^{198}Fr

The first observation of ^{198}Fr was reported in 2013 by Uusitalo et al. in "α-decay studies of the francium isotopes ^{198}Fr and ^{199}Fr" (2013Uu01). A ^{60}Ni beam accelerated by the K130 cyclotron of the University of Jyväskylä to 268 MeV bombarded rolled ^{141}Pr targets. Residues produced in the fusion-evaporation reaction ^{141}Pr(^{60}Ni,3n) were identified with the gas-filled recoil separator RITU: "Two α-particle activities, with E_α = 7613(15) keV and $T_{1/2}$ = (15^{+12}_{-5}) ms and E_α = 7684(15) keV and $T_{1/2}$ = (16^{+13}_{-5}) ms were identified in the new isotope ^{198}Fr." Independently, Kalaninova et al. submitted their results of a 15(3) ms half-life and an isomeric state with a half-life of 1.1(7) ms two months later (2013Ka16).

Adapted from reference (2014Th03)

2013Ka16 Z. Kalaninova, A. N. Andreyev, S. Antalic, F. P. Hessberger *et al.*, Phys. Rev. C **87**, 044335 (2013).

2013Uu01 J. Uusitalo, J. Saren, S. Juutinen, M. Leino *et al.*, Phys. Rev. C **87**, 064304 (2013).

2014Th03 M. Thoennessen, Int. J. Mod. Phys. E **23**, 1430002 (2014).

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