

¹⁶⁶Os

Cabot et al. published the first observation of ¹⁶⁶Os in the paper “New osmium and iridium isotopes produced through ⁶³Cu induced reactions” in 1977 ([1977Ca23](#)). Self-supporting ¹⁰⁶Cd and ¹⁰⁹Ag targets were bombarded with a 380 MeV ⁶³Cu beam from Orsay ALICE accelerator. The neutron-deficient osmium isotope was produced in the fusion-evaporation reaction ¹⁰⁶Cd(⁶³Cu,p2n)¹⁶⁶Os. Reaction fragments were collected with a He-jet and α -decay half-lives and decay energies were measured. “New α active osmium and iridium isotopes ¹⁶⁸Os, ¹⁶⁷Os, ¹⁶⁶Os, and ¹⁷⁰Ir have been identified by cross bombardments and excitation functions measurements.”

Adapted from reference ([2012Ro36](#))

[1977Ca23](#) C. Cabot, S. Della Negra, C. Deprun, H. Gauvin, and Y. Le Beyec, *Z. Phys. A* **283**, 221 (1977).

[2012Ro36](#) R. Robinson and M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 911 (2012).

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