# $^{195}$Rn

The discovery of $^{195}$Rn by Kettunen et al. was reported in the 2001 paper "$\alpha$ decay studies of the nuclides $^{195}$Rn and $^{196}$Rn" (2001Ke06). A $^{142}$Nd target was bombarded with 239−267 MeV $^{56}$Fe beams from the Jyväskylä K-130 cyclotron producing $^{195}$Rn in the (3n) fusion-evaporation reaction. Recoil products were separated with the gas-filled recoil separator RITU and implanted into a position sensitive silicon detector which also measured subsequent $\alpha$ decay. "Two $\alpha$ decaying isomeric states, with $E_\alpha$=7536(11) keV [$T_{1/2}$=($6^{+3}_{-2}$) ms] for the ground state and $E_\alpha$=7555(11) keV [$T_{1/2}$=($5^{+3}_{-2}$) ms] for an isomeric state were identified in $^{195}$Rn."

Adapted from reference (2013Fr09)


2001Ke06 H. Kettunen, J. Uusitalo, M. Leino, P. Jones *et al.*, Phys. Rev. C **63**, 044315 (2001).

2013Fr09 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 497 (2013).



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