^{162}Er(d,d′) 1968Tj02

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

Additional information 1.

(d,d′) reaction on enriched (>99%) target with 12.1-MeV d. Scattered d measured in magnetic spectrograph at three angles. From the spectral plot, the evaluator estimates that FWHM≈10 keV.

^{162}Er Levels

E(level)	Jπ†	Comments
0‡	0^+	
101‡	2^+	
327‡	4^+	
663‡	6^+	
897#	2^+	
1081@	0^+	Jπ: may include contribution from 8^+ member of ground-state band.
1124#	4^+	
1166@	2^+	
1351&	3^-	B(E3)↑≈0.133 B(E3)↑: based on assumed proportionality of (d,d′) cross section and B(E3) (1968Tj02).
≈1369@	(4^+)	
1423		
1464&	5^-	
1594a	1^-	
1616a	3^-	B(E3)↑≈0.025 B(E3)↑: based on assumed proportionality of (d,d′) cross section and B(E3) (1968Tj02).
1725a	(5^-)	
1740		
1910		
1955	$(3^-,4^+)$	
1966		
2033		
2116		
2288	$(3^-,4^+)$	
2306		
2332		
2399		
2444		
2520		
2553		
2567		
2618		

† From ^{162}Er Adopted Levels. Original assignments (1968Tj02) were based on ratio of cross sections at 90° and 125°. These generally agree with those shown here, except that, above 0.9 MeV, many are enclosed in parentheses.

‡ Band(A): $K^\pi=0^+$ ground-state band.

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

@ Band(C): first excited $K^\pi=0^+$ band. Possible β-vibrational band.

& Band(D): $K^\pi=3^-$ octupole-vibrational band.

a Band(E): $K^\pi=1^-$ octupole-vibrational band.

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