$^{13}C(^{7}Li,p)$ 1977Fo10

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Tilley, Weller, Cheves, Chasteler	NP A595, 1 (1995)	31-Oct-1994

Projectile ^{7}Li E=16.0 MeV. Angular distributions measured for states with excitation energy less then 6.8 MeV.

^{19}O Levels

E(level)	J^{π}	Comments
0	5/2	
94.4 *11*	3/2	
1471.6 *18*	1/2	
2371.1 *19*	9/2	
2777.6 *19*	7/2	
3067.4 *16*	3/2	
3153.6 *28*	5/2	
3231.6 *23*	3/2	
3944.9 *14*		Corresponds to two unresolved states. Assuming one of these to be a $3/2^{-}$ state, the other should have J=7/2 to 13/2.
4109.3 *19*	3/2	
4328.1 *24*	3/2,5/2	
4402.5 *27*	3/2,5/2,7/2	
4582.0 *46*	3/2	
4702.6 *27*		May correspond to unresolved states.
4968.3 *55*	5/2,7/2	
5007.0 *45*	3/2,5/2	
5082.0 *54*	1/2	
5148.4 *32*	5/2	
5384.0 *28*	9/2,11/2,13/2	J assignment assumes a single state.
5503.5 *31*		Narrow unresolved states. See discussion in 1977Fo10.
5704.6 *43*		Cross section is too large for the known state at this energy with $J^{\pi}=3/2^{+}$. If this group corresponds to a doublet, the other member should have J=1/2 to 5/2.
6119.6 *32*		Sharp group; if due to a single state J=11/2 to 17/2.
6191.6 *55*	1/2	
6269.3 *26*	7/2	
6405.8 *31*		Sharp group; if due to a single state J=11/2 to 17/2.
6446.2 *48*	(7/2,9/2,11/2)	
6582.7 *60*		Total cross section to this state is very high implying unresolved states: if there are two states one must have J>13/2.
6903 *8*		
6988 *9*		
7118 *10*		
7242 *8*		
7508 *10*		
8048 *20*		
8132 *20*		
8247 *20*		
8450 *20*		
8561 *20*		
8591 *20*		
8916 *20*		
8923 *20*		
9022 *20*		
9064 *20*		
9253 *20*		
9324 *20*		
9430		
9560		

Continued on next page (footnotes at end of table)

^{13}C(^{7}Li,p) 1977Fo10 (continued)

^{19}O Levels (continued)

E(level)
9770
9880
9930
9980