^{78}Sr

"Extreme prolate deformation in light strontium isotopes" by Lister et al. identified ^{78}Sr in 1982 (1982Li08). A ^{58}Ni target was bombarded with a 100 MeV beam of ^{24}Mg from the Brookhaven Van de Graaff accelerator facility, and ^{78}Sr was formed in the fusion-evaporation reaction ^{58}Ni(^{32}Mg,2p2n). The isotope was identified by triple coincidence measurements of light-charged particles, neutrons and γ-rays. "Levels in ^{78}Sr were seen to J=10 with E(2^+) = 278 keV and $T_{1/2}$ = 155$\pm$19 ps." The first half-life measurement of the ^{78}Sr ground state was reported only five months later (1982Li17). A previously reported half-life of 30.6(23) min (1971Bi23) was incorrect.

Adapted from reference (2012Pa21)

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