

## $^{273}\text{Ds}$

In the 1996 paper “ $\alpha$  decay of  $^{273}110$ : Shell closure at  $N = 162$ ”, Lazarev et al. reported the discovery of  $^{273}\text{Ds}$  ([1996La12](#)). A 190 MeV  $^{34}\text{S}$  beam from the Dubna U400 cyclotron bombarded enriched  $^{244}\text{Pu}$  targets.  $^{273}\text{Ds}$  was formed in the (5n) fusion-evaporation reaction. Reaction residues were separated with the Dubna Gas-filled Recoil Separator and subsequent  $\alpha$  and spontaneous fission decays were recorded in a position sensitive silicon detector. “As a result of the above-described selection, 14 candidate chains of the  $^{273}110$  type were observed in detector strips 1–6, and one four-member sequence, with  $E_{\alpha 1} = 11.35$  MeV, was detected in strip 7”. A half-life of  $0.3^{+1.3}_{-0.2}$  ms was quoted. About a month later Hofmann et al. independently reported the observation of  $^{273}\text{Ds}$  in the  $\alpha$ -decay of  $^{277}\text{Cn}$  ([1996Ho13](#)).

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

- [1996Ho13](#) S. Hofmann, V. Ninov, F. P. Hessberger, P. Armbruster *et al.*, *Z. Phys. A* **354**, 229 (1996).  
[1996La12](#) Yu. A. Lazarev, Yu. V. Lobanov, Yu. Ts. Oganessian, V. K. Utyonkov *et al.*, *Phys. Rev. C* **54**, 620 (1996).  
[2013Th02](#) M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 312 (2013).

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