# $^{206}$Ac

Eskola et al. discovered $^{206}$Ac and published the results in the 1998 paper "$\alpha$ decay of the new isotope $^{206}$Ac" (1998Es02). A 5.5 MeV/nucleon $^{36}$Ar beam from the Jyväskylä K-130 heavy-ion cyclotron bombarded a $^{175}$Lu target to form $^{206}$Ac in (5n) fusion-evaporation reactions. Residues were separated with the gas-filled separator RITU and implanted in a position sensitive passivated implanted planar silicon detector which also detected subsequent $\alpha$ decay. "$^{206}$Ac was found to have two $\alpha$ particle emitting isomeric levels with half-lives of ($22^{+9}_{-5}$) ms and ($33^{+22}_{-9}$) ms, and with $\alpha$ particle energies of (7790$\pm$30) keV and (7750$\pm$20) keV, respectively." The first level corresponds to the ground state.

Adapted from reference (2013Fr03)


1998Es02 K. Eskola, P. Kuusiniemi, M. Leino, J. F. C. Cocks *et al.*, Phys. Rev. C **57**, 417 (1998).

2013Fr03 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 345 (2013).



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