^{168}Re

The identification of ^{168}Re was published in 1992 in "Revision of the decay data of $^{166-170}$Re, including new isomers ^{167m,169m}Re" by Meissner et al. (1992Me10). ^{141}Pr targets were irradiated with a 235 MeV ^{32}Si beam from the VICKSI accelerator facility at the Hahn-Meitner-Institut, Berlin, Germany. The reaction products were transported to a surface barrier α-detector, mounted between a γ-X detector and a γ-detector with a helium jet system and a fast transport tape. "The earlier reported 5.26 MeV and also the new 5.02 MeV α-rays display a similar excitation function as ^{167}W and are consequently assigned to ^{167}Re... From the excitation functions in [the figure], the new 4.83 MeV α-radiation has to be assigned to the isotope ^{168}Re." Meissner also demonstrated that α-decay assignments by Schrewe et al. (1984Sc06) to $^{166-168}$Re were most likely from $^{163-165}$W.

Adapted from reference (2012Ro36)

1984Sc06 U. J. Schrewe, E. Hagberg, H. Schmeing, J. C. Hardy *et al.*, Z. Phys. A **315**, 49 (1984).

1992Me10 F. Meissner, H. Salewski, W. D. Schmidt-Ott, U. Bosch-Wicke, and R. Michaelsen, Z. Phys. A **343**, 283 (1992).

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