

PN-IV-P1-PCE-2023-0273

Investigation of the nuclear structure at the proton stability line (PROLINE)

LIST OF PUBLISHED PAPERS

1. R. Budaca and A.I. Budaca,
Harmonic chiral vibration in triaxial nuclei,
Physics Letters B **868**, 139794 (2025).
2. R. Budaca,
The energy staggering of the alternating parity band in pear-shaped nuclei,
European Journal of Physics A **151**, 34002 (2025)
3. R. Budaca and S. Pascu,
Interplay of quadrupole and octupole degrees of freedom in the Gd isotopes,
Physical Review C **113**, 014326 (2026).
4. D.S. Delion and S.A. Penu,
Proton emission systematics along proton drip line,
Physical Review C **113**, 034309 (2026).
5. P. Baganu and R. Budaca,
Bohr-Mottelson Hamiltonian with octic potential applied to the $^{106-116}\text{Cd}$ isotopes,
Nuclear Physics A **1067**, 123311 (2026).
6. R. Budaca,
Intermediate particle-core coupling in reflection asymmetric odd mass nuclei,
European Physical Journal A **62**, 32 (2026).
7. S.A. Penu and D.S. Delion,
Simple approach to describe ^{104}Te ,
Romanian Journal of Physics (2026) (submitted).

PAPERS IN PREPARATION

8. S.A. Penu and D.S. Delion,
Nuclear structure above $^{100,132}\text{Sn}$ doubly magic nuclei,
Journal of Physics G (2026).
9. A. Dumitrescu and D.S. Delion,
Mean field description of alpha clustering in deformed nuclei,
Journal of Physics G (2026).