^{63}Fe

Guerreau et al. reported the discovery of ^{63}Fe in the 1980 paper "Seven New Neutron Rich Nuclides Observed in Deep Inelastic Collisions of 340 MeV ^{40}Ar on ^{238}U" (1980Gu09). A 340 MeV ^{40}Ar beam accelerated by the Orsay ALICE accelerator facility bombarded a 1.2 mg/cm^2 thick UF_4 target supported by an aluminum foil. The isotopes were identified using two ΔE-E telescopes and two time-of-flight measurements. "The new nuclides ^{54}Ti, ^{56}V, $^{58-59}$Cr, ^{61}Mn, $^{63-64}$Fe, have been produced through ^{40}Ar + ^{238}U reactions." At least twenty counts were recorded for these isotopes. Breuer et al. detected ^{63}Fe independently only a few months later (1980Br26).

Adapted from reference (2010Sc18)

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