PUBLICATIONS

Research papers published in National and International Journals

1. Study on Transport Properties of Bi$_2$Se$_3$ Single Crystals Grown by Vapor Phase Technique
   M. P. Deshpande, Sunil H. Chaki, Nilesh N. Pandya, Pallavi Sakariya & Sandip V. Bhatt
   Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry, 42(10), (2012),1418-1425.

2. Transport property measurements of Bi$_2$Se$_3$ crystal grown by Bridgman method.
   M.P. Deshpande, Nilesh N. Pandya and M. N. Parmar.

3. Study on transport properties of Bi$_2$Se$_3$ single crystals grown by vapour phase technique.
   M.P. Deshpande, Pallavi Sakaria and Nilesh N Pandya.
   Proceedings of 54$^{th}$ DAE solid state physics symposium 54(2009)825.


5. Growth and transport property measurements of rhenium doped tungsten diselenide single crystal.

   Sunil H.Chaki, M.P.Deshpande, Pallavi N Sakaria, Nilesh N. Pandya
   Prajna,17(2009)170-175.

7. Electrical transport properties of some mixed transition metal dichalcogenides Mo$_x$W$_{1-x}$Se$_2$ ($x = 0.3$, 0.4, 0.85 & 0.9).
   M. P. Deshpande, Sunil Chaki, Nilesh N. Pandya and Sagar C. Shah

8. Band gap determination of copper doped tungsten diselenide single crystals by optical absorption method
   M. P. Deshpande, M. N. Parmar, Nilesh N. Pandya, Sandip V. Bhatt and Sunil H. Chaki
9. Chemical synthesis and characterization of Lead Sulphide (PbS) nanoparticles.

10. Studies on transport properties of copper doped tungsten diselenide single crystals.
M. P. Deshpande, M. N. Parmar, Nilesh N. Pandya, Sunil Chaki and Sandip V. Bhatt

11. Influence of Mn doping on optical properties of ZnO nanoparticles synthesized by microwave irradiation

12. Microwave synthesis and study of structural properties of ZnS nanoparticles.
M.P. Deshpande, Nilesh N Pandya, Pallavi Sakariya, Sandip V Bhatt & Sunil H Chaki
Turkish Journal of Physics (Communicated in 2014 and under revision)

13. Controlled synthesis through inverse micellar method and study of structural properties of ZnS nanoparticles.
M.P. Deshpande, Nilesh N Pandya, Sandip V Bhatt & Sunil H Chaki
International Journal of Material Science (Recently Communicated in 2015)
List showing Papers presented at conferences /symposiums/ seminars / workshops

1. Presented a paper on **Controlled synthesis through microwave heating and structural properties of ZnS nanoparticles** National conference of Condensed matter and material processing-2012 (CMMP-2012) at Department of Physics, Sardar Patel University, Vallabh Vidyangar on 4th March 2012.

2. Presented a paper on **Characterization of Bi$_2$S$_3$ nanorods prepared at room temperature** National conference of Condensed matter and material processing -2012(CMMP-2012) at Department of Physics, Sardar Patel University, Vallabh Vidyangar on 4th March 2012.


4. Presented a paper on **Microwave assisted synthesis of ZnS nanoparticles and its characterization at** state level seminar SCIXL-2010 on 9th January 2010 at Ahmedabad.

5. Presented a paper on **Synthesis and characterization of CdS nanocrystalline thin films and nanoparticles** in Gujarat Science Congress held on 15/2/2009 at Veer Narmad South Gujarat University, SURAT.

6. Presented a paper on **Characterization of PbS nanoparticles synthesized by chemical route** in International conference on Active/Smart Materials (ICASM 2009) during January 7-9, 2009 held at Physics Department, Thiagarajar college of Engineering, MADURAI , Tamilnadu.

7. Presented a paper on **Synthesis and characterization of copper intercalated / doped compounds of tungsten diselenide single crystals** in National conference on Advance Materials Device and Technology (NCAMDT) during February 20-22, 2008 held at Department of Physics, Sri Venkateswara University, TIRUPATI , A.P

8. Presented a paper on **Optical band gap determination of copper doped tungsten diselenide single crystals** in National conference on Emerging Materials, Device and Technology (NCEMDT-2009) during February 24-25, 2009 held at Department of Physics, Sri Venkateswara University, TIRUPATI, A.P.

9. Attended and presented a poster on “**Thermal and Surface study of Bi$_2$Se$_3$ Crystal**” in 22nd Gujarat Science Congress at Bhavnagar University, Bhavnagar on March, 09, 2008.
10. Attended and presented a paper on “Synthesis of CdS nanoparticle by chemical route and their characterization” in National conference on Nanomaterials and Nanotechnology (NATCON NAMTECH-2007) during 08-10 December, 2007 at Department of Physics, University of Lucknow, Lucknow.


12. Attended and presented a paper on “Thermal and surface study of Bi$_2$Se$_3$ crystal.” in state level meeting of research scholars in physics on 17th march 2007 at Applied physics department, M.S. University Vadodara..

13. Attended and presented a paper on “Growth of Bi$_2$Se$_3$ crystal by Bridgman method and its characterization” at National seminar on crystallography 36 held at Department of Biophysics and crystallography, University of Madras, Chennai during 22nd -24th January 2007.

14. Attended and presented a Paper on “Atomic force microscope (AFM) and its application in revealing research problems” in one day seminar on “Upgrading physics education & research” at Palanpur on 19th November 2006.

15. Attended and presented a presentation on “New design of experimental set up of Bridgman technique used for synthesis of crystal” at 20th Gujarat Science Congress held at Ahmedabad in March.2006.
Visits to National/International Research Laboratories and Awards Received


2. Presented a paper on **Microwave assisted synthesis of ZnS nanoparticles and its characterization** in International Conference on Materials for Advanced Technologies (ICMAT-09) held during 28th June to 3rd July 2009 at Suntec Singapore International Convention & Exhibition Centre, Singapore.

3. Presented a paper on **Growth and characterization of copper doped transition metal dichalcogenide single crystals** in International conference on Materials for Advanced technologies (ICMAT-09) held during 28th June to 3rd July 2009 at Suntec Singapore International Convention & Exhibition Centre, Singapore.

4. Awarded second best oral presentation for **Thermal and surface study of Bi$_2$Se$_3$ crystal** in state level meeting of research scholars in physics on 17th march 2007 at Applied Physics Department, M.S. University, Vadodara.

5. Received best poster award for **Controlled synthesis through microwave heating and structural properties of ZnS nanoparticles** in National conference of Condensed matter and material processing-2012 (CMMP-2012) at Department of Physics, Sardar Patel University, Vallabh Vidyangar on 4th March 2012.