^{69}Ge

The first identification of ^{69}Ge was made by Mann in 1938, titled "Nuclear transformations produced in zinc by alpha-particle bombardment" (1938Ma01). A zinc target was irradiated with 17 MeV α-particles from the Berkeley cyclotron. Decay curves and absorption spectra were recorded with two electroscopes following chemical separation. "The 37-hour activity is probably to be identified with that of 26 hours reported by Sagane for Ge^{69}. While the possibility of isomorphism cannot be overlooked, the identification of Ge^{69} seems reasonable." No reference to the 26 h half-life reported by Sagane was given in the paper, but it probably refers to reference (1938Sa01). However, in that paper, Sagane assigned this half-life to ^{71}Ge, reporting a half-life of 30 min for ^{69}Ge. In 1941, Seaborg et al. reassigned a 195-d half-life originally assigned to ^{67}Ge (1938Ma01) incorrectly to ^{69}Ge (1941Se03).

Adapted from reference (2012Gr19)

1938Ma01 W. B. Mann, Phys. Rev. **54**, 649 (1938).

1938Sa01 R. Sagane, S. Kojima, G. Miyamoto, and M. Ikawa, Phys. Rev. **54**, 542 (1938).

1941Se03 G. T. Seaborg, J. J. Livingood, and G. Friedlander, Phys. Rev. **59**, 320 (1941).

2012Gr19 J. L. Gross and M. Thoennessen, At. Data Nucl. Data Tables **98**, 983 (2012).

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