# $^{114}$Ag

Alexander et al. discovered in 1958 $^{114}$Ag as reported in "Short-Lived Isotopes of Pd and Ag of Masses 113-117" (1958Al90). Uranium was bombarded with 15 MeV deuterons from the M.I.T. cyclotron and the isotopes were produced in the subsequent fission of uranium. $^{114}$Ag was identified following chemical separation by measuring $\beta$-particles and $\gamma$-rays. $^{114}$Ag was identified by a known $^{114}$Cd $\gamma$-ray: "A level between 0.55 and 0.56 Mev has been found in $Cd^{114}$ by several investigators using Coulomb excitation of $Cd^{114}Cd$ and neutron capture of $Cd^{113}$, and it has been found in the decay by K capture of 50-day $In^{114}$. The similarity of the energy levels suggest the mass number 114 for the 2.4-min Pd, 5-sec Ag chain." The previous observation of a 2 m activity (1949Du06) could not be confirmed.

Adapted from reference (2010Sc10)


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Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"