^{178}Pb

The first observation of ^{178}Pb was published in 2016 by Badran et al. in the paper entitled "Confirmation of the new isotope ^{178}Pb" (2016Ba60). A self-supporting ^{104}Pd target was bombarded with a 358 MeV ^{78}Kr beam from the K-130 cyclotron at Jyväskylä. The recoils from the fusion evaporation reaction ^{104}Pd(^{78}Kr,4n)^{178}Pb were separated with the gas-filled separator RITU and identified in the GREAT spectrometer. "The half-life of the ground state of ^{178}Pb was determined to be $t_{1/2} = 0.21^{+0.21}_{-0.08}$ ms using the maximum-likelihood method." The word confirmation in the title of the paper referred to a previous observation of ^{178}Pt which, however, was only published as a conference proceeding (2003BaZO).

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