

Dr. Aga Shahee || Curriculum Vitae

Centre for Interdisciplinary Research & Innovations (CIRI),
University of Kashmir, Hazratbal, Srinagar-190006 (J&K), India

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Focus of research

- Explores the novel phases of quantum materials; the combination of synthesis, crystal growth, scattering, spectroscopy, and physical property to obtain a comprehensive picture of the intriguing phenomena of structure, (anti)ferromagnetism, charge-orbital order, multiferroicity and any combination thereof.
- Design, fabrication & channelization of 2D controllable vdW magnetoelectronic and (AFM) spintronic devices.

Education

Ph.D. Physics

Research Avenue:

Advisors: Dr. Niranjan P. Lalla

Thesis Title: Crystal structure and phase-transition studies of few perovskite-based manganites and chromates using powder x-ray diffraction and transmission electron microscopy

Devi Ahilya Vishwavidyalaya, Indore, India
UGC DAE Consortium for Scientific Research Indore, India
2010-2015

M.Phil. Physics

Research Avenue:

Advisors: Dr. Niranjan P. Lalla

Synopsis Title: Synthesis, structure and dielectric studies of possible Multiferroic $\text{La}_{1-x}\text{Bi}_x\text{CrO}_3$

Devi Ahilya Vishwavidyalaya, Indore, India
UGC DAE Consortium for Scientific Research Indore, India
2009-2010

MSc. Physics

Prof. Rais Ahmad & University Gold Medals

Courses: Quantum electrodynamics, microprocessor, and microcomputer, nuclear and particle physics, computational method, and programming.

University of Kashmir, J&K, India
2005-2007

BSc. Non-Medical

(Eng., Phys., Math., Chem.)

Courses: Gen. English, Mathematics, Physics, Chemistry.

University of Kashmir, J&K, India
2002-2005

Faculty and Research Positions

Ramanujan Faculty Fellow

Research Areas: Condensed Matter Experiment

Centre for Interdisciplinary Research & Innovations (CIRI)
University of Kashmir
July 2022-current

Research Associate

Advisor: Prof. Dr. Mathias Kläui

Project: Fabrication and characterization of 2D Van der Waals (vdW) spintronics devices

Johannes Gutenberg-Universität Mainz, Germany
Dec 2020-July 2022

Brain Korea and IBS Post-Doctoral Fellow

Advisor: Prof. Kee Hoon Kim

Project: Crystal growth and physical properties studies of multiferroic and magnetically frustrated materials

Seoul National University, South Korea
Nov 2016-Nov. 2020

Institute Post-Doctoral Fellow

Advisor: Prof. Avinash V. Mahajan

Project: NMR and physical properties studies of magnetically frustrated materials

Indian Institute of Technology Bombay, India
Sept 2015- Nov 2016

Graduate researcher

(CSIR India-Junior/Senior Research Fellowship "JRF/SRF")

UGC DAE Consortium for Scientific Research Indore, India
Feb 2009- Sept 2015

Advisor: Dr. Niranjan P. Lalla (Scientist-G)

Project: Exploring charge orbital ordering, magnetic field drove structural phase transitions and kinetic arrest in wide bandwidth manganites

Teaching Experience

- i). Teaching Assistant** Jan 2016-Nov 2016
Organization: Indian Institute of Technology Bombay, India
- ii). Lecturer Physics** April 2008- Dec 2009
Organization: Women College, Nawakadal, Srinagar, J&K, India
- iii). Lecturer Physics** July 2007- Dec 2008
Organization: Govt. Hr. Sec. School, Kuchumuqam, Baramulla, J&K, India

Skills

Synthesis: Solid-state and sol-gel synthesis, single crystal growth (flux, and chemical vapor transport techniques).

Structure and Microstructural analysis: Transmission electron microscopy, powder x-ray diffraction, powder neutron diffraction, structural refinements using FullProf, JANA, X'Pert HighScore, Laue alignment of crystals.

Magnetic and Electronic Property Measurements: Low-temperature methods: Neutron diffraction, magnetic susceptibility, electric polarization, pyrocurrent, magnetoelectric current, heat capacity, electrical transport.

2D Device Fabrication. Mechanical exfoliation, Nano-fabrication, Optical Lithography, Electron beam lithography (EBL).

Device Characterization: Spin Transport, SM-FMR, Harmonic Hall voltage measurement for spin-orbit torque analysis.

Awards, Fellowships and Honors

- Ramanujan Fellowship – SERB India Feb. 2022
- Post-Doctoral Fellowship, Johannes Gutenberg-Universität Mainz, Germany Dec. 2020
- Prestigious Brain Korean BK21 Plus Post-Doctoral Fellowship, South Korea Oct. 2018
- Prestigious IBS Post-Doctoral Fellowship, Seoul National University, South Korea Nov. 2016
- Prestigious Institute Post-Doctoral Fellowship, IIT Bombay, India Sept. 2015
- Young Scientists speaker at XXIII Conference on Applied Crystallography (CAC-2015), Poland July. 2015
- Best poster presentation award in 59th DAE Solid State Physics Symposium, India Dec. 2014
- NET- Senior Research Fellowship (SRF) –CSIR India July. 2011
- All India Rank = 51 in Joint Entrance Screening Test (JEST- 2009) Ph.D. Admissions in Physics Feb. 2009
- NET-Junior Research Fellowship (JRF) – CSIR India Dec. 2008
- (NET) – Lectureship (LS) - CSIR-UGC India in the capacity of Physical Sciences June. 2008
- University Gold Medal July. 2007
- Professor Rais Ahmad Gold Medal July. 2007

Professional Membership

- Life member of Indian Physical Society (IPS)
- Life member of Neutron Scattering Society of India (NSSI)
- Lead Coordinator of Physics, Nanotechnology, Materials Science (PNM) Club- JK Scientist Spectrum (JKS).

Quantitative parameters

Publication Record:

International Journal Publications = **33**, International AIP Conference Proceeding = **11**, Impact Factor > **130**, Citations = **381**, H-index = **10**, i10-index = **12** RG-Score = **50.44**, RG-Research Interest = **820** Publication Read > **85000**.

Presentation Record:

Total National and International Conference/workshops attend = **42**, Talk = **11**, Oral = **10**, Poster = **19**.

Few Selected Talk and Presentations

1. Invited Talk Title “*Magneto-electric Multiferroic: New quantum materials beyond the semiconductor era*” Organized by Department of Physics, Central University Of Kashmir, J&K, India, held from 28th June 2020.
2. Invited Talk Title “*Basics of X-Ray Powder Diffraction: A Tool for Crystal Structure Analysis*” in Virtual International Conference on Material Science (Device Fabrication) Organized by Department of Physics, Shri Neelkantheshwar Government Postgraduate College, Khandwa, MP, India, held from 5th – 6th June 2020.

3. Invited SFB/TRR (Spin + X) Colloquium–Seminar, Talk title “*Doping tunable multiferroicity in PbCu₃TeO₇ and magneto-electric coupling in Van der Waal CuCrP₂S₆*” at Johannes Gutenberg-Universität Mainz, Mainz, Germany, held on 12 March-2020.
4. Oral “*Zn²⁺ doping tunable multiferroicity in S = 1/2 kagome staircase PbCu₃TeO₇*” at 11th International Conference on Magnetic and Superconducting Materials (MSM19), 17-24 August 2019 held at Seoul National University, South Korea.
5. Invited Talk Title “*Magnetically driven ferroelectric order in S = 1/2 kagome staircase compound PbCu₃TeO₇*” held on 26 July 2019 at Department of Physics, Jamia Millia Islamia, New Delhi, India, held on 02nd August 2019.
6. Invited Talk Title “*Ferroelectric polarization driven magnetically in S = 1/2 kagome staircase compound PbCu₃TeO₇*” held on 02 August 2019 at Department of Physics, National Institute of Technology Srinagar, J&K, India, held on 29th July-2019.
7. Oral “*Tuning multiferroicity towards zero magnetic field in Zn substituted Pb(Cu_{1-x}Zn_x)₃TeO₇*” The (Korean Physical Society) KPS Fall Meeting 2018, 24-26 Oct-2018, held at Changwon Convention Center (CECO), Changwon, South Korea.
8. Seminar Title “*Structural phase-transitions and its correlation with magnetic and transport properties of few wideband manganites*” at Institute of Materials Physics, University of Göttingen, Germany, held on 25 Sept-2015.
9. Oral “*Tuning the ground state of La_{0.2}Sr_{0.8}MnO_{3-δ} between charge-ordered cubic and JT-distorted tetragonal phase*” Young Scientific speaker at XXIII Conference on Applied Crystallography (CAC-2015), held during 20-24 Sept-2015, at Czarny Potok, Krynica Zdrój, Poland.
10. Séminaire MCMF, Title “*Structural phase-transitions and correlated physical properties of few wideband manganites*” at Institut Néel, CNRS-Grenoble, France on 15 Sept-2015.
11. Seminar Title “*Structural phase-transitions and correlated physical properties of few wideband manganites*” at Indian Institute of Technology Kanpur, India on 31 August 2015.
12. Seminar Title “*Structural phase-transitions and correlated physical properties of few wideband manganites*” at Indian Institute of Technology Bombay, India on 24 August 2015.
13. Talk Title “*Powder X-Ray Diffraction: A Tool for Crystal Structure Analysis*”, Workshop on Surface Science (WSS-14), held during 20-24 Mar-2014 at Christian Eminent College-Indore (M.P), India”.
14. Oral “*Direct visualization of Glass-like kinetic arrest of first-order structural phase transition in ferromagnetic La_xMnO_{3+δ} (x=1, 0.9, 0.83)*” 28th M. P. Young Scientist Congress, held during 24 Feb.- 01 Mar. 2013 at Vigyan Bhawan, Bhopal (India).
15. Oral “*Glass-like kinetic arrest of first-order structural phase transition in ferromagnetic LaMnO_{3.15}*” The 30th IPS Colloquium for Young Physicists (2012), held during 16-17 Aug-2012, at Saha Institute of Nuclear Physics (SINP), Kolkata, India.
16. Oral “*Evidence of Magneto-elastic (ME) coupling across the Metal-Insulator (M-I) Transition in La_{0.833}MnO_{3-δ}*” International Conference on Frontiers in Nano-Science, Nanotechnology and their Applications ‘NanoSciTech-2012’ held during 15– 18 Feb-2012, at Punjab University, Chandigarh, Punjab, India.
17. Oral “*Electron-beam induced phase transition from R-3c to Pnma in oxygen excess LaMnO_{3+δ}*” International Conference on Recent Trends in Physics ‘ICRTP2012’ held during 4–5 Feb-2012, at Devi Ahilya University, Indore (M. P.) India.

Publications in International Journals:

(available on [Google Scholar](#) and [ResearchGate](#))

1. *Observation of anomalously large magnetoelectric coupling in the hexagonal Z-type ferrite films*, KW Shin, M Soroka, A Shahee, KH Kim, J Buršik, R Kužel, M Vronka, M. H. Aguirre, [Advanced Electronic Materials 2101294, 1-9 \(2022\)](#). **IF: 7.295**
2. *Observation of Spin-Induced Ferroelectricity in a Layered van der Waals Antiferromagnet CuCrP₂S₆*, CB Park, A Shahee, KT Kim, DR Patil, SA Guda, N Ter-Oganessian, K. H. Kim, [Advanced Electronic Materials 2101072, 1-9 \(2022\)](#). **IF: 7.295**
3. *Explore the charge transfer and d-d excitation in perovskite manganite using 2p3d resonant inelastic X-ray scattering*, RN Aljawfi, M Abu-Samak, S Kumar, A Shahee, M A.Swillam, [Journal of Alloys and Compounds 904, 164020 \(2022\)](#). **IF: 5.316**
4. *Effect on Optical and Structural Parameters in Heavy Ca Doped ZnO Nanostructures*, Kamakhya P. Misra, A. Kumawat, **A. Shahee** and S. Chattopadhyay, [Materials Technology: Advanced Performance Materials, 36, 529-540 \(2021\)](#). **IF: 3.846**
5. *Gapless Quantum Spin Liquid in the Triangular System Sr₃CuSb₂O₉*, S. Kundu, **A. Shahee**, A. Chakraborty, K. M. Ranjith, B. Koo, J. Sichelschmidt, Mark T. F. Telling, P. K. Biswas, M. Baenitz, I. Dasgupta, S. Pujari, and A. V. Mahajan, [Phys. Rev. Lett. 125, 267202 \(2020\)](#). **IF: 9.161**
6. *Spin- 1/2 chain compound Ba₂Cu₂Te₂P₂O₁₃: Magnetization, specific heat, and local-probe NMR*, V. Kumar, **A. Shahee**, S. Kundu, M. Baenitz, and A. V. Mahajan, [Phys. Rev. B 102, 104419](#). **IF: 4.036**

7. *Contrasting temperature dependence of band gap in $CH_3NH_3PbX_3$ ($X=I, Br, Cl$): Insight from lattice dilation and electron-phonon coupling*, R. Saxena, J. Kangsabanik; A. Kumar; **A. Shahee**, S. Singh, N. Jain, S. Ghorui, V. Kumar, A. V. Mahajan, A. Alam, D. Kabra, [Phys. Rev. B 102, 081201\(R\) \(2020\)](#) **IF: 4.036**
8. *Impact of annealing on the structural and optical properties of ZnO nanoparticles and tracing the formation of clusters via DFT calculation*, R. N. Aljawfi, M. J. Alam, F. Rahman, S. Ahmad, **A. Shahee**, S. Kumar, [Arabian J. Chemistry, 13, 2207-2218 \(2020\)](#). **IF: 5.165**
9. *Dislocations and particle size governed band gap and ferromagnetic ordering in Ni doped ZnO nanoparticles synthesized via co-precipitation*, S. Chattopadhyay, A. Agarwala, **A. Shahee**, S. Jain, N. Halder, A. Rao, P. D. Babu, M. Saran, A. K. Mukhopadhyay, [Ceramics International, 45, 23341-23354 \(2019\)](#). **IF: 4.527**
10. *The spin-1/2 coupled tetramer system $Ba(TiO)Cu_4(PO_4)_4$ probed by magnetization, specific heat, and P-NMR*, V Kumar, **A Shahee**, S Kundu, M Baenitz, AV Mahajan, [J. Mag. Mag. Materials 492, 165600 \(2019\)](#) **IF: 2.993**
11. *Structural, thermodynamic, and local probe investigations of the honeycomb material $Ag_3LiMn_2O_6$* , R. Kumar, Tusharkanti Dey, P. M. Ette, K. Ramesha, A. Chakraborty, I. Dasgupta, R. Eremina, S. Tóth, **A. Shahee**, S. Kundu, M. Prinz-Zwick, A. A. Gippius, H. A. Krug von Nidda, N. Büttgen, P. Gegenwart, and A. V. Mahajan, [Phys. Rev. B 99, 144429 \(2019\)](#). **IF: 4.036**
12. *Unconventional magnetism in the $4d^4$ based ($S=1$) honeycomb system $Ag_3LiRu_2O_6$* , R. Kumar, T. Dey, P. M. Ette, K. Ramesha, A. Chakraborty, I. Dasgupta, J. C. Orain, C. Baines, S. Toth, **A. Shahee**, S. Kundu, M. Prinz-Zwick, A. A. Gippius, N. Buttgen, P. Gegenwart, A. V. Mahajan, [Phys. Rev. B 99, 054417 \(2019\)](#) **IF: 4.036**
13. *Charge orbital and spin ordering transitions in $La_{1-x}Sr_xMnO_{3+\delta}$ ($x = 0.67$ & 0.71)*, **A. Shahee**, S. Kaushik and N. P. Lalla, [J. Alloy. Compd., 782, 277-287 \(2019\)](#). **IF: 5.316**
14. *Magnetic field-induced ferroelectricity in $S = 1/2$ kagome staircase compound $PbCu_3TeO_7$* , K. Yoo, B. Koteswararao, J. Kang, **A. Shahee**, W. Nam, F. Balakirev, V. S. Zapf, N. Harrison, A. Guda, N. Ter-Oganessian and K. H. Kim, [Nature-npj Quantum Materials 3, 45 \(2018\)](#). **IF: 7.032**
15. *Nano scale phase coexistence and charge-ordering with $3d_{x^2-y^2}$ orbital-ordering in $La_{0.25}Sr_{0.75}MnO_{3.01}$* , **A. Shahee**, NP Lalla, [J. Alloy. Compd., 714, 79-88 \(2017\)](#). **IF: 5.316**
16. *Infield X-ray diffraction studies of field and temperature driven structural phase transition in $Nd_{0.49}Sr_{0.51}MnO_{3+\delta}$* , **A Shahee**, S Sharma, K Singh, NP Lalla, [J. Mag. Mag. Materials 434, 174-180 \(2017\)](#). **IF: 2.993**
17. *Studies on magnetic field and temperature driven magneto-structural phase transition in $La_{0.5}Sr_{0.5}MnO_{3+\delta}$* , **A Shahee**, S Sharma, K Singh, NP Lalla, [J. Alloy. Compd., 708, 734-742 \(2017\)](#). **IF: 5.316**
18. *In-field X-ray and neutron diffraction studies of re-entrant charge-ordering and field induced metastability in $La_{0.175}Pr_{0.45}Ca_{0.375}MnO_{3-\delta}$* , S Sharma, **A Shahee**, P Yadav, I da Silva, NP Lalla, [J. Appl. Phys. 122 \(17\), 175902 \(2017\)](#). **IF: 2.546**
19. *Charge ordering in B-site Mo doped $Pr_{0.20}Sr_{0.80}Mn_{1-x}Mo_xO_{3-\delta}$* , S Sharma, **A Shahee**, P Yadav, NP Lalla, [J. Alloy. Compd., 722, 878-887 \(2017\)](#). **IF: 5.316**
20. *Magnetocaloric effect and magnetic properties of the isovalent Sr^{2+} substituted Ba_2FeMoO_6 double perovskite*, I Hussain, MS Anwar, SN Khan, **A. Shahee**, ZU Rehman, BH Koo, [Ceram. Int., 43, 10080-10088 \(2017\)](#). **IF: 4.527**
21. *Complex dielectric and impedance behavior of magnetoelectric Fe_2TiO_5* , S. Sharma, T. Basu, **A. Shahee**, K. Singh, N. P. Lalla, E. V. Sampathkumara, [J. Alloy. Compd., 663, 289–294 \(2016\)](#). **IF: 5.316**
22. *Structural, electronic and magnetic properties of $Sm_{0.55}Sr_{0.45-x}Ag_xMnO_3$ ($0.00 \leq x \leq 0.10$) system*, M. A. Bhat, K. Devendra, **Aga Shahee**, N. K. Gaur, [J. Alloy. Compd., 661, 216-220 \(2016\)](#). **IF: 5.316**
23. *Low-temperature high magnetic field powder x-ray diffraction setup for field-induced structural phase transition studies from 2 to 300 K and at 0 to 8-T field*, **A Shahee**, S Sharma, D Kumar, P Yadav, P Bhardwaj, N Ghodke, K Singh, NP Lalla, P Chaddah, [Rev. Sci. Instrum. 87 \(10\), 105110 \(2016\)](#). **IF: 1.587**
24. *Comment on “Quantum paraelectric glass state in $SrCu_3Ti_4O_{12}$ ”* S. Sharma, **A. Shahee** and N. P. Lalla, [Appl. Phys. Lett. 106, 026101 \(2015\)](#). **IF: 3.791**
25. *Strong charge ordering above room temperature in B-site disordered electron-doped manganite $SrMn_{0.875}Mo_{0.125}O_3$* , **A. Shahee**, and N. P. Lalla, [Mater. Res. Express 2, 046106 \(2015\)](#). **IF: 1.618**

26. Evidence of ferromagnetic short-range correlations in cubic $La_{1-x}Sr_xMnO_{3-\delta}$ ($x=0.80, 0.85$) above antiferromagnetic ordering, **Aga Shahee**, Kiran Singh, R. J. Choudhary and N. P. Lalla, [Physica status solidi \(b\) 1-7 252, 1832–1838 \(2015\)](#). **IF: 1.710**
27. Multiglass properties and magnetoelectric coupling in uniaxial anisotropic spin cluster-glass Fe_2TiO_5 , S. Sharma, T. Basu, **A. Shahee**, K. Singh, N. P. Lalla and E. V. Sampathkumaran, [Phys. Rev. B 90, 144426 \(2014\)](#). **IF: 4.036**
28. Oxygen deficiency induced suppression of JT-distortion and stabilization of charge ordering in $La_{0.2}Sr_{0.8}MnO_{3-\delta}$, **A. Shahee**, R. J. Choudhary, R. Rawat, N. P. Lalla, [Physica status solidi \(b\), 251, 965–973 \(2014\)](#). **IF: 1.710**
29. Effect of oxygen off-stoichiometry on coupled structural and magnetic phase-transitions in $La_{0.15}Sr_{0.85}MnO_{3-\delta}$ ($\delta=0.02, 0.14$), **A. Shahee**, R. J. Chaudhari, R. Rawat, A. M. Awasthi, N. P. Lalla, [Solid State Commun., 177, 84 \(2014\)](#). **IF: 1.804**
30. Direct visualization of cubic to tetragonal phase transition in $La_{0.2}Sr_{0.8}MnO_{3-\delta}$ using transmission electron microscopy, **A. Shahee**, N. P. Lalla, [Physica B: Cond. Matt. 448, 290-296 \(2014\)](#). **IF: 2.436**
31. Kinetic arrest of the first-order $R-3c$ to $Pbnm$ phase transition in supercooled $La_xMnO_{3+\delta}$ ($x=1$ and 0.9), **A. Shahee**, D. Kumar, C. Shekhar, N. P. Lalla, [J Phys.: Cond. Matt. 24, 225405 \(2012\)](#). **IF: 2.333**
32. Lattice Expansion in ZnSe Quantum Dots, S. Chattopadhyay, N. V. Kulkarni, Kaushik Choudhury, R. Prasad, **A. Shahee**, B. N. Raja Sekhar, P. Sen, [Materials Lett., 65, 1625-27 \(2011\)](#). **IF: 3.423**
33. Low Cost Ferroelectric Loop Study Set up With New and Simple Compensation Circuit: Operated at Variable Frequencies, C. S. Das, A. Majumdar, **A. Shahee**, N. P. Lalla, T. Shripathi, R. Hippler, [Ferroelectrics Letters, 38, 78–86 \(2011\)](#). **IF: 0.860**

AIP Conference Proceeding:

34. Geometrical frustration in a new $S=1/2$ distorted check-board lattice $PbCuTeO_5$, SP Chilakalapudi, **A. Shahee**, AV Mahajan, S. Srinath, B. Koteswararao, [AIP Conf. Proc. 1832 \(1\), 130032 \(2017\)](#).
35. Low Temperature Structural and Transport Studies of $La_{0.175}Pr_{0.45}Ca_{0.375}MnO_{3-d}$, S. Sharma, **A. Shahee**, K. Singh, N. P. Lalla, [AIP Conf. Proc. 1731, 030006 \(2016\)](#).
36. Development of Low Temperature and High Magnetic Field X-Ray Diffraction Facility, **A. Shahee**, S. Sharma, K. Singh, N. P. Lalla and P. Chaddah, 59th DAE Solid State Physics Symposium (DAE-SSPS-2014), [AIP Conf. Proc. 1665, 060004 \(2015\)](#).
37. Oxygen a Key Parameter to Tune Structural Phase Diagram of $La_{0.2}Sr_{0.8}MnO_{3-\delta}$, **A. Shahee** and N. P. Lalla, 59th DAE Solid State Physics Symposium (DAE-SSPS-2014), [AIP Conf. Proc. 1665, 030005 \(2015\)](#).
38. Structural and Electronic Transport Studies of Self-doped $Pr_{1-x}MnO_{3\pm\delta}$ Manganites, **A. Shahee**, N. P. Lalla, [AIP Conf. Proc. 1591, 1510 \(2014\)](#).
39. Structural and In-Field Dielectric Studies Across the Anti-ferroelectric Transition in $Sr_{1-x}Ca_xTiO_3$, S. Sharma, **A. Shahee**, N. P. Lalla, [AIP Conf. Proc. 1591, 42 \(2014\)](#).
40. Temperature Dependent Structural studies of Multiferroic $La_{0.7}Bi_{0.3}CrO_3$ Perovskites, **A. Shahee**, N. P. Lalla, [AIP Conf. Proc. 1512, 60 \(2013\)](#).
41. Occurrence of Magneto-elastic coupling across the Metal-Insulator Transition in $LaMnO_{3\pm\delta}$, **A. Shahee**, Dharendra Kumar, N. P. Lalla, [AIP Conf. Proc. 1447, 1113 \(2012\)](#).
42. Anomalous Field-Induced Magnetoresistance Behavior in $Pr_{0.5}Sr_{0.5}MnO_3$ at Low Temperatures, D. Kumar, **A. Shahee**, R. Rawat, N. P. Lalla, [AIP Conf. Proc. 1447, 83 \(2012\)](#).
43. Multiferroic Studies on $La_{0.7}Bi_{0.3}CrO_3$ Perovskite, **A. Shahee**, D. Kumar, N. P. Lalla, [AIP Conf. Proc. 1349, 1239 \(2011\)](#).
44. Structural studies on Multiferroic $La_{1-x}Bi_xCrO_3$ Perovskites, **A. Shahee**, D. Kumar, N. P. Lalla, [AIP Conf. Proc. 1349, 1243 \(2011\)](#).

Conference booklets

1. Observation of strong bulk spin-orbit torques in the van der Waals ferromagnet Fe_3GeTe_2 , F. Martin, K. Lee, M. Schmitt, A. Liedtke, **A. Shahee**, H. T. Simensen, T. Scholz, T. G. Sanderson, D. Go, M. Gradhand, Y. Mokrousov, T. Denneulin, A. Kovács, B. Lotsch, A. Brataas, M. Kläui, 한국자기학회 학술연구발표회 논문개요집, **31**, 243-243 (2021).
2. Linear magnetoelectric effects in an antiferromagnetic spin-web compound Cu_3TeO_6 , **A. Shahee**, K. Yoo, B. Koteswararao, N. V. Ter-Oganessian and K. H. Kim, 8th International Congress on Ceramics (ICC8), Jeju, South Korea (2020).

3. *Discovery of magnetoelectric coupling in a van der Waals compound CuCrP_2S_6* , C. B. Park, **A. Shahee**, D. R. Patil, N. Ter-Oganessian, K. H. Kim 한국자기학회 학술연구발표회 논문개요집, **30**, 160-160 (2020).
4. *Observation of magnetic field induced ferroelectricity in the poly-and single crystals of $\text{CaFe}_3\text{O}(\text{PO}_4)_3$* , K-T. Kim, **A. Shahee**, J-W. Lee, V. U. Kumar, B K. Rao, K. H. Kim, 한국자기학회 학술연구발표회 논문개요집, **30**, 56-56 (2020)
5. *Site preferential Zn^{2+} doping effects on the multiferroicity of $S = 1/2$ kagome staircase $\text{PbCu}_3\text{TeO}_7$* , **A. Shahee**, C. B. Park, N. Ter-Oganessian, and K. H. Kim, 2019 Hsinchu Oxide Forum: The 11th APCTP Workshop on Multiferroics, Taiwan (2019)
6. *Neutron and X-ray Diffraction Studies on B-site Substituted Electron-Doped Manganite $\text{SrMn}_{0.85}\text{Mo}_{0.15}\text{O}_3$* , **A. Shahee**, K. Singh, E. Suard, N. P. Lalla and C. Simon, APCTP-KIAS Quantum Materials Symposium (QMS) 2018, held at Muju Deogyusan Resort, Korea, 24 Feb. ~ 01 Mar-2018.
7. *Development of low temperature and high magnetic field Powder X-ray diffraction facility for field-driven structural phase transition studies*, **A. Shahee**, S. Sharma, P. Yadav, P. Bhardwaj, N. P. Lalla¹, and P. Chaddah, APCTP-Quantum Materials Symposium 2017 in conjunction with 17th Korea-Taiwan-Japan Workshop on SCES & APW, held at Yongpyong resort (Dragon Valley Hotel), from 19-24 Feb-2017.
8. *Neutron diffraction study of spin, charge and orbital ordering in $\text{La}_{0.33}\text{Sr}_{0.67}\text{MnO}_3$* , **A. Shahee**, S. D. Kaushik, N. P. Lalla & V. Siruguri, Conf. on Neutron Scattering, 10-12 Feb-2014 at the IISER-Pune, Pune, India.
9. *Oxygen-vacancy effect on structural, magnetic, and electronic properties in $\text{La}_{0.15}\text{Sr}_{0.85}\text{MnO}_{3-\delta}$* , **A. Shahee** & N. P. Lalla, Research Scholars Workshop on Phys. of Materials', 23-24 Dec-2013 at UGC-DAE CSR Indore.
10. *Structural and electrical Properties of Ag doped $\text{Pr}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$* , M. A. Bhat, **A. Shahee**, R. K. Thakur, B. Singh, N. Kumar & N.K. Gaur, International Conf. on Materials Processing and Characterization "ICMPC2012", 08 – 10 Mar-2012 at Gokaraju Rangaraju Inst. of Eng. & Tech., Hyderabad, India.
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