

JST SAKURA and SSSV Seminar Program

(2015/09/03)

Place: Doctor course 2nd floor, meeting room

9:20 Opening address – Prof. Y. Hayakawa, Shizuoka University

– Prof. S. Ponnusamy, SRM University

Session – I

9:30 – 12:45

Session Chairs – Mr. Rajan Karthikeyan and Ms. Murugesan Tarini

1. Gas sensing application of ZnO nanorods prepared by hydrothermal method
Guru Nisha¹, A. Pavithra¹, R. Ajay Rakkesh², S. Balakumar² and Karthigeyan Annamalai¹, ¹Department of Physics and Nanotechnology, SRM University, ²National Centre for Nanosciences And Nanotechnology, University of Madras.
2. Influence of Film Thickness on The Properties of Nanocrystalline CdTe thin film coated by electron beam evaporation method
Manimozhi and K. Rammurthi, Department of Physics and Nanotechnology, SRM University
3. Metal versus metal free Electrocatalyst for Oxygen Reduction Reaction (ORR) – A first principle study
Nandhini Subbukani¹, Sinthika² and Ranjith Thapa², ¹Department of Physics and Nanotechnology, SRM University, ²SRM Research Institute, SRM University.
4. A Comparative Study of different Silicon Structure Nanowire Channeled Transistor with Halide Single Dopants
Gaurang Prabhudesai¹ and Arjitsen², ¹Department of Physics and Nanotechnology, SRM University, ²SRM Research Institute, SRM University.
5. Graphene Oxide- Metal Oxide NPs: a Hybrid electrocatalyst for application in electrochemical cells
M.Vivekanantha and Karthigeyan Annamalai, Department of Physics and Nanotechnology, SRM University.
6. Preparation and Characterisation of Ni-Mo powder for Piston ring application using Plasma spray technique
A. Vignesh and R Jagadish, Department of Physics and Nanotechnology, SRM University.
7. Hydrogen storage on Vanadium catalysed on defective Graphene - A first principle study
E. Mathan Kumar¹, **P. Sabarikirishwaran**² and Ranjith Thapa¹, ¹SRM Research Institute, SRM University.
²Department of Physics and Nanotechnology, SRM University.

Session Chairs – Mr. Velu Nirmal Kumar and Mr. Mani Sabarinathan

8. Adsorption of Carbon Monoxide (CO) and Carbon-Dioxide (CO₂)- A first principle study
C. Prakash Reddy¹, S.Sinthika² and Ranjit thapa², ¹Department of Physics and Nanotechnology, SRM University, ²SRM Research Institute, SRM University.

9. Influence of TiO₂ Nanoparticles and rGO-TiO₂ Nanocomposite on Thermal and Mechanical properties of Epoxy Resin
Ashwin agathiya B, Kathikeyan B, and Ashwin Velraj, Department of Physics and Nanotechnology, SRM University.
10. Thin film heaters based on Silver Nanowire
Sidharth Suman¹, Paolo Lugli², Ing Bernhard Fabel² and Marco Bobinger², ¹Department of Physics and Nanotechnology, SRM University, ²Technische Universität München, Germany
11. Synthesis of Cu NP collagen peptide for conductive ink application
Arun Ragavendar¹, Murali² and P.Thanikaivelan², ¹Department of Physics and Nanotechnology, SRM University, ²Centre Leather Research Institute, Guindy, Chennai,
12. Structural and Morphological investigation of alpha-MoO₃ nanoflakes
Laxmi Depika Bharatula and Korivi Sairam, Department of Physics and Nanotechnology, SRM University.
13. Investigation of absorbance in graphene and plasmonic graphene oxide
Moon Paul¹, Ravi Kumar², Samurai Singh² and P K Giri², ¹Department of Physics and Nanotechnology, SRM University, ²Centre for Nanotechnology, Indian Institute of Technology, Guwahati.
14. Highly dispersed palladium nanoparticles on mesoporous silica as a catalyst for carbon carbon coupling reactions
Vinusha Reddy K¹ and Pavuluri Srinivasu², ¹Department of Physics and Nanotechnology, SRM University, ²Indian Institute of Chemical Technology: CSIR, Hyderabad.

12:45 – 13:45 Lunch

Session - II

13:45-17:00

Session Chairs – Ms. Guru Nisha and Ms. Manimozhi

15. A Graphene based Photoelectrochemical Cell for Hydrogen Production
V. Vignesh¹, Venkateswaran Raman², R. Vinoth² and B. Neppolian², ¹Department of Physics and Nanotechnology, SRM University, ²SRM Research Institute, SRM University.
16. Growth properties of InGaSb under normal and microgravity condition at International Space Station
Velu Nirmal Kumar¹, Govindasamy Rajesh¹, Mukannan Arivanandhan¹, Tadanobu Koyama¹, Yoshimi Momose¹, Kaoruho Sakata², Takehiko Ishikawa², Tetsuo Ozawa³, Yasunori Okano⁴, Yuko Inatomi² and Yasuhiro Hayakawa¹, ¹Research Institute of Electronics, Shizuoka University, Hamamatsu, Japan, ²Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency, Kanagawa, Japan, ³Department of Electrical Engineering, Shizuoka Institute of Science and Technology, Fukuroi, Japan, ⁴Graduate school of Engineering Science, Osaka University, Machiganeyama, Japan.
17. Preparation of TiO₂:Ag:Er nanocomposites and their enhanced photocatalytic activity under visible irradiation
Natarajan Prakash¹, Rajan Karthikeyan¹, Dheivasigamani Thangaraju², Tadanobu Koyama² and Yasuhiro Hayakawa^{1,2}, ¹Graduate School of Science and Technology, Shizuoka University, ²Research Institute of Electronics, Shizuoka University.

18. Synthesis of bismuth antimony telluride alloyed nanostructures for thermoelectric applications
M. Sabarinathan¹, M. Navaneethan², J. Archana¹, M. Omprakash¹, T. Koyama¹, H. Ikeda^{1,2} and Y. Hayakawa^{1,2}, ¹Graduate school of science and technology, Shizuoka University. ²Research institute of Electronics, Shizuoka University.
19. Effect of metal oxides on photocatalytic performance under visible light irradiation
S. Harish¹, J. Archana², M. Navaneethan², S. Ponnusamy³, C. Muthamizhchelvan³, Y. Hayakawa², ¹Graduate School of Science and Technology, Shizuoka University. ²Research Institute of Electronics, Shizuoka University, ³Department of Physics and Nanotechnology, SRM University.
20. Formation of 1-D nanostructured fluorine-doped tin oxide layer
Ajith Bandara, Masaru Shimomura, Masayuku Okuya and Kenji Murakami, Graduate school of science and technology, Shizuoka University, Research institute of Electronics, Shizuoka University.
21. Effect of seed layer on formation of ZnO nano rods
Albertus Bramantyo, Masayuku Okuya and Kenji Murakami, Research institute of Electronics, Shizuoka University, Graduate school of science and technology, Shizuoka University.

Session Chairs – Mr. Natarajan Prakash and Mr. Santhana Krishnan Harish

22. Fabrication of thin Ge-on-insulator nano-layer by wafer bonding method
V. Manimuthu^{1,2} and H. Ikeda^{1,2}, ¹Graduate School of Science and Technology, Shizuoka University, ²Research Institute of Electronics, Shizuoka University.
23. Fabrication of wearable thermoelectric device with UV protection
V. Pandiyarasan^{1,2}, F. Salleh³, Y. Suzuki^{1,2}, J. Archana², M. Navaneethan², Y. Hayakawa^{1,2} and H. Ikeda^{1,2}, ¹Graduate School of Science and Technology, Shizuoka University, ²Research Institute of Electronics, Shizuoka University, ³Faculty of Engineering, University of Malaya.
24. Fabrication of Si nanowire thermopile for infrared photodetector
Y. Suzuki^{1,2}, T. Aramaki², F. Salleh³ and H. Ikeda^{1,2}, ¹Graduate School of Science and Technology, Shizuoka University, ²Research Institute of Electronics, Shizuoka University, ³Faculty of Engineering, University of Malaya.
25. Single-step synthesis and catalytic activity of phase controlled nickel sulfide nanoparticles
R. Karthikeyan¹, D. Thangaraju², N. Prakash¹, T. Koyama² and Y. Hayakawa², ¹Graduate School of Science and Technology, Shizuoka University, ²Research Institute of Electronics, Shizuoka University.
26. Investigation of SnO₂ nanostructures for the development of dye-sensitized solar cells
M. Tarini¹, S. Harish¹, J. Archana², M. Navaneethan², Y. Hayakawa², ¹Graduate School of Science and Technology, Shizuoka University, ²Research Institute of Electronics, Shizuoka University.
27. Vertically aligned TiO₂ one-dimensional nanostructured arrays for DSSC applications.
E. K. D. H. D. Siriwardena, Graduate School of Science and Technology, Shizuoka University.
28. Structural control of Si based nano-structures by catalyst design
X. Meng and H. Tatsuoka, Graduate School of Science and Technology, Shizuoka University.