

$^{164}\text{Dy}(e,e')$  1987Bo27,1989Gu17

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen <sup>#</sup>		NDS 147, 1 (2018)	30-Nov-2017

1987Bo27, 1987Bo49, 1984Bo43:

1987Bo27:  $E(e)=24.3,29.4,34.7,40.5,48.2,55.8,62.3$  MeV;  $\theta=165^\circ$ ;  $E(e)=74.4,89.6,104.7,119.4,139.3$  MeV;  $\theta=154^\circ$ ; magnetic spectrometer, FWHM=20-40, form factors, transition strengths. In 1987Bo49, search was made for a mixed-symmetric  $3^+$  state.

1989Gu17:  $E=20-220$  MeV. Measured form factor for an E1 excitation.

All references are from the same laboratory and share common authors.

 $^{164}\text{Dy}$  Levels

$\Sigma(B(M1)\uparrow)=5.25$  (1987Bo27) for composite of  $1^+$  levels near 2550 and 3140.

E(level) <sup>†</sup>	$J^\pi$ <sup>‡</sup>	Comments
0	$0^+$	
828	$3^+$	$B(M3)\uparrow=0.3$ +I-2 (1987Bo49)
1675	$1^-$	$B(E1)\uparrow<0.025$ (1989Gu17) $\Gamma<32$ keV (1989Gu17). $J^\pi$ : based on form factor distribution (1989Gu17).
1757	$(3)^-$	$J^\pi$ : from 1989Gu17.
2531	$1^+$	
2540	$1^+$	
2578	$1^+$	
3112	$1^+$	$B(M1)\uparrow=1.53$ (1984Bo43)
3159	$1^+$	
3173	$1^+$	

<sup>†</sup> 828 level is from 1987Bo49. 1675 and 1757 are from 1989Gu17. The energies of two groups of  $1^+$  levels are from  $(\gamma,\gamma')$ , and are analyzed for  $(e,e')$  data by 1984Bo43. In the  $(e,e')$  spectrum shown by 1987Bo49, a large number of unlabeled peaks are shown which would correspond to levels in  $^{164}\text{Dy}$ .

<sup>‡</sup> From Adopted Levels. Above 2500 level, M1 assignments are consistent with excitation function data (1987Bo27).