

$^{144}\text{Nd}(\alpha, ^3\text{He})$ 1975Hi03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 110, 507 (2009)	1-Oct-2008

E=66.2 MeV, FWHM=50 keV.

Measured: $\sigma(E, \theta=15^\circ)$, DWBA analysis.

 ^{145}Nd Levels

E(level) [‡]	J ^π [†]	L [‡] #	C ² S'	Comments
0.0	7/2 ⁻	3	2.9	
657	11/2 ⁻	5		
747	9/2 ⁻	5	2.7	
930	5/2 ⁻	3	1.9	C ² S': if L=(1) J=(3/2 ⁻) S=0.48, if L=(5) J=(9/2 ⁻) S=0.6.
1112	13/2 ⁺	6	4.2	
1252	5/2 ⁻	3	0.42	
1334	5/2 ⁻	3	0.72	
1530	9/2 ⁻	5	0.34	
1760	5/2 ⁻	3	0.52	C ² S': if L=(5) and J=(9/2 ⁻) S=0.31.
1849	13/2 ⁺	6	1.54	
1960	5/2 ⁻	3	0.14	C ² S': if L=(6) and J=(13/2 ⁺) S=0.22.
2016	9/2 ⁻	5	0.32	
2095	9/2 ⁻	5	0.94	
2152	5/2 ⁻ , 9/2 ⁻	(3+5)	0.38, 0.31	
2220	3/2 ⁻ , 9/2 ⁻	(1+5)	0.44, 0.55	
2500	3/2 ⁻ , 9/2 ⁻	(1+5)	0.22, 0.68	

[†] Values assumed in analysis of data from 1975Hi03.

[‡] From (d,p) (1975Hi03).

Levels with large L \geq 3 dominated the spectra.