⁹Be(⁴⁸Ca,¹⁸C) 1981St23

History			
Туре	Author	Citation	Literature Cutoff Date
Full Evaluation	J. Kelley, C. G. Sheu	ENSDF	01-May-2017

1981St23: Production yields for fragmentation of 213 GeV/nucleon ⁴⁸Ca projectiles on a berylium target were measured at the Bevalac using a 0° magnetic spectrometer. The neutron-rich fragments were focused on a stack of Lexan plastic track detectors; analysis of the tracks provided the range, charge and magnetic deflection of the produced isotopes. A charge resolution of 0.2 was obtained along with a mass resolution of approximately ≤ 0.2 u. The analysis showed clear indications of ¹⁸C, ¹⁹C, ²⁰C. Ambiguous results on ²¹C are found. This work is credited with the

discover of 20 C and 27 F. For 18 C, the cross section of roughly 10 μ b was deduced.

¹⁸C Levels

E(level)

0

 ${}^{18}_{6}C_{12}$