^{100}Nb

In the 1967 article "Isomeres de Courte Periode du Niobium 99 et du Niobium 100," Hübenthal et al. described the first observation of ^{100}Nb (1967Hu09). 14-15 MeV neutrons produced at the Centre d'Études Nucléaires de Grenoble irradiated an enriched ^{100}Mo target. ^{100}Nb was identified by measuring β- and γ-ray spectra. "^{100}Nb de période 2,5 s se désintègre par émission de rayonnements β d'énergie maximale 4±0.5 MeV et de rayonnements γ d'énergie 157, 360, 400, 533 et 598 keV." [^{100}Nb decays with a period of 2.5 s by β radiation with a maximum energy of 4 MeV and γ rays of energy 157, 360, 400, 533 and 598 keV]. Previously reported half-lives of 3.0(3) min (1960Or02), 11 min (1961Ta08), and 2.8(2) min (1966Gu05) were incorrect. The observed half-life corresponds to an isomeric state and a half-life of 1.4 s was first correctly assigned to the ground state of ^{100}Nb by Ahrens et al. nine years later (1976Ah06).

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