

¹¹⁸Sb

¹¹⁸Sb was discovered by Coleman and Pool from the Mendenhall Laboratory at Ohio State University in 1947 as reported in “X-Ray emitting isotopes of radioactive Sb and Sn” (1947Co04). Tin and indium were bombarded with 20 MeV α -particles forming ¹¹⁸Sb. Characteristic x-rays were photographed with a pair of Cauchois cameras following chemical separation. “Three new x-ray emitting activities in Sb with half-lives of 2.8 hours, 5.1 hours and 39 hours have been found by the use of the curved crystal camera in conjunction with the x-ray decay curves. The assignments are ¹¹⁷Sb, ¹¹⁸Sb, and ¹¹⁹Sb respectively.” The 5.1 h half-life corresponds to an isomer and a half-life of 3.5 m was assigned to the ground state by Lindner and Perlman a year later (1948Li02) crediting an abstract by Risser et al. for the identification (1940Ri02).

Adapted from reference (2013Ka01)

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