^{120}Sn(^{3}He,d) 1966Ba45,1967Is02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. Ohya	NDS 111, 1619 (2010)	20-Jan-2009

1966Ba45, 1971Ba12: E=19 MeV, FWHM=30 keV, θ=40°.
1967Is02: E=28.2 MeV, FWHM=70-90 keV, σ(E(d),θ).
1968Co22: E=18 MeV, FWHM=70-110 keV, σ(E(d),θ).

^{121}Sb Levels

The level energies given by 1967Is02 have large uncertainties and are ≈30 keV higher than those given by others. Energy corresponding cited C^2S' data are listed in comment.

E(level)[†]	L	C^2S'[#]	Comments
0.0	2	5.49 *28*	
37 *10*	4		
504 *10*	2	1.18 *14*	E(level): other: 510+590 (not completely resolved) (1967Is02).
574 *10*	0	0.76 *9*	
1032 *10*			E(level): other: 1038 *10* (1971Ba12).
1138 *10*			E(level): other: 1141 *10* (1971Ba12).
1380 *10*			E(level): other: 1382 *10* (1971Ba12).
1423 *10*	2[‡]	1.10 *18*	C^2S' for a probable composite peak 1380+1423+1450.
1450 *10*	5	13 *3*	E(level): other: 1446 *10* (1971Ba12). C^2S': 7.6 (1968Co22).
1623 *10*	2+0	0.20+0.05	E(level): other: 1650 *20* (1967Is02). C^2S': 0.20 *4* + 0.05 *1*.
1735 *10*			E(level): other: 1770 *20* (1967Is02).
1816 *10*	0	0.33 *4*	E(level): other: 1850 *20* (1967Is02).
1983 *10*	2	0.20 *3*	E(level): other: 2010 *20* (1967Is02).
2100 *10*	2	0.51 *7*	E(level): other: 2130 *30* (1967Is02).
2149 *10*			
2200 *10*	0	0.16 *2*	E(level): other: 2230 *30* (1967Is02).
2335 *10*	0	0.64 *8*	E(level): other: 2380 *30* (1967Is02).
2384 *10*			
2435 *10*			
2558 *10*	0+2	0.07+0.25	E(level): other: 2600 *30* (1967Is02). C^2S': 0.07 *2* + 0.25 *5*.
2639 *10*			
2692 *10*	2	1.08 *14*	E(level): other: 2730 *30* (1967Is02).
2773 *10*			
2830 *10*			
2939 *10*	0	0.13 *2*	E(level): other: 2970 *30* (1967Is02).

[†] E(levels) are from 1966Ba45, 1971Ba12, except where noted otherwise.
[‡] From 1973Co33.
[#] From 1967Is02. Relative C^2S', normalized so that sum of values for L=2 is equal to 10.0. The ratios of the S-factors for the g.s., 504- and 574-keV levels are consistent with those of 1966Ba45 and 1968Co22. DWBA calculation was made for σ(E,θ>10°) assuming $3s_{1/2}$, $2d_{5/2}$ (g.s. only) and $2d_{3/2}$, $1h_{11/2}$ single-particle orbitals for L=0, 2, 5 transfer, respectively.