C(^{20}N,X) 1998Bo02,1996Ch24

History

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

1998Bo02: A secondary beam of E(^{20}N)=950 MeV/nucleon ions, produced at the GSI/FRS, impinged on a carbon target. Interaction cross sections, σ_i, and charge-changing cross section, σ_{cc} were measured; r.m.s. matter radii, r_m and upper limits for r.m.s. proton radii, r_p^{max} were deduced. Evidence for the existence of a neutron skin in ^{20}N is presented.

σ_i=1121 mb *17*, σ_{cc}=774 mb *65*, r_m=2.77 fm *4*, r_p^{max}=2.39 fm *20*.

1996Ch24: A secondary ^{20}N beam, produced at the GSI Fragment Separator FRS, impinged on carbon targets with thickness 7.5 g/cm^2 and 3.7 g/cm^2. Interaction cross sections, σ_i were measured with accuracies of ≈1% and r.m.s. matter radii, r_m were deduced.

σ_i=1121 mb *17*; the values of r_m≈2.80 fm *4* were obtained with various model assumptions.

2001Oz03: A secondary beam of E(^{20}N)≈950 MeV/nucleon ions, produced at the GSI/FRS, impinged on a carbon target. Interaction cross sections, σ_i were measured and r.m.s. matter radii, r_m were deduced using Glauber-model, few-body system calculations (GMFB).

r_m=2.82 fm *5*.

See also (1995ChZV, 1997Ki22, 1999Kn04, 2000Ch20, 2001La06, 2001Oz04, 2002Me12, 2003Bh06, 2011Al11, 2017Ah08, 2018Fo17).

^{20}N Levels

E(level)
0