## C($^{21}$N,$^{20}$N) 2000Sa47,2004Sa14

History

| Type | Author | Citation | Literature Cutoff Date |
|---|---|---|---|
| Full Evaluation | C. G. Sheu, J. H. Kelley | ENSDF | 31-Dec-2018 |

2000Sa47,2004Sa14: Secondary E($^{21}$N)=43 MeV/nucleon beams , produced from $^{40}$Ar fragmentation at GANIL, impinged on a 170 mg/cm$^2$ C target. The beam energy spread was ΔE/E=1% (2% in 2000Sa47). The one-neutron removal cross sections and core fragment longitudinal and transverse momentum distributions were measured using the SPEG spectrometer.

$\sigma_{-1n}$=98 mb *13* was measured; this compares the value $\sigma^{Glauber}_{-1n}$=101 mb calculated using a Glauber model. The longitudinal momentum distribution width FWHM$^{cm}_{pz}$=162 MeV/c *4*, transverse momentum width FWHM$^{cm}_{px}$=217 MeV/c *16* (2004Sa14), and $J^{\pi}=2^{-}$ for the ground state were also deduced.

### $^{20}$N Levels

| E(level) | $J^{\pi}$ |
|---|---|
| 0 | $2^{-}$ |