^{128}Pr

^{128}Pr was discovered in 1985 by Wilmarth et al. and the results were published in the paper entitled "Beta-delayed proton precursors with $59 \leqslant Z \leqslant 62$" (1985Wi07). A 170 MeV ^{40}Ca beam from the Berkeley Super HILAC was used to produce ^{128}Pr in the fusion-evaporation reaction ^{92}Mo(^{40}Ca,3pn). Charged-particles, X-rays and γ-rays were measured following mass separation with the on-line separator OASIS. "A weak β-delayed proton activity with a half-life of $3.2^{+0.5}_{-0.5}$s observed in coincidence with Cs K x-rays can now be unambiguously assigned to the new isotope ^{128}Pr." Previously, a 4(2) s half-life had been assigned to ^{128}Nd (1983Ni05).

Adapted from reference (2012Ma48)

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