

List of Publications

1. “Large power factor and anomalous Hall effect and their correlation with observed linear magneto resistance in Co-doped Bi_2Se_3 3D topological insulator” **Rahul Singh**, K KShukla, A Kumar, G S Okram, D Singh, V Ganeshan, ArchanaLakhani, A K Ghoshand Sandip Chatterjee, *J. Phys.: Cond. Matt.*28, 376001 (2016)
2. “Change-over of carrier type and magneto-transport property in Cu doped Bi_2Te_3 Topological Insulators” Abhishek Singh, **Rahul Singh**, A. Lakhani, T. Chand, G. S. Okram, V. Ganeshan, A. K. Ghosh and Sandip Chatterjee *Mat Res Bull*, 98, 1 (2018)
3. “Unusual negative magnetoresistance in $\text{Bi}_2\text{Se}_{3-y}\text{S}_y$ topological insulator under perpendicular magnetic field” **Rahul Singh**, Vinod K. Gangwar, D. D.Daga, Abhishek Singh, A. K.Ghosh, Manoranjan Kumar, A.Lakhani, Rajeev Singh, and Sandip Chatterjee, *Appl. Phys. Letts.* **112**, 102401 (2018).
4. “Giant negative magneto-resistance in $\text{Bi}_{2-x}\text{Fe}_x\text{Se}_{3-x}\text{S}_x$ Topological insulators” **Rahul Singh**, V. Gangwar, Abhishek Singh, A. K. Ghosh, Soma Banik, A. Lakhani, Rajeev Singh, S. Patil and Sandip Chatterjee (*To be Communicated*).
5. “Inducing magneto-topological Insulator with Gd intercalation in Bi_2Se_3 ” **Rahul Singh**, V. Gangwar, Abhishek Singh, A. K. Ghosh, A. Lakhani, Rajeev Singh, S. Patil and Sandip Chatterjee (*To be communicated, 2018*)
6. “Hidden transition in multiferroic and magnetodielectric CuCrO_2 evidenced by ac-susceptibility” Kaushak K. Shukla, Arkadeb Pal, Abhishek Singh, **Rahul Singh**, J. Saha, A. K. Sinha, A. K. Ghosh, S. Patnaik, A. M. Awasthi and SandipChatterjee, *Euro Phys. Letts.* **118**, 27008 (2017)
7. "Enhancement in electrical and magnetic properties with Ti-doping in $\text{Bi}_{0.5}\text{La}_{0.5}\text{Fe}_{0.5}\text{Mn}_{0.5}\text{O}_3$ " :**Rahul Singh**, Prince Kumar Gupta, Shiv Kumar, Amish G. Joshi, A. K. Ghosh, S. Patil, and Sandip Chatterjee, *J.of Appl. Phys.* 121, 154101 (2017)
8. “Griffith-like phase in Crednerite CuMnO_2 ” Kaushal K. Shukla, **Rahul Singh**, A. Kumar, A. K. Ghosh and Sandip Chatterjee, *Mat. Res. Bull.* **91**, 135 (2017)
9. “Effect of dilution of both A- and B- sites on the multiferroic properties of spinel Mott insulators” Prashant Shahi, **Rahul Singh**, Rajesh K. Singh, Shiv Kumar, A. Tiwari, A. Tripathi, J. Saha, S. Patnaik, A. K. Ghosh and Sandip Chatterjee, *Mat. Res. Express* **2** 076501 (2015)
10. “Chemical Pressure effect at the boundary of Mott insulator and itinerant electron limit of Spinel Vanadates”, P. Shahi, A. Kumar, **Rahul Singh**, Ripandeep Singh, P.U. Sastry, A.

- Das, Amish G. Joshi, A. K. Ghosh, A. Banerjee and Sandip Chatterjee, *Sci. Adv. Mater.* 7, 1187-1196 (2015).
11. "Effect of Pr- and Nd- doping on structural, dielectric, and magnetic properties of multiferroic $\text{Bi}_{0.8}\text{La}_{0.2}\text{Fe}_{0.9}\text{Mn}_{0.1}\text{O}_3$ ", **Rahul Singh**, G. D. Dwivedi, P. Shahi, D. Kumar, Om Prakash, A. K. Ghosh, and Sandip Chatterjee *J. Appl. Phys.* 115, 134102 , (2014).
 12. "Room temperature large spontaneous exchange bias in hard-soft antiferromagnetic composite $\text{BiFeO}_3\text{-TbMnO}_3$ " P. K. Gupta, S. Ghosh, A. Pal, **Rahul Singh**, A. Singh, S. Roy, S. Kumar, Eike F. Schwier, M. Sawada, T. Matsumura, K. Shimada, A. K. Ghosh and Sandip Chatterjee (Revised Manuscript Submitted to Phys. Rev. B)