

$^{146}\text{Nd}(^3\text{He},\alpha\gamma)$ 1984Ra03

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

E=26 MeV, FWHM=0.3 MeV.

Measured: γ , $\alpha\gamma$; deduced S(h11/2) for level 1802.

 ^{145}Nd Levels

E(level)	J^π †	Comments
0.0	$7/2^-$	
72.5	$5/2^-$	
657.7 2	$11/2^-$	
748.3 4	$9/2^-$	
780.5 20	$3/2^-$	
920.7 5	$9/2^-$	
1051.4 14	$7/2^-, 5/2^-$	
1111.2 4	$13/2^+$	
1403.9 20	$(5/2^-)$	
1533.3 12	$3/2^+$	
1802.0 11	$11/2^-$	S=1.9.

† Adopted values.

 $\gamma(^{145}\text{Nd})$

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
352.5 9	8 2	1403.9	$(5/2^-)$	1051.4	$7/2^-, 5/2^-$
453.5 3	23 3	1111.2	$13/2^+$	657.7	$11/2^-$
657.7 2	100 7	657.7	$11/2^-$	0.0	$7/2^-$
675.8 6	21 3	748.3	$9/2^-$	72.5	$5/2^-$
708.0 17	6 2	780.5	$3/2^-$	72.5	$5/2^-$
748.3 4	25 3	748.3	$9/2^-$	0.0	$7/2^-$
848.2 3	2 1	920.7	$9/2^-$	72.5	$5/2^-$
920.7 10	6 2	920.7	$9/2^-$	0.0	$7/2^-$
978.9 12	6 2	1051.4	$7/2^-, 5/2^-$	72.5	$5/2^-$
1051.4 30	6 2	1051.4	$7/2^-, 5/2^-$	0.0	$7/2^-$
1144.3 10	9 3	1802.0	$11/2^-$	657.7	$11/2^-$
1460.8 10	9 3	1533.3	$3/2^+$	72.5	$5/2^-$

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Level Scheme

Intensities: Relative I_γ

Legend

- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$

