

$^{144}\text{Nd}(\text{d,p})$  1980Ja15

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

E=12.1 MeV, FWHM=12-15 keV.

Others: E=33 MeV, FWHM=25 keV ([1975Hi03](#)); 12.6 MeV, FWHM=16 keV ([1973Ga01](#)).

Measured:  $\sigma(E,\theta)$ , DWBA analysis.

 $^{145}\text{Nd}$  Levels

Levels: 1400 (L=1,  $C^2S'=0.02$ ), 1578 (L=3,  $C^2S'=0.25$ ), 1988 (L=1,  $C^2S'=0.01$ ), 2160 (L=1,  $C^2S'=0.05$ ) were observed only in [1973Ga01](#); level 2152 (L=3+5,  $C^2S'=0.38+0.31$ ) only in [1975Hi03](#).

E(level) <sup>†</sup>	L <sup>†</sup>	$C^2S'^{\dagger}$	Comments
0.0	3	4.08	
68 3	1	0.21	
656 6	5	0.25	
749 3	5	2.17	
780 3	1	1.41	
919 3	1	0.58	
937 3	3	1.13	
1110 3	6	3.70	
1150 6	3	0.05	
1213 6			$C^2S'$ : weak.
1250 3	3	0.24	
1284 6	3	0.01	
1331	3		
1400	1	0.02	E(level),L, $C^2S'$ : from <a href="#">1973Ga01</a> .
1528 3	5	0.44	
1575 3	3	0.12	
1592 3	1	0.18	L=1 ( <a href="#">1973Ga01</a> ); L=3 ( <a href="#">1975Hi03</a> ).
1653 6	3	0.02	
1684 6	3	0.03	
1713 6	3	0.03	
1744 3	1	0.09	
1762 3	3	0.36	
1822 6	5	0.10	
1846 3	6	2.10	L: L=8 in the table in <a href="#">1980Ja15</a> is a misprint.
1885 3	1	0.09	
1913 6	3	0.02	L=1 ( <a href="#">1973Ga01</a> ).
1969 3	3	0.18	
2004 6	1	0.02	
2018 6	5	0.08	
2090 6	5	0.65	L=1 ( <a href="#">1973Ga01</a> ).
2117 6	(5)	0.14	L=(1) ( <a href="#">1973Ga01</a> ).
2133 6	(5)	0.08	
2176 3	1	0.27	
2223 3	3	0.20	
2246 6	1	0.02	
2270 3	1	0.09	
2291 3	3	0.20	
2331 3	1	0.09	
2355 3	3	0.21	L=1 ( <a href="#">1973Ga01</a> ).
2374 3	3	0.46	
2423 3	1	0.08	
2449 3	3	0.07	

Continued on next page (footnotes at end of table)

$^{144}\text{Nd}(\text{d,p})$  1980Ja15 (continued) $^{145}\text{Nd}$  Levels (continued)

<u>E(level)<sup>†</sup></u>	<u>L<sup>†</sup></u>	<u>C<sup>2</sup>S'<sup>†</sup></u>	<u>Comments</u>
2471 6	1	0.02	
2481 3	(6)	1.27	L=1+5 (1975Hi03), L=3 (1973Ga01).
2510 3	3	0.37	
2533 3	3	0.06	L=1 (1973Ga01).
2566 3	(3)	0.22	L=1 (1973Ga01).
2606 3	(3)	0.33	L=1 (1973Ga01).
2627 3	(3)	0.20	
2643 6	(1)	0.02	
2670 3	(6)	1.58	
2713 3	(3)	0.45	
2748 3	1	0.11	
2781 3	1	0.08	
2810 3	1	0.11	
2839 3	1	0.02	
2858 3	1	0.02	
2882 3	(3)	0.12	L=1 (1973Ga01).
2907 6	(1)		
2938 3	1	0.03	
2977 3	3	0.06	
3001 6	1	0.03	
3027 3	1	0.06	
3051 3	1	0.05	
3086 6	1	0.01	
3117 3	1	0.04	
3140 3	3	0.11	
3159 3	3	0.10	
3181 3	3	0.09	
3214 3	1	0.09	

<sup>†</sup> From 1980Ja15.