

List of Publications

Refereed Journal:

1. *Alignment effects in the medium-spin level structure of $^{78}\text{Se}^{**}$*
K. Mandal, A. Chakraborty, A. K. Mondal, U. S. Ghosh, Aniruddha Dey, Saumyajit Biswas, B. Mukherjee, S. Rai, S. Chatterjee, S. K. Das, S. Samanta, R. Raut, S. S. Ghugre, S. Bhattacharyya, S. Nandi, S. Bhattacharya, G. Mukherjee, S. Ali, A. Goswami, S. Mukhopadhyay, Krishichayan, R. Banik, R. Chakrabarti, V. Kumar, and A. Kumar
Phys. Rev. C **105**, 034328 (2022).
<https://doi.org/10.1103/PhysRevC.105.034328>
2. *Probing the low-lying level structure of ^{94}Zr through β^- decay ***
K. Mandal, A. K. Mondal, A. Chakraborty, E.E. Peters, B.P. Crider, C. Andreoiu, P.C. Bender, D.S. Cross, G.A. Demand, A.B. Garnsworthy, P.E. Garrett, G. Hackman, B. Hadinia, S. Ketelhut, Ajay Kumar, K.G. Leach, M.T. McEllistrem, J. Pore, F.M. Prados-Estévez, E.T. Rand, B. Singh, E.R. Tardiff, Z.-M. Wang, J.L. Wood, and S.W. Yates
IJPAP Vol. 58, 223-227 (2020).
<http://op.niscpr.res.in/index.php/IJPAP/article/view/67594>
3. *Evidence for competing bi-faceted compound nucleus fission modes in $^{232}\text{Th}(\alpha, f)$ reaction*
Aniruddha Dey, D. C. Biswas, A. Chakraborty, S. Mukhopadhyay, **K. Mandal**, A. K. Mondal, B. Mukherjee, R. Chakrabarti, B. N. Joshi, L. A. Kinage, S. Chatterjee, S. Samanta, S. Das, Soumik Bhattacharya, R. Banik, S. Nandi, Shabir Dar, R. Raut, G. Mukherjee, S. Bhattacharyya, S. S. Ghugre, and A. Goswami
Phys. Lett. B **825**, 136848 (2022).
<https://doi.org/10.1016/j.physletb.2021.136848>
4. *Investigation of different possible excitation modes in neutron-rich ^{78}As*
A. K. Mondal, A. Chakraborty, **K. Mandal**, U. S. Ghosh, Aniruddha Dey, Saumyajit Biswas, B. Mukherjee, S. Rai, Krishichayan, S. Chatterjee, S. K. Das, S. Samanta, R. Raut, S. S. Ghugre, S. Rajbanshi, R. Banik, S. Bhattacharyya, S. Nandi, S. Bhattacharya, G. Mukherjee, S. Ali, A. Goswami, R. Chakrabarti, S. Mukhopadhyay, A. K. Sinha, V. Kumar, and A. Kumar
Phys. Rev. C **102**, 064311 (2020).
<https://doi.org/10.1103/PhysRevC.102.064311>

5. *Evolution of collectivity and shape transition in ^{66}Zn*
S. Rai, U. S. Ghosh, B. Mukherjee, A. Biswas, A. Chakraborty, A.K. Mondal, **K. Mandal**,
S. Chakraborty, G. Mukherjee, A. Sharma, I. Bala, S. Muralithar and R.P. Singh
Phys. Rev. C 102, 064313 (2020).
<https://doi.org/10.1103/PhysRevC.102.064313>
6. *Spectroscopic investigation of complex nuclear excitations in ^{66}Ga*
U. S. Ghosh, S. Rai, B. Mukherjee, A. Biswas, A. Chakraborty, A.K. Mondal, **K. Mandal**,
S. Chakraborty, G. Mukherjee, A. Sharma, I. Bala, S. Muralithar and R.P. Singh
Phys. Rev. C 102, 024328 (2020).
<https://doi.org/10.1103/PhysRevC.102.024328>
7. *In-beam spectroscopic study of ^{63}Zn*
U. S. Ghosh, S. Rai, B. Mukherjee, A. Biswas, A. Chakraborty, A.K. Mondal, **K. Mandal**,
S. Chakraborty, G. Mukherjee, A. Sharma, I. Bala, S. Muralithar and R.P. Singh
Phys. Rev. C 100, 034314 (2019).
<https://doi.org/10.1103/PhysRevC.100.034314>
8. *High spin states in ^{63}Cu*
S. Rai, U. S. Ghosh, B. Mukherjee, A. Biswas, A. Chakraborty, A.K. Mondal, **K. Mandal**,
S. Chakraborty, G. Mukherjee, A. Sharma, I. Bala, S. Muralithar and R.P. Singh
Eur. Phys. J. A 54, 84 (2018).
<https://doi.org/10.1140/epja/i2018-12518-2>

Manuscript under preparation:

1. *Investigation of Low-lying Level Structure of ^{94}Zr*
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International and National Conference/Symposium papers:

1. *Identification of collective proton excitations in $^{94}\text{Zr}^{**}$*
K. Mandal, A. K. Mondal, A. Chakraborty, E.E. Peters, B.P. Crider, C. Andreoiu, P.C. Bender, D.S. Cross, G.A. Demand, A.B. Garnsworthy, P.E. Garrett, G. Hackman, B. Hadinia, S. Ketelhut, Ajay Kumar, K.G. Leach, M.T. McEllistrem, J. Pore, F.M. Prados-Estévez, E.T. Rand, B. Singh, E.R. Tardiff, Z.-M. Wang, J.L. Wood, and S.W. Yates
Proceedings of DAE-BRNS Symp. on Nuclear Physics, Vol. 60, 264 (2015); Prasanthi Nilayam, India.
<http://sympnp.org/proceedings/60>

2. *Probing the Low-lying Level Structure of ^{94}Zr Using β^- decay***
K. Mandal, A. K. Mondal, A. Chakraborty, E.E. Peters, B.P. Crider, C. Andreoiu, P.C. Bender, D.S. Cross, G.A. Demand, A.B. Garnsworthy, P.E. Garrett, G. Hackman, B. Hadinia, S. Ketelhut, Ajay Kumar, K.G. Leach, M.T. McEllistrem, J. Pore, F.M. Prados-Estévez, E.T. Rand, B. Singh, E.R. Tardiff, Z.-M. Wang, J.L. Wood, and S.W. Yates
Proceedings of DAE-BRNS Symp. on Nuclear Physics, Vol. 62, 230 (2017); Patiala, India.
<http://sympnp.org/proceedings/62>
3. *Investigation of the medium-spin level structure of $^{78}\text{Se}^{**}$*
K. Mandal, A. K. Mondal, A. Chakraborty, S. Ali, R. Banik, S. Bhattacharya, S. Bhattacharyya, D. C. Biswas, S. Biswas, S. Chattarjee, S. K. Das, A. Dey, U. S. Ghosh, S. S. Ghugre, A. Goswami, Krishichayan, A. Kumar, V. Kumar, B. Mukherjee, G. Mukherjee, S. Mukhopadhyay, S. Nandi, S. Rai, R. Raut, and S. Samanta
Proceedings of DAE Symp. on Nuclear Physics, Vol. 63, 274 (2018); BARC, India.
<http://sympnp.org/proceedings/63>
4. *Yrast Spectroscopy of ^{77}As*
A.K. Mondal, A. Chakraborty, **K. Mandal**, U.S. Ghosh, Aniruddha Dey, S. Biswas, B. Mukherjee, Krishichayan, S. Mukhopadhyay, S. Chatterjee, S.K. Das, S. Samanta, R. Raut, S.S. Ghugre, S. Rajbanshi, R. Banik, S. Bhattacharyya, S. Nandi, S. Bhattacharya, G. Mukherjee, S. Ali, A. Goswami, R. Chakrabarti, A. Kumar, and R. Goswami
Proceedings of DAE Symp. on Nuclear Physics, Vol. 66, 104 (2022); Guwahati, India.
<http://sympnp.org/proceedings/66>
5. *Re-investigation of some low and medium-spin level structure in ^{67}Ga*
U. S. Ghosh, S.Rai, B. Mukherjee, A. K. Mondal, **K. Mandal**, S. Barman, A. Goswami, S. Biswas, A. Chakraborty, G. Mukherjee, S. Chakraborty, A. Sharma, I. Bala, S. Muralithar, R. P. Singh
Proceedings of DAE Symp. on Nuclear Physics, Vol. 66, 144 (2022); Guwahati, India.
<http://sympnp.org/proceedings/66>
6. *Delving deep into the multi-faceted fission modes through fission fragment spectroscopy*
Aniruddha Dey, D. C. Biswas, A. Chakraborty, S. Mukhopadhyay, A. K. Mondal, **K. Mandal**, B. Mukherjee, R. Chakrabarti, B. N. Joshi, L. A. Kinage, S. Chatterjee, S. Samanta, S. Das, Soumik Bhattacharya, R. Banik, S. Nandi, Shabir Dar, R. Raut, G. Mukherjee, S. Bhattacharyya, S. S. Ghugre, and A. Goswami
Proceedings of DAE Symp. on Nuclear Physics, Vol. 65, 32 (2021); BARC, India.
<http://sympnp.org/proceedings/65>

7. *High-K states and band structures in Yb isotopes*
Saket Suman, S. K. Tandel, S. G. Wahid, Poulomi Roy, A. Chakraborty, **K. Mandal**, A.K. Mondal, G. Mukherjee, S. Bhattacharyya, Soumik Bhattacharya, R. Banik, S. Nandi, Shabir Dar, A. Asgar, S. Samanta, S. Das, S. Chatterjee, R. Raut, S. S. Ghugre, A. Sharma, Sajad Ali, and P. Chowdhury
Proceedings of the DAE Symp. on Nuclear Physics, Vol. 64, 226 (2019); Lucknow, India.
<http://sympnp.org/proceedings/64>
8. *In-beam γ -ray spectroscopy of ^{63}Zn*
U. S. Ghosh, S. Rai, B. Mukherjee, A. Biswas, A. Chakraborty, A.K. Mondal, **K. Mandal**, S. Chakraborty, G. Mukherjee, A. Sharma, I. Bala, S. Muralithar and R.P. Singh.
Proceedings of DAE Symp. on Nuclear Physics, Vol. 63, 130 (2018); BARC, India.
<http://sympnp.org/proceedings/63>
9. *In-beam γ -ray spectroscopy of ^{66}Zn*
S. Rai, B. Mukherjee, U. S. Ghosh, A. Biswas, A. Chakraborty, A.K. Mondal, **K. Mandal**, S. Chakraborty, G. Mukherjee, A. Sharma, I. Bala, S. Muralithar and R.P. Singh.
Proceedings of DAE Symp. on Nuclear Physics, Vol. 63, 240 (2018); BARC, India.
<http://sympnp.org/proceedings/63>
10. *Isotopic yield and mass distributions of neutron-rich fragment nuclei produced in α induced fission of ^{232}Th*
Aniruddha Dey, S. Mukhopadhyay, D. C. Biswas, A. Chakraborty, A. K. Mondal, **K. Mandal**, B. N. Joshi, S. Chatterjee, S. Samanta, S. Das, Soumik Bhattacharya, R. Banik, S. Nandi, R. Raut, G. Mukherjee, S. Bhattacharyya, S. S. Ghugre, and A. Goswami
Proceedings of DAE Symp. on Nuclear Physics, Vol. 63, 268 (2018); BARC, India.
<http://sympnp.org/proceedings/63>
11. *In-beam γ -ray spectroscopy of $^{63,64}\text{Cu}$*
S. Rai, B. Mukherjee, A. Biswas, U. S. Ghosh, A. Chakraborty, A. Mondal, **K. Mandal**, S. Chakraborty, A. Sharma, G. Mukherjee, I. Bala, S. Muralithar and R. P. Singh
Proceedings of the DAE Symp. on Nuclear Physics, Vol. 61, 240 (2016); Kolkata, India.
<http://sympnp.org/proceedings/61>

Conferences and Symposia attended:

1. “60th DAE-BRNS Symposium on Nuclear Physics”, sponsored by Board of Research in Nuclear Sciences, organized at Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam-515134, A.P., India from 7th to 11th December, 2015.

Type of presentation: Poster presentation

2. “International Conference on Advancement in Science & Technology (ICAST-2018)”, organized by Indian JSPS Alumni Association in association with Department of Physics, Visva-Bharati from 3rd to 4th September, 2018.

Type of presentation: Poster presentation

3. “63th DAE-BRNS Symposium on Nuclear Physics”, sponsored by Board of Research in Nuclear Sciences, organized at BARC, India from 10th to 14th December, 2018.

Type of presentation: Poster presentation

4. “International Conference on Recent Issues in Nuclear and Particle Physics (RINP2)”, organized by Department of Physics, Visva-Bharati from 3rd to 5th February, 2019.

Type of presentation: Poster presentation

5. “International Conference on New Frontiers in Nuclear Physics (ICNFNP 2019)”, organized by Department of Physics, Banaras Hindu University, Varanasi, Uttar Pradesh, India from 14th to 17th October, 2019.

Type of presentation: Poster presentation