7.1 Publications in Journals

1. Nidhi Agnihotri, Pintu Sen, Amitabha De, Manabendra Mukherjee, *"Hierarchically designed PEDOT encapsulated graphene-MnO_2 nanocomposite as supercapacitors"* Materials Research Bulletin 88 (2017) 218

2. S. S. Alam, T. Bhattacharjee, D. Banerjee, A. Saha, Deepak Pandit, D. Mondal, S. Mukhopadhyay, Surajit Pal, P. Bhaskar, S. K. Das, S. R. Banerjee *"VECC array for Nuclear fast Timing and angUlarcorRElation studies(VENTURE)"*, Nuclear Inst. and Methods in Physics Research, A 874 (2017) 103–112.

3. S. S. Alam, T. Bhattacharjee, D. Banerjee, A. Saha, S. Das, M. Saha Sarkar, and S. Sarkar, "*Lifetimes and transition probabilities for the low-lying states in ^{131}I and ^{132}Xe",* Phys. Rev. C 99, 014306 (2019).

4. Sajad Ali, S. Rajbanshi, B. Das, S. Chattopadhyay, M. Saha Sarkar, A. Goswami, R. Raut, AbhijitBisoi, Somnath Nag, S. Saha, J. Sethi, R. Palit, G. Gangopadhyay, T. Bhattacharjee, S. Bhattacharyya, G. Mukherjee, A. K. Singh, and T. Trivedi *"Evidence of antimagnetic rotation in an odd-odd nucleus: The case of ^{142}Eu"* - Phys. Rev. C 96, 021304(R) (2017).

5. Debasis Atta, Somnath Mukhopadhyay, D. N. Basu, "*Core-Crust Transition and Crustal Fraction of Moment of Inertia in Neutron Stars"*, Ind. J. Phys. 91 (2017) 235.

6. K.Banerjee, Pratap Roy, Deepak Pandit, Jhilam Sadhukhan, S.Bhattacharya, C.Bhattacharya, G.Mukherjee, T.K.Ghosh, S.Kundu, A.Sen, T.K.Rana, S. Manna, R. Pandey, T. Roy, A. Dhal, Md.A. Asgar, S. Mukhopadhyay,*"Direct evidence of fadeout of collective enhancement in nuclear level density"* Phys. Lett. B 772, (2017) 105.

7. Debashis Banerjee, Ryan Murray, Gary S. Collins, Matthew O. Zacate, "*Solute-solute interactions in intermetallic compounds"*, Hyperfine Interact (2017) 238: 18. doi:10.1007/s10751-016-1393-3

8. D Banerjee, S. K. Das, & S. V. Thakare, "*Simultaneous measurement of electric field gradient both at ^{111}Cd and ^{181}Ta sites in a single perturbed γ-γ angular correlation measurement"*, J Radioanal Nucl Chem (2017) 313:677–682.

9. D. Banerjee, S. Santosh K. Gupta, N. Patra, Sk Wasim Raja, N. Pathak, D.Bhattacharyya, P. K. Pujari, S. V. Thakare, S. N. Jha, "*Unraveling Doping Induced Anatase-Rutile Phase Transition in TiO_2 Using Electron, X-ray and Gamma-ray As Spectroscopic Probe"*, Physical Chemistry Chemical Physics, 20 (2018) 28699.

10. Partha Pratim Bhaduri, Michael Deveaux and Alberica Toia, *"Charmonium interaction in nuclear matter at FAIR",* J. Phys. G45 (2018) no. 5, 055103.

11. Partha Pratim Bhaduri and Abhijit Bhattacharyya, *"Psi(2S) production in p+A collisions"*, EPL 124, 22001 (2018)

12. S. Bhattacharyya, E. H. Wang, A. Navin, M. Rejmund, J. H. Hamilton, A. V. Ramayya, J.K. Hwang, A. Lemasson, A. V. Afanasjev, Soumik Bhattacharya, J. Ranger, M.Caamano, E. Clement, O. Delaune, F. Farget, G. de France, B. Jacquot, Y. X. Luo, Yu. Ts. Oganessian, J. O. Rasmussen, G. M. Ter-Akopian, and S. J. Zhu,*"Deformed band structures in neutron-rich $^{152-158}Pm$ isotopes",* Phys. Rev. C 98 (2018), 044316.

13. Soumik Bhattacharya, S. Bhattacharyya, R. Banik, S. Das Gupta, G. Mukherjee, A. Dhal, S. S. Alam, Md. A. Asgar, T. Roy, A. Saha, S. Nandi, T. Bhattacharjee, A. Choudhury, Debasish Mondal, S. Mukhopadhyay, P. Mukhopadhyay, S. Pal, Deepak Pandit, I. Shaik, and S. R. Banerjee,*"Yrast and non-yrast spectroscopy of ^{199}Tl using α-induced reactions",* Phys. Rev C 98, (2018) 044311.

14. Soumik Bhattacharya, S. Bhattacharyya, S. Das Gupta, H. Pai, G. Mukherjee, R. Palit, F. R. Xu, Q. Wu, A. Shrivastava, Md. A. Asgar, R. Banik, T. Bhattacharjee, S. Chanda, A. Chatterjee, A. Goswami, V. Nanal, S. K. Pandit, S. Saha, J. Sethi, T. Roy, and S. Thakur *"Deformed band structures at high spin in ^{200}Tl",* Phys. Rev C 95 (2017) 014301.

15. P. Bhattacharyya, N. Gayathri, M. Bhattacharya, A. Dutta Gupta, Apu Sarkar, S. Dhar, M.K. Mitra, P. Mukherjee, "*Proton irradiation studies on Al and Al5083 alloy*", In Radiation Physics and Chemistry, 139 (2017) 132.

16. Swarupananda Bhattacharjeea, Gopes Chandra Das , Anirban Roychowdhury, Dipankar Das , Chandan Kumar Ghoshd, Dipten Bhattacharya , Pintu Sen, *"Non-inversion anisotropy energy in NiO coral structure: Asymmetric hysteresis loop at room temperature"* Applied Surface Science: 449 (2018) p389-397

17. D. Bhowmik, S. Bhattacharjee, D. Lavanyakumar, V. Naik, B. Satpati, and P. Karmakar, *"Synthesis of nano-patterned and Nickel Silicide embedded amorphous Si thin layer by ion implantation for higher efficiency solar devices"*, Appl. Surf. Sci.422, 11(2017).

18. Kunal Biswas, Debashis De, Jaya Bandyopadhyay, Nabanita Dutta, Subhasis Rana, Pintu Sen, Sujit Kumar Bandyopadhyay, P.K. Chakraborty, *"Enhanced polarization magnetic response and pronounced antibacterial activity of bismuth ferrite nanorods",* Materials Chemistry and Physics 195 (2017) 207

19. Kunal Biswas, Debashis De, Jaya Bandyopadhyay and Pintu Sen *"Differential antibacterial response exhibited by Graphene nanosheets towards Gram positive bacterium Staphylococcus aureus"*, IET Nanobiotechnology. 12(6), 2018, p. 733 – 740

20. S. Chattopadhyay, S. S. Das, M. N. Alam, Madusmita, *"Preparation of $^{99}Mo/^{99m}Tc$ generator based on cross-linked chitosan polymer using low-specific activity (n,γ)^{99}Mo".* J. Radioanal. Nucl. Chem. 313 (2017) 647–657.

21. Sankha Chattopadhyay, Sujata Das, Luna Barua, Asit K. Pal, Umesh Kumar, Madhusmita, Md. Nayer Alam, Arup K. Hudait, Sharmila Banerjee, *"A compact solvent extraction based $^{99}Mo/^{99m}Tc$ generator for Hospital Radiopharmacy".* Appl. Radiat. Isot. 143 (2019) 41-46.

22. S. Chatterjee , K. Banerjee, Deepak Pandit, Pratap Roy, T. Bandyopadhyay, R. Ravishankar, C. Bhattacharya, S. Bhattacharya, D. Datta, S.R. Banerjee. *"Optimization of beam dump shielding for K-130 cyclotron at VECC",* Applied Radiation and Isotopes 128 (2017) 216–223.

23. Rupa Chatterjee, Pingal Dasgupta, Dinesh K. Srivastava, *"Anisotropic flow of thermal photons at energies available at the BNL Relativistic Heavy Ion Collider and at the CERN Large Hadron Collider",* Phys. Rev. C96 (2017) 014911.

24. Gargi Choudhuri, P. Mukherjee, N. Gayathri, V. Kain, M. Kiran Kumar, D. Srivastava, S. Basu, D. Mukherjee, G.K. Dey, "*Effect of heavy ion irradiation and α+β phase heat treatment on Oxide of Zr-2.5Nb pressure tube material*", Journal of Nuclear Materials, 489 (2017) 22.

25. Gargi Choudhuri, Prerna Mishra, S. Basu, N. Gayathri, P. Mukherjee, V. Kain, D. Mukherjee, D.S rivastava, G. K. Dey, *"Effect of ion and neutron irradiation on oxide of PHWR fuel tube material",* Journal of Nuclear Materials, Volume 514, February 2019, Pages 12-27

26. S. Das, S.Samanta, R.Banik, R. Bhattacharjee, K.Basu, R. Raut, S.S. Ghugre, A.K. Sinha, S. Bhattacharya, S. Imran, G. Mukherjee, S. Bhattacharyya, A. Goswami, R. Palit, H.Tan, *"A Compton suppressed detector multiplicity trigger based digital DAQ for gamma-ray spectroscopy",* NIM A893 (2018), 138.

27. P. Das, S. Mallik and G. Chaudhuri, *"Effect of hyperons on phase co-existence in strange matter",* Phys. Rev. C 95, 014603 (2017)

28. P. Das, S. Mallik and G. Chaudhuri, *"Statistical ensembles and fragmentation of finite nuclei"*, Phys. Rev. C 96, 034609 (2017)

29. P. Das, S. Mallik and G. Chaudhuri, *"First-order derivative of cluster size as a new signature of phase transition in heavy ion collisions at intermediate energies"*, Phys. Lett. B 783, 364 (2018)

30. S. Das Gupta, S. Mallik and G. Chaudhuri, *"Further studies of the multiplicity derivative in models of heavy ion collision at intermediate energies as a probe for phase transitions"*, Phys. Rev. C 97, 044605 (2018)

31. S. S. Das, S. Chattopadhyay, L. Barua, *et al.*, *"Production and radiochemical separation of a potential immuno-PET imaging agent ^{89}Zr from proton irradiated ^{nat}Y target"*. J. Radioanal. Nucl. Chem. 313 (2017) 641–645.

32. Kalipada Das, R. Roy Chowdhury, Swati Midda, Pintu . Sen and I. Das, *"Magnetocaloric effect study of $Pr_{0.67}Ca_{0.33}MnO_3$-$La_{0.67}Sr_{0.33}MnO_3$ nanocomposite"*, Journal of Magnetism and Magnetic Materials: 449 (2018) p 304-307

33. Pingal Dasgupta, Rupa Chatterjee, Sushant K. Singh, Jan-E Alam *"Effects of initial-state nucleon shadowing on the elliptic flow of thermal photons"* Phys. Rev. C 97 (2018) no.3, 034902.

34. Pingal Dasgupta, Somnath De, Rupa Chatterjee, Dinesh K. Srivastava, *"Photon production from Pb+Pb collisions at 5.02 TeV at LHC and at 39 TeV at FCC"*, Phys. Rev. C 98 (2018) no.2, 024911.

35. Pingal Dasgupta, Rupa Chatterjee, Dinesh K. Srivastava, *"Spectra and elliptic flow of thermal photons from full-overlap U+U collisions at energies available at the BNL Relativistic Heavy Ion Collider"*, Phys. Rev. C95 (2017) 064907.

36. J. Datta, M. Ghosh, S. Dasgupta, "*Simultaneous quantification of Zr, Cr and Cu in copper alloy matrix using charged particle activation analysis*", J. Radioanal. Nucl. Chem. 314 (2017) 1161-1167.

37. Balaram Dey, N. Quang Hung, Deepak Pandit, Srijit Bhattacharya, N. Dinh Dang, L. T. Quynh Huong, Debasish Mondal, S. Mukhopadhyay, Surajit Pal, A. De and S.R. Banerjee. *"S-shaped heat capacity in an odd–odd deformed nucleus"* Phys. Lett. B 789, (2019) 634.

38. Balaram Dey, C. Ghosh, Deepak Pandit, A. K. Rhine Kumar, S. Pal, V. Nanal, R. G. Pillay, P. Arumugam, S. De, G. Gupta, H. Krishnamoorthy, E. T. Mirgule, Surajit Pal, and P. C. Rout, *"Study of the Jacobi shape transition in $A \approx 30$ nuclei"* Phys. Rev C 97, (2018) 014317.

39. J. Dudek, D. Curien, I. Dedes, K. Mazurek, S. Tagami, Y. R. Shimizu and T. Bhattacharjee, *"Spectroscopic criteria for identification of nuclear tetrahedral and octahedral symmetries: Illustration on a rare earth nucleus",* Physical Review C 97, 021302(R) (2018).

40. Balaram Dey, Deepak Pandit, Srijit Bhattacharya, N. Quang Hung, N. Dinh Dang, L. Tan Phuc, Debasish Mondal, S. Mukhopadhyay, Surajit Pal, A. De and S.R. Banerjee. *"Level density and thermodynamics in hot rotating ^{96}Tc nucleus"* Phys. Rev C 96, (2017) 054326.

41. S. Dey, N. Gayathri & P. Mukherjee, *"Depth profiling of ion-induced damage in D9 alloy using X-ray diffraction",* Radiation Effects and Defects in Solids, 173, (3–4), 300–317, (2018).

42. Sandip Kumar De, Subrata Mondal, Pintu Sen, Uttam Pal, Biswarup Pathak, Munmun Bardhan, Maireyee Bhattacharya, Amitabha De, Dulal Senapati. *"Crystal Defect Induced Facet Dependent Electrocatalytic Activity of Anisotropic 3D Gold Nanoflower: A Potential Biosensor for Fingerprinting Vitamin C in Pathological Sample",* : Nanoscale, 10(23), 2018, p 11091-11102

43. J. Dhar, S. Sil, A. Dey, D. Sanyal and P. P. Ray, *"Investigation Investigation of Ion Mediated Charge Transport in Methylammonium Lead Iodide Perovskite"* J of Phy. Chem. C 121 (2017) 5515.

44. J. Dhar, S. Sil, A. Dey, P. P. Ray and D. Sanyal**,** *"Positron Annihilation Spectroscopic Investigation on the Origin of Temperature Dependent Electrical Response in Methylammonium Lead Iodide Perovskite"* J of Phys. Chem. Lett. 8 (2017) 1745.

45. Argha Dutta, Kalipada Das, N. Gayathri, Ranjini Menon, P.Y. Nabhiraj, Paramita Mukherjee, *"Effect of Ar9+ irradiation on Zr-1Nb-1Sn-0.1Fe alloy characterized by Grazing Incidence X-ray diffraction technique",* Radiation Physics and Chemistry, Volume 144, p. 125-131 (2018).

46. Argha Dutta, N.Gayathri, P.Mukherjee, Santu Dey, Sudipta Mandal, Tapatee Kundu Roy, Apu Sarkar, S.Neogy, Archna Sagdeo, *"An approach in the analysis of microstructure of proton irradiated T91 through XRDLPA using synchrotron and laboratory source"*, Journal of Nuclear Materials Volume 514, February 2019, Pages 161-170.

47. Argha Dutta, N. Gayathri, S. Neogy & P. Mukherjee, *"Microstructural characterisation of proton irradiated niobium using X-ray diffraction technique",* Philosophical Magazine, Volume 98, Issue 12, 1031-1052 (2018).

48. Rajesh Ganai, Mitali Mondal, Shaifali Mehta, Zubayer Ahammed and Subhasis Chattopadhyay. *"Development and Characterization of 6-gap Bakelite Multi-gap Resistive Plate Chamber",* Journal of Instrumentation, 2018, JINST 13 P07022

49. R. Ganai, M. Mondal, Z. Ahammed and S. Chattopadhyay. *"Timing Studies of Bakelite Multi-gap Resistive Plate Chamber,"* NIMA, Available online 25 October 2018, DOI https://doi.org/10.1016/j

50. N. Gayathri, & P. Mukherjee, *"Study of Initial Stages of Ball-Milling of Cu Powder Using X-ray Diffraction"*, Journal of The Institution of Engineers (India): Series D, Volume 99, Issue 1, pp 125–132 (2018)

51. S. Ghosh, S. Sarkar and S. Mitra, " *Δ self-energy at finite temperature and density and the πN cross-section*", Phys. Rev. C95 (2017) 056010

52. S. Ghosh, A. Mukherjee, M. Mandal, S. Sarkar and P. Roy, " *Thermal effects on ρ meson properties in an external magnetic field*", Phys. Rev. D96 (2017) 116020

53. Subrata Ghosh, Pintu Sen and Kalyan Mandal, *"Effect of Si doping on magnetic and magnetocaloric properties of Ni-Co-Mn-Sn alloys"*, IEEE Transactions on Magnetics 54(11), 2018, p 1-5

54. S. Ghosh, S. Mitra and S. Sarkar, "*Medium effects on the electrical conductivity of a hot pion gas*", Nucl. Phys. A969 (2018) 237

55. S. A. Giuliani, Z. Matheson, W.Nazarewicz, E. Olsen, P.-G.Reinhard, J. Sadhukhan, B.Schuetrumpf, N.Schunck, P.Schwerdtfeger,*"Colloquium: Superheavy elements: Oganesson and beyond"*, Rev. Mod. Phys. 91, 011001 (2019).

56. A. Goswami , P. Sing Babu, V.S. Pandit, *"Dynamics of the off axis intense beam propagation in a spiral inflector"*, Nuclear Instruments and Methods in Physics Research A 841 (2017) 47.

57. A. Goswami, P. Sing Babu and V.S. Pandit, *"Compact high current proton cyclotron and associated beam dynamics"*, 12, JINST (2017) 11005.

58. A. Goswami, A. Dutta and A. Bandhyopadhyay, *"Study of orbit properties and intense beam dynamics in a high current separated sector proton cyclotron"*, 14, JINST (2019) P03027.

59. S. N. Guin, S. Banerjee, D. Sanyal, S. K. Pati, and K. Biswas,*"Nanoscale Stabilization of Nonequilibrium Rock Salt BiAgSeS: Colloidal Synthesis and Temperature Driven Unusual Phase Transition",* Chemistry of Materials, 2017, 29 (8), pp 3769–3777

60. Amaresh Jaiswal and Partha Pratim Bhaduri *"Effect of an anisotropic escape mechanism on elliptic flow in relativistic heavy-ion collisions"*, Published in Phys. Rev. C 97, 044909 (2018).

61. Somnath Kar, Subikash Choudhury, Sanjib Muhuri, and Premomoy Ghosh, *"Multiple parton interactions and production of charged particles up to the intermediate-pT range in high-multiplicity pp events at the LHC"*, Phy. Rev. D 95, 014016 (2017)

62. Somnath Kar, Subikash Choudhury, Samrangy Sadhu and Premomoy Ghosh, *"Centrality dependent long-range angular correlations of intermediate-p T D-mesons and charged particles in pPb collisions at the LHC energy",* J. Phys. G: Nucl. Part. Phys. 45, 125103(2018)

63. Shuaib Ahmad Khan, Jubin Mitra, Tushar kanti Das, Tapan K. Nayak., *"Optimization of multi-gigabit transceivers for high speed data communication links in HEP Experiments",* NIM A: Accelerators, Spectrometers, Detectors and Associated Equipment. https://doi.org/10.1016/j.nima.2019.02.030 Volume 927(2019).

64. Y. H. Kim, S. Biswas, M. Rejmund, A. Navin, A. Lemasson, S. Bhattacharyya, M. Caamaño, E. Clément, G. de France, B. Jacquot, *"The impact of the intruder orbitals on the structure of neutron-rich Ag isotopes"* Phys. Lett. B 772, (2017) 403.

65. Y. H. Kim, A. Lemasson, M. Rejmund, A. Navin, S. Biswas, C. Michelagnoli, I. Stefan, R. Banik, P. Bednarczyk, S. Bhattacharya, S. Bhattacharyya, E. Clément, H. L. Crawford, G. De France, P. Fallon, J. Goupil, B. Jacquot, H. J. Li, J.Ljungvall, A. O. Macchiavelli, A. Maj, L. Ménager, V. Morel, R. Palit, R. M. Pérez-Vidal, J. Ropert, C. Schmitt, *"Prompt-delayed γγ-ray spectroscopy with AGATA, EXOGAM and VAMOS++",* Eur. Ph. J. A 53 (2017), 162.

66. N. Kumar, S. Mohsina, J. Sadhukhan, and S. Verma, "*Role of dynamical deformation in pre-scission neutron multiplicity*", Phys. Rev. C 96 (2017) 034614.

67. Ashwani Kumar, Guruprasad Mandal, Parnika Das, B.S.Tomar, *"Hyperfine Interaction Study of Pressure Induced Phase in Hafnia",* J Radioanal Nucl Chem 313: 683 (2017).

68. N. Naveen Kumar, R. Tewari, P. Mukherjee, N. Gayathri , P.V. Durgaprasad, G.S. Taki , J.B.M. Krishna, A.K. Sinha P. Pant, A. K. Revally , G. K. Dey, "*Evaluation of Argon ion irradiation hardening of ferritic/ martensitic steel-T91 using nanoindentation*, *X-ray diffraction and TEM techniques"*, Radiation Effects and Defects in Solids, 172 (2017) 678

69. M. T. Senthil Kannan, J. Sadhukhan, B. K. Agrawal, M. Balasubramaniam, and S. Pal, *"Dynamical model calculation to reconcile the nuclear fission lifetime from different measurement techniques*", Phys. Rev. C 98, 021601(R) (2018).

70. H. Luitel and D. Sanyal, *"Ab-initio calculation of magnetic properties in B, Al, C, Si, N, P and As doped rutile TiO_2",* Int. J. Mod. Phys. B, 31 (2017) 1750227.

71. H. Luitel, D. Sanyal, N. Gogurla, A. Sarkar , *"Defect generation and recovery in polycrystalline ZnO during annealing below 300˚C as studied by in situ positron annihilation spectroscopy"*, J . Mat. Sci. 52 (2017) 7615.

72. H. Luitel, S. Roy, D. Sanyal, *"Ferromagnetism in P and As doped SnO_2: First-principle study"*, Computational Condensed Matter, 14 (2017) 36-39.

73. H. Luitel, M. Chakrabarti, A. Sarkar, S. Dechoudhury, D. Bhowmick, V. Naik and D. Sanyal *"Ab-initio calculation and experimental observation of room temperature ferromagnetism in 50 keV nitrogen implanted rutile TiO_2".* Mat. Res. Exp. 5 (2017) 026105.

74. K. Madhuri, D. N. Basu, T. R. Routray, S. P. Pattnaik, "*Crustal Momeni of Inertia of Glitching Pulsars with the KDE0v1 Skyrme Interaction"*, Eur. Phys. J. A53 (2017) 151.

75. S. Mallik, G. Chaudhuri, P. Das and S. Das Gupta, *"Multiplicity derivative: A new signature of a first order phase transition in intermediate energy heavy ion collisions",* Phys. Rev. C 95, 061601 (2017) (Rapid Communication and Editor's suggestion)

76. S. Mallik, G. Chaudhuri and F. Gulminelli, *"Dynamical and statistical bimodality in nuclear multifragmentation",* Phys. Rev. C 97, 024606 (2018)

77. Priyanath Mal, G.Bera, P. Rambabu, G.Turpu, Brahmananda Chakraborty, Lavanya Ramaniah, R. Singh, Sen, Pintu Sen, Pradip Das, *"Electronic, Magnetic and Spectroscopic Properties of Doped $Mn_{(1-x)}A_xWO_4$ (A= Co, Cu, Ni and Fe) Multiferroic: An Experimental and DFT Study"* , Journal of Physics Condense Matter, 29 (2017) 075901

78. M. Mandal, A. Mukherjee, S. Ghosh, P. Roy and S. Sarkar, "*rho-omega mixing in the presence of a weak magnetic field*", Eur. Phys. J. A54 (2018) 99

79. Jubin Mitra, Erno David, Eduardo Mendez, Shuaib Ahmad Khan, Tivadar Kiss, Sophie Baron, Alex Kluge, Tapan Nayak., *"Trigger and timing distributions using the TTC-PON and GBT bridge connection in ALICE for the LHC Run 3 Upgrade",* NIM A. https://doi.org/10.1016/j.nima.2018.12.076, Volume 922(2018)

80. Jubin Mitra, Tapan K Nayak, *"An FPGA based phase measurement system"*, IEEE Transactions on Very Large Scale Integration (VLSI) Systems Volume 26 Issue 1 Pages 133-142 Publisher IEEE(2018).

81. J. Mitra, E Mendes, S Baron**,** *"Effect of repetitive reset, temperature variation and frequency offset on the performance of PLL for the LHC experiments"*, Journal of Instrumentation, Volume 14, February 2019.

82. Debasish Mondal, Deepak Pandit, S. Mukhopadhyay, Surajit Pal, Srijit Bhattacharya, A. De, N. Dinh Dang, N. Quang Hung , Soumik Bhattacharya , S. Bhattacharyya, Balaram Dey, Pratap Roy, K. Banerjee, S.R. Banerjee. *"Study of giant dipole resonance in hot rotating light mass nucleus ^{31}P"* Phys. Lett. B 784, (2018) 423.

83. Debasish Mondal, Deepak Pandit, S. Mukhopadhyay, Surajit Pal, Balaram Dey, Srijit Bhattacharya, A. De, Soumik Bhattacharya, S. Bhattacharyya, Pratap Roy, K. Banerjee, and S.R. Banerjee. *"Experimental determination of n/s for finite nuclear matter",* Phys. Rev Lett 118, (2017) 192501.

84. Somnath Mukhopadhyay, Joydev Lahiri, Debasis Atta, Kouser Imam, D. N. Basu, "*Gravitational waves from isolated neutron stars: Mass dependence of r-mode instability"*, Phys. Rev. C97 (2018) 065804.

85. Somnath Mukhopadhyay, Debasis Atta, D. N. Basu, "*Landau Quantization and Mass- Radius Relation of Magnetized White Dwarfs in General Relativity"*, Rom. Rep. Phys. Rev. C69 (2017) 101.

86. Somnath Mukhopadhyay, Debasis Atta, Kouser Imam, D. N. Basu, C. Samanta, "*Compact Bifluid Hybrid Stars: Hadronic Matter Mixed with Self-Interacting Fermionic Asymmetric Dark Matter"*, Eur. Phys. J. C77 (2017) 440.

87. A. Mukherjee, S. Ghosh, M. Mandal, P. Roy and S. Sarkar, "*Mass modification of hot pions in a magnetized dense medium*", Phys.Rev. D96 (2017) 016024

88. A. Mukherjee, S. Ghosh, M. Mandal, S. Sarkar and P. Roy, "*Effect of external magnetic fields on nucleon mass in a hot and dense medium: Inverse magnetic catalysis in the Walecka model*", Phys. Rev. D98 (2018) 056024

89. Ryan Murray, Debashis Banerjee, Gary S. Collins and Matthew O. Zacate, Trapping of solute atoms at grain boundaries in $GdNi_2$, Hyperfine Interact (2017) 238: 17. doi:10.1007/s10751-016-1394-2.

90. V. Naik, M. Bhattacharjee, D. Lavanya Kumar, P. Karmakar, S. Das, D. Banerjee, S. Chattopadhyay, L. Barua, S. S. Das, A. Pal, A. Bandopadhyay, A. Chakrabarti, *"Radioactive ion beams of ^{111}In using ECR plasma sputtering method*". Review of Scientific Instruments, 88 (2017) 063308.

91. Rajendra Nath Patra, Rama Narayan Singaraju, Somnath Dalal, Saikat Biswas, Yogendra P. Viyogi and Tapan K. Nayak, *"Characteristic study of a quadruple GEM detector and comparison with triple GEM detector",* NIM A 906, 37 (2018)

92. Rajendra Nath Patra, Rama Narayan Singaraju, Somnath Dalal, Saikat Biswas, Yogendra P. Viyogi and Tapan K. Nayak, *"Characteristic study of a quadruple GEM detector in different electric field configurations"*. Accepted for publication in NIM A (article in press)

93. A. Navin, M. Rejmund, S. Bhattacharyya, R. Palit, G.H. Bhat, J.A. Sheikh, A. Lemasson, S. Bhattacharya, M. Caamaño, E. Clément, O. Delaune, F. Farget, G. de France, B. Jacquot, *"Evolution of triaxial shapes at large isospin: Rh isotopes"*. Phys. Lett. B 767 (2017), 480.

94. Deepak Pandit, Srijit Bhattacharya, Debasish Mondal, Balaram Dey, S. Mukhopadhyay, Surajit Pal, A. De and S.R. Banerjee. *"Role of fluctuations in a thermal phase transition in a nucleus probed via the giant dipole resonance"* Phys. Rev C 99, (2019) 024315.

95. Deepak Pandit, Srijit Bhattacharya, Debasish Mondal, Pratap Roy, K. Banerjee, S. Mukhopadhyay, Surajit Pal, A. De, Balaram Dey and S.R. Banerjee. *"Experimental signature of collective enhancement in nuclear level density"* Phys. Rev C 97, (2018) 041301 (Rapid Communications).

96. Deepak Pandit, Debasish Mondal, Balaram Dey, Srijit Bhattacharya, S. Mukhopadhyay, Surajit Pal, A. De and S.R. Banerjee. *"Signature of clustering in quantum many body system probed by giant dipole resonance"* Phys. Rev C 95, (2017) 034301.

97. S. K. Pandit, A. Shrivastava, K. Mahata, V. V. Parkar, R. Palit, N. Keeley, P. C. Rout, A. Kumar, K. Ramachandran, S. Bhattacharyya, V. Nanal, C. S. Palshetkar, T. N. Nag, Shilpi Gupta, S. Biswas, S. Saha, J. Sethi, P. Singh, A. Chatterjee, and S. Kailas, *"Investigation of large α production in reactions involving weakly bound ^{7}Li",* Phys. Rev C 96 (2017), 044616.

98. S.P. Pattnaik, T.R. Routray , X. Viñas, D.N. Basu, M. Centelles, K. Madhuri, B. Behera "*Influence of the nuclear matter equation of state on the r-mode instability using the finite-range simple effective interaction"*, J. Phys. G45 (2018) 055202.

99. S.P. Pattnaik, T.R. Routray , X. Viñas, D.N. Basu, M. Centelles, K. Madhuri, B. Behera "*Addendum: Influence of the nuclear matter equation of state on the r-mode instability using the finite-range simple effective interaction"*, J. Phys. G45 (2018) 119401.

100. M. Rahaman and Jan-e Alam, *"Effects of causality on the fluidity and viscous horizon of quark gluon plasma",* Phys. Rev. C 97, 054906 (2018).

101. M. Rahaman, S. Ghosh, S. Ghosh, S. Sarkar and Jan-e Alam, *"Contribution of a kaon component in the viscosity and conductivity of a hadronic medium"*, Phys. Rev. C 97, 035201 (2018).

102. W. Raja, Md. S. Ali, A. Chakrabarti, A. Ray, *"The Blue light indicator in rubidium 5S–5P–5D Ξ excitation",* Appl. Phys. B 123,202 (2017).

103. S. Rajbanshi, R. Raut, H. Pai, Sajad Ali, A. Goswami, G. Gangopadhyay, S.Bhattacharyya, G. Mukherjee, S. Muralithar, R. P. Singh, M. Kumar Raju P. Singh, R. K. Bhowmik *"Abrupt phase change of the core rotation in the ^{143}Sm nucleus",* Phys. Lett. B 782 (2018), 143.

104. Rajyavardhan Ray, A. K. Himanshu, Uday Kumar, Manuel Richter and T. P. Sinha, *"Effects of octahedral tilting on the electronic structure and optical properties of d^0 double perovskites A_2ScSbO_6 (A=Sr;Ca)"*, Journal of Alloys and Compounds, 705 (2017) 497

105. Ashif Reza, Kumardeb Banerjee, Parnika Das, K. Ray, S. Bandyopadhyay, B. Dam, *"An in situ trap capacitance measurement and ion-trapping detection scheme for a Penning ion trap facility"*, Review of Scientific Instruments, 88 (3), 034705, (2017).

106. Sudhir P. Rode, Partha Pratim Bhaduri, Amaresh Jaiswal and Ankhi Roy, *"Kinetic freeze-out conditions in nuclear collisions with 2 – 150 A GeV beam energy within a non boost-invariant blast wave model"*, Phys. Rev. C 98, 024907 (2018).

107. K. Routray, D. Sanyal, and D. Behera, *"Dielectric, magnetic, ferroelectric and Mossbauer properties of bismuth substituted nanosized cobalt ferrites through glycine nitrate synthesis method"*, J. of Appl. Phys. 122 (2017) 224104

108. T. Roy, G. Mukherjee, Md. A. Asgar, S. Bhattacharyya, Soumik Bhattacharya, C.Bhattacharya, S. Bhattacharya, T. K. Ghosh, K. Banerjee, Samir Kundu, T.K. Rana, P.Roy, R. Pandey, J. Meena, A. Dhal, R. Palit, S.Saha, J.Sethi, A.Goswami, *"Observation of multiple doubly degenerate bands in ^{195}Tl",* Phys. Lett. B 782 (2018), 143.

109. S. Roy, D. Das, Tapatee Kundu Roy, *"Processing, characterization and properties of Er_2O_3added ZnObased varistor ceramics"*, J. Mater. Sci. Mater. Electron. 28 (2017) 14906-14918.

110. S. Roy, H. Luitel and D. Sanyal, *"Origin of ferromagnetism in Cu doped rutile TiO_2 - An ab-initio approach"*, *Computational Condensed Matter*, 13 (2017) 127-130.

111. Samrangy Sadhu and Premomoy Ghosh, *"Anomalous features of particle production in high-multiplicity events of pp collisions at the LHC energies",* Phys. Rev. D99, 034020 (2019)

112. J. Sadhukhan, C. Zhang, W. Nazarewicz, and N. Schunck, "*Formation and distribution of fragments in the spontaneous fission of ^{240}Pu*", Phys. Rev. C 96 (2017) 061301(R).

113. A. Saha, T. Bhattacharjee, S. S. Alam, D. Banerjee, M. SahaSarkar, S .Sarkar, J. B. Gupta, P. Das, Soumik Bhattacharya, Deepak Pandit, R. Guin, S. K. Das, S. R. Banerjee. *"Spectroscopy of low lying states in ^{150}Sm",* Nuclear Physics A 976, 1 (2018)

114. A Saha, T Bhattacharjee, D Curien, I Dedes, K Mazurek, S R Banerjee, S Rajbanshi, A Bisoi, G de Angelis, Soumik Bhattacharya, S Bhattacharyya, S Biswas, A Chakraborty,S Das Gupta, B Dey, A Goswami, D Mondal, D Pandit,R Palit, T Roy, R P Singh, M Saha Sarkar, S Saha and J Sethi J. Dudek, D. Curien, I. Dedes, K. Mazurek, S. Tagami, Y. R. Shimizu and T. Bhattacharjee *"Excited negative parity bands in 160Yb"*, Phys. Scr. 93 034001 (2018).

115. A. Saha, T. Bhattacharjee, Dominique CURIEN, Jerzy Dudek, I Dedes, Katarzyna Mazurek, Andrzej Gozdz, S Tagami, Yoshifumi R Shimizu, Sudhee Ranjan Banerjee1,S Rajbanshi, A Bisoi, Giacomo de Angelis, Soumik Bhattacharya, S Bhattacharyya,S Biswas, A Chakraborty, S Das Gupta, B Dey, A Goswami, D Mondal, D Pandit, Rudrajyoti Palit, T Roy, R. P. Singh, Maitreyee Saha Sarkar, Sudipta Saha and J Sethi, *"Spectroscopy of a tetrahedral doubly magic candidate nucleus 160Yb"* J. Phys. G: Nucl. Part. Phys. 46 055102 (2019).

116. A. Sarkar, H. Luitel, N. Gogurla and D. Sanyal, *"Positron annihilation spectroscopic characterization of defects in wide band gap oxide Semiconductors"*, Mat. Res. Exp., 4 (2017) 035909.

117. Nachiketa Sarkar and Premomoy Ghosh, *"Thermalization in a small hadron gas system and high-multiplicity pp events"*, Phy. Rev. C 96, 044901 (2017)

118. Nachiketa Sarkar and Premomoy Ghosh, *"Van der Waals hadron resonance gas and QCD phase diagram"*, Phys. Rev. C 98, 014907 (2018)

119. Nachiketa Sarkar and Premomoy Ghosh, *"The η/s of the LQCD-EoS complied hadron gas of different sizes approach common minimum near the crossover temperature"* Eur. Phys. J. A 54, 194 (2018)

120. G. Sarwar and Jan-e Alam, *"Kinetic evolution and correlation of fluctuations in an expanding quark gluon plasma"*, Int. J. Mod. Phys. A 33, 1850040 (2018).

121. G. Sarwar, S. K. Singh and Jan-e Alam, *"Power Spectrum of the Little Bangs"*, Int. J. Mod. Phys. A 33, 1850121 (2018).

122. M. Shareef, E. Prasad, A. Jhingan, N. Saneesh, K. S. Golda, A. M. Vinodkumar, M. Kumar, A. Shamlath, P. V. Laveen, A. C. Visakh, M. M. Hosamani, S. K. Duggi, P. Sandya Devi, G. N. Jyothi,

A. Tejaswi, P. N. Patil, J. Sadhukhan, P. Sugathan, A. Chatterjee, S. Pal, "*Nuclear dissipation at high excitation energy and angular momenta in reaction forming ^{227}Np",* Phys. Rev. C 99, 024618 (2019).

123. Ashik Ikbal Sheikh, Zubayer Ahammed, Prashant Shukla and Munshi G. Mustafa, *"Effect of the chromo-electromagnetic field fluctuations on heavy quark propagation in a deconfined hadronic medium at energies available at the CERN Large Hadron Collider"*, Phys.Rev. C 98, 034915 (2018).

124. A. K. Sikdar, A. Ray, Deepak Pandit, B. Dey, Sarmishtha Bhattacharyya, Soumik Bhattacharya, A. Bisoi, A. De, S. Paul, Srijit Bhattacharya, A. Chatterjee *"Slow fission of highly excited plutonium nuclei"* Phys. Rev C 98, (2018) 024615.

125. Vinay Singh, Joydev Lahiri, Debasis Bhowmick, D. N. Basu, "*Big-bang nucleosynthesis and primordial lithium abundance problem"*, Journal of Experimental and Theoretical Physics 155 (2019) No.4.

126. Saurabh Srivasatava and V.S. Pandit, *"A 2-Dof LQR based PID controller for integrating processes considering robustness/performance tradeoff"*. ISA Transactions, 71 (2017) 426- 439.

127. Dinesh K. Srivastava, Steffen A. Bass, Rupa Chatterjee, *"Production of charm quarks in a parton cascade model for relativistic heavy ion collisions at \sqrt{s_NN}= 200 GeV"* Phys. Rev. C96 (2017) 064906.

128. Dinesh K. Srivastava, Rupa Chatterjee, Steffen A. Bass, *"Transport dynamics of parton interactions in pp collisions at energies available at the CERN Large Hadron Collider"*. Phys. Rev. C 97 (2018) no.6, 064910.

129. Dinesh K. Srivastava, Rupa Chatterjee, Steffen A. Bass, *"Landau-Pomeranchuk-Midgal effect and charm production in pp collisions at energies available at the CERN Large Hadron Collider using the parton cascade model."*, Phys. Rev. C 98 (2018) no.5, 054910.

130. I. Tsekhanovich, A. N. Andreyev, K.Nishio, D. Denis-Petit, K. Hirose, H.Makii, Z. Matheson, K. Morimoto, K. Morita, W.Nazarewicz, R.Orlandi, J. Sadhukhan, T. Tanaka, M.Vermeulen, M.Warda,*"Observation of the competing fission modes in ^{178}Pt*", Phys. Lett. B 790, 583 (2019).

131. Y. X. Zhang, Y. J. Wang, M. Colonna, P. Danielewicz, A. Ono, M. B. Tsang, H. Wolter, J. Xu, L. W.Chen, D. Cozma, Z. Q. Feng, S. Das Gupta, N. Ikeno, Che Ming Ko, Bao An Li, Q. F. Li, Z. X. Li, S. Mallik, Y. Nara, T. Ogawa, A. Ohnishi, D. Oliinychenko, M. Papa, H. Peterson, J. Su, Taesoo Song, J. Weil, N. Wang, F. S. Zhang and Z. Zhang, *"Comparison of heavy-ion transport simulations: Collision integral in a box"* , Phys. Rev. C 97, 034625 (2018)