^{124}Ba

^{124}Ba was first observed in 1967 by Clarkson et al. as reported in "Collective Excitations in Neutron-Deficient Barium, Xenon, and Cerium Isotopes" (1967Cl02). ^{124}Ba was produced by the reactions ^{115}In(^{14}N,5n) at 84 MeV and ^{116}Sn(^{12}C,4n) at 80 MeV where the ions were accelerated with the Berkeley heavy-ion linear accelerator (HILAC). Gamma-ray spectra were measured with a lithium-drifted germanium counter. "Since ^{124}Ba was produced by two reactions with different targets and projectiles, which both give the same transitions, this mass assignment is likewise considered to be quite certain." The first two transitions of the ground-state band were correctly identified.

Adapted from reference (2010Sh20)

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