^{201}Ra

^{201}Ra was first observed by Uusitalo et al. and the results were published in the 2005 paper "α decay studies of very neutron-deficient francium and radium isotopes" (2005Uu02). A ^{141}Pr target was bombarded with 278-288 MeV ^{63}Cu beams from the Jyväskylä K-130 cyclotron forming ^{201}Ra in the fusion-evaporation reaction ^{141}Pr(^{63}Cu,3n). Reaction products were separated with the gas-filled recoil separator RITU and implanted in a position-sensitive silicon detector which measured subsequent α decay. "... and thus the activity with E_α = 7905 keV and T_{lt} = 2 ms can be identified to originate from a new even-odd radium isotope ^{201}Ra. " This half-life corresponds to an isomeric state and the half-life of the ground state of 8^{+40}_{-4} s was measured nine years later by Kalaninova et al. (2014Ka23).

Adapted from reference (2013Fr09)

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