

^{210}Ac

In 1968, Valli et al. reported the first observation of ^{210}Ac in the article “On-line alpha spectroscopy of neutron-deficient actinium isotopes” ([1968Va04](#)). The Berkeley heavy-ion linear accelerator was used to produce light actinium isotopes in the reactions $^{197}\text{Au}(^{20}\text{Ne},\text{xn})$, $^{203,205}\text{Tl}(^{16}\text{O},\text{xn})$, and $^{209}\text{Bi}(^{12}\text{C},\text{xn})$. Reaction products were deposited by helium flow onto a catcher foil which was then rotated in front of a Si(Au) surface barrier detector. “Actinium-211 and Actinium-210: ...In the $^{197}\text{Au}+^{20}\text{Ne}$ system, when we prepared the activity with 124-MeV ^{20}Ne ions, the α energy was 7.480 MeV. This energy we assign to ^{211}Ac . When we used 145-MeV ^{20}Ne ions, the α energy of the unknown peak was 7.462 MeV, which we assign to ^{210}Ac ”

Adapted from reference ([2013Fr03](#))

[1968Va04](#) K. Valli, W. J. Treytl, and E. K. Hyde, Phys. Rev. **167**, 1094 (1968).
[2013Fr03](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 345 (2013).

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