

^{219}Np

The first identification of ^{219}Np was reported in 2018 by Yang et al. in the paper “Alpha decay properties of the semi-magic nucleus ^{219}Np ” (2018Ya01). A 191.5 MeV ^{36}Ar was accelerated with the sector focusing cyclotron of the heavy ion research facility in Lanzhou (HIRFL), China. Residues from the fusion-evaporation reaction $^{187}\text{Re}(^{40}\text{Ar},4n)$ were identified with the gas-filled recoil separator SHANS. “According to the observed α -decay chain, an energy of $E_\alpha = 9039(40)$ keV and a half-life of $T_{1/2} = 0.15^{+0.72}_{-0.07}$ ms were determined for ^{219}Np .” Previously, ^{219}Np was reported in the decay chain starting at ^{223}Am , however, neither the α -decay energy nor the lifetime were measured (2015De22).

Adapted from reference (2019Th02)

- 2015De22 H. M. Devaraja, S. Heinz, O. Beliuskina, V. Comas *et al.*, Phys. Lett. B **748**, 199 (2015).
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2019Th02 M. Thoennessen, Int. J. Mod. Phys. E **28**, 1930002 (2019).

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