

## <sup>92</sup>Nb

Sagane et al. described the discovery of <sup>92</sup>Nb in the 1938 paper “Neutron Induced Radioactivity in Columbium” (1938Sa03). Fast neutrons produced by bombarding lithium with 3 MeV deuterons from the RIKEN cyclotron were used to irradiate niobium samples. Beta-ray activities were measured following chemical separation. The half-life of <sup>92</sup>Nb was reported to be 11(1) d in a table and corresponds to an isomeric state. The half-life ( $3.3 \times 10^7$  y) of the ground state was measured only 39 years later by Makino and Honda (1977Ma45).

Adapted from reference (2012Ny02)

- 1938Sa03 R. Sagane, S. Kojima, G. Miyamoto, and M. Ikawa, Phys. Rev. **54**, 970 (1938).  
1977Ma45 T. Makino and M. Honda, Geochim. Cosmochim. Act. **41**, 1521 (1977).  
2012Ny02 A. Nystrom and M. Thoennessen, At. Data Nucl. Data Tables **98**, 95 (2012).

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