Adopted Levels, Gammas

		Type Full Evaluation		Author	History Citation	Literature Cutoff Date			
				F. G. Kondev NDS 159, 1 (2019)		30-Aug-2019			
$Q(\beta^{-}) = -8760$	0 <i>80</i> ; S(n)=	=11100 <i>30</i> ; S(p)=	=-100 <i>1</i> ;	Q(<i>a</i>)=56298 4	2017Wa10				
					¹⁷⁷ Au Levels				
				Cross Re	ference (XREF) Flags				
A 181 Tl α decay (2.9 s) B 181 Tl α decay (1.40 ms) C (HI,xn γ)									
E(level) [†]	J^{π}	T _{1/2}	XREF			Comments			
0.0	1/2+	1.501 s 20	ABC	%α=40 6; %ε	$+\%\beta^+=60~6$				
24.90 23	(3/2+)		BC	XREF: B(26). J^{π} : From systematics of similar structures in neighboring nuclei and the proposed configuration. The assignment is tentative. Other: $J^{\pi} = (5/2^+)$ in 2009An14. configuration: $\pi(d_{\pi}^{-1})$. The assignment is tentative.					
182.7 [@] 5	(11/2 ⁻)	1.193 s <i>13</i>	BC	 %α=60 10; %ε+%β⁺=40 10 XREF: B(186). Additional information 1. %α: From 2009An14. %ε+β⁺ decay has not been directly measured. Other: %α=65 (1975Ca06). J^π: Favored α decay to the ¹⁷³Ir isomeric state (J^π=11/2⁻); J^π systematics in neighboring odd-Z nuclei and proposed configuration. T_{1/2}: Unweighted average of 1.180 s 12 (2001Ko44) and 1.205 s 3 (2014AlZX). Others: 1.0 s 2 (2009An14), 1.3 s 4 (1968Si01), 1.3 s 2 (1996Pa01), 1.18 s 7 (1991Se01) and 1.3 s 1 (1975Ca06). Eα=6124 keV 7 (2009An14), 6122 keV 6 (2001Ko44), 6118 6 (2014AlZX), 6118 keV 9 (1996Pa01), 6110 keV 10 (1975Ca06), 6110 keV 10 (1973Ga08) and 6115 keV 100 (1968Si01). 					
290.30 23	$(5/2^+)$		С	J^{π} : 265.4 γ to	Spherical (weakly-defo ($3/2^+$), 290.3 γ to ($1/2^+$). ($\pi(n_{11/2})$) configuration.			
423.6 [‡] 6 703.5 [@] 7 706.6 [@] 7	(9/2 ⁻) (13/2 ⁻) (15/2 ⁻)	≤15 ns	BC C C	XREF: B(431) J^{π} : 240.8 γ (M $T_{1/2}$: From int J^{π} : 520.7 γ (M J^{π} : 523.8 γ (E2). 1+E2) to (11/2 ⁻). tensity balance conside 1+E2) to (11/2 ⁻). 2) to (11/2 ⁻).	rations (2001Ko44).			
713.5 [‡] 6 743.00 25	(13/2 ⁻) (9/2 ⁺)		C C	J^{π} : 289.9 γ to J^{π} : 319.4 γ to	$(9/2^{-})$; band assignmen $(9/2^{-})$, 452.7 γ to $(5/2^{+})$	nt.).			

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Adopted Levels, Gammas (continued)

¹⁷⁷Au Levels (continued)

E(level) [†]	J^{π}	XREF	Comments				
743.00+x [#] 5	$(13/2^+)$	С	Additional information 2.				
			J^{π} : Systematics of similar structures in neighboring nuclei; proposed configuration. configuration: Well-deformed $\pi 1/2[660]$ (i _{13/2}) band member.				
903.10+x [#] 10	$(17/2^+)$	С	J^{π} : 160.1 γ E2 to (13/2 ⁺); band assignment.				
931.0 ^{&} 7	(11/2 ⁻)	С	J^{π} : 227.5 γ (M1+E2) to (13/2 ⁻). configuration: Well-deformed π 11/2[505] (h _{11/2}).				
1096.2 [‡] 7	$(17/2^{-})$	С	J^{π} : 382.7 γ (E2) to (13/2 ⁻); band assignment.				
1102.6 ^{&} 7	$(13/2^{-})$	С	J^{π} : 171.6 γ to (11/2 ⁻), 396.0 γ to (15/2 ⁻), 399.1 γ (M1+E2) to (13/2 ⁻); band assignment.				
1160.40+x [#] 15	$(21/2^+)$	С	J^{π} : 257.3 γ to (17/2 ⁺); band assignment.				
1305.6 ^{&} 7	$(15/2^{-})$	С	J^{π} : 203.0 γ to (13/2 ⁻), 374.6 γ to (11/2 ⁻); band assignment.				
1430.7 [@] 9	$(17/2^{-})$	С	J^{π} : 727.2 γ to (13/2 ⁻).				
1499.40+x [#] 18	$(25/2^+)$	С	J^{π} : 339.0 γ to (21/2 ⁺); band assignment.				
1526.2 ^{&} 8	$(17/2^{-})$	С	J^{π} : 220.6 γ to (15/2 ⁻), 423.6 γ to (13/2 ⁻); band assignment.				
1532.0 [‡] 8	$(21/2^{-})$	С	J^{π} : 435.8 γ to (17/2 ⁻); band assignment.				
1577.4 [@] 9	$(19/2^{-})$	С	J^{π} : 870.8 γ to (15/2 ⁻).				
1758.3 ^{&} 8	$(19/2^{-})$	С	J^{π} : 232.1 γ to (17/2 ⁻), 452.7 γ to (15/2 ⁻); band assignment.				
1909.30+x [#] 20	$(29/2^+)$	С	J^{π} : 409.9 γ to (25/2 ⁺); band assignment.				
2004.3 ^{&} 8	$(21/2^{-})$	С	J^{π} : 245.9 γ to (19/2 ⁻), 478.0 γ to (17/2 ⁻); band assignment.				
2020.2 [‡] 8	$(25/2^{-})$	С	J^{π} : 488.2 γ to (21/2 ⁻); band assignment.				
2262.5 ^{&} 9	$(23/2^{-})$	С	J^{π} : 258.2 γ to (21/2 ⁻), 504.4 γ to (19/2 ⁻); band assignment.				
2381.20+x [#] 23	$(33/2^+)$	С	J^{π} : 471.9 γ to (29/2 ⁺); band assignment.				
2533.2 ^{&} 9	$(25/2^{-})$	С	J^{π} : 270.7 γ to (23/2 ⁻), 528.9 γ to (21/2 ⁻); band assignment.				
2553.8 [‡] 9	$(29/2^{-})$	С	J^{π} : 533.6 γ to (25/2 ⁻); band assignment.				
2810.3 ^{&} 11	$(27/2^{-})$	С	J^{π} : 277 γ to (25/2 ⁻), 548 γ to (23/2 ⁻); band assignment.				
2907.10+x [#] 25	$(37/2^+)$	С	J^{π} : 525.9 γ to (33/2 ⁺); band assignment.				
3100.4 ^{&} 11	$(29/2^{-})$	С	J^{π} : 290.2 γ to (27/2 ⁻), 567 γ to (25/2 ⁻); band assignment.				
3121.0 [‡] <i>11</i>	$(33/2^{-})$	С	J^{π} : 567.2 γ to (29/2 ⁻); band assignment.				
3480.6+x [#] 4	$(41/2^+)$	С	J^{π} : 573.5 γ to (37/2 ⁺); band assignment.				
3709.0? [‡] 14	$(37/2^{-})$	С	J^{π} : 588.0 γ to (33/2 ⁻); band assignment.				
4096.3+x [#] 4	$(45/2^+)$	С	J^{π} : 615.7 γ to (41/2 ⁺); band assignment.				
4753.3+x [#] 5	$(49/2^+)$	С	J^{π} : 657.0 γ to (45/2 ⁺); band assignment.				
5444.3+x [#] 6	$(53/2^+)$	С	J^{π} : 691.0 γ to (49/2 ⁺); band assignment.				
6158.2+x? [#] 12	$(57/2^+)$	С	J^{π} : 714.0 γ to (53/2 ⁺); band assignment.				

 † From a least-squares fit to Ey.

[‡] Band(A): $\pi 1/2[541]$ (h_{9/2}) band.

Band(B): $\pi 1/2[601]$ ($h_{1/2}$) band. @ Seq.(D): Spherical (weakly-deformed) $\pi h_{11/2} \otimes J^{\pi}$ (even-even core). & Band(C): Well-deformed $\pi 11/2[505]$ ($h_{11/2}$) band.

Adopted Levels, Gammas (continued)

$\gamma(^{177}\mathrm{Au})$

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	E _i (level)	\mathbf{J}_i^π	${\rm E_{\gamma}}^{\dagger}$	I_{γ}^{\dagger}	E_f	\mathbf{J}_{f}^{π}	Mult. [†]	Comments
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	24.90 290.30	$(3/2^+)$ $(5/2^+)$	(24.9 <i>3</i>) 265.4 <i>2</i> 290.3 <i>4</i>	100 100 <i>3</i> 50 3 <i>17</i>	0.0 24.90 0.0	$\frac{1/2^+}{(3/2^+)}$ $\frac{1}{2^+}$		E_{γ} : From level energy differences.
703.5 (132 ⁻) 520.7 5 100 182.7 (11/2 ⁻) (M1+E2) Mult: R(DCO)=0.59 / 4. 713.5 (132 ⁻) 289.9 100 432.6 (92 ⁻) Mult: R(DCO)=1.5 5 implies M1,E2. 743.00 (9/2 ⁻) 319.4 2 52 423.6 (9/2 ⁻) Kall K(DCO)=1.5 5 implies M1,E2. 903.10+x (13/2 ⁺) (29.5+y 5) 713.5 (13/2 ⁻) E2 Mult: R(DCO)=1.5 7 and o(exp)=0.070 7 (200)Ko44) 903.10+x (17/2 ⁺) 160.1 1 100 743.00+x (13/2 ⁺) E2 Mult: R(DCO)=1.5 and o(exp)=0.58 23 in 2017Vc03.2014AL2X, from the K x-ray intensity balance considerations from yr coincidence relations from yr coincidence plasma plane considerations from yr coincidence plane pla	423.6	(9/2-)	240.8 3	100	182.7	$(11/2^{-})$	(M1+E2)	E_{γ} : 241.5 keV 3 (2009An14). Mult.: R(DCO)=0.9 4 implies M1.E2.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	703.5	$(13/2^{-})$	520.7 5	100	182.7	$(11/2^{-})$	(M1+E2)	Mult.: R(DCO)=0.59 14.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	706.6	(15/2)	523.8 5	100	182.7	(11/2)	(E2)	Mult.: $R(DCO)=1.5.5$ implies M1,E2.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	713.5	(13/2)	289.9 2	100	423.6	(9/2)		
432.0 + (132 ⁺) (29.5 + s) 713.5 (132 ⁺) E; From level energy differences. Required by coincidence relationship. 903.10+x (172 ⁺) 160.1 I 100 743.00+x (132 ⁺) E2 Mult: From a(exp)=0.707 (2001Ko44) deduced using intensity balance considerations from γy coincidence spectrum produced by summing gates on γ rays above the $Irr=(172^+)$ level. 931.0 (11/2 ⁻) 227.5 5 100 703.5 (132 ⁻) (E2) Mult: RDCO)=1.5 7 and a(exp)=0.58 23 in 2017ve03.201AL2X, from the K x-ray intensity balance. 1096.2 (177 ⁻) 382.7 3 100 713.5 (132 ⁻) (E2) Mult: RDCO)=1.5 7 and a(exp)=0.58 23 in 2017ve03.201AL2X, from the K x-ray intensity balance. 1096.2 (172 ⁻) 382.7 3 100 713.5 (132 ⁻) (M1+E2) Mult: RDCO)=1.2 8 implies M1.E2. 1102.6 (132 ⁻) 257.3 100 903.10+x (172 ⁺) (M1+E2) Mult: R(DCO)=1.2 5 implies M1.E2. 1160.40+x (212 ⁺) 257.3 100 22 706.6 (152 ⁻) Mult: R(DCO)=1.0 2 17. 1430.7 (172 ⁻) 723.5 100.2 703.5 (132 ⁻) (M1+E2) Mult: R(DCO)=1.0 2 17. <td< td=""><td>743.00</td><td>(9/2+)</td><td>319.4 2</td><td>52.6</td><td>423.6</td><td>(9/2)</td><td></td><td></td></td<>	743.00	(9/2+)	319.4 2	52.6	423.6	(9/2)		
903.10+x (17/2 ⁺) 160.1 <i>I</i> 100 743.00+x (13/2 ⁺) E2 Mult: From $\alpha(x_2)=0.707$ (2001Ko44) deduced using intensity balance considerations from $\gamma\gamma$ coincidence spectrum produced by summing gates on γ rays above the $I_{T-1}(7/2^+)$ level. 931.0 (11/2 ⁻) 227.5 <i>S</i> 100 703.5 (13/2 ⁻) (M1+E2) Mult: RIOCO)=1.5 7 and $\alpha(x_2)=0.58$ 23 in 2017Ve03.2014A1ZX, from the K x-ray intensity balance. 1096.2 (17/2 ⁻) 382.7 <i>3</i> 100 713.5 (13/2 ⁻) (M1+E2) Mult: RIOCO)=1.5 7 and $\alpha(x_2)=0.58$ 23 in 2017Ve03.2014A1ZX, from the K x-ray intensity balance. 1102.6 (13/2 ⁻) 171.6 5 25.4 24 931.0 (11/2 ⁻) 390.9 <i>S</i> 100 <i>I</i> 5 706.6 (15/2 ⁻) 390.9 <i>S</i> 101 <i>I</i> 5 706.6 (15/2 ⁻) 390.9 <i>S</i> 101 <i>I</i> 5 706.6 (15/2 ⁻) 390.9 <i>S</i> 101 <i>I</i> 20 903.10+x (17/2 ⁺) (M1+E2) Mult: R(DCO)=1.2 8 implies M1,E2. 1105.6 (15/2 ⁻) 220.3 <i>S</i> 86 7 1102.6 (13/2 ⁻) (M1+E2) Mult: R(DCO)=1.0 2 <i>I</i> . 13. 1109.9 $\alpha(x_1, x_1, x_2, x_2, x_3, x_4, x_4, x_4, x_4, x_4, x_4, x_4, x_4$	743.00+x	$(13/2^+)$	452.72 (29.5+y 5)	100 3	290.30 713.5	$(5/2^{-})$ $(13/2^{-})$		E_{γ} : From level energy differences. Required by
931.0 (11/2 ⁻) 227.5 5 100 703.5 (13/2 ⁻) (M1+E2) Mult.: R(DCO)=1.5 7 and $\alpha(\exp)=0.58$ 23 in 2017V603.2014AlZX, from the K x-ray intensity balance. 1096.2 (17/2 ⁻) 382.7 3 100 713.5 (13/2 ⁻) (E2) Mult.: R(DCO)=1.1 3. 1102.6 (13/2 ⁻) 171.6 5 25.4 24 931.0 (11/2 ⁻) 396.0 5 100 15 706.6 (15/2 ⁻) 399.1 5 31 3 703.5 (13/2 ⁻) (M1+E2) Mult.: R(DCO)=1.2 8 implies M1,E2. 1160.40+x (21/2 ⁺) 273.3 1 100 903.10+x (17/2 ⁺) 1305.6 (15/2 ⁻) 203.0 5 86 7 9130.0 (11/2 ⁻) 599.0 5 100 22 706.6 (15/2 ⁻) 1430.7 (17/2 ⁻) 727.2 5 100 22 705.6 (15/2 ⁻) 1439.40+x (25/2 ⁺) 339.0 1 100 1160.40+x (21/2 ⁺) (E2) Mult.: R(DCO)=1.2 5 implies M1,E2. 1439.40+x (25/2 ⁺) 339.0 1 100 1160.40+x (21/2 ⁺) (E2) Mult.: R(DCO)=1.02 21. 1526.2 (17/2 ⁻) 220.6 5 100 9 1305.6 (15/2 ⁻) 1532.0 (21/2 ⁻) 435.8 3 100 1096.2 (17/2 ⁻) 1577.4 (19/2 ⁻) 870.8 5 100 706.6 (15/2 ⁻) 1577.4 (19/2 ⁻) 232.1 5 76 9 1526.2 (17/2 ⁻) 452.7 5 100 12 1305.6 (15/2 ⁻) 1577.4 (19/2 ⁻) 232.1 5 76 9 1526.2 (17/2 ⁻) 452.7 5 100 10 1490.40+x (25/2 ⁻) (E2) Mult.: R(DCO)=1.0 7 implies M1,E2. 2004.3 (21/2 ⁻) 245.9 5 64 9 1758.3 (19/2 ⁻) 2020.2 (25/2 ⁻) 438.2 3 100 1532.0 (21/2 ⁻) 2020.2 (25/2 ⁻) 488.2 3 100 1532.0 (21/2 ⁻) 2033.2 (25/2 ⁻) 270.7 5 100 16 126.2 (17/2 ⁻) 504.4 5 75 10 176 126.2 (17/2 ⁻) 528.9 5 86 18 2004.3 (21/2 ⁻) 2281.0 3 (27/2 ⁻) 277.1 253.3 (25/2 ⁻) 548.1 226.5 (23/2 ⁻)	903.10+x	(17/2+)	160.1 <i>1</i>	100	743.00+x	(13/2+)	E2	Mult.: From $\alpha(\exp)=0.70$ 7 (2001Ko44) deduced using intensity balance considerations from $\gamma\gamma$ coincidence spectrum produced by summing gates on γ rays above the $I\pi=(17/2^+)$ level
$ \begin{array}{cccccccccccccccccccccccc$	931.0	(11/2 ⁻)	227.5 5	100	703.5	(13/2 ⁻)	(M1+E2)	Mult.: $R(DCO)=1.5$ 7 and $\alpha(exp)=0.58$ 23 in 2017Ve03,2014AIZX, from the K x-ray intensity balance.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1096.2	$(17/2^{-})$	382.7 <i>3</i>	100	713.5	$(13/2^{-})$	(E2)	Mult.: $R(DCO)=1.1 3$.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1102.6	$(13/2^{-})$	171.6 5	25.4 24	931.0	$(11/2^{-})$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			396.0 5	100 15	706.6	$(15/2^{-})$		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			399.1 5	31 3	703.5	$(13/2^{-})$	(M1+E2)	Mult.: R(DCO)=1.2 8 implies M1,E2.
1305.6(15/2 ⁻)203.08671102.6(13/2 ⁻)(M1+E2)Mult.: R(DCO)=1.25 implies M1,E2.374.6557931.0(11/2 ⁻)599.0510022706.6(15/2 ⁻)1430.7(17/2 ⁻)727.2510022703.5(13/2 ⁻)1499.40+x(25/2 ⁺)339.011001160.40+x(21/2 ⁺)(E2)Mult.: R(DCO)=1.0221.1526.2(17/2 ⁻)220.6510091305.6(15/2 ⁻)Mult.: R(DCO)=1.04 implies M1,E2.1532.0(21/2 ⁻)435.831001096.2(17/2 ⁻)Mult.: R(DCO)=1.07 implies M1,E2.1577.4(19/2 ⁻)870.85100706.6(15/2 ⁻)(E2)Mult.: R(DCO)=1.07 implies M1,E2.1909.30+x(29/2 ⁺)425.756491758.3(19/2 ⁻)Mult.: R(DCO)=0.8224 implies M1,E2.2004.3(21/2 ⁻)245.956491758.3(19/2 ⁻)Mult.: R(DCO)=0.8224 implies M1,E2.2020.2(25/2 ⁻)488.21001532.0(21/2 ⁻)226S1001499.40+x(29/2 ⁺)2381.20+x(33/2 ⁺)471.911001909.30+x(29/2 ⁺)232.1556492381.20+x(33/2 ⁺)75100152.62(23/2 ⁻)238.15661758.3(19/2 ⁻)2533.8(29/2	1160.40+x	$(21/2^+)$	257.3 1	100	903.10+x	$(17/2^+)$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1305.6	$(15/2^{-})$	203.0 5	86 7	1102.6	$(13/2^{-})$	(M1+E2)	Mult.: $R(DCO)=1.25$ implies M1,E2.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			374.6 5	56 7	931.0	$(11/2^{-})$		
$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	1 4 2 0 7	(17/2-)	599.0 5	100 22	706.6	(15/2)		
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	1430.7	(1/2)	121.2.5	100 22	/03.5	(13/2)	(E2)	\mathbf{M} -the \mathbf{D} (\mathbf{D} (\mathbf{O}) 1.02.21
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$1499.40 \pm x$ 1526.2	(23/2) $(17/2^{-})$	220.6 5	100 0	$1100.40 \pm x$ 1305.6	(21/2) $(15/2^{-})$	(E2) (M1 + E2)	Mult.: $R(DCO)=1.02.21$. Mult.: $R(DCO)=1.0.4$ implies M1 E2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1320.2	(11/2)	423.6.5	71.9	1102.6	$(13/2^{-})$	(WIT+L2)	Mult.: $R(DCO) = 1.0.4$ implies W1,E2.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1532.0	$(21/2^{-})$	435.8.3	100	1096.2	$(15/2^{-})$		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1552.0	$(19/2^{-})$	870.8.5	100	706.6	$(17/2^{-})$		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1758.3	$(19/2^{-})$	232.1 5	76 9	1526.2	$(17/2^{-})$		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			452.7 5	100 12	1305.6	$(15/2^{-})$	(E2)	Mult.: R(DCO)=1.0 7 implies M1,E2.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1909.30+x	$(29/2^+)$	409.9 <i>1</i>	100	1499.40+x	$(25/2^+)$	(E2)	Mult.: R(DCO)=0.82 24 implies M1,E2.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2004.3	$(21/2^{-})$	245.9 5	64 9	1758.3	$(19/2^{-})$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			478.0 5	100 16	1526.2	$(17/2^{-})$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2020.2	$(25/2^{-})$	488.2 3	100	1532.0	$(21/2^{-})$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2262.5	$(23/2^{-})$	258.2 5	100 13	2004.3	$(21/2^{-})$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2201.20	(22 /2+)	504.4 5	75 16	1758.3	$(19/2^{-})$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2381.20+x	$(33/2^{+})$	471.9 1	100	1909.30+x	$(29/2^{+})$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2533.2	(25/2)	270.7 5	100 16	2262.5	(23/2)		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2552.9	$(20/2^{-})$	528.9 5	80 18	2004.3	(21/2)		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2333.0	(29/2)	333.04 277 1	100	2020.2	$(25/2^{-})$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2010.3	(21/2)	548 1		2353.2	$(23/2^{-})$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2907.10+x	$(37/2^{+})$	525.9 1	100	$2381\ 20+x$	$(33/2^+)$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3100.4	$(29/2^{-})$	290.2.5	100	2810.3	$(27/2^{-})$		
3121.0 $(33/2^-)$ $567.2.5$ 100 2553.8 $(29/2^-)$ $3480.6+x$ $(41/2^+)$ $573.5.2$ 100 $2907.10+x$ $(37/2^+)$ $3709.0?$ $(37/2^-)$ 588.0^{\ddagger} 10 100 3121.0 $(33/2^-)$ $4096.3+x$ $(45/2^+)$ $615.7.2$ 100 $3480.6+x$ $(41/2^+)$		(567 1		2533.2	$(25/2^{-})$		
$3480.6+x$ $(41/2^+)$ $573.5.2$ 100 $2907.10+x$ $(37/2^+)$ $3709.0?$ $(37/2^-)$ $588.0^{\frac{1}{2}}$ 100 3121.0 $(33/2^-)$ $4096.3+x$ $(45/2^+)$ $615.7.2$ 100 $3480.6+x$ $(41/2^+)$	3121.0	$(33/2^{-})$	567.2 5	100	2553.8	$(29/2^{-})$		
$3709.0?$ $(37/2^-)$ 588.0^{\ddagger} 10 3121.0 $(33/2^-)$ $4096.3+x$ $(45/2^+)$ $615.7.2$ 100 $3480.6+x$ $(41/2^+)$	3480.6+x	$(41/2^+)$	573.5 2	100	2907.10+x	$(37/2^+)$		
4096.3+x (45/2 ⁺) 615.7 2 100 3480.6+x (41/2 ⁺)	3709.0?	$(37/2^{-})$	588.0 [‡] 10	100	3121.0	$(33/2^{-})$		
	4096.3+x	$(45/2^+)$	615.7 2	100	3480.6+x	$(41/2^+)$		

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

 $\gamma(^{177}\text{Au})$ (continued)

E _i (level)	\mathbf{J}_i^{π}	E_{γ}^{\dagger}	I_{γ}^{\dagger}	E_f	${ m J}_f^\pi$
4753.3+x	$(49/2^+)$	657.0 <i>3</i>	100	4096.3+x	$(45/2^+)$
5444.3+x	$(53/2^+)$	691.0 <i>3</i>	100	4753.3+x	$(49/2^+)$
6158.2+x?	$(57/2^+)$	714.0 [‡] <i>10</i>	100	5444.3+x	$(53/2^+)$

[†] From (HI,xn γ). The R(DCO) values are from 2014AlZX. [‡] Placement of transition in the level scheme is uncertain.



¹⁷⁷₇₉Au₉₈



¹⁷⁷₇₉Au₉₈

Adopted Levels, Gammas



¹⁷⁷₇₉Au₉₈