

$^{105}\text{Cd}$   $\varepsilon$  decay 1976Ja05

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, J. Timar and Z. Elekes		NDS 161, 1 (2019)	1-Apr-2019

Parent:  $^{105}\text{Cd}$ :  $E=0.0$ ;  $J^\pi=5/2^+$ ;  $T_{1/2}=55.5$  min 4;  $Q(\varepsilon)=2737$  4;  $\% \varepsilon + \% \beta^+$  decay=100.0

**1976Ja05**: Facility: Lawrence Livermore Laboratory ICT accelerator; Source:  $^{105}\text{Cd}$  from  $^{106}\text{Cd}(n,2n)$  reaction. 50-100 mg CdO, enriched to 82.09% in  $^{106}\text{Cd}$ . Neutrons from  $^2\text{H}(^3\text{H},\alpha)n$  reaction. Rotating target. Irradiation for 1 min to 1 h. Off-beam measurement for 10-20 min; Detectors: two large-volume Compton-suppressed Ge(Li) and one small 1.5 cm<sup>3</sup> Ge(Li) X-ray detector; Measured: X,  $\gamma$ ,  $\gamma$ - $\gamma$ -coinc.,  $E\gamma$ ; Deduced:  $J^\pi$ ,  $^{105}\text{Ag}$  level scheme.

**1979Fr03**: Facility: ISOLDE/CERN synchro-cyclotron; Source:  $^{105}\text{Cd}$  from Sn spallation; Detectors: cylindrical plastic scintillator and electron spectrometer. FWHM=83.5 ps; Measured:  $\gamma$ -ce(t) coinc.; Deduced:  $T_{1/2}$ .

**1976Sv04**: Facility: Gustaf Werner Institute's synchro-cyclotron; Source: chemically separated  $^{105}\text{Cd}$  from  $^{107}\text{Ag}(p,3n)$  reaction at  $E(p)=31$  MeV; Target: enriched to 98% in  $^{107}\text{Ag}$ ; Detectors: magnet spectrometer in double and single focusing modes, NE111 plastic scintillator. FWHM=1.5 ns; Measured: X- and  $\gamma$ -rays,  $E\gamma$ , ce, Ice, x-ce(t) coinc.; Deduced:  $\delta$ ,  $T_{1/2}$ .

Others: **1979De28**, **1978Sh08**, **1974Bu15**, **1969Ho36**, **1969St18**, **1953Jo20**, **1950Gu54**.

 $^{105}\text{Ag}$  Levels

E(level) <sup>†</sup>	$J^\pi$ <sup>‡</sup>	$T_{1/2}$	Comments
0.0	1/2 <sup>-</sup>		
25.470 16	7/2 <sup>+</sup>	7.23 min 16	$T_{1/2}$ : from the Adopted Levels.
53.140 18	9/2 <sup>+</sup>	2.33 ns 8	$T_{1/2}$ : from $\gamma$ -27.67ce(t) coinc. in <b>1979Fr03</b> ; Other: 1.8 2 ns X-27.67ce(t) coinc. in <b>1976Sv04</b> .
346.867 16	3/2 <sup>-</sup>		
433.222 22	5/2 <sup>-</sup>		
877.86 6	3/2 <sup>-</sup>		
987.312 21	(5/2) <sup>+</sup>		
1023.67 5	7/2 <sup>-</sup>		
1042.66 5	3/2 <sup>-</sup> ,5/2 <sup>-</sup>		
1097.18 4	(9/2 <sup>+</sup> )		
1166.29 9	9/2 <sup>-</sup>		
1243.41 7	(3/2 <sup>+</sup> ,5/2,7/2 <sup>-</sup> )		
1294.897 21	1/2 <sup>+</sup>		
1327.928 21	5/2 <sup>+</sup>		
1386.27 3	3/2 <sup>+</sup> ,5/2 <sup>+</sup>		
1416.10 10	1/2,3/2,5/2 <sup>-</sup>		
1441.59 3	5/2 <sup>+</sup>		
1543.2 3	3/2 <sup>-</sup> ,5/2 <sup>-</sup>		
1557.881 21	3/2 <sup>+</sup>		
1586.87 3	1/2 <sup>+</sup>		
1635.80? 6	5/2 <sup>+</sup>		
1635.81? 6	3/2 <sup>+</sup>		
1656.2 4	3/2,5/2,7/2		
1669.54 3	(3/2 <sup>+</sup> ,5/2)		
1690.79 4	(3/2 <sup>+</sup> ,5/2)		
1718.83 4	(5/2 to 11/2)		
1750.14 3	(5/2 <sup>+</sup> )		
1794.44 5	7/2 <sup>+</sup>		
1884.8? 2	(9/2 <sup>+</sup> )		
1885.73? 15	(5/2 <sup>+</sup> ,7/2 <sup>+</sup> ,9/2 <sup>+</sup> )		
1922.97 3	(7/2) <sup>+</sup>		
1986.34 4	(5/2 <sup>+</sup> )		
2081.64 6	5/2 <sup>+</sup> ,7/2 <sup>+</sup>		
2144.4 4	3/2 <sup>-</sup> ,5/2 <sup>-</sup>		
2156.42 5	3/2 <sup>+</sup>		
2249.57 4	(1/2 <sup>+</sup> ,3/2)		

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<sup>105</sup>Cd ε decay **1976Ja05** (continued)

<sup>105</sup>Ag Levels (continued)

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>
2256.49 6	5/2 <sup>+</sup>	2327.83 7	3/2 <sup>+</sup> , 5/2 <sup>+</sup> , 7/2 <sup>+</sup>	2429.10 8	(3/2 <sup>+</sup> )
2275.99 20	5/2 <sup>+</sup>	2333.34 3	3/2 <sup>+</sup>	2447.21 10	(5/2 <sup>+</sup> , 7/2 <sup>+</sup> )
2300.39 7	3/2 <sup>+</sup> , 5/2 <sup>+</sup>	2371.79 17	5/2 <sup>+</sup> , 7/2 <sup>+</sup>	2472.99 6	(3/2 <sup>+</sup> , 5/2 <sup>+</sup> , 7/2 <sup>+</sup> )
2308.32 6	3/2 <sup>+</sup>	2400.62 7	(3/2 <sup>+</sup> )	2494.8 3	(3/2 <sup>+</sup> to 9/2 <sup>-</sup> )
2314.81 5	5/2 <sup>+</sup>	2419.30 8	5/2 <sup>+</sup> , 7/2 <sup>+</sup> , 9/2 <sup>+</sup>	2550.68 9	(5/2 <sup>-</sup> )
2326.04 3	(5/2 <sup>+</sup> )	2423.08 9	3/2 <sup>+</sup>	2584.25 16	(5/2 <sup>+</sup> )

<sup>†</sup> From a least-squares fit to E<sub>γ</sub>.

<sup>‡</sup> From the Adopted Levels.

ε, β<sup>+</sup> radiations

E(decay)	E(level)	Iβ <sup>+</sup> <sup>†</sup>	Iε <sup>†</sup>	Log ft	I(ε+β <sup>+</sup> ) <sup>†</sup>	Comments
(153 4)	2584.25		0.049 11	5.41 11	0.049 11	εK=0.8239 14; εL=0.1401 11; εM+=0.0360 4
(186 4)	2550.68		0.42 6	4.67 7	0.42 6	εK=0.8329 9; εL=0.1331 7; εM+=0.03395 20
(242 4)	2494.8		0.030 6	6.07 9	0.030 6	εK=0.8416 5; εL=0.1264 4; εM+=0.03198 11
(264 4)	2472.99		0.38 6	5.05 7	0.38 6	εK=0.8439 4; εL=0.1246 3; εM+=0.03147 9
(290 4)	2447.21		0.22 3	5.38 6	0.22 3	εK=0.8461 4; εL=0.12292 25; εM+=0.03097 7
(308 4)	2429.10		0.28 5	5.33 8	0.28 5	εK=0.8474 3; εL=0.12191 22; εM+=0.03068 7
(314 4)	2423.08		0.56 5	5.05 4	0.56 5	εK=0.8478 3; εL=0.12161 21; εM+=0.03059 6
(318 4)	2419.30		0.34 6	5.27 8	0.34 6	εK=0.8480 3; εL=0.12142 20; εM+=0.03054 6
(336 4)	2400.62		0.59 6	5.09 5	0.59 6	εK=0.8491 3; εL=0.12057 18; εM+=0.03029 5
(365 4)	2371.79		0.41 4	5.32 5	0.41 4	εK=0.8506 2; εL=0.11944 15; εM+=0.02996 5
(404 4)	2333.34		4.4 3	4.38 4	4.4 3	εK=0.8522 2; εL=0.1182 2; εM+=0.02960 4
(409 4)	2327.83		0.42 6	5.42 7	0.42 6	εK=0.8524 2; εL=0.1181 2; εM+=0.02956 4
(411 4)	2326.04		7.9 6	4.15 4	7.9 6	εK=0.8525 2; εL=0.1180 2; εM+=0.02954 4
(422 4)	2314.81		0.62 5	5.28 4	0.62 5	εK=0.8528 2; εL=0.1177 1; εM+=0.02946 3
(429 4)	2308.32		0.65 8	5.27 6	0.65 8	εK=0.8531 2; εL=0.1175 1; εM+=0.02941 3
(437 4)	2300.39		0.33 5	5.58 7	0.33 5	εK=0.8533 2; εL=0.1173 1; εM+=0.02935 3
(461 4)	2275.99		0.047 10	6.48 10	0.047 10	εK=0.8540 2; εL=0.11677 9; εM+=0.02919 3
(481 4)	2256.49		1.11 9	5.14 4	1.11 9	εK=0.8546 1; εL=0.11637 8; εM+=0.02907 3
(487 4)	2249.57		1.51 13	5.02 4	1.51 13	εK=0.8547 1; εL=0.11624 8; εM+=0.02903 3
(581 4)	2156.42		0.68 5	5.53 4	0.68 5	εK=0.8567; εL=0.11475 6; εM+=0.02860 2
(593 4)	2144.4		0.023 10	7.01 19	0.023 10	εK=0.8569; εL=0.11459 6; εM+=0.02856 2
(655 4)	2081.64		0.95 7	5.49 4	0.95 7	εK=0.8578; εL=0.11387 5; εM+=0.02835 2
(751 4)	1986.34		3.17 22	5.09 3	3.17 22	εK=0.8589; εL=0.11302 4; εM+=0.028104 9
(814 4)	1922.97		2.95 20	5.19 3	2.95 20	εK=0.8595; εL=0.11257 3; εM+=0.027974 8
(851 4)	1885.73?		0.103 24	6.69 11	0.103 24	εK=0.8598; εL=0.11234 3; εM+=0.027907 7
(987 4)	1750.14		1.16 9	5.77 4	1.16 9	εK=0.8606; εL=0.11164 2; εM+=0.027707 5
(1018 <sup>‡</sup> 4)	1718.83		0.11 8	6.8 4	0.11 8	εK=0.8608; εL=0.11151 2; εM+=0.027668 5
(1046 4)	1690.79		0.43 10	6.25 11	0.43 10	εK=0.8610; εL=0.11140 2; εM+=0.027636 5
(1067 4)	1669.54		0.58 6	6.14 5	0.58 6	εK=0.8611; εL=0.11132 2; εM+=0.027612 5
(1081 4)	1656.2		0.24 8	6.53 15	0.24 8	εK=0.8611; εL=0.11127 2; εM+=0.027598 5
(1101 4)	1635.80?		1.24 9	5.84 4	1.24 9	εK=0.8612; εL=0.11119 2; εM+=0.027577 4
(1179 4)	1557.881		2.26 16	5.64 4	2.26 16	εK=0.8615; εL=0.11093 2; εM+=0.027500 4
(1194 4)	1543.2		0.023 5	7.64 10	0.023 5	εK=0.8615; εL=0.11088 2; εM+=0.027486 4
(1295 4)	1441.59	0.0043 5	3.2 3	5.57 4	3.2 3	av Eβ=129.3 18; εK=0.8608; εL=0.11047 2; εM+=0.027374 6
(1351 4)	1386.27	0.00043 23	0.15 8	6.94 24	0.15 8	av Eβ=153.5 18; εK=0.8596 2; εL=0.11017 3; εM+=0.027293 7
(1409 4)	1327.928	0.022 2	4.0 3	5.55 4	4.0 3	av Eβ=178.8 18; εK=0.8575 2; εL=0.10974 4; εM+=0.027183 9

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$^{105}\text{Cd}$   $\epsilon, \beta^+$  decay **1976Ja05** (continued) $\epsilon, \beta^+$  radiations (continued)

<u>E(decay)</u>	<u>E(level)</u>	<u><math>I\beta^+</math></u> †	<u><math>I\epsilon</math></u> †	<u>Log <math>ft</math></u>	<u><math>I(\epsilon + \beta^+)</math></u> †	<u>Comments</u>
(1494 4)	1243.41	0.0008 3	0.069 23	7.36 15	0.070 23	av $E\beta=215.3$ 18; $\epsilon K=0.8522$ 4; $\epsilon L=0.10887$ 5; $\epsilon M+=0.02696$ 2
(1571 4)	1166.29	0.0018 3	0.082 16	7.33 9	0.084 16	av $E\beta=248.7$ 18; $\epsilon K=0.8446$ 5; $\epsilon L=0.10774$ 7; $\epsilon M+=0.02668$ 2
(1694‡ 4)	1042.66	0.006 5	0.12 11	7.2 4	0.13 11	av $E\beta=302.2$ 18; $\epsilon K=0.8256$ 8; $\epsilon L=0.1051$ 1; $\epsilon M+=0.02601$ 3
1822 75	987.312	0.185 14	3.07 23	5.85 4	3.26 24	av $E\beta=326.3$ 18; $\epsilon K=0.8141$ 9; $\epsilon L=0.10355$ 13; $\epsilon M+=0.02563$ 3
(1859 4)	877.86	0.0207 23	0.209 23	7.07 5	0.230 25	av $E\beta=374.0$ 18; $\epsilon K=0.7857$ 12; $\epsilon L=0.09979$ 16; $\epsilon M+=0.02469$ 4
2713 5	25.470	29 2	28 2	5.27 3	57 4	av $E\beta=753.3$ 19; $\epsilon K=0.4286$ 17; $\epsilon L=0.05403$ 21; $\epsilon M+=0.01336$ 5

† Absolute intensity per 100 decays.

‡ Existence of this branch is questionable.

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag)

I<sub>γ</sub> normalization: absolute intensity of 961γ was determined by 1976Ja05 as 4.69% 29. A 2% uncertainty has been added in quadrature for the uncertainty due to the detector efficiency (1976Ja05).

<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub><sup>†@</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.<sup>‡</sup></u>	<u>δ<sup>‡</sup></u>	<u>α<sup>&amp;</sup></u>	<u>Comments</u>
25.48 2	0.76 CA	25.470	7/2 <sup>+</sup>	0.0	1/2 <sup>-</sup>	E3		2.29×10 <sup>4</sup>	α(L)=1.83×10 <sup>4</sup> 3; α(M)=3.96×10 <sup>3</sup> 6; α(N+..)=609 9 α(N)=609 9; α(O)=0.0372 6 E <sub>γ</sub> : weighted average of 25.53 3 (1978Sh08) and 25.47 1 (1976Sv04). I <sub>γ</sub> : 0.76 6 calculated by requiring the sum of all transition intensities to g.s. to be 100%. Mult.: from α(L1)exp:α(L2)exp:α(L3)exp=0.002< :1:1.47 4 and α(L)exp:α(M)exp:α(N)exp=1: 0.22 2:0.09 2 in 1978Sh08; Other: 1953Jo20. α(K)=14.93 21; α(L)=2.11 9; α(M)=0.404 17; α(N+..)=0.072 3 α(N)=0.069 3; α(O)=0.00285 4 E <sub>γ</sub> : from 1976Sv04. δ: from Ice(M1)/(Ice(M2)+Ice(M3))= (100 5)/(22 3) in 1976Sv04, and M1+25% E2 in 1976Ja05; α: Other: 46 7 from I <sub>γ</sub> balance leading to δ=0.51 7 and unreasonably high B(E2)(W.u.)=2200.
27.67 1	45 5	53.140	9/2 <sup>+</sup>	25.470	7/2 <sup>+</sup>	(M1+E2)	0.044 8	17.5 3	α(K)=14.93 21; α(L)=2.11 9; α(M)=0.404 17; α(N+..)=0.072 3 α(N)=0.069 3; α(O)=0.00285 4 E <sub>γ</sub> : from 1976Sv04. δ: from Ice(M1)/(Ice(M2)+Ice(M3))= (100 5)/(22 3) in 1976Sv04, and M1+25% E2 in 1976Ja05; α: Other: 46 7 from I <sub>γ</sub> balance leading to δ=0.51 7 and unreasonably high B(E2)(W.u.)=2200.
51.7 <sup>#c</sup> 2	4 2	2308.32	3/2 <sup>+</sup>	2256.49	5/2 <sup>+</sup>	[M1]		2.79 5	α(K)=2.41 5; α(L)=0.303 6; α(M)=0.0577 11; α(N+..)=0.01042 19 α(N)=0.00997 18; α(O)=0.000455 9
86.33 7	21 2	433.222	5/2 <sup>-</sup>	346.867	3/2 <sup>-</sup>	M1(+E2)	-0.05 5	0.640 17	α(K)=0.555 13; α(L)=0.070 4; α(M)=0.0133 7; α(N+..)=0.00240 12 α(N)=0.00230 12; α(O)=0.0001044 19 δ: from 1979KeZW.
<sup>x</sup> 107.6 <sup>#</sup> 3	1.2 7								
128.6 <sup>c</sup> 2	1.6 6	1922.97	(7/2) <sup>+</sup>	1794.44	7/2 <sup>+</sup>	[M1]		0.208	α(K)=0.180 3; α(L)=0.0223 4; α(M)=0.00424 7; α(N+..)=0.000768 12 α(N)=0.000734 11; α(O)=3.40×10 <sup>-5</sup> 5
132.9 2	4 2	1690.79	(3/2 <sup>+</sup> ,5/2)	1557.881	3/2 <sup>+</sup>				
171.34 16	12 4	1557.881	3/2 <sup>+</sup>	1386.27	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	[M1]		0.0948	α(K)=0.0824 12; α(L)=0.01011 15; α(M)=0.00192 3; α(N+..)=0.000348 5 α(N)=0.000333 5; α(O)=1.548×10 <sup>-5</sup> 22
172.82 13	16 3	1922.97	(7/2) <sup>+</sup>	1750.14	(5/2 <sup>+</sup> )	[M1]		0.0926	α(K)=0.0805 12; α(L)=0.00987 14; α(M)=0.00188 3; α(N+..)=0.000340 5 α(N)=0.000325 5; α(O)=1.512×10 <sup>-5</sup> 22

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub><sup>†@</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.<sup>‡</sup></u>	<u>α&amp;</u>	<u>Comments</u>
192.27 9	19 2	1750.14	(5/2 <sup>+</sup> )	1557.881	3/2 <sup>+</sup>	[M1]	0.0695	α(K)=0.0605 9; α(L)=0.00739 11; α(M)=0.001406 20; α(N+..)=0.000255 4 α(N)=0.000243 4; α(O)=1.135×10 <sup>-5</sup> 16
<sup>x</sup> 221.76 12	7 1							
229.82 9	15 2	1557.881	3/2 <sup>+</sup>	1327.928	5/2 <sup>+</sup>	[M1]	0.0433	α(K)=0.0377 6; α(L)=0.00459 7; α(M)=0.000872 13; α(N+..)=0.0001581 23 α(N)=0.0001510 22; α(O)=7.06×10 <sup>-6</sup> 10
232.37 8	18 2	1922.97	(7/2) <sup>+</sup>	1690.79	(3/2 <sup>+</sup> ,5/2)			
249.41 <sup>ac</sup> 6	10 <sup>a</sup> 4	1635.80?	5/2 <sup>+</sup>	1386.27	3/2 <sup>+</sup> ,5/2 <sup>+</sup>			
249.41 <sup>ac</sup> 6	10 <sup>a</sup> 4	1635.81?	3/2 <sup>+</sup>	1386.27	3/2 <sup>+</sup> ,5/2 <sup>+</sup>			
249.41 <sup>a</sup>	5 <sup>a</sup> 3	1690.79	(3/2 <sup>+</sup> ,5/2)	1441.59	5/2 <sup>+</sup>			
253.42 3	31 2	1922.97	(7/2) <sup>+</sup>	1669.54	(3/2 <sup>+</sup> ,5/2)			
262.99 3	39 2	1557.881	3/2 <sup>+</sup>	1294.897	1/2 <sup>+</sup>	[M1]	0.0305	α(K)=0.0265 4; α(L)=0.00321 5; α(M)=0.000611 9; α(N+..)=0.0001108 16 α(N)=0.0001058 15; α(O)=4.96×10 <sup>-6</sup> 7
283.29 4	33 2	1669.54	(3/2 <sup>+</sup> ,5/2)	1386.27	3/2 <sup>+</sup> ,5/2 <sup>+</sup>			
291.96 4	47 2	1586.87	1/2 <sup>+</sup>	1294.897	1/2 <sup>+</sup>	[M1]	0.0233	α(K)=0.0203 3; α(L)=0.00245 4; α(M)=0.000465 7; α(N+..)=8.44×10 <sup>-5</sup> 12 α(N)=8.06×10 <sup>-5</sup> 12; α(O)=3.79×10 <sup>-6</sup> 6
295.7 3	3 2	1986.34	(5/2 <sup>+</sup> )	1690.79	(3/2 <sup>+</sup> ,5/2)			
307.83	12 5	1294.897	1/2 <sup>+</sup>	987.312	(5/2) <sup>+</sup>	[E2]	0.0285	α(K)=0.0243 4; α(L)=0.00345 5; α(M)=0.000660 10; α(N+..)=0.0001155 17 α(N)=0.0001114 16; α(O)=4.09×10 <sup>-6</sup> 6
307.83 <sup>ac</sup> 3	180 <sup>a</sup> 12	1635.80?	5/2 <sup>+</sup>	1327.928	5/2 <sup>+</sup>	[M1]	0.0203	α(K)=0.01772 25; α(L)=0.00213 3; α(M)=0.000405 6; α(N+..)=7.36×10 <sup>-5</sup> 11 α(N)=7.03×10 <sup>-5</sup> 10; α(O)=3.31×10 <sup>-6</sup> 5
307.83 <sup>ac</sup> 3	180 <sup>a</sup> 12	1635.81?	3/2 <sup>+</sup>	1327.928	5/2 <sup>+</sup>	[M1]	0.0203	α(K)=0.01772 25; α(L)=0.00213 3; α(M)=0.000405 6; α(N+..)=7.36×10 <sup>-5</sup> 11 α(N)=7.03×10 <sup>-5</sup> 10; α(O)=3.31×10 <sup>-6</sup> 5
316.82 5	53 2	1986.34	(5/2 <sup>+</sup> )	1669.54	(3/2 <sup>+</sup> ,5/2)			
<sup>x</sup> 325.0 2	5 2							
340.66 <sup>a</sup> 4	83 <sup>a</sup> 9	1327.928	5/2 <sup>+</sup>	987.312	(5/2) <sup>+</sup>	[M1]	0.01572	α(K)=0.01371 20; α(L)=0.001646 23; α(M)=0.000312 5; α(N+..)=5.67×10 <sup>-5</sup> 8 α(N)=5.42×10 <sup>-5</sup> 8; α(O)=2.55×10 <sup>-6</sup> 4
340.66 <sup>ac</sup> 4	14 <sup>a</sup> 6	1635.80?	5/2 <sup>+</sup>	1294.897	1/2 <sup>+</sup>	[E2]	0.0205	α(K)=0.01750 25; α(L)=0.00243 4; α(M)=0.000464 7; α(N+..)=8.16×10 <sup>-5</sup> 12 α(N)=7.86×10 <sup>-5</sup> 11; α(O)=2.98×10 <sup>-6</sup> 5
340.66 <sup>ac</sup> 4	14 <sup>a</sup> 6	1635.81?	3/2 <sup>+</sup>	1294.897	1/2 <sup>+</sup>	[M1]	0.01572	α(K)=0.01371 20; α(L)=0.001646 23; α(M)=0.000312 5; α(N+..)=5.67×10 <sup>-5</sup> 8 α(N)=5.42×10 <sup>-5</sup> 8; α(O)=2.55×10 <sup>-6</sup> 4
343.4 <sup>c</sup> 2	≤6	1586.87	1/2 <sup>+</sup>	1243.41	(3/2 <sup>+</sup> ,5/2,7/2 <sup>-</sup> )			

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

$E_\gamma$ †	$I_\gamma$ †@	$E_i$ (level)	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. ‡	$\delta^\ddagger$	$\alpha$ &	Comments
346.87 2	896 9	346.867	3/2 <sup>-</sup>	0.0	1/2 <sup>-</sup>	M1+E2	+0.10 +5-7	0.01507 22	$\alpha(K)=0.01313$ 19; $\alpha(L)=0.001579$ 24; $\alpha(M)=0.000300$ 5; $\alpha(N+..)=5.44\times 10^{-5}$ 8 $\alpha(N)=5.20\times 10^{-5}$ 8; $\alpha(O)=2.44\times 10^{-6}$ 4
<sup>x</sup> 353.91 12	9 2								
362.9 <sup>ac</sup> 3	4 <sup>a</sup> 2	1386.27	3/2 <sup>+</sup> , 5/2 <sup>+</sup>	1023.67	7/2 <sup>-</sup>				
362.9 <sup>ac</sup> 3	4 <sup>a</sup> 2	1690.79	(3/2 <sup>+</sup> , 5/2)	1327.928	5/2 <sup>+</sup>				
362.9 <sup>ac</sup> 3	4 <sup>a</sup> 2	2081.64	5/2 <sup>+</sup> , 7/2 <sup>+</sup>	1718.83	(5/2 to 11/2)				
<sup>x</sup> 371.28 10	9 2								
398.99 8	12 1	1386.27	3/2 <sup>+</sup> , 5/2 <sup>+</sup>	987.312	(5/2) <sup>+</sup>			0.0107	
403.3 4	3 2	2326.04	(5/2 <sup>+</sup> )	1922.97	(7/2) <sup>+</sup>	[M1]		0.01031	$\alpha(K)=0.00900$ 13; $\alpha(L)=0.001074$ 16; $\alpha(M)=0.000204$ 3; $\alpha(N+..)=3.70\times 10^{-5}$ 6 $\alpha(N)=3.54\times 10^{-5}$ 5; $\alpha(O)=1.673\times 10^{-6}$ 24 $\alpha=0.00313$ 5; $\alpha(K)=0.00274$ 4; $\alpha(L)=0.000321$ 5; $\alpha(M)=6.06\times 10^{-5}$ 9; $\alpha(N+..)=1.093\times 10^{-5}$ 16 $\alpha(N)=1.045\times 10^{-5}$ 15; $\alpha(O)=4.79\times 10^{-7}$ 7 $\alpha=0.00921$ 13; $\alpha(K)=0.00803$ 12; $\alpha(L)=0.000958$ 14; $\alpha(M)=0.000182$ 3; $\alpha(N+..)=3.30\times 10^{-5}$ 5 $\alpha(N)=3.15\times 10^{-5}$ 5; $\alpha(O)=1.492\times 10^{-6}$ 21 $\alpha=0.00965$ 14; $\alpha(K)=0.00830$ 12; $\alpha(L)=0.001097$ 16; $\alpha(M)=0.000209$ 3; $\alpha(N+..)=3.71\times 10^{-5}$ 6 $\alpha(N)=3.57\times 10^{-5}$ 5; $\alpha(O)=1.444\times 10^{-6}$ 21
417.1 2	3 2	1294.897	1/2 <sup>+</sup>	877.86	3/2 <sup>-</sup>	[E1]		0.00313 5	
422.27 6	19 1	1750.14	(5/2 <sup>+</sup> )	1327.928	5/2 <sup>+</sup>	[M1]		0.00921 13	
433.24 3	600 5	433.222	5/2 <sup>-</sup>	0.0	1/2 <sup>-</sup>	E2		0.00965 14	
443.9 <sup>c</sup> 2	≤4	1885.73?	(5/2 <sup>+</sup> , 7/2 <sup>+</sup> , 9/2 <sup>+</sup> )	1441.59	5/2 <sup>+</sup>				
444.6 <sup>c</sup> 2	≤4	877.86	3/2 <sup>-</sup>	433.222	5/2 <sup>-</sup>	[M1]		0.00811 12	$\alpha=0.00811$ 12; $\alpha(K)=0.00708$ 10; $\alpha(L)=0.000843$ 12; $\alpha(M)=0.0001599$ 23; $\alpha(N+..)=2.90\times 10^{-5}$ $\alpha(N)=2.77\times 10^{-5}$ 4; $\alpha(O)=1.314\times 10^{-6}$ 19 $\alpha=0.00769$ 11; $\alpha(K)=0.00671$ 10; $\alpha(L)=0.000799$ 12; $\alpha(M)=0.0001515$ 22; $\alpha(N+..)=2.75\times 10^{-5}$ $\alpha(N)=2.63\times 10^{-5}$ 4; $\alpha(O)=1.246\times 10^{-6}$ 18
454.38 7	23 2	1441.59	5/2 <sup>+</sup>	987.312	(5/2) <sup>+</sup>	[M1]		0.00769 11	
<sup>x</sup> 458.3 11	11 2								
461.96 11	10 2	2256.49	5/2 <sup>+</sup>	1794.44	7/2 <sup>+</sup>	[M1]		0.00739 11	$\alpha=0.00739$ 11; $\alpha(K)=0.00645$ 9; $\alpha(L)=0.000767$ 11; $\alpha(M)=0.0001454$ 21; $\alpha(N+..)=2.64\times 10^{-5}$ 4 $\alpha(N)=2.52\times 10^{-5}$ 4; $\alpha(O)=1.197\times 10^{-6}$ 17 $\alpha=0.00720$ 10; $\alpha(K)=0.00629$ 9; $\alpha(L)=0.000747$ 11; $\alpha(M)=0.0001418$ 20; $\alpha(N+..)=2.58\times 10^{-5}$ 4 $\alpha(N)=2.46\times 10^{-5}$ 4; $\alpha(O)=1.167\times 10^{-6}$ 17
466.73 7	11 2	1794.44	7/2 <sup>+</sup>	1327.928	5/2 <sup>+</sup>	[M1]		0.00720 10	

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub><sup>†@</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.<sup>‡</sup></u>	<u>α<sup>&amp;</sup></u>	<u>Comments</u>
486.73 <sup>ac</sup> 10	14 <sup>a</sup> 2	2156.42	3/2 <sup>+</sup>	1669.54	(3/2 <sup>+</sup> , 5/2)			
486.73 <sup>ac</sup> 10	14 <sup>a</sup> 2	2472.99	(3/2 <sup>+</sup> , 5/2 <sup>+</sup> , 7/2 <sup>+</sup> )	1986.34	(5/2 <sup>+</sup> )			
499.45 <sup>b</sup>	8 <sup>b</sup> 4	1885.73?	(5/2 <sup>+</sup> , 7/2 <sup>+</sup> , 9/2 <sup>+</sup> )	1386.27	3/2 <sup>+</sup> , 5/2 <sup>+</sup>			
499.45 <sup>b</sup>	6 <sup>b</sup> 6	2249.57	(1/2 <sup>+</sup> , 3/2)	1750.14	(5/2 <sup>+</sup> )			
520.54 5	24 1	2314.81	5/2 <sup>+</sup>	1794.44	7/2 <sup>+</sup>	[M1]	0.00553 8	α=0.00553 8; α(K)=0.00483 7; α(L)=0.000572 8; α(M)=0.0001086 16; α(N+..)=1.97×10 <sup>-5</sup> 3 α(N)=1.88×10 <sup>-5</sup> 3; α(O)=8.95×10 <sup>-7</sup> 13
530.95 8	16 1	877.86	3/2 <sup>-</sup>	346.867	3/2 <sup>-</sup>	[M1]	0.00528 8	α=0.00528 8; α(K)=0.00461 7; α(L)=0.000545 8; α(M)=0.0001035 15; α(N+..)=1.88×10 <sup>-5</sup> 3 α(N)=1.80×10 <sup>-5</sup> 3; α(O)=8.54×10 <sup>-7</sup> 12
538.67 6	151 5	1635.80?	5/2 <sup>+</sup>	1097.18	(9/2 <sup>+</sup> )	[E2]	0.00510 8	α=0.00510 8; α(K)=0.00441 7; α(L)=0.000563 8; α(M)=0.0001071 15; α(N+..)=1.91×10 <sup>-5</sup> 3 α(N)=1.83×10 <sup>-5</sup> 3; α(O)=7.78×10 <sup>-7</sup> 11
545.0 2	3 1	1986.34	(5/2 <sup>+</sup> )	1441.59	5/2 <sup>+</sup>	[M1]	0.00496 7	α=0.00496 7; α(K)=0.00433 6; α(L)=0.000512 8; α(M)=9.71×10 <sup>-5</sup> 14; α(N+..)=1.765×10 <sup>-5</sup> 25 α(N)=1.685×10 <sup>-5</sup> 24; α(O)=8.02×10 <sup>-7</sup> 12
550.17 <sup>ac</sup> 11	8 <sup>a</sup> 1	2300.39	3/2 <sup>+</sup> , 5/2 <sup>+</sup>	1750.14	(5/2 <sup>+</sup> )			
550.17 <sup>ac</sup> 11	8 <sup>a</sup> 1	2472.99	(3/2 <sup>+</sup> , 5/2 <sup>+</sup> , 7/2 <sup>+</sup> )	1922.97	(7/2 <sup>+</sup> )			
558.14 <sup>ac</sup> 10	8 <sup>a</sup> 1	1885.73?	(5/2 <sup>+</sup> , 7/2 <sup>+</sup> , 9/2 <sup>+</sup> )	1327.928	5/2 <sup>+</sup>			
558.14 <sup>ac</sup> 10	8 <sup>a</sup> 1	2308.32	3/2 <sup>+</sup>	1750.14	(5/2 <sup>+</sup> )	[M1]	0.00468 7	α=0.00468 7; α(K)=0.00409 6; α(L)=0.000483 7; α(M)=9.17×10 <sup>-5</sup> 13; α(N+..)=1.667×10 <sup>-5</sup> 24 α(N)=1.591×10 <sup>-5</sup> 23; α(O)=7.57×10 <sup>-7</sup> 11
570.56 6	23 2	1557.881	3/2 <sup>+</sup>	987.312	(5/2 <sup>+</sup> )	[M1]	0.00444 7	α=0.00444 7; α(K)=0.00388 6; α(L)=0.000459 7; α(M)=8.69×10 <sup>-5</sup> 13; α(N+..)=1.581×10 <sup>-5</sup> 23 α(N)=1.509×10 <sup>-5</sup> 22; α(O)=7.18×10 <sup>-7</sup> 10
576.1 <sup>#c</sup> 5	3 2	2326.04	(5/2 <sup>+</sup> )	1750.14	(5/2 <sup>+</sup> )	[M1]	0.00434 7	α=0.00434 7; α(K)=0.00379 6; α(L)=0.000448 7; α(M)=8.49×10 <sup>-5</sup> 12; α(N+..)=1.544×10 <sup>-5</sup> 22 α(N)=1.474×10 <sup>-5</sup> 21; α(O)=7.02×10 <sup>-7</sup> 10
577.4 2	9 2	2371.79	5/2 <sup>+</sup> , 7/2 <sup>+</sup>	1794.44	7/2 <sup>+</sup>			
579.97 9	12 1	2249.57	(1/2 <sup>+</sup> , 3/2)	1669.54	(3/2 <sup>+</sup> , 5/2)			
583.17 6	18 1	2333.34	3/2 <sup>+</sup>	1750.14	(5/2 <sup>+</sup> )	[M1]	0.00422 6	α=0.00422 6; α(K)=0.00369 6; α(L)=0.000435 6; α(M)=8.25×10 <sup>-5</sup> 12; α(N+..)=1.500×10 <sup>-5</sup> 21 α(N)=1.432×10 <sup>-5</sup> 20; α(O)=6.82×10 <sup>-7</sup> 10
590.44 5	25 1	1023.67	7/2 <sup>-</sup>	433.222	5/2 <sup>-</sup>	[M1]	0.00410 6	α=0.00410 6; α(K)=0.00358 5; α(L)=0.000422 6; α(M)=8.01×10 <sup>-5</sup> 12; α(N+..)=1.456×10 <sup>-5</sup> 21 α(N)=1.390×10 <sup>-5</sup> 20; α(O)=6.62×10 <sup>-7</sup> 10
598.54 5	25 2	2156.42	3/2 <sup>+</sup>	1557.881	3/2 <sup>+</sup>	[M1]	0.00397 6	α=0.00397 6; α(K)=0.00347 5; α(L)=0.000409 6; α(M)=7.75×10 <sup>-5</sup> 11; α(N+..)=1.409×10 <sup>-5</sup> 20 α(N)=1.345×10 <sup>-5</sup> 19; α(O)=6.41×10 <sup>-7</sup> 9
607.22 2	798 7	2326.04	(5/2 <sup>+</sup> )	1718.83	(5/2 to 11/2)			
609.45 5	23 2	1042.66	3/2 <sup>-</sup> , 5/2 <sup>-</sup>	433.222	5/2 <sup>-</sup>			

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<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

$E_\gamma$ †	$I_\gamma$ †@	$E_i$ (level)	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. ‡	$\alpha$ &	Comments
613.5 <sup>b</sup> 4	52 <sup>b</sup> 15	1656.2	3/2,5/2,7/2	1042.66	3/2 <sup>-</sup> ,5/2 <sup>-</sup>			
613.5 <sup>b</sup> 4	21 <sup>b</sup> 13	2249.57	(1/2 <sup>+</sup> ,3/2)	1635.80?	5/2 <sup>+</sup>			
617.41 9	16 6	2308.32	3/2 <sup>+</sup>	1690.79	(3/2 <sup>+</sup> ,5/2)			
623.7 2	14 1	2314.81	5/2 <sup>+</sup>	1690.79	(3/2 <sup>+</sup> ,5/2)			
630.8 3	8 3	2300.39	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	1669.54	(3/2 <sup>+</sup> ,5/2)			
635.4 3	102 2	2326.04	(5/2 <sup>+</sup> )	1690.79	(3/2 <sup>+</sup> ,5/2)			
640.46 8	13 2	987.312	(5/2 <sup>+</sup> )	346.867	3/2 <sup>-</sup>	[E1]	0.001141 16	$\alpha=0.001141$ 16; $\alpha(K)=0.000999$ 14; $\alpha(L)=0.0001159$ 17; $\alpha(M)=2.19\times 10^{-5}$ 3; $\alpha(N+..)=3.96\times 10^{-6}$ 6; $\alpha(N)=3.79\times 10^{-6}$ 6; $\alpha(O)=1.770\times 10^{-7}$ 25
642.8 6	20 2	2333.34	3/2 <sup>+</sup>	1690.79	(3/2 <sup>+</sup> ,5/2)			
648.49 <sup>ac</sup> 2	335 <sup>a</sup> 5	1635.80?	5/2 <sup>+</sup>	987.312	(5/2 <sup>+</sup> )	[M1]	0.00329 5	$\alpha=0.00329$ 5; $\alpha(K)=0.00287$ 4; $\alpha(L)=0.000338$ 5; $\alpha(M)=6.40\times 10^{-5}$ 9; $\alpha(N+..)=1.165\times 10^{-5}$ 17; $\alpha(N)=1.112\times 10^{-5}$ 16; $\alpha(O)=5.31\times 10^{-7}$ 8
648.49 <sup>ac</sup> 2	335 <sup>a</sup> 5	1635.81?	3/2 <sup>+</sup>	987.312	(5/2 <sup>+</sup> )	[M1]	0.00329 5	$\alpha=0.00329$ 5; $\alpha(K)=0.00287$ 4; $\alpha(L)=0.000338$ 5; $\alpha(M)=6.40\times 10^{-5}$ 9; $\alpha(N+..)=1.165\times 10^{-5}$ 17; $\alpha(N)=1.112\times 10^{-5}$ 16; $\alpha(O)=5.31\times 10^{-7}$ 8
656.53 7	15 1	2326.04	(5/2 <sup>+</sup> )	1669.54	(3/2 <sup>+</sup> ,5/2)			
658.27 <sup>b</sup>	7 <sup>b</sup> 6	1986.34	(5/2 <sup>+</sup> )	1327.928	5/2 <sup>+</sup>	[M1]	0.00317 5	$\alpha=0.00317$ 5; $\alpha(K)=0.00277$ 4; $\alpha(L)=0.000326$ 5; $\alpha(M)=6.18\times 10^{-5}$ 9; $\alpha(N+..)=1.124\times 10^{-5}$ 16; $\alpha(N)=1.073\times 10^{-5}$ 15; $\alpha(O)=5.12\times 10^{-7}$ 8
658.27 <sup>bc</sup>	6 <sup>b</sup> 7	2327.83	3/2 <sup>+</sup> ,5/2 <sup>+</sup> ,7/2 <sup>+</sup>	1669.54	(3/2 <sup>+</sup> ,5/2)			
662.79 7	17 2	2249.57	(1/2 <sup>+</sup> ,3/2)	1586.87	1/2 <sup>+</sup>			
676.88 12	10 1	1023.67	7/2 <sup>-</sup>	346.867	3/2 <sup>-</sup>	[E2]	0.00275 4	$\alpha=0.00275$ 4; $\alpha(K)=0.00239$ 4; $\alpha(L)=0.000295$ 5; $\alpha(M)=5.61\times 10^{-5}$ 8; $\alpha(N+..)=1.008\times 10^{-5}$ 15; $\alpha(N)=9.65\times 10^{-6}$ 14; $\alpha(O)=4.25\times 10^{-7}$ 6
681.97 16	7 2	1669.54	(3/2 <sup>+</sup> ,5/2)	987.312	(5/2 <sup>+</sup> )			
691.88 <sup>ac</sup> 13	9 <sup>a</sup> 2	2249.57	(1/2 <sup>+</sup> ,3/2)	1557.881	3/2 <sup>+</sup>			
691.88 <sup>ac</sup> 13	9 <sup>a</sup> 2	2327.83	3/2 <sup>+</sup> ,5/2 <sup>+</sup> ,7/2 <sup>+</sup>	1635.80?	5/2 <sup>+</sup>			
695.76 10	16 2	1042.66	3/2 <sup>-</sup> ,5/2 <sup>-</sup>	346.867	3/2 <sup>-</sup>			
697.7 2	19 1	2333.34	3/2 <sup>+</sup>	1635.81?	3/2 <sup>+</sup>	[M1]	0.00277 4	$\alpha=0.00277$ 4; $\alpha(K)=0.00242$ 4; $\alpha(L)=0.000284$ 4; $\alpha(M)=5.39\times 10^{-5}$ 8; $\alpha(N+..)=9.80\times 10^{-6}$ 14; $\alpha(N)=9.36\times 10^{-6}$ 14; $\alpha(O)=4.47\times 10^{-7}$ 7
700.07 16	9 1	2419.30	5/2 <sup>+</sup> ,7/2 <sup>+</sup> ,9/2 <sup>+</sup>	1718.83	(5/2 to 11/2)			
703.46 8	64 2	1690.79	(3/2 <sup>+</sup> ,5/2)	987.312	(5/2 <sup>+</sup> )			
709.87 8	27 2	2400.62	(3/2 <sup>+</sup> )	1690.79	(3/2 <sup>+</sup> ,5/2)			
714.8 <sup>#c</sup> 6	4 3	2156.42	3/2 <sup>+</sup>	1441.59	5/2 <sup>+</sup>	[M1]	0.00262 4	$\alpha=0.00262$ 4; $\alpha(K)=0.00229$ 4; $\alpha(L)=0.000269$ 4; $\alpha(M)=5.09\times 10^{-5}$ 8; $\alpha(N+..)=9.26\times 10^{-6}$ 13; $\alpha(N)=8.84\times 10^{-6}$ 13; $\alpha(O)=4.23\times 10^{-7}$ 6
721.6 <sup>#c</sup> 4	4 2	2308.32	3/2 <sup>+</sup>	1586.87	1/2 <sup>+</sup>	[M1]	0.00256 4	$\alpha=0.00256$ 4; $\alpha(K)=0.00224$ 4; $\alpha(L)=0.000263$ 4; $\alpha(M)=4.98\times 10^{-5}$ 7; $\alpha(N+..)=9.06\times 10^{-6}$ 13; $\alpha(N)=8.65\times 10^{-6}$ 13; $\alpha(O)=4.13\times 10^{-7}$ 6



<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub><sup>†@</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.<sup>‡</sup></u>	<u>α<sup>&amp;</sup></u>	<u>Comments</u>
727.54 13	12 2	2314.81	5/2 <sup>+</sup>	1586.87	1/2 <sup>+</sup>	[E2]	0.00229 4	α=0.00229 4; α(K)=0.00199 3; α(L)=0.000244 4; α(M)=4.63×10 <sup>-5</sup> 7; α(N+..)=8.33×10 <sup>-6</sup> 12 α(N)=7.97×10 <sup>-6</sup> 12; α(O)=3.55×10 <sup>-7</sup> 5
733.03 9	24 2	1166.29	9/2 <sup>-</sup>	433.222	5/2 <sup>-</sup>	E2	0.00224 4	α=0.00224 4; α(K)=0.00195 3; α(L)=0.000239 4; α(M)=4.54×10 <sup>-5</sup> 7; α(N+..)=8.16×10 <sup>-6</sup> 12 α(N)=7.82×10 <sup>-6</sup> 11; α(O)=3.48×10 <sup>-7</sup> 5
738.8 3	4 2	2326.04	(5/2 <sup>+</sup> )	1586.87	1/2 <sup>+</sup>	[E2]	0.00220 3	α=0.00220 3; α(K)=0.00191 3; α(L)=0.000234 4; α(M)=4.45×10 <sup>-5</sup> 7; α(N+..)=8.00×10 <sup>-6</sup> 12 α(N)=7.66×10 <sup>-6</sup> 11; α(O)=3.42×10 <sup>-7</sup> 5
746.44 7	114 2	2333.34	3/2 <sup>+</sup>	1586.87	1/2 <sup>+</sup>	[M1]	0.00237 4	α=0.00237 4; α(K)=0.00207 3; α(L)=0.000243 4; α(M)=4.60×10 <sup>-5</sup> 7; α(N+..)=8.38×10 <sup>-6</sup> 12 α(N)=7.99×10 <sup>-6</sup> 12; α(O)=3.82×10 <sup>-7</sup> 6
749.7 3	8 2	2419.30	5/2 <sup>+</sup> ,7/2 <sup>+</sup> ,9/2 <sup>+</sup>	1669.54	(3/2 <sup>+</sup> ,5/2)			
755.9 3	6 2	2550.68	(5/2 <sup>-</sup> )	1794.44	7/2 <sup>+</sup>	[E1]	0.000799 12	α=0.000799 12; α(K)=0.000700 10; α(L)=8.09×10 <sup>-5</sup> 12; α(M)=1.528×10 <sup>-5</sup> 22; α(N+..)=2.77×10 <sup>-6</sup> α(N)=2.64×10 <sup>-6</sup> 4; α(O)=1.244×10 <sup>-7</sup> 18
758.07 <sup>ac</sup> 15	18 <sup>a</sup> 2	1635.80?	5/2 <sup>+</sup>	877.86	3/2 <sup>-</sup>	[E1]	0.000794 12	α=0.000794 12; α(K)=0.000696 10; α(L)=8.04×10 <sup>-5</sup> 12; α(M)=1.518×10 <sup>-5</sup> 22; α(N+..)=2.75×10 <sup>-6</sup> α(N)=2.63×10 <sup>-6</sup> 4; α(O)=1.236×10 <sup>-7</sup> 18
758.07 <sup>ac</sup> 15	18 <sup>a</sup> 2	1635.81?	3/2 <sup>+</sup>	877.86	3/2 <sup>-</sup>	[E1]	0.000794 12	α=0.000794 12; α(K)=0.000696 10; α(L)=8.04×10 <sup>-5</sup> 12; α(M)=1.518×10 <sup>-5</sup> 22; α(N+..)=2.75×10 <sup>-6</sup> α(N)=2.63×10 <sup>-6</sup> 4; α(O)=1.236×10 <sup>-7</sup> 18
762.8 3	4 2	1750.14	(5/2 <sup>+</sup> )	987.312	(5/2 <sup>+</sup> )	[M1]	0.00226 4	α=0.00226 4; α(K)=0.00197 3; α(L)=0.000231 4; α(M)=4.38×10 <sup>-5</sup> 7; α(N+..)=7.96×10 <sup>-6</sup> 12 α(N)=7.60×10 <sup>-6</sup> 11; α(O)=3.64×10 <sup>-7</sup> 6
770.18 12	12 2	2156.42	3/2 <sup>+</sup>	1386.27	3/2 <sup>+</sup> ,5/2 <sup>+</sup>			
775.41 7	41 2	2333.34	3/2 <sup>+</sup>	1557.881	3/2 <sup>+</sup>	[M1]	0.00217 3	α=0.00217 3; α(K)=0.00190 3; α(L)=0.000222 4; α(M)=4.21×10 <sup>-5</sup> 6; α(N+..)=7.67×10 <sup>-6</sup> 11 α(N)=7.32×10 <sup>-6</sup> 11; α(O)=3.50×10 <sup>-7</sup> 5
782.4 3	4 2	2472.99	(3/2 <sup>+</sup> ,5/2 <sup>+</sup> ,7/2 <sup>+</sup> )	1690.79	(3/2 <sup>+</sup> ,5/2)			
788.7 2	6 2	1885.73?	(5/2 <sup>+</sup> ,7/2 <sup>+</sup> ,9/2 <sup>+</sup> )	1097.18	(9/2 <sup>+</sup> )			
800.23 16	10 2	2550.68	(5/2 <sup>-</sup> )	1750.14	(5/2 <sup>+</sup> )	[E1]	0.000710 10	α=0.000710 10; α(K)=0.000622 9; α(L)=7.18×10 <sup>-5</sup> 10; α(M)=1.356×10 <sup>-5</sup> 19; α(N+..)=2.46×10 <sup>-6</sup> 4 α(N)=2.35×10 <sup>-6</sup> 4; α(O)=1.106×10 <sup>-7</sup> 16
810.1 8	26 1	1243.41	(3/2 <sup>+</sup> ,5/2,7/2 <sup>-</sup> )	433.222	5/2 <sup>-</sup>			
813.9 <sup>ac</sup> 2	8 <sup>a</sup> 2	2371.79	5/2 <sup>+</sup> ,7/2 <sup>+</sup>	1557.881	3/2 <sup>+</sup>			
813.9 <sup>ac</sup> 2	8 <sup>a</sup> 2	2400.62	(3/2 <sup>+</sup> )	1586.87	1/2 <sup>+</sup>	[M1]	0.00194 3	α=0.00194 3; α(K)=0.001701 24; α(L)=0.000199 3; α(M)=3.77×10 <sup>-5</sup> 6; α(N+..)=6.86×10 <sup>-6</sup> 10 α(N)=6.54×10 <sup>-6</sup> 10; α(O)=3.13×10 <sup>-7</sup> 5
825.72 15	26 3	1922.97	(7/2 <sup>+</sup> )	1097.18	(9/2 <sup>+</sup> )	[M1]	0.00188 3	α=0.00188 3; α(K)=0.001647 23; α(L)=0.000192 3; α(M)=3.65×10 <sup>-5</sup> 6; α(N+..)=6.63×10 <sup>-6</sup> 10 α(N)=6.33×10 <sup>-6</sup> 9; α(O)=3.03×10 <sup>-7</sup> 5

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

$E_\gamma$ †	$I_\gamma$ †@	$E_i$ (level)	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. ‡	$\alpha$ &	Comments
827.7 <sup>#c</sup> 6	2 2	2156.42	3/2 <sup>+</sup>	1327.928	5/2 <sup>+</sup>	[M1]	0.00187 3	$\alpha=0.00187$ 3; $\alpha(K)=0.001638$ 23; $\alpha(L)=0.000191$ 3; $\alpha(M)=3.63\times 10^{-5}$ 6; $\alpha(N+..)=6.60\times 10^{-6}$ 10 $\alpha(N)=6.30\times 10^{-6}$ 9; $\alpha(O)=3.02\times 10^{-7}$ 5
836.3 3	5 2	2423.08	3/2 <sup>+</sup>	1586.87	1/2 <sup>+</sup>	[M1]	0.00183 3	$\alpha=0.00183$ 3; $\alpha(K)=0.001600$ 23; $\alpha(L)=0.000187$ 3; $\alpha(M)=3.54\times 10^{-5}$ 5; $\alpha(N+..)=6.44\times 10^{-6}$ 9 $\alpha(N)=6.15\times 10^{-6}$ 9; $\alpha(O)=2.95\times 10^{-7}$ 5
842.44 <sup>b</sup>	14 <sup>b</sup> 4	2400.62	(3/2 <sup>+</sup> )	1557.881	3/2 <sup>+</sup>	[M1]	0.00180 3	$\alpha=0.00180$ 3; $\alpha(K)=0.001574$ 22; $\alpha(L)=0.000184$ 3; $\alpha(M)=3.48\times 10^{-5}$ 5; $\alpha(N+..)=6.34\times 10^{-6}$ 9 $\alpha(N)=6.05\times 10^{-6}$ 9; $\alpha(O)=2.90\times 10^{-7}$ 4
842.44 <sup>b</sup>	7 <sup>b</sup> 5	2429.10	(3/2 <sup>+</sup> )	1586.87	1/2 <sup>+</sup>	[M1]	0.00180 3	$\alpha=0.00180$ 3; $\alpha(K)=0.001574$ 22; $\alpha(L)=0.000184$ 3; $\alpha(M)=3.48\times 10^{-5}$ 5; $\alpha(N+..)=6.34\times 10^{-6}$ 9 $\alpha(N)=6.05\times 10^{-6}$ 9; $\alpha(O)=2.90\times 10^{-7}$ 4
858.95 <sup>b</sup> 12	21 <sup>b</sup> 7	2300.39	3/2 <sup>+</sup> , 5/2 <sup>+</sup>	1441.59	5/2 <sup>+</sup>			
858.95 <sup>bc</sup> 12	≤5 <sup>b</sup>	2494.8	(3/2 <sup>+</sup> to 9/2 <sup>-</sup> )	1635.81?	3/2 <sup>+</sup>			
866.9 2	10 1	2308.32	3/2 <sup>+</sup>	1441.59	5/2 <sup>+</sup>	[M1]	0.001686 24	$\alpha=0.001686$ 24; $\alpha(K)=0.001475$ 21; $\alpha(L)=0.0001722$ 25; $\alpha(M)=3.26\times 10^{-5}$ 5; $\alpha(N+..)=5.94\times 10^{-6}$ $\alpha(N)=5.66\times 10^{-6}$ 8; $\alpha(O)=2.72\times 10^{-7}$ 4
870.88 14	10 3	2429.10	(3/2 <sup>+</sup> )	1557.881	3/2 <sup>+</sup>	[M1]	0.001669 24	$\alpha=0.001669$ 24; $\alpha(K)=0.001460$ 21; $\alpha(L)=0.0001704$ 24; $\alpha(M)=3.23\times 10^{-5}$ 5; $\alpha(N+..)=5.87\times 10^{-6}$ $\alpha(N)=5.61\times 10^{-6}$ 8; $\alpha(O)=2.69\times 10^{-7}$ 4
877.81 9	46 2	877.86	3/2 <sup>-</sup>	0.0	1/2 <sup>-</sup>	[M1]	0.001639 23	$\alpha=0.001639$ 23; $\alpha(K)=0.001434$ 20; $\alpha(L)=0.0001674$ 24; $\alpha(M)=3.17\times 10^{-5}$ 5; $\alpha(N+..)=5.77\times 10^{-6}$ $\alpha(N)=5.51\times 10^{-6}$ 8; $\alpha(O)=2.64\times 10^{-7}$ 4
884.57 8	126 2	2326.04	(5/2 <sup>+</sup> )	1441.59	5/2 <sup>+</sup>	[M1]	0.001611 23	$\alpha=0.001611$ 23; $\alpha(K)=0.001410$ 20; $\alpha(L)=0.0001645$ 23; $\alpha(M)=3.12\times 10^{-5}$ 5; $\alpha(N+..)=5.67\times 10^{-6}$ $\alpha(N)=5.41\times 10^{-6}$ 8; $\alpha(O)=2.60\times 10^{-7}$ 4
889.13 8	54 2	1986.34	(5/2 <sup>+</sup> )	1097.18	(9/2 <sup>+</sup> )	[E2]	0.001403 20	$\alpha=0.001403$ 20; $\alpha(K)=0.001223$ 18; $\alpha(L)=0.0001472$ 21; $\alpha(M)=2.79\times 10^{-5}$ 4; $\alpha(N+..)=5.04\times 10^{-6}$ $\alpha(N)=4.82\times 10^{-6}$ 7; $\alpha(O)=2.20\times 10^{-7}$ 3
892.21 <sup>b</sup> 8	38 <sup>b</sup> 8	2308.32	3/2 <sup>+</sup>	1416.10	1/2, 3/2, 5/2 <sup>-</sup>			
892.21 <sup>bc</sup> 8	≤6 <sup>b</sup>	2333.34	3/2 <sup>+</sup>	1441.59	5/2 <sup>+</sup>	[M1]	0.001580 23	$\alpha=0.001580$ 23; $\alpha(K)=0.001383$ 20; $\alpha(L)=0.0001613$ 23; $\alpha(M)=3.05\times 10^{-5}$ 5; $\alpha(N+..)=5.56\times 10^{-6}$ $\alpha(N)=5.31\times 10^{-6}$ 8; $\alpha(O)=2.55\times 10^{-7}$ 4
896.61 9	18 2	1243.41	(3/2 <sup>+</sup> , 5/2, 7/2 <sup>-</sup> )	346.867	3/2 <sup>-</sup>			
921.62 5	102 2	2249.57	(1/2 <sup>+</sup> , 3/2)	1327.928	5/2 <sup>+</sup>			
928.8 2	7 4	2256.49	5/2 <sup>+</sup>	1327.928	5/2 <sup>+</sup>	[M1]	0.001444 21	$\alpha=0.001444$ 21; $\alpha(K)=0.001264$ 18; $\alpha(L)=0.0001473$ 21; $\alpha(M)=2.79\times 10^{-5}$ 4; $\alpha(N+..)=5.08\times 10^{-6}$ $\alpha(N)=4.84\times 10^{-6}$ 7; $\alpha(O)=2.33\times 10^{-7}$ 4
934.14 4	271 3	987.312	(5/2 <sup>+</sup> )	53.140	9/2 <sup>+</sup>	[E2]	0.001251 18	$\alpha=0.001251$ 18; $\alpha(K)=0.001091$ 16; $\alpha(L)=0.0001307$ 19;

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub><sup>†@</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.<sup>‡</sup></u>	<u>α<sup>&amp;</sup></u>	<u>Comments</u>
								α(M)=2.48×10 <sup>-5</sup> 4; α(N+..)=4.48×10 <sup>-6</sup> α(N)=4.28×10 <sup>-6</sup> 6; α(O)=1.96×10 <sup>-7</sup> 3
941.6 11	13 2	2327.83	3/2 <sup>+</sup> ,5/2 <sup>+</sup> ,7/2 <sup>+</sup>	1386.27	3/2 <sup>+</sup> ,5/2 <sup>+</sup>			
948.04 4	182 3	1294.897	1/2 <sup>+</sup>	346.867	3/2 <sup>-</sup>	[E1]	0.000506 7	α=0.000506 7; α(K)=0.000444 7; α(L)=5.10×10 <sup>-5</sup> 8; α(M)=9.63×10 <sup>-6</sup> 14; α(N+..)=1.748×10 <sup>-6</sup> 25 α(N)=1.668×10 <sup>-6</sup> 24; α(O)=7.91×10 <sup>-8</sup> 11
954.53 12	6 2	2249.57	(1/2 <sup>+</sup> ,3/2)	1294.897	1/2 <sup>+</sup>			
961.84 3	1000 7	987.312	(5/2 <sup>+</sup> )	25.470	7/2 <sup>+</sup>	[M1]	0.001336 19	α=0.001336 19; α(K)=0.001169 17; α(L)=0.0001361 19; α(M)=2.58×10 <sup>-5</sup> 4; α(N+..)=4.69×10 <sup>-6</sup> α(N)=4.48×10 <sup>-6</sup> 7; α(O)=2.15×10 <sup>-7</sup> 3
<sup>x</sup> 967.23 6	26 2							
972.48 10	12 2	2300.39	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	1327.928	5/2 <sup>+</sup>			
978.22 15	12 2	2419.30	5/2 <sup>+</sup> ,7/2 <sup>+</sup> ,9/2 <sup>+</sup>	1441.59	5/2 <sup>+</sup>			
981.5 9	29 3	2423.08	3/2 <sup>+</sup>	1441.59	5/2 <sup>+</sup>	[M1]	0.001277 18	α=0.001277 18; α(K)=0.001118 16; α(L)=0.0001301 19; α(M)=2.46×10 <sup>-5</sup> 4; α(N+..)=4.48×10 <sup>-6</sup> α(N)=4.28×10 <sup>-6</sup> 6; α(O)=2.06×10 <sup>-7</sup> 3
984.58 17	15 4	2081.64	5/2 <sup>+</sup> ,7/2 <sup>+</sup>	1097.18	(9/2 <sup>+</sup> )			
986.91 10	35 3	2314.81	5/2 <sup>+</sup>	1327.928	5/2 <sup>+</sup>	[M1]	0.001262 18	α=0.001262 18; α(K)=0.001104 16; α(L)=0.0001285 18; α(M)=2.43×10 <sup>-5</sup> 4; α(N+..)=4.43×10 <sup>-6</sup> α(N)=4.23×10 <sup>-6</sup> 6; α(O)=2.03×10 <sup>-7</sup> 3
992.93 14	9 2	2550.68	(5/2 <sup>-</sup> )	1557.881	3/2 <sup>+</sup>	[E1]	0.000463 7	α=0.000463 7; α(K)=0.000406 6; α(L)=4.66×10 <sup>-5</sup> 7; α(M)=8.80×10 <sup>-6</sup> 13; α(N+..)=1.597×10 <sup>-6</sup> 23 α(N)=1.525×10 <sup>-6</sup> 22; α(O)=7.24×10 <sup>-8</sup> 11
998.43 <sup>bc</sup>	12 <sup>b</sup> 17	1023.67	7/2 <sup>-</sup>	25.470	7/2 <sup>+</sup>	[M1]	0.001230 18	α=0.001230 18; α(K)=0.001076 15; α(L)=0.0001252 18; α(M)=2.37×10 <sup>-5</sup> 4; α(N+..)=4.32×10 <sup>-6</sup> α(N)=4.12×10 <sup>-6</sup> 6; α(O)=1.98×10 <sup>-7</sup> 3
998.43 <sup>b</sup>	20 <sup>b</sup> 6	1986.34	(5/2 <sup>+</sup> )	987.312	(5/2 <sup>+</sup> )	[M1]	0.001230 18	α=0.001230 18; α(K)=0.001076 15; α(L)=0.0001252 18; α(M)=2.37×10 <sup>-5</sup> 4; α(N+..)=4.32×10 <sup>-6</sup> α(N)=4.12×10 <sup>-6</sup> 6; α(O)=1.98×10 <sup>-7</sup> 3
998.43 <sup>b</sup>	31 <sup>b</sup> 8	2326.04	(5/2 <sup>+</sup> )	1327.928	5/2 <sup>+</sup>	[M1]	0.001230 18	α=0.001230 18; α(K)=0.001076 15; α(L)=0.0001252 18; α(M)=2.37×10 <sup>-5</sup> 4; α(N+..)=4.32×10 <sup>-6</sup> α(N)=4.12×10 <sup>-6</sup> 6; α(O)=1.98×10 <sup>-7</sup> 3
1006.25 9	16 3	2249.57	(1/2 <sup>+</sup> ,3/2)	1243.41	(3/2 <sup>+</sup> ,5/2,7/2 <sup>-</sup> )			
1013.51 8	22 2	2308.32	3/2 <sup>+</sup>	1294.897	1/2 <sup>+</sup>	[M1]	0.001189 17	α=0.001189 17; α(K)=0.001041 15; α(L)=0.0001211 17; α(M)=2.29×10 <sup>-5</sup> 4; α(N+..)=4.17×10 <sup>-6</sup> α(N)=3.98×10 <sup>-6</sup> 6; α(O)=1.91×10 <sup>-7</sup> 3
<sup>x</sup> 1021.5 2	7 3							
1031.86 <sup>b</sup>	10 <sup>b</sup> 7	2326.04	(5/2 <sup>+</sup> )	1294.897	1/2 <sup>+</sup>	[E2]	0.000999 14	α=0.000999 14; α(K)=0.000873 13; α(L)=0.0001037 15; α(M)=1.96×10 <sup>-5</sup> 3; α(N+..)=3.55×10 <sup>-6</sup> α(N)=3.40×10 <sup>-6</sup> 5; α(O)=1.570×10 <sup>-7</sup> 22

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

$E_\gamma$ †	$I_\gamma$ †@	$E_i$ (level)	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. ‡	$\alpha$ &	Comments
1031.86 <sup>b</sup>	15 <sup>b</sup> 10	2472.99	(3/2 <sup>+</sup> , 5/2 <sup>+</sup> , 7/2 <sup>+</sup> )	1441.59	5/2 <sup>+</sup>			
1033.1 2	15 4	2419.30	5/2 <sup>+</sup> , 7/2 <sup>+</sup> , 9/2 <sup>+</sup>	1386.27	3/2 <sup>+</sup> , 5/2 <sup>+</sup>			
1038.44 6	125 2	2333.34	3/2 <sup>+</sup>	1294.897	1/2 <sup>+</sup>	[M1]	0.001127 16	$\alpha=0.001127$ 16; $\alpha(K)=0.000987$ 14; $\alpha(L)=0.0001147$ 16; $\alpha(M)=2.17\times 10^{-5}$ 3; $\alpha(N+..)=3.95\times 10^{-6}$ 6; $\alpha(N)=3.77\times 10^{-6}$ 6; $\alpha(O)=1.81\times 10^{-7}$ 3
1039.4 <sup>c</sup> 2	≤6	1386.27	3/2 <sup>+</sup> , 5/2 <sup>+</sup>	346.867	3/2 <sup>-</sup>			
1042.7	45 17	1042.66	3/2 <sup>-</sup> , 5/2 <sup>-</sup>	0.0	1/2 <sup>-</sup>			
1044.0	60 14	1097.18	(9/2 <sup>+</sup> )	53.140	9/2 <sup>+</sup>	[M1]	0.001114 16	$\alpha=0.001114$ 16; $\alpha(K)=0.000976$ 14; $\alpha(L)=0.0001134$ 16; $\alpha(M)=2.15\times 10^{-5}$ 3; $\alpha(N+..)=3.91\times 10^{-6}$ 6; $\alpha(N)=3.73\times 10^{-6}$ 6; $\alpha(O)=1.79\times 10^{-7}$ 3
1061.4 3	4 2	2447.21	(5/2 <sup>+</sup> , 7/2 <sup>+</sup> )	1386.27	3/2 <sup>+</sup> , 5/2 <sup>+</sup>			
1071.65 5	273 4	1097.18	(9/2 <sup>+</sup> )	25.470	7/2 <sup>+</sup>	[M1]	0.001052 15	$\alpha=0.001052$ 15; $\alpha(K)=0.000921$ 13; $\alpha(L)=0.0001070$ 15; $\alpha(M)=2.03\times 10^{-5}$ 3; $\alpha(N+..)=3.69\times 10^{-6}$ 6; $\alpha(N)=3.52\times 10^{-6}$ 5; $\alpha(O)=1.692\times 10^{-7}$ 24
1082.56 16	13 3	2326.04	(5/2 <sup>+</sup> )	1243.41	(3/2 <sup>+</sup> , 5/2, 7/2 <sup>-</sup> )			
1091.0 3	6 2	2419.30	5/2 <sup>+</sup> , 7/2 <sup>+</sup> , 9/2 <sup>+</sup>	1327.928	5/2 <sup>+</sup>			
1095.7 4	3 2	2423.08	3/2 <sup>+</sup>	1327.928	5/2 <sup>+</sup>	[M1]	0.001002 14	$\alpha=0.001002$ 14; $\alpha(K)=0.000878$ 13; $\alpha(L)=0.0001019$ 15; $\alpha(M)=1.93\times 10^{-5}$ 3; $\alpha(N+..)=3.51\times 10^{-6}$ 6; $\alpha(N)=3.35\times 10^{-6}$ 5; $\alpha(O)=1.612\times 10^{-7}$ 23
1105.8 2	6 1	2400.62	(3/2 <sup>+</sup> )	1294.897	1/2 <sup>+</sup>	[M1]	0.000983 14	$\alpha=0.000983$ 14; $\alpha(K)=0.000860$ 12; $\alpha(L)=9.98\times 10^{-5}$ 14; $\alpha(M)=1.89\times 10^{-5}$ 3; $\alpha(N+..)=3.97\times 10^{-6}$ 6; $\alpha(N)=3.28\times 10^{-6}$ 5; $\alpha(O)=1.580\times 10^{-7}$ 23; $\alpha(IPF)=5.31\times 10^{-7}$ 9
1109.15 <sup>bc</sup>	≤6 <sup>b</sup>	2494.8	(3/2 <sup>+</sup> to 9/2 <sup>-</sup> )	1386.27	3/2 <sup>+</sup> , 5/2 <sup>+</sup>			
1109.15 <sup>b</sup>	8 <sup>b</sup> 4	2550.68	(5/2 <sup>-</sup> )	1441.59	5/2 <sup>+</sup>	[E1]	0.000382 6	$\alpha=0.000382$ 6; $\alpha(K)=0.000330$ 5; $\alpha(L)=3.78\times 10^{-5}$ 6; $\alpha(M)=7.13\times 10^{-6}$ 10; $\alpha(N+..)=6.77\times 10^{-6}$ 10; $\alpha(N)=1.236\times 10^{-6}$ 18; $\alpha(O)=5.89\times 10^{-8}$ 9; $\alpha(IPF)=5.47\times 10^{-6}$ 8
1119.7 2	13 2	2447.21	(5/2 <sup>+</sup> , 7/2 <sup>+</sup> )	1327.928	5/2 <sup>+</sup>			
1124.73 8	20 2	1557.881	3/2 <sup>+</sup>	433.222	5/2 <sup>-</sup>	[E1]	0.000375 6	$\alpha=0.000375$ 6; $\alpha(K)=0.000322$ 5; $\alpha(L)=3.68\times 10^{-5}$ 6; $\alpha(M)=6.95\times 10^{-6}$ 10; $\alpha(N+..)=9.58\times 10^{-6}$ 14; $\alpha(N)=1.205\times 10^{-6}$ 17; $\alpha(O)=5.74\times 10^{-8}$ 8; $\alpha(IPF)=8.32\times 10^{-6}$ 12
<sup>x</sup> 1137.2 2	8 2							
1144.7 3	3 1	2472.99	(3/2 <sup>+</sup> , 5/2 <sup>+</sup> , 7/2 <sup>+</sup> )	1327.928	5/2 <sup>+</sup>			
1147.9 4	2 1	2314.81	5/2 <sup>+</sup>	1166.29	9/2 <sup>-</sup>	[M2]	0.00209 3	$\alpha=0.00209$ 3; $\alpha(K)=0.00183$ 3; $\alpha(L)=0.000218$ 3; $\alpha(M)=4.15\times 10^{-5}$ 6; $\alpha(N+..)=7.86\times 10^{-6}$ 11; $\alpha(N)=7.20\times 10^{-6}$ 11; $\alpha(O)=3.43\times 10^{-7}$ 5; $\alpha(IPF)=3.13\times 10^{-7}$ 6
<sup>x</sup> 1159.75 16	≈7							
1159.75 <sup>c</sup>	≤7	2256.49	5/2 <sup>+</sup>	1097.18	(9/2 <sup>+</sup> )	[E2]	0.000778 11	$\alpha=0.000778$ 11; $\alpha(K)=0.000677$ 10; $\alpha(L)=7.98\times 10^{-5}$

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub><sup>†@</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.<sup>‡</sup></u>	<u>α&amp;</u>	<u>Comments</u>
1169.09 8	24 2	2156.42	3/2 <sup>+</sup>	987.312	(5/2) <sup>+</sup>	[M1]	0.000874 13	12; α(M)=1.512×10 <sup>-5</sup> 22; α(N+..)=5.84×10 <sup>-6</sup> α(N)=2.62×10 <sup>-6</sup> 4; α(O)=1.220×10 <sup>-7</sup> 17; α(IPF)=3.11×10 <sup>-6</sup> 5 α=0.000874 13; α(K)=0.000762 11; α(L)=8.83×10 <sup>-5</sup> 13; α(M)=1.672×10 <sup>-5</sup> 24; α(N+..)=6.29×10 <sup>-6</sup> α(N)=2.90×10 <sup>-6</sup> 4; α(O)=1.399×10 <sup>-7</sup> 20; α(IPF)=3.24×10 <sup>-6</sup> 5
1196.3 3	5 1	1543.2	3/2 <sup>-</sup> ,5/2 <sup>-</sup>	346.867	3/2 <sup>-</sup>			
1205.4 3	4 2	2371.79	5/2 <sup>+</sup> ,7/2 <sup>+</sup>	1166.29	9/2 <sup>-</sup>			
1211.09 7	42 3	1557.881	3/2 <sup>+</sup>	346.867	3/2 <sup>-</sup>	[E1]	0.000363 5	α=0.000363 5; α(K)=0.000282 4; α(L)=3.21×10 <sup>-5</sup> 5; α(M)=6.07×10 <sup>-6</sup> 9; α(N+..)=4.37×10 <sup>-5</sup> 7 α(N)=1.052×10 <sup>-6</sup> 15; α(O)=5.02×10 <sup>-8</sup> 7; α(IPF)=4.26×10 <sup>-5</sup> 6
1217.5 <sup>ac</sup> 2	4 <sup>a</sup> 1	1243.41	(3/2 <sup>+</sup> ,5/2,7/2 <sup>-</sup> )	25.470	7/2 <sup>+</sup>			
1217.5 <sup>ac</sup> 2	4 <sup>a</sup> 1	2314.81	5/2 <sup>+</sup>	1097.18	(9/2 <sup>+</sup> )	[E2]	0.000709 10	α=0.000709 10; α(K)=0.000611 9; α(L)=7.18×10 <sup>-5</sup> 10; α(M)=1.360×10 <sup>-5</sup> 19; α(N+..)=1.208×10 <sup>-5</sup> α(N)=2.35×10 <sup>-6</sup> 4; α(O)=1.102×10 <sup>-7</sup> 16; α(IPF)=9.62×10 <sup>-6</sup> 14
1228.74 6	52 4	2326.04	(5/2 <sup>+</sup> )	1097.18	(9/2 <sup>+</sup> )	[E2]	0.000697 10	α=0.000697 10; α(K)=0.000600 9; α(L)=7.04×10 <sup>-5</sup> 10; α(M)=1.333×10 <sup>-5</sup> 19; α(N+..)=1.373×10 <sup>-5</sup> α(N)=2.31×10 <sup>-6</sup> 4; α(O)=1.081×10 <sup>-7</sup> 16; α(IPF)=1.131×10 <sup>-5</sup> 16
1232.84 13	14 2	2256.49	5/2 <sup>+</sup>	1023.67	7/2 <sup>-</sup>	[E1]	0.000366 6	α=0.000366 6; α(K)=0.000273 4; α(L)=3.11×10 <sup>-5</sup> 5; α(M)=5.88×10 <sup>-6</sup> 9; α(N+..)=5.58×10 <sup>-5</sup> 8 α(N)=1.019×10 <sup>-6</sup> 15; α(O)=4.86×10 <sup>-8</sup> 7; α(IPF)=5.48×10 <sup>-5</sup> 8
1239.98 5	61 2	1586.87	1/2 <sup>+</sup>	346.867	3/2 <sup>-</sup>	[E1]	0.000366 6	α=0.000366 6; α(K)=0.000270 4; α(L)=3.08×10 <sup>-5</sup> 5; α(M)=5.82×10 <sup>-6</sup> 9; α(N+..)=5.99×10 <sup>-5</sup> 9 α(N)=1.009×10 <sup>-6</sup> 15; α(O)=4.82×10 <sup>-8</sup> 7; α(IPF)=5.89×10 <sup>-5</sup> 9
<sup>x</sup> 1256.5 10	≈17							
1256.5 <sup>c</sup>	≤6	2584.25	(5/2 <sup>+</sup> )	1327.928	5/2 <sup>+</sup>	[M1]	0.000759 11	α=0.000759 11; α(K)=0.000653 10; α(L)=7.55×10 <sup>-5</sup> 11; α(M)=1.429×10 <sup>-5</sup> 20; α(N+..)=1.617×10 <sup>-5</sup> α(N)=2.48×10 <sup>-6</sup> 4; α(O)=1.197×10 <sup>-7</sup> 17; α(IPF)=1.357×10 <sup>-5</sup> 19
1262.24 14	8 2	2249.57	(1/2 <sup>+</sup> ,3/2)	987.312	(5/2) <sup>+</sup>			
1274.78 4	175 3	1327.928	5/2 <sup>+</sup>	53.140	9/2 <sup>+</sup>	[E2]	0.000655 10	α=0.000655 10; α(K)=0.000556 8; α(L)=6.51×10 <sup>-5</sup> 10; α(M)=1.232×10 <sup>-5</sup> 18; α(N+..)=2.15×10 <sup>-5</sup> 3 α(N)=2.13×10 <sup>-6</sup> 3; α(O)=1.002×10 <sup>-7</sup> 14; α(IPF)=1.92×10 <sup>-5</sup> 3
1283.6 3	5 2	2326.04	(5/2 <sup>+</sup> )	1042.66	3/2 <sup>-</sup> ,5/2 <sup>-</sup>			
1289.6 4	6 2	2584.25	(5/2 <sup>+</sup> )	1294.897	1/2 <sup>+</sup>	[E2]	0.000642 9	α=0.000642 9; α(K)=0.000543 8; α(L)=6.35×10 <sup>-5</sup> 9; α(M)=1.203×10 <sup>-5</sup> 17; α(N+..)=2.43×10 <sup>-5</sup> 4 α(N)=2.08×10 <sup>-6</sup> 3; α(O)=9.78×10 <sup>-8</sup> 14; α(IPF)=2.21×10 <sup>-5</sup> 4
1294.89 4	66 2	1294.897	1/2 <sup>+</sup>	0.0	1/2 <sup>-</sup>	[E1]	0.000376 6	α=0.000376 6; α(K)=0.000250 4; α(L)=2.85×10 <sup>-5</sup> 4; α(M)=5.38×10 <sup>-6</sup> 8; α(N+..)=9.21×10 <sup>-5</sup> 13 α(N)=9.34×10 <sup>-7</sup> 13; α(O)=4.46×10 <sup>-8</sup> 7; α(IPF)=9.11×10 <sup>-5</sup> 13

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub><sup>†@</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.<sup>‡</sup></u>	<u>α<sup>&amp;</sup></u>	<u>Comments</u>
1302.46 <sup>b</sup> 2	848 <sup>b</sup> 16	1327.928	5/2 <sup>+</sup>	25.470	7/2 <sup>+</sup>	[M1]	0.000711 10	α=0.000711 10; α(K)=0.000605 9; α(L)=6.99×10 <sup>-5</sup> 10; α(M)=1.323×10 <sup>-5</sup> 19; α(N+..)=2.37×10 <sup>-5</sup> 4 α(N)=2.30×10 <sup>-6</sup> 4; α(O)=1.108×10 <sup>-7</sup> 16; α(IPF)=2.13×10 <sup>-5</sup> 3
1302.46 <sup>b</sup>	20 <sup>b</sup> 10	2326.04	(5/2 <sup>+</sup> )	1023.67	7/2 <sup>-</sup>	[E1]	0.000378 6	α=0.000378 6; α(K)=0.000248 4; α(L)=2.82×10 <sup>-5</sup> 4; α(M)=5.33×10 <sup>-6</sup> 8; α(N+..)=9.66×10 <sup>-5</sup> 14 α(N)=9.24×10 <sup>-7</sup> 13; α(O)=4.42×10 <sup>-8</sup> 7; α(IPF)=9.57×10 <sup>-5</sup> 14
<sup>x</sup> 1317.41 11	16 2							
1322.20 <sup>b</sup>	24 <sup>b</sup> 7	1669.54	(3/2 <sup>+</sup> ,5/2)	346.867	3/2 <sup>-</sup>			
1322.20 <sup>b</sup>	13 <sup>b</sup> 8	2419.30	5/2 <sup>+</sup> ,7/2 <sup>+</sup> ,9/2 <sup>+</sup>	1097.18	(9/2 <sup>+</sup> )			
1327.20 17	10 2	2314.81	5/2 <sup>+</sup>	987.312	(5/2 <sup>+</sup> )	[M1]	0.000689 10	α=0.000689 10; α(K)=0.000581 9; α(L)=6.71×10 <sup>-5</sup> 10; α(M)=1.270×10 <sup>-5</sup> 18; α(N+..)=2.84×10 <sup>-5</sup> 4 α(N)=2.21×10 <sup>-6</sup> 3; α(O)=1.065×10 <sup>-7</sup> 15; α(IPF)=2.61×10 <sup>-5</sup> 4
1338.69 4	139 4	2326.04	(5/2 <sup>+</sup> )	987.312	(5/2 <sup>+</sup> )	[M1]	0.000680 10	α=0.000680 10; α(K)=0.000570 8; α(L)=6.59×10 <sup>-5</sup> 10; α(M)=1.247×10 <sup>-5</sup> 18; α(N+..)=3.08×10 <sup>-5</sup> 5 α(N)=2.17×10 <sup>-6</sup> 3; α(O)=1.045×10 <sup>-7</sup> 15; α(IPF)=2.85×10 <sup>-5</sup> 4
1340.50 6	66 4	2327.83	3/2 <sup>+</sup> ,5/2 <sup>+</sup> ,7/2 <sup>+</sup>	987.312	(5/2 <sup>+</sup> )			
1343.82 10	19 2	1690.79	(3/2 <sup>+</sup> ,5/2)	346.867	3/2 <sup>-</sup>			
1350.0 3	4 2	2447.21	(5/2 <sup>+</sup> ,7/2 <sup>+</sup> )	1097.18	(9/2 <sup>+</sup> )			
1360.79 4	119 15	1386.27	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	25.470	7/2 <sup>+</sup>			
1361.5 2	26 11	1794.44	7/2 <sup>+</sup>	433.222	5/2 <sup>-</sup>	[E1]	0.000395 6	α=0.000395 6; α(K)=0.000229 4; α(L)=2.61×10 <sup>-5</sup> 4; α(M)=4.93×10 <sup>-6</sup> 7; α(N+..)=0.0001349 19 α(N)=8.55×10 <sup>-7</sup> 12; α(O)=4.09×10 <sup>-8</sup> 6; α(IPF)=0.0001340 19
1375.77 8	24 2	2472.99	(3/2 <sup>+</sup> ,5/2 <sup>+</sup> ,7/2 <sup>+</sup> )	1097.18	(9/2 <sup>+</sup> )			
1388.48 3	575 5	1441.59	5/2 <sup>+</sup>	53.140	9/2 <sup>+</sup>	[E2]	0.000580 9	α=0.000580 9; α(K)=0.000467 7; α(L)=5.44×10 <sup>-5</sup> 8; α(M)=1.030×10 <sup>-5</sup> 15; α(N+..)=4.79×10 <sup>-5</sup> 7 α(N)=1.785×10 <sup>-6</sup> 25; α(O)=8.42×10 <sup>-8</sup> 12; α(IPF)=4.61×10 <sup>-5</sup> 7
1403.10 6	83 3	1750.14	(5/2 <sup>+</sup> )	346.867	3/2 <sup>-</sup>	[E1]	0.000411 6	α=0.000411 6; α(K)=0.000218 3; α(L)=2.48×10 <sup>-5</sup> 4; α(M)=4.68×10 <sup>-6</sup> 7; α(N+..)=0.0001639 23 α(N)=8.11×10 <sup>-7</sup> 12; α(O)=3.88×10 <sup>-8</sup> 6; α(IPF)=0.0001630 23
1413.24 18	30 7	2400.62	(3/2 <sup>+</sup> )	987.312	(5/2 <sup>+</sup> )	[M1]	0.000627 9	α=0.000627 9; α(K)=0.000509 8; α(L)=5.87×10 <sup>-5</sup> 9; α(M)=1.111×10 <sup>-5</sup> 16; α(N+..)=4.87×10 <sup>-5</sup> 7 α(N)=1.93×10 <sup>-6</sup> 3; α(O)=9.32×10 <sup>-8</sup> 13; α(IPF)=4.67×10 <sup>-5</sup> 7
1416.1 <sup>b</sup>	40 <sup>b</sup> 15	1416.10	1/2,3/2,5/2 <sup>-</sup>	0.0	1/2 <sup>-</sup>			
1416.1 <sup>b</sup> 10	310 <sup>b</sup> 25	1441.59	5/2 <sup>+</sup>	25.470	7/2 <sup>+</sup>	[M1]	0.000626 9	α=0.000626 9; α(K)=0.000507 8; α(L)=5.85×10 <sup>-5</sup> 9;

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

$E_\gamma$ <sup>†</sup>	$I_\gamma$ <sup>†@</sup>	$E_i$ (level)	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$ &	Comments
								$\alpha(M)=1.106\times 10^{-5}$ 16; $\alpha(N+..)=4.95\times 10^{-5}$ 8 $\alpha(N)=1.92\times 10^{-6}$ 3; $\alpha(O)=9.28\times 10^{-8}$ 13; $\alpha(IPF)=4.75\times 10^{-5}$ 8
1422.19 15	6 2	2300.39	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	877.86	3/2 <sup>-</sup>			
1431.85 16	9 2	2419.30	5/2 <sup>+</sup> ,7/2 <sup>+</sup> ,9/2 <sup>+</sup>	987.312	(5/2) <sup>+</sup>			
1459.62 13	18 3	2447.21	(5/2 <sup>+</sup> ,7/2 <sup>+</sup> )	987.312	(5/2) <sup>+</sup>			
<sup>x</sup> 1465.1 4	3 2							
<sup>x</sup> 1469.1 <sup>#</sup> 6	2 2							
1485.71 8	36 2	2472.99	(3/2 <sup>+</sup> ,5/2 <sup>+</sup> ,7/2 <sup>+</sup> )	987.312	(5/2) <sup>+</sup>			
1489.72 5	95 2	1922.97	(7/2) <sup>+</sup>	433.222	5/2 <sup>-</sup>	[E1]	0.000451 7	$\alpha=0.000451$ 7; $\alpha(K)=0.000197$ 3; $\alpha(L)=2.24\times 10^{-5}$ 4; $\alpha(M)=4.22\times 10^{-6}$ 6; $\alpha(N+..)=0.000227$ 4 $\alpha(N)=7.32\times 10^{-7}$ 11; $\alpha(O)=3.51\times 10^{-8}$ 5; $\alpha(IPF)=0.000227$ 4
1507.8 <sup>ac</sup> 3	5 <sup>a</sup> 1	2494.8	(3/2 <sup>+</sup> to 9/2 <sup>-</sup> )	987.312	(5/2) <sup>+</sup>			
1507.8 <sup>ac</sup> 3	5 <sup>a</sup> 1	2550.68	(5/2 <sup>-</sup> )	1042.66	3/2 <sup>-</sup> ,5/2 <sup>-</sup>			
1522.9 3	4 2	2400.62	(3/2 <sup>+</sup> )	877.86	3/2 <sup>-</sup>	[E1]	0.000468 7	$\alpha=0.000468$ 7; $\alpha(K)=0.000190$ 3; $\alpha(L)=2.15\times 10^{-5}$ 3; $\alpha(M)=4.07\times 10^{-6}$ 6; $\alpha(N+..)=0.000253$ 4 $\alpha(N)=7.06\times 10^{-7}$ 10; $\alpha(O)=3.38\times 10^{-8}$ 5; $\alpha(IPF)=0.000252$ 4 $\alpha=0.000533$ 8; $\alpha(K)=0.000384$ 6; $\alpha(L)=4.46\times 10^{-5}$ 7; $\alpha(M)=8.43\times 10^{-6}$ 12; $\alpha(N+..)=9.55\times 10^{-5}$ 14 $\alpha(N)=1.461\times 10^{-6}$ 21; $\alpha(O)=6.93\times 10^{-8}$ 10; $\alpha(IPF)=9.39\times 10^{-5}$ 14
1532.32 12	14 2	1557.881	3/2 <sup>+</sup>	25.470	7/2 <sup>+</sup>	[E2]	0.000533 8	
1552.8 3	7 2	1986.34	(5/2 <sup>+</sup> )	433.222	5/2 <sup>-</sup>	[E1]	0.000484 7	$\alpha=0.000484$ 7; $\alpha(K)=0.000184$ 3; $\alpha(L)=2.09\times 10^{-5}$ 3; $\alpha(M)=3.94\times 10^{-6}$ 6; $\alpha(N+..)=0.000276$ 4 $\alpha(N)=6.83\times 10^{-7}$ 10; $\alpha(O)=3.28\times 10^{-8}$ 5; $\alpha(IPF)=0.000275$ 4 $\alpha=0.000487$ 7; $\alpha(K)=0.000183$ 3; $\alpha(L)=2.07\times 10^{-5}$ 3; $\alpha(M)=3.92\times 10^{-6}$ 6; $\alpha(N+..)=0.000279$ 4 $\alpha(N)=6.79\times 10^{-7}$ 10; $\alpha(O)=3.26\times 10^{-8}$ 5; $\alpha(IPF)=0.000279$ 4 $\alpha=0.000525$ 8; $\alpha(K)=0.000361$ 5; $\alpha(L)=4.18\times 10^{-5}$ 6; $\alpha(M)=7.90\times 10^{-6}$ 11; $\alpha(N+..)=0.0001150$ 17 $\alpha(N)=1.370\times 10^{-6}$ 20; $\alpha(O)=6.51\times 10^{-8}$ 10; $\alpha(IPF)=0.0001136$ 16
1557.84 4	437 4	1557.881	3/2 <sup>+</sup>	0.0	1/2 <sup>-</sup>	[E1]	0.000487 7	
1582.56 7	135 2	1635.80?	5/2 <sup>+</sup>	53.140	9/2 <sup>+</sup>	[E2]	0.000525 8	
1586.84 8	44 2	1586.87	1/2 <sup>+</sup>	0.0	1/2 <sup>-</sup>	[M1]	0.000560 8	$\alpha=0.000560$ 8; $\alpha(K)=0.000400$ 6; $\alpha(L)=4.60\times 10^{-5}$ 7; $\alpha(M)=8.71\times 10^{-6}$ 13; $\alpha(N+..)=0.0001053$ 15 $\alpha(N)=1.513\times 10^{-6}$ 22; $\alpha(O)=7.31\times 10^{-8}$ 11; $\alpha(IPF)=0.0001037$ 15
1610.3 <sup>ac</sup> 6	56 <sup>a</sup> 3	1635.80?	5/2 <sup>+</sup>	25.470	7/2 <sup>+</sup>	[M1]	0.000555 8	$\alpha=0.000555$ 8; $\alpha(K)=0.000388$ 6; $\alpha(L)=4.46\times 10^{-5}$ 7; $\alpha(M)=8.44\times 10^{-6}$ 12; $\alpha(N+..)=0.0001142$ 17 $\alpha(N)=1.467\times 10^{-6}$ 21; $\alpha(O)=7.09\times 10^{-8}$ 10; $\alpha(IPF)=0.0001126$ 16
1610.3 <sup>ac</sup> 6	56 <sup>a</sup> 3	1635.81?	3/2 <sup>+</sup>	25.470	7/2 <sup>+</sup>	[E2]	0.000523 8	$\alpha=0.000523$ 8; $\alpha(K)=0.000349$ 5; $\alpha(L)=4.04\times 10^{-5}$ 6; $\alpha(M)=7.64\times 10^{-6}$ 11; $\alpha(N+..)=0.0001263$ 18 $\alpha(N)=1.324\times 10^{-6}$ 19; $\alpha(O)=6.29\times 10^{-8}$ 9; $\alpha(IPF)=0.0001249$ 18

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub><sup>†@</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.<sup>‡</sup></u>	<u>α<sup>&amp;</sup></u>	<u>Comments</u>
1635.81 6	223 4	1635.81?	3/2 <sup>+</sup>	0.0	1/2 <sup>-</sup>	[E1]	0.000531 8	α=0.000531 8; α(K)=0.0001685 24; α(L)=1.91×10 <sup>-5</sup> 3; α(M)=3.61×10 <sup>-6</sup> 5; α(N+..)=0.000340 5 α(N)=6.27×10 <sup>-7</sup> 9; α(O)=3.01×10 <sup>-8</sup> 5; α(IPF)=0.000339 5
1644.03 7	186 3	1669.54	(3/2 <sup>+</sup> ,5/2)	25.470	7/2 <sup>+</sup>			
1665.0 8	75 14	1718.83	(5/2 to 11/2)	53.140	9/2 <sup>+</sup>			
1665.65 10	203 18	1690.79	(3/2 <sup>+</sup> ,5/2)	25.470	7/2 <sup>+</sup>			
1693.34 5	755 5	1718.83	(5/2 to 11/2)	25.470	7/2 <sup>+</sup>			
1697.2 2	25 3	1750.14	(5/2 <sup>+</sup> )	53.140	9/2 <sup>+</sup>	[E2]	0.000522 8	α=0.000522 8; α(K)=0.000315 5; α(L)=3.64×10 <sup>-5</sup> 6; α(M)=6.89×10 <sup>-6</sup> 10; α(N+..)=0.0001631 23 α(N)=1.195×10 <sup>-6</sup> 17; α(O)=5.69×10 <sup>-8</sup> 8; α(IPF)=0.0001619 23
1724.69 7	148 3	1750.14	(5/2 <sup>+</sup> )	25.470	7/2 <sup>+</sup>	[M1]	0.000543 8	α=0.000543 8; α(K)=0.000337 5; α(L)=3.87×10 <sup>-5</sup> 6; α(M)=7.32×10 <sup>-6</sup> 11; α(N+..)=0.0001596 23 α(N)=1.273×10 <sup>-6</sup> 18; α(O)=6.16×10 <sup>-8</sup> 9; α(IPF)=0.0001583 23
1741.8 4	7 2	1794.44	7/2 <sup>+</sup>	53.140	9/2 <sup>+</sup>	[M1]	0.000542 8	α=0.000542 8; α(K)=0.000330 5; α(L)=3.80×10 <sup>-5</sup> 6; α(M)=7.18×10 <sup>-6</sup> 10; α(N+..)=0.0001668 24 α(N)=1.247×10 <sup>-6</sup> 18; α(O)=6.04×10 <sup>-8</sup> 9; α(IPF)=0.0001655 24
1797.5 4	5 2	2144.4	3/2 <sup>-</sup> ,5/2 <sup>-</sup>	346.867	3/2 <sup>-</sup>			
1809.0 4	5 1	2156.42	3/2 <sup>+</sup>	346.867	3/2 <sup>-</sup>	[E1]	0.000633 9	α=0.000633 9; α(K)=0.0001433 20; α(L)=1.624×10 <sup>-5</sup> 23; α(M)=3.06×10 <sup>-6</sup> 5; α(N+..)=0.000471 α(N)=5.32×10 <sup>-7</sup> 8; α(O)=2.56×10 <sup>-8</sup> 4; α(IPF)=0.000470 7
1823.1 2	33 7	2256.49	5/2 <sup>+</sup>	433.222	5/2 <sup>-</sup>	[E1]	0.000642 9	α=0.000642 9; α(K)=0.0001416 20; α(L)=1.604×10 <sup>-5</sup> 23; α(M)=3.03×10 <sup>-6</sup> 5; α(N+..)=0.000481 α(N)=5.25×10 <sup>-7</sup> 8; α(O)=2.53×10 <sup>-8</sup> 4; α(IPF)=0.000481 7
1831.67 <sup>c</sup> 14	33 2	1884.8?	(9/2 <sup>+</sup> )	53.140	9/2 <sup>+</sup>	[M1]	0.000545 8	α=0.000545 8; α(K)=0.000298 5; α(L)=3.42×10 <sup>-5</sup> 5; α(M)=6.48×10 <sup>-6</sup> 9; α(N+..)=0.000206 3 α(N)=1.125×10 <sup>-6</sup> 16; α(O)=5.45×10 <sup>-8</sup> 8; α(IPF)=0.000205 3
<sup>x</sup> 1853.6 <sup>#</sup> 8	1 1							
1860.1 2	8 2	1885.73?	(5/2 <sup>+</sup> ,7/2 <sup>+</sup> ,9/2 <sup>+</sup> )	25.470	7/2 <sup>+</sup>			
1867.3 3	10 2	2300.39	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	433.222	5/2 <sup>-</sup>			
1869.74 9	136 3	1922.97	(7/2 <sup>+</sup> )	53.140	9/2 <sup>+</sup>	[M1]	0.000549 8	α=0.000549 8; α(K)=0.000286 4; α(L)=3.28×10 <sup>-5</sup> 5; α(M)=6.21×10 <sup>-6</sup> 9; α(N+..)=0.000223 4 α(N)=1.079×10 <sup>-6</sup> 16; α(O)=5.23×10 <sup>-8</sup> 8; α(IPF)=0.000222 4
1874.99 14	19 2	2308.32	3/2 <sup>+</sup>	433.222	5/2 <sup>-</sup>	[E1]	0.000673 10	α=0.000673 10; α(K)=0.0001355 19; α(L)=1.534×10 <sup>-5</sup> 22; α(M)=2.89×10 <sup>-6</sup> 4; α(N+..)=0.000520 α(N)=5.02×10 <sup>-7</sup> 7; α(O)=2.42×10 <sup>-8</sup> 4; α(IPF)=0.000519 8
1881.36 12	28 2	2314.81	5/2 <sup>+</sup>	433.222	5/2 <sup>-</sup>	[E1]	0.000677 10	α=0.000677 10; α(K)=0.0001347 19; α(L)=1.525×10 <sup>-5</sup> 22; α(M)=2.88×10 <sup>-6</sup> 4; α(N+..)=0.000524 α(N)=5.00×10 <sup>-7</sup> 7; α(O)=2.41×10 <sup>-8</sup> 4; α(IPF)=0.000524 8
1892.89 8	151 2	2326.04	(5/2 <sup>+</sup> )	433.222	5/2 <sup>-</sup>	[E1]	0.000684 10	α=0.000684 10; α(K)=0.0001335 19; α(L)=1.511×10 <sup>-5</sup> 22; α(M)=2.85×10 <sup>-6</sup> 4; α(N+..)=0.000533 α(N)=4.95×10 <sup>-7</sup> 7; α(O)=2.38×10 <sup>-8</sup> 4; α(IPF)=0.000532 8



<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub><sup>†@</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.<sup>‡</sup></u>	<u>α&amp;</u>	<u>Comments</u>
1894.8 3	10 8	2327.83	3/2 <sup>+</sup> ,5/2 <sup>+</sup> ,7/2 <sup>+</sup>	433.222	5/2 <sup>-</sup>			
1897.52 7	308 3	1922.97	(7/2) <sup>+</sup>	25.470	7/2 <sup>+</sup>	[M1]	0.000552 8	α=0.000552 8; α(K)=0.000278 4; α(L)=3.19×10 <sup>-5</sup> 5; α(M)=6.03×10 <sup>-6</sup> 9; α(N+..)=0.000236 4 α(N)=1.048×10 <sup>-6</sup> 15; α(O)=5.07×10 <sup>-8</sup> 8; α(IPF)=0.000235 4
1900.21 13	25 2	2333.34	3/2 <sup>+</sup>	433.222	5/2 <sup>-</sup>	[E1]	0.000689 10	α=0.000689 10; α(K)=0.0001327 19; α(L)=1.502×10 <sup>-5</sup> 21; α(M)=2.83×10 <sup>-6</sup> 4; α(N+..)=0.000538 α(N)=4.92×10 <sup>-7</sup> 7; α(O)=2.37×10 <sup>-8</sup> 4; α(IPF)=0.000538 8
1902.79 13	28 2	2249.57	(1/2 <sup>+</sup> ,3/2)	346.867	3/2 <sup>-</sup>			
1909.69 8	130 3	2256.49	5/2 <sup>+</sup>	346.867	3/2 <sup>-</sup>	[E1]	0.000694 10	α=0.000694 10; α(K)=0.0001316 19; α(L)=1.490×10 <sup>-5</sup> 21; α(M)=2.81×10 <sup>-6</sup> 4; α(N+..)=0.000545 α(N)=4.88×10 <sup>-7</sup> 7; α(O)=2.35×10 <sup>-8</sup> 4; α(IPF)=0.000544 8
1929.1 2	10 2	2275.99	5/2 <sup>+</sup>	346.867	3/2 <sup>-</sup>	[E1]	0.000706 10	α=0.000706 10; α(K)=0.0001296 19; α(L)=1.466×10 <sup>-5</sup> 21; α(M)=2.77×10 <sup>-6</sup> 4; α(N+..)=0.000559 α(N)=4.80×10 <sup>-7</sup> 7; α(O)=2.31×10 <sup>-8</sup> 4; α(IPF)=0.000559 8
1933.11 8	339 3	1986.34	(5/2 <sup>+</sup> )	53.140	9/2 <sup>+</sup>	[E2]	0.000552 8	α=0.000552 8; α(K)=0.000247 4; α(L)=2.84×10 <sup>-5</sup> 4; α(M)=5.37×10 <sup>-6</sup> 8; α(N+..)=0.000271 4 α(N)=9.31×10 <sup>-7</sup> 13; α(O)=4.46×10 <sup>-8</sup> 7; α(IPF)=0.000270 4
1938.5 9	63 2	2371.79	5/2 <sup>+</sup> ,7/2 <sup>+</sup>	433.222	5/2 <sup>-</sup>			
1953.51 16	13 1	2300.39	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	346.867	3/2 <sup>-</sup>			
1960.89 <sup>b</sup> 9	189 <sup>b</sup> 10	1986.34	(5/2 <sup>+</sup> )	25.470	7/2 <sup>+</sup>	[M1]	0.000561 8	α=0.000561 8; α(K)=0.000260 4; α(L)=2.98×10 <sup>-5</sup> 5; α(M)=5.64×10 <sup>-6</sup> 8; α(N+..)=0.000265 4 α(N)=9.80×10 <sup>-7</sup> 14; α(O)=4.75×10 <sup>-8</sup> 7; α(IPF)=0.000264 4
1960.89 <sup>b</sup>	11 <sup>b</sup> 7	2308.32	3/2 <sup>+</sup>	346.867	3/2 <sup>-</sup>	[E1]	0.000725 11	α=0.000725 11; α(K)=0.0001263 18; α(L)=1.429×10 <sup>-5</sup> 20; α(M)=2.70×10 <sup>-6</sup> 4; α(N+..)=0.000582 α(N)=4.68×10 <sup>-7</sup> 7; α(O)=2.26×10 <sup>-8</sup> 4; α(IPF)=0.000581 9
<sup>x</sup> 1975.66 10	52 7							
1986.57 7	161 2	2333.34	3/2 <sup>+</sup>	346.867	3/2 <sup>-</sup>	[E1]	0.000741 11	α=0.000741 11; α(K)=0.0001238 18; α(L)=1.400×10 <sup>-5</sup> 20; α(M)=2.64×10 <sup>-6</sup> 4; α(N+..)=0.000600 α(N)=4.59×10 <sup>-7</sup> 7; α(O)=2.21×10 <sup>-8</sup> 3; α(IPF)=0.000600 9
1995.97 10	29 3	2429.10	(3/2 <sup>+</sup> )	433.222	5/2 <sup>-</sup>	[E1]	0.000746 11	α=0.000746 11; α(K)=0.0001229 18; α(L)=1.390×10 <sup>-5</sup> 20; α(M)=2.62×10 <sup>-6</sup> 4; α(N+..)=0.000607 α(N)=4.55×10 <sup>-7</sup> 7; α(O)=2.19×10 <sup>-8</sup> 3; α(IPF)=0.000607 9
2014.0 3	7 2	2447.21	(5/2 <sup>+</sup> ,7/2 <sup>+</sup> )	433.222	5/2 <sup>-</sup>			
2028.48 7	135 4	2081.64	5/2 <sup>+</sup> ,7/2 <sup>+</sup>	53.140	9/2 <sup>+</sup>			
2053.6 14	34 2	2400.62	(3/2 <sup>+</sup> )	346.867	3/2 <sup>-</sup>	[E1]	0.000781 11	α=0.000781 11; α(K)=0.0001176 17; α(L)=1.330×10 <sup>-5</sup> 19; α(M)=2.51×10 <sup>-6</sup> 4; α(N+..)=0.000648 α(N)=4.36×10 <sup>-7</sup> 7; α(O)=2.10×10 <sup>-8</sup> 3; α(IPF)=0.000647 10
2056.06 13	52 2	2081.64	5/2 <sup>+</sup> ,7/2 <sup>+</sup>	25.470	7/2 <sup>+</sup>			
2061.5 3	5 1	2494.8	(3/2 <sup>+</sup> to 9/2 <sup>-</sup> )	433.222	5/2 <sup>-</sup>			
2076.5 4	8 1	2423.08	3/2 <sup>+</sup>	346.867	3/2 <sup>-</sup>	[E1]	0.000795 12	α=0.000795 12; α(K)=0.0001156 17; α(L)=1.307×10 <sup>-5</sup> 19; α(M)=2.47×10 <sup>-6</sup> 4; α(N+..)=0.000664 α(N)=4.28×10 <sup>-7</sup> 6; α(O)=2.06×10 <sup>-8</sup> 3; α(IPF)=0.000663 10

<sup>105</sup>Cd ε decay 1976Ja05 (continued)

γ(<sup>105</sup>Ag) (continued)

$E_\gamma^\dagger$	$I_\gamma^\ddagger@$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha^\&$	Comments
<sup>x</sup> 2095.2 <sup>#</sup> 6 2117.3 15	2 1 19 2	2550.68	(5/2 <sup>-</sup> )	433.222	5/2 <sup>-</sup>	[M1]	0.000593 9	$\alpha=0.000593$ 9; $\alpha(K)=0.000224$ 4; $\alpha(L)=2.56\times 10^{-5}$ 4; $\alpha(M)=4.84\times 10^{-6}$ 7; $\alpha(N+..)=0.000339$ 5 $\alpha(N)=8.41\times 10^{-7}$ 12; $\alpha(O)=4.08\times 10^{-8}$ 6; $\alpha(IPF)=0.000338$ 5
2156.2 11	80 3	2156.42	3/2 <sup>+</sup>	0.0	1/2 <sup>-</sup>	[E1]	0.000842 12	$\alpha=0.000842$ 12; $\alpha(K)=0.0001092$ 16; $\alpha(L)=1.234\times 10^{-5}$ 18; $\alpha(M)=2.33\times 10^{-6}$ 4; $\alpha(N+..)=0.000718$ $\alpha(N)=4.04\times 10^{-7}$ 6; $\alpha(O)=1.95\times 10^{-8}$ 3; $\alpha(IPF)=0.000718$ 10
2203.58 <sup>bc</sup>	≤8 <sup>b</sup>	2256.49	5/2 <sup>+</sup>	53.140	9/2 <sup>+</sup>	[E2]	0.000622 9	$\alpha=0.000622$ 9; $\alpha(K)=0.000195$ 3; $\alpha(L)=2.23\times 10^{-5}$ 4; $\alpha(M)=4.21\times 10^{-6}$ 6; $\alpha(N+..)=0.000401$ 6 $\alpha(N)=7.31\times 10^{-7}$ 11; $\alpha(O)=3.51\times 10^{-8}$ 5; $\alpha(IPF)=0.000400$ 6
2203.58 <sup>b</sup>	20 <sup>b</sup> 8	2550.68	(5/2 <sup>-</sup> )	346.867	3/2 <sup>-</sup>	[M1]	0.000616 9	$\alpha=0.000616$ 9; $\alpha(K)=0.000207$ 3; $\alpha(L)=2.36\times 10^{-5}$ 4; $\alpha(M)=4.47\times 10^{-6}$ 7; $\alpha(N+..)=0.000381$ 6 $\alpha(N)=7.77\times 10^{-7}$ 11; $\alpha(O)=3.77\times 10^{-8}$ 6; $\alpha(IPF)=0.000380$ 6
2230.88 12	42 2	2256.49	5/2 <sup>+</sup>	25.470	7/2 <sup>+</sup>	[M1]	0.000623 9	$\alpha=0.000623$ 9; $\alpha(K)=0.000202$ 3; $\alpha(L)=2.31\times 10^{-5}$ 4; $\alpha(M)=4.36\times 10^{-6}$ 7; $\alpha(N+..)=0.000394$ 6 $\alpha(N)=7.58\times 10^{-7}$ 11; $\alpha(O)=3.68\times 10^{-8}$ 6; $\alpha(IPF)=0.000393$ 6
2249.48 10 2272.85 15	105 4 220 12	2249.57 2326.04	(1/2 <sup>+</sup> , 3/2) (5/2 <sup>+</sup> )	0.0 53.140	1/2 <sup>-</sup> 9/2 <sup>+</sup>	[E2]	0.000644 9	$\alpha=0.000644$ 9; $\alpha(K)=0.000184$ 3; $\alpha(L)=2.11\times 10^{-5}$ 3; $\alpha(M)=3.98\times 10^{-6}$ 6; $\alpha(N+..)=0.000435$ 6 $\alpha(N)=6.91\times 10^{-7}$ 10; $\alpha(O)=3.32\times 10^{-8}$ 5; $\alpha(IPF)=0.000434$ 6
2274.83 <sup>ac</sup> 15 2274.83 <sup>ac</sup> 15 2288.9 2	180 <sup>a</sup> 12 180 <sup>a</sup> 12 6.4 7	2300.39 2327.83 2314.81	3/2 <sup>+</sup> , 5/2 <sup>+</sup> 3/2 <sup>+</sup> , 5/2 <sup>+</sup> , 7/2 <sup>+</sup> 5/2 <sup>+</sup>	25.470 53.140 25.470	7/2 <sup>+</sup> 9/2 <sup>+</sup> 7/2 <sup>+</sup>	[M1]	0.000640 9	$\alpha=0.000640$ 9; $\alpha(K)=0.000192$ 3; $\alpha(L)=2.19\times 10^{-5}$ 3; $\alpha(M)=4.15\times 10^{-6}$ 6; $\alpha(N+..)=0.000422$ 6 $\alpha(N)=7.21\times 10^{-7}$ 10; $\alpha(O)=3.50\times 10^{-8}$ 5; $\alpha(IPF)=0.000421$ 6
2300.57 <sup>ac</sup> 9 2300.57 <sup>ac</sup> 9	110 <sup>a</sup> 4 110 <sup>a</sup> 4	2300.39 2326.04	3/2 <sup>+</sup> , 5/2 <sup>+</sup> (5/2 <sup>+</sup> )	0.0 25.470	1/2 <sup>-</sup> 7/2 <sup>+</sup>	[M1]	0.000643 9	$\alpha=0.000643$ 9; $\alpha(K)=0.000190$ 3; $\alpha(L)=2.17\times 10^{-5}$ 3; $\alpha(M)=4.11\times 10^{-6}$ 6; $\alpha(N+..)=0.000427$ 6 $\alpha(N)=7.14\times 10^{-7}$ 10; $\alpha(O)=3.46\times 10^{-8}$ 5; $\alpha(IPF)=0.000427$ 6
2308.3 12	22 1	2308.32	3/2 <sup>+</sup>	0.0	1/2 <sup>-</sup>	[E1]	0.000931 13	$\alpha=0.000931$ 13; $\alpha(K)=9.86\times 10^{-5}$ 14; $\alpha(L)=1.113\times 10^{-5}$ 16; $\alpha(M)=2.10\times 10^{-6}$ 3; $\alpha(N+..)=0.000819$ 1 $\alpha(N)=3.64\times 10^{-7}$ 6; $\alpha(O)=1.760\times 10^{-8}$ 25; $\alpha(IPF)=0.000818$ 12
2318.5 14 2333.26 5	10.4 9 422 14	2371.79 2333.34	5/2 <sup>+</sup> , 7/2 <sup>+</sup> 3/2 <sup>+</sup>	53.140 0.0	9/2 <sup>+</sup> 1/2 <sup>-</sup>	[E1]	0.000945 14	$\alpha=0.000945$ 14; $\alpha(K)=9.70\times 10^{-5}$ 14; $\alpha(L)=1.095\times 10^{-5}$ 16; $\alpha(M)=2.07\times 10^{-6}$ 3; $\alpha(N+..)=0.000835$ 1 $\alpha(N)=3.59\times 10^{-7}$ 5; $\alpha(O)=1.732\times 10^{-8}$ 25; $\alpha(IPF)=0.000834$ 12
2345.7 <sup>#c</sup> 7 <sup>x</sup> 2364.6 13 2375.2 3	0.8 5 10.5 6 1.6 5	2371.79 2400.62	5/2 <sup>+</sup> , 7/2 <sup>+</sup> (3/2 <sup>+</sup> )	25.470 25.470	7/2 <sup>+</sup> 7/2 <sup>+</sup>	[E2]	0.000678 10	$\alpha=0.000678$ 10; $\alpha(K)=0.0001704$ 24; $\alpha(L)=1.95\times 10^{-5}$ 3; $\alpha(M)=3.68\times 10^{-6}$ 6; $\alpha(N+..)=0.000484$ 7 $\alpha(N)=6.38\times 10^{-7}$ 9; $\alpha(O)=3.07\times 10^{-8}$ 5; $\alpha(IPF)=0.000484$ 7

<sup>105</sup>Cd ε decay 1976Ja05 (continued)γ(<sup>105</sup>Ag) (continued)

$E_\gamma$ <sup>†</sup>	$I_\gamma$ <sup>†@</sup>	$E_i$ (level)	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\alpha$ &	Comments
<sup>x</sup> 2382.66 12	10.2 6							
2393.69 <sup>ac</sup> 9	38 <sup>a</sup> 1	2419.30	5/2 <sup>+</sup> ,7/2 <sup>+</sup> ,9/2 <sup>+</sup>	25.470	7/2 <sup>+</sup>			
2393.69 <sup>ac</sup> 9	38 <sup>a</sup> 1	2447.21	(5/2 <sup>+</sup> ,7/2 <sup>+</sup> )	53.140	9/2 <sup>+</sup>			
2400.37 15	9.4 7	2400.62	(3/2 <sup>+</sup> )	0.0	1/2 <sup>-</sup>	[E1]	0.000982 14	$\alpha=0.000982$ 14; $\alpha(K)=9.30\times 10^{-5}$ 13; $\alpha(L)=1.049\times 10^{-5}$ 15; $\alpha(M)=1.98\times 10^{-6}$ 3; $\alpha(N+..)=0.000877$ 1 $\alpha(N)=3.44\times 10^{-7}$ 5; $\alpha(O)=1.661\times 10^{-8}$ 24; $\alpha(IPF)=0.000876$ 13
2422.99 10	75 3	2423.08	3/2 <sup>+</sup>	0.0	1/2 <sup>-</sup>	[E1]	0.000995 14	$\alpha=0.000995$ 14; $\alpha(K)=9.18\times 10^{-5}$ 13; $\alpha(L)=1.035\times 10^{-5}$ 15; $\alpha(M)=1.95\times 10^{-6}$ 3; $\alpha(N+..)=0.000891$ 1 $\alpha(N)=3.39\times 10^{-7}$ 5; $\alpha(O)=1.638\times 10^{-8}$ 23; $\alpha(IPF)=0.000890$ 13
2429.19 14	13 6	2429.10	(3/2 <sup>+</sup> )	0.0	1/2 <sup>-</sup>	[E1]	0.000998 14	$\alpha=0.000998$ 14; $\alpha(K)=9.14\times 10^{-5}$ 13; $\alpha(L)=1.031\times 10^{-5}$ 15; $\alpha(M)=1.94\times 10^{-6}$ 3; $\alpha(N+..)=0.000895$ 1 $\alpha(N)=3.38\times 10^{-7}$ 5; $\alpha(O)=1.632\times 10^{-8}$ 23; $\alpha(IPF)=0.000894$ 13
2447.5 <sup>c</sup> 3	≤0.1	2472.99	(3/2 <sup>+</sup> ,5/2 <sup>+</sup> ,7/2 <sup>+</sup> )	25.470	7/2 <sup>+</sup>			
2469.5 5	1.3 3	2494.8	(3/2 <sup>+</sup> to 9/2 <sup>-</sup> )	25.470	7/2 <sup>+</sup>			
<sup>x</sup> 2512.1 5	0.7 3							
2525.45 18	16.7 7	2550.68	(5/2 <sup>-</sup> )	25.470	7/2 <sup>+</sup>	[E1]	0.001051 15	$\alpha=0.001051$ 15; $\alpha(K)=8.64\times 10^{-5}$ 12; $\alpha(L)=9.73\times 10^{-6}$ 14; $\alpha(M)=1.84\times 10^{-6}$ 3; $\alpha(N+..)=0.000953$ 14 $\alpha(N)=3.19\times 10^{-7}$ 5; $\alpha(O)=1.541\times 10^{-8}$ 22; $\alpha(IPF)=0.000953$ 14
2530.8 3	1.3 3	2584.25	(5/2 <sup>+</sup> )	53.140	9/2 <sup>+</sup>	[E2]	0.000731 11	$\alpha=0.000731$ 11; $\alpha(K)=0.0001525$ 22; $\alpha(L)=1.739\times 10^{-5}$ 25; $\alpha(M)=3.28\times 10^{-6}$ 5; $\alpha(N+..)=0.000558$ $\alpha(N)=5.70\times 10^{-7}$ 8; $\alpha(O)=2.75\times 10^{-8}$ 4; $\alpha(IPF)=0.000558$ 8
<sup>x</sup> 2554.3 4	1.2 3							
2558.8 2	3.2 3	2584.25	(5/2 <sup>+</sup> )	25.470	7/2 <sup>+</sup>	[M1]	0.000726 11	$\alpha=0.000726$ 11; $\alpha(K)=0.0001551$ 22; $\alpha(L)=1.769\times 10^{-5}$ 25; $\alpha(M)=3.34\times 10^{-6}$ 5; $\alpha(N+..)=0.000550$ $\alpha(N)=5.81\times 10^{-7}$ 9; $\alpha(O)=2.82\times 10^{-8}$ 4; $\alpha(IPF)=0.000549$ 8
<sup>x</sup> 2568.5 8	0.5 3							
<sup>x</sup> 2573.8 2	3.2 3							
<sup>x</sup> 2594.5 5	0.7 2							
<sup>x</sup> 2660.4 6	0.4 2							

† From 1976Ja05.

‡ From the adopted gammas.

# The presence of this transition is questionable (1976Ja05).

@ For absolute intensity per 100 decays, multiply by 0.00469 31.

&amp; Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.

<sup>a</sup> Multiply placed with undivided intensity.<sup>b</sup> Multiply placed with intensity suitably divided.

$^{105}\text{Cd}$   $\varepsilon$  decay    **1976Ja05** (continued)

$\gamma(^{105}\text{Ag})$  (continued)

<sup>c</sup> Placement of transition in the level scheme is uncertain.

<sup>x</sup>  $\gamma$  ray not placed in level scheme.

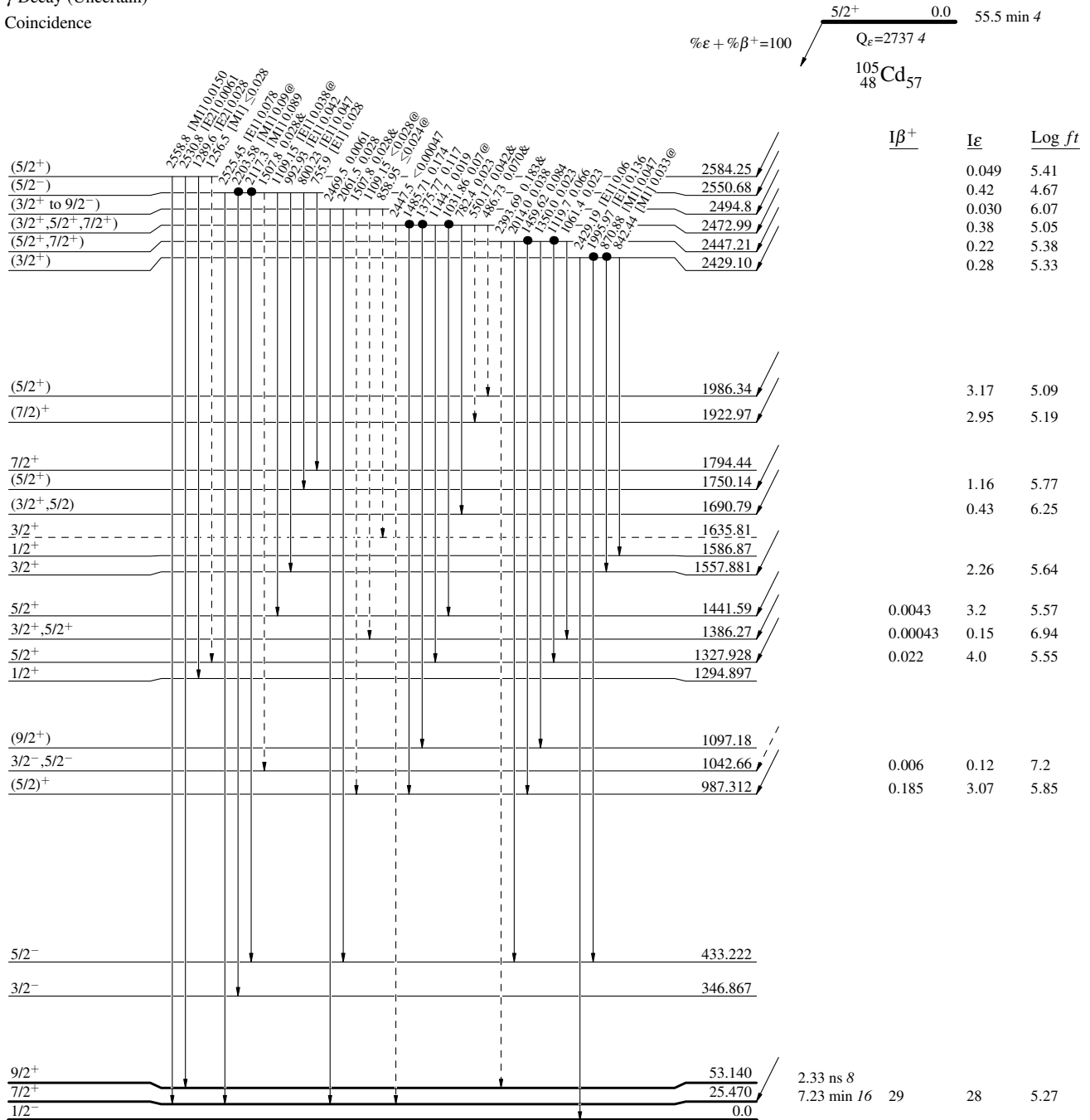
<sup>105</sup>Cd ε decay 1976Ja05

Decay Scheme

Legend

- I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>
- - - - - γ Decay (Uncertain)
- Coincidence

Intensities: I<sub>(γ+ce)</sub> per 100 parent decays  
 & Multiply placed: undivided intensity given  
 @ Multiply placed: intensity suitably divided



<sup>105</sup>Ag<sub>58</sub>

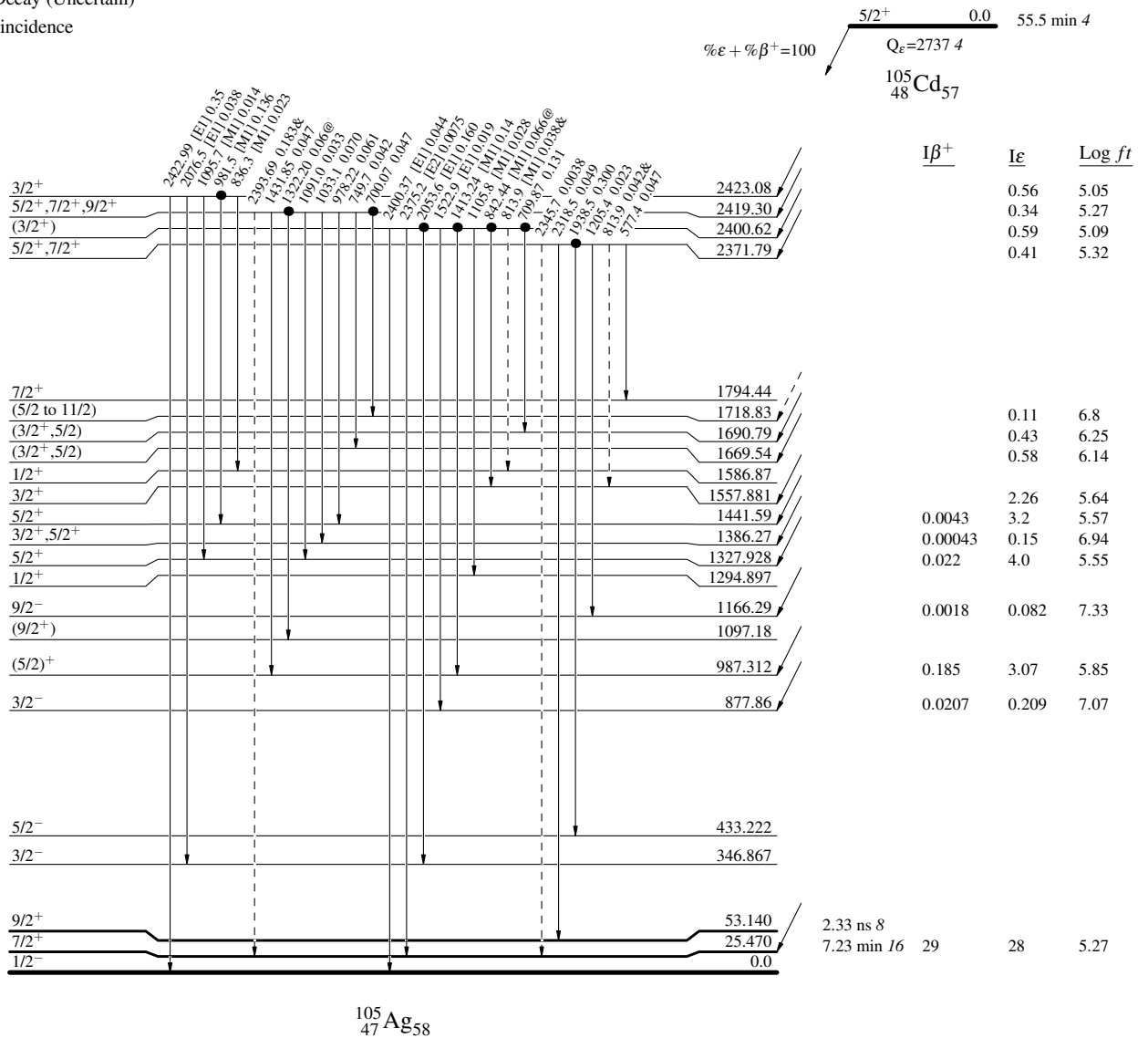
<sup>105</sup>Cd ε decay 1976Ja05

Decay Scheme (continued)

Legend

- I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>
- - - - γ Decay (Uncertain)
- Coincidence

Intensities: I<sub>(γ+ce)</sub> per 100 parent decays  
 & Multiply placed: undivided intensity given  
 @ Multiply placed: intensity suitably divided



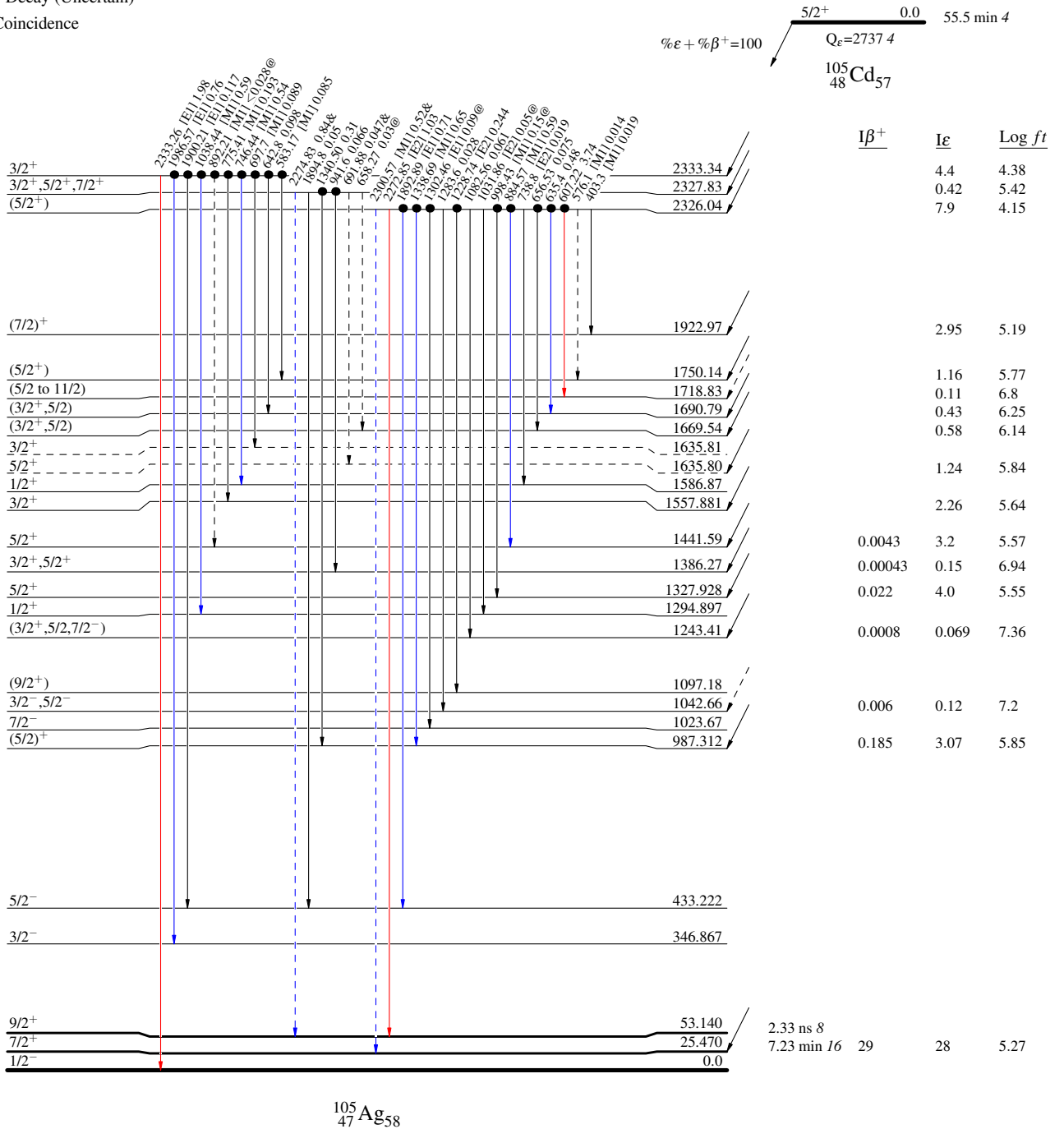
<sup>105</sup>Cd ε decay 1976Ja05

Decay Scheme (continued)

Legend

- I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>
- - - - - γ Decay (Uncertain)
- Coincidence

Intensities: I<sub>(γ+ce)</sub> per 100 parent decays  
 & Multiply placed: undivided intensity given  
 @ Multiply placed: intensity suitably divided



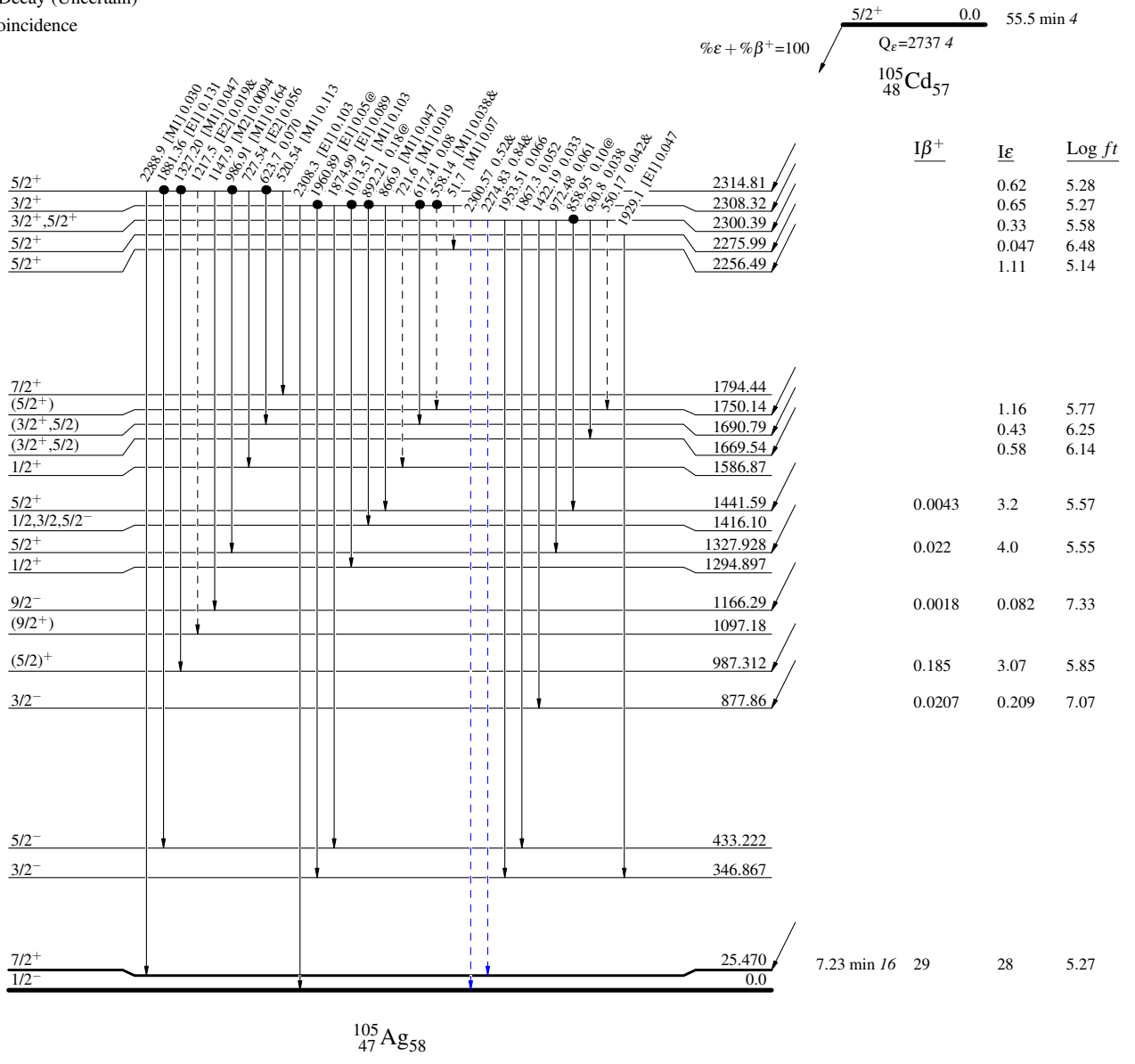
<sup>105</sup>Cd ε decay 1976Ja05

Decay Scheme (continued)

Legend

- I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>
- - - - - γ Decay (Uncertain)
- Coincidence

Intensities: I<sub>(γ+ce)</sub> per 100 parent decays  
 & Multiply placed: undivided intensity given  
 @ Multiply placed: intensity suitably divided





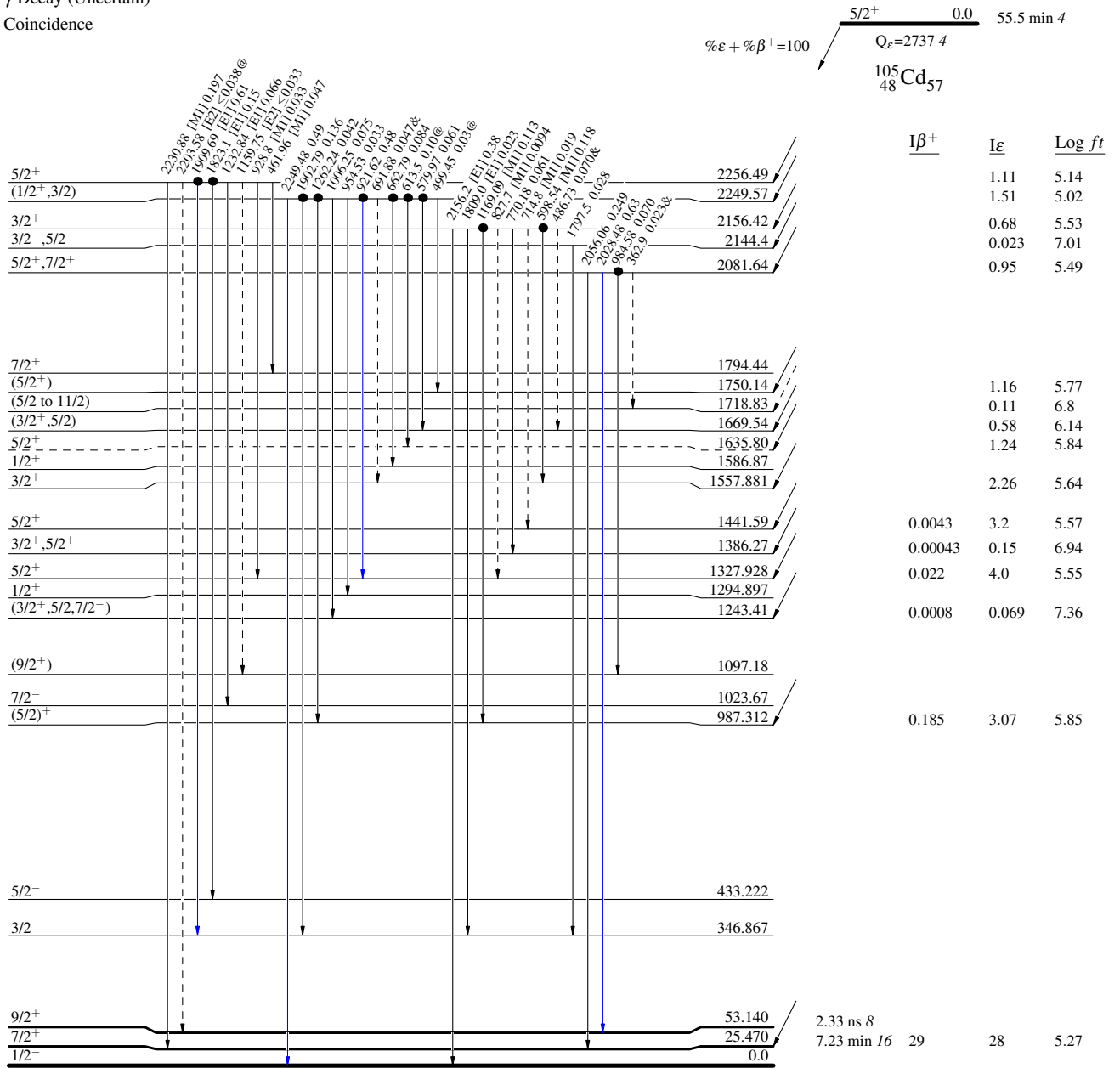
$^{105}\text{Cd}$   $\epsilon$  decay 1976Ja05

Decay Scheme (continued)

Legend

- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$
- - - - -  $\gamma$  Decay (Uncertain)
- Coincidence

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



$^{105}_{47}\text{Ag}_{58}$

<sup>105</sup>Cd ε decay 1976Ja05

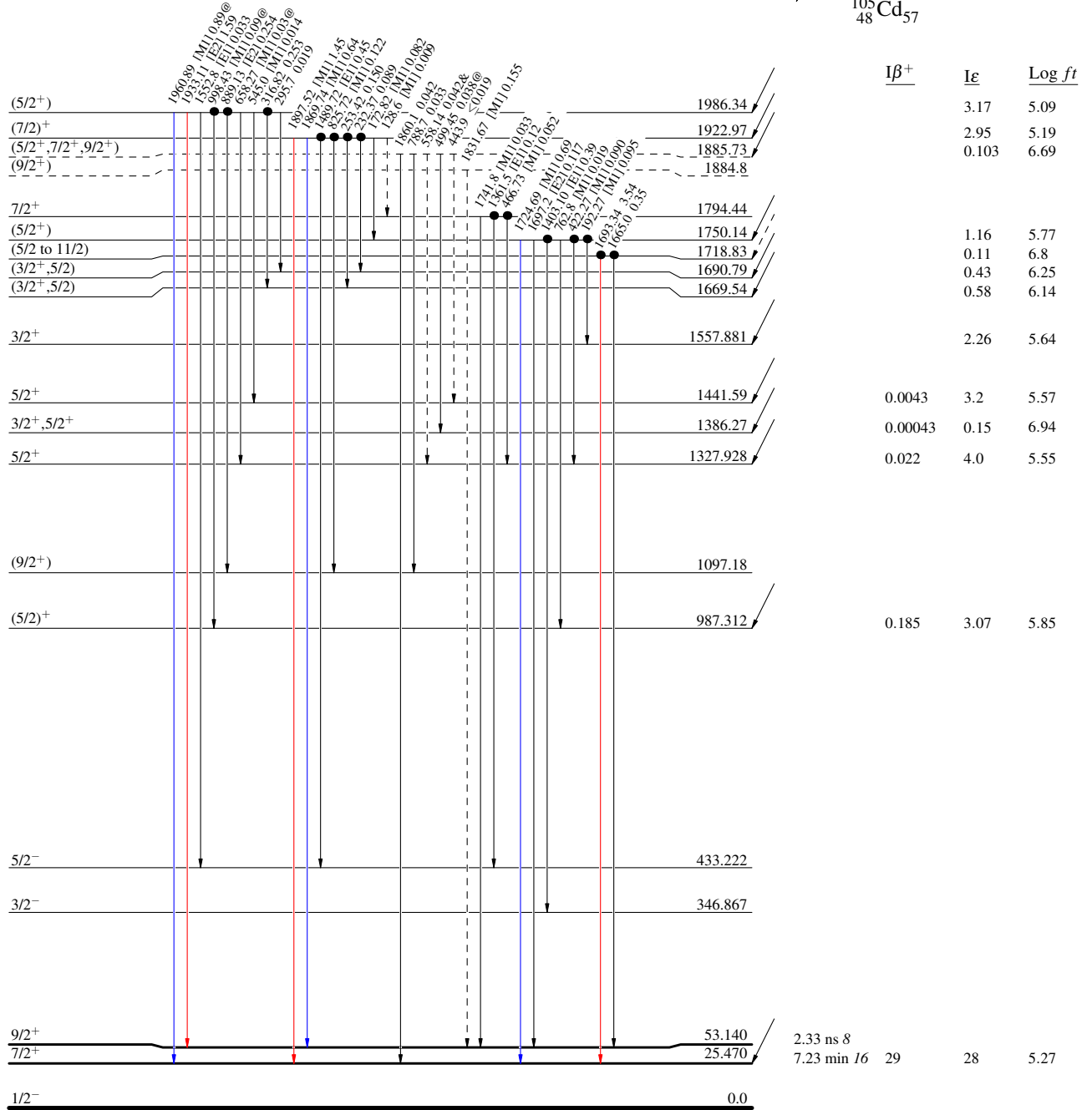
Decay Scheme (continued)

Legend

- I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>
- - - - - γ Decay (Uncertain)
- Coincidence

Intensities: I<sub>(γ+ce)</sub> per 100 parent decays  
 & Multiply placed: undivided intensity given  
 @ Multiply placed: intensity suitably divided

5/2<sup>+</sup> 0.0 55.5 min 4  
 Q<sub>ε</sub>=2737.4  
<sup>105</sup>Cd<sub>57</sub>



<sup>105</sup>Ag<sub>58</sub>

$^{105}\text{Cd}$   $\epsilon$  decay 1976Ja05

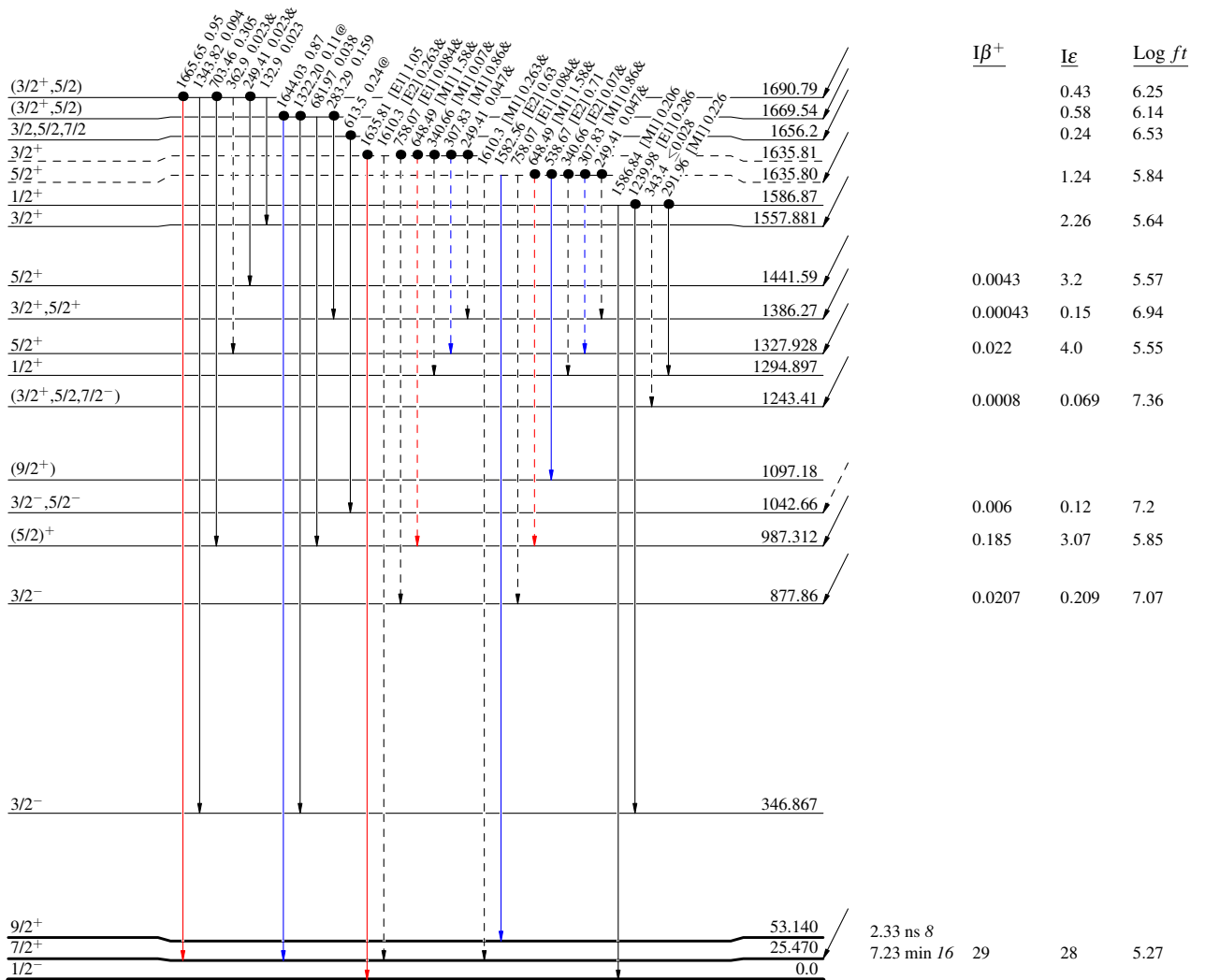
Decay Scheme (continued)

Legend

- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$
- - - -  $\gamma$  Decay (Uncertain)
- Coincidence

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

$^{105}_{48}\text{Cd}_{57}$   $5/2^+$  0.0 55.5 min 4  
 $Q_\epsilon = 2737.4$   
 $\% \epsilon + \% \beta^+ = 100$



$^{105}_{47}\text{Ag}_{58}$

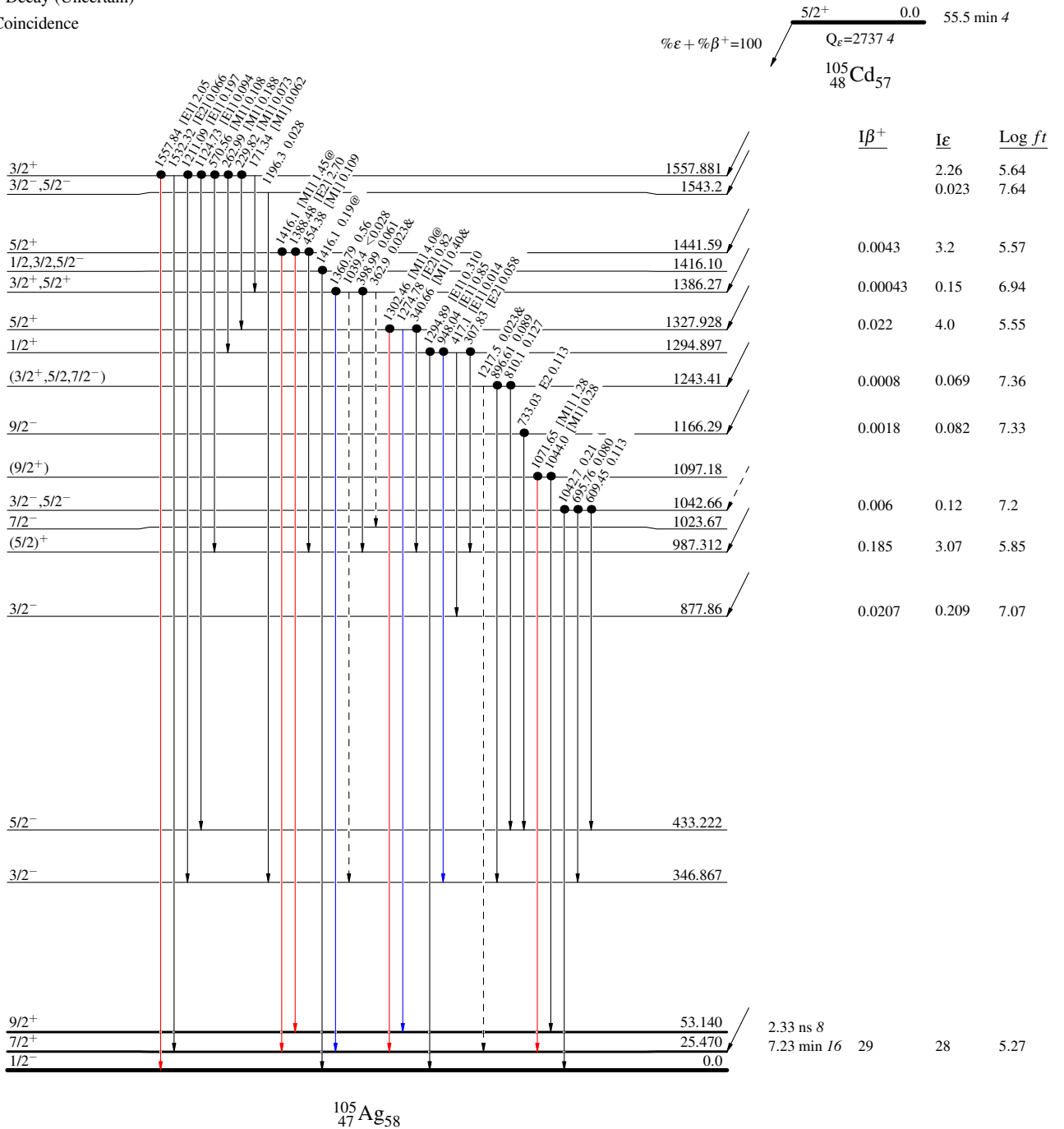
$^{105}\text{Cd}$   $\epsilon$  decay 1976Ja05

Decay Scheme (continued)

Legend

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

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



<sup>105</sup>Cd ε decay 1976Ja05

Decay Scheme (continued)

Legend

- I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>
- - - - - γ Decay (Uncertain)
- Coincidence

Intensities: I<sub>(γ+ce)</sub> per 100 parent decays  
 & Multiply placed: undivided intensity given  
 @ Multiply placed: intensity suitably divided

