^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

History

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

Parent: ^{108}In: E=0; $J^\pi=7^+$; $T_{1/2}$=58.0 min *12*; Q(ε)=5157 *36*; %ε+%β^+ decay=100.0

Parent: ^{108}In: E=29.75 *5*; $J^\pi=2^+$; $T_{1/2}$=39.6 min *7*; Q(ε)=5157 *36*; %ε+%β^+ decay=100.0

In ^{108}In ε decay, measured Eγ, branchings, $\gamma\gamma(\theta)$ using OSIRIS spectrometer with nine HPGe detectors, six of which were Compton suppressed.

Corrections made to gamma-ray placements and mixing ratios based based on e-mail replies (Nov. 30, 2002 and Dec. 8, 2002) from the first author (A. Gade) of 2002Ga35.

^{108}Cd Levels

3221.9 and 3489.4 levels reported in 2002Ga35 are non-existent; 780.6γ and 984.1γ from these levels, respectively are placed elsewhere in the level scheme (e-mail reply from A. Gade, Dec 8, 2002).

E(level)†	J^π	$T_{1/2}$‡	E(level)†	J^π	E(level)†	J^π	$T_{1/2}$‡
0	0^+		2998.12 *5*		3388.99 *6*	$5^{(+)}$	0.21 ps *6*
632.99 *3*	2^+		3005.68 *6*	1	3389.43 *11*	(3)	
1508.44 *3*	4^+		3028.33 *5*		3400.51 *7*		
1601.81 *3*	2^+		3031.70 *5*	2^+	3407.28 *7*		
1720.63 *4*	0^+		3048.53 *6*	1^+	3407.89 *6*		
1913.36 *4*	0^+		3057.51 *6*	7^-	3413.05 *9*	(6^+)	
2145.83 *3*	3^+		3059.55 *7*		3427.97 *7*		
2162.79 *3*	2^+	0.34 ps *14*	3059.83 *6*	$(4,5)^+$	3433.01 *8*		
2202.17 *4*	3^-		3077.48 *5*	(4^+)	3435.17 *11*		
2239.33 *4*	4^+		3081.84 *5*	3^+	3436.96 *8*		
2365.84 *3*	2^+	0.28 ps *6*	3092.30 *5*	(3)	3450.09 *5*	$2^+,3^+$	
2374.59 *4*	(0^+)		3110.45 *8*	(8^+)	3454.16 *4*	1^+	
2486.35 *4*	2^+		3138.99 *6*		3459.84 *7*	5,6	
2541.31 *4*	6^+		3171.23 *6*	$2,3^+$	3460.58 *6*		
2555.16 *4*	$3^{(-)}$		3174.16 *8*		3470.03 *6*	$2^{(+)}$	
2565.04 *4*	5^+		3181.49 *7*		3474.98 *8*	8^-	
2601.57 *4*	5^-		3189.58 *8*	5,6,7	3482.44 *11*	2	
2620.04 *4*	2^+	83 fs *20*	3194.85 *6*	2^+	3485.21 *9*	9^-	
2645.61 *4*	4^+		3203.63 *11*		3512.26 *8*		
2678.10 *5*	1^-		3221.65 *5*	$(3,4)^+$	3525.36 *6*		
2682.73 *4*	1	0.22 ps *5*	3223.79 *8*	8^-	3527.15 *11*		
2707.06 *5*	5^-		3227.93 *8*	(2^+)	3535.84 *11*	$(3,4)^+$	
2738.71 *4*	4^+	0.37 ps *9*	3248.22 *7*		3539.95 *8*		0.29 ps *8*
2755.04 *6*	$4^+,5^+$	0.23 ps *7*	3249.06 *7*	7^-	3555.04 *11*	(3^+)	
2762.98 *4*	3^+		3259.64 *8*		3559.64 *11*		
2790.79 *6*			3264.93 *11*	$1,2^+,3$	3561.18 *5*	$(4,5,6)^+$	
2805.14 *5*	3		3289.75 *6*		3566.44 *11*		
2807.74 *5*	6^+		3292.73 *5*	1	3571.86 *4*	2^+	
2810.24 *6*	4^-		3294.90 *7*	3^+	3576.21 *7*		
2816.52 *5*	2^+		3298.54 *8*		3605.58 *11*		
2820.19 *6*	$2^{(-)}$		3303.55 *10*		3611.67 *7*		
2875.90 *5*	4^+		3316.41 *7*	(3^+)	3629.19 *8*		
2905.81 *5*	5^+		3321.90 *6*		3633.74 *11*		
2936.22 *11*	$0^+,1^+,2^+$		3326.63 *11*	$3,(2^+)$	3642.12 *7*		
2975.38 *5*	6^-		3343.99 *5*	1	3643.22 *8*		
2976.57 *5*	4^+		3353.35 *6*		3656.28 *7*		
2993.16 *5*	2^+		3367.49 *5*	$(5,6^+)$	3656.44 *9*	(8^+)	
2994.20 *5*	6^+		3384.93 *5*	$2^+,3$	3667.07 *10*	1	

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^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

^{108}Cd Levels (continued)

E(level)†	Jπ	E(level)†	Jπ	E(level)†	Jπ	E(level)†	Jπ
3674.68 *6*		3904.06 *8*		4209.83 *5*	2^+	4525.35 *7*	
3683.22 *11*	8^+	3946.14 *5*	(2^+)	4224.17 *8*		4529.10 *6*	
3683.34 *11*		3968.27 *11*		4238.92 *4*	1^+	4584.68 *5*	1^+
3718.45 *6*		3968.65 *11*		4239.96 *5*		4617.13 *8*	
3724.54 *4*	2^+	3968.99 *8*		4251.57 *7*		4640.22 *7*	
3726.66 *11*		3984.61 *7*		4278.67 *7*		4640.42 *6*	1^+,(2)
3731.96 *11*		4008.76 *8*		4282.32 *11*		4649.49 *6*	
3740.37 *8*		4011.42 *8*		4293.93 *5*		4656.40 *6*	$(1^+,3^+)$
3770.37 *8*	(7^+)	4011.90 *5*	2^+,(3)	4315.72 *7*		4663.33 *7*	
3779.76 *8*		4016.97 *13*		4323.50 *6*	$(1^+,3^+)$	4663.98 *8*	(2^+)
3787.07 *11*		4028.76 *4*	2^+	4334.38 *5*		4698.34 *5*	
3788.92 *5*	2^+	4030.93 *6*		4345.40 *5*	1^+	4755.53 *6*	
3811.67 *11*		4043.80 *5*	$4,5^+$	4351.98 *6*	1	4774.90 *5*	
3814.60 *4*	1^+	4082.87 *11*		4394.81 *5*	1^+	4811.55 *7*	$1^+,2,3^+$
3816.28 *5*	$(5^+,6^+)$	4083.61 *11*		4400.66 *6*	$(3^+,2^+)$	4811.77 *8*	
3827.91 *4*	1^+	4096.17 *11*		4414.06 *8*	$(1^+,3^+)$	4849.09 *8*	
3860.72 *8*		4109.28 *8*		4468.51 *7*		4858.80 *6*	
3875.77 *8*		4160.71 *7*		4471.05 *5*	1	4864.74 *6*	
3881.58 *8*		4179.26 *5*		4481.35 *6*	$(3^+,1^+)$	4870.33 *8*	
3890.72 *8*		4203.61 *4*	(1^+)	4512.61 *6*		4914.49 *8*	

† From least-squares fit to Eγ′s, assuming uncertainty of 0.1 keV for each γ ray.
‡ Effective half-life.

γ(^{108}Cd)

E_i(level)	J^π_i	E_γ	I_γ	E_f	J^π_f	Mult.	δ†	Comments
632.99	2^+	633.0	100	0	0^+	E2		
1508.44	4^+	875.4	100	632.99	2^+	E2(+M3)	−0.02‡ *3*	δ: −0.011 *34* in ε decay.
1601.81	2^+	968.8	97 *8*	632.99	2^+	M1+E2	−1.59‡ *13*	δ: −1.68 *13* in ε decay.
		1601.8	100 *8*	0	0^+	E2		
1720.63	0^+	1087.7	100	632.99	2^+	E2		
1913.36	0^+	311.5	100 *8*	1601.81	2^+	E2		
		1280.3	95 *8*	632.99	2^+	E2		
2145.83	3^+	544.0	12 *1*	1601.81	2^+	M1+E2	−1.7‡ *+4−7*	δ: −1.7 *+8−22* in ε decay.
		637.3	6.2 *9*	1508.44	4^+	M1+E2	−0.52‡ *7*	δ: −0.72 *+17−20* in ε decay.
		1512.7	100 *8*	632.99	2^+	M1+E2	−0.87 *8*	δ: −0.82 *7* in (α,nγ); also −1.9 *2* in ε decay. δ=−0.78 *7* in table III is a misprint (e-mail reply from A. Gade Nov. 30, 2002).
2162.79	2^+	442.0	0.3 *1*	1720.63	0^+	E2	‡	B(E2)(W.u.)=9 *5* δ: +0.26 *3* in ε decay.
		1529.8	100 *8*	632.99	2^+	M1+E2	+0.27 *4*	B(M1)(W.u.)=0.016 *7*; B(E2)(W.u.)=0.42 *22*
		2162.8	5.6 *7*	0	0^+	E2		B(E2)(W.u.)=0.06 *3*
2202.17	3^-	600.3	4.1 *9*	1601.81	2^+			
		1569.2	100 *8*	632.99	2^+	E1(+M2)	+0.03 *3*	δ: +0.01 *3* in ε decay.
2239.33	4^+	637.5	18 *1*	1601.81	2^+	E2(+M3)	−0.01 *6*	
		730.8	100 *8*	1508.44	4^+	M1+E2	−0.31‡ *10*	δ: −0.70 *16* or −0.25 *20* in ε decay.
		1606.3	86 *7*	632.99	2^+	E2(+M3)	−0.07‡ *4*	δ: −0.003 *38* in ε decay.
2365.84	2^+	1732.8	100 *9*	632.99	2^+	M1(+E2)	−0.03‡ *5*	B(M1)(W.u.)=(0.012 *3*); B(E2)(W.u.)=(0.003 *+11−3*) δ: −0.04 *3* in ε decay.

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^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	Comments
2365.84	2^+	2365.7	23 *3*	0	0^+	E2		B(E2)(W.u.)=0.17 *5*
2374.59	(0^+)	772.7	8 *2*	1601.81	2^+	E2		
		1741.5	100 *9*	632.99	2^+	E2		
2486.35	2^+	884.5	5 *2*	1601.81	2^+	M1+E2	+0.31 *8*	
		1853.2	100 *9*	632.99	2^+	M1+E2	−0.47‡ *14*	
		2486.3	4 *1*	0	0^+	E2		
2541.31	6^+	1032.9	100	1508.44	4^+	E2(+M3)	−0.004‡ *32*	δ: −0.001 *42* in ε decay.
2555.16	$3^{(-)}$	353.1	12 *3*	2202.17	3^-			
		392.5	<0.6	2162.79	2^+			
		409.1	3 *2*	2145.83	3^+			
		953.3	33 *4*	1601.81	2^+	E1(+M2)	−0.03 *9*	δ: +0.07 *8* in (α,nγ). In table IV δ=−0.03 *9* should be listed from ε decay (E-mail reply from A. Gade November 30, 2002).
		1922.1	100 *10*	632.99	2^+	E1(+M2)	+0.04‡ *4*	δ: −0.07 *6* in ε decay.
2565.04	5^+	325.7	46 *4*	2239.33	4^+	M1+E2	−0.08‡ *4*	
		419.2	0.7 *1*	2145.83	3^+			
		1056.6	100 *8*	1508.44	4^+	M1+E2	−0.21‡ *3*	δ: −0.18 *3* in ε decay.
2601.57	5^-	399.4	1.6 *2*	2202.17	3^-	E2(+M3)	−0.1‡ *2*	
		1093.2	100 *10*	1508.44	4^+	E1(+M2)	−0.012‡ *19*	δ: −0.007 *29* in ε decay.
2620.04	2^+	1018.2	0.9 *3*	1601.81	2^+	M1+E2	−0.13 *10*	B(M1)(W.u.)=0.0022 *9*; B(E2)(W.u.)=0.03 *+5−3*
		1987.0	100 *8*	632.99	2^+	M1+E2	+0.16 *3*	B(M1)(W.u.)=0.032 *9*; B(E2)(W.u.)=0.18 *8* δ: +0.13 *7* in (α,nγ).
		2620.0	1.8 *4*	0	0^+	E2		B(E2)(W.u.)=0.032 *11*
2645.61	4^+	406.2	3 *2*	2239.33	4^+			
		499.8	5 *2*	2145.83	3^+			
		1043.9	4 *2*	1601.81	2^+			
		1137.1	100 *8*	1508.44	4^+	M1+E2	−0.6‡ *2*	δ: −1.14 *+20−25* or +0.07 *10* in ε decay.
		2012.4	16 *2*	632.99	2^+			
2678.10	1^-	2678.0	100	0	0^+			
2682.73	1	316.9	<0.5	2365.84	2^+			
		1080.8	2.9 *3*	1601.81	2^+			
		2049.6	100 *10*	632.99	2^+	D+Q	−0.056 *15*	δ: not listed in table IV of 2002Ga35.
		2682.8	2.7 *3*	0	0^+			
2707.06	5^-	105.5	2.0 *2*	2601.57	5^-			
		467.7	1.2 *2*	2239.33	4^+			
		504.9	1.5 *5*	2202.17	3^-			
		1198.5	100 *10*	1508.44	4^+	E1(+M2)	−0.006‡ *21*	δ: +0.05 *4* in ε decay.
2738.71	4^+	536.6	0.9 *2*	2202.17	3^-			
		575.9	0.9 *1*	2162.79	2^+			
		1230.3	100 *9*	1508.44	4^+	M1+E2	+0.16‡ *8*	B(M1)(W.u.)=0.027 *8*; B(E2)(W.u.)=0.4 *4* δ: +0.22 *11* in ε decay.
		2105.6	14 *2*	632.99	2^+			
2755.04	$4^+,5^+$	1246.6	100	1508.44	4^+			
2762.98	3^+	397.1	<5	2365.84	2^+			
		523.6	<4	2239.33	4^+			
		560.7	<11	2202.17	3^-			
		617.1	<14	2145.83	3^+			
		1161.1	100 *10*	1601.81	2^+	M1+E2	+1.0‡ *+5−3*	δ: +0.55 *24* in ε decay.
		1254.5	70 *8*	1508.44	4^+	M1+E2	−0.55‡ *14*	δ: −0.58 *12* in ε decay.
		2129.9	33 *11*	632.99	2^+			
2790.79		551.4	9 *2*	2239.33	4^+			
		1189.0	44 *4*	1601.81	2^+			
		1282.3	100 *8*	1508.44	4^+			

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^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	Comments
2805.14	3	1296.6	100 *9*	1508.44	4^+	D+Q	−0.15‡ *4*	δ: −0.16 *4* in ε decay.
		2172.1	10 *2*	632.99	2^+			
2807.74	6^+	206.1	2.0 *5*	2601.57	5^-	E1(+M2)	−0.06 *6*	
		242.8	100 *8*	2565.04	5^+			
		266.4	8.5 *9*	2541.31	6^+			
		1299.3	40 *4*	1508.44	4^+	E2(+M3)	−0.003 *4*	δ: not listed in table IV of 2002Ga35.
2810.24	4^-	608.1	18 *2*	2202.17	3^-			
		664.4	40 *3*	2145.83	3^+	E1+M2	+0.04‡ *3*	
		1301.8	100 *8*	1508.44	4^+			
2816.52	2^+	450.7	19 *3*	2365.84	2^+			
		614.4	38 *4*	2202.17	3^-			
		653.7	16 *3*	2162.79	2^+			
		670.7	45 *4*	2145.83	3^+			
		2183.4	100 *9*	632.99	2^+	M1+E2	+0.22 *8*	
		2816.5	57 *5*	0	0^+			
2820.19	$2^{(-)}$	618.0	≤6	2202.17	3^-			
		1218.3	26 *4*	1601.81	2^+	(E1(+M2))	+0.2 *2*	
		2187.2	100 *10*	632.99	2^+	(E1+M2)	+0.25 *6*	
2875.90	4^+	510.2	≤12	2365.84	2^+			
		729.9	15 *4*	2145.83	3^+			
		1367.4	79 *8*	1508.44	4^+	M1+E2	−0.5‡ *3*	δ: positive sign in table IV of 2002Ga35 is a misprint (E-mail reply from A. Gade, November 30, 2002).
		2242.9	100 *9*	632.99	2^+			
2905.81	5^+	364.5	4 *1*	2541.31	6^+			
		666.5	38 *3*	2239.33	4^+			
		760.0	55 *5*	2145.83	3^+	E2(+M3)	−0.012‡ *40*	δ: uncertainty=0.004 in table III of 2002Ga35 is a misprint (E-mail reply from A. Gade, November 30, 2002).
		1397.4	100 *8*	1508.44	4^+	M1+E2	−0.73 *14*	
2936.22	$0^+,1^+,2^+$	2303.2	100	632.99	2^+			
2975.38	6^-	268.4	38 *3*	2707.06	5^-			
		373.8	100 *8*	2601.57	5^-	M1+E2	+0.55 *5*	
		434.1	8.9 *9*	2541.31	6^+			
2976.57	4^+	331.0	<10	2645.61	4^+			
		737.3	14 *6*	2239.33	4^+			
		774.6	12 *5*	2202.17	3^-			
		1374.7	44 *7*	1601.81	2^+			
		1468.1	100 *11*	1508.44	4^+	M1(+E2)	−0.17 *31*	δ: −0.36 *21* from (α,n). δ=−0.5 *2* in table III is a misprint (E-mail reply from A. Gade, November 30, 2002).
2993.16	2^+	1391.4	<25	1601.81	2^+			
		2360.1	100 *12*	632.99	2^+	M1+E2	−0.91 *+20−25*	
		2993.1	32 *6*	0	0^+			
2994.20	6^+	429.1	<7	2565.04	5^+			
		452.9	7 *3*	2541.31	6^+			
		754.9	43 *5*	2239.33	4^+	E2(+M3)	+0.06 *6*	δ: +0.02 *15* in (α,nγ).
		1485.8	100 *9*	1508.44	4^+	E2(+M3)	−0.05 *5*	δ: no value given in table IV of 2002Ga35.
2998.12		315.3	100 *8*	2682.73	1			
		320.1	44 *4*	2678.10	1^-			
		796.1	19 *3*	2202.17	3^-			
		835.3	24 *3*	2162.79	2^+			
3005.68	1	2372.6	21 *4*	632.99	2^+	D(+Q)	−0.06 *6*	
		3005.6	100 *9*	0	0^+			

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^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	Comments
3028.33		662.5	4	2365.84	2^+			
		882.5	12	2145.83	3^+			
		1426.5	49 *15*	1601.81	2^+			
		2395.3	100 *17*	632.99	2^+			
3031.70	2^+	829.5	21	2202.17	3^-			
		868.9	5	2162.79	2^+			
		1118.3	9	1913.36	0^+			
		2398.6	100	632.99	2^+			
3048.53	1^+	1446.6	19 *3*	1601.81	2^+	M1+E2	+0.17 *3*	
		2415.6	62 *5*	632.99	2^+	M1+E2	+0.320 *13*	
		3048.5	100 *8*	0	0^+	M1		
3057.51	7^-	350.5	63 *5*	2707.06	5^-			
		455.9	100 *8*	2601.57	5^-	E2(+M3)	−0.06 *9*	δ: −0.04 *4* in (α,nγ).
		516.2	53 *4*	2541.31	6^+			
3059.55		494.4	34 *14*	2565.04	5^+			
		1551.0	100 *17*	1508.44	4^+			
3059.83	$(4,5)^+$	252.0	13	2807.74	6^+			
		414.2	72	2645.61	4^+			
		518.7	100	2541.31	6^+			
		914.0	53	2145.83	3^+			
3077.48	(4^+)	314.5	9	2762.98	3^+			
		322.4	<3	2755.04	$4^+,5^+$			
		431.8	5	2645.61	4^+			
		838.2	18	2239.33	4^+			
		931.7	10	2145.83	3^+			
		1569.1	100	1508.44	4^+	M1+E2	−1.0 *+4−7*	δ: −0.5 *+3−4* in (α,nγ).
3081.84	3^+	918.9	15 *7*	2162.79	2^+			
		1480.1	33 *10*	1601.81	2^+			
		2448.8	100 *13*	632.99	2^+			
3092.30	(3)	606.0	10	2486.35	2^+			
		853.0	22	2239.33	4^+			
		929.6	4	2162.79	2^+			
		1490.4	100	1601.81	2^+	D+Q	−0.30 *11*	
		2459.2	26	632.99	2^+			
3110.45	(8^+)	302.8	0.4	2807.74	6^+			
		569.0	100	2541.31	6^+	E2(+M3)	+0.04‡ *4*	
3138.99		328.8	100	2810.24	4^-			
		583.9	<4	2555.16	$3^{(-)}$			
		936.8	40	2202.17	3^-			
		993.2	17	2145.83	3^+			
		1630.4	35	1508.44	4^+			
3171.23	$2,3^+$	805.5	5 *2*	2365.84	2^+			
		2538.2	100 *9*	632.99	2^+			
3174.16		435.4#	<5	2738.71	4^+			Placement from 3171.2 level as given in 2002Ga35 is incorrect (e-mail reply from A. Gade, Dec. 8, 2002).
		1028.3	15	2145.83	3^+			
		1665.7	100	1508.44	4^+			
3181.49		626.3	29	2555.16	$3^{(-)}$			
		1035.8	7	2145.83	3^+			
		2548.4	100	632.99	2^+			
3189.58	5,6,7	648.3	100 *10*	2541.31	6^+			
		950.2	<12	2239.33	4^+			
3194.85	2^+	1049.0	47	2145.83	3^+			
		1593.0	66	1601.81	2^+			

Continued on next page (footnotes at end of table)

^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	Comments
3194.85	2+	2561.8	100	632.99	2+			
		3194.8	44	0	0+			
3203.63		2570.6	100	632.99	2+			
3221.65	(3,4)+	466.7	7	2755.04	4+,5+			
		483.1	7	2738.71	4+			
		1075.9	14	2145.83	3+			
		1713.4	100	1508.44	4+			
		2588.8	29	632.99	2+			
3223.79	8−	166.3	100 *8*	3057.51	7−			
		248.4	32 *3*	2975.38	6−			
3227.93	(2+)	1065.0	30	2162.79	2+			
		2595.0	100	632.99	2+	M1+E2	+0.14 *10*	
3248.22		602.6	12	2645.61	4+			
		1008.9	25	2239.33	4+			
		1739.8	100	1508.44	4+			
3249.06	7−	191.5	30 *3*	3057.51	7−			
		273.6	5 *1*	2975.38	6−			
		707.9	100 *8*	2541.31	6+	E1(+M2)	−0.01‡ *4*	
3259.64		1057.5	100	2202.17	3−			
		1113.8	34	2145.83	3+			
3264.93	1,2+,3	2631.9	100	632.99	2+			
3289.75		582.8	23	2707.06	5−			
		734.6	100	2555.16	3(−)			
		1087.6	81	2202.17	3−			
		1781.2	93	1508.44	4+			
3292.73	1	2659.8	45 *8*	632.99	2+			
		3292.8	100 *9*	0	0+			
3294.90	3+	1092.7	11	2202.17	3−			
		1132.2	10	2162.79	2+			
		2661.8	100	632.99	2+	M1+E2	+4.3 *+9−6*	δ: or +0.002 *4*.
3298.54		323.1	100	2975.38	6−			
		697.0	59	2601.57	5−			
3303.55		2670.7	<23	632.99	2+			
		3303.4	100 *9*	0	0+			
3316.41	(3+)	1714.5	13 *6*	1601.81	2+	M1+E2	+3.7 *+29−12*	
		2683.5	100 *14*	632.99	2+	M1+E2	+8.7 *+41−21*	δ: or −0.10 *4*.
3321.90		327.9	3.5	2994.20	6+			
		566.8	21	2755.04	4+,5+			
		780.6	76	2541.31	6+			Placement from 3221.9 level as given in 2002Ga35 is incorrect (e-mail reply from A. Gade, Dec. 8, 2002).
		1082.5	24	2239.33	4+			
		1813.4	100	1508.44	4+			
3326.63	3,(2+)	2693.6	100	632.99	2+			
3343.99	1	350.9	1.3	2993.16	2+			
		723.9	1.3	2620.04	2+			
		978.1	4	2365.84	2+			
		1181.2	6	2162.79	2+			
		1430.7	4	1913.36	0+			
		1623.4	12	1720.63	0+			
		1742.2	100	1601.81	2+	D+Q	+0.065 *26*	
		2710.9	<7	632.99	2+			
3353.35		614.6	100	2738.71	4+			
		1207.6	53	2145.83	3+			
		1751.5	38	1601.81	2+			

Continued on next page (footnotes at end of table)

^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	Comments
3353.35		1844.8	44	1508.44	4^+			
3367.49	$(5,6^+)$	826.2	100 *8*	2541.31	6^+			
		1128.1	14 *2*	2239.33	4^+			
		1859.0	49 *5*	1508.44	4^+			
3384.93	$2^+,3$	579.8	7	2805.14	3			
		898.4	10	2486.35	2^+			
		1222.2	80	2162.79	2^+			
		1239.2	47	2145.83	3^+			
		1783.0	100	1601.81	2^+			
		2752.0	99.8	632.99	2^+			
3388.99	$5^{(+)}$	413.7	27	2975.38	6^-			
		578.7	47	2810.24	4^-			
		787.4	69	2601.57	5^-			
		824.1	52	2565.04	5^+			
		1149.6	24	2239.33	4^+			
		1880.4	100	1508.44	4^+	M1+E2	−0.14 *5*	B(M1)(W.u.)=0.0048 *14*; B(E2)(W.u.)=0.023 *18* δ: or −15.4.
3389.43	(3)	2756.4	100	632.99	2^+	D+Q	+0.04 *5*	
3400.51		845.4	95	2555.16	$3^{(-)}$			
		1198.4	100	2202.17	3^-			
		1891.9	57	1508.44	4^+			
3407.28		1041.4	32	2365.84	2^+			
		1244.5	43	2162.79	2^+			
		1805.4	100	1601.81	2^+			
3407.89		669.2	11	2738.71	4^+			
		762.2	15	2645.61	4^+			
		1262.1	<13	2145.83	3^+			
		1899.5	100	1508.44	4^+			
3413.05	(6^+)	223.4	4	3189.58	5,6,7			
		871.8	100	2541.31	6^+	M1+E2	+0.25‡ *12*	
3427.97		452.6	29	2975.38	6^-			
		826.4	9	2601.57	5^-			
		886.7	100	2541.31	6^+			
3433.01		677.9	32	2755.04	$4^+,5^+$			
		891.8	100	2541.31	6^+			
3435.17		1233.0	100	2202.17	3^-			
3436.96		698.4	19	2738.71	4^+			
		1928.4	100	1508.44	4^+			
3450.09	$2^+,3^+$	644.9	11	2805.14	3			
		963.8	27	2486.35	2^+			
		1084.3	38	2365.84	2^+			
		1247.8	5.5	2202.17	3^-			
		1287.3	11	2162.79	2^+			
		1848.2	100	1601.81	2^+			
		2817.1	80	632.99	2^+			
3454.16	1^+	282.9	0.2	3171.23	$2,3^+$			
		461.0	0.45	2993.16	2^+			
		771.4	12	2682.73	1			
		1079.5	7 *5*	2374.59	(0^+)			
		1291.3	7	2162.79	2^+			
		1540.7	3.3	1913.36	0^+			
		1733.6	4.4	1720.63	0^+			
		1852.3	30 *9*	1601.81	2^+	M1(+E2)	−0.005 *20*	
		2821.1	8	632.99	2^+	E2(+M1)	≥+11.7	

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^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	Comments
3454.16	1^+	3454.1	100 *12*	0	0^+	M1		
3459.84	5,6	484.4	17	2975.38	6^-			
		752.8	20	2707.06	5^-			
		858.3	100	2601.57	5^-			
3460.58		652.8	46	2807.74	6^+			
		895.4	16	2565.04	5^+			
		919.2	28	2541.31	6^+			
		1221.3	39	2239.33	4^+			
		1952.2	100	1508.44	4^+			
3470.03	$2^{(+)}$	1104.3	13	2365.84	2^+			
		1307.3	64	2162.79	2^+			
		1324.1	38	2145.83	3^+			
		1868.1	100	1601.81	2^+	M1+E2	−0.4 *3*	
3474.98	8^-	225.9	29	3249.06	7^-			
		417.5	100	3057.51	7^-			
		499.5	35	2975.38	6^-			
3482.44	2	2849.4	100	632.99	2^+			
3485.21	9^-	261.5	100	3223.79	8^-			
		427.6	86	3057.51	7^-			
3512.26		1366.3	54.5	2145.83	3^+			
		2003.9	100	1508.44	4^+			
3525.36		770.4	19	2755.04	$4^+,5^+$			
		786.6	16	2738.71	4^+			
		984.1	100	2541.31	6^+			Placement from 3489.4 level as given in 2002Ga35 is incorrect (e-mail reply from A. Gade, Dec. 8, 2002).
		1286.1	22	2239.33	4^+			
		2016.9	<16	1508.44	4^+			
3527.15		1381.3	100	2145.83	3^+			
3535.84	$(3,4)^+$	2902.8	100	632.99	2^+			
3539.95		1938.2	19	1601.81	2^+			
		2031.4	100	1508.44	4^+			
3555.04	(3^+)	2922.0	100	632.99	2^+			
3559.64		2926.6	100	632.99	2^+			
3561.18	$(4,5,6)^+$	770.3	<31	2790.79				
		822.4	0.25	2738.71	4^+			
		915.7	12	2645.61	4^+			
		996.1	51 *8*	2565.04	5^+			
		1019.8	14	2541.31	6^+			
		1321.9	100 *12*	2239.33	4^+			
3566.44		2933.4	100	632.99	2^+			
3571.86	2^+	889.1	18	2682.73	1			
		951.9	10	2620.04	2^+			
		1085.4	23	2486.35	2^+			
		1369.6	4	2202.17	3^-			
		1409.0	12	2162.79	2^+			
		1426.0	13	2145.83	3^+			
		1658.4	11	1913.36	0^+			
		2939.0	100	632.99	2^+	M1+E2	+0.40 *7*	δ: from table IV of 2002Ga35. δ=+0.49 *8* in table III is a misprint (e-mail reply from A. Gade, November 30, 2002).
		3571.8	47	0	0^+	E2		
3576.21		930.6	36	2645.61	4^+			
		1021.0	100	2555.16	$3^{(-)}$			
		1374.1	18	2202.17	3^-			

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^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†
3605.58		1403.4	100	2202.17	3^-		
3611.67		1409.5	<13	2202.17	3^-		
		1465.7	<19	2145.83	3^+		
		2103.2	100	1508.44	4^+		
3629.19		1027.6	100	2601.57	5^-		
		1087.9	46	2541.31	6^+		
3633.74		3000.7	100	632.99	2^+		
3642.12		666.7	56	2975.38	6^-		
		934.9	100	2707.06	5^-		
		1040.6	<52	2601.57	5^-		
		1100.9	40	2541.31	6^+		
3643.22		1403.9	87	2239.33	4^+		
		2134.7	100	1508.44	4^+		
3656.28		680.9	33	2975.38	6^-		
		949.2	100	2707.06	5^-		
		1054.7	17	2601.57	5^-		
3656.44	(8^+)	432.6	19	3223.79	8^-		
		1115.2	100	2541.31	6^+		
3667.07	1	3667.0	100	0	0^+		
3674.68		1119.5	40	2555.16	$3^{(-)}$		
		1472.4	41	2202.17	3^-		
		1528.9	100	2145.83	3^+		
		2073.0	64	1601.81	2^+		
3683.22	8^+	1141.9	100	2541.31	6^+	E2(+M3)	−0.011‡ *8*
3683.34		1118.3	100	2565.04	5^+		
3718.45		979.8	16	2738.71	4^+		
		1072.8	<34	2645.61	4^+		
		1572.6	44	2145.83	3^+		
		2210.0	100	1508.44	4^+		
3724.54	2^+	692.7	1	3031.70	2^+		
		919.4	6	2805.14	3		
		1104.5	33	2620.04	2^+		
		1238.2	6.5	2486.35	2^+		
		1358.8	1.5	2365.84	2^+		
		1522.3	2	2202.17	3^-		
		1561.7	8	2162.79	2^+		
		1578.7	3	2145.83	3^+		
		2003.8	3	1720.63	0^+		
		2123.0	4	1601.81	2^+		
		2216.0	36	1508.44	4^+		
		3091.7	100	632.99	2^+	M1+E2	−0.28 *5*
		3724.5	39	0	0^+		
3726.66		2218.2	100	1508.44	4^+		
3731.96		2223.5	100	1508.44	4^+		
3740.37		1001.6	<24	2738.71	4^+		
		2232.0	100	1508.44	4^+		
3770.37	(7^+)	795.0	51	2975.38	6^-		
		1229.0	100	2541.31	6^+	M1+E2	−0.17‡ *13*
3779.76		1072.6	<40	2707.06	5^-		
		2271.4	100	1508.44	4^+		
3787.07		2278.6	100	1508.44	4^+		
3788.92	2^+	1026.0	14	2762.98	3^+		
		1423.0	23	2365.84	2^+		
		1626.1	<10	2162.79	2^+		
		1643.1	15	2145.83	3^+		

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^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†
3788.92	2+	2187.1	100	1601.81	2+	M1(+E2)	+0.06 *8*
		3155.9	90	632.99	2+	M1+E2	−0.33 *11*
3811.67		2303.2	100	1508.44	4+		
3814.60	1+	521.9	0.2	3292.73	1		
		782.8	0.3	3031.70	2+		
		816.5	0.2	2998.12			
		1131.8	0.5	2682.73	1		
		1194.6	0.7	2620.04	2+		
		1651.7	1.6	2162.79	2+		
		1901.1	4.4	1913.36	0+		
		2093.9	2.8	1720.63	0+		
		3181.8	40	632.99	2+	M1+E2	+0.107 *17*
		3814.6	100	0	0+	M1	
3816.28	(5+,6+)	448.7	29	3367.49	(5,6+)		
		839.8	12	2976.57	4+		
		910.5	19	2905.81	5+		
		940.4	17	2875.90	4+		
		1008.5	100	2807.74	6+		
		1077.6	16	2738.71	4+		
		1214.7	27	2601.57	5−		
		1251.2	60	2565.04	5+		
		1275.0	73	2541.31	6+		
3827.91	1+	373.7	1	3454.16	1+		
		377.9	0.3	3450.09	2+,3+		
		535.2	1	3292.73	1		
		656.8	4	3171.23	2,3+		
		746.0	0.5	3081.84	3+		
		829.8	1	2998.12			
		1007.7	1	2820.19	2(−)		
		1145.2	2	2682.73	1		
		1149.8	0.4	2678.10	1−		
		1207.8	1	2620.04	2+		
		1341.4	4	2486.35	2+		
		1453.2	1	2374.59	(0+)		
		1461.9	4	2365.84	2+		
		1665.1	4	2162.79	2+		
		1914.5	18	1913.36	0+		
		2107.3	1.5	1720.63	0+		
		2226.2	72	1601.81	2+	M1+E2	−0.060 *17*
		3194.9	7	632.99	2+		
		3827.9	100	0	0+		
3860.72		866.5	100	2994.20	6+		
		1319.4	91	2541.31	6+		
3875.77		1730.0	<23	2145.83	3+		
		2367.2	100	1508.44	4+		
3881.58		1280.0	43	2601.57	5−		
		1340.3	100	2541.31	6+		
3890.72		915.4	62	2975.38	6−		
		1349.3	100	2541.31	6+		
3904.06		1258.4	7	2645.61	4+		
		2395.6	100	1508.44	4+		
3946.14	(2+)	1263.3	8.5	2682.73	1		
		1580.2	19	2365.84	2+		
		1783.2	21	2162.79	2+		
		2225.4	60	1720.63	0+		
		2344.1	26	1601.81	2+		

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^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	Comments
3946.14	(2$^+$)	3313.7	100	632.99	2$^+$	M1+E2	+0.23 *16*	E_γ: level-energy difference=3313.1.
3968.27		2459.8	100	1508.44	4$^+$			
3968.65		1822.8	100	2145.83	3$^+$			
3968.99		1262.0	24	2707.06	5$^-$			
		1367.4	100	2601.57	5$^-$			
3984.61		1179.6	50	2805.14	3			
		1821.7	89	2162.79	2$^+$			
		3351.5	100	632.99	2$^+$			
4008.76		1443.8	100	2565.04	5$^+$			
		1467.4	<8.4	2541.31	6$^+$			
4011.42		1865.5	<34	2145.83	3$^+$			
		2503.0	100	1508.44	4$^+$			
4011.90	2$^+$,(3)	983.7	2	3028.33				
		1206.7	6.6	2805.14	3			
		1329.1	10	2682.73	1			
		1646.0	19	2365.84	2$^+$			
		1809.6	33	2202.17	3$^-$			
		2410.2	15	1601.81	2$^+$			
		3379.0	100	632.99	2$^+$	D+Q	+0.10 *5*	
4016.97		542.0	100	3474.98	8$^-$			
4028.76	2$^+$	936.5	3	3092.30	(3)			
		946.9	2	3081.84	3$^+$			
		1035.5	7	2993.16	2$^+$			
		1223.5	12	2805.14	3			
		1346.0	38	2682.73	1			
		1408.7	94	2620.04	2$^+$			
		1542.5	9	2486.35	2$^+$			
		1654.1	7	2374.59	(0$^+$)			
		1662.8	4	2365.84	2$^+$			
		1826.5	28	2202.17	3$^-$			
		1866.0	99	2162.79	2$^+$			
		1882.8	8	2145.83	3$^+$			
		2308.2	40	1720.63	0$^+$			
		2426.9	8	1601.81	2$^+$			
		2520.3	28	1508.44	4$^+$			
		3395.8	100	632.99	2$^+$	M1+E2	−0.55 *16*	
4030.93		1323.9	37	2707.06	5$^-$			
		1429.3	15	2601.57	5$^-$			
		1466.0	34	2565.04	5$^+$			
		1489.6	100	2541.31	6$^+$			
4043.80	4,5$^+$	676.3	36.6	3367.49	(5,6$^+$)			
		1167.9	31	2875.90	4$^+$			
		1236.0	35	2807.74	6$^+$			
		1305.0	38.5	2738.71	4$^+$			
		1336.8	71.6	2707.06	5$^-$			Placement from 3605.5 level also as shown in 2002Ga35 is incorrect (e-mail reply from A. Gade, Dec. 8, 2002).
		1398.1	33.6	2645.61	4$^+$			
		1442.3	28.6	2601.57	5$^-$			
		1478.8	36	2565.04	5$^+$			
		1502.6	100	2541.31	6$^+$			
4082.87		2574.4	100	1508.44	4$^+$			
4083.61		1438.0	100	2645.61	4$^+$			
4096.17		2587.7	100	1508.44	4$^+$			
4109.28		1946.6	44	2162.79	2$^+$			
		2507.3	100	1601.81	2$^+$			

Continued on next page (footnotes at end of table)

^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	Comments
4160.71		1794.9	51	2365.84	2^+			
		1997.8	76	2162.79	2^+			
		3527.7	100	632.99	2^+			
4179.26		1119.6	32	3059.55				
		1184.9	44	2994.20	6^+			
		1202.8	18	2976.57	4^+			
		1371.5	28	2807.74	6^+			
		1472.2	36	2707.06	5^-			
		1533.7	40	2645.61	4^+			
		1614.2	96	2565.04	5^+			
		1637.9	100	2541.31	6^+			
		1940.0	60	2239.33	4^+			
		2670.9	99	1508.44	4^+			
4203.61	(1^+)	1525.6	4	2678.10	1^-			
		1717.3	16	2486.35	2^+			
		1829.0	3.6	2374.59	(0^+)			
		1837.8	9	2365.84	2^+			
		2040.6	6.6	2162.79	2^+			
		2290.2	16	1913.36	0^+			
		2482.9	14	1720.63	0^+			
		2601.8	100	1601.81	2^+	M1+E2	+0.11 *5*	
		3570.7	43.6	632.99	2^+	M1+E2	−0.20 *7*	
		4203.5	44	0	0^+	(M1)		
4209.83	2^+	917.2	5	3292.73	1			
		1446.7	13	2762.98	3^+			
		1723.4	26	2486.35	2^+			
		2063.9	4	2145.83	3^+			
		2608.0	100	1601.81	2^+	M1+E2	−0.21 *11*	δ: from table IV of 2002Ga35. δ=−0.49 *6* in table III is a misprint (e-mail reply from A. Gade, November 30, 2002).
		2701.4	<9	1508.44	4^+			
		3576.9	49	632.99	2^+	M1+E2	−3.0 *+8−15*	
		4209.8	25	0	0^+			
4224.17		1230.0	63	2994.20	6^+			
		1682.8	100	2541.31	6^+			
4238.92	1^+	1752.5	18	2486.35	2^+			
		1864.2	23	2374.59	(0^+)			
		1873.0	27	2365.84	2^+			
		2076.0	22	2162.79	2^+			
		2325.6	14	1913.36	0^+			
		2518.3	36	1720.63	0^+			
		2637.2	46	1601.81	2^+	M1+E2	+0.39 *13*	
		3605.9	49	632.99	2^+	M1+E2	−0.14 *8*	
		4238.8	100	0	0^+	M1		
4239.96		1334.1	51	2905.81	5^+			
		1432.1	100	2807.74	6^+			
		1501.2	2.4	2738.71	4^+			
		1594.5	5	2645.61	4^+			
		1638.4	85	2601.57	5^-			
		1674.9	61	2565.04	5^+			
		1698.8	20	2541.31	6^+			
4251.57		690.4	26	3561.18	$(4,5,6)^+$			
		1443.8	100	2807.74	6^+			
		1686.6	38	2565.04	5^+			
4278.67		2132.7	36	2145.83	3^+			
		2676.8	100	1601.81	2^+			

Continued on next page (footnotes at end of table)

^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	Comments
4278.67		3645.7	96	632.99	2^+			
4282.32		1741.0	100	2541.31	6^+			
4293.93		926.4	32	3367.49	$(5,6^+)$			
		1317.3	19	2976.57	4^+			
		1388.0	96	2905.81	5^+			
		1418.0	26	2875.90	4^+			
		1503.1	50	2790.79				
		1555.3	5	2738.71	4^+			
		1692.3	100	2601.57	5^-			
		1728.9	74	2565.04	5^+			
		1752.6	<15	2541.31	6^+			
4315.72		948.2	60	3367.49	$(5,6^+)$			
		1750.8	50	2565.04	5^+			
		1774.3	100	2541.31	6^+			
4323.50	$(1^+,3^+)$	1957.7	7	2365.84	2^+			
		2160.6	23	2162.79	2^+			
		2721.7	30	1601.81	2^+			
		3690.4	100	632.99	2^+			
4334.38		1242.0	4	3092.30	(3)			
		1571.2	10	2762.98	3^+			
		1714.3	25	2620.04	2^+			
		1848.0#	5	2486.35	2^+			Placement from 4323.4 level as shown in 2002Ga35 is incorrect (e-mail reply from A. Gade, Dec. 8, 2002).
		1968.6	16	2365.84	2^+			
		2132.1	33	2202.17	3^-			
		2188.6	7	2145.83	3^+			
		3701.5	100	632.99	2^+			
4345.40	1^+	1667.2	5	2678.10	1^-			
		1859.1	14	2486.35	2^+			
		1979.4	26	2365.84	2^+			
		2182.6	25	2162.79	2^+			
		2624.7	7	1720.63	0^+			
		2743.6	36	1601.81	2^+	M1+E2	−0.40 *12*	
		3712.4	100	632.99	2^+	M1+E2	−0.55 *5*	
4351.98	1	2189.1	14	2162.79	2^+			
		2631.4	9	1720.63	0^+			
		2750.0	19	1601.81	2^+			
		3719.0	100	632.99	2^+	D+Q	−0.042 *35*	
4394.81	1^+	2028.9	6	2365.84	2^+			
		2231.9	43	2162.79	2^+			
		2481.4	13	1913.36	0^+			
		2674.1	50	1720.63	0^+			
		3761.8	100	632.99	2^+	M1+E2	+0.31 *8*	
4400.66	$(3^+,2^+)$	1661.8	17	2738.71	4^+			
		2237.8	50	2162.79	2^+			
		2892.3	33	1508.44	4^+			
		3767.6	100	632.99	2^+			
4414.06	$(1^+,3^+)$	2251.2	13	2162.79	2^+			
		3781.0	100	632.99	2^+			
4468.51		1660.8	74	2807.74	6^+			
		1903.4	100	2565.04	5^+			
		1927.2	54	2541.31	6^+			
4471.05	1	1788.4	14	2682.73	1			
		1793.0	3	2678.10	1^-			

Continued on next page (footnotes at end of table)

^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†	Comments
4471.05	1	2096.4	4	2374.59	(0^+)			
		2105.2	12	2365.84	2^+			
		2557.5	13	1913.36	0^+			
		2750.5	15	1720.63	0^+			
		2869.3	25	1601.81	2^+	D+Q	+0.09 *7*	
		3837.9	100	632.99	2^+	D(+Q)	+0.022 *25*	
4481.35	$(3^+,1^+)$	2115.5	26	2365.84	2^+			
		2318.5	9	2162.79	2^+			
		2879.5	55	1601.81	2^+			
		3848.3	100	632.99	2^+			
4512.61		1145.2	7	3367.49	$(5,6^+)$			
		1704.8	9.5	2807.74	6^+			
		1805.5	84	2707.06	5^-			
		1911.1	34	2601.57	5^-			
		1947.5	100	2565.04	5^+			
		1971.4	26	2541.31	6^+			
4525.35		1923.8	75	2601.57	5^-			
		1960.3	100	2565.04	5^+			
		1984.0	48	2541.31	6^+			
4529.10		1623.2	26	2905.81	5^+			
		1927.5	92	2601.57	5^-			
		1964.1	18	2565.04	5^+			
		1987.8	100	2541.31	6^+			
4584.68	1^+	1292.0	3	3292.73	1			
		1363.7	16	3221.65	$(3,4)^+$			E_γ: level-energy difference=1363.0.
		1906.3	11	2678.10	1^-			
		2098.2	83	2486.35	2^+			
		2210.0	22	2374.59	(0^+)			
		2671.2	17	1913.36	0^+			
		2982.8	31	1601.81	2^+	M1(+E2)	+0.09 *9*	
		3951.4	100	632.99	2^+	M1+E2	−0.73 *7*	
4617.13		2052.0	100	2565.04	5^+			
		2075.9	67	2541.31	6^+			
4640.22		2038.6	51	2601.57	5^-			
		2075.2	56	2565.04	5^+			
		2098.9	100	2541.31	6^+			
4640.42	1^+,(2)	2154.0	14	2486.35	2^+			
		2477.6	44	2162.79	2^+			
		3038.5	35	1601.81	2^+	D+Q	−4 *+3−18*	δ: if J(4640.4 level)=1.
		4007.4	100	632.99	2^+	D+Q	−0.49 *6*	δ: if J(4640.4 level)=1.
4649.49		1886.4	30	2762.98	3^+			
		2283.6	100	2365.84	2^+			
		2447.4	37	2202.17	3^-			
		2503.7	36	2145.83	3^+			
		4016.4	70	632.99	2^+			
4656.40	$(1^+,3^+)$	1650.7	8.5	3005.68	1			
		1973.7	12	2682.73	1			
		2290.6	22	2365.84	2^+			
		2493.6	9	2162.79	2^+			
		2743.2#	10	1913.36	0^+			Placement from 4640.4 level as shown in 2002Ga35 is incorrect (e-mail reply from A. Gade, Dec. 8, 2002).
		4023.3	100	632.99	2^+			
4663.33		1346.9	11	3316.41	(3^+)			
		2461.2	100	2202.17	3^-			

Continued on next page (footnotes at end of table)

^{108}In ε decay (58.0 min+39.6 min) 2002Ga35 (continued)

γ(^{108}Cd) (continued)

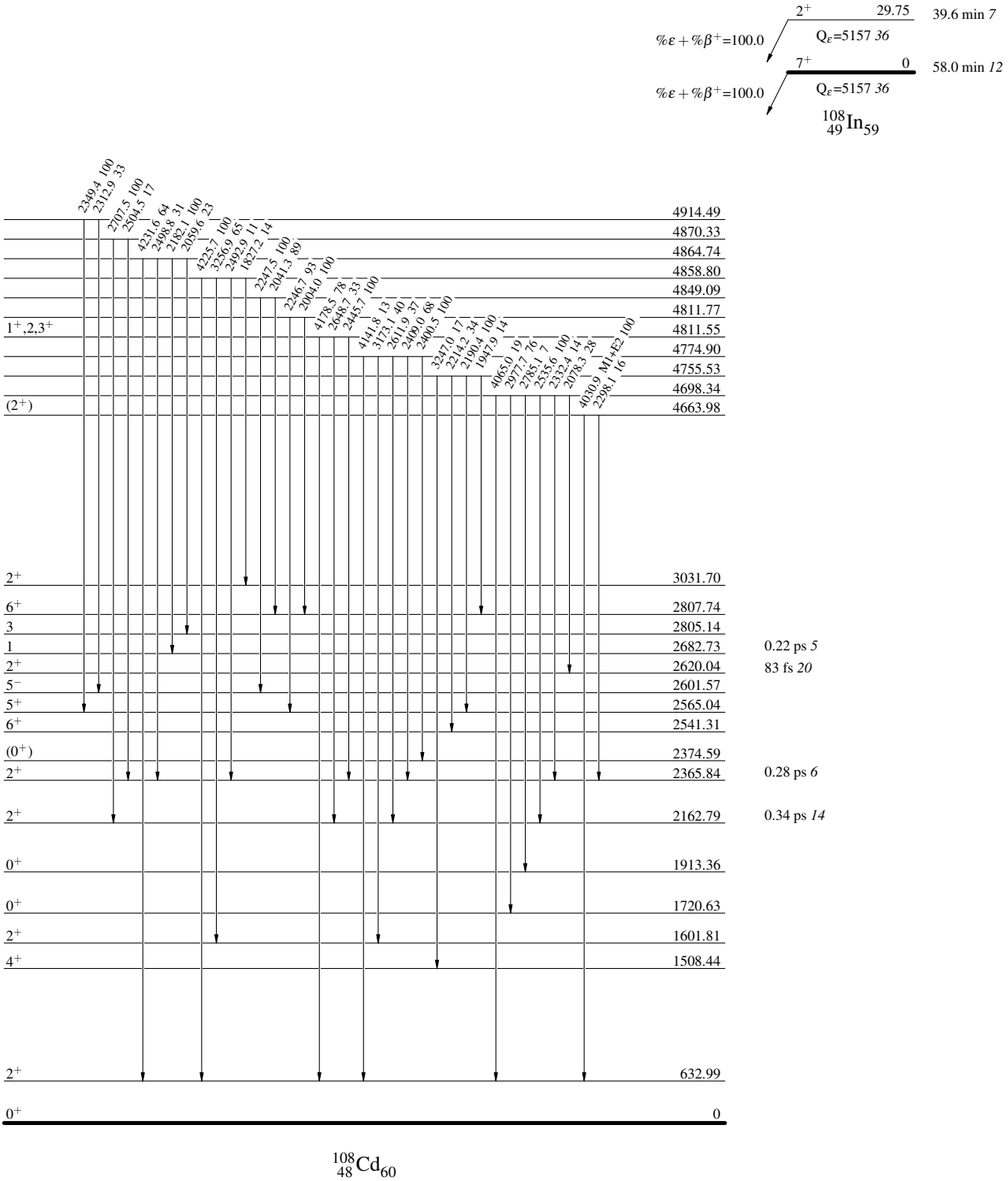
E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ†
4663.33		2517.4	23.5	2145.83	3^+		
4663.98	(2^+)	2298.1	16	2365.84	2^+		
		4030.9	100	632.99	2^+	M1+E2	−1.0 *+4−6*
4698.34		2078.3	28	2620.04	2^+		
		2332.4	14	2365.84	2^+		
		2535.6	100	2162.79	2^+		
		2785.1	7	1913.36	0^+		
		2977.7	76	1720.63	0^+		
		4065.0	19	632.99	2^+		
4755.53		1947.9	14	2807.74	6^+		
		2190.4	100	2565.04	5^+		
		2214.2	34	2541.31	6^+		
		3247.0	17	1508.44	4^+		
4774.90		2400.5	100	2374.59	(0^+)		
		2409.0	68	2365.84	2^+		
		2611.9	37	2162.79	2^+		
		3173.1	40	1601.81	2^+		
		4141.8	13	632.99	2^+		
4811.55	$1^+,2,3^+$	2445.7	100	2365.84	2^+		
		2648.7	33	2162.79	2^+		
		4178.5	78	632.99	2^+		
4811.77		2004.0	100	2807.74	6^+		
		2246.7	93	2565.04	5^+		
4849.09		2041.3	89	2807.74	6^+		
		2247.5	100	2601.57	5^-		
4858.80		1827.2	14	3031.70	2^+		
		2492.9	11	2365.84	2^+		
		3256.9	65	1601.81	2^+		
		4225.7	100	632.99	2^+		
4864.74		2059.6	23	2805.14	3		
		2182.1	100	2682.73	1		
		2498.8	31	2365.84	2^+		
		4231.6	64	632.99	2^+		
4870.33		2504.5	17	2365.84	2^+		
		2707.5	100	2162.79	2^+		
4914.49		2312.9	33	2601.57	5^-		
		2349.4	100	2565.04	5^+		

† From γγ(θ) in ^{108}In ε decay, unless otherwise stated.
‡ From γγ(θ)(DCO) in (α,nγ).
# Placement of transition in the level scheme is uncertain.

^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme

Intensities: Relative photon branching from each level



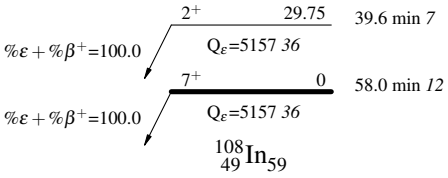
^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

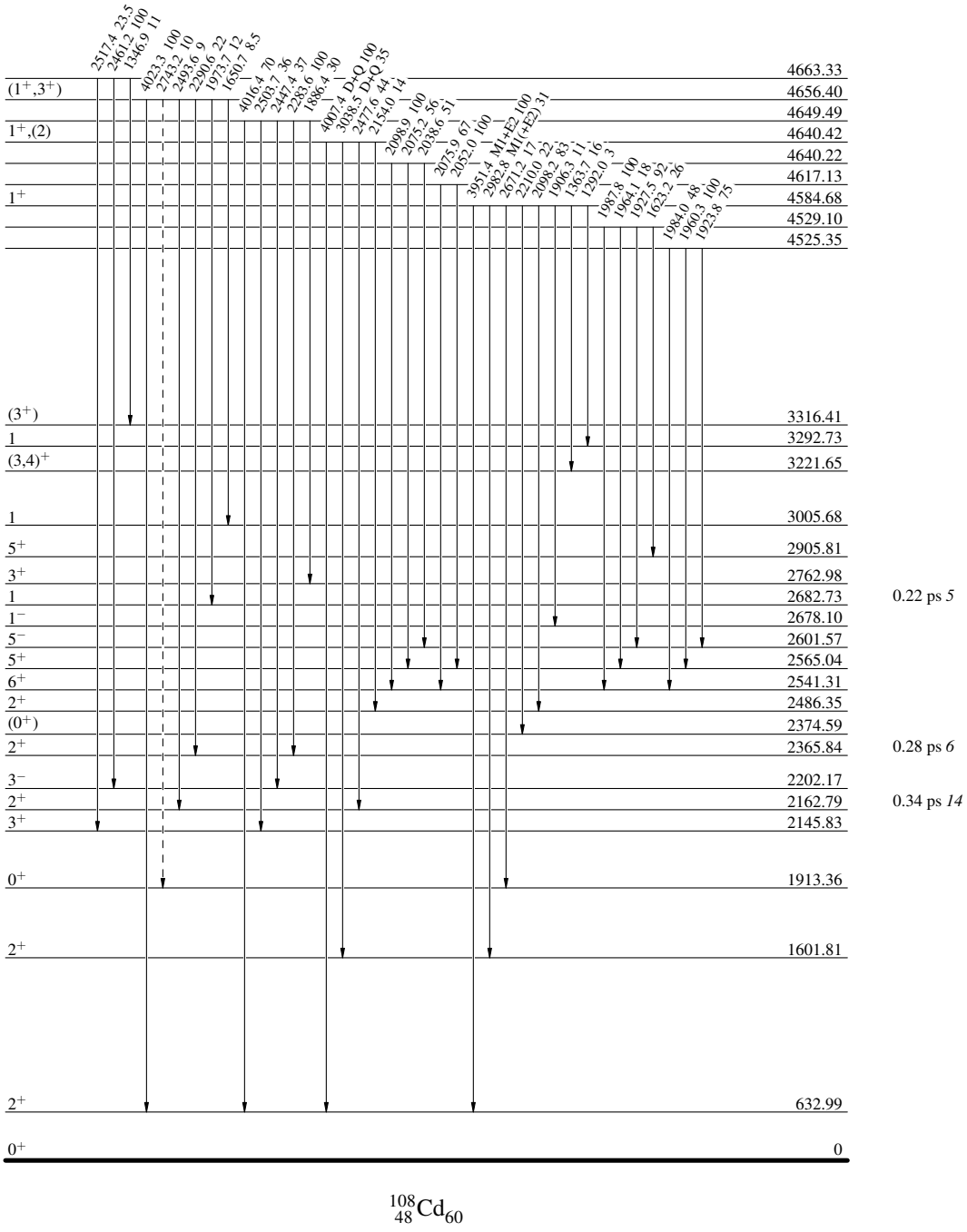
Decay Scheme (continued)

Legend

Intensities: Relative photon branching from each level

- - - - - - ► γ Decay (Uncertain)



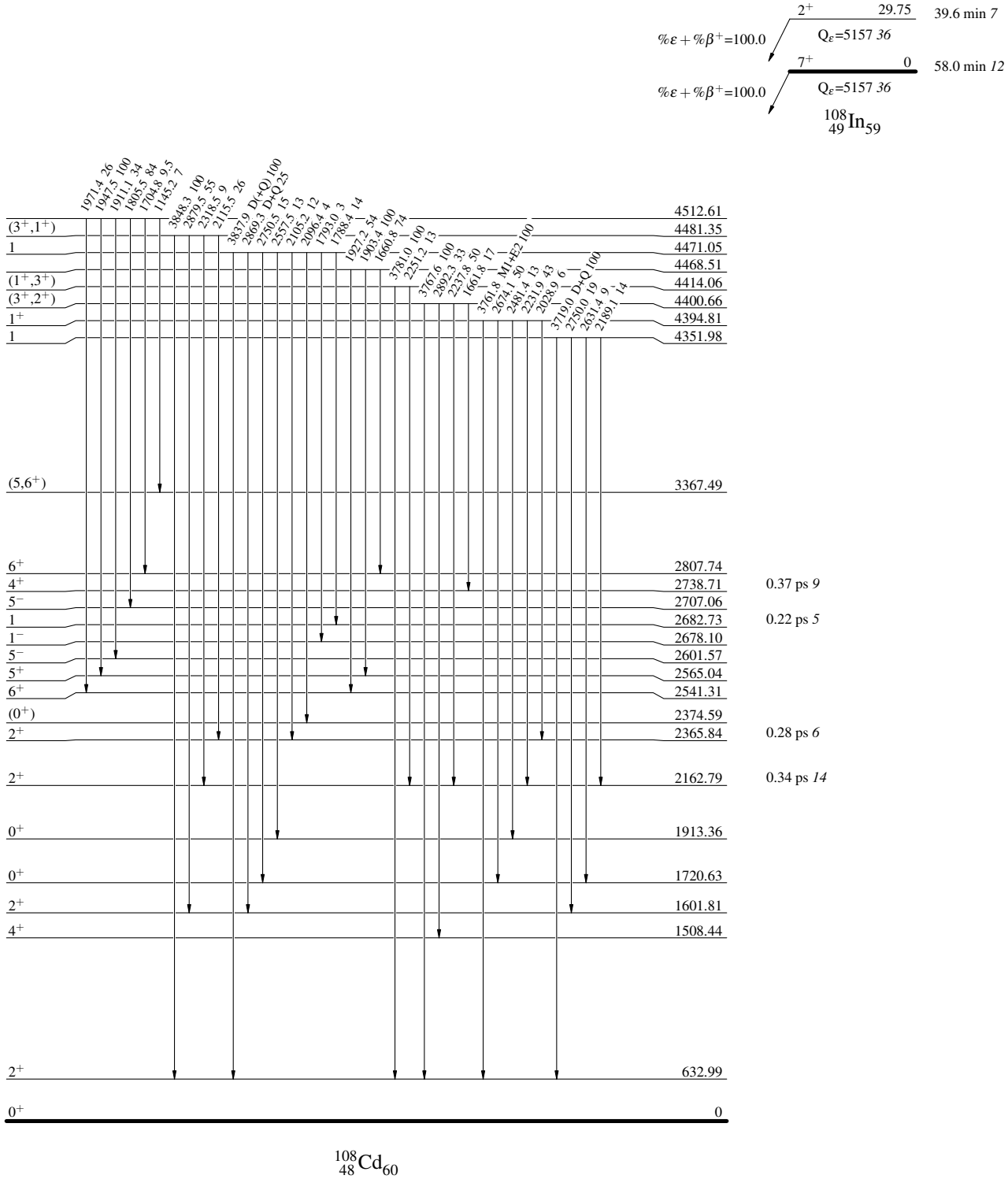


$^{108}_{48}Cd_{60}$

^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

Intensities: Relative photon branching from each level



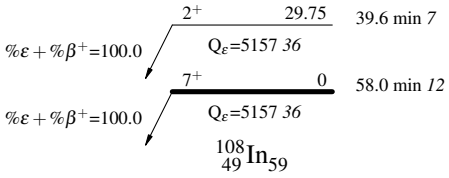
^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

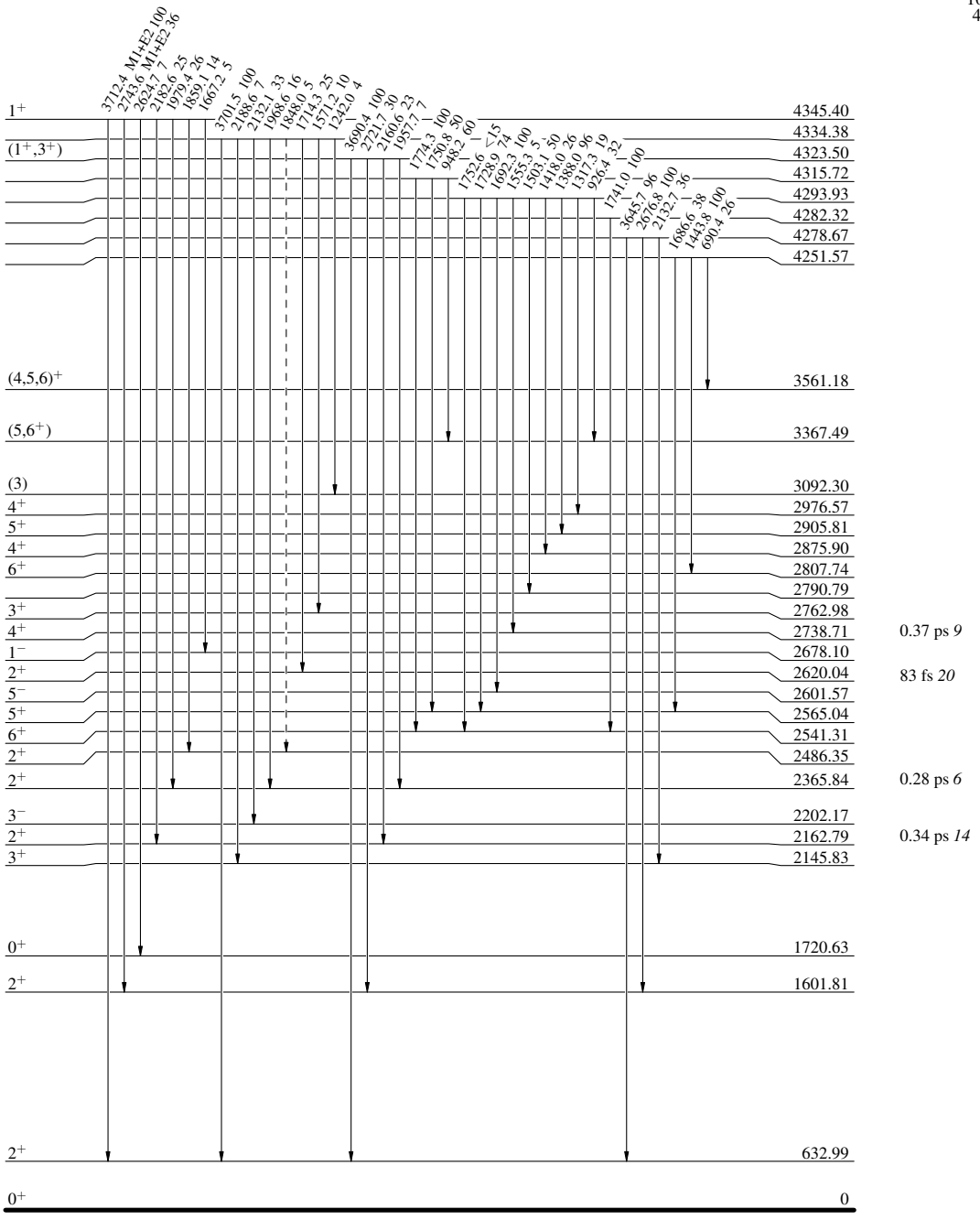
Decay Scheme (continued)

Legend

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



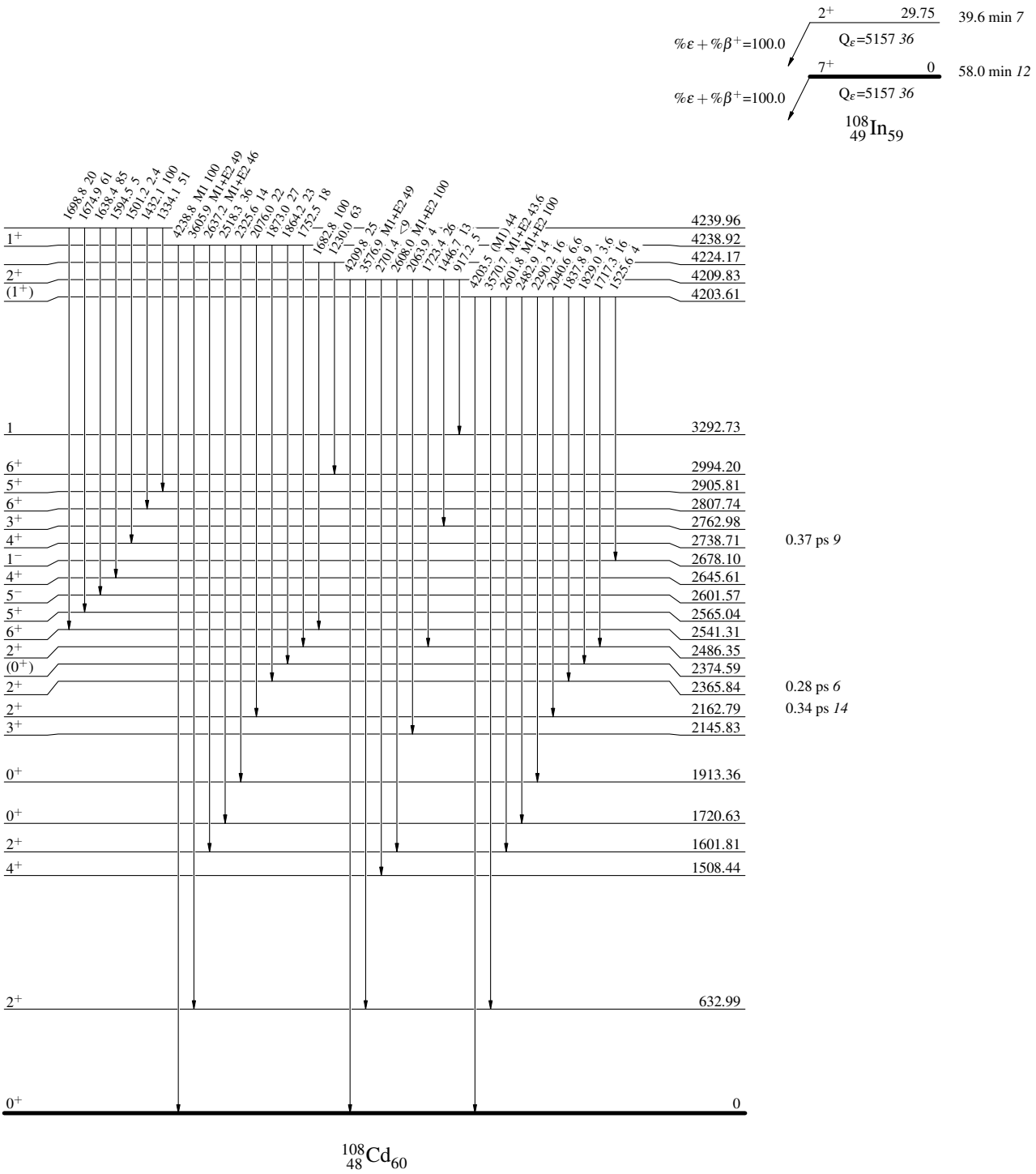


$^{108}_{48}Cd_{60}$

^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

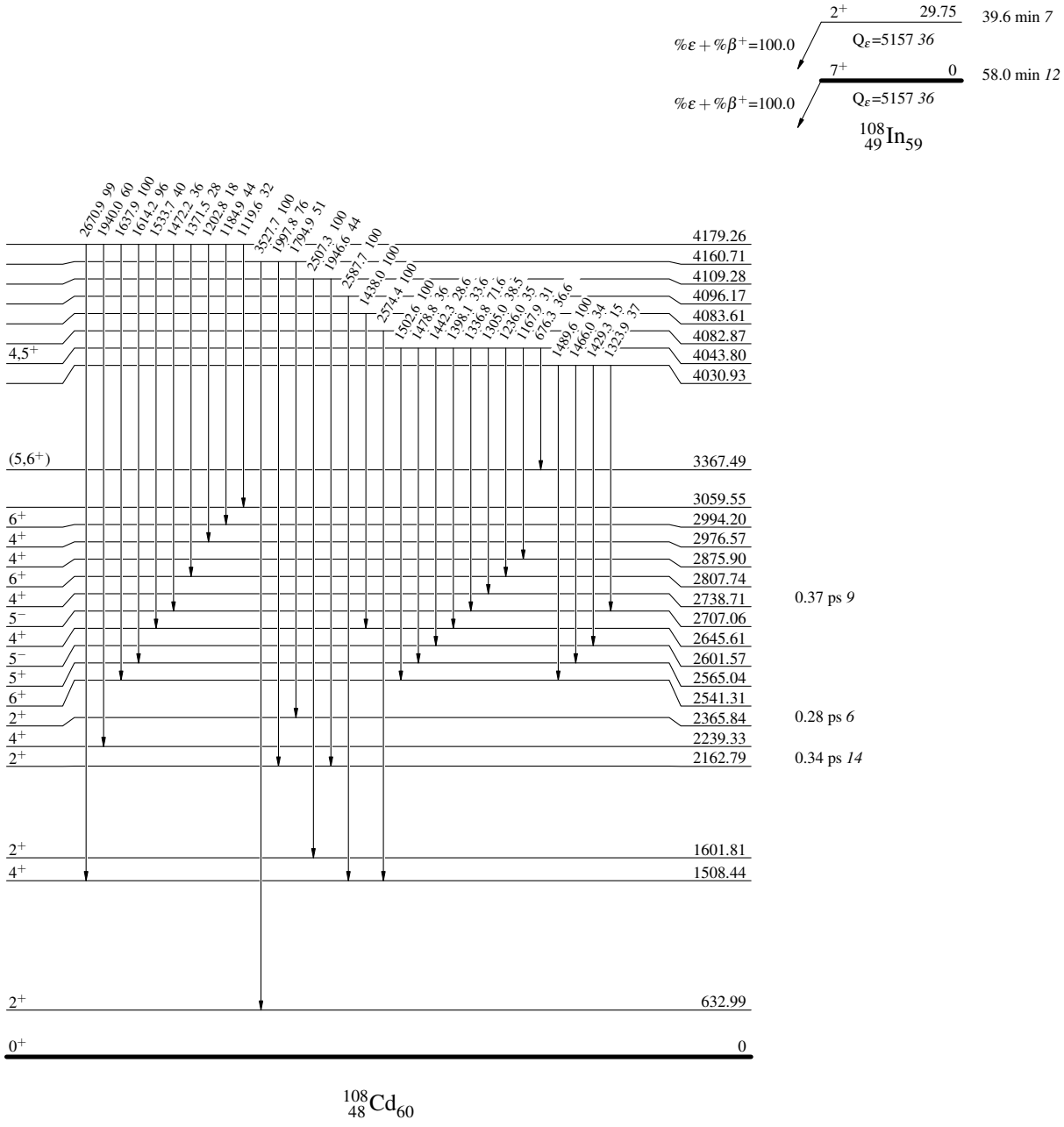
Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

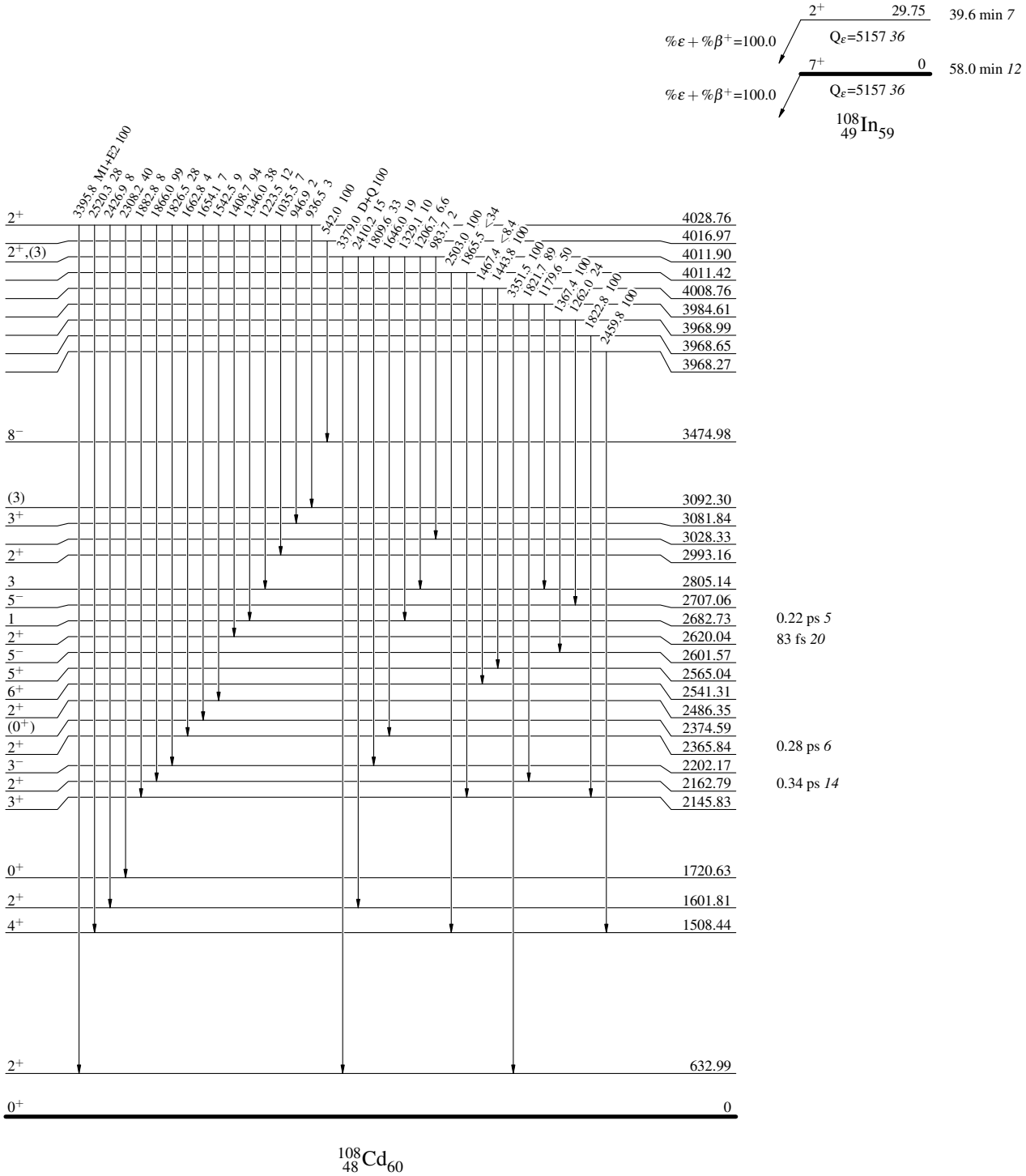
Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

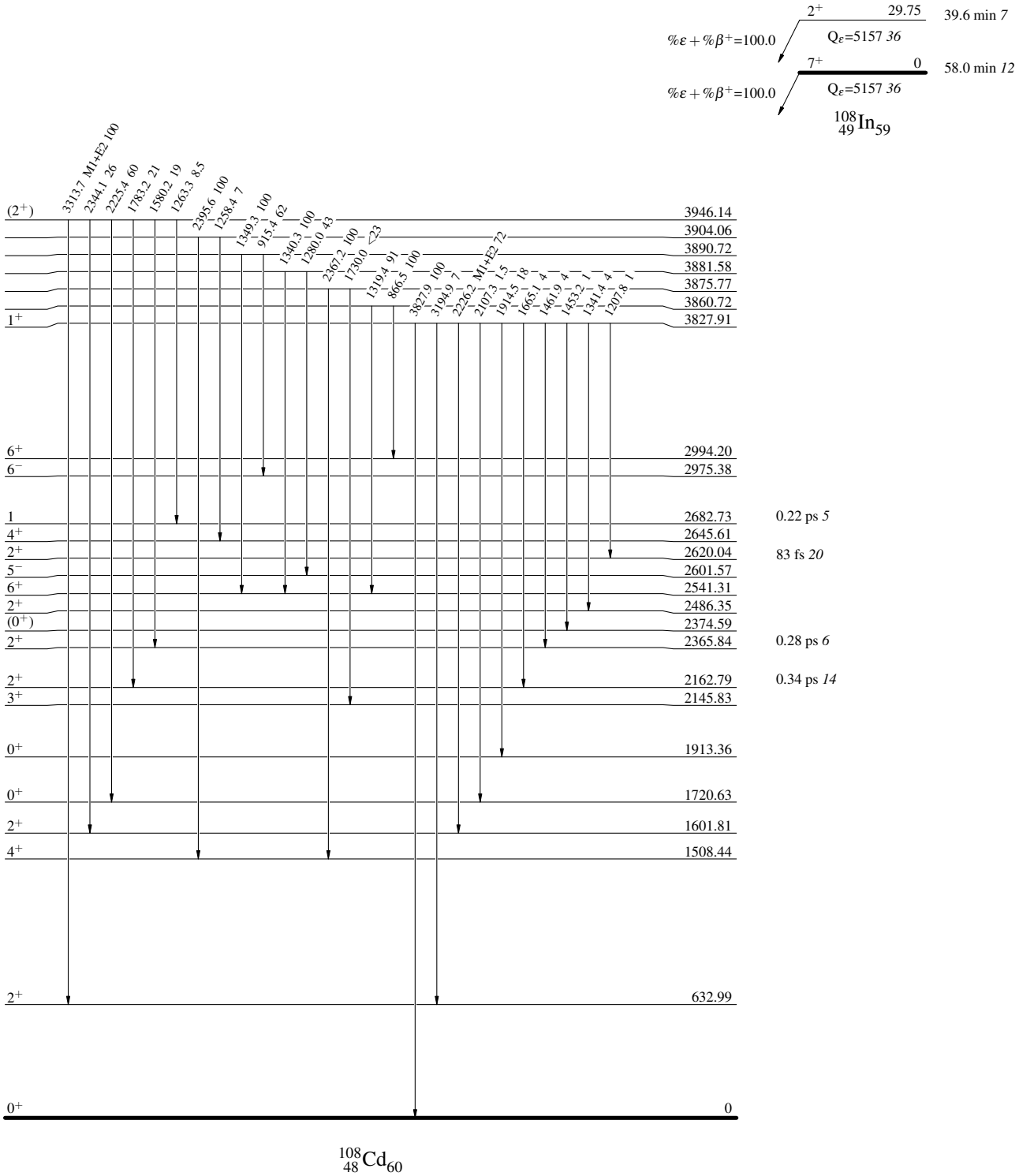
Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

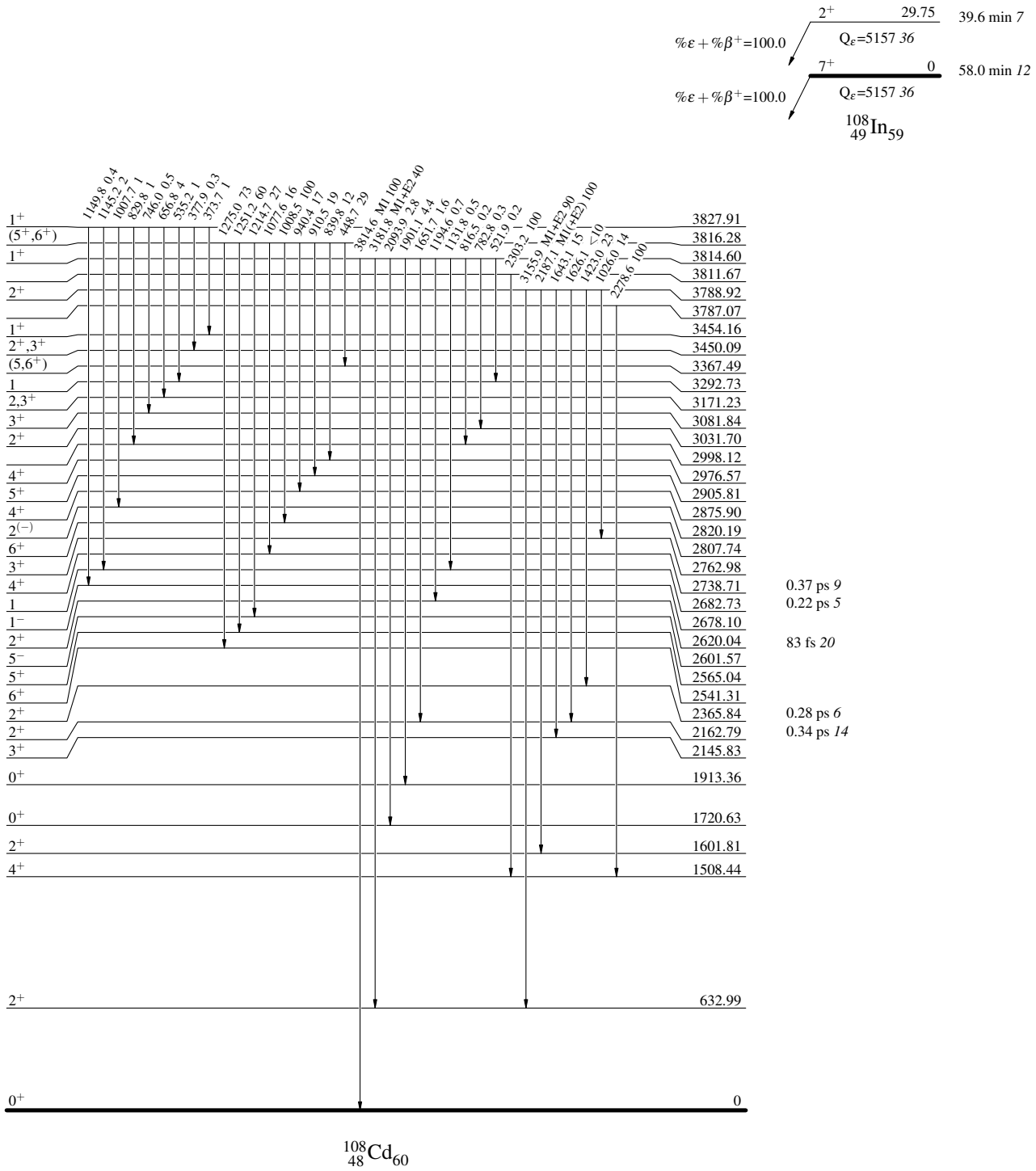
Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

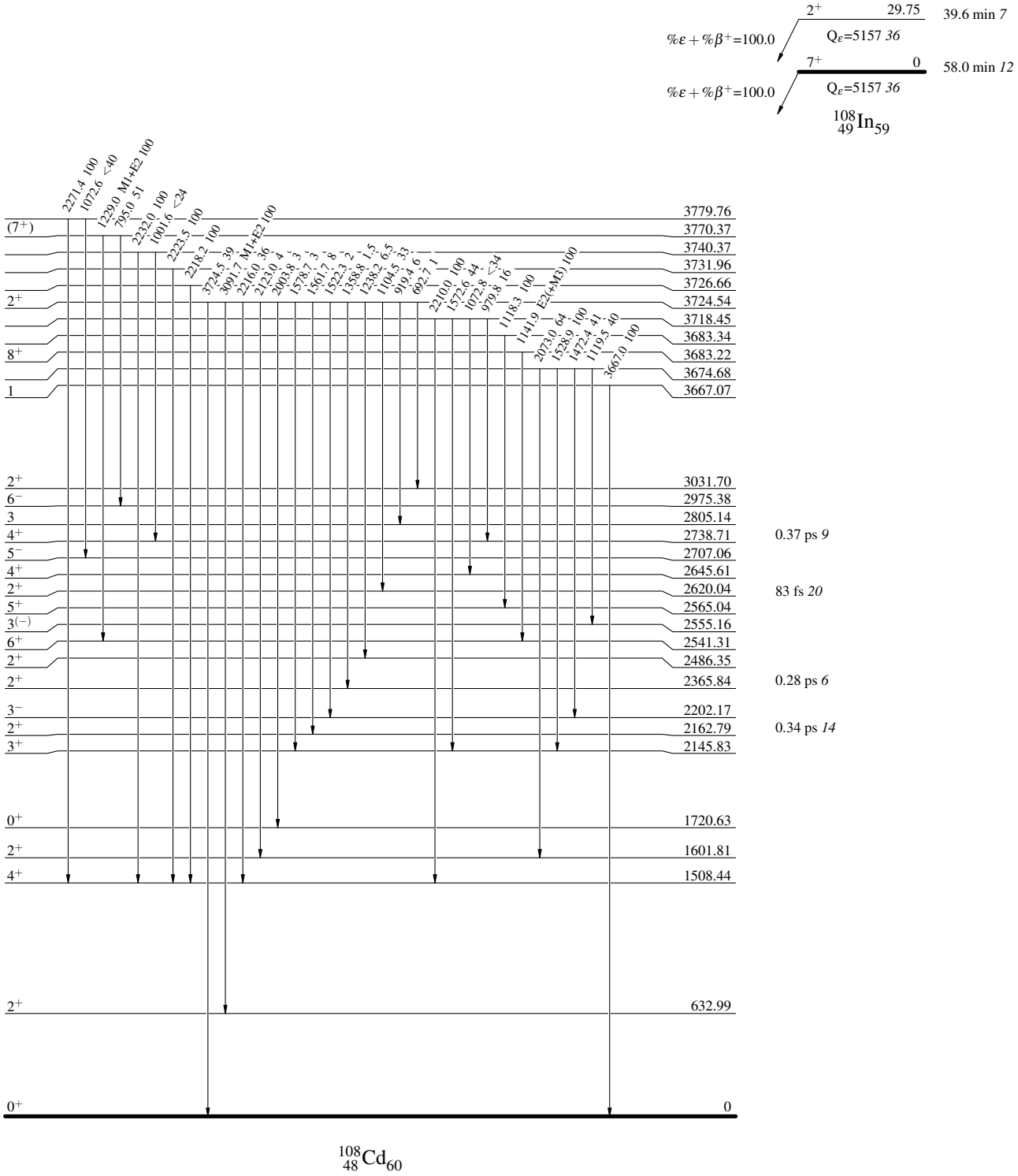
Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

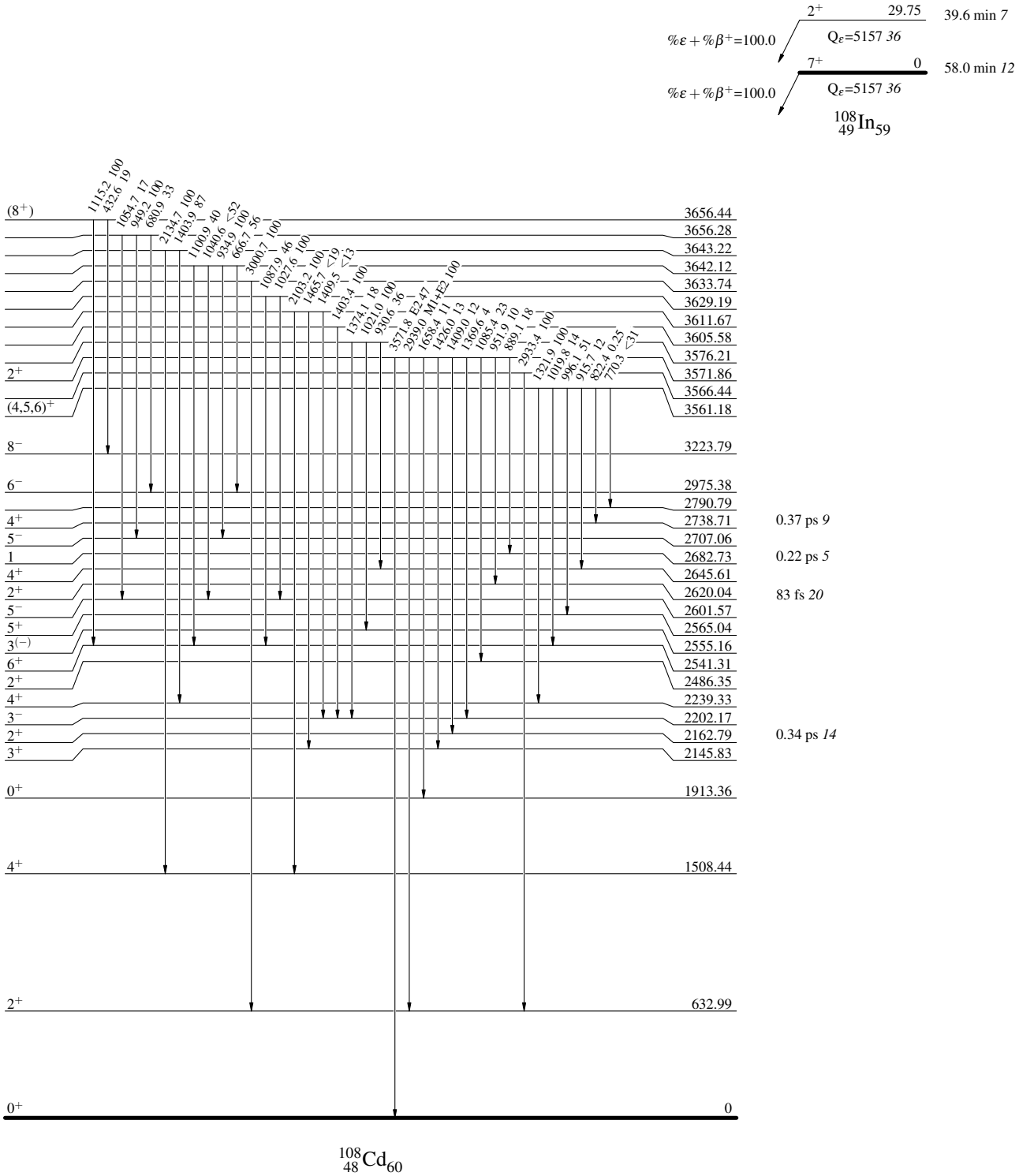
Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

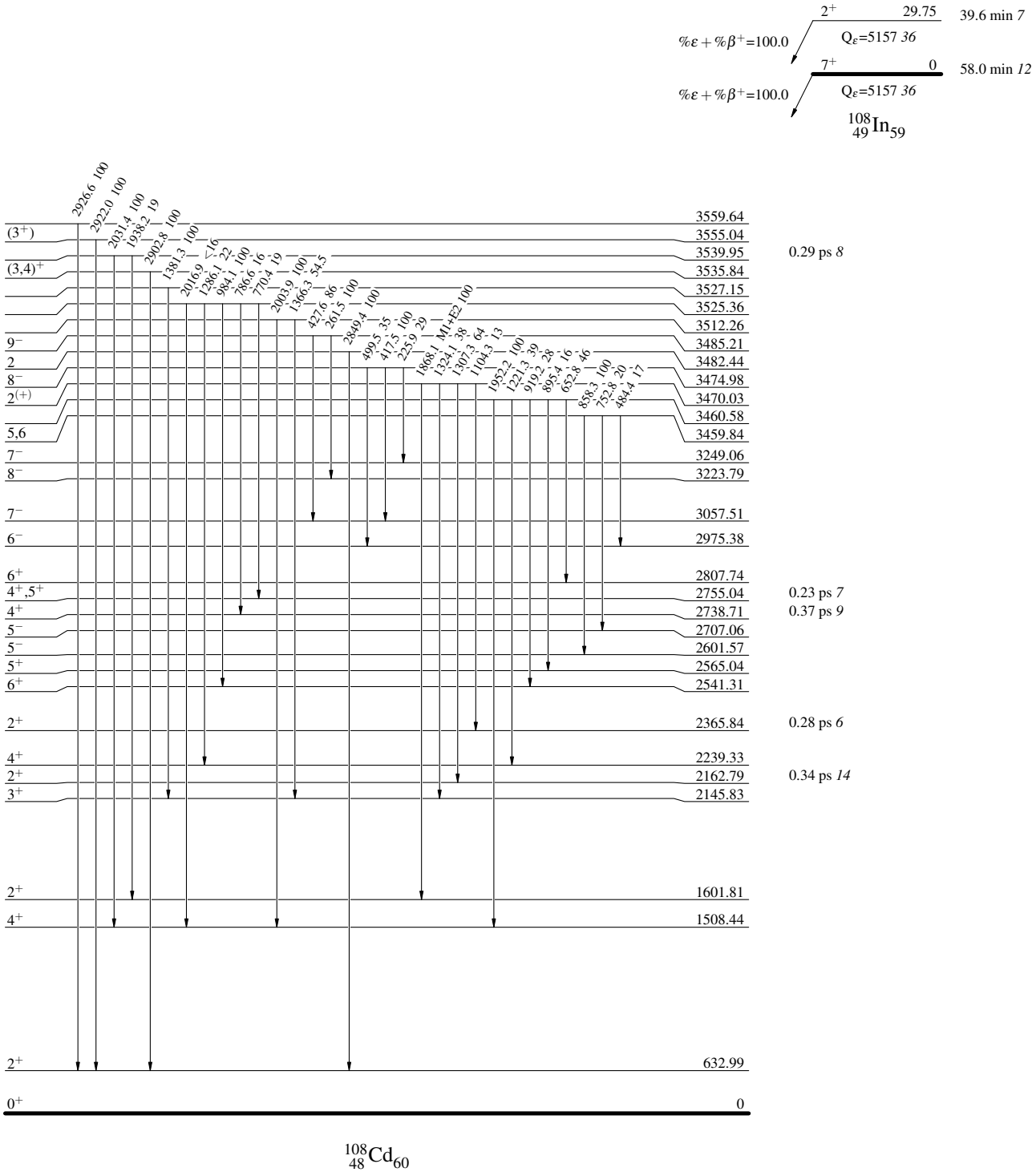
Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

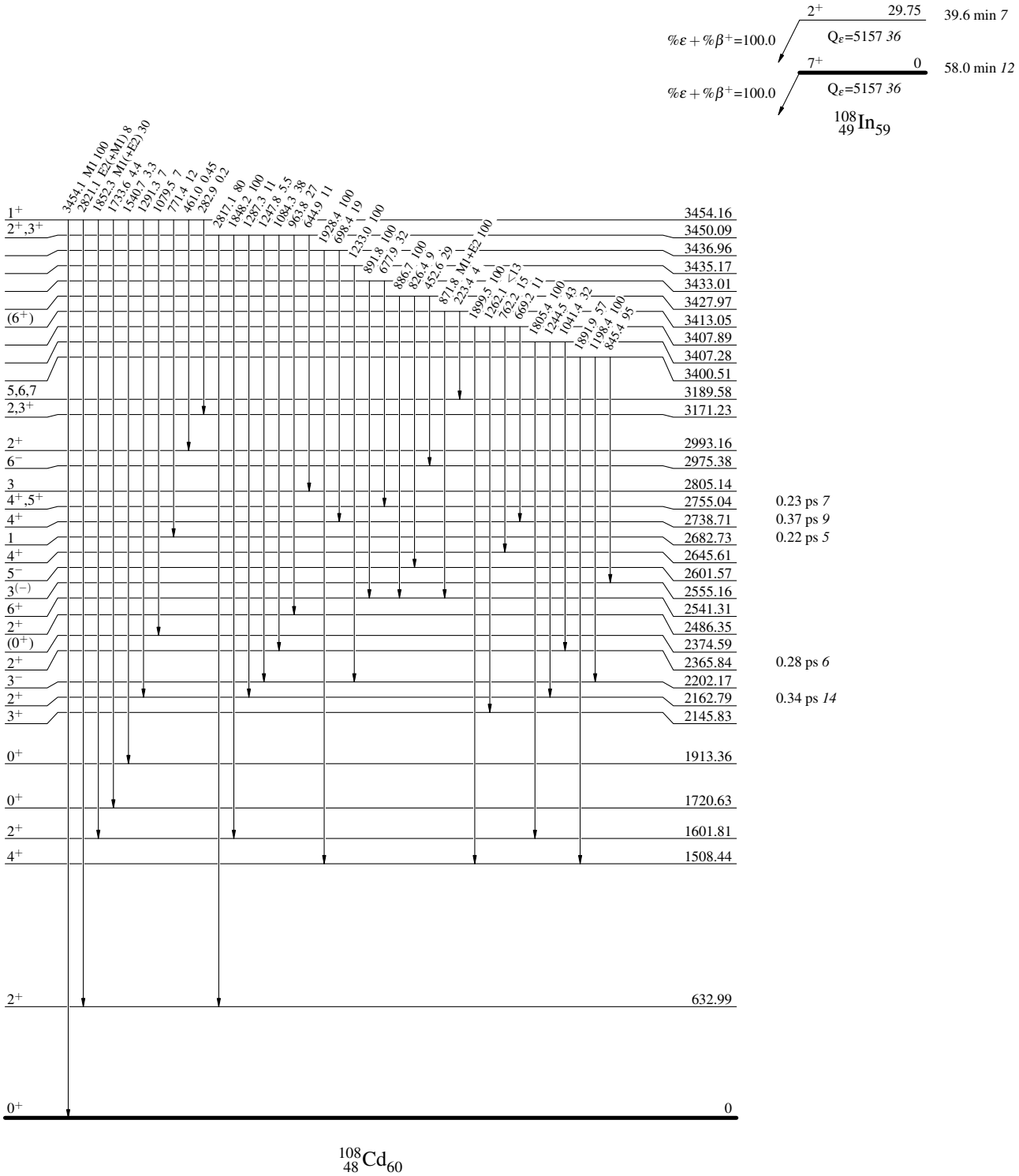
Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

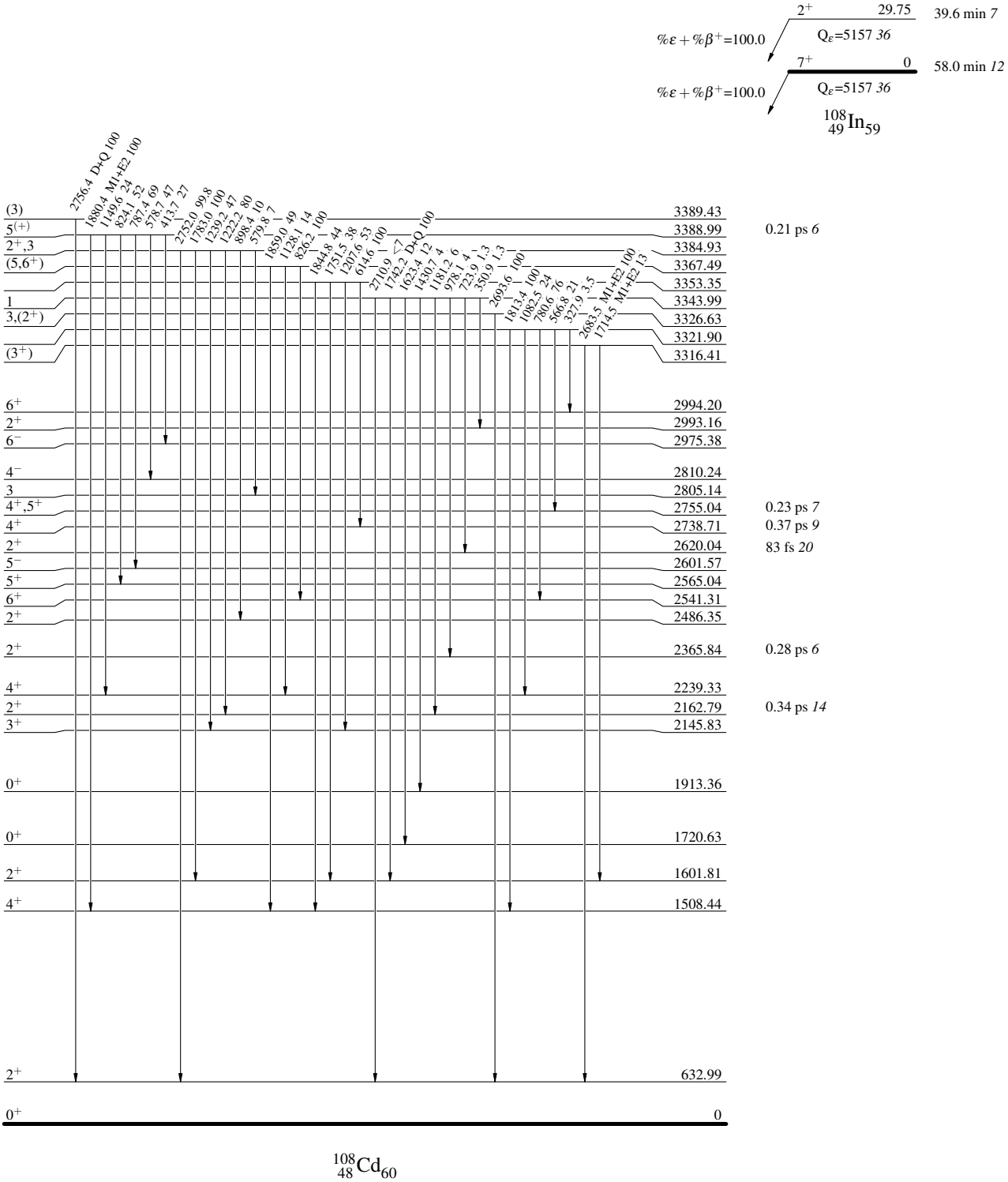
Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

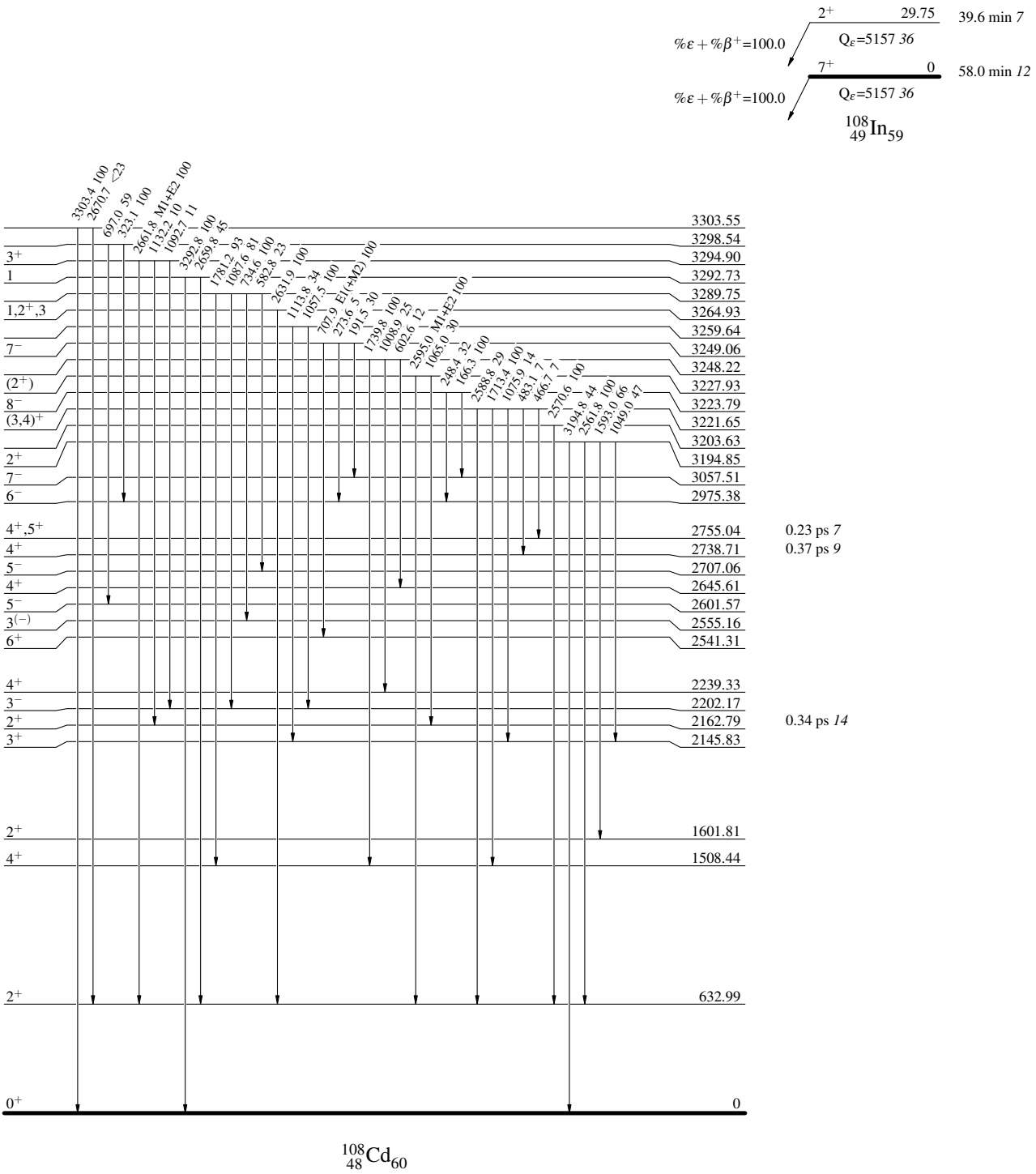
Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

Intensities: Relative photon branching from each level



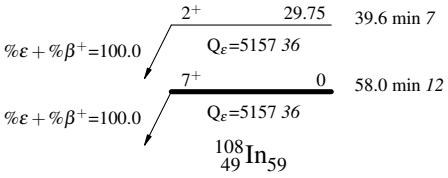
^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

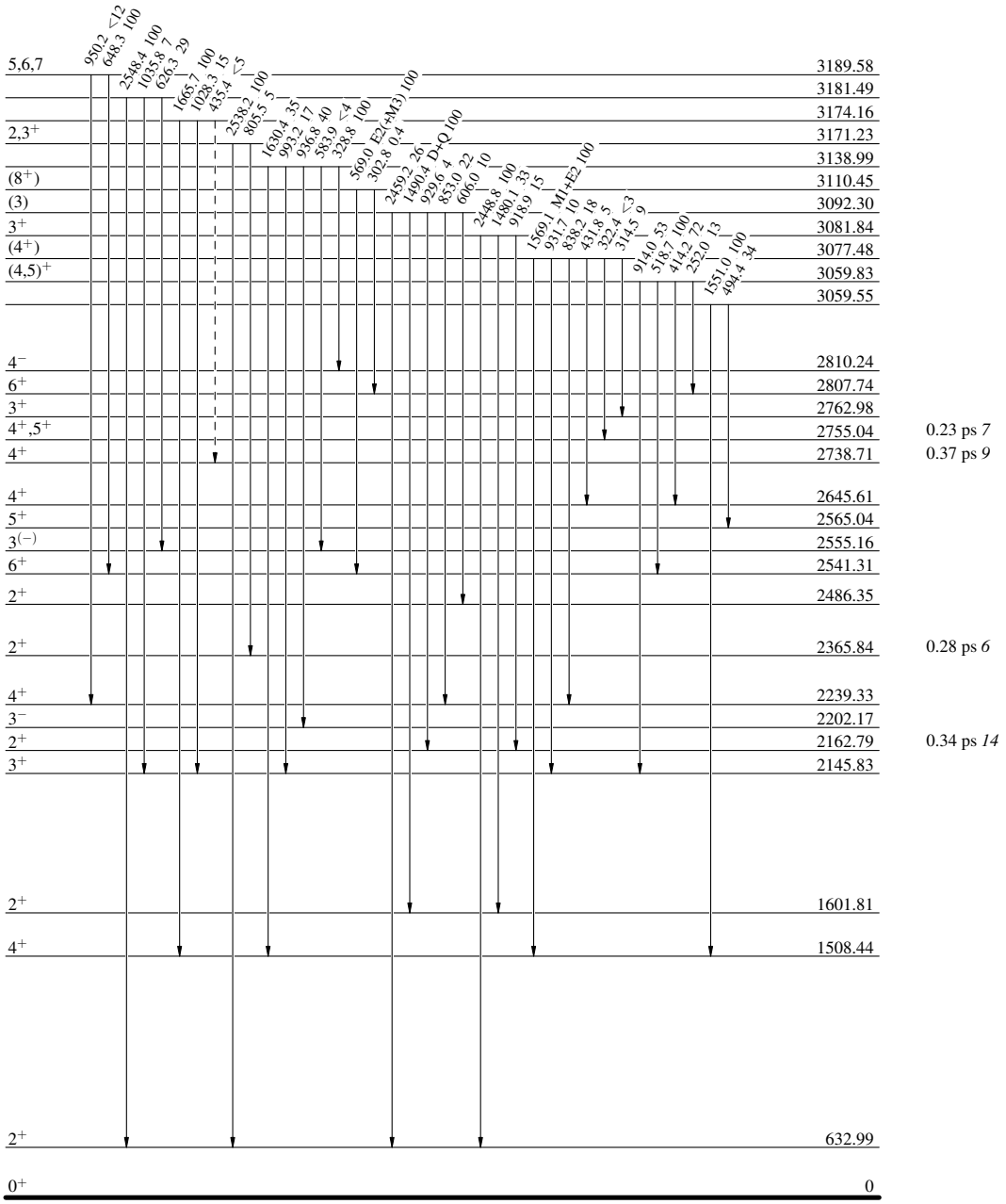
Decay Scheme (continued)

Legend

Intensities: Relative photon branching from each level

- - - - - - ► γ Decay (Uncertain)



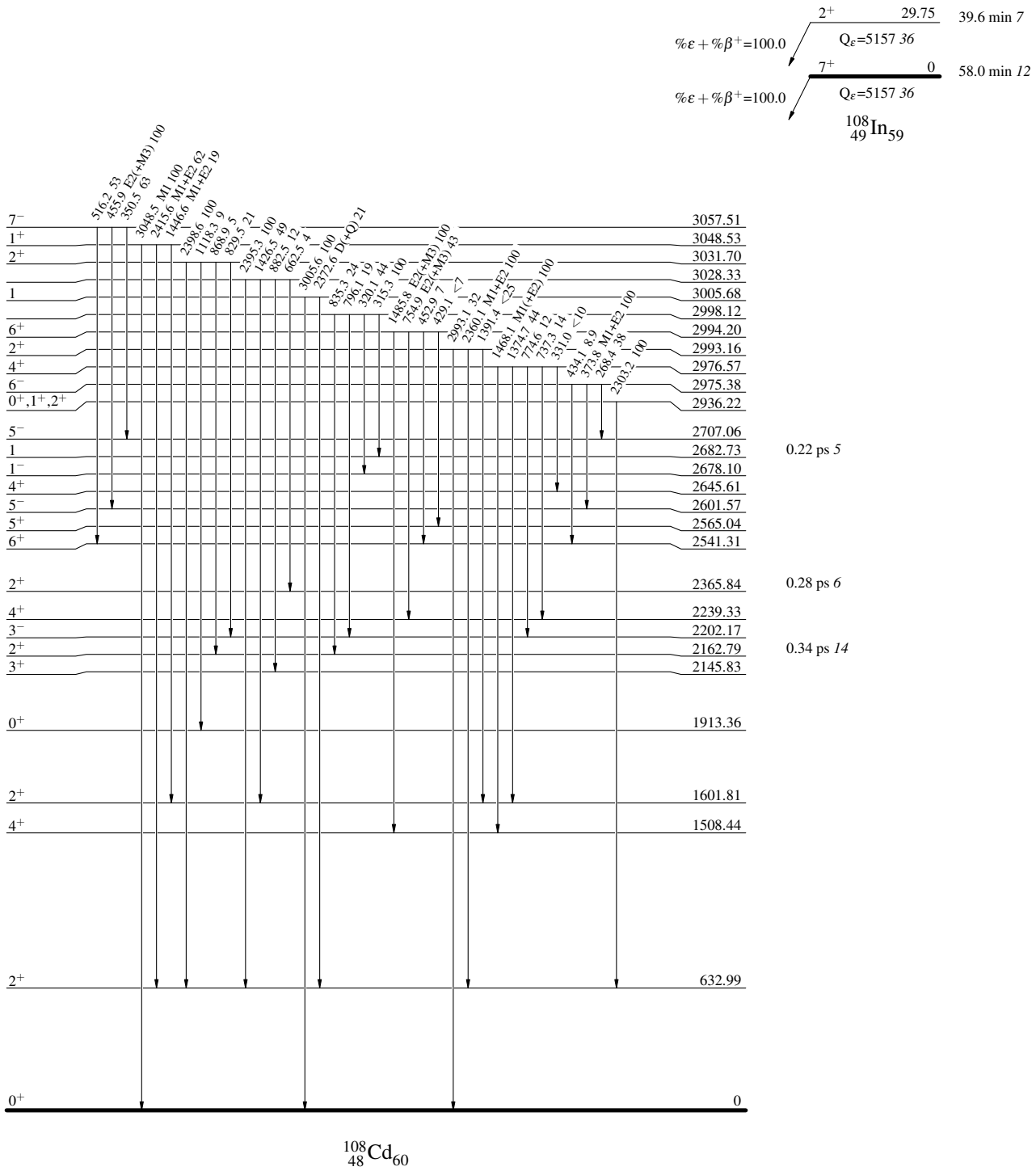


$^{108}_{48}Cd_{60}$

^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

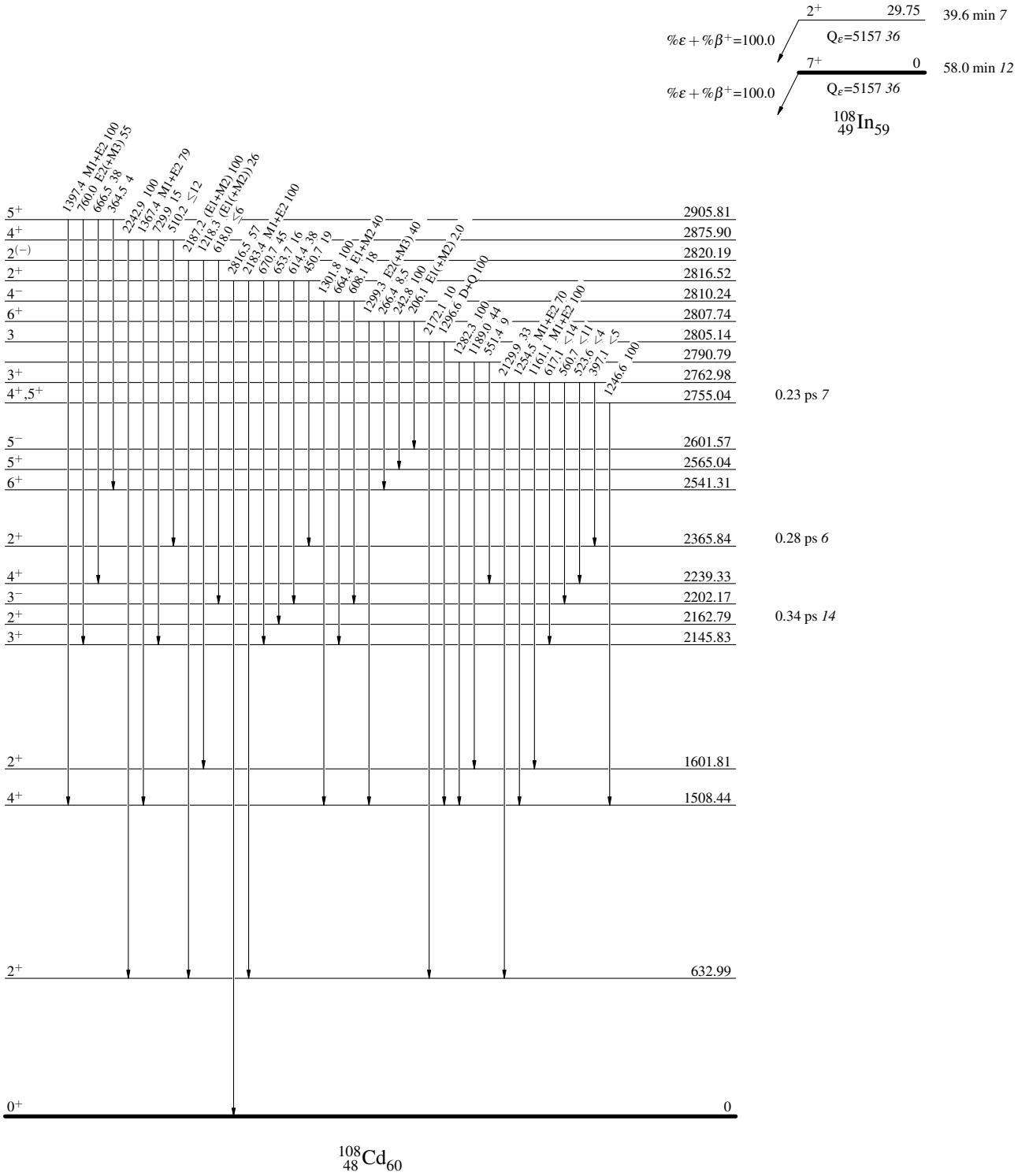
Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

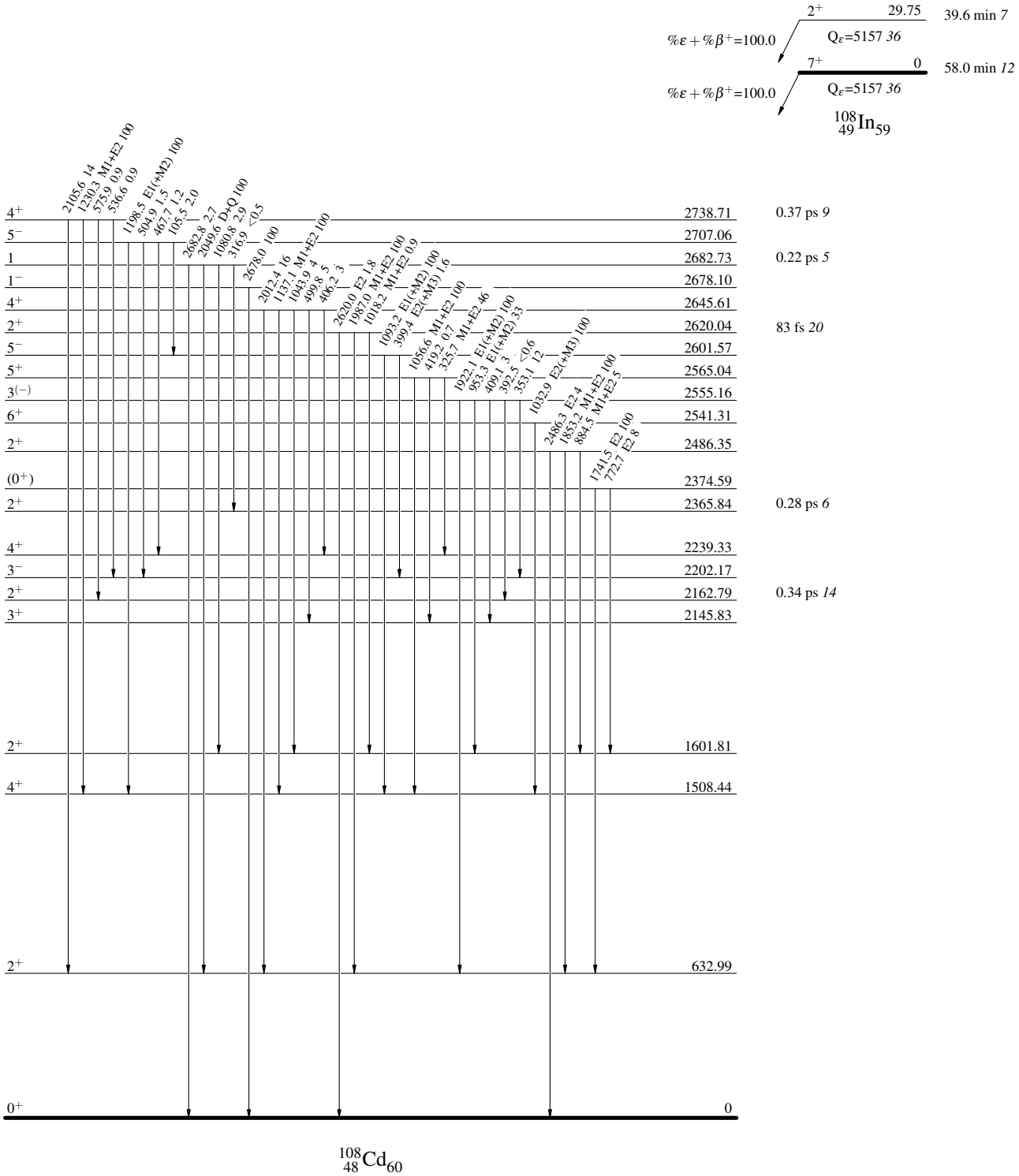
Intensities: Relative photon branching from each level



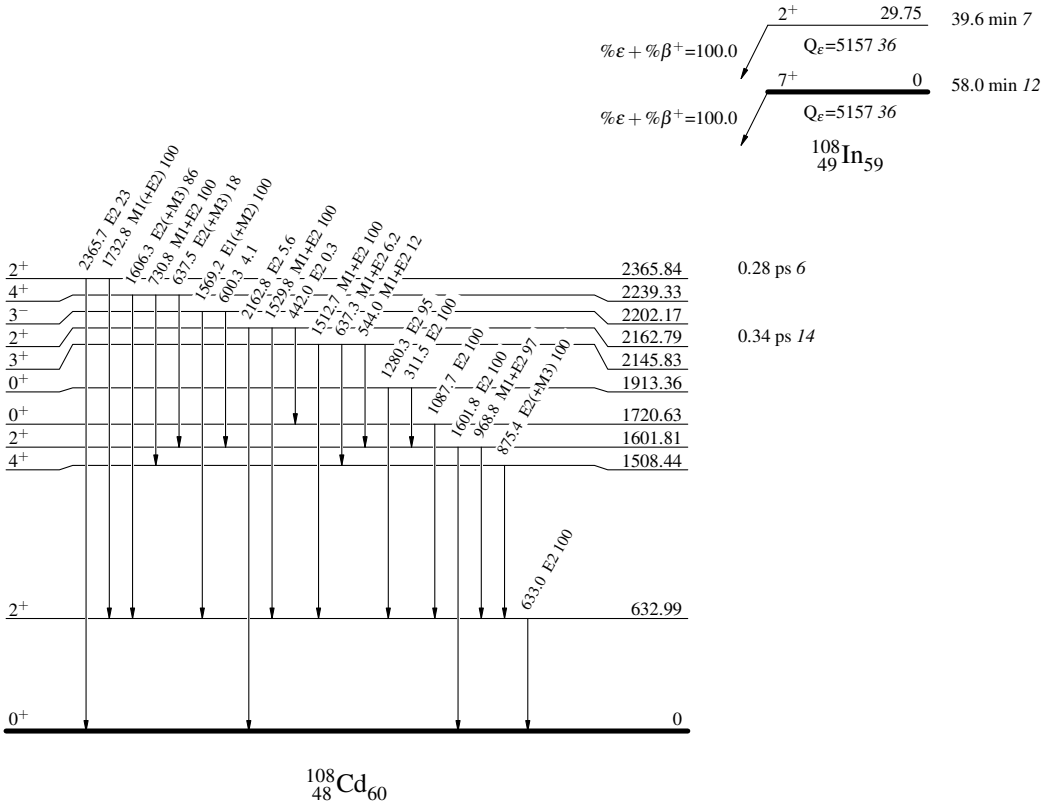
^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

Intensities: Relative photon branching from each level



^{108}In ε decay (58.0 min+39.6 min) 2002Ga35

Decay Scheme (continued)

Intensities: Relative photon branching from each level