^{88}Rb

The identification of ^{88}Rb was reported in 1939 by Heyn et al. in the article "Transmutation of uranium and thorium by neutrons" (1939He01). An uranyl nitrate solution was irradiated with a strong neutron source of the Philips X-Ray Laboratory in Eindhoven, The Netherlands. Resulting activities were measured following chemical separation. "Active krypton forms radio-rubidium with a period of 16±2 minutes. Probably this period is due to the known radioactive rubidium isotope obtained from rubidium by neutron capture. The half-life of the latter we found to be 17±2 minutes. In this connexion, it may be mentioned that from uranium bombarded with neutron Curie and Savitch obtained precipitates of alkali salts showing a period of 18 minutes. Based on the experiments described we suggest the following processes: ... ^{88}Kr→^{88}Rb(17m.)→^{88}Sr(stable)," The 18 min half-life mentioned in the quote was published in reference without a mass assignment.(1939Cu02). Two years earlier, Sell reported half-lives of 18±2 m and 18±1 d and assigned them to either ^{86}Rb or ^{88}Rb (1937Sn02).

Adapted from reference (2012Pa21)

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