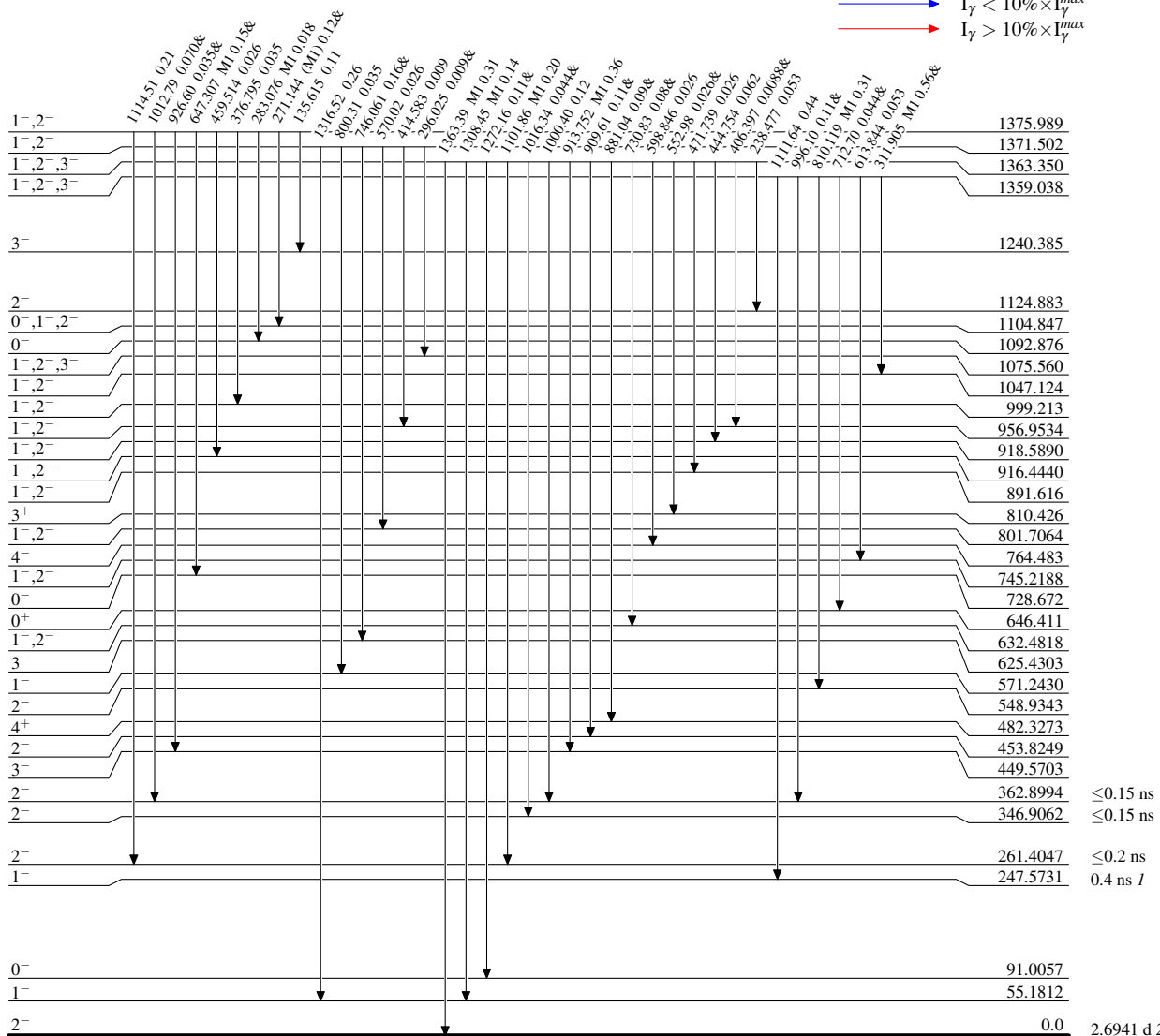
$^{197}\text{Au}(n,\gamma)$ E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

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



$^{198}_{79}\text{Au}_{119}$

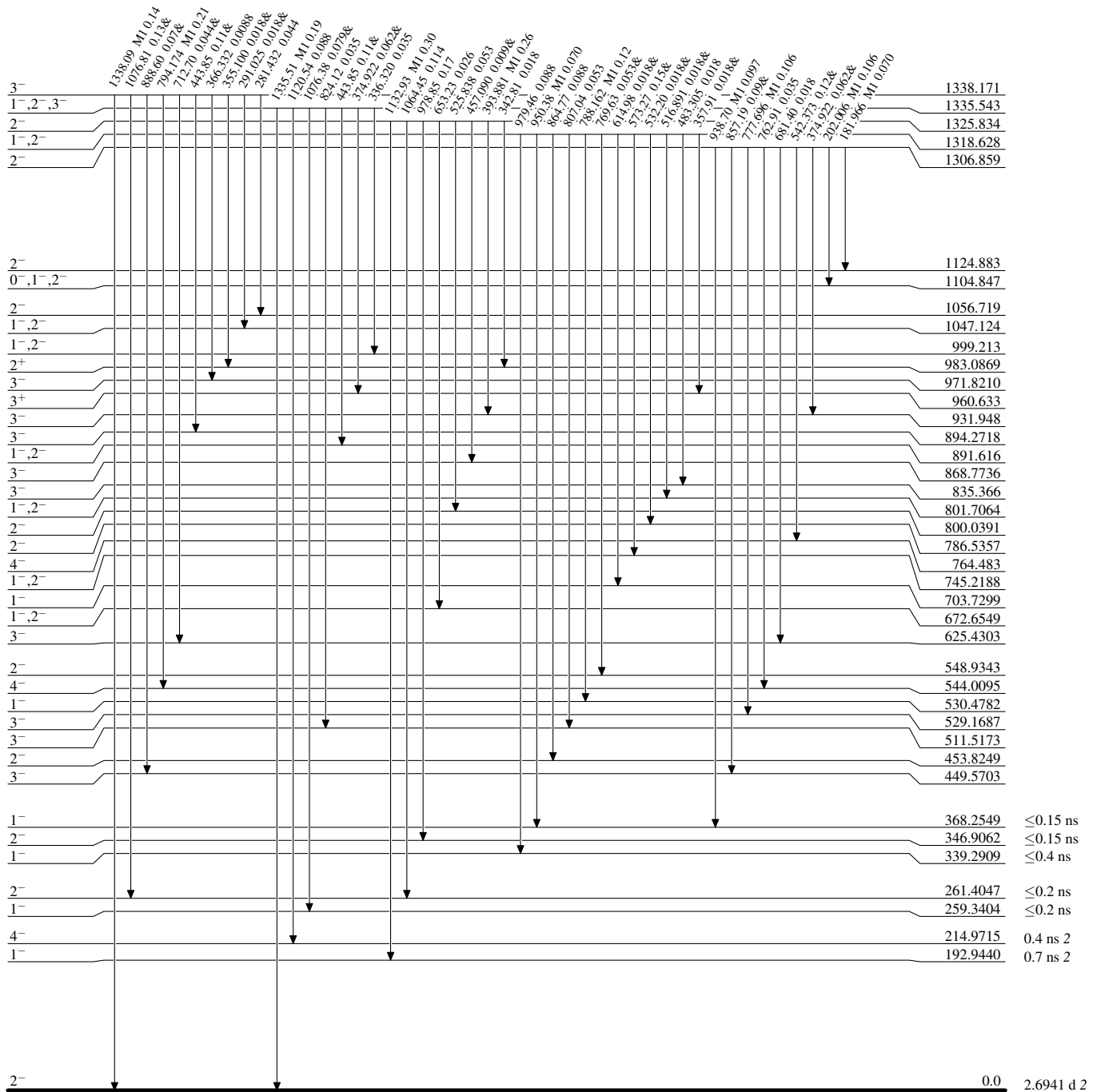
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

Legend

Intensities: I_γ per 100 neutron captures
& Multiplied placed: undivided intensity given

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



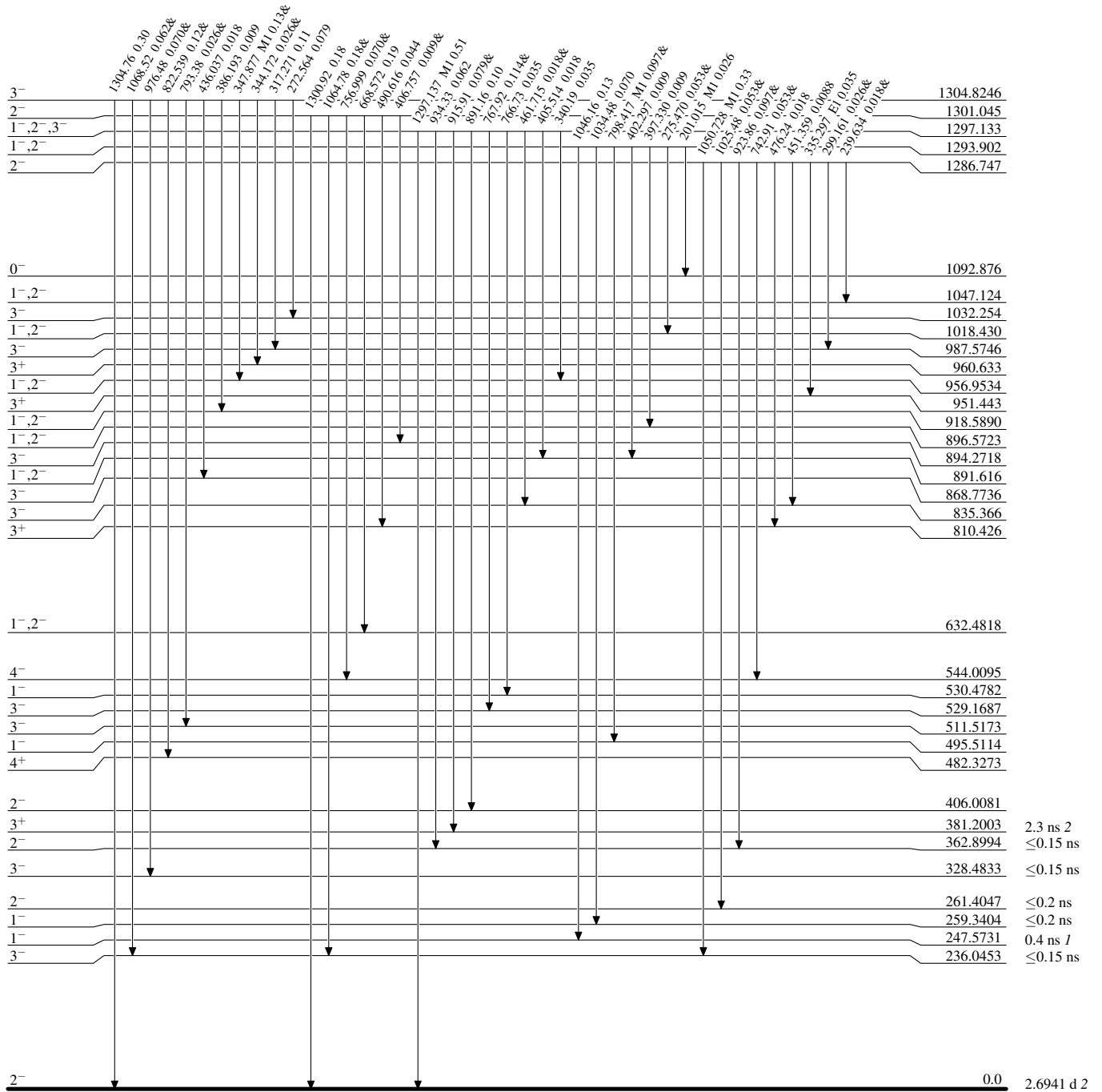
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹⁹⁸Au₁₁₉

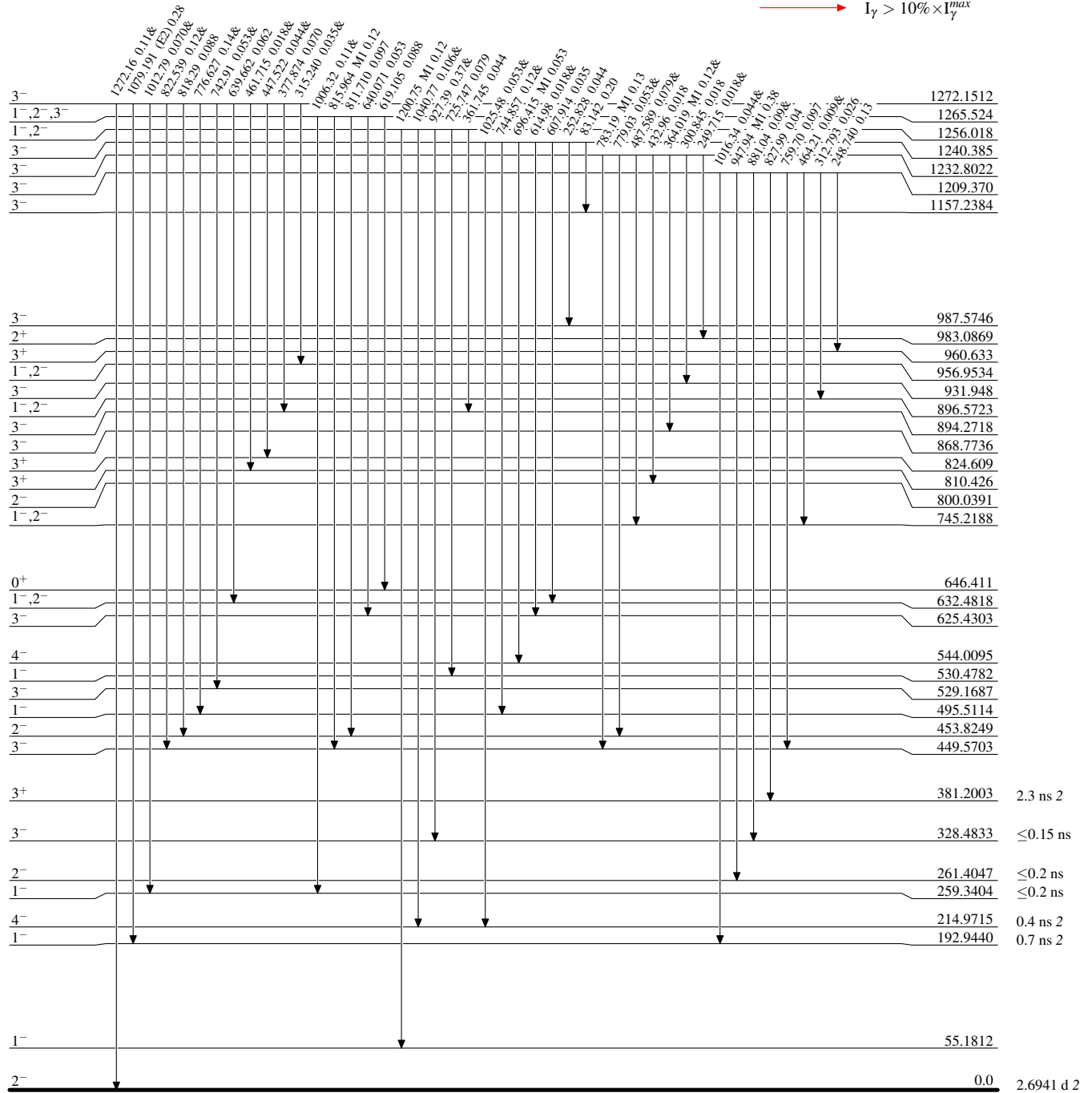
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹⁹⁸Au₁₁₉

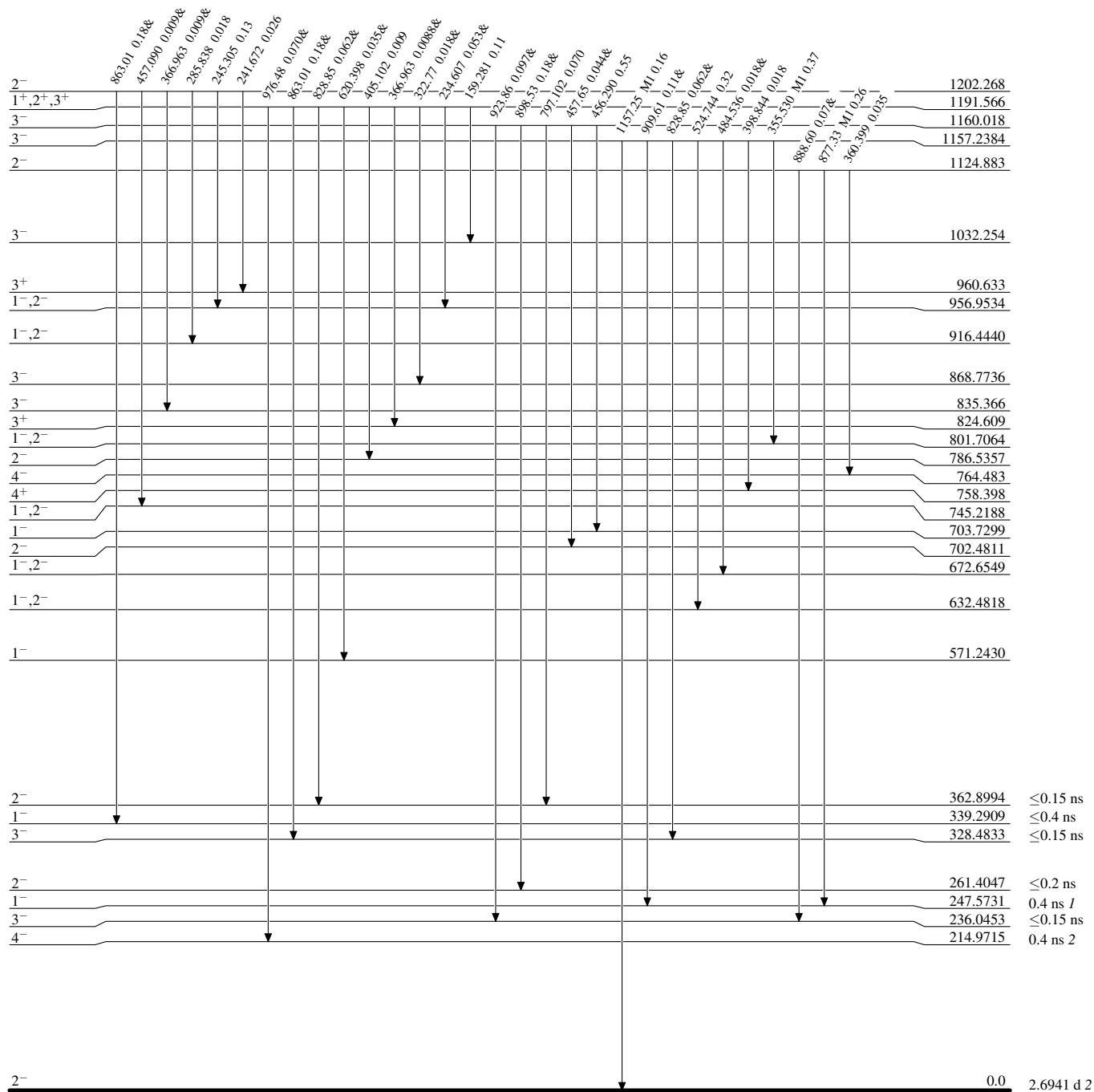
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

Legend

Intensities: I_γ per 100 neutron captures
& Multiplied placed: undivided intensity given

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹⁹⁸Au₁₁₉

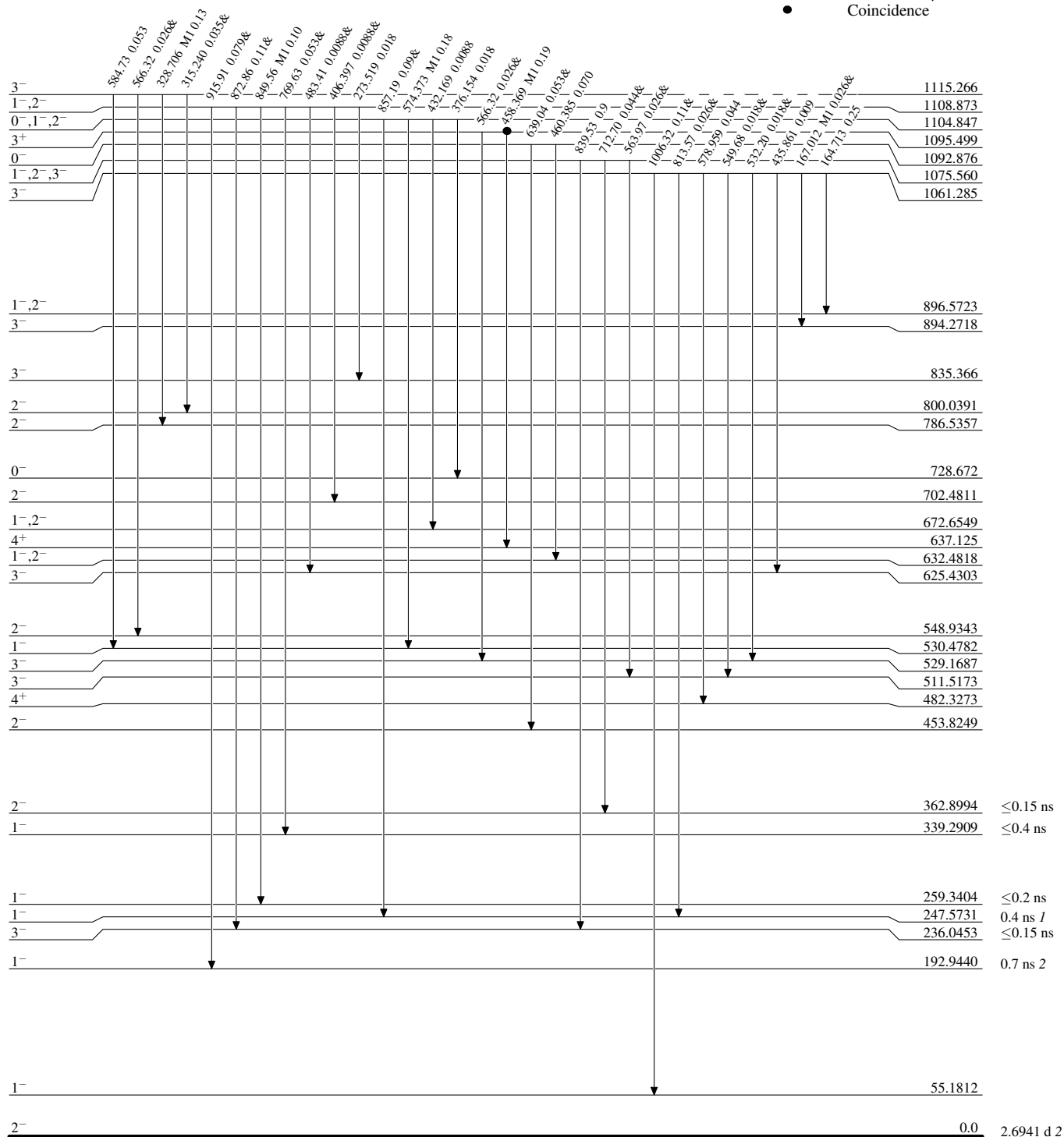
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}
- Coincidence



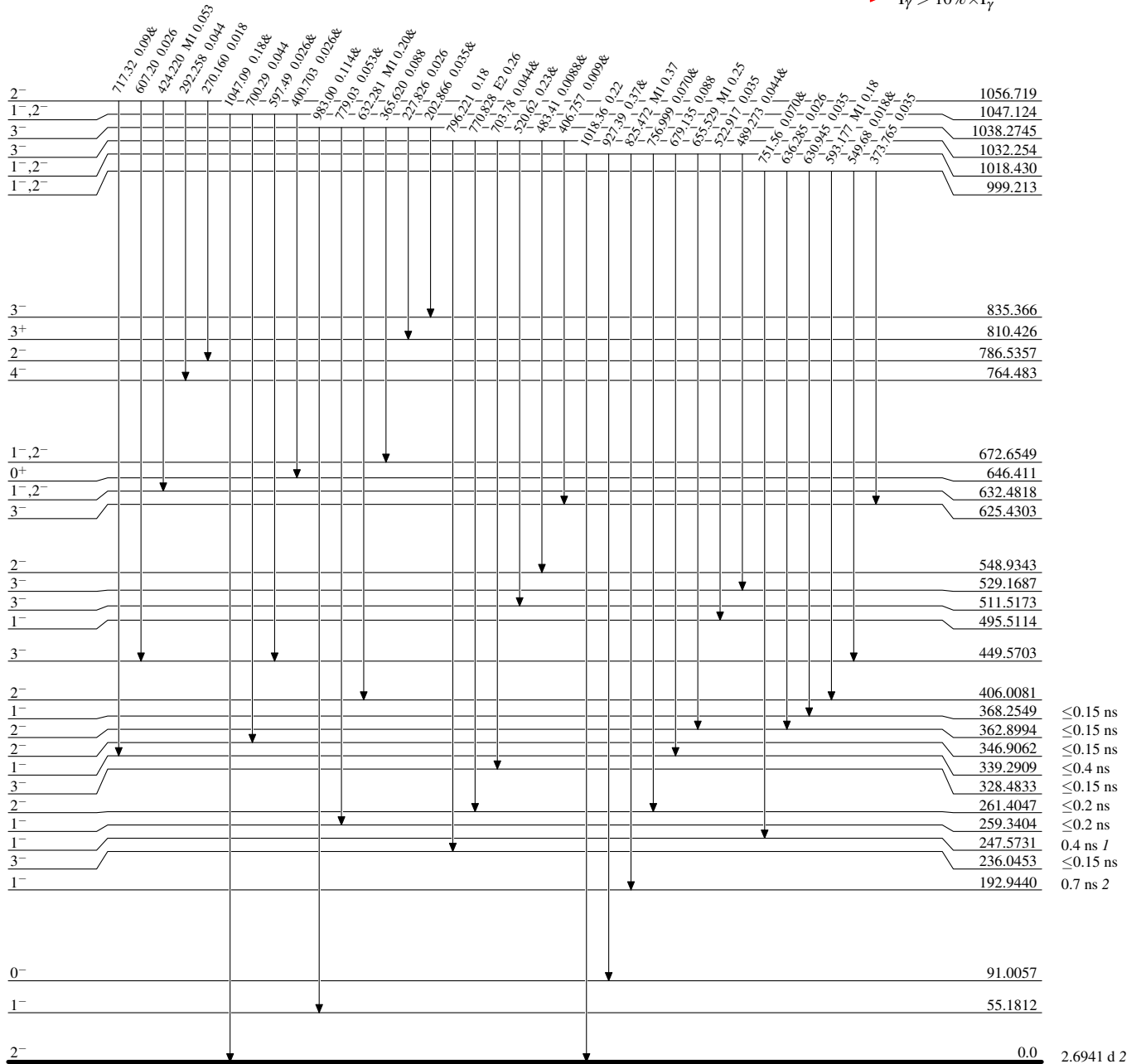
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

Intensities: I_γ per 100 neutron captures
& Multiplied placed: undivided intensity given

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹⁹⁸Au₁₁₉

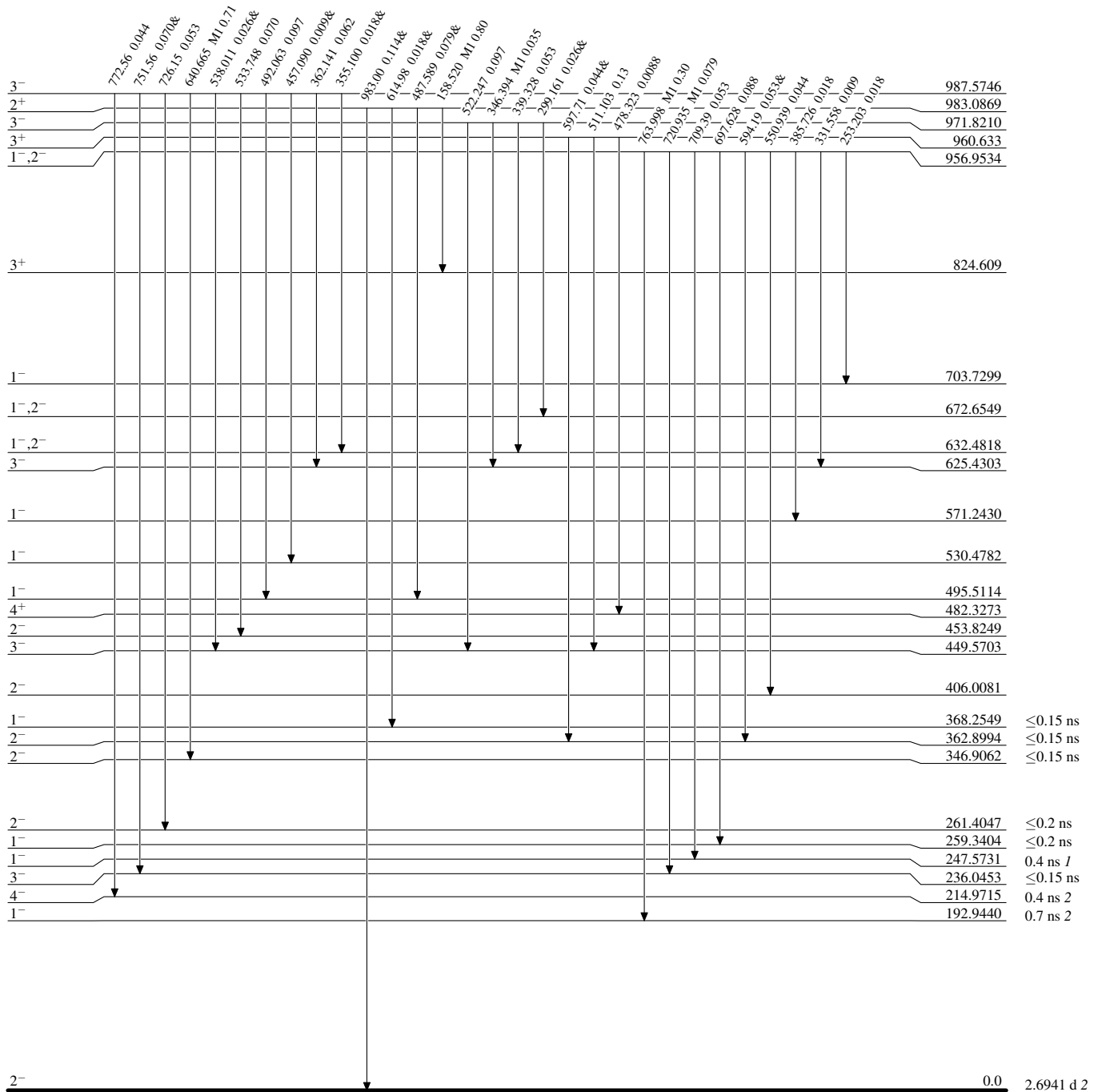
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

Legend

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

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹⁹⁸Au₁₁₉

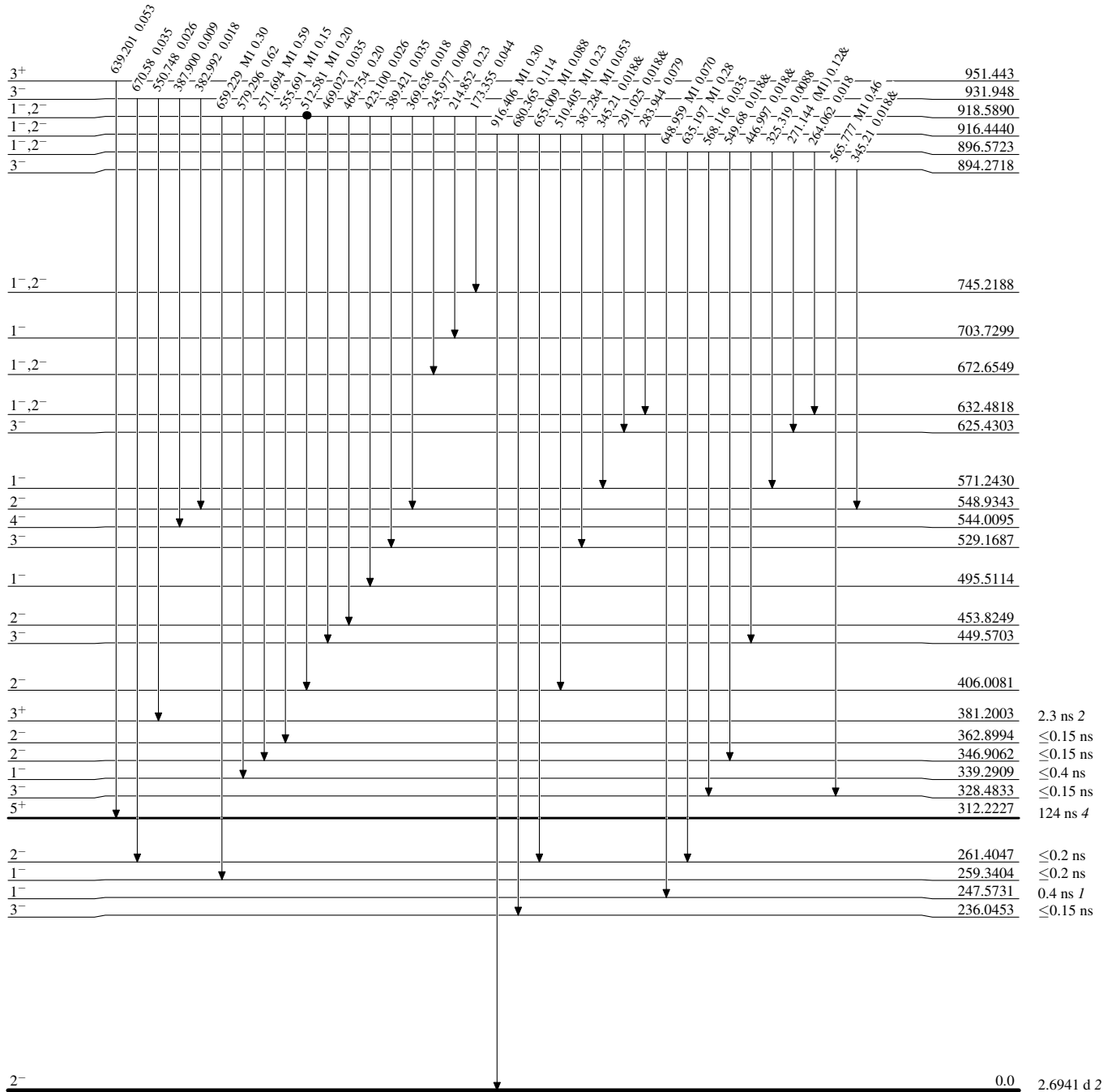
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}
- Coincidence



¹⁹⁸Au₁₁₉

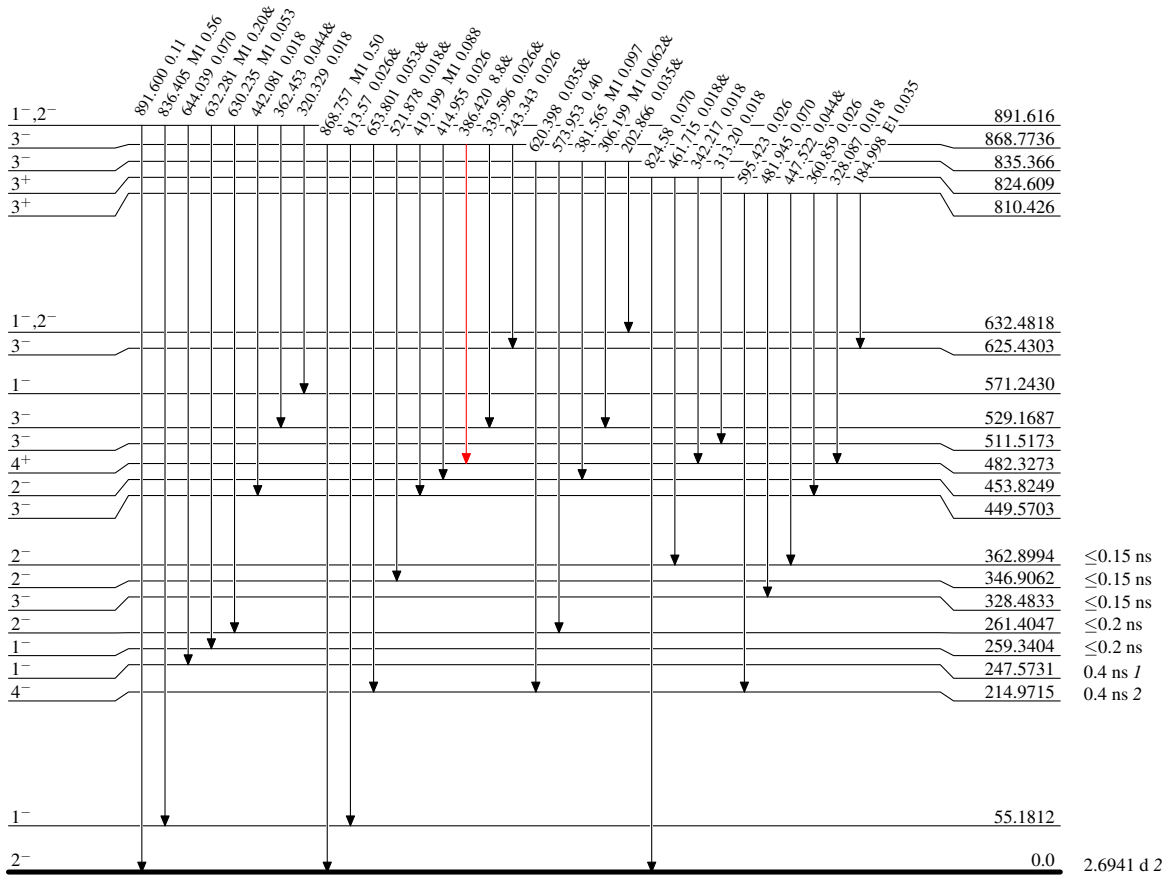
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

Legend

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

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹⁹⁸Au₁₁₉

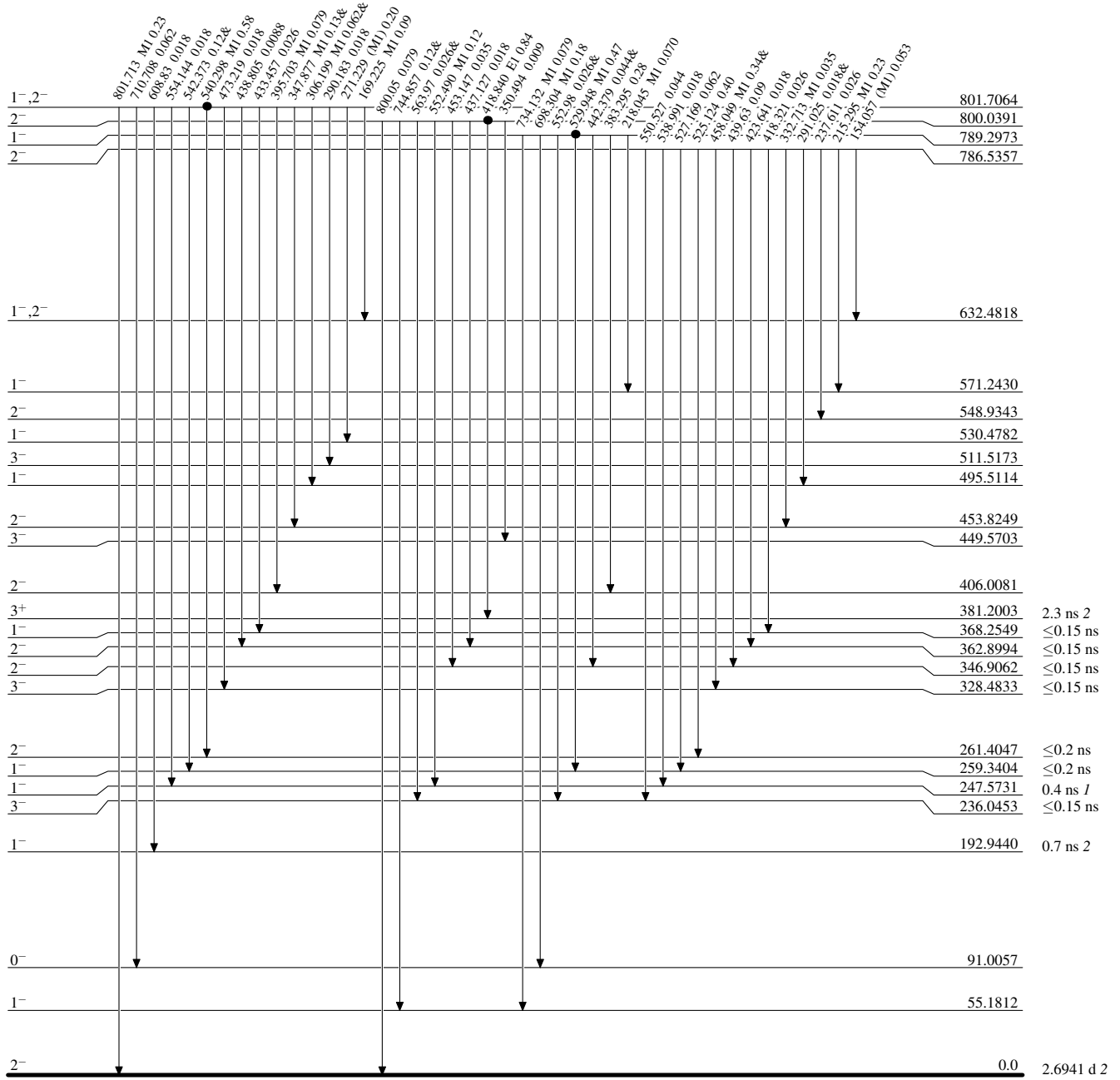
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}
- Coincidence



¹⁹⁸Au₁₁₉

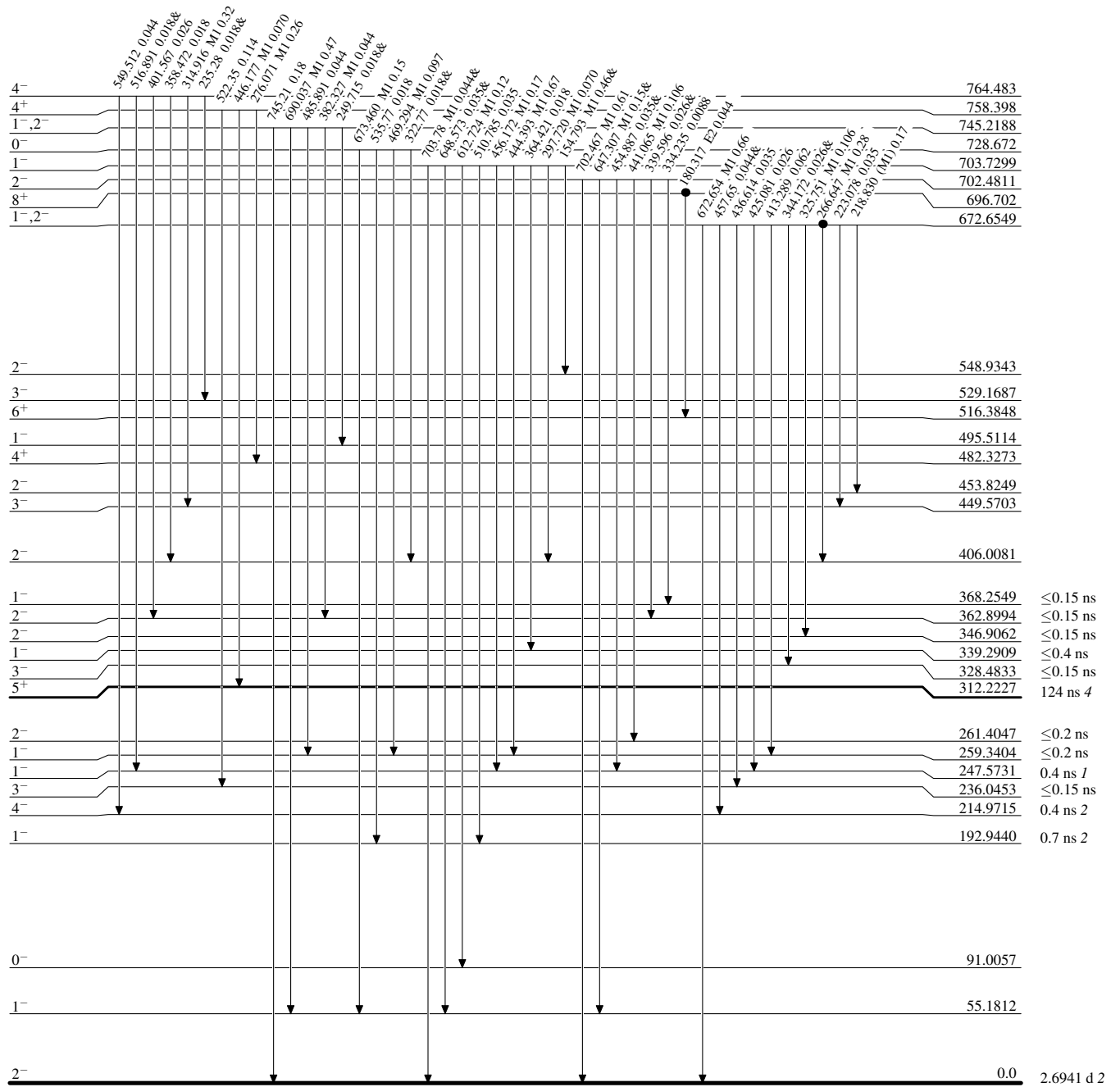
¹⁹⁷Au(n,γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Legend

Level Scheme (continued)

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

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}
- Coincidence



¹⁹⁸Au₁₁₉

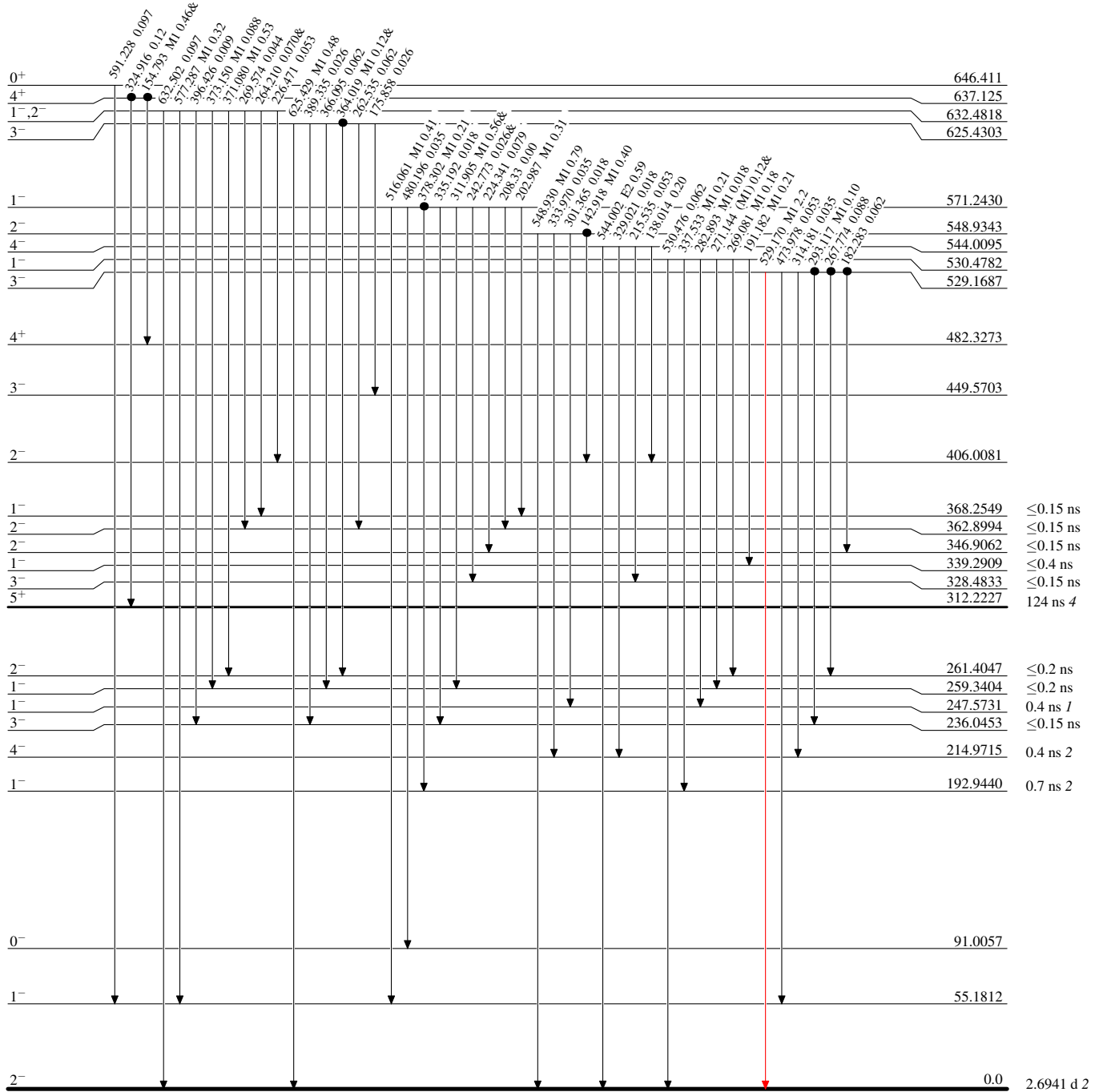
¹⁹⁷Au(n, γ) E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

Intensities: I γ per 100 neutron captures
& Multiplied placed: undivided intensity given

Legend

- I γ < 2% × I γ^{max}
- I γ < 10% × I γ^{max}
- I γ > 10% × I γ^{max}
- Coincidence



¹⁹⁸Au₁₁₉

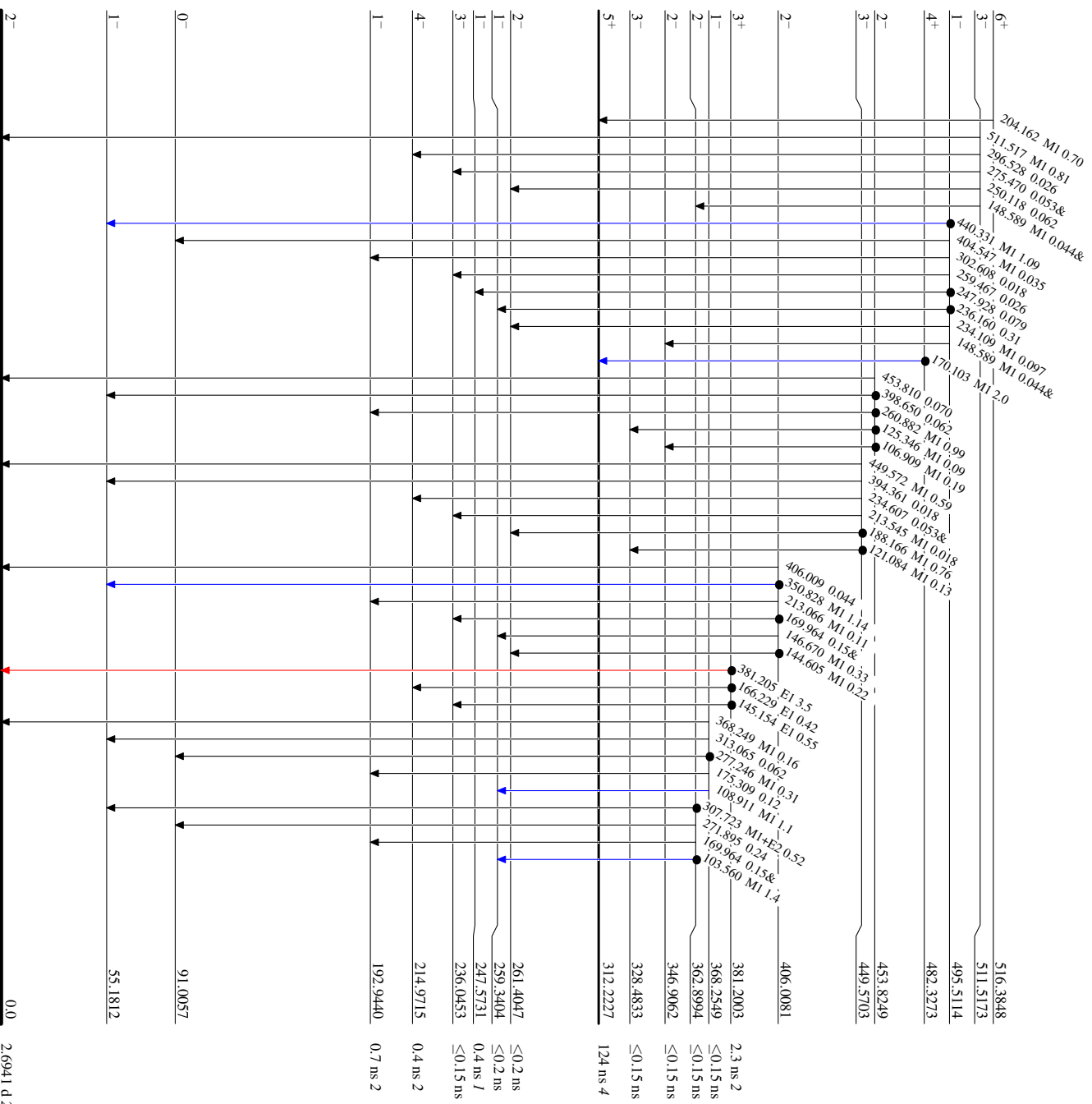
¹⁹⁷Au(n,γ)¹⁹⁸Au E=thermal 1996Ma70,1996Ma75,1993Pe04

Level Scheme (continued)

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

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}
- Coincidence



¹⁹⁸Au₁₁₉
⁷⁹Au₁₁₉

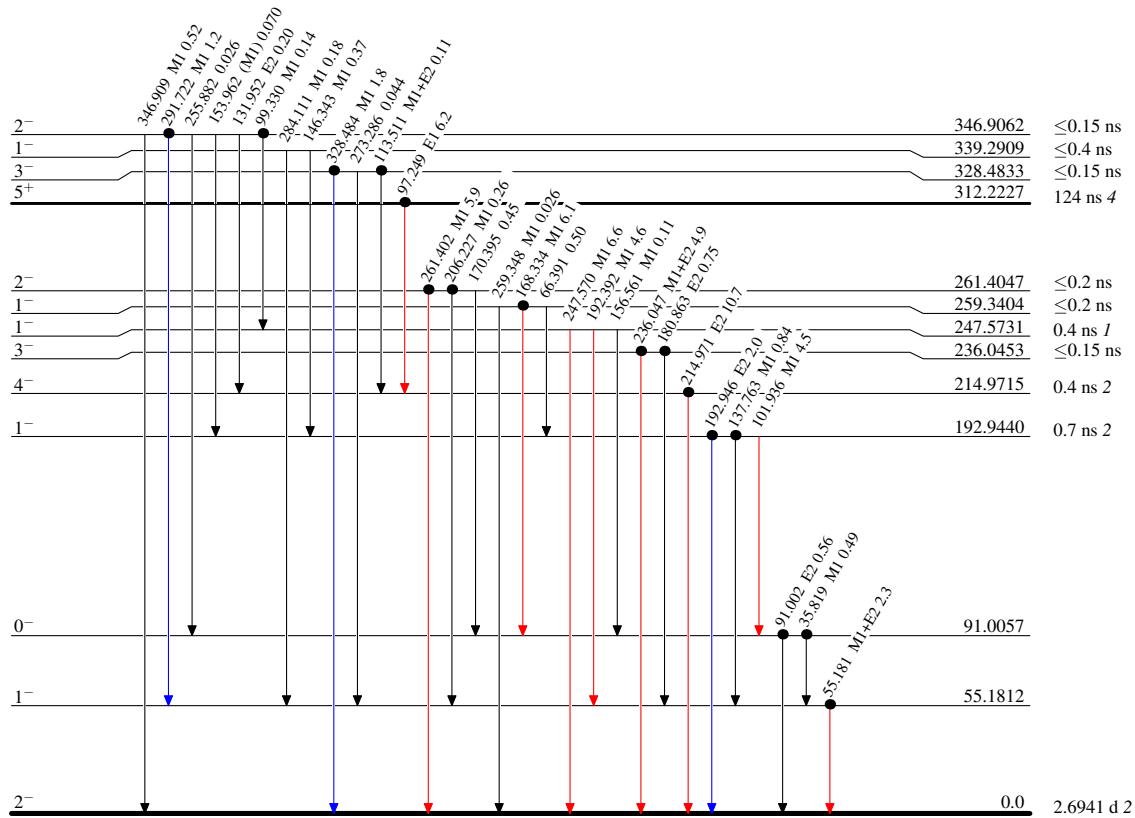
$^{197}\text{Au}(n,\gamma)$ E=thermal 1996Ma70,1996Ma75,1993Pe04

Legend

Level Scheme (continued)

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

- \blacktriangleright $I_\gamma < 2\% \times I_\gamma^{max}$
- $\color{blue}\blacktriangleright$ $I_\gamma < 10\% \times I_\gamma^{max}$
- $\color{red}\blacktriangleright$ $I_\gamma > 10\% \times I_\gamma^{max}$
- \bullet Coincidence



$^{198}_{79}\text{Au}_{119}$