

$^{162}\text{Dy}(p,t)$ 1972Ma37

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 176, 1 (2021)	1-May-2021

E(p)=17.5 MeV. Enriched (96.3% ^{162}Dy) target, consisting of $\approx 100 \mu\text{g}/\text{cm}^2$ metallic foils evaporated onto $120 \mu\text{g}/\text{cm}^2$ Al backings. Tritons detected in photographic emulsions following magnetic analysis in split-pole spectrograph. Energy resolution=12 keV. Measured energy spectra, angular distributions, and absolute $d\sigma/d\Omega$ at 25° . These absolute cross sections are reported to be accurate to better than 20%.

 ^{160}Dy Levels

E(level)	L	$d\sigma/d\Omega(\text{mb}/\text{sr})^\dagger$	Comments
0.0 \ddagger 5	0	0.65	
87 \ddagger 5	2	0.16	
284 \ddagger 5	4	0.04	
581 \ddagger 5		0.01	
966 $\#$ 5	2	0.04	
1275 $@$ 5	0	0.10	
1339 $@$ 5		0.02	from systematics of strongly populated excited 0^+ states in other strongly deformed nuclides, this level is most likely the 2^+ member of the 0^+ band at 1275 keV.

† Values at $\theta=25^\circ$.

\ddagger Band(A): ground-state rotational band.

$\#$ Band(B): γ -vibrational band.

$@$ Band(C): excited 0^+ band.

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		Band(C): Excited 0 ⁺ band	
		<u>1339</u>	
		<u>1275</u>	
		Band(B): γ -vibrational band	
		<u>966</u>	
<th>Band(A): Ground-state rotational band</th>		Band(A): Ground-state rotational band	
<u>581</u>			
<u>284</u>			
<u>87</u>			
<u>0.0</u>			