^{119}Sn(p,n) 1971Ke21

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	D. M. Symochko, E. Browne, J. K. Tuli	NDS 110,2945 (2009)	1-Dec-2008

1971Ke21, 1967Ki06: E=4.4-4.8 MeV; n tof (FWHM≈15 keV), 90% enriched target (thickness 0.26 mg/cm^2); measured $\sigma(\theta)$ on resonance (E(p)=4.642 MeV) and off resonance (E=4.709 MeV), σ(E(p)); deduced J.

Other: 1977Jo01, E=4.4-4.8 MeV; deduced three-particle quasibound-proton states in ^{119}Sb. 2008Br05, analyzed cross-sections.

^{119}Sb Levels

E(level)	J$^\pi$[†]	Comments
0	5/2$^+$[‡]	
271 *10*	7/2$^+$[‡]	
640 *10*	1/2$^+$[@]	
700 *10*	3/2$^+$[@]	
975 *10*		J$^\pi$: 5/2$^-$ or≥7/2.
1046 *10*		
1240 *10*		E(level): doublet.
1337 *10*	1/2$^-$	
1416 *10*	3/2$^-$	
1482 *10*	1/2$^-$	
1547 *10*		J$^\pi$: 5/2$^-$ or≥7/2.
1650 *10*	[#]	
1680 *10*	[#]	
1745 *10*	3/2$^+$	
1822 *10*	1/2$^+$	
1880 *10*		J$^\pi$: doublet with J=3/2$^+$ and (5/2$^-$,7/2), large off-resonance yield suggests J<9/2.
1970 *10*		J$^\pi$: 5/2$^-$ or≥7/2.
2130 *10*		J$^\pi$: doublet with J=1/2 and (≥1/2).
2230 *10*		

[†] From on- and off-resonance yield ratios and $\sigma(\theta)$ (1971Ke21), except as noted.

[‡] From Adopted Levels.

[#] Partially resolved doublet with J=1/2 or 5/2. At least one of the two levels having J=1/2.

[@] Unresolved doublet with L=0+2. J=1/2 is determined for 640 level. J$^\pi$(700)=3/2$^+$ suggested from other works is consistent with present data.