^{13}C(^{6}Li,^{6}He)

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. E. Purcell	NDS 198,1 (2024)	1-Aug-2024

1970Ch19: ^{13}C(^{6}Li,^{6}He) E=30.8 MeV; measured $\sigma(\theta, E(^{6}He))$ for θ=18° and 36°. Deduced levels.
1981Vi03: ^{13}C(^{6}Li,^{6}He) E=93 MeV; measured $\sigma(\theta$=12°, E(^{6}He)) deduced levels. See further discussion in (2010Ga19).
1984Gl06: ^{13}C(^{6}Li,^{6}He) E=93 MeV, ^{13}C(^{7}Li,^{6}He) E=78 MeV; measured $\sigma(\theta, E(^{6,7}He))$.
1989De34: ^{13}C(^{6}Li,^{6}He) E=93 MeV; measured $\sigma(\theta, E(^{6}He))$ for θ=20° to 60°; analyzed $^{13}N^{*}$(0, 3.5) peaks.
1994La10: ^{13}C(^{6}Li,^{6}He) E=100 MeV/nucleon; measured $\sigma(\theta\approx0°, E(^{6}He))$.
1999Ue03, 1999UeZY: ^{13}C(^{6}Li,^{6}He) E=100 MeV/nucleon; measured $\sigma(\theta\approx0°, E(^{6}He))$ for $\theta_{c.m.}\leq$7 mrad. Compared yields with B(GT) from β decay.

^{13}N Levels

E(level)	J^{π}	Comments
0[†‡#@&]		
2.37×10^{3}[†&]		
3.5×10^{3}[†‡#@&]	(3/2^{-})	J^{π}: From (1970Ch19). Population of 3/2^{-} is preferred.
7.4×10^{3}[‡#@]		
9.2×10^{3}[‡@*a*]		
12.5×10^{3}[‡@]		
17.5×10^{3}[‡]		
21×10^{3}[‡*a*]		

† Observed in (1970Ch19).
‡ Observed in (1981Vi03).
# Observed in (1984Gl06).
@ Observed in (1994La10).
& Observed in (1999Ue03).
a Some states are not associated with Adopted Levels because inadequate details for association are given in the literature.