

# ANSARI ZUBAIDA MOHAMMED AMIN

Associate Professor, Center for Interdisciplinary Research in Basic Sci.s, Jamia Millia Islamia, Jamia Nagar, New Delhi, India 110025

E-mail: optics2k@yahoo.com  
Telephone: +91-11-268981717  
Fax: +91-11-26983409



## EDUCATION

**Ph.D., Applied Physics (Major), Materials Sci. (Minor), Department of Physics, University of Pune, April 1997.**

THESIS TITLE: STUDY OF PLANER OPTICAL WAVEGUIDE SENSORS WITH ACTIVE CLADDING FOR GASEOUS SPECIES

ADVISOR: PROF. R.N. KAREKAR, PROF. R. C. AIYER

**M.Sc., Physics, Department of Physics, Pune University, Pune INDIA: May 1991**

**B.Sc. Physics - University of Pune, Pune 1989 – IST CLASS WITH DISTINCTION**

**B.Sc. Electronic Sci. - University of Pune, Pune 1988 – IST CLASS WITH DISTINCTION**

## EXPERIENCE

### A. RESEARCH

JAIST, SCHOOL OF MATERIALS SCI.,  
JSPS Postdoctoral Fellow, Assistant professor- Venture Business Laboratory; Nov. 2002- Feb 2007.

Prof M. Tomitori - Scanning Tunneling Microscopy.  
- AFM, nc-AFM and nanomechanics.  
- Surface Sci.  
- Application of STM for DNA studies  
- AFM Probe modification and its SEM, and TEM study.  
- Study of Si/Ge system using STM. LEEDS, Scanning Auger Microscopy.

CHONBUK NATIONAL UNIVERSITY  
SCHOOL OF SCI. AND TECHNOLOGY, PHYSICS DEPARTMENT, CHONJU, SOUTH KOREA

Research Professor

Prof. Jae-Myong Seo Sept. 2001 - Sept. 2002

- Surface Sci. and STM  
- Study and growth of Bi on high index (5 5 12) surface using STM

INHA UNIVERSITY

DEPARTMENT OF MATERIAL SCI. AND ENGINEERING, INCHEON, SOUTH KOREA

Research Professor

Prof. Tae-Gyung Ko July. 2000 - Aug. 2001

- Semiconducting nanoparticles physics and applications  
- Porous silicon and its device applications

UNIVERSITY OF PUNE

DEPARTMENT OF PHYSICS

Master's Project

Prof. R.C Aiyer Group – Optical glass waveguides Jan 1991 - May 1998

## B. TEACHING

CENTER FOR INTERDISCIPLINARY RESEARCH IN BASIC SCI.S, JAMIA MILLIA ISLAMIA,  
READER (ASSOCIATE PROFESSOR); FEB 2007-TILL DATE

DEPARTMENT OF PHYSICS, UNIVERSITY OF PUNE,  
*LECTURER; Feb 2000 to May 2000*

DEPARTMENT OF ELECTRONICS, UNIVERSITY OF PUNE,  
*INSTRUCTOR (PG special course); July 1998 to May 1999*

S.P. COLLEGE, PUNE,  
*Guest Lecturer; July 1998 to April 1999*

---

## C. OVERSEAS VISITS

- Japan advanced Institute of Sci. and Technology from 16/01/2010 to 31/03/2010 through DST-JSPS exchange program
- Invited by Najran University, Saudi Arab from 20/05/2009 to 16/07/2009
- Invited to deliver a talk and for research work at e-REST, Chonbuk National University, Korea from 09/05/2008 to 24/07/2008.
- JSPS short term research work fellowship from 07//04/2007 to 16/07/2007.
- International workshop and conference on Physics and Technology of Thin Film at ICTP, Italy during 7/3/99 to 28/3/99.

---

## D. AWARDS AND HONORS

- JSPS-DST exchange program
- JSPS postdoctoral fellowship (Nov.2002 to Nov. 2004)
- RA award by CSIR, India (Sept'99 to Jan'2000)
- SRF award by CSIR, India (Oct'96 to Sept'99)
- Research scientist award by the National Muslim Organization, MASS.
- Awarded the state level fellowship for M.Sc. by MASS.

---

## SKILLS

### Scientific

- All scanning probe microscopic techniques for imaging quantum dots, nanomaterials, biomolecules and spectroscopic studies
- Surface Science techniques for analysis and validation e.g. XPS, ESCA, Auger, PACS, LEEDs, HEEDs, Field-ion and Field-electron microscopy, Field-ion beam lithography.
- Thin film deposition by PVD, MOCVD, Plasma CVD, Spray CVD, Sputtering, Laser ablation, Ion-exchange, Electron beam evaporation, Focused Ion beam deposition, Epitaxial growth.
- Thick film deposition using screen printing and firing (Inductive/ resistive).
- Sol-gel process for thin films and nano-particle synthesis.
- Device Fabrication Techniques used in VLSI and UVLSI



- XRD (Low & Bulk), DTA-TGA analysis, STM, AFM, nc-AFM, EDAX, SEM, TEM, UV-Visible and IR spectroscopy, Ellipsometry, Raman spectroscopy. LCR Bridge (impedance analyzers), Scalar network and Vector network analyzers at microwave frequencies. Photolithography etc.
- Computer programming skills in FORTRAN, Basic and C. Experience in computer interfacing to scientific instrumentation.
- Experience with DOS, Microsoft Windows, Linux and Mac Operating Systems.

#### LANGUAGES KNOWN

---

- English, Urdu, Hindi, Marathi, Arabic, Korean, Japanese

#### SELECTED PUBLICATIONS

---

SALONI SHARMA, SHREEYA RANE, SHUBHDA SRIVASTAVA, Z. A. ANSARI, DIBAKAR ROY CHOWDHURY, BIPIN KUMAR GUPTA, ELECTRONICALLY TRIGGERED TUNABLE TERAHERTZ SIGNAL OBSERVED IN LPCVD-GROWN SINGLE LAYER GRAPHENE, ACCEPTED IN JOURNAL OF MATERIALS CHEMISTRY C, RSC, D3TC03173J.

Sharma, S., Chauhan, P., Rane, S., Raj, U., Srivastava, S., Ansari, Z.A., Roy Chowdhury, D., Gupta, B.K., New insights into APCVD grown monolayer MoS<sub>2</sub> using time-domain terahertz spectroscopy, *Scientific Reports*, 13, 4146-4146, 2023

Manoj Kumar Patel, Md. Azahar Ali, Md. Zafaryab, Ved Varun Agrawal, M. Moshahid Alam Rizvi, Z. A. Ansari, S. G. Ansari, Bansi D. Malhotra, *Biocompatible nanostructured magnesium oxide-chitosan platform for genosensing applications*, *Biosensors and BioElect.*

Soumyananda Chakraborti, Prachi Joshi, Devlina Chakrabarty, Virendra Shanker, Z.A. Ansari, Surinder P. Singh, Piank Chakrabarti, *Interaction of Polyethyleneimine- Functionalized ZnO Nanoparticles with Bovine Serum Albumin*, *Langmuir* 28 (2012) 11142-11152.

Z.A. Ansari, T. Arai. M. Tomitori, Low-flux elucidation of initial growth of Ge clusters deposited on Si(111)-7×7 observed by scanning tunneling microscopy, *Phys. Rev. B* 79 (2009) 033302.

Z. A. Ansari, T. Arai, M. Tomitori, AFM Si tip with Ge clusters with capability of remolding by heating, *Nanotechnology* 18(8) (2007) 084020.

Z.A. Ansari, T. Arai. M. Tomitori, Evidence of temperature dependence of initial adsorption sites of Ge atoms on Si(111)-7×7, *Appl. Phys. Lett.* 88 (2006) 171902.

Z.A. Ansari, T. Arai. M. Tomitori, Hexagonal arrangement of Ge clusters self-organized on a template of half unit cells of Si(111)-7x7 observed by scanning tunneling microscopy, *Surface Sci. Lett.*, 574 (2005) L17-L22.

Z.A. Ansari, Kwangpyoo Hong, Chongmu Lee, Structural and electrical properties of

porous silicon with RF-sputtered Cu films, Materials Sci. and Engineering, B, 90 (2002) 103-109.

Atul Kulkarni, Rizwan Wahab, S. G. Ansari, Tae-Sung Kim, Salem S. Al-Deyab, Z. A. Ansari, *Photoconducting properties of a unit nanostructure of ZnO assembled between microelectrodes*, Jr. of NanoSci. and Nanotechnology 12 (2012) 2406–2411.

S. G. Ansari, Laitka Bhayana, Ahmad Umar, A. Al-Hajry, Salem S. Al-Deyab, Z. A. Ansari, *Understanding the effect of flower extracts on the photoconducting properties of nanostructured TiO<sub>2</sub>*, Jr. of NanoSci. and Nanotechnology 12 (2012) 7860-7868.

Z.A. Ansari, R.N. Karekar, R.C. Aiyer, *Influence of chlorine on planar waveguide cladded with RbCl and AgCl*, Appl. Surf. Sci. 125 (1998) 149-156, Elsevier.

## **FULL LIST OF PUBLICATIONS (ONLY SCOPUS INDEXED)**

---

1. Saloni Sharma, Shreeya Rane, Shubhda Srivastava, Z. A. Ansari, Dibakar Roy Chowdhury, Bipin Kumar Gupta, Electronically triggered tunable terahertz signal observed in LPCVD-grown single layer graphene, Accepted in Journal of Materials Chemistry C, RSC, d3tc03173j.
2. Sharma, S., Chauhan, P., Rane, S., Raj, U., Srivastava, S., Ansari, Z.A., Roy Chowdhury, D., Gupta, B.K., New insights into APCVD grown monolayer MoS<sub>2</sub> using time-domain terahertz spectroscopy, Scientific Reports, 13, 4146-4146, 2023.
3. Umar, A., Haque, M., Ansari, S.G., Seo, H.-K., Ibrahim, A.A., Alhamami, M.A.M., Algadi, H., Ansari, Z.A., Label-Free Myoglobin Biosensor Based on Pure and Copper-Doped Titanium Dioxide Nanomaterials, Biosensors, 12, 1151-1151, 2022.
4. Jameel, M.R., Ansari, Z., Al-Huqail, A.A., Naaz, S., Qureshi, M.I., CRISPR/Cas9-Mediated Genome Editing of Soluble Starch Synthesis Enzyme in Rice for Low Glycemic Index, Agronomy, 12, 2206-2206, 2022.
5. Al Fatease, A., Guo, W., Umar, A., Zhao, C., Alhamhoon, Y., Muhsinah, A.B., Mahnashi, M.H., Ansari, Z.A., A dual-mode electrochemical aptasensor for the detection of Mucin-1 based on AuNPs-magnetic graphene composite, Microchemical Jr., 180, 107559-107559, 2022.
6. Al Fatease, A., Haque, M., Umar, A., Ansari, S.G., Mahnashi, M.H., Alhamhoon, Y., Ansari, Z.A., Fabrication and Characterization of Acute Myocardial Infarction Myoglobin Biomarker Based on Chromium-Doped Zinc Oxide Nanoparticles, Biosensors, 12, 585-585, 2022.
7. Kotta, A., Kim, E.-B., Seo, I., Ansari, Z.A., Seo, H.K., Simple Additive to MAPbI<sub>3</sub> Solution that Enhances Film Quality of Mini-Module Perovskite Solar Cells Fabricated under Moderate Humidity, Solar RRL, 5, 2100826-2100826, 2021.
8. Al Fatease, A., Haque, M., Umar, A., Ansari, S.G., Alhamhoon, Y., Muhsinah, A.B., Mahnashi, M.H., Guo, W., Ansari, Z.A., Label-free electrochemical sensor based on manganese doped titanium dioxide nanoparticles for myoglobin detection: Biomarker for acute myocardial infarction, Molecules, 26, 4252-4252, 2021.
9. Chishti, B., Ansari, Z.A., Fouad, H., Alothman, O.Y., Hashem, M., Ansari, S.G., Picomolar-level melamine detection via ATP regulated CeO<sub>2</sub> nanorods tunable peroxidase-like nanozyme-activity-based colorimetric sensor: Logic gate implementation and real sample analysis, Crystals, 11, 178, 1-15,178, 2021.

10. Khatoon, Z., Fouad, H., Seo, H.-K., Alothman, O.Y., Ansari, Z.A., Ansari, S.G., Ethyl acetate chemical sensor as lung cancer biomarker detection based on doped nano-SnO Synthesized by sol-gel process, *IEEE Sensors Jr.*, 20, 9113403, 12504-12511, 9113403, 2020.
11. Khatoon, Z., Fouad, H., Alothman, O.Y., Hashem, M., Ansari, Z.A., Ansari, S.A., Doped SnO<sub>2</sub> nanomaterials for e-nose based electrochemical sensing of biomarkers of lung cancer, *ACS Omega*, 5, 27645-27654, 2020.
12. Khatoon, Z., Fouad, H., Seo, H.K., Hashem, M., Ansari, Z.A., Ansari, S.G., Feasibility study of doped SnO<sub>2</sub> nanomaterial for electronic nose towards sensing biomarkers of lung cancer, *Jr. of Materials Sci.: Materials in Electt.*, 31, 15751-15763, 2020.
13. Haque, M., Fouad, H., Seo, H.-K., Alothman, O.Y., Ansari, Z.A., Cu-Doped ZnO Nanoparticles as an Electrochemical Sensing Electrode for Cardiac Biomarker Myoglobin Detection, *IEEE Sensors Jr.*, 20, 9044727, 8820-8832, 9044727, 2020.
14. Chishti, B., Fouad, H., Seo, H.K., Alothman, O.Y., Ansari, Z.A., Ansari, S.G., ATP fosters the tuning of nanostructured CeO<sub>2</sub> peroxidase-like activity for promising antibacterial performance, *New Jr. of Chemistry*, 44, 11291-11303, 2020.
15. Haque, M., Fouad, H., Seo, H.-K., Othman, A.Y., Kulkarni, A., Ansari, Z.A., Investigation of Mn doped ZnO nanoparticles towards ascertaining myocardial infarction through an electrochemical detection of myoglobin, *IEEE Access*, 8, 9186016, 164678-164692, 9186016, 2020.
16. Chishti, B., Ansari, Z.A., Ansari, S.G., Engineered nano-ZnO: Doping regulates dissolution and reactive Ansari, Z.A oxygen species levels eliciting biocompatibility, *Materials Today: Proceedings*, 36, 626-630, 2019.
17. Ansari, Z.A., Ansari, S.G., Kumar, R., Kumar, G., Umar, A., Kim, S.-H., Algarni, H., Toxicological and antimicrobial properties of nanostructured metal oxides, *Handbook of Remediation for Complex Environmental Problems*, 211-256, 2019.
18. James, S., Chishti, B., Ansari, S.A., Alothman, O.Y., Fouad, H., Ansari, Z.A., Ansari, S.G., Nanostructured Cuprous-Oxide-Based Screen-Printed Electrode for Electrochemical Sensing of Picric Acid, *Jr. of Electronic Materials*, 47, 7505-7513, 2018.
19. Kotta, A., Ansari, S.A., Parveen, N., Fouad, H., Alothman, O.Y., Khaled, U., Seo, H.K., Ansari, S.G., Ansari, Z.A., Mechanochemical synthesis of melamine doped TiO<sub>2</sub> nanoparticles for dye sensitized solar cells application, *Jr. of Materials Sci.: Materials in Electronics*, 29, 9108-9116, 2018.
20. Chishti, B., Ansari, Z.A., Fouad, H., Alothman, O.Y., Ansari, S.G., Significance of doping induced Tailored Zinc oxide nanoparticles: Implication on structural, morphological and optical characteristics, *Sci. of Advanced Materials*, 9, 2202-2213, 2017.
21. Khan, S., Ansari, Z.A., Alothman, O.Y., Fouad, H., Ansari, S.G., Application of amine and copper doped magnesium oxide nanoparticles in electrochemical immunosensors for detecting Brucella abortus, *NanoSci. and Nanotechnology Lett.*, 9, 1656-1664, 2017.
22. Ansari, S.A., Khatoon, Z., Parveen, N., Fouad, H., Kulkarni, A., Umar, A., Ansari, Z.A., Ansari, S.G., Polyaniline-functionalized TiO<sub>2</sub> nanoparticles as a suitable matrix for hydroquinone sensor, *Sci. of Advanced Materials*, 9, 2032-2038, 2017.
23. Ibrahim, A.A., Tiwari, P., Al-Assiri, M.S., Al-Salami, A.E., Umar, A., Kumar, R., Kim, S.H., Ansari, Z.A., Baskoutas, S., A highly-sensitive picric acid chemical sensor based on ZnO nanopeanuts, *Materials*, 10, 795-795, 2017.
24. Khan, S., Kumar, A., Khan, A.A., Athar, T., Fouad, H., Ansari, Z.A., Seo, H.K., Ansari, S.G., Electrochemical nanodevice based on praseodymium doped zinc oxide synthesized by hydrothermal method, *Jr. of Nanoelectronics and Optoelectronics*, 12, 236-241, 2017.

25. Khan, N., Athar, T., Fouad, H., Umar, A., Ansari, Z.A., Ansari, S.G., Application of pristine and doped SnO<sub>2</sub> nanoparticles as a matrix for agro-hazardous material (organophosphate) detection, *Scientific Reports*, 7, 42510-42510, 2017.
26. Seo, H.K., Farheen, Ansari, S.A., Parveen, N., Qadir, S., Fouad, H., Shin, H.S., Cho, M.H., Ansari, S.G., Ansari, Z.A., Effect of polyaniline concentration on the photoconversion efficiency of nano-TiO<sub>2</sub> based dye sensitized solar cells, *Jr. of Materials Sci.: Materials in Electronics*, 28, 3210-3216, 2017.
27. Ansari, Z.A., Athar, T., Fouad, H., Ansari, S.G., Sol-gel synthesis of manganese doped titanium oxide nanoparticles for electrochemical sensing of hydroquinone, *Jr. of NanoSci. and Nanotechnology*, 17, 2296-2301, 2017.
28. Khatoon, Z., Athar, T., Fouad, H., Umar, A., Ansari, Z.A., Ansari, S.G., Highly sensitive hydrazine chemical sensor based on nickel doped antimony oxide nanoellipsoids modified screen-printed electrode, *NanoSci. and Nanotechnology Lett.*, 8, 555-560, 2016.
29. Khan, N., Kumar, A., Khan, A.A., Wahab, R., Khan, S.T., Ahmad, J., Alkhedhairy, A.A., Ansari, Z.A., Ansari, S.G., Effect of praseodymium on the characteristics of nano-ZnO towards organophosphate as a nano-electrochemical device, *Jr. of Nanoelectronics and Optoelectronics*, 11, 6-11, 2016.
30. Ansari, S.G., Fouad, H., Shin, H.-S., Ansari, Z.A., Electrochemical enzyme-less urea sensor based on nano-tin oxide synthesized by hydrothermal technique, *Chemico-Biological Interactions*, 242, 45-49, 2015.
31. Al Rez, M.F., Choudhury, T., Islam, J., Fouad, H., Umar, A., Khan, A.A., Ansari, S.G., Ansari, Z.A., Tailoring the optoelectronic properties of nano-metal oxides using anthocyanins and lanthanide, *Jr. of NanoSci. and Nanotechnology*, 15, 9548-9553, 2015.
32. Patel, M.K., Ali, M.A., Krishnan, S., Agrawal, V.V., Al Kheraif, A.A., Fouad, H., Ansari, Z.A., Ansari, S.G., Malhotra, B.D., A Label-Free Photoluminescence Genosensor Using Nanostructured Magnesium Oxide for Cholera Detection, *Scientific Reports*, 5, 17384-17384, 2015.
33. Kumar, A., Zafaryab, M., Umar, A., Rizvi, M.M.A., Fouad, H., Ansari, Z.A., Ansari, S.G., Relief of oxidative stress using curcumin and glutathione functionalized ZnO nanoparticles in HEK-293 cell line, *Jr. of Biomedical Nanotech.*, 11, 1913-1926, 2015.
34. Ansari, S.G., Tuz-Zehra, F., Fouad, H., Hassenein, A.S., Ansari, Z.A., Effect of flower extracts on the photoconversion efficiency of dye sensitized solar cells fabricated with Sn-doped TiO<sub>2</sub>, *Jr. of Materials Sci.: Materials in Electronics*, 26, 5170-5174, 2015.
35. Ansari, Z.A., Umar, A., Fouad, H., Ansari, S.G., Dye sensitized solar cells fabricated using Cu-Doped TiO<sub>2</sub> nanopowder with anthocyanin as sensitizer, *Jr. of Nanoelectronics and Optoelectronics*, 10, 290-294, 2015.
36. Khan, A.A., Islam, J., Ansari, S.G., Fouad, H., Ansari, Z.A., Effect of neodymium on the photoconversion efficiency of TiO<sub>2</sub> based dye sensitized solar cells, *Jr. of Materials Sci.: Materials in Electronics*, 26, 1737-1742, 2015.
37. Aamir, S., Ansari, Z.A., Fouad, H., Umar, A., Al Kheraif, A.A., Ansari, S.G., Effect of inoculum size and surface charges on the cytotoxicity of ZnO nanoparticles for bacterial cells, *Sci. of Advanced Materials*, 7, 2515-2522, 2015.
38. Athar, T., Abdelaal, M., Khatoon, Z., Kumar, A., Razzaq, A., Khan, A.A., Fouad, H., Ansari, S.A., Ansari, Z.A., Green synthesis of NiSnO<sub>3</sub> nanopowder and its application as a hydroquinone electrochemical sensor, *Sensors and Materials*, 27, 563-573, 2015.
39. Ansari, S.G., Khan, A.A., Fouad, H., Ansari, Z.A., Feasibility Study of Sn-doped titanate nanotubes as a suitable matrix for glucose sensing, *Sensor Lett.*, 12, 1765-1768, 2014.
40. Ansari, Z.A., Khan, A.A., Fouad, H., Athar, T., Ansari, S.G., Application of platinum doped MnTiO<sub>3</sub> as electrochemical cholesterol sensor, *Sensor Lett.*, 12, 1203-1207, 2014.

41. Ansari, Z.A., Khalid, S., Khan, A.A., Fouad, H., Ansari, S.G., Cholesterol biosensor based on neodymium doped manganese titanate nanoparticles, *Sensor Lett.*, 12, 1495-1501, 2014.
42. Ansari, Z.A., Khalid, S., Khan, A.A., Ansari, S.G., Cholesterol sensing properties of neodymium doped NanoTiO<sub>2</sub>, *Advanced Sci. Lett.*, 20, 1433-1436, 2014.
43. Ansari, Z.A., Irfan, A., Umar, A., Fouad, H., Al-Hajry, A., Ansari, S.G., Fabrication and characterization of cholesterol biosensor based on nanoscale Sn-TiO<sub>2</sub> thin films, *Sensor Lett.*, 12, 44-49, 2014.
44. Kumar, A., Ansari, Z.A., Fouad, H., Umar, A., Ansari, S.G., Oxidative stress control in E. coli and S. aureus cells using amines adsorbed ZnO, *Sci. of Advanced Materials*, 6, 1236-1243, 2014.
45. Patel, M.K., Ali, M.A., Zafaryab, M., Agrawal, V.V., Rizvi, M.M.A., Ansari, Z.A., Ansari, S.G., Malhotra, B.D., Biocompatible nanostructured magnesium oxide-chitosan platform for genosensing application, *Biosensors and Bioelectronics*, 45, 181-188, 2013.
46. Patel, M.K., Azahar Ali, M., Agrawal, V.V., Ansari, Z.A., Ansari, S.G., Malhotra, B.D., Nanostructured magnesium oxide biosensing platform for cholera detection, *Applied Physics Lett.*, 102, 144106-144106, 2013.
47. Ansari, S.G., Bhayana, L., Umar, A., Al-Hajry, A., Al-Deyab, S.S., Ansari, Z.A., Understanding the effect of flower extracts on the photoconducting properties of nanostructured TiO<sub>2</sub>, *Jr. of NanoSci. and Nanotechnology*, 12, 7860-7868, 2012.
48. Athar, T., Hashmi, A., Al-Hajry, A., Ansari, Z.A., Ansari, S.G., One-pot synthesis and characterization of Nb<sub>2</sub>O<sub>5</sub> nanopowder, *Jr. of NanoSci. and Nanotechnology*, 12, 7922-7926, 2012.
49. Chakraborti, S., Joshi, P., Chakravarty, D., Shanker, V., Ansari, Z.A., Singh, S.P., Chakrabarti, P., Interaction of polyethyleneimine-functionalized ZnO nanoparticles with bovine serum albumin, *Langmuir*, 28, 11142-11152, 2012.
50. Kulkarni, A., Wahab, R., Ansari, S.G., Kim, T.-S., Al-Deyab, S.S., Ansari, Z.A., Photoconducting properties of a unit nanostructure of ZnO assembled between microelectrodes, *Jr. of NanoSci. and Nanotechnology*, 12, 2406-2411, 2012.
51. Ansari, S.G., Umar, A., Al-Hajry, A., Al-Deyab, S.S., Ansari, Z.A., Effect of flower extracts on the optoelectronic properties of Cd and Sn doped TiO<sub>2</sub> nanopowder, *Sci. of Advanced Materials*, 4, 763-770, 2012.
52. Seo, H.-K., Ansari, S.G., Al-Deyab, S.S., Ansari, Z.A., Glucose sensing characteristics of Pd-doped tin oxide thin films deposited by plasma enhanced CVD, *Sensors and Actuators, B: Chemical*, 168, 149-155, 2012.
53. Joshi, P., Chakraborti, S., Ramirez-Vick, J.E., Ansari, Z.A., Shanker, V., Chakrabarti, P., Singh, S.P., The anticancer activity of chloroquine-gold nanoparticles against MCF-7 breast cancer cells, *Colloids and Surfaces B: Biointerfaces*, 95, 195-200, 2012.
54. Joshi, P., Chakraborti, S., Chakrabarti, P., Singh, S.P., Ansari, Z.A., Husain, M., Shanker, V., ZnO nanoparticles as an antibacterial agent against E.coli, *Sci. of Advanced Materials*, 4, 173-178, 2012.
55. Ansari, S.G., Ansari, Z.A., Tomitori, M., Arai, T., Yamazaki, T., Park, S.H., Gosavi, S., A special section on Nano-Bio Materials and systems, *Sci. of Advanced Materials*, 4, 93-95, 2012.
56. Joshi, P., Chakraborti, S., Chakrabarti, P., Singh, S.P., Ansari, Z.A., Shanker, V., Polyethyleneimine functionalized ZnO quantum dots and their binding interaction with bovine serum albumin protein, *Materials Research Society Symposium Proceedings*, 1316, 53-58, 2011.
57. Joshi, P., Chakraborti, S., Ramirez-Vick, J.E., Ansari, Z.A., Shanker, V., Chakrabarti, P., Singh, S.P., Anti-tumor chloroquine-gold nanocomposites and their binding interaction

- with bovine serum albumin: Biophysical and biochemical aspects of protein binding, Materials Research Society Symposium Proceedings, 1316, 92-97, 2011.
- 58. Ansari, Z.A., Ansari, S.G., Seo, H.-K., Kim, Y.-S., Shin, H.-S., Urea sensing characteristics of titanate nanotubes deposited by electrophoretic deposition method, Jr. of NanoSci. and Nanotechnology, 11, 3323-3329, 2011.
  - 59. Ansari, Z.A., Mazhar-ul-Haque, Seo, H.-K., Umar, A., Al-Hajry, A., Al-Sayari, S.A., Shin, H.-S., Ansari, S.G., Urea sensing properties of Cu-doped titanate nanostructures, Advanced Sci. Lett., 4, 3451-3457, 2011.
  - 60. Kumar, R.K., Husain, M., Ansari, Z.A., Morphological variations and structural properties of ZnO nanostructures grown by rapid thermal CVD, Jr. of NanoSci. and Nanotechnology, 11, 6940-6945, 2011.
  - 61. Chakraborty, S., Joshi, P., Shanker, V., Ansari, Z.A., Singh, S.P., Chakrabarti, P., Contrasting effect of gold nanoparticles and nanorods with different surface modifications on the structure and activity of bovine serum albumin, Langmuir, 27, 7722-7731, 2011.
  - 62. Joshi, P., Chakraborty, S., Dey, S., Shanker, V., Ansari, Z.A., Singh, S.P., Chakrabarti, P., Binding of chloroquine-conjugated gold nanoparticles with bovine serum albumin, Jr. of Colloid and Interface Sci., 355, 402-409, 2011.
  - 63. Kim, Y.S., Ansari, S.G., Ansari, Z.A., Wahab, R., Shin, H.-S., A simple method to deposit palladium doped SnO<sub>2</sub> thin films using plasma enhanced chemical vapor deposition technique, Review of Scientific Instruments, 81, 113903-113903, 2010.
  - 64. Ansari, S.G., Dar, M.A., Ansari, Z.A., Seo, H.K., Kim, Y.-S., Al-Hajry, A., Shin, H.-S., Effect of RF plasma power and deposition temperature on the surface properties of tin oxide deposited by modified plasma enhanced chemical vapor deposition, Sci. of Advanced Materials, 1, 254-261, 2009.
  - 65. Joshi, P., Chakraborti, S., Chakrabarti, P., Haranath, D., Shanker, V., Ansari, Z.A., Singh, S.P., Gupta, V., Role of surface adsorbed anionic species in antibacterial activity of ZnO quantum dots against Escherichia coli, Jr. of NanoSci. and Nanotech., 9, 6427-6433, 2009.
  - 66. Ansari, S.G., Dar, M.A., Dhage, M.S., Kim, Y.S., Ansari, Z.A., Al-Hajry, A., Shin, H.-S., A novel method for preparing stoichiometric SnO<sub>2</sub> thin films at low temperature, Review of Scientific Instruments, 80, 45112-45112, 2009.
  - 67. Ansari, S.G., Wahab, R., Ansari, Z.A., Kim, Y.-S., Khang, G., Al-Hajry, A., Shin, H.-S., Effect of nanostructure on the urea sensing properties of sol-gel synthesized ZnO, Sensors and Actuators, B: Chemical, 137, 566-573, 2009.
  - 68. Ansari, Z.A., Arai, T., Tomitori, M., Low-flux elucidation of initial growth of Ge clusters deposited on Si(111)-7×7 observed by scanning tunneling microscopy, Physical Review B - Condensed Matter and Materials Physics, 79, 33302-33302, 2009.
  - 69. Poddar, N.K., Ansari, Z.A., Singh, R.K.B., Moosavi-Movahedi, A.A., Ahmad, F., Effect of monomeric and oligomeric sugar osmolytes on ΔGD, the Gibbs energy of stabilization of the protein at different pH values: Is the sum effect of monosaccharide individually additive in a mixture?, Biophysical Chemistry, 138, 120-129, 2008.
  - 70. Ansari, S.G., Ansari, Z.A., Wahab, R., Kim, Y.-S., Khang, G., Shin, H.-S., Glucose sensor based on nano-baskets of tin oxide templated in porous alumina by plasma enhanced CVD, Biosensors and Bioelectronics, 23, 1838-1842, 2008.
  - 71. Ansari, S.G., Ansari, Z.A., Seo, H.-K., Kim, G.-S., Kim, Y.-S., Khang, G., Shin, H.-S., Urea sensor based on tin oxide thin films prepared by modified plasma enhanced CVD, Sensors and Actuators, B: Chemical, 132, 265-271, 2008.
  - 72. Ansari, S.G., Dar, M.A., Kim, Y.-S., Seo, H.-K., Kim, G.-S., Wahab, R., Ansari, Z.A., Seo, J.-M., Shin, H.-S., Influence of the silicon surface treatment by plasma etching and scratching on the nucleation of diamond grown in HFCVD - A comparative study, Korean Jr. of Chemical Engineering, 25, 593-598, 2008.

73. Ansari, S.G., Dar, M.A., Dhage, M.S., Kim, Y.S., Shin, H.-S., Ansari, Z.A., Low temperature deposition and effect of plasma power on tin oxide thin films prepared by modified plasma enhanced chemical vapor deposition, Jr. of Applied Physics, 102, 73537-73537, 2007.
74. Amit Kumar, Sumitra Arora, Navin Mogha, Salem S. Al-Deyab, Z. A. Ansari, S. G. Ansari, *Glutathione coated Zinc oxide nanoparticles: a promising material for pesticide detection*, Energy and Environment Focus, 2(2):101-107, 2013
75. Manoj K. Patel, Md. Azahar Ali, Ved V. Agrawal, Z.A. Ansari, S. G. Ansari, Bansi D. Malhotra, Nanostructured magnesium oxide biosensing platform for cholera detection, Appl. Phys. Lett., 102 (2013), 144106
76. Manoj Kumar Patel, Md. Azahar Ali, Md. Zafaryab, Ved Varun Agrawal, M. Moshahid Alam Rizvi, Z.A. Ansari, S. G. Ansari, Bansi D. Malhotra, *Biocompatible nanostructured magnesium oxide-chitosan platform for genosensing applications*, Biosensors and BioElect., 45 (2013) 181-188
77. Amit Kumar, Shabihur Rahman, S. N. Kazim, Z. A. Ansari, S. G. Ansari, *Application of glutathione coated ZnO nanoparticles to study the oxidative stress in bacterial cells*, Material Focus 2 (2013) 148-154.
78. Manoj K. Patel, Md. Zafaryab, M. Moshahid Alam Rizvi, Ved Varun Agrawal, Z. A. Ansari, B. D. Malhotra, S. G. Ansari, *Antibacterial and Cytotoxic effect of Magnesium Oxide nanoparticles on bacterial and human cells*, Jr. of Nanoengineering and Nanomanufacturing 3 (2013) 162-166.
79. S. G. Ansari, Fatima Tuz Zehra, Z. A. Ansari, *Effect of calcination temperature and flower extracts on the photoconducting properties of Titanium dioxide*, Jr. of Nanoengineering and Nanomanufacturing 3 (2013) 131-137.
80. Soumyananda Chakraborti, Prachi Joshi, Devlina Chakravarty, Virendra Shanker, Z.A. Ansari, Surinder P. Singh, Pinak Chakrabarti, *Interaction of Polyethyleneimine-Functionalized ZnO Nanoparticles with Bovine Serum Albumin*, Langmuir, 28 (2012) 11142-11152
81. Prachi Joshi, Soumyananda Charaboti, Jaime E. Ramirez-Vick, Z.A. Ansari, Virendra Shanker, Pinak Chakrabarti, Surinder P. Singh, *The anticancer activity of chloroquine-gold nanoparticles against MCF-7 breast cancer cells*, Colloids and Surfaces B: Biointerfaces, 95 (2012), 195-200.
82. Taimur Athar, Ameed Hashmi, Ali Al-Hajry, Z.A. Ansari, S.G. Ansari, *One-pot Synthesis and Characterization Nb<sub>2</sub>O<sub>5</sub> Nanopowder*, Jr. of NanoSci. and Nanotechnology, 12, (2012), 7922-7926.
83. S. G. Ansari, Laitka Bhayana, Ahmad Umar, A. Al-Hajry, Salem S. Al-Deyab, Z. A. Ansari, *Understanding the effect of flower extracts on the photoconducting properties of nanostructured TiO<sub>2</sub>*, Jr. of NanoSci. and Nanotechnology, 12 (2012) 7860-7868.
84. S. G. Ansari, Ahmad Umar, A. Al-Hajry, Salem S. Al-Deyab, Z. A. Ansari, *Effect of Flower Extracts on the Optoelectronic Properties of Cd and Sn Doped TiO<sub>2</sub> Nanopowder*, Sci. of Advanced Materials, 4 (2012) 763-770.
85. Atul Kulkarni, Rizwan Wahab, S. G. Ansari, Tae-Sung Kim, Salem S. Al-Deyab, Z. A. Ansari, *Photoconducting properties of a unit nanostructure of ZnO assembled between microelectrodes*, Jr. of NanoSci. and Nanotechnology, 12 (2012) 2406–2411.
86. S.G. Ansari, Z.A. Ansari, *A Special Section on Nano-Bio Materials and Systems (Editorial)*, Sci. of Advanced Materials, 4 (2012), 93-95.
87. Hyung-Kee Seo, S. G. Ansari, Salem S. Al-Deyab, Z. A. Ansari, *Glucose sensing characteristics of Pd-doped tin oxide thin films deposited by plasma enhanced CVD*, Sensors and Actuators B, 168 (2012) 149-155.

88. Prachi Joshi,- Soumyananda Chakraborti, Pinak Chakrabarti , Surinder P. Singh, Z. A. Ansari, M. Husain, Virendra Shanker , *ZnO Nanoparticles as an Antibacterial Agent against E-coli*, Sci. of Advanced Materials, 4 (2012), 173-178.
89. Ravi K. Kumar, M. Husain, Z. A. Ansari, *Morphological variations and structural properties of ZnO nanostructure grown by rapid thermal CVD*, Jr. NanoSci. and Nanotechnology, 11 (2011) 6940-6945.
90. Soumyananda Chakraborty, Prachi Joshi, Virendra Shanker, Z. A. Ansari, Surinder P. Singh, and Pinak Chakrabarti, *Contrasting Effect of Gold Nanoparticles and Nanorods with Different Surface Modifications on the Structure and Activity of Bovine Serum Albumin*, Langmuir, 27(2011) 7722-7731.
91. Ashna Irfan, S. G. Ansari, Z. A. Ansari, *Cholesterol sensor based on sn-doped titanate nanostructures*, Jr. of Natural Sci., Biology and Medicine, 2 (2011) 133-4.
92. Mazhar-ul-Haque, Z. A. Ansari, S. G. Ansari, *Application of nanostructured Cu-doped titanate for urea sensing*, Jr. of Natural Sci., Biology and Medicine, 2 (2011) 134-5.
93. M. K. Patel, V. V. Agrawal, Z. A. Ansari, B. D. Malhotra, S. G. Ansari, *Use of DNA sequences in nano-biosensing techniques*, Jr. of Natural Sci., Biology and Medicine, 2 (2011) 135-6.
94. Rizwan Wahab, Z. A. Ansari, S. G. Ansari, Young-Soon Kim, I. H. Hwang, Dong-Hyun Kim, Javed Mussarat, Abdulaziz A. Al-Khedhairy, M. A. Siddiqi, and Hyung-Shik Shin, *Hydrogen Storage Properties of Heterostructured Zinc Oxide Nanostructures*, Jr. of Nanoengineering and Nanomanufacturing, 1, (2011) 188–195.
95. Prachi Joshi, Soumyananda Chakraborty, Sucharita Dey, Virendra Shanker, Z. A. Ansari, Surinder P. Singh, Pinak Chakrabarti, *Binding of chloroquine-conjugated gold nanoparticles with bovine serum albumin*, Jr. of Colloid and Interface Sci., 355 (2011) 402–409.
96. Z. A. Ansari, Mazhar-ul-Haque, Hyung-Kee Seo, Ahmad Umar, Ali Al-Hajry, S. A. Al-Sayari, Hyung-Shik Shin, S. G. Ansari, *Urea sensing properties of Cu-doped Titanate nanostructure*, Advanced Sci. Lett., 4, (2011), 3451-3457.
97. Z.A. Ansari, S.G. Ansari, Hyung-Kee Seo, Young-Soon Kim, and Hyung-Shik Shin, *Urea sensing characteristics of Titanate nanotubes deposited by electrophoretic deposition method*, Jr. of NanoSci. and Nanotechnology, 11 (2011), 3323.
98. Young-soon Kim, S.G. Ansari, Z.A. Ansari, Rizwan Wahab, Hyung-Shik Shin, *A simple method to deposit palladium doped SnO<sub>2</sub> thin films using plasma enhanced chemical vapour deposition technique*, Rev. of Scientific Instruments 81 (2010) 1.
99. Nitesh Kumar Poddar, Z. A. Ansari, R. K. Brojen Singh, Ali A. Moosavi Movahedi, Faizan Ahmad, *Effect of Oligosaccharides and their Monosaccharide Mixtures on the Stability of Proteins: A Scaled Particle Study*, Jr. of Biomolecular Structure and dynamics, 28, (2010) 331-341.
- 100.Z.A. Ansari, T. Arai. M. Tomitori, *Low-flux elucidation of initial growth of Ge clusters deposited on Si(111)-7×7 observed by scanning tunneling microscopy*, Phys. Rev. B 79 (2009) 033302. (IF 3.691)
- 101.S. G. Ansari, Rizwan Wahab, Young-Soon Kim, Z.A. Ansari, O Bong Yang, Gilson Khang, Hyung-Shik Shin, *Thick film urea sensor based on nanostructured zinc oxide*, Int. Jr. of Nanomanufacturing 4 (2009) 290-299. (InderSci. Publishers)
- 102.S. G. Ansari, Rizwan Wahab, Z. A. Ansari, Young-Soon Kim, Gilson Khang, A. Al-Hajry, Hyung-Shik Shin, *Effect of nanostructure on the urea sensing properties of sol-gel synthesized zinc oxide*, Sensors and Actuators B, 137, (2009), 566-573.(IF 3.898)
- 103.Prachi Joshi, Z.A. Ansari, Srinder P. Singh, Virendra Shanker, *Synthesis and characterization of highly fluorescence water dispersible ZnO quantum dots*, Advanced Sci. Lett. 2 (2009) 360-363.

104. Prachi Joshi, Soumyananda Chakraborti, Pinak Chakrbarti, D. Haranath, Virendra Shanker, Z. A. Ansari, Surinder P. Singh, and Vinay Gupta, *Role of Surface Adsorbed Anionic Species in Antibacterial Activity of ZnO Quantum Dots against Escherichia coli*, Jr. of NanoSci. and Nanotechnology 9 (2009) 6427-6433.
105. S.G. Ansari, M.A. Dar, Z.A. Ansari, Hyung Kee Seo, Young-Soon Kim, A. Al-Hajry, Hyung-Shik Shin, *Effect of RF plasma power and deposition temperature on the surface properties of tin oxide deposited by modified plasma enhanced chemical vapor deposition*, Sci. of Advanced Materials 1 (2009) 254-261 (American Scientific Publications).
106. S.G. Ansari, M.A. Dar, M.S. Dhage, Young Soon Kim, Z. A. Ansari, A. Al-Hajry, Hyung-Shik Shin, *A novel method for preparing stoichiometric SnO<sub>2</sub> thin films at low temperature*, Review of Scientific Instruments, AIP, 80 (2009), 045112.
107. Poddar N. K., Ansari Z. A., Singh R. K. B, Moosavi-Movahedi A. A., Ahmad F. *Effect of Monomeric and Oligomeric sugar osmolytes on ΔGD°, the Gibbs energy of Stabilization of the Protein at Different pH Values: Is the sum effect of monosaccharide individually additive in a mixture*, Biophys. Chem. 138 (2008) 120-129.
108. S.G. Ansari, Z.A. Ansari, H.K. Seo, G. S. Kim, Young-Soon Kim, G. Khnag, Hyung-Shik Shin, *Glucose sensor based on nano-baskets of tin oxide templated in porous alumina by plasma enhanced CVD*, Biosensors and BioElect. 23 (2008), 1838-1842.
109. S.G. Ansari, Z.A. Ansari, Young-Soon Kim, Hyung-Shik Shin, *Urea sensor based on tin oxide thin films prepared by modified plasma enhanced CVD*, Sensors and Actuators B-Chemical 132, (2008), 265-272.
110. S.G. Ansari, M.A. Dar, M.S. Dhage, Young-Soon Kim, Z.A. Ansari, Hyung-Shik Shin, *Low temperature deposition and effect of plasma power on tin oxide thin films prepared by modified plasma enhanced CVD*, Jr. of Applied Physics 102 (2007) 073537.
111. S G Ansari, Mushtaq Ahmad Dar, Young-Soon Kim, Hyung-Kee Seo, Gil-Sung Kim, Rizwan Wahab, Zubaida A. Ansari, Jae-Myung Seo, Hyung-Shik Shin, *Influence of the silicon surface treatment by plasma etching and scratching on the nucleation of diamond grown in HFCVD- a comparative study*, Korean Jr. of Chemical Engineering, (KICHE), 25-3 (2008), 13.
112. Z. A. Ansari, T. Arai, M. Tomitori, *Atomic Force Microscope Si tip with Ge clusters with the capability of remolding by heating*, Nanotechnology, Institute of Physics, 18(8), 084020 (2007).
113. Z.A. Ansari, T. Arai. M. Tomitori, *Evidence of temperature dependence of initial adsorption sites of Ge atoms on Si(111)-7×7*, Appl. Phys. Lett. 88, 171902 (2006), AIP
114. Z.A. Ansari, T. Arai. M. Tomitori, *Hexagonal arrangement of Ge clusters self-organized on a template of half unit cells of Si(111)-7x7 observed by scanning tunneling microscopy*, Surface Sci. Lett., 574 (2005) L17-L22, Elsevier.
115. Z.A. Ansari, T. G. Ko, J. H. Oh, *CO sensing properties of In<sub>2</sub>O<sub>3</sub> doped SnO<sub>2</sub> thick film sensors: Effect of doping concentration and grain size*, IEEE sensors Jr. 5 (2005) 817-824, IEEE publications.
116. M.A. Dar, S.G. Ansari, Z.A. Ansari, Hironobu Umemoto, Young-Soon Kim, Hyung-Kee Seo, Gil-Sung Kim, Eun-Kyung Suh, Hyung-Shik Shin, *Magnesium interlayered diamond coating on silicon*, International Jr. of Refractory Metals and Hard Materials, 24 (2006) 418-426, Elsevier.
117. Mushtaq Ahmad Dar, S.K. Kulkarni, Z.A. Ansari, S.G. Ansari, Hyung-Shik Shin, *Preparation and characterization of α-FeOOH and α -Fe<sub>2</sub>O<sub>3</sub> by Sol-Gel method*, Jr. of Materials Sci. Lett., 40(2005) 3031-3034, Springer.
118. Z.A. Ansari, T. Ko, J. H. Oh, *Humidity sensing behavior of thick films of strontium doped lead-zirconium-titanate*, Surface and Coatings Technology, 179/2-3 (2003) 182-187, Elsevier.

- 119.Z.A. Ansari, Teagyoung Ko, J.-H. Oh, *Effect of  $MoO_3$  doping and grain size on  $SnO_2$ -enhancement of sensitivity and selectivity for CO and  $H_2$  gas sensing*, Sensors and Actuators B, 87 (2002) 105-114, Elsevier.
- 120.Z.A. Ansari, Kwangpyoo Hong, Chongmu Lee, *Structural and electrical properties of porous silicon with RF-sputtered Cu films*, Materials Sci. and Engineering, B, 90 (2002) 103-109, Elsevier.
- 121.Z.A. Ansari, R.N. Karekar, R.C. Aiyer, *Cladded optical glass waveguide as planar polarizer*, Microwave and optical Technology Lett., 23 (1999) 337-342, Wiley Pub.
- 122.Z.A. Ansari, R.N. Karekar, R.C. Aiyer, *Influence of chlorine on planar optical guide cladded with  $RbCl$  and  $AgCl$* , Appl. Surf. Sci. 125 (1998) 149-156, Elsevier. (IF 2.103)
- 123.Z.A. Ansari, R.N. Karekar, R.C. Aiyer, *Oxygen sensing properties of  $V_2O_5$  cladded optical glass waveguide*, Thin Solid Films 301 (1997) 82-89, Elsevier.
- 124.Z.A. Ansari, R.N. Karekar, R.C. Aiyer, *Influence of oxygen on the guiding properties of  $V_2O_5$  - clad glass waveguide*, Optical and Quantum Elect. 29 (1997) 533-537, Springer.
- 125.Z.A. Ansari, R.N. Karekar, R.C. Aiyer, *Humidity sensor using planar optical waveguides with claddings of various oxide materials*, Thin Solid Films 305 (1997) 330, Elsevier.
- 126.Z.A. Ansari, R.N. Karekar, R.C. Aiyer, *Planar optical waveguide with  $PbCl_2$  cladding: a chlorine sensor*, Jr. of Mat. Sc. (Mat. in Elec.) 7 (1996) 259-265, Springer.
- 127.S.G. Ansari, Z.A. Ansari, M.R. Kadam, R.N. Karekar, R.C. Aiyer, *The effect of humidity on  $SnO_2$  thick film planar resistor*, Sensors and Actuators-B 21 (1994) 159-163, Elsevier.
- 128.C. Dhanavantari, Z.A. Ansari, S.G. Ansari, R.C. Aiyer, R.N. Karekar, *A simple fabrication of TE polarizer by using metal cladding layer on planar optical waveguide*, Physics Education (Indian) 10 (1993) 284-288, Wiley publications.
- 129.C. Dhanavantari, Z.A. Ansari, M.D. Mahajan, G.R. Chaudhari, R.N. Karekar, *A simple project on planar optical waveguide fabricated by ion exchange process*, Physics Education (Indian) 8 (1992) 328-331, Wiley publications.

### **Invited Talks**

1. Z.A. Ansari, Nanostructured metal oxides and their application to biotechnology, New University for regional innovations, Chonbuk National University, Chonju, 16<sup>th</sup> May, 2008.
2. Z.A. Ansari, Effect of grain size on  $H_2$  sensitivity for  $SnO_2$ , International Seminar on Recent Development of New Functional Nanomaterials, Organized by Institute of Advanced Materials, Inha University, on 6<sup>th</sup> October 2000.

### **FULL LIST OF PRESENTATIONS**

---

1. Amit Kumar, Z. A. Ansari, S.G. Ansari, Cytotoxic study of positively charged species on  $ZnO$  nanoparticles for antibacterial activities, National symposium on Nanobiotechnology, IIT Mandi, 1-2 June 2012.
2. M. K. Patel, Z. A. Ansari, S.G. Ansari, Nanostructured  $MgO$  based DNA sensor, National symposium on Nanobiotechnology, IIT Mandi, 1-2 June 2012 (Best poster award).
3. Jaspal Singh, Z.A. Ansari, S.G. Ansari, Effect of Flower extracts on the photoconducting Properties of Cd-doped nanostructured  $TiO_2$ , National symposium on Nanobiotechnology, IIT Mandi, 1-2 June 2012.
4. Amit Kumar, Kanak Prabha, Z.A. Ansari, S. G. Ansari, Glutathione coated Zinc oxide nanoparticles: a promising material for pesticide detection, International Symposium on Physics and technology of sensors, Pune University, 8-10, March, 2012.
5. Ashna Irfan, S.G. Ansari, Z. A. Ansari, Cholesterol enzymatic sensor based on doped

Titanium oxide, International Symposium on Physics and technology of sensors, Pune University, 8-10, March, 2012.

6. S. G. Ansari1, Sumitra Arora, Navin Mogha, Z.A. Ansari, Enzyme based biosensor for detection of pesticides using nanostructured titanium oxide, International Symposium on Physics and technology of sensors, Pune University, 8-10, March, 2012.
7. Manoj K. Patel, Ved V. Agrawal, Bansi D. Malhotra, Z. A. Ansari, S.G. Ansari, Magnesium oxide based nucleic acid sensor for Cholera detection, International Symposium on Physics and technology of sensors, Pune University, 8-10, March, 2012.
8. Prachi Joshi, Soumyananda Chakraborty, Pinak Chakrabarti, Surinder P. Singh, Z. A. Ansari and Virendra Shanker, *Polyethyleneimine Functionalized ZnO Quantum Dots and their Binding Interaction with Bovine Serum Albumin Protein*, MRS Online Proceedings, 1316, (2011),518.
9. Prachi Joshi, Soumyananda Chakraborty, Jaime E. Ramirez-Vick, Z. A. Ansari, Virendra Shanker, Pinak Chakrabarti and Surinder P. Singh, *Anti-Tumor Chloroquine-Gold Nanocomposites and their Binding Interaction with Bovine Serum Albumin: Biophysical and Biochemical Aspects of Protein Binding*, MRS Online Proceedings 1316, (2011), 595.
10. Ashna Irfan, S. G. Ansari, Z. A. Ansari, Cholesterol sensor based on Sn-doped titanate nanostructures, International Interdisciplinary Sci. Conference on Bioinformatics, Jamia Millia Islamia, 15-17 November, 2011.
11. Mazhar-ul-Haque, Z. A. Ansari, S. G. Ansari, Application of nanostructured Cu-doped titanate for urea sensing, International Interdisciplinary Sci. Conference on Bioinformatics, Jamia Millia Islamia, 15-17 November, 2011.
12. M. K. Patel, V. V. Agrawal, Z. A. Ansari, B. D. Malhotra, S. G. Ansari, Use of DNA sequences in nano-biosensing techniques, International Interdisciplinary Sci. Conference on Bioinformatics, Jamia Millia Islamia, 15-17 November, 2011.
13. Young-Soon Kim, Rizwan Wahab, I.H.Hwang, S.G.Annsari, Z.A.Annsari, Minwu Song, You Bing Yang, Hyung-Shik Shin, The anticancer activity of zinc oxide nanoparticles prepared via solution process, International Interdisciplinary Sci. Conference on anobiotechnology: An Interface between Physics and Biology, Dec. 2-4, 2010, New Delhi, India.
14. Prachi Joshi, Soumyananda Chakraborty, Pinak Chakrabarti, Z.A. Ansari, Surinder P. Singh, Vinay Gupta, Virendra Shanker, ZnO quantum dots as an antibacterial agent against E-coli, International Interdisciplinary Sci. Conference on Nanobiotechnology: An Interface between Physics and Biology, Dec. 2-4, 2010, New Delhi, India.
15. Ravi K. Kumar, M. Husain, Z. A. Ansari, Influence of evaporation rate on the growth of SnO<sub>2</sub> nanostructures using Rapid Thermal CVD, International Interdisciplinary Sci. Conference on Nanobiotechnology: An Interface between Physics and Biology, Dec. 2-4, 2010, New Delhi, India.
16. Prachi Joshi, Z.A. Ansari, Virendra Shanker, Synthesis and Characterization of Gold Nanoparticles and their surface functionalization for bioapplications, International Interdisciplinary Sci. Conference on Nanobiotechnology: An Interface between Physics and Biology, Dec. 2-4, 2010, New Delhi, India.
17. Bilal Ahangar, S.G.Annsari, Z.A.Annsari, Study of the ZnO nanostructure variation as a function of solution pH in sol-gel technique, International Interdisciplinary Sci. Conference on Nanobiotechnology: An Interface between Physics and Biology, Dec. 2-4, 2010, New Delhi, India.
18. Ashna I, Shamshi F., Ansari Z.A., Applications of Nanoparticles to Biological Sci.s: A review, International Interdisciplinary Sci. Conference on Nanobiotechnology: An Interface between Physics and Biology, Dec. 2-4, 2010, New Delhi, India.
19. Young-Soon Kim, Rizwan Wahab, S.G.Annsari, Z.A.Annsari, Amrita Mishra, Soon-II Yun,

Minwu Song,Donggyu Kim, Hyung-Shik Shin, Use of zinc oxide nanoparticle as an antibacterial agent prepared via solution process, International Interdisciplinary Sci. Conference on Nanobiotechnology: An Interface between Physics and Biology, Dec. 2-4, 2010, New Delhi, India.

20. Khan B, Sharma A., Ansari Z.A., Scanning Probe Microscopy: A New Era of Biological Analyses, International Interdisciplinary Sci. Conference on Nanobiotechnology: An Interface between Physics and Biology, Dec. 2-4, 2010, New Delhi, India.
21. Z. A. Ansari, Tatsuya Sakuishi, Yuqi Zhang, Noriaki Oyabu, Ryohei Kokawa, Kei Kobayashi, Toyoko Arai, Faizan Ahmad, Hirofumi Yamada, Masahiko Tomitori, Self-organization of alfa-lactalbumin on a H-passivated Si(111)-7x7 surface studied at atmospheric pressure using non-contact atomic force microscopy, NC-AFM 2010, Kanazawa, July 31- Aug. 5, 2010.
22. Z. A. Ansari, T. Arai, M. Husain, M. Tomitori, Self-organized Ge clusters on a template of half unit cells of Si(111)-7x7 observed by scanning tunneling microscopy, APAM General assembly and Conference "State of materials research and new trends in material Sci.", NPL, Delhi, India, 18-20 November 2008.
23. Z.A. Ansari, T. Arai, M. Tomitori, Modification of an AFM Si tip by Pt sputtering and its characterization, ICSPM 14 , Dec. 7-9, 2006 Atagawa, Japan.
24. Z. A. Ansari, T. Arai, M. Tomitori, AFM Si tip with Ge clusters with capability of remolding by heating, 9th International Conference on Non-Contact Atomic Force Microscopy, Kobe, Japan, 16-20 July 2006.
25. M.Tomitori, Z.A.Anvari and T.Arai, In situ tip treatments for nanoscale observation and characterization with scanning probe microscopy, International conference on NanoSci. and Technology, BASEL Switzerland, July 30- August4, 2006.
26. Z.A. Ansari, T. Arai, M. Tomitori, Self-Assembled Ge Nano-Clusters Grown on Si(111)-7×7 at Elevated Temperatures, 13th International Conference on Scanning Tunneling Microscopy/Spectroscopy and Related Techniques (STM'05), July 3-8, 2005, Sapporo Convention Center, Japan.
27. Z.A. Ansari, T. Arai, M. Tomitori, Influence of deposition rate and temperature on self-assembled Ge nano-clusters over Si (111)-7x7, 52<sup>nd</sup> Spring meeting, March 2005, Japan society of Applied Physics, Saitama University, Tokyo.
28. Z.A. Ansari, T. Arai, M. Tomitori, Room temperature growth of Ge clusters on a Si(111)-7x7 reconstructed surface studied by scanning tunneling microscopy, JAIST NT 2004, JAIST, Ishikawa, Japan, Sept. 9-10, 2004.
29. Z.A. Ansari, T. Arai, M. Tomitori, STM study of initial growth and arrangement of Ge clusters on Si(111)-7x7 surface, The 65<sup>th</sup> Autumn Meeting of the Japan Society of Applied Physics, Tohoku Gakuin University, Sendai, Japan 1-4 Sept. 2004.
30. Z.A. Ansari, T. Arai, M. Tomitori, Optimization of growth parameters for self-assembled nanometer Ge-islands on Si(111)-7x7 substrate studied by UHV-STM, 51<sup>st</sup> Spring meeting, March 2004, Japan society of Applied Physics, Tokyo Institute of Technology, Tokyo.
31. Z.A.Anvari, R.N.Karekar, R.C.Aiyer, Transmission based sensor for LPG and H<sub>2</sub>, Presented at an International Conference on Physics and Technology of Thin Films, ICTP Italy, 8-28 March 99.
32. Z.A. Ansari, S. Datar, R.N. Kareker, R.C. Aiyer, A planar optical waveguide with Ag and Ag<sub>2</sub>S claddings: A gas sensor, National Seminar on Physics & Technology of sensors, Department of Electronics, Poona University, (NSPTS-5) Feb. 98, C19.1-5.
33. Z.A.Anvari, R.N.Karekar, R.C.Aiyer, Influence of LPG and H<sub>2</sub> on guiding properties of single mode wave guide with ZnO and SnO<sub>2</sub> claddings, NSPTS-4, Feb.97, C19.1-4.

- 34.** Z.A.Anvari, R.N. Karekar, R.C. Aiyer, Humidity sensor on optical waveguide with claddings of various materials- a further study, NSPTS-3, Feb. 1-3, 1996, C47.1-5.
- 35.** Z.A. Ansari, R.N. Karekar, R.C. Aiyer, Planar optical waveguide chlorine sensor with  $PbCl_2$  cladding, NSPTS-3,1-3, Feb. 1996, C21.1-6.
- 36.** Z.A.Anvari, R.N. Karekar, R.C. Aiyer, An Optical waveguide humidity sensor with different semiconductor oxide claddings, Presented in National Laser Symposium, Feb. 10-14 1995, IRDE, Dehradun.
- 37.** Z.A. Ansari, R.N. Karekar, R.C. Aiyer, Study of optical Y-junction as optical power divider with a view to use in optical sensor bridge, presented in 1<sup>st</sup> RMMC conference, Department of Physics, Poona University, Jan 23-24, 95.