
 $^2\text{H}(^{11}\text{C}, ^{12}\text{N})$ [2011Le25](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, J. E. Purcell and C. G. Sheu		NP A968, 71 (2017)	1-Jan-2017

[2011Le25](#): XUNDL dataset compiled by TUNL, 2011.

A beam of 150 MeV ^{11}C was produced at the Berkeley cyclotron by injecting radioactive $^{11}\text{CO}_2$ into the cyclotron's ECR source.

The beam impinged on a 2.22 mg/cm^2 CD_2 target and ^{12}N reaction products were detected for $0^\circ < \theta_{\text{c.m.}} < 180^\circ$. A DWBA analysis of the $^{12}\text{N}_{\text{g.s.}}$ angular distribution was used to deduce the $\text{ANC}_{p_{1/2}} = 1.56\text{ fm}^{-1}$ [23]. The effective $\text{ANC} = \text{ANC}_{p_{1/2}} + \text{ANC}_{p_{3/2}} = 1.83\text{ fm}^{-1}$ [27] is deduced. Discussion of the astrophysical rate is also given.

 ^{12}N Levels

E(level)	J^π
0	1^+