

^{122}I

The discovery of ^{122}I was reported by Marquez and Perlman in the 1950 article “Neutron deficient isotopes of iodine” (1950Ma29). Antimony targets were irradiated with 45–360 MeV α particles from the Berkeley 174-in. cyclotron. Electrons, X-rays, and γ -rays were measured following chemical separation. “4-MIN I^{122} : ...More rapid chemistry showed a 4-min. iodine activity, and a single yield determination at 45 MeV showed it to be in the expected range as indicated in [the figure]... The assignment of this activity to I^{122} is also based on the fact that it was the only new activity beyond I^{123} , I^{124} , I^{125} , and I^{126} to appear at 45 Mev.”

Adapted from reference (2013Ka01)

- 1950Ma29 L. Marquez and I. Perlman, Phys. Rev. **78**, 189 (1950).
2013Ka01 J. Kathawa, C. Fry, and M. Thoennessen, At. Data Nucl. Data Tables **99**, 22 (2013).

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