

⁹⁸Ag ε decay (47.5 s) [2000Hu17,2001HuZZ](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, Balraj Singh		NDS 164, 1 (2020)	15-Feb-2020

Parent: ⁹⁸Ag: E=0; J^π=(6⁺); T_{1/2}=47.5 s 3; Q(ε)=8250 30; %ε+%β⁺ decay=100.0

⁹⁸Ag-J^π,T_{1/2}: From ⁹⁸Ag Adopted Levels.

⁹⁸Ag-Q(ε): From [2017Wa10](#).

[2000Hu17, 2001HuZZ](#): ⁹⁸Ag was produced via fusion-evaporation reaction ⁶¹Ni(⁴⁰Ca,1p2n) with E=3.75 MeV/nucleon ⁴⁰Ca beam provided from the GSI accelerator facility on a 86.4% enriched ⁶¹Ni target. Reaction products were separated by the GSI on-line mass separator and ⁹⁸Ag ions were implanted into the tape of a moving-tape collector. γ rays were detected with the Cluster Cube array of 42 Ge crystals and a total-absorption spectrometer (TAS). Measured E_γ, I_γ, γγ-coin, γ(t). Deduced levels, parent T_{1/2}, Q-value, Gamow-Teller strength distribution. Comparisons with shell-model calculations. Data of γ energies and intensities are not reported in [2000Hu17](#) and are from [2001HuZZ](#).

Others:

[1982Ku15](#): ⁹⁸Ag formed by ⁶²Ni(⁴⁰Ca,p3n). Measured γ, γγ. A total of 24 γ rays reported, 14 of which were assigned amongst 11 levels.

[1978Hu11](#): ⁹⁸Ag formed by ⁹²Mo(¹⁴N,α4n). Measured γ, γγ. Four strong γ rays reported.

[1980VeZN](#): singles β⁺ data.

The level scheme is from [2001HuZZ](#). See experimental details in [2000Hu17](#).

⁹⁸Pd Levels

E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]
0.0	0 ⁺	3601.66 13	(5,6 ⁺)	4314.85 24		4888.03 24	
862.80 10	2 ⁺	3633.41 14	(5,6,7)	4321.57 14	(5,6,7)	4891.69 14	(6 ⁺ ,7)
1541.35 13	4 ⁺	3708.86 16		4332.34 16	(7 ⁺)	4918.37 23	(5,6 ⁺)
1966.13 14	(2 ⁺)	3739.95 24		4353.63 15	(5,6,7)	4929.8 4	
2112.42 13	6 ⁺	3752.77 15	(9 ⁺)	4373.57 16		4931.2 4	
2289.40 13	(4 ⁺)	3759.77 14	(5,6,7)	4388.61 15	(7 ⁺)	4961.00 21	(5,6,7)
2407.94 13	(4,5,6 ⁺)	3763.39 14	(5,6,7)	4406.14 16	(5,6,7)	5009.48 17	(5,6 ⁺)
2564.24 13	(5,6 ⁺)	3816.50 16	(5,6,7)	4410.96 17	(6 ⁺ ,7)	5051.48 15	(6 ⁺)
2616.98 14	(5,6 ⁺)	3853.05 13	(5,6 ⁺)	4412.60 16	(5,6,7)	5059.73 14	(5 ⁺ ,6 ⁺)
2620.08 15	(5 ⁻)	3893.79 18		4417.54 15	(5,6 ⁺)	5062.00 17	(5,6,7)
2724.48 13	(5,6 ⁺)	3905.44 14	(5,6,7)	4445.02 24		5131.13 19	(5,6 ⁺)
2767.05 16	(4 ⁺)	3928.09 24		4464.44 15	(5,6 ⁺)	5173.59 14	(5 ⁺ ,6 ⁺)
2773.15 13	8 ⁺	3951.10 14	(5,6,7)	4500.51 19	(5,6 ⁺)	5181.89 22	(5,6,7)
2784.11 16	(4,5,6 ⁺)	3965.26 14	(5,6,7)	4515.37 19	(5,6,7)	5206.56 17	(5 ⁺ ,6 ⁺)
3003.70 21	(4 ⁺)	3969.39 14	(5,6 ⁺)	4522.39 22	(7 ⁺)	5207.81 18	
3009.00 13	(5,6 ⁺)	3976.41 14	(6 ⁺ ,7)	4541.82 24		5212.8 4	
3021.72 24		3991.89 25		4542.73 14	(6 ⁺ ,7 ⁺)	5236.70 16	(5 ⁺ ,6 ⁺ ,7 ⁺)
3076.50 13	(6 ⁺ ,7)	4050.61 15	(6 ⁺ ,7)	4559.56 13	(5 ⁺ ,6 ⁺)	5248.42 18	(5,6,7)
3091.52 14	(4,5,6 ⁺)	4081.74 14	(5,6,7)	4598.96 17	(5,6,7)	5269.14 25	
3117.62 24		4090.71 15	(5,6,7)	4608.72 17	(5,6,7)	5282.96 21	
3125.24 13	(5 ⁺ ,6 ⁺)	4092.2 4	(4,5,6 ⁺)	4611.3 5	(5,6,7)	5286.85 19	(5,6,7 ⁻)
3173.08 18		4105.36 24		4615.14 16	(5,6 ⁺)	5304.07 16	(5 ⁺ ,6 ⁺)
3219.41 13	(6 ⁺ ,7,8 ⁺)	4124.66 21	(5,6 ⁺)	4638.05 15	(5,6,7)	5314.23 19	(6 ⁺ ,7)
3345.27 13	(5,6 ⁺)	4136.4 4		4664.95 25		5352.5 5	
3347.94 25	(4 ⁺)	4152.69 13	(6 ⁺ ,7 ⁺)	4691.44 20	(5,6 ⁺)	5399.77 24	(5,6,7)
3349.27 19		4164.50 24	(5,6,7)	4718.39 14	(6 ⁺ ,7)	5416.97 22	(5,6,7)
3378.49 18	(7 ⁻)	4181.32 14	(5,6 ⁺)	4756.22 17	(5,6,7)	5436.3 6	(5,6 ⁺)
3401.61 16	(4 ⁺)	4222.07 13	(5 ⁺ ,6 ⁺)	4766.95 15	(6 ⁺ ,7)	5450.64 21	(5,6,7)
3440.75 14	(5,6 ⁺)	4265.60 14	(6 ⁺)	4813.56 24		5477.44 17	(5 ⁺ ,6 ⁺)
3488.95 24	(6 ⁺ ,7,8)	4278.16 17	(6 ⁺ ,7)	4845.6 5		5487.11 15	(5 ⁺ ,6 ⁺)
3553.29 14	(4 ⁺)	4284.70 14	(5 ⁺ ,6 ⁺)	4847.28 13	(6 ⁺ ,7 ⁺)	5505.7 5	
3582.7 4		4291.82 24		4877.46 22	(5,6,7)	5507.50 18	(5 ⁺ ,6 ⁺ ,7 ⁺)

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^{98}Ag ε decay (47.5 s) **2000Hu17,2001HuZZ** (continued) ^{98}Pd Levels (continued)

E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]
5508.9 4	(5,6 ⁺)	5716.1 3		5903.0 8		6108.5 7	
5536.38 24		5717.88 18	(5 ⁺ ,6 ⁺)	5937.67 17	(5 ⁺ ,6 ⁺ ,7 ⁺)	6141.1 5	
5573.9 5	(5,6 ⁺)	5723.0 5		5951.7 7		6143.2 5	
5575.2 3		5756.09 24	(5 ⁺ ,6 ⁺ ,7 ⁺)	5964.00 16	(6 ⁺ ,7 ⁺)	6187.0 5	
5576.7 3		5779.0 4		5971.4 4		6200.1 4	
5583.4 7		5814.98 22	(5 ⁺ ,6 ⁺)	5982.56 23	(5,6 ⁺)	6230.5 8	
5585.2 3		5817.5 5		5999.69 23	(5 ⁺ ,6 ⁺)	6262.8 3	(5 ⁺ ,6 ⁺)
5619.8 4		5833.84 18	(5 ⁺ ,6 ⁺ ,7 ⁺)	6047.40 25	(5 ⁺ ,6 ⁺)	6316.0 4	
5628.1 7		5845.3 6		6062.1 5		6350.4 6	
5706.6 6		5852.37 21	(5 ⁺ ,6 ⁺)	6085.1 5		6424.2 7	
5708.6 5		5883.90 18	(5 ⁺ ,6 ⁺)	6097.18 25		6450.1 7	

[†] From a least squares fit to E_γ values, with a reduced $\chi^2=2.6$. Some of the uncertainties on E_γ values may be underestimated, since about 13 quoted E_γ values deviate from the least-squares fitted value by 3 or more times the quoted uncertainty. Another 35 E_γ values deviate by 2 times the quoted uncertainty.

[‡] From Adopted Levels. The assignments are based on $\varepsilon+\beta^+$ feedings from (6⁺) and γ decay modes. When no J^π is given, log ft from (6⁺) suggests (5,6,7). See also comments in Adopted Levels.

 ε,β^+ radiations

From intensity balance, feeding to the 863 level is 3 7, consistent with no feeding as expected from $\Delta J=(4)$. Apparent feeding of 1.2 8 to 2773, (8⁺) level may be due to missing γ -ray intensity feeding this level.

E(decay)	E(level)	I β^+ #	I ε #	Log ft [‡]	I($\varepsilon+\beta^+$) ^{†#}	Comments
(1.80×10 ³ 3)	6450.1	0.0022 6	0.026 6	6.1 1	0.028 7	av E β =347 13; ε K=0.797 9; ε L=0.1004 12; ε M+=0.0244 3
(1.83×10 ³ 3)	6424.2	0.0017 5	0.018 5	6.2 1	0.020 5	av E β =359 13; ε K=0.790 10; ε L=0.0995 12; ε M+=0.0241 3
(1.90×10 ³ 3)	6350.4	0.0035 8	0.027 5	6.1 1	0.031 6	av E β =391 14; ε K=0.766 11; ε L=0.0964 14; ε M+=0.0234 4
(1.93×10 ³ 3)	6316.0	0.0063 12	0.043 7	5.9 1	0.049 8	av E β =406 14; ε K=0.754 12; ε L=0.0948 15; ε M+=0.0230 4
(1.99×10 ³ 3)	6262.8	0.01 1	0.08 1	5.68 6	0.09 1	av E β =429 14; ε K=0.734 12; ε L=0.0922 16; ε M+=0.0224 4
(2.02×10 ³ 3)	6230.5	0.0055 13	0.028 6	6.1 1	0.033 7	av E β =443 14; ε K=0.721 13; ε L=0.0906 16; ε M+=0.0220 4
(2.05×10 ³ 3)	6200.1	0.0069 14	0.031 6	6.1 1	0.038 7	av E β =457 14; ε K=0.708 13; ε L=0.0890 17; ε M+=0.0216 4
(2.06×10 ³ 3)	6187.0	0.0066 14	0.028 6	6.2 1	0.035 7	av E β =463 14; ε K=0.703 13; ε L=0.0882 17; ε M+=0.0214 4
(2.11×10 ³ 3)	6143.2	0.0082 16	0.031 6	6.1 1	0.039 7	av E β =482 14; ε K=0.684 14; ε L=0.0858 17; ε M+=0.0208 5
(2.11×10 ³ 3)	6141.1	0.0076 18	0.028 6	6.2 1	0.036 8	av E β =483 14; ε K=0.683 14; ε L=0.0857 17; ε M+=0.0208 5
(2.14×10 ³ 3)	6108.5	0.0050 14	0.017 5	6.4 1	0.022 6	av E β =497 14; ε K=0.668 14; ε L=0.0838 18; ε M+=0.0203 5
(2.15×10 ³ 3)	6097.18	0.01 1	0.04 1	6.1 1	0.05 1	av E β =502 14; ε K=0.663 14; ε L=0.0832 18; ε M+=0.0202 5
(2.16×10 ³ 3)	6085.1	0.0041 10	0.013 3	6.5 1	0.017 4	av E β =508 14; ε K=0.657 14; ε L=0.0825 18; ε M+=0.0200 5

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^{98}Ag ϵ decay (47.5 s) **2000Hu17,2001HuZZ** (continued) ϵ, β^+ radiations (continued)

E(decay)	E(level)	$I\beta^+$ #	$I\epsilon^{\#}$	Log ft^{\ddagger}	$I(\epsilon + \beta^+)^{\ddagger\#}$	Comments
(2.19×10^3) 3)	6062.1	0.0081 16	0.024 5	6.3 1	0.032 6	av $E\beta=518$ 14; $\epsilon K=0.647$ 14; $\epsilon L=0.0812$ 18; $\epsilon M+=0.0197$ 5
(2.20×10^3) 3)	6047.40	0.047 6	0.13 2	5.53 6	0.18 2	av $E\beta=524$ 14; $\epsilon K=0.640$ 14; $\epsilon L=0.0803$ 18; $\epsilon M+=0.0195$ 5
(2.25×10^3) 3)	5999.69	0.034 3	0.086 7	5.74 5	0.12 1	av $E\beta=546$ 14; $\epsilon K=0.618$ 15; $\epsilon L=0.0774$ 18; $\epsilon M+=0.0188$ 5
(2.27×10^3) 3)	5982.56	0.030 3	0.070 7	5.84 5	0.10 1	av $E\beta=553$ 14; $\epsilon K=0.609$ 15; $\epsilon L=0.0764$ 18; $\epsilon M+=0.0185$ 5
(2.28×10^3) 3)	5971.4	0.02 1	0.05 1	6.0 1	0.07 1	av $E\beta=558$ 14; $\epsilon K=0.604$ 15; $\epsilon L=0.0757$ 19; $\epsilon M+=0.0184$ 5
(2.29×10^3) 3)	5964.00	0.076 7	0.17 1	5.45 5	0.25 2	av $E\beta=561$ 14; $\epsilon K=0.601$ 15; $\epsilon L=0.0753$ 19; $\epsilon M+=0.0183$ 5
(2.30×10^3) 3)	5951.7	0.0078 16	0.017 3	6.5 1	0.025 5	av $E\beta=567$ 14; $\epsilon K=0.595$ 15; $\epsilon L=0.0745$ 19; $\epsilon M+=0.0181$ 5
(2.31×10^3) 3)	5937.67	0.093 11	0.20 2	5.41 5	0.29 3	av $E\beta=573$ 14; $\epsilon K=0.588$ 15; $\epsilon L=0.0737$ 19; $\epsilon M+=0.0179$ 5
(2.35×10^3) 3)	5903.0	0.01 1	0.03 1	6.3 1	0.04 1	av $E\beta=589$ 14; $\epsilon K=0.572$ 15; $\epsilon L=0.0716$ 19; $\epsilon M+=0.0174$ 5
(2.37×10^3) 3)	5883.90	0.11 1	0.19 1	5.43 4	0.30 2	av $E\beta=597$ 14; $\epsilon K=0.562$ 15; $\epsilon L=0.0705$ 18; $\epsilon M+=0.0171$ 5
(2.40×10^3) 3)	5852.37	0.085 8	0.15 1	5.57 5	0.23 2	av $E\beta=611$ 14; $\epsilon K=0.547$ 15; $\epsilon L=0.0686$ 18; $\epsilon M+=0.0166$ 5
(2.40×10^3) 3)	5845.3	0.016 3	0.028 5	6.3 1	0.044 8	av $E\beta=614$ 14; $\epsilon K=0.544$ 15; $\epsilon L=0.0681$ 18; $\epsilon M+=0.0165$ 5
(2.42×10^3) 3)	5833.84	0.10 1	0.17 1	5.50 4	0.28 2	av $E\beta=620$ 14; $\epsilon K=0.539$ 15; $\epsilon L=0.0674$ 18; $\epsilon M+=0.0164$ 5
(2.43×10^3) 3)	5817.5	0.012 3	0.019 4	6.5 1	0.031 7	av $E\beta=627$ 14; $\epsilon K=0.531$ 15; $\epsilon L=0.0665$ 18; $\epsilon M+=0.0161$ 5
(2.44×10^3) 3)	5814.98	0.078 8	0.12 1	5.66 5	0.20 2	av $E\beta=628$ 14; $\epsilon K=0.530$ 15; $\epsilon L=0.0663$ 18; $\epsilon M+=0.0161$ 5
(2.47×10^3) 3)	5779.0	0.03 1	0.04 1	6.1 1	0.07 1	av $E\beta=644$ 14; $\epsilon K=0.513$ 14; $\epsilon L=0.0642$ 18; $\epsilon M+=0.0156$ 5
(2.49×10^3) 3)	5756.09	0.071 9	0.099 12	5.77 6	0.17 2	av $E\beta=654$ 14; $\epsilon K=0.502$ 14; $\epsilon L=0.0629$ 18; $\epsilon M+=0.0152$ 5
(2.53×10^3) 3)	5723.0	0.019 4	0.024 5	6.4 1	0.043 8	av $E\beta=669$ 14; $\epsilon K=0.487$ 14; $\epsilon L=0.0610$ 18; $\epsilon M+=0.0148$ 5
(2.53×10^3) 3)	5717.88	0.17 1	0.21 2	5.45 5	0.38 3	av $E\beta=672$ 14; $\epsilon K=0.485$ 14; $\epsilon L=0.0607$ 18; $\epsilon M+=0.0147$ 5
(2.53×10^3) 3)	5716.1	0.020 3	0.025 4	6.4 1	0.045 7	av $E\beta=672$ 14; $\epsilon K=0.484$ 14; $\epsilon L=0.0606$ 18; $\epsilon M+=0.0147$ 5
(2.54×10^3) 3)	5708.6	0.03 1	0.03 1	6.3 1	0.06 1	av $E\beta=676$ 14; $\epsilon K=0.481$ 14; $\epsilon L=0.0601$ 18; $\epsilon M+=0.0146$ 5
(2.54×10^3) 3)	5706.6	0.012 3	0.015 4	6.6 1	0.027 7	av $E\beta=677$ 14; $\epsilon K=0.480$ 14; $\epsilon L=0.0600$ 18; $\epsilon M+=0.0145$ 5
(2.62×10^3) 3)	5628.1	0.019 4	0.020 4	6.5 1	0.039 8	av $E\beta=712$ 14; $\epsilon K=0.445$ 13; $\epsilon L=0.0557$ 17; $\epsilon M+=0.0135$ 4
(2.63×10^3) 3)	5619.8	0.029 5	0.031 5	6.3 1	0.060 9	av $E\beta=716$ 14; $\epsilon K=0.442$ 13; $\epsilon L=0.0552$ 17; $\epsilon M+=0.0134$ 4
(2.66×10^3) 3)	5585.2	0.027 4	0.026 4	6.4 1	0.053 8	av $E\beta=731$ 14; $\epsilon K=0.427$ 13; $\epsilon L=0.0534$ 16; $\epsilon M+=0.0129$ 4
(2.67×10^3) 3)	5583.4	0.025 5	0.025 5	6.4 1	0.05 1	av $E\beta=732$ 14; $\epsilon K=0.426$ 13; $\epsilon L=0.0533$ 16; $\epsilon M+=0.0129$ 4
(2.67×10^3) 3)	5576.7	0.051 5	0.049 5	6.14 5	0.10 1	av $E\beta=735$ 14; $\epsilon K=0.423$ 13; $\epsilon L=0.0529$ 16; $\epsilon M+=0.0128$ 4
(2.67×10^3) 3)	5575.2	0.051 5	0.049 5	6.14 5	0.10 1	av $E\beta=736$ 14; $\epsilon K=0.423$ 13; $\epsilon L=0.0529$ 16;

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^{98}Ag ε decay (47.5 s) **2000Hu17,2001HuZZ** (continued) ε, β^+ radiations (continued)

E(decay)	E(level)	$I\beta^+$ #	$I\varepsilon$ #	Log $f t^{\ddagger}$	$I(\varepsilon + \beta^+)^{\ddagger\#}$	Comments
(2.68×10^3) 3)	5573.9	0.02 1	0.01 1	6.7 2	0.03 1	$\varepsilon M^+ = 0.0128$ 4 av $E\beta = 737$ 14; $\varepsilon K = 0.422$ 13; $\varepsilon L = 0.0528$ 16; $\varepsilon M^+ = 0.0128$ 4
(2.71×10^3) 3)	5536.38	0.074 11	0.066 10	6.0 1	0.14 2	av $E\beta = 753$ 14; $\varepsilon K = 0.407$ 13; $\varepsilon L = 0.0509$ 16; $\varepsilon M^+ = 0.0123$ 4
(2.74×10^3) 3)	5508.9	0.12 2	0.11 2	5.8 1	0.23 4	av $E\beta = 766$ 14; $\varepsilon K = 0.396$ 12; $\varepsilon L = 0.0495$ 15; $\varepsilon M^+ = 0.0120$ 4
(2.74×10^3) 3)	5507.50	0.17 1	0.15 1	5.69 4	0.32 2	av $E\beta = 767$ 14; $\varepsilon K = 0.395$ 12; $\varepsilon L = 0.0494$ 15; $\varepsilon M^+ = 0.0120$ 4
(2.74×10^3) 3)	5505.7	0.022 4	0.019 4	6.6 1	0.041 8	av $E\beta = 767$ 14; $\varepsilon K = 0.395$ 12; $\varepsilon L = 0.0493$ 15; $\varepsilon M^+ = 0.0120$ 4
(2.76×10^3) 3)	5487.11	0.38 2	0.31 2	5.37 4	0.69 4	av $E\beta = 776$ 14; $\varepsilon K = 0.387$ 12; $\varepsilon L = 0.0484$ 15; $\varepsilon M^+ = 0.0117$ 4
(2.77×10^3) 3)	5477.44	0.29 2	0.23 2	5.50 4	0.52 4	av $E\beta = 780$ 14; $\varepsilon K = 0.384$ 12; $\varepsilon L = 0.0479$ 15; $\varepsilon M^+ = 0.0116$ 4
(2.80×10^3) 3)	5450.64	0.13 1	0.095 9	5.89 5	0.22 2	av $E\beta = 792$ 14; $\varepsilon K = 0.374$ 12; $\varepsilon L = 0.0467$ 15; $\varepsilon M^+ = 0.0113$ 4
(2.81×10^3) 3)	5436.3	0.020 3	0.014 3	6.7 1	0.034 6	av $E\beta = 799$ 14; $\varepsilon K = 0.368$ 12; $\varepsilon L = 0.0460$ 15; $\varepsilon M^+ = 0.0111$ 4
(2.83×10^3) 3)	5416.97	0.082 6	0.058 5	6.11 4	0.14 1	av $E\beta = 808$ 14; $\varepsilon K = 0.361$ 11; $\varepsilon L = 0.0451$ 14; $\varepsilon M^+ = 0.0109$ 4
(2.85×10^3) 3)	5399.77	0.11 1	0.078 9	5.99 6	0.19 2	av $E\beta = 816$ 14; $\varepsilon K = 0.355$ 11; $\varepsilon L = 0.0443$ 14; $\varepsilon M^+ = 0.0107$ 4
(2.90×10^3) 3)	5352.5	0.024 4	0.015 2	6.7 1	0.039 6	av $E\beta = 837$ 14; $\varepsilon K = 0.338$ 11; $\varepsilon L = 0.0422$ 14; $\varepsilon M^+ = 0.0102$ 4
(2.94×10^3) 3)	5314.23	0.15 1	0.090 8	5.95 5	0.24 2	av $E\beta = 855$ 14; $\varepsilon K = 0.325$ 10; $\varepsilon L = 0.0406$ 13; $\varepsilon M^+ = 0.0098$ 3
(2.95×10^3) 3)	5304.07	0.37 3	0.22 2	5.57 4	0.59 4	av $E\beta = 859$ 14; $\varepsilon K = 0.322$ 10; $\varepsilon L = 0.0402$ 13; $\varepsilon M^+ = 0.0097$ 3
(2.96×10^3) 3)	5286.85	0.21 2	0.12 1	5.84 5	0.33 3	av $E\beta = 867$ 14; $\varepsilon K = 0.316$ 10; $\varepsilon L = 0.0395$ 13; $\varepsilon M^+ = 0.0096$ 3
(2.97×10^3) 3)	5282.96	0.05 1	0.03 1	6.45 6	0.08 1	av $E\beta = 869$ 14; $\varepsilon K = 0.315$ 10; $\varepsilon L = 0.0393$ 13; $\varepsilon M^+ = 0.0095$ 3
(2.98×10^3) 3)	5269.14	0.06 1	0.03 1	6.41 6	0.09 1	av $E\beta = 875$ 14; $\varepsilon K = 0.311$ 10; $\varepsilon L = 0.0388$ 13; $\varepsilon M^+ = 0.0094$ 3
(3.00×10^3) 3)	5248.42	0.19 2	0.10 1	5.92 5	0.29 3	av $E\beta = 885$ 14; $\varepsilon K = 0.304$ 10; $\varepsilon L = 0.0380$ 12; $\varepsilon M^+ = 0.0092$ 3
(3.01×10^3) 3)	5236.70	0.40 2	0.22 1	5.60 3	0.62 3	av $E\beta = 890$ 14; $\varepsilon K = 0.301$ 10; $\varepsilon L = 0.0375$ 12; $\varepsilon M^+ = 0.0091$ 3
(3.04×10^3) 3)	5212.8	0.066 7	0.034 4	6.41 5	0.10 1	av $E\beta = 901$ 14; $\varepsilon K = 0.293$ 10; $\varepsilon L = 0.0366$ 12; $\varepsilon M^+ = 0.0089$ 3
(3.04×10^3) 3)	5207.81	0.020 2	0.010 1	6.94 5	0.030 3	av $E\beta = 903$ 14; $\varepsilon K = 0.292$ 9; $\varepsilon L = 0.0364$ 12; $\varepsilon M^+ = 0.0088$ 3
(3.04×10^3) 3)	5206.56	0.33 3	0.17 1	5.71 5	0.50 4	av $E\beta = 904$ 14; $\varepsilon K = 0.291$ 9; $\varepsilon L = 0.0364$ 12; $\varepsilon M^+ = 0.0088$ 3
(3.07×10^3) 3)	5181.89	0.074 7	0.036 3	6.4 1	0.11 2	av $E\beta = 915$ 14; $\varepsilon K = 0.284$ 9; $\varepsilon L = 0.0355$ 11; $\varepsilon M^+ = 0.0086$ 3
(3.08×10^3) 3)	5173.59	1.3 1	0.62 4	5.16 4	1.9 1	av $E\beta = 919$ 14; $\varepsilon K = 0.282$ 9; $\varepsilon L = 0.0352$ 11; $\varepsilon M^+ = 0.0085$ 3
(3.12×10^3) 3)	5131.13	0.14 1	0.065 7	6.15 5	0.22 2	av $E\beta = 938$ 14; $\varepsilon K = 0.270$ 9; $\varepsilon L = 0.0337$ 11; $\varepsilon M^+ = 0.0082$ 3
(3.19×10^3) 3)	5062.00	0.085 7	0.035 3	6.44 5	0.12 1	av $E\beta = 970$ 14; $\varepsilon K = 0.252$ 8; $\varepsilon L = 0.0314$ 10; $\varepsilon M^+ = 0.00760$ 24
(3.19×10^3) 3)	5059.73	0.63 3	0.26 1	5.57 3	0.89 4	av $E\beta = 971$ 14; $\varepsilon K = 0.251$ 8; $\varepsilon L = 0.0313$ 10; $\varepsilon M^+ = 0.00759$ 24

Continued on next page (footnotes at end of table)

^{98}Ag ε decay (47.5 s) [2000Hu17](#), [2001HuZZ](#) (continued) ε, β^+ radiations (continued)

E(decay)	E(level)	$I\beta^+$ #	$I\varepsilon$ #	Log ft^{\ddagger}	$I(\varepsilon + \beta^+)^{\dagger}$ #	Comments
(3.20×10^3) 3)	5051.48	0.56 3	0.23 1	5.63 3	0.79 4	av E β =975 14; ε K=0.249 8; ε L=0.0310 10; ε M+=0.00752 24
(3.24×10^3) 3)	5009.48	0.34 3	0.13 1	5.88 5	0.47 4	av E β =994 14; ε K=0.239 8; ε L=0.0297 10; ε M+=0.00721 23
(3.29×10^3) 3)	4961.00	0.074 7	0.026 3	6.59 5	0.10 2	av E β =1017 14; ε K=0.227 7; ε L=0.0283 9; ε M+=0.00686 21
(3.32×10^3) 3)	4931.2	0.05 1	0.02 1	6.8 1	0.07 1	av E β =1031 14; ε K=0.221 7; ε L=0.0275 9; ε M+=0.00666 21
(3.32×10^3) 3)	4929.8	0.034 5	0.011 2	7.0 1	0.045 7	av E β =1031 14; ε K=0.220 7; ε L=0.0275 9; ε M+=0.00665 21
(3.33×10^3) 3)	4918.37	0.11 2	0.038 5	6.4 1	0.15 2	av E β =1036 14; ε K=0.218 7; ε L=0.0272 9; ε M+=0.00658 20
(3.36×10^3) 3)	4891.69	0.45 3	0.15 1	5.86 4	0.60 4	av E β =1049 14; ε K=0.212 7; ε L=0.0264 8; ε M+=0.00640 20
(3.36×10^3) 3)	4888.03	0.07 1	0.02 1	6.69 6	0.09 1	av E β =1050 14; ε K=0.211 7; ε L=0.0263 8; ε M+=0.00638 20
(3.37×10^3) 3)	4877.46	0.15 2	0.048 5	6.35 7	0.20 3	av E β =1055 14; ε K=0.209 7; ε L=0.0261 8; ε M+=0.00632 20
(3.40×10^3) 3)	4847.28	3.23 11	0.99 5	5.04 3	4.2 2	av E β =1069 14; ε K=0.203 6; ε L=0.0253 8; ε M+=0.00613 19
(3.40×10^3) 3)	4845.6	0.05 1	0.02 1	6.8 1	0.07 1	av E β =1070 14; ε K=0.203 6; ε L=0.0253 8; ε M+=0.00612 19
(3.44×10^3) 3)	4813.56	0.07 1	0.02 1	6.74 6	0.09 1	av E β =1085 14; ε K=0.196 6; ε L=0.0245 8; ε M+=0.00593 18
(3.48×10^3) 3)	4766.95	0.36 2	0.100 7	6.06 4	0.46 3	av E β =1106 14; ε K=0.188 6; ε L=0.0234 7; ε M+=0.00566 17
(3.49×10^3) 3)	4756.22	0.13 2	0.036 4	6.50 6	0.17 2	av E β =1111 14; ε K=0.186 6; ε L=0.0231 7; ε M+=0.00561 17
(3.53×10^3) 3)	4718.39	0.56 3	0.14 1	5.91 4	0.70 4	av E β =1129 14; ε K=0.179 6; ε L=0.0223 7; ε M+=0.00540 16
(3.56×10^3) 3)	4691.44	0.15 2	0.038 4	6.49 5	0.19 2	av E β =1142 14; ε K=0.175 6; ε L=0.0217 7; ε M+=0.00526 16
(3.59×10^3) 3)	4664.95	0.080 8	0.020 2	6.79 5	0.10 1	av E β =1154 14; ε K=0.170 5; ε L=0.0212 7; ε M+=0.00513 15
(3.61×10^3) 3)	4638.05	0.23 2	0.056 4	6.35 5	0.29 3	av E β =1166 14; ε K=0.166 5; ε L=0.0206 6; ε M+=0.00500 15
(3.63×10^3) 3)	4615.14	0.19 2	0.043 4	6.46 5	0.23 2	av E β =1177 14; ε K=0.162 5; ε L=0.0202 6; ε M+=0.00489 15
(3.64×10^3) 3)	4611.3	0.15 2	0.035 6	6.6 1	0.19 3	av E β =1179 14; ε K=0.162 5; ε L=0.0201 6; ε M+=0.00488 15
(3.64×10^3) 3)	4608.72	0.098 8	0.022 2	6.75 5	0.12 1	av E β =1180 14; ε K=0.161 5; ε L=0.0201 6; ε M+=0.00487 14
(3.65×10^3) 3)	4598.96	0.24 2	0.054 6	6.37 5	0.29 3	av E β =1185 14; ε K=0.160 5; ε L=0.0199 6; ε M+=0.00482 14
(3.69×10^3) 3)	4559.56	1.82 7	0.393 18	5.52 3	2.21 8	av E β =1203 14; ε K=0.154 5; ε L=0.0192 6; ε M+=0.00464 14
(3.71×10^3) 3)	4542.73	1.00 5	0.212 12	5.79 3	1.21 6	av E β =1211 14; ε K=0.152 5; ε L=0.0189 6; ε M+=0.00457 13
(3.71×10^3) 3)	4541.82	0.056 7	0.012 2	7.04 6	0.068 9	av E β =1211 14; ε K=0.152 5; ε L=0.0189 6; ε M+=0.00457 13
(3.73×10^3) 3)	4522.39	0.083 8	0.017 2	6.88 5	0.10 1	av E β =1220 14; ε K=0.149 5; ε L=0.0185 6; ε M+=0.00449 13
(3.73×10^3) 3)	4515.37	0.13 3	0.027 7	6.7 1	0.16 4	av E β =1223 14; ε K=0.148 5; ε L=0.0184 6; ε M+=0.00446 13
(3.75×10^3) 3)	4500.51	0.21 2	0.042 4	6.50 4	0.25 2	av E β =1230 14; ε K=0.146 5; ε L=0.0181 6;

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⁹⁸Ag ε decay (47.5 s) **2000Hu17,2001HuZZ** (continued)

ε,β⁺ radiations (continued)

<u>E(decay)</u>	<u>E(level)</u>	<u>Iβ⁺ #</u>	<u>Iε[#]</u>	<u>Log f_i[‡]</u>	<u>I(ε+β⁺)^{†#}</u>	<u>Comments</u>
(3.79×10 ³ 3)	4464.44	0.68 4	0.13 1	6.01 4	0.81 5	εM+=0.00440 13 av Eβ=1247 14; εK=0.141 4; εL=0.0176 5; εM+=0.00425 12
(3.80×10 ³ 3)	4445.02	0.07 1	0.01 1	7.03 6	0.08 1	av Eβ=1256 14; εK=0.139 4; εL=0.0172 5; εM+=0.00418 12
(3.83×10 ³ 3)	4417.54	0.69 4	0.13 1	6.04 4	0.82 5	av Eβ=1269 14; εK=0.135 4; εL=0.0168 5; εM+=0.00407 12
(3.84×10 ³ 3)	4412.60	0.28 3	0.051 5	6.43 5	0.33 3	av Eβ=1271 14; εK=0.135 4; εL=0.0167 5; εM+=0.00405 12
(3.84×10 ³ 3)	4410.96	0.19 2	0.034 3	6.61 5	0.22 2	av Eβ=1272 14; εK=0.134 4; εL=0.0167 5; εM+=0.00405 12
(3.84×10 ³ 3)	4406.14	0.19 2	0.034 3	6.61 5	0.22 2	av Eβ=1274 14; εK=0.134 4; εL=0.0166 5; εM+=0.00403 12
(3.86×10 ³ 3)	4388.61	0.15 2	0.027 3	6.71 6	0.18 2	av Eβ=1283 14; εK=0.132 4; εL=0.0164 5; εM+=0.00397 11
(3.88×10 ³ 3)	4373.57	0.03 2	0.006 3	7.4 2	0.04 2	av Eβ=1290 14; εK=0.130 4; εL=0.0162 5; εM+=0.00391 11
(3.90×10 ³ 3)	4353.63	0.32 3	0.056 5	6.41 4	0.38 3	av Eβ=1299 14; εK=0.128 4; εL=0.0159 5; εM+=0.00384 11
(3.92×10 ³ 3)	4332.34	0.22 2	0.038 3	6.57 6	0.27 3	av Eβ=1309 14; εK=0.125 4; εL=0.0156 5; εM+=0.00377 11
(3.93×10 ³ 3)	4321.57	0.87 5	0.146 10	6.00 4	1.02 6	av Eβ=1314 14; εK=0.124 4; εL=0.0154 5; εM+=0.00374 11
(3.94×10 ³ 3)	4314.85	0.06 1	0.010 1	7.2 1	0.07 1	av Eβ=1317 14; εK=0.123 4; εL=0.0153 5; εM+=0.00371 10
(3.96×10 ³ 3)	4291.82	0.052 8	0.0085 13	7.2 1	0.061 9	av Eβ=1328 14; εK=0.121 4; εL=0.0150 4; εM+=0.00364 10
(3.97×10 ³ 3)	4284.70	2.3 1	0.37 2	5.60 3	2.7 1	av Eβ=1331 14; εK=0.120 4; εL=0.0149 4; εM+=0.00362 10
(3.97×10 ³ 3)	4278.16	0.16 2	0.025 3	6.78 6	0.18 2	av Eβ=1334 14; εK=0.119 4; εL=0.0148 4; εM+=0.00359 10
(3.98×10 ³ 3)	4265.60	2.7 2	0.42 3	5.55 4	3.1 2	av Eβ=1340 14; εK=0.118 4; εL=0.0147 4; εM+=0.00355 10
(4.03×10 ³ 3)	4222.07	2.2 1	0.33 2	5.67 3	2.5 1	av Eβ=1361 14; εK=0.114 3; εL=0.0141 4; εM+=0.00342 10
(4.07×10 ³ 3)	4181.32	0.72 4	0.11 1	6.17 3	0.83 4	av Eβ=1380 14; εK=0.110 3; εL=0.0136 4; εM+=0.00330 9
(4.09×10 ³ 3)	4164.50	0.22 3	0.031 4	6.70 6	0.25 3	av Eβ=1388 14; εK=0.108 3; εL=0.0134 4; εM+=0.00325 9
(4.10×10 ³ 3)	4152.69	3.9 2	0.56 3	5.46 3	4.5 2	av Eβ=1393 14; εK=0.107 3; εL=0.0133 4; εM+=0.00322 9
(4.11×10 ³ 3)	4136.4	0.037 6	0.0051 9	7.5 1	0.042 7	av Eβ=1401 15; εK=0.105 3; εL=0.0131 4; εM+=0.00318 9
(4.13×10 ³ 3)	4124.66	0.11 1	0.016 1	6.98 4	0.14 1	av Eβ=1406 15; εK=0.104 3; εL=0.0130 4; εM+=0.00315 9
(4.14×10 ³ 3)	4105.36	0.088 9	0.012 1	7.14 5	0.10 1	av Eβ=1416 15; εK=0.103 3; εL=0.0128 4; εM+=0.00309 8
(4.16×10 ³ 3)	4092.2	0.05 3	0.007 4	7.4 2	0.06 3	av Eβ=1422 15; εK=0.102 3; εL=0.0126 4; εM+=0.00306 8
(4.16×10 ³ 3)	4090.71	0.22 2	0.029 2	6.75 4	0.25 2	av Eβ=1422 15; εK=0.101 3; εL=0.0126 4; εM+=0.00306 8
(4.17×10 ³ 3)	4081.74	0.23 4	0.030 5	6.7 1	0.26 4	av Eβ=1427 15; εK=0.101 3; εL=0.0125 4; εM+=0.00303 8
(4.20×10 ³ 3)	4050.61	0.80 5	0.10 1	6.21 4	0.90 6	av Eβ=1441 15; εK=0.098 3; εL=0.0122 4; εM+=0.00295 8

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^{98}Ag ε decay (47.5 s) **2000Hu17,2001HuZZ** (continued) ε, β^+ radiations (continued)

E(decay)	E(level)	$I\beta^+$ #	$I\varepsilon$ #	Log ft^{\ddagger}	$I(\varepsilon + \beta^+)^{\ddagger}$ #	Comments
(4.26×10 ³ 3)	3991.89	0.08 1	0.010 1	7.25 6	0.09 1	av $E\beta=1469$ 15; $\varepsilon K=0.0934$ 24; $\varepsilon L=0.0116$ 3; $\varepsilon M+=0.00281$ 8
(4.27×10 ³ 3)	3976.41	0.92 7	0.110 9	6.20 4	1.03 8	av $E\beta=1476$ 15; $\varepsilon K=0.0923$ 24; $\varepsilon L=0.0115$ 3; $\varepsilon M+=0.00278$ 7
(4.28×10 ³ 3)	3969.39	1.11 7	0.131 9	6.12 4	1.24 8	av $E\beta=1480$ 15; $\varepsilon K=0.0917$ 23; $\varepsilon L=0.0114$ 3; $\varepsilon M+=0.00276$ 7
(4.28×10 ³ 3)	3965.26	0.8 1	0.09 1	6.26 6	0.9 1	av $E\beta=1481$ 15; $\varepsilon K=0.0914$ 23; $\varepsilon L=0.0114$ 3; $\varepsilon M+=0.00275$ 7
(4.30×10 ³ 3)	3951.10	0.48 4	0.056 4	6.49 5	0.54 5	av $E\beta=1488$ 15; $\varepsilon K=0.0904$ 23; $\varepsilon L=0.0112$ 3; $\varepsilon M+=0.00272$ 7
(4.32×10 ³ 3)	3928.09	0.11 1	0.012 1	7.16 4	0.12 1	av $E\beta=1499$ 15; $\varepsilon K=0.0887$ 22; $\varepsilon L=0.0110$ 3; $\varepsilon M+=0.00267$ 7
(4.34×10 ³ 3)	3905.44	1.2 1	0.13 1	6.14 4	1.3 1	av $E\beta=1510$ 15; $\varepsilon K=0.0871$ 22; $\varepsilon L=0.0108$ 3; $\varepsilon M+=0.00262$ 7
(4.36×10 ³ 3)	3893.79	0.12 1	0.013 1	7.14 4	0.13 1	av $E\beta=1515$ 15; $\varepsilon K=0.0863$ 22; $\varepsilon L=0.0107$ 3; $\varepsilon M+=0.00260$ 7
(4.40×10 ³ 3)	3853.05	1.4 1	0.14 1	6.10 4	1.5 1	av $E\beta=1534$ 15; $\varepsilon K=0.0835$ 21; $\varepsilon L=0.0104$ 3; $\varepsilon M+=0.00251$ 7
(4.43×10 ³ 3)	3816.50	0.51 5	0.052 5	6.55 5	0.56 5	av $E\beta=1552$ 15; $\varepsilon K=0.0811$ 20; $\varepsilon L=0.01007$ 25; $\varepsilon M+=0.00244$ 6
(4.49×10 ³ 3)	3763.39	0.66 12	0.065 12	6.5 1	0.72 13	av $E\beta=1577$ 15; $\varepsilon K=0.0777$ 19; $\varepsilon L=0.00966$ 24; $\varepsilon M+=0.00234$ 6
(4.49×10 ³ 3)	3759.77	1.03 9	0.101 9	6.28 5	1.13 10	av $E\beta=1578$ 15; $\varepsilon K=0.0775$ 19; $\varepsilon L=0.00963$ 23; $\varepsilon M+=0.00233$ 6
(4.50×10 ³ @ 3)	3752.77	0.11 2	0.011 2	7.3 1	0.12 2	av $E\beta=1582$ 15; $\varepsilon K=0.0771$ 19; $\varepsilon L=0.00958$ 23; $\varepsilon M+=0.00232$ 6 Log ft : too low for $\Delta J=(3)$ transition. Apparent $\varepsilon + \beta^+$ feeding may be due to missing γ transition feeding 3752.8 level.
(4.51×10 ³ 3)	3739.95	0.091 9	0.0088 9	7.34 5	0.10 1	av $E\beta=1588$ 15; $\varepsilon K=0.0763$ 19; $\varepsilon L=0.00948$ 23; $\varepsilon M+=0.00230$ 6
(4.54×10 ³ 3)	3708.86	0.16 2	0.015 2	7.10 5	0.18 2	av $E\beta=1603$ 15; $\varepsilon K=0.0745$ 18; $\varepsilon L=0.00926$ 22; $\varepsilon M+=0.00224$ 6
(4.62×10 ³ 3)	3633.41	0.80 6	0.071 5	6.46 4	0.87 6	av $E\beta=1638$ 15; $\varepsilon K=0.0703$ 17; $\varepsilon L=0.00873$ 21; $\varepsilon M+=0.00211$ 5
(4.65×10 ³ 3)	3601.66	1.3 1	0.11 1	6.24 4	1.5 1	av $E\beta=1653$ 15; $\varepsilon K=0.0686$ 16; $\varepsilon L=0.00852$ 20; $\varepsilon M+=0.00206$ 5
(4.67×10 ³ 3)	3582.7	0.035 6	0.0030 6	7.8 1	0.038 7	av $E\beta=1662$ 15; $\varepsilon K=0.0677$ 16; $\varepsilon L=0.00840$ 20; $\varepsilon M+=0.00203$ 5
(4.70×10 ³ 3)	3553.29	0.19 4	0.016 3	7.1 1	0.21 4	av $E\beta=1676$ 15; $\varepsilon K=0.0662$ 15; $\varepsilon L=0.00822$ 19; $\varepsilon M+=0.00199$ 5
(4.76×10 ³ 3)	3488.95	0.10 2	0.0080 15	7.4 1	0.11 2	av $E\beta=1707$ 15; $\varepsilon K=0.0631$ 15; $\varepsilon L=0.00783$ 18; $\varepsilon M+=0.00190$ 5
(4.81×10 ³ 3)	3440.75	3.0 2	0.22 2	5.98 3	3.3 2	av $E\beta=1730$ 15; $\varepsilon K=0.0609$ 14; $\varepsilon L=0.00756$ 17; $\varepsilon M+=0.00183$ 4
(4.85×10 ³ 3)	3401.61	0.39 6	0.029 4	6.9 1	0.42 6	av $E\beta=1748$ 15; $\varepsilon K=0.0592$ 13; $\varepsilon L=0.00735$ 17; $\varepsilon M+=0.00178$ 4
(4.87×10 ³ 3)	3378.49	0.42 4	0.030 3	6.87 5	0.45 4	av $E\beta=1759$ 15; $\varepsilon K=0.0582$ 13; $\varepsilon L=0.00723$ 16; $\varepsilon M+=0.00175$ 4
(4.90×10 ³ 3)	3349.27	0.22 2	0.016 1	7.16 4	0.24 2	av $E\beta=1773$ 15; $\varepsilon K=0.0570$ 13; $\varepsilon L=0.00708$ 16; $\varepsilon M+=0.00171$ 4
(4.90×10 ³ 3)	3347.94	0.058 8	0.0041 6	7.8 1	0.062 9	av $E\beta=1774$ 15; $\varepsilon K=0.0570$ 13; $\varepsilon L=0.00707$ 16; $\varepsilon M+=0.00171$ 4
(4.90×10 ³ 3)	3345.27	2.0 2	0.14 1	6.22 5	2.1 2	av $E\beta=1775$ 15; $\varepsilon K=0.0569$ 13; $\varepsilon L=0.00706$ 16; $\varepsilon M+=0.00171$ 4

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⁹⁸Ag ϵ decay (47.5 s) **2000Hu17,2001HuZZ (continued)**

ϵ, β^+ radiations (continued)

E(decay)	E(level)	I β^+ #	I ϵ #	Log ft^{\ddagger}	I($\epsilon+\beta^+$) ‡ #	Comments
(5.03×10 ³ 3)	3219.41	0.32 16	0.020 10	7.1 2	0.34 17	av E β =1835 15; ϵ K=0.0520 11; ϵ L=0.00646 14; ϵ M+=0.00156 4
(5.08×10 ³ 3)	3173.08	0.18 2	0.011 1	7.34 5	0.19 2	av E β =1857 15; ϵ K=0.0504 11; ϵ L=0.00625 14; ϵ M+=0.00151 4
(5.12×10 ³ 3)	3125.24	6.2 4	0.37 2	5.83 3	6.6 4	av E β =1880 15; ϵ K=0.0488 11; ϵ L=0.00605 13; ϵ M+=0.00146 3
(5.13×10 ³ 3)	3117.62	0.13 2	0.0078 11	7.5 1	0.14 2	av E β =1883 15; ϵ K=0.0485 10; ϵ L=0.00602 13; ϵ M+=0.00146 3
(5.16×10 ³ 3)	3091.52	0.43 8	0.025 4	7.0 1	0.45 8	av E β =1896 15; ϵ K=0.0477 10; ϵ L=0.00591 13; ϵ M+=0.00143 3
(5.17×10 ³ 3)	3076.50	1.4 3	0.082 16	6.5 1	1.5 3	av E β =1903 15; ϵ K=0.0472 10; ϵ L=0.00585 12; ϵ M+=0.00142 3
(5.23×10 ³ 3)	3021.72	0.14 2	0.0079 11	7.52 6	0.15 2	av E β =1929 15; ϵ K=0.0455 10; ϵ L=0.00564 12; ϵ M+=0.00137 3
(5.24×10 ³ 3)	3009.00	1.6 2	0.088 11	6.47 6	1.7 2	av E β =1935 15; ϵ K=0.0451 10; ϵ L=0.00559 12; ϵ M+=0.00135 3
(5.25×10 ³ 3)	3003.70	0.16 5	0.009 3	7.5 2	0.17 5	av E β =1938 15; ϵ K=0.0449 9; ϵ L=0.00557 12; ϵ M+=0.00135 3
(5.47×10 ³ 3)	2784.11	0.41 5	0.019 2	7.17 6	0.43 5	av E β =2043 15; ϵ K=0.0390 8; ϵ L=0.00483 10; ϵ M+=0.001170 23
(5.48×10 ³ @ 3)	2773.15	1.1 8	0.05 4	6.7 3	1.2 8	av E β =2048 15; ϵ K=0.0387 8; ϵ L=0.00480 10; ϵ M+=0.001162 23 Log ft : too low for $\Delta J=(2)$, $\Delta\pi$ =no transition. Apparent $\epsilon+\beta^+$ feeding may be due to missing γ transition feeding the 2773 level.
(5.48×10 ³ 3)	2767.05	0.43 4	0.020 2	7.15 4	0.45 4	av E β =2051 15; ϵ K=0.0385 8; ϵ L=0.00478 10; ϵ M+=0.001157 23
(5.53×10 ³ 3)	2724.48	3.3 7	0.15 3	6.29 9	3.4 7	av E β =2071 15; ϵ K=0.0375 8; ϵ L=0.00465 9; ϵ M+=0.001126 22
(5.63×10 ³ 3)	2620.08	2.3 3	0.097 12	6.49 6	2.4 3	av E β =2122 15; ϵ K=0.0352 7; ϵ L=0.00436 9; ϵ M+=0.001055 20
(5.63×10 ³ 3)	2616.98	1.8 2	0.077 8	6.59 5	1.9 2	av E β =2123 15; ϵ K=0.0351 7; ϵ L=0.00435 9; ϵ M+=0.001053 20
(5.69×10 ³ 3)	2564.24	2.3 10	0.09 4	6.5 2	2.4 10	av E β =2148 15; ϵ K=0.0340 7; ϵ L=0.00421 8; ϵ M+=0.001020 19
(5.84×10 ³ 3)	2407.94	0.8 3	0.03 1	7.1 2	0.8 3	av E β =2223 15; ϵ K=0.0310 6; ϵ L=0.00384 7; ϵ M+=0.000929 17
(5.96×10 ³ 3)	2289.40	1.1 4	0.037 13	7.0 2	1.1 4	av E β =2280 15; ϵ K=0.0289 5; ϵ L=0.00358 7; ϵ M+=0.000866 16
(6.14×10 ³ @ 3)	2112.42	<8	<0.2	>6.2	<8	av E β =2366 15; ϵ K=0.0261 5; ϵ L=0.00324 6; ϵ M+=0.000784 14 I($\epsilon+\beta^+$): upper limit from 3 5, deduced from intensity balance.
(6.28×10 ³ @ 3)	1966.13	0.15 7	0.0042 19	8.0 2	0.15 7	av E β =2436 15; ϵ K=0.0241 4; ϵ L=0.00299 5; ϵ M+=0.000723 12 β feeding is questionable in view of $\Delta J=(4)$ involved.
(6.71×10 ³ @ 3)	1541.35	<11	<0.24	>6.2	<11	av E β =2641 15; ϵ K=0.0193 3; ϵ L=0.00239 4; ϵ M+=0.000578 9 I($\epsilon+\beta^+$): upper limit from 4 7, deduced from intensity balance.

[†] From γ -ray intensity imbalance at each level.

^{98}Ag ε decay (47.5 s) 2000Hu17,2001HuZZ (continued) ε, β^+ radiations (continued)

‡ Values are rounded off to nearest tenth. Overall uncertainty is estimated as ≥ 0.1 .

Absolute intensity per 100 decays.

@ Existence of this branch is questionable.

 $\gamma(^{98}\text{Pd})$

I γ normalization: I γ (863 γ)=100.

E_γ †	I γ †@	E_i (level)	J_i^π	E_f	J_f^π	Comments
160.1 1	0.31 2	2724.48	(5,6 ⁺)	2564.24	(5,6 ⁺)	
209.1 2	0.18 3	2616.98	(5,6 ⁺)	2407.94	(4,5,6 ⁺)	
251.4 1	0.11 1	3853.05	(5,6 ⁺)	3601.66	(5,6 ⁺)	
303.3 1	1.7 1	3076.50	(6 ⁺ ,7)	2773.15	8 ⁺	
352.0 ‡ 1	2.3 2	3076.50	(6 ⁺ ,7)	2724.48	(5,6 ⁺)	
393.1 2	0.09 1	4152.69	(6 ⁺ ,7 ⁺)	3759.77	(5,6,7)	
414.1 1	0.55 4	3633.41	(5,6,7)	3219.41	(6 ⁺ ,7,8 ⁺)	
416.0 1	0.16 1	3969.39	(5,6 ⁺)	3553.29	(4 ⁺)	
435.1 1	0.11 1	2724.48	(5,6 ⁺)	2289.40	(4 ⁺)	
446.2 1	1.6 1	3219.41	(6 ⁺ ,7,8 ⁺)	2773.15	8 ⁺	
451.8 1	12.9 9	2564.24	(5,6 ⁺)	2112.42	6 ⁺	Other: $E_\gamma=452.0$ 4, I $\gamma=11.0$ 6 (1982Ku15).
494.7 1	0.51 4	2784.11	(4,5,6 ⁺)	2289.40	(4 ⁺)	
502.2 1	0.25 2	4265.60	(6 ⁺)	3763.39	(5,6,7)	
519.1 2	0.10 2	4152.69	(6 ⁺ ,7 ⁺)	3633.41	(5,6,7)	
521.2 2	0.054 8	4284.70	(5 ⁺ ,6 ⁺)	3763.39	(5,6,7)	
551.1 1	0.51 4	4152.69	(6 ⁺ ,7 ⁺)	3601.66	(5,6 ⁺)	
553.0 1	0.19 2	3173.08		2620.08	(5 ⁻)	
558.2 1	0.11 1	4321.57	(5,6,7)	3763.39	(5,6,7)	
560.9 1	0.51 4	3125.24	(5 ⁺ ,6 ⁺)	2564.24	(5,6 ⁺)	
571.0 1	57 4	2112.42	6 ⁺	1541.35	4 ⁺	Other: $E_\gamma=571.1$ 3, I $\gamma=53$ 2 (1982Ku15). Additional information 1.
579.4 2	0.038 6	4332.34	(7 ⁺)	3752.77	(9 ⁺)	
612.0 1	7.7 5	2724.48	(5,6 ⁺)	2112.42	6 ⁺	Other: $E_\gamma=612.0$ 3, I $\gamma=6.5$ 7 (1982Ku15).
620.9 1	0.46 4	3345.27	(5,6 ⁺)	2724.48	(5,6 ⁺)	
635.7 1	0.045 6	4388.61	(7 ⁺)	3752.77	(9 ⁺)	
654.1 1	0.34 3	4559.56	(5 ⁺ ,6 ⁺)	3905.44	(5,6,7)	
660.7 1	9.7 7	2773.15	8 ⁺	2112.42	6 ⁺	Other: $E_\gamma=660.4$ 10, I $\gamma \approx 6$ from coincidence data (1982Ku15).
678.5 1	91 5	1541.35	4 ⁺	862.80	2 ⁺	Other: $E_\gamma=678.5$ 3, I $\gamma=85$ 4 (1982Ku15).
686.9 1	0.19 2	3763.39	(5,6,7)	3076.50	(6 ⁺ ,7)	
706.5 1	0.23 3	4559.56	(5 ⁺ ,6 ⁺)	3853.05	(5,6 ⁺)	
715.8 2	0.11 2	3488.95	(6 ⁺ ,7,8)	2773.15	8 ⁺	
717.5 1	0.13 1	3125.24	(5 ⁺ ,6 ⁺)	2407.94	(4,5,6 ⁺)	
719.5 1	0.35 3	3009.00	(5,6 ⁺)	2289.40	(4 ⁺)	
731.6 1	0.45 4	3951.10	(5,6,7)	3219.41	(6 ⁺ ,7,8 ⁺)	
732.6 1	0.11 1	4638.05	(5,6,7)	3905.44	(5,6,7)	
736.6 1	0.07 1	4081.74	(5,6,7)	3345.27	(5,6 ⁺)	
740.2 2	0.08 1	4181.32	(5,6 ⁺)	3440.75	(5,6 ⁺)	
755.4 1	0.062 8	4388.61	(7 ⁺)	3633.41	(5,6,7)	
756.8 1	0.25 2	3976.41	(6 ⁺ ,7)	3219.41	(6 ⁺ ,7,8 ⁺)	
758.4 1	0.45 4	3378.49	(7 ⁻)	2620.08	(5 ⁻)	
767.2 1	0.13 1	4718.39	(6 ⁺ ,7)	3951.10	(5,6,7)	
769.5 2	0.022 3	4522.39	(7 ⁺)	3752.77	(9 ⁺)	
781.0 1	1.6 1	3345.27	(5,6 ⁺)	2564.24	(5,6 ⁺)	
800.8 1	0.15 1	2767.05	(4 ⁺)	1966.13	(2 ⁺)	

Continued on next page (footnotes at end of table)

⁹⁸Ag ε decay (47.5 s) [2000Hu17](#),[2001HuZZ](#) (continued)

γ(⁹⁸Pd) (continued)

E_γ †	I_γ †@	E_i (level)	J_i^π	E_f	J_f^π	Comments
802.1	1	3091.52	(4,5,6 ⁺)	2289.40	(4 ⁺)	
807.5	1	3816.50	(5,6,7)	3009.00	(5,6 ⁺)	
819.2	1	5207.81		4388.61	(7 ⁺)	
829.0	1	3905.44	(5,6,7)	3076.50	(6 ⁺ ,7)	
831.4	2	4050.61	(6 ⁺ ,7)	3219.41	(6 ⁺ ,7,8 ⁺)	
835.7	1	3125.24	(5 ⁺ ,6 ⁺)	2289.40	(4 ⁺)	
844.0	1	3969.39	(5,6 ⁺)	3125.24	(5 ⁺ ,6 ⁺)	
862.8	1	862.80	2 ⁺	0.0	0 ⁺	Other: $E_\gamma=863.1$ 3, $I_\gamma=100$ 4 (1982Ku15).
866.7	1	2407.94	(4,5,6 ⁺)	1541.35	4 ⁺	
870.8	1	4847.28	(6 ⁺ ,7 ⁺)	3976.41	(6 ⁺ ,7)	
874.6	1	3951.10	(5,6,7)	3076.50	(6 ⁺ ,7)	
876.7	1	4222.07	(5 ⁺ ,6 ⁺)	3345.27	(5,6 ⁺)	
882.2	2	4847.28	(6 ⁺ ,7 ⁺)	3965.26	(5,6,7)	
896.6	2	3009.00	(5,6 ⁺)	2112.42	6 ⁺	
909.3	2	3021.72		2112.42	6 ⁺	
912.7	3	4353.63	(5,6,7)	3440.75	(5,6 ⁺)	
913.8	2	4515.37	(5,6,7)	3601.66	(5,6 ⁺)	
933.4	1	4152.69	(6 ⁺ ,7 ⁺)	3219.41	(6 ⁺ ,7,8 ⁺)	
937.3	3	3345.27	(5,6 ⁺)	2407.94	(4,5,6 ⁺)	
939.3	1	4284.70	(5 ⁺ ,6 ⁺)	3345.27	(5,6 ⁺)	
941.3	2	3349.27		2407.94	(4,5,6 ⁺)	
951.3	2	5173.59	(5 ⁺ ,6 ⁺)	4222.07	(5 ⁺ ,6 ⁺)	
954.9	2	4718.39	(6 ⁺ ,7)	3763.39	(5,6,7)	
956.1	1	3965.26	(5,6,7)	3009.00	(5,6 ⁺)	
960.0	2	3969.39	(5,6 ⁺)	3009.00	(5,6 ⁺)	
963.9	1	3076.50	(6 ⁺ ,7)	2112.42	6 ⁺	Other: $E_\gamma=964.0$ 7, $I_\gamma=2.6$ 3 (1982Ku15).
974.2	1	4050.61	(6 ⁺ ,7)	3076.50	(6 ⁺ ,7)	
976.5	2	4321.57	(5,6,7)	3345.27	(5,6 ⁺)	
976.9	2	4417.54	(5,6 ⁺)	3440.75	(5,6 ⁺)	
979.4	1	3752.77	(9 ⁺)	2773.15	8 ⁺	
993.8	2	4847.28	(6 ⁺ ,7 ⁺)	3853.05	(5,6 ⁺)	
997.1	2	4598.96	(5,6,7)	3601.66	(5,6 ⁺)	
1005.2	2	3117.62		2112.42	6 ⁺	
1012.7	1	3125.24	(5 ⁺ ,6 ⁺)	2112.42	6 ⁺	Other: $E_\gamma=1013.0$ 7, $I_\gamma=3.0$ 4 (1982Ku15).
1022.9	1	2564.24	(5,6 ⁺)	1541.35	4 ⁺	Other: $E_\gamma=1023.5$ 10, $I_\gamma=1.2$ 3 (1982Ku15).
1023.4	2	4464.44	(5,6 ⁺)	3440.75	(5,6 ⁺)	
1027.3	1	4152.69	(6 ⁺ ,7 ⁺)	3125.24	(5 ⁺ ,6 ⁺)	
1032.7	2	3440.75	(5,6 ⁺)	2407.94	(4,5,6 ⁺)	
1037.3	1	3601.66	(5,6 ⁺)	2564.24	(5,6 ⁺)	Other: $E_\gamma=1037.8$ 7, $I_\gamma=1.8$ 3 (1982Ku15 , unplaced).
1055.7	2	3345.27	(5,6 ⁺)	2289.40	(4 ⁺)	
1056.1	1	4181.32	(5,6 ⁺)	3125.24	(5 ⁺ ,6 ⁺)	
1059.9	2	3349.27		2289.40	(4 ⁺)	
1069.0	1	3633.41	(5,6,7)	2564.24	(5,6 ⁺)	
1074.8	2	5051.48	(6 ⁺)	3976.41	(6 ⁺ ,7)	
1075.6	1	2616.98	(5,6 ⁺)	1541.35	4 ⁺	Other: $E_\gamma=1076.6$ 10, $I_\gamma=3.0$ 7 (1982Ku15 , unplaced).
1076.1	1	4152.69	(6 ⁺ ,7 ⁺)	3076.50	(6 ⁺ ,7)	Other: $E_\gamma=1076.6$ 10, $I_\gamma=3.0$ 7 unplaced in 1982Ku15 could correspond mainly to 1075.6γ from 2617 level in 2001HuZZ .
1078.7	1	2620.08	(5 ⁻)	1541.35	4 ⁺	
1083.9	1	4847.28	(6 ⁺ ,7 ⁺)	3763.39	(5,6,7)	
1087.8	4	4847.28	(6 ⁺ ,7 ⁺)	3759.77	(5,6,7)	
1091.7	2	3708.86		2616.98	(5,6 ⁺)	
1092.4	2	5173.59	(5 ⁺ ,6 ⁺)	4081.74	(5,6,7)	
1102.0	1	4321.57	(5,6,7)	3219.41	(6 ⁺ ,7,8 ⁺)	
1103.2	1	1966.13	(2 ⁺)	862.80	2 ⁺	

Continued on next page (footnotes at end of table)

⁹⁸Ag ε decay (47.5 s) **2000Hu17,2001HuZZ (continued)**

γ(⁹⁸Pd) (continued)

<u>E_γ[†]</u>	<u>I_γ^{†@}</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Comments</u>
1106.8 1	1.6 1	3219.41	(6 ⁺ ,7,8 ⁺)	2112.42	6 ⁺	Other: possibly E _γ =1105.0 7, I _γ =1.0 3, unplaced in 1982Ku15 .
1112.2 1	0.21 2	3401.61	(4 ⁺)	2289.40	(4 ⁺)	
1113.5 3	0.023 5	5487.11	(5 ⁺ ,6 ⁺)	4373.57		
1118.5 2	0.08 1	4559.56	(5 ⁺ ,6 ⁺)	3440.75	(5,6 ⁺)	
1128.4 1	0.26 2	3853.05	(5,6 ⁺)	2724.48	(5,6 ⁺)	
1138.3 2	0.058 9	4691.44	(5,6 ⁺)	3553.29	(4 ⁺)	
1145.0 2	0.24 2	3553.29	(4 ⁺)	2407.94	(4,5,6 ⁺)	
1156.5 1	0.10 1	5062.00	(5,6,7)	3905.44	(5,6,7)	
1168.9 2	0.10 1	4388.61	(7 ⁺)	3219.41	(6 ⁺ ,7,8 ⁺)	
1170.0 2	0.069 9	4515.37	(5,6,7)	3345.27	(5,6 ⁺)	
1172.1 2	0.07 1	4181.32	(5,6 ⁺)	3009.00	(5,6 ⁺)	
1180.8 1	1.5 1	3905.44	(5,6,7)	2724.48	(5,6 ⁺)	
1183.0 1	3.9 3	2724.48	(5,6 ⁺)	1541.35	4 ⁺	Other: E _γ =1183.0 5, I _γ =3.4 3 (1982Ku15).
1189.3 1	0.45 3	4265.60	(6 ⁺)	3076.50	(6 ⁺ ,7)	
1189.6 2	0.07 1	4314.85		3125.24	(5 ⁺ ,6 ⁺)	
1195.8 1	0.51 4	3759.77	(5,6,7)	2564.24	(5,6 ⁺)	
1197.7 2	0.051 8	4542.73	(6 ⁺ ,7 ⁺)	3345.27	(5,6 ⁺)	
1201.3 2	0.06 1	4961.00	(5,6,7)	3759.77	(5,6,7)	
1203.5 1	0.22 2	3976.41	(6 ⁺ ,7)	2773.15	8 ⁺	
1208.3 1	0.39 3	4284.70	(5 ⁺ ,6 ⁺)	3076.50	(6 ⁺ ,7)	
1211.6 2	0.053 8	5585.2		4373.57		
1213.0 1	0.54 4	4222.07	(5 ⁺ ,6 ⁺)	3009.00	(5,6 ⁺)	
1214.2 1	0.16 2	4559.56	(5 ⁺ ,6 ⁺)	3345.27	(5,6 ⁺)	
1228.2 3	0.05 1	4353.63	(5,6,7)	3125.24	(5 ⁺ ,6 ⁺)	
1236.2 1	0.30 3	3853.05	(5,6 ⁺)	2616.98	(5,6 ⁺)	
1241.1 3	0.09 1	3965.26	(5,6,7)	2724.48	(5,6 ⁺)	
1244.7 2	0.14 1	3969.39	(5,6 ⁺)	2724.48	(5,6 ⁺)	
1245.5 1	0.20 2	4847.28	(6 ⁺ ,7 ⁺)	3601.66	(5,6 ⁺)	
1258.5 1	0.045 7	4891.69	(6 ⁺ ,7)	3633.41	(5,6,7)	
1263.7 1	0.11 1	3553.29	(4 ⁺)	2289.40	(4 ⁺)	
1272.0 3	0.04 1	5248.42	(5,6,7)	3976.41	(6 ⁺ ,7)	
1273.7 1	0.13 1	3893.79		2620.08	(5 ⁻)	
1275.7 2	0.11 1	4284.70	(5 ⁺ ,6 ⁺)	3009.00	(5,6 ⁺)	
1277.3 1	0.15 1	4050.61	(6 ⁺ ,7)	2773.15	8 ⁺	
1288.9 1	0.35 3	3853.05	(5,6 ⁺)	2564.24	(5,6 ⁺)	
1290.0 2	0.10 1	4891.69	(6 ⁺ ,7)	3601.66	(5,6 ⁺)	
1293.3 3	0.038 7	3582.7		2289.40	(4 ⁺)	Other: possibly E _γ =1292.0 10, I _γ =1.3 3, unplaced in 1982Ku15 .
1299.1 3	0.020 5	5062.00	(5,6,7)	3763.39	(5,6,7)	
1311.1 2	0.12 1	3928.09		2616.98	(5,6 ⁺)	
1312.3 2	0.08 1	3601.66	(5,6 ⁺)	2289.40	(4 ⁺)	
1320.6 3	0.15 3	5173.59	(5 ⁺ ,6 ⁺)	3853.05	(5,6 ⁺)	
1328.3 1	2.1 2	3440.75	(5,6 ⁺)	2112.42	6 ⁺	Other: E _γ =1328.9 10, I _γ =2.4 3 (1982Ku15).
1332.0 2	0.10 1	3739.95		2407.94	(4,5,6 ⁺)	
1342.5 2	0.045 7	5716.1		4373.57		
1351.6 2	0.16 2	3759.77	(5,6,7)	2407.94	(4,5,6 ⁺)	
1351.8 [#] 2	0.09 1	3969.39	(5,6 ⁺)	2616.98	(5,6 ⁺)	E _γ : level-energy difference=1352.40.
1371.8 2	0.09 1	3991.89		2620.08	(5 ⁻)	
1372.8 2	0.09 1	4813.56		3440.75	(5,6 ⁺)	
1379.6 1	1.4 1	4152.69	(6 ⁺ ,7 ⁺)	2773.15	8 ⁺	
1381.8 2	0.062 9	3347.94	(4 ⁺)	1966.13	(2 ⁺)	
1388.0 2	0.15 2	4464.44	(5,6 ⁺)	3076.50	(6 ⁺ ,7)	
1400.9 1	0.23 2	3965.26	(5,6,7)	2564.24	(5,6 ⁺)	
1406.7 2	0.07 1	4847.28	(6 ⁺ ,7 ⁺)	3440.75	(5,6 ⁺)	

Continued on next page (footnotes at end of table)

⁹⁸Ag ε decay (47.5 s) **2000Hu17,2001HuZZ (continued)**

γ(⁹⁸Pd) (continued)

<u>E_γ[†]</u>	<u>I_γ^{†@}</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Comments</u>
1408.5 2	0.086 9	3816.50	(5,6,7)	2407.94	(4,5,6 ⁺)	
1412.1 1	0.18 2	3976.41	(6 ⁺ ,7)	2564.24	(5,6 ⁺)	
1419.5 1	0.12 1	3708.86		2289.40	(4 ⁺)	
1426.1 2	0.07 1	5507.50	(5 ⁺ ,6 ⁺ ,7 ⁺)	4081.74	(5,6,7)	
1426.6 1	4.9 4	2289.40	(4 ⁺)	862.80	2 ⁺	Other: E _γ =1427.2 5, I _γ =4.5 3 (1982Ku15).
1428.0 2	0.13 1	4152.69	(6 ⁺ ,7 ⁺)	2724.48	(5,6 ⁺)	
1436.0 2	0.08 1	4445.02		3009.00	(5,6 ⁺)	
1445.4 2	0.17 2	3853.05	(5,6 ⁺)	2407.94	(4,5,6 ⁺)	
1457.0 2	0.08 1	4181.32	(5,6 ⁺)	2724.48	(5,6 ⁺)	
1462.3 2	0.26 3	3003.70	(4 ⁺)	1541.35	4 ⁺	
1465.3 2	0.068 9	4541.82		3076.50	(6 ⁺ ,7)	
1467.4 [#] 1	0.09 1	4559.56	(5 ⁺ ,6 ⁺)	3091.52	(4,5,6 ⁺)	E _γ : level-energy difference=1468.03. Other: E _γ =1468.1 7, I _γ =2.6 3 unplaced in 1982Ku15 could correspond to the 1467.5+1467.4 doublet in 2001HuZZ.
1467.5 1	3.1 2	3009.00	(5,6 ⁺)	1541.35	4 ⁺	Other: E _γ =1468.1 7, I _γ =2.6 3 unplaced in 1982Ku15 could correspond to the 1467.5+1467.4 doublet in 2001HuZZ.
1473.4 2	0.07 1	5236.70	(5 ⁺ ,6 ⁺ ,7 ⁺)	3763.39	(5,6,7)	
1473.9 2	0.07 1	4090.71	(5,6,7)	2616.98	(5,6 ⁺)	
1474.8 3	0.048 9	5450.64	(5,6,7)	3976.41	(6 ⁺ ,7)	
1477.2 2	0.08 1	5236.70	(5 ⁺ ,6 ⁺ ,7 ⁺)	3759.77	(5,6,7)	
1482.9 1	0.15 1	4559.56	(5 ⁺ ,6 ⁺)	3076.50	(6 ⁺ ,7)	
1489.3 1	0.36 3	3601.66	(5,6 ⁺)	2112.42	6 ⁺	
1491.6 3	0.049 8	4265.60	(6 ⁺)	2773.15	8 ⁺	
1497.6 1	0.23 2	4222.07	(5 ⁺ ,6 ⁺)	2724.48	(5,6 ⁺)	
1505.0 1	0.18 2	4278.16	(6 ⁺ ,7)	2773.15	8 ⁺	
1505.6 [#] 2	0.06 1	5059.73	(5 ⁺ ,6 ⁺)	3553.29	(4 ⁺)	E _γ : level-energy difference=1506.43.
1507.5 2	0.08 1	4124.66	(5,6 ⁺)	2616.98	(5,6 ⁺)	
1511.3 3	0.043 9	5487.11	(5 ⁺ ,6 ⁺)	3976.41	(6 ⁺ ,7)	
1521.5 [#] 1	0.42 3	3633.41	(5,6,7)	2112.42	6 ⁺	E _γ : level-energy difference=1520.98.
1522.4 2	0.063 8	4598.96	(5,6,7)	3076.50	(6 ⁺ ,7)	Other: E _γ =1523.4 10, I _γ =1.1 3 unplaced in 1982Ku15 could correspond to 1522.4+1521.5 in 2001HuZZ.
1526.5 1	0.13 1	4090.71	(5,6,7)	2564.24	(5,6 ⁺)	
1532.2 1	0.12 1	4608.72	(5,6,7)	3076.50	(6 ⁺ ,7)	
1538.6 1	0.16 2	4615.14	(5,6 ⁺)	3076.50	(6 ⁺ ,7)	
1541.1 2	0.10 1	4105.36		2564.24	(5,6 ⁺)	
1547.5 2	0.25 3	4164.50	(5,6,7)	2616.98	(5,6 ⁺)	
1548.0 3	0.15 2	4766.95	(6 ⁺ ,7)	3219.41	(6 ⁺ ,7,8 ⁺)	
1549.7 [#] 1	0.64 7	3091.52	(4,5,6 ⁺)	1541.35	4 ⁺	E _γ : level-energy difference=1550.15.
1559.2 1	0.18 2	4332.34	(7 ⁺)	2773.15	8 ⁺	
1560.2 1	1.8 1	4284.70	(5 ⁺ ,6 ⁺)	2724.48	(5,6 ⁺)	Other: 1561.3 10, I _γ =1.3 3 (1982Ku15, unplaced).
1563.4 2	0.066 9	3853.05	(5,6 ⁺)	2289.40	(4 ⁺)	
1572.1 3	0.042 7	4136.4		2564.24	(5,6 ⁺)	
1583.7 1	4.0 3	3125.24	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺	Other: E _γ =1584.6 7, I _γ =3.5 3 (1982Ku15).
1588.4 1	0.23 2	4152.69	(6 ⁺ ,7 ⁺)	2564.24	(5,6 ⁺)	
1603.5 2	0.051 9	5236.70	(5 ⁺ ,6 ⁺ ,7 ⁺)	3633.41	(5,6,7)	
1619.6 [#] 2	0.09 1	5059.73	(5 ⁺ ,6 ⁺)	3440.75	(5,6 ⁺)	E _γ : level-energy difference=1618.97.
1637.8 1	0.22 2	4410.96	(6 ⁺ ,7)	2773.15	8 ⁺	
1641.8 1	0.15 1	4718.39	(6 ⁺ ,7)	3076.50	(6 ⁺ ,7)	
1647.2 1	1.01 8	3759.77	(5,6,7)	2112.42	6 ⁺	
1651.0 1	2.0 1	3763.39	(5,6,7)	2112.42	6 ⁺	Other: E _γ =1651.8 10, I _γ =1.5 3 (1982Ku15, unplaced).
1658.0 1	0.16 1	4222.07	(5 ⁺ ,6 ⁺)	2564.24	(5,6 ⁺)	
1664.8 2	0.25 3	4284.70	(5 ⁺ ,6 ⁺)	2620.08	(5 ⁻)	
1679.7 1	0.17 2	4756.22	(5,6,7)	3076.50	(6 ⁺ ,7)	
1679.8 2	0.10 1	3969.39	(5,6 ⁺)	2289.40	(4 ⁺)	

Continued on next page (footnotes at end of table)

⁹⁸Ag ε decay (47.5 s) **2000Hu17,2001HuZZ (continued)**

γ(⁹⁸Pd) (continued)

<u>E_γ[†]</u>	<u>I_γ^{†@}</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Comments</u>
1682.4 2	0.053 7	4090.71	(5,6,7)	2407.94	(4,5,6 ⁺)	
1685.8 4	0.040 9	5286.85	(5,6,7 ⁻)	3601.66	(5,6 ⁺)	
1688.1 1	0.33 3	4412.60	(5,6,7)	2724.48	(5,6 ⁺)	
1690.2 1	0.14 1	4766.95	(6 ⁺ ,7)	3076.50	(6 ⁺ ,7)	
1701.3 1	1.4 1	4265.60	(6 ⁺)	2564.24	(5,6 ⁺)	Other: E _γ =1702.2 10, I _γ =1.1 2 (1982Ku15, unplaced).
1721.8 2	0.11 2	4847.28	(6 ⁺ ,7 ⁺)	3125.24	(5 ⁺ ,6 ⁺)	
1727.0 2	0.12 2	5487.11	(5 ⁺ ,6 ⁺)	3759.77	(5,6,7)	
1739.8 2	0.12 1	4464.44	(5,6 ⁺)	2724.48	(5,6 ⁺)	
1740.4 1	0.39 4	3853.05	(5,6 ⁺)	2112.42	6 ⁺	
1746.6 4	0.043 8	5723.0		3976.41	(6 ⁺ ,7)	
1752.2 4	0.04 1	4877.46	(5,6,7)	3125.24	(5 ⁺ ,6 ⁺)	
1757.4 1	0.50 4	4321.57	(5,6,7)	2564.24	(5,6 ⁺)	
1769.5 1	0.61 5	4542.73	(6 ⁺ ,7 ⁺)	2773.15	8 ⁺	
1770.6 1	0.28 2	4847.28	(6 ⁺ ,7 ⁺)	3076.50	(6 ⁺ ,7)	
1773.3 4	0.041 7	5536.38		3763.39	(5,6,7)	
1775.9 2	0.14 1	4500.51	(5,6 ⁺)	2724.48	(5,6 ⁺)	
1789.8 2	0.087 9	4353.63	(5,6,7)	2564.24	(5,6 ⁺)	
1803.8 1	1.16 9	3345.27	(5,6 ⁺)	1541.35	4 ⁺	
1805.9 3	0.07 1	4931.2		3125.24	(5 ⁺ ,6 ⁺)	
1809.3 1	0.16 1	4373.57		2564.24	(5,6 ⁺)	
1814.2 2	0.11 1	4222.07	(5 ⁺ ,6 ⁺)	2407.94	(4,5,6 ⁺)	
1818.3 3	0.08 1	4542.73	(6 ⁺ ,7 ⁺)	2724.48	(5,6 ⁺)	
1827.0 4	0.040 9	4918.37	(5,6 ⁺)	3091.52	(4,5,6 ⁺)	
1831.7 2	0.07 1	5051.48	(6 ⁺)	3219.41	(6 ⁺ ,7,8 ⁺)	
1835.6 3	0.055 8	4124.66	(5,6 ⁺)	2289.40	(4 ⁺)	
1853.1 1	0.48 9	3965.26	(5,6,7)	2112.42	6 ⁺	
1853.3 1	0.58 4	4417.54	(5,6 ⁺)	2564.24	(5,6 ⁺)	
1856.8 3	0.047 9	5833.84	(5 ⁺ ,6 ⁺ ,7 ⁺)	3976.41	(6 ⁺ ,7)	
1863.9 1	0.84 6	3976.41	(6 ⁺ ,7)	2112.42	6 ⁺	
1874.7 2	0.13 1	4598.96	(5,6,7)	2724.48	(5,6 ⁺)	
1891.4 2	0.23 2	5236.70	(5 ⁺ ,6 ⁺ ,7 ⁺)	3345.27	(5,6 ⁺)	
1891.9 5	0.022 6	4181.32	(5,6 ⁺)	2289.40	(4 ⁺)	Other: E _γ =1901.9 10, I _γ =1.9 3 (1982Ku15).
1899.4 1	1.8 1	3440.75	(5,6 ⁺)	1541.35	4 ⁺	
1902.6 3	0.09 2	5304.07	(5 ⁺ ,6 ⁺)	3401.61	(4 ⁺)	
1904.7 2	0.30 3	2767.05	(4 ⁺)	862.80	2 ⁺	
1924.2 3	0.049 8	5269.14		3345.27	(5,6 ⁺)	
1932.6 2	0.10 1	4222.07	(5 ⁺ ,6 ⁺)	2289.40	(4 ⁺)	
1934.4 2	0.14 2	5059.73	(5 ⁺ ,6 ⁺)	3125.24	(5 ⁺ ,6 ⁺)	
1937.5 3	0.053 8	5282.96		3345.27	(5,6 ⁺)	
1943.1 2	0.10 1	4559.56	(5 ⁺ ,6 ⁺)	2616.98	(5,6 ⁺)	
1945.4 1	0.29 2	4718.39	(6 ⁺ ,7)	2773.15	8 ⁺	
1945.6 1	0.19 2	4353.63	(5,6,7)	2407.94	(4,5,6 ⁺)	
1951.8 3	0.044 8	4961.00	(5,6,7)	3009.00	(5,6 ⁺)	
1962.1 4	0.03 1	5181.89	(5,6,7)	3219.41	(6 ⁺ ,7,8 ⁺)	
1966.8 3	0.063 9	4691.44	(5,6 ⁺)	2724.48	(5,6 ⁺)	
1968.8 3	0.029 8	5059.73	(5 ⁺ ,6 ⁺)	3091.52	(4,5,6 ⁺)	
1969.4 1	0.32 3	4081.74	(5,6,7)	2112.42	6 ⁺	
1973.5 3	0.032 7	5575.2		3601.66	(5,6 ⁺)	
1978.4 2	0.13 1	4542.73	(6 ⁺ ,7 ⁺)	2564.24	(5,6 ⁺)	
1993.8 2	0.09 1	4766.95	(6 ⁺ ,7)	2773.15	8 ⁺	
1994.9# 1	0.36 3	4559.56	(5 ⁺ ,6 ⁺)	2564.24	(5,6 ⁺)	E _γ : level-energy difference=1995.29.
2000.6 3	0.059 9	5009.48	(5,6 ⁺)	3009.00	(5,6 ⁺)	
2002.4 2	0.061 9	4291.82		2289.40	(4 ⁺)	
2040.3 1	0.70 5	4152.69	(6 ⁺ ,7 ⁺)	2112.42	6 ⁺	

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⁹⁸Ag ε decay (47.5 s) **2000Hu17,2001HuZZ (continued)**

γ(⁹⁸Pd) (continued)

E_γ †	I_γ †@	E_i (level)	J_i^π	E_f	J_f^π	Mult.	Comments
2043.1 & 3	0.048 8	4332.34	(7 ⁺)	2289.40	(4 ⁺)	[M3]	E_γ : implied mult=[M3] makes the placement of this γ questionable.
2050.9 2	0.08 1	5059.73	(5 ⁺ ,6 ⁺)	3009.00	(5,6 ⁺)		
2051.0 3	0.050 7	4615.14	(5,6 ⁺)	2564.24	(5,6 ⁺)		
2054.1 4	0.031 7	5817.5		3763.39	(5,6,7)		
2060.3 2	0.28 3	3601.66	(5,6 ⁺)	1541.35	4 ⁺		
2063.6 2	0.031 9	5282.96		3219.41	(6 ⁺ ,7,8 ⁺)		
2069.2 2	0.20 2	4181.32	(5,6 ⁺)	2112.42	6 ⁺		
2073.8 1	0.18 2	4638.05	(5,6,7)	2564.24	(5,6 ⁺)		
2074.2 1	0.68 5	4847.28	(6 ⁺ ,7 ⁺)	2773.15	8 ⁺		
2074.7 4	0.04 1	5833.84	(5 ⁺ ,6 ⁺ ,7 ⁺)	3759.77	(5,6,7)		
2097.0 2	0.17 2	5173.59	(5 ⁺ ,6 ⁺)	3076.50	(6 ⁺ ,7)		
2109.5 1	1.15 9	4222.07	(5 ⁺ ,6 ⁺)	2112.42	6 ⁺		
2118.5 2	0.12 1	4891.69	(6 ⁺ ,7)	2773.15	8 ⁺		
2122.8 2	0.18 2	4847.28	(6 ⁺ ,7 ⁺)	2724.48	(5,6 ⁺)		
2127.7 3	0.09 1	4417.54	(5,6 ⁺)	2289.40	(4 ⁺)		
2140.8 4	0.10 2	3003.70	(4 ⁺)	862.80	2 ⁺		
2152.6 # 2	0.09 1	4559.56	(5 ⁺ ,6 ⁺)	2407.94	(4,5,6 ⁺)		E_γ : level-energy difference=2151.60.
2153.1 1	0.86 6	4265.60	(6 ⁺)	2112.42	6 ⁺		
2162.1 3	0.042 9	5507.50	(5 ⁺ ,6 ⁺ ,7 ⁺)	3345.27	(5,6 ⁺)		
2164.7 3	0.060 9	5173.59	(5 ⁺ ,6 ⁺)	3009.00	(5,6 ⁺)		
2174.8 2	0.10 1	4464.44	(5,6 ⁺)	2289.40	(4 ⁺)		
2177.6 3	0.09 2	5937.67	(5 ⁺ ,6 ⁺ ,7 ⁺)	3759.77	(5,6,7)		
2191.0 3	0.044 9	5536.38		3345.27	(5,6 ⁺)		
2193.8 3	0.060 9	4918.37	(5,6 ⁺)	2724.48	(5,6 ⁺)		
2200.5 4	0.045 8	5964.00	(6 ⁺ ,7 ⁺)	3763.39	(5,6,7)		
2203.4 # 2	0.08 1	4766.95	(6 ⁺ ,7)	2564.24	(5,6 ⁺)		E_γ : level-energy difference=2202.68.
2210.1 2	0.12 1	5286.85	(5,6,7 ⁻)	3076.50	(6 ⁺ ,7)		
2211.2 2	0.11 1	4500.51	(5,6 ⁺)	2289.40	(4 ⁺)		
2212.7 2	0.08 1	5304.07	(5 ⁺ ,6 ⁺)	3091.52	(4,5,6 ⁺)		
2228.6 4	0.07 1	4845.6		2616.98	(5,6 ⁺)		
2236.0 7	0.014 4	5999.69	(5 ⁺ ,6 ⁺)	3763.39	(5,6,7)		
2257.0 3	0.046 8	4664.95		2407.94	(4,5,6 ⁺)		
2270.8 # 1	0.28 3	4559.56	(5 ⁺ ,6 ⁺)	2289.40	(4 ⁺)		E_γ : level-energy difference=2270.13.
2278.0 3	0.06 1	5286.85	(5,6,7 ⁻)	3009.00	(5,6 ⁺)		
2278.3 1	0.36 3	5051.48	(6 ⁺)	2773.15	8 ⁺		
2283.1 1	0.31 3	4847.28	(6 ⁺ ,7 ⁺)	2564.24	(5,6 ⁺)		
2293.7 1	0.22 2	4406.14	(5,6,7)	2112.42	6 ⁺		
2311.6 2	0.40 4	3853.05	(5,6 ⁺)	1541.35	4 ⁺		
2325.4 4	0.023 6	5416.97	(5,6,7)	3091.52	(4,5,6 ⁺)		
2326.1 8	0.018 6	4615.14	(5,6 ⁺)	2289.40	(4 ⁺)		
2327.4 1	0.18 2	4891.69	(6 ⁺ ,7)	2564.24	(5,6 ⁺)		
2327.4 2	0.09 1	5051.48	(6 ⁺)	2724.48	(5,6 ⁺)		
2352.0 3	0.05 1	5477.44	(5 ⁺ ,6 ⁺)	3125.24	(5 ⁺ ,6 ⁺)		
2352.3 2	0.17 2	4464.44	(5,6 ⁺)	2112.42	6 ⁺		
2362.0 3	0.06 1	5487.11	(5 ⁺ ,6 ⁺)	3125.24	(5 ⁺ ,6 ⁺)		
2365.5 3	0.045 7	4929.8		2564.24	(5,6 ⁺)		
2375.5 3	0.056 9	4664.95		2289.40	(4 ⁺)		
2401.8 3	0.07 1	4691.44	(5,6 ⁺)	2289.40	(4 ⁺)		
2403.0 5	0.06 3	4515.37	(5,6,7)	2112.42	6 ⁺		
2410.2 3	0.08 1	4522.39	(7 ⁺)	2112.42	6 ⁺		
2415.9 3	0.047 9	5507.50	(5 ⁺ ,6 ⁺ ,7 ⁺)	3091.52	(4,5,6 ⁺)		
2428.6 # 1	0.48 7	3969.39	(5,6 ⁺)	1541.35	4 ⁺		E_γ : level-energy difference=2428.01.
2430.3 1	0.34 3	4542.73	(6 ⁺ ,7 ⁺)	2112.42	6 ⁺		

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^{98}Ag ε decay (47.5 s) **2000Hu17,2001HuZZ** (continued) $\gamma(^{98}\text{Pd})$ (continued)

E_γ †	I_γ †@	E_i (level)	J_i^π	E_f	J_f^π	Comments	
2441.3	3	0.038	7	5450.64	(5,6,7)	3009.00 (5,6 ⁺)	
2442.6	2	0.07	1	5059.73	(5 ⁺ ,6 ⁺)	2616.98 (5,6 ⁺)	
2445.2	2	0.065	8	5009.48	(5,6 ⁺)	2564.24 (5,6 ⁺)	
2447.6	2	0.12	3	4559.56	(5 ⁺ ,6 ⁺)	2112.42 6 ⁺	
2449.0	2	0.10	1	5173.59	(5 ⁺ ,6 ⁺)	2724.48 (5,6 ⁺)	
2469.2	3	0.040	8	5477.44	(5 ⁺ ,6 ⁺)	3009.00 (5,6 ⁺)	
2486.5	3	0.04	2	4598.96	(5,6,7)	2112.42 6 ⁺	
2487.6	2	0.077	9	5051.48	(6 ⁺)	2564.24 (5,6 ⁺)	
2498.9	4	0.19	3	4611.3	(5,6,7)	2112.42 6 ⁺	
2505.0	4	0.19	3	5508.9	(5,6 ⁺)	3003.70 (4 ⁺)	
2511.9	2	0.13	1	5236.70	(5 ⁺ ,6 ⁺ ,7 ⁺)	2724.48 (5,6 ⁺)	
2539.2	4	0.30	5	3401.61	(4 ⁺)	862.80 2 ⁺	
2541.0	2	0.12	1	5314.23	(6 ⁺ ,7)	2773.15 8 ⁺	
2550.8	3	0.06	3	4092.2	(4,5,6 ⁺)	1541.35 4 ⁺	
2566.7	2	0.086	9	5131.13	(5,6 ⁺)	2564.24 (5,6 ⁺)	
2579.2	2	0.11	1	5304.07	(5 ⁺ ,6 ⁺)	2724.48 (5,6 ⁺)	
2592.6	2	0.06	1	5937.67	(5 ⁺ ,6 ⁺ ,7 ⁺)	3345.27 (5,6 ⁺)	
2598.6	2	0.09	1	4888.03		2289.40 (4 ⁺)	
2609.1	2	0.16	2	5173.59	(5 ⁺ ,6 ⁺)	2564.24 (5,6 ⁺)	
2617.7	2	0.083	9	5181.89	(5,6,7)	2564.24 (5,6 ⁺)	
2626.8	3	0.05	1	5717.88	(5 ⁺ ,6 ⁺)	3091.52 (4,5,6 ⁺)	
2628.9	3	0.052	9	4918.37	(5,6 ⁺)	2289.40 (4 ⁺)	
2639.9	3	0.19	2	4181.32	(5,6 ⁺)	1541.35 4 ⁺	
2666.4	5	0.026	7	5286.85	(5,6,7 ⁻)	2620.08 (5 ⁻)	
2671.7	3	0.063	8	5236.70	(5 ⁺ ,6 ⁺ ,7 ⁺)	2564.24 (5,6 ⁺)	
2684.2	2	0.11	1	5248.42	(5,6,7)	2564.24 (5,6 ⁺)	
2690.5	3	0.14	2	3553.29	(4 ⁺)	862.80 2 ⁺	
2704.5	3	0.042	6	5269.14		2564.24 (5,6 ⁺)	
2721.5	4	0.041	8	5505.7		2784.11 (4,5,6 ⁺)	
2723.9	4	0.09	2	4265.60	(6 ⁺)	1541.35 4 ⁺	
2735.0	1	1.19	9	4847.28	(6 ⁺ ,7 ⁺)	2112.42 6 ⁺	
2759.0	3	0.05	1	5883.90	(5 ⁺ ,6 ⁺)	3125.24 (5 ⁺ ,6 ⁺)	
2765.0	2	0.16	2	4877.46	(5,6,7)	2112.42 6 ⁺	
2770.1	2	0.21	2	5059.73	(5 ⁺ ,6 ⁺)	2289.40 (4 ⁺)	
2778.4#	2	0.15	2	4891.69	(6 ⁺ ,7)	2112.42 6 ⁺	E_γ : level-energy difference=2779.23.
2788.2	4	0.039	6	5352.5		2564.24 (5,6 ⁺)	
2798.6	2	0.12	1	5206.56	(5 ⁺ ,6 ⁺)	2407.94 (4,5,6 ⁺)	
2804.8	3	0.10	1	5212.8		2407.94 (4,5,6 ⁺)	
2811.7	4	0.051	8	5536.38		2724.48 (5,6 ⁺)	
2842.4	5	0.029	7	5131.13	(5,6 ⁺)	2289.40 (4 ⁺)	
2842.8	4	0.037	9	5852.37	(5 ⁺ ,6 ⁺)	3009.00 (5,6 ⁺)	
2886.1	3	0.062	8	5450.64	(5,6,7)	2564.24 (5,6 ⁺)	
2889.0	4	0.042	9	5508.9	(5,6 ⁺)	2620.08 (5 ⁻)	
2895.6	6	0.025	6	5619.8		2724.48 (5,6 ⁺)	
2896.1	3	0.08	2	5304.07	(5 ⁺ ,6 ⁺)	2407.94 (4,5,6 ⁺)	
2896.8	3	0.02	2	5009.48	(5,6 ⁺)	2112.42 6 ⁺	
2922.6	2	0.09	1	5487.11	(5 ⁺ ,6 ⁺)	2564.24 (5,6 ⁺)	
2923.3	2	0.18	3	4464.44	(5,6 ⁺)	1541.35 4 ⁺	
2938.9	3	0.09	1	5051.48	(6 ⁺)	2112.42 6 ⁺	
2948.0	3	0.11	1	5059.73	(5 ⁺ ,6 ⁺)	2112.42 6 ⁺	
2956.4	4	0.039	8	5576.7		2620.08 (5 ⁻)	
3012.5	3	0.061	8	5576.7		2564.24 (5,6 ⁺)	
3014.5	3	0.07	1	5304.07	(5 ⁺ ,6 ⁺)	2289.40 (4 ⁺)	
3018.7	2	0.10	1	5131.13	(5,6 ⁺)	2112.42 6 ⁺	
3018.8#	2	0.21	3	4559.56	(5 ⁺ ,6 ⁺)	1541.35 4 ⁺	E_γ : level-energy difference=3018.15.

Continued on next page (footnotes at end of table)

^{98}Ag ε decay (47.5 s) [2000Hu17,2001HuZZ](#) (continued) $\gamma(^{98}\text{Pd})$ (continued)

E_γ †	I_γ †@	$E_i(\text{level})$	J_i^π	E_f	J_f^π
3055.3 4	0.035 6	5619.8		2564.24	(5,6 ⁺)
3061.1 1	0.75 6	5173.59	(5 ⁺ ,6 ⁺)	2112.42	6 ⁺
3094.1 2	0.15 2	5206.56	(5 ⁺ ,6 ⁺)	2112.42	6 ⁺
3099.1 3	0.06 1	5507.50	(5 ⁺ ,6 ⁺ ,7 ⁺)	2407.94	(4,5,6 ⁺)
3135.9 2	0.14 2	5248.42	(5,6,7)	2112.42	6 ⁺
3167.2 4	0.063 9	5575.2		2407.94	(4,5,6 ⁺)
3174.6 5	0.08 2	5286.85	(5,6,7 ⁻)	2112.42	6 ⁺
3190.8 1	0.20 2	5964.00	(6 ⁺ ,7 ⁺)	2773.15	8 ⁺
3201.8 2	0.12 1	5314.23	(6 ⁺ ,7)	2112.42	6 ⁺
3231.9 5	0.048 9	5852.37	(5 ⁺ ,6 ⁺)	2620.08	(5 ⁻)
3262.9 5	0.04 1	6047.40	(5 ⁺ ,6 ⁺)	2784.11	(4,5,6 ⁺)
3266.2 3	0.08 1	5883.90	(5 ⁺ ,6 ⁺)	2616.98	(5,6 ⁺)
3269.6 2	0.068 9	5833.84	(5 ⁺ ,6 ⁺ ,7 ⁺)	2564.24	(5,6 ⁺)
3287.3 2	0.19 2	5399.77	(5,6,7)	2112.42	6 ⁺
3304.5 2	0.12 1	5416.97	(5,6,7)	2112.42	6 ⁺
3309.6 2	0.18 2	5717.88	(5 ⁺ ,6 ⁺)	2407.94	(4,5,6 ⁺)
3319.8 2	0.071 9	5883.90	(5 ⁺ ,6 ⁺)	2564.24	(5,6 ⁺)
3338.1 4	0.07 1	5450.64	(5,6,7)	2112.42	6 ⁺
3351.3 3	0.07 1	5971.4		2620.08	(5 ⁻)
3364.5 2	0.12 1	5477.44	(5 ⁺ ,6 ⁺)	2112.42	6 ⁺
3373.5 3	0.042 6	5937.67	(5 ⁺ ,6 ⁺ ,7 ⁺)	2564.24	(5,6 ⁺)
3374.5 2	0.21 2	5487.11	(5 ⁺ ,6 ⁺)	2112.42	6 ⁺
3394.8 3	0.10 1	5507.50	(5 ⁺ ,6 ⁺ ,7 ⁺)	2112.42	6 ⁺
3417.1 5	0.027 7	5706.6		2289.40	(4 ⁺)
3426.9 3	0.038 7	6200.1		2773.15	8 ⁺
3444.6 3	0.057 8	5852.37	(5 ⁺ ,6 ⁺)	2407.94	(4,5,6 ⁺)
3468.1 2	0.33 3	5009.48	(5,6 ⁺)	1541.35	4 ⁺
3470.9 6	0.05 1	5583.4		2112.42	6 ⁺
3476.0 4	0.051 8	5883.90	(5 ⁺ ,6 ⁺)	2407.94	(4,5,6 ⁺)
3476.6 3	0.02 1	6097.18		2620.08	(5 ⁻)
3483.9 4	0.020 5	6047.40	(5 ⁺ ,6 ⁺)	2564.24	(5,6 ⁺)
3509.7 3	0.058 7	5051.48	(6 ⁺)	1541.35	4 ⁺
3518.1 2	0.101 8	5059.73	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺
3520.8 4	0.017 4	6085.1		2564.24	(5,6 ⁺)
3533.3 3	0.029 6	6097.18		2564.24	(5,6 ⁺)
3563.5 7	0.020 6	5852.37	(5 ⁺ ,6 ⁺)	2289.40	(4 ⁺)
3566.8 4	0.035 7	6187.0		2620.08	(5 ⁻)
3593.2 7	0.019 6	5883.90	(5 ⁺ ,6 ⁺)	2289.40	(4 ⁺)
3632.2 2	0.35 3	5173.59	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺
3639.2 4	0.07 1	6047.40	(5 ⁺ ,6 ⁺)	2407.94	(4,5,6 ⁺)
3643.6 2	0.17 2	5756.09	(5 ⁺ ,6 ⁺ ,7 ⁺)	2112.42	6 ⁺
3665.1 2	0.23 3	5206.56	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺
3666.5 3	0.07 1	5779.0		2112.42	6 ⁺
3702.5 2	0.14 2	5814.98	(5 ⁺ ,6 ⁺)	2112.42	6 ⁺
3721.4 2	0.12 1	5833.84	(5 ⁺ ,6 ⁺ ,7 ⁺)	2112.42	6 ⁺
3732.8 5	0.044 8	5845.3		2112.42	6 ⁺
3757.5 4	0.046 9	6047.40	(5 ⁺ ,6 ⁺)	2289.40	(4 ⁺)
3762.8 2	0.16 2	5304.07	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺
3771.4 5	0.027 6	5883.90	(5 ⁺ ,6 ⁺)	2112.42	6 ⁺
3790.5 7	0.04 1	5903.0		2112.42	6 ⁺
3822.5 7	0.033 7	6230.5		2407.94	(4,5,6 ⁺)
3825.0 2	0.10 1	5937.67	(5 ⁺ ,6 ⁺ ,7 ⁺)	2112.42	6 ⁺
3870.1 2	0.08 1	5982.56	(5,6 ⁺)	2112.42	6 ⁺
3887.2 2	0.08 1	5999.69	(5 ⁺ ,6 ⁺)	2112.42	6 ⁺
3894.9 5	0.034 6	5436.3	(5,6 ⁺)	1541.35	4 ⁺
3936.2 2	0.31 3	5477.44	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺

Continued on next page (footnotes at end of table)

^{98}Ag ε decay (47.5 s) **2000Hu17,2001HuZZ** (continued) $\gamma(^{98}\text{Pd})$ (continued)

E_γ^\dagger	$I_\gamma^{\dagger@}$	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ^\dagger	$I_\gamma^{\dagger@}$	$E_i(\text{level})$	J_i^π	E_f	J_f^π
3946.0 2	0.14 2	5487.11	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺	4311.0 3	0.07 1	5852.37	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺
3949.6 4	0.032 6	6062.1		2112.42	6 ⁺	4337.6 6	0.028 7	6450.1		2112.42	6 ⁺
4030.7 4	0.039 7	6143.2		2112.42	6 ⁺	4410.2 6	0.025 5	5951.7		1541.35	4 ⁺
4032.5 4	0.03 1	5573.9	(5,6 ⁺)	1541.35	4 ⁺	4440.8 6	0.023 5	5982.56	(5,6 ⁺)	1541.35	4 ⁺
4086.7 6	0.039 8	5628.1		1541.35	4 ⁺	4458.4 6	0.022 5	5999.69	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺
4150.3 3	0.07 1	6262.8	(5 ⁺ ,6 ⁺)	2112.42	6 ⁺	4567.0 6	0.022 6	6108.5		1541.35	4 ⁺
4167.2 4	0.06 1	5708.6		1541.35	4 ⁺	4599.6 4	0.036 8	6141.1		1541.35	4 ⁺
4176.5 2	0.15 2	5717.88	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺	4721.0 7	0.019 6	6262.8	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺
4203.5 3	0.049 8	6316.0		2112.42	6 ⁺	4808.9 5	0.031 6	6350.4		1541.35	4 ⁺
4273.5 4	0.063 9	5814.98	(5 ⁺ ,6 ⁺)	1541.35	4 ⁺	4882.7 6	0.020 5	6424.2		1541.35	4 ⁺

[†] From **2001HuZZ**. See experimental details in **2000Hu17**.

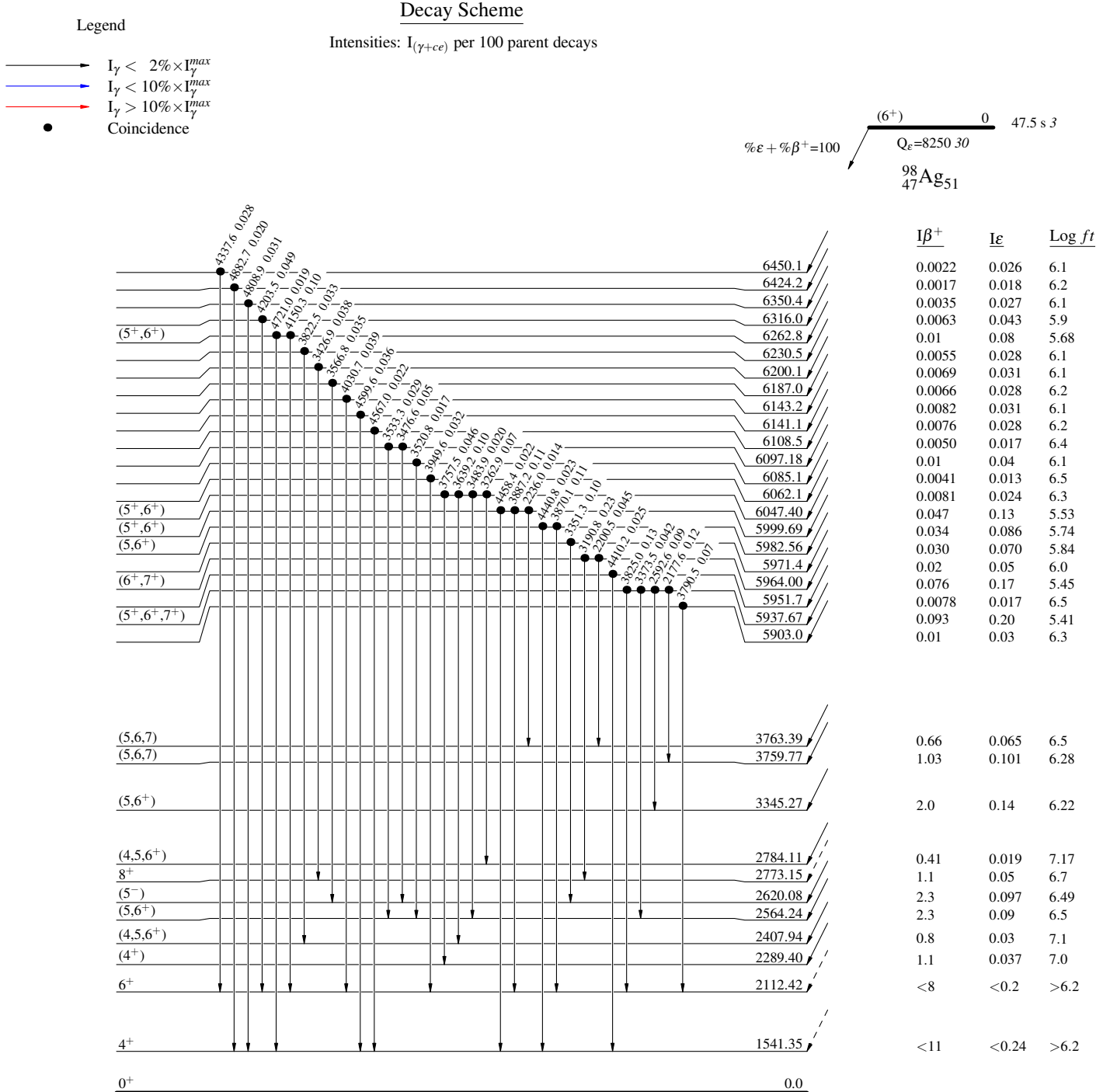
[‡] **1982Ku15** misassigned this transition from 3441 level.

Poor fit. Energy from least-squares adjustment differs by 0.3 to 1.0 keV from the quoted E_γ . Fitted energy is given under comments.

@ Absolute intensity per 100 decays.

& Placement of transition in the level scheme is uncertain.

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ



⁹⁸Pd₅₂

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

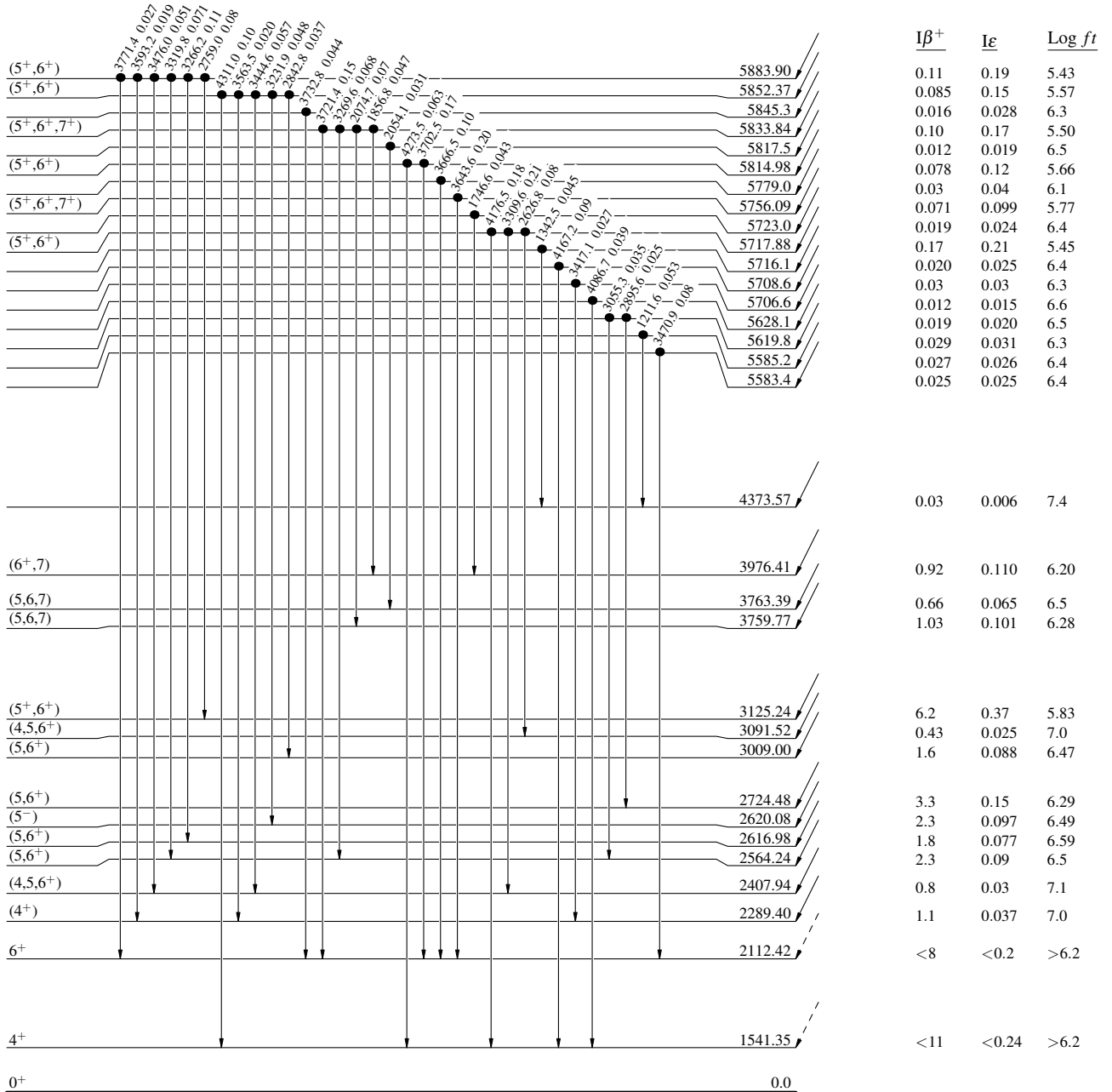
Decay Scheme (continued)

Legend

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

Intensities: I_(γ+ce) per 100 parent decays

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁



⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

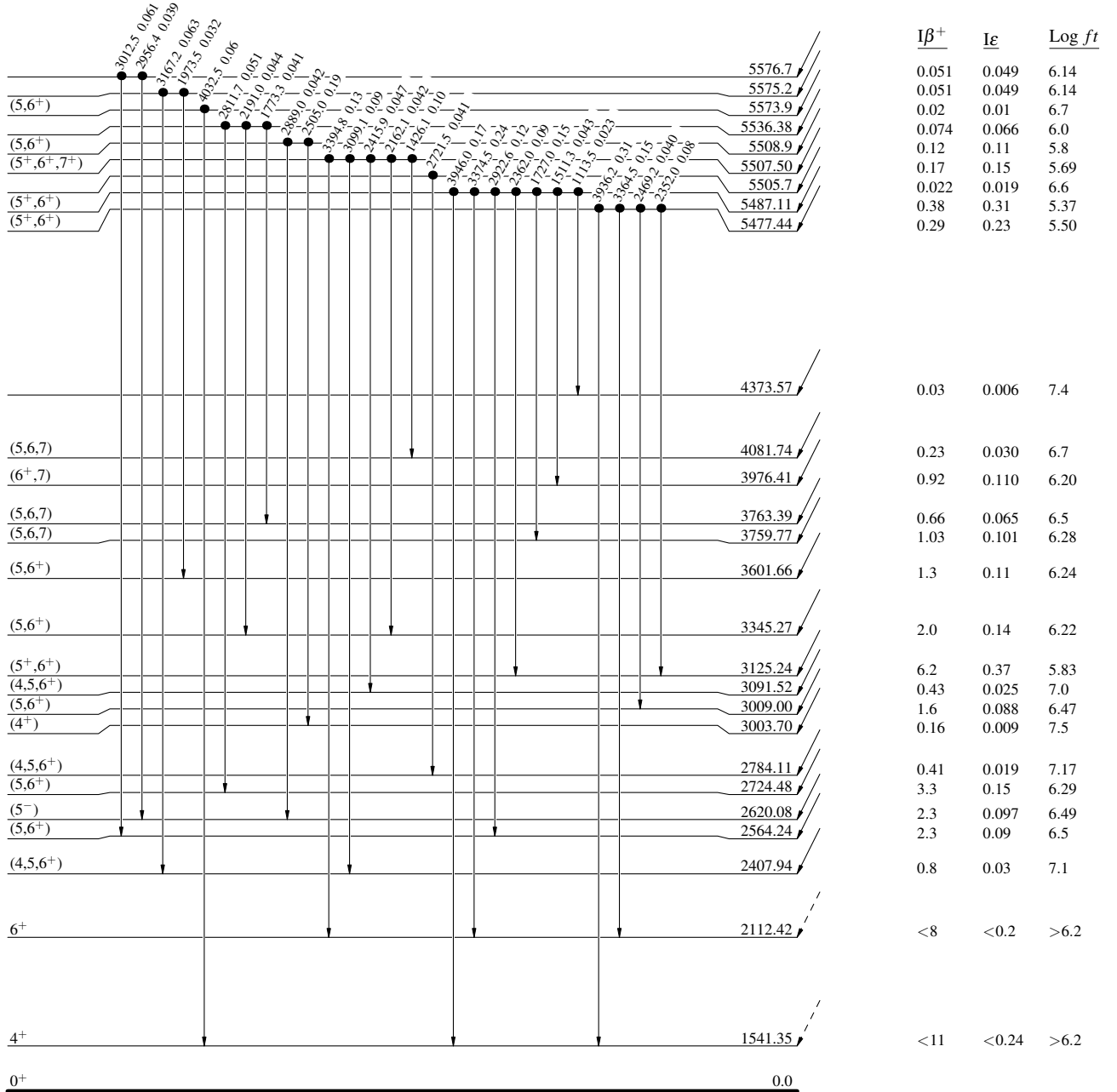
Decay Scheme (continued)

Legend

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

Intensities: I_(γ+ce) per 100 parent decays

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁
 %ε + %β⁺=100



⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

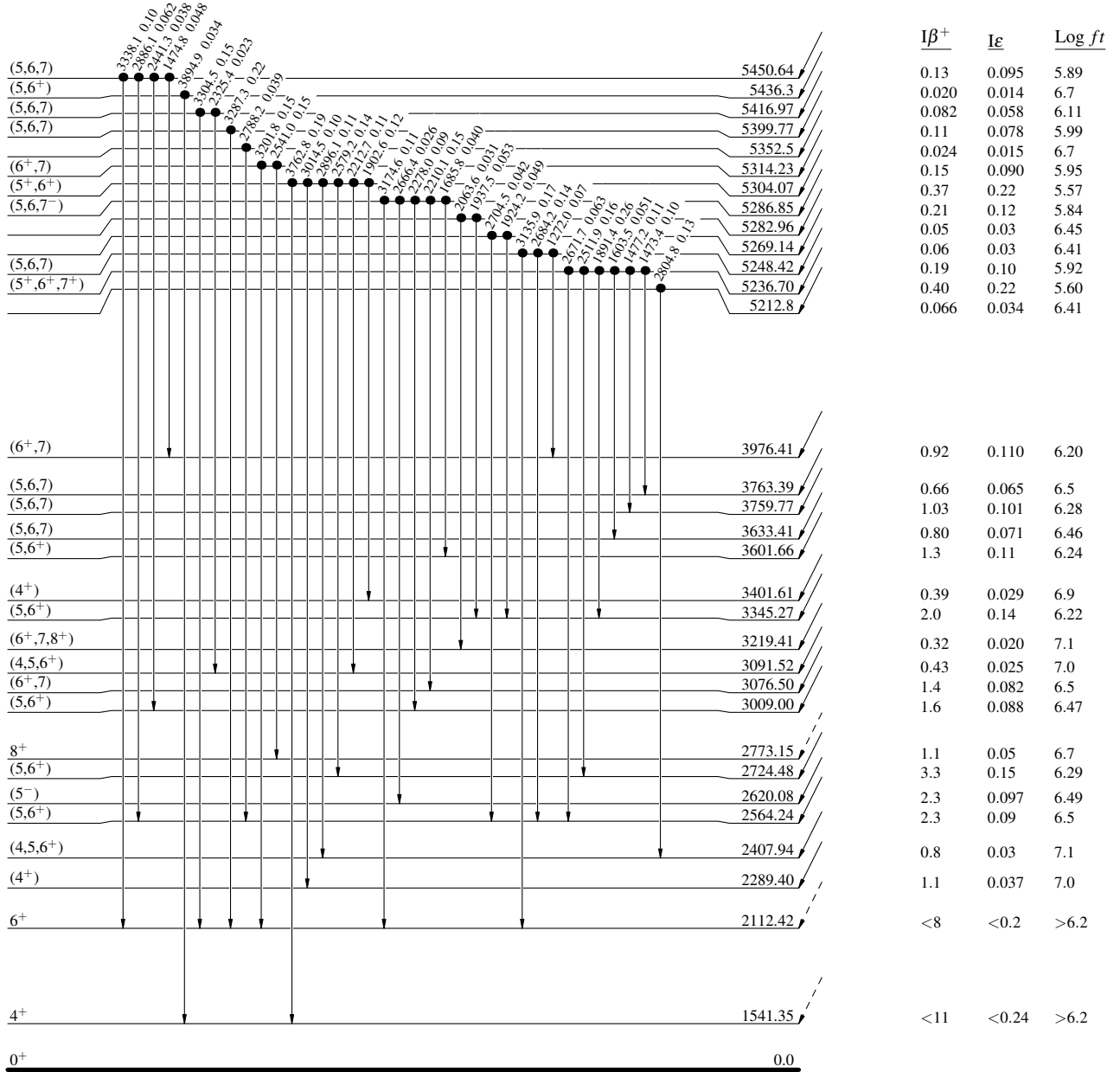
Decay Scheme (continued)

Legend

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

Intensities: I_(γ+ce) per 100 parent decays

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁



⁹⁸Pd₅₂

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

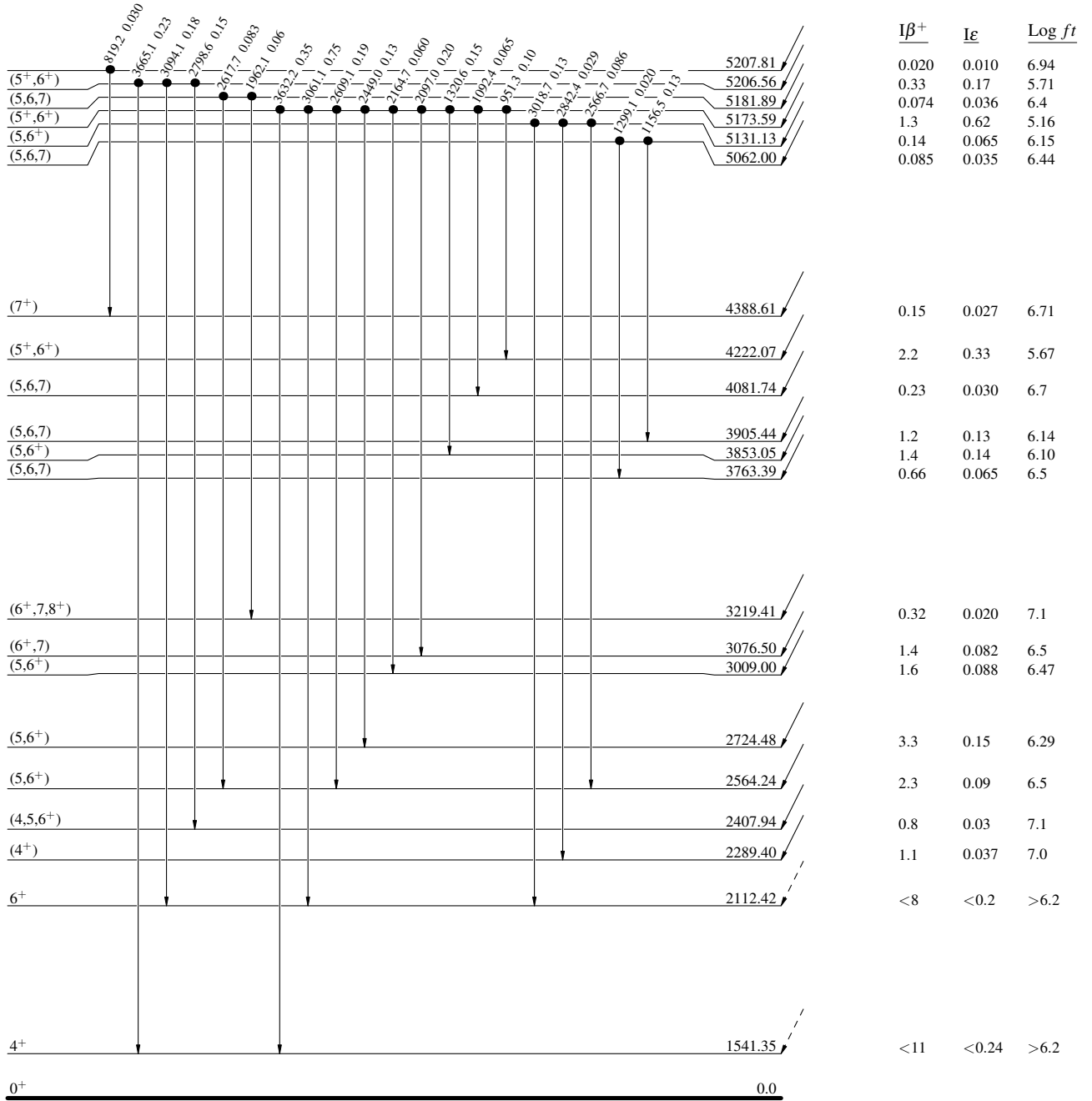
Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

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

(6⁺) 0 47.5 s 3
 Q_ε=8250 30
⁹⁸Ag₅₁



⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

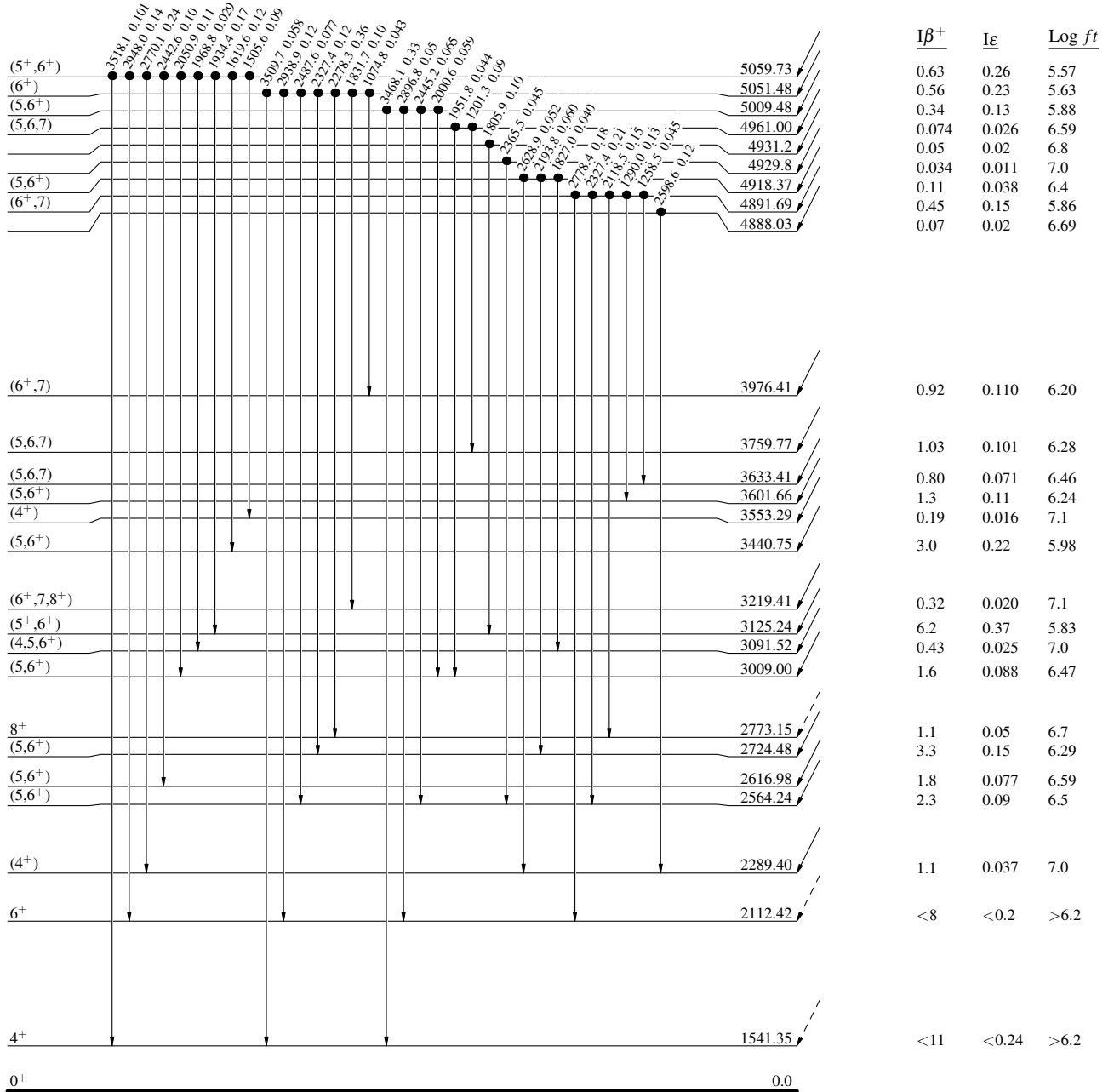
Decay Scheme (continued)

Legend

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

Intensities: I_(γ+ce) per 100 parent decays

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁
 %ε + %β⁺=100



⁹⁸Pd₅₂

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

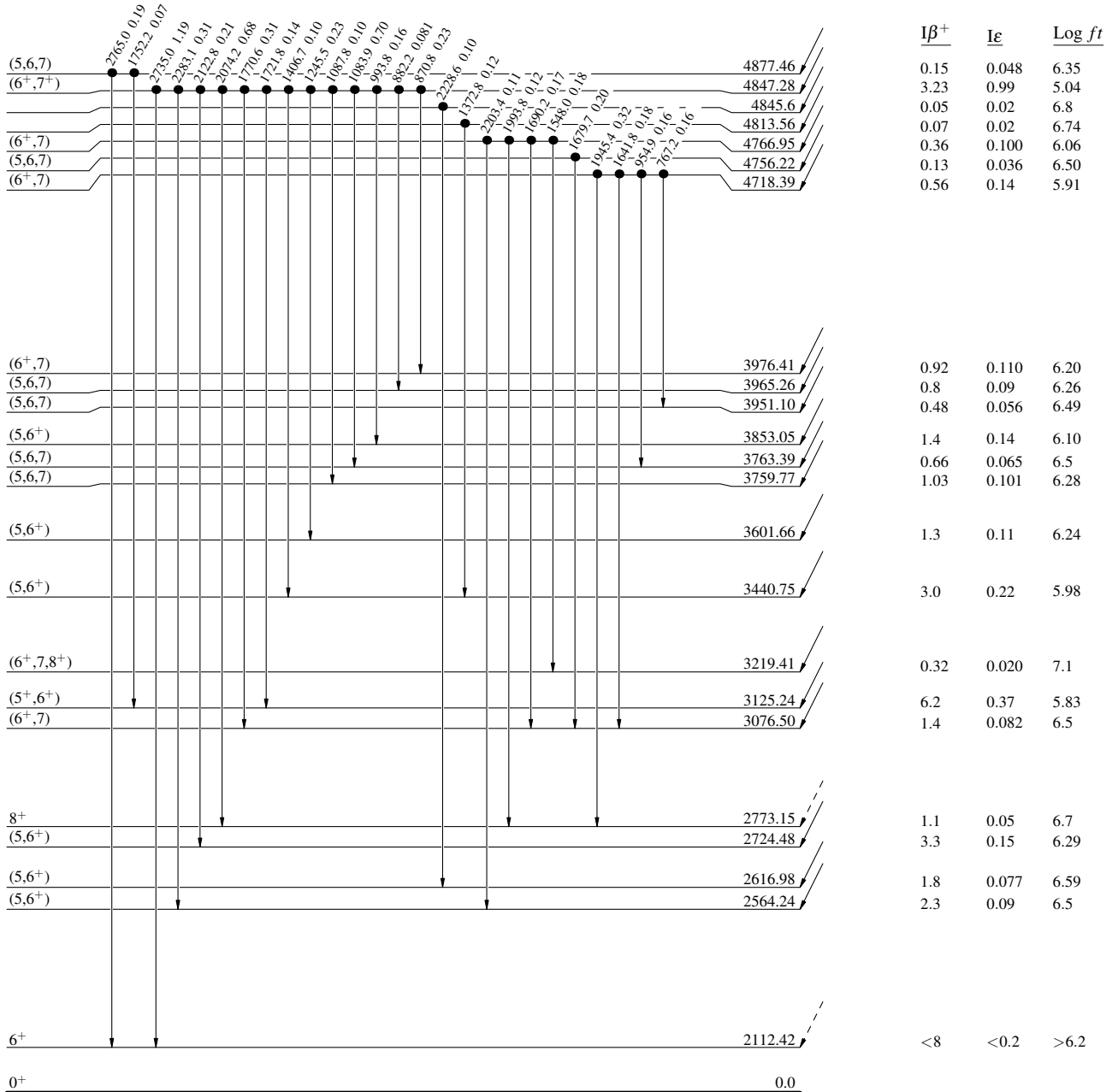
Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

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

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁
 47⁺Ag₅₁
 %ε + %β⁺=100



⁹⁸Pd₅₂

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

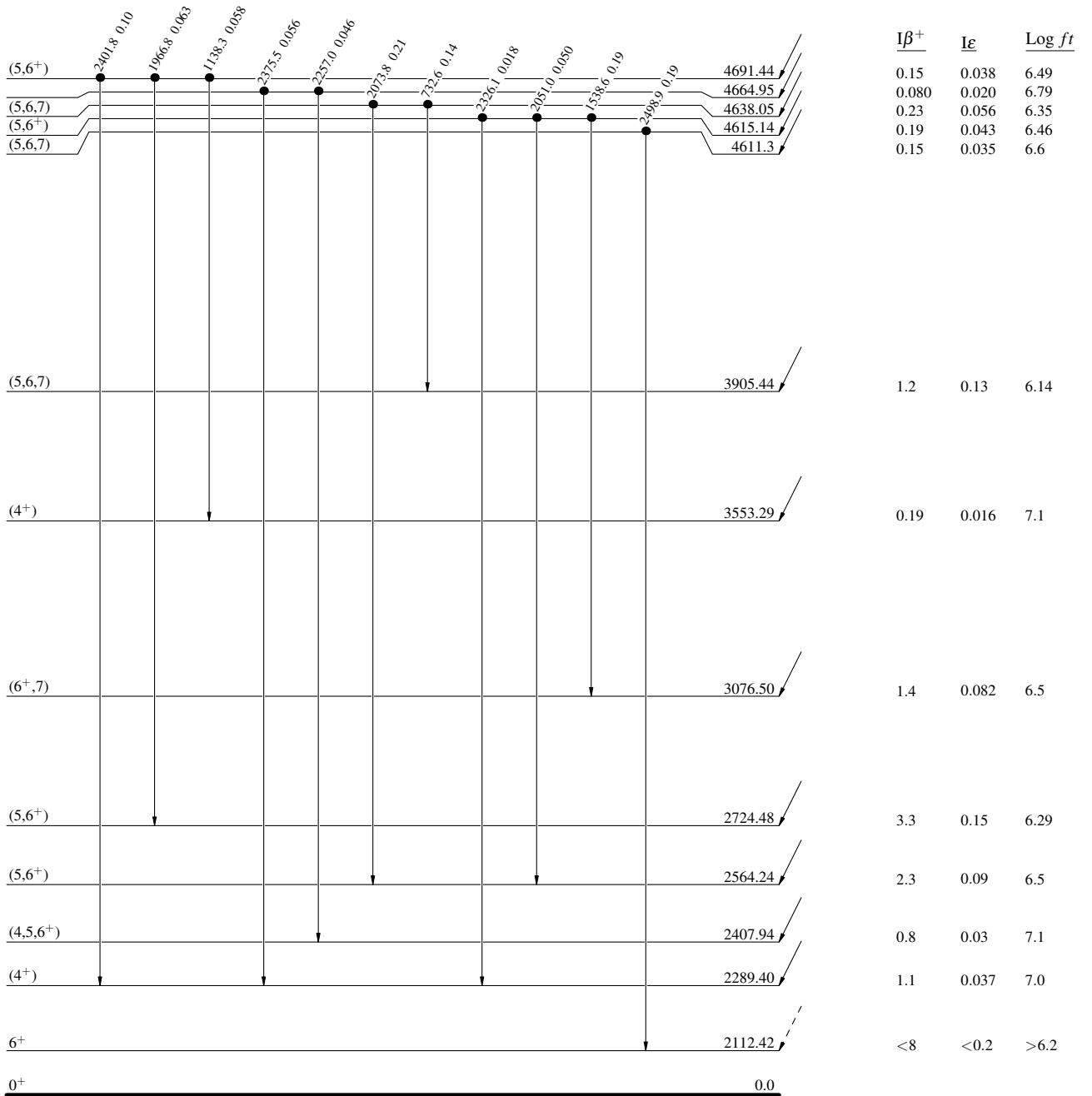
Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

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

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁
 %ε + %β⁺=100



⁹⁸Pd₅₂

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

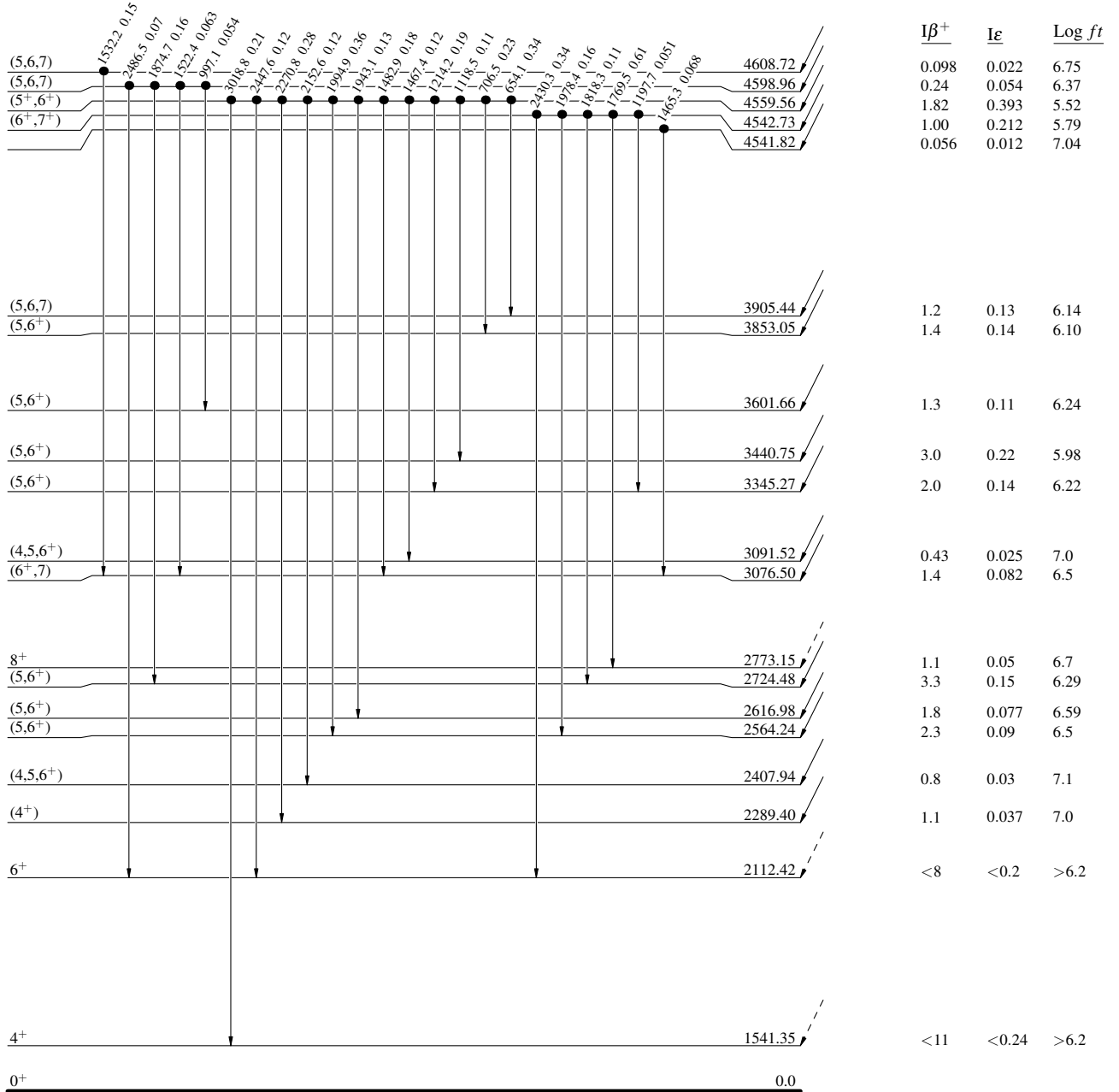
Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

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

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁



⁹⁸Pd₅₂

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

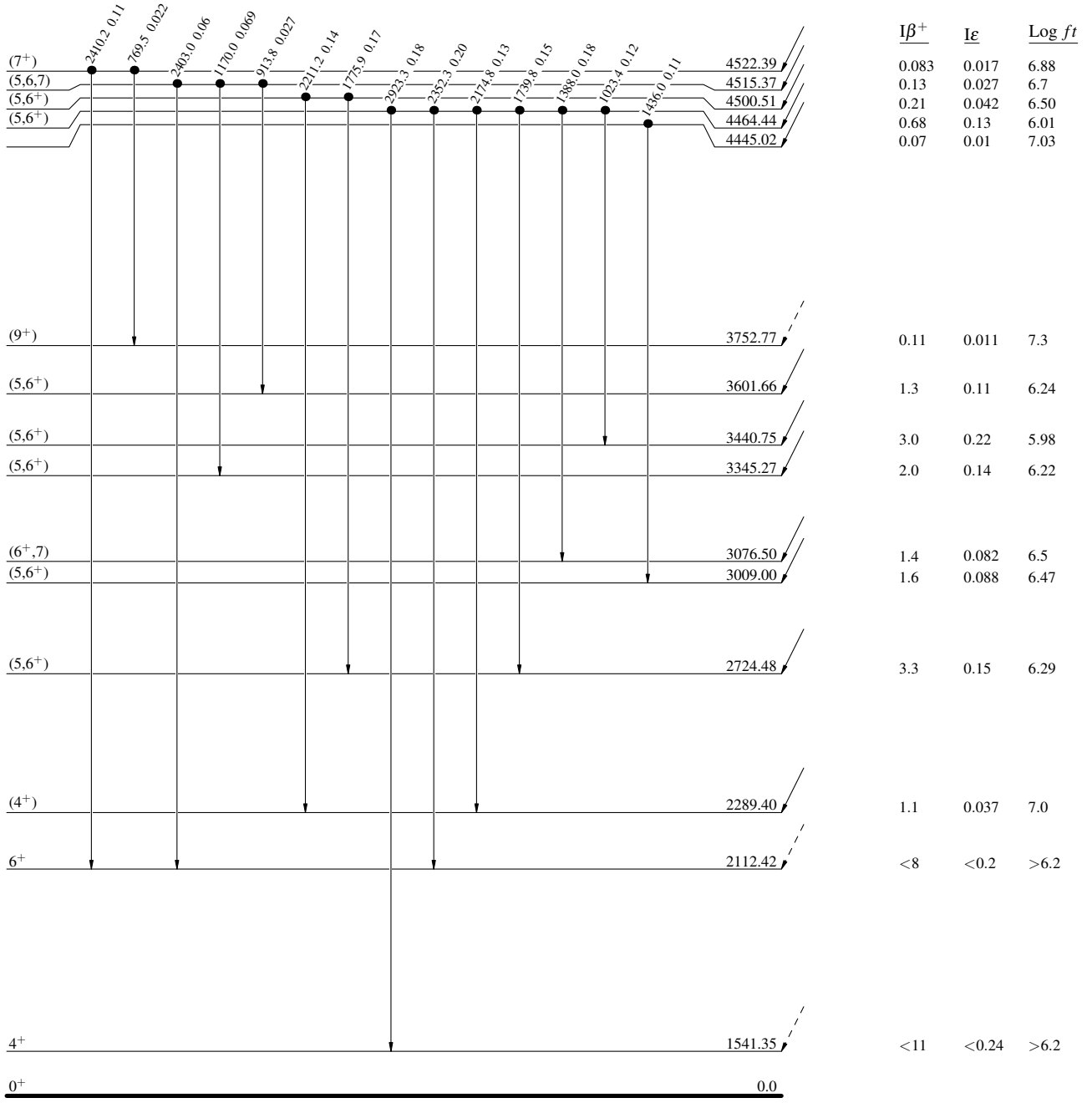
Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

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

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁
 %ε + %β⁺=100



⁹⁸Pd₅₂

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

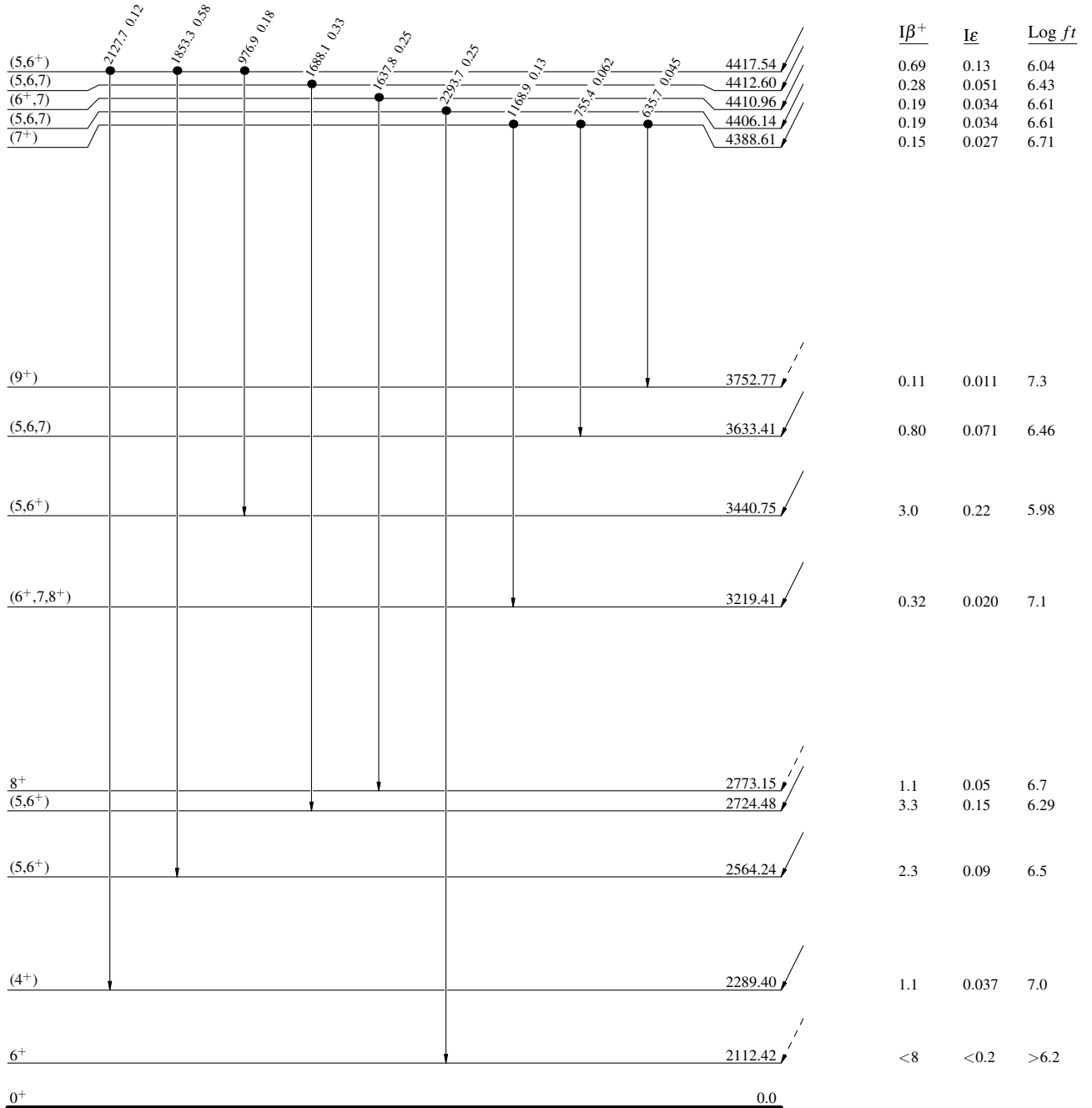
Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

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

(6⁺) 0 47.5 s 3
 Q_ε = 8250.30
⁹⁸Ag₅₁
 %ε + %β⁺ = 100



⁹⁸Pd₅₂

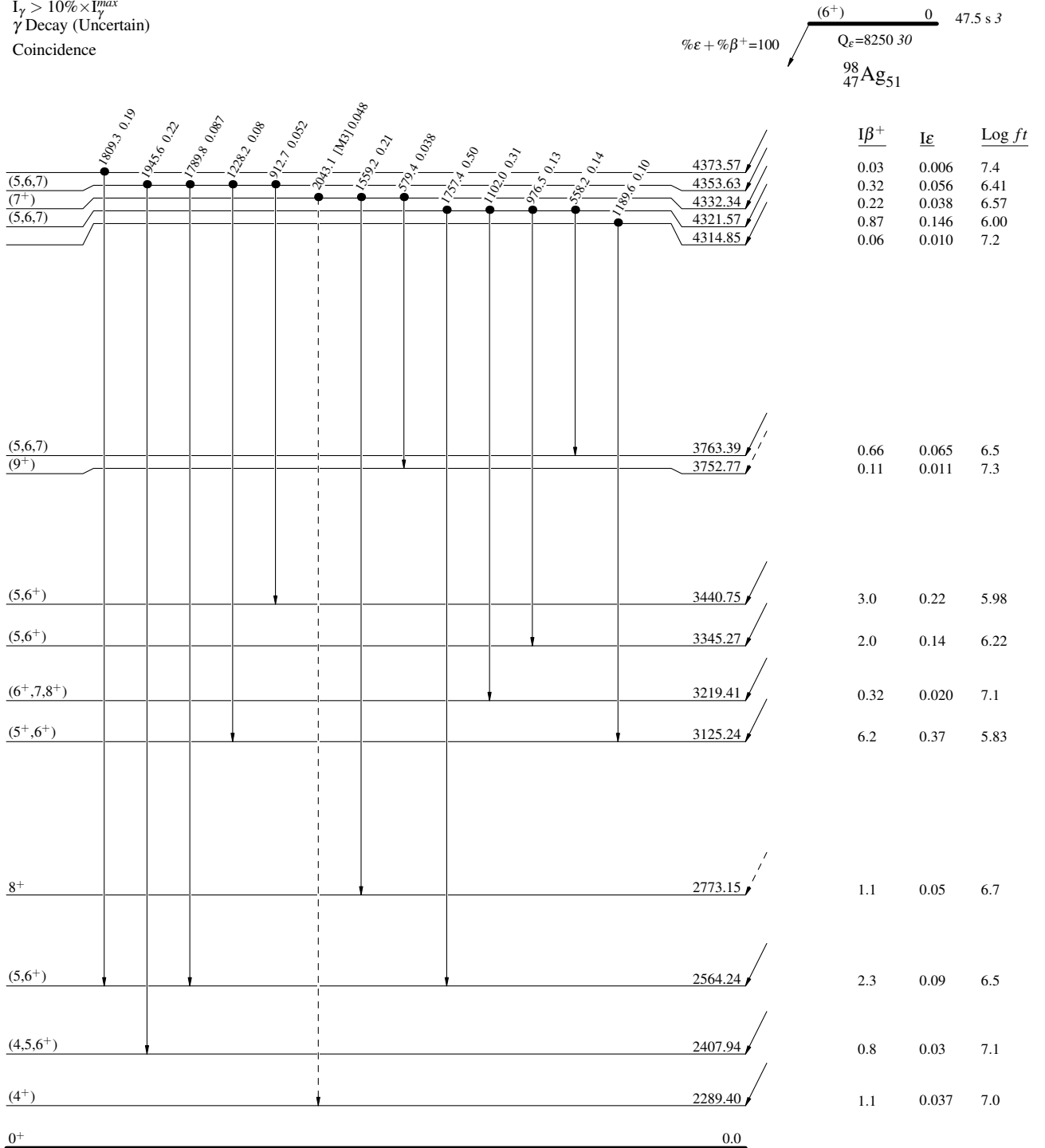
⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}
- - - - - γ Decay (Uncertain)
- Coincidence



⁹⁸Pd₅₂

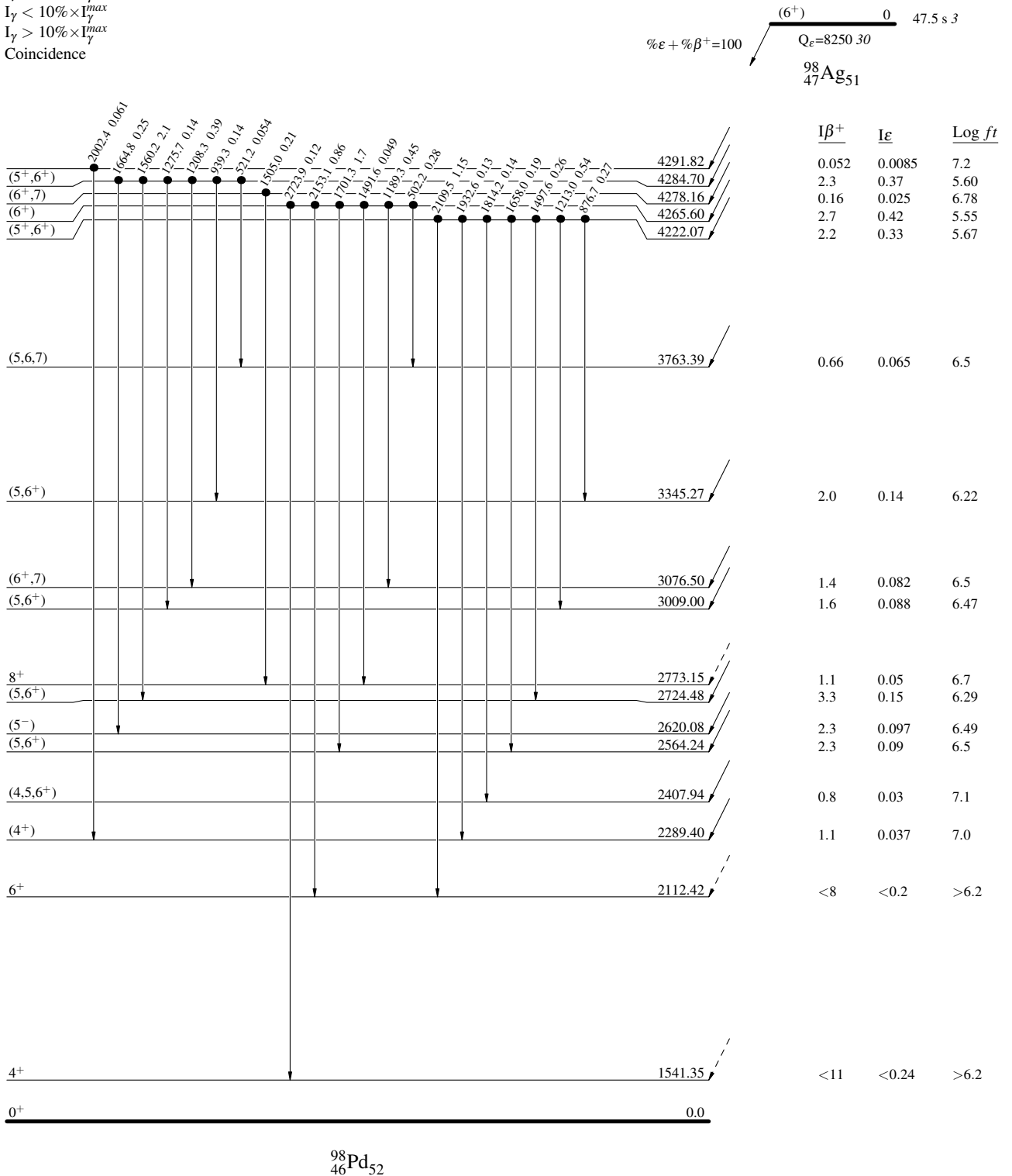
⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

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



⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

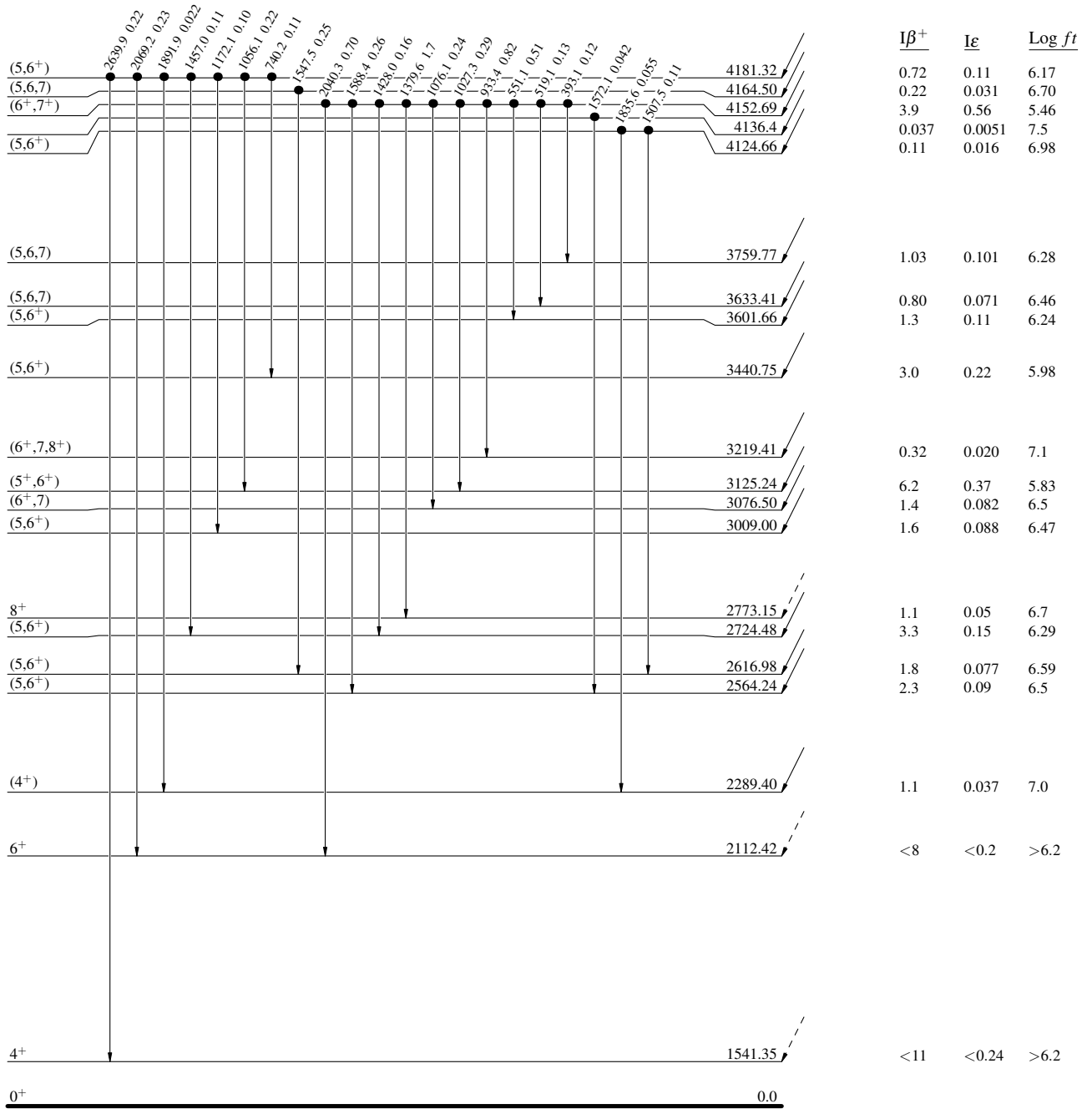
Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

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

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁



⁹⁸Pd₅₂

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

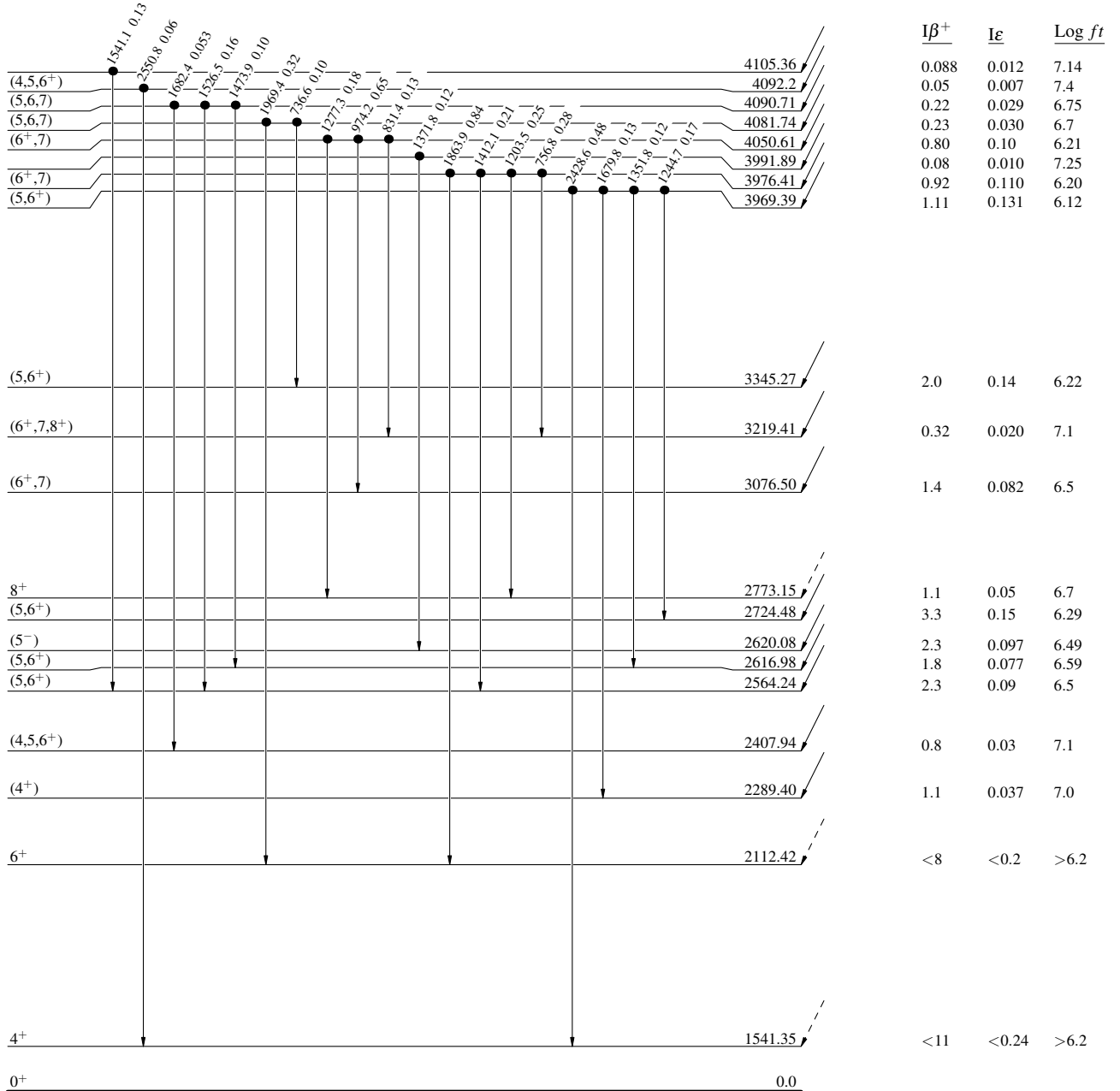
Decay Scheme (continued)

Legend

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

Intensities: I_(γ+ce) per 100 parent decays

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁



⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

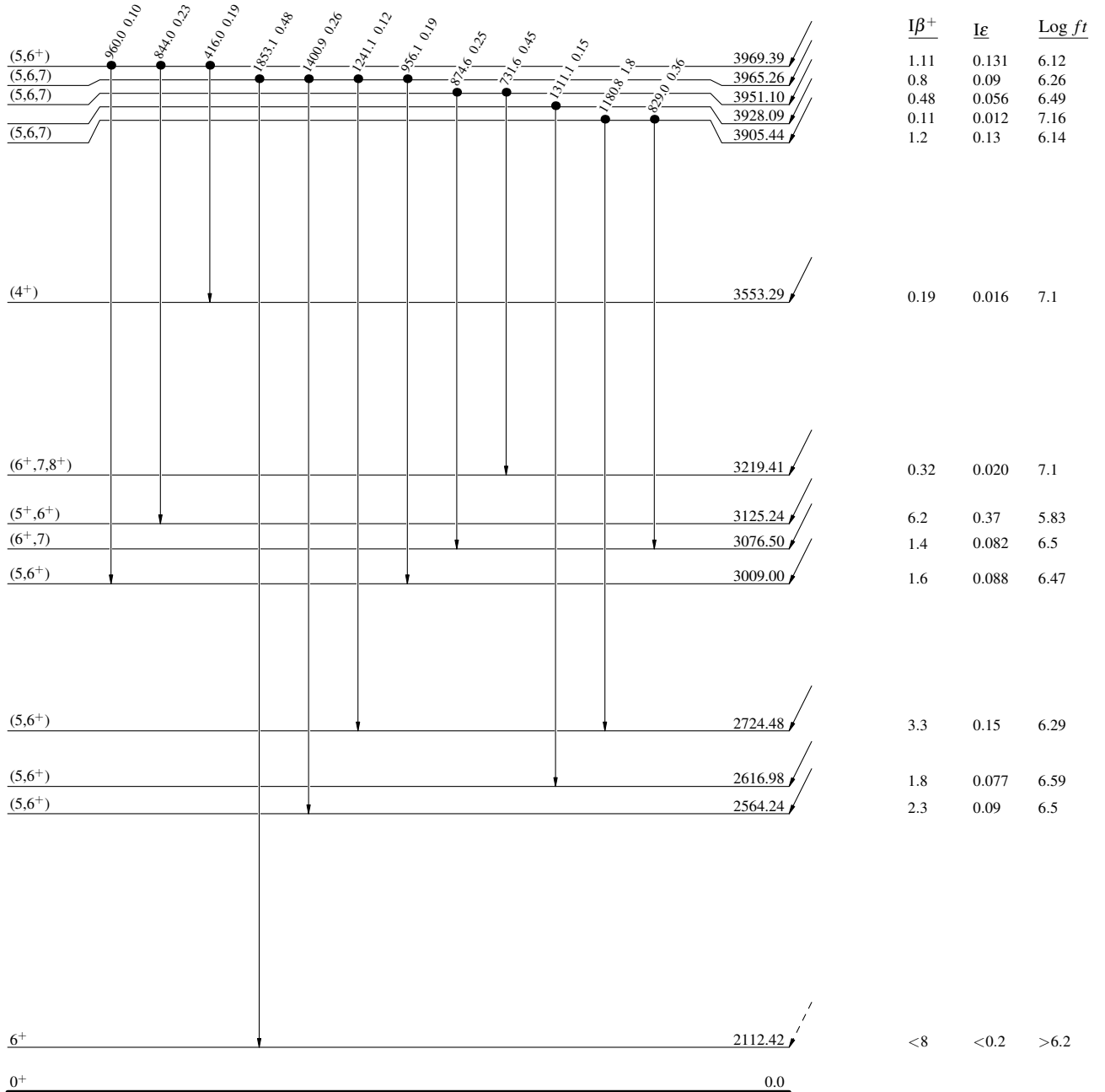
Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

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

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁



⁹⁸Pd₅₂

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

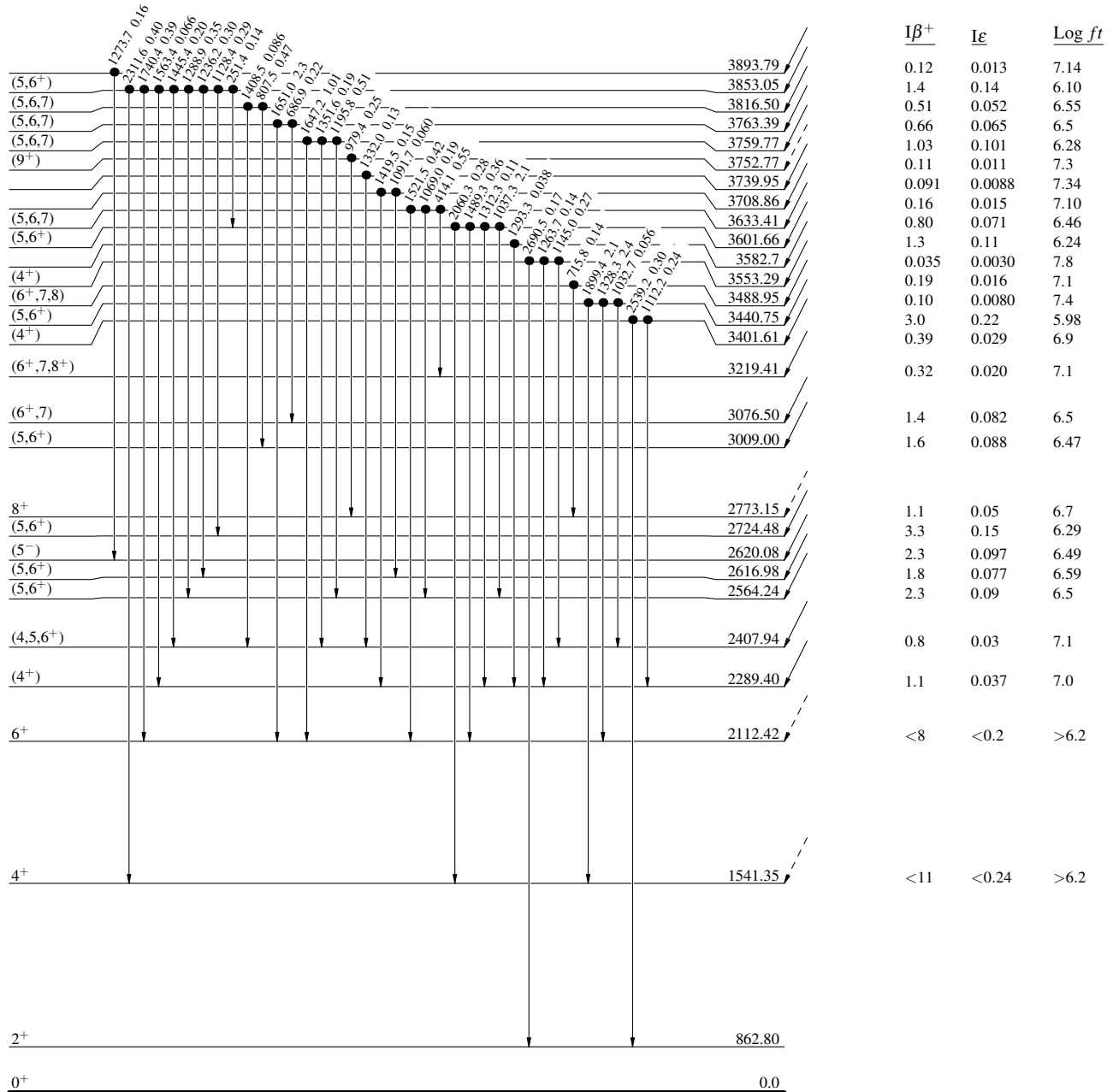
Decay Scheme (continued)

Legend

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

Intensities: I_(γ+ce) per 100 parent decays

(6⁺) 0 47.5 s 3
 Q_ε=8250 30
⁹⁸Ag₅₁



⁹⁸Pd₅₂

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

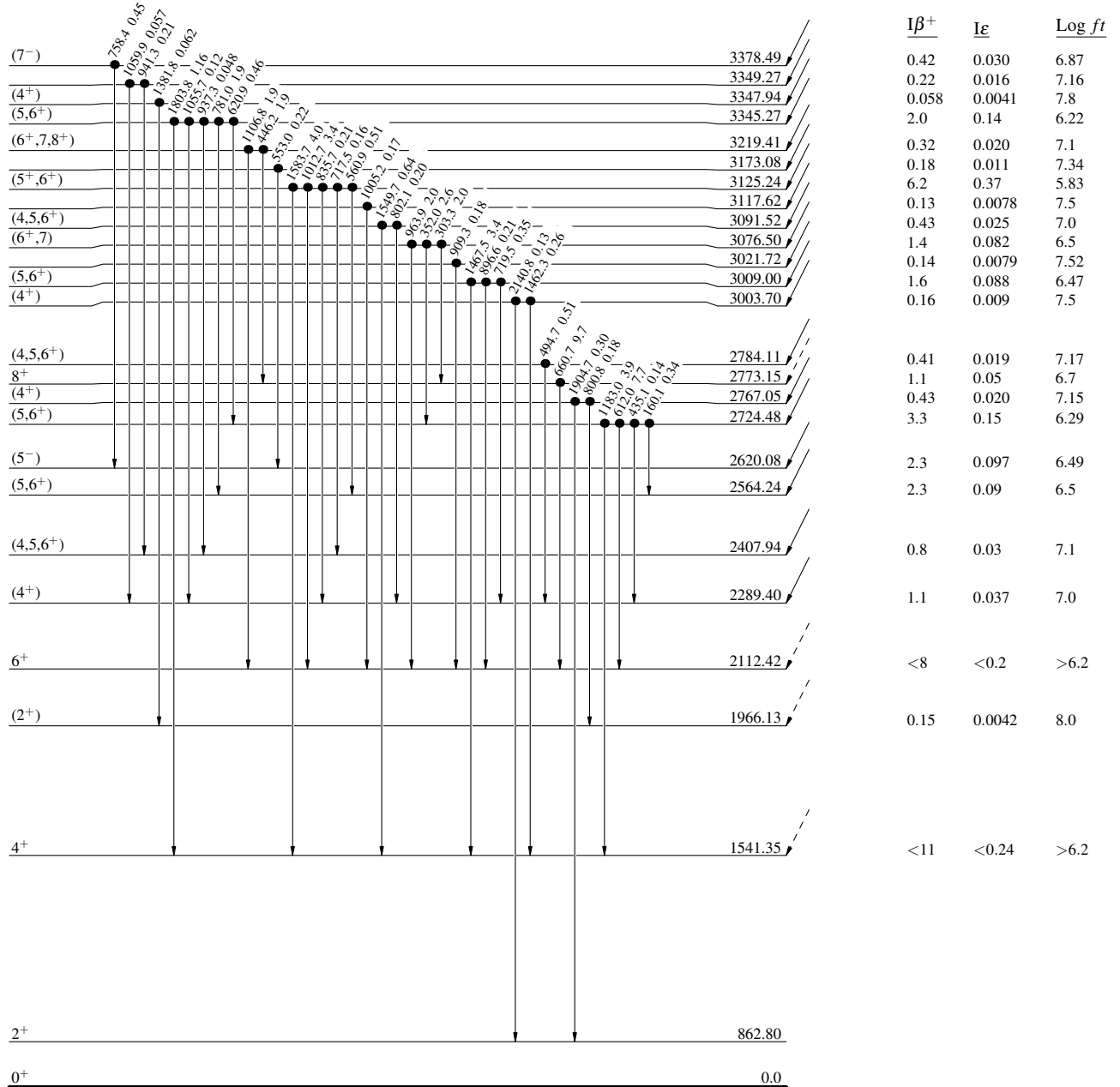
Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

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

(6⁺) 0 47.5 s 3
 Q_ε=8250 30
⁹⁸Ag₅₁



⁹⁸Pd₅₂

⁹⁸Ag ε decay (47.5 s) 2000Hu17,2001HuZZ

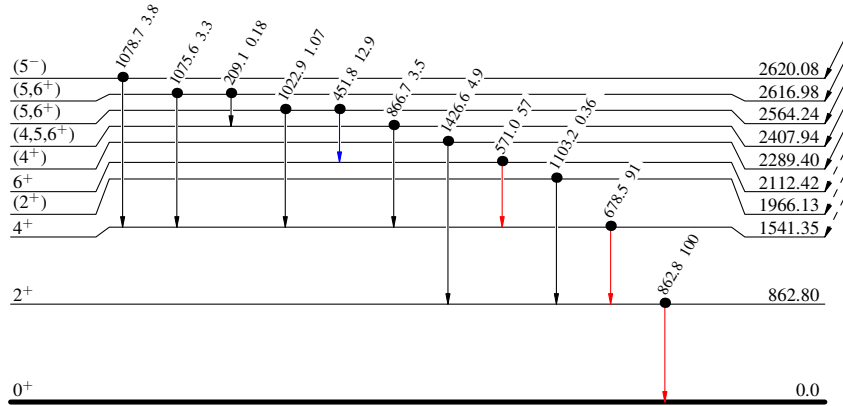
Decay Scheme (continued)

Intensities: I_(γ+ce) per 100 parent decays

Legend

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

(6⁺) 0 47.5 s 3
 Q_ε=8250.30
⁹⁸Ag₅₁



Iβ ⁺	Iε	Log ft
2.3	0.097	6.49
1.8	0.077	6.59
2.3	0.09	6.5
0.8	0.03	7.1
1.1	0.037	7.0
<8	<0.2	>6.2
0.15	0.0042	8.0
<11	<0.24	>6.2

⁹⁸Pd₅₂