^{49}Cr

"Artificial Radioactivity of ^{49}Cr", published in 1942 by O'Connor et al., announced the discovery of ^{49}Cr (1942Oc01). The bombardment of TiO_2 targets with 20 MeV alpha particles from the Ohio State cyclotron resulted in the formation of ^{49}Cr by the reaction ^{46}Ti(α,n). A Wulf quartz fiber electrometer connected to a Freon filled ionization chamber was used to measure decay and absorption curves. "Since chemical separation shows that the 41.9-minute activity, produced by alpha-particle bombardment of titanium and by fast neutron bombardment of chromium is an isotope of chromium and since this period has not been found by proton bombardment of vanadium or deuteron bombardment of chromium, the activity must evidently be due to ^{49}Cr."

Adapted from reference (2012Ga06)

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