

$^{198}\text{Pt}(p,d)$  1977Sm03

Type	Author	History	Citation	Literature Cutoff Date
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Other: E=26 MeV (1978Be09) natural target, s; compared angular distributions at 6 angles with DWBA calc.

Q(p,d)=-5332.3 keV (2003Au03).

See 1977Sm03 studies of  $^{194}\text{Pt}$ ,  $^{196}\text{Pt}(p,d)$  reactions for comparison of  $^{193}\text{Pt}$ ,  $^{195}\text{Pt}$  with  $^{197}\text{Pt}$  excitations.

1977Sm03: E=27.01 MeV, measured  $\sigma(E(d),\theta)$  with  $\Delta E$ -E spectrometer.  $\Delta E=3$ -5 keV.

 $^{197}\text{Pt}$  Levels

E(level) <sup>†‡</sup>	L <sup>@</sup>	C <sup>2</sup> S <sup>ab</sup>	Comments
0	1&	0.34	
53 3	3&	1.88	
70 4	1&	0.27	
101 4	1&	0.53	
130 4	1&	0.16	
273? 3	(3)	0.08	L=(3) is not compatible with primary n-capture; see 1978Ya07. Not seen in $^{197}\text{Ir}$ $\beta^-$ decay.
301 3	3&	0.14	
371 4	(4)	0.09	Very weak.
395 3	6&	2.7	
460# 4	1+3	0.38+0.22	
487# 4	(1+3)	0.24+1.65	
507 5	1	0.067	
534 4	3	0.92	
591 5	(3)	0.14	
716 5	1	0.076	
755 6	1	0.064	
825 6	1	0.014	
865 6	3	0.59	
912 8	1	0.028	
991 8	1	0.056	
1047 6	3	0.23	
1077 6	1	0.10	
1124 10	(3)	<0.10	
1149 7	1	0.072	
1175# 7	1+6	0.092+2.5	
1266 8	3	0.21	
1318 6	3	0.56	
1350 6	1	0.15	
1412# 10	1+(4)	0.064+0.37	

<sup>†</sup> Values appear shifted upward for higher-lying states compared with (d,p),(d,t),(n, $\gamma$ ) results; magnitude of shift is energy dependent.

<sup>‡</sup> FWHM resolution=30 keV, 13 keV (short run).

# Unresolved doublet. See 1977Sm03 for apportioned C<sup>2</sup>S.

@ From angular distributions measured at 6-15 angles, compared with DWBA predictions.

& 1978Be09 L-value assignments agree with 1977Sm03.

<sup>a</sup> Values are given by  $d\sigma/d\Omega=3/2(C^2S)\sigma(\theta)(DWBA)/(2J+1)$ ; J=3/2 assumed if L=1, except for g.s., J=5/2 if L=3, J=9/2 if L=4, and J=13/2 if L=6.

<sup>b</sup> Uncertainty=15%.