

Curriculum Vitae

Name: S. K. Khosa
Date of Birth: Feb. 02, 1954
Institution: Department of Physics,
University of Jammu,
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Current Position

CSIR Emeritus Scientists,

Retired as Professor and Dean Faculty of Sciences, University of Jammu (February 28, 2014-)

Education

- Ph.D in Physics at Indian Institute of Technology, Kanpur, India (1982)
- Pre. Ph.D in Physics at Indian Institute of Technology, Kanpur, India (1978)
Secured 90% Marks in the course work
- M.Sc. in Physics at Kashmir University, Hazaratbal, Kashmir, India (1977)
Secured first Position in University
- B.Sc. at Kashmir University, Hazaratbal, Kashmir, India (1974)
Secured Second Position in University
- First-year B.Sc. (XII) at Kashmir University, Hazaratbal, Kashmir, India (1972)
Secured first Position in University
- Pre-University at Kashmir University, Hazaratbal, Kashmir, India (1971)
Secured fourth Position in University
- Xth Jammu & Kashmir Board of Education India
Secured first division

Awards

- I was awarded **CSIR Emeritus Scientists** Fellowship from May 01, 2014
- I was awarded a **Gold Medal** for standing **first** in Science faculty in the University at the M.Sc. level.
- I was awarded a merit certificate for securing **first** position in M.Sc.
- I was awarded a merit certificate for securing **second** position in the University in B.Sc.

- I was awarded a merit certificate for standing **first** in the University in XII.

Field of Specialization

- Theoretical Physics (Nuclear Theory)

Field of research interest

- Nuclear Structure
- Mean Field Theorist involving super conducting calculations
- Nuclear Spectroscopy
- Study of Superdeformation and High-spin Spectroscopy
- Theoretical modeling & phenomenological studies of materials growth and characterization.

Teaching Experience **33 years**

Research Experience **33 Years**

- **Research Publications**
 - Research papers 75 (For details kindly refer annexure - I)
 - International 58
 - National 17
- **Conference Abstracts** 70 (For details kindly refer annexure - II)
- **Research Guidance**
 - Ph.D. Completed 17
 - Ph.D. nearing completion -
 - M.Phil. Completed 18
 - Students working for Ph.D. 02
- **National & International Conferences attended** 11
 - International Conferences 02
 - National 09

Professional Experience

- **Long-term positions**
 - Dean faculty of sciences, University of Jammu, Jammu (2011-2014)
 - Professor, Department of Physics & Electronics, University of Jammu, Jammu

- Head of Department, Department of Physics & Electronics, University of Jammu, Jammu
- Convener, Board of Studies in Physics, Department of Physics & Electronics, University of Jammu, Jammu
- Convener, Department Research Committee, Department of Physics & Electronics, University of Jammu, Jammu
- Chairman Science purchase committee, Department of Physics & Electronics, University of Jammu, Jammu
- Chairman PURSE committee, University of Jammu, Jammu
- Convener, Board of Studies in B.Pharmacy in University of Jammu
- Convener, Board of Studies in Remote Sensing in University of Jammu
- Reader at Department of Physics & Electronics, University of Jammu, Jammu (1985-1998)
- Lecturer at Kashmir University Hazaratbal, Kashmir, (April 1981-July 1985)

➤ **Membership of other University board**

- Acted as an expert member of Board of Studies of PG department of Physics, University of Kashmir, Kurukshetra University, Himachal Pradesh University
- Acted as an expert in the selection committees of appointment of faculty positions in Punjab University Chandigarh, Kashmir University, Hazarthbal, Srinagar, Himachal Pradesh University, Kurukshetra University.
- Acted as resource person in various refresher courses held in various Universities and also in the parent University
- Appointed external referee for evaluation of Ph.D. and M.Phil. dissertations of other Universities in the country.
- Appointed as a member of the Board of Studies for determining the viability of various syllabi in Himachal Pradesh University
- Collaborating with Solid State Physics Group of the Department on theoretical aspects of crystal growth & Materials Characterization

➤ **Invited Lectures**

- Delivered lectures on Research topics at **Saha Institute of Nuclear Physics**, Calcutta under TPSC - Programme.
- Invited to deliver a seminar talk on the research topic of my interest at **Physics Department**, Punjab University Chandigarh.
- Delivered invited talk at **Physics Department**, Roorkee University.
- Delivered series of lectures on **Quantum Mechanics** to the college teachers in the Summer school organised by the Department of Physics.

- Delivered series of lectures on Nuclear **Physics** to the college teachers in the winter School organised by the Department of Physics in December 1993.
- Delivered lectures on mechanics to the junior lecturers in the re-orientation programme for junior lecturers organised by the **state institute of education**.
- Invited to participate in a Mini-Workshop organised to make a National syllabus for Nuclear Physics at M.Phil. and Ph.D. level. The Work-shop was held at I.I.T. Kanpur
- Delivered invited talk at **Physics Department**, NIT Jaipur.

➤ **Professional Service**

- Sectional local President of Physical Science in the 101st Indian Science Congress held at University of Jammu, Jammu (February 2014)
- Coordinator, ANVESHAN-2010, 3rd Student Convention North Zone held at University of Jammu, Jammu, June 04-06, 2010
- Member of the organizing committee of the various J&K Science Congresses held at the University of Jammu.

➤ **Contribution towards development of the University/ Department**

➤ **Contribution towards development of the University**

- Develop the scheme for introduction of Choice based Credit System in the University to be implemented from 2014-15. In this case, the entire nomenclature of the various courses to be offered by the different departments following under the Faculties of sciences were designed and also the scheme of examinations and the mandatory number of credits that a student has to do from other departments were envisaged and formulated .
- The scheme to be followed by University at the undergraduate level for making a shift from the annual pattern of teaching system to semester pattern of teaching system in all the affiliated colleges of University of Jammu.
- Drafted the nomenclature for the courses of B.Pharmacy and involved in drafting the admission statues for four year programme of B.Pharmacy that was to be introduced by the university as a new programme for the first time was got approved and presented in academic council in the year 2014. The admissions in this programme will take place in the year 2014 and onwards. The syllabi were also got framed and passed from the Board of Studies in B.Pharmacy and also from the academic council.
- Acted as convener of Board of Studies in B.Pharmacy and was responsible for introducing this programme for the first time in the University of Jammu.

- Acted as convener of Board of Studies For the M.Sc programme in the subject of Remote Sensing and was responsible for designing the curricular and developing and modifying this syllabi as per the requirement of choice based credit system
- Responsible for designing the syllabi and courses of study and the full scheme of B.Sc Honors in Physics which has been forwarded by the Department of Physics for the planning board for its consideration.

➤ **Contribution towards development of the University**

- **Introduction of New Specialization**

Soon after joining the department of Physics, University of Jammu in July 1985, I and one of my colleagues initiated the proposal for the introduction of New specialization at the M.Sc. level in Theoretical Physics. The specialization was formally introduced in the year 1987 and is continuing till date. The syllabi for all the courses were designed and taught by me. The department at present is having a full specialization in Theoretical Nuclear Physics and a separate Nuclear Theory Group which perhaps did not exist before 1985.

- **Started a common Computer Facility**

The proposal for setting up of common computer facility for the department was initiated by me and accepted by the department resulting in setting up of this facility. The facility created at that time had 4-PC/XT's, 4-PC/AT (386) and two printers. The facility has proved very beneficial to M.Sc. and research students.

- Restructured the courses of Quantum Mechanics at M.Sc.level in the Deptt. of Physics, University of Jammu.
- I was the architect of making for the first time the syllabi for the following new courses that were offered by the Department for the first time.

(i) Group Theory	(M.Sc. level)
(ii) Non-Relativistic Field Theory	(M.Sc. level)
(iii) Problems in Quantum Mechanics	(M.Sc. level)
(iv) Nuclear Structure I & II	(M.Phil. Ph.D. level)
(v) Computer Programming and Numerical Analysis	(Ph.D. level)

➤ **Conferences/Workshops organized**

- Co-ordinator for organizing ANEVASION programme for research scholars in university of Jammu

Annexure I

List of Research Publications

Research Journals

1. Deformation producing tendency of the like particle effective interactions in nuclei
S.K. Khosa and S.K. Sharma, Phys. Rev. C 24 (1981) 2715 (U.S.A)
2. Microscopic Description of Onset of Large Deformation in Neutron - rich Zr isotopes
S.K.Khosa, P.N.Tripathi and S.K.Sharma, ICTP Miramare-Trieste- Italy (1981) 239.
(ITALY)
3. Microscopic description of the large onset of deformations in the Zirconium region
S.K. Khosa, P.N. Tripathi and S.K. Sharma, Phys. Lett. 119B (1982) 257
(NORTH HOLLAND)
4. Backbending Anomaly in some neutron-rich Molybdenum isotopes
P.N. Tripathi, S.K. Sharma and **S.K. Khosa**, Phys. Rev. C 29 (1984) 1951 (U.S.A)
5. Onset of Large-Deformation and the occurrence of Anomalous High Spin Yrast Spectra in the Zirconium region.
S.K. Sharma, P.N. Tripathi and **S.K. Khosa**, Phys. Rev. C 38 (1988) 2935 (U.S.A)
6. Microscopic theory of backbending in some neutron-rich Palladium isotopes.
S.K. Khosa and P.K. Mattu, Phys. Rev C 38 (1988) 1498 (U.S.A)
7. Microscopic study of High-Spin Yrast Spectra and Shape Transition in Doubly even Palladium isotopes
P.K. Mattu and **S.K. Khosa**, Phys. Rev. C 39 (1989) 2018 (U.S.A)
8. Calculation of Yrast Spectra in the doubly even Cadmium isotopes
P.K.Mattu and **S.K.Khosa**, Phys. Rev. C 43 (1991) 634 (U.S.A)
9. Microscopic study of Deformation systematics and Low-Lying Yrast Spectra in even-even Ruthenium isotopes
Arun Bharti and **S.K. Khosa**, Nucl. Phys. A572 (1994) 317-328
(NORTH HOLLAND)
10. Onset of Large DeformationHigh Spin Yrast Spectra in the Zr-Mo region
S.K. Sharma, P.N. Tripathi and **S.K. Khosa**, IAEA-ICTP-86-384 (1986) (ITALY)
11. E2 transition and $Q_J +$ systematics in even-mass Ruthenium isotopes
Arun Bharti, Rani Devi and **S.K. Khosa**, Journal of Phys.G: Nucl. Part. Phys. 20 (1994) 1231
(GREAT BRITAIN)

12. Dielectric studies of Lanthanum heptamolybdate crystal grown from gels
Sushma Bhat, **S.K. Khosa**, P.N. Kotru and R.P. Tandon
Materials Science and Engineering B30 (1995) 7 (U.S.A)
13. Dielectric Characteristics of gel-grown mixed neodymium-lanthanum-heptamolybdate crystals
S.Bhat, **S.K. Khosa**, P.N.Kotru and R.P. Tandon
Journal of Material Science, Letts. 14 (1995) 564 (U.K)
14. Dielectric Characteristics of Neodymium-Heptamolybdate crystals
S.Bhat, **S.K. Khosa**, P.N.Kotru and R.P. Tandon
Krist Und Technik 30 (1995) 267 (GERMANY)
15. E2 Transition and Q_{J^+} systematics in even-mass Tellurium isotopes
Rani Devi and **S.K. Khosa**, Journal of Z.Phys. A 354 (1996) 45 (GERMANY)
16. E2 transition and Q_{J^+} systematics of even-mass Palladium nuclei
Arun Bharti and **S.K. Khosa**, Phys. Rev. C 53 (1996) 2528-32. (U.S.A)
17. Study of $^{108-112}\text{Ru}$ in Non-axial Microscopic Framework
Rani Devi, Arti Pandoh and **S.K. Khosa**, Z. Phys. A 355 (1996) 389-395. (GERMANY)
18. ^{114}Ru in Axial and Non-axial Microscopic Frameworks
Rani Devi and **S.K. Khosa**, Phys. Rev. C 54 (1996) 1661 (U.S.A)
19. E2 transition and Q_{J^+} systematics of even-mass Xenon nuclei
Rani Devi, S.P.Sarswat, Arun Bharti and **S.K.Khosa**,
Phys. Rev. C55 (1997) 2433. (U.S.A)
20. Study of ^{108}Mo nucleus in microscopic frameworks,
Rani Devi and **S.K. Khosa**, Nuovo Cimento 110 A (1997) 1375 (ITALY)
21. Microscopic study of backbending in $^{108,110,112}\text{Cd}$ isotopes
Rani Devi, Arti Pandoh and **S.K.Khosa**, Canadian Journal of Physics 76 (1998) 381. (CANADA)
22. Backbending and Breaking of Axial symmetry in the yrast bands of $^{114-130}\text{Xe}$ isotopes
S.P. Sarswat, Arun Bharti and **S.K. Khosa**, Phys. Rev. C58, (1999) 2041. (U.S.A)
23. Role of octupole-octupole interaction in neutron-rich $^{108-114}\text{Pd}$ isotopes
Arti Pandoh, Rani Devi and **S.K. Khosa**, Phys. Rev. C59 (1999) 129 (U.S.A)
24. Microscopic insight into vibrational nature of $^{114,116}\text{Cd}$ isotopes,
Arti Pandoh, Rani Devi and **S.K. Khosa**, Phys. Rev. C60 (1999) 047302.

(U.S.A)

25. Microscopic insight into nuclear structure properties of proton-rich barium isotopes
Neeru Sawhney, Rani Devi, Arun Bharti and **S.K. Khosa**, Ind. J. of Phys. 76A (2002) 283
(INDIA)
26. Microscopic study of low-lying yrast spectra in $^{100-108}\text{Mo}$ isotopes
Neeru Sawhney, Arun Bharti and **S.K. Khosa**, Pramana Journal of Phys.59 (2002) 585
(INDIA)
27. Microscopic study of deformation systematics in Samarium Mass Chain
R.K. Bhat, Rani Devi and **S.K. Khosa**
Bulgarian Journal of Physics 29 (2002)114. (BULGARIA)
28. Study of neodymium mass chain in the variation after projection framework
R.K. Bhat, Rani Devi and **S.K. Khosa**, Ind. Journal of Pure and Applied Phys.41 (2003) 5.
(INDIA)
29. Microscopic study of deformed neutron-deficient $^{124-132}\text{Ce}$ isotopes
R.K. Bhat, Rani Devi and **S.K. Khosa**, Braz. J. of Phys. 33 (2003)340
(BRAZIL)
30. Microscopic study of low spin yrast levels in even-even krypton isotopes in the variation after projection approach
Tariq Ahmad War, A. Chandan, Rani Devi, A. Bharti and **S.K. Khosa**, Ind. Journal of Phys.71A(2003) 465
(INDIA)
31. Importance of hexadecapole interactions in even-even germanium and selenium isotopes
Tariq Ahmad War, A. Chandan, Rani Devi, A. Bharti and **S.K. Khosa**, Ind. Journal of Pure and Applied Phys. 41 (2003) 914.
(INDIA)
32. Microscopic study of backbending phenomena in $^{126-132}\text{Ce}$ isotopes
Rani Devi, R.K. Bhat and **S.K. Khosa**
International Journal of Modern Physics E13 (2004) 529. (SINGAPORE)
33. Study of N=Z nuclei in variation after projection framework
T.A. War, Rani Devi and **S.K. Khosa**
European Physical Journal A22 (2004)13. (ITALY)
34. Microscopic Insight into deformed nature of $^{100-108}\text{Zr}$ Isotopes.
Anil Chandan, Tariq Ahmad War, Neeru Sawhney, Arun Bharti and **S.K. Khosa**
Indian Journal of Physics 78 (2004) 893. (INDIA)
35. Projected shell model description of high spin states in ^{124}Ce
Rani Devi, B.D. Sehgal, **S.K. Khosa** and J.A. Sheikh
Physical Review C 72 (2005) 064304. (U.S.A)

36. Projected shell model study of the yrast bands of neutron-deficient $^{126-130}\text{Ce}$ isotopes
B.D. Sehgal, Rani Devi and **S.K. Khosa**
Journal of Phys. G. Nucl. Part. Phys. 32 (2006) 1211. (U.K)
37. Projected shell model study of neutron-deficient ^{122}Ce
Rani Devi, B.D. Sehgal and **S.K. Khosa**
Pramana Journal of Physics 67 (2006) 467. (INDIA)
38. Microscopic study of yrast bands and backbending anomaly in $^{78-82}\text{Kr}$ isotopes
Sonia Verma, Rani Devi and **S.K. Khosa**
European Physical Journal A 30 (2006) 531. (ITALY)
39. Microscopic Insight into deformed nature of $^{152-160}\text{Gd}$ Isotopes.
Amita Dua, Arun Bharti and **S.K. Khosa**
Indian Journal of Phys. 80 (2006) 275. (INDIA)
40. Spectroscopy of lower spin states in Tellurium Isotopes with the Inclusion of Hexadecapole interaction.
Amita Dua, Neeru Sawhney, Anil Chandan, Arun Bharti and **S.K. Khosa**
Indian Journal of Phys. 80 (2006) 283. (INDIA)
41. A microscopic study of deformation systematics in $^{154-166}\text{Dy}$ Isotopes.
Amita Dua, Arun Bharti and **S.K. Khosa**
Pramana Journal of Physics 68 (2007) 1013. (INDIA)
42. Microscopic study of yrast band structures in $^{66-72}\text{Ge}$ isotopes
Parvaiz Ahmad Dar, Rani Devi, **S.K. Khosa** and J.A. Sheikh
Physical Review C 75 (2007) 054315 (U.S.A)
43. Microscopic insight in the study of yrast bands in selenium isotopes
Parvaiz Ahmad Dar, Sonia Verma, Rani Devi and **S.K. Khosa**
Pramana Journal of Physics 70 (2008) 817 (INDIA)
44. Single crystal growth and characterization of pure and sodium-modified copper tartrate
I. Quasim, A. Firdous, B. Want, **S.K. Khosa** and P.N. Kotru
J. Cryst. Growth 310 (2008) 5357 (NORTH HOLLAND)
45. Characterization of pure and doped potassium hydrogen tartrate single crystal grown in silica gel
I. Quasim, A. Firdous, N. Sahni, **S.K. Khosa** and P.N. Kotru
Cryst. Res. Tech. 44 (2009) 539. (GERMANY)
46. Micromechanical behavior of gel grown pure and doped potassium hydrogen tartrate single crystals
I. Quasim, A. Firdous, N. Sahni, **S.K. Khosa** and P.N. Kotru
Phys. Stat. Soli. A 206 (2009) 2791. (GERMANY)

47. Optical and electrical characteristics of pure and doped potassium hydrogen tartrate single crystals
I. Quasim, A. Firdous, **S.K. Khosa** and P.N. Kotru
J. Phys. D, Appl. Phys. 42 (2009) 155505 (U.K.)
48. A Study of neutron-deficient $^{122-128}\text{Ba}$ isotopes in Projected shell model Framework
Rawan Kumar, Rani Devi and **S.K. Khosa**
Physica Scripta 80 (2009) 045201 (U.K)
49. Microscopic study of low-lying yrast spectra and deformation systematics in neutron-rich $^{98-106}\text{Sr}$ isotopes.
Anil Chandan, Suram Singh, Arun Bharti and **S.K. Khosa**
Pramana Journal of Physics 73 (2009) 657. (INDIA)
50. Micromechanical and thermal behavior of gel grown pure and sodium modified cooper tartrate crystals
I. Quasim, A. Firdous, B. Want, **S.K. Khosa** and P.N. Kotru
J. Phys. Chem. Solids 71 (2010) 1501 (U.S.A.)
51. Structure of negative parity yrast bands in the odd mass $^{125-131}\text{Ce}$ nuclei
Arun Bharti, Suram Singh and **S.K. Khosa**
Pramana Journal of Physics 74 (2010) 525. (INDIA)
52. Microscopic study of negative parity yrast states in the neutron-deficient $^{119-127}\text{Ba}$ isotopes
Arun Bharti, Suram Singh and **S.K. Khosa**
International Journal of Physics E 20 (2011) 1183 (SINGAPORE)
53. Projected shell model study of yrast bands in even-even $^{100-118}\text{Pd}$ isotope
Arvind Bhat, Arun Bharti and **S.K. Khosa**
Eur. Phy. J. A48 (2012) 39 (ITALY)
54. A microscopic perspective on structure of yrast bands in $^{100-112}\text{Ru}$ isotopes.
Arvind Bhat, Arun Bharti and **S. K. Khosa**
Int. J. Mod. Phys. E21 (2012)1250030. (SINGAPORE)
55. Microscopic insight into the structure of Gallium isotopes.
Preeti Verma, Chetan Sharma, Suram Singh, Arun Bharti and **S. K. Khosa**
Nucl. Phys. A 884 (2012)1-20. (NORTH HOLLAND)
56. Theoretical investigation of positive parity band structure of Y and Nb isotopes
Chetan Sharma, Preeti Verma, Suram Singh, Arun Bharti and **S. K. Khosa**
Int. J. Mod. Phys. E21 (2012) 1250081. (SINGAPORE)

57. Microscopic analysis of band structures in odd mass $^{79-89}\text{Y}$ isotopes
Chetan Sharma, Preeti Verma, Suram Singh, Arun Bharti and **S. K. Khosa**
Eur. Phys. J. A48 (2012) 138. (ITALY)
58. Projected shell model description of E2 transition probabilities and g-factors of even-even neutron-rich nuclei from Xe to Nd.
Gopal Krishan, Rani Devi, **S.K. Khosa**
Int. J. Mod. Phys E21 (2012) 1250093 (SINGAPORE)
59. The study of energy bands in neutron-deficient $^{123,125}\text{Ce}$ nuclei.
Rawan Kumar, Rani Devi and **S.K. Khosa**
Nucl. Phys. A 907 (2013) 55 (North Holland)
60. Study of band structure of neutron-rich Pr isotopes
Daya Ram, Gopal Krishan, Rani Devi, and **S. K. Khosa**
AIP Conf. Proc. 1524 (2013) 81 (U.S.A)
61. Axial and non-axial study of neutron rich Pd and Cd isotopes near $A = 120$
G. Krishan, R. Chaudhary, D. Ram, R. Kumar, R. Devi and **S.K. Khosa**
Conf. Proc. 1524 (2013) 89 (U.S.A)
62. Cranking study of low lying yrast spectra and deformation systematics in some even-even neutron-deficient $^{130-136}\text{Nd}$
Arun Sharma, Arun Bharti, and **S. K. Khosa**
AIP Conf. Proc. 1524, 93 (2013) (U.S.A)
63. Theoretical perspective of nuclear structure of some neutron rich isotones
Chetan Sharma, Preeti Verma, Suram Singh, Arun Bharti, and **S. K. Khosa**
AIP Conf. Proc. 1524, 97 (2013) (U.S.A)
64. Theoretical overview of back-bending in arsenic isotopes
Preeti Verma, Chetan Sharma, Suram Singh, Arun Bharti, and **S. K. Khosa**
AIP Conf. Proc. 1524, 101 (2013) (U.S.A)
65. Microscopic study of positive parity yrast bands of $^{224-234}\text{Th}$ isotopes.
Daya Ram, Rani Devi and **S.K. Khosa**
Pramana J. of Phys. 953 (2013) 80 (INDIA)
66. Study on $^{222-226}\text{Th}$ Isotopes in the Cranking framework
Daya Ram, Rani Devi and **S.K. Khosa**
Braz. J. Phys. 247 (2013) 43 (Brazil)

- 67 Projected shell model study of quasiparticle structure of arsenic isotopes
Preeti Verma, Chetan Sharma, Suram Singh, Arun Bharti, **S.K. Khosa**, G.H.Bhat,
J.A.Sheikh
Nucl. Phys. A 918 (2013) 1 (NORTH HOLLAND)
- 68 Microscopic non-axial study of even-even $^{226-230}\text{Th}$ isotopes using octupole interaction
Daya Ram, Rani Devi and **S.K. Khosa**
Ind. J. of Pure and App. Phys. 322 (2014) 52 (INDIA)
- 69 Study of neutron-rich Mo isotopes by the projected shell model approach
Gopal Krishan, Rawan Kumar, Rani Devi, **S.K. Khosa**
Accepted for publication in Pramana J. of Physics (INDIA)
- 70 Band structure of odd-mass lanthanum nuclei
Deepti Sharma, Preeti Verma, Arun Bharti, and **S. K. Khosa**
Int. J. Mod. Phys. E 23, (2014) 1450020 (SINGAPORE)
- 71 A study of positive parity yrast bands of 230-240U and 236-242Pu nuclei
Saiqa Sadiq, Daya Ram, Rani Devi and **S.K. Khosa**
Indian Journal of Physics, 899 (2015) 713 (INDIA)
- 72 Study of electromagnetic properties and structure of yrast bands in
neutron-rich $^{70-76}\text{Zn}$ isotopes
Ritu Chaudhary, N.K. Makhnotra, Rani Devi and **S.K. Khosa**
Nucl. Phys. A 939 (2015) 1 (NORTH HOLLAND)
- 73 Quasi-particle structure of proton-hole cobalt isotopes
Anuradha Gupta, Preeti Verma, Suram Singh, Arun Bharti, **S.K. Khosa**,
G.H. Bhat, J.A. Sheikh
Nucl. Phys. A 941 (2015) 48 (NORTH HOLLAND)
- 74 Projected shell model study of band spectra and electromagnetic
properties of $^{160-164}\text{Ho}$
Barun Slathia, Rani Devi and **S.K. Khosa**
Nucl. Phys. A 943 (2015) 39 (NORTH HOLLAND)
- 75 Theoretical study of neutron-rich $^{107,109,111,113}\text{Rh}$ isotopes
Amit Kumar, Suram Singh, **S.K. Khosa**, Arun Bharti, G.H. Bhat, J.A. Sheikh
Int. J. Mod. Phys. E 24, (2015) 1550076 (SINGAPORE)

Conferences Papers/Abstracts

1. **S.K. Khosa** and S.K. Sharma
Proc. of NP and SSP sym. Dec. 27-31 (1980) NA5 held
at I.I.T Delhi
2. **S.K. Khosa**, P.N. Tripathi and S.K. Sharma
Proc. of NP and SSP sym. Dec. 27-31 (1980) NC3 held
at I.I.T Delhi
3. **S.K. Khosa**, and A. Tichoo
Proc. of international Conference on Nucl. Phys. Dec. 27-31 (1984) 61
4. Mechanism of shape transition in Doubly Even Ruthenium isotopes
Arun Bharti, P.K. Mattu and **S.K. Khosa**
Nuclear Physics Sym. 32B (1989) 04 held at Aligarh Muslim University.
5. Role of $1h_{11/2}$ vis-à-vis parabolic systematics of 2^+ and 4^+ states in Tellurium isotopes.
Rakesh Gupta and **S.K. Khosa**
Nucl. Phys. Sym. held at Aligarh Muslim University. 32B (1989) p.84
6. Role of protons in the onset of deformation in the $A \sim 100$ mass region.
Rakesh Gupta, **S.K. Khosa**, Proc. of DAE sym. on Nucl. Phys. 33B (1990).
7. Proc. of the symposium in the honour of Akito Arima
Nuclear Physics in the 1990's May 1-5, 1990 Santa FE, New Mexico.
(U.S.A.)
8. Mechanism of shape transition in even-even cadmium isotopes
P.K. Mattu and **S.K. Khosa**
Nucl. Phys. Sym. 34B (1991) held at BARC, Bombay
9. Study of ground state systematics in neutron rich Palladium isotopes in microscopic
framework
P.K. Mattu and **S.K. Khosa**
Nucl. Phys. Sym. 34B (1991) held at BARC, Bombay
10. Microscopic study of deformation systematics and low-lying spectra in even-even Xenon
isotopes
B.D. Seghal, S.P. Sarswat and **S.K. Khosa**
Proc. of Nucl. Phys. Sym. 37B (1994) 47
11. E2 transition and Q_j^+ systematics in even-mass Palladium nuclei
Arun Bharti and **S.K. Khosa**
Proc. of Nucl. Phys. Sym. 37B (1994) 33.

12. Dynamical Symmetry Model and Shape Transition in Mass Region A~100
Rani Devi and **S.K. Khosa**
Proc. of DAE sym. on Nuclear Physics, Vol. 35B (1992) 90.
13. Systematics of yrast spectra, E2 transition probabilities and Q_J^+ values in Ruthenium isotopes
Rani Devi, Arun Bharti and **S.K. Khosa**
Proc. of DAE sym. on Nuclear Physics, Vol. 36B (1993) 102.
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