

¹²⁶Sb

The 1956 article “Ein neues Antimonisotop, ¹²⁶Sb” by Fränz et al. described the discovery of ¹²⁶Sb ([1956Fr31](#)). A tellurium target was bombarded with 28 MeV deuterons from the Buenos Aires synchrocyclotron and ¹²⁶Sb was formed in the reaction ¹²⁸Te(d,α). Following chemical separation β- and γ-ray spectra were measured with a Geiger-Müller counter and a single-channel scintillation spectrometer, respectively. “Wegen der genauen Übereinstimmung der stärksten γ-Linie des 18.8 min-Antimons mit dem ersten angeregten Niveau von ¹²⁶Te, bzw. mit der den K-Einfang begleitenden Photonenstrahlung von 650 keV des ¹²⁶J, kann man diesem Isotop die Massenzahl 126 zuschreiben.” [Because of the the exact agreement of the strongest γ-line of the 18.8 min antimony with the first excited state of ¹²⁶Te, or with the K-capture of the accompanying 650 keV radiation of ¹²⁶I, it is possible to assign this isotope to mass 126.] This level corresponds to an isomeric state and the ground state half-life of 12.2(1) d was reported five years later by Hahn and Miller ([1961Ha39](#)). A previously measured half-life of 9 h ([1951Ba41](#)) was incorrect.

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](https://doi.org/10.11578/frib/2279152)”