^{93}Mo

Wiedenbeck described the observation of ^{93}Mo at the Randall Laboratory of Physics of the University of Michigan in the 1946 paper "Radioactive isotopes in the columbium region" (1946Wi02). Columbium (niobium) metal foils were bombarded with 10 MeV deuterons. Beta and γ-ray spectra as well as absorption curves were measured. Short bombardments of columbium metal foils with 10-Mev deuterons produced the 6.6-minute β^--activity in Cb^{94} as well as 18-minute and 6.5-hour positron activities. The latter periods can be assigned to isomeric states of Mo^{93} produced in the Cb^{93}(d,2n) process."

While the first half-life was incorrect the second half-life (6.5 h) correspond to an isomeric state. The $3.0(6)\times10^3$ y ground state was reported 21 years later (1967Dm01).

Adapted from reference (2012Pa21)

1946Wi02 M. L. Wiedenbeck, Phys. Rev. **70**, 435 (1946).

1967Dm01 P. P. Dmitriev, I. O. Konstantinov, and N. N. Krasnov, Sov. J. Nucl. Phys. **6**, 209 (1967).

2012Pa21 A. M. Parker and M. Thoennessen, At. Data Nucl. Data Tables **98**, 812 (2012).

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