^{221}Ac

The first detection of ^{221}Ac was reported in 1968 by Hahn et al. in "New neptunium isotopes, ^{230}Np and ^{229}Np" (1968Ha14). ^{233}U was bombarded with 32−41.6 MeV protons from the Oak Ridge isochronous cyclotron forming ^{229}Np in (p,5n) reactions. Reaction products were implanted on a catcher foil which was periodically rotated in front of a surface barrier Si(Au) detector which measured subsequent α decay. "The α-particle energies found for the ^{225}Pa series are more precise than the previously available values: ^{225}Pa, 7.25±0.02 MeV (new value); ^{221}Ac, 7.63±0.02 MeV; ^{217}Fr, 8.31±0.02 MeV and ^{213}At, 9.06±0.02 MeV." The observation of ^{221}Ac was not considered new, referring to an unpublished thesis (1951Ke53).

Adapted from reference (2013Fr03)

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