^{217}Fr

In the 1968 article "New neptunium isotopes, ^{230}Np and ^{229}Np" Hahn et al. reported the observation of ^{213}Fr (1968Ha14). Enriched ^{233}U targets were bombarded with 32−41.6 MeV protons from the Oak Ridge Isochronous Cyclotron forming ^{229}N in (p,5n) reactions, respectively. Reaction products were implanted on a catcher foil which was periodically rotated in front of a surface barrier Si(Au) detector. Isotopes populated by subsequent α emission were measured. "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 The observation of ^{217}Fr was not considered new, referring to an unpublished thesis (1951Ke53).

Adapted from reference (2013Fr09)

1951Ke53 J. D. Keys, Thesis, McGill University (1951).
1968Ha14 R. L. Hahn, M. F. Roche, and K. S. Toth, Nucl. Phys. A **113**, 206 (1968).
2013Fr09 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 497 (2013).

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