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DECAY CHAIN OF SUPERHEAVY NUCLEI Z=118-122 AND N[~]172

We address the current understanding of the nuclear structure of nuclei to evaluate their stability. The microscopic shel model approach and phenomenological models are applied to predict the α halflives for several yet-unaccessible isotopes of superheavy elements Z=118-122. We outline what might be expected for the nuclear stability from studying:i) couplings between the single particle and collective motions; ii) corrections due to finite sizes of nucleons and clusters. The g.s. state-to-g.s. state total halflives indicate a rather stable shell structure at the 292120 nuclide wich is symilar to the spherical shell structures in 208P b and 100Sn.

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