^{9}Be(^{48}Ca,^{20}C) 1981St23

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. S. Narijauskas, J. H. Kelley, C. G. Sheu	ENSDF	9-June-2017

1981St23: Production yields for fragmentation of 213 GeV/nucleon ^{48}Ca 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 ^{18}C, ^{19}C, ^{20}C. Ambiguous results on ^{21}C are found. This work is credited with the discovery of ^{20}C and ^{27}F. For ^{20}C, the cross section of roughly 0.1 μb was deduced.

^{20}C Levels

E(level)
0