^{191}Pb

The first observation of ^{191}Pb was reported by Le Beyec et al. in 1974 in "New neutron deficient Pb and Bi nuclides produced in cross bombardments with heavy ions" (1974Le02). Fluorine and oxygen beams with energies up to 10.4 MeV/nucleon were accelerated by the Berkeley HILAC and bombarded self-supporting tantalum foils and WO_3 targets enriched in ^{182}W, respectively. Excitation function were recorded and α-decay energies and half-lives were measured. "^{191}Pb: E_α=5.29±0.02 MeV, ($t_{1/2}$=1.3±0.3 min) This α-ray was obtained in highest yield for an excitation energy of 120 MeV in the case of reactions induced in ^{181}Ta by ^{19}F ions. Also, in the ^{182}W(^{16}O,xn) series, the maximum occurred at an excitation energy of 90 MeV, corresponding to the emission of seven neutrons from the compound nucleus ^{198}Pb." Similar results were already included in an overview article by Eskola (1967Es05), quoting a private communication by Siivola.

Adapted from reference (2013Fr04)

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