

⁷⁴As

Sagane et al. of the Radiation Laboratory of the University of California at Berkeley were first to observe ⁷⁴As as reported in the 1938 article “Radioactive As Isotopes” (1938Sa02). Samples of germanium were activated with a 5.5 MeV deuteron beam at the Berkeley cyclotron with the reaction ⁷³Ge(*d,n*). In an additional experiment samples of arsenic were bombarded with fast neutrons from the Li + d reaction at the Tokyo cyclotron. “...we are certain that the process should be written as follows: Ge⁷³ + D² → As⁷⁴ + n¹ [and] As⁷⁵ + n¹ → As⁷⁴ + 2n¹.” The half-life was found to be 17 d. A half-life of 13.5 d was reported by Curtis and Cork in the same year in an abstract (1938Cu01).

Adapted from reference (2010Sh34)

- 1938Cu01 B. R. Curtis and J. M. Cork, Phys. Rev. **53**, 681 (1938).
1938Sa02 R. Sagane, S. Kojima, and M. Ikawa, Phys. Rev. **54**, 149 (1938).
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