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List of Publications

1. “Anomalous Hall effect in Cu doped Bi_2Te_3 topological insulator” **Mahima Singh**, Abhishek Singh, et al. *J. Phys.: Condens. Matter* **32**, 305602 (2020).
2. “Evidence of surface and bulk magnetic ordering in Fe and Mn doped Bi_2Se_3 topological insulator” **Mahima Singh**, et al. *Appl. Phys. Lett.* **118**, 132409 (2021).
3. “Correlation between switching over Weak Antilocalization (WAL) to Weak Localization (WL) and coexistence of positive and negative magnetoresistance in S doped $\text{Bi}_{1.5}\text{Sb}_{0.5}\text{Te}_{1.3}\text{Se}_{1.7-y}\text{Sy}$ ” **Mahima Singh**, et al. (Under review).
4. “Study of Transport properties of BiFeSeS ” **Mahima Singh**, et al. (communicated).
5. “Presence of Anomalous Hall Effect in Nonmagnetic $\text{Bi}_{1.90}\text{Mo}_{0.10}\text{Se}_3$ ” **Mahima Singh**, et al. (To be communicated).
6. “Pressure induced superconducting state in ideal topological insulator BiSbTe_3 ” Vinod K. Gangwar, Shiv Kumar, **Mahima Singh** et al. *Phys. Scr.* **96**, 055802 (2021).
7. “Observation of antiferromagnetic ordering from μ -SR study and Kondo effect in Dy doped Bi_2Se_3 topological insulator” Vinod K. Gangwar, Shiv Kumar, **Mahima Singh** et al. *J. Phys. D: Appl. Phys.* **54** 455302 (2021).
8. “Defect induced ferromagnetic ordering and room temperature negative magnetoresistance in MoTeP ” Debarati Pal, Shiv Kumar, Prashant Shahi, Sambhab Dan, Abhineet Verma, Vinod K. Gangwar, **Mahima Singh** et al. *Sci. reports* **11**:9104 (2021).
9. “Pressure induced topological and structural transitions in iron and sulphur doped Sb_2Te_3 ” D. Pal, B. Sharma, Shambhav Dan, Vinod K. Gangwar, **Mahima Singh** et al. *Materials Letters* **320**, 130401 (2021).

Schools / Meetings / Workshops / Conference Attended

- 1.** International Conference on “Advances in Biological System and Materials Science in NanoWorld” (ABSMSNW-2017), Department of Physics, IIT (BHU), Vranasi, 19-23 February 2017.
- 2.** National Conference on “Optics Photonics and Synchrotron Radiation For Technological Applications” (OPSR-2018), Raja Ramanna Center for Advanced Technology, Indore 29th April to 2nd May 2018.
- 3.** First Indian Materials Conclave (IndMac) & 30th Annual General Meeting of MRSI, IISC Bangalore, 12-15th February 2019.
- 4.** “64th DAE Solid State Physics Symposium” organized by BARC Mumbai, IIT Jodhpur Rajasthan, 18-22th December 2019.
- 5.** “International Conference on Functional Nanomaterials (ICFNM-2019)”, IIT BHU, Varanasi, 22-25th February 2019.
- 6.** “Advances in Materials Science and Technology (WSAMST-2020)” held during 23-26 June 2020 by the Department of Applied Sciences and Humanities (Physics), School of Engineering, University of Petroleum and Energy Studies, Dehradun.
- 7.** “Advanced Physical Tools and Techniques for Materials Characterization” APTTMC-2020, Mahatma Gandhi Central University, Motihari-Bihar.
- 8.** “Synthesis and Characterization of Smart Materials and Their Potential Applications” (ISSCSMPA-2020), University School of basic and Applied Sciences Guru Gobind Singh Indraprastha University, New Delhi-110078, India.