

## Papers to be presented in ICSEA-2019

SN.	<i>Paper title, author(s) &amp; affiliations</i>
1)	<p><b><i>“Electrochemical Energy Storage: Role of two-dimensional materials for enabling sustainable future”</i></b>  <b>Vijayamohan K Pillai</b>  <i>Outstanding Scientist &amp; Former Director, CSIR-CECRI, Karaikudi, Tamil Nadu, India</i></p>
2)	<p><b><i>“Nanostructured carbonaceous transition metal oxide composites for high performance supercapatteries”</i></b>  <b>O. M. Hussain</b>  <i>Thin films Laboratory, Dept. of Physics, Sri Venkateswara University, Tirupati-517502, India.</i></p>
3)	<p><b><i>“Paradigm shift in power electronics with supercapacitors”</i></b>  <b>P. Sudhakar</b>  <i>OSD to DAE Secretary &amp; Former CMD, ECIL, Hyderabad, India</i></p>
4)	<p><b><i>“Magnesium molybdate hierarchical architectures for high performance sodium devices”</i></b>  <b>Manickam Minakshi</b>  <i>School of Engineering &amp; Information Technology, Murdoch University, WA 6150, Australia</i></p>
5)	<p><b><i>“Hybridization of Fuel Cells and Supercapacitors for Electric Vehicle Applications”</i></b>  <b>N. Rajalakshmi</b>  <i>Centre for Fuel Cell Technology, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), 2<sup>nd</sup> Floor, IIT-M Research Park, 6 Kanagam Road, Taramani, Chennai-600113, India</i></p>
6)	<p><b><i>“Flexible supercapacitor for energy autonomous E-skins”</i></b>  <b>Ravinder Dahiya</b>  <i>Bendable Electronics and Sensing Technologies (BEST) Group, School of Engineering, University of Glasgow, G12 8QQ, UK</i></p>
7)	<p><b><i>“Physics of lithiation and delithiation processes in metal oxide nanoparticles”</i></b>  <b>Roberto Gunnella</b>  <i>Dipartimento di Fisica, Università di Camerino, Camerino, Italy</i></p>
8)	<p><b><i>“Functional Materials for Hybrid Ion Capacitors”</i></b>  <b>M. M. Shaijumon</b>  <i>School of Physics, Indian Institute of Science Education &amp; Research, Maruthamala PO, Thiruvananthapuram - 695551, India</i></p>
9)	<p><b><i>“Towards Indigenous Energy Storage System beyond Li-ion battery”</i></b>  <b>S. Gopukumar</b>  <i>Electrochemical Power Systems Division, CSIR-Central Electrochemical Research Institute, Karaikudi – 630006, Tamil Nadu, India</i></p>
10)	<p><b><i>“Opportunity &amp; R&amp;D programs/initiative on energy storage materials &amp; systems”</i></b>  <b>Sanjay Bajpai</b>  <i>Department of Science &amp; Technology, Govt. of India, India</i></p>
11)	<p><b><i>“Energy Security through Energy Storage”</i></b>  <b>Mohan V Aware</b>  <i>Dept. of Electrical Engineering, Viswasara National Institute of Technology (VNIT), Nagpur, India</i></p>
12)	<p><b><i>“Carbon nanomaterials for advanced energy related applications”</i></b>  <b>S. Ramaprabhu</b>  <i>Alternative Energy and Nanotechnology Laboratory (AENL), Nano-Functional Materials Technology Centre (NFMTC), Department of Physics, IITM, Chennai-600036, India</i></p>
13)	<p><b><i>“Supercapacitor – “The future In-charge of Energy Storage”</i></b></p>

	<p><b>Rajendrakumar Lal Sharma</b>  <i>SPEL Technologies Pvt. Ltd., Pune, India</i></p>
14)	<p><b>“Supercapacitors - Based on 1T MoSSe: AC Filtering Applications”</b>  <b>S Sampath</b>  <i>Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore 560 012, India</i></p>
15)	<p><b>“Interpreting supercapacitor behaviour by a new formula for charge-storage”</b>  <b>Shantanu Das</b>  <i>E&amp;I Group, Bhaba Atomic Research Centre (BARC), Trombay, Mumbai, India</i></p>
16)	<p><b>“High Density Thermal Energy Storage”</b>  <b>Patrick Glynn</b>  <i>Queensland, Griffic University, Australia,</i></p>
17)	<p><b>“Materials designs for battery–supercapacitor hybrid energy storage devices”</b>  <b>Jose Rajan</b>  <i>Renewable Energy Materials Laboratory, Faculty of Industrial Sciences &amp; Technology, University of Malaysia Pahang, 26300 Kuantan, Malaysia</i></p>
18)	<p><b>“A Novel approach to produce ceramic separator for electrochemical device applications”</b>  <b>Rajendra N Basu</b>  <i>Battery &amp; Fuel Cell Division, CSIR-Central Glass &amp; Ceramic Research Institute, Jadavpur, Kolkata-700032, India</i></p>
19)	<p><b>“Supercapacitor to supercapattery: emerging trends”</b>  <b>S A Ilangovan</b>  <i>Chemical Systems Group, Propellants, Polymers, Chemicals and Materials Entity, Vikram Sarabhai Space Centre, Thiruvananthapuram, Kerala – 695 022, India</i></p>
20)	<p><b>“Vertical Graphene Nanowalls for supercapacitor applications”</b>  <b>M. Kamruddin</b>  <i>Associate Director, Accelerator &amp; Nanoscience Group, MSG Indira Gandhi Centre for Atomic Research, Kalpakkam, India</i></p>
21)	<p><b>“Effect of morphological ordering on electro-chemical performance of metal oxide composites “</b>  <b>Sachindranath Das, Samik Saha, and Apurba Ray,</b>  <i>Dept. of Instrumentation Science, Jadavpur University, Kolkata-700032, India</i></p>
22)	<p><b>“Metal oxide/ CNT/Graphene composite porous thin films electrode for Supercapacitor as an energy storage device”</b>  <b>S. G. Kandalkar, A. S. Devsthali, A. V. Patil</b>  <i>JSPM’s Rajarshi Shahu College of Engineering, Tathawade, Pune-411033, India</i></p>
23)	<p><b>“Preparation and electrochemical characterization of Brookite TiO<sub>2</sub> Nanorods as an electrode material for lithium-ion batteries”</b>  <b><a href="#">Kitchamsetti Narasimharao</a><sup>1</sup>, <a href="#">Parameshwar R.Chikate</a><sup>1</sup>, <a href="#">Vishesh Manjunath</a><sup>1</sup>, <a href="#">Ramchandra S. Kalubarme</a><sup>2</sup>  <a href="#">Parasharam M. Shirage</a><sup>1</sup>, <a href="#">Rupesh S. Devan</a><sup>1</sup></b>  <sup>1</sup><i>Discipline of Metallurgy Engineering &amp; Materials Science, Indian Institute of Technology Indore, Simrol, Indore-453552, India</i>  <sup>2</sup><i>Centre for Materials for Electronics Technology, Thrissur-680581, India</i></p>
24)	<p><b>“Two-dimensional hybrid nanosheets of tungsten sulphide and graphene as cathode materials for aluminium ion batteries”</b>  <b>M Latha, T. Sahithi</b>  <i>Polymers &amp; Functional Materials, CSIR-Indian Institute of Chemical Technology, Hyderabad-500007, Telangana, India</i></p>
25)	<p><b>“ZrO<sub>2</sub> incorporated TiO<sub>2</sub> based transparent hard nanocomposite coatings usable for energy saving”</b>  <b><a href="#">Srikrishna Manna</a>, <a href="#">Suparana Bhattacharyya</a> and <a href="#">Samar Kumar Medda</a></b></p>

	<i>Functional Materials &amp; Devices Division, CSIR-Central Glass and Ceramic Research Institute, 196, Raja S. C. Mullick Road, Kolkata 700032, India</i>
26)	<p><b><i>“Mesoporous antireflective (AR) cum hydrophobic coatings for easy maintenance and enhancing solar energy conversion efficiency”</i></b></p> <p><b><a href="#">Samar Kumar Medda</a></b></p> <p><i>Functional Materials &amp; Devices Division, CSIR-Central Glass and Ceramic Research Institute, 196, Raja S. C. Mullick Road, Kolkata 700032, India</i></p>
27)	<p><b><i>“Role of electrolyte-pore interactions towards designing energy dense supercapacitors: A simulation study”</i></b></p> <p><b><a href="#">Samyabrata Chatterjee<sup>1</sup></a>, <a href="#">Rajesh Pavan<sup>1</sup></a>, <a href="#">Manish Agarwal<sup>2</sup></a> and <a href="#">Mithun Radhakrishna<sup>1</sup></a></b></p> <p><sup>1</sup>Department of Chemical Engineering, Indian Institute of Technology (IIT) Gandhinagar, India  <sup>2</sup>Computer Services Center, Indian Institute of Technology (IIT), New Delhi, India</p>
28)	<p><b><i>“Chromium oxynitride as a novel electrode material for supercapacitors”</i></b></p> <p><b><a href="#">U. Naveen Kumar</a>, <a href="#">M.V.S.S Raghunath Sharma</a>, <a href="#">Tiju Thomas</a></b></p> <p><i>Department of Metallurgical and Materials Engineering, Indian Institute of Technology, Madras Chennai-600036, Tamil Nadu, India</i></p>
29)	<p><b><i>“NiCo<sub>2</sub>O<sub>4</sub> Nanoparticle electrode based super capacitor device with high performances and long cycling stability”</i></b></p> <p><b><a href="#">Sasanka Deka</a></b></p> <p><i>Department of Chemistry, University of Delhi, North Campus, Delhi-110007, India</i></p>
30)	<p><b><i>“Graphene based binary or ternary nanohybrids with polyaniline and manganese dioxide for super capacitor application”</i></b></p> <p><b><a href="#">Biplab Kumar Kuila</a></b></p> <p><i>Department of Chemistry, Institute of Science, Banaras Hindu University, Varanasi-221005, India</i></p>
31)	<p><b><i>“A bio-derived carbon supported prussian blue composite electrode material for asymmetric supercapacitor applications”</i></b></p> <p><b><a href="#">Janraj Naik Ramavath</a>, <a href="#">M Raja</a>, &amp; <a href="#">Kothandaraman R</a></b></p> <p><i>Department of Chemistry, Indian Institute of Technology Madras, Chennai 600036, India.</i></p>
32)	<p><b><i>“One-step fabrication of three-dimensional binder-free polypyrrole/reduced graphene oxide/iron oxide electrode for high-performance super capacitor”</i></b></p> <p><b><a href="#">Sibi Abraham</a>, <a href="#">J. Vigneshwaran</a>, <a href="#">T. Prasankumar</a>, and <a href="#">Sujin P. Jose</a></b></p> <p><i>Advanced Materials Laboratory, School of Physics, Madurai Kamaraj University, Madurai-625021, Tamil Nadu, India</i></p>
33)	<p><b><i>“UV induced in-situ synthesis of polymer electrolytes for supercapacitors and lithium batteries”</i></b></p> <p><b><a href="#">Vidyanand Vijayakumar</a> and <a href="#">Sreekumar Kurungot</a></b></p> <p><i>Physical and Material Chemistry Division, National Chemical Laboratory, India</i></p>
34)	<p><b><i>“Dendrite Preventing Role of Zn<sup>2+</sup>-Integrated Ionomer Membrane: A Step towards Stable Cycling of Zinc Metal Battery”</i></b></p> <p><b><a href="#">Meena Ghosh</a>, <a href="#">Vidyanand Vijayakumar</a>, and <a href="#">Sreekumar Kurungot</a></b></p> <p><i>CSIR-National Chemical Laboratory, Pune- 411008, India</i></p>
35)	<p><b><i>“Electrochemical Study of Monodispersed FePt Electrocatalyst for Fuel Cell Application”</i></b></p> <p><b><a href="#">Sarmistha Baruah</a>, <a href="#">Barkha Rani</a>, and <a href="#">Niroj Kumar Sahu</a></b></p> <p><i>Centre for Nanotechnology Research, Vellore Institute of Technology, Vellore-632014, India</i></p>
36)	<p><b><i>“Alkali activated carbon derived from puffed rice for a high performance multilayered supercapacitor”</i></b></p> <p><b><a href="#">Manoranjan Ojha</a>, <a href="#">Melepurath Deepa</a></b></p> <p><i>Department of Chemistry, Indian Institute of Technology Hyderabad, Kandi-502285, Sangareddy, India</i></p>
37)	<p><b><i>“Piezo-composites for application as self-powered sensors”</i></b></p> <p><b><a href="#">Shrabanee Sen</a></b></p>

	<i>Functional Materials Devices Division, CSIR-Central Glass &amp; Ceramic Research Institute, Raja S C Mullick Road, Jadavpur, Kolkata, India</i>
38)	<p><b>“Exfoliated layered TiO<sub>2</sub> nanosheets supported NiCo<sub>2</sub>O<sub>4</sub> nanoparticles as an efficient electrocatalyst for overall water splitting in an alkaline, neutral and sea water”</b></p> <p><b>Raji Vadakkekara</b></p> <p><i>Physical and Materials Chemistry Division, CSIR-National Chemical Laboratory, Pune, 411008, India.</i></p>
39)	<p><b>“Understanding the origin of enhanced pseudocapacitive charge storage properties of Co<sub>3</sub>S<sub>4</sub> compared to Co<sub>3</sub>O<sub>4</sub> nanosheets: experimental and theoretical insight”</b></p> <p><b>Rutuparna Samal<sup>1</sup>, Soumen Mondal<sup>2</sup>, Abhijeet Sadashiv Gangan<sup>3</sup>, Saroj K Nayak<sup>2</sup>, Brahmananda Chakraborty<sup>3</sup>, Chandra Sekhar Rout<sup>1</sup></b></p> <p><sup>1</sup><i>Centre for Nano and Material Sciences, Jain University, Jain Global Campus, Ramanagaram, Bangalore 562112, India.</i></p> <p><sup>2</sup><i>School of Basic Sciences, Indian Institute of Technology, Bhubaneswar, Odisha 751013, India.</i></p> <p><sup>3</sup><i>High Pressure and Synchrotron Radiation Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai-400085, India.</i></p>
40)	<p><b>“Flexible supercapacitors based on ternary transition metal oxides”</b></p> <p><b>Sree Raj K A, Rutuparna Samal, and Chandra Sekhar Rout</b></p> <p><i>Centre for Nano and Material Sciences, Jain Global Campus, Ramanagaram, Bangalore-562112, India</i></p>
41)	<p><b>“Surface engineered Li<sub>4</sub>Ti<sub>5</sub>O<sub>12</sub> for ultra-fast lithium ion batteries”</b></p> <p><b>G. Binitha, Shantikumar V, Nair, Dhamodaran S</b></p> <p><i>Amrita Center for Nanosciences and Molecular Medicine, Amrita Vishwa Vidyapeetham, AIMS, Kochi Campus, Kerala, India</i></p>
42)	<p><b>“Graphene/Zn-Al layered double hydroxide nanocomposite for supercapacitors”</b></p> <p><b>B. Joji Reddy, P. Vickraman, A. Simon Justin</b></p> <p><i>Solid State Ionics Lab, Department of Physics, Gandhigram Rural Institute-DU, Gandhigram-624302, Tamil Nadu, India</i></p>
43)	<p><b>“Structural, mechanical and dielectric properties of microwave assisted high energy ball milling synthesis of Lead-free ferroelectrics for MLC applications”</b></p> <p><b>Sonia Sharma<sup>1</sup>, Sujata Swain<sup>2</sup> and P. Kumar<sup>2</sup></b></p> <p><sup>1</sup><i>Department of Chemistry, Govt. (A) College, Rourkela-769004, Odisha, India</i></p> <p><sup>2</sup><i>Department of Physics and Astronomy, National Institute of Technology, Rourkela, 769008, Odisha, India</i></p>
44)	<p><b>“Microwave assisted morphology-controlled synthesis of Co<sub>3</sub>O<sub>4</sub> nanostructures for all solid-state supercapacitor”</b></p> <p><b>Biraj Kanta Satpathy<sup>1</sup>, Arpan Kumar Nayak<sup>3</sup>, C. Retna Raj<sup>1,2</sup>, and Debabrata Pradhan<sup>1,3</sup></b></p> <p><sup>1</sup><i>School of Nanoscience and Nanotechnology, Indian Institute of Technology, Kharagpur 721 302, India</i></p> <p><sup>2</sup><i>Dept. of Chemistry, Indian Institute of Technology, Kharagpur 721 302, India</i></p> <p><sup>3</sup><i>Materials Science Centre, Indian Institute of Technology, Kharagpur 721 302, India</i></p>
45)	<p><b>“Electrochemical reduction of CO<sub>2</sub> for renewable energy storage”</b></p> <p><b>Karan Malik, Yash Kumawat, Udit S. Bhel, and Anil Verma</b></p> <p><i>Department of Chemical Engineering, Indian Institute of Technology Delhi, New Delhi, India</i></p>
46)	<p><b>“Understanding the influence of operating parameters on the performance of Vanadium Redox Flow Battery”</b></p> <p><b>Manshu Kapoor, Rajeev K. Gautam, and Anil Verma</b></p> <p><i>Department of Chemical Engineering, Indian Institute of Technology Delhi, New Delhi, India</i></p>
47)	<p><b>“Synthesis and characterization of polypyrrole/ prussian blue/carbon black hybrid nanocomposite for high performance supercapacitors”</b></p> <p><b>Suganthi Muthusamy and Julie Charles</b></p> <p><i>Department of Physics, SSN College of Engineering, Chennai-603110, India</i></p>

48)	<p><b>“Development of a transistor based dissipative shunt equalization circuit for supercapacitor packs”</b>  <a href="#">Geethi Krishnan<sup>1</sup></a>, <a href="#">Vikas Gupta<sup>1</sup></a>, <a href="#">Shantanu Das<sup>2</sup></a>, <a href="#">Vivek Agarwal<sup>1</sup></a>  <sup>1</sup>Department of Electrical Engineering, IIT Bombay, India  <sup>2</sup>RCSDS, E&amp;I Group, B.A.R.C Mumbai, India</p>
49)	<p><b>“Realization of (De)intercalation chemistry in rechargeable hybrid Sodium-air batteries”</b>  <a href="#">Chinnasamy Murugesan</a>, <a href="#">Baskar Senthilkumar</a>, and <a href="#">Prabeer Barpanda</a>  Faraday Materials Laboratory, Materials Research Center, Indian Institute of Science, C. V. Raman Avenue, Bangalore 560012, India</p>
50)	<p><b>“Electrochemical investigation of sodium and potassium-ion intercalation in Na<sub>0.44</sub>MnO<sub>2</sub>”</b>  <a href="#">Sai Pranav Vanam</a>, <a href="#">Baskar Senthilkumar</a>, and <a href="#">Prabeer Barpanda</a>  Faraday Materials Laboratory, Materials Research Centre, Indian Institute of Science, Bangalore, India</p>
51)	<p><b>“Role of electrolytes in high energy symmetric/ asymmetric supercapacitor fabrication using porous carbon electrodes”</b>  <a href="#">M. Sathish</a>  Functional Materials Division, CSIR-Central Electrochemical Research Institute, Karaikudi -630003, India</p>
52)	<p><b>“An investigation on the Luminescent Response of Eu doped Barium Aluminate Nanophosphor”</b>  <a href="#">Mini Krishna K</a>, <a href="#">Jini K Jose</a>, <a href="#">Vinitha N</a>  Department of Physics, Vimala College, Thrissur, Kerala, India</p>
53)	<p><b>“High dielectric response in microwave processed CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub>: Effect of sintering temperature on capacitive properties “</b>  <a href="#">B. Samanta</a>, <a href="#">P. Kumar</a>  Department of Physics &amp; Astronomy, National Institute of Technology, Rourkela-769008, India</p>
54)	<p><b>“Enhancing the electrocatalytic performance for hydrogen evolution of Cu<sub>3</sub>P/g-C<sub>3</sub>N<sub>4</sub> mixture via 3D graphene”</b>  <a href="#">Sk Riyajuddin</a>, <a href="#">Kaushik Ghosh</a>  Institute of Nano Science and Technology, Mohali, Punjab, 160062, India</p>
55)	<p><b>“Effect of different surfactants on the pseudocapacitive properties of NiMn<sub>2</sub>O<sub>4</sub> “</b>  <a href="#">Samik Saha<sup>1,2</sup></a>, <a href="#">Atanu Roy<sup>1</sup></a>, <a href="#">Aparba Ray<sup>1</sup></a>, and <a href="#">Sachindranath Das<sup>1</sup></a>  <sup>1</sup>Dept. of Instrumentation Science, Jadavpur University, Kolkata, India  <sup>2</sup>Dept. of Physics, Jadavpur University, Kolkata, India</p>
56)	<p><b>“Enabling redox additive sustainably enhance the energy storage capability of activated carbon in aqueous electrolyte”</b>  <a href="#">M. Karnan</a> and <a href="#">M. Sathish</a>  Functional Materials Division, CSIR-Central Electro-chemical Research Institute, Karaikudi-630003, India</p>
57)	<p><b>“Synthesis, Dielectric and Ferroelectric Behaviour of Lead Free KBT-BT Ceramics for application in electrochemical energy storage devices”</b>  <a href="#">K. Aravinth</a> and <a href="#">P. Ramasamy</a>  SSN Research Centre, SSN College of Engineering, Chennai, India</p>
58)	<p><b>“Opportunities and current challenges of supercapacitor technologies for real-world applications “</b>  <a href="#">Mani Karthik</a>  Centre for Nanomaterials, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Balapur, Hyderabad-500005, India</p>
59)	<p><b>“Synthesis and study of structural, morphological, optical and dielectric properties of pure SnO<sub>2</sub> thin films for energy applications”</b>  <a href="#">Madhukar Poloju<sup>1,2</sup></a>, <a href="#">Nagabandi Jayababu<sup>1</sup></a>, <a href="#">K. GangaReddy<sup>1</sup></a>, <a href="#">D. Sunil Gavaskar<sup>1</sup></a>, and <a href="#">M. V. Ramana Reddy<sup>1</sup></a>  <sup>1</sup>Thin films and Nano Materials Research Laboratory, Department of Physics, Osmania University, Hyderabad -500007, Telangana, India.</p>

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60)	<p><b>“Synthesis and characterizations of SrTiO<sub>3</sub> modified BNT-BT-BKT Ceramics for energy storage applications”</b>  <a href="#">M. Chandrasekhar<sup>1,2</sup></a>, <a href="#">Dipak Kumar Khatua<sup>3</sup></a>, <a href="#">A. Chowdhary<sup>4</sup></a>, and <a href="#">P. Kumar<sup>1</sup></a></p> <p><sup>1</sup>Department of Physics, National Institute of Technology, Rourkela 769008, India  <sup>2</sup>Department of Physics, RGM College of Engineering and Technology, Nandyal 518501, India  <sup>3</sup>Department of Materials Engineering, Indian Institute of Science, Bangalore 560012, India  <sup>4</sup>Centre for Materials for Electronics Technology (C-MET), Thrissur - 680 581, India</p>
61)	<p><b>“Reinforcing the performance of hybrid supercapacitors with magnetic electrodes using a Magnetic Driving Force “</b>  <a href="#">Himadri Tanaya Das</a> and <a href="#">Perumal Elumalai</a></p> <p><i>Electrochemical Energy and Sensors Lab, Department of Green Energy Technology, Madanjeet School of Green Energy Technologies, Pondicherry University, Puducherry-605014, India</i></p>
62)	<p><b>“Preparation of Metamaterials by incorporation of Plasmonic particles in Polymer Matrix”</b>  <a href="#">Anitha C Kumar</a></p> <p><i>Department of Chemistry, Acharya Nagarjuna University, Guntur, Andhra Pradesh-522510, India</i></p>
63)	<p><b>“Graphene sheets like nano-porous carbon derived from Agricultural bio-waste (jute stick) as electrode material for high performing Supercapacitors “</b>  <a href="#">Katchala Nanaji<sup>1,2</sup></a>, <a href="#">Srinivasan Anandan<sup>1</sup></a>, <a href="#">UV Varadaraju<sup>2</sup></a> and <a href="#">Tata N Rao<sup>1</sup></a></p> <p><sup>1</sup>Centre for Nano Materials, International Advanced Research Centre for Powder Metallurgy and New Materials, Hyderabad-500005, Telangana, India  <sup>2</sup>Department of Chemistry, Indian Institute of Technology Madras, Chennai-600036, Tamil Nadu, India.</p>
64)	<p><b>“Preparation of Novel Aerogel-Graphene for application as electrode material for Supercapacitors”</b>  <a href="#">Ranipanicker. N</a>, <a href="#">Swathy K S</a>, <a href="#">Pooja Bhaskar M</a>, <a href="#">Haritha Venu</a>, <a href="#">P. A. Abraham</a> and <a href="#">N. C. Pramanik</a></p> <p><i>Aerogel Division, Centre for Materials for Electronics Technology (C-MET), Athani, M G Kavu PO, Thrissur – 680581, India</i></p>
65)	<p><b>“Preparation porous Aerogel carbon by successive pore-liquid exchange technique for supercapacitors electrode application”</b>  <a href="#">Swathy K S</a>, <a href="#">Ranipanicker. N</a>, <a href="#">Dimna C Denny</a>, <a href="#">P. A. Abraham</a>, <a href="#">Stanly Jacob K</a> and <a href="#">N. C. Pramanik</a></p> <p><i>Aerogel Lab, Centre for Materials for Electronics Technology, (C-MET),Athani, M G Kavu, Thrissur-680581, Kerala, india</i></p>
66)	<p><b>“Synthesis and characterization of tin doped copper sulphide thin film by chemical bath deposition for the solar cell applications”</b>  <a href="#">Anitha T V</a>, and <a href="#">Vimalkumar T. V</a></p> <p><i>Dept. of Physics, St. Thomas’ College (autonomous), Thrissur, Kerala, India</i></p>
67)	<p><b>“Design &amp; Setting-up of Safe, Recyclable and Indigenous Plant for production of carbon aerogel in pilot scale for Supercapacitor applications”</b>  <a href="#">P. A. Abraham</a>, <a href="#">Ranipanicker. N</a>, <a href="#">Abhishek Choudhuri</a>, <a href="#">Sumesh K R</a>, <a href="#">Vasanth Mohan</a>, <a href="#">E. K. Sunny</a>, <a href="#">Stanly Jacob. K</a> and <a href="#">N. C. Pramanik</a></p> <p><i>Aerogel Lab, Centre for Materials for Electronics Technology, (C-MET),Athani, M G Kavu, Thrissur-680581, Kerala, India</i></p>
68)	<p><b>“Hysteresis modelling, energy estimation and parameter extraction of ultracapacitor for single &amp; multiple charge-discharge excitations”</b>  <a href="#">Subhojit Ghosh</a></p> <p><i>Dept. of Electrical Engineering, National Institute of Technology, Raipur, India</i></p>
69)	<p><b>“TiO<sub>2</sub>/MWNTs-Nanocomposites thin films for enhanced supercapacitive performances”</b>  <a href="#">Nitin N. Patil</a>, <a href="#">Manish K. Shinde</a>, <a href="#">Abheejit S. Patil</a>, <a href="#">Aakash S. Patil</a>, <a href="#">Niranjan D. Badgujar</a>, <a href="#">Hemant B. Gajare</a>.</p> <p><i>Department of Physics, Moolji Jaitha College Jalgaon 425002 MS India</i></p>

70)	<p><b><i>"CdSe nanoparticles sensitized ZnO nanorods photoanode for solar cell &amp; other energy application: Electrolyte effect"</i></b></p> <p><b>Pratibha R. Nikam<sup>1</sup>, Prashant K. Baviskar<sup>3</sup>, Sutripto Majumder<sup>5</sup>, Jaydeep V. Sali<sup>2</sup>, Babasaheb R. Sankapal<sup>4</sup></b></p> <p><sup>1</sup>Department of Physics, M. J. College, Jalgaon, M.S.-425 001</p> <p><sup>2</sup>Department of Physics, School of Physical Sciences, North Maharashtra University, Jalgaon 425001, India</p> <p><sup>3</sup>Advanced Physics Laboratory, Department of Physics, Savitribai Phule Pune University, Pune 411007, India</p> <p><sup>4</sup>Dept. of Physics, National Institute of Technology, Raipur, G.E. Road, Raipur, Chattisgarh 492010, India</p> <p><sup>5</sup>Nano Materials and Device Laboratory, Department of Physics, Visvesvaraya National Institute of Technology, South Ambazari Road, Nagpur 440010, India</p>
71)	<p><b><i>"Design &amp; Fabrication of Supercapacitor-based energy storage device with load equalization circuits for powering various electronic devices"</i></b></p> <p><b>E K Sunny<sup>1</sup>, A K Athira<sup>1</sup>, Aravind Madanan<sup>1</sup>, P A Abraham<sup>1</sup>, N Rani Panicker<sup>1</sup>, Shantanu Das<sup>2</sup> and N C Pramanik<sup>2</sup></b></p> <p><sup>1</sup>Aerogel Division, Centre for Materials for Electronics Technology (C-MET), Athani, M G Kavu PO, Thrissur – 680581, India</p> <p><sup>2</sup>RnC Division, Bhaba Atomic Research Centre, Trombey, Mumbai-400085, India</p>
72)	<p><b><i>"Structural and electrochemical properties of spray deposited molybdenum trioxide (<math>\alpha</math>-MoO<sub>3</sub>) thin films"</i></b></p> <p><b>R. S. Kate<sup>1</sup>, V. B. Autade<sup>1</sup>, B. B. Kale,<sup>1</sup> R. J. Deokate<sup>2</sup></b></p> <p><sup>1</sup>Centre for Materials and Electronics Technology, Pune, 411008, India.</p> <p><sup>2</sup>Vidya Pratishthan's, Arts, Science and Commerce College, Baramati-413 133(MS), India.</p>
73)	<p><b><i>"Cotton Silk biomass-derived hard carbon/SnO<sub>2</sub> composite anodes for High-performance Lithium-ion batteries"</i></b></p> <p><b>Anuradha A. Ambalkar, Rajendra P. Panmand, Yogesh A. Sethi, Ujjwala P. Chothe, Chitra K. Ugale, Parag V. Adhyapak and Bharat B. Kale</b></p> <p>Centre for Materials for Electronics Technology (C-MET), Panchavati, Pune 411008, India</p>
74)	<p><b><i>"Architecture of the SnS@ZnIn<sub>2</sub>S<sub>4</sub> heterojunction photocatalyst for direct Conversion of sunlight into fuel"</i></b></p> <p><b>Aarti R. Gunjal<sup>1,2</sup>, Arvind V. Nagawade<sup>2</sup>, Bharat B. Kale<sup>1</sup></b></p> <p><sup>1</sup>Centre for Materials for Electronics Technology (C-MET), Panchawati off Pashan Road, Pune-411008, India</p> <p><sup>2</sup>Ahmednagar College, Ahmednagar, India</p>
75)	<p><b><i>"Synthesis and Characterization of Nanostructured Lithium iron phosphate (LiFePO<sub>4</sub>) as Cathode material for Li-ion Battery applications"</i></b></p> <p><b>Chitra Ugale, Anuradha Ambalkar, Ujjwala Chothe, Bharat B. Kale, Milind V. Kulkarni</b></p> <p>Center of Materials of Electronic Technology, Dr. Homi Bhabha Road, Pashan, Pune 411008, India</p>
76)	<p><b><i>"Silicon Nanoparticles Sandwiched Ultrathin MoS<sub>2</sub>-Graphene Layers as an Anode Material for Li-Ion Battery"</i></b></p> <p><b>Ujjwala V Kawade<sup>1</sup>, Anuradha A Ambalkar<sup>1</sup>, Rajendra P Panmand<sup>1</sup>, Ramchandra S Kalubarme<sup>2</sup>, Sunil R Kadam<sup>3</sup>, Sonali D Naik<sup>1</sup>, Milind V Kulkarni<sup>1</sup>, Bharat B Kale<sup>1</sup></b></p> <p><sup>1</sup>Centre for Materials for Electronics Technology (C-MET), Panchavati, Pune 411008, India</p> <p><sup>2</sup>Centre for Materials for Electronics Technology (C-MET), Thrissure, Kerala, India</p> <p><sup>3</sup>Department of Physics, Savitribai Phule Pune University, Ganeshkhind, Pune 411007, India</p>
77)	<p><b><i>"One step synthesis of mesoporous carbon as an anode material for high performance for sodium ion batteries"</i></b></p> <p><b>Yogesh A. Sethi, Rajendra P. Panmand, Milind V. Kulkarni, Bharat B. Kale</b></p> <p>Centre for Materials for Electronics Technology (C-MET), Panchawati off Pashanroad, Pune-411008, India</p>
78)	<p><b><i>"Vanadium doping in bismuth titanate (Bi<sub>4</sub>Ti<sub>3</sub>O<sub>12</sub>) and its influence on structural, dielectric and electrical properties for energy storage application"</i></b></p> <p><b>Shraddha K. Badge and A. V. Deshpande</b></p>

	Department of Physics, Visvesvaraya National Institute of Technology, South Ambazari Road, Nagpur-440010, Maharashtra, India.
79)	<p><b>“Effect of addition of <math>\text{LiAlO}_2</math> on ionic conductivity of garnet type <math>\text{Li}_{6.6}\text{La}_3\text{Zr}_{1.6}\text{Sb}_{0.4}\text{O}_{12}</math> solid electrolyte for lithium ion batteries”</b></p> <p><b>Pritee Wakudkar, A.V. Deshpande</b></p> <p>Department of Physics, Visvesvaraya National Institute of Technology (VNIT), Nagpur-440010, India</p>
80)	<p><b>“Defects in <math>\text{SnO}_2</math> nanoparticles for hybrid supercapacitors”</b></p> <p><b>Binaya Kumar Sahu, A Das</b></p> <p>Nanomaterials Characterization and Sensor Section, Surface and Nanoscience Division, Material Science Group, Indira Gandhi Centre for Atomic Research, Homi Bhabha National Institute, Kalpakkam,603102, India.</p>
81)	<p><b>“Synthesis of lithium titanium oxide (<math>\text{Li}_4\text{Ti}_5\text{O}_{12}</math>) as an anode material for high-rate Li-ion battery”</b></p> <p><b>Reshma S. Ballal, Manish S. Jayswal, Neha Joshi, Shashikant P. Tekale, Milind V. Kulkarni, Bharat B. Kale</b></p> <p>Nanocrystalline Material and Glass Laboratory, Centre for Materials for Electronics Technology, Panchwati, off Pashan Road, Pune-411008, India</p>
82)	<p><b>“Sn/SnO<sub>2</sub>@C Composites anode for rechargeable sodium-ion batteries “</b></p> <p><b>Neha S. Joshi, Rajendra P. Panmand, Manish S. Jayswal, Purnima M. Patil, Reshma S. Ballal, Milind V. Kulkarni and Bharat B. Kale,</b></p> <p>Centre for Materials of Electronics Technology (C-MET), Panchwati, off Pashan road, Pune 411008, India</p>
83)	<p><b>“Development of flexible lithium ion battery for flexible electronics devices “</b></p> <p><b>Shashikant P. Tekale, Reshma S. Ballal, Pournima M. Patil, Rajendra P. Panmand, Milind V. Kulkarni and Bharat B Kale</b></p> <p>Centre for Materials for Electronics Technology (C-MET), Panchwati, Off Pashan Road, Pune, 411 008, India</p>
84)	<p><b>“Microwave assisted solvothermal synthesis of nickel hydroxide-reduced graphene oxide (RGO) nanocomposite for energy storage application”</b></p> <p><b>Purnima M. Patil, Rajendra P. Panmand, Neha S. Joshi, Milind V. Kulkarni and Bharat B. Kale</b></p> <p>Centre for Materials for Electronics Technology (C-MET), Panchawati, Pune 411008,India</p>
85)	<p><b>“Pyrrolidinium based ionic liquids as electrolytes for lithium batteries: A computational study”</b></p> <p><b>Suseeladevi Asha, K. P. Vijayalakshmi, and Benny K. George</b></p> <p>Analytical Spectroscopy and Ceramics Group, PCM Entity, Vikram Sarabhai Space Centre, Thiruvananthapuram 695022, India.</p>
86)	<p><b>“Studies of sodium ion conducting electrolytes for rechargeable all-solid-state batteries”</b></p> <p><b>R. Prasada Rao<sup>1</sup>, S. Adams<sup>2</sup></b></p> <p><sup>1</sup>Centre for Materials for Electronics Technology, Pune- 411008, , India  <sup>2</sup>Dept. Of Materials Science and Engineering, National University of Singapore, Singapore 117575, Singapore</p>
87)	<p><b>“Carbon encapsulated manganese doped cobalt oxide nanostructures as electrode materials for energy storage devices”</b></p> <p><b>Ramchandra S. Kalubarme<sup>1</sup>, Bharat B. Kale<sup>2</sup>, Suresh W. Gosavi<sup>3</sup></b></p> <p><sup>1</sup>Centre for Materials for Electronics Technology, Shornur Road, Athani, M G Kavu, Thrissur-680581, India  <sup>2</sup>Centre for Materials for Electronics Technology, Panchawati, Opp. Pashan Road, Pune – 411008, India  <sup>3</sup>Centre for Advanced Studies in Material Science, Department of Physics, Savitribai Phule Pune University, (Formerly University of Pune), Ganeshkhind, Pune - 411007, India</p>
88)	<p><b>“Ionogel electrolytes for efficient solid-state supercapacitors”</b></p> <p><b>Shabeeba Pilathottathil<sup>1</sup>, Mohamed Shahin Thayyil<sup>1</sup>, M. P Pillai<sup>2</sup></b></p> <p><sup>1</sup>Department of Physics, University of Calicut, Kerala, Calicut, India  <sup>2</sup>Department of Electronics, NIELIT, Calicut, Kerala, India</p>
89)	<p><b>“Cleaner energy, greener profits: A contribution in the journey towards sustainable hydrogen economy”</b></p> <p><b>Nadeema Ayasha, and Sreekumar Kurungot</b></p>



	<i>Physical and Materials Chemistry Division, CSIR-National Chemical Laboratory, Pune, India.</i>
90)	<p><b>“NiCo<sub>2</sub>O<sub>4</sub> Nanowire array on CNT sponge: A bi-functional oxygen electrode material for alkaline Fuel cell and rechargeable Zinc-air battery “</b></p> <p><b>Pranav K. Gangadharan and Sreekumar Kurungot</b></p> <p><i>Physical and Materials Chemistry Division, CSIR-National Chemical Laboratory, Pune, Maharashtra, India.</i></p>
91)	<p><b>“CuPt alloy with mixed dispersion on nitrogen doped graphene as a highly efficient and durable electrocatalyst for Oxygen Reduction Reaction”</b></p> <p><b>Rajith Illathvalappil<sup>1,2</sup> and Sreekumar Kurungot<sup>1,2</sup></b></p> <p><sup>1</sup><i>Physical &amp; Materials Chemistry Division, CSIR- National Chemical Laboratory, Pune-411 008, Maharashtra, India</i></p> <p><sup>2</sup><i>Academy of Scientific and Innovative Research (AcSIR), Ghaziabad- 201002, India.</i></p>
92)	<p><b>“Preparation and characterization of Polyaniline – Sr<sub>2</sub>TiMnO<sub>6</sub> nanocomposites for supercapacitor application”</b></p> <p><b>M. Padmini, P. Thomas</b></p> <p><i>Dielectric Materials Division, Central Power Research Institute, Bangalore-560080, India</i></p>
93)	<p><b>“Hydrothermally reduced nano-porous graphene–polyaniline nanofiber composites for Supercapacitors”</b></p> <p><b>Mrinmoy Kumar Chini<sup>1,2</sup>, and Shyambo Chatterjee<sup>2</sup></b></p> <p><sup>1</sup><i>Department of Physics, Indian Institute of Technology Roorkee, Haridwar-247667, Uttarakhand, India</i></p> <p><sup>2</sup><i>Polymer Science and Engineering Division, CSIR-NCL, Pune- 411008, India</i></p>
94)	<p><b>“Metal nanoparticles decorated vertical graphene nanostructure enhanced electrochemical capacitance”</b></p> <p><b>Gopinath Sahoo, S. R. Polaki and M. Kamruddin</b></p> <p><i>Surface and Nanoscience Division, Materials Science Group, Indira Gandhi Centre for Atomic Research, Homi Bhabha National Institute, Kalpakkam 603102, India</i></p>
95)	<p><b>“Preparation and characterization of high surface area porous lithium titanate aerogel, suitable for hybrid supercapacitor electrode”</b></p> <p><b>Stanly Jacob K and Rani Panicker N, P. A. Abraham and N C Pramanik</b></p> <p><i>Aerogel Lab, Centre for Materials for Electronics Technology (C-MET), Athani, M G Kavu PO, Thrissur – 680581, Kerala, India</i></p>
96)	<p><b>“Synthesis of Carbon spheres by emulsion technique for supercapacitor electrode application “</b></p> <p><b>Stanly Jacob. K, P. A. Abraham, Rani panicker N and N. C. Pramanik</b></p> <p><i>Aerogel Lab, Centre for Materials for Electronics Technology (C-MET), Athani, MG Kavu PO, Thrissur-680581, India</i></p>
97)	<p><b>“Super-wetting vertical graphene nanosheets for energy storage applications”</b></p> <p><b>S. R. Polaki, Gopinath Sahoo and M. Kamruddin</b></p> <p><i>Surface and Nanoscience Division, Materials Science Group, Indira Gandhi Centre for Atomic Research, Homi Bhabha National Institute, Kalpakkam, 603102, India</i></p>
98)	<p><b>“Study the effect of Conductive interlayer (CIL) on cell capacitance &amp; ESR of Aerogel Supercapacitors”</b></p> <p><b>Swathy KS<sup>1</sup>, J Vigneswaran<sup>1</sup>, Dimna C Deny<sup>1</sup>, P A Abraham<sup>1</sup>, Rani Panicker N<sup>1</sup>, Stanly Jacob K<sup>1</sup>, Shantanu Das<sup>2</sup> and N C Pramanik<sup>1</sup></b></p> <p><sup>1</sup><i>Aerogel Division, Centre for Materials for Electronics Technology (C-MET), Shornur Road, Athani, M. G Kavu PO, Thrissur-680581, Kerala, India</i></p> <p><sup>2</sup><i>RnC Division, Bhaba Atomic Research Centre, Trombay, Mumbai-400085, India</i></p>
99)	<p><b>“In-situ synthesis and characterization of water dispersible and conducting polythiophene-functionalized multiwalled carbon nanotube nanocomposite”</b></p> <p><b>T. S. Swathy and M. Jinish Antony</b></p> <p><i>Research and PG department of Chemistry, Centre for Sustainable Chemistry, St. Thomas College (Autonomous), Affiliated to University of Calicut, Thrissur, 680 001, Kerala, India</i></p>
100)	<b>“2-Dimensional tin sulphide nanostructures as supercapacitor electrode material”</b>

	<p><b>J. Sakthivel, Anita R Warriar</b>  <i>Department of Physics, Nanophotonics research laboratory, Academy of Maritime Education and Training, Chennai, Tamilnadu-630112, India</i></p>
101)	<p><b>“Spherical hard carbon (SHC) from natural sources for high performance lithium ion battery”</b>  <b>Prashant S. Misal<sup>1</sup>, Mohaseen S. Tamboli<sup>1,2</sup>, Milind V. Kulkarni<sup>1</sup> and Bharat B. Kale<sup>1</sup></b>  <sup>1</sup><i>Centre for Materials for Electronics Technology (C-MET), Panchawati Off Pashan Road, Pune –411008, India</i>  <sup>2</sup><i>Department of Physics, Savitribai Phule Pune University Pune-411007, India.</i></p>
102)	<p><b>“Fabrication of hierarchical 3D-flower like LDH nanostructures using graphene-based core-shells for supercapacitor application”</b>  <b>Sarigamala Karthik Kiran<sup>1</sup>, Shobha Shukla<sup>2</sup>, Alexander Struck<sup>3</sup> and Sumit Saxena<sup>2</sup></b>  <sup>1</sup><i>Centre for Research in Nanotechnology and Science, Indian Institute of Technology Bombay, Mumbai-400076, India</i>  <sup>2</sup><i>Nanostructures Engineering and Modeling Laboratory, Department of Metallurgical Engineering and Materials Science, Indian Institute of Technology Bombay, Mumbai -400076, India.</i>  <sup>3</sup><i>Faculty of Technology and Bionics, Rhein-Waal University of Applied Sciences, Kleve- 47533, , Germany</i>  sumit.saxena@iitb.ac.in</p>
103)	<p><b>“Nickel based additive-free ultrathin graphite film for fabrication of flexible symmetric supercapacitor”</b>  <b>R. Sneha, Kosta Shivangi, and Rana Kuldeep</b>  <sup>1</sup><i>Electrical Appliances Technology Division, Central Power Research Institute, Bengaluru, India</i></p>
104)	<p><b>“Supercapacitors: Future replacement of batteries”</b>  <b>Mariya Paul</b>  KSEB 400 KV Substation, Madakkathara, Thrissur, India</p>
105)	<p><b>“Synthesis and characterization of nitrogen doped reduced graphene oxide as high-performance binder-free supercapacitor electrode material”</b>  <b>Sahil Thareja and Anil Kumar</b>  <i>Department of Chemistry, Indian Institute of Technology, Roorkee, Roorkee-247667, India</i></p>
106)	<p><b>“Edge planes oriented electrochemically engineered graphite for Supercapacitor application”</b>  <b>Rupesh Tamgadge, and Anupam Shukla</b>  <i>Department of Chemical Engineering, Indian Institute of Technology, Delhi, India.</i></p>
107)	<p><b>“A pH dependent high voltage aqueous super capacitor with dual electrolytes”</b>  <b>Musthafa Ottakam Thotiyil, Soumodip Sur, Alagar Raja Kottaichamy, Zahid Manzoor Bhat, Mruthyunjayachari Chattanahalli Devendrachari and Ravikumar Thimmappa</b>  <i>Department of Chemistry and Centre for Energy Science, Indian Institute of Science Education and Research Pune, Dr Homi Bhabha Road, Pashan, Pune 411008, India</i></p>
108)	<p><b>“P3HT-Polyaniline nanohybrid material leads energy storage application for supercapacitor”</b>  <b>Soumili Daripa , Biplab Kumar Kuila</b>  <i>Department of Chemistry, Institute of Science, Banaras Hindu University, Varanasi, Uttar Pradesh-221005, India</i></p>
109)	<p><b>“MoS<sub>2</sub>- A versatile 2D material for energy storage applications”</b>  <b>Swathy B Saseendran<sup>1</sup>, Asha Arackal Sukumaran<sup>1</sup> and Madambi K Jayaraj<sup>1,2</sup></b>  <sup>1</sup><i>Department of Physics, Cochin University of Science and Technology, Kochi 682022, Kerala, India</i>  <sup>2</sup><i>Centre of Excellence in Advanced Materials, Cochin University of Science and Technology, Kochi 682022, Kerala, India.</i></p>
110)	<p><b>“Electrochemical investigation of binder free composite (g-C<sub>3</sub>N<sub>4</sub>/PPy) thin film for energy storage application”</b>  <b>Navaneethan Duraisamy<sup>1*</sup>, Prabhu S<sup>2</sup>, Ramesh R<sup>2</sup></b>  <sup>1</sup><i>Department of Chemistry, Periyar University, Salem, Tamil Nadu, India</i></p>

	<sup>2</sup> Department of Physics, Periyar University, Salem, Tamil Nadu, India
111)	<p><b>Synthesis and electrochemical characterizations of CeO<sub>2</sub>/RGO and CeO<sub>2</sub>/MoS<sub>2</sub> nanocomposites for supercapacitor application</b></p> <p><b>M. Mohamed Ismail, P. Saraswathi Devi, D. Mani, M. Arivanandhan</b></p> <p>Centre for Nanoscience and Technology, Anna University, Chennai, India</p>
112)	<p><b>“High yield synthesis and hierarchical assembly of boron based nanosheets derived from layered TiB<sub>2</sub> for energy storage applications”</b></p> <p><b>Asha Liza James, Akash Varma, Rishabh Patidar, Manis Lenka, Nidhi Pandey, and Kabeer Jasuja</b></p> <p>Chemical Engineering, Indian Institute of Technology Gandhinagar, Gujarat 382355, India</p>
113)	<p><b>“In-situ carbon coating on metal oxide based cathode materials for improved electrochemical properties of lithium-ion battery.”</b></p> <p><b>Vasu. S<sup>1,3</sup>, M. B. Sahana<sup>1</sup>, C. Sudakar<sup>2</sup>, R. Gopalan<sup>1</sup> and G. Sundrarajan<sup>3</sup></b></p> <p><sup>1</sup>Centre for Automotive Energy Materials, International Advanced Research Centre for Powder Metallurgy and New Materials, IITM Research Park, Kanagam, Taramani, Chennai-600113, India.  <sup>2</sup>Multifunctional Materials Laboratory, Department of Physics, Indian Institute of Technology Madras, Chennai 600036, India.  <sup>3</sup>Department of Metallurgical and Materials Engineering, Indian Institute of Technology Madras, Chennai 600036, India.</p>
114)	<p><b>“The growth and characterization of ZnO nanorod over AZO substrate for solar cell application”</b></p> <p><b>Frenson P Jose<sup>1</sup>, Asha Arackal Sukumaran<sup>1</sup>, Sreekumar Rajappan Achary<sup>2</sup> and Mabambi K Jayaraj<sup>1,2</sup></b></p> <p><sup>1</sup>Department of Physics, Cochin university Of Science And Technology, Cochin 682022, Kerala, India  <sup>2</sup>Centre of Excellence in Advanced Material, Cochin University of Science And Technology, Cochin 682022, Kerala, India</p>
115)	<p><b>“Design, development and real-time demonstration of supercapacitor powered electric bicycle”</b></p> <p><b>A. Bharathi Sankar, M. Karthik, S. Anandan, R. Vijay, T.N. Rao</b></p> <p>Centre for Nanomaterials, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad-500005, Telangana, India</p>
116)	<p><b>“On the development of a new solid-state composite electrolyte with carbon-dot nanofillers for energy storage applications”</b></p> <p><b>Soumya Ravi<sup>1</sup>, Abhilash A<sup>2</sup>, Asha A S<sup>2</sup>, M.K. Jayaraj<sup>1,2</sup></b></p> <p><sup>1</sup>Centre of Excellence in Advanced Materials, Cochin University of Science and Technology, Kochi- 682022,  <sup>2</sup>Department of Physics, Cochin University of Science and Technology, Kochi-682022, India</p>
117)	<p><b>“Supercapacitor/Battery based Hybrid Powered Electric Bicycle”</b></p> <p><b>A. Bharathi Sankar, R. Seyezhai</b></p> <p>Department of EEE, Renewable Energy Conversion Lab, SSN College of Engineering, Chennai, India</p>
118)	<p><b>“Effect of Mn doping on the physicochemical and electrochemical performance of LiFePO<sub>4</sub>”</b></p> <p><b>V. U. Mulik, L. D. Jadhav</b></p> <p>Electrochemical Energy Materials Laboratory, Department of Physics, Rajaram College. Kolhapur – 416 004, India</p>
119)	<p><b>“Preparation and performance of LiMn<sub>2</sub>O<sub>4</sub> cathode for lithium ion battery application in aqueous electrolyte “</b></p> <p><b>V. B. Gadkari<sup>1</sup>, S. V. Wagh<sup>1</sup>, S. J. Rajoba<sup>2</sup>, S. N. Yadav<sup>2</sup>, P. S. Patil<sup>1</sup>, L. D. Jadhav<sup>2</sup></b></p> <p><sup>1</sup>School of Nano Science and Technology, Shivaji University, Kolhapur-416004, India  <sup>2</sup>Electrochemical Energy Materials Laboratory, Department of Physics, Rajaram College. Kolhapur - 416 004, India</p>
120)	<p><b>“Synthesis of spinel LiMn<sub>2</sub>O<sub>4</sub> and its potential for fabrication of supercapacitors”</b></p> <p><b>J. Vigneshwaran, T. Prasankumar, M. Kaaviah and Sujin P. Jose</b></p>

	<i>Advanced Materials Laboratory, School of Physics, Madurai Kamaraj University, Madurai-625021, India</i>
121)	<p><b>“Mesoporous three-dimensional MnO<sub>2</sub>@Ni nanoneedles as binder-free electrode for high-performance supercapacitors”</b></p> <p><a href="#">Nilima Priyadarsini Swain</a>, <a href="#">Smita Mohanty</a>, <a href="#">Sanjay K Nayak</a>, <a href="#">Ananthakumar Ramadoss</a></p> <p><i>School of Advanced Research in Polymers: Laboratory for Advanced Research in Polymeric Materials, Central Institute of Plastics Engineering and Technology, Bhubaneswar, India, 751024.</i></p>
122)	<p><b>“Magnetically controlled Li ion battery with iron oxide-based anode materials”</b></p> <p><a href="#">Dipsikha Ganguly<sup>1</sup></a>, <a href="#">Anamika Ghosh<sup>1</sup></a>, <a href="#">Kothandaraman Ramanujam<sup>2</sup></a> and <a href="#">Sundara Ramaprabhu<sup>1</sup></a></p> <p><sup>1</sup><i>Alternative Energy Nanotechnology Laboratory, Dept. of Physics, IIT Madras, Chennai- 600036, India</i>  <sup>2</sup><i>Clean Energy Laboratory, Department of Chemistry, IIT Madras, Chennai- 600036, India</i></p>
123)	<p><b>“Synthesis and electrochemical characterization of silicon-graphene nanosheet anode for Li-ion battery”</b></p> <p><a href="#">K. Thileep Kumar<sup>1</sup></a>, <a href="#">R. A. Kalaivani<sup>1</sup></a>, <a href="#">A. M. Shanmugaraj<sup>1</sup></a> and <a href="#">S. Raghu<sup>2</sup></a></p> <p><sup>1</sup><i>Dept. of Chemistry, Vels Institute of Science, Tech-nology &amp; Advanced Studies (VISTAS), Chennai -117, India</i>  <sup>2</sup><i>Centre for Advanced Research and Development (CARD), Vels Institute of Science, Technology &amp; Advanced Studies, Chennai -117, India</i></p>
124)	<p><b>“Porous polymer blend separators for Lithium-ion batteries”</b></p> <p><a href="#">B. Ram Ganesh</a>, <a href="#">M.Dinesh kumar</a>, <a href="#">T. Veldevi</a>, <a href="#">K. Thileep Kumar</a>, <a href="#">E. Senthil Kumar</a>, <a href="#">G. Sivagama Sundari</a>, <a href="#">S. Lalitha</a>, <a href="#">S. Raghu</a>, <a href="#">R. A. Kalaivani</a>, <a href="#">A. M. Shanmugharaj</a></p> <p><i>Department of Chemistry, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Chennai, India</i></p>
125)	<p><b>“High energy density supercapacitor based on novel bio-waste active carbon and ionic liquid electrolytes”</b></p> <p><a href="#">Sumana Brahma</a>, <a href="#">Ramesh L. Gardas</a> and <a href="#">Kothandaraman Ramanujam</a></p> <p><i>Department of Chemistry, Indian Institute of Technology Madras, Chennai-600036, India</i></p>
126)	<p><b>“Influence of Substrate Temperature on Microstructure and Supercapacitive Behavior of Sputter Deposited Cr Doped CuO Thin Films”</b></p> <p><a href="#">G. Durai<sup>1</sup></a>, <a href="#">P. Kuppusami<sup>1,2</sup></a>, <a href="#">S. Arulmani<sup>3</sup></a>, <a href="#">S. Anandan<sup>3</sup></a> and <a href="#">P. Vinoth Kumar<sup>4,5</sup></a></p> <p><sup>1</sup><i>Centre of Excellence for Energy Research, Sathyabama Institute of Science and Technology, Chennai-600119, India</i>  <sup>2</sup><i>Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai-600119, India</i>  <sup>3</sup><i>Nanomaterials and Solar Energy Conversion Lab., Department of Chemistry, National Institute of Technology (NIT), Trichy-620015, India</i>  <sup>4</sup><i>Department of Medicinal and Applied Chemistry, Kaohsiung Medical University, Kaohsiung City- 807, Taiwan</i>  <sup>5</sup><i>Research Center for Environmental Medicine, Kaohsiung Medical University, Kaohsiung City-807, Taiwan</i></p>
127)	<p><b>“Hierarchical growth of MoS<sub>2</sub> nanoflakes on carbon nanotubes for all solid-state symmetric supercapacitors: Insights into the surface science and storage mechanism”</b></p> <p><a href="#">Pranjala Tiwari</a> and <a href="#">Ramesh Chandra</a></p> <p><i>Thin Film Laboratory, Institute Instrumentation Centre, Indian Institute of Technology-Roorkee, Roorkee- 247667, India</i></p>
128)	<p><b>“Stitching carbon nanotubes for high-performance wearable supercapacitor ”</b></p> <p><a href="#">Mihir Kumar Jha</a>, <a href="#">Tanya Jain</a>, and <a href="#">Chandramouli Subramaniam</a></p> <p><i>Department of Chemistry, Indian Institute of Technology Bombay, Powai, Mumbai, India</i></p>
129)	<p><b>“Raman spectroscopy of coaxial interfaces in an ultra-lightweight, CNT-yarn based wearable supercapacitor operable at high scan rates (100 V/s)”</b></p> <p><a href="#">Mihir Kumar Jha</a>, <a href="#">Ranadeb Ball</a>, and <a href="#">Chandramouli Subramaniam</a></p> <p><i>Department of Chemistry, Indian Institute of Technology Bombay, Powai, Mumbai, India</i></p>
130)	<p><b>“Cu<sub>2</sub>ZnSnS<sub>4</sub> thin films by spray coating from thiourea-free solution for photovoltaic applications “</b></p>

	<p><b>P. Prabeesh, V.G. Sajeesh, I. Packia Selvam, S. N. Potty</b>  <i>Centre for Materials for Electronics Technology (C-MET), Shoranur Road, Athani P.O, Thrissur 680 581, India</i></p>
131)	<p><b>“Flexible thin film solar cell using earth abundant non-toxic Cu<sub>2</sub>ZnSnS<sub>4</sub> absorber material”</b>  <b>V. P. Anandhu, P. Prabeesh, I. Packia Selvam, S. N. Potty</b>  <i>Centre for Materials for Electronics Technology (C-MET), Shoranur Road, Athani P.O, Thrissur 680 581, India</i></p>
132)	<p><b>“Electrochemical performance of layered V<sub>2</sub>O<sub>5</sub> for energy storage applications”</b>  <b>Shobha Birajdar, Aishwarya Kasabe, Sulabha Kulkarni, Bharat Kale, Parag Adhyapak</b>  <i>Centre of Materials of Electronics Technology (C-MET), Panchawati, off Pashan Road, Pune411008, India.</i></p>
133)	<p><b>“Coconut sprout-derived graphitized carbon based sodium ion capacitors”</b>  <b>Vishnu Surendran, R. S. Arya, T. V. Vineesh, Binson Babu and M. M. Shaijumon</b>  <i>School of Physics, Indian Institute of Science Education and Research Thiruvananthapuram, Maruthamala PO, Kerala, 695551, India</i></p>
134)	<p><b>“Biomimetic cobalt oxide/ carbon nanocomposite for enhanced rate capability and cycle life for supercapacitors”</b>  <b>Sivagaami Sundari Gunasekaran<sup>1</sup>, Thileep Kumar Kumaresan<sup>1</sup>, Lalitha Satheesh<sup>1</sup>, , Ram Ganesh<sup>1</sup>, Dinesh Kumar<sup>1</sup>, Kalaivani Raman<sup>1</sup>, Raghu Subashchandra Bose<sup>2</sup>, Shanmugaraj Andikkadu Masilamani<sup>2</sup></b>  <sup>1</sup><i>Department of Chemistry, Vels Institute of Science, Technology &amp; Advanced Studies, Chennai -117, India</i>  <sup>2</sup><i>Centre for Advanced Research and Development (CARD), Vels Institute of Science, Technology &amp; Advanced Studies, Chennai -117, India</i></p>
135)	<p><b>“Facile synthesis of ZnCo<sub>2</sub>O<sub>4</sub> microstructures with spindle-like morphologies for high performance supercapacitors”</b>  <b>G. Rajasekhara Reddy<sup>1</sup>, Rajeh Megala<sup>2</sup>, G.R. Dillip<sup>3</sup>, B. Deva Prasad Raju<sup>2</sup></b>  <sup>1</sup><i>Department of Instrumentation, Sri Venkateswara University, Tirupati – 517 502, India</i>  <sup>2</sup><i>Department of Physics, Sri Venkateswara University, Tirupati – 517 502, India</i>  <sup>3</sup><i>Solid-State and Structural Chemistry Unit, Indian Institute of Science, Bangalore-560 012, India</i></p>
136)	<p><b>“Polymer metal oxide nanocomposites as active materials for energy storage application”</b>  <b>K. Anju, L. K Alexander</b>  <i>Department of Physics, University of Calicut, Malappuram, India</i></p>
137)	<p><b>“Synthesis and fabrication of flexible polyimide aerogels for light weight capacitive antenna systems, suitable for aerospace applications”</b>  <b>Amitha. B<sup>1</sup>, Smitha C. Sukumaran<sup>2</sup>, Shahina M. A<sup>2</sup> and R.S. Rajeev<sup>2</sup></b>  <sup>1</sup><i>Department of polymer science and rubber technology, Cochin university of Science and Technology, Cochin, Kerala, India</i>  <sup>2</sup><i>Vikram Sarabhai Space Center, Thriuvanathapuram, Kerala, India</i></p>
138)	<p><b>“Styrene butadiene rubber/carboxy methyl cellulose based aqueous binder for anode of lithium-ion cells”</b>  <b>Salini PS, Sumol V Gopinath, Athira K, Bibin John, Md Jamal Nawas Ansari, Aiswarya Samridh, Vijayakumar PS, Arjun Raj M, Deepak Srivastava, Mercy TD*</b>  <i>Energy Systems Division, PCM Entity, Vikram Sarabhai Space Centre, Thiruvananthapuram, Kerala, India</i></p>
139)	<p><b>“Implementation of 3-15 series-cell battery monitoring for Li-ion and phosphate batteries and secondary protection techniques for EV &amp; HEV applications”</b>  <b>Deepak A. Kajale, Sudhir S. Arbuji</b>  <i>Materials for Renewable Energy &amp; Sensors Division, Centre for Materials for Electronics Technology, Off Pashan Road, Panchawati, Pune-411008, India</i></p>
140)	<p><b>“Ferrocenylethenyl-substituted oxadiazoles with phenolic and nitro anchors as sensitizers in dye sensitized solar cells”</b>  <b>Ratna Chauhan<sup>1</sup>, Suresh W. Gosavi<sup>2</sup> and Sunt B. Rane<sup>1</sup></b>  <sup>1</sup><i>Materials for Renewable Energy Division, Centre for Materials for Electronics Technology (C-MET), Panchawati, Pune-411008, India.</i></p>

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141)	<p><b>“Hydrothermal synthesis of anatase TiO<sub>2</sub> and study of photocatalytic properties for dye degradation for DSSC applications”</b></p> <p><a href="#">Niteen Jawale</a>, <a href="#">Sudhir Arbuj</a>, <a href="#">Sunit Rane</a></p> <p>Materials for Renewable Energy &amp; Sensor Division, Centre for Materials for Electronics Technology, Off Pashan Road, Panchavati, Pune 411008, India.</p>
142)	<p><b>“Synthesis and characterization of manganese ferrite nanoparticles by hydrothermal method for energy storage application”</b></p> <p><a href="#">Rahul Ghuge<sup>1</sup></a>, <a href="#">Kranti Patole<sup>1</sup></a>, <a href="#">Sudhir Arbuj<sup>1</sup></a>, <a href="#">Manish Shinde<sup>1</sup></a>, <a href="#">P.V. V. Patnaik<sup>2</sup></a>, <a href="#">B. B. Kale<sup>1</sup></a>, <a href="#">Sunit Rane<sup>1</sup></a></p> <p><sup>1</sup>Materials for Renewable Energy &amp; Sensor Division, Centre for Materials for Electronic Technology, Off. Pashan Road, Pune, India</p> <p><sup>2</sup>MOIL Ltd. Nagpur, India</p>
143)	<p><b>“Interdigital Nanoporous gold (NPG) – manganese dioxide (MnO<sub>2</sub>) based micro-supercapacitor”</b></p> <p><a href="#">Balwant Kr Singh</a>, <a href="#">Aasiya Shaikh</a>, <a href="#">Rajiv.O. Dusane</a> , <a href="#">Smrutiranjana Parida</a></p> <p>Department of Metallurgical Engineering and Materials Science, Indian Institute of Technology Bombay, Powai, Mumbai – 400076, Maharashtra, India</p>
144)	<p><b>“Chemically derived reduced graphene oxide for energy storage applications”</b></p> <p><a href="#">Kriti Gupta</a>, <a href="#">Plawan K. Jha</a>, and <a href="#">Nirmalya Ballav</a></p> <p>Department of Chemistry, Indian Institute of Science Education and Research (IISER), Dr. Homi Bhabha Road, Pune – 411008, India</p>
145)	<p><b>“Coordination polymer-conducting polymer nanocomposites for energy storage applications”</b></p> <p><a href="#">Ashwini Jadhav</a>, <a href="#">Kriti Gupta</a>, <a href="#">Plawan K. Jha</a> and <a href="#">Nirmalya Ballav</a></p> <p>Department of Chemistry, Indian Institute of Science Education and Research, Pashan, Pune 411008, India</p>
146)	<p><b>“Synthesis and characterization of graphene based nanocomposites for enhancing electrochemical performance”</b></p> <p><a href="#">Sarika Jadhav<sup>1</sup></a>, <a href="#">Ramchandra Kalubarme<sup>2</sup></a>, <a href="#">Norihiro Suzuki<sup>3</sup></a>, <a href="#">Chiaki Terashima<sup>3</sup></a>, <a href="#">Bharat Kale<sup>4</sup></a>, <a href="#">Suresh Gosavi<sup>1</sup></a>, and <a href="#">Akira Fujishima<sup>3</sup></a></p> <p><sup>1</sup>Department of Physics, Savitribai Phule Pune University, (formerly University of Pune), Ganeshkhind, Pune-411007, India</p> <p><sup>2</sup>Centre for Materials for Electronics Technology, (C-MET), Shoranur Road, M.G. Kavu P.O., Athani, Thrissur – 680581, India</p> <p><sup>3</sup>Photocatalysis International Research Center, Research Institute for Science &amp; Technology, Tokyo University of Science, 2641 Yamazaki, Noda, Chiba 278-8510, Japan.</p> <p><sup>4</sup>Centre for Materials for Electronics Technology, Panchavati, Opp. Pashan Road, Pune-411008, India</p>
147)	<p><b>“Synthesis and characterization of CeO<sub>2</sub> nanostructures and its key role in morphological behaviour for supercapacitive study”</b></p> <p><a href="#">Sandhya S. Gadge</a>, <a href="#">Sarika Jadhav</a>, <a href="#">Ashif H. Tamboli</a>, and <a href="#">Suresh Gosavi</a></p> <p>Department of Physics, Savitribai Phule Pune University (Formerly University of Pune), Pune-411007, India</p>
148)	<p><b>“PMN-PT/Polymer composite thin films for energy harvesting applications”</b></p> <p><a href="#">Lakshmi Variar C. V<sup>1,2</sup></a>, <a href="#">M.N. Muralidharan<sup>1</sup></a>, <a href="#">Sunil. K. Narayanankutty<sup>2</sup></a> and <a href="#">A. Seema<sup>1</sup></a></p> <p><sup>1</sup>Centre for Materials for Electronics Technology, Athani P.O, Thrissur, Kerala, India</p> <p><sup>2</sup>Department of polymer science and rubber technology, CUSAT P.O, Ernakulam, Kerala, India</p>
149)	<p><b>“Supercapacitors for Pulse power applications”</b></p> <p><a href="#">Nixon Jacob</a>, <a href="#">Venkateswara Rao Genji</a>, <a href="#">Sajitha</a>, <a href="#">Ajeesh K S</a>, <a href="#">Sujatha S.</a>, <a href="#">Ilangovan S. A.</a></p> <p>Advanced Power Systems Division, Chemical Systems Group, Propellants Polymers Chemicals and Materials Entity, Vikram Sarabhai Space Centre, ISRO, Trivandrum, Kerala, India</p>
150)	<p><b>“Activated carbons from natural precursors for High-Performance Supercapacitor Electrodes”</b></p> <p><a href="#">Sajitha T S</a>, <a href="#">Sujatha S</a>, <a href="#">Ilangovan S A</a></p>

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151)	<p><b>“Voltage recovery phenomenon in graphene supercapacitors”</b></p> <p><b>M. N. Muralidharan, R. Sridharkrishna and A. Seema</b></p> <p><i>Centre for Materials for Electronics Technology (C-MET), Athani, Thrissur- 680 581, India</i></p>
152)	<p><b>“Graphene electrode based coin cell supercapacitors”</b></p> <p><b>P. Jimmy Joy, V. P. Alastin, R. Sridharkrishna, M. N. Muralidharan and A. Seema</b></p> <p><i>Centre for Materials for Electronics Technology (C-MET), Athani, Thrissur- 680 581, India</i></p>
153)	<p><b>“Study the feasibility of use of aerogel super capacitor packs for applications in VVPAT of EVM”</b></p> <p><b>Omprakash Sahu<sup>1</sup>, Ajith Kumar<sup>1</sup>, Vishnu Prasad V<sup>1</sup>, S R C Reddy<sup>2</sup>, Madhury M<sup>2</sup>, Noor Ahmed<sup>2</sup>, P A Abraham<sup>1</sup>, Stanly Jacob K<sup>1</sup>, Shantanu Das<sup>3</sup>, and N C Pramanik<sup>1</sup></b></p> <p><sup>1</sup><i>Aerogel Division, Centre for Materials for Electronics Technology (C-MET), Shornur Road, Athani, M. G Kavu PO, Thrissur-680581, Kerala</i></p> <p><sup>2</sup><i>CRnD, Electronics Corporation of India Limited, ECIL Post, Hyderabad, India</i></p> <p><sup>3</sup><i>RnC Division, Bhaba Atomic Research Centre, Trombey, Mumbai-400085, INDIA</i></p>