

$^{164}\text{Dy}(\text{p,t})$

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 195,1 (2024)	19-Sep-2023

Additional information 1.

2006Me25: $^{164}\text{Dy}(\text{p,t})$, $E(\text{p})=25$ MeV. Enriched target, enrichment not given. Outgoing tritons measured at 5° , 17.5° and 30° using a Q3D magnetic spectrograph. FWHM=4-6 keV for $E(\text{t})=15$ -20 MeV. Report and discuss only 0^+ states, which are identified from $L=0$ transitions established from angular-distribution data. List 12 such states, three of which are tentative.

2006Me13: an earlier report from the same group as that of **2006Me25**.

1983IsZY: $^{164}\text{Dy}(\text{p,t})$, $E(\text{p})=40$ MeV. Angular distribution of tritons measured using a magnetic spectrograph. Survey of 5^- and 7^- levels in several nuclides. Shows 1 level on a plot.

1972Ma37: $^{164}\text{Dy}(\text{p,t})$, $E(\text{p})=17.5$ MeV on enriched (98.4%) target. $^3\text{H}(\theta)$ measured in magnetic spectrograph with FWHM=12 keV. Lists 9 states.

1971IsZP: $^{164}\text{Dy}(\text{p,t})$, $E(\text{p})=51.9$ MeV on enriched target. $^3\text{H}(\theta)$ measured at 9 angles at FWHM $\approx$ 90 keV. Abstract lists 7 states.

 ^{162}Dy Levels

E(level) [†]	L [‡]	Comments
0	0	
81.5		
266.5		
549.5		
774.2?& 3		Possible contaminant (2006Me25). Level is not included in the Adopted Levels.
889.5		
1130 [#]		Level not included in the Adopted Levels.
1210 [#]		
1398.9& 3	0	E(level): 1972Ma37 report E(level)=1397. The evaluator assumes that this is the same level.
1666.3& 4	0	
1700 [#]	2	
1732.5		
1814.6&a 5	0	
1820.3&a 5	0	
2112.5		
2126.5& 6	0	
2130 [#]	2	
2496.7& 7	0	
2580 [#]	2	
2588.8& 7	0	Level not reported in any of the other studies of ^{162}Dy . The evaluator has chosen not to include it in the Adopted Levels data set. It is assumed that it is not the same as the 2584.0 4 level.
2655.3& 7	0	Level not reported in any of the other studies of ^{162}Dy . It is not included in the Adopted Levels data set.
2663.0?& 7	0	
$\approx$ 2800@	5+7	This may be the same as the 2802.9 level tentatively assigned by 2006Me25 .
2802.9?& 7	0	

[†] From **1972Ma37**, unless otherwise noted.

[‡] L=0 values are from **1972Ma37** and **2006Me25**, L=2 values from **1971IsZP**, and L=5+7 from **1983IsZY**.

[#] From **1971IsZP**.

@ From **1983IsZY**.

& From **2006Me25**.

^a Having two 0^+ levels this close together at this excitation is not usual. Since they are not seen in any of the other studies, they are not included in the Adopted Levels.