

¹⁸⁶Re

Sinma and Yamasaki identified ¹⁸⁶Re in the 1939 article “ β -radioactivities of rhenium” (1939Si05). Metallic rhenium samples were irradiated with slow and fast neutrons produced from Be+D and Li+D reactions from the Tokyo cyclotron at RIKEN, respectively. Energy spectra were measured with a Wilson cloud chamber and decay curves were recorded. “Now rhenium has only two isotopes Re¹⁸⁵ and Re¹⁸⁷. From the above large change in the ratio of the intensities for two cases, it seems therefore more probable, contrary to Pool, Cork and Thornton, to ascribe the 16-hour period to Re¹⁸⁸ and the 90-hour activity to Re¹⁸⁶.” The opposite assignment mentioned in the quote was published two years earlier (1937Po04). Half-lives of 20 h (1935Am01, 1935Ku03) and 85 h (1935Ku03) had previously been reported without mass assignments.

Adapted from reference (2012Ro36)

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