^{119}I

The identification of ^{119}I was reported by Rossi et al. in 1954 in "The acceleration of nitrogen-14 (+6) ions in a 60-inch cyclotron" (1954Ro03). A 120 MeV ^{14}N beam from the Berkeley 60-in. cyclotron bombarded palladium foils forming ^{119}I in the fusion evaporation reactions ^{110}Pd(^{14}N,5n) or ^{108}Pd(^{14}N,3n). Decay curves were measured following chemical separation. "The 18-minute activity may be the same as the ∼30-minute radio-iodine found by Marquez and Perlman (1950Ma29) from high-energy helium-ion bombardments of antimony, and assigned by them to either I^{119} or I^{120}. The 5-day tail in the decay curve may correspond to 4.5-day Te^{119}, in which case the 18-minute radio-iodine probably is I^{119}."

Adapted from reference (2013Ka01)

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