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*Professor, Center for Interdisciplinary
Research in Basic Sciences (CIRBSc),
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EDUCATION

Ph.D., Applied Physics (Major), Materials Science (Minor), Department of Physics, University of Pune, April 1998.

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

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

M.Sc., Physics, Department of Physics, Pune University, Pune 1991 – (55.20%)

B.Sc. Physics - University of Pune, Pune 1989 – IST CLASS WITH DISTINCTION (72.44%)

B.Sc. Electronic Science - University of Pune, Pune 1988 – IST CLASS WITH DISTINCTION (72.00%)

EXPERIENCE

A. RESEARCH

CIRBSC, JAMIA MILLIA ISLAMIA,

Professor Feb 2013 -

Reader/Associate Professor Feb – 2007 – Feb 2013.

- AFM, nc-AFM and Nanomechanics.
- Bioimaging, Biosensors and Biosolar cells
- QDs as FRET probes

JAIST, SCHOOL OF MATERIALS SCIENCE,

JSPS Postdoctoral Fellow, VBL fellow (Assistant professor); Nov. 2002- Feb 2007.

Prof M. Tomitori - Scanning Tunneling Microscopy.

- AFM, nc-AFM and nanomechanics.
- Surface science
- 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 SCIENCE AND TECHNOLOGY, PHYSICS DEPARTMENT, CHONJU, SOUTH KOREA

Research Professor

Prof. Jae-Myong Seo

Sept. 2001 - Sept. 2002

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

INHA UNIVERSITY

DEPARTMENT OF MATERIAL SCIENCE 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 SCIENCES, JAMIA MILLIA ISLAMIA;
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,
Lecturer; July 1998 to April 1999

C. ADMINISTRATIVE POSITIONS

*Director, Center for Interdisciplinary Research in Basic Sciences, Jamia Millia
Islamia Nov, 5 2013 till date*

Member- Technical Committee, Jamia Millia Islamia

D. OVERSEAS VISITS

- Japan advanced Institute of Science and Technology from Jan-March 2010, Jan-Feb 2011, Jan 2012 through DST-JSPS exchange program
- Najran University, Saudi Arab from 20/05/2009 to 16/07/2009
- 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.

E. RESEARCH STUDENTS SUPERVISED

PH.D. STUDENTS

1. **Dr. Prachi Joshi 2010**, “Synthesis and Characterization of Metal and Semiconducting Nanoparticles and their Bioapplications”.
2. **Dr. Bilal Ahangar, May 2016** “Nanostructured semiconductor metal oxide and their composites for solar cell: A theoretical approach”

M.PHIL STUDENTS

1. Aarfa Queen
2. Farah Naz “Comparative Antibacterial Study of Doped and Undoped Titanium Oxide Nanoparticles”
3. Shabena Qadir, “Development of DSSC using doped/undoped TiO₂ nanoparticles sensitized with natural colour pigments”

F. 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
- 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.
- XRD (Low & Bulk), DTA-TGA analysis, STM, AFM, nc-AFM, EDAX, SEM, TEM, XPS (ESCA), Auger, PACS, 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, Mac Operating Systems.

LANGUAGES KNOWN

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

BOOK CHAPTERS

- ***Nanostructured Metal Oxides: Applications to biosensing***, Vol. 2, Chapter 7, Metal Oxide Nanostructures and Their Applications, American Scientific Publishers (ASP), USA (2010).
- ***Semiconductor Nanomaterials based Biosensors: Concept, Design and Applications***, Encyclopedia of Metal Oxide Nanomaterials, American Scientific Publishers (ASP), USA (to be published in 2017).

- *Nanostructure TiO₂ for dye sensitized solar cells: A theoretical approach (Chapter 4)*, Smart Materials for Energy Storage and Environmental Applications, LAP Lambert Academic Publications, Germany (2016), ISBN: 9783659865398

PATENT

- S G Ansari, H Fouad, Z A Ansari, *Hydroquinone electrochemical sensor based on Manganese doped titanium dioxide*, **Indian patent (File No. 3406/DEL/2014, dt. 25/11/2014, Published)**.
- S G Ansari, Z A Ansari, T Athar, A A Khedairy, B. Chishti, P Sharma et. al., *Electrochemical sensor for Brucella abortus using doped nano metal oxide*, **Indian patent (File No. 201611002691 dt. 25/1/2016)**.

SELECTED PUBLICATIONS

Manoj Kumar Patel, Md. Azahar Ali, Sadagopan Krishnan, Ved Varun Agrawal, AbdulAziz A. Al Kheraif, H. Fouad, **Z.A. Ansari**, S. G. Ansari and Banshi D. Malhotra, *A Label-Free Photoluminescence Genosensor Using Nanostructured Magnesium Oxide for Cholera Detection*, **Scientific Reports**, **5**, 17384 (2015).

Amit Kumar, Md Zafaryab, M. M. A. Rizvi, H. Fouad, **Z. A. Ansari**, S. G. Ansari, *Relief of Oxidative stress using curcumin and glutathione functionalized ZnO nanoparticles in HEK-293 cell line*, **Journal of Biomedical Nanotechnology**, **11 (11)**, 1913-1926 (2015)

Manoj Kumar Patel, Md. Azahar Ali, Md. Zafaryab, Ved Varun Agrawal, M. Moshahid Alam Rizvi, **Z. A. Ansari**, S. G. Ansari, Banshi D. Malhotra, *Biocompatible nanostructured magnesium oxide-chitosan platform for genosensing applications*, **Biosensors and Bioelectronics**, **45 (2013) 181-188. (IF 6.5)**

Soumyananda Chakraborti, Prachi Joshi, Devlina Chakrabarty, Virendra Shanker, **Z.A. Ansari**, Surinder P. Singh, Pank Chakrabarti, *Interaction of Polyethyleneimine- Functionalized ZnO Nanoparticles with Bovine Serum Albumin*, **Langmuir** **28 (2012) 11142-11152. (IF 4.186)**

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**

Science Letters, 574 (2005) L17-L22.

Z.A.Ansari, Kwangpyoo Hong, Chongmu Lee, Structural and electrical properties of porous silicon with RF-sputtered Cu films, **Materials Science 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 Nanoscience 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 TiO₂*, **Jr. of Nanoscience 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. Science 125 (1998) 149-156, Elsevier. (IF 2.103)**

FULL LIST OF PUBLICATIONS

1. Farheen, H. Fouad, S. G. **Ansari**, **Z. A. Ansari**, *Europium doped TiO₂: an efficient photoanode material for DSSC*, **Solar Energy Materials and Solar Cells** (Submitted).
2. Sajid Ansari, Zeenat Khatoon, Nazish Parveen, Atul Kulkarni, H. Fouad, A. Umar, **Z. A. Ansari**, S. G. Ansari, *Polyaniline-functionalized TiO₂ nanoparticles: Growth, properties and hydroquinone sensing application*, **Jr. of Alloys and Compounds**, (Submitted).
3. Naushad Khan, Taimur Athar, H. Fouad, Ahmad Umar, **Z. A. Ansari**, S. G. Ansari, *Synthesis and application of pristine and doped SnO₂ nanoparticles as a matrix for agro-hazardous material (organophosphate) detection*, **Scientific Reports** (submitted).
4. Summaiyya Khan, Amit Kumar, A. A. Khan, T. Athar, H. Fouad, **Z. A. Ansari**, Hyung Kee Seo, and S. G. Ansari, *Z. A. Ansari*, *Electrochemical device for Glucose Detection using Praseodymium doped Nano Zinc Oxide synthesized by hydrothermal method*, **Journal of Nanoelectronics and Optoelectronics**, (Proof Read).
5. H. K. Seo, Farheen, Sajid Ansari, Nazish Parveen, Shabeena Qadir, H. Fouad, H. S. Shin, Moo Hwan Cho, S. G. Ansari, **Z. A. Ansari**, *Effect of polyaniline concentration on the photoconversion efficiency of nano-TiO₂ based Dye Sensitized Solar Cell*, **Jr. of Materials Science: Materials in Electronics**, (In press).
6. **Z. A. Ansari**, Taimur Athar, H. Fouad, S. G. Ansari, *Sol-gel synthesis of Manganese Doped Titanium Oxide Nanoparticles for Electrochemical Sensing of Hydroquinone*, **Jr. of Nanoscience and Nanotechnology** (Proof read).
7. Zeenat Khatoon, Taimur Athar, H. Fouad, A. Umar, **Z. A. Ansari**, S. G. Ansari, *Highly sensitive hydrazine chemical sensor based on nickel doped antimony oxide nanoellipsoids modified screen-printed electrode*, **Nanoscience and Nanotechnology Letters**, **8, 555–560, (2016)**

8. Naushad Khan, Amit Kumar, A. A. Khan, Rizwan Wahab, Shams Tabrez Khan, Javed Ahmad, Abdulaziz A. Alkhedhairy, **Z.A. Ansari**, S. G. Ansari, *Effect of praseodymium on the characteristics of nano-ZnO towards organophosphate as a nano-electrochemical device*, **Journal of Nanoelectronics and Optoelectronics**, **11 (1), 6-11 (2016)**.
9. S.G. Ansari, H. Fouad, Hyung-Shik Shin, **Z.A. Ansari**, *Electrochemical Enzyme-less Urea Sensor based on Nano-Tin Oxide Synthesized by Hydrothermal Technique*, **Chemico-Biological Interactions**, **242 45-49 (2015)**.
10. Sakina Aamir, **Z.A. Ansari**, H. Fouad, Ahmad Umar, AbdulAziz A. Al Kheraif, S. G. Ansari, *Effect of Inoculum Size and Surface Charges on the Cytotoxicity of ZnO Nanoparticles for Bacterial Cells*, **Science of Advanced Materials**, **7(12), 2515-2522 (2015)**.
11. Amit Kumar, Md Zafaryab, M. M. A. Rizvi, H. Fouad, **Z. A. Ansari**, S. G. Ansari, *Relief of Oxidative stress using curcumin and glutathione functionalized ZnO nanoparticles in HEK-293 cell line*, **Journal of Biomedical Nanotechnology**, **11 (11), 1913-1926 (2015)**
12. Manoj Kumar Patel, Md. Azahar Ali, Sadagopan Krishnan, Ved Varun Agrawal, AbdulAziz A. Al Kheraif, H. Fouad, **Z.A. Ansari**, S. G. Ansari and Bansi D. Malhotra, *A Label-Free Photoluminescence Genosensor Using Nanostructured Magnesium Oxide for Cholera Detection*, **Scientific Reports**, **5, 17384 (2015)**.
13. Taimur Athar, Magdy Abdelaal, Zeenat Khatoon, Amit Kumar, Alabass Razzaq, Aleem Khan, H. Fouad, S. G. Ansari, **Z. A. Ansari**, *Green Synthesis of NiSnO₃ Nanopowder and its Application as Hydroquinone Electrochemical Sensor*, **Sensors and Materials** **27(7) 563–573 (2015)**.
14. **Z. A. Ansari**, H. Fouad, S.G. Ansari, *Dye Sensitized Solar Cells fabricated using Cu-doped TiO₂ nanopowder with anthocyanin as sensitizer*, **Journal of Nanoelectronics and Optoelectronics**, **10 (2), 290-294 (2015)**.
15. S. G. Ansari, Fatima Tuz-Zehra, H. Fouad, Azza S. Hassenein, **Z. A. Ansari**, *Effect of flower extracts on the photoconversion efficiency of Dye Sensitized Solar Cells fabricated with Sn-doped TiO₂*, **Jr. of Materials Science: Materials in Electronics**, **26 (3), 1737-1742 (2015)**.
16. S. G. Ansari, Trisha Choudhury, H. Fouad, **Z. A. Ansari**, *Tailoring the optoelectronic properties of nano-metal oxides using anthocyanins and lanthanide*, **Journal of Nanoscience and Nanotechnology (In press, 2015)**.
17. **Z. A. Ansari**, A A Khan, H. Fouad, S. G. Ansari, *Effect of neodymium on the photoconversion efficiency of TiO₂ based Dye Sensitized Solar Cells*, **Jr. of Materials Sc. (Mat. in Elec.)**, **26(3), 1737-1742 (2015)**.
18. S. G. Ansari, Ashna Irfan, H. Fouad, **Z. A. Ansari**, *Feasibility study of Sn-doped Titanate Nanotubes as a suitable matrix for Glucose Sensing*, **Sensor Letters** **12, 44-49 (2014)**.

19. **Z. A. Ansari**, Ashna Irfan, Ahmad Umar, H. Fouad, A. Al-Hajry, S. G. Ansari, *Fabrication and Characterization of Cholesterol Biosensor Based on Nanoscale Sn-TiO₂ Thin Films*, **Sensor Letters**, **12** (2014), **44-49**.
20. **Z. A. Ansari**, S. Khalid, A A Khan, H. Fouad, S. G. Ansari, *Cholesterol biosensor based on Neodymium doped manganese titanate nanoparticles*, **Sensor Letters**, **12**, **1495-1501**, (2014).
21. **Z. A. Ansari**, A A Khan, H. Fouad, S. G. Ansari, *Application of Platinum doped MnTiO₃ as Electrochemical Cholesterol Sensor*, **Sensor Letters**, **12**, **1203-1207** (2014).
22. Amit Kumar, **Z. A. Ansari**, H. Fouad, A. Umar, S. G. Ansari, *Oxidative stress control in E. coli and S. aureus cells using amines adsorbed ZnO*, **Science of Advanced Materials**, **6** (2014), **1236-1243**.
23. Bilal Ahmad Ahanger, R. K. Brojen Singh, **Z. A. Ansari**, *Thermal Perturbation in Dye-Sensitized Solar Cell*, **Material Focus** **3** (2014), **368-372**.
24. **Z. A. Ansari**, Shafaque Khalid, Azad A. Khan, H. Fouad, S. G. Ansari, *Cholesterol Sensing Properties of Neodymium doped nanoTiO₂*, **Advanced Science Letters**, **20**, **1433-1436** (2014).
25. 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**, (2013), **101-107**.
26. Taimur Athar, Ameer Hashmi, S. G. Ansari, **Z. A. Ansari**, *Architectonics of Mesoporous Nanomaterials*, **Reviews in Advanced Sciences and Engineering**, **2**, (2013). **1-13**.
27. 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**
28. 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 Bioelectronics**, **45** (2013) **181-188**.
29. 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**.
30. 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.

31. 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.
32. 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. (IF 4.186)
33. Prachi Joshi, Soumyananda Charaborti, 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.
34. Taimur Athar, Ameer Hashmi, Ali Al-Hajry, **Z.A. Ansari**, S.G. Ansari, *One-pot Synthesis and Characterization Nb₂O₅ Nanopowder*, **Jr. of Nanoscience and Nanotechnology**, 12, (2012), 7922-7926.
35. 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 TiO₂*, **Jr. of Nanoscience and Nanotechnology**, 12 (2012) 7860-7868.
36. 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 TiO₂ Nanopowder*, **Science of Advanced Materials**, 4 (2012) 763-770.
37. 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 Nanoscience and Nanotechnology**, 12 (2012) 2406-2411.
38. S.G. Ansari, **Z.A. Ansari**, *A Special Section on Nano-Bio Materials and Systems (Editorial)*, **Science of Advanced Materials**, 4 (2012), 93-95.
39. 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.
40. 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*, **Science of Advanced Materials**, 4 (2012), 173-178.
41. Ravi K. Kumar, M. Husain, **Z. A. Ansari**, *Morphological variations and structural properties of ZnO nanostructure grown by rapid thermal CVD*, **Jr. Nanoscience and Nanotechnology**, 11 (2011) 6940-6945.

42. 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.
43. Ashna Irfan, S. G. Ansari, **Z. A. Ansari**, *Cholesterol sensor based on Sn-doped titanate nanostructures*, **Jr. of Natural Science, Biology and Medicine**, 2 (2011) 133-4.
44. Mazhar-ul-Haque, **Z. A. Ansari**, S. G. Ansari, *Application of nanostructured Cu-doped titanate for urea sensing*, **Jr. of Natural Science, Biology and Medicine**, 2 (2011) 134-5.
45. 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 Science, Biology and Medicine**, 2 (2011) 135-6.
46. Rizwan Wahab, **Z. A. Ansari**, S. G. Ansari, Young-Soon Kim, I. H. Hwang, Dong-Hyun Kim, Javed Mussarat, Abdulaziz A. Al-Khedhairi, M. A. Siddiqi, and Hyung-Shik Shin, *Hydrogen Storage Properties of Heterostructured Zinc Oxide Nanostructures*, **Journal of Nanoengineering and Nanomanufacturing**, 1, (2011) 188–195.
47. 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 Science**, 355 (2011) 402–409. (IF 3.070)
48. **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 Science Letters**, 4, (2011), 3451-3457.
49. **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 Nanoscience and Nanotechnology**, 11 (2011), 3323.
50. Young-soon Kim, S.G. Ansari, **Z.A. Ansari**, Rizwan Wahab, Hyung-Shik Shin, *A simple method to deposit palladium doped SnO₂ thin films using plasma enhanced chemical vapour deposition technique*, **Rev. of Scientific Instruments** 81 (2010) 1.
51. 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.
52. **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)

53. 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. (Inderscience Publishers)**
54. 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.**
55. Prachi Joshi, **Z.A. Ansari**, Srinder P. Singh, Virendra Shanker, *Synthesis and characterization of highly fluorescence water dispersible ZnO quantum dots*, **Advanced Science Letters 2 (2009) 360-363.**
56. Prachi Joshi, Soumyananda Chakraborti, Pinak Chakraborti, 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 Nanoscience and Nanotechnology 9 (2009) 6427-6433.**
57. 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*, **Science of Advanced Materials 1 (2009) 254-261 (American Scientific Publications).**
58. 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 SnO₂ thin films at low temperature*, **Review of Scientific Instruments, (American Physical Society), 80 (2009), 045112.**
59. Poddar N. K., **Ansari Z. A.**, Singh R. K. B, Moosavi-Movahedi A. A., Ahmad F. *Effect of Monomeric and Oligomeric sugar osmolytes on ΔG_D° , 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.**
60. 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 Bioelectronics. 23 (2008), 1838-1842.**
61. 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.**
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Invited Talks

1. **Z.A. Ansari**, Nanostructured metal oxides and their application to biotechnology, **New University for regional innovations, Chonbuk National University, Chonju, 16th May, 2008.**
2. **Z.A. Ansari**, Effect of grain size on H₂ sensitivity for SnO₂, **International Seminar on Recent Development of New Functional Nanomaterials, Organized by Institute of Advanced Materials, Inha University, on 6th October 2000.**

FULL LIST OF PRESENTATIONS

1. Zeenat Khatoon, Taimur Athar, **Z.A. Ansari**, S. G. Ansari, *Hydroquinone Electrochemical Sensing Properties of Fe₃AlO₆ Powder Synthesized by soft chemical route*, **National Conference on Interdisciplinary Approaches in Chemical Sciences (IACS-2015), Jamia Millia Islamia, 16 Dec, 2015.**

2. Amit Kumar, A Al-Hajry, **Z. A. Ansari**, S. G. Ansari, *Hydrogen and CO gas sensor based on bimetallic oxide composite nanomaterials*, **National Symposium on Biophysics and Golden Jubilee meeting of Indian Biophysical Society, Jamia Millia Islamia, New Delhi, 14-17 Feb 2015.**
3. Naushad Khan, Amit Kumar, H. Fouad, **Z.A. Ansari**, S. G. Ansari, *Application of Pr-doped Zinc Oxide synthesized by hydrothermal method for organophosphate sensing*, **National Symposium on Biophysics and Golden Jubilee meeting of Indian Biophysical Society, Jamia Millia Islamia, New Delhi, 14-17 Feb 2015.**
4. Sakina Aamir, **Z. A. Ansari**, S. G. Ansari, Effect of surface charges on bacterial cytotoxicity of Zinc Oxide nanoparticles, **National Symposium on Biophysics and Golden Jubilee meeting of Indian Biophysical Society, Jamia Millia Islamia, New Delhi, 14-17 Feb 2015.**
5. S. G. Ansari, H. Fouad, **Z. A. Ansari**, *Tailoring the photoconducting properties of calcined TiO₂ nanopowder with flower extracts*, **1st National Conference on Energy & Environment (NC2E-2014), , University of Pune, India, 21-22 Feb 2014.**
6. S. G. Ansari, H. Fouad, **Z. A. Ansari**, *Can flower extracts tailor the optical properties of Cd and Sn doped TiO₂ nanopowders*, **1st National Conference on Energy & Environment (NC2E-2014), University of Pune, Pune, India, 21-22 Feb 2014.**
7. Z. A. Ansari, S. Khalid, A A Khan, H. Fouad, S. G. Ansari, *Cholesterol sensing properties of Neodymium doped nano-TiO₂*, **National Conference on "Nanotechnology and Renewable Energy, (NCNRE-2014), Jamia Millia Islamia, April 28 & 29, 2014.**
8. 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.**
9. 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).**
10. Jaspal Singh, Z.A. Ansari, S.G. Ansari, Effect of Flower extracts on the photoconducting Properties of Cd-doped nanostructured TiO₂, **National symposium on Nanobiotechnology, IIT Mandi, 1-2 June 2012.**
11. 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.**
12. 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.**

13. 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.**
14. 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.**
15. 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.**
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18. Mazhar-ul-Haque, Z. A. Ansari, S. G. Ansari, Application of nanostructured Cu-doped titanate for urea sensing, **International Interdisciplinary Science Conference on Bioinformatics, Jamia Millia Islamia, 15-17 November, 2011.**
19. 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 Science Conference on Bioinformatics, Jamia Millia Islamia, 15-17 November, 2011.**
20. Young-Soon Kim, Rizwan Wahab, I.H.Hwang, S.G.Ansari, Z.A.Ansari, Minwu Song, You Bing Yang, Hyung-Shik Shin, The anticancer activity of zinc oxide nanoparticles prepared via solution process, **International Interdisciplinary Science Conference on anobiotechnology: An Interface between Physics and Biology, Dec. 2-4, 2010, New Delhi, India.**
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25. Ashna I, Shamshi F., **Ansari Z.A.**, Applications of Nanoparticles to Biological Sciences: A review, **International Interdisciplinary Science Conference on Nanobiotechnology: An Interface between Physics and Biology, Dec. 2-4, 2010, New Delhi, India.**
26. Young-Soon Kim, Rizwan Wahab, S.G.Ansari, **Z.A.Ansari**, Amrita Mishra, Soon-Il Yun, Minwu Song, Donggyu Kim, Hyung-Shik Shin, Use of zinc oxide nanoparticle as an antibacterial agent prepared via solution process, **International Interdisciplinary Science Conference on Nanobiotechnology: An Interface between Physics and Biology, Dec. 2-4, 2010, New Delhi, India.**
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- 39. Z.A. Ansari, S. Datar, R.N. Kareker, R.C. Aiyer, A planar optical waveguide with Ag and Ag₂S claddings: A gas sensor, National Seminar on Physics & Technology of sensors, Department of Electronics, Poona University, (NSPTS-5) Feb. 98, C19.1-5.**
- 40. Z.A. Ansari, R.N. Karekar, R.C. Aiyer, Influence of LPG and H₂ on guiding properties of single mode wave guide with ZnO and SnO₂ claddings, NSPTS-4, Feb.97, C19.1-4.**
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- 43. Z.A. Ansari, 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.**
- 44. 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 1st RMMC**

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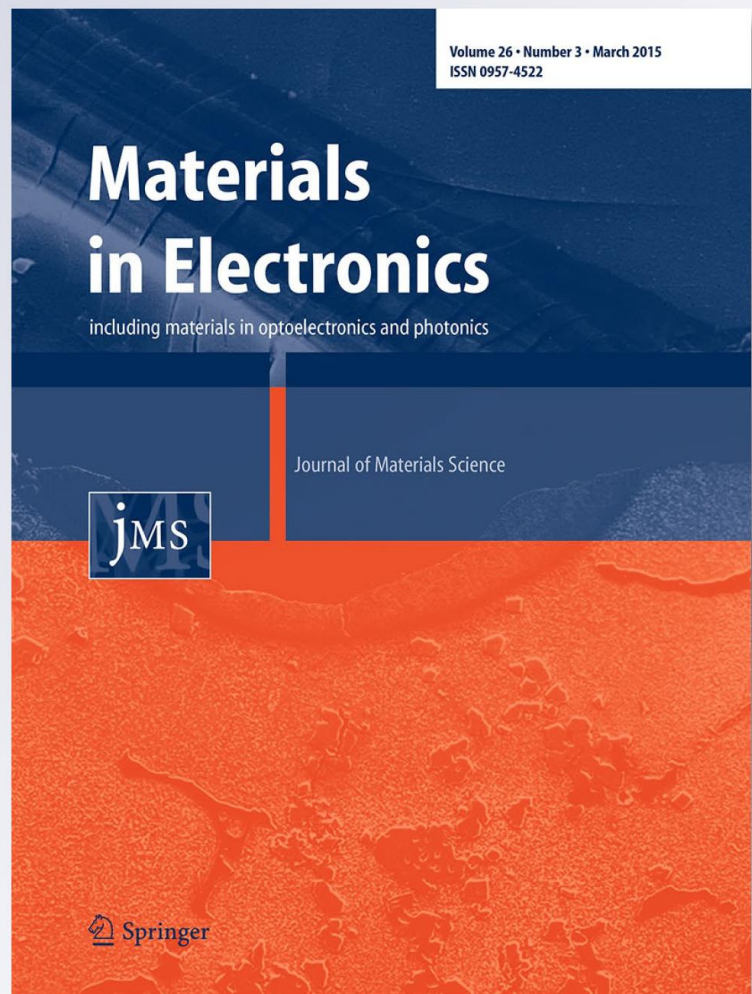
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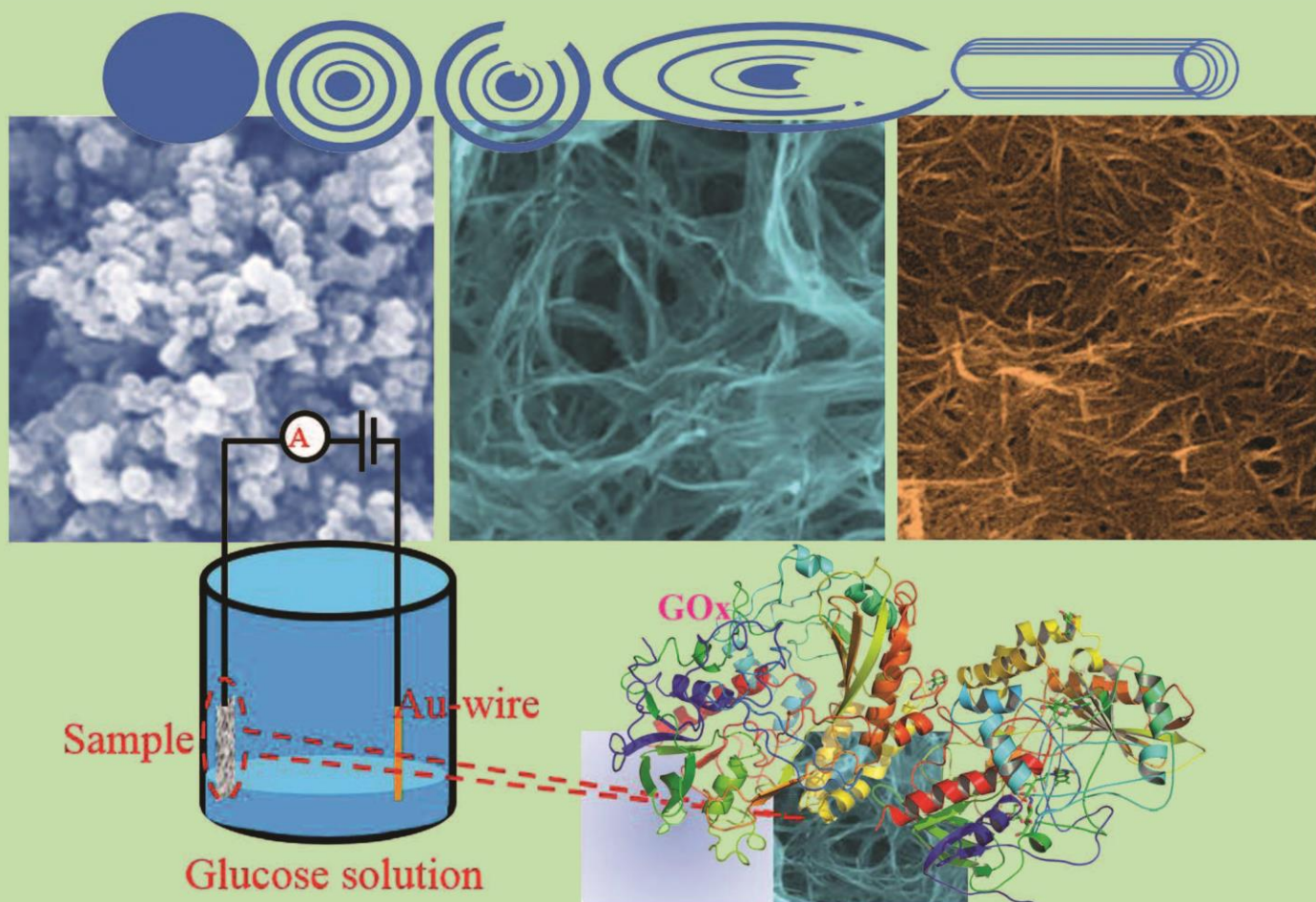
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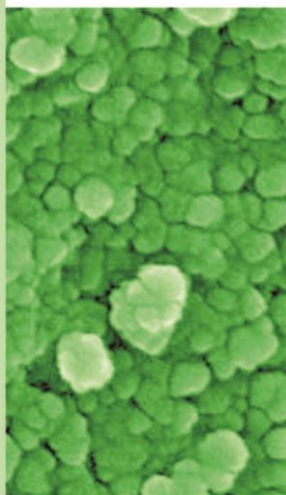
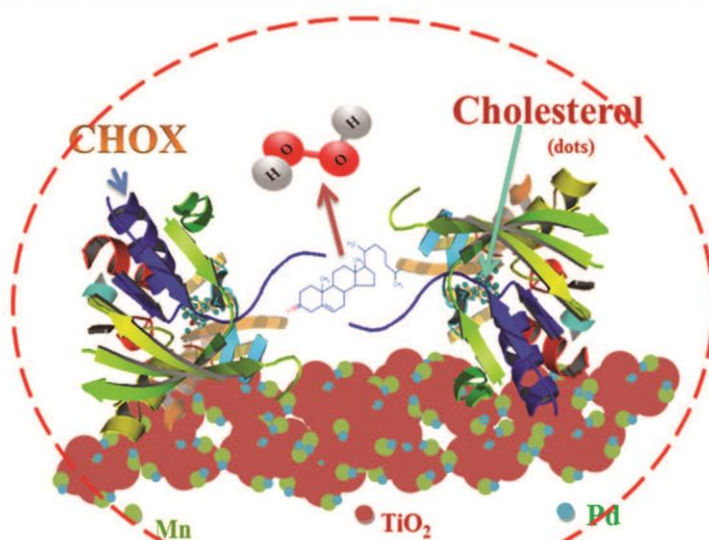
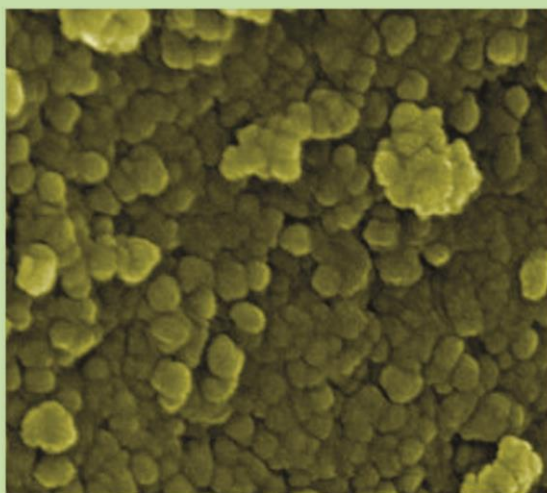


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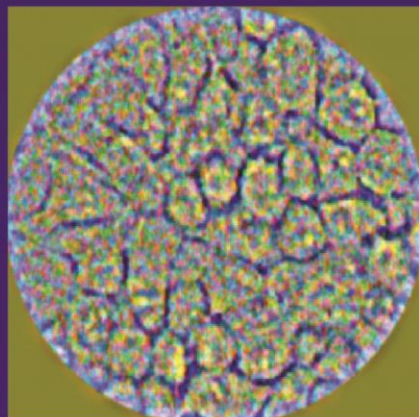
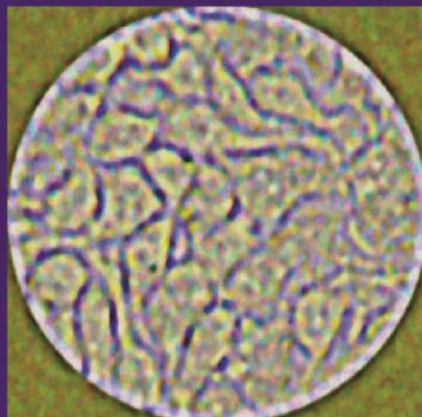
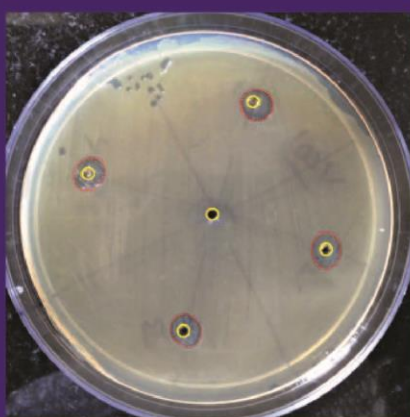
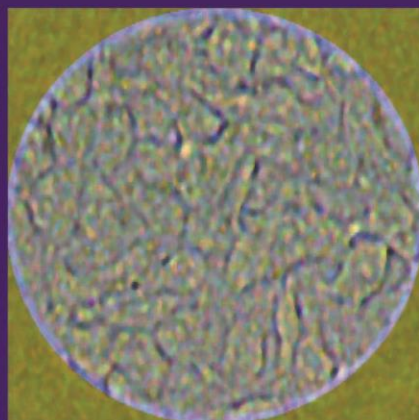
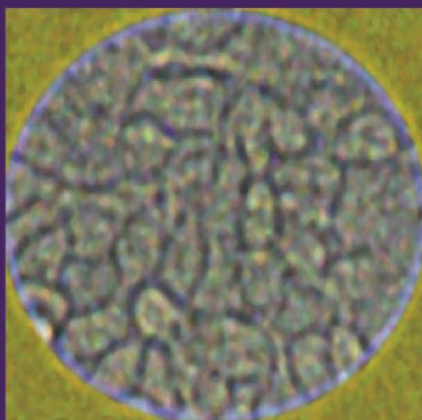
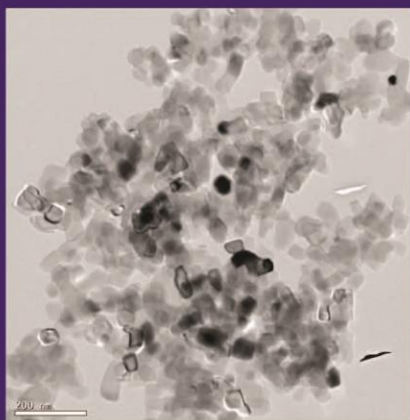
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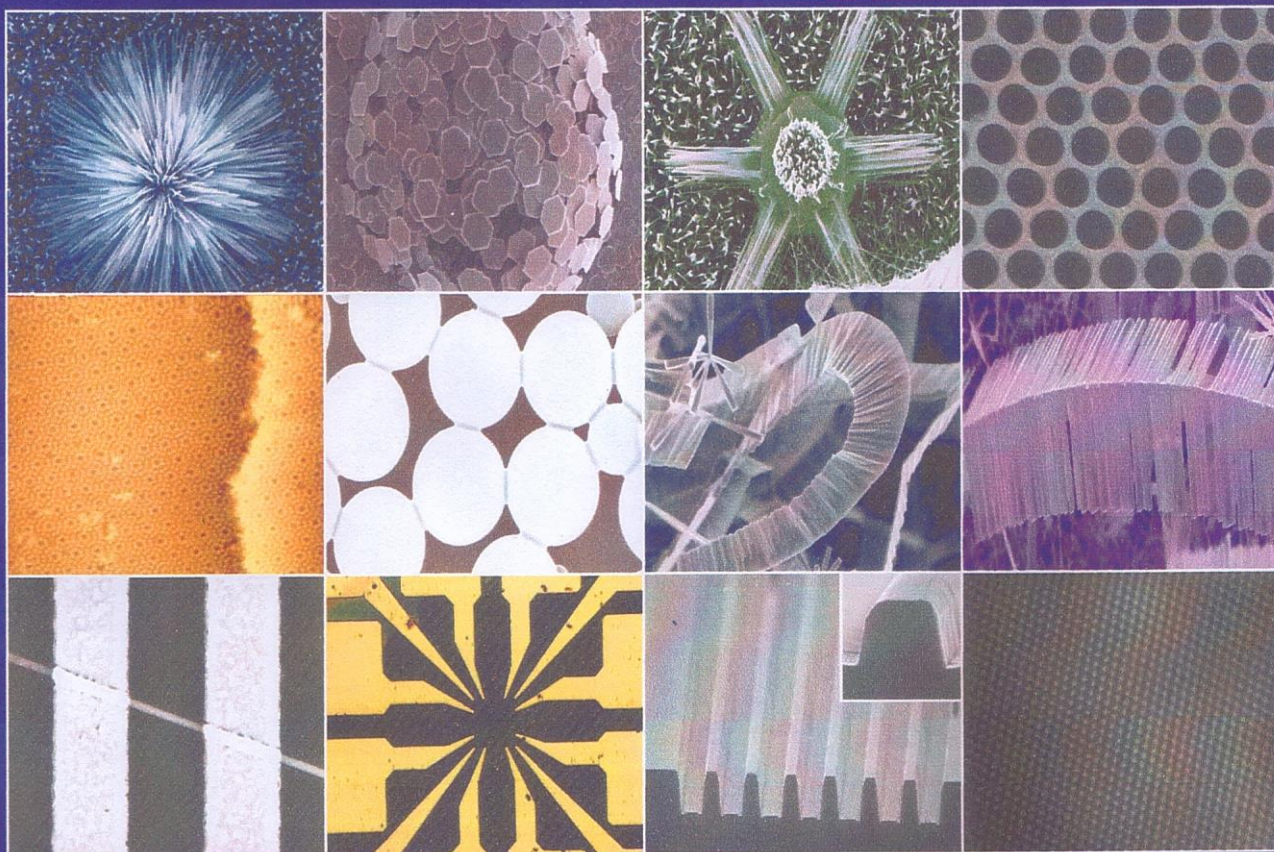
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