

CURRICULUM VITAE

1. **NAME :** SURESH KUMAR PATRA
2. **DATE OF BIRTH :** 14TH APRIL 1964
3. **NATIONALITY :** INDIAN
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7. EDUCATIONAL QUALIFICATION :

- (1) **1985 :** **B. Sc. in Physics**
Sonepur College, Sonepur, India.
- (2) **1985 – 1987** **M. Sc. in Physics**
Sambalpur University, Burla, India.
- (3) **1988 – 1989** **Post M.Sc. in Physics**
Institute of Physics, Bhubaneswar, India.

During this one year course work I have studied advanced physics.

- (4) **1989 – 1994** **Ph.D. in Nuclear Physics Theory.**
Institute of Physics, Bhubaneswar, India.

8. RESEARCH EXPERIENCE:

- (1) **1994 – 1995** **Postdoctoral Research Fellow**

Department of Physics, Tohoku University, Sendai, Japan.

(2) 1995 – 1997 Postdoctoral Research Fellow
Institut für Theoretische Physik, J.W.G. University, Frankfurt, Germany.

(3) 1997 – 1999 Postdoctoral Research Fellow
Department of Physics, CYCU, Chung-Li, Taiwan

(4) 1999 – 2001 Postdoctoral Research Fellow
Department of Physics, University of Barcelona, Barcelona, Spain

(5) November 29th – December 19th 2003. Visiting Fellow
Department of Physics, University of Barcelona, Barcelona, Spain

(6) August 2001 – July 31st 2004 Sr. Lecturer
Institute of Physics, Sachivalaya Marg, Bhubaneswar, India

(7) 1st August 2004 – till date Asst. Professor
Institute of Physics, Sachivalaya Marg, Bhubaneswar, India

(8) June 2005 – December 2005 EPSRC Research Fellow
Department of Physics, University of Surrey, Guildford, U.K.

(9) April 2006 – June 2006 Re-visit in AvH Fellowship
Frankfurt Institute of Advanced Studies, Frankfurt/Main, Germany.

**(10) 5th November 2007 – 19th November 2007 Centro de
Fisica das Interaccoes Fundamentals, Instituto Superior Tecnico-
Edificio Ciencia (Fisica), 8th November 2007, Lisbon, Portugal.**

**(11) 19th November 2007 – 28th November 2007 GSI, Darm-
stadt, for Research Collaboration**

9. TEACHING EXPERIENCE:

(1) 2002 – February to May One trimester course in Nuclear Physics

- for Pre-doctoral (Post M.Sc.) students.
- (2) 2003 – February to May One trimester course in Nuclear Physics for Pre-doctoral (Post M.Sc.) students.
- (3) 2004 – February to May One trimester course in Nuclear Physics for Pre-doctoral (Post M.Sc.) students.
- (4) 2008 – February to May One trimester course in Nuclear Physics for Pre-doctoral (Post M.Sc.) students.

10. RECIPIENT OF FELLOWSHIPS:

- Re-visit Alexander von Humboldt Research Fellow, Germany (**April 2006-June 2006**).
- EPSRC Research Fellow, Govt. of U.K., June-December (2005).
- Spain Education Ministry Fellowship, Spain (1999-2001).
- National Science Council Fellow, Taiwan, (1997-99).
- Alexander von Humboldt Research Fellow, Germany, (1995-97).
- Monbusho Research Fellow, Japan, (1994-95).
- Predoctoral and Doctoral Research Fellow, Institute of Physics, Bhubaneswar (1988-94).
- National Scholarship, (1985-87).
- Apart from the above, I had also been selected for a visiting lecturer in the University of Santa Catarina, Florianopolis, Brazil, FAFRJ Research Fellow (BRAZIL), FAPESP Research Fellow (BRAZIL), Post-doctoral Fellow in University of Tel Aviv, Israel, Postdoctoral Fellow in Institute of Super-Technique, Lisbon, Portugal, Visiting Scientist in University of Gent, Belgium.

11. SEMINAR/COLLOQUIUM/PRESENTATION GIVEN IN IMPORTANT PLACES:

- Formation of superheavy and neutron-rich nuclei in astrophysical objects, Invited talk given at "National Seminar on Advances in Physics" Berhampur University, Orissa, February 6-7, 2009.
- Summary talk given at the DAE-BRNS Symposium (India) in Nuclear Physics, Indian Institute of Technology, Roorkee, December 22-26, 2008.
- Recent developments in relativistic mean field theory, Centro de Fisica das Interaccoes Fundamentais, Instituto Superior Tecnico-Edificio Ciencia (Fisica), 8th November 2007, Lisbon, Portugal.

- Clustering in nuclei, June 2006, Department of Physics, University of Barcelona, Spain.
- Relativistic Mean Field Formalism and its Application to finite nuclei, 17th November 2005, Department of Physics, University of York, U.K.
- Relativistic Mean Field Formalism and its Recent Developments, 9th October 2005, Department of Physics, University of Surrey, U.K.
- Relativistic Mean Field Formalism and its Recent Developments, presented at Int. Workshop on "Nuclear Structure at the Extremes: New Directions", Department of Physics, H.P. University, Shimla, India March 21-24, 2005.
- Nuclear Physics: Past, Present and Future, North Orissa University, Baripada, October 17, 2004.
- Lecture given on "Relativistic semiclassical calculation of isoscalar giant resonances" at the National Workshop on "Relativistic mean field theory in nuclear physics", Institute of Physics, Bhubaneswar, India during 26-31 st July, 2004.
- Lecture given on "Recent developments in relativistic mean field formalism" at the National Workshop on "Relativistic mean field theory in nuclear physics", Institute of Physics, Bhubaneswar, India during 26-31 st July, 2004.
- Invited talk given on "Field theory motivated effective Lagrangian approach: towards a complete relativistic nuclear model" at the National Conference on "Neutrinos in Nuclear, Particle and Astrophysics", held at I I T Kharagpur, India during 26-28 th Feb, 2004.
- Invited talk given on "Field theory motivated effective Lagrangian approach: towards a complete relativistic nuclear model" at the National Workshop on "Production & Utilization of Radioactive Ion Beams from ISOL type facilities", held at Toshali Sands Resorts, Puri, India during 16-19 th Feb, 2004, organised by VECC, Kolkata.
- Lectures given on "Scaling calculations of Isoscalar Giant Resonances in Relativistic Thomas-Fermi Theory" at the National Workshop, Puri (India) on "Nuclei at extremes of Isospin and Mass", Institute of Physics, Bhubaneswar, March 10–22 (2003).
- Invited talk on "Scaling calculations of Isoscalar Giant Resonances in Relativistic Thomas-Fermi Theory" at DAE-BRNS Symposium (India) in Nuclear Physics, Manonmaniam Sundaranar University, Tirunelveli, Tamilnadu, December 26–30 (2002).

- "Structure of Superheavy elements" Centro de Fisica das Interaccoes Fundamentals, Instituto Superior Tecnico-Edificio Ciencia (Fisica), Lisbon, Portugal.
- "Structure of Superheavy elements" Department of Physics, University of Barcelona, Barcelona, Spain.
- "The $k - i$ basis shell model: -Recent development of the Fermion Dynamical Symmetry Model," Department of Physics, University of Barcelona, Barcelona, Spain.
- "Relativistic Mean Field Theory and its application to negative energy states", Department of Physics, Chung Yuan Christian University, Chung-Li, Taiwan.
- Strong Correlation of the Vacuum in Relativistic Mean Field Theory, Institute of Physics, Bhubaneswar, India.
- "Anti-particle bound state in Relativistic Mean Field Theory", Nuclear Physics Institute, Academic of Sciences, Rez (Prague), Czech Republic.
- "Strong correlation of vacuum in the relativistic mean field theory", Department of Physics, University of Gottingen, Gottingen,
- "Halo-Structures of Light Exotic Nuclei", GSI, Darmstadt, Germany.
- "Negative energy bound states in relativistic mean field theory", Institut für Theoretische Physik, J.W.G. University, Frankfurt/M, Germany.
- "How far the magic number $Z=82$ is true in exotic nuclei ?", Department of Physics, Hong Kong University, Hong Kong.
- "Superdeformation in neutron-deficient rare-earth nuclei" Yukawa Institute, Kyoto, Japan.
- "Shape and superdeformed structure in rare-earth nuclei", Center for Mathematical Sciences, Office for Planing and Management, University of Aizu, Aizu-Wakamatsu, Japan.
- "Neutron- and proton-rich nuclei near the drip-lines and its astrophysical application", Department of Physics, Tohoku University, Sendai, Japan.

12. PARTICIPATION IN SYMPOSIA, SCHOOLS and CONFERENCES:

- Int. Workshop on "Nuclear Structure at the Extremes: New Directions", Department of Physics, H.P. University, Shimla, India March 21-24, 2005.

- Workshop on "Hadron Physics", held at Toshali Sands Resorts, Puri, India March 7-17, 2005, organised by Institute of Physics, Bhubaneswar.
- Workshop on "Relativistic mean field theory in nuclear physics", Institute of Physics, Bhubaneswar, India during 26-31 st July, 2004.
- Workshop on "Nuclear astrophysics using low energy accelerators", Saha Institute of Nuclear Physics, Kolkata, India 29th April, 2004.
- "Production & Utilization of Radioactive Ion Beams from ISOL type facilities", held at Toshali Sands Resorts, Puri, India during 16-19 th Feb, 2004, organised by VECC, Kolkata.
- "National Conference on Neutrinos in Nuclear, Particle and Astrophysics", held at I I T Kharagpur, India during 26-28 th Feb, 2004.
- Workshop on "Nuclear structure and decay data: Theory and evaluation", 17-28 November 2003, The Abdus Salam International Centre for Theoretical Physics, Italy.
- Nuclear Structure and Decay Data: Theory and Evaluation, ICTP, Italy, November 17–28 (2003).
- DAE-BRNS Symposium (India) in Nuclear Physics, Manonmaniam Sundaranar University, Tirunelveli, Tamilnadu, December 26–30 (2002).
- DAE-BRNS Symposium (India) in Nuclear Physics, Saha Institute of Nuclear Physics and Variable Energy Cyclotron Centre, Calcutta December 26–30 (2001).
- Spring School on Nuclear Physics, Sun-Moon Lake, Taiwan (1999).
- Physical Society of Republic of China, Academia Sinica, Taipei, Taiwan, (1999).
- 1998 School on Nuclear Physics and Few-Body Problem, Chi-theo, Taiwan (1998).
- Physical Society of Republic of China, Central National University, Chung-Li, Taiwan, (1998).
- Physical Society of Germany, Goettingen, (1997).
- International Conference on Physics of Unstable Nuclei, University of Niigata, Niigata, Japan, (1994).
- Structure of Unstable Nuclei, Yukawa Institute, Kyoto, Japan, (1994).
- National Symposium on Nuclear Structure, IUC Calcutta Centre, Puri, (1993).

- *IVth* SERC School on Nuclear Physics, Goa University, Goa, (1993).
- *VIIIth* SERC School on High Energy Physics, Institute of Physics, Bhubaneswar, (1992).
- International Conference on Medium and High Energy Nuclear Physics, Saha Institute of Nuclear Physics, Calcutta, India (1991).
- Department of Atomic Energy (India) Symposium in Nuclear Physics, Madras, December, 1990, Bombay, December, 1991.
- SERC School on Nuclear Structure, Banarus Hindu University, Varanasi (1989).

13. **Ph.D. STUDENT SUPERVISION:**

I am the supervisor and co-supervisor of the following Ph.D. student.

1. Thesis Supervisor of Mr. B.K. Sharma (Ph.D. awarded)
Title: Relativistic Nuclear Many-Body Problems
2. Thesis Co-supervisor of Mr. M.S. Mehta (Ph.D. awarded)
Title: The Nuclear Structure Studies in the Drip lines and Superheavy Region using Relativistic Mean Field Formalism
3. Thesis Co-supervisor of Mr. A. Gangadeb
Title: Giant dipole resonance studies of rapidly rotating hot nuclei
4. Thesis Co-supervisor of Mr. R. N. Panda
Title: Nuclear reaction for exotic nuclei

14. **COMMITTEE SERVICE:**

- Co-ordinator of the **SUMMER STUDENT VISITING PROGRAMME**
- Convener of the **REFRESHER COURSE FOR COLLEGE TEACHERS** for last four years.
- Convener of the **NATIONAL WORKSHOP ON RELATIVISTIC MEAN FIELD THEORY IN NUCLEAR PHYSICS**
- Editor of the proceeding: **RELATIVISTIC MEAN FIELD THEORY IN NUCLEAR PHYSICS.**

15. COMPUTING EXPERIENCE :

I have worked in several computing environments, namely IBM/*TSO*, VAX/*VMS* and almost all Unix platforms supporting X-windows, *e.g.* Sun/*Solaris*, HP/*HP-UX*, DEC/*OSF/1*, SGI/*IRIX*, PC/*Linux etc.* I have extensively programmed in FORTRAN77 for my research work.

(a) Publications in Refereed Journals:-

1. Formation of neutron-rich and superheavy elements in astrophysical objects, **S.K. Patra**, R.N. Panda, Phys. Lett. **B** (submitted); arXiv:0906.3797.
2. Internal structure of clusters in $^{112-122}\text{Ba}$ nuclei within relativistic mean field theory, M. Bhuyan, **S.K. Patra**, P. Arumugam, Raj K. Gupta, Phys. Rev. **C** (submitted); arXiv:0906.2335.
3. Importance of preformation probability in cluster radioactive-decays using relativistic mean field theory within the preformed cluster model, BirBikram Singh, S K Patra and Raj K. Gupta, Int. J. of Mod. Phys. **E** (in press).
4. Influence of the symmetry energy on the giant monopole resonance of neutron-rich nuclei, M. Centelles, **S.K. Patra**, X. Roca-Maza, B.K. Sharma, P.D. Stevenson, X. Vinas, J. Phys. **G** (in press); arXiv:0906.2906.
5. Anatomy of neck configuration in fission decay, S.K. Patra, R. K. Choudhury and L. Satpathy, J. Phys. **G** (in press).
6. Fine structure dips in the fission fragment mass distribution for the $^{238}\text{U}(^{18}\text{O}, f)$ reaction, L. S. Danu, D. C. Biswas, A. Saxena,.... **S. K. Patra**, Phys. Rev. **C81** (2010) 014311.
7. Superdeformed and Hyperdeformed States in $Z=122$ Isotopes, **S. K. Patra**, M. Bhuyan, M. S. Mehta, Raj K. Gupta, Phys. Rev. **C80** (2009) 034312.
8. Nuclear reaction cross sections of exotic nuclei in Glauber model for relativistic mean field densities, **S.K. Patra**, R. N. Panda, P. Arumugam and Raj K. Gupta, Phys. Rev. **C80** (2009) 064602.
9. Isomeric state in ^{53}Co : A mean field analysis, **S.K. Patra**, F.H. Bhat, R.N. Panda, P. Arumugam and Raj K. Gupta, Phys. Rev. **C79** 044303 (2009).
10. Clusters in light, heavy, super-heavy and super-superheavy nuclei, Raj K. Gupta, S.K. Arun, Dalip Singh, Raj Kumar, NIYTI, **S.K. Patra**, P. Arumugam and B.K. Sharma, Int. J. Mod. Phys. **E17** (2008) 2244.
11. Fission of hyper-hyperdeformed ^{56}Ni : a clustering analysis within mean-field approaches, Raj K. Gupta, S.K. Patra, P.D. Stevenson, C. Beck and Walter Greiner, J. Phys. **G35** (2008) 075106.
12. Fission decay properties of ultra neutron-rich Uranium isotopes, L.Satpathy, **S.K. Patra** and R.K. Choudhury, PRAMANA - J. Phys. **70** (2008) 87.

13. Nuclear reaction studies of unstable nuclei using relativistic mean field formalisms in conjunction with Glauber model, A. Shukla, B. K. Sharma, R. Chandra, P. Arumugam and **S. K. Patra**, Phys. Rev. **C76** (2007) 034601.
14. Nuclear mean field and equation of state of asymmetric nuclear matter, B. Behera, T.R. Routray, **S.K. Patra** and P.K. Sahu, Nucl. Phys. **A794** 132 (2007).
15. Exotic clustering in heavy and superheavy nuclei within the relativistic and non-relativistic mean field formalisms, **S.K. Patra**, Raj K. Gupta, B.K. Sharma, P.D. Stevenson and Walter Greiner, J. Phys. **G34** (2007) 2073 (Times cited 3).
16. Phase transition and properties of compact star, B.K. Sharma, P.K. Panda and **S.K. Patra**, Phys. Rev. **C75** (2007) 035808.
17. A highly neutron-rich cluster and/or a superheavy nucleus in the compound nucleus $^{238}U - ^{238}U$: a mean field study, Raj K. Gupta, **S.K. Patra**, P.D. Stevenson and Walter Greiner, Int. J. of Mod. Phys. **E16** (2007) 1721 (Times cited 1).
18. Neutron star matter in an effective model, T.K. Jha, P.K. Raina, P.K. Panda and **S.K. Patra**, Phys. Rev. **C74** (2006) 055803; **C75** (2007) 029903.
19. Higher-multipole deformations and compactness of hot fusion reactions, Monika Manhas, Raj K. Gupta, Qingfeng Li, **S.K. Patra** and Walter Greiner, Phys. Rev. **C74** (2006) 034603.
20. Reaction cross-sections for light nuclei on ^{12}C , using relativistic mean field formalism, B.K. Sharma, **S.K. Patra**, Raj K. Gupta, A. Shukla, P. Arumugam, P.D. Stevenson and Walter Greiner, J. Phys. **G32** (2006) 2089 (Times cited 1).
21. Decrease of the spin-orbit interaction in drip-line nuclei, using relativistic mean field models, M.S. Mehta, B.K. Sharma, **S.K. Patra**, R.K. Gupta and W. Greiner, Int. J. Mod. Phys. **E15** (2006) 1149.
22. Magic numbers in exotic light nuclei near drip lines, R.K. Gupta, M. Balasubramaniam, Sushil Kumar, **S.K. Patra**, G. M \ddot{u} nzenberg and W. Greiner, J. Phys. **G32** (2006) 565 (Times cited 3).
23. Clustering in superheavy nuclei within the relativistic mean field approach, B.K. Sharma, P. Arumugam, **S.K. Patra**, P.D. Stevenson, Raj K. Gupta and W. Greiner, J. Phys. **G32** (2006) L1 (Times cited 7).
24. Giant dipole resonance and shape transitions in medium heavy mass nuclei, P. Arumugam, A. Ganga Deb and **S.K. Patra**, European Physical Journal **A25** (2005) 199.

25. Relativistic mean field study of clustering in light nuclei, P. Arumugam, B.K. Sharma, **S.K. Patra** and Raj K. Gupta, Phys. Rev. **C71** (2005) 064308 (Times cited 5).
26. Sum rule approach to the isoscalar giant monopole resonance in drip line nuclei, M. Centelles, X. Vinas, **S.K. Patra**, J.N. De, Tapas Sil, Phys. Rev. **C72** (2005) 014304.
27. Applicability of shape parameterizations for giant dipole resonance in warm and rapidly rotating nuclei, P. Arumugam, A. Gangadeb and **S.K. Patra**, Euro. Phys. Lett. **70** (2005) 313.
28. Momentum and density dependence of the isospin part of nuclear mean field and equation of state of asymmetric nuclear matter, B. Behera, T.R. Routray, A. Pradhan, **S.K. Patra** and P.K. Sahu, Nucl. Phys. **A753** (2005) 367 (Times cited 8).
29. Giant dipole resonance in rapidly rotating hot nuclei with exact treatment of fluctuations, P. Arumugam, A. Ganga Deb and **S. K. Patra**, Acta Physica Polonica **B36** (2005) 1181.
30. Versatility of field theory motivated nuclear effective lagrangian approach, P. Arumugam, B.K. Sharma, P.K. Sahu, **S.K. Patra**, Tapas Sil, M. Centelles and X. Viñas, Phys. Lett. **B601** (2004) 51 (Times cited 12).
31. Giant dipole resonance and Jacobi transition with exact treatment of fluctuations, P. Arumugam, G. Shanmugam and **S.K. Patra**, Phys. Rev. **C69** (2004) 054313 (Times cited 5).
32. Shell overcomes repulsive nuclear force instability, L. Satpathy and **S.K. Patra**, J. Phys. **G30** (2004) 771-781 (Times cited 3).
33. Superheavy nuclei in relativistic effective Lagrangian model, Tapas Sil, **S.K. Patra**, B.K. Sharma, M. Centelles, and X. Viñas, Phys. Rev. **C69** (2004) 044315 (Times cited 21).
34. Potential energy surfaces for $N = Z$, ^{20}Ne — ^{112}Ba nuclei, M. S. Mehta, T. K. Jha, **S. K. Patra**, and Raj K. Gupta, PRAMANA -J. Phys. **62** (2004) 841 (Times cited 2).
35. Shape change in Hf, W and Os-isotopes: A Non-relativistic Hartree-Fock versus Relativistic Hartree Approximation, Z. Naik, B.K. Sharma, P. Arumugam, T.K. Jha and **S.K. Patra**, PRAMANA -J. Phys. **62** (2004) 827 (Times cited 4).
36. Hot Nuclear Matter in Asymmetry Chiral Sigma Model, P. K. Sahu, T. K. Jha, K. C. Panda and **S. K. Patra**, Nucl. Phys. **A733** (2004) 169 (Times cited 6).

37. A relativistic mean-field study of magic numbers in light nuclei from neutron- to proton-drip lines, T.K. Jha, M.S. Mehta, **S.K. Patra**, B.K. Raj and Raj K. Gupta, PRAMANA -J. Phys. **61** (2003) 517 (Times cited 4).
38. New magic numbers and new islands of stability in drip-line regions in mass model, L. Satpathy and **S.K. Patra**, Nucl. Phys. **A722** (2003) 24c.
39. Systematic study of Bh isotopes in a relativistic mean field formalism, M.S. Mehta, B.K. Raj, **S.K. Patra** and Raj K. Gupta, Phys. Rev. **C66** (2002) 044317 (Times cited 10).
40. Isospin-rich nuclei in neutron star matter, Tapas Sil, J. N. De, S. K. Samaddar, X. Viñas, M. Centelles, B. K. Agrawal and S. K. Patra, Phys. Rev. **C66** (2002) 045803. (Times cited 2).
41. Multiple shape-structures in $N = Z$, neutron deficient $^{72}\text{Kr} - ^{92}\text{Pd}$ nuclei, **S.K. Patra**, B.K. Raj, M.S. Mehta, and Raj K. Gupta, Phys. Rev. **C65** (2002) 054323 (Times cited 8).
42. Surface incompressibility from semiclassical relativistic mean field calculations, **S.K. Patra**, M. Centelles, X. Viñas, and M. Del Estal, Phys. Rev. **C65** (2002) 044304 (Times cited 8).
43. Scaling Calculation of Isoscalar Giant Resonances in Relativistic Thomas–Fermi Theory, **S.K. Patra**, X. Viñas, M. Centelles and M. Del Estal, Nucl. Phys. **A703** (2002) 240 (Times cited 4).
44. Scaling in Relativistic Thomas–Fermi Approach for Nuclei, **S.K. Patra**, M. Centelles, X. Viñas and M. Del Estal, Phys. Lett. **B523** (2001) 67 (Times cited 3).
45. Nuclei beyond the drip line, J.N. De, X. Viñas, **S.K. Patra** and M. Centelles, Phys. Rev. **C64** (2001) 057306 (Times cited 2).
46. Strange matter and its stability in presence of magnetic field, P. K. Sahu and **S. K. Patra**, Int. J. Mod. Phys. **A16** (2001) 2435.
47. Pairing properties in Relativistic Mean Field Theory obtained from Effective Field Theory, M. Del Estal, M. Centelles, X. Viñas and **S. K. Patra**, Phys. Rev. **C63** (2001) 044321 (Times cited 34).
48. Ground state spins and other properties of the odd $Z=N+1$ nuclei $^{61}\text{Ga} - ^{97}\text{In}$, **S. K. Patra**, M. Del Estal, M. Centelles and X. Viñas, Phys. Rev **C63** (2001) 024311 (Times cited 5).
49. Effects of new non-linear couplings in relativistic effective field theory, M. Del Estal, M. Centelles, X. Viñas and **S.K. Patra**, Phys. Rev **C63** (2001) 024314 (Times cited 18).

50. Alpha-decay chain of the $^{289}114$ nucleus, **S. K. Patra**, C.-L. Wu, W. Greiner and Raj K. Gupta, J. Phys. **G26** (2000) 1569.
51. Shell structure of superheavy nuclei, **S. K. Patra**, W. Greiner and Raj K. Gupta, J. Phys. **G26** (2000) L65 (Times cited 9).
52. A systematic study of superheavy nuclei for $Z=114$ and beyond using the relativistic mean field approach, **S. K. Patra**, Cheng-Li Wu, C. R. Praharaaj and Raj K. Gupta, Nucl. Phys. **A651** (1999) 117 (Times cited 48).
53. Oscillations in deformation properties of heavy rare-earth nuclei, **S. K. Patra**, Cheng-Li Wu, C. R. Praharaaj and G. K. Khamari, J. Phys. **G25** (1999) 501.
54. Proton-skin in ^8B -nucleus, **S. K. Patra**, C. R. Praharaaj and Cheng-Li Wu, Mod. Phys. Lett. **A13** (1998) 2743 (Times cited 6).
55. Coefficient of fractional parentage in the $k - i$ Basis Shell Model, C. Y. Chang, **S. K. Patra** and C. -L. Wu, Phys. Rev. **C58** (1998) 2133.
56. Structure of $^{302,304}120$ nuclei in Relativistic Mean Field Theory, **S. K. Patra**, Raj K. Gupta and W. Greiner, Mod. Phys. Lett. **A12** (1997) 1727 (Times cited 9) .
57. Negative energy bound states in relativistic mean field theory, **S. K. Patra**, P. K. Panda, J. Maruhn, H. Stöcker and W. Greiner, Mod. Phys. Lett. **A12** (1997) 1561 (Times cited 2).
58. On the vanishing of spherical shell gap at $N=28$ in ^{44}S using relativistic mean-field model, Raj K. Gupta, **S. K. Patra** and W. Greiner, Mod. Phys. Lett. **A12** (1997) 1317 (Times cited 7).
59. Q Values for α decays in the $^{277}112$ chain, **S. K. Patra** and C.R. Praharaaj, J. Phys. **G23** (1997) 939 (Times cited 4) .
60. Relativistic Mean-field Theory and the Structural properties of Ne, Mg, Si, S, Ar and Ca Nuclei from Proton- to Neutron-drip Lines, **S. K. Patra**, Raj K. Gupta and W. Greiner, Int. J. Mod. Phys. **E6** (1997) 641 (Times cited 12).
61. Strong Correlation of the Vacuum in Relativistic Mean Field Theory, P. K. Panda, **S. K. Patra**, J. Reinhardt, J. Maruhn, H. Stöcker and W. Greiner, Int. J. Mod. Phys. **E6** (1997) 307. (Times cited 24).
62. Field theoretical study of ^4He - a variational approach, P. K. Panda, **S. K. Patra**, S. P. Misra and R. Sahu, Int. J. of Mod. Phys. **E5** (1996) 575 (Times cited 4).

63. Reply to "Comment on 'Shape and superdeformed structure in Hg isotopes in relativistic mean field model' and 'Structure of neutron-deficient Pt, Hg and Pb isotopes' " ; S. Yoshida, N. Takigawa, **S. K. Patra**, K. Hagino, C. R. Praharaaj; Phys Rev **C53** (1996) 1038 (Times cited 8).
64. Interaction cross-sections and matter radii of A=20 isobars, L. Chulkov et al., Nucl. Phys. **A603** (1996) 219.
65. Multi-Neutron and Proton Transfer Reactions in Deep Inelastic Heavy-Ion Collisions, S. Yoshida, **S. K. Patra** and Noboru Takigawa, Progress of Theoretical Physics, Supplement No.124 (1996) pp. 131-134.
66. Multi-nucleon transfer reactions and fusion with unstable nuclei, N. Takigawa, S. Yoshida, K. Hagino and **S. K. Patra**, Nucl. Phys. **A588** (1995) 91c.
67. Surface properties of Cs Isotopes, S. Yoshida, **S. K. Patra**, N. Takigawa and C.R. Praharaaj, Phys. Rev. **C52** (1995) 157 (Times cited 3).
68. Hexadecupole Shape Change in Ytterbium Nuclei, **S. K. Patra**, S. Yoshida, N. Takigawa, C. R. Praharaaj and A. K. Rath, Phys. Rev. **C51** (1995) 2248 (Times cited 1).
69. Shape and Superdeformed Structure in Hg Isotopes in Relativistic Mean Field Model, **S. K. Patra**, S. Yoshida, N. Takigawa and C. R. Praharaaj, Phys. Rev. **C50** (1994) 1924 (Times cited 11).
70. Structure of neutron-deficient Pt, Hg and Pb isotopes, S. Yoshida, **S. K. Patra**, N. Takigawa and C. R. Praharaaj, Phys. Rev. **C50** (1994) 1398 (Times cited 11).
71. Shapes of the $N = Z$ nuclei in mass 24 – 48 region **S. K. Patra** and C. R. Praharaaj, Nucl. Phys. **A565** (1993) 442 (Times cited 5).
72. Relativistic Mean Field Study of Light Nuclei, **S. K. Patra**, Nuclear Phys. **A559** (1993) 173. (Times cited 25).
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74. Effects of Pairing Correlation in Light Nuclei, **S. K. Patra**, Phys. Rev. **C48** (1993) 1449. (Times cited 3).
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