Publications in Journals – 2024

1. A. S. Roy, K. Banerjee, Pratap Roy, R. Shil, R. Ravishankar, R. Datta, A. Sen, S. Manna, T. K. Ghosh, G. Mukherjee, T. K. Rana, S. Kundu, S.S. Nayak, R. Pandey, D. Paul, K. Atreya, S. Basu, S. Mukhopadhyay, Deepak Pandit, M.S. Kulkarni, C. Bhattacharya, "Measurement of energy and directional distribution of neutron ambient dose equivalent for the 7Li (p, n) 7Be reaction", Applied Radiation and Isotopes 204 (2024) 111140

2. Soumen Podder, Suman Pal, Debashree Sen, Gargi Chaudhuri, "Constraints on density dependent MIT bag model parameters for quark and hybrid stars", Nuclear Physics A 1042 (2024) 122796

3. S Bhowmick, J Mukherjee, M Ghosal, C Nayak, B Satpati, G Pramanik, P. Karmakar, "Green to deep-red emissive carbon dot formation by C+ ion implantation on nitrogen beam created self-masked nano-template", Nanotechnology 35 (2024) 125301

4. S Moshat, D Sanyal, "Ab-initio calculation of magnetic properties of doped methylammonium lead chloride", Philosophical Magazine 104 (2024) 406

5. M. Bhattacharjee, C. Giri, S. Masum, S. Hansda, S. Mitra, S. Haque, P. Chakraborty, S. Dechoudhury, A. Ray, M. Mondal, B. Nayan, V. Shukla, D. Sanyal, A. Bandyopadhyay, V. Naik, "Development of a gas jet coupled Electron Cyclotron Resonance ion source for Radioactive Ion Beam", Review of Scientific Instruments 95 (2024) 23302

6. S. Moshat, J. Dhar, S. Sil and D. Sanyal, "Positron Annihilation Spectroscopic Studies of Ferromagnetic Methylammonium Lead Iodide Perovskite", Journal of Materials Science 59 (2024) 3919

7. S. Ghosh, P. Nath, S. Moshat and D. Sanyal, "Adsorption and Evolution of Hydrogen Molecules on Hexagonal Boron Nitride Monolayer: A Combined DFT and Kinetic Monte-Carlo Simulations Study", Physica Scripta 99 (2024) 45913

8. Snigdha Ghosh, Nilanjan Chaudhuri, Sourav Sarkar, Pradip Roy, "Mass and spectral function of scalar and pseudoscalar mesons in a hot and chirally imbalanced medium using the two-flavor NJL model", Physical Review D 109 (2024) 16021

9. Devesh Kumar, Anandagopal Pal, Shefali Basak, Tumpa Bhattacharjee, S. S. Alam, L. Gerhard, L. Knafla, A. Esmaylzadeh, M. Ley, F. Dunkel, K. Schomaker, J.-M. Régis, J. Jolie, Y. H. Kim, and U. Köster, "Lifetime measurement for the 15/2−1 and 13/2−1 levels in 129Sn", Physical Review C 109 (2024) 24304

10. Pallavi Kalikotay, Snigdha Ghosh, Nilanjan Chaudhuri, Pradip Roy, Sourav Sarkar, "Electrical conductivity and shear viscosity of a pion gas in a thermo magnetic medium", The European Physical Journal A 60 (2024) 71

11. Vinay Shukla and Ayan Ray, "Two-photon coherence in a DROP-FWM medium", Physica Scripta 99 (2024) 45406

12. Samuel Ajayi, Vandana Tripathi, E. Rubino, Soumik Bhattacharya, L. T. Baby, R. S. Lubna, C.Benetti, Catur Wibisono, MacMillan B. Wheeler, S. L. Tabor, Yutaka Utsuno, Noritaka Shimizu, J. M. Allmond, "Observation of collective modes of excitations in 59Co, 59Ni, and 61Co and the influence of the g9/2 orbital", Physical Review C 109 (2024) 14305

13. Abhijit Bijanu, Rahul Arya, Gaurav Rajak, V. Sorna Gowri, ahitashya Shil, Kaushik Banerjee, Sarmishtha Bhattacharya, Supriya Mukhopadhyay, Sujoy Chatterjee, Raman Ravishankar, Deepti Mishra, "Flexible, Chemically Bonded Bismuth/Tungsten-based Polyvinyl alcohol-Polyvinyl pyrrolidone Composite for Gamma and Neutron Shielding Application", Journal of Applied Polymer Science 141 (2024) e55435

14. S. Chattopadhyay, L. Barua, D.G. Mahesh, S. Ash, A. Mitra, S. Saha Das, S. Singha, Md. N. Alam, Madhusmita, S. Roy, P. Dhang, M. Jain, "Production of Pharmaceutical Grade [201Tl] Thallous Chloride using 30 MeV Cyclotron", Applied Radiation and Isotopes 204 (2024) 111128

15. Biswajit Das, R. Palit, N .R. Khan Chowdhury, S. Saha, Md. S. R. Laskar, F. S. Babra, P. Dey, S. K. Jadhav, A. Kundu, Vishal Malik, B. S. Naidu, A. Sindhu, A. T. Vazhappilly, S. S. Ghugre, R. Raut, S. Bhattacharyya, G. Mukherjee, S. Mukhopadhyay, R. P. Singh, "A novel active collimator for compton-suppressed clover HPGe detector and its role in a hybrid gamma detector array", Nuclear Instruments and Methods in Physics Research A 1060 (2024) 169030

16. Sneha Das, S. Bhattacharyya, Soumik Bhattacharya, S. Chakraborty, Sakshi Shukla, Praveen C. Srivastava, R. Banik, S. Nandi, G. Mukherjee, Indu Bala, S. S. Bhattacharjee, S. Das Gupta, A. Dhal, Debasish Mondal, S. Muralithar, R. Raut, A. Sharma, R. P. Singh, and V. Srivastava, "High-spin level structure of 209Rn", Physical Review C 109 (2024) 14322

17. J. Lahiri, D. Atta and D. N. Basu, “Properties of glitching pulsars in the Skyrme-Hartree-Fock framework”, Pramana 98 (2024) 17

18. G. Mukherjee, S. S. Nayak, J. Datta, S. Dasgupta, A. Choudhury, Adaityadev Behera, Saikat Chakraborty, Shabir Dar, Sneha Das, Sansaptak Basu, Snigdha Pal and S. Bhattacharyya, “Beta decay study of 126Sb and 126mSb”, Journal of Radioanalytical and Nuclear Chemistry 333 (2024) 1531

19. M. Rahaman, Md. Hasanujjaman, G. Sarwar, A. Bhattacharyya and J. Alam, “Correlation of density fluctuation in a magnetized QCD matter near the critical end point”, The European Physical Journal C 84 (2024) 279

20. Namrata Singh, A. Gandhi, Mahesh Choudhary, Aman Sharma, Punit Dubey, Mahima Upadhyay, Rebecca Pachuau, S. Dasgupta, J. Datta and A. Kumar, “Measurement of the excitation functions for nat Ni(alpha,x) reactions with detailed covariance analysis”, The European Physical Journal A 60 (2024) 24

21. STAR Collaboration, “Longitudinal and transverse spin transfer to Λ and $\bar{\Lambda}$ hyperons in polarized p+p collisions at $\sqrt{s}$ =200 GeV”, Physical Review D 109 (2024) 12004

22. STAR Collaboration, “Observation of the electromagnetic field effect via charge-dependent directed flow in heavy-ion collisions at the Relativistic Heavy Ion Collider”, Physical Review X 14 (2024) 11028

23. Somenath Pal, Anton Motornenko, Volodymyr Vovchenko, Abhijit Bhattacharyya, Jan Steinheimer, Horst Stoecker, “Effect of finite volume on thermodynamics of quark-hadron matter”, Physical Review D 109 (2024) 1

24. Vikas, Kavita, K. S. Golda, T. K. Ghosh, A. Jhingan, P. Sugathan, A. Chatterjee , B. R. Behera , Ashok Kumar , Rakesh Kumar , N. Saneesh , Mohit2 , Abhishek Yadav , C. Yadav , S. Appannababu , S. K. Duggi , Rakesh Dubey , Kavita Rani , Neeraj Kumar , A. Banerjee , A. Rani , Kajal , Shoaib Noor , Jaimin Acharya & Hardev Singh, “Measurement of mass-angle and mass-total kinetic energy distributions from the fission of 190Pt compound nucleus”, Journal of Physics G 51 (2024) 35103

25. ALICE Collaboration, “Measurement of the low-energy antitriton inelastic cross section”, Physics Letters B 848 (2024) 138337

26. ALICE Collaboration, “Measurement of the radius dependence of charged-particle jet suppression in Pb-Pb collisions at $\sqrt{s}_{NN}$ = 5.02 TeV”, Physics Letters B 849 (2024) 13841

27. ALICE Collaboration, “ψ(2S) suppression in Pb-Pb collisions at the LHC”, Physical Review Letters 132 (2024) 42301

28. ALICE Collaboration, “Measurements of long-range two-particle correlation over a wide pseudorapidity range in p−Pb collisions at √sNN =5.02 TeV”, Journal of High Energy Physics 1 (2024) 199

29. ALICE Collaboration, “System size dependence of the hadronic rescattering effect at energies available at the CERN Large Hadron Collider”, Physical Review C 109 (2024) 14911

30. ALICE Collaboration, “Pseudorapidity dependence of anisotropic flow and its decorrelations using long-range multiparticle correlations in Pb-Pb and Xe-Xe collisions”, Physics Letters B 850 (2024) 138477

31. ALICE Collaboration, “Measurements of inclusive J/ψ production at midrapidity and forward rapidity in Pb−Pb collisions at √sNN = 5.02 TeV”, Physics Letters B 849 (2024) 138451

32. ALICE Collaboration, “Charged-particle production as a function of the relative transverse activity classifier in pp, p−Pb, and Pb−Pb collisions at the LHC”, Journal of High Energy Physics 1 (2024) 56

33. ALICE Collaboration, “ALICE luminosity determination for Pb−Pb collisions at √sNN =5.02 TeV”, Journal of Instrumentation 19 (2024) P02039

34. ALICE Collaboration, “Skewness and kurtosis of mean transverse momentum fluctuations at the LHC energies”, Physics Letters B 850 (2024) 138541

35. ALICE Collaboration, “Prompt and non-prompt J/ψ production at midrapidity in Pb−Pb collisions at √sNN = 5.02 TeV”, Journal of High Energy Physics 2 (2024) 66

36. ALICE Collaboration, “Multiplicity and event-scale dependent flow and jet fragmentation in pp collisions at √s = 13 TeV and in p−Pb collisions at √sNN = 5.02 TeV”, Journal of High Energy Physics 3 (2024) 92

37. Joydip Nandi, A. K. Sikdar, Parnika Das, A. Ray, “Temporal evolution of electron cloud in a cylindrical Penning trap at room temperature”, Review of Scientific Instruments 95 (2024) 43202

38. Mahesh Choudhary, Aman Sharma, Namrata Singh, Punit Dubey, Mahima Upadhyay, Sriya Paul, Shweta Singh, Utkarsha Mishra, and A. Kumar S. Dasgupta and J. Datta, “Estimation of level density model parameters for 93Nb using Unscented Transform Kalman Filter technique”, Physical Review C 109 (2024) L041603

39. Shabir Dar, S. Bhattacharyya, S. Chakraborty, S. Jehangir, Soumik Bhattacharya, G. H. Bhat, J. A. Sheikh, N. Rather, S. S. Nayak, Sneha Das, S. Basu, G. Mukherjee, S. Nandi, R. Banik, S. Basak, C. Bhattacharya, S. Chattopadhyay, S. Das Gupta, A. Karmakar, S. S. Ghugre, D. Kumar, D. Mondal, S. Mukhopadhyay, D. Pandit, S. Rajbanshi, R. Raut, "Coexistence of low-K oblate and high-K prolate g9/2 proton-hole bands in 115Sb", Physics Letters B 851 (2024) 138565

40. D. Lay, E. Flynn, S. Agbemava, K. Godbey, W. Nazarewicz, S. A. Giuliani, J. Sadhukhan, "Multimodal fission from self-consistent calculations", Physical Review C 109 (2024) 44306

41. ALICE Collaboration, "Modification of charged-particle jets in event-shape engineered Pb−Pb collisions at √sNN =5.02 TeV", Physics Letters B 851 (2024) 138584

42. Rupa Chatterjee, Pingal Dasgupta, "Probing Relativistic Heavy-Ion Collisions via Photon Anisotropic Flow Ratios: A Brief Review", Physics 6 (2024) 674

43. Soumita Chakraborty, Argha Dutta, Santu Dey, N. Gayathri, P. Mukherjee, "PKA Energy dependence of defect evolution in ion irradiated Fe-15Ni-15Cr alloy – a successive cascade study using molecular dynamics simulation", Radiation Effects and Defects in Solid 179 (2024) 781

44. S. Chattopadhyay, S. Singha, S. Ash, L. Barua, D. G. Mahesh, S. Saha Das, Madhusmita, Md. N. Alam, U. Kumar, S. Roy, P. Dhang and S. Dey, "Production and radiochemical separation of 68Ge from irradiated Ga–Ni alloy target in 30 MeV cyclotron", Radiochimica Acta 112 (2024) 539

45. K. Atreya, A. Sen, D. Paul, T. K. Ghosh, Kavita Rani, Md. Moin Shaikh, K. Banerjee, C. Bhattacharya, Samir Kundu, S. Manna, G. Mukherjee, S. Nandi, R. Pandey, T. K. Rana, Pratap Roy, S. Mukhopadhyay, and Raj Kumar Santra, "Fragment-mass distributions in 16O-induced reactions at energies well above the Coulomb barrier", Physical review C 109 (2024) 64620

46. Rajkumar Mondal, Nilanjan Chaudhuri, Pradip Roy, Sourav Sarkar, "Speed of sound in magnetized nuclear matter", Physical review C 109 (2024) 54911

47. D Atta, V Singh, D N Basu, "Quark-hadron deconfinement phase transition and massive hybrid stars", Indian Journal of Physics 98 (2024) 4243

48. Akash Mitra and Shashi C. L. Srivastava, "Sunburst quantum Ising battery", Physical review A 110 (2024) 12227

49. S. Dasgupta, J. Datta, G. L. N. Reddy, M. Ghosh, K. K. Swain, “Chemical characterization of lithium based ceramics utilizing charged particle activation and ion beam techniques”, Journal of Radioanalytical and Nuclear Chemistry 333 (2024) 4919

50. M. Ghosh, M. Sarma, S. Dagupta, J. Datta, K. K. Swain, “Compositional characterization of paint sample by neutron and charge particle activation analysis: validation by energy dispersive X-ray fluorescence spectrometry”, Analytical Chemistry Letters 14 (2024) 382

51. Payel Karmakar, Samir Kundu,, T. K. Rana, S. Manna, R. Pandey,, C. Bhattacharya, K. Banerjee, Pratap Roy, Arijit Sen, T. K. Ghosh, G. Mukherjee, S. Mukhopadhyaya, D. Paul, M. Shaikh, S. Nandi, S. Dalal, “Nuclear dissipation and isospin relaxation in 20Ne + 116,124Sn reactions”, Physical review C 110 (2024) 14608

52. Ram Kumar Paul, K Banerjee, A Das, A Banerjee, P Dhara, A. Joshi, A. Choudhury , A.K. Saha , P. Roy , T. Samanta , S. Pal , T. Martinez , D. Villamarin , D. Cano-Ott, “Digital neutron-gamma discrimination algorithm using adaptive noise filter”, Nuclear Instruments and Methods in Physics Research Section A 1065 (2024) 169564

53. T. K. Rana, Samir Kundu, S. Manna, K. Banerjee, T. K. Ghosh, G. Mukherjee, P. Karmakar, A. Sen, R. Pandey, P. Pant, Pratap Roy, R. Shil, S. S. Nayak, K. Rani, K. Atreya, D. Paul, R. Santra, A. Sultana, S. Pal, S. Basu, Deepak Pandit, S. Mukhopadhyay, C. Bhattacharya, J. Debnath, U. Bhunia, M. K. Dey, “Characterization of the first beam from the K500 superconducting cyclotron at VECC”, Nuclear Instruments and Methods in Physics Research Section A 1065 (2024) 169530

54. A. Ray, P. Das, A. K. Sikdar, “Effect of lattice compression on the 7Li recoil energy spectrum following electron capture decay of 7Be”, Physical review C 110 (2024) 35808

55. Rajkumar Mondal, Sourav Duari, Nilanjan Chaudhuri, Sourav Sarkar, Pradip Roy, “Speed of sound and isothermal compressibility in a magnetized quark matter with anomalous magnetic moment of quarks”, Physical review D 110 (2024) 54010

56. Pankaj Pant, K. Banerjee, P. Roy, R. Shil, A. K. Saha, “Characterization of EJ-276D plastic scintillator and its comparison with EJ-299-33A and BC-501A”, Journal of Instrumentation 19 (2024) P10036

57. V. Shukla, P. Chakraborty and Ayan Ray, “Effect of dephasing on modulation transfer in potassium”, Applied Physics B 130 (2024) 180

58. R. Mondal Saha, K. Banerjee, A. Banerjee, N. Gayathri, G. Pramanik, Shabi Thankaraj Salammal, Varsha Agrawal, Biswarup Satpati, Souvik Jana, Satyajit Hazra, “Investigation of spitting effect in the boron target preparation using vapour deposition technique”, Vacuum 230 (2024) 113642

59. T. K. Rana, Deepak Pandit, S. Manna, Samir Kundu, K. Banerjee, A. Sen, R. Pandey, G. Mukherjee, T. K. Ghosh, S. S. Nayak, R. Shil, P. Karmakar, K. Atreya, K. Rani, D. Paul, R. Santra, A. Sultana, S. Basu, S. Pal, S. Sadhukhan, Debasish Mondal, S. Mukhopadhyay, Srijit Bhattacharya, Surajit Pal, P. Pant, Pratap Roy, Sk M. Ali, S. Mondal, A. De , Balaram Dey, R. Datta, S. Bhattacharya, C. Bhattacharya, “New measurement of the Hoyle state radiative transition width”, Physics Letters B 859 (2024) 139083

60. Ram Prakash , Prasanta Kumar Sahani, Arup Ratan Jana , Vinit Kumar, Praveen Mohania, and Purushottam Shrivastava, “Computational and Experimental Studies on Dark Current and Field Emission in $\beta g = 0.92$, 650 MHz Elliptic SRF Cavities in a Vertical Test Stand (VTS)”, IEEE Transactions on Nuclear Science 71 (2024) 1

61. Snigdha Ghosh, Nilanjan Chaudhuri, Sourav Sarkar & Pradip Roy, “Effect of chiral imbalance on the electrical conductivity of hot and dense quark matter using Green-Kubo method within the 2-flavour gauged NJL model”, The European Physical Journal C 84 (2024) 1321

62. Suman Pal and Gargi Chaudhuri, “Effect of dark matter interaction on hybrid star in the light of the recent astrophysical observations”, Journal of Cosmology and Astroparticle Physics 2024 (2024) 64

63. Suman Pal and Gargi Chaudhuri, “Self-consistent thermodynamical treatment for quark matter in a quasiparticle model at finite temperature”, Physical review D 110 (2024) 123021

64. S. Ghosh, P. Nath, S. Moshat and Dirtha Sanyal, “Role of Carbon Substitutional and Vacancy in Tailoring the H2 Adsorption Energy over a Hexagonal Boron Nitride Monolayer: An ab-initio Study”, Journal of Materials Science 59 (2024) 10887

65. Tapatee Kundu Roy, “Effects of In2O3 doping on the microstructure and electrical properties of ZnO–V2O5 Nb2O5 varistor ceramics”, Current Applied Physics 65 (2024) 32

66. Maqsuma Banoo, Arjun Kumar Sah, Raj Sekhar Roy, Komalpreet Kaur, Bramhaiah Kommula, Dirtha Sanyal, Ujjal K. Gautam, “Surface Reconstruction Route for Increasingly Improved Photocatalytic H2O2 Production Using Sr2Bi3Ta2O11Cl”, Chemical Science 15 (2024) 17049

67. STAR Collaboration, “Reaction plane correlated triangular flow in Au + Au collisions at √sNN=3 GeV”, Physical review C 109 (2024) 44914

68. M. Banoo, K. Samanta, A. K. Sah, R. S. Roy, M. Bhakar, Dirtha Sanyal, D. G. Porob, K. Glazyrin, D. Topwal, G. Sheet, D. Ghosh, U. K. Gautam, “Bi Off-Centering in Centrosymmetric BiOBr Leading to Ultrahigh Bifunctional Piezocatalytic Fuel Generation Efficiencies in Seawater”, Advanced Functional Materials 34 (2024) 2411462

69. V. Singh, M. Das, K. Mondal, S. Barua, Dirtha Sanyal, P. P. Ray and J. Dhar, “Investigating the Effect of Lead Substitution on the Optical, Electrical, and Photoresponse Properties of Quasi-2D Double Perovskites”, Journal of Physics and Chemistry of Solids 192 (2024) 112082

70. V Singh, Debasis Bhowmick, D N Basu, “Radiative neutron capture reaction rates for stellar nucleosynthesis”, Indian Journal of Physics 99 (2024) 1233

71. V. Singh, Debasis Bhowmick, D N Basu, “Re-examining the Lithium abundance problem in Big-Bang nucleosynthesis”, Astroparticle Physics 162 (2024) 102995

72. M. De Sarkar, S. Ghosh, Dirtha Sanyal and D. Jana, “First-principles study of robust half-metallic ferromagnetism and electronic structure of the Heusler compounds Co2-xCrxMnGe”, Physica Scripta 100(2024) 15963

73. S. Ghosh, P. Nath, and Dirtha Sanyal, “Adsorption and Evolution of N2 Molecules over ZnO Monolayer: A Combined DFT and Kinetic Monte-Carlo Insight”, Adsorption 30 (2024) 2255

74. S Bhowmick, B Satpati, D Chowdhury, Prasanta Karmakar, “Development of an efficient UV absorber and reusable SERS chip by buried Ag ion implantation in Si substrate”, Current Applied Physics 68 (2024) 267

75. Argha Dutta, Apu Sarkar, N. Gayathri, Sandip Bysakh, Arpan Arora, Santu Dey, S. Srivastava, Suhrit Mula & P. Mukherjee, “Effects of Cold Rolling–Induced Defects on Proton Irradiation Response in Nb-1Zr-0.1C Alloy”, Nuclear Science and Engineering 198 (2024) 1

76. D. Banerjee, A. Pal, “Measurement of excitation function for alpha induced reaction on natural silver up to 40 MeV”, Applied Radiation and Isotopes 214 (2024) 111542

77. ALICE Collaboration, “Systematic study of flow vector fluctuations in √sNN=5.02 TeV Pb-Pb collisions”, Physical review C 109 (2024) 65202

78. STAR Collaboration, “Imaging shapes of atomic nuclei in high-energy nuclear collisions”, Nature 635 (2024) 67

79. Satwik Choudhury, “A new parameter of assessment of linear iterative algorithms: On their Informative Efficiency and Law of exponential-dissipation”, Journal of Computational and Applied Mathematics 448 (2024) 115924

80. S.K. Chand, A. Anand, A.S. Gou, T. S. Datta, U. Bhunia, “A numerical study on homogeneity and central field with axial spacing between DP coils of HTS magnet at 65K”, Cryogenics 140 (2024) 103838

81. Mahesh Choudhary, Namrata Singh, Mahima Upadhyay, Punit Dubey, Shweta Singh, Sriya Paul, Utkarsha Mishra, S. Dasgupta, J. Datta, A. Kumar, “Excitation functions for natAg(α,x) reactions with detailed covariance analysis”, Nuclear Physics A 1050 (2024) 122917

82. Ritika Datta, K. Banerjee, Sujoy Chatterjee, Rajkumar Santra, R. Shil, S. Manna, Pratap Roy, T.K. Rana, G. Mukherjee, T.K. Ghosh, A.S. Roy, A. Sen, S. Kundu, Anirudhha Dey, P. Karmakar, D. Pandit, A.K. Bakshi, B.K. Sapra, C. Bhattacharyya, “Investigation of breakup process in 9Be(α,n)12C reaction”, Nuclear Physics A 1048 (2024) 12280

83. Sourav Patra, Sanchita Ghosh, Debashis Banerjee, Khajan Singh, Sanjay Vishwanath Thakare, Rubel Chakravarty, “Robust electrochemical method for separation of theranostic 44Sc/47Sc pair of radiometals”, Separation and Purification Technology 345 (2024) 127400

84. Sanchita Ghosh, Debashis Banerjee, Apurav Guleria, Rubel Chakravarty, “Production, purification and formulation of nanoradiopharmaceutical with 211At: An emerging candidate for targeted alpha therapy”,Nuclear Medicine and Biology 138-139 (2024) 108947

85. Paramita Patra, S. Dey, N. Gayathri, P. Mukherjee, “Influence of alloying elements on stacking fault energy in Ni and Ni-based alloy: A first–principles study”, Computational and Theoretical Chemistry 1240 (2024) 114815

86. Mohamad Asikali, Rajesh Paulraj, Lizbeth Alex, Kaushik Banarjee, “Vaporized purification and growth of optically transparent Trans-Stilbene for fast neutron detection applications”, Inorganic Chemistry Communications 166 (2024) 112624

87. Sulagna Ghosh, Sudipta Moshat and Dirtha Sanyal, “Tunable electronic and magnetic properties of 3d transition metal ion-doped monolayer graphitic-ZnO: An ab-initio calculation”, International Journal of Modern Physics B 38 (2024) 2450347

88. Tanay Dey, Purba Bhattacharya, Supratik Mukhopadhyay, Nayana Majumdar, Abhishek Seal, Subhasis Chattopadhyay, “Parallelization of Garfield++ and neBEM to simulate space-charge effects in RPCs”, Computer Physics Communications 294 (2024) 108944

89. Pratap Roy, K. Banerjee, N. Quang Hung, N. Ngoc Anh, Samir Kundu, S. Manna, A. Sen, T.K. Ghosh, T.K. Rana, G. Mukherjee, R. Pandey, S. Mukhopadhyay, Deepak Pandit, Debasish Mondal, Surajit Pal, C. Bhattacharya, “The puzzle of suppression of nuclear level density in $N \approx Z$ Zn isotopes compared to $N > Z$”, Physics Letters B 859 (2024) 139101

90. Ramana Ramya Jayapalan, Thanigai Arul Kumaravelu, Karthikeyan K.R., Nabhiraj P.Y., Krishna J.B.M., Kaarthikeyan G., Sathiamurthi P., Gajendiran J., Chung-Li Dong, Narayana Kalkura S., “Surface modification of iron-zinc ions incorporated calcium phosphate biocomposite flexible films for biomedical applications”, Materials Today Communications 38 (2024) 107988

91. Prashant N. Patil, N. M. Badiger, B. K. Nayak, S. Santra, A. Pal, P. C. Rout, K. Ramachandran, K. Mahata, G. Mohanto, Jhilam Sadhukhan, Ramandeep Gandhi, A. Baishya, T. Santhosh, M. M. Hosamani, A. Vinayak, A. S. Bennal, E. T. Mirgule, Y. Sawant, S. V. Suryanarayana, A. Saxena, S. K. Duggi, and G. B. Hiremath, “Correlated measurement of neutron multiplicity, fission fragment mass, and total kinetic energy distributions: Reaction dynamics of different fission modes”, Physical review C 110 (2024) 64602

92. Pooja, Mohammad Yousuf Jamal, Partha Pratim Bhaduri, Marco Ruggieri, Santosh K. Das, “$c\bar{c}$ and $b\bar{b}$ suppression in the glasma”, Physical review D 110 (2024) 94018

93. Sk Mustak Ali, Rajkumar Santra, Sathi Sharma, and Ashok Kumar Mondal, “Reevaluation of the 22Ne (p, y) 23Na reaction rate”, Physical review C 109 (2024) 45809

94. Vikas, Kavita, K. S. Golda, T. K. Ghosh, A. Jhingan, P. Sugathan, N. Saneesh, Mohit, B. R. Behera, Rakesh Kumar, and Hardev Singh, “Reply to “Comment on ‘Fusion-fission dynamics of ^{188,190}Pt through fission fragment mass distribution measurements”, Physical review C 109 (2024) 69802

95. S. Chakraborty, S. Bhattacharyya, G. Mukherjee, and C. Majumder, “Exploring the possibility of wobbling motion in 129 Ba”, Physical review C 110 (2024) 24324

96. ALICE Collaboration, “Measurement of the production and elliptic flow of (anti)nuclei in Xe-Xe collisions at √sNN=5.44 TeV”, Physical review C 110 (2024) 64901

97. ALICE Collaboration, “First Measurement of the |t| Dependence of Incoherent J/psi Photonuclear Production”, Physical review Letters 132 (2024) 162302

98. ALICE Collaboration, “Measurement of the fraction of jet longitudinal momentum carried by Λ+c baryons in pp collisions”, Physical review D 109 (2024) 72005

99. ALICE Collaboration, “Photoproduction of K+K− Pairs in Ultra peripheral Collisions”, Physical review Letters 132 (2024) 222303

100. ALICE Collaboration, “Observation of Medium-Induced Yield Enhancement and Acoplanarity Broadening of Low-pT Jets from Measurements in pp and Central Pb-Pb Collisions at √sNN=5.02 TeV”, Physical review Letters 133 (2024) 22301

101. ALICE Collaboration, “Measurements of jet quenching using semi-inclusive hadron + jet distributions in pp and central Pb-Pb collisions at √sNN=5.02 TeV”, Physical review C 110 (2024) 14906

102. ALICE Collaboration, “Exploring the Strong Interaction of Three-Body Systems at the LHC”, Physical review X 14 (2024) 31051

103. ALICE Collaboration, “Investigating strangeness enhancement in jet and medium via ϕ(1020) production in p-Pb collisions at √sNN=5.02TeV”, Physical review C 110 (2024) 64912

104. ALICE Collaboration, “Emergence of Long-Range Angular Correlations in Low-Multiplicity Proton-Proton Collisions”, Physical review Letters 132 (2024) 172302

105. ALICE Collaboration, “Measurement of Ωc0 baryon production and branching-fraction ratio BR(Ωc0→Ω-e+νe)/BR(Ωc0→Ω-π+) in pp collisions at √s =13 TeV”, Physical review D 110 (2024) 32014

106. ALICE Collaboration, “Studying the interaction between charm and light-flavor mesons”, Physical review D 110 (2024) 32004

107. ALICE Collaboration, “Measurements of Chemical Potentials in Pb-Pb Collisions at √sNN=5.02 TeV”, Physical review Letters 133 (2024) 92301

108. ALICE Collaboration, “K*(892)± resonance production in Pb-Pb collisions at √sNN=5.02 TeV”, Physical review C 109 (2024) 44902

109. Mamta Prajapati, Somnath Nag, H. Pai, S. Chakraborty, Soumik Bhattacharya, Sajad Ali, S. Rajbanshi, Prithwijita Ray, Subhrajit Sahoo, Praveen C. Srivastava, J. Meng, F. F. Xu, A. Goswami, R. Banik, S. Nandi, S. Bhattacharyya, G. Mukherjee, C. Bhattacharya, Md. S. R. Laskar, R. Palit, S. Samanta, S. Das, S. Chattarjee, R. Raut, and S. S. Ghugre, "Evolution of quadrupole and octupole excitations beyond noncollective states in 114Te", Physical review C 110 (2024) 64321

110. G. Mohanto, M. T. Senthil Kannan, Jhilam Sadhukhan, and B. Srinivasan, "Inferring fission timescales from prescission neutron multiplicity using a Langevin dynamical model", Physical review C 110 (2024) 34604

111. Dipali Basak, Tanmoy Bar, Lalit Kumar Sahoo, Sukhendu Saha, Jagannath Datta, Sandipan Dasgupta, Abhijit Roy, Norikazu Kinoshita, and Chinmay Basu, "Experimental study of a-induced reactions on 113In for the astrophysical p process", Physical review C 110 (2024) 65807

112. Debasish Mondal, Chandrani Sen, S. Mukhopadhyay, Deepak Pandit, Surajit Pal, J. Sadhukhan, Saumanti Sadhukhan, Balaram Dey, Srijit Bhattacharya, A. De, Pratap Roy, T. K. Rana, Rajkumar Santra, and C. Bhattacharya, "Probing the role of photon strength function models in determining the properties of the hot giant dipole resonance", Physical review C 109 (2024) 54322

113. Atreyee Dey, A. K. Singh, Anwesha Basu, Somnath Nag, G. Mukherjee, S. Bhattacharyya, S. Nandi, S. Bhattacharya, R. Banik, R. Raut, S. S Ghugre, S. Das, S. Samanta, S. Chatterjee, A. Goswami, S. Ali, H. Pai, and S. Rajbanshi, "Yrast and nonyrast states in 126Te", Physical review C 109 (2024) 44327

114. A. Karmakar, P. Datta, Soumik Bhattacharya, Shabir Dar, S. Bhattacharyya, G. Mukherjee, H. Pai, S. Basu, S. Nandi, S. S. Nayak, Sneha Das, R. Raut, S. S. Ghugre, Sajad Ali, R. Banik, W. Shaikh, and S. Chattopadhyay, "Possibility of stable octupole deformation in 100Ru", Physical review C 109 (2024) 54312

115. A. Karmakar, Nazira Nazir, P. Datta, J. A. Sheikh, S. Jehangir, G. H. Bhat, S. S. Nayak, Soumik Bhattacharya, Suchorita Paul, Snigdha Pal, S. Bhattacharyya, G. Mukherjee, S. Basu, S. Chakraborty, S. Panwar, Pankaj K. Giri, R. Raut, S. S. Ghugre, R. Palit, Sajad Ali, W. Shaikh, and S. Chattopadhyay, "Measurement of enhanced electric dipole transition strengths at high spin in 100Ru: Possible observation of octupole deformation", Physical review C 110 (2024) L051302

116. STAR Collaboration, "Strangeness production in √sNN = 3 GeV Au+Au collisions at RHIC", Journal of High Energy Physics 2024 (2024) 1

117. Arkadip Bera, Abhijit Bisoi, Y. Sapkota, Rozina Rahaman, Anik Adhikari, Arkabrata Gupta, Ananya Das, H. Ghosh, S. Sarkar, Dibyadyuti Pramanik, Sangeeta Das, Sathi Sharma, S. Ray, Shabir Dar, S. Nandi, S. Bhattacharya, T. Bhattacharjee, G. Mukherjee, S. Bhattacharyya, S. Samanta, S. Das, S. Chatterjee, R. Raut, and S. S. Ghugre, "Spectroscopic study of 50V", Physical review C 109 (2024) 54328

118. STAR Collaboration, "Correlations of event activity with hard and soft processes in p+Au collisions at √sNN=200 GeV at the RHIC STAR experiment", Physical review C 110 (2024) 44908

119. STAR Collaboration, "Estimate of background baseline and upper limit on the chiral magnetic effect in isobar collisions at √sNN=200 GeV at the BNL Relativistic Heavy Ion Collider", Physical review C 110 (2024) 14905

120. STAR Collaboration, "Production of protons and light nuclei in Au +Au collisions at √sNN=3 GeV with the STAR detector", Physical review C 110 (2024) 54911

121. STAR Collaboration, "Observation of Strong Nuclear Suppression in Exclusive J/psi Photoproduction in Au+Au Ultraperipheral Collisions at RHIC", Physical review Letters 133 (2024) 52301

122. STAR Collaboration, "Upper limit on the chiral magnetic effect in isobar collisions at the Relativistic Heavy-Ion Collider", Physical review Research 6 (2024) L032005

123. STAR Collaboration, "Exclusive J/ψ, ψ(2s), and e+e− pair production in Au+Au ultraperipheral collisions at the BNL Relativistic Heavy Ion Collider", Physical review C 110 (2024) 14911

124. STAR Collaboration, "Jet-hadron correlations with respect to the event plane in √sNN=200 GeV Au+Au collisions in STAR", Physical review C 109 (2024) 44909

125. STAR Collaboration, "Measurement of flow coefficients in high-multiplicity p+Au, d+Au, and He3+Au collisions at √sNN=200 GeV", Physical review C 110 (2024) 64902

126. ALICE Collaboration, "Measurement of beauty production via non-prompt charm hadrons in p–Pb collisions at √sNN = 5.02 TeV", Journal of High Energy Physics 2024 (2024) 1

127. ALICE Collaboration, "Measurement of the impact-parameter dependent azimuthal anisotropy in coherent ρ0 photoproduction in Pb–Pb collisions at √sNN=5.02 TeV", Physics Letters B 858 (2024) 139017

128. ALICE Collaboration, “Charm fragmentation fractions and $c\bar{c}$ cross section in p–Pb collisions at $\sqrt{s}_{NN}$=5.02TeV”, The European Physical Journal C 84 (2024) 1

129. ALICE Collaboration, “Investigating strangeness enhancement with multiplicity in pp collisions using angular correlations”, Journal of High Energy Physics 2024 (2024) 1

130. T R Routray, S Sahoo, X Viñas, D N Basu and M Centelles, “Equation of state of hot neutron star matter using finite range simple effective interaction”, Journal of Physics G 51 (2024) 85203

131. ALICE Collaboration, “Measurement of beauty-quark production in pp collisions at $\sqrt{s}$ = 13 TeV via non-prompt D mesons”, Journal of High Energy Physics 2024 (2024) 1

132. Enakshi Senapati, Satabdi Mondal, Srijit Bhattacharya, Deepak Pandit, Le Tan Phuc, Nguyen Ngoc Anh, Tran Vu Dong, Nguyen Dinh Dang, Nguyen Quang Hung, Balaram Dey, “Impact of nuclear level density and γ-ray strength function in (n,γ) and Maxwellian-averaged cross-section of 69Zn nucleus”, Journal of Physics G 51 (2024) 115104

133. Vandana Tripathi , Soumik Bhattacharya, E. Rubino, C. Benetti, J. F. Perello, S. L. Tabor, S. N. Liddick, P. C. Bender, M. P. Carpenter, J. J. Carroll, A. Chester, C. J. Chiara, K. Childers, B. R. Clark, B. P. Crider, J. T. Harke, R. Jain, B. Longfellow, S. Luitel, M. Mogannam, T. H. Ogunbeku, A. L. Richard, S. Saha, N. Shimizu, O. A. Shehu, Y. Utsuno, R. Unz, Y. Xiao, S. Yoshida, Yiyi Zhu, “Low spin spectroscopy of neutron-rich 43,44,45Cl via β^- and βn decay”, Physical review C 109 (2024) 44320

134. T. J. Gray, J. M. Allmond, C. Benetti, C. Wibisono, L. Baby, A. Gargano, T. Miyagi, A. O. Macchiavelli, A. E. Stuchbery, J. L. Wood, S. Ajayi, J. Aragon, B. W. Asher, P. Barber, S. Bhattacharya, R. Boisseau, J. M. Christie, A. L. Conley, P. De Rosa, D. T. Dowling, C. Esparza, J. Gibbons, K. Hanselman, J. D. Holt, S. Lopez-Caceres, E. Lopez Saavedra, G. W. McCann, A. Morelock, B. Kelly, T. T. King, B. C. Rasco, V. Sitaraman, S. L. Tabor, E. Temanson, V. Tripathi, I. Wiedenhöver, R. B. Yadav, “Suppressed electric quadrupole collectivity in 49Ti”, Physics Letters B 855 (2024) 138856

135. S. Rajbanshi, G. Manna, R. Palit, Abhijit Bisoi, Habibur Rahaman, Sajad Ali, F. S. Babra, R. Banik, S. Bhattacharya, S. Bhattacharyya, P. Dey, Md. S. R. Laskar, G. Mukherjee, S. Nandi, H. Pai, Rajkumar Santra, T. Trivedi, “Antimagnetic rotation in the shape-phase transition point nucleus 82Kr”, Physical review C 109 (2024) 64308

136. Pankaj K. Giri, S. Dasgupta, A. Sharma, K. Basu, S. S. Ghugre, J. Datta, G. Mukherjee, S. Bhattacharyya, P. Pallav and R. Raut, “Investigation of the cross sections of natCu(α,x)66,67Ga, 65Zn reactions”, Journal of Radioanalytical and Nuclear Chemistry 333 (2024) 5589-5595

137. Vikas, Kavita, T. K. Ghosh, K. S. Golda, A. Jhingan, P. Sugathan, A. Chatterjee, Mohit, Abhishek Yadav, C. Yadav, N. Saneesh, B. R. Behera, Ashok Kumar, Kavita Rani, S. Appannababu, Ranjeet Dalal, Meenu Thakur, Rakesh Dubey, S. K. Duggi, Neeraj Kumar, A. Banerjee, A. Rani, Rakesh Kumar, Kajal, Shoaib Noor, Jaimin Acharya, Hardev Singh, “Investigating fusion–fission and quasifission in reaction populating 188Pt compound nucleus”, The European Physical Journal A 60 (2024) 202

138. Dipali Basak, Tanmoy Bar, Lalit Kumar Sahoo, Sukhendu Saha, TK Rana, S Manna, C Bhattacharya, Samir Kundu, JK Sahoo, JK Meena, AK Saha, Ashok Kumar Mondal, Chinmay Basu, “Study of 113In (alpha,alpha) elastic scattering to determine alpha-optical potential relevant for astrophysical gamma-process”, Journal of Physics G 51 (2024) 65107

139. ALICE Collaboration, “Multiplicity dependence of charged-particle intra-jet properties in pp collisions at √s= 13 TeV”, The European Physical Journal C 84 (2024) 1079

140. ALICE Collaboration, “Studying strangeness and baryon production mechanisms through angular correlations between charged Ξ baryons and identified hadrons in pp collisions at √s= 13 TeV”, Journal of High Energy Physics 9 (2024) 102

141. ALICE Collaboration, “Azimuthal anisotropy of jet particles in p-Pb and Pb-Pb collisions at √sNN= 5.02 TeV”, Journal of High Energy Physics 8 (2024) 234

142. ALICE Collaboration, “The ALICE experiment: a journey through QCD”, The European Physical Journal C 84 (2024) 813

143. ALICE Collaboration, “Measurement of (anti)alpha production in central Pb-Pb collisions at √sNN = 5.02 TeV”, Physics Letters B 858 (2024) 138943

144. ALICE Collaboration, “Search for the Chiral Magnetic Effect with charge-dependent azimuthal correlations in Xe - Xe collisions at √sNN=5.44 TeV”, Physics Letters B 856 (2024) 138862

145. ALICE Collaboration, “Multiplicity-dependent production of Σ(1385)± and Ξ(1530)0 in pp collisions at √s=13 TeV” Journal of High Energy Physics 5 (2024) 317

146. ALICE Collaboration, “ALICE upgrades during the LHC Long Shutdown 2”, Journal of Instrumentation 19 (2024) P05062

147. ALICE Collaboration, “Search for jet quenching effects in high-multiplicity pp collisions at √s= 13 TeV via di-jet acoplanarity”, Journal of High Energy Physics 5 (2024) 229

148. ALICE Collaboration, “Measurement of inclusive charged-particle jet production in pp and p-Pb collisions at √sNN=5.02 TeV”, Journal of High Energy Physics 5 (2024) 41

149. ALICE Collaboration, “Observation of abnormal suppression of f0(980) production in p−Pb collisions at √sNN = 5.02 TeV”, Physics Letters B 853 (2024) 138665

150. Sk Wasim Raja, R. Acharya, Arati D. Sonawane, T. S. R. C. Murthy, S. Majumdar, “Potential of external (in air) Particle Induced Gamma-ray Emission method for the preparation of isotopic composition of boron in-house reference standard in boron carbide matrix for quality control work”, Journal of Analytical Atomic Spectrometry 39 (2024) 2278-2289

151. Sk Wasim Raja, R. Acharya, Akash Dileep Gandhi, J. B. Singh, “Characterization of ferroboron alloys by simultaneously quantifying Fe and B mass fractions and isotopic compositions of B by external Particle Induced Gamma-ray Emission method”, Journal of Analytical Atomic Spectrometry 39 (2024) 1919-1926

152. ALICE Collaboration, “Investigating the composition of the K∗0(700) state with π±K0S correlations at the LHC”, Physics Letters B 856 (2024) 138915

153. ALICE Collaboration, “Light-flavor particle production in high-multiplicity pp collisions at √s=13 TeV as a function of transverse spherocity”, Journal of High Energy Physics 5 (2024) 184