

$^{198}\text{Pt}(p,t)$ $^{1979}\text{De25}$

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

1979De25: E=35 MeV. $\approx 97\%$ enriched ^{198}Pt . Enge split-pole spectrograph with position-sensitive detectors, FWHM ≈ 15 keV. Emulsion, FWHM ≈ 7 keV. $\sigma(\theta)$ from 7° to 60° (lab). DWBA calculations. Theoretical interpretation based on IBA model. Also [1976DeYR](#), [1976KiZU](#), [1977DeXT](#), [1980DeZX](#), [1982VeZT](#) from the same lab.
1981HyZY: E=54.6 MeV. $\sigma(\theta)$, FWHM ≈ 15 keV, zero-range DWBA.
1985Mi06: E=51.9 MeV. Measured transition strength to g.s.
 See [1979De25](#) for enhancement factors and integration cross sections.

 ^{196}Pt Levels

$\sigma(\text{exp})$ are cross-sections integrated between 7° and 60° . Uncertainties are 10-15%.

E(level) [†]	L#	ε [@]	Comments
0.0	0	3.7	$\sigma(\text{exp})=57.8$ mb.
355 [‡]	2	2.2	$\sigma(\text{exp})=20.1$ mb.
689 [‡]	2	0.12	$\sigma(\text{exp})=0.97$ mb.
877 [‡]	4	0.12	$\sigma(\text{exp})=1.03$ mb.
1135 [‡]	0	0.11	$\sigma(\text{exp})=1.72$ mb.
1271 [‡]			J^π : known to Be 5^- , but unresolved In (p,t).
1293 <i>1</i>	(4)	0.77	$\sigma(\text{exp})=6.72$ mb.
1362 <i>1</i>			$\sigma(\text{exp})=0.25$ mb.
1374 <i>1</i>	6,7	0.94	J^π : $J^\pi=7^-$ from Adopted Levels.
1402 <i>1</i>	0	0.15	$\sigma(\text{exp})=2.56$ mb.
1447 [‡]	3	0.81	$\sigma(\text{exp})=2.10$ mb.
1527 <i>1</i>			
1537 <i>1</i>			
1606 <i>1</i>	(2)	0.09	
1675 <i>1</i>			
1796 <i>1</i>			
1824 [‡]	0	0.32	$\sigma(\text{exp})=5.50$ mb.
1848 <i>2</i>	(2)	0.22	
1884 <i>2</i>	(4)	2.1	$\sigma(\text{exp})=18.4$ mb.
1932 <i>2</i>			
1987 <i>10</i>			
2006 <i>2</i>			
2052 <i>2</i>			
2072 <i>2</i>	6 ^{&}		E(level): E=2070 from 1981HyZY . J^π : $J^\pi=6^+$ from $\gamma(\theta)$ and DWBA (1981HyZY).
2095 <i>2</i>			
2114 <i>2</i>			
2128 <i>2</i>			
2164 <i>2</i>			
2174 <i>2</i>			
2193 <i>2</i>			
2204 <i>2</i>			
2264 <i>2</i>			
2277 <i>2</i>	9 ^{&}		
2296 <i>2</i>	7,8 ^{&}		E(level): E=2293 from 1981HyZY .
2370 <i>2</i>			
2386 <i>2</i>			

Continued on next page (footnotes at end of table)

$^{198}\text{Pt}(p,t)$ **1979De25 (continued)** ^{196}Pt Levels (continued)

<u>E(level)[†]</u>	<u>L[#]</u>	<u>Comments</u>
2423 2	7&	
2440 2		
2462 3		
2521 3		
2535 3		
2545 3		
2557 3		
2609 3		
2627 3		
2635 3		
2655 3		
2666 3		
2676 3		
2729	11&	E(level): from 1981HyZY .
2759 3		
2766 3		
2779 3		
2974	9&	E(level): from 1981HyZY .

[†] $\Delta E \approx 1$ keV below 1.8 MeV and $\approx 0.1\%$ above 1.8 MeV.

[‡] Calibration energy adopted by authors from [1979Ha41](#).

[#] Based on comparison with DWBA and empirical shapes of $\sigma(\theta)$.

[@] The enhancement factors, ε , were calculated with pickup configuration= $(p_{3/2})^2$ for L=0, configuration= $(2p_{3/2})(1f_{7/2})$ for L=2, configuration= $(i_{13/2})(1f_{7/2})$ for L=3, configuration= $(1f_{5/2})(2p_{3/2})$ for L=4, configuration= $(2p_{3/2})(i_{13/2})$ for L=5, configuration= $(1f_{5/2})(1f_{7/2})$ for L=6, and configuration= $(2p_{1/2})(i_{13/2})$ for L=7.

[&] From [1981HyZY](#) based on comparison of $\sigma(\theta)$ with DWBA calculations.