^{118}Sn(p,d)

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	ENSDF	1-Mar-2009

E=55 MeV, FWHM≈80 keV (1968Ya01).
E=30 MeV, FWHM=55-70 keV (1970Ca01).
E≈20 MeV, polarized beam (1971Ma58).
E=52 MeV (1977Se01,1973Is09).
E=30.16 MeV, FWHM 20 keV (1983Se12).
The data are from 1977Se01, unless otherwise noted.

^{117}Sn Levels

E(level)	J^{π}[#]	L	C^2S[b]	Comments
0	$1/2^+$	0	1.4	
158	$3/2^+$	2[a]	1.5	
317	$11/2^-$	5[a]	3.1	
730	$7/2^+$	4[a]	7.3	
1030	$5/2^+$	2[a]	3.5	
1190	$5/2^+$	2[a]	1.9	
1470	$5/2^+$	2	0.53	
1530	$5/2^+$	2		
1589[‡] *5*		(5)		
1628[‡] *5*		(4)		
1670[‡] *5*		(2)		
1710 *20*	$5/2^+$	2[&]	0.33	
1770	$5/2^+$	2		
2020	$3/2^-$	1[&]		
2050 *20*	$7/2^+$	4[@]	1.5	
2079	$1/2^+$	0[&]		
2140	$5/2^+$	2[&]		
2290	$5/2^+$	2[@]	0.19	
2350	$11/2^-$	5[&]		
2400 *20*	$1/2^+$	0[@]	0.09	
2500	$9/2^+$	4[&]		
2660 *20*	$5/2^+$	2[@]	0.38	
2690	$3/2^-$	1[&]		
2770	$5/2^+$	2[&]		
2830	$5/2^+$	2[&]		
2940				
3040				
3100	$5/2^+$	2[&]		
5.5×10^3 *4*	$(9/2^+)$	(4)		
14.18×10^3[†]	$9/2^+$	4	0.37	Configuration=$(1g_{9/2})^{-1}$ IAS of ^{117}In g.s. (1997Se01).
14.55×10^3[†]	$1/2^-$	1	0.095	Configuration=$(2p_{1/2})^{-1}$ IAS of ^{117}In 320 (1997Se01).
14.81×10^3[†]	$3/2^-$	1	0.11	Configuration=$(2p_{3/2})^{-1}$ IAS of ^{117}In 588 (1997Se01).

[†] Proposed IAS (1977Se01).
[‡] Seen by 1983Se12.
[#] Assumed for DWBA analysis; supported by polarized beam measurements (1971Ma58) for six lowest levels.

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^{118}Sn(p,d) (continued)

^{117}Sn Levels (continued)

[@] From 1968Ya01.
[&] From 1970Ca01.
[a] From 1971Ma58.
[b] C^2S from DWBA analysis. 1977Se01 also report values from coupled-channel analyses which are 20-30% smaller.