		Tune	Aut	His	story	Citation	Literature Cutoff Date
		Type Full Evaluation	Aut C. Gürdəl and	E G. Kondey	NDS	113 1315 (2012)	
$Q(\beta^{-})=2891.0$ Note: Current $Q(\beta^{-})=2892.9$	13; S evalua 15; S	(n)=6809.19 <i>10</i> ; S(ation has used the f (n)=6809.20 <i>10</i> ; S(p)=7140.1 <i>14</i> ; Q pollowing Q recor p)=7143.0 <i>20</i> ; Q	$Q(\alpha) = -3521 \ 6$ rd. $Q(\alpha) = -3522 \ 6$	2012V 2011A	Wa38 AuZZ	1-Aug-2011
				¹¹⁰ Ag	Levels		
				Cross Deferrers		TE) Elece	
				Closs Relefence		2F) Flags	
		I I C	$\begin{array}{c} 110 \text{ Ag IT d} \\ 109 \text{ Ag}(n,\gamma) \\ 109 \text{ Ag}(n,\gamma) \end{array}$	ecay (249.83 d) E=thermal E=5.2 eV res	D E F	109 Ag(d,p) 110 Pd(p,n γ), 109 A 176 Yb(28 Si,X γ)	$Ag(d,p\gamma)$
E(level) [†]	\mathbf{J}^{π}	$T_{1/2}^{\ddagger}$ X	REF			Comment	S
0.0	1+	24.56 s 11 AB	C EF $\%\beta^-=99$ $\%\varepsilon$: Fro J^{π} : J=1 ^{110}Ag $T_{1/2}$: W (1962 Other 22 s (μ : 2.711 resona Q: 0.24 configur Gallaj	9.70 6; $\% \varepsilon = 0.30$ from atomic besises of the second se	am mag 52Ka07) of 24.7 72 (1957) 10), 24 4R in 1 ⁹ in 1969 by mea $] \otimes v 5/2[\cdot]$ ki rule f	gnetic resonance te) and μ . 7 s 7 (1970Va08), 2 7Se19), 24 s 2 (192 s (1944Fl01), 23 s 976Wi03). Other:2 Cu09). Issuring the spin-latt 413] (for prolate d favors $J^{\pi} = 1^+$ assig	chnique (1969Cu09); π =+ from 24.93 s 22 (1967Yu01), 24.42 s 14 54Bo39) and 24.5 s 3 (1946Hi06). s (1938Re04), 22 s (1938Po03) and .84 5 (using atomic beam magnetic tice relaxation time (1981Do17). eformation), the gnment.
1.112 16	2-	660 ns 40 AB	DEF Addition E(level) 109 Ag not re (1979 J^{π} : Fror $T_{1/2}$: Fr	al information : From a least-seg(n, γ) E=therma eported reported Bo41) and 3.18 n L(d,p)=2; 1.11 rom ce-inner she ration: $\pi 1/2[301]$	1. quares 1 l. $\Delta E\gamma$ in 1973 keV (1 12γ E1 ell vacan] $\otimes v5/2[$	fit to $E\gamma$ pairs that are from 1975Cl03 5Cl03. Others: 1.23 968El03). to 1 ⁺ . ncy delayed coincid 402] (for prolate d	populate this level and g.s. in 8, but estimated by the evaluators if 8 keV <i>10</i> (1970Ka05), 1.113 keV dences (1975Cl03). eformation).
117.59 <i>5</i> 118.719 <i>10</i>	6 ⁺ 3 ⁺	249.83 d <i>4</i> A 36.6 ns 6 B	EF $\%\beta^-=98$ $\mu=+3.58$ %IT: Fr J^{π} : Fron $T_{1/2}$: W 249.7 270 d μ : Weig and + Q: +1.4 configur E $\mu=3.79$ J^{π} : 117. (1976)	8.67 8; %IT=1.3 88 3 om Ti(116 γ)=10 n atomic-beam t 'eighted average 4 d 5 (1980Ho1 l (1950Gu54) an hted average of -3.587 4 (from a 4 10 (1984Be53) ration: π 7/2[413] 6 607 γ E1(+M2) Ha57); π =+ fro Pa 47)	33 8 00 - Ti techniqu of 249 7), 249 td 225 c +3.589 tomic-t b). $] \otimes v5/2[$. to 2 ⁻ ; J m comp	(658γ+1476γ+178 the (1958Ew84); 11 .950 d 24 (2002Un d 3 (1962Ni01) an d 20 (1938Li07). D 4 (NMR on brute beam magnetic reso 413] (for prolate d U=3 from γ(θ) and parison of experime	3γ). 6.48γ M4 to 2 ⁻ . 02), 249.790 d <i>16</i> (1983Wa26) ad 252.5 d <i>15</i> (1957Ge07). Others: force oriented nuclei in 1992Hu09) ponance technique in 1967Sc04). eformation). γ -ray excitation function ental and calculated g-factors
			T _{1/2} : W coinci metho	Veighted average idence method i od in 1974Be47)	of 36.7 n <mark>19761</mark>), 36.5 1	7 ns 7 (from 117.60 Ha57), 37 ns 5 (usi ns 20, 37 ns 4, 37	$07\gamma(t)$ pulsed-beam delayed ing pulsed-beam delayed coincidence ns 2 (using delayed coincidence

Continued on next page (footnotes at end of table)

¹¹⁰Ag Levels (continued)

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	E(level) [†]	\mathbf{J}^{π}	$T_{1/2}$ ‡	XREF	Comments
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					technique in 1971Gu05, 1967Es03 and 1963Be51, respectively) and 33 ns 3
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					(1967WiZZ as quoted in 2000De11).
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					μ : Weighted average of 3.87 5 (1974Be47) (reevaluated value using adopted
$ \begin{array}{cccccc} (1970 \text{Hz}^3), \ (revoluted value using adopted frame, \mu=3.73 4 using \\ T_{12}=36.75, Tz, Ti (970 \text{Hz}^3), \ (revoluted frame pulse-deman time-differential perturbed angular correlation technique). \\ 198,689 / 0 & 2^+ & 0.08 \text{ ns} & \textbf{B} & \textbf{E} & F; 198,069 \text{ M}(+\text{E2}) to 1^+, \\ 237,069 / 1 & (1,2,3^+) & 0.43 \text{ ns} & \textbf{B} & \textbf{E} & \textbf{E} & F; 198,069 \text{ M}(+\text{E2}) to 1^+, \\ 242.09^{\frac{4}{3}} 21 & (1,2,3^+) & 0.43 \text{ ns} & \textbf{B} & \textbf{B} & \textbf{E} & F; 198,069 \text{ M}(+\text{E2}) to 1^+, \\ 242.09^{\frac{4}{3}} 21 & (6^-) & \textbf{F} & \textbf{F}; 124.57 \text{ to } 6^+; \text{ band assignment} (2022 \text{Pol}1), \\ 242.09^{\frac{4}{3}} 21 & (6^-) & \textbf{F} & \textbf{F}; 124.57 \text{ to } 6^+; \text{ band assignment} (2022 \text{Pol}1), \\ 242.09^{\frac{4}{3}} 2 & (7^+) & \textbf{F} & \textbf{F}; 124.57 \text{ to } 6^+; \text{ band assignment} (2022 \text{Pol}1), \\ 267.290 & 1^+, 2^- & <0.08 \text{ ns} & \textbf{B} & \textbf{E} & \textbf{F}; 168.552 \text{ M}(1422) \text{ to } 2^+; 267.22 \text{ (MI) to } 1^+, \\ 269.8^{\frac{4}{3}} 4 & (7^+) & \textbf{F} & \textbf{F}; 168.552 \text{ M}(1422) \text{ to } 2^+; 267.22 \text{ (MI) to } 1^+, \\ 293.3+x^{\frac{4}{3}} & \textbf{B} & \textbf{E} & \textbf{F}; 105.824 \text{ M} \text{ to } 2^+; 304.538 \text{ to } 1^+, \\ 304.525 / 0 & 1^+, 2^+, 3^- & \text{col} \text{ ns} & \textbf{B} & \textbf{E} & \textbf{F}; 105.824 \text{ M} \text{ to } 2^+; 304.538 \text{ to } 1^+, \\ 304.525 / 0 & 1^+, 2^+, 3^- & \text{col} \text{ ns} & \textbf{B} & \textbf{E} & \textbf{F}; 105.824 \text{ M} \text{ to } 2^+; 304.538 \text{ to } 1^+, \\ 312.07 / 2 & -0.04 \text{ ns} & \textbf{B} & \textbf{D} & \textbf{XREF}; 1037), \\ 312.07 / 2 & -0.04 \text{ ns} & \textbf{B} & \textbf{D} & \textbf{XREF}; 1037), \\ 312.07 / 2 & -0.24 \text{ ns} & \textbf{B} & \textbf{D} & \textbf{XREF}; 1037), \\ 312.07 / 2 & -0.04 \text{ ns} & \textbf{B} & \textbf{D} & \textbf{XREF}; 1037), \\ 411.973 24 & (1^+, 2.3^+) & \text{col} \text{ ns} & \textbf{B} & \textbf{E} & F^+; 105.220 \text{ to } 1^+, \\ 114.972 24 & (1^+, 2.3^+) & \text{col} \text{ ns} & \textbf{B} & \textbf{E} & \textbf{F}; 123.766 \text{ to } 1^+, \\ 424.721 / 16 & (1,2,3^+) & \text{col} \text{ ns} & \textbf{B} & \textbf{E} & F^+; 103.297 \text{ to } 1^+, \\ 424.31 x^6 / 20 & (9^-) & \textbf{K} & \textbf{E} & \textbf{E} & F^+; 123.50 \text{ to } 1^-, \\ F^+; 14.4(p_1)=0.373 \text{ koy } 10^+, \\ 425.533 & (1^+, 2.3^+) & \text{col} \text{ ns} & \textbf{B} & \textbf{E} & F^+; 127.23 \text{ soy } 10^+, \\ 426.440 x e$					lifetime. μ =3.83 5 using T _{1/2} =37 ns 5 in 1974Be47) and 3.74 4
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					(1976Ha57), (reevaluated value using adopted lifetime. μ =3.73 4 using
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					$T_{1/2}$ =36.7 ns 7 in 1976Ha57) (both μ , deduced from pulsed-beam
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					time-differential perturbed angular correlation technique).
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	191.622 12	3+		ΒE	J^{π} : 191.2 γ (E2) to 1 ⁺ ; 72.903 γ M1 to 3 ⁺ .
236.859 /2 17 - < 0.24 ns B d XREF: d(235). JF: L(d,p)=0: 235.757 M1 to 2 ⁻ . 237.069 /1 (1,2,3 ⁺) 0.43 ns 8 B dE F. KeFF: d(235). JF: 235.947 to 2 ⁻ ; 237.057 to 1 ⁺ . 242.09 ⁴ 21 (6 ⁻) F J ⁻ : 124.57 to 6 ⁺ ; band assignment (2002Po11). 242.09+4 ⁽⁶⁾ (7 ⁻) F J ⁻ : Assigned as band head in 2002Po11. 267.229 /0 1 ⁺ .2 ⁺ < < 0.08 ns B E J ⁻ : (6.85527 M1(-E2) to 2 ⁺ ; 267.227 (M1) to 1 ⁺ . 269 ⁽⁶⁾ 4 1 ⁻ .2 ⁻ .3 ⁻ D J ⁻ : L(d,p)=2. 271.470 /3 2 ⁺ .3 ⁺ .4 ⁺ B E J ⁻ : 79.8477 to 3 ⁺ ; 152.7557 M1(+E2) to 3 ⁺ . 232.34x ⁴ (8 ⁻) F Additional information 2. J ⁺ : 51.27 to (7 ⁻); band member. 302.14 (1 ⁺ .2,3 ⁺) F Additional information 2. J ⁺ : 51.27 to (7 ⁻); band member. 302.14 (1 ⁺ .2,3 ⁺) C = D F : L(d,p)=6; 337.807 to 2 ⁻ ; 338.920 to 1 ⁺ . 303.8960 /4 0 ⁻ ,1 ⁻ < <0.04 ns B C E J ⁻ : 105.8024 M1 to 2 ⁺ ; 304.5387 to 1 ⁺ . 312.07 /2 1 ⁻ .2 ⁻ < <0.04 ns B CD E XREF: C(380)C(378). J ⁺ : L(d,p)=6; 337.807 to 1 ⁺ . 312.07 /2 1 ⁻ .2 ⁻ < <0.04 ns B CD E XREF: C(380)C(378). J ⁺ : L(d,p)=2; 381.207 to 1 ⁺ . 411.973 24 (1 ⁺ .2,3 ⁺) B J ⁻ : 293.267 to 3 ⁺ ; 411.967 to 1 ⁺ . 424.721 /6 (1.2,3 ⁺) < C = M F J ⁺ : 275.237 to 3 ⁺ . 432.376 /5 (2 ⁻) <0.08 ns 6 B J ⁺ : 275.237 to 3 ⁺ . 432.376 /5 (2 ⁻) <0.08 ns 6 B J ⁺ : 275.237 to 3 ⁺ . 446.885 /2 (1 ⁺ .2,3 ⁺) B J ⁺ : 270.157 to 2 ⁺ : 350.127 to 3 ⁺ . 411.239 /9 (1.2,3) 0.22 ns 5 B J ⁺ : 270.157 to 2 ⁺ : 350.127 to 3 ⁺ . 424.71 to (1 ⁺ .2,3 ⁺) < B J ⁺ : 275.547 to 3 ⁺ . 448.80 /2 (1 ⁺ .2,3 ⁺) < C XREF: (d48). J ⁺ : 127.547 to 2 ⁺ . 484. ⁶⁴ 4 0 ⁻ ,1 ⁻ CD XREF: (d48). J ⁺ : 186.77 to 1 ⁻ . 484. ⁶⁴ 4 0 ⁻ ,1 ⁻ CD XREF: (d48). J ⁺ : 186.77 to 1 ⁻ . 484. ⁶⁴ 4 0 ⁻ ,1 ⁻ CD XREF: (d48). J ⁺ : 186.77 to 1 ⁻ . 484. ⁶⁴ 4 0 ⁻ ,1 ⁻ CD XREF: (d48). J ⁺ : 186.77 to 1 ⁻ . 484. ⁶⁴ 4 0 ⁻ ,1 ⁻ CD XREF: (d48). J ⁺ : 186.77 to 1 ⁻ . 484. ⁶⁴ 4 0 ⁻ ,1 ⁻ CD XREF: (d48). J ⁺ : 186.77 to 1 ⁻ . 485.857 1/7 (1.2,3 ⁻) <0.08 ns B C J ⁺ : 186.77 to 1 ⁻ . 486.85 1 ⁻ (1.2,3 ⁻) <0.08 ns B C J ⁺ : 186.77 to 1 ⁻ . 487.92.97 to 3 ⁺	198.689 <i>10</i>	2+	<0.08 ns	ΒE	J^{π} : 198.69 γ M1(+E2) to 1 ⁺ .
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	236.859 12	1-	<0.24 ns	Βd	XREF: d(235).
237.069 <i>I</i> 1 (1,2,3 ⁺) 0.43 ns <i>B</i> b f XREF: d(235). J ⁺ : 235.94y to 2 ⁺ : 237.05y to 1 ⁺ . 242.09 [±] 21 (6 ⁻) F J ⁺ : 124.5y to 6 ⁺ ; band assignment (2002Po11). 242.09 [±] 4 (7 ⁻) F J ⁺ : 124.5y to 6 ⁺ ; band assignment (2002Po11). 269 ^{6,4} 1 ⁻ , 2 ⁻ , 3 ⁻ D J ⁺ : L(d,p)=2. 271.470 <i>I</i> 3 2 ⁺ , 3 ⁺ , 4 ⁺ B E J ⁺ : 7.98.47y to 3 ⁺ ; 152.755y M1(+E2) to 3 ⁺ . 293.3+x ⁴ 4 (8 ⁺) F Additional information 2. <i>J</i> ⁺ : 51.2y to (7 ⁻); band member. 302.14 (1 ⁺ , 2, 3 ⁺) F Additional information 2. <i>J</i> ⁺ : 51.2y to (7 ⁻); band member. 303.89 (ol 10 ⁻ , 1 ⁻ <0.06 ns B E J ⁺ : 105.8024y M1 to 2 ⁺ ; 304.538y to 1 ⁺ . 383.900 <i>I</i> 4 O ⁻ , 1 ⁻ <0.06 ns B E E F ⁺ : 103.70, <i>J</i> ⁺ : 10.5y to 3 ⁺ ; 304.538y to 1 ⁺ . 381.207 <i>I</i> 2 1 ⁻ , 2 ⁻ <0.04 ns B CE F F ⁺ : 293.020 Yu (1+C2) to 1 ⁺ , 2 ⁺ : 161.920y M1(+E2) to 2 ⁺ ; 123.766y to 1 ⁻ . 381.207 <i>I</i> 2 1 ⁻ , 2 ⁻ <0.42 ns BCDE KEEF : D(337). J ⁺ : 203.20y to 1 ⁺ . J ⁺ : 233.20y to 1 ⁺ . J ⁺ : 233.20y to 3 ⁺ ; 411.96y to 1 ⁺ . 411.973 24 (1 ⁺ , 2, 3 ⁺) B J ⁺ : 293.20y to 1 ⁺ . J ⁺ : 293.20y to 3 ⁺ ; 411.96y to 1 ⁺ . 424.721 <i>I</i> 6 (1,2,3 ⁺) <0.08 ns B DE KKE : C (477). J ⁺ : 424.71y to 1 ⁺ : 423.60y to 2 ⁻ . In ¹¹⁰ Pd(p,my). ¹⁶⁹ Ag(d,py) a 231.7y is observed, so that this level can be a close-lying doublet. J ⁺ : 273.23y to 3 ⁺ . J ⁺ : 270.15y to 3 ⁺ ; 431.38y to 2 ⁻ . J ⁺ : 367.05y to 3 ⁺ . J ⁺ : 270.15y to 2 ⁺ ; 350.12y to 3 ⁺ . J ⁺ : 270.15y to 2 ⁺ ; 350.12y to 3 ⁺ . J ⁺ : 270.15y to 2 ⁺ ; 350.12y to 3 ⁺ . J ⁺ : 367.05y to 3 ⁺ ; 438.91y to 1 ⁻ . K ⁺ : (L(d,p)=0. KKE : (C488). J ⁺ : 270.51y to 2 ⁺ ; 350.12y to 3 ⁺ . J ⁺ : 367.05y to 3 ⁺ ; 248.91y to 1 ⁻ . J ⁺ : 367.05y to 3 ⁺ ; 248.91y to 1 ⁺ . J ⁺ : 367.05y to 3 ⁺ ; 245.97y to 1 ⁺ . J ⁺ : 367.05y to 3 ⁺ ; 245.97y to 1 ⁺ . J ⁺ : 367.05y to 3 ⁺ ; 245.97y to 1 ⁺ . J ⁺ : 367.05y to 3 ⁺ ; 245.97y to 1 ⁺ . J ⁺ : 367.05y to 3 ⁺ ; 245.359y to 1 ⁺ . 					J^{π} : L(d,p)=0; 235.75 γ M1 to 2 ⁻ .
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	237.069 11	$(1,2,3^+)$	0.43 ns 8	B dE	XREF: d(235).
$\begin{array}{rcl} 242.09 & 27 & (6^{-}) & F & J^{+}; 124.57 \ to 6^{+}; \ band assignment (2002Pol 1), \\ 242.09 + x^{0} & (7^{-}) & F & J^{+}; \ Assigned as band head in 2002Pol 1, \\ 269^{64} & 1^{-}, 2^{-}, 3^{-} & D & J^{+}; \ L(d,p) = 2, \\ 271.470 & J^{+}, 2^{+}, 3^{+}, 4^{+} & B & E & J^{+}; \ 79.8477 \ to 3^{+}; \ 152.7557 \ M1(+E2) \ to 3^{+}, \\ 293.3+x^{44} & (8^{-}) & F & Additional information 2, \\ J^{+}; \ 51.27 \ to (7^{-}); \ band member. \\ 302.14 & (1^{+}, 2, 3^{+}) & <0.16 \ ns & B & E & J^{+}; \ 10.55 \ to 3^{+}; \ 302.07 \ to 1^{+}, \\ 304.525 & J0 & 1^{+}, 2^{+}, 3^{+} & <0.16 \ ns & B & E & J^{+}; \ 10.55 \ to 3^{+}; \ 302.07 \ to 1^{+}, \\ 338.960 \ J^{-} & O^{-}, 1^{-} & <0.08 \ ns & B & DE & XREF: \ C3370. \\ J^{+}; \ L(d,p) = (337.807 \ to 2^{+}; 338.929 \ to 1^{+}, \\ 338.00 \ J^{-} & (1^{+}, 2, 3^{+}) & & B & E & J^{+}; \ 10.55 \ to 3^{+}; \ 411.973 \ 24 & (1^{+}, 2, 3^{+}) & & B & E & J^{-}; \ 293.267 \ to 1^{+}, 2^{+}; \ 161.207 \ M1(+E2) \ to 2^{+}; \ 123.7667 \ to 1^{-}, \\ 342.376 \ J^{-} & (1^{+}, 2, 3^{+}) & & B & F^{-}; \ 293.267 \ to 1^{+}, \ 293.267 \ to 1^{+}, \\ 424.721 \ J^{-} & (1^{+}, 2, 3^{+}) & & B & F^{-}; \ 293.267 \ to 3^{+}; \ 411.969 \ to 1^{+}, \\ 424.721 \ J^{-} & (1^{+}, 2, 3^{+}) & & B & F^{-}; \ 293.267 \ to 3^{+}; \ 411.969 \ to 1^{+}, \\ 424.721 \ J^{-} & (1^{+}, 2, 3^{+}) & & B & F^{-}; \ 293.267 \ to 3^{+}; \ 424.717 \ to 1^{+}; \ 423.767 \ J^{-} & (1^{+}, 2, 3^{+}) & \\ 44.66 \ 46.885 \ J^{-} & (1^{+}, 2, 3^{+}) & & B & F^{-}; \ 373.780 \ to 3^{+}, \\ 446.68 \ 46.885 \ J^{-} & (1^{+}, 2, 3) & \\ 446.88 \ J^{-} & (1^{+}, 2, 3) & \\ 448.40 \ x^{-} & & \\ 484.40 \ x^{-} & & \\ 496.886 \ J^{-} & (1, 2, 3^{+}) & < \\ 400.88 \ ns \ J^{+} \ 186.767 \ to 3^{+}; \ 136.767 \ to 3^{+}; \ 335.917 \ to 3^{+}; \ 526.397 \ to 2^{-}; \ 524.897 \ to 1^{+}, \\ \\ 485.737 \ J^{-} & & \\ 484.40 \ x^{-} & & \\ 496.886 \ J^{-} & (1, 2, 3^{+}) & < \\ 496.886 \ J^{-} & (1, 2, 3^{+}) \$	щ				J^{π} : 235.94 γ to 2 ⁻ ; 237.05 γ to 1 ⁺ .
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	242.09# 21	(6 ⁻)		F	J^{π} : 124.5 γ to 6 ⁺ ; band assignment (2002Po11).
$ 267 229 10 1^{+} 2^{+} <0.08 ns B E J^{+} (68.552 y M1(+E2) to 2^{+} (27.22 y (M1) to 1^{+}. 269^{-} 4 1^{+} 2^{-} 3^{-} D J^{+} L(dp)=2. 1^{-} (27.23 y (M1) to 1^{+}. 293 3^{+} x^{\#} 4 (8^{-}) F Additional information 2. J^{+} (14, 2, 3^{+}) B E J^{+} (10.5 y to 3^{+} (302.0 y to 1^{+}. 304.532 to 1^{+}. 304.532 to 1^{+}. 2^{+} 3^{+} <0.16 ns B E J^{+} (10.5 y to 3^{+} (302.0 y to 1^{+}. 338.960 1/4 0^{-} 1^{-} <0.08 ns B DE XREF: D(337). J^{+} (14.4 y)=0. 337.80 y to 2^{-} (338.90 y to 2^{-}; 338.92 y to 1^{+}. 383.960 1/4 0^{-} 1^{-} <0.04 ns B DE XREF: D(337). J^{+} (14.4 y)=0. 337.80 y to 2^{-}; 338.92 y to 1^{+}. 381.207 1/2 1^{-} 2^{-} <0.42 ns BCDE XREF: C(380)D(378). J^{+} (14.4 y)=0. 337.80 y to 2^{-}; 318.92 y to 1^{+}. 311.95 y t$	242.09+x [@]	(7-)		F	J^{π} : Assigned as band head in 2002Po11.
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	267.229 10	$1^+, 2^+$	<0.08 ns	ΒE	J^{π} : 68.552 γ M1(+E2) to 2 ⁺ ; 267.22 γ (M1) to 1 ⁺ .
271.470 <i>13</i> 2 ⁺ ,3 ⁺ ,4 ⁺ B E <i>J</i> ⁺ : 79.847y to 3 ⁺ : 152.755y M1(+E2) to 3 ⁺ . 293.3+ $\frac{4}{9}$ 4 (8 ⁺) F Additional information 2. <i>J</i> Additional information 2. <i>J</i> Additional information 2. <i>J</i> Additional member. 302.1 <i>4</i> (1 ⁺ ,2,3 ⁺) E <i>J</i> ⁺ : 10.5y to 3 ⁺ : 302.0y to 1 ⁺ . 304.525 <i>I</i> 0 1 ⁺ ,2 ⁺ ,3 ⁺ < 0.16 ns B D E XREF: D(37). <i>J</i> - <i>c</i> 0.08 ns B D E XREF: D(37). <i>J</i> - <i>c</i> 0.04 ns B C E <i>J</i> ⁺ : 193.70 M1 (to 2 ⁺ ; 101.920y M1(+E2) to 2 ⁺ ; 123.766y to 1 ⁻ . 381.207 <i>I</i> 2 1 ⁻ ,2 ⁻ < 0.42 ns BCDE XREF: C(380)D(378). <i>J</i> ⁺ : 120.207 M1(+E2) to 1 ⁺ ,2 ⁺ ; 161.920y M1(+E2) to 2 ⁺ ; 123.766y to 1 ⁻ . 381.207 <i>I</i> 2 1 ⁻ ,2 ⁻ < 0.42 ns BCDE XREF: C(380)D(378). <i>J</i> ⁺ : 1203.207 uo 1 ⁺ . 411.973 <i>24</i> (1 ⁺ ,2,3 ⁺) B <i>J</i> ⁺ : 293.207 to 1 ⁺ . 424.721 <i>I</i> 6 (1,2,3 ⁺) < 0.13 ns BC E XREF: C(427). <i>J</i> ⁺ : 424.71y to 1 ⁺ ; 423.60y to 2 ⁻ . In ¹¹⁰ Pd(p,ny), ¹⁰⁹ Ag(d,py) a 231.7y is observed, so that this level can be a close-lying doublet. 432.376 <i>I</i> 5 (2) ⁻ < 0.08 ns B D <i>J</i> ⁺ : 373.80y to 3 ⁺ . 446.6 0.86 ns 6 456.53 <i>3</i> (2 ⁺ ,3,4 ⁺) B <i>J</i> ⁺ : 337.80y to 3 ⁺ . 466.885 <i>I</i> 1 (1 ⁺ ,2,3 ⁺) B <i>J</i> ⁺ : 272.54y to 2 ⁺ . 471.239 <i>I</i> 9 (1,2,3) 0.22 ns 5 B <i>J</i> ⁺ : 272.54y to 2 ⁺ . 484.40 + x ⁶⁰ 20 (9 ⁻) F <i>J</i> ⁺ : 191.1y to (8 ⁻); band member. 484.64 0 -1^{-} CD XREF: c(488). <i>J</i> ⁺ : 367.057 to 3 ⁺ ; 248.517 to 1 ⁺ . 486.886 <i>I</i> 3 (1,2,3 ⁺) < 0.08 ns BCD <i>X</i> XREF: 10.490. 486.757 <i>I</i> 7 (1,2,3 ⁻) < 0.08 ns BCD <i>X</i> XREF: 0.575 to 3 ⁺ ; 249.577 to 1 ⁺ . 525.677 <i>I</i> 7 (1,2,3 ⁻) < 0.08 ns BC <i>J</i> ⁺ : 188.177 to 0 ⁻ , 1; 326.977 to 2 ⁺ ; 524.547 to 1 ⁺ . 525.677 <i>I</i> 7 (1,2,3 ⁻) < 0.08 ns BC <i>J</i> ⁺ : 188.177 to 0 ⁻ , 1; 326.977 to 2 ⁺ ; 335.919 to 3 ⁺ ; 526.399 to 2 ⁻ . 527.428 <i>I</i> 6 (1 ⁺ ,2,3 ⁻) < 0.08 ns BC <i>J</i> ⁺ : 188.177 to 0 ⁻ , 1; 326.977 to 2 ⁺ ; 335.919 to 3 ⁺ ; 526.399 to 2 ⁻ . 527.428 <i>I</i> 6 (1 ⁺ ,2,3 ⁻) < 0.08 ns BC <i>J</i> ⁺ : 188.177 to 0 ⁻ , 1; 326.977 to 2 ⁺ ; 335.919 to 3 ⁺ ; 526.399 to 2 ⁻ . 527.428 <i>I</i> 6 (1 ⁺ ,2,3 ⁻	269 ^{&} 4	1-,2-,3-		D	J^{π} : L(d,p)=2.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	271.470 13	$2^+, 3^+, 4^+$		ΒE	J^{π} : 79.847 γ to 3 ⁺ ; 152.755 γ M1(+E2) to 3 ⁺ .
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	293.3+x [#] 4	(8 ⁻)		F	Additional information 2.
$\begin{array}{llllllllllllllllllllllllllllllllllll$					J^{π} : 51.2 γ to (7 ⁻); band member.
$\begin{array}{rclcrcl} 304.525 \ lot & l^+, 2^+, 3^+ & <0.16 \ ns & B & E & l^+; 105.824 \ MI to 2^+; 304.538 \ to 1^+. \\ 338.960 \ l4 & 0^-, 1^- & <0.08 \ ns & B & DE & XREF: D(337). \\ 338.960 \ l4 & 0^-, 1^- & <0.08 \ ns & B & DE & XREF: d(459). \\ 338.900 \ l4 & 0^-, 1^- & <0.04 \ ns & B & CE & F^+; 93.402 \ MI (+E2) \ to 1^-, 2^+; 161.920 \ MI (+E2) \ to 2^+; 123.766 \ to 1^ \\ J^+; 1d(d,p)=2; 381.20 \ to 3^+; 411.96 \ to 1^+. \\ J^+; 1d(d,p)=2; 381.20 \ to 1^+. \\ J^+; 1d(d,p)=2; 381.20 \ to 1^+. \\ J^+; 24.721 \ l6 & (1,2,3^+) & < 0.13 \ ns & BC & XREF: C(427). \\ J^+; 424.711 \ lot 1^+; 423.60 \ to 2^ \ In \ ^{110} Pd(p,ny), \ ^{109} Ag(d,py) \ a \ 231.7 \ is observed, so that this level can be a close-lying doublet. \\ J^+; 1d(d,p)=0, \ 2^+; 375.23 \ to 3^+, \ 411.96 \ to 1^+. \\ J^+; 246.885 \ l2 & (1^+, 2, 3^+) & B & J^+; 275.23 \ to 3^+. \\ J^+; 275.23 \ to 3^+. \ J^+; 1d(d,p)=0, \ J^+; \ J^+; 1d(d,p)=0, \ J^+; \ 275.23 \ to 3^+. \\ J^+; 275.23 \ to 3^+. \ J^+; 1d(d,p)=0. \ J^+; \$	302.1 4	$(1^+, 2, 3^+)$		E	J^{π} : 110.5 γ to 3 ⁺ ; 302.0 γ to 1 ⁺ .
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	304.525 10	$1^+, 2^+, 3^+$	<0.16 ns	ΒE	J^{π} : 105.824 γ M1 to 2 ⁺ ; 304.538 γ to 1 ⁺ .
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	338.960 14	$0^{-}, 1^{-}$	<0.08 ns	B DE	XREF: D(337).
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	260 610 10	1+ 0+	0.04	DC D	J^{n} : L(d,p)=0; 337.80 γ to 2 ⁻ ; 338.92 γ to 1 ⁺ .
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	360.618 10	1,2,	<0.04 ns	BC F	$J^{*}: 93.402\gamma \text{ MI}(+\text{E2}) \text{ to } 1^{\circ}, 2^{\circ}; 161.920\gamma \text{ MI}(+\text{E2}) \text{ to } 2^{\circ}; 123.766\gamma \text{ to } 1^{\circ}.$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	381.207 12	1,2	<0.42 ns	BCDF	XREF: $C(380)D(378)$. I_{4} , I_{4} , I_{4} , I_{2} , I_{2} , I_{4}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	411 072 24	(1+22+)		D	J^{*} : L(u,p)=2, 581.207 to 1 ⁺ .
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	411.975 24	(1, 2, 3) $(1, 2, 3^+)$	<0.13 ns	D BC F	J = 295.207 to 5, 411.907 to 1 . XREF: $C(A27)$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	424.721 10	(1,2,5)	<0.15 lls	DCL	I^{π} : 424 712 to 1 ⁺ : 423 602 to 2 ⁻ In ¹¹⁰ Pd(n m) ¹⁰⁹ Ag(d m) a 231 72
432.376 15(2) ⁻ <0.08 ns 0.86 ns 6BDE B J^{π} : L(d,p)=0+2; 240.76y to 3^{+} ; 431.38y to 2^{-} .446.60.86 ns 6B456.53 3 $(2^{+},3,4^{+})$ B J^{π} : 275.23y to 3^{+} .466.885 21 $(1^{+},2,3^{+})$ B J^{π} : 275.23y to 3^{+} .468.850 12 $(1^{+},2,3^{+})$ B J^{π} : 270.15y to 2^{+} ; 350.12y to 3^{+} .471.239 19 $(1,2,3)$ 0.22 ns 5B J^{π} : 272.54y to 2^{+} .484.40 + $x^{\textcircled{0}}$ 20 9^{-})F J^{π} : 191.1y to (8^{-}) ; band member.485.737 13 $(1^{+},2,3^{-})$ <0.1 ns					is observed, so that this level can be a close-lying doublet.
446.6 0.86 ns 6 B J^{π} : 337.80 γ to 3 ⁺ . 466.85 21 (1 ⁺ ,2,3 ⁺) B J^{π} : 337.80 γ to 3 ⁺ . 468.850 12 (1 ⁺ ,2,3) 0.22 ns 5 B J^{π} : 270.15 γ to 2 ⁺ ; 350.12 γ to 3 ⁺ . 471.239 19 (1,2,3) B J^{π} : 272.54 γ to 2 ⁺ . 484.40+ $x^{(0)}$ 20 (9 ⁻) F J^{π} : 191.1 γ to (8 ⁻); band member. 485.737 13 (1 ⁺ ,2,3 ⁻) <0.1 ns Bc XREF: c(488). J^{π} : 267.05 γ to 3 ⁺ : 248.91 γ to 1 ⁻ . 496.886 13 (1,2,3 ⁺) <0.08 ns BCD XREF: D(494). J^{π} : 186.76 γ to 2 ⁺ ; 495.76 γ to 2 ⁻ ; 496.87 γ to 1 ⁺ . 525.677 17 (1,2,3 ⁻) <0.08 ns B J ^{\pi} : 186.76 γ to 0 ⁻ , 1 ⁻ ; 326.97 γ to 2 ⁺ ; 524.54 γ to 2 ⁻ . 527.428 16 (1 ⁺ ,2,3 ⁻) <0.4 ns B C J ^{\pi} : 188.17 γ to 0 ⁻ , 1 ⁻ ; 328.80 γ to 2 ⁺ ; 335.91 γ to 3 ⁺ ; 526.39 γ to 2 ⁻ . 540.3 <0.1 ns BC J ^{\pi} : 1(d,p)=0. 549.397 13 (1,2,3) <0.08 ns B J ^{\pi} : 312.53 γ to 1 ⁻ ; 549.38 γ to 1 ⁺ . 557.1 <0.34 ns B J ^{\pi} : 312.53 γ to 1 ⁻ ; 549.38 γ to 1 ⁺ . 558.8 <0.14 ns B 592.9 1 ⁻ , 2 ⁻ , 3 ⁻ <0.34 ns B d XREF: d(594).	432.376 15	$(2)^{-}$	<0.08 ns	B DE	J^{π} : L(d,p)=0+2; 240.76 γ to 3 ⁺ : 431.38 γ to 2 ⁻ .
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	446.6	(-)	0.86 ns 6	В	$(-(-)_{\mathbf{F}})$ $(-(-)_{\mathbf{F}})$ $(-(-)_{\mathbf{F}})$ $(-(-)_{\mathbf{F}})$ $(-(-)_{\mathbf{F}})$
$\begin{array}{rclcrcl} 466.885 \ 21 & (1^+,2,3^+) & & & & & & & & & \\ 468.850 \ 12 & (1^+,2,3) & 0.22 \ \mathrm{ns} \ 5 & & & & & & & & \\ 471.239 \ 19 & (1,2,3) & & & & & & \\ 484.40 + x^{(0)} \ 20 & (9^-) & & & & & \\ 884.40 + x^{(0)} \ 20 & (9^-) & & & & & & \\ 885.737 \ 13 & (1^+,2,3^-) & <0.1 \ \mathrm{ns} & & & & \\ 80 & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ 496.886 \ 13 & (1,2,3^+) & <0.08 \ \mathrm{ns} & & & \\ & & & & & & \\ 80 & & & & & \\ 525.677 \ 17 & (1,2,3^-) & <0.08 \ \mathrm{ns} & & & \\ & & & & & & \\ 525.677 \ 17 & (1,2,3^-) & <0.08 \ \mathrm{ns} & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ 549.397 \ 13 & (1^+,2,3^-) & <0.08 \ \mathrm{ns} & & & \\ & & & & & \\ 549.397 \ 13 & (1,2,3) & <0.08 \ \mathrm{ns} & & & \\ & & & & & \\ & & & & & \\ 580.8 & & & & \\ & & & & & \\ 589.8 & & & & \\ & & & & \\ & & & & & \\ 592.9 & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ \end{array}$	456.53 <i>3</i>	$(2^+, 3, 4^+)$		В	J^{π} : 337.80 γ to 3 ⁺ .
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	466.885 21	$(1^+, 2, 3^+)$		В	J^{π} : 275.23 γ to 3 ⁺ .
471.239 19 $(1,2,3)$ B $J^{\pi}: 272.54\gamma$ to 2^+ .484 $\overset{@}{4}$ $0^-, 1^-$ cDXREF: c(488). $J^{\pi}: L(d,p)=0.$ F $J^{\pi}: 191.1\gamma$ to (8^-) ; band member.485.737 13 $(1^+,2,3^-)$ <0.1 ns	468.850 12	$(1^+, 2, 3)$	0.22 ns 5	В	J^{π} : 270.15 γ to 2 ⁺ ; 350.12 γ to 3 ⁺ .
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	471.239 19	(1,2,3)		В	J^{π} : 272.54 γ to 2 ⁺ .
$J^{\pi}: L(d,p)=0.$ $484.40+x^{(2)} 20 (9^{-}) \qquad F \qquad J^{\pi}: 191.1\gamma \text{ to } (8^{-}); \text{ band member.}$ $485.737 \ I3 \qquad (1^{+},2,3^{-}) \qquad <0.1 \text{ ns} \qquad Bc \qquad XREF: c(488).$ $J^{\pi}: 367.05\gamma \text{ to } 3^{+}; 248.91\gamma \text{ to } 1^{-}.$ $496.886 \ I3 \qquad (1,2,3^{+}) \qquad <0.08 \text{ ns} \qquad BCD \qquad XREF: D(494).$ $J^{\pi}: 298.18\gamma \text{ to } 2^{+}; 495.76\gamma \text{ to } 2^{-}; 496.87\gamma \text{ to } 1^{+}.$ $525.677 \ I7 \qquad (1,2,3^{-}) \qquad <0.08 \text{ ns} \qquad B \qquad J^{\pi}: 186.76\gamma \text{ to } 0^{-}, 1^{-}; 326.97\gamma \text{ to } 2^{+}; 524.54\gamma \text{ to } 2^{-}.$ $527.428 \ I6 \qquad (1^{+},2,3^{-}) \qquad <0.4 \text{ ns} \qquad BC \qquad J^{\pi}: 188.17\gamma \text{ to } 0^{-}, 1^{-}; 328.80\gamma \text{ to } 2^{+}; 335.91\gamma \text{ to } 3^{+}; 526.39\gamma \text{ to } 2^{-}.$ $536.209 \ I3 \qquad 0^{-}, 1^{-} \qquad <0.16 \text{ ns} \qquad B \qquad J^{\pi}: L(d,p)=0.$ $540 \ 3 \qquad \qquad <0.1 \text{ ns} \qquad BC \qquad 547.333597 \ I3 \qquad (1,2,3) \qquad <0.08 \text{ ns} \qquad B \qquad E \qquad J^{\pi}: 312.53\gamma \text{ to } 1^{-}; 549.38\gamma \text{ to } 1^{+}.$ $557.1 \qquad <0.34 \text{ ns} \qquad B \qquad S86.85 \qquad \qquad$	484 ^{&} 4	$0^{-}, 1^{-}$		cD	XREF: c(488).
484.40+x (9^{-}) F $J^{\pi}: 191.1\gamma$ to (8^{-}) ; band member.485.737 13 $(1^{+},2,3^{-})$ <0.1 ns					$J^{\pi}: L(d,p)=0.$
485.737 13 $(1^+,2,3^-)$ <0.1 ns Bc XREF: c(488). J^{π} : 367.05y to 3^+ ;248.91y to 1^- . 496.886 13 $(1,2,3^+)$ <0.08 ns	484.40+x [@] 20	(9 ⁻)		F	J^{π} : 191.1 γ to (8 ⁻); band member.
$496.886\ 13$ $(1,2,3^+)$ $<0.08\ ns$ BCD $XREF:\ D(494).$ $J^{\pi}:\ 298.18y\ to\ 2^+;\ 495.76y\ to\ 2^-;\ 496.87y\ to\ 1^+.$ $525.677\ 17$ $(1,2,3^-)$ $<0.08\ ns$ B $J^{\pi}:\ 186.76y\ to\ 0^-,1^-;\ 326.97y\ to\ 2^+;\ 524.54y\ to\ 2^$ $527.428\ 16$ $(1^+,2,3^-)$ $<0.4\ ns$ BC $J^{\pi}:\ 188.17y\ to\ 0^-,1^-;\ 328.80y\ to\ 2^+;\ 335.91y\ to\ 3^+;\ 526.39y\ to\ 2^$ $536.209\ 13$ $0^-,1^ <0.16\ ns$ BD $J^{\pi}:\ 188.17y\ to\ 0^-,1^-;\ 328.80y\ to\ 2^+;\ 335.91y\ to\ 3^+;\ 526.39y\ to\ 2^$ 540.3 $<0.1\ ns$ BC $J^{\pi}:\ 312.53y\ to\ 1^-;\ 549.38y\ to\ 1^+.$ 57.1 $<0.34\ ns$ B E $586.8\ 5$ E 589.8 $<0.14\ ns$ B 592.9 $1^-,2^-,3^ <0.34\ ns$ B M $XREF:\ d(594).$	485.737 13	$(1^+, 2, 3^-)$	<0.1 ns	Bc	XREF: c(488).
496.886 13 $(1,2,3^+)$ <0.08 ns BCD XREF: D(494). J ^{π} : 298.18y to 2 ⁺ ; 495.76y to 2 ⁻ ; 496.87y to 1 ⁺ . 525.677 17 $(1,2,3^-)$ <0.08 ns					J^{π} : 367.05 γ to 3 ⁺ ;248.91 γ to 1 ⁻ .
$J^{\pi}: 298.18 \gamma \text{ to } 2^+; 495.76 \gamma \text{ to } 2^-; 496.87 \gamma \text{ to } 1^+.$ 525.677 17 (1,2,3 ⁻) <0.08 ns B $J^{\pi}: 186.76 \gamma \text{ to } 0^-, 1^-; 326.97 \gamma \text{ to } 2^+; 524.54 \gamma \text{ to } 2^$ 527.428 16 (1 ⁺ ,2,3 ⁻) <0.4 ns BC $J^{\pi}: 188.17 \gamma \text{ to } 0^-, 1^-; 328.80 \gamma \text{ to } 2^+; 335.91 \gamma \text{ to } 3^+; 526.39 \gamma \text{ to } 2^$ 536.209 13 0 ⁻ ,1 ⁻ <0.16 ns B D $J^{\pi}: 1(d,p)=0.$ 540 3 <0.1 ns BC 549.397 13 (1,2,3) <0.08 ns B E $J^{\pi}: 312.53 \gamma \text{ to } 1^-; 549.38 \gamma \text{ to } 1^+.$ 557.1 <0.34 ns B 586.8 5 E (0.14 ns B) 589.8 <0.14 ns B (0.14 ns B) 592.9 $1^-, 2^-, 3^- <0.34 \text{ ns B}$ d XREF: d(594).	496.886 <i>13</i>	$(1,2,3^+)$	<0.08 ns	BCD	XREF: D(494).
$525.677 \ 17$ $(1,2,3^-)$ $<0.08 \text{ ns}$ B $J^{\pi}: 186.76y \text{ to } 0^-, 1^-; 326.97y \text{ to } 2^+; 524.54y \text{ to } 2^$ $527.428 \ 16$ $(1^+,2,3^-)$ $<0.4 \text{ ns}$ BC $J^{\pi}: 188.17y \text{ to } 0^-, 1^-; 328.80y \text{ to } 2^+; 335.91y \text{ to } 3^+; 526.39y \text{ to } 2^$ $536.209 \ 13$ $0^-, 1^ <0.16 \text{ ns}$ B D $J^{\pi}: L(d,p)=0.$ 540.3 $<0.1 \text{ ns}$ BC $J^{\pi}: 312.53y \text{ to } 1^-; 549.38y \text{ to } 1^+.$ $549.397 \ 13$ $(1,2,3)$ $<0.08 \text{ ns}$ B E $J^{\pi}: 312.53y \text{ to } 1^-; 549.38y \text{ to } 1^+.$ 557.1 $<0.34 \text{ ns}$ B E <589.8 $<0.14 \text{ ns}$ B 592.9 $1^-, 2^-, 3^ <0.34 \text{ ns}$ B XREF: d(594). XREF: d(594).					J^{π} : 298.18 γ to 2 ⁺ ; 495.76 γ to 2 ⁻ ; 496.87 γ to 1 ⁺ .
$527.428\ I6$ $(1^+,2,3^-)$ $<0.4\ ns$ BC J^* : 188.17γ to $0^-,1^-$; 328.80γ to 2^+ ; 335.91γ to 3^+ ; 526.39γ to 2^- . $536.209\ I3$ $0^-,1^ <0.16\ ns$ B D J^π : $L(d,p)=0.$ $540\ 3$ $<0.1\ ns$ BC J^π : 312.53γ to 1^- ; 549.38γ to 1^+ . $549.397\ I3$ $(1,2,3)$ $<0.08\ ns$ B E J^π : 312.53γ to 1^- ; 549.38γ to 1^+ . 557.1 $<0.34\ ns$ B E $S86.8\ 5$ E 589.8 $<0.14\ ns$ B S92.9 $1^-,2^-,3^ <0.34\ ns$ B C 592.9 $1^-,2^-,3^ <0.34\ ns$ B C C C	525.677 17	$(1,2,3^{-})$	<0.08 ns	В	J^{n} : 186.76 γ to 0 ⁻ ,1 ⁻ ; 326.97 γ to 2 ⁺ ; 524.54 γ to 2 ⁻ .
536.209 13 0 ,1 <0.16 ns	527.428 16	$(1^+, 2, 3^-)$	<0.4 ns	BC	J^{π} : 188.1/ γ to 0 ⁻ ,1 ⁻ ; 328.80 γ to 2 ⁺ ; 335.91 γ to 3 ⁺ ; 526.39 γ to 2 ⁻ .
540 3 <0.1 ns	536.209 13	0,1	<0.16 ns	R D	$J^{n}: L(d,p)=0.$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	540 3 540 207 12	(1, 2, 2)	<0.1 ns	RC	π_{-212} 52. 4. 1^{-1} 540.29. 4. 1^{+1}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	549.397 15	(1,2,3)	< 0.08 ns	вЕ	J : 512.55γ το 1 ; 549.58γ το 1 ⁻ .
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JJ/.1 586.8 5		<0.34 NS	D T	
592.9 $1^-, 2^-, 3^-$ <0.34 ns B d XREF: d(594).	580.8		<0.14 mg	R	
$\mathbf{J}_{\mathbf{L}} = \mathbf{J}_{\mathbf{L}} $	502.0	1-2-3-	< 0.17 115	R d	XREF: d(594)
$J^{\pi}: L(d,p)=2.$	574.7	1, <u>2</u> , J	\$0.5 1 115	bu	$J^{\pi}: L(d,p)=2.$

¹¹⁰Ag Levels (continued)

E(level) [†]	J^{π}	T _{1/2} ‡	XREF	Comments
595.05 4	1-,2-	<0.16 ns	BCd	XREF: C(597)d(594).
				J^{π} : L(d,p)=2; 595.07 γ to 1 ⁺ ; 593.91 γ to 2 ⁻ .
613.058 25		<0.07 ns	В	
615.137 23	(1,2,3)	<0.06 ns	В	J^{π} : 378.08 γ to 1 ⁻ ; 614.04 γ to 2 ⁻ .
633.442 18		<0.14 ns	В	
653.929 17	$(1^+, 2, 3^+)$	<0.36 ns	ΒE	J^{π} : 462.29 γ to 3 ⁺ ; 652.76 γ to 2 ⁻ .
663.463 16	$(1^{-}, 2^{-}, 3^{-})$	<0.22 ns	Βd	XREF: d(661).
((1.025.22	(1 - 2 - 2 -)	.0.5	D 1	J^{n} : L(d,p)=2; 464.78 γ to 2 ⁺ ; 662.27 γ to 2 ⁻ .
664.935 22	(1,2,3)	<0.5 ns	ва	XKEF: $d(001)$.
692 152 10	(1, 2, 2)	<0.46 mg	D	J^{π} : L(d,p)=2; 005.757 to 2; 400.227 to 2.
689 47 <i>4</i>	(1,2,3) (1+2,3+)	< 0.40 ms	B	J^{π} : 422 232 to 1^{\pm} 2 ⁺ : 570 762 to 3^{\pm}
698 561 15	(1,2,5)	< 0.40 ns	B	J . 422.25 / 10 1 ,2 , 570.70 / 10 5 .
706 214 16	$(1^+ 2 3^+)$	<0.10 113	B	I^{π} : 507 41 γ to 2 ⁺ : 514 45 γ to 3 ⁺
711 & 1	(1, 2, 3)		л П	I^{π} : I (d p)=0
724 67 4	$1^+ 2 3^+$		R d	$3 \cdot E(0,p) = 0.$
124.01 4	1,2,5		bu	I^{π} : 605 95 γ to 3 ⁺ : 723 57 γ to 2 ⁻ : 724 69 γ to 1 ⁺
725,807,22		<0.8 ns	Bd	XREF: d(725).
748.598 22	$1^{-}.2^{-}$	<0.8 ns	Bd	XREF: d(751).
	,			J^{π} : L(d,p)=2; 549.87 γ to 2 ⁺ ; 748.63 γ to 1 ⁺ .
750.837 25	$(2)^{-}$	<0.12 ns	Βd	XREF: d(751).
				J^{π} : L(d,p)=2; 632.19 γ to 3 ⁺ ; 750.89 γ to 1 ⁺ .
753 <i>3</i>	1-,2-,3-	<0.25 ns	BCd	XREF: d(751).
				J^{π} : L(d,p)=2.
759.6		<0.21 ns	В	
767.01 4	$(1^+, 2, 3^+)$	<1.3 ns	Βd	XREF: d(770).
772 (07.22	(1+2,2+)	.0.16	DC I	J ^{<i>n</i>} : L(d,p)=2; 648.04 γ to 3 ⁺ ; 765.93 γ to 2 ⁻ .
//3.69/ 23	$(1^+, 2, 3^+)$	<0.46 ns	BCa	XREF: $C(7/1)a(7/0)$.
795 692 10	$(1^+ 2 2^+)$	<0.5 m	D	J^{π} : $L(0,p)=2; 5/4.987 \text{ to } 2; 034.997 \text{ to } 3; 7/5.077 \text{ to } 1$. I^{π} : 586 07a to 2^{+} : 666 84a to 2^{+} : 785 66a to 1^{+}
789 7	(1,2,3)	< 0.5 lis	D R	J . 380.977 10 2 , 000.847 10 5 , 783.007 10 1 .
793 3	1 2 3+	<0.54 113	CD CD	I^{π} : L(d p)=2: 793v to 1 ⁺
802.73 4	1,2,5		В	v: E(a,p) = 2, r > 5 r = 0
811.419 24		<0.22 ns	Βd	XREF: d(814).
819.017 22		<0.72 ns	В	
820 <i>3</i>		<1.1 ns	BC	
854.4		<0.1 ns	В	
864 <mark>&</mark> 4	1-,2-,3-		D	J^{π} : L(d,p)=2.
881.5		<0.6 ns	В	
890.7+x [#] 3	(10 ⁻)		F	J^{π} : 406.3 γ to (9 ⁻); band member.
893 <mark>&</mark> 4			D	
905 3			С	
910.9		<0.42 ns	В	
918 <i>3</i>			CD	XREF: D(925).
925 <mark>&</mark> 4			D	
948 <mark>&</mark> 4	123-		D	$J^{\pi}: L(d,p)=2$
953.2	1 ,2 ,0	<2.0 ns	В	
954.4		<0.3 ns	В	
985.7		<0.7 ns	В	
995.1	$(1^{-},2^{-},3^{-})$	<0.4 ns	ΒD	XREF: D(993).
				J^{π} : L(d,p)=(2).
1013.0		<0.84 ns	В	
1026 ^{&} 4	(1-,2-,3-)		D	J^{π} : L(d,p)=(2).
1104 3		<1.2 ns	BC	XREF: B(1107).

Continued on next page (footnotes at end of table)

¹¹⁰Ag Levels (continued)

E(level) [†]	J^{π}	XREF	Comments
1111 4	1,2,3+	CD	J^{π} : L(d,p)=2; 1111 γ to 1 ⁺ .
1167 <i>3</i>	1,2,3+	CD	XREF: D(1165).
0_			J^{π} : L(d,p)=2; 1167 γ to 1 ⁺ .
1188 4		D	
1229.8+x [@] 3	(11 ⁻)	F	J^{π} : 339.1 γ to (10 ⁻); 745.5 γ to (9 ⁻); band member.
1230 ^{&} 4	1-,2-,3-	D	J^{π} : L(d,p)=2.
1263 ^{&} 4		D	
1315 ^{&} 4	$0^{-}, 1^{-}$	D	$J^{\pi}: L(d,p)=0.$
1343 ^{&} 4		D	
1377 ^{&} 4		D	
1402 ^{&} 4	1-,2-,3-	D	$J^{\pi}: L(d,p)=2.$
1480 ^{&} 4		D	
1513 ^{&} 4		D	
1535 ^{&} 4		D	
1568 ^{&} 4		D	
1659 ^{&} 4	1-,2-,3-	D	$J^{\pi}: L(d,p)=2.$
1707.2+x [#] 4	(12 ⁻)	F	J^{π} : 477.4 γ to (11 ⁻); 816.4 γ to (10 ⁻); band member.
2198.1+x [@] 4	(13 ⁻)	F	J^{π} : 490.8 γ to (12 ⁻); 968.4 γ to (11 ⁻); band member.
2666.1+x [#] 5	(14 ⁻)	F	
6809.20 10	$0^{-}, 1^{-}$	В	E(level): From neutron separation energy (2003Au03). Other: 6810 keV 1 (1967Bo06).
			J^{π} : From s-wave capture by ¹⁰⁹ Ag g.s ($J^{\pi}=1/2^{-}$).

[†] From least-squares fit to $E\gamma'$ s, unless otherwise stated. [‡] From ¹⁰⁹Ag(n, γ) E=thermal (1988Ko31), unless otherwise stated. [#] Band(A): $\pi g_{9/2} \nu h_{11/2}$, α =0 band.

^{*a*} Band(a): $\pi g_{9/2} \cdot n_{11/2}$, $\alpha = 1$ band. ^{*b*} From ¹⁰⁹Ag(d,p).

	Adopted Levels, Gammas (continued)											
						<u> γ(</u>	¹¹⁰ Ag)					
E _i (level)	\mathbf{J}_i^π	E_{γ}^{\ddagger}	I _γ ‡	$\mathbf{E}_f = \mathbf{J}_f^{\pi}$	Mult. [#]	$\delta^{@}$	α^{\dagger}	Comments				
1.112	2-	1.112 16	100	0.0 1+	E1		933 66	B(E1)(W.u.)=0.00035 4 E_{γ} : From energy level differences. α : 933 66, calculated with the RAINE code using the same atomic and nuclear parameters as BRICC (T. Kibedi, private communication).				
117.59	6+	116.48.5	100	1.112 2-	M4		164.9.17	Mult.: From M1/M2/M3=0.3 $1/1.0/2.1 4$, N1/N2/N3=0.25 $10/1.00/2.0 6 1993$ Ka37). Theoretical α ratios for E1 transition (calculated by T. Kibedi with the RAINE code using the same atomic and nuclear parameters as BRICC by T. Kibedi): M1/M2/M3=0.3/1.0/2.2, N1/N2/N3=0.43/1.00/2.11. B(M4)(W µ)=0.0165 10				
117.07	0	110.100	100				1011/17	E_{γ} : From ¹¹⁰ Ag IT decay (249.83 d) (1990Me15). Mult.: From conversion electron intensity ratios, K/L=2.04 <i>6</i> , L1/L2=4.8 5, L1/L3=1.02 2 (1965Ge01). Other: K/L=2.1 2 (1963Su07), K/L=1.95 <i>10</i> (1965Ha07).				
118.719	3+	117.607 <i>17</i>	100	1.112 2-	E1(+M2)	+0.034 9	0.1032 22	B(E1)(W.u.)=($4.48 \times 10^{-6} 8$); B(M2)(W.u.)=($1.7 9$) α (K)=0.0897 19; α (L)=0.0110 3; α (M)=0.00208 6; α (N+)=0.000368 10 α (N)=0.000353 9; α (O)= $1.45 \times 10^{-5} 4$ Mult.: A ₂ =-0.142 5, A ₄ =+0.019 8 (for E(p)=3.5 MeV), A ₂ =-0.149 16, A ₄ =+0.019 8 (for E(p)=3.0 MeV) (1976Ha57); α (K)exp=0.088, α (L1)exp=0.0073 (1968E103).				
191.622	3+	118.716 <i>17</i> 72.903 <i>11</i> 191.2 <i>5</i>	100 100	$\begin{array}{ccc} 0.0 & 1^+ \\ 118.719 & 3^+ \\ 0.0 & 1^+ \end{array}$	M1 (E2)		1.031 0.1447 25	Mult.: $\alpha(K)\exp=0.86$ 17, $\alpha(L1)\exp=0.11$ 7 (1968EL03). $\alpha(K)=0.1202$ 20; $\alpha(L)=0.0200$ 4; $\alpha(M)=0.00387$ 7; $\alpha(N+)=0.000661$ 12 $\alpha(N)=0.000642$ 11; $\alpha(O)=1.92\times10^{-5}$ 4 Mult.: From A ₂ =+0.235 13, A ₄ =-0.030 22 (1976Ha57). Authors of 1976Ha57 assign this transition as Q+(O), based on the measured $\delta=+0.034$ 61.				
198.689	2+	197.58 3 198.69 3	100	$1.112 \ 2^{-} \ 0.0 \ 1^{+}$	M1(+E2)	+0.017 17	0.0637	$\alpha(K)=0.0554 \ 8; \ \alpha(L)=0.00677 \ 10; \ \alpha(M)=0.001287 \ 19; \ \alpha(N+)=0.000233 \ 4 \ \alpha(N)=0.000223 \ 4; \ \alpha(O)=1.040\times10^{-5} \ 15 \ B(M1)(W.u.)>0.033? \ Mult.: A_2=-0.084 \ 4, \ A_4=+0.014 \ 6 \ (1976Ha57) \ and \ from \ \alpha(K)\exp=0.048 \ 3 \ \alpha(L)\exp=0.0055 \ 8 \ (1968E103)$				
236.859	1-	235.75 3	100	1.112 2-	M1		0.0405	B(M1)(W.u.)>0.0067 Mult.: α (K)exp=0.027 1, α (L1)exp=0.0016 7 (1968EL03) (includes L236.62γ).				
237.069	(1,2,3 ⁺)	235.94 <i>4</i> 237.05 <i>4</i>	100	$\begin{array}{ccc} 1.112 & 2^{-} \\ 0.0 & 1^{+} \end{array}$								

S

 $^{110}_{47}{\rm Ag}_{63}\text{-}5$

L

Adopted Levels, Gammas (continued)											
						γ (¹¹⁰ A)	g) (continue	ed)			
E _i (level)	\mathbf{J}_i^{π}	E_{γ}^{\ddagger}	I_{γ}^{\ddagger}	E_{f}	J_f^π	Mult. [#]	α^{\dagger}	Comments			
242.09 267.229	(6 ⁻) 1 ⁺ ,2 ⁺	124.5 ^{<i>a</i>} 2 68.552 10	100 ^a 13 3	117.59 198.689	6 ⁺ 2 ⁺	M1(+E2)	3.4 22	α (K)=2.4 <i>14</i> ; α (L)=0.8 <i>7</i> ; α (M)=0.16 <i>14</i> ; α (N+)=0.026 <i>21</i> α (N)=0.025 <i>21</i> ; α (O)=0.00035 <i>16</i>			
		266.11 <i>4</i> 267.22 <i>4</i>	100 <i>11</i> 24.6 25	1.112 0.0	2 ⁻ 1 ⁺	(M1)	0.0292	Mult.: $\alpha(K) \exp[=1.04\ 21, \ \alpha(L1) \exp[=0.23\ 19\ (1968 E103)]$. $\alpha(K) = 0.0255\ 4; \ \alpha(L) = 0.00308\ 5; \ \alpha(M) = 0.000586\ 9; \ \alpha(N+) = 0.0001062\ 15$			
								α (N)=0.0001015 <i>15</i> ; α (O)=4.76×10 ⁻⁶ 7 B(M1)(W.u.)>0.0019 Mult.: A ₂ =+0.013 9, A ₄ =+0.026 <i>16</i> (1976Ha57), coefficient of summed angular distribution for 265.7 γ and 267.0 γ and from α (K)exp=0.017 <i>1</i> (1968El03).			
271.470	2+,3+,4+	79.847 12	100 10	191.622	3+	M1(+E2)	2.0 13	$\alpha(K)=1.5.9; \alpha(L)=0.4.4; \alpha(M)=0.08.7; \alpha(N+)=0.013.11$ $\alpha(N)=0.013.11; \alpha(O)=0.00023.10$ Mult : $\alpha(K)=n=0.82.16; \alpha(L)=n=0.08.3$ (1968E103)			
		152.755 22	26 5	118.719	3+	M1(+E2)	0.22 10	$\alpha(K)=0.19 \ 8; \ \alpha(L)=0.031 \ 18; \ \alpha(M)=0.006 \ 4; \ \alpha(N+)=0.0010 \ 6 \ \alpha(N)=0.0010 \ 6; \ \alpha(O)=3.1\times10^{-5} \ 10 \ Mult.: \ \alpha(K)exp=0.15 \ 2 \ (1968E103).$			
293.3+x 302.1	(8 ⁻) (1 ⁺ ,2,3 ⁺)	51.2 ^{<i>a</i>} 4 110.5 5 302.0 5	100 ^a	242.09+x 191.622	(7^{-}) 3 ⁺ 1 ⁺			E_{γ} : From ¹¹⁰ Pd(p,n γ), ¹⁰⁹ Ag(d,p γ).			
304.525	1+,2+,3+	105.824 15	100	198.689	1 2 ⁺	M1	0.358	B(M1)(W.u.)>0.085 Mult.: α (K)exp=0.25 4, α (L1)exp=0.037 7 (1968El03).			
338.960	0 ⁻ ,1 ⁻	304.538 15 101.856 15 337.80 5 338.92 5		0.0 237.069 1.112 0.0	$(1,2,3^+)$ 2^- 1^+						
360.618	1+,2+	93.402 14	100 10	267.229	1+,2+	M1(+E2)	1.2 7	α (K)=0.9 5; α (L)=0.22 16; α (M)=0.04 4; α (N+)=0.007 5 α (N)=0.007 5; α (O)=0.00014 6 Mult.: α (K)exp=0.50 10, α (L1)exp=0.078 24 (1968El03).			
		123.571 <i>18</i> 123.766 <i>18</i> 161.920 <i>24</i>	26 5	237.069 236.859 198.689	$(1,2,3^+)$ 1^- 2^+	M1(+E2)	0.19 8	$\alpha(K)=0.15\ 6;\ \alpha(L)=0.025\ 14;\ \alpha(M)=0.005\ 3;\ \alpha(N+)=0.0008\ 5$ $\alpha(N)=0.0008\ 5;\ \alpha(O)=2.6\times10^{-5}\ 8$ Mult : $\alpha(K)=0.12\ 4\ (1968E103)$			
381.207	1-,2-	359.51 <i>5</i> 360.62 <i>5</i> 113.976 <i>17</i> 144.148 <i>21</i> 144.342 <i>21</i> 280.06	≤12 ≤12	1.112 0.0 267.229 237.069 236.859	$2^{-} \\ 1^{+} \\ 1^{+}, 2^{+} \\ (1, 2, 3^{+}) \\ 1^{-} \\ 2^{-}$			Mart. a(1)0Ap=0.12 + (1)00L105).			
411.973	(1+,2,3+)	380.09 6 381.20 6 220.35 3	24 100	0.0 191.622	2 1+ 3+						

6

L

					A	dopted Lev	els, Gamm	as (continued)
						$\gamma(^{11}$	⁾ Ag) (conti	nued)
E _i (level)	\mathbf{J}_i^{π}	Eγ‡	I_{γ}^{\ddagger}	E _f	J_f^{π}	Mult. [#]	α^{\dagger}	Comments
411.973	(1+,2,3+)	293.26 <i>4</i> 411.96 <i>6</i>		118.719 0.0	3+ 1 ⁺			
424.721	(1,2,3 ⁺)	157.488 ^b 23 187.65 3 423.60 6 424.71 6		267.229 237.069 1.112 0.0	$1^+, 2^+$ (1,2,3^+) 2^- 1^+			
432.376	(2)-	165.138 24 195.52 3 233.67 3 240.76 4 313.64 5 431.38 6	100	267.229 236.859 198.689 191.622 118.719 1.112	1 ⁺ ,2 ⁺ 1 ⁻ 2 ⁺ 3 ⁺ 2 ⁻			
456.53	(2+,3,4+)	185.07 <i>3</i> 337.80 <i>5</i>		271.470 118.719	2 ⁺ ,3 ⁺ ,4 ⁺ 3 ⁺			
466.885	(1+,2,3+)	162.371 24 275.23 4 348 17 5		304.525 191.622 118 719	$1^+, 2^+, 3^+$ 3^+ 3^+			
468.850	(1+,2,3)	108.229 <i>16</i> 164.316 <i>24</i> 197.38 <i>3</i> 231.77 <i>3</i> 270.15 <i>4</i> 350.12 <i>5</i>		360.618 304.525 271.470 237.069 198.689 118.719	$ \begin{array}{c} 1^+, 2^+ \\ 1^+, 2^+, 3^+ \\ 2^+, 3^+, 4^+ \\ (1, 2, 3^+) \\ 2^+ \\ 3^+ \end{array} $			
471.239	(1,2,3)	166.710 <i>24</i> 234.18 <i>3</i> 272.54 <i>4</i>	100	304.525 237.069 198.689	$1^+, 2^+, 3^+$ (1,2,3 ⁺) 2^+			
484.40+x 485.737	(9^{-}) $(1^{+},2,3^{-})$	191.1 ^{<i>a</i>} 2 125.155 <i>1</i> 8	100 ^a 100	293.3+x 360.618	(8 ⁻) 1 ⁺ ,2 ⁺	M1+E2	0.44 22	$\alpha(K)=0.35 \ 16; \ \alpha(L)=0.07 \ 5; \ \alpha(M)=0.013 \ 9; \ \alpha(N+)=0.0022 \ 14 \ \alpha(N)=0.0021 \ 14; \ \alpha(O)=5.7\times10^{-5} \ 21 \ Mult.; \ \alpha(K)exp=0.29 \ 4 \ (1968E103).$
496.886	(1,2,3+)	181.27 3 218.57 3 248.91 4 287.08 4 294.12 4 367.05 5 115.685 17 229.66 3 259.82 4 260.02 ^b 4 298.18 ^b 4 495.76 7		304.525 267.229 236.859 198.689 191.622 118.719 381.207 267.229 237.069 236.859 198.689 1.112	$1^{+},2^{+},3^{+}$ $1^{+},2^{+}$ 1^{-} 2^{+} 3^{+} $1^{-},2^{-}$ $1^{+},2^{+}$ $(1,2,3^{+})$ 1^{-} 2^{+} 2^{-}			

 \neg

From ENSDF

 $^{110}_{47}\mathrm{Ag}_{63}$ -7

¹¹⁰₄₇Ag₆₃-7

I

$\gamma(^{110}\text{Ag})$ (continued)

E _i (level)	\mathbf{J}_i^{π}	E_{γ}^{\ddagger}	I _γ ‡	E_f	\mathbf{J}_f^π	Comments
496.886	$(1.2.3^{+})$	496.87 7		0.0	1+	
525.677	$(1,2,3^{-})$	186.76 <i>3</i>		338.960	$0^{-}, 1^{-}$	
		288.62 4		237.069	$(1,2,3^+)$	
		288 82 <mark>b</mark> 4		236 859	1-	
		326.97.5		198 689	2^{+}	
		524 54 8		1 112	$\bar{2}^{-}$	
527.428	$(1^+, 2, 3^-)$	166.891.24		360.618	$1^{+}.2^{+}$	
02/1120	(1,,=,0)	188.17.3		338,960	$0^{-}.1^{-}$	
		256.03 4		271.470	$2^+.3^+.4^+$	
		328.80 5		198.689	2+	
		335.91.5		191.622	3+	
		408.79 6		118,719	3+	
		526.39 8		1.112	2-	
536.209	$0^{-}.1^{-}$	175.56 3		360.618	$1^+.2^+$	
	- ,	231.66.3		304.525	$1^{+}.2^{+}.3^{+}$	
		268.96 4		267.229	$1^+, 2^+$	
		299.33 4		236.859	1-	
		536.16 8		0.0	1^{+}	
540		$540^{\&}$ 3		0.0	1+	
549.397	(1.2.3)	188.77.3		360.618	$1^{+}.2^{+}$	
0 19 10 9 1	(1,=,0)	244.85 4		304.525	$1^{+}.2^{+}.3^{+}$	
		277.88 4		271.470	$2^+.3^+.4^+$	
		282.16 4		267.229	$1^+.2^+$	
		312.53 5		236.859	1-	
		549.38 8		0.0	1+	
586.8		586.8 5		0.0	1^{+}	E_{γ} : From ¹¹⁰ Pd(p,n γ), ¹⁰⁹ Ag(d,p γ).
595.05	$1^{-},2^{-}$	358.00 5		237.069	$(1,2,3^+)$	
		358.17 5		236.859	1-	
		593.91 9		1.112	2-	
		595.07 9		0.0	1^{+}	
613.058		231.84 <i>3</i>		381.207	$1^{-},2^{-}$	
		274.12 4		338.960	$0^{-}, 1^{-}$	
		494.33 7		118.719	3+	
615.137	(1,2,3)	182.76 <i>3</i>		432.376	$(2)^{-}$	
		254.51 <i>4</i>		360.618	$1^+, 2^+$	
		378.08 6		237.069	$(1,2,3^+)$	
		378.28 6		236.859	1-	
		614.04 9		1.112	2-	
633.442		136.555 20	100	496.886	$(1,2,3^{+})$	
		252.24 4		381.207	1-,2-	
		272.82 4		360.618	1+,2+	
		366.21 5		267.229	1+,2+	
		396.39 6		237.069	$(1,2,3^{+})$	

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 $^{110}_{47}\mathrm{Ag}_{63}\text{--}8$

L

$\gamma(^{110}\text{Ag})$ (continued)

E _i (level)	\mathbf{J}_i^π	E_{γ}^{\ddagger}	\mathbf{E}_{f}	\mathbf{J}_f^{π}	E _i (level)	\mathbf{J}_i^π	E _γ ‡	E_f	\mathbf{J}_f^{π}
653.929	(1+,2,3+)	157.043 23 185.07 3 315.05 5 417.06 6 462 20 7	496.886 468.850 338.960 236.859	$(1,2,3^+) (1^+,2,3) 0^-,1^- 1^- 2^+ $	706.214	(1+,2,3+)	345.50 5 434.65 6 507.41 7 514.45 ^b 8	360.618 1+ 271.470 2+ 198.689 2+ 191.622 3+ 118.710 2+	,2 ⁺ ,3 ⁺ ,4 ⁺
663.463	(1 ⁻ ,2 ⁻ ,3 ⁻)	652.76 <i>10</i> 114.082 <i>17</i> 177.69 <i>3</i> 194.61 <i>3</i>	191.022 1.112 549.397 485.737 468.850	$5 \\ 2^{-} \\ (1,2,3) \\ (1^{+},2,3^{-}) \\ (1^{+},2,3) $	724.67	1+,2,3+	253.43 4 605.95 9 723.57 11 724.69 11	$\begin{array}{c} 118.719 & 3 \\ 471.239 & (1, \\ 118.719 & 3^{+} \\ 1.112 & 2^{-} \\ 0.0 & 1^{+} \end{array}$	2,3)
664.935	(1-,2-,3-)	302.84 <i>4</i> 358.93 5 464.78 7 662.27 <i>10</i> 283.73 <i>4</i>	360.618 304.525 198.689 1.112 381.207	$1^+, 2^+$ $1^+, 2^+, 3^+$ 2^- $1^-, 2^-$	725.807		228.92 <i>3</i> 301.06 <i>4</i> 344.60 <i>5</i> 386.90 <i>6</i> 488.75 <i>7</i>	496.886 (1, 424.721 (1, 381.207 1 338.960 0 237.069 (1,	$2,3^+)$ $2,3^+)$ $,2^-$ $,1^-$ $2,3^+)$
	(- ,- ,-)	304.30 5 326.01 5 393.49 6 427.87 6 428.06 6 466.22 7 663.75 10	360.618 338.960 271.470 237.069 236.859 198.689 1.112	$1^{+}, 2^{+}$ $0^{-}, 1^{-}$ $2^{+}, 3^{+}, 4^{+}$ $(1, 2, 3^{+})$ 1^{-} 2^{+} 2^{-}	748.598	1 ⁻ ,2 ⁻	212.39 <i>3</i> 323.86 <i>5</i> 367.38 <i>5</i> 387.97 <i>6</i> 409.69 <i>6</i> 549.87 <i>8</i> 748.63 <i>11</i>	536.209 0 ⁻ 424.721 (1, 381.207 1 ⁻ 360.618 1 ⁺ 338.960 0 ⁻ 198.689 2 ⁺ 0.0 1 ⁺	$(1,1)^{,1}$ $(2,3^+)^{,2^-}$ $(2,2^+)^{,2^+}$ $(1,1)^{,2^-}$
683.152	(1,2,3)	157.488 ^b 23 214.29 3 322.52 5 378.62 6 415.91 6 484.45 7	525.677 468.850 360.618 304.525 267.229 198.689	$(1,2,3^{-})$ $(1^{+},2,3)$ $1^{+},2^{+}$ $1^{+},2^{+},3^{+}$ $1^{+},2^{+}$ 2^{+}	750.837	(2) ⁻	223.37 <i>3</i> 390.25 6 446.34 7 483.68 7 632.19 9 750.89 <i>11</i>	527.428 (1 360.618 1+ 304.525 1+ 267.229 1+ 118.719 3+ 0.0 1+	⁺ ,2,3 ⁻) ,2 ⁺ ,2 ⁺ ,3 ⁺ ,2 ⁺
689.47	(1+,2,3+)	232.94 <i>3</i> 422.23 <i>6</i> 570.76 <i>8</i>	456.53 267.229 118.719	(2 ⁺ ,3,4 ⁺) 1 ⁺ ,2 ⁺ 3 ⁺	753 767.01	1 ⁻ ,2 ⁻ ,3 ⁻ (1 ⁺ ,2,3 ⁺)	753 ^{&} 3 298.18 ^b 4 406.44 6	0.0 1 ⁺ 468.850 (1 ⁻ 360.618 1 ⁺	+,2,3) ,2 ⁺
698.561		149.168 22 162.371 24 201.68 3 212.77 3 273.85 4 317.34 5 337.95 5 461.51 7 698 58 10	549.397 536.209 496.886 485.737 424.721 381.207 360.618 237.069 0.0	$(1,2,3) 0^{-},1^{-} (1,2,3^{+}) (1^{+},2,3^{-}) (1,2,3^{+}) 1^{-},2^{-} 1^{+},2^{+} (1,2,3^{+}) 1^{+}$	773.697	(1+,2,3+)	648.04 <i>10</i> 765.93 <i>11</i> 237.49 <i>4</i> 276.80 <i>4</i> 348.98 5 469.14 7 536.72 8 574.98 8 654 99 <i>10</i>	118.719 3 ⁺ 1.112 2 ⁻ 536.209 0 ⁻ 496.886 (1, 424.721 (1, 304.525 1 ⁺ 237.069 (1, 198.689 2 ⁺ 118.719 3 ⁺	,1 ⁻ 2,3 ⁺) 2,3 ⁺) ,2 ⁺ ,3 ⁺ 2,3 ⁺)
706.214	(1+,2,3+)	156.754 23 169.923 25 220.85 3 237.28 4	549.397 536.209 485.737 468.850	(1,2,3) $0^{-},1^{-}$ $(1^{+},2,3^{-})$ $(1^{+},2,3)$	785.683	(1+,2,3+)	773.67 <i>11</i> 236.27 <i>4</i> 249.47 <i>4</i> 260.02 ^{<i>b</i>} <i>4</i>	$\begin{array}{c} 0.0 & 1^+ \\ 549.397 & (1, \\ 536.209 & 0^- \\ 525.677 & (1, \\ \end{array}$	2,3) ,1 ⁻ 2,3 ⁻)

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 $^{110}_{47}\mathrm{Ag}_{63}$ -9

				Ado	opted Lev	els, Gammas (continued)		
					$\gamma(^{11}$	⁰ Ag) (continue	d)		
E _i (level)	\mathbf{J}_i^{π}	E_{γ}^{\ddagger}	$\mathbf{E}_f \qquad \mathbf{J}_f^{\pi}$	E _i (level)	\mathbf{J}_i^{π}	E_{γ}^{\ddagger}	I_{γ}^{\ddagger}	E_f	${ m J}_f^\pi$
785.683	(1+,2,3+)	288.82 ^b 4 316.82 5 481.21 7 586.97 7	496.886 (1,2,3 ⁺) 468.850 (1 ⁺ ,2,3) 304.525 1 ⁺ ,2 ⁺ ,3 ⁺ 198.689 2 ⁺	819.017		386.64 <i>6</i> 514.45 ^{<i>b</i>} 8 581.96 <i>9</i> 620.32 <i>10</i>		432.376 304.525 237.069 198.689	$(2)^{-}$ $1^{+},2^{+},3^{+}$ $(1,2,3^{+})$ 2^{+}
		666.84 <i>10</i> 785.66 <i>12</i>	$\begin{array}{ccc} 118.719 & 3^+ \\ 0.0 & 1^+ \end{array}$	820 890.7+x	(10 ⁻)	$820^{\infty} 3$ 406.3 ^{<i>a</i>} 2	100 <i>a</i>	0.0 484.40+x	1 ⁺ (9 ⁻)
793	1,2,3+	793 ^{&} 3	0.0 1+	918		918 ^{&} 3		0.0	1+
802.73		277.07 <i>4</i> 611.04 <i>9</i>	525.677 $(1,2,3^{-})$ 191.622 3^{+}	1104 1111	1,2,3+	$1104^{\circ} 3$ $1111^{\circ} 4$		0.0 0.0	1+ 1+
811.419		683.98 <i>10</i> 275.23 <i>4</i> 325.64 <i>5</i> 342.62 <i>5</i>	$\begin{array}{c} 118.719 3^{+} \\ 536.209 0^{-},1^{-} \\ 485.737 (1^{+},2,3^{-}) \\ 468.850 (1^{+},2,3) \\ 360 (1^{+},2,3) \\ 360 (1^{+},2,3) \end{array}$	1167 1229.8+x 1707.2+x	1,2,3 ⁺ (11 ⁻) (12 ⁻)	$1167^{\&} 3$ $339.1^{a} 2$ $745.5^{a} 3$ $477.4^{a} 2$	$100^{a} 12$ $44^{a} 12$ $100^{a} 24$	0.0 890.7+x 484.40+x 1229.8+x	1^+ (10 ⁻) (9 ⁻) (11 ⁻)
		450.78 7 506.83 7 544.20 8 612 71 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2198.1+x	(13^{-})	816.4^{a} 4 490.8^{a} 3 968.4^{a} 5 468.0^{a} 3	$18^{a} 6$ $86^{a} 29$ $100^{a} 29$ $100^{a} 33$	890.7+x 1707.2+x 1229.8+x 2108.1+x	(10) (12^{-}) (11^{-}) (13^{-})
819.017		165.093 <i>24</i> 282.80 <i>4</i>	$\begin{array}{c} 136.009 \ 2 \\ 653.929 \ (1^+,2,3^+) \\ 536.209 \ 0^-,1^- \end{array}$	2000.1+X	(14)	959 ^{<i>a</i>} 1	$50^{a} 17$	1707.2+x	(12 ⁻)

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[†] Additional information 3. [‡] From ¹⁰⁹Ag(n, γ) (Δ E γ estimated by the evaluators based on Δ E γ given in 1975Cl03), unless otherwise stated. [#] Deduced from α (K)exp and α (L1)exp in ¹⁰⁹Ag(n, γ) (1968El03), or $\gamma(\theta)$ in ¹¹⁰Pd(p,n γ), ¹⁰⁹Ag(d,p γ) (1976Ha57), unless otherwise stated. [@] From $\gamma(\theta)$ in ¹¹⁰Pd(p,n γ), ¹⁰⁹Ag(d,p γ) (1976Ha57). [&] From ¹⁰⁹Ag(n, γ) E=5.2 eV res. ^a From ¹⁷⁶Yb(²⁸Si,X γ). ^b Multiply placed

^b Multiply placed.



¹¹⁰₄₇Ag₆₃

Level Scheme (continued)

Intensities: Type not specified



¹¹⁰₄₇Ag₆₃

Level Scheme (continued)

Intensities: Type not specified



¹¹⁰₄₇Ag₆₃

Level Scheme (continued)

Intensities: Type not specified



¹¹⁰₄₇Ag₆₃



¹¹⁰₄₇Ag₆₃





¹¹⁰₄₇Ag₆₃



¹¹⁰₄₇Ag₆₃



 $^{110}_{47}\mathrm{Ag}_{63}$