^{164}Dy(t,p) 1988Bu08

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 109, 1103 (2008)	1-Mar-2008

1988Bu08: E=17 MeV; 98.43% ^{164}Dy target; Enge split-pole magnetic spectrograph with photographic emulsions (FWHM≈15-20 keV); measured E(level), angular distributions (θ(lab)=7.5° to 67.5° In 7.5° steps), differential cross section.

^{166}Dy Levels

E(level)	J^π[†]	L[‡]	dσ/dΩ(30°) μb/sr[#]	Comments
0[@]	0^+	0	220	J^π: from L=0.
77[@]	2^+		17	
254[@]	4^+		12	
858[&]	2^+		4	
1024[&]	(4^+)		11	
1096			3	
1149[a]	0^+	0	31	J^π: from L=0.
1208[a]	(2^+)		3	
1274				dσ/dΩ(30°) μb/sr: obscured.
1334				dσ/dΩ(30°) μb/sr: obscured.
1351				dσ/dΩ(30°) μb/sr: obscured.
1515			4	
1556			26	
1616			4	
1645			2	
1674			2	
1770			6	
1864			4	
1891			5	
2029			10	
2048			7	
2120			15	
2183			2	
2252			8	
2311			10	
2383			5	

[†] Authors′ suggested values based on observed $\sigma(\theta)$, and deduced band structure, except As noted.
[‡] From DWBA analysis of angular distributions.
[#] dσ/dΩ(30°) μb/sr; uncertainty≈20%.
[@] Band(A): $K^\pi=0^+$ band.
[&] Band(B): $K^\pi=2^+$ γ-vibrational band.
[a] Band(C): possible $K^\pi=0^+$ band.

^{164}Dy(t,p) 1988Bu08

Band(C): Possible $K^{\pi}=0^{+}$ band

(2^{+}) 1208

0^{+} 1149

Band(B): $K^{\pi}=2^{+}$ γ-vibrational band

(4^{+}) 1024

2^{+} 858

Band(A): $K^{\pi}=0^{+}$ band

4^{+} 254

2^{+} 77

0^{+} 0

$^{166}_{66}Dy_{100}$