^{91}Nb

Jacobson and Overstreet identified ^{91}Nb in "Mass Assignment of the Chain 65d Zr^{95} - 35d Nb^{95} and Notes on Other Niobium Activities," in 1951 as a part of the Plutonium Project Series (1950Ja01). Deuterons and fast neutrons produced with the Berkeley cyclotron bombarded molybdenum and zirconium targets and niobium targets, respectively. Decay and absorption curves were measured following chemical separation. "In addition, evidence was obtained that the 60d Nb has a mass assignment of 91, clarifying certain previous transmutations studies, and that the 18h Nb positron emitter is Nb^{90}." The observed half-life corresponds to an isomeric state and the internal transition to the ground state was also published in 1951 by Preiswerk and Stahelin (1951Pr20). The half life of the ground state (680±130 y) was only measured 32 years later by Nakanishi and Honda (1982Na17).

Adapted from reference (2012Ny02)

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