^{109}Ru

The first measurements of ^{109}Ru were reported in the 1967 paper "The Half-Life of Ruthenium-109," by Griffiths and Fritze (1967Gr25). $UO_2(NO_3)_2$ was irradiated with neutrons from the McMaster reactor and ^{109}Ru was identified by measuring the activity following chemical separation. "The resulting ^{109}Ru decay curve is shown in [the figure]. Analysis of the data by computer (using a Gauss-Newton iterative method) gave a value for the half-life of 34.5±2.4 sec." The existence of ^{109}Ru was stipulated in an earlier paper, but no half-life or other identifying observables were presented (1967Fr16).

Adapted from reference (2012Ny02)

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