

List of Publication

Published

1. **Dixit, S.**, Ghosh, L., Alam, M., Kumar, S. V., Patel, N., Ghosh, S., Shahi, N., Singh, S., and Chatterjee, S., 2023, "Existence of exotic magnetic phases along with exchange bias and memory effect in frustrated beta-Mn Heusler alloy.", *Journal of Applied physics* 133, 013904.

2. **Dixit, S.**, Ghosh, S., Patel, N., Alam, M., Bandyopadhyay, K., Shahi, N., Kumar, Y., Sawada, M., Shimada, K., Saha, S., Singh, S., and Chatterjee, S., 2023. Raman effect and unusual transport properties of Co-doped Mn₂FeAl Heusler alloy. 2023. "Raman effect and unusual transport properties of Co-doped Mn₂FeAl Heusler alloy.", *Europhysics Letters.*, 44(18), pp.5736-5754.

3*. Ghosh, L., Alam, M., Singh, M., **Dixit, S.**, Kumar, S.V., Verma, A., Shahi, P., Uwatoko, Y., Saha, S., Tiwari, A. and Tripathi, and Chatterjee, S. , "Anharmonic phonon interactions and the Kondo effect in a FeSe/Sb₂Te₃/FeSe heterostructure: a proximity effect between ferromagnetic chalcogenide and di-chalcogenide.", *Nanoscale.*, 14(30), pp.10889-10902. 2022.

4*. Ghosh, L., Gangwar, V.K., Singh, M., Kumar, S.V., **Dixit, S.**, Verma, A., Sharma, D.K., Kumar, S., Saha, S., Ghosh, A.K., and Chatterjee, S., 2022, "Lattice Dynamics of Bi_{1.9}Dy_{0.1}Te₃ Topological Insulator," *Physica B: Condensed Matter*, 640, p.414050.

5*. Alam, M., Ghosh, L., Majumder, S., Singh, P., Kumar, S.V., **Dixit, S.**, Kumar, D., Anand, K., Kumari, S., Ghosh, A.K., and Choudhary, R.J., 2022, "Multifunctional behaviour in B-site disordered double perovskite EuPrCoMnO₆," *Journal of Physics D: Applied Physics*, 55(25), p.255003.

6*. Alam, M., Ghosh, L., **Dixit, S.**, Jena, M., Kumari, S., Kumar, S.V., Kumar, D., Verma, A., Ghosh, A.K., Saha, S. and Choudhary, R.J., 2023, "Giant dielectric constant, magnetocaloric effect and spin-phonon coupling in EuTbCoMnO₆ semiconductor," *Physica B: Condensed Matter*, p.415043.

7*. Singh, P., Singh, R.K., **Dixit, S.**, Patel, N., Alam, M., Dan, S., Jain, A., Anand, K., Gangwar, V.K., Singh, R. and Joshi, A.G., 2022, "Double glassy states and large spontaneous and conventional exchange bias in La_{1.5}Ca_{0.5}CoFeO₆ ferrimagnetic double perovskite," *Journal of Physics: Condensed Matter*, 34(37), p.375803.

8*. Kumari, S., Alam, M., **Dixit, S.**, Ghosh, L., Ghosh, S., Gupta, P.K., Rohit, J., Anand, K., Rana, N., Mukherjee, S. and Mohan, A., 2023, "Spin-phonon coupling and giant dielectric constant in $Bi_{0.5}La_{0.5}Fe_{0.4}Al_{0.1}Mn_{0.5}O_3$," *Journal of Materials Science: Materials in Electronics*, 34(32), p.2142.

9*. Kumari, S., Anand, K., Alam, M., Ghosh, L., **Dixit, S.**, Singh, R., Jain, A.K., Yusuf, S.M., Gautam, C., Ghosh, A.K., and Mohan, A., 2023, "Enhancement of multiferroic and optical properties in $BiFeO_3$ due to different exchange interactions between transition and rare earth ions," *physica status solidi (b)*, 260(9), p.2300026.

Unpublished

10. **Dixit, S.**, Ghosh, S., Patel, N., Alam, M., Shahi, N., Mishra, S., Shahi, P., Singh, S., Tiwari, A., and Chatterjee, S., "Coexistence of Spin valve and anomalous Hall effect in Ni-based Heusler alloy.", Communicated ...

11. **Dixit, S.**, Ghosh, S., Patel, N., Alam, M., Shahi, N., Mishra, S., Shahi, P., Singh, S., Tiwari, A., and Chatterjee, S., "Effect of antisite disorder on the magnetic and transport properties of a quaternary Heusler alloy." Communicated ...

Note* works in 3-9 are not part of this thesis.

School/Workshops/Conferences Attended

- **Faculty Development programme on Materials Characterization**, Hybrid Mode, India, 2022
- **65th DAE Solid State Physics Symposium** (Participation Certificate), Bhabha Atomic Research Centre (BARC), Mumbai, India, 2021.
- **7th Conference on Neutron Scattering** (Participation Certificate), Hybrid mode, Mumbai, India, 2021.
- **International Webinar on material synthesis and Characterization**, Dr. Ram Manohar Lohia Awadh University U.P, India and Department of Natural Sciences Florida Polytechnic University, U.S.A, 2020.
- **1st International e-Conference on Recent Advances in Physics & Materials Science**, Kurseong College, Darjeeling, West Bengal, In collaboration with St. Joseph's College, Darjeeling, West Bengal, India, 2020.
- **IX International Conference on Perspectives in Vibrational Spectroscopy (ICOPVS-2022)**, Srishti Dixit and Sandip Chatterjee; poster presentation "lattice dynamics of Dy-doped Bi₂Te₃" Topological insulator.

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