

$^{170}\text{Yb}(t,p)$ 1983Bu03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 75,199 (1995)	31-May-1995

E=15 MeV.

Enriched (75.0%) target. Measured $\sigma(\theta)$ ($\theta=7.5^\circ$ - 67.5°) in steps of 7.5° . Magnetic spectrometer, FWHM \approx 15 keV. Uncertainties on cross sections \approx 10%. DWBA calculations.

Theoretical work: [1973Ab06](#), [1971Ud01](#), [1969Br18](#).

 ^{172}Yb Levels

E(level) [†]	L [‡]	$d\sigma/d\Omega$ (30°) In $\mu\text{b}/\text{sr}$	Comments
0	0	302	
78 3		39	L: $\sigma(\theta)$ shape deviates from L=2 predicted by DWBA calculations. The discrepancy has been interpreted as due to multistep processes.
260 3		15	
1043 3	0	43	
1118 3		≤ 3	
1263 3		13	
1287 3		≈ 3	
1466 3	2	7	
1654 5		9	
1823 5		15	
1853 5		5	
2046 5			
2177 5		8	
2228 5	2	10	
2466 5			

[†] Uncertainty \approx 3 keV for levels below 1.5 MeV, and \approx 5 keV for levels above this energy.

[‡] From comparison of experimental $\sigma(\theta)$ with DWBA calculations.