### <sup>99</sup>Ag $\beta^+$ decay 1981Hu03

History									
Туре	Author	Citation	Literature Cutoff Date						
Full Evaluation	E. Browne, J. K. Tuli	NDS 145, 25 (2017)	1-Jul-2017						

Parent: <sup>99</sup>Ag: E=0.0; J<sup> $\pi$ </sup>=(9/2)<sup>+</sup>; T<sub>1/2</sub>=124 s 3; Q( $\beta$ <sup>+</sup>)=5470 8; % $\beta$ <sup>+</sup> decay=100.0 Measured:  $\gamma$ ,  $\gamma\gamma$ .

# 99Pd Levels

E(level)	$J^{\pi \dagger}$	Comments
0.0	$(5/2)^+$	
219.79 8	$(3/2)^+$	
264.382 25	$(7/2)^+$	
463.77 6	$(3/2^+)$	
686.93 5	$(5/2^+)$	$J^{\pi}$ : $(7/2^+)$ In $\beta^+$ decay.
815.31 5	$(7/2)^+$	$J^{\pi}$ : (7/2,9/2 <sup>+</sup> ) In $\beta^{+}$ decay.
816.05 9	$(7/2^+)$	
832.45 <i>3</i>	$(9/2)^+$	$J^{\pi}$ : (7/2,9/2 <sup>+</sup> ) In $\beta^{+}$ decay.
1069.84 12	$(11/2)^+$	
1102.78 5	$(9/2)^+$	$J^{\pi}$ : (7/2,9/2 <sup>+</sup> ) In $\beta^{+}$ decay.
1182.81 20	$(3/2, 5/2)^+$	$J^{\pi}$ : (7/2 <sup>+</sup> ) In $\beta^+$ decay.
1423.58 16	$(5/2^{-}, 7/2, 9/2^{+})$	
1468.44 6	$(11/2)^+$	$J^{\pi}$ : $(7/2^+, 9/2^+, 11/2^+)$ In $\beta^+$ decay.
1540.42 5	$(9/2)^+$	$J^{\pi}$ : $(7/2^+, 9/2^+)$ In $\beta^+$ decay.
1650.1 10	$(13/2)^+$	$J^{\pi}$ : (7/2,9/2,11/2) In $\beta^+$ decay.
1696.55 8	$(9/2^+)$	$J^{\pi}$ : (7/2 <sup>+</sup> ) In $\beta^{+}$ decay.
1719.10 <i>13</i>	$(15/2)^+$	
1849.71 <i>15</i>	$(7/2, 9/2^+)$	
1854.04 21	$(9/2^+)$	$J^{\pi}$ : (7/2,9/2,11/2) In $\beta^+$ decay.
1911.64 <i>19</i>	(7/2,9/2,11/2)	
2007.15 18	(7/2,9/2)	$J^{\pi}$ : (7/2,9/2,11/2) In $\beta^+$ decay.
2137.68 9	$(7/2^+, 9/2^+, 11/2^+)$	
2145.40 21	(11/2)	$J^{\pi}$ : (7/2,9/2,11/2 <sup>+</sup> ) In $\beta^{+}$ decay.
2171.91 14	$(7/2^+, 9/2^+, 11/2^+)$	
2239.9 5	$(7/2, 9/2, 11/2^+)$	
2263.57 17	$(7/2, 9/2^+)$	
2332.85 21	$(7/2,9/2,11/2^+)$	
2486.35 23	$(7/2^+, 9/2^+, 11/2^+)$	
2601.75 15	$(7/2^+, 9/2^+, 11/2^+)$	
3209.5 4	$(1/2^+, 9/2^+, 11/2^+)$	
3446.2 <i>4</i>	$(1/2^+, 9/2^+, 11/2^+)$	
3394.4 10	(7/2',9/2',11/2')	

<sup>†</sup> From Adopted Levels.

#### $\varepsilon, \beta^+$ radiations

E(decay)	E(level)	Ιβ <sup>+‡</sup>	$I\varepsilon^{\dagger\ddagger}$	Log ft	$I(\varepsilon + \beta^+)^{\ddagger}$	Comments
(1876 8) (2024 8) (2261 8) (2868 8) (2984 8) (3137 8)	3594.4 3446.2 3209.5 2601.75 2486.35 2332.85	0.040 <i>14</i> 0.22 <i>4</i> 0.15 <i>2</i> 2.7 <i>3</i> 0.85 <i>14</i> 0.81 <i>10</i>	0.34 <i>12</i> 1.10 <i>18</i> 0.35 6 1.8 2 0.47 8 0.35 4	5.40 <i>15</i> 4.96 8 5.55 7 5.05 <i>5</i> 5.67 8 5.83 6	0.38 <i>I3</i> 1.32 22 0.50 8 4.5 5 1.32 22 1.16 <i>I4</i>	av E $\beta$ =380.4 36; $\varepsilon$ K=0.774 3; $\varepsilon$ L=0.0974 4; $\varepsilon$ M+=0.02364 9 av E $\beta$ =445.3 36; $\varepsilon$ K=0.719 4; $\varepsilon$ L=0.0904 5; $\varepsilon$ M+=0.02191 11 av E $\beta$ =550.1 36; $\varepsilon$ K=0.613 4; $\varepsilon$ L=0.0768 5; $\varepsilon$ M+=0.01863 12 av E $\beta$ =823.8 37; $\varepsilon$ K=0.348 3; $\varepsilon$ L=0.0435 4; $\varepsilon$ M+=0.01054 9 av E $\beta$ =876.5 37; $\varepsilon$ K=0.310 3; $\varepsilon$ L=0.0387 4; $\varepsilon$ M+=0.00937 8 av E $\beta$ =946.8 37; $\varepsilon$ K=0.2650 22; $\varepsilon$ L=0.0330 3; $\varepsilon$ M+=0.00801
						7

### $^{99}$ Ag $\beta^+$ decay 1981Hu03 (continued)

#### $\epsilon, \beta^+$ radiations (continued)

E(decay)	E(level)	Ιβ <sup>+‡</sup>	$I\varepsilon^{\dagger\ddagger}$	Log <i>ft</i>	$I(\varepsilon + \beta^+)^{\ddagger}$	Comments
(3206 8)	2263.57	1.09 15	0.43 6	5.77 7	1.52 21	av E $\beta$ =978.7 37; $\varepsilon$ K=0.2470 20; $\varepsilon$ L=0.0308 3; $\varepsilon$ M = 0.00746 6
(3230 8)	2239.9	0.27 7	0.11 3	6.39 12	0.38 10	av $E\beta$ =989.6 37; $\varepsilon$ K=0.2412 20; $\varepsilon$ L=0.03007 25;
(3298 8)	2171.91	2.0 2	0.70 8	5.58 5	2.7 3	$\varepsilon$ M+=0.00729 6 av E $\beta$ =1021.0 37; $\varepsilon$ K=0.2253 18; $\varepsilon$ L=0.02808 23; $\varepsilon$ M=0.00890 6
(3325 8)	2145.40	0.94 12	0.32 4	5.93 6	1.26 16	av E $\beta$ =1033.2 37; $\varepsilon$ K=0.2194 18; $\varepsilon$ L=0.02735 22; $\varepsilon$ M+=0.00663 6
(3332 8)	2137.68	2.5 3	0.85 10	5.51 6	3.4 4	av E $\beta$ =1036.8 37; $\varepsilon$ K=0.2178 18; $\varepsilon$ L=0.02714 22; $\varepsilon$ M = 0.00557 6
(3463 8)	2007.15	0.64 9	0.18 2	6.21 6	0.82 11	av $\mathcal{E}\beta$ =1097.2 37; $\varepsilon$ K=0.1915 15; $\varepsilon$ L=0.02385 19;
(3558 8)	1911.64	0.55 10	0.14 3	6.35 9	0.69 13	$\epsilon_{\text{M}+=0.0057.4}$ av E $\beta$ =1141.5 38; $\epsilon_{\text{K}}$ =0.1746 14; $\epsilon_{\text{L}}$ =0.02174 17;
(3616 8)	1854.04	0.40 11	0.10 3	6.53 13	0.50 14	$\epsilon_{\text{M}+=0.005274}$ av E $\beta$ =1168.2 38; $\epsilon_{\text{K}}$ =0.1653 13; $\epsilon_{\text{L}}$ =0.02058 16;
(3620 8)	1849.71	1.1 3	0.27 8	6.08 13	1.4 4	$\epsilon_{\rm EM}$ = 0.00498 4 av E $\beta$ = 1170.3 38; $\epsilon_{\rm K}$ = 0.1646 13; $\epsilon_{\rm L}$ = 0.02049 16;
(3751 8)	1719.10	0.27 6	0.054 12	6.81 10	0.32 7	$\varepsilon M$ +=0.00496 4 av E $\beta$ =1231.1 38; $\varepsilon K$ =0.1457 11; $\varepsilon L$ =0.01813 14;
(3773 8)	1696.55	6.3 7	1.2 1	5.45 5	7.5 8	$\epsilon M +=0.00439$ 4 av $E\beta = 1241.6$ 38; $\epsilon K = 0.1427$ 11; $\epsilon L = 0.01775$ 14;
(3820 8)	1650.1	0.74 8	0.14 2	6.41 5	0.88 10	$\varepsilon M + = 0.00430 4$ av E $\beta = 1263.3 38$ ; $\varepsilon K = 0.1367 10$ ; $\varepsilon L = 0.01701 13$ ;
(3930 8)	1540.42	5.4 7	0.90 11	5.63 6	6.3 8	$\varepsilon M +=0.00412$ 3 av E $\beta$ =1314.6 38; $\varepsilon K$ =0.1239 9; $\varepsilon L$ =0.01541 11;
(4002 8)	1468.44	3.6 5	0.56 8	5.85 7	4.2 6	$\varepsilon M$ +=0.00373 3 av E $\beta$ =1348.3 38; $\varepsilon K$ =0.1163 9; $\varepsilon L$ =0.01446 11; $\varepsilon M$ +=0.003502 25
(4046 <sup>#</sup> 8)	1423.58	< 0.3	< 0.05	>6.9	<0.4	av E $\beta$ =1369.4 38; $\varepsilon$ K=0.1118 8; $\varepsilon$ L=0.01390 10;
(4287 8)	1182.81	1.3 3	0.15 3	6.49 10	1.4 3	$\varepsilon M$ +=0.003367 24 av E $\beta$ =1482.6 38; $\varepsilon K$ =0.0913 6; $\varepsilon L$ =0.01134 8;
(4367 8)	1102.78	4.5 5	0.49 5	5.98 5	5.0 5	$\varepsilon M$ +=0.002/4/ 19 av E $\beta$ =1520.4 38; $\varepsilon K$ =0.0855 6; $\varepsilon L$ =0.01063 7;
(4400 8)	1069.84	4.7 6	0.50 7	5.98 6	5.2 7	$\varepsilon M$ +=0.0025/3 1/ av E $\beta$ =1535.9 38; $\varepsilon K$ =0.0833 6; $\varepsilon L$ =0.01035 7;
(4638 8)	832.45	6.7 9	0.58 8	5.96 6	7.3 10	$\varepsilon M$ +=0.002506 <i>1</i> / av E $\beta$ =1648.2 <i>38</i> ; $\varepsilon K$ =0.0692 <i>5</i> ; $\varepsilon L$ =0.00860 <i>6</i> ;
(4654 8)	816.05	1.9 6	0.17 6	6.51 15	2.1 7	$\varepsilon M$ +=0.002082 13 av E $\beta$ =1656.0 38; $\varepsilon K$ =0.0684 5; $\varepsilon L$ =0.00849 6;
(4655 8)	815.31	3.6 13	0.31 11	6.24 16	3.9 14	$\varepsilon M$ +=0.002056 13 av E $\beta$ =1656.4 38; $\varepsilon K$ =0.0683 5; $\varepsilon L$ =0.00849 6;
(4783 8)	686.93	1.9 <i>3</i>	0.15 2	6.58 7	2.1 3	$\varepsilon M$ +=0.002055 <i>13</i> av E $\beta$ =1717.3 <i>38</i> ; $\varepsilon K$ =0.0621 <i>4</i> ; $\varepsilon L$ =0.00771 <i>5</i> ;
(5006 <sup>#</sup> 8)	463.77	< 0.2	< 0.01	>7.7	< 0.2	$\varepsilon M$ +=0.001867 <i>11</i> av E $\beta$ =1823.4 <i>39</i> ; $\varepsilon K$ =0.0529 <i>3</i> ; $\varepsilon L$ =0.00657 <i>4</i> ;
						$\varepsilon M$ +=0.001590 9 I( $\varepsilon + \beta^+$ ): 0.0 4 from intensity balance.
(5206 8)	264.382	29 3	1.7 2	5.61 5	31 3	av Eβ=1918.5 39; εK=0.04618 25; εL=0.00573 3; εM+=0.001387 8
(5250 <sup>#</sup> 8)	219.79	<0.6	<0.2	>10.7 <sup>2</sup> <i>u</i>	<0.8	av Eβ=1952.3 38; εK=0.1682 9; εL=0.02123 12; εM+=0.00515 3 Additional information 1.

<sup>†</sup> The  $(\varepsilon + \beta^+)$  feeding to the g.s. was assumed to be negligible since transition is second forbidden. Feedings to excited states are

Continued on next page (footnotes at end of table)

#### $^{99}\mathrm{Ag}\,\beta^{+}$ decay 1981Hu03 (continued)

 $\varepsilon, \beta^+$  radiations (continued)

deduced from intensity balance.
<sup>‡</sup> Absolute intensity per 100 decays.
<sup>#</sup> Existence of this branch is questionable.

# $\gamma(^{99}\text{Pd})$

Iy normalization: From  $\Sigma$  (I( $\gamma$ +ce)) to gs=100. The ( $\varepsilon$ + $\beta$ <sup>+</sup>) feeding to the g.s. was assumed to be negligible since transition is second forbidden.

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Eγ	$I_{\gamma}^{b}$	$E_i$ (level)	$\mathbf{J}_i^{\pi}$	$E_f$	$\mathrm{J}_f^\pi$	Mult. <sup>†</sup>	$\alpha^{\dagger a}$	Comments
219.9 4	6.3 2	219.79	$(3/2)^+$	0.0	$(5/2)^+$	[M1,E2]	0.065 21	%Iy=4.0 6
					. , ,			$\alpha(K)=0.055\ 17;\ \alpha(L)=0.0078\ 32;\ \alpha(M)=0.00148\ 61$
								$\alpha(N)=2.43\times10^{-4}96$
243.7 2	0.6 1	463.77	$(3/2^+)$	219.79	$(3/2)^+$			%Iy=0.38 8
264.46 <i>3</i>	100	264.382	$(7/2)^+$	0.0	$(5/2)^+$	M1	0.0273	%Iγ=63 5
								$\alpha(K)=0.0239 4; \alpha(L)=0.00286 4; \alpha(M)=0.000538 8$
								$\alpha(N) = 9.06 \times 10^{-5} \ 13$
287.65 7	0.8 2	1102.78	(9/2)+	815.31	$(7/2)^+$			%Iγ=0.51 15
326.0 2	0.6 1	2332.85	$(7/2, 9/2, 11/2^+)$	2007.15	(7/2,9/2)			%Iy=0.38 8
352.4 1	1.0 2	816.05	$(7/2^+)$	463.77	$(3/2^+)$			$\%$ I $\gamma$ =0.63 15
371.3 3	0.3 1	1911.64	(7/2, 9/2, 11/2)	1540.42	$(9/2)^+$			$\%1\gamma = 0.197$
385.6 2	0.8 2	1854.04	$(9/2^+)$	1468.44	$(11/2)^+$			$\%1\gamma = 0.51$ 15
*391.7 3	0.5 1	1460.44	(11/0)+	10/0 04	(11/2)+		0.0100.11	$\%1\gamma = 0.32 8$
398.6 1	1.3 1	1468.44	$(11/2)^{+}$	1069.84	$(11/2)^{+}$	[M1,E2]	0.0108 11	$\%_{1\gamma}=0.82$ 13
								$\alpha(\mathbf{K})=0.0093, 9; \alpha(\mathbf{L})=0.00117, 18; \alpha(\mathbf{M})=0.00022, 4$
X41665	0 4 1							$\alpha(N)=3.7\times10^{-5}6$
x416.6 5	0.4 I							$\%1\gamma = 0.25 8$
*422.4 5	0.4 I	1540.42	$(0/2)^{+}$	1100 79	$(0/2)^{+}$			$\%1\gamma = 0.25 8$
438.5 2	0.5 I	1540.42	$(9/2)^{1}$	1102.78	$(9/2)^{+}$			$\%1\gamma=0.52$ 8
443.1 3	0.4 I 172	1911.04	(1/2,9/2,11/2) $(2/2^+)$	1408.44	(11/2) $(5/2)^+$			$\%1\gamma = 0.25$ 8
403.757	1.72	403.77	(5/2) $(5/2^+)$	210.70	(3/2) $(3/2)^+$			701y = 1.0819
488 1 3	0.92	1011 64	(3/2) (7/2) 0/2 11/2)	1/23 58	(5/2) $(5/2^{-} 7/2 0/2^{+})$			$\sqrt{1} = 0.57 = 15$
551 1 1	0.41	815 31	$(7/2)^+$	264 382	$(3/2, 7/2, 7/2)^+$			%Iy=0.25 0 %Iy=0.38 8
568 20 4	592	832.45	$(9/2)^+$	264 382	$(7/2)^+$			$%I_{V} = 3.7.5$
596.2 1	2.3 8	816.05	$(7/2^+)$	219.79	$(3/2)^+$			%Iy=1.5 6
<sup>x</sup> 602.9 1	1.1 3		(.1- )		(-/-)			$\%$ I $\gamma$ =0.70 21
$x_{610}6^{\ddagger}3$	122							%I <sub>2</sub> =0.76.16
636.0.1	2.2.2	1468 44	$(11/2)^+$	832.45	$(9/2)^+$			$%I_{\nu} = 1.39.23$
649.26 6	0.5 1	1719.10	$(15/2)^+$	1069.84	$(11/2)^+$			%1/2 = 0.32 8
653.2 1	1.3 7	1468.44	$(11/2)^+$	815.31	$(7/2)^+$			$\%$ I $\gamma$ =0.8 5
686.99 5	5.0 3	686.93	$(5/2^+)$	0.0	$(5/2)^+$			$\%$ I $\gamma$ =3.2 5
708.0 1	0.96 16	1540.42	$(9/2)^+$	832.45	$(9/2)^+$			$\%$ I $\gamma$ =0.61 13
725.4 2	1.2 1	1540.42	$(9/2)^+$	815.31	$(7/2)^+$			$\%$ I $\gamma$ =0.76 12
805.6 5	19.3 6	1069.84	$(11/2)^+$	264.382	$(7/2)^+$			%Iγ=12.2 <i>17</i>
815.63 10	10.5 20	815.31	$(7/2)^+$	0.0	$(5/2)^+$			%Iy=6.6 15
816.1 10	<2	816.05	$(7/2^+)$	0.0	$(5/2)^+$			%Iy=0.6 7
								$I_{\gamma}$ : from coincidence spectra.

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## $\gamma(^{99}\text{Pd})$ (continued)

Eγ	$I_{\gamma}^{b}$	E <sub>i</sub> (level)	$\mathrm{J}_i^\pi$	$E_f$	${f J}_f^\pi$	Comments
817.6 10	1.4 1	1650.1	$(13/2)^+$	832.45	(9/2)+	$\%$ I $\gamma$ =0.89 <i>14</i> L <sub>2</sub> : from coincidence spectra.
832.29 4	20.7 8	832.45	$(9/2)^+$	0.0	$(5/2)^+$	%Iy=13.1 <i>18</i>
838.47 8	3.2 2	1102.78	$(9/2)^+$	264.382	$(7/2)^+$	%Iy=2.0 3
853.73 9	0.80 7	1540.42	$(9/2)^+$	686.93	$(5/2^+)$	%Iy=0.51 8
864.0 1	6.2 6	1696.55	$(9/2^+)$	832.45	$(9/2)^+$	%Iγ=3.9 7
881.1 <i>3</i>	0.34 8	1696.55	$(9/2^+)$	815.31	$(7/2)^+$	%Iy=0.22 6
908.4 4	0.5 1	2332.85	$(7/2, 9/2, 11/2^+)$	1423.58	$(5/2^{-}, 7/2, 9/2^{+})$	%Iy=0.32 8
<sup>x</sup> 911.4 <i>1</i>	0.3 1					%Iγ=0.19 7
954.7 <i>3</i>	0.14 5	2137.68	$(7/2^+, 9/2^+, 11/2^+)$	1182.81	$(3/2,5/2)^+$	%Iy=0.09 4
963.2 <i>3</i>	1.6 2	1182.81	$(3/2,5/2)^+$	219.79	$(3/2)^+$	%Iγ=1.01 <i>19</i>
1010.1 2	0.8 1	1696.55	$(9/2^+)$	686.93	$(5/2^+)$	%Iy=0.51 10
1034.8 2	0.6 1	2137.68	$(7/2^+, 9/2^+, 11/2^+)$	1102.78	$(9/2)^+$	%Iy=0.38 8
<sup>x</sup> 1068.8 <sup>#</sup> 3	0.8 1					%Iy=0.51 <i>10</i>
1076.3 🗴 1	0.8 1	1540.42	$(9/2)^+$	463.77	$(3/2^+)$	%Iγ=0.51 10
1102.60 7	5.0 2	1102.78	$(9/2)^+$	0.0	$(5/2)^+$	%Iy=3.2 5
1158.9 2	0.8 2	1423.58	$(5/2^-, 7/2, 9/2^+)$	264.382	$(7/2)^+$	%Iγ=0.51 <i>15</i>
1175.0 2	1.9 <i>1</i>	2007.15	(7/2, 9/2)	832.45	$(9/2)^+$	%Iγ=1.20 <i>17</i>
1182.2 4	0.8 <i>3</i>	1182.81	$(3/2, 5/2)^+$	0.0	$(5/2)^+$	%Iγ=0.51 20
1203.98 8	3.1 2	1468.44	$(11/2)^+$	264.382	$(7/2)^+$	%Iy=2.0 3
1233.1 <sup>&amp;</sup> 2	0.5 1	1696.55	$(9/2^+)$	463.77	$(3/2^+)$	%Iy=0.32 8
<sup>x</sup> 1261.9 5	0.8 3					%Iγ=0.51 20
1275.8 1	3.8 9	1540.42	$(9/2)^+$	264.382	$(7/2)^+$	$\%$ I $\gamma$ =2.4 7
*1281.5 5	1.0 3				(0 ( <b>0</b> ) ±	$\%1\gamma = 0.63\ 21$
1304.9 2	1.0 4	2137.68	(//2',9/2',11/2')	832.45	(9/2)	$\% 1\gamma = 0.6 3$ E <sub><math>\gamma</math></sub> : placed between 2137.8-keV and 832.4-keV levels although not in coincidence with 832 keV transition
1339 3 2	1 35 15	2171 91	(7/2+9/2+11/2+)	832 45	$(9/2)^+$	%Iv=0.85.15
1356.1.2	107	2171.91	$(7/2^+ 9/2^+ 11/2^+)$	816.05	$(7/2^+)$	%Iy=0.63 13 %Iy=0.63 11
x1368.6.3	0.50 15		(1)= ,2)= ,11/2 )	010100	('/= ')	%Iv=0.32.11
<sup>x</sup> 1402.8 2	0.23 5					$\%$ I $\gamma = 0.15$ 4
1416.5 2	2.1 3	2486.35	$(7/2^+, 9/2^+, 11/2^+)$	1069.84	$(11/2)^+$	%Iv=1.3 3
1423.9 4	0.4 2	1423.58	$(5/2^{-}, 7/2, 9/2^{+})$	0.0	$(5/2)^+$	%Iy=0.25 <i>13</i>
1432.3 2	2.4 2	1696.55	$(9/2^+)$	264.382	$(7/2)^+$	%Iy=1.52 24
1448.3 2	1.3 2	2263.57	$(7/2, 9/2^+)$	815.31	$(7/2)^+$	%Iy=0.82 17
<sup>x</sup> 1452.3 3	0.7 2					%Iy=0.44 14
1476.3 <sup>&amp;</sup> 3	1.0 3	1696.55	(9/2+)	219.79	$(3/2)^+$	%Iy=0.63 21
<sup>x</sup> 1498.7 <sup>@</sup> 5	0.8 2					%Iy=0.51 15
1531.9 <i>1</i>	7.1 5	2601.75	$(7/2^+, 9/2^+, 11/2^+)$	1069.84	$(11/2)^+$	%Iy=4.5 7
1540.4 1	2.2 3	1540.42	$(9/2)^+$	0.0	$(5/2)^+$	%Iy=1.4 3
<sup>x</sup> 1550.7 3	0.6 2					%Iy=0.38 14
1576.4 3	1.00 15	2263.57	$(7/2, 9/2^+)$	686.93	$(5/2^+)$	%Iy=0.63 <i>13</i>

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From ENSDF

 $^{99}_{46}\mathrm{Pd}_{53}$ -5

					$^{99}$ Ag $\beta^+$	decay	1981Hu03 (continued)	
						γ( <sup>99</sup> Ρα	d) (continued)	
Eγ	$I_{\gamma}^{b}$	E <sub>i</sub> (level)	$\mathrm{J}_i^\pi$	$E_f$	${ m J}_f^\pi$			Comments
1585.3 2	1.7 6	1849.71	(7/2,9/2+)	264.382	$(7/2)^+$	%Iγ=1.	1 4	
X150466	0 4 1					$I_{\gamma}$ : from	a coincidence spectra.	
x1612 7 2	0.4 I					$\%1\gamma=0.2$	25 8 70 11	
x1642.5.6	1.1 I 0.0.3					$\sqrt[70]{\gamma=0}$	70 11 57 21	
x1682.0.2	0.95					$\sqrt{1} = 0.5$	38 1/	
1695.9.2	0.60.15	1696 55	$(9/2^+)$	0.0	$(5/2)^+$	$\%I_{\gamma=0.5}$	38 11	
x1725.9.5	0.0015	1070.55	()/2)	0.0	(3/2)	$\%I_{\nu=0}$	25.8	
<sup>x</sup> 1739.3 4	0.5 1					$\%I\gamma = 0.3$	32.8	
<sup>x</sup> 1796.7 4	0.8 2					$\%I\gamma = 0.5$	51 15	
1849.7 2	0.60 15	1849.71	$(7/2,9/2^+)$	0.0	$(5/2)^+$	$\%I\gamma=0.3$	38 11	
1873.4 <i>1</i>	3.7 2	2137.68	$(7/2^+, 9/2^+, 11/2^+)$	264.382	$(7/2)^+$	$\%$ I $\gamma$ =2.3	3 4	
1881.0 2	2.0 2	2145.40	(11/2)	264.382	$(7/2)^+$	$\%$ I $\gamma$ =1.2	27 21	
1907.1 4	1.9 <i>1</i>	2171.91	$(7/2^+, 9/2^+, 11/2^+)$	264.382	$(7/2)^+$	$\%$ I $\gamma$ =1.2	20 17	
1975.5 5	0.60 15	2239.9	$(7/2, 9/2, 11/2^+)$	264.382	$(7/2)^+$	$\%$ I $\gamma$ =0.3	38 11	
<sup>x</sup> 2010.5 7	0.20 7					$\%$ I $\gamma$ =0.	13 5	
<sup>x</sup> 2028.8 4	0.17 7					%Iγ=0.	11 5	
2068.1 4	0.74 8	2332.85	$(7/2, 9/2, 11/2^+)$	264.382	$(7/2)^+$	%Iγ=0.4	47 8	
x2204.6 3	0.9 1					$\%$ I $\gamma$ =0.5	57 10	
<sup>x</sup> 2206.0 3	0.3 1					$%I\gamma=0.1$	19 7	
2264.0 6	0.11 7	2263.57	$(7/2, 9/2^+)$	0.0	$(5/2)^+$	%Iγ=0.0	07 5	
<sup>x</sup> 2305.2 3	1.0 1					$\%$ I $\gamma$ =0.0	63 11	
x2322.2 4	0.5 1					$\%$ I $\gamma$ =0.3	32.8	
x2340.8 6	0.4 1					$\%$ I $\gamma$ =0.2	25.8	
x2454.0 9	0.24 5					$\%$ l $\gamma$ =0.1	15 4	
x2537.2 5	0.4 1					$\%1\gamma=0.2$	25.8	
x2629.79	0.5 2					$\%1\gamma=0.1$	32 14	
×2708.5 4	1.5 1					$\%1\gamma=0.8$	82 13	
x2820.8.0	0.3 1					$\%1\gamma=0$	52 0 55 11	
2020.09	0.4010	3200 5	$(7/2^+ 0/2^+ 11/2^+)$	264 382	$(7/2)^+$	$\sqrt{2} \sqrt{2} \sqrt{2} \sqrt{2} \sqrt{2} \sqrt{2} \sqrt{2} \sqrt{2} $	51 10	
3181 8 4	213	3446.2	$(7/2^+, 9/2^+, 11/2^+)$	264 382	$(7/2)^+$	$\%_{1\gamma=0}$	3 3	
3330 1	0.6.2	3594.4	$(7/2^+ 9/2^+ 11/2^+)$	264 382	$(7/2)^+$	$\%I_{\gamma=0}$	38 14	
x3542.8.7	0.8.2	5571.1	(12,72,11/2)	201.502	(12)	$\%I_{\gamma=0.5}$	51 15	
2012:07	0.0 2					,01, 0.		

<sup>†</sup> From the adopted gammas. <sup>‡</sup> Transition placed by authors between 832.42 and 219.91 levels but there is an energy-sum mismatch. <sup>#</sup> Note that this line can be placed between 2171.93 and 1102.78 levels. <sup>@</sup> This transition can be placed between 2601.75 and 1102.78 levels. <sup>&</sup> Placement not consistent with  $\Delta(J^{\pi})$ .

 $^{99}\mathrm{Ag}\,\beta^{+}$  decay 1981Hu03 (continued)

 $\gamma(^{99}\text{Pd})$  (continued)

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- <sup>*a*</sup> Additional information 2. <sup>*b*</sup> For absolute intensity per 100 decays, multiply by 0.63 9. <sup>*x*</sup>  $\gamma$  ray not placed in level scheme.

<sup>99</sup><sub>46</sub>Pd<sub>53</sub>-8

#### $^{99}$ Ag $\beta^+$ decay 1981Hu03



<sup>99</sup><sub>46</sub>Pd<sub>53</sub>

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#### $^{99}\mathrm{Ag}\,\beta^{+}\,\mathrm{decay}$ 1981Hu03

# Decay Scheme (continued)

Intensities:  $I_{(\gamma+ce)}$  per 100 parent decays



<sup>99</sup><sub>46</sub>Pd<sub>53</sub>

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### <sup>99</sup>Ag $\beta^+$ decay 1981Hu03

#### Decay Scheme (continued)

Intensities:  $I_{(\gamma+ce)}$  per 100 parent decays



Legend



<sup>99</sup><sub>46</sub>Pd<sub>53</sub>