

U(P, $^{20}\text{N}$ ) 1970Bu22,1986Pi09

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

**1970Bu22:** The particle stability of  $^{20}\text{N}$  was confirmed at the Bevatron by analysis of the spallation products emitted in the 5.5 GeV proton bombardment of a  $^{\text{nat}}\text{U}$  target. The reaction products were detected using a set of Si detectors that were placed at  $\theta=90^\circ$  with respect to the incident beam. Two detectors, which provided  $\Delta E$  and E signals were located at distances of 14.5 cm and 25.7 cm from the target. Particle identification was unambiguously determined by evaluating  $\Delta E$ , E and the time-of-flight between the detectors.

**1986Pi09:** Spallation products from 800 MeV proton bombardment of a uranium target at LAMPF were detected using a series of detectors that provided  $\Delta E$ , E and time-of-flight information. The products were analyzed to obtain A and Z identification, and mass excesses were deduced for a few carbon, nitrogen, oxygen, fluorine and neon isotopes.

The  $^{20}\text{N}$  mass excess  $\Delta M=21.9$  MeV 57 was obtained.

 $^{20}\text{N}$  LevelsE(level)

0