

<sup>141</sup>Pr(d,t) E=16 MeV **1974Hu03**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 154, 1 (2018)	20-Nov-2018

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

Measured:  $\sigma(E,\theta)$ , DWBA analysis.

**1962Fu10**: E=15 MeV, measured (d,t) spectra at several angles; data reported for 60°.

<sup>140</sup>Pr Levels

E(level) <sup>†</sup>	$J^\pi$ <sup>‡</sup>	L	S	Comments
0.0	1 <sup>+</sup>	2	0.48 4	
29 2	2 <sup>+</sup>	2	2.00 13	$J^\pi$ : doublet with $J^\pi=2^+$ and 3 <sup>+</sup> .
127 2	5 <sup>+</sup>			
192 2	3 <sup>+</sup>	0+2	0.02+0.13	
271 2	2 <sup>+</sup>	2	0.06 1	
287 2	3 <sup>+</sup>	0	1.00 8	
331 2	(4,5) <sup>+</sup>	2	1.30 20	
390 2	(4,5) <sup>+</sup>			
420 2	2 <sup>+</sup> ,3 <sup>+</sup>	0	0.67 5	
576 2	(4,5) <sup>+</sup>	2	0.09 1	
604 2	(3) <sup>+</sup>	0	0.05 1	
630 2	1 <sup>+</sup> ,2 <sup>+</sup> ,3 <sup>+</sup>			
642 2				
764 2	(7) <sup>-</sup> #	5	2.1 4	
784 2	(8) <sup>-</sup> #	5	2.6 5	
861 2	(4) <sup>-</sup>	5	3.2 6	$J^\pi$ : possible doublet with $J^\pi=4^-$ and 6 <sup>-</sup> , because S is too large.
889 2	(5) <sup>-</sup>	5	1.6 3	
905 2	(2 <sup>-</sup> )	(5)	(0.2) 1	
968 2				
1018 2	3 <sup>+</sup> ,4 <sup>+</sup> ,5 <sup>+</sup>			
1033 2	2 <sup>-</sup> ,3 <sup>-</sup>	5	0.9 2	
1052 2	(1 <sup>+</sup> ,2,3 <sup>+</sup> )	(5)	(0.4) 1	
1060 2		(5)	(0.4) 1	
1147 2	(2) <sup>-</sup>			
1184	(2) <sup>+</sup>	2	0.17 2	
1204 2	(5 <sup>+</sup> )			
1230 2	5 <sup>+</sup>	2	0.09 1	
1293 2	1 <sup>+</sup> ,2 <sup>+</sup> ,3 <sup>+</sup>	2	0.06 1	

<sup>†</sup> 4 levels with E>1300 (1350,1400,1470,1540) with poor resolution ( $\approx 60$  keV) were observed by **1962Fu10**.

<sup>‡</sup> Adopted values.

# The assignments of 764 and 784 levels were inverted in <sup>130</sup>Te(<sup>14</sup>N,4n $\gamma$ ) based on **2005Yu05** (see dataset for details).