^{45}Ar

Jelley et al. discovered ^{45}Ar in 1974 as described in "Masses for ^{43}Ar and the new isotopes ^{45}Ar and ^{46}Ar" (1974Je01). Enriched ^{48}Ca targets were bombarded with 77.7 MeV α-particles from the Berkeley 88-in. cyclotron to form ^{45}Ar. The ejectiles were measured with a counter telescope. "By also detecting ^{7}Be nuclei from the ^{48}Ca(α,^{7}Be)^{45}Ar reaction (Q$^{\sim}-28$ MeV), excited states in ^{45}Ar and the mass of this new isotope were determined."

Adapted from reference (2012Th10)

1974Je01 N. A. Jelley, K. H. Wilcox, R. B. Weisenmiller, G. J. Wozniak, and J. Cerny, Phys. Rev. C **9**, 2067 (1974).

2012Th10 M. Thoennessen, At. Data Nucl. Data Tables **98**, 933 (2012).

Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"