

$^{116}\text{Sn}(\text{p,d})$ 1970Ca01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113, 2391 (2012)	1-Sep-2012

E=30 MeV.

Magnetic spectrograph resolution: 55-70 keV (FWHM).

Q(p,d)=-7344.15 (1970Ca01).

 ^{115}Sn Levels

1970Ca01: syst analysis of (p,d) excitations in ^{111}Sn - ^{123}Sn .

ΔE : Uncertainty ≥ 6 keV.

E(level)	J^π	$L^\ddagger$	$S^\#$	Comments
0.0	$1/2^+$	0	14.0	J^π : from Adopted Levels.
501		2	3.22	
623		4	2.12	
729		5	0.65	
998		2	15.3	
1282		2	0.27	
1419		2	0.36	
1652		2	0.34	E(level): may correspond with 1644-keV state; see ($\alpha, n\gamma$).
1753		2@	0.49	E(level): may correspond with 1734-keV state; see ($\alpha, n\gamma$), ^{115}Sb decay.
1840		4	0.07	E(level): may correspond with 1857-keV state; see ($\alpha, n\gamma$), ^{115}Sb decay.
1980		0	1.75	
2060		2@	0.28	
2280		(1+2)	0.15	
2360				
2390				
2510		(2)	0.07	
2590		1	0.65	
2810		2@	0.14	
2950			0.07	

† Uncertainty ≥ 6 keV.

‡ From angular distributions compared with characteristic shapes.

$^\#$ Cross section (mb/sr) at peak angle.

@ $5/2^+$ assigned to L=2 transfer (1970Ca01) on the basis of J dependence of (p,d) angular distributions.