

## LIST OF PUBLICATIONS

1. Electric Field Induced Structural Transformation across the Morphotropic Phase Boundary of  $(1-x)\text{Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3-x\text{PbTiO}_3$  Piezoceramic, **Ashutosh Upadhyay** and Akhilesh Kumar Singh, *Scripta mater.* **115**, 71-74 (2016).
2. Grain Size Dependent Phase Stability and Presence of a Monoclinic (Pm) Phase in the Morphotropic Phase Boundary Region of  $(1-x)\text{Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3-x\text{PbTiO}_3$  Piezoceramics, **Ashutosh Upadhyay** and Akhilesh Kumar Singh, *J. Appl. Phys.* **117**, 144102 (2015).
3. Phase Coexistence and the Structure of the MPB Region in  $(1-x)\text{Bi}(\text{Mg}_{1/2}\text{Zr}_{1/2})\text{O}_3-x\text{PbTiO}_3$  Solid Solution, *Rishikesh Pandey*, Ashish Tiwari, **Ashutosh Upadhyay** and Akhilesh Kumar Singh, *Acta Mater.* **76**, 198-206 (2014).
4. Electronic Structural and stability of Hydrogen Defects in Diamond and Boron Doped Diamond: A Density Functional Theory Study, **Ashutosh Upadhyay**, Akhilesh Kumar Singh, and Amit Kumar, *Comp. Mater. Sci.* **89**, 257-263 (2014).
5. Synthesis and Characterization of  $(1-x)\text{Bi}(\text{Mg}_{2/3}\text{Sb}_{1/3})\text{O}_3-x\text{PbTiO}_3$  Piezoceramics, **Ashutosh Upadhyay**, Saurabh Dwivedi, Rishikesh Pandey, and Akhilesh Kumar Singh, *AIP Conf. proc.* **1731**, 030004 (2016).
6. Synthesis and Structural studies on  $(1-x)\text{Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3-x\text{PbTiO}_3$  Piezoceramics, **Ashutosh Upadhyay**, Rishikesh Pandey, Shashwat Anand and Akhilesh Kumar Singh, *AIP Conf. proc.* **1591**, 79 (2014).

## Participation in Schools/ Workshops/ Symposiums/ Conferences

1. Participated in the “Institute Day IIT (BHU), Varanasi from April 2-3, 2016” “Synthesis and Characterization of  $(1-x)\text{Bi}(\text{Mg}_{2/3}\text{Sb}_{1/3})\text{O}_3-x\text{PbTiO}_3$  Piezoceramics” (*Poster Presentation*).
2. Paper Presented in “60<sup>th</sup> DAE Solid State Physics Symposium” at Amity University, Noida U. P., India, from Dec. 21-25, 2015 (*Poster Presentation*).
3. Participated in International Workshop on “Symmetry Relationships between Crystal Structures with Application to Structural Phase Transition” by International Union of Crystallography (IUCr) at IIT (BHU) Varanasi, from Oct. 27-31, 2014.
4. Participated in MASTANI Summer School on “MATERIALS Simulation Theory and Numerics” at IISER-Pune, from Jun 30 - July 12, 2014.
5. Participated in workshop on “High Performance Computing” at Inter University Accelerator Centre, New Delhi, from May 5-6, 2014.
6. Participated in Winter School on “Practical Crystallography and Structure Solution” at Department of physics, Banaras Hindu University, Varanasi, from March 5-11, 2014.
7. Participated in “Author workshop jointly organized by Springer and IIT (BHU)” Varanasi, India, on Feb. 10, 2014.
8. Paper Presented in “58<sup>th</sup> DAE Solid State Physics Symposium” at Thapar University, Patiala, India, from Dec. 17-21, 2013. “Synthesis and Structural Studies on  $(1-x)\text{Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3-x\text{PbTiO}_3$  Piezoceramics” (*Poster Presentation*).
9. Participated in “42<sup>nd</sup> National Seminar on Crystallography and International Workshop on Application of X-ray Diffraction for Drug Discovery” at Jawaharlal Nehru University New Delhi, From Nov. 21-23, 2013. “Structural Characterization of Piezoelectric  $(1-x)\text{Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3-x\text{PbTiO}_3$  Ceramics in the morphotropic Phase Boundary Region” (*Oral Speaker*).
10. Participated in “International Conference on Nanoscience and NanoTechnology (ICNN-2013)” at Babasaheb Bhimrao Ambedkar University Lucknow India from Nov. 18-20, 2013. “Electronic Structure and Optical Properties of Scintillating Barium di-Halides” (*Poster Presentation*).

11. Participated in Garuda Boot Camp on “National Computational Grid (GBC-2013), March 6-7, 2013 at IIT (BHU), Varanasi.
12. Participated in workshop on “Electroactive Materials” from Apr. 22-23, 2012 at SMST, IIT (BHU) Varanasi.
13. Participated in Theory and Practical Sessions of workshop on “Materials Modelling and Simulation” Dec. 27-31, 2010 at Centre for Modelling Simulation and Design, University of Hyderabad, India.