

²⁵⁶Lr

In the 1965 article “Synthesis of the isotope of element 103 (lawrencium) with mass number 256” Donets et al. described the discovery of ²⁵⁶Lr ([1965Do10](#)). A ¹⁸O beam with a maximum energy of 96 MeV from the Dubna three-meter, multiple-charged ion cyclotron bombarded a ²⁴³Am target forming ²⁵⁶Lr in the (5n) fusion-evaporation reaction. Recoil products were diffused by gas on a rotating disc and the half-life of ²⁵⁶Lr was determined from the distribution of ²⁵²Fm on the collector and the rotation speed of the disc. ²⁵²Fm was identified by its α -decay measured in an α spectrometer with surface-barrier Au-Si detectors, following chemical separation. “The detection and identification of ¹⁰³Lw²⁵⁶ was made through the isotope ¹⁰⁰Fm²⁵², a product of electron capture in ¹⁰¹Mv²⁵² produced by α -decay of ¹⁰³Lw²⁵⁶. The half-life of ¹⁰⁰Lw²⁵⁶ is 45 sec.”

Adapted from reference ([2013Th02](#))

[1965Do10](#) E. D. Donets, V. A. Shchegolev, and V. A. Ermakov, Soviet J. At. Energy **19**, 109 (1965).

[2013Th02](#) M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).

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