^{139}Ba

Pool et al. published the first identification of ^{139}Ba in "A Survey of Radioactivity Produced by High Energy Neutron Bombardment" in 1937 (1937Po04). Neutrons with energies up to 20 MeV, produced by bombarding lithium with 6.3 MeV deuterons at the University of Michigan, were used to irradiate many stable elements. In the summary table the observed half-life of 85 m was assigned to ^{139}Ba. This assignment is supported by a previously published contribution to a conference: "Barium becomes strongly radioactive with a half-life period of 85.6 min. The β-particles have the negative sign. Chemical analysis shows that the activity is most probably due to Ba^{139}." (1937Po03). Amaldi et al. had reported a 80 m period in barium in 1935; however, no mass assignment was made (1935Am02).

Adapted from reference (2010Sh20)

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