^{195}Pt(^{3}He,d) 2004Wi08

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

E=36 MeV. Measured E(deuteron), $\sigma(\theta)$, cross sections with a new focal plane detector which consists of a position-sensitive proportional counter with a single-strip readout of a cathode foil and $\Delta E/E_{rest}$ particle identification. The beam was stopped in a Faraday cup, and the current was integrated so as to facilitate the measurement of absolute differential cross sections. Ten spectra were taken from 5° to 50° in 5° steps. FWHM=11 keV. DWBA analysis performed. For $\sigma(\theta)$ distributions, see the on-line appendix.

^{196}Au Levels

Cross-section measurements were made at an angle of 25° to the ^{3}He beam axis; the units are μb/sr.

E(level)	J^{π}[‡]	L[†]	Comments
0.0	2^-	2	S: 4.99 *11* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=233 μb/sr.
6.4 *4*	1^-	0	S: 0.61 *4* for L=0, $s_{1/2}$. $d\sigma/d\Omega$=63 μb/sr.
41.7 *4*	0^-	0	S: 0.59 *3* for L=0, $s_{1/2}$. $d\sigma/d\Omega$=66 μb/sr.
84.1 *5*	5^+	5	S: 4.6 *3* for L=5, $h_{9/2}$. $d\sigma/d\Omega$=19 μb/sr.
166.2 *4*	1^-	0+2	S: 0.42 *5* for L=0, $s_{1/2}$; 2.50 *11* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=156 μb/sr.
197.9 *7*	1^-	0+2	S: 0.37 *4* for L=0, $s_{1/2}$; 0.87 *5* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=105 μb/sr.
253.2 *6*	1^-	2	S: 0.57 *3* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=27 μb/sr.
289.2 *4*	2^-	2	S: 1.97 *5* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=82 μb/sr.
304.3[#] *5*	1^-&2^-	0+2	S: 0.13 *3* for L=0, $s_{1/2}$; 1.14 *9* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=62 μb/sr. E(level): Attempt to separate this doublet showed that about 90% of the $d_{3/2}$ strength is due to the 307-keV state. E(level): Doublet.
323.4 *5*	1^-	0+2	S: 0.25 *3* for L=0, $s_{1/2}$; 0.26 *7* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=44 μb/sr.
348.8[#] *5*	2^-&5^-	2+5	S: 0.80 *12* for L=2, $d_{3/2}$; 7.5 *7* for L=5, $h_{9/2}$. $d\sigma/d\Omega$=61 μb/sr. E(level): Doublet.
370.5 *5*	5^+	5	S: 3.45 *25* for L=5, $h_{9/2}$. $d\sigma/d\Omega$=16 μb/sr.
389.0 *6*	3^+	3	S: 0.76 *5* for L=3, $f_{5/2}$. $d\sigma/d\Omega$=26 μb/sr.
411.6[#] *4*	2^-&3^-	2	S: 1.57 *5* for L=2, $d_{3/2}$. Possible simultaneous $d_{3/2}$ and $d_{5/2}$ transfer cannot be seperated. S=1.19 *4* for L=0, $d_{5/2}$. $d\sigma/d\Omega$=74 μb/sr.
479.8 *4*	2^-	2	S: 2.46 *6* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=119 μb/sr.
498.5 *5*	5^+	5	S: 11.0 *4* for L=5, $h_{9/2}$. $d\sigma/d\Omega$=49 μb/sr.
517.8[#] *5*	2^-&5^+	2+5	S: 0.60 *9* for L=2, $d_{3/2}$; 2.5 *8* for L=5, $h_{9/2}$. $d\sigma/d\Omega$=39 μb/sr. E(level): Doublet.

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^{195}Pt(^{3}He,d) 2004Wi08 (continued)

^{196}Au Levels (continued)

E(level)	J^{π}‡	L†	Comments
564.9 *5*	2^-	2	S: 2.09 *8* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=97 μb/sr.
575.2 *7*			$d\sigma/d\Omega$=62 μb/sr.
637.6 *7*	(2^-)	2	S: 0.31 *3* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=17 μb/sr.
734.0 *5*	1^-	0+2	S: 0.16 *2* for L=0, $s_{1/2}$; 0.08 *2* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=42 μb/sr.
806.6 *6*			$d\sigma/d\Omega$=24 μb/sr.
849.6 *6*			$d\sigma/d\Omega$=16 μb/sr.
880.9 *9*	(3^-)	2	S: 0.14 *2* for L=2, $d_{5/2}$. $d\sigma/d\Omega$=6 μb/sr.
899.6 *5*	1^-	0,0+2	S: for L=0, S=0.42 *3* for $s_{1/2}$. S: for L=0+2, S=0.37 *4* for $s_{1/2}$; 0.15 *9* for $d_{3/2}$. $d\sigma/d\Omega$=54 μb/sr.
986.4 *7*			$d\sigma/d\Omega$=31 μb/sr.
997.4 *4*	$0^-,1^-$	0,0+2	S: for L=0, $J^{\pi}=0^-,1^-$; S=1.40 *3* for $s_{1/2}$. S: for L=0+2; $J^{\pi}=1^-$; S=1.10 *5* for $s_{1/2}$; 0.76 *12* for $d_{3/2}$. $d\sigma/d\Omega$=180 μb/sr.
1016.7 *4*	1^-	0+2	S: 0.54 *4* for L=0, $s_{1/2}$; 0.92 *10* for L=2, $d_{3/2}$. $d\sigma/d\Omega$=111 μb/sr.
1052.3 *4*	$0^-,1^-$	0	S: 2.12 *3* for L=0, $s_{1/2}$. $d\sigma/d\Omega$=276 μb/sr.
1099.3 *4*	$0^-,1^-$	0,0+2	S: for L=0, $J^{\pi}=0^-,1^-$; S=1.09 *3* for $s_{1/2}$. S: for L=0+2, $J^{\pi}=1^-$; S=0.96 *4* for $s_{1/2}$; 0.40 *9* for $d_{3/2}$. $d\sigma/d\Omega$=158 μb/sr.
1127.0 *6*			$d\sigma/d\Omega$=40 μb/sr.
1148.1 *6*			$d\sigma/d\Omega$=28 μb/sr.
1168.5 *9*			$d\sigma/d\Omega$=8 μb/sr.
1200.2 *6*			$d\sigma/d\Omega$=34 μb/sr.
1217.4 *6*			$d\sigma/d\Omega$=32 μb/sr.
1238.3 *7*			$d\sigma/d\Omega$=39 μb/sr.
1272.2 *4*		0+5	S: 0.47 *3* for L=0, $s_{1/2}$; 38.5 *10* for L=5, $h_{9/2}$. $d\sigma/d\Omega$=286 μb/sr.
1312.9 *10*			$d\sigma/d\Omega$=35 μb/sr.
1326.4 *6*	$4^+,5^+$	5	S: 34.4 *8* for L=5, $h_{9/2}$. $d\sigma/d\Omega$=188 μb/sr.

† From $d\sigma/d\Omega(\theta)$ DWBA analysis.
‡ Suggested by authors on basis of angular distributions and DWBA.
# Doublet.