

⁴⁰Ti

Morris et al. discovered ⁴⁰Ti in “Target mass dependence of isotensor double charge exchange: Evidence for deltas in nuclei” in 1982 ([1982Mo12](#)). ⁴⁰Ti was produced by the pion induced double charge exchange reaction ⁴⁰Ca(π^+ , π^-) and the negative pions were analyzed with the Energetic Pion Channel and Spectrometer EPICS at the Clinton P. Anderson Meson Physics Facility (LAMPF) at Los Alamos National Laboratory. “Byproducts of the present measurements are values of the masses of ²⁸S and ⁴⁰Ti. Our measured mass excesses are 4.13 ± 0.16 and -8.79 ± 0.16 MeV for ²⁸S and ⁴⁰Ti, respectively.”

Adapted from reference ([2011Me01](#))

[1982Mo12](#) C. L. Morris, H. T. Fortune, L. C. Bland, R. Gilman *et al.*, Phys. Rev. C **25**, 3218 (1982).

[2011Me01](#) D. Meierfrankenfeld, A. Bury, and M. Thoennessen, At. Data Nucl. Data Tables **97**, 134 (2011).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”