# Publications in Journals – 2015

1. T. Roy, G. Mukherjee, N. Madhavan, T.K. Rana, Soumik Bhattacharya, Md. A. Asgar, I. Bala, K. Basu, S. S. Bhattacharjee, C. Bhattacharya, S. Bhattacharya, S. Bhattacharyya, J. Gehlot, S. S. Ghugre, R. K. Gurjar, A. Jhingan, R. Kumar, S. Muralithar, S. Nath, H. Pai, R. Palit, R. Raut, R.P. Singh, A. K. Sinha and T. Varughese, "A new high-spin isomer in 195Bi", The European Physical Journal A 51 (2015) 153

2. E. H. Wang, A. Lemasson, J. H. Hamilton, A. V. Ramayya, J. K. Hwang, J. M. Eldridge, A. Navin, M. Rejmund, S. Bhattacharyya, S. H. Liu, N. T. Brewer, Y. X. Luo, J. O. Rasmussen, H. L. Liu, H. Zhou, Y. X. Liu, H. J. Li, Y. Sun, F. R. Xu, S. J. Zhu, G. M. Ter-Akopian, Yu. Ts. Oganessian, M. Caamano, E. Clement, O. Delaune, F. Farget, G. de France and B. Jacquot, "Identification of new transitions and mass assignments of levels in 143-153Pr", Physical Review C 92 (2015) 34317

3. R. Garg, S. Kumar, M. Saxena, S. Goyal, D. Siwal, S. Kalkal, S. Verma, R. Singh, S. C. Pancholi, R. Palit, D. Choudhury, S. S. Ghugre, G. Mukherjee, R. Kumar, R. P. Singh, S. Muralithar, R. K. Bhowmik and S. Mandal, "Negative-parity high-spin states and a possible magnetic rotation band in 135 59Pr76", Physical Review C 92 (2015) 54325

4. T. K. Ghosh, A. Chaudhuri, K. Banerjee, S. Bhattacharya, C. Bhattacharya, S. Kundu, G. Mukherjee, R. Pandey, T. K. Rana, P. Roy, T. Roy, V. Srivastava and P. Bhattacharya, "Fusion-fission dynamics studies using mass distribution as a probe", Pramana 85 (2015) 291

5. S. Rajbanshi, S. Roy, S. Nag, A. Bisoi, S. Saha, J. Sethi, T. Bhattacharjee, S. Bhattacharyya, S. Chattopadhyay, G. Gangopadhyay, G. Mukherjee, R. Palit, R. Raut, M. S. Sarkar, A. K. Singh, T. Trivedi and A. Goswami, "Antimagnetic rotation and sudden change of electric quadrupole transition strength in 143Eu", Physics Letters B 748 (2015) 387

6. S. K. Das, M. Ruggieri, S. Mazumder, V. Greco and J. Alam, "Heavy quark diffusion in the pre-equilibrium stage of heavy ion collisions", Journal of Physics G 42 (2015) 95108

7. Siddhartha Dechoudhury, Hemendra Kumar Pandey, Dipta Pratim Dutta, Vaishali Naik, Alok Chakrabarti, Yu-Chiu Chao and Robert E. Laxdal, “Coupler induced transverse kick and emittance growth in single cell elliptical cavities of 10 MeV superconducting electron linac injector”, Journal of Instrumentation 10 (2015) T03001

8. Arup Bandyopadhyay, Vaishali Naik, S. Dechoudhury, M. Mondal and A. Chakrabarti, “ANURIB – A National facility for Unstable and Rare Ion Beams”, Pramana 85 (2015) 505

9. Debasis Bhowmick, D. Atta, D. N. Basu and Alok Chakrabarti Yields of neutron-rich nuclei by actinide photofission in the giant dipole resonance regionPhysical Review C91 (2015) 44611

10. Tapas Ghosh, Prasanta Karmakar and Biswarup Satpati, “Electrochemical Ostwald ripening and surface diffusion in the galvanic displacement reaction: control over particle growth”, RSC Advances 5 (2015) 94380

11. Tapatee Kundu Roy, “Assessing hardness and fracture toughness in sintered zinc oxide ceramics through indentation technique”, Materials Science and Engineering A 640 (2015) 267

12. J. Cyriac, R. M. Thankachan, B. Raneesh, P. M. G. Nambissan, Dirtha Sanyal and N. Kalarikkal, “Positron annihilation spectroscopic studies of Mn substitution-induced cubic to tetragonal transformation in ZnFe2–xMnxO4 (x = 0.0–2.0) spinel nanocrystallites”, Philosophical Magazine 95 (2015) 4000

13. R. M. Thankachan, J. Cyriac, B. Raneesh, N. Kalarikkal, Dirtha Sanyal and P.M.G. Nambissan, “Cr3+-substitution induced structural reconfigurations in the nanocrystalline spinel compound ZnFe2O4 as revealed from x-ray diffraction, positron annihilation and Mössbauer spectroscopic studies”, RSC Advances 5 (2015) 64966

14. P. Biswas, P. Nath, Dirtha Sanyal and P. Banerji, “An alternative approach to investigate the origin of p-type conductivity in arsenic doped ZnO”, Current Applied Physics 15 (2015) 1256

15. S. Pal, A. Sarkar, Dirtha Sanyal, T. Rakshit, D. Kanjilal, P. Kumar, S. K. Ray and D. Jana, “Native defects and optical properties of Ar ion irradiated ZnO”, Advanced Materials Letters 6 (2015) 365

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21. A. Chaudhuri, T. K. Ghosh, K. Banerjee, S. Bhattacharya, Jhilam Sadhukhan, S. Kundu, C. Bhattacharya, J. K. Meena, G. Mukherjee, A. K. Saha, Md. A. Asgar, A. Dey, S. Manna, R. Pandey, T. K. Rana, P. Roy, T. Roy, V. Srivastava, P. Bhattacharya, D. C. Biswas, B. N. Joshi, K. Mahata, A. Shrivastava, R. P. Vind, S. Pal, B. R. Behera and Varinderjit Singh, “No influence of a N= 126 neutron-shell closure in fission-fragment mass distributions”, Physical Review C 92 (2015) 41601

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26. S. Mallik, G. Chaudhuri and S. Das Gupta, "Hybrid model for studying nuclear multifragmentation around the Fermi energy domain: The case of central collisions of Xe on Sn", Physical Review C91 (2015) 44614

27. S. Mallik and G. Chaudhuri, "Liquid Gas Phase transition in hypernuclei", Physical Review C91 (2015) 54603

28. S. Mallik, F. Gulminelli and G. Chaudhuri, "Finite-size effects on the phase diagram of the thermodynamical cluster decay model", Physical Review C 92 (2015) 64605

29. Sukanya Mitra, Utsab Gangopadhyaya and Sourav Sarkar, "Medium effects on the relaxation of dissipative flows in a hot pion gas", Physical Review D 91 (2015) 94012

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31. Balaram Dey, Deepak Pandit, Srijit Bhattacharya, K. Banerjee, N. Quang Hung, N. Dinh Dang, Debasish Mondal, S. Mukhopadhyay, Surajit Pal, A. De and S. R. Banerjee, "Experimental investigation on the temperature dependence of the nuclear level density parameter", Physical Review C 91 (2015) 44326

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33. I. Bautista, A. Fernandez Téllez and Premomoy Ghosh, “Indication of change of phase in high-multiplicity proton-proton events at LHC in String Percolation Model”, Physical Review D 92 (2015) 71504

34. Bhanu Sharma, adan M. Aggarwal, Nihar R. Sahoo and Tapan K. Nayak, “Dynamical charge fluctuations in the hadronic medium”, Physical Review C 91(2015) 24909

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41. Shashi C L Srivastava and Arul Lakshminarayan, “Records in the classical and quantum standard map”, Chaos, Solitons and Fractals 74 (2015) 67

42. S. Mallik, S. Das Gupta and G. Chaudhuri, “Event simulations in a transport model for intermediate energy heavy ion collisions: Applications to multiplicity distributions”, Physical Review C 91(2015) 34616

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50. ALICE Collaboration, “Two-pion femtoscopy in p-Pb collisions at 5.02 TeV”, Physical Review C 91 (2015) 34906

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55. ALICE Collaboration, “Measurement of jet quenching with semi-inclusive hadron-jet distributions in central Pb-Pb collisions at √sNN = 2.76 TeV”, Journal of High Energy Physics 9 (2015) 170

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