^{102}Ag ε decay (12.9 min) 2002Za04

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne	NDS 110, 1745 (2009)	31-Dec-2008

Parent: ^{102}Ag: E=0; $J^\pi=5^+$; $T_{1/2}$=12.9 min *3*; Q(ε)=5660 *28*; %ε+%$β^+$ decay=100.0

Measured Eγ, Iγ, γγ using three Compton-suppressed segmented clover HPGe detectors and one LEPS detector.
Other: 1971Hn05.
All data are from 2002Za04.
Due to serious problems with the decay scheme no normalization possible.

^{102}Pd Levels

E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡
0	0^+	2342.25 *20*	(3^-)	2798.18 *8*	(4^+)
556.45 *4*	2^+	2473.90 *16*	5^-	2863.39 *10*	
1275.77 *6*	4^+	2480.65 *10*		2976.05 *18*	$4^{(+)},5^{(+)},(6^+)$
1534.26 *5*	2^+	2532.38 *9*	$(4)^+$	3002.70 *12*	$4^+,5^+,6^+$
1943.87 *11*	2^+	2581.18 *12*		3075.26 *9*	$4^+,5^+,6^+$
2110.98 *8*	6^+	2606.36 *9*		3113.1 *3*	
2111.45 *8*	3^+	2650.90 *10*	(4^+)	3166.36 *11*	4,5,6
2137.61 *6*	4^+	2669.48 *21*		3178.19 *13*	4,5,6
2247.8 *3*	(2,3)	2733.88 *21*		3278.5 *8*	
2293.99 *12*	(4^-)	2749.78 *11*		3295.5 *5*	
2300.68 *7*	$(4)^+$	2768.38 *12*			

† From least-squares fit to Eγ′s by the evaluator.
‡ From Adopted Levels.

γ(^{102}Pd)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Comments
163.0 *1*	0.25 *5*	2300.68	$(4)^+$	2137.61	4^+	
179.8 *2*	0.09 *2*	2473.90	5^-	2293.99	(4^-)	
182.5 *1*	0.15 *3*	2293.99	(4^-)	2111.45	3^+	
231.7 *1*	0.21 *2*	2532.38	$(4)^+$	2300.68	$(4)^+$	
336.4 *2*	0.18 *2*	2473.90	5^-	2137.61	4^+	
424.4 *1*	0.07 *2*	3075.26	$4^+,5^+,6^+$	2650.90	(4^+)	
495.0 *1*	0.59 *6*	2606.36		2111.45	3^+	
539.6 *4*	0.06 *3*	2650.90	(4^+)	2110.98	6^+	E_γ: 540.6 in figure 4 of 2002Za04.
556.44 *4*	100.0	556.45	2^+	0	0^+	
577.1 *1*	0.17 *3*	2111.45	3^+	1534.26	2^+	
603.32 *6*	1.61 *14*	2137.61	4^+	1534.26	2^+	
634.1 *1*	0.19 *3*	3166.36	4,5,6	2532.38	$(4)^+$	
660.5 *1*	0.20 *10*	2798.18	(4^+)	2137.61	4^+	
719.33 *5*	55.9 *15*	1275.77	4^+	556.45	2^+	
835.11 *7*	12.6 *11*	2110.98	6^+	1275.77	4^+	
836.0 *5*	0.15 *8*	2111.45	3^+	1275.77	4^+	
854.3 *1*	0.17 *10*	2798.18	(4^+)	1943.87	2^+	
861.9 *1*	1.59 *14*	2137.61	4^+	1275.77	4^+	
865.0 *2*	2.70 *25*	2976.05	$4^{(+)},5^{(+)},(6^+)$	2110.98	6^+	
891.6 *1*	3.8 *4*	3002.70	$4^+,5^+,6^+$	2110.98	6^+	
937.7 *2*	1.39 *12*	3075.26	$4^+,5^+,6^+$	2137.61	4^+	
946.4 *1*	0.18 *2*	2480.65		1534.26	2^+	
963.3 *5*	0.21 *10*	3075.26	$4^+,5^+,6^+$	2111.45	3^+	

Continued on next page (footnotes at end of table)

^{102}Ag ε decay (12.9 min) 2002Za04 (continued)

γ(^{102}Pd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.	δ	Comments
964.2 *1*	1.22 *11*	3075.26	$4^+,5^+,6^+$	2110.98	6^+			
977.75 *5*	1.81 *16*	1534.26	2^+	556.45	2^+	E2+M1	2.8 *2*	Mult.: from on-line nuclear orientation in 12.9-min ^{102}Ag decay (1987Wo04).
998.3 *3*	0.09 *3*	2532.38	$(4)^+$	1534.26	2^+			
1018.5 *5*	0.25 *5*	2293.99	(4^-)	1275.77	4^+			
1024.9 *1*	4.4 *4*	2300.68	$(4)^+$	1275.77	4^+	M1(+E2)	0.01 *8*	
1054.9 *5*	0.11 *5*	3166.36	4,5,6	2111.45	3^+			
1055.4 *2*	0.59 *7*	3166.36	4,5,6	2110.98	6^+			
1066†	0.18 *8*	2342.25	(3^-)	1275.77	4^+			E_γ: not resolved from 1067.2 in γγ.
1067.2 *1*	0.41 *6*	3178.19	4,5,6	2110.98	6^+			
1167.5 *8*	0.03 *1*	3278.5		2110.98	6^+			
1184.5 *5*	0.21 *2*	3295.5		2110.98	6^+			
1215.5 *3*	0.11 *3*	2749.78		1534.26	2^+			
1256.7 *1*	11.7 *7*	2532.38	$(4)^+$	1275.77	4^+			
1263.9 *1*	0.69 *7*	2798.18	(4^+)	1534.26	2^+			
1305.4 *1*	1.66 *17*	2581.18		1275.77	4^+			
1329.1 *1*	0.33 *7*	2863.39		1534.26	2^+			
1330.5 *1*	1.90 *3*	2606.36		1275.77	4^+			
1375.2 *1*	0.53 *6*	2650.90	(4^+)	1275.77	4^+			
1387.4 *2*	0.21 *14*	1943.87	2^+	556.45	2^+			
1393.7 *2*	1.14 *12*	2669.48		1275.77	4^+			
1458.1 *2*	0.16 *2*	2733.88		1275.77	4^+			
1474.0 *1*	2.38 *25*	2749.78		1275.77	4^+			
1492.6 *1*	0.14 *2*	2768.38		1275.77	4^+			
1522.5 *1*	2.03 *21*	2798.18	(4^+)	1275.77	4^+			
1534.3 *1*	1.93 *21*	1534.26	2^+	0	0^+			
1555.1 *1*	1.44 *15*	2111.45	3^+	556.45	2^+			
1581.1 *1*	12.9 *8*	2137.61	4^+	556.45	2^+			
1587.7 *2*	1.01 *11*	2863.39		1275.77	4^+			
1691.3 *3*	0.15 *2*	2247.8	(2,3)	556.45	2^+			E_γ: 1691.7 in figure of level scheme of 2002Za04.
1700.4 *3*	0.13 *2*	2976.05	$4^{(+)},5^{(+)},(6^+)$	1275.77	4^+			
1727.9 *3*	0.25 *3*	3002.70	$4^+,5^+,6^+$	1275.77	4^+			E_γ: poor fit. Level-energy difference=1726.9.
1744.3 *1*	14.3 *8*	2300.68	$(4)^+$	556.45	2^+			Mult.: from on-line nuclear orientation in 12.9-min ^{102}Ag decay (1987Wo04).
1785.8 *2*	0.14 *3*	2342.25	(3^-)	556.45	2^+			
1799.5 *1*	2.23 *24*	3075.26	$4^+,5^+,6^+$	1275.77	4^+			
1837.3 *3*	0.78 *9*	3113.1		1275.77	4^+			
1889.4 *3*	0.40 *5*	3166.36	4,5,6	1275.77	4^+			E_γ: poor fit. Level-energy difference=1890.6.
1924.1 *2*	0.54 *6*	2480.65		556.45	2^+			
1943.0 *9*	0.18 *10*	1943.87	2^+	0	0^+			
1976.0 *3*	0.09 *5*	2532.38	$(4)^+$	556.45	2^+			
2241.6 *8*	0.60 *10*	2798.18	(4^+)	556.45	2^+			

† Placement of transition in the level scheme is uncertain.

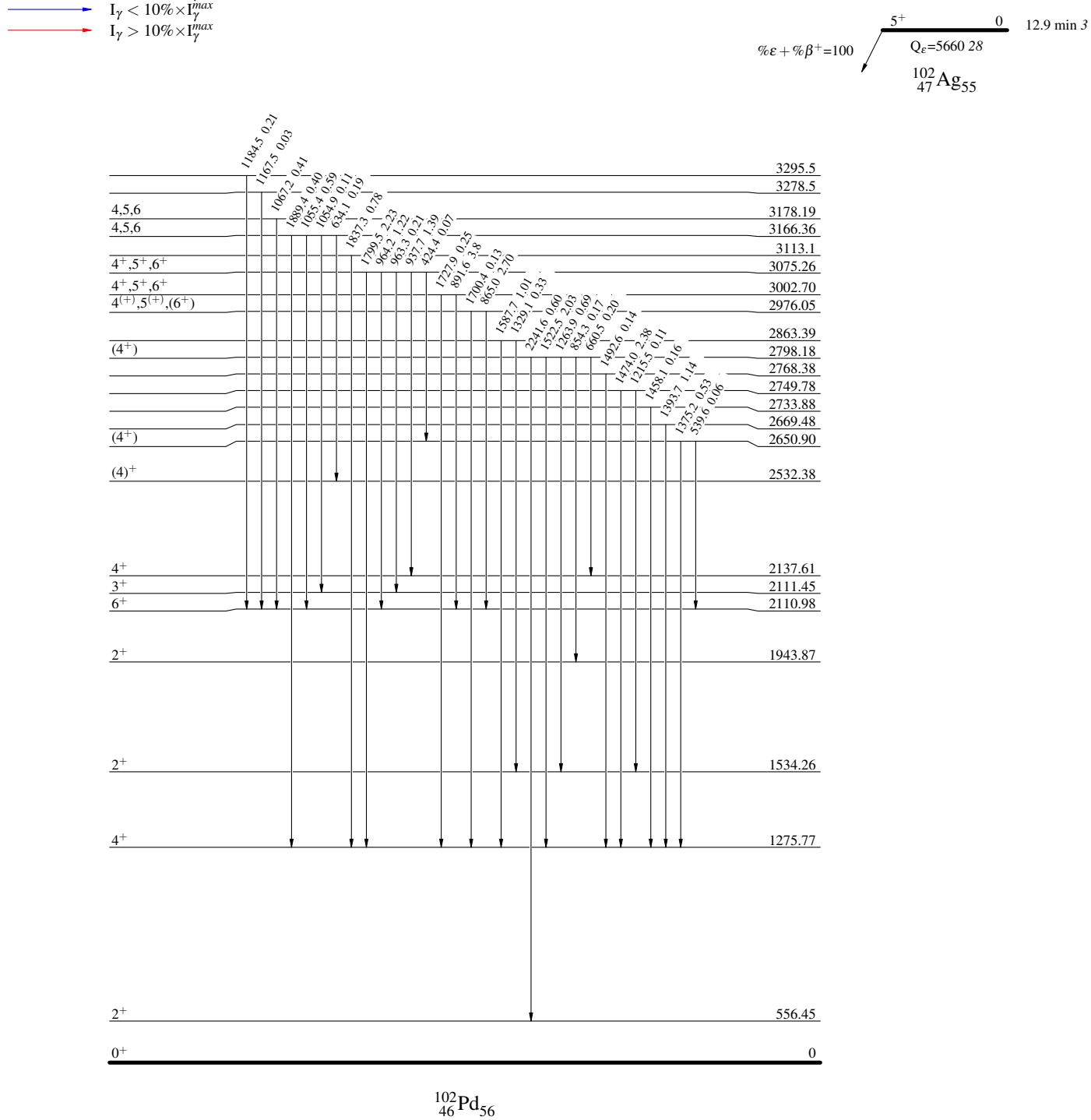
^{102}Ag ε decay (12.9 min) 2002Za04

Decay Scheme

Intensities: Relative I_γ

Legend

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



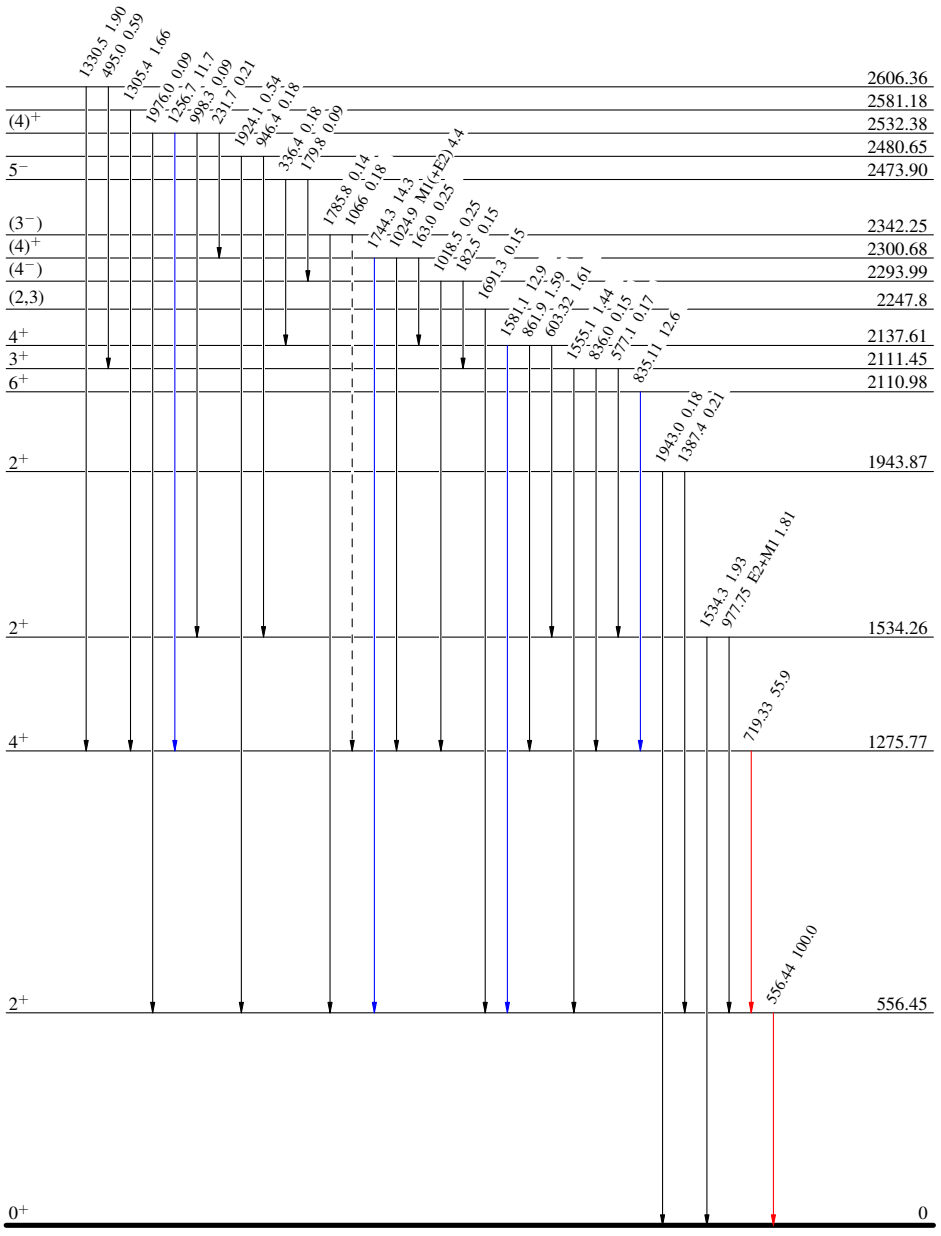
^{102}Ag ε decay (12.9 min) 2002Za04

Decay Scheme (continued)

Intensities: Relative I_γ

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

$^{102}_{47}Ag_{55}$: 5^+ 0 12.9 min 3; $\%\varepsilon + \%\beta^+ = 100$; $Q_\varepsilon = 5660\ 28$



$^{102}_{46}Pd_{56}$