

¹⁴⁴Sm(p,d),(pol p,d) 1983Ga07

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 113, 715 (2012)	31-May-2011

E=42 MeV; FWHM=25-30 MeV (1983Ga07).

Others: E=35 MeV (1971Jo04); E=24.55 MeV (pol p) (1971Ch07).

¹⁴³Sm Levels

E(level) [‡]	J ^π [@]	L	C ² S	Comments
0.0	3/2 ⁺ [†]	2	3.0	
110 5	1/2 ⁺ [#]	0	1.6	
758 5	11/2 ⁻ [#]	5	8.4	
1100 5	5/2 ⁺ [†]	2	2.5	
1304 5	7/2 ⁻	3		
1362 5	7/2 ⁺	4	1.6	
1533 5	5/2 ⁺	2	0.14	
1708 5	5/2 ⁺	2	0.33	
1870 5				
1930 5	5/2 ⁺	2	0.05	
1990 5	1/2 ⁺ [#]	0	0.30	
2064 10	5/2 ⁺	2	0.45	
2161 10	7/2 ⁺	4	1.57	
2274 10	7/2 ⁺	4	0.70	
2450 10	11/2 ⁻	5	1.26	
2586 10		5+4		
2662 10	7/2 ⁺ & 3/2 ⁺	4+2	0.49+0.04	
2767 10	7/2 ⁺ & 3/2 ⁺	4+2	0.16+0.01	
2842 10	7/2 ⁺ & 3/2 ⁺	4+2	0.23+0.02	
2874 10	7/2 ⁺ & 3/2 ⁺	4+2	0.21	C ² S: average for L=4 and L=2.
2970 10	5/2 ⁺	2	0.04	
3017 15	7/2 ⁺ & 5/2 ⁺	4+2	1.12+0.09	
3085 15	7/2 ⁺ & 11/2 ⁻	4+5	0.25+0.25	
3136 15	5/2 ⁺	2	0.18	
3180 15	5/2 ⁺	2	0.13	
3245 15	5/2 ⁺	2	0.06	
3360 15				
3474 15	7/2 ⁺	4	0.43	
3540 15				
3625 15				
3717 15				
3867 15	7/2 ⁺	4	0.71	
4075 15	5/2 ⁺	2	0.15	
4272 15	5/2 ⁺	2	0.28	
4470 15	7/2 ⁺ & 5/2 ⁺	4+2	0.61+0.11	
4755 15	5/2 ⁺	2	0.13	

[†] From (pol p,d) and L (1971Ch07).

[‡] Note that energies (>1100 keV) presented here are systematically lower than those given in Adopted Levels.

[#] From Adopted Levels.

[@] Spins used for calculation of C²S.