^{82}Rb

The observation of ^{82}Rb was reported in the 1949 publication "Mass spectrographic assignment of rubidium isotopes" by Reynolds et al. (1949Re19). The Berkeley 60 and 184-inch cyclotrons accelerated helium ions to energies of 20-100 MeV which irradiated ammonium bromide targets. ^{82}Rb was separated with a mass spectrograph and activities were measured with a geiger counter. "With 80-MeV helium ions, 5.0-hour Rb^{81} predominated in the mixture, and with 20-MeV helium ions almost pure 6.3-hour Rb^{82} was obtained. Otherwise, the similar half-lives would have made characterization of the radiations, which are listed in [the table], very difficult." This observation corresponds to an isomeric state of ^{82}Rb and the half-life of the ground state was measured four years later (1953Li27). Adapted from reference (2012Pa21)

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