

$^{156}\text{Dy}(\text{p,t})$  [1992Ta22](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 200,2 (2025)	22-Aug-2022

[Additional information 1.](#)

$^{156}\text{Dy}(\text{p,t})$ ,  $E(\text{p})=20$  MeV. Target was prepared by isotope separation of already isotope-separated material. The isotopic purity of the resulting target material is believed to be  $\geq 99\%$ . Reaction products were analyzed using an Enge split-pole spectrograph with photographic detection at  $5^\circ$  intervals from  $5^\circ$  to  $75^\circ$  and FWHM of  $\leq 10$  keV. Authors treat primarily only the  $L=0$  transitions.

 $^{154}\text{Dy}$  Levels

E(level)	$J^\pi^\dagger$	L	$d\sigma/d\Omega(\mu\text{b/sr})^\ddagger$	Comments
0	$0^+$	0	400	
335	$2^+$		64	
661	$0^+$	0	231	$d\sigma/d\Omega(\mu\text{b/sr})$ : Relative to 100 for the ground state, the (p,t) "strength" (measured cross section divided by the DWBA cross section) for this state is 74 ( <a href="#">1992Ta22</a> ).
747	$4^+$		15	
906	$2^+$		17	
1027	$2^+$		32	
1058	$0^+$	0	41	$d\sigma/d\Omega(\mu\text{b/sr})$ : Relative to 100 for the ground state, the (p,t) "strength" (measured cross section divided by the DWBA cross section) for this state is 16 ( <a href="#">1992Ta22</a> ).
1208	$3^-$		6	
1223	$6^+$		2	
1251	$4^+$		6	
1392	$2^+$		3	
1442	$4^+$		3	
1509	$2^+$		12	
1547	$5^-$		4	
1835			2	
1876			3	
1903	$(3^-)$		3	
2038			6	

$^\dagger$  From the adopted values. [1992Ta22](#) do not attempt to propose any new such values.

$^\ddagger$  Values at  $\theta=25^\circ$ . The relative cross sections are reproducible to  $\approx 10\%$ , and the absolute cross sections have an uncertainty of  $\approx 25\%$ , mainly from the normalization procedure ([1992Ta22](#)).