^{79}Sr

Landenbauer-Bellis et al. reported the observation of ^{79}Sr in the 1972 paper "Energies and intensities of γ rays in the decay of ^{79}Sr" (1972La32). A 65 MeV ^{14}N beam from the Yale Heavy Ion Accelerator activated enriched ^{69}Ga targets and ^{79}Sr was formed in the fusion-evaporation reaction ^{69}Ga(^{14}N,4n). Gamma-ray spectra of the activated samples were recorded with high-resolution Ge(Li) detectors. "Our conclusions are that ^{79}Sr has a half-life of 4.4±0.2 minutes associated with a single γ-ray having the energy of 105.4±0.2 keV." This half-life is almost a factor two larger than the correct value of 2.25(10) min (2016Si14), however, the γ-ray decay of the second excited state in the daughter nucleus ^{79}Rb at 105.4(2) keV was identified correctly. A previously reported half-life of 8.1(3) min. (1971Bi10) was incorrect. In 1971, Doron and Blann observed a half-life of 1.9 min in coincidence with three γ-rays consistent with the decay of ^{79}Sr, however, they argued that it could not be ^{79}Sr because of a growth in the activity of ^{79}Kr (1971Do01).

Adapted from reference (2012Pa21)

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