^{75}Ge

Sagane identified ^{75}Ge in 1939 as reported in "Radioactive isotopes of Cu, Zn, Ga and Ge" (1939Sa02). Metallic germanium targets were irradiated by slow and fast neutrons produced by deuteron bombardments of lithium and beryllium from the Berkeley cyclotron. ^{75}Ge was produced by neutron capture reactions and the resulting activities were measured with a Lauritsen-type quartz fiber electroscope. "The 81-min. period was formed in strong intensity in each bombardment. This isotope emits negative electrons and is sensitive to slow neutrons. Because of the relative abundance of Ge^{74} (37 percent) and Ge^{76} (6.5 percent), the isotope in question is probably Ge^{75}." Previously, Aston had incorrectly reported ^{75}Ge to be stable (1928As02, 1931As04).

Adapted from reference (2012Gr19)

1928As02 F. W. Aston, Nature **122**, 167 (1928).
1931As04 F. W. Aston, Proc. Roy. Soc. (London) **132**, 487 (1931).
1939Sa02 R. Sagane, Phys. Rev. **55**, 31 (1939).
2012Gr19 J. L. Gross and M. Thoennessen, At. Data Nucl. Data Tables **98**, 983 (2012).

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