

**CONTRIBUTORY LECTURES (ORAL PRESENTATIONS)**

S.No.	CL No.	Abstr act No.	Titile
1	CL1	1427	<p><b>Establishing and orienting well dispersed CNT coating on Aluminum 6061(Al6061) to enhance Surface properties</b>                      Suneev Anil Bansal<sup>1,2</sup>, Jatinder Kumar Goswamy<sup>3</sup>, Suresh Kumar<sup>3</sup>, Amrinder Pal Singh<sup>1</sup>  <sup>1</sup>Department of Mechanical Engineering, UIET, PanjabUniversity, Chandigarh, India - 160014  <sup>2</sup>Department of Mechanical Engineering, RIMT, MandiGobindgarh, Punjab, India - 147301  <sup>3</sup>Department of Applied Sciences,UIET, PanjabUniversity, Chandigarh, India – 160014</p>
2	CL2	1476	<p><b>Feather Like Highly Porous Co<sub>3</sub>o<sub>4</sub>electrode For Supercapacitor Application-A Potentiodynamic Approach</b>                      Niveditha C V, Rajita Ramanarayan,Aswini R, Jabeen Fatima M Jand Sindhu S*                      Department of Nanoscience and Technology, University of Calicut, Kerala, India-673635</p>
3	CL3	1488	<p><b>Structural And Optical Analysis Of Fe Doped Nio Nanoparticles Synthesized By Chemical Precipitation Route</b>                      Kiran N. Patel<sup>1</sup>,M. P. Deshpande<sup>1</sup>, Vivek P. Gujarati<sup>1</sup>, Krishna Chauhan<sup>1</sup>, Piyush Rajput<sup>1</sup>, Swati Pandya<sup>1</sup>, V. Sathe<sup>2</sup>,S. H. Chaki<sup>1</sup>  <sup>1</sup>Department of Physics, Sardar Patel University, Vallabh Vidyanagar 388120, Gujarat, India</p>
4	CL4	1511	<p><b>Evolution of nano-crystalline microstructure during formation of nb<sub>3</sub>sn superconducting phase</b>                      A. K. Singh<sup>1</sup>, Sayandeep Kundu<sup>1</sup>, M. M. Hussain<sup>1</sup>, S. K. Jha<sup>1</sup> and G. K. Dey<sup>2</sup>  <sup>1</sup>Atomic Fuels Division, <sup>2</sup>Materials Science Division                      Bhabha Atomic Research Centre, Trombay, Mumbai 400 085</p>
5	CL5	1521	<p><b>Graphitic Carbon Nitride Rod For Copper (2+) Ion Sensing</b>                      Dimitra Das<sup>1,*</sup>, Diptonil Banerjee<sup>2</sup>, Kalyan Kumar Chattopadhyay<sup>1,3</sup>  <sup>1</sup>School of Material Science and Nanotechnology, Jadavpur University, Kolkata 700032  <sup>2</sup>Dr. M.N. Dastur School of Materials Science Engineering, Indian Institute of Engineering Science and Technology, Shibpur, Howrah, India  <sup>3</sup>Department of Physics, Jadavpur University, Kolkata 700032, India</p>
6	CL6	1560	<p><b>Tribological Investigation of DLC Nanocoatings prepared by RF Sputtering</b>                      Santosh Singh<sup>1</sup>, Amit Banerjee<sup>2</sup>, Debajyoti Das<sup>2</sup>, Rashmiranjan Sahoo<sup>1*</sup>  <sup>1</sup>Surface Engineering and Tribology Division,                      CSIR - Central Mechanical Engineering Research Institute, Durgapur-713209, India</p>
7	CL7	1454	<p><b>GRAPHITE OXIDE FROM MIL-100(AI) FOR ELECTROCHEMICAL SENSING APPLICATIONS</b>                      Kulandai Vel Sivasankar<sup>1</sup>, Rajkumar Devasenathipathy<sup>2</sup>,Sea-FueWang<sup>*2</sup>, Duraisamy Senthil Raja<sup>1</sup>, Chia-Her Lin<sup>*,1</sup>  <sup>1</sup>Department of Chemistry, Chung Yuan Christian University, Chungli, Taiwan 32023.  <sup>2</sup>Department of Materials and Mineral Resources Engineering, National Taipei</p>

			University of Technology, Taipei, Taiwan
8	CL8	1691	<p><b>Fabrication of reduced graphene oxide (r-GO)/ PVDF nanocomposite films for flexible piezosensor application</b></p> <p>K. VijayaSekhar<sup>1</sup>,Miryalkar Pooja<sup>1</sup>,Ronit Ganguly<sup>2</sup>,SanghamitraDebroy<sup>2</sup>,Amit Acharyya<sup>2</sup>,Swati Ghosh Acharyya<sup>1,*</sup></p> <p><sup>1</sup>School of Engineering Sciences and Technology (SEST), University of Hyderabad, Hyderabad 500046, India <sup>2</sup>Department of Electrical Engineering, Indian Institute of Technology, Hyderabad, India</p>
9	CL9	1736	<p><b>Flourescence Intensity Ratio Based Optical Thermometry By Exploiting The Luminescence Properties Of MgO Nanocubes</b></p> <p>Subrata Senapati<sup>1*</sup>, Karuna Kar Nanda<sup>2</sup></p> <p><sup>1,2</sup>Materials Research Centre, Indian Institute of Science, Bangalore – 560012, India</p>
10	CL10	1806	<p><b>Polymeric Iron Oxide Graphene Nanocomposite as a Trace Level Sensor of Vitamin C</b></p> <p>Trupti R. Das<sup>*1</sup>, Suchit Kumar Jena<sup>1</sup>, Rashmi Madhuri<sup>2</sup>, Prashant K. Sharma<sup>**1</sup></p> <p><sup>1</sup>Functional Nanomaterials Research Laboratory, Department of Applied Physics, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004, Jharkhand, India</p> <p><sup>2</sup>Department of Applied Chemistry, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004, Jharkhand, India</p>
11	CL11	1406	<p><b>Polysaccharide-Doxorubicin Nanoconjugates for Tumor-Selective Drug Release</b></p> <p>Shiji R<sup>1</sup>, Manu M. Joseph<sup>1,2</sup>, Raveendran Pillai K<sup>3</sup>, Sreelekha TT<sup>1</sup></p> <p><sup>1,2</sup> Laboratory of Biopharmaceutics &amp; Nanomedicine, Division of Cancer Research, <sup>3</sup>. Division of Clinical Laboratory, Regional Cancer Centre, Thiruvananthapuram-695011, Kerala, India</p>
12	CL12	1420	<p><b>Pamam Dendrimer Based Antileishmanial Drug Delivery System Containing Amphotericin B</b></p> <p>Jobin Jose<sup>1*</sup>, R Narayana Charyulu<sup>1</sup>, P Sahai<sup>2</sup></p> <p><sup>1</sup>Department of Pharmaceutics, NGSM Institute of Pharmaceutical Sciences, Paneer, Mangalore-575018, Karnataka, India</p> <p><sup>2</sup> National Institute of Immunology, New Delhi, India-110067</p>
13	CL13	1463	<p><b>Synthesis Of TiO<sub>2</sub> Nanotubes With Improved Biocompatibility And Antibacterial Property</b></p> <p>Sahely Saha<sup>1</sup>, Amit Biswas<sup>1</sup></p> <p><sup>1</sup>Department of Biotechnology &amp; Medical Engineering, National Institute of Technology, Rourkela, Odisha, India</p>
14	CL14	2204	<p><b>GROWTH OF COPPER OXIDE NANOWIRES: SYNTHESIS AND OPTIMIZATION</b></p> <p>Vipin Chawla<sup>1*</sup>, Harshdeep Kaur<sup>1</sup>, Arvind Kumar<sup>2</sup>, Ramesh Chandra<sup>2</sup>, Sunita Mishra<sup>1</sup></p> <p><sup>1</sup>CSIR-Central Scientific Instruments Organization, Sector-30C, Chandigarh vipin.phy@gmail.com</p> <p><sup>2</sup>Nano Science Laboratory, Institute Instrumentation Center, IIT Roorkee, Roorkee, Uttarakhand</p>
15	CL15	2233	<p><b>Thickness Dependent Dielectric Studies of Manganite Based Thin Film Devices: Role of Swift Heavy Ion Irradiation</b></p> <p>Keval Gadani<sup>1</sup>, Hetal Boricha<sup>1</sup>, K.N. Rathod<sup>1</sup>, A.D. Joshi<sup>2</sup>, K. Asokan<sup>3</sup>, P.S. Solanki<sup>1</sup>, N.A. Shah<sup>1</sup></p> <p><sup>1</sup>Department of Physics, Saurashtra University, Rajkot–360005, Gujarat, India</p>

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16	CL16	2238	<b>Design, Fabrication and Characterization of Molybdenum based microheater for PCR chip</b> Monoj Kumar Singha <sup>1</sup> , Langoju.Lakshmi. Rajeswara Rao <sup>1,2</sup> and NagarajuJampana <sup>1</sup> Dept. Of Instrumentation and Applied Physics, Indian institute of Science, Bangalore <sup>2</sup> GITAM University
17	CL17	2315	<b>Supercapacitor Application of Nickel Phthalocyanine Nanofiber and Reduced Graphene Oxide Composite</b> K. Priya Madhuri and Neena S. John Centre for Nano and Soft Matter Sciences, Jalahalli, Bangalore 560013, India
18	CL18	2318	<b>Carbon Film Electrodes for Electric Double Layer Capacitor via Electrospray of Polymeric Precursor Sol</b> Madhav P. Chavhan <sup>1</sup> , Somenath Ganguly <sup>2</sup> <sup>1</sup> Department of Chemical Engineering, Indian Institute of Technology, Kharagpur, India-721302 E-mail:madhav.chavhan@gmail.com <sup>2</sup> Department of Chemical Engineering, Indian Institute of Technology, Kharagpur, India-721302
19	CL19	1413	<b>Controlled Hydrothermal Synthesis of Graphene Supported NiCo<sub>2</sub>O<sub>4</sub> Coral-Like Nanostructures: An Efficient Electrocatalyst for Overall Water Splitting</b> Suryakanti Debata <sup>1*</sup> , Santanu Patra <sup>2</sup> , Sanchari Banerjee <sup>1</sup> , Rashmi Madhuri <sup>2</sup> , Prashant K. Sharma <sup>1*</sup> <sup>1</sup> Functional Nanomaterials Research Laboratory, Department of Applied Physics, Indian Institute of Technology (Indian School of Mines) Dhanbad, JH 826004, India <sup>2</sup> Department of Applied Chemistry, Indian Institute of Technology (Indian School of Mines) Dhanbad, JH 826004, India
20	CL20	1426	<b>Electrocatalytic Behavior of Transition Metal (Ni, Fe, Co) Doped Metal Oxide Nanocomposites for Oxygen Evolution Reaction</b> Sanchari Banerjee <sup>1*</sup> , Suryakanti Debata <sup>1</sup> , Rashmi Madhuri <sup>2</sup> , Prashant K. Sharma <sup>1*</sup> Functional Nanomaterial Research Laboratory, Department of Applied Physics, Indian Institute of Technology (Indian School of Mines), Dhanbad 826004, JH, India. Department of Applied Chemistry, Indian Institute of Technology (Indian School of Mines), Dhanbad 826004, JH, India
21	CL21	1469	<b>Cs<sub>2</sub>O-Bi<sub>2</sub>O<sub>3</sub>-ZnO Nanojunctions for Efficient Sunlight-driven Photocatalysis</b> Abdo Hezam <sup>1,*</sup> , K. Namratha <sup>1</sup> , Adel Saeed <sup>2</sup> , Q. Drmosh <sup>3</sup> and K.Byrappa <sup>1</sup> <sup>1</sup> Centre for Materials Science and Technology, University of Mysore, Vijana Bhavana, P.B.No.21, Manasagangothiri, Mysuru-570006, India.
22	CL22	1485	<b>Band Gap Engineering of chloroacetate derived Nano TiO<sub>2</sub> for visible light photocatalysis</b> Kamini Gupta <sup>*1</sup> , Ashutosh Pandey <sup>2</sup> <sup>1*</sup> Department of Chemistry, MNNIT, Allahabad, 211004, India
23	CL23	2055	<b>Effect Of Nano Particle Additive Cobalt Oxide (Co<sub>3</sub>O<sub>4</sub>) on the performance and Emission Characteristics of Diesel in a Single Cylinder, Air Cooled, Compression Ignition Engine</b>

			Vijaya Kumar Reddy K <sup>1</sup> , Srinikethan Pusthay <sup>2</sup> , Mahesh SaiVarma Mudunuru <sup>3</sup> JNTUH College of Engineering Hyderabad <sup>1</sup> , JNTUH College of Engineering Hyderabad <sup>2</sup> , JNTUH College of Engineering Hyderabad <sup>3</sup>
24	CL24	1545	<b>Potential Of Biosynthesized Covellite Nanocrystals Using <i>Trichoderma Viride</i> for Combination Assay With Antimicrobial Agents</b> Abishad P.M. <sup>a</sup> , Namratha K. <sup>b</sup> , Srinath B.S. <sup>c</sup> and Byrappa K. <sup>d</sup> <sup>a,b,d</sup> Center for Material Science and Technology, Vijnana Bhavan, University of Mysore, Karnataka, India <sup>c,d</sup> Department of Studies and Research in Microbiology, Mangalore University, P.G.Center, Karnataka, India
25	CL25	1651	<b>ECO-FRIENDLY SYNTHESIS OF GOLD NANOPARTICLES USING GOLD MINE BACTERIA <i>BACILLUS TOYONENSIS</i> AND THEIR BIOLOGICAL ACTIVITIES</b> <u>B. S. Srinath</u> <sup>1</sup> , K. Namratha <sup>2</sup> and K. Byrappa <sup>3</sup> <sup>1,3*</sup> Department of Studies and Research in Microbiology, Mangalore University, P.G. Center, Chikka Aluvara - 571232, Kodagu. Karnataka, India. <sup>2</sup> Department of Earth Science, University of Mysore, Mysore-570006, Karnataka, India.
26	CL26	1745	<b>Bio-hydrothermal Synthesis of Hybrid ZnO-Ag Nanocomposite Using <i>Thymus vulgaris</i> Aqueous Extract and Assessment of its Antimicrobial Potency Against Foodborne Pathogens</b> Mina Zare <sup>1</sup> , K. Namratha <sup>2</sup> , K. Byrappa <sup>*,3</sup> <sup>1</sup> Centre for Materials Science and Technology, <i>Vijnana Bhavan</i> , University of Mysore, Mysore, India, 570006 <sup>2</sup> Centre for Materials Science and Technology, <i>Vijnana Bhavan</i> , University of Mysore, Mysore, India, 570006 <sup>3,*</sup> Centre for Materials Science and Technology, <i>Vijnana Bhavan</i> , University of Mysore, Mysore, India, 570006
27	CL27	1807	<b>Rutin Loaded Nanoemulsion Formulation For Brain Tumor Targeting: <i>In Vitro</i>, <i>Ex Vivo</i> Permeation And <i>In Vitro</i> Cytotoxicity Assay</b> Nayana Patil <sup>1</sup> , Dr. H S Mahajan <sup>2</sup> <sup>1</sup> Affiliation- Research Scholar <sup>2</sup> Affiliation- HOD & Associate Professor R C Patel Institute of Pharmaceutical Education and Research, Shirpur, Dist- Dhule
28	CL28	1997	<b>Synthesis and Characterization of Diselenid Containing Polymeric Nanogel(-SeSe-PEG-)<sub>n</sub> for Biomedical Applications</b> Balkew Zewge Hailemeskel, <u>Adhimoorthy Prasannan</u> , Kefyalew Dagnew Adissu, Shewaye Lakew Mekuria, Hsieh-Chih Tsai* Graduate Institute of Applied Science and Technology, National Taiwan University of Science and Technology, Taipei 106, Taiwan, ROC
29	CL29	1460	<b>Tunable Optical and Ferromagnetic Behavior of reduced Graphene Oxide Wrapped CeO<sub>2</sub> Nanocrystals</b> K. Thiyagarajan <sup>1</sup> and K.Sivakumar <sup>1</sup> Department of Physics, Anna University, Chennai-600 025, India.
30	CL30	1566	<b>Structural, Electrical and Magnetic properties of Yttrium Iron Garnet Nanoparticles Synthesized by Sol Gel Auto-combustion route</b> A.Raja <sup>1</sup> , B. Sathyamoorthy, Md Gazzali P. M., G. Chandrasekaran

			Department of Physics, Pondicherry University, R. V. Nagar, Kalapet, Puducherry – 605014, India.
31	CL31	1668	<b>Observation of reduction in magnetic hyperfine field and superparamagnetic relaxation behaviour of Ni<sup>2+</sup> doped CoFe<sub>2</sub>O<sub>4</sub></b> Srinivasamurthy.K.M, Anupama.M.K, Jagadeesha Angadi.V.Rudraswamy.B*. Department of Physics, Bangalore University, Bangalore 560056.
32	CL32	1839	<b>Dual Stimuli Responsive Drug Delivery Properties of Multifunctional Metal Ferrites Nanoparticles</b> Manisha Kumari <sup>*1</sup> , Rashmi Madhuri <sup>2</sup> Prashant K. Sharma <sup>**1</sup> <sup>1</sup> Functional Nanomaterials Research Laboratory, Department of Applied Physics, Indian Institute of Technology (ISM), Dhanbad 826004, India. <sup>2</sup> Department of Applied Chemistry, Indian Institute of Technology (ISM), Dhanbad 826004, India.
33	CL33	2007	<b>Magnetodielectric Properties of Superparamagnetic Cobalt Ferrite – Graphene Oxide Nanocomposite</b> N. Ambikeswari and S. Manivannan* Carbon Nanomaterials Laboratory, Department of Physics, National Institute of Technology, Tiruchirappalli- 620 015, India.
34	CL34	2547	<b>STUDY OF STRUCTURAL AND MAGNETIC PROPERTIES OF Y-TYPE HEXAFERRITE NANOPARTICLES</b> Arundhati J. Prabhudesai <sup>*1</sup> and R.B.Tangsali <sup>*2</sup> <sup>*</sup> Department of Physics, Goa University, Taleigao Plateau, Goa 403206, India.
35	CL35	2551	<b>Engineering the Resonances in Coupled Bilayer Terahertz Metamaterials</b> Deepak Kumar <sup>1*</sup> , S Jagan Mohan Rao <sup>2</sup> , Ranjan Kumar <sup>1</sup> , Gagan Kumar <sup>2</sup> , and Dibakar Roy Chowdhury <sup>3</sup> <sup>1</sup> Department of Physics, Panjab University, Chandigarh, 160014, India <sup>2</sup> Department of Physics, Indian Institute of Technology Guwahati, Guwahati, 781039, Assam, India <sup>3</sup> Mahindra Ecole Centrale, Jeedimetla, Hyderabad, 500043, Telangana, India
36	CL36	1772	<b>Development and Studies of Molybdenum Oxide Thin Films Prepared By RF Magnetron Sputtering</b> Akshay L. Sonera <sup>a</sup> , Kamlesh V. Chauhan <sup>a</sup> , Sushant K. Rawal <sup>b*</sup> <sup>a</sup> CHAMOS Matrusansta Department of Mechanical Engineering, Chandubhai S. Patel Institute of Technology (CSPIT), Charotar University of Science and Technology (CHARUSAT), Changa- 388421, Gujarat, India. <sup>b</sup> McMaster Manufacturing Research Institute, Department of Mechanical Engineering, McMaster University, 1280 Main Street West, Hamilton, ON, L8S 4L7, Canada
37	CL37	1532	<b>Inhibition of chloride induced soil corrosion of mild steel by thin film of MCI</b> S.Suganya <sup>1</sup> , Dr.R.Jeyalakshmi <sup>1*</sup> and Dr.N. P.Rajamane <sup>2</sup> 1 Research scholar, Department of Chemistry, SRMU. 1*Professor, Department of Chemistry, SRMU . rajyashree64@gmail.com. 2 CACR, SRMU
38	CL38	2640	<b>Synthesis and characterization of graphene supported inorganic nanocomposite and its electrocatalytic activity in ORR and sensor application</b> Subramanian Sakthinathan <sup>ab</sup> , Shen-Ming Chen <sup>*a</sup> , Te-Wei Chiu <sup>*b</sup> , P.Tamizhdurai <sup>c</sup> . <sup>a</sup> Electroanalysis and Bioelectrochemistry Lab, Department of Chemical Engineering and Biotechnology, National Taipei University of Technology, No.1, Section 3,

			Chung-Hsiao East Road, Taipei 106, Taiwan (R.O.C). <sup>b</sup> Department of Materials and Mineral Resources Engineering, National Taipei University of Technology, Taipei, 106 Taiwan(ROC). <sup>c</sup> National Centre for Catalysis Research (NCCR, Indian Institute of Technology, Chennai.
39	CL39	1855	<b>On Tunneling Rates of Single Electron Transistor</b> Arpita Ghosh <sup>1</sup> , Subir Kumar Sarkar <sup>2</sup> <sup>1</sup> RCC Institute of Information Technology, Kolkata
40	CL40	1913	<b>Multiferroic Properties Of Fe Substituted Tungsten Bronze Electroceramics</b> Shilpi Jindal <sup>1</sup> , Ajay Vasishth <sup>2</sup> , Sheela Devi <sup>3</sup> 1Department of Physics, Chandigarh University, Mohali,Punjab 2Department of Applied Sciences, ChandigarhEngineering College,Mohali, Punjab
41	CL41	2328	<b>Hydrothermal Growth of ZnO and ZnO/ZnCr<sub>2</sub>O<sub>4</sub> Nanostructures towards Biosensing Applications</b> Mayoorika Shukla <sup>1*</sup> , Pramila <sup>1</sup> , Tejendra Dixit <sup>1</sup> , I. A. Palani <sup>2,3</sup> and V. Singh <sup>1,3*</sup> <sup>1</sup> Molecular and Nanoelectronics Research Group (MNRG), Department of Electrical Engineering, IIT Indore, Indore, Madhya Pradesh, India. <sup>2</sup> Mechatronics and Instrumentation Lab, Department of Mechanical Engineering, IIT Indore, Indore, Madhya Pradesh, India. <sup>3</sup> Metallurgical Engineering and Material Science, IIT Indore, Indore, Madhya Pradesh, India
42	CL42	2463	<b>Polymer Decorated Multiwall Carbon Nanotube On Flexible Fabric For Volatileorganic Compound (Vocs)Sensingat Room Temperature.</b> DebasisMaity <sup>1</sup> , R. T. Rajendra Kumar <sup>1,2*</sup> . <sup>1</sup> Junior research fellow, DRDO - Center for Life Sciences, Bharathiar University, Coimbatore –46, India. <sup>2</sup> Associate Professor,Department of NanoScience and Technology, Bharathiar University, Coimbatore - 641046, Tamil Nadu, India.
43	CL43	1598	<b>Impact of Material Properties and Device Architecture on the Device Performance for a Gate All Around Nanowire Tunneling FET</b> Sankalp Kuamr Singh <sup>1</sup> , Ankur Gupta <sup>2</sup> , Hung Wei Yu <sup>1</sup> , Edward Yi Chang <sup>* 1,3</sup> <sup>1</sup> Department of Materials Science Engineering, National Chiao Tung University, Hsinchu, Taiwan *edc@mail.nctu.edu.tw <sup>2</sup> Centre for Applied Research in Electronics, IIT Delhi, New Delhi, India <sup>3</sup> Internantional College of Semiconductor Technology, National Chiao Tung University, Hsinchu, Taiwan
44	CL44	1169	<b>Optimization of Platinumand Titanium Thermistor in Uncooled Antenna-Coupled Terahertz Microbolometer Fabrication</b> Amit Banerjee <sup>1</sup> , Hiroaki Satoh <sup>1</sup> , Yash Sharma <sup>2</sup> , Ajay Tiwari <sup>1</sup> , Norihisa Hiromoto <sup>2</sup> , and Hiroshi Inokawa <sup>1</sup> <sup>1</sup> Research Institute of Electronics, Shizuoka University, E-mail: inokawa.hiroshi@shizuoka.ac.jp <sup>2</sup> Graduate School of Science and Technology, Shizuoka University, 3-5-1 Johoku, Naka-ku, Hamamatsu 432-8011, Japan
45	CL45	1170	<b>Electric Field Effect on Dopant Bands in Silicon 2D Esaki Tunnel Diodes</b> G. Prabhudesai, <sup>1,2</sup> G. Greeshma, <sup>1</sup> M. Manoharan, <sup>3</sup> H. Mizuta, <sup>3</sup> M. Tabe, <sup>1</sup> and D. Moraru <sup>1*</sup> <sup>1</sup> Research Institute of Electronics, Shizuoka University, Japan

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46	CL46	1853	<b>Modeling and Optimization of Silver Nanoparticles</b> Shiva Naresh Mulampaka <sup>1</sup> , Hanumantha Rao Garipati <sup>2</sup> <sup>1</sup> Anil Neerukonda Institute of Technology and Sciences, Visakhapatnam <sup>2</sup> Anil Neerukonda Institute of Technology and Sciences, Visakhapatnam
47	CL47	2413	<b>Donor States in Semimagnetic Triangular Quantum Well</b> Kalpana P <sup>1</sup> , Jayakumar K <sup>1*</sup> Nanostructure Lab, Department of Physics, Gandhigram Rural Institute – Deemed University, Gandhigram – 624 302, Tamilnadu, India
48	CL48	2442	<b>Influence of Temperature on the Interfacial Mechanical Properties of CNT-polyethylene Nanocomposite Using Molecular Dynamics Simulations.</b> Akhileshwar Singh <sup>1</sup> , Dinesh Kumar <sup>2</sup> <sup>1</sup> Department of Mechanical Engineering, Malaviya National Institute of Technology Jaipur, India 302017 <sup>2</sup> Department of Mechanical Engineering, Malaviya National Institute of Technology Jaipur, India 302017
49	CL49	2451	<b>Influence of Various Interatomic Potentials on Thermal Conductivity of SWCNT Using Reverse Non-equilibrium Molecular Dynamics Simulations</b> Ankit Chauhan <sup>1</sup> , Dinesh Kumar <sup>2</sup> , Akhileshwar Singh <sup>3</sup> <sup>1</sup> M.Tech. Scholar, Department of Mechanical Engineering, Malaviya National Institute of Technology Jaipur, India 302 017. <sup>2</sup> Assistant Professor, Department of Mechanical Engineering, Malaviya National Institute of Technology Jaipur, India 302 017. <sup>3</sup> Ph.D. Scholar, Department of Mechanical Engineering, Malaviya National Institute of Technology Jaipur, India 302 017.
50	CL50	2452	<b>Quantum transport in edge functionalized graphene and stanene nanoribbons</b> Vipin Kumar*, Shobha Shukla, Sumit Saxena Nanostructures Engineering and Modeling (NEMO) Laboratory, Department of Metallurgical Engineering and Materials Science, Indian Institute of Technology Bombay, Mumbai- 400 076, MH, India
51	CL51	2387	<b>Evolution Of Si(100) Surface Topographies Induced By Mass Redistribution Due To Near Sputter-Threshold Energy Ar<sup>+</sup> Ion Irradiation</b> Debasree Chowdhury and Debabrata Ghose Saha Institute of Nuclear Physics, Sector – I, Block – AF, Bidhan Nagar, Kolkata 700064, India
52	CL52	2396	<b>The Symmetrically Arranged Stable Architecture of Silver Nanoparticles</b> Vinita <sup>1</sup> , Madhu Tiwari <sup>1,2</sup> , Rajiv Prakash <sup>1</sup> <sup>1</sup> School of Materials Science and Technology, Indian Institute of Technology, Banaras Hindu University, Varanasi-221005, India <sup>2</sup> K. N. G. P. G. College Gyanpur, Bhadohi, India
53	CL53	1588	<b>Structural Modulation of ZnO Nano Discs Annealed at Various Temperature</b> Pratima Bhat <sup>1</sup> , Dr. Uma Ullas Pradhan <sup>2</sup> , Dr. Naveen Kumar S.K <sup>3</sup> <sup>1,3</sup> Department of Electronics, Mangalore University, Mangalore, India <sup>2</sup> Department of Electronics, CIIRC Bangalore, India
54	CL54	2345	<b>EFFECT OF O<sub>2</sub>, N<sub>2</sub> AND H<sub>2</sub> ON ANNEALING OF PAD PRINTED HIGH CONDUCTIVE Ag-Cu NANO-ALLOYS ELECTRODES</b>

			Manjunath G <sup>1#</sup> , Anusha P <sup>1#</sup> , Ashritha Salian <sup>1#</sup> and Saumen Mandal <sup>1*</sup> <sup>1</sup> Department of Metallurgical and Materials Engineering, National Institute of Technology Karnataka – Surathkal, Mangalore - 575 025, Karnataka, India
55	CL55	1624	<b>Photophysical Properties of Graphene Based Quantum Dots Prepared via Different Chemical Routes</b> Fadeela C. U, Dharsana M. V, Bhabhina N. M and Sindhu S* Department of Nanoscience and Technology, University of Calicut, Kerala-673635, India
56	CL56	2085	<b>Influence of nanohydroxyapatite and titania nanoparticle fillers in affecting the hydrophobic nature, mechanical properties of poly(methyl methacrylate) / polyvinylidene fluoride blends</b> Ratnakar Arumugam <sup>1,3*</sup> , Vivekanandhan Sadaiyandi <sup>2</sup> , Karthika Chandrababu <sup>2</sup> , Satyanarayana Nallani <sup>3</sup> <sup>1</sup> Centre for Nanoscience and Technology, Pondicherry University, Pondicherry, India <sup>2</sup> Department of Physics and Nanotechnology, SRM Univeristy, Kattankulathur, India <sup>3</sup> Department of Physics, Pondicherry University, Pondicherry, India
57	CL57	2326	<b>Multi-Stimuli Responsive and Self-Healing Amino Acid Based Metal-Organic Hydrogel</b> Bhagwati Sharma* <sup>1</sup> , Tridib K. Sarma <sup>2</sup> and Neha Sardana* <sup>1</sup> <sup>1</sup> Institute of Nano Science and Technology <sup>2</sup> Indian Institute of Technology Indore
58	CL58	2371	<b>Self Nano Emulsifying Drug Delivery System (Snedds): Development Optimization Characterization Of Pioglytazone Hydrochloride.</b> Girish Chandra Soni <sup>1</sup> S.K Prajapati <sup>2</sup> Sri Vankateshwara University, Merrut Bundelkhand University, Jhansi.U.P
59	CL59	2460	<b>Electrospun Nanofiber Embedded with Nanodots for Biomedical Applications</b> S.Kanagasubbulakshmi, K.Lakshmi, K.Kadirvelu* DRDO – BU Center for Life Sciences, Bharathiar University Campus, Coimbatore, 641046
60	CL60	2474	<b>Green Synthesized Gold Nanoparticles Loaded Pva Nanofibers By Fabrication Of Electrospun And Their <i>In Vitro</i> Cytotoxicity Effect Of Breast Cancer Cell Line</b> Balashanmugam Panner selvam <sup>a*</sup> , Tamil Selvi Alagumuthu <sup>a*</sup> Swarna V Kanth <sup>a</sup> , G.Devanand Venkatasubbu <sup>b</sup> <sup>a</sup> Centre for Human & Organisational Resources Development (CHORD), CSIR-Central Leather Research institute, Chennai 600 020, India. <sup>b</sup> Department of nanotechnology, SRM University, Chennai 603203, India
61	CL61	2288	<b>DYE SENSITIZED SOLAR CELL BASED ON POYMER USING BASELLA ALBA FRUIT EXTRACT</b> K. Shiva pratha <sup>1</sup> , A.Clara Dhanemozhi <sup>2</sup> , S. Maria Steffi <sup>2</sup> Department of Physics, Jayaraj Annapackiam College for Women, Periyakulam, Tamil Nadu, India.
62	CL62	1543	<b>Immobilization of Liquid Electrolyte with Polymeric Matrix for the Long Term Stability and Durability of Dye Sensitized Solar Cells</b> Nijisha P, Niveditha. C.V, Rajitha R, Sindhu.S* Department of Nanoscience and Technology, University of Calicut, Kerala – 673635
63	CL63	2009	<b>Superior Electrochemical Properties of Hausmanite - Mn<sub>3</sub>O<sub>4</sub> Nanocrystal for Supercapacitor Electrodes</b> Prakash Dand S.Manivannan*



			Carbon Nanomaterials Laboratory, Department of Physics, National Institute of Technology, Tiruchirappalli-620 015, India
64	CL64	1754	<b>Effect of various ionic liquids on the performance of electrospun polymer membrane electrolyte based DSSC</b> <b>Sarathkumar K, Vignesh M, Subramania A*</b> Electrochemical Energy Research Lab, Centre for Nanoscience and Technology, Pondicherry University, Puducherry - 605 014, India.
65	CL65	1808	<b>Synthesis and Characterization of CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> Perovskite</b> <b>Dacha Omprakash<sup>1</sup>, R. Mohan<sup>1</sup>, Jada Shanker<sup>1</sup>, D. Suresh Babu<sup>1,2,*</sup></b> <sup>1</sup> Department of physics, Osmania University, Hyderabad-500007, India.
66	CL66	1811	<b>Microstructure and Thermoelectric Properties of Cu<sub>2</sub>Te-Sb<sub>2</sub>Te<sub>3</sub> Pseudobinary System</b> Shriparna Mukherjee <sup>1</sup> , Olu Emmanuel Femi <sup>2</sup> , Raju Chetty <sup>3</sup> , Kamanio Chattopadhyay <sup>1,2</sup> , Satyam Suwas <sup>2</sup> , Ramesh Chandra Mallik <sup>3*</sup> <sup>1</sup> Interdisciplinary Centre for Energy Research, Indian Institute of Science, Bangalore-560012 <sup>2</sup> Department of Materials Engineering, Indian Institute of Science, Bangalore-560012 <sup>3</sup> Thermoelectric Materials and Device Laboratory, Department of Physics, Indian Institute of Science, Bangalore-560012
67	CL67	1812	<b>Thermoelectric Properties of Co<sub>4</sub>Sb<sub>12</sub> with Bi<sub>2</sub>Te<sub>3</sub> Nano inclusions</b> Sanyukta Ghosh <sup>1</sup> , Anuj Bisht <sup>2</sup> , Gerda Rogl <sup>3,4</sup> , Pater Rogl <sup>3,4</sup> , B. S. Murty <sup>5</sup> , Satyam Suwas <sup>2</sup> , Ramesh Chandra Mallik <sup>1*</sup> <sup>1</sup> Thermoelectric Materials and Devices Laboratory, Department of Physics, Indian Institute of Science, Bangalore 560012, India <sup>2</sup> Department of Materials Engineering, Indian Institute of Science, Bangalore 560012, India <sup>3</sup> Institute of Materials Chemistry and Research, University of Vienna, Währingerstrasse 42, Wien, Austria <sup>4</sup> Christian Doppler Laboratory for Thermoelectricity, Wiedner Hauptstrasse 8-10, A-1040 Wien, Austria <sup>5</sup> Department of Metallurgical and Materials Engineering, Indian Institute of Technology, Madras, Chennai-600036
68	CL68	1571	<b>Alternative Dispersion Techniques For The Preparation Of Nanofluids</b> Ankita Srivastava, Babita, S.K Sharma USCT, Guru Gobind Singh Indraprastha University Dwarka, India
69	CL69	1573	<b>Hydrodynamics Studies Of Cnt Nanofluids In Helical Coil Heat Exchanger</b> Babita <sup>1</sup> , S. K. Sharma <sup>1</sup> , Shipra Mital Gupta <sup>2</sup> , Arinjay Kumar <sup>1</sup> <sup>1</sup> USCT, Guru Gobind Singh Indraprastha University, Dwarka, India <sup>2</sup> USBAS, Guru Gobind Singh Indraprastha University, Dwarka, India
70	CL70	1575	<b>Effect Of Chemical Treatment On Stability Of Mwcnt Nanofluids</b> Nikita Gupta <sup>1</sup> , Shipra Mital Gupta <sup>1,*</sup> , S.K. Sharma <sup>2</sup> <sup>1</sup> USBAS Guru Gobind Singh Indraprastha University, Dwarka, India <sup>2</sup> USCT Guru Gobind Singh Indraprastha University, Dwarka, India
71	CL71	1587	<b>The Relationship Nanolubricant: Magnetic Nanoparticle Based</b> Kinjal Trivedi <sup>1</sup> , Kinnari Parekh <sup>2</sup> , Ramesh V Upadhyay <sup>1,2</sup> <sup>1</sup> P. D. Patel Institute of Applied Sciences, Charotar University of Science and Technology, CHARUSAT- campus, Changa 388 421, India <sup>2</sup> K. C. Patel R & D Center, Charotar University of Science and Technology, CHARUSAT- campus, Changa 388 421, India

72	CL72	1647	<p><b>Understanding Sorption Capacity of Functionalized Multiwalled Carbon Nanotubes through pH Measurements</b>  Manishkumar D. Yadav<sup>a</sup>, Kinshuk Dasgupta<sup>b</sup>, Ashwin W. Patwardhan<sup>a</sup>, Jyeshtharaj B. Joshi<sup>a*</sup></p> <p><sup>a</sup>Department of Chemical Engineering, Institute of Chemical Technology, Mumbai, India  <sup>b</sup>Materials Group, Bhabha Atomic Research Centre, Mumbai, India</p>
73	CL73	2038	<p><b>Heat Transfer, Friction Factor Analysis Of Fe<sub>3</sub>O<sub>4</sub> Nanofluid Flow In A Double Pipe U-Bend Heat Exchanger With And Without Longitudinal Strip Inserts</b>  N.T.Ravi Kumar<sup>1</sup>, P.Bhramara<sup>1</sup>, L.Syam Sundar<sup>2</sup></p> <p><sup>1</sup>Department of Mechanical Engineering, J.N.T.U. College of Engineering, Hyderabad, India.  ntravi23@gmail.com  <sup>2</sup>Center for Mechanical Technology and Automation, Department of Mechanical Engineering, University of Aveiro, Portugal.</p>
74	CL74	2426	<p><b>BaTiO<sub>3</sub>:Eu<sup>3+</sup> perovskite red emitting phosphor: Structural and temperature dependent photoluminescence studies for the lighting applications</b>  Dhananjay Kumar Singh<sup>a)</sup>, J. Manam<sup>b)</sup></p> <p>Department of Applied Physics, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004, India</p>
75	CL75	2466	<p><b>Effect of W Addition on Phase Formation and Morphology of Nanocrystalline AlCuCrFeMnW<sub>x</sub> (x=0, 0.05, 0.1 and 0.5 mol) High Entropy Alloys via Mechanical Alloying</b>  Devesh Kumar<sup>1</sup>, Ornov Maulik<sup>1</sup>, Saurav Kumar<sup>1</sup>, Y.V.S.S. Prasad<sup>1</sup> and Vinod Kumar<sup>1,2</sup></p> <p><sup>1</sup>Department of Metallurgical and Materials Engineering, MNIT, Jaipur, India-302017  <sup>2</sup>Department of Metallurgy and Materials Science, IIT Indore, India-453552</p>
76	CL76	2468	<p><b>Photoluminescence properties and thermal stability of red emitting Ca<sub>2</sub>SiO<sub>4</sub>:Eu<sup>3+</sup> nanophosphor synthesized by solution combustion route for solid state lighting application</b>  Kanchan Mondal* and J. Manam</p> <p>Department of Applied Physics  Indian Institute of Technology (Indian School of Mines) Dhanbad 826004, India</p>
77	CL77	2556	<p><b>Preparation, Characterization and Dielectric Properties of Gd<sup>3+</sup> doped Cobalt ferrite Nanoparticles</b>  Manoj D. Salgaonkar<sup>1</sup>, Pranav P. Naik<sup>2</sup>, R. B. Tangsali<sup>2*</sup></p> <p><sup>1</sup> St. Xavier's College, Mapusa Goa 403507  <sup>2</sup> Department of Physics, Goa University, Taleigao Plateau, Goa 403206</p>
78	CL78	1471	<p><b>Thermal Stability of Nanofractals Fabricated by Soft-landing of Size selected Cu nanoclusters</b>  Shyamal Mondal<sup>1,2</sup>, DebasreeChowdhury<sup>1</sup>, S. R. Bhattacharyya<sup>1</sup></p> <p><sup>1</sup>SP&amp;MS Division, Saha Institute of Nuclear Physics, Sector-1, Block-AF, Bidhan Nagar, Kolkata- 700064, India  <sup>2</sup>Dept. Of Physics, Maharaja Manindra Chandra College, 20 Ramkanto Bose Street, Kolkata- 700101, India</p>
79	CL79	2133	<p><b>Fabrication of thin film transistor using Magnesium Zinc Oxide (MgZnO) as a semiconductor layer by magnetron sputtering technique</b>  M. Amutha Surabi<sup>1</sup> and J. Chandradass<sup>2*</sup></p> <p><sup>1</sup>PRIST University, Center for Nanotechnology, Thanjavur, Tamilnadu, India.</p>

			<sup>2</sup> SRM University, School of Mechanical Engineering, Department of Automobile Engineering, Kancheepuram, Tamilnadu, India.
80	CL80	2024	<b>Grafting of Copper complexes onto Graphene oxide Nanosheets and its Catalytic Study in Suzuki Cross Coupling Reaction</b> Saroja Anuma, Ramachandra Bhat Badekai* Department of Chemistry, Catalysis and Material Chemistry Laboratory National Institute of Technology Karnataka, Mangalore, Karnataka, India-575025
81	CL81	2034	<b>Drastic Enhancement in Photocatalytic Response of BiVO<sub>4</sub>/C<sub>3</sub>N<sub>4</sub> Composite System</b> Bhagyesh Purohit <sup>1</sup> , Sagarmal Kumawat <sup>1</sup> , Ambesh Dixit <sup>1,*</sup> <sup>1</sup> Department of Physics & Center for Solar Energy, Indian Institute of Technology Jodhpur, 342011, Rajasthan, India
82	CL82	2035	<b>Facile Synthesis and Characterization of Chitosan based Nanocomposite Aerogels: Kinetic Modeling of Hexavalent Chromium Adsorption</b> Arit Das <sup>1</sup> , Sankhadeep Basu <sup>1</sup> , and Sudeshna Saha <sup>1*</sup> <sup>1</sup> Department of Chemical Engineering, Jadavpur University, Kolkata-700032, India
83	CL83	2051	<b>Delaminated Porous Graphitic Carbon Nitrides For Enhanced Photocatalytic Hydrogen Evolution</b> Nishanthi. S.T. <sup>1,2</sup> , Subramanian. B. <sup>2</sup> and Kamalakannan Kailasam <sup>1</sup> <sup>1</sup> Institute of Nano Science and Technology, Phase-X, Sector-64, Mohali-160062, Punjab <sup>2</sup> CSIR-Central Electrochemical Research Institute, Karaikudi – 630006, Tamil Nadu
84	CL84	2129	<b>Shear - Thickening Fluids With Nanoparticles And Their Application</b> Rajeev Mehta Department of Chemical Engineering, Thapar University, Patiala, Punjab, India
85	CL85	2142	<b>Carbon semi-coated on titaniananorods-Pt electrocatalyst for electrochemical activity and durability towards oxygen reduction reaction in PEFCs</b> P. Dhanasekaran*, Vinod Selvaganesh and Santoshkumar D. Bhat <sup>a</sup> Central Electrochemical Research Institute (CECRI), CSIR-Madras Complex, Chennai 600 113, Tamil Nadu, India
86	CL86	1666	<b>VERTICALLY ALIGNED SILVER (Ag) NANOWIRES FOR ENHANCING POOL BOILING HEAT TRANSFER</b> Udaya Kumar G <sup>1</sup> , S. Suresh* <sup>1</sup> , M.R. Thansekhar <sup>2</sup> <sup>1</sup> Department of Mechanical Engineering, National Institute of Technology, Tiruchirappalli <sup>2</sup> K.L.N. College of Engineering, Madurai, Tamilnadu
87	CL87	1682	<b>INFLUENCE OF CONCENTRATION OF MEA ON CU<sub>2</sub>ZnSnS<sub>4</sub> THIN FILMS GROWN BY ETHANOL BASED SOLUTION PROCESS</b> Indu Gupta and Bhaskar Chandra Mohanty* School of Physics and Materials Science, Thapar University, Patiala-147004
88	CL88	1856	<b>Facile and Rapid Synthesis of Nanocrystalline Mixed Valance Vanadium Oxide Assisted by Microwave Heating</b> Vandana Shinde <sup>1a*</sup> , Pradip Patil <sup>2a</sup> <sup>a</sup> Department of Physics, North Maharashtra University, Jalgaon 425 001, Maharashtra,
89	CL89	1870	<b>A Novel Approach Employed to Study the Stability of 3D/1D Hierarchical Hybrid TiO<sub>2</sub> Microarchitectures over Titanium Oxide Seeded FTO Substrates and their Characterizations</b> Maria Angelin Sinthiya Maria John <sup>1</sup> , Ramamurthi Kandasamy <sup>1</sup> , Sethu Raman K <sup>2</sup>

			<sup>1</sup> Crystal Growth and Thin Film Laboratory, Department of Physics and Nanotechnology, SRM University, Kattankulathur 603203, Tamilnadu, India.
90	CL90	1877	<b>Zn<sub>2</sub>SnO<sub>4</sub> thin films by alternate thermal evaporation of Sn and Zn metals</b> R. Ramarajan <sup>1</sup> , K. Thangaraju <sup>1,2</sup> , M. Kovendhan <sup>3</sup> , D. Paul Joseph <sup>1,2</sup> <sup>1</sup> Department of Physics, National Institute of Technology Warangal- 506004, India. <sup>2</sup> Center for Advanced Materials, National Institute of Technology, Warangal, Telangana – 506004, India. <sup>3</sup> Department of Environmental Engineering, Inha University, Incheon 402-751, South Korea.
91	CL91	1512	<b>Novel Study of Gas Sensing Characteristics of Thermally Evaporated Tin Oxide Thin Film</b> Dr. Sumanta Kumar Tripathy Department of Physics, GVP College of Engineering (Autonomous), Madhurawada, Visakhapatnam-530048, Andhra Pradesh
92	CL92	1912	<b>Selective Electrochemical Detection of Dopamine in Presence of Uric Acid and Ascorbic Acid using Aminothiophenol Functionalized Electrochemically Reduced Graphene Oxide Modified Electrode</b> Aparna TK <sup>1</sup> , Susan Immanuel <sup>1</sup> , R. Sivasubramanian <sup>1</sup> Nanosensor laboratory, PSG Institute of Advanced Studies, Coimbatore-641004
93	CL93	1944	<b>Surface modified nanoparticle thin film wraps for prolonged shelf-life of perishable food products.</b> Chandraprabha M N <sup>1*</sup> , Samrat K <sup>1</sup> , Ahalya N <sup>1</sup> , Deepa Parameshwar Kundagol <sup>1</sup> , Hamsapriya S <sup>1</sup> , Ishita Paul <sup>1</sup> , Yugadhi <sup>1</sup> <sup>1</sup> Department of Biotechnology, M S Ramaiah Institute of Technology, Bangalore, Karnataka, India -560054.
94	CL94	1985	<b>Energy Transfer Study Between Ce<sup>3+</sup> and Tb<sup>3+</sup> in Wet Chemically Synthesized Novel LiAl(SO<sub>4</sub>)<sub>2</sub> Phosphor</b> M. M. Yerpude and S. J. Dhoble Department of Physics, RTM Nagpur University, Nagpur, India
95	CL95	1992	<b>Microwave Assisted Synthesis of BCNO Nanophosphor as LDS Layer for Enhancing Solar Cell Efficiency</b> Sonal P. Ghawade <sup>a</sup> , Kavita Abhay Deshmukh <sup>b</sup> , S.J.Dhoble <sup>c</sup> and Abhay D. Deshmukh <sup>a</sup> <sup>a</sup> Dept. of Physics, Energy Materials and Devices Laboratory, RTM Nagpur University, Nagpur, India <sup>b</sup> Dept. of MME, Visvesvaraya National Institute of Technology, Nagpur, India <sup>c</sup> Dept. of Physics, Nanomaterials Research Laboratory, RTM Nagpur University, Nagpur, India
96	CL96	1411	<b>Effect of Water Layer at the Graphene/SiO<sub>2</sub> Interface on the Optical Properties of Pentacene Thin Film</b> Anu Babusen <sup>1</sup> , Sanjoy Jena <sup>2</sup> , Lijin George <sup>1</sup> , Manu Jaiswal <sup>1</sup> , Debdutta Ray <sup>2</sup> , Jayeeta Bhattacharyya <sup>1</sup> <sup>1</sup> Department of Physics, Indian Institute of Madras, Chennai <sup>2</sup> Department of Electrical Engineering, Indian Institute of Madras, Chennai
97	CL97	1477	<b>Green Silver Nanoparticles For Enhanced Light Harvesting In Dye Sensitized Solar Cells</b> Rajita Ramanarayanan, Niveditha C. V, Nijisha . P, Sindhu . S <sup>*</sup> Department of Nanoscience and Technology, University of Calicut, Kerala, India-673635
98	CL98	1863	<b>Recycling Management for End-of-Life Solar Photovoltaic Modules</b> Poonam Sharma <sup>1*</sup> and Mohan L Kolhe <sup>2</sup>

			<sup>1</sup> Department of Electrical, Electronics, and Instrumentation, Shanghai Jiao Tong University, Shanghai-240200, PR China.
99	CL99	2359	<b>Highly Fluorescent golden-silk fabric for medical grade fabric through in situ chemical modification on pristine-silk and gold nanoclusters</b> Chuan-Chung Chuang, <sup>†</sup> AdhimoorthyPrasannan, <sup>*‡</sup> Po-Da Hong, <sup>*,†‡</sup> <sup>†</sup> Graduate Institute of Applied Science and Technology, National Taiwan University of Science and Technology, 43, Keelung road, Section 4, Taipei 10607, Taiwan <sup>‡</sup> Department of Materials Science and Engineering, National Taiwan University of Science and Technology, 43, Keelung road, Section 4, Taipei 10607, Taiwan
100	CL100	2498	<b>Efficacy of mycosynthesized silver nanoparticles of <i>Earliella scabrosa</i> as an antibacterial and wound healing agent.</b> MosaChristasK <sup>1</sup> , Sandilya Sharma B.M. <sup>2</sup> , Jagadeeswari S <sup>2</sup> , Balashanmugam P <sup>1*</sup> <sup>1</sup> Avanz Bio Pvt. Ltd., M.E.S Road, Tambaram East, Chennai – 600059, Tamil Nadu, India.
101	CL101	2208	<b>Analyses Of Antiwear And Extreme Pressure Properties Of Zinc Oxide Nano Friction Modifiers Based Vegetable Oil</b> ShubrajitBhaumik <sup>*1</sup> , Shubhabrata Datta <sup>1</sup> , S.D Pathak <sup>1</sup> , Rishab Maggirwar <sup>1</sup> , Atharva Kadam <sup>1</sup> <sup>1</sup> Department of Mechanical Engineering, SRM University, Kattankulathur, Tamil Nadu 603203
102	CL102	2383	<b>THE INFLUENCE OF ORGANIC FIBRES AND NANO PARTICLES ON THE SHEAR STRENGTH OF SOILS</b> J.Rajaraman <sup>1</sup> Professor, Department of Harbour and Ocean Engineering, AMET University, 135 East Coast road, Kanathur -603 112 Chennai, INDIA S.Narasimha Rao <sup>2</sup> Director, Dredging Corporation of India ( Govt. of India)
103	CL103	2603	<b>Novel ZnSe Nano/sub-microstructures for photocatalysis Applications: Low Temperature Green Solvothermal Approach</b> <sup>1,3</sup> A. K. Shahi <sup>*</sup> , B. K. Pandey <sup>2</sup> , P. Singh <sup>3</sup> , R. Gopal <sup>1</sup> <sup>1</sup> Laser Spectroscopy & Nanomaterials Lab, Department of Physics, University of Allahabad, Allahabad-211002, India <sup>2</sup> Material Research Center, Indian Institute of Science, Bangalore 560012 <sup>3</sup> Department of Physics, Indian Institute of Technology, Varanasi-221005, India
104	CL104	2159	<b>Thermoelectric Properties of BiCuSeO with Bismuth and Oxygen Vacancies</b> Sayan Das <sup>1</sup> , Anbalagan Ramakrishnan <sup>2</sup> , Kuei-Hsien Chen <sup>2</sup> , Ramesh Chandra Mallik <sup>1</sup> <sup>1</sup> Thermoelectric Materials and Devices Laboratory, Department of Physics, Indian Institute of Science, Bangalore, India <sup>2</sup> Institute of Atomic and Molecular Sciences, Academia Sinica, No. 1, Sec. 4, Roosevelt Road, Taipei, Taiwan
105	CL105	2197	<b>ZnO-Polypyrrole Composite for Supercapacitor Application</b> Monoj Kumar Singha <sup>1,2</sup> , Eswaramoorthy K V <sup>1</sup> , Gauthaman Bose <sup>1</sup> <sup>1</sup> Department of Instrumentation and Applied Physics, eswaramoorthykv@gmail.com <sup>2</sup> Department of Physics, Indian institute of Science, Bangalore
106	CL106	2231	<b>Optical and Electrical Properties of High-Quality Perovskite Methylammonium Lead Iodide films by using Facile, One-Step Spin-Coating Method for Solar Photovoltaic Applications</b> Akash Sharma <sup>1</sup> and R. Thangavel <sup>*1</sup>

			<sup>1</sup> Solar Energy Research Laboratory, Department of Applied Physics, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004, Jharkhand, India
107	CL107	2294	<b>Capacitance Behavior Of Carbon-Nano-Sphere As An Active Electrode Material For Supercapacitor Application</b> Sushant Haladkar <sup>1</sup> , Prashant Alegaonkar <sup>2</sup> Department of Applied Physics, Defence Institute of Advanced Technology, Girinagar, Pune - 411025, MS, India
108	CL108	2336	<b>Effect of CuPc layer on MEH:PPV-PCBM Bulk Heterojunction Organic Solar Cells</b> Rosemary Davis <sup>1</sup> , Jayan Manuvel <sup>2</sup> , P.Predeep <sup>3*</sup> <sup>1</sup> Dept.of Physics, National Institute of Technology, Calicut, Kerala rosemarydavis050@gmail.com <sup>2</sup> Dept.of Physics, National Institute of Technology, Calicut, Kerala jayanmanuvel@yahoo.com <sup>3*</sup> Dept.of Physics, National Institute of Technology, Calicut, Kerala
109	CL109	2389	<b>Fabrication of One Dimensional Graphene Nanoscrolls for High Performance Supercapacitor Application</b> Mohanapriya. K and Neetu Jha Department of Physics, Institute of Chemical Technology, Nathalal Parekh Marg, Matunga (East), Mumbai.
110	CL110	2515	<b>Electrochemical Study of Sol-Gel Driven Carbon nanotube-NiO Composite for Supercapacitor Electrode Materials</b> <u>Atanu Roy</u> <sup>1</sup> , Apurba Ray <sup>2</sup> , Sachindranath Das <sup>3*</sup> <sup>1,2,3</sup> Department of Instrumentation Science, Jadavpur University, Kolkata-700032, India
111	CL111	2182	<b>Study of Optical Properties of Amorphous Carbon Nanotube-CdSe Quantum Dot Hybrid</b> S.Sarkar <sup>1,3,Ξ</sup> , D Pahari <sup>2</sup> , D.Banerjee <sup>2,§</sup> , N.S. Das <sup>1,#</sup> and K.K.Chattopadhyay <sup>1,3</sup> , <sup>1</sup> ) School of Material Science and Nanotechnology <sup>2</sup> ) Dr. M.N. Dastur School of Materials Science Engineering; Indian Institute of Engineering Science and Engineering, West Bengal, India. <sup>3</sup> ) Thin Film and Nano Science Laboratory, Department of Physics, Jadavpur University, Kolkata 700032, India
112	CL112	2523	<b>Performance Test on Four Stroke Diesel Engine by Using MWCNT/Water Based Nanofluid as a Coolant of I.C Engine</b> Muruganandam.M <sup>1*</sup> , Mukesh Kumar.P.C <sup>2</sup> <sup>1</sup> Department of Mechanical Engineering, St. Joseph's College of Engineering and Technology, Thanjavur-613403, Tamilnadu, India <sup>2</sup> Department of Mechanical Engineering, University College of Engineering, Dindigul-624622.Tamilnadu, India.
113	CL113	2459	<b>Green Synthesis of SnO2/Activated Carbon Nanocomposite and Its Application as Photocatalyst in the Degradation of Naproxen</b> Shamima Begum <sup>1</sup> , Md. Ahmaruzzaman <sup>2</sup> <sup>1,2</sup> Department of Chemistry, National Institute of Technology, Silchar-788010, Assam, India.
114	CL114	2006	<b>Investigation on Preferentially Oriented Al-doped ZnO Thin Films Developed Using RF Magnetron Sputtering</b> Nalin Prashant Poddar <sup>1</sup> , Rajan Kr. Singh <sup>2</sup> , S. K. Mukherjee <sup>3</sup> <sup>1</sup> Department of Physics, Birla Institute of Technology, Mesra, Ranchi, Jharkhand – 835215

115	CL115	2096	<p><b>Broadband antireflection property of conformally grown ZTO thin filmson nanofaceted- and nanorippled-Si substrates</b></p> <p>Mahesh Saini<sup>1,3</sup>, Ranveer Singh<sup>1,3</sup>, Avanendra Singh<sup>2,3</sup> and Tapobrata Som<sup>1,3,*</sup></p> <p><sup>1</sup>SUNAG Laboratory, Institute of Physics, Sachivalaya Marg, Bhubaneswar 751 005, Odisha, India</p> <p><sup>2</sup>School of Physical Sciences, National Institute of Science Education and Research, Bhubaneswar 751005, Odisha, India</p> <p><sup>3</sup>Homi Bhabha National Institute, Training School Complex, Anushakti Nagar, Mumbai 400 085, India</p>
116	CL116	1769	<p><b>Influence Of Nitrogen Partial Pressure On Reactive Sputtered Zirconium Nitride Films</b></p> <p>Akash Thakkar<sup>a</sup>, Kamlesh V. Chauhan<sup>a</sup> and Sushant K. Rawal<sup>b*</sup></p> <p><sup>a</sup>CHAMOS Matrusanstha Department of Mechanical Engineering, Chandubhai S. Patel Institute of Technology (CSPIT), Charotar University of Science and Technology (CHARUSAT), Changa- 388421, Gujarat, India.</p> <p><sup>b</sup>McMaster Manufacturing Research Institute, Department of Mechanical Engineering, McMaster University, 1280 Main Street West, Hamilton, ON, L8S 4L7, Canada,</p>
117	CL117	1479	<p><b>Numerical Study of SOI Polarization Mode Converter at 1.55<math>\mu</math>m</b></p> <p>Nitika Gupta<sup>1</sup>, Arvind Yelashetty<sup>2</sup>, Devnath Dhirhe<sup>3</sup>,</p> <p>Department of Applied Physics,</p> <p>Defence Institute of Advanced Technology</p>
118	CL118	1981	<p><b>Effect of Surface Plasmon Resonance onthe Improved Upconversion Luminescence Multifunctional NaGdF<sub>4</sub>:Yb,Er@Ag Nanocomposite</b></p> <p>S.Yamini<sup>1</sup>, M.Gunaseelan<sup>1</sup>, G A Kumar<sup>2,3,4</sup> and J.Senthilselvan<sup>1*</sup></p> <p><sup>1</sup>Department of Nuclear Physics, University of Madras, Chennai, Tamil Nadu, India.</p> <p><sup>2</sup>Department of Physics and Astronomy, University of Texas at San Antonio, TX, United States.</p> <p><sup>3</sup>Department of atomic and molecular spectroscopy, Manipal University, Karnataka, India.</p> <p><sup>4</sup>Northwest Vista College,3535 N Ellison Dr, San Antonio, TX, United States</p>
119	CL119	2054	<p><b>Investigation On The Effect Of Thermal Annealing And Metal Coating On The Optoelectronic Properties Of ZnO Nanostructures</b></p> <p>Jitesh Agrawal<sup>1</sup>, Tejendra Dixit<sup>1</sup>, I.A. Palani<sup>2,3</sup> and Vipul Singh<sup>1,3*</sup></p> <p><sup>1</sup> Molecular and Nanoelectronics Research Group (MNRG), Department of Electrical Engineering, IIT Indore, Indore, Madhya Pradesh, India.</p> <p><sup>2</sup> Mechatronics and Instrumentation Lab, Department of Mechanical Engineering, IIT Indore, Indore, Madhya Pradesh, India.</p> <p><sup>3</sup> Centre of Material Science and Engineering, IIT Indore, Indore, Madhya Pradesh, India</p>
120	CL120	2203	<p><b>Ultrasound Assisted Catalytic Removal of Textile Effluent: An Efficient Remediation for Waste Water Treatment</b></p> <p>Madhupriya Samanta<sup>1</sup>, Moumita Mukherjee<sup>2</sup>, Uttam Kumar Ghorai<sup>3</sup>, Kalyan Kumar Chattopadhyay<sup>1*</sup></p> <p><sup>1</sup>School of Materials Science &amp; Nanotechnology, Jadavpur University, Kolkata-700032</p> <p><sup>2</sup>Department of Materials Science, Indian Association for the Cultivation of Science, Jadavpur, Kolkata – 700032</p> <p><sup>3</sup>Department of Industrial Chemistry &amp; Swami Vivekananda Research Centre,</p>

			Ramakrishna Mission Vidyamandira, Belur Math, Howrah-711202 <sup>1*</sup> School of Materials Science & Nanotechnology, Jadavpur University, Kolkata-700032
121	CL121	2517	<b>Fabrication Of Visible Blind Uv-Detector With ZnO Nanoparticles</b> Subhasish Patra <sup>1</sup> , Apurba Ray <sup>2</sup> , Atanu Roy <sup>3</sup> , Priyabrata Sadhukhan <sup>4</sup> , Swagatalaxmi Pujaru <sup>5</sup> , Uttam Kumar Ghorai <sup>6</sup> , Radhaballabh Bhar <sup>7</sup> and Sachindranath Das <sup>8*</sup> <sup>1-5</sup> Department of Instrumentation Science, Jadavpur University, Kolkata, India-700032 <sup>6</sup> Department of Industrial Chemistry and Applied Chemistry, Ramakrishna Mission Vidyamandira, Belur Math, India-711202
122	CL122	2552	<b>PREPARATION AND INVESTIGATION INTO THE STRUCTURAL, MAGNETIC AND LUMINESCENCE PROPERTIES OF Zn<sub>(1-x)</sub>Co<sub>x</sub>O NANOPARTICLE DILUTE MAGNETIC SEMICONDUCTORS</b> Kapil Y. Salkar, Bandisha B. Parwar, Pranav P. Naik, R. B. Tangsali* Department of Physics, Goa University, Taleigao Plateau, Goa, India 403206.
123	CL123	2059	<b>INVESTIGATION OF DEFECTS IN BLUE EMITTING DOPED GRAPHENE QUANUM DOTS: PHOTOLUMINESCENCE</b> Poonam R. Kharangarh*, and Gurmeet Singh Department of Chemistry, University of Delhi, Delhi, 110007, India
123	WNS1	1852	<b>Novel architectures of ultra-nanocrystalline diamond/ZnO-NiO nanocomposites for efficient ultraviolet photodetectors</b> Deepa Kathiravan <sup>†*</sup> , Bohr-Ran Huang <sup>†</sup> and Adhimoorthy Saravanan <sup>†</sup> <sup>†</sup> Graduate Institute of Electro-Optical Engineering and Department of Electronic and Computer Engineering, National Taiwan University of Science and Technology, Taipei 106, Taiwan, R.O.C.
124	WNS2	1596	<b>Nanostructured TiO<sub>2</sub> thin films sensitized by CeO<sub>2</sub> as an Inexpensive Photoanode for enhanced photoactivity of water oxidation</b> Dipika Sharma*, Nisha. Kodan, B. R. Mehta Thin Film Laboratory, Department of Physics, Indian Institute of Technology, New Delhi-110016, INDIA
125	WNS3	1730	<b>RGO/CuBO<sub>2</sub>: A New Hybrid System for Efficient On-Site Hydrogen Production</b> S. Santra <sup>1*</sup> , D. Das <sup>1</sup> , N.S. Das <sup>2</sup> and K.K. Nanda <sup>1</sup> <sup>1</sup> Materials Research Centre, Indian Institute of Science, Bangalore-560012, India. <sup>2</sup> Department of Basic Science and Humanities, Techno India – Batanagar, Kolkata 700141, India
126	WNS4	1656	<b>Black Titanium Oxide Nano Sheets as Highly Efficient Water Splitting Electrocatalyst</b> Raji Vadakkekara Physical and Materials Chemistry Division, CSIR-National Chemical Laboratory (CSIR-NCL), Dr. Homi Bhabha Road, Pashan, Pune, Maharashtra 411008.

**Women Nano Scientist (WNS): 15 minutes, Contributory Lecture (CL): 10 minutes**