

CURRICULUM VITAE

Name : **Sheikh, Javid Ahmed**

Present Address : Vice-Chancellor

Cluster University Srinagar

Gogji Bagh, Srinagar

Jammu and Kashmir, 190 008, India

Education :

- Ph. D (Nuclear Physics) from Indian Institute of Technology, Bombay, India in 1987;
Research topic : Bosonization of the Nuclear Collective Excitations
- M. Sc (Physics) from University of Kashmir, Srinagar, India in 1982

Post-Doctoral Experience :

- Research Associate at Oak Ridge National Laboratory and University of Tennessee, USA during Feb. 1993 - May 1994
- Visiting Fellow at Tata Institute of Fundamental Research, Bombay, India during April 1991 - Jan. 1993
- Research Associate at Daresbury Laboratory, Daresbury, England during Jan. 1988 - Jan. 1991

Academic and Research Positions :

- Vice-Chancellor, Cluster University Srinagar, Jammu and Kashmir, from Mar. 1, 2017-
- Dean Research, University of Kashmir, Hazratbal, Srinagar, India during Dec. 2014 – Feb. 2017
- Visiting Professor at University of Tennessee and Oak Ridge National Laboratory, USA during Dec. 2013 – Aug. 2014
- Dean, Faculty of Physical & Material Sciences, University of Kashmir, Hazratbal, Srinagar, India during May 2011 - Dec. 2013
- Head, Department of Physics, University of Kashmir, Hazratbal, Srinagar, India during April 2011 - Dec. 2013
- Visiting Professor at Oak Ridge National Laboratory and University of Tennessee, USA during Dec. 2007 - Nov. 2009

- Head Department of Physics University of Kashmir, Hazratbal, Srinagar, India during Jan. 2006 - Nov. 2007
- Professor of Physics at University of Kashmir, Srinagar, India from Nov. 2003 -
- Research Scientist at Technical University Munich, Germany, Institut de Recherches Subatomiques, Strasbourg, France and Asst. Prof. at King Saud University during May 1998 - Oct. 2003
- Reader at Tata Institute of Fundamental Research, Bombay, India during Feb. 1997 - June 1999
- Visiting Scientist at University of Surrey, Surrey, England during May 1997 - April 1998
- Visiting Scientist at Lund Institute of Technology, Lund, Sweden; Royal Institute of Technology, Stockholm Sweden; and Institute of Nuclear and Hadronic Studies, Rossendorf, Germany during Nov. 1996 - April 1997
- Fellow at Tata Institute of Fundamental Research, Bombay, India during June 1994 – Jan. 1997

Short term Visits:

- Visiting Professor at National Superconducting Cyclotron Laboratory, Michigan State University, East Lansing, USA during Sept. – Oct. 2015 (one month)
- Department of Physics, University of Notre Dame, USA, May 2014 (one week)
- Visiting Professor at Oak Ridge National Laboratory and University of Tennessee, USA during Feb. - May 2013 (three months)
- Visiting Professor at Oak Ridge National Laboratory and University of Tennessee, USA from Feb. - May 2012 (three months)
- Institute of Nuclear Theory, University of Washington, Seattle, USA, June 2009 (one week)
- Department of Physics, Michigan State University, USA, Nov. 2008 (one Week)
- Technical University, Munich, Germany, Jan. - Feb. 2004 (two months)
- Institute for Nuclear and Hadronic Physics, Rossendorf, Germany, July 2001 (three weeks)
- Technical University, Munich, Germany, April 1997 (one week)
- Oak Ridge National Laboratory, Oak Ridge, USA, June - July 1996 (two months)

- University of Gottingen, Gottingen, Germany, Oct. 1995 (three days)
- Institute for Nuclear and Hadronic Physics, Rossendorf, Germany, Sept. 1995 (three weeks)
- European Center for Theoretical Nuclear Physics, Trento, Italy, Feb. 1994 (three weeks)
- Argonne National Laboratory, USA, Dec. 1993 (one week)
- Drexel University, Philadelphia, USA, June 1993 (three days)
- Technical University, Munich, Germany, Feb. 1993 (one week)
- University de Autonoma, Madrid, Spain, June 1989 (one week)
- Lund Institute of Technology, Lund, Sweden, Feb. 1989 (one week)
- Oak Ridge National Laboratory, Oak Ridge, USA, Nov. 1988 (one week)
- Oxford University, Oxford, England, June 1988 (one week)

Awards and Fellowships:

- Elected member on the International Advisory Committee of “Capture Gamma-Ray Spectroscopy and Related Topics”, Shanghai, China, 2017
- Elected Fellow of American Physical Society, 2015
- Elected member on the Board of Scientific Advisory Committee of Inter-University Accelerator Center (IUAC), New Delhi from 2014 -
- Nominated Editorial Board member of the STM : Journal of Physics from 2014 – 2016
- Sultana N. Nahar Prize for “Distinguished Research Advisor in Physics”, University of Kashmir, 2014
- Elected University Syndicate Member, University of Jammu, from July 2012 - Dec. 2013
- Elected University Council Member, University of Kashmir, from July 2011 - Dec. 2013
- “Best Teacher award”, University of Kashmir, Hazratbal, Srinagar for the year 2010
- Elected member of the AUC Committee of Inter-University Accelerator Centre, New Delhi from 2005 - 2007 and 200 – 2011
- Elected by the publisher’s Barons Who’s Who among “ Asia 500 - Leaders of the New Century”
- Awarded Fellowship from the United Kingdom Physical Sciences Research Council at

the University of Surrey, Surrey, England in 1997

- Elected associate member of the European Center for Theoretical Nuclear Physics, Trento in 1996
- Elected member of the New York Academy of Sciences in 1995

Scholars Supervised at Doctoral/Pre-Doctoral Levels :

- P. Singh, S.D. Paul and R. Palit from Tata Institute of Fundamental Research, Bombay
P. Ganai , G.H. Bhat, A. Rather, J.A. Para, S.A. Lone, W.A. Dar and S. Jehangir from University of Kashmir, Srinagar
- Presently following research scholars are pursuing their Ph. D and M. Phil Programmes on various research topics under my supervision :

I. Maqbool, R.N. Ali, R. Akbar and T.A. Mir

Research Projects Sponsored by Various Funding Organizations :

- “Symmetry-projection in mesoscopic systems of metallic clusters and atomic nuclei”, sponsored by Department of Science and Technology, Govt. of India (~ 13 lacs)
- “Special Assistance Programme (SAP)”, UGC, New Delhi, Coordinator, Dept. of Physics, University of Kashmir (~ 80 lacs)
- “Analysis and Projections of Extreme Weather Events over Western Himalayas”, Ministry of Earth Sciences, Government of India (~ 23 lacs)

- SERC school on “Modern Microscopic Approaches in Nuclear Physics”, May 17- June 6, 2016, University of Kashmir, Srinagar, SERB (DST), Government of India (~ 20 lacs)
- “Up-gradation of the Indian National Gamma Array for Nuclear Structure Studies using Indian Accelerator facilities (INGA-II)”, Co-PI of the National Project, DST, New Delhi (~50 crores)

Approved Reviewer of International/National Journals:

Physical Review C, European Physical Journal A, Pramana and many other Journals

Recent Invited Talks:

- “Ab initio Methods in Nuclear Physics”, School on Nuclear Physics, VECC, Kolkata, Jan. 15, 2018
- Series of four lectures on “Density Functional Theory”, CNT Lectures, VECC, Kolkata, Feb. 16 – 25, 2016
- “Modern nuclear structure models : chiral symmetry, wobbling motion and gamma bands”, International workshop on Recent Trends in Nuclear Structure and its Implications in Astrophysics, Bhubaneswar, India, Jan. 4-8, 2016
- “Isospin invariant Skyrme energy density functional approach to atomic nuclei”, Nuclear Physics Meet, Institute of Physics, Bhubaneswar, India, June 26 - 30, 2015
- Series of Eight Lectures on “Random Phase Approximation, Finite Amplitude Method-QRPA and Isospin invariant Density Functional Theory”, DST-SERC School, organized by Department of Physics, IIT Roorkee, Uttarakhand, India, Feb. 23- March 05, 2015
- “Chiral and Wobbling motion in atomic nuclei”, Conference on "Frontiers in Gamma-Ray Spectroscopy", Variable Energy Cyclotron Centre, Kolkata, India, Feb. 18 - 20, 2015
- “Spontaneous Fission Studies using the Adiabatic Time-Dependent HFB Model”, NUCLEI, SciDAC Meeting, Santa Fe, NM, USA, June 15– 19, 2014
- “Density Functional Theory”, KU-IUCAA Workshop on Astronomical Techniques and Science with Virtual Observatories , University of Kashmir, Srinagar, Sept. 2013

- “Mysterious Quantum World”, INSPIRE programme, University of Kashmir, Srinagar, Sept. 2013 and INSPIRE programme, NIT, Srinagar, Nov. 2013
- “Density Functional Theory”, Workshop on Parallel Computing for Scientific Applications, Inter-University Accelerator Centre (IUAC) New Delhi, March 01-02, 2013.
- Series of “Lectures on Density Functional Theory”, DST-SERC School organized by Department of Physics, IIT Roorkee, Uttarakhand, India, Feb 06-24, (2012)
- “Modern Density Functional Methods for Nuclear Structure and Dynamics Study”, NUSTAR INDIA Collaborative Meeting, Tata Institute of Fundamental Research, Colaba, Mumbai, India, Feb. 21-23, 2011
- “Density Functional Theory”, Interaction Meeting on Theoretical Nuclear Physics, IIT Roorkee, India, Sept. 3-5, 2010
- “Adiabatic Time-dependent Hartree-Fock-Bogoliubov Approach to Fission”, Workshop on Nuclear Structure and Reactions, Oak Ridge Laboratory, USA, Nov. 16, 2009
- “ATDHFB Collective Inertia and Fission Paths at Finite temperature”, 3rd LACM-EFES-JUSTIPEN Workshop, Oak Ridge National Laboratory, USA, February 23-25, 2009
- “Symmetry Projection in Density Functional Theory”, Workshop on Effective Field Theories and the Many-Body Problem at INT, University of Washington, Seattle, USA, June 2009
- “Microscopic study of Collective Inertia and Fission Paths”, LANL-LLNL Fission Workshop, Los Alamos National Laboratory, USA, Feb. 3-4, 2009
- “Dynamics of Spontaneous Fission”, 5th ANL/MSU/JINA/INT FRIB Workshop on Bulk Nuclear Properties, Michigan State University, USA, November 19-22, 2008

Publications in Peer-Reviewed Journals:

Most of the publications are in the leading International Journals with impact factors exceeding three. Five publications have citations more than hundred with one of them about 455.

1. “Quasiparticle and γ -band structures in ^{156}Dy , ” S Jehangir, G H Bhat, J A Sheikh, S Frauendorf, S N T Majola, P A Ganai, and J. F. Sharpey-Schafer, Phys. Rev. C97 (2018)

014310

2. "Projected Shell Model Description of Positive Parity Band of ^{130}Pr Nucleus," Suram Singh, Amit Kumar, Dhanvir Singh, Chetan Sharma, Arun Bharti, G. H. Bhat, and J. A. Sheikh, *Brazilian Journal of Phys.* 48 (2018) 85
3. "Intrinsic properties of high-spin band structures in triaxial nuclei", S Jehangir, G H Bhat, J A Sheikh, R Palit and P A Ganai, *Nuclear Physics A* 968 (2017) 48
4. "Structure and symmetries of odd-odd triaxial nuclei", R Palit, G H Bhat, and J A Sheikh, *Eur. Phys. J. A* 53 (2017) 90
5. "Band Structures in ^{101}Pd ", V Singh, S Sihotra, G H Bhat, J A Sheikh et al., *Phys. Rev. C* 95 (2017) 064312
6. "Evolution of triaxial shapes at large isospin: Rh isotopes", A Navin, M Rejmund, S Bhattacharyy, R Palit, G H. Bhat, J A Sheikh et al, *Phys. Lett. B* 767 (2017) 480
7. "Possible very anharmonic one and two phonon γ -vibrational bands in ^{103}Mo ", J Hunter, E H Wang, C J Zachary, J H Hamilton, A V Ramayya, G H Bhat, J A Sheikh et al., *International Journal of Modern Physics E* Vol. 26, No. 5 (2017) 1750030
8. "One and two phonon γ -vibrational bands in neutron rich ^{107}Mo ", J Marcellino, E H Wang, C J Zachary, G H Bhat, J A Sheikh et. al., *Phys. Rev. C* 96 034319 (2017)
9. "Study of odd mass 115–125Sb isotopes with the projected shell model calculations", Dhanvir Singh, Arun Bharti, Amit Kumar, Suram Singh, G H Bhat and J A Sheikh, *International Journal of Modern Physics E* Vol. 26, No. 6 (2017) 1750041
10. "Rotational structure of odd-proton $^{103,105,107,109,111}\text{Tc}$ isotopes", Amit Kumar, Dhanvir Singh, Suram Singh, Arun Bharti, G H Bhat and J A Sheikh, *Eur. Phys. J. A* 53, 200 (2017).
11. "Investigation of the structure of core-coupled odd-proton Copper nuclei in fp_g valence space using the Projected Shell Model", Anuradha Gupta, Suram Singh, Arun Bharti, S K Khosa, G H Bhat and J A Sheikh, *Eur. Phys. J. A* (2017) 53
12. "Structure of dipole bands in doubly odd ^{102}Ag ", V Singh, S Sihotra, SS Malik, GH Bhat, R Palit, J A Sheikh, S Kumar, N Singh, K Singh, J Goswamy, J Sethi, S Saha, T Trivedi, D Mehta, *Phys. Rev. C* 94 (2016) 044320
13. "Study of nuclear structure of odd mass 119-127 I nuclei in a phenomenological approach", Dhanvir Singh, Anuradha Gupta, Amit Kumar, Chetan Sharma, Suram Singh, Arun Bharti, S.K. Khosa, G.H. Bhat and J.A. Sheikh, *Nucl. Phys. A* 952 (2016) 41

14. "Unified description of rotational-, gamma- and quasiparticle-band structures in neutron-rich mass ~ 110 region", G.H. Bhat, J.A. Sheikh, Y. Sun and R. Palit, Nucl. Phys. A947 (2016) 127
15. "Observation of a gamma band based on a two-quasiparticle configuration in ^{70}Ge ", M. KumarRaju, P.V. Madusudhana Rao, S. Muralithar, R. P. Singh, G.H. Bhat, J. A. Sheikh, S.K. Tandel, P. Sugathan, T. Seshi Reddy, B.V. Thirumala Rao and R.K. Bhowmik, Phys. Rev. C 93 (2016) 034317
16. "Microscopic nuclear structure models and methods : Chiral symmetry, Wobbling motion and gamma-bands", J.A. Sheikh, G.H. Bhat, W.A. Dar, S. Jehangir and P.A. Ganai, Phys. Scr. 91, (2016) 063015 (19pp)
17. "Quasi-particle structure of proton-hole cobalt isotopes", Anuradha Gupta, Preeti Verma, Suram Singh, Arun Bharti, S. K. Khosa, G. H. Bhat and J. A. Sheikh, Nucl. Phys. A941 (2015) 48
18. "Theoretical study of neutron-rich $107, 109, 111, 113$ Rh isotopes", A. Kumar, S. Singh, S.K. Khosa, A. Bharti, G. H. Bhat and J. A. Sheikh, Int. J. of Mod. Phys. E24 (2015) 1550076
19. "Theoretical study of triaxial shapes of neutron-rich Mo and Ru nuclei", C.L. Zhang, G.H. Bhat, W. Nazarewicz, J. A. Sheikh and Y. Shi, Phys. Rev. C 92 (2015) 034307
20. "Multidimensional Skyrme-Density-Functional study of the spontaneous fission of U 238", Sadhukhan, K. Mazurek, J. Dobaczewski, W. Nazarewicz, J. A. Sheikh, A. Baran, Acta Physica Polonica B46 (2015) 575
21. "High spin spectroscopy and shape evolution in Cd 105" M. Kumar Raju, D. Negi, S. Muralithar, R. P. Singh, J. A. Sheikh, G. H. Bhat, R. Kumar, Indu Bala, T. Trivedi, A. Dhal, K. Rani, R. Gurjar, D. Singh, R. Palit, B. S. Naidu, S. Saha, J. Sethi, R. Donthi, and S. Jadhav, Phys. Rev. C 91 (2015) 024319
22. "Microscopic study of doublet bands in odd-odd $A \approx 100$ nuclei", W. A. Dar, J. A. Sheikh, G. H. Bhat, R. Palit, R. N. Ali, S. Frauendorf, Nucl. Phys. A 933 (2015) 123
23. "Pairing-induced speedup of nuclear spontaneous fission", J. Sadhukhan, J. Dobaczewski, W. Nazarewicz, J. A. Sheikh, A. Baran, Phys. Rev. C 90 (2014) 061304
24. "Triaxial projected shell model description of high-spin band-structures in 103,105 Rh isotopes", G. H. Bhat, J. A. Sheikh, W.A. Dar, S. Jehangir, R. Palit, P.A. Ganai, Phys. Lett. B 738 (2014) 218

25. "Excitation-energy dependence of fission in the mercury region", J. D. McDonnell, W. Nazarewicz, J. A. Sheikh, A. Staszczak, M. Warda, Phys. Rev. C 90 (2014) 021302
26. "Exploring the origin of nearly degenerate doublet bands in ^{106}Ag ", N. Rather, P. Datta, S. Chattopadhyay, S. Roy, S. Rajbanshi, A. Goswami, G. H. Bhat, J. A. Sheikh, R. Palit, S. Pal, S. Saha, J. Sethi, S. Basu, P. Singh and H. C. Jain, Phys. Rev. Lett. 112 (2014) 202503
27. "Isospin-invariant Skyrme energy-density-functional approach with axial symmetry", J.A. Sheikh, N. Hinohara, J. Dobaczewski, T. Nakatsukasa, W. Nazarewicz and K. Sato, Phys. Rev. C 89(2014) 054317
28. "Nature of gamma-deformation in Ge and Se nuclei and the triaxial projected shell model description", G. H. Bhat, W. A. Dar, J. A. Sheikh and Y. Sun, Phys. Rev. C 89 (2014) 014328
29. "Investigation of doublet-bands in $^{124,126,130,132}\text{Cs}$ odd-odd nuclei using triaxial projected shell model approach", G.H.Bhat, R. N. Ali, J. A. Sheikh and R. Palit, Nucl. Phys. A 922 (2014) 50
30. "Spontaneous fission lifetimes from the minimization of self-consistent collective action ", Sadhukhan, K. Mazurek, A. Baran, J. Dobaczewski, W Nazarewicz and J. A. Sheikh, Phys. Rev. C 88 (2013) 064314
31. "Projected Shell Model Study of Quasiparticle Structure of Arsenic Isotopes", Preeti Verma, Chetan Sharma, Suram Singh, Arun Bharti, S. K. Khosa, G. H. Bhat and J. A. Sheikh, Nucl. Phys. A 918 (2013) 1
32. "Mixing effects on K-forbidden transition rates from the 6^+ isomers in the N=104 isotones", F. Q. Chen, Y. Sun, P. M. Walker, G. D. Dracoulis, Y. R. Shimizu and J. A. Sheikh, Journal of Physics G 40 (2013) 015101
33. "Structure of nearly degenerate dipole bands ^{108}Ag ", J. Sethi, R. Palit, S. Saha, T. Trivedi, G. H. Bhat, J. A. Sheikh, P. Datta, J. J. Carroll, S. Chattopadhyay, R. Donthi, U. Garg, S. Jadhav, H. C. Jain, S. Karamian, S. Kumar, M. S. Litz, D. Mehta, B. S. Naidu, Z. Naik, S. Sihotra and P. M. Walker, Phys. Lett. B 725 (2013) 8
34. "Third minimum in thorium and uranium isotopes in a self-consistent theory", J. D. McDonnell, W. Nazarewicz and J. A. Sheikh, Phys. Rev. C 87 (2013) 054327
35. "Triaxial projected shell model study of the rapid changes in B(E2) for $^{180-190}\text{Pt}$ isotopes", G. H. Bhat, J. A. Sheikh, Y. Sun and U. Garg, Phys. Rev. C 86 (2012) 047307
36. "Triaxial projected shell model study of chiral rotation in odd-odd nuclei", G.H. Bhat, J. A

- Sheikh and R. Palit, Phys. Lett. B 707 (2012) 250
37. "Solution of Skyrme-Hartree-Fock-Bogoliubov equations in the Cartesian deformed harmonic oscillator basis", N. Schunck, J. Dobaczewski, J. McDonnell, W. Satuła, J. A. Sheikh, A. Staszczak, M. Stoitsov and P. Toivanen, Computer Physics Communications, 183 (2012) 166
 38. "Particle-number projected Hartree-Fock-Bogoliubov study with effective shell model interactions", I. Maqbool, J. A. Sheikh, P.A. Ganai and P. Ring, Journal of Physics G 38 (2011) 045101
 39. "High-spin structure and multiphonon γ -vibrations in very neutron-rich ^{114}Ru ", E. Y. Yeoh, S. J. Zhu, J. H. Hamilton, K. Li, A. V. Ramayya, Y. X. Liu, J. K. Hwang, S. H. Liu, J. G. Wang, Y. Sun, J. A. Sheikh, G. H. Bhat, Y. X. Luo, J. O. Rasmussen, I. Y. Lee, H. B. Ding, L. Gu, Q. Xu, Z. G. Xiao and W. C. Ma, Phys. Rev. C 83 (2011) 054317
 40. "Quadrupole collective inertia in nuclear fission: cranking approximation", A. Baran, J. A. Sheikh, J. Dobaczewski and W. Nazarewicz, Phys. Rev. C 84 (2011) 054321
 41. "Mixing of quasiparticle excitations and gamma-vibrations in transitional nuclei" G.H. Bhat, J. A. Sheikh, Y.-X. Liu, F.-Q. Chen and Y. Sun, Phys. Rev. C 84 (2011) 054314
 42. "Multi-phonon γ -vibrational bands in odd-mass nuclei studied by triaxial projected shell model approach", J. A. Sheikh, G.H. Bhat, Y. Sun and R. Palit, Phys. Lett. B 688 (2010) 305
 43. "Lifetime measurement of high spin states in ^{75}Kr ", T. Trivedi, R. Palit, D. Negi, Z. Naik, Y.-C. Yang, Y. Sun, J. A. Sheikh, A. Dhal, M. K. Raja, A. Babu, S. Kumar, D. Choudhury, K. Maurya, G. Mahanto, R. Kumar, R. P. Singh, S. Muralithar, A. K. Jain, H. C Jain, S. C. Pancholi, R. K. Bhowmik and I. Mehrotra, Nucl. Phys. A 834 (2010) 72c
 44. "Fission barriers and neutron gas in compound superheavy nuclei" J. C. Pei, W. Nazarewicz, J. A. Sheikh and A. K. Kerman, Nucl. Phys. A 834 (2010) 381c
 45. "Multi-quasiparticle γ -band structure in neutron-deficient Ce and Nd isotopes", J. A. Sheikh, G.H. Bhat, R. Palit, Z. Naik and Y. Sun, Nucl. Phys. A 824 (2009) 58
 46. "Fission quadrupole mass parameters in HF+BCS and HFB methods", A. Baran, J. A. Sheikh, A. Staszczaka and W. Nazarewicz, Int. J. Mod. Phys. E 18 (2009) 1049
 47. "Adiabatic mass parameters for spontaneous fission", A. Baran, J. A. Sheikh and W. Nazarewicz, Int. J. Mod. Phys. E 18 (2009) 1054
 48. "Fission Barriers of Compound Superheavy Nuclei" J. C. Pei, W. Nazarewicz, J. A. Sheikh

- and A. K. Kerman, Phys. Rev. Lett. 102 (2009) 192501
49. “Systematic Study of Fission Barriers of Excited Superheavy Nuclei” J. A. Sheikh, W. Nazarewicz and J.C. Pei, Phys. Rev. C (Rapid Comm.) 80 (2009) 011302(R)
 50. “Temperature and angular momentum dependence of the quadrupole deformation in sd-shell”, P.A.Ganai, J. A. Sheikh, I. Maqbool and R.P. Singh, Pramana J. of Phys. 73 (2009) 839
 51. “Shape evolution of highly deformed ^{75}Kr nucleus through Doppler shift attenuation method”, T. Trivedi, R. Palit, D. Negi, Z. Naik, Y.-C. Yang, Y. Sun, J.A. Sheikh, A. Dhal, M. K. Raja, A. Babu, S. Kumar, D. Choudhury, K. Maurya, G. Mahanto, R. Kumar, R. P. Singh, S. Muralithar, A. K. Jain, H. C Jain, S. C. Pancholi, R. K. Bhowmick and I. ehotra, Phys. Rev. C 80 (2009) 047302
 52. “Shell model study of pairing correlations”, J. A. Sheikh, P.A. Ganai, R.P. Singh, R.K. Bhowmic and S. Frauendorf, Phys. Rev. C 77 (2008) 014303
 53. “ γ - vibrational states in superheavy nuclei”, Y. Sun, G.L. Long, F. Al- Khudair and J.A. Sheikh, Phys. Rev. C 77 (2008) 044307
 54. “Triaxial projected shell model study of γ -vibrational bands in even-even Er isotopes”, J. A. Sheikh, G.H. Bhat, Y. Sun, G.B. Vakil and R. Palit, Phys. Rev. C77 (2008) 034313
 55. “Abrupt change of rotation axis in ^{109}Ag ” P. Datta, S. Roy, S. Pal, S. Chattopadhyay, S. Bhattacharya, A. Goswami, M. Saha Sarkar, J. A. Sheikh, Y. Sun, P. V. Madhusudana Rao, R. K. Bhowmik, R. Kumar, N. Madhavan, S. Muralithar, R. P. Singh, H.C. Jain, P.K. Joshi and Amita, Phys. Rev. C (Rapid Comm.) 78 (2008) 021306 ®
 56. . “Systematics of g factors of 2_1^+ states in even-even rare earth nuclei from Gd to Pt: A microscopic description by the projected shell model”, B.A. Bian, Y.M. Di, G.L. Long, Y. Sun, J. Zhang and J. A. Sheikh, Phys. Rev. C 75 (2007) 014312
 57. “Microscopic study of yrast band structures in $^{66-72}\text{Ge}$ isotopes”, P.A. Dar, R. Devi, S.K. Khosa and J. A. Sheikh, Phys. Rev. C 75 (2007) 054315
 58. “Rotational structures in the ^{125}Cs nucleus”, K. Singh, S. Sihotra, S.S. Malik, J. Goswamy, D. Mehta, N. Singh, R.P. Singh, S. Muralithar, E.S. Paul, J. A. Sheikh and C.R. Praharaj, Eur. Phys. J. A 27 (2006) 321
 59. “Re-appearance of the pairing correlations at finite temperature”, J.A. Sheikh, R. Palit and S. Frauendorf, Phys. Rev. C (Rapid Comm.) 72 (2005) 041301(R)
 60. “Chaos and rotational damping in particle-rotor model”, J. A. Sheikh and Y. Sun, Nucl.

Phys. A 733 (2004) 67

61. “Collective excitations and shape changes in ^{80}Y ”, R. A. Kaye, O. Grubor-Uros-ovic, S. L. Tabor, J. Dring, Y. Sun, R. Palit, J. A. Sheikh, T. Baldwin, D. B. Campbell, C. Chandler, M. W. Cooper, S. M. Gerbick, C. R. Hoffman, J. Pavan, L. A. Riley, and M. Wiedeking, Phys. Rev. C 69 (2004) 064314
62. “Projected shell model study of odd-odd f –p–g shell proton-rich nuclei”, R. Palit, J. A. Sheikh, Y. Sun and H.C. Jain, Phys. Rev. C 67 (2003) 014321
63. “Temperature-induced pair correlations in clusters and nuclei”, S. Frauendorf, N.K. Kuzmenko, V.M. Mikhajlov and J. A. Sheikh, Phys. Rev. B 68 (2003) 024518
64. “Nuclear magnetic dipole properties and the triaxial deformation”, Y. Sun, J. A. Sheikh and G.L. Long, Phys. Lett. B 533 (2002) 253
65. “In-Band and Inter-Band B(E2) Values within the Triaxial Projected Shell Model”, P. Boutachkov, A. Aprahamian, Y. Sun, J. A. Sheikh and S. Frauendorf, Eur. Phys. J. A 15 (2002) 455
66. “Pairing-correlations and particle-number projection methods”, J. A. Sheikh, P. Ring, E. Lopes and R. Rossignoli, Phys. Rev. C 66 (2002) 044318
67. “Projected shell model study for the yrast-band structure of the proton rich mass-80 nuclei”, R. Palit, J. A. Sheikh, Y. Sun and H.C. Jain, Nucl. Phys. A 686 (2001) 141
68. “Shape co-existence in ^{72}Se ”, R. Palit, H.C. Jain, P.K. Joshi, J. A. Sheikh and Y. Sun, Phys. Rev. C 63 (2001) 024313
69. “Chaos and isospin symmetry breaking in rotational nuclei”, J. A. Sheikh, N. Rowley and A.T. Kruppa, Nucl. Phys. A 694 (2001) 233
70. “On the solution of the number-projected Hartree-Fock-Bogoliubov equations”, J. A. Sheikh, E. Lopes and P. Ring, Phys. Atom. Nucl. 64 (2001) 477
71. “Transition quadrupole moments in γ -soft nuclei and the triaxial projected shell model”, J. A. Sheikh, Y. Sun and R. Palit, Phys. Lett. B 507 (2001) 115
72. “Consequences of neutron-proton pairing correlations for the rotational motion of the N = Z nucleus ^{72}Kr ”, N. S. Kelsall, R. Wadsworth, A. N. Wilson, P. Fallon, A. O. Macchiavelli, R. M. Clark, D. G. Sarantites, D. Seweryniak, C. E. Svensson, S. M. Vincent, S. Frauendorf, J. A. Sheikh and G. C. Ball, Phys. Rev. C 64 (2001) 024309
73. “Anomalous rotational-alignment in N=Z nuclei and residual neutron- proton interaction”, Y. Sun and J.A. Sheikh, Phys. Rev. C (Rapid Comm.) 64 (2001) 031302(R)

74. "High-spin structure of yrast band in ^{72}Kr ", P.K. Joshi, R. Palit, H.C. Jain, S. Nagaraj and J. A. Sheikh, *Pramana Journal of Physics* 57 (2001) 185
75. "Structure of $^{72,74}\text{Se}$ at high spin", R. Palit, H.C. Jain, P.K. Joshi and J.A. Sheikh, *Pramana Journal of Physics* 57 (2001) 191
76. "Moments of inertia for multi-quasiparticle configurations", S. Frauendorf, K. Neegard, J. A. Sheikh and P.M. Walker, *Phys. Rev. C* 61 (2000) 064324
77. "Symmetry-projected Hartree-Fock-Bogoliubov Equations", J.A. Sheikh and P. Ring, *Nucl. Phys. A* 665 (2000) 71
78. "Symmetry breaking by proton-neutron pairing", S. Frauendorf and J.A. Sheikh, *Physica Scripta* T88 (2000) 162
79. "Multiphonon γ -vibrational bands and the triaxial projected shell model", Y. Sun, K. Hara, J. A. Sheikh, J.G. Hirsch, V. Velazquez and M. Guidry, *Phys. Rev. C* 61 (2000) 064323
80. "Rotational and multi-quasiparticle excitations in ^{183}Re ", C.S. Purry, P.M. Walker, G.D. Dracoulis, S. Bayer, A.P. Byrne, T. Kibedi, F.G. Kondov, C.J. Pearson, J. A. Sheikh and F.R. Xu, *Nucl. Phys. A* 672 (2000) 54
81. "Isovector and isoscalar superfluid phases in rotating nuclei", J. A. Sheikh and R. Wyss, *Phys. Rev. C (Rapid Comm.)* 62 (2000) 051302
82. "Observation of the $Z=N+1$ nuclei ^{77}Y , ^{79}Zr and ^{83}Mo ", Z. Janas, C. Chandler, B. Blank, P. H. Regan, A. M. Bruce, W. N. Catford, N. Curtis, S. Czajkowski, Ph. Dessagne, A. Fleury, W. Gelletly, J. Giovinazzo, R. Grzywacz, M. Lewitowicz, C. Longour, C. Marchand, Ch. Mieh, N. A. Orr, R. D. Page, C. J. Pearson, M. S. Pravikoff, A. T. Reed, M. G. Saint-Laurent, J. A. Sheikh, S. M. Vincent, R. Wadsworth, D. D. Warner, and J. S. Winfield, *Phys. Rev. Lett.* 82 (1999) 295
83. "Rotational alignment near $N=Z$ and proton-neutron correlations" S. Frauendorf and J. A. Sheikh, *Phys. Rev. C* 59 (1999) 1400
84. "Cranked shell model and isospin symmetry near $N=Z$ " S. Frauendorf and J.A. Sheikh, *Nucl. Phys. A* 645 (1999) 509
85. "Triaxial projected shell model approach", J. A. Sheikh and K. Hara, *Phys. Rev. Lett.* 82 (1999) 3968
86. "Neutron-proton pairing, Coulomb effects and shape co-existence in odd-odd $N=Z$ ^{46}V ", C.D. O'Leary, M.A. Bentely, D.E. Appelbe, R.A. Bark, D.M. Cullen S. Erturk, A. Maj, J. A. Sheikh and D.D. Warner, *Phys. Lett. B* 459 (1999) 73

87. "Gamma-ray spectroscopy of high-spin states near $N = Z$ in the $f_{7/2}$ shell", M.A. Bentely, C.D. O'Leary, D.E. Appelbe, R.A. Bark, D.M. Cullen S. Erturk, A. Maj, G. Martinez-Pinedo, A. Poves, J. A. Sheikh and D.D. Warner, *Acta Physica Polonica B* 30 (1999) 475
88. "Low and high spin states in rare earth nuclei - a theoretical study using the projected shell model", Y. Sun, M. Guidry, V. Velazquez, J.G. Hirsch, J. A. Sheikh and K. Hara, *Rev. Mex. Fis.* 45 S2 (1999) 74
89. "Nuclear properties in early stages of stellar collapse with the relativistic mean field approach", F. K. Sutaria, A. Ray, J.A. Sheikh and P. Ring, *Astron. Astrophys.* 349 (1999) 135
90. "Projected shell model analysis of tilted rotation", J. A. Sheikh, Y. Sun and P.M. Walker, *Phys. Rev. C (Rapid Comm.)* 57 (1998) 26(R)
91. "Band structures and alignment properties in ^{74}Se ", J. Doring, G.D. Johns, M.A. Riley, S.L. Tabor, Y. Sun and J. A. Sheikh, *Phys. Rev. C* 57 (1998) 2912
92. "Multi-quasiparticle potential-energy surfaces", F. Xu, P.M. Walker, J. A. Sheikh and R. Wyss, *Phys. Lett. B* 435 (1998) 257
93. "Rotational dependence of coulomb energy differences", J. A. Sheikh, D.D. Warner and P. Van Isacker, *Phys. Lett. B* 443 (1998) 16
94. "High spin structure of ^{82}Zr ", S.D. Paul, H.C. Jain and J. A. Sheikh, *Phys. Rev. C* 55 (1997) 1563
95. "Identification of excited states in the $T_Z = 1/2$ nucleus ^{75}Rb : The quest for experimental signature of collective neutron-proton correlations", C.J. Gross, D. Rudolph, W. Satula, J. Alexander, P.J. Coleman-Smith, C. Baktash, D.M. Cullen, R. A. Cunningham, J.D. Garrett, W. Gelletly, F. Hannachi, A. Harder, M.K. Kabadi-yski, K.P. Leib, C.J. Lister, W. Nazarewicz, H.A. Roth, D.G. Sarantites, J. Sheikh, J. Simpson, O. Skeppstedt, B.J. Varley, and D.D. Warner, *Phys. Rev. C (Rapid Comm.)* 56 (1997) 591(R)
96. "Relativistic mean field calculations of nuclear properties in early stages of stellar collapse", F. K. Sutaria, J.A. Sheikh and A. Ray, *Nucl. Phys. A* 621 (1997) 375c
97. "High-Spin Spectroscopy Near the Deformed $N=Z=38$ Shell Gap : The Light Rb-Isotopes", K. P. Lieb, A. Harder, D. Rudolph, F. Donau, W. Gelletly, C. J. Gross, A. Jungclaus and J. A. Sheikh, *Prog. Part. Nucl. Phys.* 38 (1997) 101
98. "Identification of $T = 0$ and $T = 1$ bands in the $N = Z = 37$ nucleus ^{74}Rb ", D. Rudolph, C.J. Gross, J.A. Sheikh, D.D. Warner, I.G. Bearden, R.A. Cunningham, D. Fol-tescu, W.

- Gelletly, F. Hannachi, A. Harder, M.K. Kabadiyski, K.P. Leib, C.J. Lister, H.A. Roth, D.G. Sarantites, J. Simpson, O. Skeppstedt and B.J. Varley, Phys. Rev. Lett. 76 (1996) 376
99. “Transition quadrupole moments in ^{84}Zr ”, S. Chattopadhyay, H.C. Jain and J.A. Sheikh, Phys. Rev. C 53 (1996) 1001
100. “Ground state properties of the exotic Si, S, Ar and Ca isotopes”, T.R. Werner, J.A. Sheikh, M. Misu, W. Nazarewicz, J. Rikowska, K. Heeger, A.S. Umar and M.R. Strayer, Nucl. Phys. A 597 (1996) 327
101. “Lifetime and g-factor measurement of the 11^- isomer in ^{92}Tl ”, A.A. Tulapurkar, P. Das, S.N. Mishra, R.G. Pillay and J.A. Sheikh, Phys. Rev. C 54 (1996) 2904
102. “Shape coexistence in ^{185}Tl and ^{187}Tl - investigation of the deformed minima”, G.J. Lane, G.D. Dracoulis, A.P. Byrne, P.M. Walker, A.M. Baxter, J.A. Sheikh and W. Nazarewicz, Nucl. Phys. A 586 (1995) 316
103. “High spin structure of ^{82}Y ”, S.D. Paul, H.C. Jain, S. Chattopadhyay, M.L. Jhingan and J.A. Sheikh, Phys. Rev. C 51 (1995) 2959
104. “Deformations for the light Xe - isotopes”, S. Raman, J.A. Sheikh and K.H. Bhatt, Phys. Rev. C 52 (1995) 1380
105. “Tilted axis cranking analysis in a simple model”, J.A. Sheikh, Phys. Rev. C 52 (1995) 3061 “Nuclear g - factor measurement for the $(21/2)^+$ isomeric state in ^{89}Nb ”, V.V. Krishnamurthy, S.N. Mishra, S. H. Devare and J.A. Sheikh, Phys. Rev. C 49 (1994) 705
106. “Nuclear shell structure at particle drip lines”, J. Dabaczewski, I. Hamamoto, W. Nazarewicz and J.A. Sheikh, Phys. Rev. Lett. 72 (1994) 981
107. “High spin structure of ^{84}Y ”, S. Chattopadhyay, H.C. Jain, S.D. Paul, J.A. Sheikh and M.L. Jhingan, Phys. Rev. C 49 (1994) 116
108. “Identical bands in ^{77}Sr , ^{78}Sr , and ^{78}Rb : Evidence for a very good spectator orbital”, C.J. Gross, C. Baktash, D.M. Cullen, R.A. Cunningham, J.D. Garrett, W. Gelletly, F. Hannachi, A. Harder, M.K. Kabadiyski, K.P. Leib, C.J. Lister, W. Nazarewicz, H.A. Roth, D. Rudolph, D.G. Sarantites, J.A. Sheikh, J. Simpson, O. Skeppstedt, B.J. Varley, and D.D. Warner, Phys. Rev. C (Rapid Comm.) 49 (1994) R580(R)
109. “Deformed $i_{13/2}$ bands and prolate - oblate shape coexistence in ^{185}Tl and ^{187}Tl ”, G.J. Lane, G.D. Dracoulis, A.P. Byrne, P.M. Walker, A.M. Baxter, R.G. Henry, D. Nisius, C.N. Davids, T. Lauritsen, H. Penttila, D.J. Henderson, J.A. Sheikh and W. Nazarewicz, Phys. Lett. B 324 (1994) 14

110. “Spectroscopy of ^{95}Ru at high spins”, S.S. Ghugre, S.B. Patel, M. Gupta, R.K. Bhowmik and J.A. Sheikh, Phys. Rev. C 50 (1994) 1346
111. “Microscopic aspects of nuclear deformation”, T.R. Werner, J. Dobaczewski, M.W. Guidry, W. Nazarewicz and J.A. Sheikh, Nucl. Phys. A 578 (1994) 1
112. “Consequences of neutron - proton interactions on backbending”, S. Frauendorf, J.A. Sheikh and N. Rowley, Phys. Rev. C 50 (1994) 196
113. “Shape coexistence around ^{44}S : the deformed $N = 28$ region”, T. Werner, J.A. Sheikh, W. Nazarewicz, M.R. Strayer, A.S. Umar and M. Misu, Phys. Lett. B 333 (1994) 303
114. “Nuclear structure at particle drip lines”, J. Dobaczewski, I. Hamamoto, W. Nazarewicz and J.A. Sheikh, Acta Physica Polonica B 25 (1994) 541
115. “Exotic nuclei in a relativistic mean field approach”, J.A. Sheikh and P. Ring, Phys. Rev. C (Rapid Comm.) 47 (1993) R1850 ®
116. “Rotational structure and signature inversion in odd-odd ^{84}Y ”, S. Chattopadhyay, H.C. Jain, J.A. Sheikh, Y.K. Agarwal and M.L. Jhingan, Phys. Rev. C (Rapid Comm.) 47 (1993) R1 ®
117. “Relativistic mean field description of the even-even proton drip line nuclei near $Z=34$ ”, J.A. Sheikh, Y.K. Gambhir and J.P. Maharana, Phys. Rev. C 48 (1993) 192
118. “High spin states in ^{93}Tc ”, S.S. Ghugre, S.B. Patel, M. Gupta, R.K. Bhowmik and J.A. Sheikh, Phys. Rev. C 45 (1993) 87
119. “Non-unitary nature of the Dyson boson mapping revisited”, J.A. Sheikh and M. Gupta, Phys. Rev. C 47 (1993) 2998
120. “High spin states of ^{91}Mo and ^{89}Nb ”, P. Singh, R.G. Pillay, J.A. Sheikh and H.G. Devare, Phys. Rev. C 48 (1993) 1609
121. “Ground state properties of the exotic Ba - isotopes”, J.A. Sheikh, Phys. Rev. C 48 (1993) 476
122. “Identification of ^{183}Hg : Identical bands in $^{183,185}\text{Hg}$ ”, K.S. Bindra, A.V. Ramayya, W.C. Ma, B.R.S. Babu, J.H. Hamilton, L. Chaturvedi, J. Kormicki, C.N. Davids, I. Ahmad, I.G. Bearden, M.P. Carpenter, W. Chung, D. Henderson, R.G. Henry, R.V.F. Janssens, T.L. Khoo, T. Lauritsen, Y. Liang, H. Penttila, F. Soramel, C. Baktash, W. Nazarewicz, J.A. Sheikh, Phys. Lett. B 318, (1993) 41
123. “Spectroscopy of high spin states in ^{92}Mo and ^{90}Mo ”, P. Singh, R.G. Pillay, J. A. Sheikh and H.G. Devare, Phys. Rev. C 45 (1992) 2161

124. "Shape coexistence and extreme deformations near $A=80$ ", J.P. Maharana, Y.K. Gambhir, J. A. Sheikh and P. Ring, Phys. Rev. C (Rapid Comm.) 46 (1992) R1163 (R)
125. "Microscopic analysis of high-spin band structures in ^{173}Os ", C.R. Praharaj and J.A. Sheikh, J. Phys. G: Nucl. Phys. 17 (1991) L33
126. "Broken pair approach to rotating nuclei : Formalism", J. A. Sheikh, Phys. Rev. C 43 (1991) 1733
127. "Neutron-proton interactions in the mass-80 region", J. A. Sheikh, N. Rowley, M.A. Nagarajan and H.G. Price, Phys. Rev. Lett. 64 (1990) 376
128. "Cranked-deformed-shell-model for neutron-proton systems weak-coupling calculations", J.A.Sheikh, N. Rowley and M.A. Nagarajan, Phys. Lett. B 240 (1990) 11
129. "Coulomb displacement energies and bandcrossing phenomena", J. A. Sheikh, P.Van Isacker, D.D. Warner and J.A. Cameron, Phys. Lett. B 252 (1990) 314
130. "Applicability of the truncation schemes in the cranked deformed shell model approach", J. A. Sheikh, N. Rowley and M. A. Nagarajan, Phys. Rev. C 42 (1990) 787
131. "High spin band structures in ^{161}Lu : projected Hartree Fock analysis", J. A. Sheikh, A.K.Rath and C.R. Praharaj, J. Phys. G: Nucl. Phys. 16 (1990) L275
132. "Spectroscopy of ^{20}Ne and ^{24}Mg nuclei in the interacting boson model including g-bosons", Y. D. Devi, V. K. B. Kota and J. A. Sheikh, Phys. Rev. C 39 (1989) 2057
133. "Intrinsic basis function in the Dyson boson mapping", J. A. Sheikh, Phys. Rev. C 39 (1989) 1641
134. "Cranked-shell model calculations in a truncated space", J. A. Sheikh, M.A. Nagarajan, N. Rowley and K.F. Pal, Phys. Lett. B 223 (1989) 1
135. "Fermion calculations in the boson space using the Dyson boson mapping", J. A. Sheikh, Phys. Rev. C 37 (1988) 1295
136. "An angular momentum analysis of symmetric products of paired nucleon states", J. A. Sheikh, J. Sita and C. R. Sarma, J. Math. Phys. (New York) 28 (1987) 751
137. "Spurious components in the ideal boson states", J. A. Sheikh, Phys. Rev. C 36 (1987) 848
138. "Effect of the variation of the single particle energies in the structure of $N=82$ isotones", Y. K.Gambhir and J. A. Sheikh, Phys. Rev. C 33 (1986) 2188
139. " Analysis of the truncation schemes for the physical boson states with Dyson description", J. A. Sheikh and Y.K. Gambhir, Phys. Rev. C 34 , (1986) 2344

140. “Boson basis realization for the shell model fermion problem”, Y. K. Gambhir, R.S. Nikam, C.R. Sarma and J.A. Sheikh, *J. Math. Phys. (New York)* 26 (1985) 2067
141. “Physical boson basis states in the boson expansion theories”, Y. K. Gambhir, J.A. Sheikh, P. Ring and P. Schuck, *Phys. Rev. C* 31 (1985) 1519

Proceedings of International Conferences/Workshops :

1. “Multi-phonon γ -vibrational bands in $^{103-108}\text{Mo}$ and $^{103,105}\text{Nb}$, chiral vibrations in $^{104,106}\text{Mo}$, and octupole correlations in $^{146,147}\text{La}$, E. H. Wang”, J. H. Hamilton, C. J. Zachary, A. V. Ramayya, J. M. Eldridge, G.H. Bhat, J. A. Sheikh, R. N. Ali, A. A. Wani A. C. Dai, W. Y. Liang, F. R. Xu, J. K. Hwang, Y. X. Luo, *Proceedings of the International Symposium on Exotic Nuclei International Symposium on Exotic Nuclei EXON-2016 Kazan, Russia, 4 10 September 2016*
2. “Spectroscopy of the low-lying states near the high spin isomer in ^{108}Ag ”, J. Sethi, R. Palit, S. Saha, T. Trivedi, G. H. Bhat, J. A. Sheikh et al., *Acta Physica Polonica B* Vol. 46 (2015).
3. “Study of the level structure of ^{108}Ag ”, J. Sethi, R. Palit, S. Saha, T. Trivedi, G.H. Bhat, J.A. Sheikh, P. Datta, J.J. Carroll, S. Chattopadhyay, R. Donthi, U. Garg, S. Jadhav, H.C. Jain, S. Karamian, S. Kumar, M.S. Litz, D. Mehta, B.S. Naidu, Z. Naik, S. Sihotra and P.M. Walker, *European Physical Journal, Web of Conferences*, 66 (2014) 02097
4. “Low-lying states near the long lived isomer in ^{108}Ag ”, J. Sethi, R. Palit, S. Saha, T. Trivedi, G. H. Bhat, J. A. Sheikh et al., *Zakopane Conference on Nuclear Physics “Extremes of the Nuclear Landscape” August 31 September 7, 2014, Zakopane, Poland*
5. “Isospin Invariant Skyrme Energy Density Functional Approach with Axial Symmetry”, J. A. Sheikh, W. Nazarewicz and N. Hinohara, *International Symposium on Nuclear Physics, BARC*, 58 (2013) 128
6. “Nature of chiral symmetry in ^{134}Pr nucleus”, G. H. Bhat, J. A. Sheikh, W. A. Dar, and R. Palit, *International Symposium on Nuclear Physics, BARC* 58 (2013) 88
7. “Multi-phonon -vibrational bands in ^{108}Mo nucleus”, G. H. Bhat, J. A. Sheikh, P. A. Ganai, Y. Sun, and R. Palit, *International Symposium on Nuclear Physics, BARC* 58 (2013) 80
8. “Triaxial projected shell model study of $^{178-186}\text{W}$ nuclei”, G. H. Bhat, J. A. Sheikh, P. A. Ganai, W.A. Dar, R. N. Ali, S. Jehangir, and P. Javid, *International Symposium on Nuclear*

- Physics, BARC 58 (2013)
9. "Triaxial projected shell model study of ^{109}Tc nucleus", W. A. Dar, R. N. Ali, S. Jehangir, P. Javid, P. A. Ganai, G. H. Bhat, and J. A. Sheikh, International Symposium on Nuclear Physics, BARC, 58 (2013)
 10. "Computing Heavy Elements", N. Schunck, A. Baran, M. Kortelainen, J. McDonnell, J. Moré, W. Nazarewicz, J. Pei, J. Sarich, J. Sheikh, A. Staszczak, M. Stoitsov and S.M. Wild, SciDAC 2011
 11. "Thermal fission barriers for ^{232}Th in two collective coordinates", J.D. McDonnell, W. Nazarewicz and J.A. Sheikh, Proc. Fourth International Workshop On Nuclear Fission And Fission Product Spectroscopy, Cadarache, France, May, 13-16, 2009. AIP Conference Proceedings 1175 (2009) 371
 12. "Fingerprints of the triaxial deformation on the electromagnetic transitions ", J.A. Sheikh and Y. Sun, American Physical Society Fall Meeting, 2002
 13. "Relativistic mean field calculations of nuclear properties in early stages of stellar collapse", F. K. Sutaria, J. A. Sheikh, and A. Ray, Proceedings of nuclei in the cosmos, 4th International Conference in nuclear astrophysics, 1996
 14. "High spin structure of ^{82}Rb ", S.D. Paul, H.C. Jain and J.A. Sheikh, International Conference on nuclear structure at the limits, Argonne, 1996, p. 91
 15. "T=0 pairing at the proton drip line", J.A. Sheikh and S. Frauendorf, International Conference on nuclear structure at the limits, Argonne, 1996, p. 130
 16. "Nuclei around ^{44}S ", T.R. Werner, J.A. Sheikh, W. Nazarewicz, M.R. Strayer, A.S. Umar and M. Misu, Proceedings of the International Conference on Physics from large γ -ray detector arrays, Berkeley, Aug 2-6, 1994, p. 160
 17. "Identification of excited states in the $T_z = 1/2$ nucleus ^{75}Rb ", C.J. Gross, C. Baktash, D.M. Cullen, J.D. Garrett and J.A. Sheikh, Proceedings of the International Conference on Physics from large γ -ray detector arrays, Berkeley, Aug 2-6, 1994, p. 133
 18. Shape coexistence in ^{185}Tl and ^{187}Tl - investigation of the deformed minima", G.J. Lane, G.D. Dracoulis, A.P. Byrne, P.M. Walker, A.M. Baxter, J.A. Sheikh and W. Nazarewicz, Proceedings of the International Conference on Physics from large γ -ray detector arrays, Berkely, Aug 2-6, 1994, p. 92
 19. "Nuclear structure at particle drip lines" J. Dobaczewski, I. Hamamoto, W. Nazarewicz and J.A. Sheikh, Proceedings of 23rd Summer School on Nuclear Physics, Piaski, 1994

20. "Identification of Bands in the $T_z = 1/2$ Nuclei ^{75}Rb and ^{77}Sr ", C.J. Gross, C. Baktash, D.M. Cullen, J.D. Garrett, J. Simpson, D.D. Warner, A. Harder, M.K. Kabadiyski, D. Rudolph, B. J. Varley, W. Gelletly, W. Nazarewicz, J.A. Sheikh, H. Roth, and O. Skeppstedt, American Physical Society Fall Meeting, 1993
21. "Microscopic Aspects of Nuclear Deformation", T. Werner, J. Dobaczewski, W. Nazarewicz, J.A. Sheikh and J. Skalski, American Physical Society Fall Meeting, 1993
22. "Relativistic mean field description of the exotic nuclear shapes and deformations near $Z=34$ ", Y.K. Gambhir, J.P. Maharana, J.A. Sheikh and P. Ring", Proceedings of 21st International Symposium on rapidly rotating nuclei, Tokyo, Japan, Oct.26-30, 1992
23. "Relativistic mean field description of exotic nuclei", Y.K. Gambhir, J.P. Maharana, J.A. Sheikh and P. Ring, Proceedings of 4th International Spring seminar on Nuclear Physics, the building blocks of Nuclear Structure, May 18-22, 1992, Amalfi, Italy
24. "Proton-neutron correlations in rotating nuclei", J.A. Sheikh, N. Rowley, M.A. Nagarajan and H.G. Price, Proceedings of 3rd International Spring seminar on Nuclear Physics, Understanding the variety of Nuclear Excitations, Ischia, Italy, 1990, World Scientific, p.451
25. "Neutron-proton pairing in a cranked, deformed single-j shell", J.A. Sheikh, N. Rowley, M. A. Nagarajan and H.G. Price, Proceedings of the International Conference on Spectroscopy of Heavy Nuclei, Crete, Greece, 1989, p.67
26. "Microscopic fermion calculations in boson space", Y.K. Gambhir and J. A. Sheikh, Proceedings of the 1st International Spring seminar on Nuclear Physics, Microscopic approaches to Nuclear Structure calculations", Sorrento, Italy, p.265
27. "Boson basis realization for fermion problem and the generalized Dyson boson mapping", Y.K. Gambhir, R.S. Nikam, C.R. Sarma and J.A. Sheikh, Proceedings of the International Conference on Nuclear Physics, BARC, Bombay, 32 (1984)

Proceedings of National Symposia :

1. "g-factor description of transitional nuclei", G. H. Bhat, S. Jahangir, J. A. Sheikh, and R. Palit Proceedings of the DAE Symp. on Nucl. Phys. 62 (2017)
2. "Transverse Wobbling: A New Collective Motion in Nuclei", S. Jahangir, G. H. Bhat, J. A. Sheikh, W. A. Dar, and R. Palit, Proceedings of the DAE Symp. on Nucl. Phys. 62 (2017)
3. "Candidate of chiral doublet bands in the odd-N ^{135}Nd nucleus", G. H. Bhat, J. A.

- Sheikh, S. Jahangir, W. A. Dar, and R. Palit, Proceedings of the DAE Symp. on Nucl. Phys. 62 (2017)
4. "Microscopic study of γ -deformation in atomic nuclei", S. Jahangir, G. H. Bhat, J. A. Sheikh, and R. Palit, Proceedings of the DAE Symp. on Nucl. Phys. 62 (2017)
 5. "High spin structure of ^{135}Pm ", F. S. Babra, R. Palit, S. Biswas, C.S. Palshetkar, Md. S. R. Laskar, Purnima Singh, S. Jadhav, B. S. Naidu, R. Donthi, A. Thomas, J.A. Sheikh, G. H. Bhat, and B. Das, Proceedings of the DAE Symp. on Nucl. Phys. 62 (2017)
 6. "Study of band structure in $^{78, 80}\text{Sr}$ using Triaxial Projected Shell Model", N. Behera, G. H. Bhat, Z. Naik, R. Palit, Y. Sun, and J. A. Sheikh, Proceedings of the DAE Symp. on Nucl. Phys. 62 (2017)
 7. "Rotational Band Structure in ^{101}Pd ", J. Rather, G. H. Bhat, V. Singh, S. Sihotra, D. Mehta, and J. A. Sheikh, Proceedings of the DAE Symp. on Nucl. Phys. 62 (2017)
 8. "Triaxial projected shell model study of γ - band structures in ^{160}Dy nucleus", G. H. Bhat, J. A. Sheikh, R. Palit, S. Frauendorf, RMCSAP, Feb. 26th-27th, p. 20, (2016)
 9. "Nature of γ -band staggering in $^{122-128}\text{Ba}$ nuclei", G. H. Bhat, J. A. Sheikh, and R. Palit, Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 61, 10 (2016)
 10. "Backbending phenomena in deformed even-even nuclei at $A=160$ mass region", G. H. Bhat, J. A. Sheikh, S. Jehangir, P. A. Ganai, R. Palit, Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 61, 6 (2016)
 11. "Triaxial projected shell model study of Multi-phonon γ -band in ^{165}Ho nucleus", G. H. Bhat, J. A. Sheikh, S. Jehangir, W. A. Dar, R. N. Ali, and P. A. Ganai, Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 60 (2015)
 12. "Study of γ -vibrational band structures in ^{105}Nb nucleus using triaxial projected shell model approach", W. A. Dar, J. A. Sheikh, G. H. Bhat, R. N. Ali, S. Jehangir, P. A. Ganai, T. A. Mir, and P. Javed, Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 60 (2015)
 13. "Low -lying states near $I \pi = 5 +$ Ground State in ^{102}Ag ", V. Singh¹, S. Sihotra, S. Kumar, K. Singh, N. Singh, J. Goswamy, J. Sethi, S. Saha, R. Palit, G. H. Bhat, J.A. Sheikh, and D. Mehta, Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 60 (2015)
 14. "High spin band structure of the chiral candidate ^{132}La and ^{134}Pr using Triaxial Projected Shell Model Approach", W. A. Dar, J. A. Sheikh, G. H. Bhat, Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 60 (2015)
 15. "Triaxial projected shell model study of transition probabilities for ^{134}Pr nucleus", G. H.

- Bhat, J. A. Sheikh, R.N. Ali, W. A. Dar, and R. Palit, Proceedings of the DAE Symp. on Nucl. Phys. 59, (2014)
16. "Chiral Structures in doubly odd nucleus ^{102}Ag ", V. Singh, S. Sihotra, G. H. Bhat, J. A. Sheikh et al., Proceedings of the DAE Symp. on Nucl. Phys. 59 (2014)
 17. "Nature of adiabatic crossing of degenerate doublet bands in ^{106}Ag ", G. H. Bhat, J. A. Sheikh, W. A. Dar, R.N. Ali, R. Palit, and S. Frauendorf, Proceedings of the DAE Symp. on Nucl. Phys. 59, (2014)
 18. "Structure of ^{108}Ag at low and medium spin", J Sethi, R Palit, S Saha, T Trivedi, G. H. Bhat, P. Datta, J. J. Carroll, S. Chattopadhyay, R. Donthi, S. Jadhav, H. C. Jain, S. Karamian, S. Kumar, M. S. Litz, D. Mehta, Z. Naidu, J. A. Sheikh, S. Sihotra, P. M. Walker¹⁰, Proceedings of the DAE Symposium on Nucl. Phys. 57 (2012) 288
 19. "Multi-phonon gamma vibrational bands in odd proton ^{107}Tc Nucleus", G. H. Bhat, W. A. Dar, J. A. Sheikh, P. A. Ganie, Proceedings of the DAE Symposium on Nucl. Phys (2012) 57
 20. "Quasi-particle band structures in transitional nuclei", G. H. Bhat, J. A. Sheikh, P. A. Ganie, Y. Sun, Proceedings of the DAE Symposium on Nucl. Phys., (2012)57
 21. "Study of chiral rotations in ^{126}Cs Nucleus", GH Bhat, J. A. Sheikh, R. Palit, PA Ganai, Proceedings of the DAE Symp. on Nucl. Phys 56, (2011) 238
 22. "Triaxial projected shell model study in gamma vibrational bands in odd- neutron ^{105}Mo nucleus" G. H. Bhat, J.A. Sheikh, P.A. Ganai, R Palit, Y Sun, Proceedings of the DAE Symposium on Nucl. Phys 56, 194 (2011)
 23. "Shape-coexistence study of even-even nuclei", I. Maqbool, P. A Ganai, JA Sheikh Proceedings of the International Symposium on Nuclear Physics, (2009) 164
 24. "Transition quadrupole moments in ^{84}Zr ", S. Chattopadhyay, H.C. Jain and J.A. Sheikh, Proceedings of DAE Symposium on Nuclear Physics (1995) A28
 25. "Forking of the negative parity band in ^{81}Rb ", S.D. Paul, S. Chattopadhyay, H.C. Jain, M.L. Jhingan and J.A. Sheikh, Proceedings of DAE Symposium on Nuclear Physics (1994) 7
 26. "Proton drip line nuclei near $Z = 34$ a relativistic mean field description", J.P. Maharana, J.A. Sheikh and Y.K. Gambhir, Proceedings of DAE Symposium on Nuclear Physics (1992) 32.
 27. "High spin states near and at neutron magic number $N= 50$ nuclei $^{93,94}\text{Tc}$, $^{94,95}\text{Ru}$ and ^{95}Rh ", J.A. Sheikh, S.S. Ghugre, M. Gupta, S.B. Patel, R.K Bhowmik, Proceedings of DAE

- Symposium on Nuclear Physics (1992) 12
28. “Deformation change and signature inversion in ^{85}Nb ”, A.K. Rath C.R. Praharaj, J.A. Sheikh, and S.P. Pandya, Proceedings of DAE Symposium on Nuclear Physics (1992) 8
 29. “Signature effect in ^{84}Y ”, S. Chattopadhyay, H.C. Jain, M.L. Jhingan, J.A. Sheikh and Y.K. Agarwal, Proceedings of DAE Symposium on Nuclear Physics (1992) 6
 30. “High Spin Spectroscopy of ^{88}Nb ”, J.A. Sheikh, R.S. Chakrawarthy, P. Singh, R.G. Pillay and H.G. Devare, Proceedings of DAE Symposium on Nuclear Physics (1992) 4
 31. “Structure of K isomeric state in ^{174}Hf and breakdown of K selection rule”, C.R. Praharaj, A.K. Rath and J.A. Sheikh, Proceedings of DAE Symposium on Nuclear Physics (1991) 39
 32. “Exotic Nuclei : relativistic mean field approach”, J.P. Maharana , J.A. Sheikh and Y.K. Gambhir, Proceedings of DAE Symposium on Nuclear Physics (1991) 27
 33. “In beam spectroscopy of ^{84}Y ”, S. Chattopadhyay, H.C. Jain, J.A. Sheikh, M.L. Jhingan and Y.K. Agarwal, Proceedings of DAE Symposium on Nuclear Physics (1991) 3
 34. “A low spin band crossing in ^{175}Os ”, J.A. Sheikh and C.R. Praharaj, Proceedings of DAE Symposium on Nuclear Physics (1990) 55
 35. “Hexadecouple collectivity and g-bosons in IBM”, Y.D Devi, V.K.B. Kota and J.A. Sheikh, Proceedings of DAE Symposium on Nuclear Physics (1987) 156
 36. “Microscopic determination of the interacting boson model parameters for N = 82 isotones”, J.A. Sheikh and Y.K. Gambhir, Proceedings of DAE Symposium on Nuclear Physics (1986)
 37. “Analysis of the truncation schemes for the physical boson states with Dyson’s Description”, J.A. Sheikh and Y.K. Gambhir, Proceedings of DAE Symposium on Nuclear Physics (1985) 286
 38. “The effect of variation of the single particle energies in the structure of N = 82 isotones”, Y.K. Gambhir and J.A. Sheikh, Proceedings of DAE Symposium on Nuclear Physics (1985) 106
 39. “Boson basis realization for fermion problem and the generalized Dyson boson mapping”, Y.K. Gambhir, R.S. Nikam, C.R. Sarma and J.A. Sheikh, Proceedings of DAE Symposium on Nuclear Physics (1984) 32

Reports :

1. “Two-particle coefficients of fractional parentage in the isospin representation”, J. A.

Sheikh and M.A. Nagarajan, Daresbury Technical Memorandum, DL/ NUC/ TM68T (1990)

2. "One particle coefficients of fractional parentage in the isospin representation", J. A. Sheikh and M.A. Nagarajan, Daresbury Technical Memorandum, DL / NUC / TM67T (1988)