¹⁹⁶Pt(α ,4n γ), ¹⁹⁷Au(d,3n γ) 1983He14,1981Kr04,1974Pr13

Туре	Author	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong	NDS 108, 1093 (2007)	1-Jan-2006

Included ¹⁹⁴Pt(α ,2n γ), ¹⁹⁵Pt(α ,3n γ).

2006Le06: ¹⁹⁴Pt(α ,2n γ),98% enriched ¹⁹⁶Pt, E=27 MeV,Measured E γ , I $\gamma(\theta$,H,t), deduced isometric states g factors. IPAD technique. Transition intensities are relative to 426γ .

1983He14: 97% enriched ¹⁹⁶Pt. $E(\alpha)$ =48.6 MeV. Measured Ey, Iy, t, $\gamma\gamma$ (t)-coincidence withGe(Li) detectors and low-energy photon spectrometer. γ -angular distributions were determined from I γ 's measured at five angles between 90° and 157°. Level scheme is based firmly on the $\gamma\gamma$ -coincidence results.

1983Gu05: 98% enriched ¹⁹⁶Pt. $E(\alpha)$ =50 MeV. Measured ce-ce- $T_{1/2}$ coincidence. Electron spectrometer with superconducting solenoid and Si(Li).

1981Kr04, 1980Kr21: ¹⁹⁶Pt(α ,4n γ) E(α)=48 MeV; ¹⁹⁴Pt(α ,2n γ) E=30 MeV; ¹⁹⁷Au(d,3n γ) E(d)=22 MeV. Measured E γ , I γ , $\gamma\gamma$ -coin, summed coin, Ice, Ce(t). $\gamma(\theta,H)$, $\gamma(\theta) \theta=40^{\circ}$ to 90°. Iron-free orange spectrometer.

1985Ko13: $E(\alpha)=50$ MeV. 97.5% enriched ¹⁹⁶Pt. Measured ce-ce coin. Double orange spectrometer.

1984Go06: 87% enriched ¹⁹⁴Pt, ¹⁹⁴Pt(α ,2n γ) E=27 MeV. Measured $\gamma(\theta$,H), $\gamma(\theta$,H,t). DPAD, IPAD methods.

1974Pr13: 30% enriched ¹⁹⁶Pt, $E(\alpha)$ =47 MeV. 30% ¹⁹⁵Pt(α ,3n) $E(\alpha)$ =34 MeV.

¹⁹⁶Hg Levels

E(level) [@]	Jπ&	T _{1/2}	Comments
0.0 [†]	0+	stable	
426.00 [†] 10	2+		$g=-0.005 \ 40 \ (1984Go06)$
1061.50 [†] <i>15</i>	4+		$g=-0.077 \ 33 \ (1984Go06)$
1757.09 [‡] <i>17</i>	5-		$g=-0.048\ 50\ (1984Go06)$
1785.21 [†] <i>17</i>	(6 ⁺)		$\omega \tau = 0.17 \ 7 \ (1980 \text{Kr}^{21}).$
1841.41 [‡] 23	7-	5.2 ns 2	 g: g=-0.040 19 (1984Go06), From -0.031 28 for DPAD; -0.048 23 for IPAD (1984Go06). Other: -0.030 17 for IPAD (2006Le06). g: g factor indicate that the quasiparticle structure of these states is determined mainly by the rotationally aligned i_{13/2} neutron and a neutron with low J. T_{1/2}: from γ(θ,H,t) (1984Go06). B(E2)(↓)=0.2041 87 (1970To14).
2058.54 [#] 21	(6)-		This level is confirmed by a definite 273γ deexcitation branch to the 6 ⁺ level (1983He14).
2064.42 [‡] 24	9-	0.355 ns 18	$T_{1/2}$: from Ce(t) (1977Gu05).
2097.8 [#] 3	(8-)		
2262.81 [†] 20	(8+)		$\omega \tau = 0.11 \ 6 \ (1980 \text{Kr}21).$
2342.3 [†] 3	(10 ⁺)	4.83 ns <i>19</i>	g=-0.26 <i>13</i> g: Recalculated for T _{1/2} =4.83 ns <i>19</i> from g=-0.18 9 if τ=10.1 ns <i>14</i> (1980Kr21). g: Other: -0.19 6 for IPAD (2006Le06). g: The authors' g factor measurement is probably a composite of values for the 10 ⁺ 2342 and 12 ⁺ 2439 levels (evaluators). average $\omega\tau$ =0.14 6 (1980Kr21). As $\nu(i_{13/2})$ -2 aligned quasi-particle state (1981Kr04). T _{1/2} : weighted average of 4.75 ns 22 from ce time spectra (1985Ko13), and 5.1 ns 4 from ce time spectra (1981Kr04). Others: 7 ns <i>1</i> from Ag(t) (1974Pr13). T _{1/2} : average $\omega\tau$ =0.14 6 (1980Kr21). B(E2)=0.236 <i>13</i> (1985Ko13), 0.218 <i>20</i> (1983Gu05). 0.220 <i>17</i> . neglecting 10 ⁺ to 9 ⁻ branch<5% (1981Kr04).
2359.03 25	(8 ⁻)		(1) 00 0 0 000), 0.220 17, hegioting 10 00 y oranon_10 / (1) 01110 /).
2439.0 [†] 3	(12 ⁺)	3.5 ns 3	T _{1/2} : from ce time spectra (1981Kr04). T _{1/2} : B(E2)=0.254 23 (1985Ko13), 0.254 15 (1983Gu05), and 0.256 22, neglecting 10 ⁺ to 9 ⁻ branch≤15% (1981Kr04).
2553.8 [#] 3	(10 ⁻)		

¹⁹⁶Pt(α ,4n γ), ¹⁹⁷Au(d,3n γ) 1983He14,1981Kr04,1974Pr13 (continued)

¹⁹⁶Hg Levels (continued)

E(level) [@]	J ^{π &}	E(level) [@]	Jπ&	E(level)@	Jπ&	E(level) [@]	Jπ&
2620.6 [‡] 3	(11-)	3199.6? 4	(+)	3507.5 [†] 4	(16 ⁺)	3976.1 [‡] 4	(17 ⁻)
2843.6 [†] <i>3</i>	(14+)	3236.6 [#] 4	(12 ⁻)	3684.3? 4	(+)	4321.1 [†] 4	(18+)
2929.6 [#] 4	(10 ⁻)	3310.9 [‡] 3	(13 ⁻)	3697.2 [‡] 3	(15 ⁻)	4388.0 [‡] 4	(19 ⁻)
2977?	(*)	3402.1? 4	$(^{+})$	3792?	(15 ⁺)	5038.5 [‡] 5	(21 ⁻)

[†] Band(A): positive-parity g.s. band. Higher states consistent with Configuration= $(\nu \ li_{13/2})^{+2}$ (1980Kr21). [‡] Band(B): odd-spin negative-parity band built on 5⁻ level.

[#] Band(C): even-spin negative-parity band built on $(6)^-$ level. [@] The level scheme is that proposed by 1983He14. Values from least-squares fit to $E\gamma's$.

& From Adopted Levels.

E_{γ}^{\dagger}	I_{γ}^{\dagger}	E _i (level)	\mathbf{J}_i^{π}	E_f	\mathbf{J}_f^{π}	Mult. [‡]	α #	Comments
(39.2) 79.5 <i>3</i>	27 5	2097.8 2342.3	(8 ⁻) (10 ⁺)	2058.54 2262.81	$(6)^{-}$ (8 ⁺)	E2	14.5 4	α (L)=10.88 25; α (M)=2.84 7; α (N+)=0.822 19 Mult.: from (L1+L2)/L3=1.2 2 (1983Gu05), A ₂ >0 (1983He14)
84.3 2	38 4	1841.41	7-	1757.09	5-	E2	0.556	$I_{(\gamma+ce)}: 65 \ 6(2006Le06).$ $\alpha=0.556; \ \alpha(L)=8.33; \ \alpha(M)=2.17; \ \alpha(N+)=0.678$ $B(E2)(W.u.)=29.6 \ 13$ Mult.: (L1+L2)/L3=1.3 2 (1983Gu05). $I_{\gamma}: I\gamma=4 \ from \ 1981Kr04.$
96.7 2	59 6	2439.0	(12 ⁺)	2342.3	(10+)	E2	6.39 11	I _(γ+ce) : 235 25(2006Le06). Mult.: from L-subshell intensity ratio (1981Kr04), and A ₂ =0.30 4; A ₄ =-0.00 6 (1983He14). α (K)=0.624 9; α (L)=4.31 8; α (M)=1.127 20; α (N+)=0.326 6 E _γ : 1974Pr13 placed 97γ from 10 ⁺ to 8 ⁺ . I _(γ+ce) : 2.7 3(2006Le06). Mult.: (L1+L2)/L3=1.3 2 (1983Gu05).
223.0 <i>1</i>	250 20	2064.42	9-	1841.41	7-	E2	0.271	Mult.: from L-subshell intensity ratio (1981Kr04); $A_2=0.27 \ 2; \ A_4=-0.08 \ 3 \ (1983He14). \ A_2=0.6 \ 2 \ (1974Pr13).$ B(E2)(W.u.)=33.6 <i>18</i> $\alpha(K)=0.1301 \ 19; \ \alpha(L)=0.1055 \ 15; \ \alpha(M)=0.0271 \ 4; \ \alpha(N+)=0.00791 \ 12$ I _Y : others: I _Y =240 (1981Kr04); I _Y =150 30 (1974Pr13).
256.4 2	12 2	2097.8	(8 ⁻)	1841.41	7-	M1+E2	0.36 20	Mult.: deduced from K/L=1.2 <i>1</i> (1983Gu05) and A ₂ =0.30 <i>1</i> ; A ₄ =-0.06 <i>2</i> (1983He14). A ₂ =0.46 <i>15</i> (1974Pr13). $\alpha(K)=0.27$ <i>19</i> ; $\alpha(L)=0.068$ <i>9</i> ; $\alpha(M)=0.0165$ <i>13</i> ; $\alpha(N+)=0.0049$ <i>5</i> Mult.: from A ₂ =-0.29 <i>5</i> ; A ₄ =0.19 <i>7</i> (1983He14). E _{γ} : placed by 1983He14 as defining the 8 ⁻ level. 1981Kr04 show a tentative 8 ⁻ to 7 ⁻ 301 γ , and 1983Gu05 define the 8 ⁻ by a 217.2 γ to 7 ⁻ , with mult=M1+E2, δ =0.55 from K/L=4.9 <i>5</i> .

$\gamma(^{196}\text{Hg})$

¹⁹⁶Pt(α ,4n γ), ¹⁹⁷Au(d,3n γ) 1983He14,1981Kr04,1974Pr13 (continued) $\gamma(^{196}\text{Hg})$ (continued) α**#** E_{γ}^{\dagger} I_{γ}^{\dagger} Mult.[‡] E_i(level) J_i^{π} E_f J^{π} Comments 1983He14 pointed out that the isotopic assignment of 217 K conversion line must be questioned. 261.0[@] 2 72 2359.03 (8^{-}) 2097.8 (8^{-}) 273.3 2 2058.54 51 1785.21 (6⁺) $(6)^{-}$ 278.9 2 2342.3 (10^{+}) 2064.42 9-E1 0.0330 $\alpha(K)=0.0271 4; \alpha(L)=0.00451 7; \alpha(M)=0.001046$ 15; α (N+..)=0.000311 5 Mult.: deduced from ce(K)(278)/ce(K)(223) In the spectra In coin with 96 γ and K/L=5 (1983Gu05). I_{γ} : branching intensity from 10⁺ to 9⁻ level: $\leq 15\%$ supposed by 1981Kr04, not confirmed In the spectrum gated by 223γ ; Branching $\leq 3\%$ (1983He14);≈5% (1991Me06). $I_{(\gamma+ce)}: 0.3 \ l(2006Le06).$ 278.9 2 0.1326 $\alpha(K)=0.0753 \ 11; \ \alpha(L)=0.0432 \ 7; \ \alpha(M)=0.01100$ 130 15 3976.1 (17^{-}) 3697.2 (15⁻) (E2) *16*; *α*(N+..)=0.00321 5 I_{γ} : corrected for contributions from unresolved lines in ¹⁹⁵Hg and ¹⁹⁷Au (1983He14). It is possible that $I_{\gamma}(278\gamma)=220$ of 1983Gu05 were also affected by such impurities. Placement is based on the scheme of 1983He14. Mult.: stretched quadrupole from $A_2=0.27$ 2; $A_4 = -0.01 \ 3 \ (1983 He14)$. But mult=E1 deduced from ce(K)(278)/ce(K)(223) in the spectra in coin with 96 γ and K/L=5 (1983Gu05). 300.5 2 12 4 2359.03 (8^{-}) 2058.54 (6)- I_{γ} : derived from the coincidence data (1983He14). 301.5 2 35 7 2058.54 $(6)^{-}$ 1757.09 5- I_{γ} : derived from the coincidence data (1983He14). 1983He14 find mutually coincidence 300.5γ and 301.5γ , but neither transition occurs In coincidence with the 84γ . 386.3 1 148 12 3697.2 (15^{-}) 3310.9 (13⁻) E2 0.0520 $\alpha(K)=0.0347$ 5; $\alpha(L)=0.01311$ 19; $\alpha(M)=0.00328$ 5; α (N+..)=0.000964 14 I_{γ}: I γ =130 relative to 426 γ As 1000, γ ray not placed In level scheme (1981Kr04). Mult.: from A₂=0.34 *l*; A₄=-0.06 2 (1983He14). 404.6 1 240 20 2843.6 (14^{+}) 2439.0 (12^{+}) E2 0.0460 $\alpha(K)=0.0312$ 5; $\alpha(L)=0.01120$ 16; $\alpha(M)=0.00279$ 4; α(N+..)=0.000822 12 E_{γ} : 1974Pr13 placed 405 γ from 12⁺ to 10⁺. Mult.: from $A_2=0.33$ 1; $A_4=-0.06$ 2 (1983He14). A₂=0.6 2 (1974Pr13). 411.9 2 53 10 4388.0 (19^{-}) 3976.1 (17^{-}) E2 0.0439 $\alpha(K)=0.0299$ 5; $\alpha(L)=0.01054$ 15; $\alpha(M)=0.00262$ 4; α(N+..)=0.000773 11 I_{γ}: I γ =90 relative to 426 γ As 1000, γ ray not placed In level scheme (1981Kr04). I_{γ} : derived from the coincidence data (1983He14). Mult.: A₂=0.31 2; A₄=-0.05 3 both contains 40% contribution from the 411.8 γ 2⁺ to 0⁺ transition in ¹⁹⁸Hg (1983He14). $0.0 \quad 0^+$ 426.0 1 1000 426.00 2^{+} E2 0.0402 $\alpha(K)=0.0278$ 4; $\alpha(L)=0.00943$ 14; $\alpha(M)=0.00234$ 4; α(N+..)=0.000690 10 Mult.: from $A_2=0.21 I$; $A_4=-0.04 2$ (1983He14). Others: A2=0.26 2 (1984Go06), A2=0.48 10 (1974Pr13). $I_{(\gamma+ce)}$: 1000 (2006Le06). x441.7 2 17 2 D+Q Mult.: from $A_2 = -0.61$ 7; $A_4 = -0.32$ 13 (1983He14). 21 2 2553.8 0.0338 $\alpha(K)=0.0238$ 4; $\alpha(L)=0.00755$ 11; $\alpha(M)=0.00187$ 456.0 2 (10^{-}) 2097.8 (8^{-}) E2

¹⁹⁶Pt(α ,4n γ), ¹⁹⁷Au(d,3n γ) **1983He14,1981Kr04,1974Pr13** (continued)

γ (¹⁹⁶Hg) (continued)

E_{γ}^{\dagger}	I_{γ}^{\dagger}	E _i (level)	\mathbf{J}_i^{π}	E_f	\mathbf{J}_f^{π}	Mult. [‡]	α #	Comments
468.5 2 477.6 1	12 2 440 <i>40</i>	3976.1 2262.81	(17 ⁻) (8 ⁺)	3507.5 1785.21	(16 ⁺) (6 ⁺)	E2	0.0301	3; α (N+)=0.000551 8 Mult.: from A ₂ =0.23 5; A ₄ =-0.15 7 (1983He14). This interband transition has not been detected in other even-A Hg nuclei (1983He14). α (K)=0.0215 3; α (L)=0.00652 10; α (M)=0.001607 23; α (N+)=0.000475 7 Mult.: form A ₂ =0.23 1; A ₄ =-0.05 2 (1983He14). Others: A ₂ =0.26 4 (1980Kr21), A ₂ =0.56 15 (1974Pr13). I _y : 723 γ /478g=44(5)/32(4) (1980Kr21); I _Y =400 (1981Kr04) I _Y =260 30 (1974Pr13)
489.3 2 517.6 2 556.2 1	11 2 15 2 220 20	2553.8 2359.03 2620.6	(10 ⁻) (8 ⁻) (11 ⁻)	2064.42 1841.41 2064.42	9- 7- 9-	E2	0.0209	Mult.: $A_2=0.17$ 6; $A_4=-0.05$ 9 (1983He14). $\alpha(K)=0.01551$ 22; $\alpha(L)=0.00411$ 6; $\alpha(M)=0.001002$ 14; $\alpha(N+)=0.000297$ 5 I_{γ} : other: $I_{\gamma}=190$ relative to 426 γ (1981Kr04). $I_{\gamma}=70$ 20 (1974Pr13). Mult.: from $A_2=0.31$ 1; $A_4=-0.07$ 2 (1983He14).
558.5 2	67 6	3402.1?	(*)	2843.6	(14+)	E2	0.0207	A ₂ =0.6 2 (1974Pr13). $\alpha(K)$ =0.01538 22; $\alpha(L)$ =0.00406 6; $\alpha(M)$ =0.000990 14; $\alpha(N+)$ =0.000293 5 Mult.: from A ₂ =0.30 4; A ₄ =-0.16 6 (1983He14). Sidefeeding transition populating positive-parity
570.6 2	19 2	2929.6	(10 ⁻)	2359.03	(8 ⁻)	E2	0.0197	band. $\alpha(K)=0.01470\ 21;\ \alpha(L)=0.00381\ 6;$ $\alpha(M)=0.000929\ 13;\ \alpha(N+)=0.000275\ 4$ Mult.: from A ₂ =0.32 5; A ₄ =-0.01 7 (1983He14).
^x 575.8 2 635.5 1	11 2 990 80	1061.50	4+	426.00	2+	E2	0.01546	α (K)=0.01176 <i>17</i> ; α (L)=0.00281 <i>4</i> ; α (M)=0.000680 <i>10</i> ; α (N+)=0.000202 <i>3</i> Mult.: from A ₂ =0.18 <i>2</i> ; A ₄ =-0.07 <i>3</i> (1983He14). Others: A ₂ =0.30 <i>2</i> (1984Go06); A ₂ =0.45 <i>10</i> (1974Pr13). I _{γ} : others: I γ =950 (1981Kr04); 810 <i>50</i> (1984Go06); 880 <i>40</i> (1974Pr13). I _(γ+cc) : 801 <i>9</i> (2006Le06).
x647.7 2 650.5 2	10 2 24 2	5038.5	(21 ⁻)	4388.0	(19 ⁻)	E2	0.01468	$\alpha(K)=0.01122 \ 16; \ \alpha(L)=0.00264 \ 4; \ \alpha(M)=0.000637 \ 9; \ \alpha(N+)=0.000190 \ 3$
^x 659.0 2 663.8 2	15 2 78 7	3507.5	(16+)	2843.6	(14+)	E2	0.01405	Mult.: $A_2=0.17$ 6; $A_4=-0.01$ 9 (1983He14). $\alpha(K)=0.01077$ 15; $\alpha(L)=0.00250$ 4; $\alpha(M)=0.000603$ 9; $\alpha(N+)=0.000179$ 3 I_{γ} : 70 relative to 426 γ As 1000 (1981Kr04).
682.8 2	18 2	3236.6	(12 ⁻)	2553.8	(10 ⁻)	E2	0.01321	Mult.: from $A_2=0.31$ 2; $A_4=-0.06$ 3 (1983He14). $\alpha(K)=0.01017$ 15; $\alpha(L)=0.00232$ 4; $\alpha(M)=0.000558$ 8; $\alpha(N+)=0.0001660$ 24
690.3 <i>1</i>	180 <i>15</i>	3310.9	(13 ⁻)	2620.6	(11-)	E2	0.01290	Mult.: from A ₂ =0.30 5; A ₄ =0.01 7 (1983He14). α (K)=0.00995 14; α (L)=0.00225 4; α (M)=0.000541 8; α (N+)=0.0001612 23 I _{γ} : I γ =90 relative to 426 γ As 1000, γ ray not placed In level scheme (1981Kr04). Mult.: from A = 0.26 2; A = 0.05 2 (1002H 14)
695.6 <i>1</i>	490 40	1757.09	5-	1061.50	4+	D	0.00380	Mult.: from $A_2=0.36$ 2; $A_4=-0.05$ 3 (1983He14). $\alpha=0.00380; \alpha(L)=0.00058$ I_{γ} : $I_{\gamma}=390$ 50 (1984Go06); 410 40 (1974Pr13). $I_{(\gamma+ce)}$: 372 6(2006Le06).

		1	¹⁹⁶ Pt (α ,4n	γ), ¹⁹⁷ Au(d,3n γ)	1983He14,1981Kr04,1974Pr13 (continued)				
E_{γ}^{\dagger}	I_{γ}^{\dagger}	E _i (level)	\mathbf{J}_i^{π}	E_f	\mathbf{J}_f^{π}	Mult. [‡]	α #	Comments		
								Mult.: $A_2 = -0.20 2$; $A_4 = 0.02 3$ (1983He14). $A_2 = -0.08 1$ (1984Go06). $A_2 = -0.11 15$ (1974Pr13).		
714.1 [@] 2	12 2	2977?	(+)	2262.81	(8+)	(E2)	0.01200	$\alpha(K)=0.00930 \ 13; \ \alpha(L)=0.00206 \ 3; \ \alpha(M)=0.000404 \ 7; \ \alpha(N)=0.0001472 \ 21$		
								Mult.: from $A_2=0.32$ 6; $A_4=0.00$ 9 (1983He14). Sidefeeding transition populating positive-parity band.		
723.7 1	480 <i>40</i>	1785.21	(6 ⁺)	1061.50	4+	E2	0.01166	α (K)=0.00905 <i>13</i> ; α (L)=0.00199 <i>3</i> ; α (M)=0.000477 <i>7</i> ; α (N+)=0.0001421 <i>20</i> Mult.: A ₂ =0.23 <i>1</i> ; A ₄ =-0.03 <i>2</i> (1983He14). A ₂ =0.43 <i>8</i> (1984Go06). Others: A ₂ =0.31 <i>4</i> (1980Kr21), A ₂ =0.50 <i>15</i> (1974Pr13).		
760.6 2	18 2	3199.6?	· (+)	2439.0	(12+)	D+Q		I _γ : others: 1γ =430 (1981Kr04); 250 40 (1984Gu06); 320 30 (1974Pr13). I _(γ+ce) : 170 3(2006Le06). Mult.: from A ₂ =-0.80 11; A ₄ =0.54 13 (1983He14). Sidefeeding transition populating positive-parity		
813.6 2	29 <i>3</i>	4321.1	(18+)	3507.5	(16 ⁺)	E2	0.00913	band. $\alpha(K)=0.00719 \ 10; \ \alpha(L)=0.001479 \ 21;$ $\alpha(M)=0.000352 \ 5; \ \alpha(N+1)=0.0001052 \ 15$		
840.7 2	19 2	3684.3?	· (+)	2843.6	(14+)	D+Q		Mult.: from $A_2=0.31$ 3; $A_4=-0.06$ 4 (1983He14). Mult.: from $A_2=-0.98$ 3; $A_4=0.23$ 6 (1983He14). Sidefeeding transition populating positive-parity		
853.7 2	32 3	3697.2	(15 ⁻)	2843.6	(14+)	(E1)	0.00308	band. $\alpha(K)=0.00258 \ 4; \ \alpha(L)=0.000389 \ 6;$ $\alpha(M)=8.93\times10^{-5} \ 13; \ \alpha(N+)=2.68\times10^{-5} \ 4$ This interband transition has not been detected in other even-A Hg nuclei (1983He14).		
^x 877.9 2	13 2							Mult.: from $A_2 = -0.34 5$; $A_4 = 0.05 7$ (1983He14).		
948.1 [@] 2	20 2	3792?	(15 ⁺)	2843.6	(14 ⁺)	D+Q		Mult.: from A ₂ =-0.55 <i>5</i> ; A ₄ =-0.06 <i>9</i> (1983He14). Sidefeeding transition populating positive-parity band.		

[†] From 1983He14. Relative photon intensities are from the (α ,4n γ) E=48.6 MeV reaction at θ =125°, relative to 426 γ .

^{\ddagger} Inferred from angular distributions (1983He14) with the assumption that Q=E2.

[#] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

[@] Placement of transition in the level scheme is uncertain.

^{*x*} γ ray not placed in level scheme.



¹⁹⁶Pt(α,4nγ), ¹⁹⁷Au(d,3nγ) 1983He14,1981Kr04,1974Pr13



¹⁹⁶₈₀Hg₁₁₆