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## List of Publications

1. “Extraordinary magnetic properties of double perovskite  $\text{Eu}_2\text{CoMnO}_6$  wide band gap Semiconductor”, **Mohd Alam** et al, J. Phys.: Condens. Matter **32** (2020) 365802.
2. “Relaxor-super-paraelectric behaviour and crystal field driven spin-phonon coupling in pyrochlore  $\text{Eu}(2)\text{Ti}(2)\text{O}(7)$ ”, **Mohd Alam** et al, 2021 EPL in press <https://doi.org/10.1209/0295-5075/ac2455>.
3. “Multifunctional Behaviour of  $\text{EuPrCoMnO}_6$ ”, **Mohd Alam** et. al, (*under review*).
4. “Novel Electrical and Magnetic Properties of Double Perovskites  $\text{Eu}_{2-x}\text{Tb}_x\text{CoMnO}_6$  ( $x = 0.0$  and  $1.0$ )”, **Mohd Alam** et. al, (*under review*).
5. “Effect of f-d and d-d Interactions on Dielectric and Optical Properties of Pyrochlore  $\text{Eu}_{2-x}\text{Fe}_x\text{Ti}_2\text{O}_7$ ”, **Mohd Alam** et al, (*under review*).
6. “Existence of Griffiths phase and unusual spin dynamics in double perovskite  $\text{Tb}_2\text{CoMnO}_6$ ”; K. Anand, **Mohd Alam**, et al, J. Magn. Magn. Mater. **528** (2021) 16797.
7. “Roles of Re-entrant cluster glass state and spin–lattice coupling in magneto–dielectric behavior of giant dielectric double perovskite  $\text{La}_{1.8}\text{Pr}_{0.2}\text{CoFeO}_6$ ”, P. Singh, **Mohd Alam**, et al, J. Phys.: Condens. Matter **32**, (2020) 445801.
8. “Wasp – Waisted loop and spin frustration in  $\text{Dy}_{2-x}\text{Eu}_x\text{Ti}_2\text{O}_7$  pyrochlore”, P. Singh, A. Pal V. K. Gangwar, P. K. Gupta, **Mohd. Alam**, et al, J. Magn. Magn. Mater. **518** (2021) 167364.
9. “Room temperature exchange bias in antiferromagnetic composite  $\text{BiFeO}_3\text{-TbMnO}_3$ ”, P. K. Gupta, S. Ghosh, S. Kumar, A. Pal, P. Singh, **Mohd Alam**, et al, J. Appl. Phys. **126** (2019) 243903.

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10. "Evidence of surface and bulk magnetic ordering in Fe and Mn doped  $\text{Bi}_2(\text{SeS})_3$  topological insulator", Mahima Singh, S. Kumar, **Mohd Alam**, et al, *Appl. Phys. Lett.* **118** (2021) 132409.
  11. "Probing the Griffiths like phase, unconventional dual glassy states, giant exchange bias effects and its correlation with its electronic structure in  $\text{Pr}_{2-x}\text{Sr}_x\text{CoMnO}_6$ ", A. Pal, P. Singh, V K Gangwar, A G Joshi, P Khuntia, G D Dwivedi, P. K Gupta, **Mohd Alam**, et al, *J. Phys.: Condens. Matter* **32** (2020) 215801.
  12. "Emergence of metamagnetic transition, re-entrant cluster glass and spin phonon coupling in  $\text{Tb}_2\text{CoMnO}_6$ ", K. Anand, A. Pal, **Mohd. Alam**, et al, *J. Phys: Condens. Matter* **33** (2021) 275802.

## Schools / Meetings / Workshops / Conference Attended

1. First Indian Materials Conclave (IndMac) & 30th Annual General Meeting of MRSI, IISC Bangalore, 12-15th February 2019.
2. "International Conference on Functional Nanomaterials (ICFNM-2019)", IIT (BHU), Varanasi, 22-25th February 2019.
3. "64th DAE Solid State Physics Symposium" Organized by BARC Mumbai, IIT Jodhpur, Rajasthan, 18-22th December 2019.
4. 1<sup>st</sup> International e-Conference on Recent Advances in Physics & Materials Science-2020 (IC-RAPMS-2020) Organized by Kurseong College, Darjeeling, West Bengal, India-734203, 9-10<sup>th</sup> July 2020.

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5. “Advanced Physical Tools and Techniques for Materials Characterization” (APTTMC-2020), Organized online at Department of Physics Mahatma Gandhi Central University, Motihari-845401, Bihar, 28<sup>th</sup> July- 03<sup>rd</sup> August 2020.
  6. “Online Workshop on Rietveld Refinement Method” Organized online by UGC-DAE Consortium for Scientific Research, 22-24 September 2020.
  7. “7th Conference on Neutron Scattering (CNS -2021)” Organized by Bhabha Atomic Research Centre & Neutron Scattering Society of India at Anushaktinagar, Mumbai., November 25-27, 2021.
  8. “65th DAE Solid State Physics Symposium” Organized by: Bhabha Atomic research centre, Mumbai, December 15-19, 2021.

