C(^{6}He,^{5}H) 2003Me11,2003Me18

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. E. Purcell, C. G. Sheu	ENSDF	28-Feb-2019

2003Me11,2003Me18: This experiment was performed at GSI. The primary ^{18}O beam with energy 340 MeV/nucleon on a Be target produces a secondary ^{6}He beam with energy 240 MeV/nucleon which strikes a C target. The coincidence detection of a triton and two neutrons allowed the ^{5}H spectrum to be determined by the invariant mass method. The ^{5}H spectrum had a resonance structure at $E_{res}\approx3$ MeV above the ^{3}H+2n threshold with a width $\Gamma\approx6$ MeV and $J^{\pi}=1/2^{+}$. These results are also discussed in (2004Ch16,2004Wo10).

In (2003Sh23) a complete ^{3}H+n+n three-body dynamical model investigation is carried out that finds $E_{g.s.}$=2.5-3.0 MeV and $\Gamma_{g.s.}$=3-4 MeV.

^{5}H Levels

E(level)	J^{π} †	Γ	E_{res}(^{3}H+2n)(MeV)
0	$(1/2^{+})$	≈6 MeV	≈3

† From systematics.