

⁹⁷Kr

⁹⁷Kr was discovered by Bernas et al. in 1997 at GSI in Germany and reported in “Discovery and Cross-Section Measurement of 58 New Fission Products in Projectile-Fission of 750-A MeV ²³⁸U” (1997Be70). The experiment was performed using projectile fission of ²³⁸U at 750 MeV/nucleon on a beryllium target. “Fission fragments were separated using the fragment separator FRS tuned in an achromatic mode and identified by event-by-event measurements of ΔE - $B\rho$ -ToF and trajectory.” 2110 counts for ⁹⁷Kr were recorded. It should be mentioned that an estimated half-life of 1-2 s for ⁹⁷Kr had been reported during the Manhattan Project (1950Di01). However, this observation was later questioned (1962Wa36), which is supported by a recent half-life measurement of 68(7) ms (2003Be05).

Adapted from reference (2010He02)

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