List of Publications

1. **Effect of Chemical Pressure at the Boundary of Mott Insulator to Itinerant Electron Limit Transition in Spinel Vanadates, *P. Shahi***, *A. Kumar, Rahul Singh, Ripandeep Singh, P. U. Sastry, A. Das, Amish G. Joshi, A. K. Ghosh, A. Banerjee, Sandip Chatterjee* , Science of Advanced Materials 7 (6), 1187-1196 (2015).

2. **Transport, magnetic and structural properties of Mott insulator MnV_2O_4 at the boundary between localized and itinerant electron limit, *Prashant Shahi***, *Saurabh Kumar, Neetika Sharma, Ripandeep Singh, P. U. Sastry, A. Das, A. Kumar, K. K. Shukla, A. K. Ghosh, A. K. Nigam, Sandip Chatterjee.,* Journal of Materials Science 49 (20), 7317-7324 (2014).

3. **Effect of Zn doping on the Magneto-Caloric effect and Critical Constants of Mott Insulator MnV_2O_4, *Prashant Shahi***, *Harishchandra Singh, A. Kumar, K. K. Shukla, A. K. Ghosh, A. K. Yadav, A. K. Nigam, Sandip Chatterjee,* AIP Advances 4 (9), 097137 (2014).

4. **Effect of dilution of both A- and B- sites on the multiferroic properties of spinal Mott insulators, *Prashant Shahi***, *R. Singh, Shiv Kumar, A. Tiwari, A. Tripathi, J. Saha, S. Patnaik, A. K. Ghosh, Sandip Chatterjee (communicated).*

5. **Local structure study of Co doped ZnV_2O_4 by EXAFAS, *Prashant Shahi,*** *R. Singh, N. Tiwari, D. Bhattacharyya ,S. N. Jha, Shiv Kumar, A. K. Ghosh, Sandip Chatterjee (Communicated).*

6. **Supression of orbital entropy and enhancement of magnetocaloric effect in Li doped MnV_2O_4, *Prashant Shahi***, *R. Singh, Shiv Kumar, A. Tiwari, A. Tripathi, A. K. Ghosh, Sandip Chatterjee (under preparation).*

7. **Improvement in magnetic properties from Li doping in Mott insulator CoV_2O_4,** ***Prashant Shahi****, R. Singh, Shiv Kumar, A. Tiwari, A. Tripathi, A. K. Ghosh, Sandip Chatterjee (under preparation).*

8. **Effect of Pr- and Nd- doping on structural, dielectric, and magnetic properties of multiferroic $Bi_{0.8}La_{0.2}Fe_{0.9}Mn_{0.1}O_3$,** *Rahul Singh, G. D. Dwivedi,* ***P. Shahi****, D. Kumar, Om Prakash, A. K. Ghosh, and Sandip Chatterjee,* Journal of Applied Physics 115 (13), 134102 (2014).

9. **Signature of ferroelectricity in magnetically ordered Mo-doped $CoFe_2O_4$,** *G. D. Dwivedi, K. F. Tseng, C. L. Chan,* ***P. Shahi****, J. Lourembam, B. Chatterjee, A. K. Ghosh, H. D. Yang, Sandip Chatterjee,* Physical Review B 82 (13), 134428 (2010).

10. **Neutron diffraction study of multiferroic Mo-doped $CoFe_2O_4$,** *Amitabh Das, G. D. Dwivedi, Poonam Kumari,* ***P. Shahi****, H. D. Yang, A. K. Ghosh, Sandip Chatterjee,* Journal of Magnetism and Magnetic Materials 379, 6-8 (2014).

11. **Raman effect and magnetic properties of doped $TbMnO_3$,** *A. Kumar,* ***P. Shahi****, S. Kumar, K. K. Shukla, Ranjan Kr. Singh, A. K. Ghosh, A. K. Nigam, Sandip Chatterjee,* Journal of Physics D: Applied Physics 46 (12), 125001 (2013).

12. **Structural and magnetic properties of quasi-one-dimensional doped $LiCuVO_4$,** *Abhishek Kumar, Poonam Kumari, A. Das, G. D. Dwivedi,* ***P. Shahi****, K. K. Shukla, A. K. Ghosh, A. K. Nigam, K. K. Chattopadhyay, Sandip Chatterjee,* Journal of Solid State Chemistry 208(12), 120-126 (2013).

13. **Effect of Y-doping on the transport and magnetic properties of $La_{0.5}Sr_{0.5}CoO_3$ and $La_{0.7}Sr_{0.3}CoO_3$,** *G. D. Dwivedi, K. K. Shukla,* ***P. Shahi****, A. K. Ghosh, A. K. Nigam, Sandip Chatterjee,* Journal of Materials Science 48 (5), 1997-2001 (2013).

14. **Existence of the multiferroic property at room temperature in Ti doped $CoFe_2O_4$,** *G. D. Dwivedi, Amish G. Joshi, H. Kevin,* ***P. Shahi****, A. Kumar, A. K. Ghosh, H. D. Yang, Sandip Chatterjee,* Solid State Communications 152 (5), 360-363 (2012).

Conference papers

1. **Magnetic and structural properties of Zn doped MnV_2O_4,** ***Prashant Shahi****, K. K. Shukla, Rahul Singh, Sandip Chatterjee, A. Das, A. K. Ghosh, A. K. Nigam,* AIP Conference Proceedings, 1591,1, 81-83 (2014).

2. **Effect of Y doping on magnetic and transport properties of $La_{0.7}Sr_{0.3}CoO_3$,** *G. D. Dwivedi, K. K. Shukla,* ***P. Shahi****, O. K. Jha, A. K. Ghosh, A. K. Nigam, Sandip Chatterjee,* American Institute of Physics Conference Series, 1512,1, 942-943 (2013).

3. **Short range ferromagnetic order in Mn-doped quasi one-dimensional $LiCuVO_4$,** *Abhishek Kumar,* ***P. Shahi****, S. Upadhyay, Sandip Chatterjee, A. K. Ghosh, A. K. Nigam,* Proceedings of the thirteenth international conference on magnetic fluids: abstract book (2013).

4. **Magnetic Properties of Transition Metal Ion doped LiCuVO4,** *Sandip Chatterjee, A. Kumar,* ***P. Shahi****, A. K. Ghosh, A. K. Nigam,* Asian Journal of Chemistry, 23, 12, 5632-5634 (2010).

5. **Simultaneous Presence Of Ferroelectricity And Magnetism In Mo-Doped $CoFe_2O_4$,** *G. D. Dwivedi, B. Chatterjee, A. K. Ghosh, K. F. Tseng, C. L. Chan, H. D. Yang,* ***P. Shahi****, Sandip Chatterjee,* AIP Conference Proceedings, 1313, 1, 162-164 (2010).

6. **Synthesis and study of structural, thermal and magnetic properties of $Bi_{0.8}La_{0.2}Fe_{1-x}Mn_xO_3$, ($0 \leq x \leq 0.10$) multiferroics**, *B. Chatterjee, G. D. Dwivedi, A. K. Ghosh,* ***P. Shahi****, S. Chatterjee, B. Rana, A. Barman,* Proceedings of DAE-BRNS third international symposium on materials chemistry (2010).