^{204}Au

Pakkanen et al. identified ^{204}Au for the first time at Jyväskylä, Finland, in 1972: "New ^{204}Au Activity and the Decay of ^{202}Au" (1972Pa06). Natural mercury targets were bombarded with 14-15 MeV neutrons from a Sames J150 neutron generator. Characteristic singles and coincidence γ-ray spectra were measured following the transport of the targets with a fast pneumatic transport system. "The most probable assignment for the 40$\pm$3 s activity is ^{204}Au, by the following arguments: ..." The previously reported value of 4(1) s (1967Wa23) could not be confirmed. "If the previously reported 4.0 s activity also belongs to ^{204}Au, an explanation could be the two close-lying isomeric states." However, such a state has so far not been confirmed.

Adapted from reference (2010Sc35)

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