

$^{141}\text{Pr}(\text{p},\text{t})$ **1972Go25**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	P. K. Joshi, B. Singh, S. Singh, A. K. Jain		NDS 138, 1 (2016)	15-Oct-2016

1972Go25: target $J^\pi=5/2^+$. Measured: $\sigma(\theta=15^\circ-65^\circ, 5^\circ \text{ steps})$; $E(p)=40 \text{ MeV}$, E- ΔE telescope, FWHM=50 keV. DWBA analysis.

Other: 1972Ya09: $E=52.1 \text{ MeV}$.

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

 ^{139}Pr Levels

E(level)	L [†]	E(level)	L [†]	E(level)	L [†]	E(level)
0.0	0	910 15	2	1623 20	1,3 [#]	≈ 2660
405 10	2	1010 20	2	2050 30	1,3 [#]	≈ 2740
590 10	2	1330 [‡] 20		2160 50	(3)	≈ 2800
830 [‡] 10	2	1520 [‡] 20		≈ 2240	(3)	

[†] From characteristic shape and comparison to DWBA.

[‡] Multiplet.

[#] $\sigma(\theta)$ exhibits an odd-L character; both L=1 and L=3 fit the data equally well. L(1623)≠1 from adopted $J^\pi=9/2^-$. L(2050)≠1 if level corresponds to 2048.7; 9/2⁻,11/2⁻.