

Publications in Journals – 2026

1. Soumen Podder, Sujan Kumar Roy, Suman Pal, Gargi Chaudhuri, “High mass pulsars as hybrid stars: Phase transitions and oscillation modes”, *Journal of High Energy Astrophysics* 49 (2026) 100457
2. Sourav Duari, Nilanjan Chaudhuri, Pradip Roy, Sourav Sarkar, “Dynamical color conductivity of a chiral quark-gluon plasma”, *Physical Review D* 113 (2026) 14011
3. T. Bhattacharjee, A. Pal, D. Kumar, S. Basak, S.S. Alam, “Lifetime measurements with fast timing scintillation detectors at VECC, Kolkata”, *Nuclear Physics A* 1065 (2026) 123254
4. S. Chakraborty, S. Bhattacharyya, S.S. Nayak, Soumik Bhattacharya, G. Mukherjee, Snigdha Pal, S. Panwar, Suchorita Paul, S. Jehangir, G.H. Bhat, J.A. Sheikh, C. Majumder, A. Sharma, Pankaj K. Giri, R. Raut, S.S. Ghugre, “Low-j rotational bands in ^{127}Xe ”, *Nuclear Physics A* 1065 (2026) 123251
5. ALICE Collaboration, “Exclusive photoproduction of excited p mesons decaying to four pions in ultraperipheral Pb–Pb collisions at root $s_{\text{NN}}=5.02$ TeV”, *Physics Letters B* 872 (2026) 140006
6. Habibur Rahaman, S. Rajbanshi, Abhijit Bisoi, G. Manna, R. Biswas, Saikat Sen, R. Palit, 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, “Coexistence of shapes and octupole correlation in ^{82}Kr ”, *Physical Review C* 113 (2026) 14309
7. Subhadeep Paul, Tumpa Biswas, Dibakar Dhar, Zubayer Ahammed & Prabir Kumar Haldar, “Net-charge fluctuations in p-Pb collisions at root $s_{\text{NN}}= 5.02$ TeV: insights from the AMPT model”, *The European Physical Journal Plus* 141 (2026) 12
8. Tapatee Kundu Roy, “Grain growth kinetics, microhardness and nonlinear electrical properties of ZnO-V₂O₅-Nb₂O₅ varistor ceramics”, *Solid State Communications* 409 (2026) 116295

9. 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, S. Rajbanshi, “Investigation of new and evolving structures in ^{125}Te using γ spectroscopy”, *Physical Review C* 113 (2026) 24319
10. A. Karmakar, P. Datta, 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. Palitg, Sajad Ali, W. Shaikh, S. Chattopadhyay, “ ^{98}Mo : A possible candidate for octupole collectivity in $A \approx 100$ region”, *Nuclear Physics A* 1066 (2026) 123265
11. Saumanti Sadhukhan, S. Mukhopadhyay, Saswata Roy, Debasish Mondal, Deepak Pandit, Surajit Pal, R. Shil, K. Banerjee, S. Bhattacharyya, “A novel setup of $\text{LaBr}_3(\text{Ce})\text{-NaI}(\text{Tl})$ phoswich and BaF_2 detectors for gamma-ray measurement with anti-Compton and addback features”, *Nuclear Instruments and Methods in Physics Research Section A, Part 1* 1082 (2026) 170913
12. Dharmendra Singh, Amritraj Mahato, Nitin Sharma, Rajesh K. Sahoo, Rahul Mahato, Lupteindu Chhura, Mohd. Usman, Rahbar Ali, M. Afzal Ansari, M. Ismail, “Production of ^{57}Co and ^{51}Cr isotopes for medical application in the interaction of ^{16}O projectile with ^{45}Sc target”, *Nuclear Physics A* 1066 (2026) 123285
13. CBM Collaboration, “Performance of the prototype Silicon Tracking System of the CBM experiment tested with heavy-ion beams at SIS18”, *Nuclear Instruments and Methods in Physics Research Section A, Part 2* 1082 (2026) 171059
14. E. H. Wang, M. Abushawish, J. H. Hamilton, A. Navin, S. Bhattacharyya, J. Dudouet, G. H. Bhat, J. A. Sheikh, S. Jehangir, S. Y. Wang, S. Sun, B. Qi, M. Rejmund, A. Lemasson, Y. H. Kim, E. Clément, F. Didierjean, R. Y. Dong, G. Duchêne, B. Jacquot, C. F. Jiao, Y. X. Luo, C. Michelagnoli, A. V. Ramayya, J. O. Rasmussen, C. Schmitt, O. Stezowski, W. Z. Xu, H. Zhang and S. J. Zhu, “First Observation of Multiphonon gamma-Vibrations in an Odd-Odd Nuclear System”, *Physical Review Letters* 136 (2026) 72501

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16. Govind Kumar Mishra, Hemendra Kumar Pandey, Nagendra Prasad Pathak, “High selective SIW bandpass filter with flexible bandwidth and transmission zero for 5G application”, *Scientific Reports* 16 (2026) 9639
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18. V. Kumar, S. Ali, M. Das, N. Biswas, S. Das, S. Sahoo, N. Chaddha, J. Basu, V. N. Jha, “Response of tetrafluoroethane (C₂H₂F₄) superheated emulsion detector for dark matter search at JUSL”, *Nuclear Instruments and Methods in Physics Research Section A* 1083 (2026) 171101
19. Krishna Debnath, Aniruddha Dey, P.K. Nayak, A.K. Mondal, R. Shil, A. Kundu, Biswajit Das, K. Mandal, S. Biswas, P. Dey, A. Bairagya, Vishal Malik, A. Sindhu, B. Mukherjee, D. C. Biswas, R. Palit, K. Banerjee, S. Mukhopadhyay, A. Chakraborty, “Exploring fission dynamics of ²³²Th(⁹Be,f) following prompt γ -ray spectroscopy”, *Physics Letters B* 874 (2026) 140249
20. Akash Mitra, Shashi C. L. Srivastava, “Dynamical quantum phase transitions through the lens of mode dynamics”, *Physical Review B* 113 (2026) 104309
21. Mahuya Chakrabarti, Apurba Kumar Nayek, Bidyut Haldar, Sudipta Moshat, Dirtha Sanyal, “Preparation and characterization of ferromagnetic Cu doped ZnO”, *Current Applied Physics* 84 (2026) 75
22. Sourav Duari, Nilanjan Chaudhuri, Sourav Sarkar, Pradip Roy, “Plasminos in chiral QCD plasma”, *European Physical Journal A* 62 (2026) 74

23. Javed Aktar Khan, Sulagna Ghosh, Dirtha Sanyal, “An ab-initio studies of the magnetic properties of transition metal ion doped GeO₂ monolayer”, Computational Condensed Matter 46 (2026) e01237
24. S. Dalal, K. Banerjee, G. Mukerjee, T.K. Rana, P. Roy, S. Manna, S. Roy, R. Shil, S.R. Singh, P. Pant, S. Adhikary, S. Kundu, T.K. Ghosh, A. Sen, R. Pandey, B. Layek, S. Sadhukhan, S. Dawn, “Gamma-ray spectroscopy using deuterated liquid scintillator EJ315 detector”, Nuclear Instruments and Methods in Physics Research Section A 1084 (2026) 171275
25. Amit Paul, Rupa Chatterjee, “Initial state and evolution of the hot and dense medium produced in isobaric collisions at 200A GeV at the BNL Relativistic Heavy Ion Collider”, Physical Review C 113 (2026) 44901