

^{120}Xe

^{120}Xe was discovered by Andersson et al. in 1965 in “Decay data on some Xe, I, and Te isotopes” (1965An05). Lanthanum was bombarded with 600 MeV protons at CERN to produce ^{118}Xe , ^{119}Xe , and ^{120}Xe in spallation reactions. Beta- and gamma-ray spectra were measured with a beta counter and a NaI(Tl) scintillation spectrometer, respectively, following chemical separation. “From the decay of suitable peaks in consecutive scintillation gamma spectra, Xe^{118} (peak at about 50 keV) and Xe^{119} (peak at about 100 keV) were assigned the same half-life, 6 ± 1 min, in both cases defined over six periods. In the same way a half-life of 40 ± 1 min was found for Xe^{120} (x-rays and 70 keV peak).” Six months later Butement and Qaim (1965Bu08) independently assigned a half-life of 43(3) min to ^{120}Xe .

Adapted from reference (2013Ka01)

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Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152”