

❖ LIST OF PUBLICATIONS:

➤ Articles in Journal (Published / Communicated) :

1. The European Physics Journal A 45, 23-28 (2010).

S. Mukherjee, **N.N. Deshmukh**, V. Guimarães, J. Lubian, P. R. S. Gomes, A. Barioni, S. Appannababu, C. C. Lopes, E. N. Cardozo, K. C. C. Pires, R. Lichtenthäler, A. Lépine-Szily, D. S. Monterio, J. M. B. Shorto, P. N. de Faria, E. Crema, V. Morcelle, M. S. Morais and R. Pampa Condori.

Total Reaction cross sections for light weakly bound systems.

2. Physical Review C 83, 024607 (2011).

N. N. Deshmukh, S. Mukherjee, D. Patel, N. L. Singh, P. K. Rath, B. K. Nayak, D. C. Biswas, E. T. Mirgule, S. Santra, L. S. Danu, Y. K. Gupta, A. Saxena, R. K. Choudhury, R. Kumar, J. Lubian, C. C. Lopes, E. N. Cardozo and P. R. S. Gomes.

Breakup Threshold Anomaly in the near barrier elastic scattering of ${}^6\text{Li} + {}^{116,112}\text{Sn}$.

3. Physical Review C 83, 034605 (2011).

S. Appannababu, S. Mukherjee, B. K. Nayak, R. G. Thomas, P. Sugathan, A. Jhingan, E. Prasad, D. Negi, **N. N. Deshmukh**, P. K. Rath, N. L. Singh and R. K. Choudhury.

Fission fragment mass distributions in reactions forming ${}^{213}\text{Fr}$ compound nucleus.

4. The European Physical Journal A 47, 118 (2011).

N. N. Deshmukh, S. Mukherjee, B. K. Nayak, D. C. Biswas, S. Santra, E. T. Mirgule, S. Appannababu, D. Patel, A. Saxena, R. K. Choudhury, J. Lubian, and P. R. S. Gomes.

Investigation of threshold anomaly in the near barrier elastic scattering of ${}^7\text{Li}$ on ${}^{116}\text{Sn}$.

5. Nuclear Physics A 874, 14 (2012).

P. K. Rath, S. Santra, N. L. Singh, K. Mahata, R. Palit, B. K. Nayak, K. Ramachandran, V. V. Parkar, R. Tripathi, S. K. Pandit, S. Appannababu, **N. N. Deshmukh**, R. K. Choudhury, S. Kailas.

Fusion of ${}^6\text{Li}$ with ${}^{152}\text{Sm}$: Role of projectile breakup versus target deformation

6. **Physical Review C (2012) – Communicated**

N. N. Deshmukh, S. Mukherjee, T. Correa, J. Lubian, P. R. S. Gomes, V. Guimarães, B. K. Nayak, D. C. Biswas, S. Santra.

Effect of breakup couplings on the ${}^6\text{Li} + {}^{116}\text{Sn}$ elastic scattering.

➤ **Articles as Conference Proceedings (Published / Communicated) :**

7. **AIP Conference Proceedings 1423, 122–125 (2012) (IX – Latin America Symposium on Nuclear Physics and Applications, 2011).**

N. N. Deshmukh, S. Mukherjee, B. K. Nayak, D. C. Biswas, S. Santra, S. Appannababu, E. T. Mirgule, A. Saxena, D. Patel, R. K. Choudhury, J. Lubian, and P. R. S. Gomes.

Threshold Anomaly in the Elastic Scattering of the Weakly Bound Projectile ${}^7\text{Li}$ on the Medium – Mass Target ${}^{116}\text{Sn}$.

8. **Proceedings of National Conference on Emerging Interfaces of Physics and Technology – 2011 (EIPT – 2011), Excel India Publishers (ISBN: 978-93-81361-31-3), Page 108 – 111.**

N. N. Deshmukh, S. Mukherjee, B. K. Nayak, D. C. Biswas, S. Santra, S. Appannababu, E. T. Mirgule, A. Saxena, and R. K. Choudhury.

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9. **Journal of Physics: Conference Series (JPCS) – In press.**

D. C. Biswas, Pratap Roy, Y. K. Gupta, B. N. Joshi, B. K. Nayak, L. S. Danu, B. V. John, R. P. Vind, **N. Deshmukh**, S. Mukherjee, A. K. Jain and R. K. Choudhury.

Projectile structure effects in multi-nucleon and cluster transfers in ${}^{16,18}\text{O} + {}^{164}\text{Dy}, {}^{208}\text{Pb}$ reactions

➤ **Contributions to International / National Conferences Published as Long Abstract :**

1. **N.N. Deshmukh**, S. Mukherjee, V. Guimarães, S. Appannababu, A. Barioni, K. C. C. Pires, A. Lépine-Szily, J. Lubian, P. R. S. Gomes, R. Lichtenthäler, E. Crema, D. Mendes Jr., V. Morcelle, R. Pampa Condori.

Elastic scattering with Radioactive Ion Beam ${}^8\text{Li}$ on ${}^9\text{Be}$ target.

Proceedings of the International Symposium on Nuclear Physics, Vol.54 (2009), Page 424 – 425, December 8-12, 2009.

2. **N.N. Deshmukh**, S. Mukherjee, V. Guimarães, S. Appannababu, J. Lubian, P. R. S. Gomes
Reduction methodology for reaction cross sections induced by weakly bound nuclei.
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3. Appannababu S, S Mukherjee, R.G Thomas, S Santra, B.K Nayak, P Sugathan, A Jhingan, Prasad E, D Negi, P.K Rath, N.L Singh, **N.N. Deshmukh**, R.K Choudhury
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4. P. K. Rath, S. Santra, N. L. Singh, K. Mahata, R. Palit, V. V. Parkar, B. K. Nayak, R. Tripathi, S. Appannababu, **N. N. Deshmukh**
Effect of target deformation and projectile breakup in complete fusion of $^6\text{Li} + ^{152}\text{Sm}$.
Proceedings of the International Symposium on Nuclear Physics, Vol.54 (2009), Page 312 – 313, December 8-12, 2009.
5. **N. N. Deshmukh**, S. Mukherjee, S. Appannababu, D. Patel, N. L. Singh, P. K. Rath, B. K. Nayak, D. C. Biswas, E. T. Mirgule, S. Santra, L. S. Danu, Y. K. Gupta, A. Saxena, R. K. Choudhury and R. Kumar.
The Breakup threshold anomaly of the $^6\text{Li} + ^{116}\text{Sn}$ system from the elastic scattering measurements
Book of abstracts of the Zakopane Conference on Nuclear Physics, Extremes of the Nuclear Landscape, 45th in the series of Zakopane schools of physics, Page 81 – 82, August 30 – September 05, 2010, Zakopane, Poland.
6. C. C. Lopes, E. N. Cardozo, J. Lubian, P. R. S. Gomes, S. Mukherjee and **N. N. Deshmukh**.
Comparison of total reaction cross sections of light mass systems.
XXXIII Meeting of working group on Nuclear Physics in Brazil, ID: 80 – 1, September 7 – 11, 2010, Campos do Jordao, Sao Paulo, Brazil.
7. C. C. Lopes, E. N. Cardozo, J. Lubian, P. R. S. Gomes, V. Guimarães, S. Mukherjee and **N. N. Deshmukh**.
Comparison of total reaction cross sections of medium – light mass systems.
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8. **N. N. Deshmukh**, S. Mukherjee, B. K. Nayak, D. C. Biswas, E. T. Mirgule, S. Santra, D. Patel, L. S. Danu, Y. K. Gupta, A. Saxena, R. K. Choudhury, R. Kumar, S. Appannababu, N. L. Singh, J. Lubian, P. R. S. Gomes
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9. **N. N. Deshmukh**, S. Mukherjee, B. K. Nayak, D. C. Biswas, E. T. Mirgule, S. Santra, A. Saxena, R. K. Choudhury, J. Lubian, P. R. S. Gomes
Effect of reduction methodology on reaction cross section induced in medium – mass systems
Proceedings of the DAE Symposium on Nuclear Physics, Vol.55 (2010), Page 292 – 293, December 20-24, 2010.

10. Pratap Roy, D. C. Biswas, B. K. Nayak, L. S. Danu, B. N. Joshi, B. John, R. P. Vind, Y. K. Gupta, **N. Deshmukh**, S. Mukherjee and R. K. Choudhury.
Comparative study of elastic scattering in $^{16,18}\text{O} + ^{209}\text{Bi}$ reactions.
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11. **N. N. Deshmukh**, S. Mukherjee, S. Appannababu, B. K. Nayak, D. C. Biswas, S. Santra, E. T. Mirgule, A. Saxena, D. Patel, and R. K. Choudhury.
Absence of usual Threshold Anomaly in the near barrier elastic scattering of $^7\text{Li} + ^{116}\text{Sn}$ system
Abstract book of the National Conference on Emerging Interfaces of Physics and Technology, Page – 39, March 28 – 30, 2011.

12. T. Correa, J. Lubian, P. R. S. Gomes, V. Guimarães, **N. N. Deshmukh**, S. Mukherjee.
Effects of breakup couplings on $^6\text{Li} + ^{116}\text{Sn}$
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13. **N. N. Deshmukh**, S. Mukherjee, B. K. Nayak, D. C. Biswas, S. Santra, S. Appannababu, E. T. Mirgule, A. Saxena, D. Patel, R. K. Choudhury, J. Lubian and P. Gomes.
Elastic scattering and total reaction cross sections using the weakly bound projectile ^7Li on medium – mass target ^{116}Sn
Book of abstracts of IX Latin American Symposium on Nuclear Physics and Applications, Page – 33, July 18 – 22, 2011, EPN, Quito, Ecuador.

14. **N. N. Deshmukh**, S. Mukherjee, S. Santra, B. K. Nayak, D. C. Biswas, E. T. Mirgule, A. Saxena, S. Kailas
Study of Breakup Threshold Anomaly in $^{6,7}\text{Li} + ^{116}\text{Sn}$ system: A dispersion relation analysis
Proceedings of the DAE Symposium on Nuclear Physics, Vol.56 (2011), Page 478 – 479, December 26-30, 2011.

15. D. Patel, S. Mukherjee, D. C. Biswas, B. K. Nayak, S. Santra, **N. N. Deshmukh**, P. Sahoo, E. T. Mirgule
Elastic scattering angular distribution & Threshold Anomaly in the $^7\text{Li} + ^{159}\text{Tb}$ reaction
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16. D. Patel, B. K. Nayak, S. Mukherjee, D. C. Biswas, E. T. Mirgule, B. V. John, Y. K. Gupta, S. Mukhopadhyay, G. Prajapati, L. S. Danu, P. K. Rath, V. Desai, **N. N. Deshmukh**, A. Saxena, S. Kailas
Study of fusion barrier distributions from quasi – elastic scattering for $^{6,7}\text{Li} + ^{209}\text{Bi}$ systems
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