

The results of the project are summarized in the following published works:

[1] Folding description of the fine structure of alpha decay to vibrational 2+ vibrational and transitional states, S. Peltonen, D. S. Delion, J. Suhonen, *Physical Review C*, 75, 54301, (2007). ISI indexed

[2] Realistic Orbital Momentum Operators for the Supersymmetric Two-Center Shell Model, M. Mirea, *Nuclear Physics A*, 780, 13 (2006). ISI indexed

[3] Landau-Zener effect in fission, M. Mirea, L. Tassan-Got, C. Stephan, C.O. Bacri and R.C. Bobulescu, *Physical Review C*, 76, 64608, (2007). ISI indexed

[4] Realistic Spin-Orbit Operators for the Supersymmetric Two-Center Shell Model, M. Mirea, R.C. Bobulescu and E. Petrescu, *Romanian Journal of Physics*, 52, 15 (2007). ISI indexed

[5] Comparisons of statistical multifragmentation and evaporation models for heavy-ion collisions, M. B. Tsang, R. Bougault, R. Charity, D. Durand, W. A. Friedman, F. Gulminelli, A. Le Fvr5, Al. H. Raduta, Ad. R. Raduta, S. Souza, W. Trautmann and R. Wada, *European Physical Journal A*, 30, 129 (2006). ISI indexed

[6] Compound nucleus formation and de-excitatoin with neutrons, E. Petrescu and M. Mirea, *UPB Scientific Bulletin Series A; Applied Mathematics and Physics*, 70, 59 (2008). ISI indexed

[7] Fine structure in the intermediate resonance region of the neutron induced fission cross section, M. Mirea and L. Tassan-Got, *International Conference on Nuclear Data for Science and Technology (ND 2007)*, Nice 22-27 April 2007, pages 355-358, Editors ). Bersillon et al., EDP Sciences 2008, ISBN 978-0090-2.

[8] Landau-Zener effect in the time dependent Hartree-Fock-Bogoliubov equations, M. Mirea, *Carpathian Summer School of Physics 2007, Exotic Nuclei and Nuclear/Particle Astrophysics*, Sinaia, August 23-31, Romania, Eds. L. Trache and S. Stoica, World Scientific. 2008, pages 495, ISBN 978-0-7354-0490-8 ISI proceedings