

$^{141}\text{Pr}(\text{d},\text{p})$ 1968Ke08

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	T. D. Johnson, D. Symochko(a), M. Fadil(b), and J. K. Tuli		NDS 112, 1949 (2011)	1-Jun-2010

$E(\text{d})=10$ MeV.

$J^\pi(^{141}\text{Pr})=5/2^+$.

Measured: $\sigma(E,\theta)$, DWBA analysis, FWHM=11-15 keV.

Others: 1962Bi17, 1962Fu10, 1965Ke12.

 ^{142}Pr Levels

E(level)	J^π	L	$\sigma^@$	Comments
0.0	2^-	3	16.7 8	E(level), σ : doublet with E=0 and 3.6 keV levels and $J^\pi=2^-$ and 5^- .
17.8 6	3^-	3	5.0 [†] 5	
63.7 2	6^-	3	30.5 [†] 15	
86.2 7	1^-	3	5.5 [†] 3	
128.0 4	5^-	3	12.8 [†] 6	
144.6 4	4^-	3	17.4 [†] 9	
176.8 3	(3^-)	3	9.9 [†] 5	
200.8 5	(2^-)	3	2.3 [†] 2	
637.2 5	4^-	1	45.8 [‡] 6	
664.9 15				
681.6 7				
705.8 4	$3^-, 4^-$	1	6.4 [‡] 2	
748.2 6	$2^-, 3^-$	1	22.9 [‡] 4	
767.0 8				
792.1 6	$2^-, 3^-$	1	24.6 [‡] 2	
823.5 7	$2^-, 3^-$	1	3.4 [‡] 3	
981.3 7	$2^-, 3^-$	1	11.7 [‡] 2	
1045.2 7	$2^-, 3^-$	1	17.9 [‡] 4	
1115.4 12				
1127.2 18				
1154.4 9	$2^-, 3^-$	1	6.2 [‡] 2	
1183.3 11				
1200.4 11				
1220.2 17				
1236.6 10				
1255.2 7		(1)		
1269.6 14		(1)		
1348.2 11				
1362.7 17				
1381.5 14				
1395.2 10				
1408.2 6				
1428.9 10				
1444.7 15				
1462.7 13		(1)		
1473.5 15		(1)		
1499.1 10		1		
1519.8 6		1		
1540.1 6		1		
1556.0 13				
1570.7 12		(3)		
1586.7 14		(3)		

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$^{141}\text{Pr}(\text{d,p})$ [1968Ke08](#) (continued) ^{142}Pr Levels (continued)

<u>E(level)</u>	<u>L</u>	<u>E(level)</u>	<u>L</u>	<u>E(level)</u>	<u>L</u>	<u>E(level)</u>	<u>L</u>
1597.4 12	(3)	1711.2 19		1832.3 9	1	1934.9 9	1
1621.6 4		1725.8 9		1845.1 8	1	1947.3 9	
1642.6 6	(1)	1755.2 6	1	1866.2 8	(1)	1957.4 11	1
1660.1 6	1	1771.5 5	1	1884.6 9	(1)	1982.9 9	
1677.2 8	1	1799.5 9	1	1900.8 6	(1)	2001.2 25	
1693.5 18	1	1811.9 13	1	1919.4 5	1	2015.5 24	

[†] Relative average σ in group of L=3 levels ≤ 200 keV assuming sum of σ to them equals 100.

[‡] Relative average σ in group of L=1 levels 637-1151 keV assuming that sum of σ for 637-792 levels equals 100.

Adopted values.

@ Relative σ ; for $\sigma(\theta)$ for all levels see [1968Ke08](#).