

^{227}Pu

The discovery of ^{227}Pu was reported in the 2024 article “ α decay of the new isotope ^{227}Pu ” by Yang et al. (2024Ya27). A 196.4 MeV ^{40}Ar beam impinged on a $220\ \mu\text{g}/\text{cm}^2$ enriched ^{192}Os target at the Heavy Ion Research Facility in Lanzhou, China (HIRFL). Recoil evaporation residue from the $^{192}\text{Os}(^{40}\text{Ar},5\text{n})^{227}\text{Pu}$ reaction were separated with the separator SHANS and implanted in three position-sensitive silicon detectors. “Based on five individual full-energy E_α values and all nine time intervals, the α -particle energy and half-life of ^{227}Pu were determined to be 8191(28) keV and $0.78_{-0.19}^{+0.39}$ s, respectively.”

[2024Ya27](#) H. B. Yang, Z. G. Gan, Z. Y. Zhang, M. H. Huang *et al.*, Phys. Rev. C **110**, 044302 (2024).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”