

$^{143}\text{Nd}(\text{d,p})$  1976Ra26

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni	NDS 93, 599 (2001)	1-Dec-2000

$E=25$  MeV,  $J^\pi(\text{target})=7/2^-$ .

Measured angular distribution at 11 angles,  $\theta=4^\circ-48^\circ$ , DWBA. FWHM<30 keV.

$C^2S'$  have been derived from assumed stripping in the following orbitals: 3s1/2, 3p3/2, 2d3/2, 2f7/2, 1g7/2, 1h9/2, 1i13/2.

 $^{144}\text{Nd}$  Levels

E(level)	L	Comments
0	3	$C^2S'=0.09$ 1.
696 7	1+3	$C^2S'=0.09$ 3(L=1), 0.23 4(L=3).
1314 7	1+3	$C^2S'=0.11$ 2(L=1), 0.67 5(L=3).
1512 7	6	$C^2S'=0.22$ 3.
1561	1+3	$C^2S'=0.06$ 2(L=1), 0.18 4(L=3).
1792 7	3+5	$C^2S'=1.37$ 19(L=3), 0.25 10(L=5).
2070 <sup>†</sup> 7	1+3+5	$C^2S'=0.04$ 1(L=1), 0.14 3(L=3; part of the strength is due to excitation of $^{145}\text{Nd}$ g.s.), 0.39 20(L=5).
2185 7	1+3+5+2	$C^2S'=0.04$ 4(L=1), 0.02 2(L=3), 0.81 30(L=5), 0.04 4(L=2).
2297 7	1+3	$C^2S'=0.16$ 2(L=1), 0.28 4(L=3).
2370 7	1+3	$C^2S'=0.014$ 3(L=1), 0.026 4(L=3).
2447 7	0+2+6	$C^2S'=0.07$ 7(L=0), 0.16 7(L=2), 0.41 20(L=6).
2526 7	1+3	$C^2S'=0.01$ 1(L=1), 0.07 2(L=3).
2603 7	3+5	$C^2S'=0.01$ 1(L=3), 0.74 18(L=5).
2713	1+3+5	$C^2S'=0.07$ 3(L=1), 0.33 5(L=3), 0.65 22(L=5).
2821 7	1+3+5	$C^2S'=0.29$ 6(L=1), 0.37 9(L=3), 0.50 50(L=5).
2901 7	1+3+5	$C^2S'=0.14$ 6(L=1), 0.10 5(L=3), 0.44 44(L=5).
3028		

<sup>†</sup> Complex.