

## On the shape coexistence and shape isomers in even-even nuclei in vicinity of $^{208}\text{Pb}$

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### Abstract

Potential energy surfaces of 54 even-even isotopes of Pt, Hg and Pb nuclei with neutron numbers up to  $N = 126$  are investigated within a macroscopic-microscopic model [1] based on the Lublin-Strasbourg-Drop [2] macroscopic energy and shell plus pairing-energy corrections obtained from the Yukawa-folded mean-field potential [3, 4]. A new, rapidly converging Fourier shape parametrization [5, 6] is used to describe nuclear shapes. The stability of shape isomeric states with respect to non-axial and higher-order deformations is investigated.

### References

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