^{120}Sn(t,d) 1972Ca02

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

E(t)=13 MeV, enriched target (^{120}Sn 98.4%). Magnetic spectrograph, FWHM=11 keV, $\sigma(\theta)$ θ=12°−66°. Normalization of cross section was made relative to elastic triton cross sections.
L values were deduced from comparison of $\sigma(\theta)$ with DWBA calculation, and with ^{119}Sn(t,p) reaction; see ^{119}Sn(t,p).

^{121}Sn Levels

E(level)	L	C^2S'[†]	Comments
0.0	2	2.6	Probably contains L=5 component of 6.3-keV level.
60 *2*	0	0.63	
910 *5*	2	0.03	
923 *5*	4	0.39	
948 *5*	0	0.08	L=3 in (d,p).
1096 *5*	2	0.04	
1119 *5*	2	0.34	
1400 *8*	(2)	0.11	
1708 *10*			
1864 *10*			
1907 *15*			
1940 *10*	(2,3)	≈0.15	
1953 *15*			
2095 *15*	(2)	≈0.15	E(level): possible doublet.
2233 *10*	(3)	0.21	
2246 *10*			
2457 *10*	(0)	≈0.05	
2584 *10*	3	0.42	
2662 *10*	3	0.95	
2687 *10*	3	0.83	
2742 *15*			
2908 *15*			
2926 *15*			
2946 *15*			
3009 *15*			
3020 *15*			
3088 *15*			
3105 *15*			
3303 *15*	1,2,3,4	0.09[‡]	
3314 *15*	(3)	0.17	
3369 *15*	(3,4)	0.20	
3395 *15*			
3488 *15*	(3,4)	0.18	
3507 *15*	(3,4)	0.20	
3571 *15*			
3613 *15*			
3658 *15*			
3668 *15*			
3721 *15*			

[†] DWBA calculation assuming $3s_{1/2}$, $2d_{3/2}$ (g.s., 1940, 2095) and $2d_{5/2}$, $2f_{7/2}$, $1g_{7/2}$ single-particle orbit for L=0, 1, 2, 3, 4 transfer, respectively.
[‡] $2f_{7/2}$ single particle orbit assumed.