^{208}Ac

The discovery of ^{208}Ar was reported by Leino et al. in the 1994 paper "Alpha decay of the new isotopes ^{207,208}Ac" (1994Le05). A ^{175}Lu target was bombarded with 5.2−5.6 MeV ^{40}Ar beams from the Jyväskylä K-130 heavy-ion cyclotron producing ^{208}Ar in(7n) fusion-evaporation reactions, respectively. Residues were separated with the gas-filled recoil separator RITU and implanted in a position sensitive PIPS detector which also recorded subsequent α decay. "The alpha energy and half-life of ^{208}Ac were determined to be (7572±15) keV and (95^{+24}_{-16}) ms, respectively. A new alpha line with a half-life of (25^{+9}_{-5}) ms and an energy of (7758±20) keV is assigned to the decay of an isomeric state in ^{208}Ac."

Adapted from reference (2013Fr03)

1994Le05 M. Leino, J. Uusitalo, T. Enqvist, K. Eskola *et al.*, Z. Phys. A **348**, 151 (1994).

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

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