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List of Publications

1. "Defect induced ferromagnetic ordering and room temperature negative magnetoresistance in MoTeP", Debarati Pal *et al*. Sci. Rep. 11, 9104 (2021).

2. "Pressure Induced Topological and Structural Transitions in Iron and Sulphur Doped Sb_2Te_3, Debarati Pal *et al*. Mater. Lett. 302, 130401 (2021).

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5. "Observation of antiferromagnetic ordering from μ-SR study and Kondo effect in Dy doped Bi_2Se_3 topological insulator", Vinod K. Gangwar, ... Debarati Pal *et. al*. J. Phys. D: Appl. Phys. 54, 455302 1(2021).

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Conference Proceedings

1. "Magnetic and Vibrational properties of BSTS Topological Insulator", Debarati Pal *et. al*. AIP Conf Proc, **2265**, 030419 (2020).

2. "Pressure induced semimetal to metal transition in $MoTe_{2-x}Se_x$ and $WTe_{2-x}Se_x$", Debarati Pal *et. al*. Mater. Today: Proc., **44(2)**, 3097-3101 (2021).

3. "First-principles calculations of Sb_2Te_3 Topological Insulator under pressure", Debarati Pal *et. al*. Mater. Today: Proc., **47(8)**, 1660-1664 (2021).

Book Chapter

1. "Advanced Materials and Nanosystems: Theory and Experiment Chapter 10- Advancement of Topological Nanostructures for Various Applications", Debarati Pal *et. al*. (Bentham Science books) Under Process, (2022).

Schools / Workshops / Conference Attended

1. International Conference on Advanced Materials and Mechanical Characterization (ICAMMC), Virtual mode, 2021

2. 65th DAE Solid State Physics Symposium (DAE-SSPS), 2021.

3. Topological Matter Virtual Conference, 2021.

4. International Conference on Nanoscience & Nanotechnology (ICONN), 2021.

5. An International Conference on Materials and Technologies (Material TECH), 2021.

6. National Conference on Recent Advances in Functional Materials (RAFM), 2020.

7. 3rd Annual Conference on Quantum Condensed Matter Physics(Q-MAT), 2020.

8. 47th National Seminar on Crystallography (NSC-47), 2019.

9. International Conference on Advanced Materials (ICAM), 2019.

10. 64th DAE Solid State Physics Symposium (DAE-SSPS), 2019.

11. International Conference on Functional Nanomaterials (ICFNM), 2019.

12. International Conference on Advanced Materials (ICAM), 2019.

13. Workshop on Research Writing and Publishing, IIT BHU, 2019.

14. Winter School on Synchrotron Techniques in Materials Science (WSSTM), 2018