

## 1<sup>ST</sup> INTERNATIONAL CONFERENCE ON NANOSCIENCE AND NANOTECHNOLOGY (ICNAN'16) ORGANISED BY CENTRE FOR NANOTECHNOLOGY RESEARCH VIT UNIVERSITY, VELLORE, INDIA 19<sup>TH</sup> – 21<sup>ST</sup> OCTOBER, 2016

## Table 1: Selected Abstracts for Oral Presentations (Page 2-21)

 Table 2: Selected Abstracts for Poster Presentations (Page 22 - 77)

Irrespective of Oral and Poster presentation, all paper will be considered for Journal Publications.

| SI.NO | Author's name  | Affliation of Author's   | Abstract title  | Abstract<br>No |
|-------|--|--|---|----------------|
| 1     | Gajalakshmi Sekara,<br>Amaravathy<br>Sivakumarb, Amitava<br>Mukherjeea,<br>Natarajan<br>Chandrasekarana, | a Centre for<br>Nanobiotechnology, VIT<br>University, Vellore<br>632014, Tamil Nadu,<br>India<br>b School of Advanced<br>Sciences, VIT University,<br>Vellore 632014, Tamil<br>Nadu, India   | Interaction studies of hog<br>and bacillus amylase with<br>metal and metal oxide<br>nanoparticles   | AB008          |
| 2     | Ahmed Suhail,<br>Kamrul Islam,<br>Genhua Pan, <sup>*</sup> David<br>Jenkins and Nick Fry                 | <ul> <li>Wolfson Nanomaterials</li> <li>&amp; Devices</li> <li>Laboratory,</li> <li>School of Computing,</li> <li>Electronics and</li> <li>Mathematics, Faculty</li> <li>of Science &amp;</li> <li>Engineering,</li> <li>Plymouth University,</li> <li>Devon, PL4 8AA, UK</li> </ul> | Shaping of graphene using<br>Argon plasma   | AB009          |
| 3     | Ruwaidah A.<br>Mussttaf <sup>1</sup> , David<br>Jenkins <sup>1</sup> , Awadhesh<br>Jha <sup>2</sup>      | 1School of Computing,<br>Electronics &<br>Mathematics, Plymouth<br>University, UK.<br>2School of Biological<br>Sciences, Plymouth<br>University, UK  | Fluence of low level laser<br>therapy affects proliferation<br>and DNA damage in THP-1<br>cells   | AB012          |
| 4     | Dr. D. Kalpana   | Senior Scientist<br>CECRI-Madras unit,<br>CSIR Madras Complex  | Nanostructured catalysts and<br>support materials for<br>PEMFCs   | AB019          |
| 5     | G.O. Obaiah <sup>1, a</sup> , K.H.<br>Shivaprasad <sup>*1</sup> , K.<br>Srikanth bhat <sup>1</sup>       | 1Research centre, Talent<br>development centre, IISC,<br>Kudhapur, Chitradurga.<br>aDept. of chemistry,<br>Vijayanagara Sri Krishna<br>Devaraya University,<br>Bellary.  | A Potential Use γ-Al <sub>2</sub> O <sub>3</sub><br>Coated Cordierite<br>Honeycomb Reinforcement<br>of Ti <sub>0.97</sub> Pd <sub>0.03</sub> O <sub>2</sub> Catalyst<br>for Selective High Rates in<br>H <sub>2</sub> +O <sub>2</sub> Recombination | AB031          |

| 6 | Shiji R <sup>1</sup> , Manu M<br>Joseph <sup>1,2</sup> ,<br>Unnikrishnan BS <sup>1</sup> ,<br>Preethi GU <sup>1</sup> ,<br>Sreelekha TT <sup>1</sup>                                     | 1. Laboratory of<br>Biopharmaceutics &<br>Nanomedicine, Division<br>of Cancer Research,<br>Regional Cancer Centre,<br>Thiruvananthapuram-<br>695011, Kerala, India<br>2. Chemical Sciences &<br>Technology Division,<br>Organic Chemistry<br>Section,<br>CSIR-National Institute<br>for Interdisciplinary<br>Science & Technology<br>(CSIR-NIIST),<br>Pappanamcode,<br>Thiruvananthapuram-<br>695019, Kerala, India. | Synthesis of highly<br>fluorescent galactomannan -<br>gold nanoclusters for cellular<br>imaging  | AB041 |
|---|--|--|--|-------|
| 7 | Liji John <sup>a</sup> , Israr Ul<br>Hassan <sup>b</sup> , Rajendran<br>Sobhana. Amritha <sup>a</sup> ,<br>Issac Hubert Joe <sup>c</sup> ,<br>Raphael Selwin<br>Joseyphus <sup>a,*</sup> | aDepartment of<br>Chemistry, Mar Ivanios<br>College (Autonomous),<br>Thiruvannathapuram-<br>695015,Kerala, India<br>bDepartment of Physics,<br>Mar Ivanios College<br>(Autonomous),<br>Thiruvananthapuram-695<br>015, Kerala, India<br>cDepartment of<br>Mathematics and<br>Sciences, Dhofar<br>University, Salalah,<br>Sultanate of Oman  | SYNTHESIS,<br>STRUCTURAL<br>CHARACTERIZATION<br>AND MORPHOLOGICAL<br>STUDIES OF<br>NANOCRYSTALLINE<br>CADMIUM OXIDE BY<br>WET-CHEMICAL<br>METHOD | AB047 |
| 8 | K. Shwetha, V.<br>Deepa, S. Prasanna<br>Kumar, K. Santhosh<br>Kumar, Meduri Ravi   | Microwave Tube<br>Research and<br>Development Cetnre,<br>DRDO, Ministry of<br>Defence, BE complex,<br>Jalahalli, Bangalore -<br>560093   | Porous pellets of tungsten<br>Nano powder: Investigation<br>of surface porosity of<br>Machined Surfaces  | AB057 |

| 9  | M. Shiva Prasad, D.<br>Karthik and S.<br>Sakthivel*   | a Centre for Solar energy<br>materials, International<br>Advanced Research<br>Centre for Powder<br>Metallurgy and New<br>Materials, Balapur P.O.,<br>Hyderabad - 500005,<br>Telangana, India.   | Development of novel<br>tandem absorber layer with<br>high optical performance and<br>high weather stability for<br>medium temperature<br>Concentrated solar thermal<br>power applications using<br>nanostructure materials. | AB058 |
|----|---|---|--|-------|
| 10 | Gounder Thangamani<br>J <sup>a</sup> , Kalim Deshmukh <sup>b</sup> ,<br>K. Chidambaram <sup>a</sup> ,<br>Basheer Ahamed <sup>b</sup> ,<br>Kishor Kumar<br>Sadasivuni <sup>c</sup> ,<br>Deepalekshmi<br>Ponnamma <sup>d</sup> , Mariam<br>Al-Ali AlMaadeed <sup>d</sup> ,<br>S. K. Khadheer<br>Pasha <sup>a*</sup> , | aDepartment of Physics,<br>School of Advanced<br>Sciences, VIT University,<br>Vellore - 632014, TN,<br>India.<br>bDepartment of Physics,<br>B. S. Abdur Rahman<br>University, Chennai -<br>600048, Tamil Nadu,<br>India.<br>cMechanical & Industrial<br>Engineering Department,<br>Qatar University, P.O.<br>Box 2713, Doha, Qatar.<br>dCenter for Advanced<br>Materials, Qatar<br>University, P.O. Box<br>2713, Doha, Qatar. | Synergistic Effect of Copper<br>Oxide Nanoparticles and<br>Graphene Oxide on the<br>Structural, Morphological<br>and Gas Sensing Properties<br>of Polyvinyl alcohol<br>Nanocomposites  | AB066 |
| 11 | Kalvakunta Paul<br>Reddy and A.<br>Murugadoss*  | aNational Center for<br>Nanosceicne and<br>Nanotechnology,<br>University of Madras,<br>Guindy Campus, Chennai<br>– 600 025, Tamil Nadu,<br>India.   | One-Pot High Yield<br>synthesis of Branched gold<br>Nanoparticles as Excellent<br>catalysts toward the<br>Reduction of Nitroarenes   | AB070 |
| 12 | Arun K Prasad <sup>a,*</sup> and<br>S. Dhara <sup>a</sup>   | <sup>a</sup> Nanomaterials and<br>Sensors Section, Materials<br>Science Group, Indira<br>Gandhi Centre for Atomic<br>Research, HBNI,<br>Kalpakkam 603102,<br>Tamil Nadu, India.   | Growth and NO <sub>2</sub> sensing of<br>Vanadium Oxide Nanorods   | AB074 |

| 13 | Meenakshi . M,<br>Krisnendu Biswas *  | School of Advanced<br>sciences,Chemistry<br>division, VIT University,<br>Chennai Campus<br>Chennai-127, Tamilnadu,<br>India.   | Antimicrobial studies of<br>copper-chitosan<br>nanocomposite prepared by<br>green method   | AB089 |
|----|---|--|--|-------|
| 14 | Ruma Ghosh <sup>a</sup> *,<br>Sumita Santra <sup>b</sup> , M. K.<br>Deshmukh <sup>a</sup> , Prasanta<br>Kumar Guha <sup>c</sup> | aDepartment of Electrical<br>and Electronics<br>Engineering, BITS Pilani,<br>K. K. Birla Goa Campus,<br>Zuarinagar, Goa – 403<br>726, India.<br>bDepartment of Physics,<br>IIT Kharagpur,<br>Kharagpur, West Bengal<br>– 721 302, India.<br>cDepartment of<br>Electronics and Electrical<br>Communication<br>Engineering, IIT<br>Kharagpur, Kharagpur,<br>West Bengal – 721 302,<br>India. | Highly Efficient H <sub>2</sub> Sensors<br>using Reduced Graphene<br>Oxide–Pt Nanocomposites at<br>Room Temperature  | AB096 |
| 15 | Kuwar Mausam <sup>1</sup> ,<br>Dr.Kamal Sharma <sup>2</sup> ,<br>Pradeep Kumar<br>Singh, Aniruddha <sup>4</sup>                 | 1,2,3,4 Mechanical Engg.<br>Deptt. GLA University,<br>Mathura  | Optimization of Process<br>Productivity for Multi Phase<br>Carbon Nanotubes(CNT)<br>Reinforced Nanocomposites<br>using Taguchi-Fuzzy Model   | AB098 |
| 16 | Thanusu<br>Parandhaman,<br>Baskaran<br>Ramalingam and<br>Sujoy K. Das <sup>*</sup>  | Biological Materials<br>Laboratory, Council of<br>Scientific and Industrial<br>Research (CSIR) Central<br>leather Research Institute<br>(CLRI), Chennai-600020,<br>India.  | Antibacterial Effects of<br>Biogenic Silver<br>Nanoparticles on Surface<br>Ultrastructure and<br>Nanomechanical Properties<br>of Gram-Negative Bacteria<br>viz. Escherichia coli and<br>Pseudomonas aeruginosa | AB100 |
| 17 | S. Saravanan <sup>*</sup>   | Centre for Photonics and<br>Nanotechnology, Sona<br>College of Technology,<br>Salem - 636 005, Tamil<br>Nadu, India.   | Stacking of InAs QDs with<br>different spacer layer<br>thickness on GaAs substrate<br>by Molecular Beam Epitaxy  | AB101 |

| 18 | D.V. Awale, S.C.<br>Bhise, S. K. Patil, and<br>S.S. Kolekar*  | Analytical Chemistry and<br>Material Science<br>Research Laboratory,<br>Department of Chemistry,<br>Shivaji University,<br>Kolhapur 416004,<br>Maharashtra, India  | Supercapacitor Application<br>of 3-(3'-Hydroxypropyl)-1,2-<br>Dimethylimidazolium<br>Chloride Electrolyte Using<br>Copper Oxide Prepared By<br>Chemical Bath Deposition<br>Method | AB109 |
|----|---|--|---|-------|
| 19 | D. Saritha , U.V.<br>Varadaraju*  | Malla Reddy engineering<br>college, Hyderabad-<br>500072, India<br>Materials Science<br>Research Centre and<br>Department of Chemistry,<br>IIT Madras, Chennai-<br>600036, India                                   | Sol- Gel synthesis and<br>electrochemical studies on<br>Mo <sub>3</sub> Nb <sub>2</sub> O <sub>14</sub>   | AB113 |
| 20 | D Rithesh Raj and C<br>Sudarsanakumar*  | School of pure and<br>Applied Physics,<br>Mahatma Gandhi<br>University, Kottayam –<br>686560, India  | Surface Plasmon Resonance<br>based fiber optic dopamine<br>sensor using BSA- gold<br>nano-cluster/polymer<br>composite  | AB116 |
| 21 | V P Rameesha <sup>1</sup> , T<br>Raguram <sup>2</sup> , K S<br>Rajni <sup>2*</sup>  | 1 MESKVM College,<br>Valanchery, Kerala, India<br>2 Dept. of Sciences,<br>Amrita School of<br>Engineering, Amrita<br>Vishwa Vidyapeetham,<br>Amrita Nagar, Ettimadai,<br>Coimbatore – 641 112,<br>Tamilnadu, India | Synthesis and<br>Characterization of Nickel<br>Ferrite Nanoparticle<br>prepared by Sol-Gel<br>Technique.  | AB120 |
| 22 | Lakkanna<br>S.Chougala <sup>a</sup> , M. S.<br>Yatnatti <sup>a</sup> , Ravi K.<br>Linganagoudar <sup>b</sup> ,<br>J.S.Kadadevarmath <sup>a*</sup> | aDepartment of Physics,<br>Karnatak University,<br>Dharwad-580 003<br>bDepartment of<br>Electronics, Karnatak<br>University, Dharwad-580<br>003  | Synthesis and<br>characterization of ZnO<br>nanoparticles and its<br>application to Dye sensitized<br>solar cell  | AB131 |

| 23 | Parvathy Venu M <sup>a</sup> .,<br>Shrisha B. V <sup>a</sup> .,<br>Dushyant Kushavah <sup>b</sup> ,<br>K. M. Balakrishna <sup>a</sup> ,<br>K. Gopalakrishna<br>Naik <sup>a*</sup>                            | aDepartment of studies in<br>Physics, Mangalore<br>University, Konaje-<br>574199, Karnataka, India.<br>bIndian Institute of<br>Technology, Powai,<br>Bombay-400076,<br>Maharashtra, India.   | Fabrication of n-ZnO:Al/p-<br>Si(100) Heterojunction diode<br>and its Characterisation   | AB135 |
|----|--|--|--|-------|
| 24 | Sunil Kumar*,<br>Sweety Supriya, and<br>Manoranjan Kar   | Department of Physics,<br>Indian Institute of<br>Technology, Patna, Bihta-<br>801103, India.   | Electrical properties and<br>Relaxation Behavior of<br>Zinc Substituted Cobalt<br>Ferrite  | AB136 |
| 25 | Sweety Supriya*,<br>Sunil Kumar and<br>Manoranjan Kar  | <sup>a</sup> Department of Physics,<br>Indian Institute of<br>Technology Patna, Patna-<br>801103, India.   | Electrical Behavior of<br>Nanocrystalline Mn<br>substituted Cobalt Ferrite   | AB137 |
| 26 | M. K. Mohanapriya <sup>1</sup> ,<br>Kalim Deshmukh <sup>2</sup> , G.<br>Thangamani <sup>1</sup> , K.<br>Chidambaram <sup>1</sup> , M.<br>Basheer Ahamed <sup>2</sup> , S.<br>K. Khadheer Pasha <sup>1*</sup> | 1Department of Physics,<br>School of Advanced<br>Sciences, VIT University,<br>Vellore-632014, TN,<br>India<br>2Department of Physics,<br>B. S. Abdur Rahman<br>University, Chennai-<br>600048, TN, India   | Enhanced Quality Factor of<br>Polyvinyl formal (PVF)<br>Based Nanocomposites<br>Filled with Zinc Oxide and<br>Carbon Black Nanoparticles<br>for High-Q Capacitor<br>Applications | AB138 |
| 27 | Aruna Chandra<br>Singh <sup>1#</sup> , Souvik Pal <sup>1</sup> ,<br>R.<br>Balasubramaniam <sup>2</sup> ,<br>Sunil Bhand <sup>1*</sup>  | 1Biosensor Lab,<br>Department of chemistry,<br>BITS, Pilani-K.K. Birla<br>Goa Campus, Goa-<br>403726, India<br>2Precision Engineering<br>Division, Bhabha Atomic<br>Research Centre,<br>Trombay, Mumbai-<br>400085, India  | Zinc oxide nanoparticles<br>enhanced sensitive detection<br>of Organophosphates<br>residues in water   | AB144 |
| 28 | K. Rajavel <sup>1</sup> , R. T.<br>Rajendra Kumar <sup>2</sup> *   | 1Advanced Materials and<br>Devices laboratory,<br>Department of Physics,<br>Bharathiar University,<br>Coimbatore -6410 46,<br>Tamil Nadu, India.<br>2Department of<br>NanoScience and<br>Technology, Bharathiar<br>University, Coimbatore -<br>641046, Tamil Nadu,<br>India. | Role of Functional Groups<br>on Methanol Sensing<br>Properties of Multiwalled<br>Carbon Nanotubes  | AB147 |

| 29 | C.Venkatesh <sup>*a</sup> , ,<br>N.Sundaramoorthy <sup>b</sup> ,<br>V.Aswinprasad <sup>c</sup> | *aAssociate<br>Professor,Department of<br>Mechanical Engineering,<br>Dhirajlal Gandhi College<br>of Technology, Salem<br>b,Professor ,Department<br>of Mechanical<br>Engineering, Dhirajlal<br>Gandhi College of<br>Technology, Salem<br>c Graduate<br>student,Department of<br>Mechanical Engineering,<br>Knowledge Institute of<br>Technology, Salem | Optimization of Process<br>Parameters of Pulsed Electro<br>Deposition Technique for<br>Nanocrystalline Nickel<br>Coating using Grey<br>Relational Analysis (GRA) | AB148 |
|----|--|--|--|-------|
| 30 | Dr. Uma Nerle1*, Dr.<br>M. K. Rabinal2   | 1 Associate Professor,<br>(Department of Physics<br>KLE's S.K. Arts &<br>H.S.K.Science Institute ,<br>Hubballi, Karnatak, India)<br>2Professor ( Department<br>of studies in Physics,<br>Karnatak University,<br>Dharwad, Karnatak,<br>India)  | Efficient Solution Processed<br>Thin films: Impact of thiol<br>treatment on the<br>conductivity, mobility in<br>CdS thin films                                   | AB153 |
| 31 | Mohan A <sup>a</sup> , Rajesh S<br><sup>b*</sup> , Srikesh. G <sup>c</sup>                     | a Thin film laboratory,<br>Department of Physics,<br>Karunya University,<br>Coimbatore – 641114.<br>b Department of<br>Nanoscience and<br>Technology, Karunya<br>University, Coimbatore –<br>641114.<br>c Department of<br>Chemistry, Karunya<br>University, Coimbatore –<br>641114.   | CuInSe2 formation through<br>Cu2Se-In3Se2 multilayer<br>Structures prepared for Solar<br>cell applications   | AB155 |

| 32 | S. K. Suresh Babu a,<br>Jackuline Moni b* S.<br>Lokesh a, S. Rajesh a  | a Centre for Research in<br>Nanotechnology,<br>b VLSI Laboratory, Dept.<br>of Electrical Technology,<br>Karunya University,<br>Coimbatore, Tamil Nadu,<br>India.   | Fabrication of P-Channel<br>ZnO / ZnO Gate Dielectric<br>Thin Film FET using Pulsed<br>Laser Deposition  | AB160 |
|----|--|--|--|-------|
| 33 | Elamathi. P, Murali<br>Krishna Kolli, G.<br>Chandrasekar*  | Chemistry Division,<br>School of Advanced<br>Sciences, VIT Chennai.  | Ecofriendly Synthesis of<br>Vanillin using FeMCM-41<br>Nano Catalytic Reactor  | AB163 |
| 34 | Vipin Kumar*a,b  | a Department of Physics,<br>Indian Institute of<br>Technology, Guwahati –<br>781 039, Assam, India.<br>bDepartment of<br>Metallurgical Engineering<br>and Materials Science,<br>Indian Institute of<br>Technology, Bombay,<br>Mumbai – 400 076,<br>Maharashtra, India. | Relaxation Dynamics of<br>Carriers in Monolayer<br>Graphene  | AB167 |
| 35 | V. Chandrakala,<br>Neena Bachan, P.<br>Naveen Kumar, K.<br>Pugazhendhi, B.<br>Praveen, Tenzin<br>Tenkyong and J.<br>Merline Shyla* | Department of Physics,<br>Energy Nanotechnology<br>Centre (ENTeC),<br>Loyola Institute of<br>Frontier Energy (LIFE),<br>Loyola College, Chennai<br>600 034.  | Investigation of the<br>morphology based properties<br>of multidimensional Titanate<br>Nanostructures for<br>application as proficient<br>Photoanodes  | AB168 |
| 36 | K. Nithiya Priya, S.<br>Dhanalakshmi, N.<br>Ganesh, A.<br>Kumarasamy, P.<br>Sivakumar, V.<br>Srinivasa                             | Combat Vehicles<br>Research & Development<br>Establishment (CVRDE),<br>Ministry of Defence,<br>DRDO, Avadi, Chennai<br>600 054.<br>aGITAM University,<br>Visakhapatnam 530 045.  | Thermophysical properties<br>and corrosion characteristics<br>of water-ethylene glycol<br>based MWCNT coolants<br>for diesel engines   | AB169 |
| 37 | K. M. Smita, L.<br>Stanley Abraham*, R.<br>Vasantharaja and R.<br>Thirugnanasambanda<br>m  | Centre for Ocean<br>Research, Sathyabama<br>University, Jeppiaar<br>Nagar, Rajiv Gandhi<br>Road, Chennai 600119,<br>India.   | Synthesis of Reduced<br>Graphene oxide using<br>methanolic extract of<br>Sargassum ilicifolium and<br>characterization of bioactive<br>compounds for its anticancer<br>activity against HT 29 cell<br>line | AB174 |

| 38 | Sumithra Sivadas<br>Menona, R. Janania,<br>K. Baskarb, Shubra<br>Singha*   | a Crystal Growth Centre,<br>Anna University, Chennai<br>- 600025.<br>b Manonmanium<br>Sundaranar University,<br>Thirunelveli - 627012.  | Developing ZnO based<br>(oxy)nitrides by solution<br>combustion technique and<br>realization of photocatalytic<br>activity by dye degradation. | AB177 |
|----|--|---|--|-------|
| 39 | Abdo Hezam <sup>a, *</sup> ,<br>Q.A. Drmosh <sup>b</sup> , K.<br>Namratha <sup>a</sup> and<br>K.Byrappa <sup>a</sup> | a Centre for Materials<br>Science and Technology,<br>University of Mysore,<br>Vijana Bhavan,<br>P.B.No.21,<br>Manasagangothiri,<br>Mysuru-570006, India<br>b Physics Department and<br>Center of Research<br>Excellence in<br>Nanotechnology, King<br>Fahd University of<br>Petroleum and Minerals,<br>Dhahran 31261, Saudi<br>Arabia | Facile Synthesis of<br>Heterostructured<br>Bi2O3–CeO2 –ZnO<br>Photocatalyst with Enhanced<br>Visible-Light Photocatalytic<br>Activity          | AB182 |
| 40 | R. Anitha, Vavilapalli<br>Durga Sankar and<br>Shubra Singh*  | Crystal Growth Centre,<br>Anna University, Chennai<br>- 600025, Tamil Nadu,<br>India.   | Silicon doped Gallium<br>Nitride/PEDOT:PSS<br>polymer hybrid<br>heterojunction for Light<br>Emitting Diodes                                    | AB185 |
| 41 | Bikram Keshari Das,<br>Tanushree Das, Kajal<br>Parashar, S.K.S.<br>Parashar*   | School of Applied<br>Sciences, Nano Sensor<br>Lab, KIIT University,<br>Bhubaneswar-751024,<br>Odisha,<br>India  | Band gap tuning and ac<br>conductivity of<br>nanocrystalline Nickel<br>doped ZnO synthesized by<br>High Energy Ball Milling                    | AB187 |

| 42 | Ann Rose Abraham a,<br>B. Raneesh c, Sabu<br>Thomas b,<br>Nandakumar<br>Kalarikkal*a,b  | aSchool of Pure and<br>Applied Physics,<br>Mahatma Gandhi<br>University, Kottayam-686<br>560, India<br>bInternational and Inter<br>University Centre for<br>Nanoscience and<br>Nanotechnology,<br>Mahatma Gandhi<br>University, Kottayam-686<br>560, India<br>cDepartment of Physics,<br>Catholicate College,<br>Pathanamthitta, Kerala-<br>689 645, India. | Design, Development and<br>Surface engineering of<br>Superparamagnetic<br>Magnesium Ferrite<br>Nanoparticles with<br>Biocompatible Polymeric<br>Shell for Biomedical<br>Applications | AB189 |
|----|---|---|--|-------|
| 43 | Lagen Kumar<br>Pradhan*,Rabichandr<br>a Pandey, Rajnish<br>Kumar and<br>Manoranjan Kar  | aPhysics Department,<br>Indian Institute of<br>Technology Patna,Patna-<br>801103,Bihar,India.   | Composition driven<br>magneto-electric coupling in<br>CFO-PZT multiferroic<br>nanocomposite  | AB200 |
| 44 | V. Manjunath, and V.<br>Rajagopal Reddy*  | Department of Physics,<br>Sri Venkateswara<br>University, Tirupati 517<br>502, Andhra Pradesh,<br>India   | Electrical properties of Au/n-<br>GaN Schottky contacts with<br>Sm2O3 interlayer   | AB201 |
| 45 | Arpan Maiti a*,<br>Achyut Maity a and<br>Tapas Kumar Chini a  | a Surface Physics and<br>Material Science<br>Division, Saha Institute of<br>Nuclear Physics, Kolkata<br>- 700064, West Bengal,<br>India.  | Plasmonic Response of<br>Individual Gold Nano-<br>Octahedra using<br>Cathodoluminescence<br>Spectroscopy and Imaging   | AB205 |
| 46 | G.R. Devi (a), T.N.<br>Sairam(b), S.<br>Subramanian(b), S.<br>Abhaya(b), G.<br>Amarendra(b), and<br>M.S. Ramachandra<br>Rao(a)* | a Department of Physics,<br>Nano Functional<br>Materials Technology<br>Centre and Materials<br>Science<br>Research Centre, Indian<br>Institute of Technology<br>(IIT) Madras, Chennai<br>600036, India<br>b Materials Science<br>Group, Indira Gandhi<br>Centre for Atomic<br>Research, Kalpakkam<br>603102, India  | Effect of Li and Mn<br>codoping in ZnO: A study of<br>defect<br>distribution and complex<br>formation in the system  | AB213 |

| 47 | S. K. Suresh Babu a,<br>Jackuline Moni b*,<br>Naveen Kumar T R a,<br>Zipporah Rini Benher<br>b, Prasanth<br>Raj Benjamin J a, S.<br>Rajesh a | a Centre for Research in<br>Nanotechnology,<br>b VLSI Laboratory,<br>School of Electrical<br>Technology,<br>Karunya University,<br>Coimbatore, Tamil Nadu,<br>India.  | Fabrication of Carbon Nano<br>Tube Film Field Effect<br>Transistor   | AB215 |
|----|--|---|--|-------|
| 48 | Dushyant Kushavah1,<br>P. K. Mohaptra2,<br>Pintu Ghosh2, P.<br>Vasa2, D. Bahadur3<br>and B. P. Singh2,                                       | 1Centre for Research in<br>Nanotechnology &<br>Science, IIT Bombay-<br>400076, Mumbai, India<br>2Department of physics,<br>IIT Bombay, Mumbai-<br>400076, India<br>3Department of<br>Metallurgical Engineering<br>and Materials Science, IIT<br>Bombay, Mumbai-<br>400076, India  | Size Dependent Study of<br>Exciton-Phonon Coupling<br>and Role of Interfacial States<br>in CdSe Quantum Dots   | AB226 |
| 49 | Sabina Rahamana*,<br>M. Anantha Sunilb,<br>K.G. Deepab,<br>Kaustab Ghoshc and<br>Habibuddin Shaikd   | a Department of ECE,<br>BMS Institute of<br>Technology, Bangalore-<br>560064, Karnataka, India.<br>b Department of<br>Instrumentation &<br>Applied Physics, Indian<br>Institute of Science,<br>Bangalore -<br>560012,Karnataka, India.<br>c Department of SENSE,<br>VIT Chennai campus,<br>Chennai-600127,<br>Tamilnadu, India.<br>d Department of Physics,<br>Nitte Meenakshi Institute<br>of Technology,<br>Bangalore-560064,<br>Karnataka, India | The Effect of Cu/Sn ratio on<br>the Cu 2 SnS 3 Films by<br>Low Cost<br>Ultrasonic Spray Pyrolysis<br>Technique   | AB238 |
| 50 | Rohini.Ba, Kingson<br>Solomon Jeevaraj.Ab  | aKarunya University,<br>Coimbatore-641114,<br>Tamilnadu, India<br>bArignar Anna<br>government arts college,<br>Nammakal– 637002,<br>Tamilnadu, India.   | Comparative Study of<br>Thermal conductivity and<br>Viscosity Measurement on<br>Binary fluid (DEA +THF)<br>and Hybrid CuO Nano fluid<br>(CuO + DEA +THF) | AB241 |

| 51 | Sai Praneeth Thota<br>a*, Sai Manoj Kaja<br>a,b, Aditya Kurdekar<br>b,V. Sai Muthu<br>Kumar b, Praveen V<br>Vadlanic, Belliraj<br>Siva Kumar. A   | a Department of<br>Chemistry, Sri Sathya Sai<br>Institute of Higher<br>learning, Prasanthi<br>Nilayam, A.P-515134.<br>b Department of Physics,<br>Sri Sathya Sai Institute of<br>Higher learning, Prasanthi<br>Nilayam, A.P-515134.<br>c Bioprocessing and<br>Renewable Energy<br>Laboratory, Departments  | Facile one-pot hydrothermal<br>synthesis of carbon dots<br>from medicinal, parasitic and<br>edible plant biomass. | AB242 |
|----|---|--|---|-------|
| 52 | Madhihalli<br>Basavaraju<br>Divakaraa,b,<br>Chunchanakuppe<br>Renukaprasad Ravi<br>Kumarc, Bhadrapura<br>Lakkappa<br>Dhananjayad,<br>Narendra Reddya and<br>Mysore Sridhar<br>Santosha* | of Grain Science and<br>Industry & Chemical<br>Engineering, , Kansas<br>State University,<br>Manhattan, KS 66506<br>aCentre for Incubation,<br>Innovation Research and<br>Consultancy, Jyothy<br>Institute of Technology,<br>Tataguni, Off Kanakapura<br>Road, Bengaluru- 560<br>082, India.<br>bVisvesvaraya<br>Technological University-<br>Research Resource<br>Centre, Jnana Sangama,<br>Belagavi-590 018, India.<br>cDepartment of Basic<br>Sciences, East West<br>Institute of Technology,<br>Bengaluru-560 091, India.<br>dToxicology and Drug<br>discovery Unit, Centre for<br>Emerging Technologies,<br>Jain Global Campus,<br>Jakkasandra Post,<br>Kanakapura Taluk,<br>Ramanagara District-562<br>112, India. | Insulin Modulated Self-<br>Assembled Nanostructures<br>of IAPP under the Amyloid<br>Disease State                 | AB257 |

| 53 | Saroj Vernekar1 , S<br>V H N Krishna<br>Kumari2 ,Y. V K.<br>Ravi Kumar3                              | Asst. Professor, Stanley<br>College of Engineering<br>and Technology for<br>Women, Hderabad, India1<br>Professor, Department of<br>Mathematics, Vidya<br>Jyothi Institute of<br>Technology, Hyderabad,<br>India2<br>Asst. Professor,<br>Practice School Division,<br>Birla Institute of<br>Technology & Science-<br>Pilani, Hyderabad, India3  | A Study of Optically Thick<br>Nanofluid Flow Past an<br>Oscillating Vertical Plate in<br>The Presence of Magnetic<br>field with Porous medium in<br>an Inclined Channel | AB261 |
|----|--|--|---|-------|
| 54 | Nandimalla Vishnu,<br>Mansi Gandhi and<br>Annamalai Senthil<br>Kumar*                                | a Nano and<br>Bioelectrochemistry<br>Research Laboratory,<br>Department of Chemistry,<br>School of Advanced<br>Sciences, Vellore Institute<br>of Technology University,<br>Vellore-632014, India.  | Low-Cost Pencil Graphite<br>Electrodes for Simultaneous<br>Electrochemical Sensing of<br>Tea Polyphenols  | AB267 |
| 55 | Ananya Deb, Vimala<br>R*   | School of Biosciences and<br>Technology, VIT<br>University, Vellore-632<br>014, Tamil Nadu, India  | Biofilm formation by<br>Pseudomonas species onto<br>graphene oxide-TiO2<br>nanocomposite coated<br>catheters: in-vitro analysis   | AB268 |
| 56 | Ajith James Josea,b*,<br>Sam Johnb, George<br>Jacobc, Runcy<br>Wilsond,<br>MuthukaruppanAlaga<br>ra, | aDepartment of Chemical<br>Engineering, Anna<br>University, Chennai- 600<br>025, India.<br>bPostgraduate & Research<br>Department of Chemistry,<br>St.Berchmans College<br>(Autonomous),<br>Changanassery, Kerala-<br>686101,India<br>cCenter for<br>Nanotechnology<br>Research, VIT University,<br>Vellore, Tamil Nadu –<br>632014<br>dSchool of Chemical<br>Science, Mahatma Gandhi<br>University, Kottayam,<br>Kerala, 686560, India. | Development and<br>Characterization of<br>Organoclay Filled<br>Polyetherimide<br>Nanocomposites<br>for Anticorrosive coatings   | AB274 |

| 57 | Malavika Ca, Paulose<br>Thomasa and Ajith<br>James Joseb               | aOptoelectronic Lab,<br>St.Berchmans College<br>(Autonomous),<br>Changanassery, Kerala-<br>686101.<br>bPostgraduate & Research<br>Department of Chemistry,<br>St.Berchmans College<br>(Autonomous),<br>Changanassery, Kerala-<br>686101, India   | Exploring Optoelectronic<br>Applications of Chitosan<br>Nanocomposites  | AB277 |
|----|--|--|---|-------|
| 58 | V. Vignesh1, R.<br>Nirmala2, Heon Ju<br>Lee3, and R.<br>Navamathavan1* | 1Division of Physics,<br>School of Advanced<br>Sciences, VIT University<br>Chennai<br>Vandalur – Kelambakkam<br>Road, Chennai 600 127,<br>India<br>2Department of Organic<br>Materials and Fiber<br>Engineering, Chonbuk<br>National University,<br>Jeonju 561 756, South<br>Korea<br>3Department of Nuclear<br>and Energy Engineering,<br>Jeju National University,<br>Jeju – 690 756, South<br>Korea | A study on the mechanical<br>properties of low-dielectric<br>constant SiOC(-H) thin<br>films                              | AB285 |
| 59 | Marulasiddeshwara<br>M. B, P. Raghavendra<br>Kumar.                    | Department of Chemistry,<br>UCS, Tumkur University,<br>Tumkur-572 103,<br>Karnataka, India.  | Hydrogenation of carbonyl<br>compounds to alcohol<br>reaction catalyzed by lignin<br>supported palladium<br>nanoparticles | AB289 |
| 60 | Shijo Thomas*, and<br>Umasankar. V                                     | aSchool of mechanical<br>and Building Sciences,<br>VIT University Chennai<br>campus, Chennai-600<br>127, Tamil Nadu, India   | Influence of MWCNT on<br>Precipitation Hardenable<br>Aluminium Alloy Matrix on<br>Age Hardening and<br>Solutionizing      | AB292 |
| 61 | Niketha Konikkaraa<br>and L. John<br>Kennedy*                          | a Materials Division,<br>School of Advanced<br>Sciences, Vellore Institute<br>of Technology (VIT)<br>University, Chennai<br>Campus, Chennai - 600<br>127, India  | Leather waste/sugar derived<br>graphitizable carbon for high<br>performance supercapacitor<br>applications                | AB299 |

| 62 | P. Bharath Kumar<br>and S. Srinivas*  | a Department of<br>Mathematics, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.   | Pulsating flow of non-<br>Newtonian nanofluid in<br>porous channel with<br>magnetic field  | AB318 |
|----|---|---|--|-------|
| 63 | Suresh Kumar<br>Kailsa,a* Mittal L.<br>Desai,a Hirakendu<br>Basu,b P. K.<br>Sharma,b and Rakesh<br>Kumar Singhalb | aDepartment of Applied<br>Chemistry, S. V. National<br>Institute of Technology,<br>Surat 395007, India<br>bAnalytical Chemistry<br>Division, Bhabha Atomic<br>Research Center,<br>Trombay, Mumbai<br>400085, India  | Influencing Factors on<br>Fluorescence Properties of<br>Mn2+-doped ZnS Quantum<br>Dots with Glutathione for<br>Cu2+ and Hg2+ ions sensing      | AB320 |
| 64 | R.Nanthakumar*1,<br>C.Rose2 , K.Chitra1,<br>S.Seethalakshmi3  | 1. Faculty of Pharmacy,<br>Sri Ramachandra<br>University, Porur,<br>Chennai-600116<br>2. Chief Scientist &<br>Chairman Biology<br>Cluster, CSIR- Central<br>Leather Research<br>Institute, Adyar, Chennai-<br>600020<br>3. Department of<br>Pharmacology, ESI<br>Medical College &<br>PGIMSR, K. K. Nagar,<br>Chennai | SEAWEED MEDIATED<br>BIOFABRICATION OF<br>SILVER<br>NANOPARTICLES<br>AND ITS<br>CHARACTERISATION  | AB325 |
| 65 | R.Karthick <sup>a</sup> , and<br>R.Srinivasan <sup>b*</sup>   | aDepartment of Physics,<br>PSNA College of<br>Engineering and<br>Technology, Dindigul -<br>624307, Tamil Nadu,<br>India.<br>bDepartment of Physics,<br>Thiagarajar College,<br>Madurai - 625009, Tamil<br>Nadu, India.  | A study on the magneto-<br>optic properties of Co <sub>1-</sub><br><sub>x</sub> Zn <sub>x</sub> Fe <sub>2</sub> O <sub>4</sub> nanoferrofluids | AB330 |
| 66 | S.M.Kabbur <sup>a*</sup> ,<br>U.R.Ghodake <sup>a</sup> ,<br>S.S.Suryavanshi <sup>b</sup>                          | aDepartment of Physics<br>and Electronics, Shri<br>Shivaji Mahavidyalaya,<br>Barshi-413411,<br>Solapur, Maharashtra,<br>India<br>b School of Physical<br>Sciences, Solapur<br>University, Kegaon,   | Dysprosium-substitution<br>induced changes in<br>structural,morphological and<br>electrical properties of novel<br>NiCuZn ferrites             | AB334 |

|    |   | Solapur-413255,<br>Maharashtra, India   |  |       |
|----|---|---|--|-------|
| 67 | Shivangi Kosta, <sup>a</sup>  | aCentre for   | Reduced Graphene   | AB346 |
|    | Prerna Bansal, <sup>b</sup> N. K.<br>Sahu <sup>*a</sup> and D.<br>Bahadur <sup>*b</sup> | Nanotechnology<br>Research, VIT University,<br>Vellore -632014, Tamil<br>Nadu, India<br>bDepartment of<br>Metallurgical Engineering<br>and Materials Science,<br>Indian Institute of<br>Technology Bombay,<br>Mumbai 400 076, India   | Oxide/Poly(N-<br>vinylpyrrolidone)<br>Nanocomposite for Ultralow<br>Detection of Ascorbic acid   | AD3+0 |
| 68 | Ritu Singha*, Avyakt<br>Kumar Pathaka,<br>Sanjeev Kumara,b                              | aDepartment of<br>Environmental Science,<br>School of Earth Sciences,<br>Central University of<br>Rajasthan, Kishangarh,<br>Ajmer – 305801,<br>Rajasthan, India.<br>bSchool for<br>Environmental Sciences,<br>Babasaheb Bhim Rao<br>Ambedkar University,<br>Lucknow-226025, Uttar<br>Pradesh, India | Application of Nanoparticles<br>for Remediation of Textile<br>Industry Wastewater  | AB349 |
| 69 | Kalaiselvan C <sup>a</sup> and<br>Lokavarapu Bhaskara<br>Rao <sup>b,*</sup>             | a, b School of Mechanical<br>and Building Science,<br>VIT University-Chennai<br>Campus, Vandalur-<br>Kelambakkam Raod,<br>Chennai - 600 127, Tamil<br>Nadu, India   | Highly Accelerated Life<br>Testing of Nano Ceramic<br>Capacitors using Capacitor<br>Test Board by Lognormal<br>Method and Integrated with<br>PLM Solutions | AB355 |

| 70 | V. Sathiyaraj <sup>1</sup> , G.<br>Balakrishnan <sup>2*</sup> , M.<br>Dinesh <sup>2</sup> , P. Naveen<br>Chandran <sup>1</sup> , C.<br>Thamotharan <sup>1</sup> | 1Department of<br>Automobile Engineering,<br>Bharath Institute of<br>Science and Technology,<br>Bharath University,<br>Chennai-600073, India<br>2Department of<br>Nanotechnology, Centre<br>of Excellence in Patterned<br>Multiferroics &<br>Nanotechnology, Bharath<br>Institute of Science and<br>Technology, Bharath<br>University,<br>Chennai-600073, India | Microstructural and<br>Mechanical Properties of<br>Nanostructured WN Thin<br>films Prepared by DC<br>reactive Magnetron<br>sputtering | AB357 |
|----|---|---|---|-------|
| 71 | Pravin Khandekar*,<br>Kanishka Biswas <sup>2</sup> ,<br>Dhusyant Kothari <sup>1</sup> ,<br>H. Muthurajan <sup>3</sup>   | 1Department of Physics,<br>University of Mumbai,<br>Mumbai, 400 098, India<br>2Research Centre Imarat,<br>Vignyana Kancha,<br>Hyderabad – 500069,<br>India<br>3National Centre for<br>Nanosciences and<br>Nanotechnology,<br>University of Mumbai,<br>Mumbai–400098   | Nano Mechanical Properties<br>of Ceramic Polymer<br>Composite Micro Thruster<br>Developed Using 3D<br>Printing Technology             | AB361 |
| 72 | Shruti Sunil Ranade<br>and Padma<br>Thiagarajan*  | *School of Biosciences<br>and Technology, VIT<br>University, Vellore-<br>632014, Tamil Nadu,<br>India.  | Nanoremediation of Acid<br>Red 2 with alumina<br>nanoparticles and Klebsiella<br>pneumoniae   | AB370 |
| 73 | V. Parthiban <sup>‡</sup> ,<br>SrinuAkula, andA. K.<br>Sahu*  | CSIR - Central<br>Electrochemical Research<br>Institute-Madras Unit,<br>CSIR Madras Complex,<br>Taramani, Chennai -<br>600113, INDIA  | Nafion-Sulfonated Graphene<br>Hybrid Membranes for<br>Direct Methanol Fuel Cells<br>with Reduced Methanol<br>Crossover                | AB379 |

| 74 | Pinapeddavari<br>Mayuri, <sup>a</sup> Chandran<br>Hema Gayathri, <sup>b</sup><br>Annamalai Senthil<br>Kumar <sup>a,*</sup> and<br>Krishnan Sankaran <sup>b</sup> | a Nano and<br>Bioelectrochemistry<br>Research Laboratory,<br>School of Advanced<br>Sciences, Vellore Institute<br>of Technology University,<br>Vellore-632 014, Tamil<br>Nadu, India<br>b Centre for<br>Biotechnology, Anna<br>University, Guindy,<br>Chennai-600 025, Tamil<br>Nadu, India | A Thionine/functionalized-<br>MWCNT+Chitosan<br>Chemically Modified<br>Electrode Based<br>Electrochemical<br>Immunosensor Platform for<br>Rapid Detection of<br>Uropathogenic E.coli         | AB384 |
|----|--|---|--|-------|
| 75 | B. Priyadarshini, U.<br>Anjaneyulu and U.<br>Vijayalakshmi*  | Department of Chemistry,<br>School of Advanced<br>Sciences, VIT University,<br>Vellore-632 014. Tamil<br>Nadu, India.   | Development and<br>Characterization of Ce doped<br>Hydroxyapatite-Fe <sub>3</sub> O <sub>4</sub><br>nanocomposites and its in<br>vitro biological evaluations<br>for biomedical applications | AB390 |
| 76 | *Penchalaiah Palla,<br>and Taraprasanna<br>Saha Babu   | Centre for<br>Nanotechnology<br>Research, VIT University,<br>Vellore - 632 014, Tamil<br>Nadu, India.   | Hexagonal Boron Nitride<br>Encapsulated Nano<br>perforated Graphene Field<br>Effect Transistor for logic<br>applications   | AB400 |
| 77 | Anuraj S. Kshirsagar,<br>Priyesh V. More and<br>Pawan K. Khanna*   | Nano Chemistry and<br>Quantum Dots R & D<br>Lab, Department of<br>Applied Chemistry,<br>Defence Institute of<br>Advanced Technology<br>(DIAT), Ministry of<br>Defence, Govt. of India,<br>Girinagar, Pune- 411025,<br>India   | Synthesis of Copper Indium<br>Diselenide (CuInSe2) by<br>using Organoselenium<br>Precursor   | AB405 |
| 78 | K.Venkatesan,<br>D.Rajan Babu ,<br>Vidya.R   | School of Advanced<br>Sciences, VIT University,<br>Vellore-632014, Tamil<br>Nadu, India.<br>bSchool of BioSciences<br>and Technology, VIT<br>University, Vellore-<br>632014, Tamil Nadu,<br>India.  | Nanosized cobalt ferrite for<br>evaluation against the<br>clinical samples in the form<br>of emulsion  | AB410 |

| 79 | 1RKNR Manepalli,<br>1K.Sivaram, 2K.<br>Pandian, 3G.Giridhar,<br>4BTP Madhav, 1M.<br>Tejaswi & 4V.G.K.M<br>Pisipati | 1Dept. of Physics, The<br>Hindu College, Krishna<br>University,<br>Machilipatnam, AP, India,<br>2Dept.of Inorganic<br>Chemistry,University of<br>Madras,Guindy<br>campus,Chennai,<br>Tamilnadu,India,<br>3Dept. of<br>Nanotechnology, Acharya<br>Nagarjuna University,<br>Nagarjuna Nagar, Guntur,<br>AP, India,<br>4LCRC-R&D,<br>Department of ECE, K L<br>University, Guntur Dt.,<br>AP, India. | Synthesis, Characterisation<br>of Thiol capped Silver<br>nanoparticles and its Effect<br>on liquid crystals                                  | AB425 |
|----|--|---|--|-------|
| 80 | Chaitanya Hiragond,<br>Priyesh V. More* and<br>P. K. Khanna*<br>(DRDO)   |   | Synthesis of HgS and<br>CdS/HgS core/shell<br>nanoparticles by cation<br>exchange reaction of CdS<br>quantum dots                            | AB427 |
| 81 | Rajan Vohra1,<br>Ravinder Singh<br>Sawhney2  | Department of Electronics<br>Technology,Guru Nanak<br>Dev University, Amritsar  | EXPOUNDING<br>TRANSPORT<br>PROPERTIES OF<br>DEOXYRIBONUCLEIC<br>ACID FOR ELECTRONIC<br>APPLICATIONS  | AB447 |
| 82 | <i>S. Harikrishnana*,</i><br>P. Sivasamya, A.<br>Devarajua, and S.<br>Kalaiselvamb                                 | aDepartment of<br>Mechanical Engineering,<br>Adhi College of<br>Engineering and<br>Technology,<br>Sankarapuram,<br>Kancheepuram, India<br>bDepartment of Applied<br>Science and Technology,<br>Anna University,<br>Chennai, India   | Experimental investigation<br>of improved thermal<br>characteristics of<br>SiO2/myristic acid nanofluid<br>as phase change material<br>(PCM) | AB458 |

| 83 | S. Harikrishnana*, G.<br>Rajesh Kumara, A.<br>Devarajua, and S.<br>Kalaiselvamb  | aDepartment of<br>Mechanical Engineering,<br>Adhi College of<br>Engineering and<br>Technology,<br>Sankarapuram,<br>Kancheepuram, India<br>bDepartment of Applied<br>Science and Technology,<br>Anna University,<br>Chennai, India  | Enhanced thermal energy<br>storage behavior of newly<br>prepared nanofluid as phase<br>change material (PCM) | AB459 |
|----|--|--|--|-------|
| 84 | A. Nithya Deva<br>Krupa and R.<br>Vimala*  | School of Biosciences &<br>Technology, VIT<br>University, Vellore, Tamil<br>Nadu, 632 014, India   | AgNPs doped TEOS sol-gel<br>coatings to prevent the<br>adhesion of marine fouling<br>organisms               | AB478 |
| 85 | Chella Santhosh,a,c<br>Pratap kollu,b<br>Andrews Nirmala<br>Grace a* and Amit<br>Bhatnagar c*  | a* Centre for<br>Nanotechnology<br>Research, VIT University,<br>Vellore, Tamil Nadu –<br>632014, India.<br>b DST-INSPIRE Faculty,<br>Department of<br>Metallurgical Engineering<br>and Materials Science,<br>Indian Institute of<br>Technology Bombay,<br>Mumbai 400076, India<br>c* Department of<br>Environmental and<br>Biological Sciences,<br>University of Eastern<br>Finland, FI-70211<br>Kuopio, Finland | Role of carbon based<br>magnetic nanocomposites for<br>environmental remediation                             | AB487 |
| 86 | T.Narendra Reddy <sup>1</sup> ,<br>Vithun S.N <sup>2</sup> , Prakash<br>Vinod <sup>3</sup> , Shrikantha<br>S.Rao <sup>4</sup> , Mervin<br>Herbert <sup>5</sup> | Scientist, Nono<br>Manufacturing<br>Technology<br>Centre(NMTC), Central<br>Manufacturing<br>Technology Institute<br>(CMTI), Bangalore-<br>560022   | Development of high<br>bandwidth closed loop<br>flexure based<br>Nanopositioning system                      | AB491 |

| 87 | Y.Narendra Babu*1,<br>M.Venkateswara<br>Rao2, A.Gopala<br>Krishna3 | *1,2, Department of<br>Mechanical Engineering,<br>Bapatla Engineering<br>College, Bapatla 522101<br>3Department of<br>Mechanical Engineering,<br>JNTUK, Kakinada<br>533001  | Enhancement of Mechanical<br>Properties of<br>ABS/PC - HNT NANO<br>Composites   | AB495 |
|----|--|---|---|-------|
| 88 | P. Sathiyaraj*1, E.JJ<br>Samuel1, S.R<br>Manohara2 L.<br>Gerward   | <ul> <li>1 Medical Gel Dosimetry<br/>Laboratory, Department<br/>of Physics, School of<br/>Advanced Sciences, VIT<br/>University</li> <li>2Department of Physics,<br/>Gulbarga University,<br/>Gulbarga-585 106,<br/>Karnataka, India</li> <li>3Department of Physics,<br/>Technical University of<br/>Denmark, DK-2800<br/>Lyngby, Denmark</li> </ul> | Calculation of Effective<br>atomic number, electron<br>density and Buildup factor<br>for Metharylic acid based<br>polymer gel dosimeter | AB498 |
| 89 | N.<br>JayachandraReddy,<br>and S. Sudha Rani                       | Department of<br>Biochemistry and<br>Molecular Biology,<br>School of Life Sciences,<br>Pondicherry University,<br>Pondicherry 605 014,<br>India   | Multifunctional role of green<br>synthesized Nano Silver and<br>their in vivo toxicity study  | AB502 |

| SI.NO | Author's name  | Affliation of Author's   | Abstract title   | Abstra<br>ct No |
|-------|--|--|--|-----------------|
| 1     | Sapna Rangarajan <sup>1,3</sup> , Shilpa<br>Verekar <sup>2</sup> , Sunil<br>Deshmukh <sup>2</sup> ,J Bellare <sup>5</sup><br>,Arun Balakrishnan <sup>2</sup> ,<br>Veena Agarwal <sup>1</sup> , Somesh<br>Sharma <sup>4</sup> , , Geetanjali<br>Chimote <sup>1*</sup> , R. Vidya <sup>3</sup> | <sup>1</sup> Pharmacology group,<br>Piramal Life Sciences<br>Ltd, Mumbai – 400063,<br>India 2 Natural Products<br>group, Piramal Life<br>Sciences Ltd, Mumbai –<br>400063, India 3 School<br>of Biosciences and<br>Technology, VIT<br>University, VELLORE -<br>India 4 NCE division,<br>Piramal Lifesciences 5<br>Department of Chemical<br>Engineering, IIT<br>Bombay, Mumbai- 4000,<br>India | Synthesis of Silver<br>Nanoparticles by a<br>novel strain of<br>coprophilous fungus<br>PM0651419 and their<br>impact on<br>antibacterial activity<br>of different<br>antibiotics and on<br>wound dressings | AB003           |
| 2     | C.Venkatesh <sup>*a</sup> , R.Boopathy<br>Pradeep <sup>b</sup> ,<br>S.Balasubramani <sup>c</sup> ,<br>A.Dinesh <sup>d</sup>  | * <sup>a</sup> Associate Professor,<br>Department of<br>Mechanical Engineering,<br>Dhirajlal Gandhi College<br>of Technology, Salem<br>b,c,d Graduate<br>Scholars,Department of<br>Mechanical Engineering,<br>Dhirajlal Gandhi College<br>of Technology, Salem   | Design, Development<br>and Performance<br>Evaluation of Bio-<br>Degradable Nano<br>Cutting Fluid   | AB005           |
| 3     | C. Umamaheswari, A.<br>Lakshmanan and N.S.<br>Nagarajan*   | Department of<br>Chemistry, Gandhigram<br>Rural Institute-Deemed<br>University Gandhigram-<br>624 302, Tamilnadu,<br>India   | Phyto- mediated<br>synthesis of gold<br>nanoparticles and<br>their antioxidant,<br>anti-inflammatory<br>and catalytic activity<br>studies  | AB006           |
| 4     | R. Radha Lakshmi <sup>1</sup> , D.<br>Sruthi <sup>2</sup> , K. Prithiv <sup>2</sup> , S.<br>Harippriya <sup>2</sup> and<br>K.R.Aranganayagam <sup>3*</sup>   | 1Department of<br>Aeronautical<br>Engineering,<br>Kumaraguru College of<br>Technology, Coimbatore<br>2Department of Fashion<br>Technology, Kumaraguru<br>College of Technology,<br>Coimbatore<br>3Department of<br>Chemistry, Kumaraguru<br>College of Technology,<br>Coimbatore   | Synthesis of ZnO and<br>Ag/ZnO nanorods:<br>Characterization and<br>Synergistic invitro<br>Biocidal Studies  | AB007           |

| 5  | Manikandan E ,<br>Padmalaya.G, Sreeja.B.S   | <sup>1,2</sup> Research Scholar ,<br><sup>3</sup> Associate Professor,<br>Department of ECE ,SSN<br>College of Engineering<br>Kalavakkam,Chennai-<br>603110  | Laser Surface<br>Textured Metal<br>Structure for<br>Terahertz Absorption  | AB011 |
|----|---|--|---|-------|
| 6  | Jessyamma Kurian <sup>1</sup> ,Jacob<br>Mathew M. <sup>2</sup>  | 1.B.A.M.College,<br>Thuruthicad 2.Mossbauer<br>Research group,<br>S.B.College,<br>Changanassery  | Structural, Magnetic<br>and Mossbauer<br>studies of Magnesium<br>ferrite nanoparticles<br>prepared by<br>Hydrothermal<br>Method | AB014 |
| 7  | P.E.Saranya <sup>a,*</sup> and<br>S.Selladurai <sup>a</sup>   | <sup>a</sup> Ionics lab, Department<br>of Physics, Anna<br>University, Chennai<br>600025, India  | Facile Synthesis of<br>Self-Assembled<br>Flower like<br>Mesoporous Zinc<br>Oxide Nanoflakes for<br>Energy Applications          | AB018 |
| 8  | S.Sumithra and N. Victor<br>Jaya  | Department of Physics,<br>Anna University,<br>Chennai, Tamil Nadu -<br>600025  | Structural, Optical<br>and Magnetization<br>studies of Fe-doped<br>CaSnO3<br>nanoparticles via<br>hydrothermal route            | AB020 |
| 9  | Sravani.K <sup>*a</sup> , Jhansi.S <sup>a</sup> ,<br>SVN.Pammi <sup>b</sup> ,<br>R.Muralikrishna <sup>a</sup> ,<br>T.Vishala <sup>c</sup> | a School of chemistry,<br>AndhraUniversity,<br>Visakhapatnam-<br>533003,India.<br>b NanoThin Film<br>Research Lab(NTFRL),<br>Chungnam National<br>University, Korea South-<br>30564<br>cPharmacy department,<br>AndhraUniversity,<br>Visakhapatnam-<br>533003,India. | Synthesis,<br>characterization of<br>Ag@ZnO Core Shell<br>nanoparticles and<br>their wound healing<br>activity in rats          | AB022 |
| 10 | Krishnaprabha M,<br>Manjunatha Pattabi*   | Department of Materials<br>Science, Mangalore<br>University,<br>Mangalagangothri-<br>574199, India.  | Melastoma<br>Malabathricum<br>Flower Extract<br>Mediated Green<br>Synthesis of Gold<br>Nanoparticles                            | AB024 |

| 11 | Suganya N <sup>1</sup> , Sivakumar<br>EKT <sup>2</sup> and Jaisankar V <sup>1</sup> *  | 1PG and Research<br>Department of<br>Chemistry,<br>Presidency College<br>(Autonomous), Chennai-<br>600005, Tamilnadu,<br>India.<br>2Centre for Nanoscience<br>& Technology, Anna<br>University,Chennai-<br>600025, Tamilnadu,<br>India.  | Conducting<br>polymeric hydrogel<br>electrolyte based on<br>Carboxymethylcellul<br>ose and<br>Polyacrylamide\<br>Polyaniline for<br>Supercapacitor<br>applications.                                 | AB025 |
|----|--|--|---|-------|
| 12 | D. Badmapriya and I.V.<br>Asharani *   | Department of chemistry,<br>School of Advanced<br>Sciences, VIT<br>University, Vellore - 632<br>014  | Catalytic reduction of<br>4- nitrophenol using<br>Actinodaphne<br>Madraspatna Bedd<br>leaves mediated<br>palladium<br>nanoparticles   | AB026 |
| 13 | S. Noormohammad Shareef<br>and K. Chidambaram*   | Sensor Laboratory,<br>Department of Physics,<br>School of Advanced<br>Sciences, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.  | Influence of<br>Hexagonal Boron<br>Nitride and BaTiO <sub>3</sub><br>as Hybrid Fillers on<br>the Structural,<br>Morphological and<br>Dielectric Behaviour<br>of Polyvinyl alcohol<br>nanocomposites | AB027 |
| 14 | Chidambara Kumar K N <sup>a,*</sup> ,<br>Khadeer Pasha S K <sup>b*</sup> ,<br>KalimDeshmukh <sup>c</sup> ,Chidamb<br>aram K <sup>b</sup> , Shakil<br>Muhammad G <sup>a</sup> | aThin Films Lab,<br>Department of Physics,<br>Islamiah College,<br>Vaniyambadi 635752,<br>TN, India<br>bSensors Laboratory,<br>Materials Physics<br>Division, School of<br>Advanced Science,<br>Vellore Institute of<br>Technology, Vellore<br>632014, TN, India.<br>cDepartment of Physics,<br>B S AbdurRehman<br>University, Chennai –<br>600 048, TN, India | Optical analysis of<br>iron doped lead<br>sulfide thin films for<br>Opto-electronic<br>applications   | AB028 |

| 15 | Sowmya Sankaran <sup>a</sup> , Kalim<br>Deshmukh <sup>a</sup> , M. Basheer<br>Ahamed <sup>a*</sup> , S. K. Khadheer<br>Pasha <sup>b</sup> , Kishor Kumar<br>Sadasivuni <sup>c</sup> , Deepalekshmi<br>Ponnamma <sup>d</sup> , Mariam Al-<br>Ali AlMaadeed <sup>d</sup> , K.<br>Chidambaram <sup>b</sup>   | aDepartment of Physics,<br>B. S. Abdur Rahman<br>University, Chennai -<br>600048, Tamil Nadu,<br>India.<br>bDepartment of Physics,<br>School of Advanced<br>Sciences, VIT<br>University, Vellore -<br>632014, TN, India.<br>cMechanical & Industrial<br>Engineering Department,<br>Qatar University, P.O.<br>Box 2713, Doha, Qatar.<br>dCenter for Advanced<br>Materials, Qatar<br>University, P.O. Box   | Investigation on the<br>Electrical Properties<br>of Lithium Ion<br>Conducting Polymer<br>Electrolyte Films<br>Based on<br>Biodegradable<br>Polymer Blends | AB029 |
|----|---|---|---|-------|
| 16 | Kalim Deshmukh <sup>a</sup> ,<br>Sowmya Sankaran <sup>a</sup> , M.<br>Basheer Ahamed <sup>a*</sup> , S. K.<br>Khadheer Pasha <sup>b</sup> , Kishor<br>Kumar Sadasivuni <sup>c</sup> ,<br>Deepalekshmi Ponnamma <sup>d</sup> ,<br>Mariam Al-Ali<br>AlMaadeed <sup>d</sup> , K.<br>Chidambaram <sup>b</sup> | 2713, Doha, Qatar.<br>aDepartment of Physics,<br>B. S. Abdur Rahman<br>University, Chennai -<br>600048, Tamil Nadu,<br>India.<br>bDepartment of Physics,<br>School of Advanced<br>Sciences, VIT<br>University, Vellore -<br>632014, TN, India.<br>cMechanical & Industrial<br>Engineering Department,<br>Qatar University, P.O.<br>Box 2713, Doha, Qatar.<br>dCenter for Advanced<br>Materials, Qatar<br>University, P.O. Box<br>2713, Doha, Qatar. | Studies on the<br>Electrical Properties<br>of Graphene Oxide<br>Reinforced Poly (4-<br>styrenesulfonic acid)<br>and Polyvinyl alcohol<br>Blend Composites | AB030 |
| 17 | D.Arthisree <sup>1</sup> , Annamalai<br>Senthil Kumar <sup>2</sup> , Girish<br>M.Joshi <sup>1*</sup>  | <ul> <li>2713, Dona, Qatar.</li> <li>1Polymer</li> <li>Nanocomposite</li> <li>Laboratory, Centre for</li> <li>Crystal growth, School of</li> <li>Advanced Sciences, VIT</li> <li>University, Vellore-</li> <li>632014, TN, India.</li> <li>2Nano and</li> <li>Bioelectrochemistry</li> <li>Research Laboratory,</li> <li>Department of</li> <li>Chemistry, School of</li> <li>Advanced Sciences,</li> <li>Vellore Institute of</li> </ul>           | Morphology and<br>Admittance<br>spectroscopy of<br>Cellulose<br>acetate/Graphene<br>Quantum Dots<br>Nanocomposites  | AB032 |

|    |   | Technology University,<br>Vellore 632 014, India.  |  |            |
|----|---|--|--|------------|
| 18 | S. Maria Dhivya1, S.M.<br>Sathiya1, Subramanian<br>Mugesh2, Maruthamuthu<br>Murugan2,<br>M. A. Jothi Rajan* | 1,*Department of<br>Physics, Arul Anandar<br>College (Autonomous),<br>Karumathur, Madurai–<br>625 514, India<br>2Department of<br>Microbial Technology,<br>School of Biological<br>Sciences, Madurai<br>Kamaraj University,<br>Madurai, 625 021, India | Evaluation of<br>Antibacterial<br>Potential of CS/Fe <sub>3</sub> O <sub>4</sub><br>Nanocomposite based<br>Plate Count Method  | AB035<br>M |
| 19 | Srinivasarao. Udara, and H<br>.C Hadimani <sup>*</sup>  | <sup>a</sup> Electronics &<br>Communication, S T J<br>Institute of Technology,<br>Ranebennur - 581115,<br>Karnataka, India.  | Fabrication of<br>MEMS/NEMS<br>material coating<br>Systems for the<br>Detection of<br>Response and<br>Analysis with<br>Analytes Using<br>Omnicant<br>Experimentation | AB037      |
| 20 | Kamala Priya M. R. and<br>Priya R. Iyer   | Postgraduate and<br>Research Department of<br>Biotechnology<br>Womens Christian<br>College, College Road,<br>Chennai- 600006   | APPLICATIONS OF<br>THE GREEN<br>SYNTHESIZED<br>GOLD<br>NANOPARTICLES<br>– ANTIMICROBIAL<br>ACTIVITY, WATER<br>PURIFICATION<br>SYSTEM, DRUG<br>DELIVERY<br>SYSTEM     | AB038      |

| 21 | G. Apsana <sup>ab</sup> , P. P.<br>George <sup>a</sup> *, N. Devanna <sup>b</sup>                     | aDepartment of<br>chemistry, Madanapalle<br>Institute of Technology<br>and Science, (Affiliated<br>to JNTUA, Ananthapur<br>and approved by AICTE,<br>New Delhi) Post Box No.<br>14, Angallu, Manapalle-<br>517325, Andhra Pradesh,<br>India<br>bDepartment of<br>chemistry, JNT<br>University,<br>Ananthapuram | Optical properties of<br>biosynthesized<br>Mg <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub><br>nanoparticles using<br>plant extract of<br>Ocimum sanctum  | AB039 |
|----|---|--|--|-------|
| 22 | B.Shalini <sup>1</sup> , A.Ruban<br>Kumar <sup>2</sup> , A.Mary Saral <sup>2</sup>                    | School of Advanced<br>sciences, VIT University,<br>Vellore 632014, India   | Synthesis of pure<br>hydroxyapatite (Ca <sub>10</sub><br>(PO <sub>4</sub> ) <sub>6</sub> (OH) <sub>2</sub> ) by Sol<br>–gel method and<br>the drug loaded in<br>presence and absence<br>of natural polymer<br>for the application of<br>drug delivery. | AB049 |
| 23 | Venkatesh D and Jaisankar<br>V <sup>*</sup>   | PG & Research<br>department of chemistry,<br>Presidency<br>College(Autonomous),Ch<br>ennai–600 005, Tamil<br>Nadu, India.  | Synthesis and<br>Characterisation of<br>Polyurethane<br>nanocomposite from<br>Vegetable Oil with<br>different<br>Diisocyanates   | AB050 |
| 24 | C. Subashini <sup>a</sup> , D.<br>Prabhakaran <sup>b,</sup> * and M.<br>Akhila Maheswari <sup>b</sup> | a School of Advanced<br>Sciences, Chemistry<br>Division, Vellore<br>Institute of Technology –<br>University, Chennai 600<br>127, India.<br>b School of Advanced<br>Sciences, Department of<br>Chemistry, Vellore<br>Institute of Technology –<br>University, Vellore 632<br>104, India.                        | Synthesis of<br>Mesoporous Silica<br>Monoliths –A Novel<br>Approach towards<br>Fabrication of Solid-<br>State Optical Sensors<br>for the Smart Naked<br>Eye Sensing of Ultra<br>Trace Copper Ions  | AB054 |
| 25 | Mary Thangam M.A,<br>Chellapandian Kannan <sup>*</sup>  | Department of<br>Chemistry,<br>Manonmaniam<br>Sundaranar University,<br>Tirunelveli–627 012,<br>Tamilnadu, India.  | A novel Iron<br>substituted bimetallic<br>Aluminosilicate<br>molecular sieves<br>synthesis & its<br>characterization   | AB059 |

| 26 | R. Senthilkumar <sup>a,b</sup> , Mohan<br>Raj S <sup>a,b</sup> , Dileep V Raj <sup>a,b</sup> , S.<br>Ramakrishnan <sup>a,b</sup> ,<br>DuraisamyKumaresan <sup>a,b</sup> *,<br>Nikhil K. Kothurkar <sup>a,b</sup> *. | aCenter of Excellence in<br>Advanced Materials &<br>Green Technologies<br>(CoE – AMGT)<br>Amrita School of<br>Engineering,<br>Coimbatore,Amrita<br>Vishwa Vidyapeetham,<br>Amrita University,India<br>bDepartment of<br>Chemical Engineering<br>and Materials Science,<br>Amrita School of<br>Engineering, Coimbatore,<br>Amrita Vishwa<br>Vidyapeetham, Amrita<br>University, India                             | Characteristics of low<br>temperature<br>thermally reduced<br>graphene oxide and<br>its application as dye<br>sensitized solar cell<br>counter electrode | AB061 |
|----|---|--|--|-------|
| 27 | S.M. Sathiya <sup>a</sup> , G.S.<br>Okram <sup>b</sup> , S. Maria Dhivya <sup>a</sup> ,<br>Subramanian Mugesh <sup>c</sup> ,<br>Maruthamuthu Murugan <sup>c</sup> ,<br>M.A. Jothi Rajan <sup>*</sup>                | a,*Department of<br>Physics, Arul Anandar<br>College (Autonomous),<br>Karumathur, Madurai –<br>625 514, Tamil Nadu,<br>India.<br>bUGC DAE Consortium<br>for Scientific Research,<br>University campus,<br>Kandva Road, Indore –<br>452 001, Madhya<br>Pradesh, India.<br>cDepartment of<br>Microbial Technology,<br>School of Biological<br>Sciences, Madurai<br>Kamaraj University,<br>Madurai - 625 021, Tamil | Antimicrobial<br>Resistance and<br>Mechanism of Gram<br>Positive Bacteria<br>Staphylococcus<br>aureus MTCC 3160<br>in CS/ZnO<br>Nanocomposites           | AB064 |
| 28 | S.Magibalan a*,<br>P.Senthilkumar b,<br>C.Senthilkumar c, M.Prabu<br>d and T.V.Chirsty e  | Nadu, India.<br>a,b,d Department of<br>Mechanical Engineering,<br>K.S.R. College of<br>Engineering,<br>Tiruchengode, Tamil<br>Nadu, India<br>c Department of<br>Manufacturing<br>Engineering, Annamalai<br>University,<br>Chidambaram,<br>Tamil Nadu, India<br>e School of Mechanical<br>Sciences, Karunya   | TRIBOLOGICAL<br>BEHAVIOUR OF<br>ALUMINIUM<br>ALLOY 8011  | AB071 |

|    |   | University, Coimbatore,<br>Tamil Nadu, India  |   |       |
|----|---|---|---|-------|
| 29 | M. Prakasam <sup>a,b</sup> and P. M.<br>Anbarasan <sup>a,b*</sup>   | aDepartment of Physics,<br>Periyar University, Salem<br>- 636 011, Tamil Nadu<br>India.<br>bCentre for Nanoscience<br>and Nanotechnology,<br>Periyar University, Salem<br>- 636 011, Tamil Nadu,<br>India   | Stilbene Based<br>Organic Dye as<br>Efficient Sensitizer<br>for NLO and<br>Dye-Sensitized Solar<br>Cells: A First<br>Principle Study                                | AB072 |
| 30 | Aldin Justin Sundararaj,<br>Austin Lord Tennyson,<br>Allison Edward, Bhaskar<br>Gupta, Shruti Panicker                            | Propulsion and High<br>Enthalpy Laboratory,<br>Aerospace department,<br>Karunya University,<br>Coimbatore, Tamil Nadu<br>641114, India  | NUMERICAL<br>INVESTIGATION<br>OF THE<br>CONVECTIVE<br>HEAT TRANSFER<br>OF REFINED<br>KEROSENE-<br>ALUMINA<br>NANOFLUID<br>UNDER LAMINAR<br>AND TURBULENT<br>REGIME. | AB073 |
| 31 | E. Monisha, <sup>a</sup> Arun K<br>Prasad, <sup>b,*</sup> A. Das, <sup>b</sup> S.<br>Muthuraja, <sup>a</sup> S.Dhara <sup>b</sup> | a Sensor System<br>Technology, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.<br>bNanomaterials and<br>Sensors Section,<br>Materials Science Group,<br>Indira Gandhi Centre for<br>Atomic Research, HBNI,<br>Kalpakkam 603102,<br>Tamil Nadu, India. | Portable alcohol<br>sensor module based<br>on SnO <sub>2</sub> and CuO<br>Nanoparticles   | AB075 |

| 32 | S.Helen, A. Ruban Kumar <sup>*</sup>            | Centre for Crystal                           | MORPHOLOGY                              | AB082   |
|----|---|--|---|---------|
|    |   | Growth, Department of                        | STUDIES ON                              |         |
|    |   | Physics, School of<br>Advanced sciences, VIT | HYDROXYAPATIT<br>E WITH POLYMER         |         |
|    |   | University, Vellore                          | BLENDS USING                            |         |
|    |   | 632014, India                                | SOL-GEL METHOD                          |         |
|    |   | 05201 I, IIdia                               | SOL OLL METHOD                          |         |
| 33 | Ramasamy  | aDepartment of                               | Synthesis and studies                   | AB083   |
|    | Ganesamoorthy <sup>a</sup> ,                    | Chemistry, School of                         | of bay substituted D-                   |         |
|    | Radhakrishnan Vidya <sup>b</sup> and            | Advanced Sciences, VIT                       | A-D type                                |         |
|    | Pachagounder Sakthivel <sup>a*</sup> .          | University, Vellore-<br>632014, Tamil Nadu,  | perylenediimide<br>based small molecule |         |
|    |   | India.                                       | acceptor derivatives                    |         |
|    |   | bSchool of BioSciences                       | for organic solar cell                  |         |
|    |   | and Technology, VIT                          | and its antimicrobial                   |         |
|    |   | University, Vellore-                         | applications                            |         |
|    |   | 632014, Tamil Nadu,                          | upplications                            |         |
|    |   | India.                                       |   |         |
| 34 | Upasana Gulati, U. Chinna                       | <sup>a</sup> Department of                   | RGO/CuO Catalysed                       | AB084   |
|    | Rajesh and Diwan S.                             | Chemistry, University of                     | Decarboxylative                         |         |
|    | Rawat*  | Delhi, Delhi-110007,                         | Tandem Coupling                         |         |
|    |   | India, Fax: 91-11-                           | among Proline,                          |         |
|    |   | 27667501; Tel: 91-11-                        | Aldehydes and                           |         |
| 35 | S. Norresimment of K                            | 27662683                                     | Alkynes<br>Fabrication of Fiber         | A D 097 |
| 35 | S. Narasimman a, K.<br>Harish Babu a, L.        | aSchool of Electronics<br>Engineering, VIT   | Optic Based                             | AB087   |
|    | Balakrishnan b, *, S.R.                         | University, Vellore 632                      | Temperature Sensor                      |         |
|    | Meher b, R. Sivacoumarc                         | 014, India.                                  | Temperature Sensor                      |         |
|    | and   | bDepartment of Physics,                      |   |         |
|    | Z.C. Alex c                                     | School of Advanced                           |   |         |
|    |   | Sciences, VIT                                |   |         |
|    |   | University, Vellore 632                      |   |         |
|    |   | 014, India.                                  |   |         |
|    |   | cDepartment of Sensor                        |   |         |
|    |   | and Biomedical                               |   |         |
|    |   | Technology, School of                        |   |         |
|    |   | Electronics Engineering,                     |   |         |
|    |   | VIT University, Vellore                      |   |         |
| 36 | G .Vanitha Kumari <sup>1</sup> ,                | 632 014, India.<br>1 PG and Research         | Chitosan-Silver                         | AB088   |
| 50 | S.Asha <sup>1</sup> , A. Nimrodh                | Department of physics,                       | incorporated                            | ADU00   |
|    | Ananth <sup>2</sup> T. Mathavan <sup>3</sup> M. | Arul Anandar College,                        | Graphene Oxide                          |         |
|    | A. Jothi Rajan <sup>1*</sup>                    | Madurai, India                               | based Aerogel for                       |         |
|    |   | 2 MOE Key Lab for                            | Biomedical                              |         |
|    |   | Macromolecular                               | Applications                            |         |
|    |   | synthesis and                                |   |         |
|    |   | Functionalization,                           |   |         |
|    |   | Department of polymer                        |   |         |
|    |   | Science and Engineering,                     |   |         |
|    |   | Zhejiang University, P.                      |   |         |

|    |  | R. China<br>3 PG and Research<br>Department of physics,<br>NMSSVN College<br>Madurai.   |   |       |
|----|--|---|---|-------|
| 37 | P. Lokanatha Reddya,<br>Kalim Deshmukhb, K.<br>Chidambarama, Basheer<br>Ahamedb, Kishor Kumar<br>Sadasivunic, Deepalekshmi<br>Ponnammad, S. K.<br>Khadheer Pashaa* | aDepartment of Physics,<br>School of Advanced<br>Sciences, VIT<br>University, Vellore -<br>632014, TN, India.<br>bDepartment of Physics,<br>B. S. Abdur Rahman<br>University, Chennai -<br>600048, Tamil Nadu,<br>India.<br>cMechanical & Industrial<br>Engineering Department,<br>Qatar University, P.O.<br>Box 2713, Doha, Qatar.<br>dCenter for Advanced<br>Materials, Qatar<br>University, P.O. Box<br>2713, Doha, Qatar. | Effect of Poly<br>ethylene glycol on<br>Structural, Thermal<br>and<br>Photoluminescence<br>properties of CdO<br>Nanomaterials for<br>optoelectronic<br>applications | AB090 |
| 38 | Durgesh Kumar Singh <sup>a</sup> , S.<br>Suresh <sup>a</sup>   | <sup>[a</sup> Department of<br>Mechanical Engineering,<br>National Institute of<br>Technology,<br>Tiruchirappalli- 620015,<br>Tamil Nadu, India   | EFFECT OF<br>THERMAL<br>CYCLING ON<br>NANO ENHANCED<br>MYO-INOSITOL<br>FOR SOLAR<br>THERMAL<br>ENERGY<br>STORAGE  | AB092 |
| 39 | S. S. Bandgar, K. V. Zipare<br>and G. S. Shahane <sup>*</sup>  | Department of<br>Electronics, DBF<br>Dayanand College of<br>Arts and Science,<br>Solapur-413002, MS,<br>India   | Temperature<br>Sensitive Ferrofluid<br>for Smart Cooling  | AB093 |
| 40 | K. V. Zipare, S. S. Bandgar<br>and G. S. Shahane <sup>*</sup>  | Department of<br>Electronics, DBF<br>Dayanand College of<br>Arts and Science,<br>Solapur-413002, MS,<br>India   | Structural, Magnetic<br>and Rheological<br>Behaviour of Mn-Zn<br>Ferrofluid   | AB094 |

| 41  | Khairujjaman Laskar and                     | Department of            | Synthesis of nano-                    | AB095      |
|-----|---|--------------------------|---------------------------------------|------------|
|     | Abdul Rauf <sup>*</sup>                     | Chemistry, Aligarh       | silver,                               | 1 ID 0 / C |
|     |   | Muslim University,       | characterization and                  |            |
|     |   | Aligarh, 202002, Uttar   | their antibacterial                   |            |
|     |   | Pradesh, India           | properties                            |            |
| 42  | K. Johnson <sup>a*</sup> , J.               | a,b,c Research and       | Synthesis, physical                   | AB099      |
|     | Puspharajan <sup>b*</sup> , Mareena         | Development              | and morphological                     |            |
|     | Joseph <sup>c</sup>                         | Department, Travancore   | characterization of                   |            |
|     | 1   | Titanium Products Ltd.,  | Titanium dioxide                      |            |
|     |   | Kochuveli,               | nanoparticles by wet                  |            |
|     |   | Thiruvananthapuram-      | chemical method for                   |            |
|     |   | 695021, India            | catalytic applications                |            |
| 43  | P. Rubalajyothi <sup>a</sup> and L.C.       | aDepartment of Medical   | Structural and                        | AB105      |
|     | Nehru <sup>a, *</sup>                       | Physics, School of       | Photoluminescence                     |            |
|     |   | Physics, Bharathidasan   | Properties of                         |            |
|     |   | University,              | BaCaSO <sub>4</sub> :Dy <sup>3+</sup> |            |
|     |   | Tiruchirappalli-620 024, | Phosphor By                           |            |
|     |   | Tamilnadu, India.        | Combustion                            |            |
|     |   |                          | Techniques                            |            |
| 44  | R. Padma <sup>*</sup> , and V.              | Semiconductor Devices    | Statistical Analysis of               | AB108      |
|     | Rajagopal Reddy                             | Lab, Department of       | the Current-Voltage                   |            |
|     |   | Physics, Sri             | (I-V) and                             |            |
|     |   | Venkateswara             | Capacitance-Voltage                   |            |
|     |   | University, Tirupati,    | (C-V) characteristics                 |            |
|     |   | India.                   | of the Au/Ir/n-InGaN                  |            |
|     |   |                          | Schottky Barrier                      |            |
|     |   |                          | Diodes                                |            |
| 45  | S. C. Bhisea, D. V.                         | aAnalytical Chemistry    | Controlled Synthesis                  | AB110      |
|     | Awalea, M. M. Vadiyara,                     | and Material Science     | of Nanostructured                     |            |
|     | S. K. Patila, B. N. Kokarea,                | Research Laboratory,     | Nickel oxide Thin                     |            |
|     | A.V. Ghuleb, and S. S.                      | Department of            | Film for                              |            |
|     | Kolekara*                                   | Chemistry, Shivaji       | Supercapacitor                        |            |
|     |   | University, Kolhapur-    | Application                           |            |
|     |   | 416004, Maharashtra,     |                                       |            |
|     |   | India                    |                                       |            |
|     |   | bGreen Nanotechnology    |                                       |            |
|     |   | Laboratory, Department   |                                       |            |
|     |   | of Chemistry, Shivaji    |                                       |            |
|     |   | University, Kolhapur     |                                       |            |
|     |   | 416004, Maharashtra,     |                                       |            |
| 4 - |   | India.                   |                                       |            |
| 46  | S. Ponmudi <sup>1</sup> , R.                | 1Department of Physics,  | Effects of sputtering                 | AB114      |
|     | Sivakumar <sup><math>2*</math></sup> and C. | Alagappa Chettiar        | power and substrate                   |            |
|     | Sanjeeviraja <sup>1</sup>                   | College of Engineering   | temperature on the                    |            |
|     |   | and Technology,          | optical properties of                 |            |
|     |   | Karaikudi-630003, India  | Al2O3:Cr2O3 thin                      |            |
|     |   | 2Department of Physics,  | films                                 |            |
|     |   | Alagappa University,     |                                       |            |
|     |   | Karaikudi-630003, India  |                                       |            |

| 47 | Varsha Kozhissheri <sup>1</sup> , T<br>Raguram <sup>2</sup> , K S Rajni <sup>2*</sup>  | 1 Majlis Arts and Science<br>College Puramannur,<br>Malappuram, Kerala,<br>India<br>2 Dept. of Sciences,<br>Amrita School of<br>Engineering, Amrita<br>Vishwa Vidyapeetham,<br>Amrita Nagar, Ettimadai,<br>Coimbatore – 641 112,<br>Tamilnadu, India    | Synthesis and<br>Characterization of<br>Zinc Ferrite<br>Nanoparticle<br>Prepared by Sol-Gel<br>Technique.  | AB117 |
|----|--|---|--|-------|
| 48 | H. Vignesh <sup>1</sup> , V. Vishnu <sup>2</sup> , P.<br>Balakumar <sup>3</sup> , T. Raguram <sup>4</sup><br>and K. S. Rajni <sup>5*</sup> | Department of Sciences,<br>Amrita Vishwa<br>Vidyapeetham, Amrita<br>School of Engineering,<br>Amrita nagar, Ettimadai,<br>Coimbatore, Tamilnadu,<br>India   | Structural,<br>Compositional and<br>Morphological<br>Analysis of<br>Cobalt Ferrite<br>(CoFe2O4)<br>Nanoparticles by<br>Biological Synthesis<br>Method                                | AB118 |
| 49 | A K Rameesa <sup>1</sup> , T<br>Raguram <sup>2</sup> , K S Rajni <sup>2*</sup>   | 1 Majlis Arts and Science<br>College Puramannur,<br>Malappuram, Kerala,<br>India<br>2 Dept. of Sciences,<br>Amrita School of<br>Engineering, Amrita<br>Vishwa Vidyapeetham,<br>Amrita Nagar,<br>Ettimadai, Coimbatore –<br>641 112, Tamilnadu,<br>India | Synthesis and<br>Characterization of<br>Cobalt Ferrite<br>Nanoparticle<br>Prepared by Sol-Gel<br>Technique   | AB119 |
| 50 | Manjunath Hullikere M,<br>and Chandrashekhar G.<br>Joshi <sup>*</sup>  | Department of<br>Biochemistry, Mangalore<br>University, Chikka<br>Aluvara, Kushalnagar,<br>Kodagu, Karnataka,<br>India- 571 232.  | Characterization,<br>antioxidant and<br>antimicrobial activity<br>of Silver<br>nanoparticles<br>synthesized using<br>marine endophytic<br>fungus-<br>Cladosporium<br>cladosporioides | AB122 |

| 51 | C.A.R. Maria Sahayaraj <sup>a</sup> ,<br>Mohan A <sup>b</sup> , Rajesh. S <sup>c</sup> *<br>Rathes Kannan R <sup>b</sup> | aDepartment of physics,<br>St. Joseph's College,<br>Bangalore – 560027,<br>India<br>bThin film laboratory,<br>Department of physics,<br>Karunya University,<br>Coimbatore -641 114.<br>cDepartment of<br>Nanoscience and<br>Technology, Karunya<br>University, Coimbatore -<br>641 114. | Investigation on<br>Impact of annealing<br>in the SnSe films by<br>thermal evaporation<br>method                  | AB124 |
|----|--|---|---|-------|
| 52 | R.Kesavamoorthi,<br>A.N.Vigneshwaran and<br>C.Ramachandra Raja <sup>*</sup>  | Department of Physics,<br>Government Arts College<br>(Autonomous),<br>Kumbakonam - 612 002.<br>India.   | Synthesis and<br>characterization of<br>Mg mixed Zn ferrite<br>nanoparticles                                      | AB126 |
| 53 | S. Punitha and L.C. Nehru <sup>*</sup>   | Department of Medical<br>Physics, School of<br>Physics, Bharathidasan<br>University,<br>Tiruchirappalli-620 024,<br>Tamilnadu, INDIA  | Direct Synthesis of<br>Iron Oxide (α-<br>Fe2O3)<br>Nanoparticles by the<br>Combustion<br>Approach                 | AB128 |
| 54 | Vallem Sowjanya <sup>a</sup> , Kasturi<br>V. Bangera <sup>a, *</sup> and G. K.<br>Shivakumar <sup>b</sup>                | aDepartment of Physics,<br>National institute of<br>technology, Sutathkal-<br>575025, Karnataka, India<br>bDepartment of Physics,<br>NMAM Institute of<br>Technology, Nitte-<br>574110, Karnataka, India  | Effect of annealing<br>and substrate<br>temperature on the<br>structural properties<br>of In2Te3 thin films       | AB129 |
| 55 | Anita Rajkumar Ghandhe <sup>1*</sup><br>and Basavaraja Sannakki <sup>2</sup>   | 1Department of Soil<br>Science & Agriculture<br>Chemistry, University of<br>Horticultural Science,<br>Bagalkot-587 104<br>2Department of Post<br>Graduate Studies and<br>Research in Physics,<br>Gulbarga University,<br>Gulbarga- 585 106,<br>Karnataka.                               | The Mechanical<br>Properties of Poly<br>(Methyl<br>Methacrylate)<br>(PMMA)/ZrO2<br>Nanocomposite<br>Polymer Films | AB130 |
| 56 | Riju K Thomas, S.<br>Prasanth and C.<br>Sudarsanakumar <sup>a</sup>  | a School of Pure and<br>Applied Physics,<br>Mahatma Gandhi<br>University, Kottayam,<br>Kerala India, 686560.  | Calorimetric and<br>Spectroscopic Study:<br>the interaction of L –<br>Cysteine<br>functionalised<br>Selenium      | AB132 |

|    |   |  | Nanoparticles with calf Thymus DNA   |       |
|----|---|--|--|-------|
| 57 | V.K.Stalina, M.Kirithikab*<br>and T.Prabuc  | a Professor, Department<br>of Civil Engineering,<br>CEG, Anna University,<br>Chennai – 600025, Tamil<br>Nadu, India. b<br>Research Scholar,<br>Department of Civil<br>Engineering, CEG, Anna<br>University, Chennai –<br>600025, Tamil Nadu,<br>India. c Assistant<br>Professor, Department of<br>Civil Engineering, EBET<br>Institutions, Tiruppur -<br>638108, Tamil Nadu,<br>India. | Study on the Strength<br>behavoiur of Soil<br>with Nano Flyash and<br>Nano Cement                                      | AB139 |
| 58 | P. Swapna, and S.<br>Venkatramana Reddy*  | Department of Physics,<br>Sri Venkateswara<br>University, Tirupati-<br>517502, A.P. India.   | Synthesis and<br>Structural properties<br>of (Co, Al) co-<br>doped ZnO<br>nanoparticles                                | AB140 |
| 59 | B. Sreenivasulu, S.<br>Venkatramana Reddy* and<br>P. Venkateswara Reddy   | Department of Physics,<br>Sri Venkateswara<br>University, Tirupati-<br>517502, A.P. India.   | STRUCTURAL,<br>OPTICAL AND<br>MAGNETIC<br>PROPERTIES OF Ni<br>DOPED ZnS<br>NANOPARTICLES                               | AB141 |
| 60 | Manasi Manoj Karkare <sup>*</sup> ,<br>Chaitanya Vivek Bhave  | SIES Graduate School of<br>Technology, Sri<br>Chandrasekaendra<br>Saraswathy Vidyapuram,<br>Plot1-C, D & E, Sector<br>V, Nerul, Navi Mumbai.   | Synthesis of<br>transition metal<br>doped titanium<br>dioxide nanoparticles  | AB146 |
| 61 | K. Kumara a*, and S.M.<br>Dharmaprakasha  | aDepartment Of Studies<br>in Physics, Mangalore<br>University,<br>Mangalagangothri – 574<br>199, Karnataka, India.   | Surface Modification<br>of Rare Earth Ion<br>(Dy3+) Doped YVO4<br>Nanoparticles Using<br>Natural Surfactant<br>Saponin | AB151 |
| 62 | P. Naveen Kumar, Neena<br>Bachan, V. Chandrakala,<br>D. J. Sharmila, J. Sahaya<br>Selva Mary, W. Jothi<br>Jeyarani and J. Merline<br>Shyla* | Department of Physics,<br>Energy Nanotechnology<br>Centre (ENTeC),<br>Loyola Institute of<br>Frontier Energy (LIFE),   | Relative Analysis of<br>Plasmonic Impact of<br>Silver and<br>Aluminium<br>Nanoparticles on<br>SnO2 Nanoparticles       | AB157 |

|    |  | Loyola College, Chennai<br>- 600 034.   | for Photovoltaic<br>Applications   |       |
|----|--|---|--|-------|
| 63 | Saranya Ramachandran<br>and A. Sivasamy*                                 | Chemical Engineering<br>Area, CSIR-Central<br>Leather Research<br>Institute, Adyar,<br>Chennai-600020.  | Nanocrystalline ZnO<br>as a visible active<br>photocatalyst for the<br>degradation of<br>Benzene-1,4-diol  | AB158 |
| 64 | Arun Kumar Prusty#, Sunil<br>Bhand*                                      | Biosensor Lab,<br>Department of chemistry,<br>BITS, Pilani-K.K. Birla<br>Goa Campus, Goa-<br>403726, India  | An electrochemical<br>sensor for 2,4-D<br>estimation in water<br>based on Molecular<br>imprinted polymer   | AB159 |
| 65 | B. Saravanakumar,* V.<br>Saravanan, V. Umadevi,<br>and S. Maruthamuthu   | <sup>a</sup> Department of Physics,<br>Mahalingam College of<br>Engineering and<br>Technology, Pollachi,<br>Tamilnadu, India-64203  | Preparation of CTAB<br>assisted V2O5<br>nanostructures and its<br>supercapacitive<br>features  | AB162 |
| 66 | Chaitra.V*, N. Pradeep1, A<br>Nirmala Grace2, Uma.V1,<br>Raja Sellappan3 | *1Department of<br>Nanoscience and<br>Technology, Mount<br>Carmel College,<br>Bengaluru<br>2Centre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore<br>3 Department of Micro<br>and Nanoelectronics,<br>School of Electronics<br>Engineering (SENSE),<br>VIT University, Vellore | Surface modification<br>of PANI films using<br>Ag nanoparticles to<br>enhance the sensing<br>properties to detect<br>the foodborne<br>microorganisms | AB171 |
| 67 | Midhun Mohan Va, *, and<br>Sajeeb A Ma                                   | aDepartment of<br>Mechanical Engineering,<br>Government Engineering<br>College, Kozhikode - 673<br>005, Kerala, India.  | Improving the<br>Efficiency of DASC<br>by Adding<br>CeO2/CuO Hybrid<br>Nanoparticles in<br>Water   | AB172 |
| 68 | R Janani, Sumithra Sivadas<br>Menon and Shubra Singh                     | Crystal Growth Centre,<br>Anna University,<br>Chennai – 600 025,<br>Tamil Nadu, India.  | An approach to<br>improve the<br>Photocatalytic<br>activity of Ga1-<br>xZnxN1-xOx<br>oxynitride with<br>Graphene oxide                               | AB176 |

| 69 | R. Deepak Selvakumar,                             | aThe Center for Fluid    | A new model for         | AB178 |
|----|---|--------------------------|-------------------------|-------|
| 07 | and S. Dhinakaran*                                | Dynamics, Discipline of  | effective viscosity of  | AD1/0 |
|    |   | Mechanical Engineering,  | nanofluids based on     |       |
|    |   | Indian Institute of      | particle size           |       |
|    |   | Technology Indore,       | distribution (PSD)      |       |
|    |   | Khandwa Road, Simrol,    | analysis                |       |
|    |   | Indore $-453552$ ,       | allarysis               |       |
|    |   | Madhya Pradesh, India.   |                         |       |
| 70 | Suchitra S.M*, P. Ramana                          | a) Nanomaterials and     | Synthesis and           | AB193 |
| 70 | Reddy. and N. K.                                  | Crystal growth           | characterization of     | AD195 |
|    | Udayashankar                                      | Laboratory, Department   | graphitic carbon        |       |
|    | Odayashankar                                      | of Physics,              | nitride nanotubes       |       |
|    |   | National Institute of    | using Porous Anodic     |       |
|    |   | Technology, Surathkal,   | Alumina templates       |       |
|    |   | Mangalore, Karnatak.,    | Alumna complates        |       |
| 71 | Mina Zare, K. Namratha,                           | Centre for Materials     | Facile One-step         | AB194 |
| /1 | K. Byrappa *                                      | Science and Technology,  | Fabrication of Green    |       |
|    | is. Djruppu                                       | Vijnana Bhavan,          | Synthesized ZnO- Ag     |       |
|    |   | University of Mysore,    | Nanocomposite           |       |
|    |   | 570006¬¬, Mysore, India  | Under Mild              |       |
|    |   |                          | Hydrothermal            |       |
|    |   |                          | Conditions by           |       |
|    |   |                          | Thymus vulgaris         |       |
| 72 | N.Pradeep1*, V.Chaitra1,                          |                          | Synthesis of catalyst - | AB195 |
|    | Uma.V2, A. Nirmala                                | 1Department of           | substrate free MgO      |       |
|    | Grace3  | Nanoscience and          | nanocubes used as       |       |
|    |   | Technology, Mount        | flexible gas sensor on  |       |
|    |   | Carmel College,          | over head projector     |       |
|    |   | Bengaluru-560052, India. | (OHP) sheet             |       |
|    |   | 2Department of           |                         |       |
|    |   | Electronics, Mount       |                         |       |
|    |   | Carmel College,          |                         |       |
|    |   | Bengaluru-560052,        |                         |       |
|    |   | India.                   |                         |       |
|    |   | 3 Center for             |                         |       |
|    |   | Nanotechnology           |                         |       |
|    |   | Research, VIT            |                         |       |
|    |   | University, Vellore-     |                         |       |
|    |   | 632014, India.           |                         |       |
| 73 | Shilpa C <sup>1*</sup> , N.Pradeep <sup>1</sup> , |                          | Synthesis and           | AB196 |
|    | Uma.V <sup>2</sup>                                | 1Department of           | characterization of     |       |
|    |   | Nanoscience and          | Silver coated multi     |       |
|    |   | Technology, Mount        | walled carbon           |       |
|    |   | Carmel College,          | nanotubes for water     |       |
|    |   | Bengaluru-560052, India. | purification            |       |
|    |   | 2Department of           |                         |       |
|    |   | Electronics, Mount       |                         |       |
|    |   | Carmel College,          |                         |       |
| 1  |   |                          |                         |       |
|    |   | Bengaluru-560052,        |                         |       |

| 74         | Amruta U. Badnore, and     | aInstitute of Chemical   | Synthesis and          | AB202  |
|------------|----------------------------|--------------------------|------------------------|--------|
| <i>,</i> . | Prof. A. B. Pandit*        | Technology, Matunga,     | characterization of    | 110202 |
|            |                            | Mumbai, India-400019     | iron oxide             |        |
|            |                            |                          | nanoparticles using    |        |
|            |                            |                          | conventional and       |        |
|            |                            |                          | acoustic cavitation    |        |
|            |                            |                          | method                 |        |
| 75         | Venkatesh Shankar* and     | aDepartment of Physics,  | Studies on the effects | AB209  |
|            | Vishista Kurapati          | College of Engineering,  | of Chemical            |        |
|            | ·                          | Guindy, Anna             | equivalent ratio       |        |
|            |                            | University, Chennai-25,  | variation in oxidation |        |
|            |                            | Tamil Nadu, India.       | state of Polyaniline   |        |
|            |                            |                          | synthesized using      |        |
|            |                            |                          | Ferric Chloride in a   |        |
|            |                            |                          | biphasic medium        |        |
| 76         | Sathisha D, and            | Department of Studies in | Synthesis and          | AB211  |
|            | K.Gopalakrishana Naik*     | Physics, Mangalore       | Characterization of    |        |
|            |                            | University,              | Nickel Oxide           |        |
|            |                            | Mangalagangotri-         | Nanostructures by      |        |
|            |                            | 574199, India            | Hydrothermal           |        |
|            |                            |                          | Method                 |        |
| 77         | aD.Jackuline Moni, and     | a Department of          | Junctionless           | AB217  |
|            | bT.Jaspar vinitha sundari* | Electrical technology,   | Tunneling Nanowire     | 110217 |
|            |                            | Karunya University,      | for steep              |        |
|            |                            | Coimbatore - 641114,     | Subthreshold slope     |        |
|            |                            | Tamil Nadu, India.       | Subtriceshold slope    |        |
|            |                            | bDepartment of ECE,      |                        |        |
|            |                            | Kumaraguru college of    |                        |        |
|            |                            | technology, Coimbatore - |                        |        |
|            |                            | 641049, Tamil Nadu,      |                        |        |
|            |                            | India.                   |                        |        |
| 78         | Karuppasamy B and          | Nanomaterials            | Low-cost dye           | AB218  |
| 10         | Gayathri V*                | Laboratory, Department   | sensitized solar cells | 110210 |
|            |                            | of Physics, Thiagarajar  | based on sensitizers   |        |
|            |                            | College of Engineering,  | and counter electrode  |        |
|            |                            | Madurai - 625 015, Tamil |                        |        |
|            |                            | Nadu, India.             |                        |        |
| 79         | a)Santhosh TCM*,           | a)Thin Film Laboratory,  | a)Thin Film            | AB220  |
| _          | a)Kasturi V Bangera, b)GK  | Physics Department       | Laboratory, Physics    |        |
|            | Shivakumar                 | National Institute of    | Department National    |        |
|            |                            | Technology Karnataka,    | Institute of           |        |
|            |                            | Surtahkal, Mangalore -   | Technology             |        |
|            |                            | 575025, India.           | Karnataka, Surtahkal,  |        |
|            |                            | b)Department of Physics, | Mangalore -575025,     |        |
|            |                            | NMAM Institute of        | India.                 |        |
|            |                            | Technology, Nitte -      | b)Department of        |        |
|            |                            | 574110 Karnataka India.  | Physics, NMAM          |        |
|            |                            |                          | Institute of           |        |
|            |                            |                          | Technology, Nitte -    |        |
|            |                            |                          | 10011059,11110 -       | I      |

|    |  |   | 574110 Karnataka<br>India.   |       |
|----|--|---|--|-------|
| 80 | Nikhar Khanna and Prof. A<br>Ruban Kumar   | Centre for Crystal<br>Growth<br>School of Advanced<br>Sciences<br>VIT University, Vellore-<br>632014,Tamil Nadu   | Preparation and<br>characterization of<br>MgO nanoparticles<br>by sol-gel method<br>and the study of its<br>properties | AB227 |
| 81 | Praveen Anchupogua*, G<br>Lakshmi Narayana raob, B.<br>Balakrishnac and B. Ravi<br>sankard | a,dDepartment of<br>Mechanical Engineering,<br>Bapatla Engineering<br>College, Bapatla -<br>522101,Andra Pradesh,<br>India.<br>bDepartment of<br>Mechanical Engineering,<br>QIS Institute of<br>Technology, Ongole-<br>523001,Andra Pradesh,<br>India.<br>c Department of<br>Mechanical Engineering,<br>JNTU College of<br>Engineering, JNTUK,<br>Kakinada-533001,Andra<br>Pradesh,India. | Effect Tio2 Nano<br>additives on the<br>Combustion and<br>Emission<br>Characteristics of DI<br>Diesel Engine           | AB228 |
| 82 | Nazia Fathima a*, N.<br>Pradeep b, Jyothi<br>Balakrishnan a                                | <ul> <li>a Dept. of Electronic</li> <li>Science, Bangalore</li> <li>University, Bangalore -</li> <li>560009, Karnataka,</li> <li>India.</li> <li>b Dept. of Nanoscience</li> <li>and Technology, Mount</li> <li>Carmel College,</li> <li>Bangalore-560052,</li> <li>Karnataka, India.</li> </ul>  | Growth and<br>Characterization of<br>ZnO Nanocones on<br>flexible substrates by<br>Hydrothermal<br>Method              | AB230 |

| 83 | M. Sharmaa*, P.K.<br>Mohapatrab and D.<br>Bahadura  | aDepartment of<br>Metallurgical<br>Engineering and<br>Materials Science, Indian<br>Institute of Technology,<br>Bombay, Powai, Mumbai<br>400076, India.<br>bDepartment of Physics,<br>Indian Institute of<br>Technology, Powai<br>Mumbai-400076<br>a Nanomaterials   | Supercapacitve<br>Performance of<br>Chemically<br>Exfoliated and CVD<br>Grown MoS2: A<br>Comparative Study                              | AB231<br>AB234 |
|----|---|---|---|----------------|
| 64 | B.Shenbagabalakrishnan<br>and V.Gayathri*   | Research Laboratory,<br>Department of Physics,<br>Thiagarajar College of<br>Engineering, Madurai -<br>625 015, Tamil Nadu,<br>India.  | Rechargeable<br>Aluminum Ion<br>Battery with Aqueous<br>Electrolyte   | AD234          |
| 85 | C. Pavithra, W. Madhuri*  | Ceramic Composite<br>Laboratory, CCG, SAS,<br>VIT University, Vellore-<br>632014, TN, India.  | Hydrothermal<br>Synthesis and<br>Characterization of<br>Microwave Processed<br>Lithium Titanate   | AB237          |
| 86 | B.H.Nanjunda Reddy1, a,<br>V.Venkata Lakshmi*2,<br>K.R.Vishnu Mahesh**3,<br>M.Mylarappa2, a | 1 Department of<br>Chemistry, Amrita<br>School of Engineering,<br>Bengaluru, Campus,<br>Amrita Vishwa<br>Vidyapeetham<br>University, Bangalore-<br>560035, Karnataka, India<br>aDepartment of Studies<br>and Research in<br>Chemistry, B.H Road,<br>Tumkur University,<br>Tumkur-572103,<br>Karnataka, India<br>2 Research center,<br>Department of<br>Chemistry, AMC<br>Engineering<br>College.Bengaluru-<br>560083<br>3 Department of<br>Chemistry, Dayananda<br>Sagar College of<br>Engineering, Sahvige<br>Malleshwara Hills,<br>Kumara Swamy Layout, | Synthesis and<br>Characterization of<br>Modified Sodium<br>Alginate-Bentonite<br>Clay Biocomposites<br>for Anti-Bacterial<br>Activities | AB244          |

|    |  | Bangalore, 560 083,  |  |       |
|----|--|--|--|-------|
|    |  | Karnataka, India   |  |       |
| 87 | B Guruswamya, V<br>Ravindracharya*, S D<br>Praveenab, Sri Datta<br>Hegdea, C Shruthia ,Rohan<br>N Sagara | aDepartment of Physics,<br>Mangalore<br>University,Mangalagang<br>otri-574199 ,India<br>bDepartment of Physics,<br>K V G College of<br>Engineering<br>,kurunjibhag, Sullia -<br>574327 , India   | Optical, thermal and<br>morphological study<br>of PVA-NaAlg/ZnO<br>Nanocomposites  | AB248 |
| 88 | P. Shubha, K. Namratha,<br>K.C. Mithali, V. Divya, M.<br>S. Thakur, K. Byrappa*                          | Centre for Materials<br>Science and Technology,<br>Vijnan Bhavan,<br>Manasagangotri,<br>Mysuru-570006  | Green Technology<br>Enabled Graphene<br>Oxide Reduction<br>Using Justichia<br>Wynaadensis Extract<br>and Assessment of In<br>vitro Antioxidant and<br>Antibacterial Activity | AB249 |
| 89 | Md Shahbaz Alam1,<br>Chandan Kumar Ghosh2,<br>Nillohit Mukherjee3,<br>Sk. Faruque Ahmed1,*               | 1Nanoscience<br>Laboratory, Department<br>of Physics, Aliah<br>University, IIA/27, New<br>Town,<br>Kolkata- 700 156, India.<br>2School of Material<br>Science and<br>Nanotechnology,<br>Jadavpur University,<br>Kolkata 700 032, India.<br>3Center of Excellence for<br>Green Energy and Sensor<br>Systems, Indian Institute<br>of Engineering Science | Nanostructure<br>evolution and optical<br>properties of silver<br>doped diamond like<br>carbon thin film on<br>soft polymer  | AB250 |

|    |  | and Technology, Howrah<br>711103, India  |  |       |
|----|--|--|--|-------|
| 90 | Jaculin Raiza Anasdassa,<br>Raghunathan<br>Raghavacharyb and<br>Pandian Kannaiyana,* | aDepartment of Inorganic<br>Chemistry, University of<br>Madras, Guindy Campus,<br>Chennai-25, India.<br>bDepartment of Organic<br>Chemistry, University of<br>Madras, Guindy Campus,<br>Chennai-25, India. | Biogenic synthesis of<br>Palladium<br>nanoparticles<br>decorated<br>polydopamine<br>modified halloysite<br>using Coniferous tree<br>gum extract and<br>study of its<br>application for<br>synthesis of biaryl<br>compounds | AB253 |
| 91 | Sayandip Basaka , M.Helen<br>Santhi b* and Caroline<br>Ponraj c                      | a,bSchool of Mechanical<br>and Building Sciences,<br>cSchool of Advanced<br>Sciences,<br>VIT University, Chennai<br>600 127, Tamilnadu,<br>India<br>Phone: 044-3993 1144;<br>Fax: 044-3993 2555            | Performance of<br>Concrete with Waste<br>Tyre and Nano ZrO2  | AB255 |
| 92 | S. Gowreesan, A. Ruban<br>Kumar*   | Centre for Crystal<br>Growth, School of<br>Advanced Sciences, VIT<br>University, Vellore – 632<br>014.   | Preparation of<br>Cobalt-Magnesium<br>ferrites (Co1-<br>xMgxFe2O4)<br>nanoparticles by sol-<br>gel Auto combustion<br>Method   | AB256 |
| 93 | Pawan S Rana, Ashok<br>Kumar, Ravita, Amita,   | D.C.R. University of<br>Science and Technology,<br>Murthal, Sonepat  | Effect of Annealing<br>on Structural<br>Properties of Iron<br>Oxide Ferrite<br>Nanoparticles   | AB259 |

| 94 | J.Baalamurugana,<br>V.Ganesh Kumar*a,<br>V.K.Bupesh Rajab,<br>R.Padmapriyac                                       | aNanoscience Division,<br>Centre for Ocean<br>Research, Sathyabama<br>University, Chennai –<br>600 119<br>bDepartment of<br>Automobile Engineering,<br>Sathyabama University,<br>Chennai – 600 119.<br>cDepartment of Civil<br>Engineering, Sathyabama<br>University, Chennai –<br>600 119. | Slag based<br>nanomaterial in the<br>removal of<br>hexavalent chromium  | AB260 |
|----|---|---|---|-------|
| 95 | P. A. Savale  | Department of Physics,<br>Arts & Science College,<br>Bhalod Dist Jalgaon 425<br>304<br>Maharashtra State, India   | POA-PVS-DBS-<br>GOD electrode for<br>Determination of<br>Glucose: A<br>Comparative Study in<br>Acetate and<br>Phosphate Buffers | AB262 |
| 96 | G Padmalaya <sup>a</sup> , E<br>Manikandan <sup>b</sup> , BS Sreeja <sup>c</sup> *,<br>M Arivanandan <sup>d</sup> | a,b,cDepartment of<br>Electronics and<br>Communication<br>Engineering, SSN<br>College of Engineering,<br>Kalavakkam, Chennai-<br>603 110, Tamil Nadu,<br>India<br>dCentre for Nanoscience<br>and Technology, Anna<br>University, Chennai-<br>600025, Tamil Nadu,<br>India.                  | Synthesis,<br>Characterization of<br>Magnetite<br>Nanocomposites and<br>their behaviour in<br>adsorbing chromium<br>ions        | AB263 |
| 97 | Abhinav K Nair, P. E.<br>JagadeeshBabu*   | Department of Chemical<br>Engineering, National<br>Institute of Technology<br>Karnataka, Surathkal,<br>Mangalore 575 025,<br>Karnataka, India,  | Ag-TiO2<br>NANOFIBER<br>MEMBRANES FOR<br>PHOTOCATALYTI<br>C DEGRADATION<br>OF DYES  | AB264 |
| 98 | Dr. GNK Ganesh*, Ms.<br>Vianni Chopra   | Department of<br>pharmaceutics, JSS<br>College of Pharmacy (A<br>Constituent college of<br>JSS University, Mysore),<br>Ooty, India (Affiliated<br>JSS University,Mysore)  | Development and<br>Characterization of<br>Core-Shell<br>Nanoparticles for<br>Anticancer Therapy                                 | AB265 |
| 99 | P. Uma Sathyakam*,<br>Paridhi Singh, Priyamanga<br>Bhardwaj, and P. S.<br>Mallick                                 | School of Electrical<br>Engineering, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.  | Geometry induced<br>crosstalk reduction<br>techniques in Carbon   | AB266 |

|     |   |   | nanotube<br>interconnects  |       |
|-----|---|---|--|-------|
| 100 | A. Mani <sup>a, b</sup> , K. Rajesh <sup>c</sup> and<br>P. Praveen Kumar <sup>a,*</sup>   | a Department of Physics,<br>Presidency College,<br>Chennai- 600005, India.<br>b Department of Physics,<br>Sri Venkateswaraa<br>College of Technology,<br>Sriperumbudur- 602105,<br>India.<br>c Department of Physics,<br>AMET University,<br>Chennai-603112, India.   | Crystal growth,<br>optical, dielectric,<br>thermal, mechanical,<br>laser damage<br>threshold and second<br>harmonic generation<br>characterization of<br>bis 2,5-<br>dimethylanilinium<br>sulfate single crystal | AB269 |
| 101 | Tenzin Tenkyong, Rachel<br>Mary Mona, W. Jothi<br>Jeyarani, J. Sahaya Selva<br>Mary, B. Praveen, K.<br>Pugazhendhi and J.<br>Merline Shyla* | Dept of Physics, Energy<br>Nanotechnology Centre<br>(ENTeC),<br>Loyola Institute of<br>Frontier Energy (LIFE),<br>Loyola College, Chennai<br>600 034  | A Study On The<br>Optimised Band Gap<br>Tuning Of The<br>Anodised Tio2<br>Nanotube In Relation<br>To Its Specific Tube<br>Dimensions   | AB272 |
| 102 | Ajith James Josea*, Resmi<br>Ra, Sam Johna, George<br>Jacobb  | aDepartment of<br>Chemistry, St.Berchmans<br>College (Autonomous),<br>Changanassery, Kerala-<br>686101.<br>bCenter for<br>Nanotechnology<br>Research, VIT<br>University, Vellore,<br>Tamil Nadu – 632014  | Diopside: A potential<br>bioactive material for<br>bone tissue<br>engineering  | AB275 |
| 103 | Resmi Ra, Paulose<br>Thomasb, George Jacobc,<br>Ajith James Josea*  | aPost graduate and<br>Research Department of<br>Chemistry, St.Berchmans<br>College, Changanassery,<br>Kerala-686101<br>bOptoelectronic Lab,<br>St.Berchmans College,<br>Changanassery, Kerala,<br>India- 686101<br>cCenter for<br>Nanotechnology<br>Research,VIT University,<br>Vellore, Tamil Nadu –<br>632014 | Enhanced dielectric<br>and electron transport<br>mechanism of<br>graphene oxide -<br>PVDF<br>nanocomposite films   | AB276 |

| 104 | Blessy Babukutty1,<br>Fasalurahman Parakkal1,<br>Nandakumar Kalarikkal2,<br>Swapna.S.Nair1* | 1Central University of<br>Kerala, Department of<br>Physics, Padannakkad,<br>Kasaragod, India<br>2School of Pure and<br>Applied Physics,<br>Mahatma Gandhi<br>University, Kottayam,<br>India | Synthesis and<br>characterization of<br>nanosized Cobalt<br>Manganese alloys   | AB279 |
|-----|---|---|--|-------|
| 105 | Mageswari . C1 and<br>Thangaraju . N 1*   | CAS in Botany,<br>University of Madras,<br>chennai-600 025  | Anti-cancerous, Gold<br>nanoparticles (GNPs)<br>embedded into<br>Bombyx mori silk /<br>PVA composite<br>nanofiber mats:<br>structural<br>characterization and<br>In vitro analysis   | AB281 |
| 106 | Ms. Nethravathi.P*, Dr.<br>Suresh Kumar*,Mr. Anil<br>Raju Y                                 | JSS College of Pharmacy<br>(A constituent college of<br>JSS University, Mysore),<br>Ootacamund, Tamilnadu-<br>643001  | Artesunate loaded<br>Nanodroplets -A<br>preliminary study for<br>improved efficacy in<br>the treatment of<br>Malaria: Formulation,<br>Characterization and<br>Biodistribution study  | AB282 |
| 107 | V.N. Kalpana, V. Devi<br>Rajeswari*   | Department of<br>Biomedical sciences,<br>School of Biosciences<br>and Technology, VIT<br>University,<br>Vellore –632 014, Tamil<br>Nadu, India  | SYNTHESIS OF<br>PALLADIUM<br>NANOPARTICLES<br>USING<br>LAGENARIA<br>SICERARIA SEED<br>EXTRACT AND ITS<br>LARVICIDAL<br>EFFICACY<br>AGAINST THREE<br>MOSQUITO<br>VECTORS<br>ANOPHELES<br>STEPHENSI,<br>CULEX<br>QUINQUEFASCIAT<br>US AND AEDES<br>AEGYPTI | AB283 |

| 108 | SrimathiKrishnaswamy1,G<br>anapathi Subramaniam<br>Nagarajan*2,Puspamitra<br>Panigrahi1, and Veena<br>Ragupathi1  | 1Centre for Clean Energy<br>and Nano<br>Convergence(CENCON),<br>Hindustan University,<br>Padur, Kelambakkam,<br>Chennai, India  | Visible-light active<br>NaI doped<br>Polypyrrole thin film<br>with superior<br>photocatalytic<br>activity      | AB286 |
|-----|---|---|--|-------|
|     |   | 2Quantum Functional<br>Semiconductor Research<br>Centre (QSRC), Nano<br>information Technology<br>Academy(NITA),<br>Dongguk University, 26<br>phildong3-ga, Chung-gu,<br>Seoul, Korea 100-715.  |  |       |
| 109 | Anju Anna Jacob <sup>a</sup> , L.<br>Balakrishnan <sup>b, *</sup> , S. R.<br>Meher <sup>b</sup> , K. Shambavi <sup>c</sup> and<br>Z. C. Alex <sup>d</sup> | a School of Electronics<br>Engineering, VIT<br>University, Vellore 632<br>014, India.<br>bDepartment of Physics,<br>School of Advanced<br>Sciences, VIT<br>University, Vellore 632<br>014, India.<br>cDepartment of<br>Communication, School<br>of Electronics<br>Engineering, VIT<br>University, Vellore 632<br>014, India.<br>dDepartment of Sensor<br>and Biomedical<br>Technology, School of<br>Electronics Engineering,<br>VIT University, Vellore<br>632 014, India | Zn1-xCdxO<br>nanoparticles using<br>co-precipitation:<br>structural, optical and<br>photodetection<br>analysis | AB290 |

| 110 | K. N. Shravana Kumara1,<br>2, H. P. Nagaswarupa*1,<br>K. R. Vishnu Mahesh*3,<br>M.Mylarappa4, a,<br>S.C.Prashantha1, D.M.K<br>Siddeshwara5, 2 | 1Research Centre,<br>Department of<br>Chemistry, EWIT,<br>Bengaluru-560091<br>2Research and<br>Development Centre,<br>Bharathiar University,<br>Coimbatore-641046<br>3Department of<br>Chemistry, Dayananda<br>Sagar College of<br>Engineering, Bengaluru-<br>78<br>4Research Centre,<br>Department of<br>Chemistry, AMC<br>Engineering College,<br>Bengaluru-560083<br>aDepartment of Studies<br>and Research in<br>Chemistry, Tumkur<br>University, Tumkur,<br>5Department of<br>Chemistry, Jyothi<br>Institute of technology,<br>Bengaluru-560062 | A new assisted Green<br>Synthesis of MgO<br>Nanoparticles Using<br>Murraya Koenigii<br>Leaf Extract: An<br>Efficient Catalyst for<br>Water Purification | AB291 |
|-----|---|--|---|-------|
| 111 | Vinoth Kumar Jayaraman*,<br>Yasuhiro Matsumoto,<br>Arturo Maldonado Álvarez<br>and Maria de la Luz Olvera<br>Amador                           | Departamento de<br>Ingeniería Eléctrica-<br>SEES, Centro de<br>Investigación y de<br>Estudios Avanzados del<br>Instituto Politécnico<br>Nacional, Apartado<br>postal 14740, México D.<br>F. 07000, México.   | Optimization of<br>sputtering power for<br>the fabrication of<br>highly homogeneous<br>ZnO thin films   | AB293 |
| 112 | Vinoth Kumar Jayaraman*,<br>Yasuhiro Matsumoto,<br>Arturo Maldonado Álvarez<br>and María de la Luz Olvera<br>Amador                           | Departamento de<br>Ingeniería Eléctrica-<br>SEES, Centro de<br>Investigación y de<br>Estudios Avanzados del<br>Instituto Politécnico<br>Nacional, Apartado<br>postal 14740, México D.<br>F. 07000, México.   | Fabrication of a-<br>IGZO thin films by<br>co-sputtering: Study<br>of structural,<br>morphological,<br>optical and electrical<br>properties             | AB294 |

| 113 | Vinoth Kumar Jayaraman*,<br>Yasuhiro Matsumoto,<br>Arturo Maldonado Álvarez<br>and María de la Luz Olvera<br>Amador | Departamento de<br>Ingeniería Eléctrica-<br>SEES, Centro de<br>Investigación y de<br>Estudios Avanzados del<br>Instituto Politécnico<br>Nacional, Apartado<br>postal 14740, México D.<br>F. 07000, México. | Structural and<br>morphological<br>evaluation of Al-<br>doped ZnO thin<br>films: Effect of<br>milling time of<br>precursor  | AB295 |
|-----|---|--|---|-------|
| 114 | Vinoth Kumar Jayaraman*,<br>Yasuhiro Matsumoto,<br>Arturo Maldonado Álvarez<br>and María de la Luz Olvera<br>Amador | Departamento de<br>Ingeniería Eléctrica-<br>SEES, Centro de<br>Investigación y de<br>Estudios Avanzados del<br>Instituto Politécnico<br>Nacional, Apartado<br>postal 14740, México D.<br>F. 07000, México. | Effect of precursor<br>milling time and<br>substrate temperature<br>on the structural,<br>morphological,<br>optical and electrical<br>properties of In-<br>doped ZnO thin films | AB296 |
| 115 | Vinoth Kumar Jayaraman*,<br>Yasuhiro Matsumoto,<br>Arturo Maldonado Álvarez<br>and María de la Luz Olvera<br>Amador | Departamento de<br>Ingeniería Eléctrica-<br>SEES, Centro de<br>Investigación y de<br>Estudios Avanzados del<br>Instituto Politécnico<br>Nacional, Apartado<br>postal 14740, México D.<br>F. 07000, México. | Fabrication of ZnO<br>thin film sensor for<br>CO gas detection by<br>ultrasonic spray<br>pyrolysis  | AB297 |
| 116 | C Kannana, R<br>Ramanujamb, T<br>Vijayakumarc and Amitabh<br>Dasd   | a,b,c,d School of<br>Mechanical Engineering,<br>VIT University, Vellore -<br>632 014<br>Tamilnadu, India   | Optimization of Stir<br>Casting Parameters<br>for Manufacturing<br>Aluminium based<br>Nanocomposites<br>through Numerical<br>Simulation<br>Technique                            | AB298 |

| 117 | D.M.K.Siddeswara1, a,    |                          | Enhancement of       | AB301 |
|-----|--------------------------|--------------------------|----------------------|-------|
|     | K.R.Vishnu Mahesh*2, b,  | 1Department of           | rGO/CNT/AgO          |       |
|     | M. Mylarappa3, c,        | Chemistry, Jyothi        | Nanocomposite for    |       |
|     | T.Venkatesh4,            | Institute of Technology, | the Removal of Acid  |       |
|     | H.P.Nagaswarupa5, K. N.  | Bangalore-560062,        | red 88 from aqueous  |       |
|     | Shravana Kumara5, a K.J. | aResearch and            | solution             |       |
|     | Rudresh Kumar1 and       | Development Centre,      |                      |       |
|     | N.Raghavendra6           | Bharathiar University,   |                      |       |
|     | _                        | Coimbatore-641046.       |                      |       |
|     |                          | 2Department of           |                      |       |
|     |                          | Chemistry, Dayananda     |                      |       |
|     |                          | Sagar College of         |                      |       |
|     |                          | Engineering, Bengaluru-  |                      |       |
|     |                          | 560078, Karnataka,       |                      |       |
|     |                          | India.                   |                      |       |
|     |                          | bDr. D. Premachandra     |                      |       |
|     |                          | Sagar Center for         |                      |       |
|     |                          | Advanced Materials,      |                      |       |
|     |                          | Dayananda Sagar          |                      |       |
|     |                          | College of Engineering,  |                      |       |
|     |                          | Bengaluru-78, Karnataka, |                      |       |
|     |                          | India.                   |                      |       |
|     |                          | 3Research Centre,        |                      |       |
|     |                          | Department of            |                      |       |
|     |                          | Chemistry, AMC           |                      |       |
|     |                          | Engineering College,     |                      |       |
|     |                          | Bannerghatta Road        |                      |       |
|     |                          | Bengaluru-560083,        |                      |       |
|     |                          | Karnataka, India.        |                      |       |
|     |                          | cDepartment of Studies   |                      |       |
|     |                          | and Research in          |                      |       |
|     |                          | Chemistry, Tumkur        |                      |       |
|     |                          | University-572103        |                      |       |
|     |                          | 4Department of           |                      |       |
|     |                          | Chemistry, ACS College   |                      |       |
|     |                          | of engineering,          |                      |       |
|     |                          | Bangalore-560074, India  |                      |       |
|     |                          | 5Research Centre,        |                      |       |
|     |                          | Department of            |                      |       |
|     |                          | Chemistry, EWIT,         |                      |       |
|     |                          | Bengaluru-560091         |                      |       |
|     |                          | 6CMRTU, RV College       |                      |       |
|     |                          | of Bengaluru-59          |                      |       |
| 118 | Rajdeep Roy, Abhinav     | Centre for               | Inhibition of Algal  | AB303 |
|     | Parashar, N.             | Nanobiotechnology, VIT   | Growth Using         |       |
|     | Chandrasekaran and       | University, Vellore -    | Photoactive Titanium |       |
|     | Amitava Mukherjee*       | 632014, Tamil Nadu,      | Dioxide              |       |
|     | _                        | India                    | Nanoparticles – An   |       |
|     |                          |                          | Antifouling          |       |
|     |                          |                          | Approach             |       |

| 119 | S. Prathap and W.  | Ceramic Composite  | Investigation of   | AB304      |
|-----|--|--|--|------------|
|     | Madhuri*   | Laboratory, Centre for<br>Crystal Growth, SAS,<br>VIT University, Vellore-<br>632014, Tamilnadu,   | Structural and electric<br>modulus of Lead<br>Hexaferrites<br>Synthesized by sol-  | 7111304    |
|     |  | India  | gel method   |            |
| 120 | T.V.L Thejaswini a; D.<br>Prabhakaran*,b; M. Akhila<br>Maheswari b   | a Chemistry Division,<br>School of Advanced<br>Sciences, Vellore<br>Institute of Technology –<br>University, Chennai<br>Campus, Chennai<br>600127, Tamil Nadu,<br>India<br>b Department of<br>Chemistry, School of<br>Advanced Sciences,<br>Vellore Institute of<br>Technology – University,<br>Vellore 632014, Tamil<br>Nadu, India | Synthesis of<br>Structurally Ordered<br>Mesoporous<br>ZrO2/TiO2<br>Monoliths and their<br>Potential<br>Photocatalytic<br>Application towards<br>Degradation of<br>Organic Dye (NG-B)<br>Pollutants | AB305<br>M |
| 121 | Vijaya Bhaskar.A, and<br>M.Shanmugasundaram*                         | a School of Mechanical<br>and Building<br>Sciences(SMBS), VIT<br>University,<br>Chennai - 600127, Tamil<br>Nadu, India.  | An Investigation on<br>Behavior of Multi-<br>Walled carbon<br>nanotubes as an<br>additive to cement  | AB306      |
| 122 | V. S. Kirankumar and S.<br>Sumathi*                                  | Department of<br>Chemistry, SAS, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.   | Structural, optical,<br>magnetic and<br>photocatalytic<br>properties of bismuth<br>doped copper<br>aluminate<br>nanoparticles  | AB310      |
| 123 | Vamangi M. Pandya a*,<br>Dweipayan Goswamib and<br>Sachin A. Joshi a | a Dr. K. C. Patel<br>Research & Development<br>Center, Charotar<br>University of Science<br>and Technology<br>(CHARUSAT), Changa-<br>38842, Dist.: Anand,<br>Gujarat, India.<br>b Department of Bio-<br>chemistry and<br>Biotechnology, St.<br>Xavier's College<br>(Autonomous),<br>Ahmedabad, Gujarat,<br>India.                    | Synthesis of novel<br>anticancer<br>Polyoxometalate<br>[CoW11O39(CpTi)]7<br>chitosan nano-<br>complex and its in-<br>vitro toxicity<br>assessment  | AB311      |

| 124 | Lavanya T and Dr.                     | a School of Advanced                            | Biotin Receptor           | AB312   |
|-----|---------------------------------------|---|---------------------------|---------|
|     | Priyankar Paira*                      | Science, VIT University,                        | targeting novel           | _       |
|     | <u>y</u>                              | Vellore - 632 014, Tamil                        | Graphene Quantum          |         |
|     |                                       | Nadu, India.                                    | dot conjugates for        |         |
|     |                                       |   | theranostic               |         |
|     |                                       |   | applications              |         |
| 125 | Natarajan Saravanana,                 | aNano   | A novel Mn(II)            | AB314   |
|     | Annamalai Senthil<br>Kumara*          | bioelectrochemical                              | polypyridine complex      |         |
|     |                                       | Research Laboratory,                            | functionalized carbon     |         |
|     |                                       | Department of                                   | nanotube modified         |         |
|     |                                       | Chemistry, School of                            | electrode for             |         |
|     |                                       | Advanced Sciences, VIT                          | electrochemical           |         |
|     |                                       | University, Tamilnadu,                          | sensing of hydrogen       |         |
|     |                                       | Vellore – 632014, India                         | peroxide                  |         |
| 126 | A. Vijayalakshmi*, S.                 | a Department of                                 | Hydromagnetic             | AB317   |
|     | Srinivas, Badeti                      | Mathematics, VIT                                | pulsating flow of         |         |
|     | Satyanarayana and A.                  | University, Vellore - 632                       | nanofluid between         |         |
|     | Subramanyam Reddy                     | 014, Tamil Nadu, India.                         | two parallel walls        |         |
|     |                                       |   | with porous medium        |         |
| 127 | A. Subramanyam Reddy*,                | a Department of                                 | Blood-gold nanofluid      | AB319   |
|     | S. Srinivas and K.<br>Jagadeshkumar   | Mathematics, VIT                                | flow between              |         |
|     |                                       | University, Vellore - 632                       | expanding or              |         |
|     |                                       | 014, Tamil Nadu, India.                         | contracting               |         |
|     |                                       |   | permeable walls with      |         |
|     |                                       |   | slip effects              |         |
| 128 | R.Rangasamy*,                         |   | Immobilization of         | AB321   |
|     | K.Lakshmi, E.Prathibha,               | Department of                                   | Ag/Pt Bimetallic          |         |
|     | A.Sridhar and M.Selvaraj              | Chemistry, Guru Nanak                           | Nanoparticles on          |         |
|     |                                       | College, Velachery,                             | Insoluble Polymer         |         |
|     |                                       | Chennai 600042, Tamil                           | Microsphere for           |         |
|     |                                       | Nadu, India.                                    | Aqueous Phase             |         |
|     |                                       |   | Reduction                 |         |
| 100 |                                       |   | of Nitro Compound         | 4.0.200 |
| 129 | Muhamed Shajudheen V                  | a Department of Physics,                        | Optical and               | AB322   |
|     | Pa*, Anitha Rani Ka,                  | Karpagam University,                            | Corrosion Studies of      |         |
|     | Senthil KumarVa , Uma<br>Maheswari Ab | Coimbatore, Tamil Nadu,<br>India                | Spray Pyrolysis<br>Coated |         |
|     | and Saravana Kumar Sc                 |   | Titanium Dioxide          |         |
|     | and Saravana Kumai Sc                 | bDepartment of Sciences,<br>Amrita Vishwa Vidya | Thin Films                |         |
|     |                                       | Peetham, Coimbatore,                            |                           |         |
|     |                                       | Tamil Nadu, India                               |                           |         |
|     |                                       | c Department of Physics,                        |                           |         |
|     |                                       | NSS College Pandalam,                           |                           |         |
|     |                                       | Kerala, India                                   |                           |         |
| 130 | K. V. Shilna <sup>a</sup> , S. Vivek, | Department of Physics,                          | Effect of Sintering       | AB323   |
| 150 | Swapna S. Nair <sup>a*</sup>          | Central University of                           | Conditions for a          | 110020  |
|     |                                       | Kerala, Kasargod, Kerala                        | novel Bismuth based       |         |
|     |                                       | -671 314  | high temperature          |         |
|     |                                       | 0,1011  | superconductor (Bi        |         |
|     |                                       |   | 1112)                     |         |

| 131 | Raj Kumar G [a],<br>Dharanipriya P [b],<br>Vijayanandh R [c] and<br>Senthil Kumar M [d]    | <ul> <li>[a], [c] – Assistant</li> <li>Professor, [b] – BE</li> <li>Student, [d] – Assistant</li> <li>Professor (SRG),</li> <li>Department of</li> <li>Aeronautical</li> <li>Engineering,</li> <li>Kumaraguru College of</li> <li>Technology, Coimbatore,</li> <li>Tamilnadu, India</li> </ul> | Investigation of<br>advanced<br>nanocomposites test<br>specimens for<br>Aerospace<br>applications<br>R  | AB324 |
|-----|--|--|---|-------|
| 132 | Amrita Biswas b and<br>Debasish Mishra a,b*  | a Centre for Biomaterials<br>Cellular and Molecular<br>Theranostics (CBCMT),<br>VIT University, Vellore,<br>T.N632014, India.<br>b School of Bio-Sciences<br>and Technology (SBST),<br>VIT University, Vellore,<br>T.N632014, India.   | Use of Membrane<br>Filter for Isolation of<br>Nanoscopic<br>Extracellular Vesicles<br>from Cultured A549<br>Lung Cancer Cells: A<br>Feasibility Study | AB327 |
| 133 | P. Chithralekha <sup>1</sup> and R.<br>Srinivasan <sup>2,*</sup>                           | <ol> <li>Department of Physics,</li> <li>G.Venkataswamy Naidu</li> <li>College, Kovilpatti - 628</li> <li>502.</li> <li>Department of Physics,</li> <li>Thiagarajar College,</li> <li>Madurai – 625 009,</li> <li>India.</li> </ol>  | The Study on<br>Acoustical<br>Parameters of $Ni_xZn_{1-x}Fe_2O_4$<br>Nanoferrofluid<br>Prepared by Co-<br>Precipitation Method                        | AB328 |
| 134 | K. Gangadevi <sup>1</sup> and R.<br>Srinivasan <sup>1,*</sup>                              | <sup>1</sup> Department of Physics,<br>Thiagarajar College,<br>Madurai – 625 009   | Study of ClAlPc<br>/CdS Dye Sesitized<br>Solar Cells  | AB329 |
| 135 | K.Renukadevi <sup>a</sup> ,<br>K.Gangadevi <sup>b</sup> and<br>R.Srinivasan <sup>b,*</sup> | aDepartment of Physics,<br>G. Venkataswamy Naidu<br>College, Kovilpatti –<br>628502, India.<br>bDepartment of Physics,<br>Thiagarajar College,<br>Madurai – 625009, India.   | Synthesis And<br>Characterization of b-<br>Carotene (Natural<br>Dye) Sensitizer<br>Based Solar Cell   | AB331 |
| 136 | T.K.M. Prashantha Kumar1<br>and S.K. Ashok Kumar1  | <sup>1</sup> Department of<br>Chemistry, School of<br>Advanced Sciences, VIT<br>University, Vellore-<br>632014, India  | EQUILIBRIUM<br>AND KINETICS<br>STUDIES ON THE<br>ADSORPTION OF<br>PHENOLS BY A<br>HIGHLY POROUS<br>CARBON<br>PREPARED FROM<br>RENEWABLE<br>RESOURCE   | AB332 |

| 137 | Sanjeev Kumar a,b*,<br>Supriya Vaish a, Ritu<br>Singh a   | aDepartment of<br>Environmental Science,<br>School of Earth Sciences,<br>Central University of<br>Rajasthan, Kishangarh,<br>Ajmer – 305801,<br>Rajasthan, India<br>bSchool for<br>Environmental Science,<br>Babasaheb Bhim Rao<br>Ambedkar University,<br>Lucknow-226025, Uttar | Nanotechnology for<br>Remediation of<br>Dyeing Industry<br>Wastewater   | AB333 |
|-----|---|---|---|-------|
| 138 | N. Deepika Reddy,<br>K.Govardhan, S.<br>Muthuraja*  | Pradesh, India<br>School of Electronics<br>Engineering,<br>VIT University, Vellore-<br>632 014. Tamil Nadu,<br>India.   | Effective approach<br>for the synthesis of<br>Isochrominopyrrolon<br>es and its<br>fluorescence studies<br>for OLED<br>applications   | AB336 |
| 139 | M. Vijaya Bharathi,<br>Priyankar Paira*   | *Department of<br>chemistry, School of<br>advanced sciences, VIT<br>University, Vellore-<br>632014, Tamilnadu,<br>India.  | Chemoselective "on<br>water" surface<br>immobilization of<br>quantum dot<br>conjugates via<br>bioorthogonal strain-<br>promoted click<br>Chemistry: An<br>efficient approach for<br>DNA detection | AB337 |
| 140 | P.Saravanan <sup>a*</sup> ,<br>A.Gnanavelbabu <sup>b</sup> ,<br>P.Pandiyaraj <sup>c</sup>                                   | a, b Department of<br>Industrial Engineering,<br>CEG Anna University,<br>Chennai - 600025, Tamil<br>Nadu, India.<br>c Department of<br>Mechanical Engineering,<br>CEG Anna University,<br>Chennai - 600025, Tamil<br>Nadu, India.   | Effective Thermal<br>and Optical Analysis<br>of ZnO and AZO thin<br>films   | AB338 |
| 141 | R. K. Kalaiezhily <sup>1</sup> , G.<br>Saravanan <sup>2</sup> , V. Asvini <sup>3</sup> and<br>K. Ravichandran <sup>1*</sup> | <sup>1, 2, 3</sup> Department of<br>Nuclear Physics,<br>University of Madras,<br>Chennai 600 025, India.  | Synthesis and Study<br>of Ce Doped ZnO<br>Nanophosphors   | AB344 |

| 142 | <ul> <li>P.Pandiyaraj <sup>a*</sup>,</li> <li>A.Gnanavelbabu<sup>b</sup>,</li> <li>P.Saravanan<sup>c</sup></li> <li>Dr J.P Ruparelia, Shrey A<br/>Shah* and Rahul Gundesha</li> </ul> | a Department of<br>Mechanical Engineering,<br>CEG Anna University,<br>Chennai - 600025, Tamil<br>Nadu, India.<br>b,c Department of<br>Industrial Engineering,<br>CEG Anna University,<br>Chennai - 600025, Tamil<br>Nadu, India<br>Institute of Technology,<br>Nirma University, | Experimental<br>Analysis of MgO<br>Nano fluids for<br>Thermal<br>enhancement in a<br>Novel flat plate heat<br>pipes<br>A comparative study<br>of detection of        | AB347<br>AB348 |
|-----|---|--|--|----------------|
|     |   | Ahmedabad - 382481,<br>Gujarat, India.   | melamine in milk by<br>interference sensing<br>of bio-functionalized<br>silver nanoparticles   |                |
| 144 | A. Karthik kumar, M.<br>Kannan, K. Manikandan,<br>V. Karthikeyan, B.<br>Mukeswaran1,<br>R. Harikaran, G.<br>Balakrishan1*   | Department of<br>Mechanical Engineering,<br>Bharath Institute of<br>Science and Technology,<br>Bharath University,<br>Chennai-600073, India<br>1Department of<br>Nanotechnology, Bharath<br>Institute of Science and<br>Technology,<br>Bharath University,<br>Chennai-73, India  | Microstructural and<br>Nanomechanical<br>properties of<br>Aluminium nitride<br>(AlN) Thin films<br>deposited by RF<br>magnetron sputtering                           | AB353          |
| 145 | G. Balakrishnan*, J.S. Ram<br>Vinoba and R. Rishaban  | Department of<br>Nanotechnology, Bharath<br>Institute of Science and<br>Technology,<br>Bharath University,<br>Chennai-600073,<br>Tamilnadu, India  | Microstructural and<br>Properties of P-type<br>NiO Thin films<br>Prepared by RF<br>Magnetron sputtering  | AB356          |
| 146 | Ravi.S*, Supravob Mandal<br>and Harish M.Kittur <sup>a</sup>  | a Department of Nano<br>and Microelectronics,<br>VIT University, Vellore -<br>632 014, Tamil Nadu,<br>India.   | Design and<br>verification of high<br>performance standard<br>cells for Clock<br>Network<br>Applications   | AB360          |
| 147 | Shobana Muthusamy and<br>N. Madhusudhana Rao*   | Department of Physics,<br>Thin Films Research<br>Laboratory, School of<br>Advanced Sciences, VIT<br>University, Vellore 632<br>014, Tamil Nadu, India  | High Quality<br>Controlled<br>Nanostructure ZnTe<br>Thin Films by<br>Electron Beam<br>Evaporation: as a<br>Function of Substrate<br>Temperature ( $T_s \ge$<br>303K) | AB362          |

| 148 | Deena Titus <sup>a</sup> , E. James<br>Jebaseelan Samuel <sup>a*</sup> , and<br>A. Nirmala Grace <sup>b</sup>  | a Medical Gel Dosimetry<br>Lab, Department of<br>Physics, VIT University,<br>Vellore - 632 014, Tamil<br>Nadu, India.<br>b Centre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.  | Initial study on a new<br>gel dosimeter based<br>on silver nanoparticle        | AB363 |
|-----|--|---|--|-------|
| 149 | Kaushita Banerjee, Nandita<br>Kamat, Diana<br>Pearline,Narayanaswamy<br>Thiagarajan Padma<br>Thiagarajan <sup>*</sup>  | School of Biosciences<br>and Technology, VIT<br>University, Vellore,<br>India, 632014   | Murraya koenigii<br>Linn emollient cream<br>for topical<br>applications        | AB365 |
| 150 | N. MANJULA <sup>1</sup> , S.<br>MUTHURAJA <sup>2</sup> , G.<br>SELVAN <sup>3</sup> , A.<br>AYESHAMARIAM <sup>4*</sup><br>AND M.<br>JAYACHANDRAN <sup>5</sup> | 1 Research and<br>Development Center,<br>Bharathiyar University,<br>Coimbatore, 641076,<br>India<br>selvan96@rediffmail.co<br>m<br>2Department of sensors<br>and biomedical<br>technology, SENSE, VIT<br>University, Vellore, India<br>smartnsweet@gmail.com<br>1,3 Department of<br>Physics, Thanthai Hans<br>Rover College,<br>Perambalur, India<br>selvan96@rediffmail.co<br>m<br>1,4* Department of<br>Physics, Khadir<br>Mohideen College,<br>Adirampattinam, 614<br>701, India<br>aismma786@gmail.com<br>5Department of Physics,<br>Sree Sevugan Annamalai<br>College, Devakottai,<br>630303, India<br>mjayam54@gmail.com | Sn doped TiO <sub>2</sub> oxide<br>materials for<br>biological<br>applications | AB367 |

| 151 | Subramanian Nellaiappan<br>and Annamalai Senthil<br>kumar <sup>*</sup>  | Nano and Bio-<br>electrochemical research<br>lab, Chemistry Division,<br>School of Advanced   | Reductive cleavage<br>of methyl orange azo<br>dye into redox active<br>amino-species   | AB368 |
|-----|---|---|--|-------|
|     |   | Sciences,<br>Vellore Institute of<br>Technology University,<br>Vellore-632 014 India  | immobilized on<br>MWCNT modified<br>electrode for selective<br>flow injection  |       |
|     |   |   | analysis of ascorbic<br>acid at low potential  |       |
| 152 | V.Jegadheesan Durgesh<br>Laxman Tiwari and K.<br>Sivasankaran <sup>*</sup>  | *Department of Micro<br>and Nanoelectronics,<br>School of Electronics<br>Engineering, VIT<br>University, Vellore –<br>632014, Tamilnadu,<br>India.  | Comparative Study<br>on Breakdown<br>Characteristics of<br>20nm Junctionless<br>FinFET on Different<br>Substrate   | AB369 |
| 153 | U. Anjaneyulu, B. Priyadarshini and U.<br>Vijayalakshmi*  | Chemistry Division,<br>School of Advanced<br>Sciences, VIT University<br>Vellore -632014, Tamil<br>Nadu, India.   | In vitro Biological evaluations of<br>sol-gel synthesized Ce and Si<br>doped Hydroxyapatite using<br>snail shell waste as a calcium<br>source for bone remodeling<br>applications        | AB372 |
| 154 | Ravikumar K. V. G.,<br>Mrudula P. <sup>*</sup> , Natarajan<br>Chandrasekaran, Amitava<br>Mukherjee <sup>**</sup>                  | Centre for<br>Nanobiotechnology, VIT<br>University, Vellore,<br>Tamil Nadu, India   | Synthesis and<br>immobilization of<br>zero valent iron<br>nanoparticles in<br>calcium alginate<br>beads for Hexavalent<br>chromium [Cr (VI)]<br>removal                                  | AB376 |
| 155 | Deepak Kumar <sup>1</sup> , Ashok M<br>Raichur <sup>2</sup> , N Charasekaran <sup>1</sup><br>and Amitava Mukherjee <sup>1</sup> * | 1Centre for<br>nanobiotechnology, VIT<br>University, Vellore-<br>632014, Tamil nadu,<br>India<br>2Department of Materials<br>Engineering, Indian<br>Institute of Science,<br>Bangalore, India | Synthesis and<br>characterization of<br>zero valent iron<br>nanoparticles (nZVI)<br>and its antibacterial<br>effects   | AB377 |
| 156 | Saravanan Natarajan,<br>Mrudula Pulimi, N.<br>Chandrasekaran, Amitava<br>Mukherjee  | Center for<br>Nanobiotechnology, VIT<br>University, Vellore,<br>Tamil Nadu, India   | Differences in<br>antibacterial activity<br>of PMMA/TiO2/Ag<br>nanocomposite on<br>individual dominant<br>bacterial isolates<br>from packaged<br>drinking water, and<br>their consortium | AB378 |

|     |   |  | under UV-C and dark<br>conditions   |       |
|-----|---|--|---|-------|
| 157 | Srinu Akula, <sup>†</sup> S.Gouse<br>Peera, <sup>†</sup> V.Parthiban,<br>A.K.Sahu,*   | CSIR-Central<br>Electrochemical<br>Research Institute–<br>Madras unit, CSIR<br>Campus, Taramani,<br>Chennai, 600 113,<br>INDIA   | Investigations on<br>electrocatalytic<br>activity of nitrogen<br>and fluorine co-doped<br>MWCNTs towards<br>oxygen reduction<br>reaction for polymer<br>electrolyte fuel cell | AB380 |
| 158 | Aparna Sanal, Velmurugan<br>V, D. Kannadassan and<br>Dr.P.Sathyanarayanan   | VIT University, Vellore<br>- 632014 - Tamilnadu  | Fabrication of<br>Negative Voltage<br>linearity SiO2 MIM<br>capacitors for RF-<br>AMS Applications  | AB381 |
| 159 | S. Nivedha <sup>1</sup> , P. Ramesh<br>Babu <sup>2</sup> , Penchalaiah Palla <sup>3</sup><br>and K. Senthilnathan <sup>2*</sup> | 1School of Electronics<br>Engineering, VIT<br>University, Vellore,<br>Tamilnadu, India.<br>2Department of Physics,<br>School of Advanced<br>Sciences, VIT<br>University, Vellore,<br>Tamilnadu, India.<br>3Centre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore,<br>Tamilnadu, India | An Efficient<br>Biosensor using<br>Photonic Crystal<br>Fiber  | AB382 |
| 160 | G. Melwin <sup>1</sup> , P. Ramesh<br>Babu <sup>1</sup> , Penchalaiah Palla <sup>2</sup><br>and K. Senthilnathan <sup>1*</sup>  | 1Department of Physics,<br>School of Advanced<br>Sciences, VIT<br>University, Vellore,<br>Tamilnadu, India.<br>2Centre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore,<br>Tamilnadu, India.   | Modeling a D - shape<br>plasmonic fiber<br>sensor   | AB383 |
| 161 | M. Chellappa and U.<br>Vijayalakshmi*   | Department of<br>Chemistry, School of<br>Advanced Sciences, VIT<br>University, Vellore - 632<br>014. Tamil Nadu, India.  | Fabrication of Iron<br>Oxide/Silica Core-<br>Shell Magnetic<br>Nanoparticles and its<br>In-vitro Cytotoxicity   | AB385 |

| 162 | V. Harikrishnan, and R.  | <sup>a</sup> Materials Research   | Studies for<br>Biomedical<br>Applications<br>Investigations on   | AB388 |
|-----|--|---|--|-------|
|     | EzhilVizhi <sup>*</sup>  | Laboratory, Department<br>of Physics, School of<br>Advanced Sciences, VIT<br>University, Vellore.   | structural and<br>magnetic properties<br>of $Co^{2+}ion$ rich<br>nanosized $Co_xFe_{3-x}O_4$<br>(x = 1.5, 1.75)  |       |
| 163 | Sivakumar Nishaa,Vattekat<br>Haridasb, and Annamalai<br>Senthil Kumara*  | aNano and<br>Bioelectrochemical<br>research lab, Chemistry<br>Division, School of<br>Advanced Sciences,<br>Vellore Institute of<br>Technology University,<br>Vellore-632 014, India<br>bDepartment of<br>Chemistry, Indian<br>Institute of Technology<br>Delhi (IITD),HauzKhas,<br>New Delhi 110016 | Electrochemical<br>oxidation of pyrene<br>linked dendrimer to<br>surface confined<br>quinone derivative on<br>graphitized<br>mesoporous carbon<br>and its cysteine<br>electrocatalysis | AB391 |
| 164 | V. Saranya, Amitava<br>Mukherjee and Natarajan<br>Chandrasekaran   | Centre for<br>Nanobiotechnology<br>(CNBT), VIT University,<br>Vellore - 632 014, Tamil<br>Nadu, India.  | Formulation and<br>characterization of<br>orange oil<br>nanoemulsion and its<br>toxicity profile on<br>human lymphocytes   | AB393 |
| 165 | Ramesh reddya,<br>Penchalaiah Palla b and<br>Vijay Kumar a *   | a School of Electronics<br>Engineering VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.<br>b Centre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.   | A Triple band<br>flexible Antenna<br>using three layer<br>Graphene patch and<br>polymer Substrate  | AB397 |
| 166 | S.Asha <sup>1*</sup> , G .Vanitha<br>Kumari <sup>1</sup> , A. Nimrodh<br>Ananth <sup>2</sup> and M. A. Jothi<br>Rajan <sup>1</sup> | <sup>1</sup> Bio-Nano Laboratory<br>PG and Research<br>Department of physics,<br>Arul Anandar College,<br>Madurai, India 2 MOE<br>Key Laboratory for<br>Macromolecular<br>Synthesis and<br>Functionalization,<br>Department of Polymer<br>Science and Engineering,                                  | Investigations on<br>Bio-mineralization of<br>reduced graphene<br>oxide aerogel in the<br>presence of various<br>polymers  | AB402 |

|     |   | Zhejiang University, P.<br>R. China   |  |       |
|-----|---|---|--|-------|
| 167 | Harish Gopinath <sup>1</sup>  | Department of   | In-vivo toxicity   | AB403 |
| 107 | Murugesh Shiva Shankar <sup>1#</sup>  | Chemistry, School of<br>Advanced Sciences, VIT<br>University, Vellore-<br>632014, Tamil Nadu.   | (Acute and Sub-<br>acute) and Anti-<br>diabetic activity of<br>Ayurvedic Nano<br>Medicine- Abhrak<br>Bhasma                          | AD403 |
| 168 | Pallavi Halkare, Nirmal<br>Punjabi, Aswathy Nair,<br>Jigme Wangchuk, Kiran<br>Kondabagil and Soumyo<br>Mukherji | Department of<br>Biosciences and<br>Bioengineering, IIT<br>Bombay, Mumbai, India  | Detection of Heavy<br>Metals by Bacteria -<br>Gold Nanoparticle<br>Matrix using Fiber<br>Optic Sensor                                | AB406 |
| 169 | S. Y. Krishnan1, A. K.<br>Caitanya1, P. Tripathy2, V.<br>R. Kar1,*  | 1School of Mechanical<br>Engineering, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.<br>2Department of<br>Mechanical Engineering,<br>NIT Rourkela-769008,<br>Odisha, India                       | Free Vibration<br>Behavior of Carbon<br>Nanotube Reinforced<br>Composite Conical<br>Shell Panel under<br>Thermal<br>Environment      | AB407 |
| 170 | P. S. Mandhatha1, K. V. L.<br>S. S. Reddy1, P. Tripathy2,<br>V. R. Kar1,*                                       | 1School of Mechanical<br>Engineering, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.<br>2Department of<br>Mechanical Engineering,<br>NIT Rourkela, 769008,<br>Odisha, India.                     | Effect of Perforation<br>on the Bending<br>Behavior of<br>Temperature-<br>Dependent Carbon<br>Nanotube Reinforced<br>Composite Plate | AB408 |
| 171 | Saghya Infant<br>Shofia,Jayakumar K,<br>Amitava Mukherjee and<br>Natarajan Chandrasekaran                       | a Centre for<br>Nanobiotechnology, VIT<br>University, Vellore – 632<br>014, Tamil Nadu, India<br>bSchool of Biological<br>Sciences, Madurai<br>Kamaraj University,<br>Madurai – 625 021,<br>Tamil Nadu, India | Study of<br>nanoparticles impact<br>on the growth and<br>exopolysaccharides<br>production of<br>epiphytic bacteria<br>from seaweeds  | AB409 |
| 172 | Shebina P.Rasheed1 and<br>Murugesh Shivashankar1 #  | 1. Department of<br>Chemistry, School of<br>Advanced Sciences,VIT<br>University, Vellore,<br>Tamil Nadu,India.  | HERBOMINERAL<br>FORMULATION AS<br>A NANO<br>TECHNOLOGICAL<br>APPLICATION   | AB412 |

| 173 | Chandrappa M <sup>a,b</sup> , Shiva<br>Reddy GV <sup>c</sup> , Korrapati<br>Swathi <sup>d</sup> , Rahaman Fazlur <sup>c</sup> ,<br>Narasimha Murthy B <sup>c</sup> ,<br>Uthirapathy<br>Vijayalakshmi <sup>d</sup> , Phani<br>Kumar Pullela <sup>a,b,c,d</sup> | a. Bigtec Pvt Ltd., 59th<br>"C" cross, 4th "M"<br>Block, Rajajinagar,<br>Bangalore, India -<br>560010.<br>b. CMR University,<br>HRBR Layout, 2nd<br>Block, Kalyana Nagar,<br>Bangalore - 560043.<br>c. CMR Institute of<br>Technology, ITPL Main<br>Road, Bangalore,<br>Karnataka, India -<br>560037.<br>d. VIT University,<br>Vellore, Tamilanadu, | Magnetic<br>nanoparticle assisted<br>bulk scale synthesis<br>of Quinazoline<br>Synthon  | AB413 |
|-----|---|---|---|-------|
| 174 | Gopi Kalaiyarasana,<br>Anusuya Kb, James<br>Josepha*  | India-632014.<br>aElectrodics and<br>Electrocatalysis Division,<br>CSIR-Central<br>Electrochemical<br>Research Institute,<br>Karaikudi-630003, India<br>bSchool of Chemistry,<br>Madurai Kamaraj<br>University, Madurai-<br>625021, India   | Melamine induced<br>fluorescence of<br>glutathione protected<br>gold nanoclusters and<br>ratiometric<br>quantification of<br>melamine in<br>commercial cow milk | AB414 |
| 175 | Udaya Kumar Ga, Suresh<br>Sa, Thansekhar M Rb, Ravi<br>Teja Ca, Sudheekar Reddy<br>Ma   | aNational institute of<br>technology,<br>Tiruchirappalli,<br>Tamilnadu, India<br>bK.L.N. College of<br>Engineering, Madurai,<br>Tamilnadu, India  | EFFECT OF<br>GRAPHITE<br>COATING ON THE<br>POOL BOILING<br>CHARACTERISTIC<br>S OF<br>CONVERGING<br>CHANNELS<br>BASED COPPER<br>SURFACE                          | AB415 |
| 176 | B. S. Srinath and K.<br>Byrappa   | Department of Studies<br>and Research in<br>Microbiology, Mangalore<br>University, P.G. Center,<br>Chikka Aluvara<br>571232, Kodagu.<br>Karnataka, India.   | Eco-friendly<br>synthesis of gold<br>nanoparticles by<br>Bacillus subtilis and<br>their environmental<br>applications   | AB416 |
| 177 | M. A. Khan, K. K. Nanda<br>and S. B. Krupanidhi*  | Materials Research<br>Centre, Indian Institute of<br>Science, Bangalore –<br>560012, India.   | Enhanced Infrared<br>Photodetection by<br>Solvothermally Reduced<br>Graphene Oxide  | AB418 |

| 178 | Dr J.P Ruparelia , Neeti<br>Rastogi* and Aditi Kaviya   | Institute of Technology,<br>Nirma University,<br>Ahmedabad – 382 481,<br>Gujarat, India.   | Green Synthesis of<br>Silica Nanoparticle<br>from Rice Husk Ash  | AB421 |
|-----|---|--|--|-------|
| 179 | S. Ravi* , and C.<br>Senthilkumar   | Department of<br>Physics,Mepco Schlenk<br>Engineering College,<br>Sivakasi, Tamil Nadu,<br>India.  | Structural and<br>magnetic property of<br>a new Bi2MnMoO6<br>double perovskite<br>material                       | AB422 |
| 180 | Upendra Kumar <sup>1</sup> *, Vipin<br>Kumar <sup>2</sup> , Enamullah <sup>3</sup> and<br>Girish S. Setlur <sup>1</sup> | <sup>1</sup> Department of Physics,<br>Indian Institute of<br>Technology Guwahati,<br>Guwahati, Assam, India-<br>781039, 2Department of<br>Metallurgical<br>Engineering & Materials<br>Science, Indian Institute<br>of Technology Bombay,<br>Mumbai, Maharastra,<br>India- 400076,<br>3Department of Physics,<br>Indian Institute of<br>Technology Bombay,<br>Mumbai, Maharastra,<br>India- 400076 | Quantized Transient<br>Non Linear Rabi<br>Frequency Response<br>in Weyl Semimetals                               | AB423 |
| 181 | M. Ponnar and<br>K.Pushpanathan#  | PG and Research<br>Department of Physics,<br>Government Arts College<br>- Karur-5  | Strong Ultra-violet<br>Absorption in Copper<br>Doped CeO2<br>Nanospheres   | AB424 |
| 182 | J S. Swathy , Natarajan<br>Chandrasekaran*  | Centre for<br>Nanobiotechnology, VIT<br>University, Vellore-<br>632104   | Comparative study<br>between two different<br>high energy<br>emulsification<br>strategies for<br>nanoformulation | AB426 |
| 183 | Rashmirekha Swain a,<br>Sivabrata Sahu a, and G.C.<br>Rout*,b   | a School of Applied<br>Sciences ( Physics ),<br>KIIT University,<br>Bhubaneswar, Odisha,<br>India<br>b Condensed Matter<br>Physics Group, Physics<br>Enclave, Plot No-<br>664/4825, Lane- 4A,<br>P.O -Patia, Shree Vihar,<br>Pin - 751031,<br>Bhubaneswar, Odisha,<br>India  | Model Study of the<br>Role of Impurity on<br>the Ferromagnetic<br>Order in Graphene-<br>on-Substrate             | AB430 |

| 184 | Sivabrata Sahu a, S. K.<br>Panda b and G.C. Rout*,c  | a School of Applied<br>Sciences (Physics),<br>KIIT University,<br>Bhubaneswar, Odisha,<br>India<br>b K.D. Science College,<br>Pochilima, Hinjilicut,<br>Pin-761101, Ganjam,<br>Orissa, India<br>c Condensed Matter<br>Physics Group, Physics<br>Enclave, Plot No-<br>664/4825, Lane- 4A, P.O<br>-Patia, Shree Vihar, Pin -<br>751031, Bhubaneswar,<br>Odisha, India.   | Tight-binding model<br>study of the tunable<br>anti-ferromagnetism<br>and electron specific<br>heat of AA-staked bi-<br>layer graphene in a<br>transverse electric<br>field | AB431 |
|-----|--|--|---|-------|
| 185 | Singh Rohitkumar<br>Shailendra and<br>V.N.Ramakrishnan*                                      | *Department of Micro<br>and Nanoelectronics,<br>SENSE, VIT University,<br>Vellore- 632014, Tamil<br>Nadu, India  | Study of<br>Reconfigurable<br>Properties of DG-<br>CNTFET with<br>different Oxide<br>material on Small<br>Length Scale  | AB433 |
| 186 | Smita Survase1, Himanshu<br>Narayan2 I. Sulania3<br>,Pravin Dhangda4 Madhavi<br>Thakurdesai1 | <ol> <li>Thin Film Research<br/>Laboratory, Department<br/>of Physics, Birla College,<br/>Kalyan 421 304, India</li> <li>Department of Physics<br/>&amp; Electronics, National<br/>University of Lesotho,<br/>Roma 180, Lesotho</li> <li>Inter University<br/>Accelerator Centre,<br/>Aruna Asaf Ali Road,<br/>New Delhi 110 067,<br/>India</li> <li>4K.M.C. College of arts,<br/>science and commerce,<br/>Khopoli.401203; India</li> </ol> | CdTe nanophase<br>formation using swift<br>heavy ion induced<br>layer mixing in a<br>Te/Cd/Te trilayer  | AB434 |
| 187 | H.S. Gouda1, Sivabrata<br>Sahu1, S.K.S. Parashar1,<br>and G.C. Rout 2,*                      | School of Applied<br>Sciences (Physics ),<br>KIIT University,<br>Bhubaneswar, Odisha,<br>India<br>2 Condensed Matter<br>Physics Group, Physics<br>Enclave, Plot No-<br>664/4825, Lane- 4A,<br>P.O -Patia, Shree Vihar,<br>Pin - 751031,  | Microscopic study of<br>the effect of substrate<br>induced gap and<br>doping on the<br>temperature<br>dependent anti-<br>ferromagnetic gap in<br>monolayer graphene         | AB439 |

|     |   | Bhubaneswar, Odisha,<br>India.  |  |       |
|-----|---|---|--|-------|
| 188 | A.Karthikeyan, and<br>P.S.Mallick*                          | a School of Electrical<br>Engineering, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.  | Buffer for High<br>Performance in CNT<br>based<br>VLSI interconnects   | AB442 |
| 189 | Kelothu Suresh, R. Vinoth<br>Kumar and G.<br>Pugazhenthi*   | Department of Chemical<br>Engineering, Indian<br>Institute of Technology<br>Guwahati,<br>Guwahati - 781039,<br>Assam, India   | Properties of<br>polystyrene (PS)/Co-<br>Al LDH<br>nanocomposites<br>prepared by melt<br>intercalation   | AB444 |
| 190 | P.Manuneethi Arasua*, and<br>V.Krishnarajb                  | aDepartment of<br>Mechanical Engineering,<br>KSR College of<br>Engineering,<br>Tiruchengode- 637215,<br>Tamil Nadu, India.<br>bDepartment of<br>Production Engineering,<br>PSG College of<br>Technology, Coimbatore-<br>641004, Tamil Nadu,<br>India. | Comparative<br>Investigation on<br>Mechanical<br>Properties of Banana<br>and Glass Reinforced<br>Polymer based<br>Composites<br>manufactured by<br>Hand layup and<br>VARTM process | AB448 |
| 191 | Sk Ershadul Haquea,b, S.<br>Kalaiarasana and A.<br>Sheelaa* | aDepartment of<br>Chemistry, School of<br>Advanced Sciences, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India<br>bNarayana Pharmacy<br>College, Chintha Reddy<br>Palem, Nellore, Pin-<br>524002, India                                      | Polymeric<br>microspheres as a<br>drug carrier for<br>sustained release of<br>metformin based on<br>miscibility study  | AB450 |

| 192 | Brindha Jb, Kaushik<br>Chandaa* and Balamurali<br>M Mb*  | a – Department of<br>Chemistry, School of<br>Advanced Sciences, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India<br>b – Department of<br>Chemistry, School of<br>Advanced Sciences, VIT<br>University, Chennai<br>campus, Vandalur-<br>Kelambakkam Road,<br>Chennai - 600 127, Tamil<br>Nadu, India | A review on<br>developments<br>towards smart<br>biomaterials –<br>Insights and<br>applications  | AB451 |
|-----|--|---|---|-------|
| 193 | Prateek Uttam,<br>Varunkumar.K, and Anita<br>Sagadevan Ethiraj*  | Centre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.   | Synthesis and<br>Characterization of<br>Copper doped Nickel<br>Oxide Nano Catalyst<br>and its Application in<br>Photodegradation of<br>Phenol | AB452 |
| 194 | P. Anandhia*, V. Jawahar<br>Senthil Kumara, and S.<br>Harikrishnanb  | aDepartment of<br>Electronics and<br>Communication<br>Engineering, Anna<br>University, Chennai,<br>India<br>bDepartment of<br>Mechanical Engineering,<br>Adhi College of<br>Engineering and<br>Technology,<br>Sankarapuram,<br>Kancheepuram, India  | Preparation and<br>enhanced capacitive<br>behavior of Ni-ZnO<br>nanocomposite as<br>Electrode for<br>Supercapacitor                           | AB454 |
| 195 | Surendar J <sup>a</sup> , Anita<br>Sagadevan Ethiraj <sup>a</sup> and<br>Ajay Kumar<br>Vaidhyanathan <sup>b*</sup> | a Centre for<br>Nanotechnology<br>Research, VIT university,<br>Vellore-632014, Tamil<br>Nadu, India<br>b Intel Corporation,<br>CCG, Bangalore,<br>Karnataka, India  | Investigation of<br>Thermal conductivity<br>in Single and Few<br>layer Graphene on<br>Different types of<br>substrate materials               | AB455 |
| 196 | M.S.Aruna Gandhi1, C.<br>Gandhi2, P.Ramesh Babu2<br>and K. Senthilnathan2*   | 1School of Engineering,<br>Presidency University,<br>Bengaluru, Karnataka,<br>India.<br>2Department of Physics,<br>School of Advanced<br>Sciences, VIT  | Metamaterial Fiber<br>Sensor Modeling<br>with Surface Plasmon<br>and Classical Guiding<br>Modes   | AB456 |

|     |  | University, Vellore,                      |                        |       |
|-----|--|---|------------------------|-------|
|     |  | Tamilnadu, India.                         |                        |       |
|     |  | Tammadu, muta.                            |                        |       |
|     |  |   |                        |       |
|     |  |   |                        |       |
|     |  |   |                        |       |
|     |  |   |                        |       |
|     |  |   |                        |       |
|     |  |   |                        |       |
| 197 | Raju Jadar <sup>a*</sup> ,             | aResearch scholar,                        | Performance            | AB457 |
|     | K.S.Shashishekar <sup>b</sup> , Channa | Mechanical Engineering                    | Evaluation of Al-      |       |
|     | Keshava naik N <sup>c</sup> ,          | Department, S.I.T                         | MWCNT based            |       |
|     | ,                                      | Tumkur                                    | Automobile Radiator    |       |
|     |  | b Professor and Dean,                     |                        |       |
|     |  | Department of                             |                        |       |
|     |  | Mechanical                                |                        |       |
|     |  | engineering.SI.T Tumkur                   |                        |       |
|     |  |   |                        |       |
|     |  | c PG student, Department<br>of Mechanical |                        |       |
|     |  |   |                        |       |
|     |  | engineering.S.I.T                         |                        |       |
| 100 |  | Tumkur                                    |                        |       |
| 198 | J. Manikandan, M.                      | Centre for Nanoscience                    | Carbon Incorporated    | AB461 |
|     | Arivanandhan and R.                    | and Technology, AC                        | Nickel based           |       |
|     | Jayavel*                               | Tech Campus, Anna                         | nanostructured         |       |
|     |  | University                                | material for           |       |
|     |  | Chennai - 600025, India.                  | Supercapacitor         |       |
|     |  |   | Application            |       |
| 199 | K. Srinivasan a*, E. James             | aDepartment of physics,                   | Radiological           | AB463 |
|     | Jabaseelan Samuela, V.                 | SAS, VIT University,                      | properties of gold     |       |
|     | Poopathib and A. Nirmala               | Vellore - 632 014, Tamil                  | loaded soft tissue its |       |
|     | Gracec                                 | Nadu, India.                              | application in         |       |
|     |  | bDepartment of medical                    | nanoparticle           |       |
|     |  | physics, Apollo                           | enhanced x-ray         |       |
|     |  | Gleneagles Hospital,                      | therapy                |       |
|     |  | Kolkata - 700 054, India                  |                        |       |
|     |  | cCentre for                               |                        |       |
|     |  | Nanotechnology                            |                        |       |
|     |  | Research, VIT                             |                        |       |
|     |  | University, Vellore - 632                 |                        |       |
|     |  | 014, Tamil Nadu, India.                   |                        |       |
| 200 | K.Srinivasana*, E.James                | aDepartment of physics,                   | Dose enhancement of    | AB464 |
|     | Jabaseelan Samuela,                    | SAS, VIT University,                      | Bismuth Oxide          |       |
|     | V.Poopathib and                        | Vellore - 632 014, Tamil                  | nanoparticle its       |       |
|     | A.Nirmala Gracec                       | Nadu, India.                              | application in         |       |
|     |  | bDepartment of medical                    | radiotherapy           |       |
|     |  | physics, Apollo                           | r - T J                |       |
|     |  | Gleneagles Hospital,                      |                        |       |
|     |  | Kolkata - 700 054, India                  |                        |       |
|     |  | cCentre for                               |                        |       |
|     |  | Nanotechnology                            |                        |       |
|     |  | Research, VIT                             |                        |       |
|     |  | Nestalui, VII                             |                        |       |

|     |   | University, Vellore - 632<br>014, Tamil Nadu, India.   |  |       |
|-----|---|--|--|-------|
| 201 | K.Srinivasana*, E.James<br>Jabaseelan Samuela,<br>V.Poopathib and<br>A.Nirmala Gracec | aDepartment of physics,<br>SAS, VIT University,<br>Vellore - 632 014, Tamil<br>Nadu, India.<br>bDepartment of medical<br>physics, Apollo<br>Gleneagles Hospital,<br>Kolkata - 700 054, India<br>cCentre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India. | Investigation on<br>energy dependency of<br>dose enhancement<br>factor produced by<br>gold nanoparticle  | AB465 |
| 202 | K. Govardhan, and<br>A.Nirmala Grace*   | a Centre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.  | Lanthanides as<br>Dopants in Sensors –<br>A Review   | AB466 |
| 203 | K. Govardhan, and<br>A.Nirmala Grace*   | a Centre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.  | Multiphysics<br>Modelling and<br>Optimization of Gas<br>Flow Characteristics<br>in a Flow Metric<br>based Gas Sensing<br>Chamber with<br>Integrated Heater for<br>Analyzing Nano<br>Chemical Sensors | AB467 |
| 204 | K. Govardhan, and<br>A.Nirmala Grace*   | a Centre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.  | Temperature<br>Optimized Ammonia<br>and Methanol<br>Sensing using Ce-<br>doped Tin Oxide<br>Thin Films in a Novel<br>Flow Metric Gas<br>Sensing Chamber  | AB468 |

| 205 | Deepti Rana1, Akshay     | 1Centre for Stem Cell                | Magnetic nano         | AB469   |
|-----|--------------------------|--------------------------------------|-----------------------|---------|
| 205 | Bhatt2*,Aditya           | Research (CSCR), A                   | hydroxyapatite:       | AD407   |
|     | Karunanithi3*and Murugan | Unit of the Institute for            | Preparation and       |         |
|     | Ramalingam1,4            | Stem Cell Biology and                | characterization      |         |
|     | Tumumigumi, t            | Regenerative Medicine-               | enaracterization      |         |
|     |                          | Bengaluru, Christian                 |                       |         |
|     |                          | Medical College                      |                       |         |
|     |                          | Campus, Vellore 632002               |                       |         |
|     |                          | 2School of Biosciences               |                       |         |
|     |                          | andTechnology, Vellore               |                       |         |
|     |                          | Institute of Technology,             |                       |         |
|     |                          | Vellore 632014                       |                       |         |
|     |                          | 3Department of                       |                       |         |
|     |                          | Biotechnology,Periyar                |                       |         |
|     |                          | Maniammai University,                |                       |         |
|     |                          | Vallam, Thanjavur 613403             |                       |         |
|     |                          | 4WPI-Advanced Institute              |                       |         |
|     |                          | for Materials Research,              |                       |         |
|     |                          | Tohoku University,                   |                       |         |
|     |                          | Sendai 980-8577, Japan               |                       |         |
|     |                          | *Short term project students of CSCR |                       |         |
| 206 | Aparna T P and Anita S   | Centre for                           | Preparation and       | AB471   |
| 200 | Ethiraj*                 | Nanotechnology                       | Study of Cu@Cu2O-     | 1101/1  |
|     |                          | Research, VIT                        | Graphene Oxide        |         |
|     |                          | University, Vellore - 632            | Nanocomposites for    |         |
|     |                          | 014, Tamil Nadu, India.              | Photocatalytic        |         |
|     |                          |                                      | Degradation of        |         |
|     |                          |                                      | Different Dyes        |         |
| 207 | Ramakrishna Itteboina,   | Center for Computational             | Sol-gel synthesis and | AB480   |
|     | Tapan K. Sau*            | Natural Sciences and                 | characterizations of  |         |
|     |                          | Bioinformatics,                      | morphology-           |         |
|     |                          | International Institute of           | controlled Co3O4      |         |
|     |                          | Information Technology-              | particles             |         |
|     |                          | Hyderabad, Gachibowli,               |                       |         |
|     |                          | Hyderabad-500032,<br>India.          |                       |         |
| 208 | M.Murphy,                | Department of                        | Electrochemical       | AB481   |
| 200 | D.Manoj,enmozhi,         | Chemistry, School of                 | reduction of 2-       | 110 101 |
|     | D.Saravenakumar,         | Advanced Sciences, VIT               | nitrophenol on        |         |
|     | S.Senthil kumar          | University, Vellore                  | Aminopropyl methyl    |         |
|     |                          |                                      | viologen based Ionic  |         |
|     |                          |                                      | liquid platform       |         |
| 209 | K.Theyagarajan,          | Smart materials                      | Electrochemical       | AB482   |
|     | K.Thenmozhi              | laboratory for Bio-                  | behavoiour of Azure-  |         |
|     |                          | sensing and Catalysis,               | A/Ionicd/Electroche   |         |
|     |                          | Department of                        | mically reduced       |         |
|     |                          | Chemistry, School of                 | Graphene oxide on     |         |
|     |                          | Advanced Sciences, VIT               | modified screen       |         |
|     |                          | University, Vellore                  | printed carbon        |         |

|     |  |   | electrode and its<br>application as Non-<br>enzymatic hydrogen<br>peroxide sensor   |       |
|-----|--|---|---|-------|
| 210 | M.Elancheziyan, D.Manoj,<br>D.Saravanakumar ,<br>S.Senthil kumar | Smart materials<br>laboratory for Bio-<br>sensing and Catalysis,<br>Department of<br>Chemistry, School of<br>Advanced Sciences, VIT<br>University, Vellore  | Covalent<br>immobilization of<br>Ferrocene on<br>functionalized<br>Graphene oxide for<br>Amperometric<br>determination of<br>catechol                                       | AB483 |
| 211 | Palajonna Narasaiah,<br>Sarada Nallani<br>Chakravarthula *       | Department of<br>Chemistry, School of<br>Advanced Sciences, VIT<br>University, Vellore-14,<br>Tamil Nadu,India  | Synthesis of Gold<br>nanoparticles by<br>cotton peels aqueous<br>extract and their<br>catalytic<br>efficiency for the<br>degradation of Dyes<br>and antioxidant<br>activity | AB484 |
| 212 | Dayakar. T a , K.<br>Venkateswara Rao a*                         | a Centre for Nano<br>Science & amp;<br>Technology,<br>Institute of Science<br>& amp; Technology,<br>Jawaharlal Nehru<br>Technological University<br>Hyderabad,<br>Telangana State-500085,<br>India. | Cerium oxide<br>nanoparticles<br>synthesized by a<br>Novel method:<br>Structural analysis<br>and its<br>Non enzymatic<br>glucose biosensing                                 | AB485 |
| 213 | Barkha Rani, N.K. Sahu   | Centre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore-<br>632014<br>Tamilnadu, India   | Synthesis of<br>nanostructured SnO2<br>catalyst by polyol<br>reduction and<br>assessment of<br>photocatalytic<br>degradation of<br>methylene blue dye                       | AB486 |

| 214 | Sathiyanathan Felixa,<br>George Jacobb,<br>Sathyanarayanan.Pb, Soon<br>Kwan Jeongc*,<br>Andrews Nirmala Gracec*  | aDepartment of physics,<br>Dhanalakshmi college of<br>engineering, Tambaram,<br>Chennai-601 301<br>bClimate Change<br>Technology Research<br>Division, Korea Institute<br>of Energy Research,<br>Yuseong-gu, Daejeon<br>305-343, South Korea.<br>CCentre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore 632<br>014, Tamil Nadu, India. | A novel CuO-N-<br>doped graphene<br>nanocomposite based<br>hybrid electrode for<br>the electrochemical<br>detection of glucose  | AB488 |
|-----|--|---|---|-------|
| 215 | Umadevi.K.S  | School of Computer<br>Engineering, VIT<br>University, Vellore - 632<br>014, Tamil Nadu, India.  | Nano-networks for<br>terahertz<br>communication –<br>current state of art   | AB489 |
| 216 | M. L. Aparna, Sudha<br>Murali Krishna,<br>PSathyanarayan, N. K.<br>Sahu*   | Centre for<br>Nanotechnology<br>Research, VIT<br>University, Vellore,<br>632014.  | Synthesis of metal<br>ferrite (MFe2O4,<br>M=Fe, Co, Ni, Mn,<br>Cu, Zn) nanoassblies<br>by solvothermal<br>method and<br>comparative study of<br>their supercapacitive<br>behavior | AB490 |
| 217 | B.Keerthika, R.Vidya <sup>*</sup>  | Department of<br>Biomedical Sciences,<br>School of Biosciences<br>and Technology, VIT<br>University, Vellore,<br>Tamil Nadu   | Anti-microbial<br>activity and<br>Characterization of<br>Zinc ferrite Magnetic<br>Nanomaterials   | AB492 |
| 218 | Archana.L.S <sup>a*</sup> ,Deepthi.N.R<br>ajendran <sup>a</sup>  | aDepartment of Physics,<br>Govt.College for Women<br>,Thiruvananthapuram  | Structural and optical<br>properties of<br>Ce3+doped ZnS<br>nanoparticles.  | AB493 |
| 219 | B.Jennifer Joana <sup>b</sup> , A.<br>Mohan <sup>a</sup> , R. Rathes Kannan<br><sup>a</sup> , D. Alltrin <sup>b</sup> , R . Boopathi<br><sup>b</sup> , and S. Rajesh <sup>b*</sup> | a Thin film laboratory,<br>Department of Physics,<br>Karunya University,<br>Coimbatore – 641114.<br>b Department of<br>nanoscience and<br>technology, Karunya<br>University, Coimbatore –<br>641114   | Synthesis and<br>characterization of<br>CZTS nanoparticles<br>for solar cells<br>absorber material  | AB494 |

| 220 | C. S. Vicasa,b, K.<br>Namrathab, M. B. Nayanc<br>and K. Byrappa*a,b | aDepartment of Materials<br>Science, Mangalore<br>University,<br>Mangalagangotri,<br>Mangalore, India.<br>bCenter for Materials<br>Science and Technology,<br>Vijnana Bhavan,<br>University of Mysore,<br>Mysore, India.<br>cDepartment of studies in<br>Environmental Science,<br>University of Mysore,<br>Mysore, India.<br>Mechanical with | Controlled<br>Hydrothermal<br>Synthesis of Bismuth<br>Vanadate Nano-<br>articulate Structures:<br>Photooxidation of<br>Methicillin Resistant<br>Staphylococcus<br>aureus and Organic<br>Dyes<br>Zinc oxide | AB496<br>AB497 |
|-----|---|---|--|----------------|
| 221 | G.O. Obaiah1, K.H.  | specialisation in<br>automotive engineering<br>VIT University , Vellore<br>- 632014 , Tamil Nadu ,<br>India<br>1 Dept. of chemistry,  | Nanoparticle cavaties<br>For High Efficiency<br>Of The Automobiles<br>Engines<br>Development and   | AB497          |
|     | Shivaprasad*1, K. Srikanth<br>bhat2, M.S.Hegde2 and<br>M.Mylarappa3 | Vijayanagara Sri Krishna<br>Devaraya University,<br>Bellary.<br>2Research centre, Talent<br>development centre,<br>IISC, Kudhapur,<br>Chitradurga, India.<br>3Research Centre,<br>Department of<br>Chemistry, AMC<br>Engineering College,<br>Bengaluru, (Affiliated to<br>Tumkur University,<br>Tumkur).                                      | Catalytic Application<br>of Palladium Doped<br>Titania (Ti 0.98 Pd<br>0.02 O2-δ) through<br>low temperature<br>Solution Combustion<br>Method   |                |
| 223 | Deepti Rana1* and<br>Murugan Ramalingam1,2                          | 1 Centre for Stem Cell<br>Research (CSCR), A<br>Unit of the Institute for<br>Stem Cell Biology and<br>Regenerative Medicine-<br>Bengaluru, Christian<br>Medical College<br>Campus, Vellore 632002,<br>India<br>2WPI-Advanced Institute<br>for Materials Research,<br>Tohoku University,<br>Sendai 980-8577, Japan                             | High-Throughput<br>Screening of Human<br>Mesenchymal Stem<br>Cells using Gradient<br>Nanofibrous<br>Scaffolds  | AB500          |

| 224 | J. Vidya a and V.Sindhua,*   | a Research and<br>Development center,<br>Bharathiar University,<br>Coimbatore , Tamil<br>Nadu.<br>* Central Institute of<br>Plastics Engineering and<br>Technology, Chennai,<br>India.  | Polyaniline/polythiop<br>hene Nanocomposite<br>for Energy Storage<br>Application   | AB501 |
|-----|--|---|--|-------|
| 225 | Santosh Aralia, Joseph<br>Tharionb, Bhuvaneshwari<br>Karunakaranc, Rosna<br>Binishc, Mayuri Gandhia,<br>Soumyo Mukherjia,c,* | <sup>a</sup> Centre for Research in<br>Nanotechnology and<br>Science, <sup>b</sup> Department of<br>Chemistry, cDepartment<br>of Bioscience and<br>Bioengineering, IIT<br>Bombay, Mumbai – 400<br>076, Maharashtra, India.  | A Facile, Green<br>Synthesis of Carbon<br>Dots (CDOTs) Using<br>Arrowroot Powder<br>for Fluorescent<br>Imaging of Bacteria   | AB503 |
| 226 | Neway Belachew1,<br>Mebrahtu hagos1, D. Rama<br>Devi2 and K. Basavaiah1*   | 1Department of<br>Inorganic & Analytical<br>Chemistry, Andhra<br>University,<br>Vishakapatnam-530003<br>2A.U. College of<br>Pharmaceutical Sciences,<br>Andhra University,<br>Visakhapatnam-530003,<br>India.   | Facile green synthesis<br>of Fe3O4@Reduced<br>Graphene Oxide<br>nanocomposites via<br>one pot electrostatic<br>self assembly method<br>for adsorptions of As<br>(V) and RhB from<br>contaminated water | AB504 |
| 227 | Govindasamy Sathiyan,<br>and Pachagounder<br>Sakthivel   | Department of<br>Chemistry, School of<br>Advanced Sciences, VIT<br>University, Vellore - 632<br>014,<br>Tamil Nadu, India.  | Synthesis and studies<br>of 2,7-carbazole<br>based polymers for<br>highly fluorescent<br>organic materials   | AB505 |
| 228 | Sonu kumar1, Kholmirzo<br>T. Kholmurodov2, Subrata<br>Majumdar3  | 1 International School of<br>Photonics, Cochin<br>University of Science and<br>Technology, Kochi<br>682022<br>2FLNP (Frank<br>Laboratory of Neutron<br>Physics), JINR (Joint<br>Institute of Nuclear<br>Research) Dubna, Russia<br>3National Institute of<br>Science and Technology,<br>Patna, Bihar 800005 | Molecular Dynamics<br>Simulation of<br>Aluminum metal<br>using DL_POLY   | AB506 |