^{120}Sn(d,^{3}He)   1989La21,1971We01

History

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

Additional information 1.

1989La21: E=51 MeV, magnetic spectrograph, FWHM=20 keV, θ=6°−21°; E=108.4 MeV, FWHM=350 keV, θ=3°−17° target thickness 10.2 mg/cm^2.

1971We01: E=28.9 MeV; mag spect FWHM=12-22 keV, θ=15°−52°; enriched target (98.4%).

Others: 1969Co03 (E=22 MeV; proportional counter telescope; enriched target) 2004Su04, 2003GiZZ, 2002FuZX, 2002SuZX.

^{119}In Levels

E(level)‡	L	C^{2}S†	Comments
0	4	4.1	C^{2}S: if 1g$_{9/2}$. Others: 4.0 (E=108.5 MeV), 6.5 (1971We01).
311.4	1	1.3	C^{2}S: if 2p$_{1/2}$. Others: 1.1 (E=108.5 MeV), 1.6 (1971We01).
604.2	1	1.2	C^{2}S: if 2p$_{3/2}$. Others: 1.2 (E=108.5 MeV), 1.8 (1971We01).
941.4	2	0.038	
≈1040			E(level): unresolved peak consisting of known levels at 1044 and 1050 (1989La21). Authors suggested that the peak could also contain the known 1025 level.
1203.7	3	0.073	
1388.4	3	0.21	
1436.4	4	1.7	E(level): 1450 *29* (1971We01). C^{2}S: other: 2.9 (1971We01).
1474 *5*	4	0.28	
1553 *5*	1	0.26,0.20	E(level): 1540 *31* (1971We01).
1649 *5*	2	0.013	
1729 *5*	1	0.075,0.062	
1837 *5*	1	0.32,0.24	E(level): 1820 *37* (1971We01).
1979 *5*	4	0.19	
2050 *5*	1	0.059,0.045	
2272 *5*	1+3		E(level): unresolved doublet (1989La21). C^{2}S: 0.11 if 2p$_{1/2}$, 0.086 if 2p$_{3/2}$, 0.4 if 1f$_{5/2}$.
2343 *5*	1	0.057,0.045	
2410 *5*	3,4	0.16	C^{2}S: if 1f$_{5/2}$.
2460 *5*	3,4	0.47	C^{2}S: if 1f$_{5/2}$.
2502 *5*	1	0.085,0.066	
2618 *5*	4	0.27	
2670 *5*	1+3		E(level): unresolved doublet (1989La21). C^{2}S: 0.029 if 2p$_{1/2}$, 0.022 if 2p$_{3/2}$, 0.07 if 1f$_{5/2}$.
2745 *5*	4	0.10	
2811 *5*	1	0.13,0.10	
2885 *5*	1+3		E(level): unresolved doublet (1989La21). C^{2}S: 0.032 if 2p$_{1/2}$, 0.024 if 2p$_{3/2}$, 0.1 if 1f$_{5/2}$.
3005 *5*	3,4	0.33	C^{2}S: if 1f$_{5/2}$.
3130 *5*	4	0.16	
3330 *5*	1+3		E(level): unresolved doublet (1989La21). C^{2}S: 0.055 if 2p$_{1/2}$, 0.042 if 2p$_{3/2}$, 0.08 if 1f$_{5/2}$.

† C^{2}S from DWBA analysis obtained at E=51 MeV, unless otherwise noted. Values for L=2, 3, and 4 correspond to 2d$_{5/2}$, 1f5/2, and 1g$_{9/2}$, respectively. The pairs of values for L=1 correspond to 2p$_{1/2}$ and 2p$_{3/2}$, respectively.

‡ Values quoted without uncertainties are rounded-off from Adopted Levels. Values quoted with uncertainties are from 1989La21. These uncertainties have been assigned by the evaluators based on the experimental energy resolution (FWHM).