^{64}Ge

^{64}Ge was first reported by Robertson and Austin in their 1972 paper, "Germanium-64" (1972Ro13). Enriched ^{64}Zn was irradiated with a 50 MeV ^{3}He beam from the Michigan State University cyclotron. Gamma-rays were measured with a Ge(Li) detector following chemical separation. "The strongest lines decay with a short half-life (30 ± 2 sec) and are attributed to ^{65}Ge (despite large disagreement with the previous half-life), on the basis of the rapid growth of the ^{65}Ga daughter and good energy fit with levels observed in ^{64}Zn(^{3}He,d)^{65}Ga. Other lines, at 128.2±0.2, 384.1±0.3, 427.0±0.3, 667.1±0.3, and 774.5±0.3 decay with a (weighted average) half-life of 62.3±2.0 sec and are assigned to the decay of the new isotope ^{64}Ge." An earlier attempt to observe ^{64}Ge was unsuccessful (1972De09).

Adapted from reference (2012Gr19)

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