

²⁴⁶Es

Ghiorso et al. discovered ²⁴⁶Es in 1954 as reported in “Reactions of U²³⁸ with Cyclotron-Produced Nitrogen Ions” (1954Gh12). The Berkeley Crocker Laboratory 60-inch cyclotron produced ¹⁴N beams that bombarded ²³⁸U targets and ²⁴⁶Es was produced in the fusion-evaporation reaction ²³⁸U(¹⁴N,6n). Electron-capture and α -particles were detected following chemical separation. ²⁴⁶Es was “observed only through growth of its 1.5-day Cf²⁴⁶ daughter.” Electron-capture with a half-life of “minutes” was measured. The paper was the first unclassified publication of an einsteinium isotope. However, the paper states in a footnote that “There is unpublished information relevant to element 99 at the University of California, Argonne National Laboratory, and Los Alamos Scientific Laboratory. Until this information is published the question of the first preparation should not be prejudged on the basis of this paper.” The official announcement of the discovery of the new element with Z = 99 was made in 1955 (1955Gh01).

Adapted from reference (2011Me01)

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