



**Dr. Davinder Siwal**  
*Curriculum Vitae*

## **Personal details**

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*Father's Name* Lt. Dalchand Siwal

*Birth* August 15, 1984

*Address* Department of Physics, Panjab University, Chandigarh

*email ID:* [dsiwal.physics@gmail.com](mailto:dsiwal.physics@gmail.com),

## **Education**

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- **University of Delhi**  
*Ph.D.* *Completed on 2014*
  - Subject: Experimental Nuclear Physics
  - Ph.D. thesis Title: **Development of Empirical Mode Decomposition based signal improvement method and its implementation on Pulse Shape Analysis for a segmented HPGe detector**  
(Under Indo-German NUSTAR-FAIR collaboration, for the future Germanium based DESPEC detector array at GSI, Germany)
- **University of Delhi**  
*M.Sc. Physics* *Completed on 2007*
  - Undertaken Nuclear Physics as a special paper in M.Sc. final year  
Registered at : Hans Raj College, University of Delhi
  - Post Graduated with 66% average
- **University of Delhi**  
*B.Sc. Physics (Honours)* *Completed on 2005*
  - College : Hans Raj College, University of Delhi
  - Graduated with 71% average
- **G.D. Soni D.A.V. Senior Secondary School**  
*High School* *Completed on 2002*
  - qualified with a 64% average

## **Carrer Profile**

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**UGC-Dr. D. S. Kothari Postdoctoral Fellow** 10<sup>th</sup> May 2016 – till date

*Department of Physics, Panjab University, Chandigarh*

**Post-doctoral Research Associate** 26<sup>th</sup> January 2015 – 29<sup>th</sup> Feb. 2016

*Department of Chemistry, Indiana University, Bloomington, USA*

**Research Associate** 21<sup>st</sup> October 2013 – 3<sup>rd</sup> January 2015

*Inter University Accelerator Center, New Delhi*

**Assistant Professor (Adhoc basis)** 3<sup>rd</sup> Jan – 22<sup>nd</sup> May 2013

*Shri Guru Tegh Bahadur Khalsa College, North campus, University of Delhi*

- **Have taught the following subjects of B.Sc. Physical Science course:**

- Digital Electronics
- Analog Electronics
- B.Sc. Physical Science practicals of sem IV
- B.Sc. Physical Science practicals of sem VI
- B.Sc. Physical Science practicals of sem II

- **Best Poster Presentation award**

*DAE-BRNS Symposium on nuclear physics 2017*

- **UGC-CSIR NET Qualified**

*2006*

- **CSIR Senior research fellow**

*at Department of Physics & Astrophysics, University of Delhi 2009-2012*

- **CSIR Junior research fellow**

*at Department of Physics & Astrophysics, University of Delhi 2007-2009*

## **Research area of interest**

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- **Nuclear Detector Instrumentation** : Monte Carlo Simulation based study for gamma/neutron detector, development of faster pulse timing and energy algorithms, for a HPGe, Neutron, and Resistive Anode detector. Gamma Imaging with scintillator/MCP detector.

## **Research Experience**

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- **Detector handling** : Experience with HPGe, NaI and neutron detector, mild experience with Microchannel plate intensifiers.
- **Programming languages** : Experience in C++, C with Makefile knowledge for shared-object library development, their run-time implementation and interfacing to the FORTRAN function and subroutines.

- **Software experience** : Experience in [Geant4](#) based monte carlo simulation code developmente, [ROOT](#) based analysis software, and [IUAC](#) CANDLE and FREE-DOM analysis softwares.

## **Oral/Meeting/Paper Presentations**

- **Simulating the growth of a charge cloud for a microchannel plate detector**  

At Sent Fe, New Maxico, USA

*APS DNP Fall Meeting* *On 30<sup>th</sup> Oct. 2015*
- **Characterization of a two fold segmented HPGe clover detector**  

At Saha Institute of Nuclear Physics, Kolkata, India

*Young Physicists Colloquium 2014* *On 21<sup>st</sup> August 2014*
- **A VME based Data Acquisition Installation for  $\gamma$ -ray Pulse Shape recording at Department of Physics & Astrophysics, University of Delhi**  

At Andhra University, India

*DAE-BRNS Symposium* *On 21<sup>st</sup> Dec. 2011*
- **Development of signal enhancement technique using EMD based time-series analysis and its application to Pulse Shape Analysis**  

At Variable Energy Cyclotron Centre, Kolkata, India

*FAIR-NUSTAR week* *On 11<sup>th</sup> Oct. 2012*

## **Participation in Conferences/school/Meetings/Symposium/Colloquium and Workshop**

- **International conference in nuclear physics withenergetic heavy ion beams**  

*Department of Physics, Panjab University, Chandigarh, India 15<sup>th</sup>-18<sup>th</sup> March 2017*
- **APS DNP Fall Meeting** *28<sup>th</sup>-31<sup>st</sup> Oct 2015*  

*The American Physical society, Sent Fe, New Maxico, USA*
- **Young Physicists Colloquium 2014** *21<sup>th</sup>-22<sup>th</sup> Aug. 2014*  

*The Indian Physical society, Saha Institute of Nuclear Physics, Kolkata, India*
- **FUSION14 entitled “Nuclear reactions around the Coulomb barrier”**  

*IUAC, New Delhi, India* *24<sup>th</sup>-28<sup>th</sup> Feb. 2014*
- **India-UK Seminar in Nuclear Physics at ISOLDE**  

*Panjab University, Chandigarh, India* *22<sup>nd</sup>-24<sup>th</sup> Jan. 2014*

- **DAE-BRNS Nuclear Physics Symposium 2013**  
*Bhabha Atomic Research Center, Mumbai, India* 2<sup>nd</sup> - 6<sup>th</sup> Dec. 2013
- **DAE-BRNS Nuclear Physics Symposium 2012**  
*University of Delhi, Delhi, India* 3<sup>rd</sup> - 7<sup>th</sup> Dec. 2012
- **International Conference on Recent Trends in Nuclear Physics**  
*Chitkara University, Himachal Pradesh, India* 19<sup>th</sup>-21<sup>st</sup> Nov. 2012
- **NUSTAR week 2012**  
*Variable Energy Cyclotron Center, Kolkata, India* 8<sup>th</sup> - 12<sup>th</sup> Oct 2012
- **DAE-BRNS Nuclear Physics Symposium 2011**  
*Andhra University, Andhra Pradesh, India* 26<sup>th</sup> - 30<sup>th</sup> Dec. 2011
- **Advanced Detectors for Imaging in Physics and Medical Diagnosis**  
*Variable Energy Cyclotron Center, Kolkata, India* 4<sup>th</sup>-5<sup>th</sup> March 2010
- **Physics with FAIR : Indian perspective**  
*Variable Energy Cyclotron Center, Kolkata, India* 8<sup>th</sup>-10<sup>th</sup> March 2010
- **Seminar on Nuclear Energy for National Development**  
*University of Delhi, India* 20<sup>th</sup> Oct. 2010
- **NN Interaction Meeting**  
*Tata Institute of Fundamental Research, Mumbai, India* 21<sup>st</sup>-29<sup>th</sup> Nov. 2010
- **DAE-BRNS Nuclear Physics Symposium**  
*Birla Institute of Technology, Pilani, Rajasthan, India* 19<sup>th</sup>-24<sup>th</sup> Dec. 2010
- **National Workshop “Frontiers in Gamma Spectroscopy-FIG09”**  
*Tata Institute of Fundamental Research, Mumbai, India* 2<sup>nd</sup>-4<sup>th</sup> March 2009
- **International DAE-BRNS Nuclear Physics Symposium**  
*Bhabha Atomic Research Center, Mumbai, India* 8<sup>th</sup>-12<sup>th</sup> Dec. 2009
- **Final RISING symposium**  
*Technical University Darmstadt, Germany* 5<sup>th</sup> – 7<sup>th</sup> Oct 2009
- **DST-SERC School on  
“Exploring Symmetries in Nuclei using National Facilities”**  
*IUAC, New Delhi, India* 1<sup>st</sup>-21<sup>st</sup> Sept. 2008

## **Selected Research Publications**

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### **Peer-Reviewed Journal Articles**

1. **Investigation of digital timing resolution and further improvement by using constant fraction signal time marker slope for fast scintillator detectors**  
Kundan Singh, Davinder Siwal  
*Nucl. Instr. and Meth. A* **886** 61 (2018)  
ISSN/ISBN Number : 0168-9002, Impact Factor : 1.32
2. **Using pulse shape analysis to improve the position resolution of a resistive anode microchannel plate detector**  
Davinder Siwal, B.B. Wiggins, and R.T. deSouza  
*Nucl. Instr. and Meth. A* **804** 144 (2015)  
ISSN/ISBN Number : 0168-9002, Impact Factor : 1.32
3. **Optimizing the position resolution of a Z-stack microchannel plate resistive anode detector for low intensity signals**  
B.B. Wiggins, E. Richardson, D. Siwal, S. Hudan, and R.T. deSouza  
*Rev. of Sci. Instrum.* **86** 083303 (2015).  
ISSN/ISBN Number : 0034-6748,1089-7623, Impact Factor : 1.602
4. **Pulse Shape Analysis of a two fold clover detector with an EMD based new algorithm: A Comparison**  
Davinder Siwal, S.Mandal, R. Palit, J. Sethi, R. Garg, S. Saha, Awadhesh Prasad, P.B Chavan, B.S. Naidu, S. Jadhav , R.Donthi, H.Schaffner, J. Adamczweski-Musch, N. Kurz, H. J. Wollersheim, R. Singh  
*Nucl. Instr. and Meth. A* **741** 108 (2014)  
ISSN/ISBN Number : 0168-9002, Impact Factor : 1.32
5. **A new approach of denoising the regular and chaotic signals using Empirical Mode Decomposition : Comparison and application**  
Davinder Siwal, Vinita Suyal, Awadhesh Prasad, S. Mandal, and R. Singh  
*Rev. Sci. Instrum.* **84** 075117 (2013)  
ISSN/ISBN Number : 0034-6748,1089-7623, Impact Factor : 1.602
6. **Relationship between and effect of inelastic excitations and transfer channels on sub-barrier fusion enhancement**  
Khushboo, S. Mandal,..., Davinder Siwal,.. *et al.*  
*Phys. Rev. C* **96** 014614 (2017)  
ISSN/ISBN Number : 0556-2813,1089-490X, Impact Factor : 3.715
7. **Interplay of fission modes in mass distribution of light actinide nuclei  $^{225,227}\text{Pa}$**   
R. Dubey, P. Sugathan, A. Jhingan, Gurpreet Kaur, Ish Mukul, G. Mohanto, D. Siwal, N. Saneesh, T. Banerjee, Meenu Thakur, Ruchi Mahajan, N. Kumar, M.B. Chatterjee  
*Phys. Lett. B* **752** 338 (2015).  
ISSN/ISBN Number : 0370-2693, Impact Factor : 4.569
8. **Anomalous deviations from statistical evaporation spectra for the decay of the  $^{73}\text{Br}$  and  $^{77}\text{Rb}$  compound systems**  
Maninder Kaur, B.R. Behera, Gulzar Singh, Varinderjit Singh, Rohit Sandal, A. Kumar, H. Singh, Gurpreet Singh, K.P. Singh, N. Madhavan, S. Nath, A. Jhingan,

- J. Gehlot, K.S. Golda, P. Sugathan, Davinder Siwal Sunil Kalkal, E. Prasad, S. Appannababu  
*Phy. Rev. C* **89** 034621 (2014)  
 ISSN/ISBN Number : 0556-2813,1089-490X, **Impact Factor** : 3.715
9. **Neutron multiplicity measurements for  $^{19}\text{F} + ^{194,196,198}\text{Pt}$  systems to investigate the effect of shell closure on nuclear dissipation**  
 Varinderjit Singh, B. R. Behera, Maninder Kaur, A. Kumar, P. Sugathan, K. S. Golda, A. Jhingan, M. B. Chatterjee, R. K. Bhowmik, Davinder Siwal S. Goyal, Santanu Pal, A. Saxena, S. Santra, and S. Kailas  
*Phy. Rev. C* **87** 064601 (2013)  
 ISSN/ISBN Number : 0556-2813,1089-490X, **Impact Factor** : 3.715
10. **Effect of N/Z in pre-scission neutron multiplicity for  $^{16,18}\text{O} + ^{194,198}\text{Pt}$  systems**  
 Rohit Sandal, B.R. Behra, Varinderjit Singh, Maninder Kaur, A. Kumar, G. Singh, K.P. Singh, P. Sugathan, A. Jhingan, K.S. Golda, M.B. Chatterjee, R.K. Bhowmik, Sunil Kalkal, D. Siwal, S.Goyal, S. Mandal, E. Prasad, K. Mahata, A. Saxena, Jhilam Sadhukhan and Shantanu Pal  
*Phy. Rev. C* **87** 014604 (2013).  
 ISSN/ISBN Number : 0556-2813,1089-490X, **Impact Factor** : 3.715
11. **New Isomers in the Full Seniority Scheme of Neutron-Rich Lead Isotopes: The Role of Effective Three-Body Forces**  
 A. Gottardo, J. J. Valiente-Dobon,... D. Siwal,... *et al.*  
*Phy. Rev. Lett.* **109** 162502 (2012).  
 ISSN/ISBN Number : 0031-9007,1079-7114, **Impact Factor** : 7.943
12. **First measurement of beta decay half-lives in neutron-rich Tl and Bi isotopes**  
 G. Benzoni, A.I. Morales,... D. Siwal,... *et al.*  
*Phy. Lett. B* **715** 293 (2012)  
 ISSN/ISBN Number : 0370-2693, **Impact Factor** : 4.569
13. **Search for an effect of shell closure on nuclear dissipation via a neutron-multiplicity measurement**  
 Varinderjit Singh, B. R. Behera, Maninder Kaur, P. Sugathan, K. S. Golda, A. Jhingan, Jhilam Sadhukhan, Davinder Siwal, S. Goyal, S. Santra, A. Kumar, R. K. Bhowmik, M. B. Chatterjee, A. Saxena, Santanu Pal, and S. Kailas  
*Phys. Rev. C* **86** 014609 (2012)  
 ISSN/ISBN Number : 0556-2813,1089-490X, **Impact Factor** : 3.715
14. **Channel coupling effects on the fusion excitation functions for  $^{28}\text{Si} + ^{90,94}\text{Zr}$  in sub-and near-barrier regions**  
 Sunil Kalkal, S. Mandal, N. Madhavan, E. Prasad, Shashi Verma, A. Jhingan, Rohit Sandal, S. Nath, J. Gehlot, B. R. Behera, Mansi Saxena, Savi Goyal, Davinder Siwal, Ritika Garg, U. D. Pramanik, Suresh Kumar, T. Varughese, K. S. Golda, S. Muralithar, A. K. Sinha, and R. Singh,  
*Phys. Rev. C* **81** 044610 (2010)  
 ISSN/ISBN Number : 0556-2813,1089-490X, **Impact Factor** : 3.715

## International Conference/Symposium Proceedings

- 1. Fission excitation function for  $^{19}\text{F} + ^{194,196,198}\text{Pt}$  at near and above barrier energies**  
Varinderjit Singh, B.R. Behera, Maninder Kaur, A. Jhingan, P. Sugathan, Santanu Pal, **Davinder Siwal**, M. Oswal, K.P. Singh, S. Goyal, A. Saxena, and S. Kailas  
*EPJ Web of Conferences* **86** 00052 (2015)
- 2. Spin distribution as a probe to investigate the dynamical effects in fusion reactions**  
Maninder Kaur, B.R. Behera, Gulzar Singh, Varinderjit Singh, N. Madhavan, S. Muralithar, S. Nath, J. Gehlot, G. Mohanto, Ish Mukul, **Davinder Siwal**, Meenu Thakur, Kushal Kapoor, Priya Sharma, Akhil Jhingan, T. Varughese, Indu Bala, M.B. Chatterjee, B.K. Nayak and A. Saxena  
*EPJ Web of Conferences* **86** 00026 (2015)
- 3. Effect of shell structure on neutron multiplicity of fissioning systems  $^{220,222,224}\text{Th}$  nuclei**  
Savi Goyal, S. Mandal, Akhil Jhingan, P. Sugathan, Santanu Pal, B. R. Behera, K. S. Golda , Hardev Singh, Sunil Kalkal, Varinderjit Singh, Ritika Garg, **Davinder Siwal**, Maninder Kaur, Mansi Saxena, Suresh Kumar, S.Verma, M. Gupta, Subinit Roy and R. Singh  
*EPJ Web of Conferences* **86** 00013 (2015)
- 4. Pulse Shape Analysis of a two fold clover detector with Empirical Mode Decomposition based algorithm**  
**Davinder Siwal**, S. Mandal, R. Palit, H.Schaffner, J. Adamczewski , N. Kurz, B.S. Naidu , H.J. Wollersheim and R. Singh  
*AIP conference proceedings* **1609** 25 (2014)  
ISSN/ISBN Number : 978-0-7354-1245-3
- 5. Development of EMD based signal improvement technique and its application to Pulse Shape Analysis**  
**Davinder Siwal**, V. Suyal, A. Prasad, S. Mandal and R. Singh  
*AIP conference proceedings* **1524** 271 (2013)  
ISSN/ISBN Number : 0094-243X,1551-7616
- 6. Compton imaging with a two fold clover HPGe detector**  
**Davinder Siwal**, R. Palit and S. Mandal  
*DAE-BRNS Symp. on Nucl. Phys.* **58** 894 (2013).
- 7. Dipole bands in high spin states of  $^{135}_{57}\text{La}_{78}$**   
Ritika Garg, S. Kumar, Mansi Saxena, Savi Goyal, **Davinder Siwal**, S. Verma, R. Palit, Sudipta Saha, J. Sethi, Sushil K. Sharma, T. Trivedi, S. K. Jadav, R. Donthi, B. S. Naidu, and S. Mandal  
*AIP conference proceedings* **1609** 125 (2014)  
ISSN/ISBN Number : 978-0-7354-1245-3
- 8. New Isomers in the Neutron-Rich Region Beyond  $^{208}\text{Pb}$**   
A. Gottardo, J.J. Valiente-Dobn,... **D. Siwal**,....*et al.*  
*EPJ Web of Conferences* **66** 02043 (2014).  
ISSN/ISBN Number : 2100-014X

9. **Effect of N/Z in pre-scission neutron multiplicity for  $^{16,18}\text{O}+^{194,198}\text{Pt}$  systems**  
 Rohit Sandal, B.R. Behera, Varinderjit Singh, Maninder Kaur, A. Kumar, G. Singh, K. P. Singh, P. Sugathan, A. Jhingan, K. S. Golda, M. B. Chatterjee, R. K. Bhowmik, Sunil Kalkal, **D. Siwal**, S. Goyal, S. Mandal, E. Prasad, J. Sadhukhan, K. Mahta, A. Saxena, Santanu Pal  
*EPJ Web of Conferences* **66 03006** (2014).  
**ISSN/ISBN Number : 2100-014X**
10. **Evaporation residues spin distribution for  $^{16}\text{O}+^{64}\text{Zn}$  and  $^{32}\text{S}+^{48}\text{Ti}$  systems**  
 Maninder Kaur B.R. Behera, Gulzar Singh, Varinderjit Singh, N. Madhavan, S. Murlithar, S. Nath, J. Gehlot, G. Mohanto, I. Mukul, **Davinder Siwal**, Meenu Thakur, Kushal Kapoor, Priya Sharma, A. Jhingan, T. Varughese, Indu Bala, B.K. Nayak, A. Saxena and M. B. Chatterjee  
*DAE-BRNS Symp. on Nucl. Phys.* **58 436** (2013).
11. **Effect of fissility in fission time scales for  $^{16,18}\text{O}+^{194,198}\text{P}$  systems**  
 Rohit Sandal, B. R. Behera, V. Singh, A. Kumar, G. Singh, K. P. Singh, M. Kaur, K. S. Golda, A. Jhingan, P. Sugathan, M. B. Chatterjee, R. K. Bhowmik, S. Mandal, S. Kalkal, **D. Siwal**, S. Goyal, E. Prasad, K. Mahata, A. Saxena, and Santanu Pal  
*AIP conference proceedings* **1524 167** (2013)  
**ISSN/ISBN Number : 0094-243X,1551-7616**
12.  **$\beta$  decay of  $^{102}\text{Y}$  produced in projectile fission of  $^{238}\text{U}$**   
 A M Bruce, A M Denis Bacelar,... **Davinder Siwal**,... *et al.*  
*INPC Conference series, Journal of Physics* **381 012053** (2012).  
**ISSN/ISBN Number : 1742-6588,1742-6596**
13. **Study of the effect of shell closure on the nuclear dissipation**  
 V. Singh, B.R. Behera, M. Kaur, **D. Siwal**, S. Goyal, P. Sugathan, K.S. Golda, A. Jhingan, A. Kumar, A. Saxena, R.K. Bhowmik and S. Kailas  
*EPJ Web of Conferences* **17 16014** (2011).  
**ISSN/ISBN Number : 2100-014X**
14. **Isomers in neutron-rich lead isotopes populated via the fragmentation of  $^{238}\text{U}$  at 1 GeV A**  
 A. Gottardo, J.J. Valiente-Dobon,... **D. Siwal**,...*et al.*  
*INPC Conference series, Journal of Physics* **312 092026** (2011).  
**ISSN/ISBN Number : 1742-6588, 1742-6596**
15. **Fusion and transfer reactions around the Coulomb barrier for  $^{28}\text{Si}+^{90,94}\text{Zr}$  systems**  
 Sunil Kalkal, S Mandal, N Madhavan, A Jhingan, E Prasad, Rohit Sandal, J. Gehlot, S. Verma, Ritika Garg, Savi Goyal, Mansi Saxena, S Nath, Bivash Behera, Suresh Kumar, U D Pramanik, **Davinder Siwal**, Gayatri Mohanto, H.J. Wollersheim, A K Sinha and R Singh  
*INPC Conference series, Journal of Physics* **312 082027** (2011).  
**ISSN/ISBN Number : 1742-6588, 1742-6596**

### National Conferences/Symposium

1. **Development of Geant4 based simulation package for neutron array facility at IUAC**



- Davinder Siwal**, N. Saneesh, P. Sugathan  
*DAE-BRNS Symp. on Nucl. Phys.* **59** 928 (2014).
2. **Pulse Shape Analysis of a two fold clover detector with EMD based algorithm**  
**Davinder Siwal**, S. Mandal, R. Palit, J. Sethi, R. Garg, S. Saha, A. Prasad, P.B. Chavan, B.S. Naidu, S. Jadhav, R. Donthi, H. Schaffner, J. Adamczewski, N. Kurz, H.J. Wollersheim, and R. Singh  
*DAE-BRNS Symp. on Nucl. Phys.* **57** 890 (2012).
  3. **A VME based Data Acquisition system for Pulse Shape Recording of  $\gamma$ -ray detector**  
**Davinder Siwal**, S.K. Mandal, N.Kurz, H. Schaffner, J. Adamczewski, H.J. Wollersheim, M. Saxena, R. Garg, S. Kumar and S.Verma *DAE-BRNS Symp. on Nucl. Phys.* **56** 1050 (2011).
  4. **Pulse risetime correlation studies for two fold clover detector using standard GSI Multi-Branch System**  
**Davinder Siwal**, S.K. Mandal, R. Palit, H. Schaffner, J. Adamczewski, B.S. Naidu and R. Singh  
*DAE-BRNS Symp. on Nucl. Phys.* **56** 1144 (2011).
  5. **Geant4 simulation of two fold clover detector for position resolution calculation**  
**Davinder Siwal**, S.K. Mandal, R. Palit, J. Adamczewski and R. Singh  
*DAE-BRNS Symp. on Nucl. Phys.* **56** 1146 (2011).
  6. **Signal Noise Filtering of Gamma Tracking Detectors Using Emperical Mode Decomposition Method**  
**Davinder Siwal**, Vinita Suyal, A. Prasad, S.K. Mandal, R. Palit, R. Singh  
*DAE-BRNS Symp. on Nucl. Phys.* **55** 706 (2010).
  7. **In beam test of Neutron detector array facility at IUAC**  
P. Sugathan, A. Jhingan, S. Saneesh, G. Mohanto, **D. Siwal**, R. Dubey, T. Banerjee, Kaur Gurpreet, M. Thakur, R. Mahajan, P. Sharma, K. Kapoor, B.R. Behera, N. Kumar, Kushboo, S. Geol, M. Shareef, H Singh  
*75-years of Nuclear Fission: Present status and Future Perspectives* **F8** 103 (2014).
  8. **Facility Test Run for g factor measurement using Transient Field Method**  
Mansi Saxena, S.Mandal, A.Mandal, Rajesh Kumar, P.Barua, R.Kumar, **Davinder Siwal**, Chandan Kumar, Savi Goyal, Ritika Garg, Anisur Rehman, Khushboo, Aman Rohilla, Minakshi Roy, Naveen Kumar, S. Kumar, S.Chamoli, R. Gujjar, Indu Bala, R.P. Singh ,S. Muralithar  
*DAE-BRNS Symp. of Nucl. Phys.* **57** 498 (2012).
  9. **Study of fission fragment angular distribution for  $^{19}F + ^{194,196,198}Pt$  reactions at near and above barrier energies**  
Varinderjit Singh, B.R. Behera, Maninder Kaur, A. Jhingan, P. Sugathan, **D. Siwal**, M. Oswal, S. Goyal, K.P Singh, A. Saxena, S. Kailas  
*DAE-BRNS Symp. on Nucl. Phys.* **57** 400 (2012).
  10. **Measurement of the Fission Cross Sections for the  $^{16,18}O + ^{194,198}Pt$  Systems**  
Rohit Sandal, B.R. Behera, V. Singh, M. Kaur, S. Mandal, S. Kalkal, **D. Siwal**,

- S. Goyal, E. Prasad, P. Sugathan, A. Jhingan, A. Saxena  
*DAE-BRNS Symp. on Nucl. Phys.* **57** 534 (2012).
11. **Study of Magnetic Rotation in mass  $A = 135$  region**  
Ritika Garg, S. Kumar, Mansi Saxena, Savi Goyal, Davinder Siwal, S. Verma, R. Palit, S. Saha, J. Sethi, Sushil K. Sharma, T. Trivedi, S.K. Jadav, R. Donthi, B.S. Naidu and S. Mandal  
*DAE-BRNS Symp. on Nucl. Phys.* **56** 218 (2011).
  12. **Magnetic Moment measurement of  $^{140}\text{Ba}$  nuclei using transient field technique**  
Mansi Saxena, S. Mandal, G. Rainvoski, J. Leske, H.J. Wollersheim, C. Bauer, T. Bloch, M. Danchev, A. Damyanova, K. Gladnishki, P. John, I. Kojouharov, N. Pietralla, S. Pietri, H. Schaffner, Davinder Siwal,  
*DAE-BRNS Symp. on Nucl. Phys.* **56** 360 (2011).
  13. **Effect of shell closure on nuclear dissipation at high excitation energy using neutron multiplicity as a probe**  
Varinderjit Singh, B.R. Behra, Maninder Kaur, Davinder Siwal, Jhiliam Sadhukhan, S/ Goyal, P. Sugathan, K.S. Golda, A. Jhingan, S. Santra, A. Saxena, S. Pal, R.K. Bhowmik, M.B. Chatterjee, S. Kailash  
*DAE-BRNS Symp. on Nucl. Phys.* **56** 484 (2011).
  14. **Effects of shell closure of target on neutron multiplicity for the  $^{28}\text{Si}+^{204,206,208}\text{Pb}$**   
Savi Goyal, S. Mandal, Ritika Garg, Mansi Saxena, Akhil Jhingan, P. Sugathan, K.S. Golda, S. Appannababu, D. Singh, Suresh Kumar, S. Verma, Maninder Kaur, Varinderjit Singh, Davinder Siwal, Sunil Kalkal, B.R. Behram mohini Gupta, Subinit Roy and R. Singh  
*DAE-BRNS Symp. on Nucl. Phys.* **56** 604 (2011).
  15. **In beam spectroscopy of negative parity states in  $^{135}\text{Pr}$**   
Ritika Garg, S.Kumar, Mansi Saxena, Savi Goyal, Davinder Siwal, Sunil Kalkal, S.Verma, S.Mandal, R.Singh, S.C.Pancholi, R.Palit, Deepika Chaudhary, A.K.Jain, S.S.Gugre, G.Mukherjee, R.Kimar, S.Muralithar, R.K.Bhowmik, R.P.Singh  
*DAE-BRNS Symp. on Nucl. Phys.* **55** 64 (2010).
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