

## Book Chapters:

S.No.	Publication
<b>2024</b>	
3	Flexible Sustainable Supercapacitors, S. Siva Shalini, R Balamurugan, I Ajin, <b>A. Chandra Bose</b> , Sustainable Supercapacitors: Next-Generation of Green Energy Storage Devices - Wiley-Scrivener Publishing (USA) (2024)
<b>2023</b>	
2	Functionalization techniques for the development of metal-oxide/hydroxide-based supercapacitors, R. Balamurugan, S. Siva Shalini, I. Ajin and <b>A. Chandra Bose</b> - Springer Book-Functionalized Nanomaterials Based Supercapacitor - Design, Performance & Industrial applications (2023)
<b>2022</b>	
1	Glucose Biosensing with Gold and Silver Nano Particles: For Real-Time Applications R. Balamurugan, S. Siva Shalini, M.P. Harikrishnan, S. Velmathi and <b>A. Chandra Bose</b> , Chapter in the book edited by S.K. Sahoo and Publisher Elsevier, 2023

## List of Papers Published in Journals

S.No.	Publication
<b>2025</b>	
179	Hierarchical Nanoporous Carbons with an Integrated Activation using 3D Flower-like ZnO Microspheres and KOH for Flexible EDL Capacitor with a High Operating Potential, R. Balamurugan and <b>A. Chandra Bose</b> and A. Vinu, <i>Small</i> , (2025) <i>In press</i> .
178	Fuel-Dependent Combustion Synthesis of CeCrO <sub>3</sub> Nanomaterials: Morphological Control and Its Impact on Electrochemical Properties and Device Applications, MJ. Devikasree, I. Ajin, R. Balamurugan and <b>A. Chandra Bose</b> , <i>Electrochimica Acta</i> , (2024) 145411.
<b>2024</b>	
177	Synergetic Interplay of MnNi-MOF Composite with 2D MXene for Improved Supercapacitor Application, S. Siva Shalini, and <b>A. Chandra Bose</b> <i>Chemical Engineering Journal</i> , (2024) 500, 156751.
176	Beyond barrier function: Exploring the potential of polymer coatings for high-performance Aluminium-air Batteries, A. B. Aravind, <b>A. Chandra Bose</b> , K. Ramya, <i>ACS Applied Energy Materials</i> , (2024), 7(18), 7915–7926.
175	Investigation of X-ray Peak Broadening in Magnesium Oxide Nanoparticles Through Williamson-Hall Analysis, R Srinivasan, N Karthikeyan, P Thiruramanathan, T Arun, <b>A Chandra Bose</b> , <i>Journal of Molecular and Engineering Materials</i> , (2024) <i>In press</i> .

174	Single step solid state synthesis of carbon nanoparticles for instantaneous detection of Fe (III) in water samples, K Anusuyadevi, A. Chandra Bose, S Velmathi, Single step solid state synthesis of carbon nanoparticles for instantaneous detection of Fe (III) in water samples, K Anusuyadevi, AC Bose, S Velmathi <i>Journal of Fluorescence</i> 34 (5), (2024) 2219-2227
173	Effects of Potassium-Based Activating Agents on the Biochar Derived from Coconut Tree Husk for Enhancing Surface Area and Supercapacitor Performance, I. Ajin, and <b>A. Chandra Bose</b> , <i>ACS Energy &amp; Fuels</i> , (2024), 38(12), 11240–11252.
172	Surface Sulfurized Zn-MOF Grown on Ni-foam with Various Sulfurizing Agents for Aqueous Hybrid Supercapacitor Device Fabrication, R. Balamurugan, and <b>A. Chandra Bose</b> , <i>ACS Applied Energy Materials</i> , (2024), 7(3), 974–985.
<b>2023</b>	
171	Solvent Assisted Morphology Induced Nickel Metal-Organic Framework as a Highly Efficient Electrode for Energy Storage Application, S. Siva Shalini, and <b>A. Chandra Bose</b> , <i>ACS Energy &amp; Fuels</i> , (2023), 951, 117895.
170	Caffeine Additive Based Nanoarchitectonics of Methylammonium Lead Iodide (MAPbI <sub>3</sub> ) Perovskite Solar Cell Device: Investigations on Charge Carrier Properties Using AC Impedance Spectroscopy, R. Dhanabal; K. Dhivyaprasath, M. Ashok, K. Madhuri, <b>A. Chandra Bose</b> , and Suhash Ranjan Dey, <i>Journal of Materials Science: Materials in Electronics</i> , (2023), 34(33), 2205.
169	Design and Development of Diamond-shaped Silver-Trimesic Acid based Metal-Organic Framework for High-performance Supercapacitor Application,, S. Siva Shalini, and <b>A. Chandra Bose</b> , <i>Journal of Electroanalytical Chemistry</i> , (2023), 117895.
168	Single Step Solid State Synthesis of Carbon Nanoparticles for Instantaneous Detection of Fe (III) in Water Samples, K. Anusiyadevi, <b>A. Chandra Bose</b> and S. Velmathi, <i>Journal of Fluorescence</i> , (2023), 1-9.
167	Fabrication of Flexible and Aqueous Hybrid Supercapacitors with Diffusion Channels Contained Copper Cobalt bi-Metal Organic Framework Nanosheets and Ionic Conductivity Optimized Semi-Solid Electrolyte, R. Balamurugan, <b>A. Chandra Bose</b> , <i>Electrochimica Acta</i> , (2023), 467, 143078
166	Tailoring the perovskite structure to acquire an inorganic La <sub>2</sub> NiCrO <sub>6</sub> double perovskite as an efficient energy storage application by varying molar concentrations of citric acid, I. Ajin, R. Balamurugan, <b>A. Chandra Bose</b> , <i>ACS Applied Energy Materials</i> , (2023), 6 (18), 9764–9777
165	Facile single step synthesis of carbon nano-sponges as a fluorimetric sensor for 4-nitroaniline and pseudocapacitor, K Anusuyadevi, R Balamurugan, <b>A. Chandra Bose</b> , S Velmathi, <i>Materials Today Chemistry</i> , (2023), 32, 101659
164	Development of different nanostructured nickel oxide (NIO): Investigations on highly efficient asymmetric solid state supercapacitor device, R. Dhanabal, A. Juliet Christina Mary, Suhash Ranjan Dey, and <b>A. Chandra Bose</b> , <i>Journal of Solid State Electrochemistry</i> , (2023), 1-12

163	Fabrication of Cerium Nickel Oxide (CeNiO <sub>3</sub> ) Nanoparticle on Vanadium Tetra Sulphide (VS <sub>4</sub> ) Nanosheet Composite Materials as an Enhanced Electrode for Supercapacitor Applications, P. Harikrishnan, P. Naveena, N. Baskaran and <b>A. Chandra Bose</b> , <i>Electrochimica Acta</i> , (2023) 462, 142729.
162	Recent Advances and Future Perspectives of VS <sub>4</sub> and its Nanostructure Composites for Supercapacitor Applications: A Review, P. Harikrishnan, and <b>A. Chandra Bose</b> , <i>ACS Energy &amp; Fuels</i> , (2023) 37 (15), 10799–10826
<b>2022</b>	
161	Binder-free Synthesis of Cerium Nickel Oxide for Supercapattery Devices, M. P. Harikrishnan, and <b>A. Chandra Bose</b> , <i>International Journal of Energy Research</i> , (2022) 46 (15), 21826-21840.
160	Porous CeNiO <sub>3</sub> with enhanced electrochemical performance and prolonged cycle life (> 50000 cycles) via lemon-assisted sol-gel auto combustion method, M. P. Harikrishnan, and <b>A. Chandra Bose</b> , <i>New Journal of Chemistry</i> , (2022) 46, 15118-15129.
159	Facile Synthesis of the Porous MnMo <sub>6</sub> S <sub>8</sub> for Highly Stable Pseudocapacitor, R. Balamurugan, S. Siva Shalini, and <b>A. Chandra Bose</b> , <i>Journal of Materials Science: Materials in Electronics</i> , (2022) 33(23), 18231-18240.
158	One-Pot Synthesis of Porous Crystal Structured Nanosponge-Like Pristine Copper Metal-Organic Framework for Hybrid Supercapacitor Application, R. Balamurugan, S. Siva Shalini, S. Velmathi and <b>A. Chandra Bose</b> , <i>New Journal of Chemistry</i> , (2022) 46(29), 14020-14029.
157	Systematic Investigation on the Electrochemical Performance of Pristine Silver Metal–Organic Framework as the Efficient Electrode Material for Supercapacitor Application, S. Siva Shalini, R. Balamurugan, S. Velmathi and <b>A. Chandra Bose</b> , <i>ACS Energy &amp; Fuels</i> , (2022) 36(13), 7104-7114
156	Investigating the effect of La doped CuO thin film as absorber material for Solar cell application, D. Naveena, R. Dhanabal, <b>A. Chandra Bose</b> , <i>Optical Materials</i> , 127 (2022) 112266
<b>2021</b>	
155	Three Dimensional NiO Nanonetwork Electrode for Efficient Ultra-fast Electrochemical Energy Storage Application, Nikhitha Joseph, P Muhammed Shafi, JS Sethulakshmi, Raj Karthik, <b>A. Chandra Bose</b> , Jae-Jin Shim, <i>Electrochimica Acta</i> , (2021), 139392.
154	Effect of ball-milling on the phase formation and enhanced thermoelectric properties in zinc antimonides, B. Priyadarshini, B. Manjusha, <b>A. Chandra Bose</b> , R. Gopalan, <i>Materials Science &amp; Engineering B</i> , B 271 (2021): 115274.
153	Effect of Ag doping on crystallinity and microstrain of LaMnO <sub>3</sub> nanoparticles: Confirmations of defect levels with positron lifetime and Doppler-broadening calculations, P. Muhammed Shafi, Evan Kurianb, Nikhitha Joseph, SelvakumarSellaian, Akira Uedono, <b>A. Chandra Bose</b> , <i>Physica B: Condensed Matter</i> 615 (2021): 413087.

152	Hierarchical porous carbon nanoparticles derived from Helianthus Annuus for glucose sensing application, S. Siva Shalini, R. Balamurugan, A. Juliet Christina Mary, and <b>A. Chandra Bose</b> , <i>Emergent Materials</i> , 4, no. 3 (2021): 755-760.
151	A simple nonenzymatic glucose sensor based on coconut shell charcoal powder-coated nickel foil electrode, Shuaib Edakkaparamban, P.MuhammedShafi, Gaurav Kumar Yogesh, <b>A. Chandra Bose</b> , D. Sastikumar <i>Carbon Letters</i> , (2021): 1-7.
150	Lemon juice-assisted synthesis of LaMnO <sub>3</sub> perovskite nanoparticles for electrochemical detection of dopamine, P.Muhammed Shafi, NikithaJoseph, R.Karthik, J.-J. Shim, <b>A. Chandra Bose</b> , V Ganesh, <i>Microchemical Journal</i> , (2021) 164, 105945.
149	Diethylenetriaminepentaacetic acid-functionalized multi-walled carbon nanotubes/titanium oxide-PVDF nanofiber membrane for effective separation of oil/water emulsion, Kanagaraj Venkatesh, GangasalamArthanareeswaran, <b>A. Chandra Bose</b> , Palaniswamy Suresh Kumar, JihyangKweon, <i>Separation and Purification Technology</i> , (2021) 257, 117926.
<b>2020</b>	
148	Tuning the Properties of CuAl <sub>(1-x)</sub> Fe <sub>x</sub> S <sub>2</sub> Thin Film as Potential Absorber for Solar Cell Application, D. Naveena, T. Logu, R. Dhanabal, K. Sethuraman, <b>A. Chandra Bose</b> , <i>ACS Applied Energy Materials</i> , (2020) 3 (11), 10550-10559.
147	Electrochemical Performance of ANiO <sub>3</sub> (A= La, Ce) Perovskite Oxide material and its Device Performance for Supercapattery Application, M. P. Harikrishnan, A. Juliet Christina Mary and <b>A. Chandra Bose</b> , <i>Electrochimica Acta</i> , (2020) 362, 137095.
146	Construction of few layered metallic MoS <sub>2</sub> microspheres using glucose induced carbon spheres and its application in symmetric supercapacitor device, NikithaJoseph, <b>A. Chandra Bose</b> , <i>Journal of Electroanalytical Chemistry</i> , (2020) 874, 114461.
145	Electrochemical performance of rGO/NiCo <sub>2</sub> O <sub>4</sub> /ZnCo <sub>2</sub> O <sub>4</sub> ternary composite material and the fabrication of all-solid-state supercapacitor device, A. Juliet Christina Mary, Clastinrusselraj I. Sathish, Ajayan Vinu, and <b>A. Chandra Bose</b> , <i>ACS Energy &amp; Fuels</i> , (2020) 34 (8), 10131-10141.
144	Morphology dependent electrochemical energy storage property of metallic molybdenum sulfide nanosheets, Nikitha Joseph, J S Sethulakshmi, <b>A. Chandra Bose</b> , <i>Journal of Materials Science: Materials in Electronics</i> , (2020) 31 (15), 12684-12695.
143	Supercapacitor and non-enzymatic biosensor application of the Mn <sub>2</sub> O <sub>3</sub> /NiCo <sub>2</sub> O <sub>4</sub> composite materials, A. Juliet Christina Mary, S. Siva Shalini, R. Balamurugan, M. P. Harikrishnan and <b>A. Chandra Bose</b> , <i>New Journal of Chemistry</i> , 44, no. 26 (2020): 11316-11323.

142	Recent Advances in 2D-MoS <sub>2</sub> and its Composite Nanostructures for Supercapacitor Electrode Application, Nikitha Joseph, P. Muhammed Shafi, <b>A. Chandra Bose</b> , <i>ACS Energy &amp; Fuels</i> , 34, no. 6 (2020): 6558-6597.
141	Tailoring the morphology and size of perovskite BiFeO <sub>3</sub> nanostructures for enhanced magnetic and electrical properties, KP Remya, D Prabhu, RJ Joseyphus, <b>A. Chandra Bose</b> , C Viswanathan, N. Ponpandian, <i>Materials &amp; Design</i> , (2020) 108694.
140	Fabrication of hybrid supercapacitor device based on NiCo <sub>2</sub> O <sub>4</sub> @ZnCo <sub>2</sub> O <sub>4</sub> and the biomass-derived N-doped activated carbon with a honeycomb structure, A. Juliet Christina Mary, Clastinrusselraj I. Sathish, Ajayan Vinu, and <b>A. Chandra Bose</b> , <i>Electrochimica Acta</i> , 342 (2020): 136062.
139	Hydrophilic Hierarchical Carbon with TiO <sub>2</sub> Nanofiber Membrane for High Separation Efficiency of Oil in Water Emulsion and Dye, K. Venkatesh, G. Arthanatheeswaran, <b>A. Chandra Bose</b> , and Suresh Kumar Palaniswamy, <i>Separation and Purification Technology</i> , 241 (2020): 116709.
138	Reduced Graphene Oxide MoO <sub>3</sub> Nanocomposites: High Performance Electrode Material for Supercapacitor and Photocatalytic Applications, R. Dhanabal, D. Naveena, S. Velmathi, <b>A. Chandra Bose</b> , <i>Journal of Nanoscience and Technology</i> , (2020) 20 (7), 4035-4046.
<b>2019</b>	
137	Tuning of Mg content to enhance the thermoelectric properties in binary Mg <sub>2+δ</sub> Si (δ=0, 0.1, 0.15, 0.2), B. Priyadarshini, B. Manjusha, <b>A. Chandra Bose</b> , R. Gopalan, <i>Materials Research Express</i> , (2019) 6 (12), 125519.
136	Carbon nanoparticles synthesized by laser ablation of coconut shell charcoal in liquids for glucose sensing application, E. Shuaib, P. Muhammed Shafi, Yogesh, Gaurav, <b>A. Chandra Bose</b> , D. Sastikumar, <i>Materials Research Express</i> , (2019) 6 (11), 115610.
135	Hierarchical porous structured N-doped activated carbon derived from Helianthus Annuus seed as a cathode material for hybrid supercapacitor device A. Juliet Christina Mary, C Nandhini and <b>A. Chandra Bose</b> , <i>Materials Letters</i> , 256 (2019) 126617.
134	Controllable Synthesis of V <sub>2</sub> O <sub>5</sub> /Mn <sub>3</sub> O <sub>4</sub> Nanoflakes and rGO Nanosheets: To Investigate the Performance of All Solid-State Asymmetric Supercapacitor Device, A. Juliet Christina Mary and <b>A. Chandra Bose</b> , <i>Chemistry Select</i> , 4 (2019) 7874-7882.
133	Significant enhancement of photo-physicochemical properties of Yb doped Copper oxide thin films for efficient solid-state solar cell, D. Naveena, T. Logu, R. Dhanabal, K. Sethuraman, <b>A. Chandra Bose</b> , <i>Journal of Alloys and Compounds</i> , 795(2019) 187-196.

132	Metallic MoS <sub>2</sub> grown on porous g-C <sub>3</sub> N <sub>4</sub> as an efficient electrode material for supercapattery application, Nikitha Joseph, <b>A. Chandra Bose</b> , <i>Electrochimica Acta</i> , 301 (2019) 401-410.
131	Metallic MoS <sub>2</sub> Anchored on Reduced Graphene Oxide Sheets with Edge Orientation, and Its Electrochemical Investigation on Energy Storage Application N Joseph, PM Shafi, <b>A. Chandra Bose</b> , <i>Chemistry Select</i> 3 (42), 11993-12000, 2019.
130	Incorporating Mn <sup>2+</sup> /Ni <sup>2+</sup> /Cu <sup>2+</sup> /Zn <sup>2+</sup> in the Co <sub>3</sub> O <sub>4</sub> nanorod: To investigate the effect of structural modification in the Co <sub>3</sub> O <sub>4</sub> nanorod and its electrochemical performance, A. Juliet Christina Mary and <b>A. Chandra Bose</b> , <i>Chemistry Select</i> , (2019) 4 (1), 160-170.
129	Comparative study of effective photoabsorber CuO thin films prepared via different precursors using chemical spray pyrolysis for solar cell application, D. Naveena, T. Logu, R. Dhanabal, K. Sethuraman, <b>A. Chandra Bose</b> , <i>J Mater Sci: Mater Electron.</i> , 2019, 30, pp 561–572.
<b>2018</b>	
128	Metallic 1T-MoS <sub>2</sub> with defect induced additional active edges for high performance supercapacitor application, Nikitha Joseph, <b>A. Chandra Bose</b> , <i>New Journal of Chemistry</i> , 42 (2018) 2802-2812.
127	LaMnO <sub>3</sub> /RGO/PANI Ternary nanocomposite for Supercapacitor Electrode Application and Their Outstanding Performance in All-Solid-State Asymmetrical Device Device, P. Muhammed Shafi, V Ganesh, <b>A. Chandra Bose</b> , <i>ACS Applied Energy Materials</i> , 1(2018) 2802-2812.
126	Electrochemical Material Processing via Continuous Charge-Discharge Cycling: An Enhanced performance upon Cycling for Porous LaMnO <sub>3</sub> Perovskite Supercapacitor, P. Muhammed Shafi, Ajayan Vinu, <b>A. Chandra Bose</b> , <i>Chem. Electro. Chem</i> (2018) 5 (23), 3723-3730.
125	Investigations of Interfacial Electric Field on RGO Supported Molybdenum Oxide @ Silver phosphate Ternary Hybrid Composite: Highly Efficient Visible Light Driven Photocatalyst, R. Dhanabal, P. Muhammed Shafi, A Thirumurugan, Shamima Hussain, S. Velmathi, <b>A. Chandra Bose</b> , <i>Chemistry Select</i> (2018)3 (34), 9920-9932.
124	A novel method for generating tricolor emission for white LED application P Priyanka, B Nalini, D Lakshmi, <b>A. Chandra Bose</b> , <i>Journal of Materials Science: Materials in Electronics</i> , 29 (2018) 12288-12299.
123	One-pot synthesis of LaMnO <sub>3</sub> /Mn <sub>3</sub> O <sub>4</sub> nanocomposite: impact of calcination temperature on the synergetic effect towards high energy supercapacitor performance, P. Muhammed Shafi, and <b>A. Chandra Bose</b> , <i>Chemistry Select</i> , (2018) 3 (23), 6459-6467.

122	Synthesis and characterizations of Ag-doped CdO nanoparticles for P-N junction diode application, K. Mohanraja, D. Balasubramaniana, J. Chandrasekaranb, <b>A. Chandra Bose</b> , <i>Materials Science in Semiconductor Processing</i> , 79,2018, 74-91.
121	Surfactant assisted ZnCo <sub>2</sub> O <sub>4</sub> nanomaterial for supercapacitor application, A. Juliet Christina Mary and <b>A. Chandra Bose</b> , <i>Applied Surface Science</i> , (2018) 449, 105-112.
120	Enhanced Electrochemical Performances of Agglomeration-free LaMnO <sub>3</sub> Perovskite Nanoparticles and Achieving High Energy and Power Densities with Symmetri...P. Muhammed Shafi, N Joseph, A Thirumurugan <b>A. Chandra Bose</b> , <i>Chemical Engineering Journal</i> , 338, (2018), 147-156.
119	Fabrication of RuO <sub>2</sub> -Ag <sub>3</sub> PO <sub>4</sub> Heterostructure Nanocomposites: Investigations of Band Alignment on the Enhanced Visible Light Photocatalytic Activity, R Dhanabal, S Velmathi, <b>A. Chandra Bose</b> , <i>Journal of Hazardous Material</i> , 44, (2018) 865-874
<b>2017</b>	
118	Automated nebulizer sprayed tin doped titanium dioxide (Sn <sub>x</sub> Ti <sub>1-x</sub> O <sub>2</sub> ) anatase nanofilms properties, gas sensing performa, V. Gopala Krishnan, P. Elango, A. Purushothaman, <b>A. Chandra Bose</b> , <i>Materials Chemistry and Physics</i> , 199 (2017) 113-121.
117	Hydrothermal synthesis of Mn-doped ZnCo <sub>2</sub> O <sub>4</sub> electrode material for high-performance Supercapacitor, A. Juliet Christina Mary and <b>A. Chandra Bose</b> , <i>Applied Surface Science</i> , 425, (2017), 201-211.
116	α-MnO <sub>2</sub> /h-MoO <sub>3</sub> hybrid material for high performance supercapacitor electrode and photocatalyst, P. Muhammed Shafi, R. Dhanabal, A. Chithambararaj, S. Velmathi and <b>A.Chandra Bose</b> , <i>ACS Sustainable Chemistry &amp; Engineering</i> , 2017, 5 (6), 4757-4770.
115	Structural evolution and electrical properties of the biphasic compound _ - Al <sub>2</sub> O <sub>3</sub> :MgAl <sub>2</sub> O <sub>4</sub> , K. Chitrarasu, J.Udaya Bhanu, R. Dhanabal, <b>A. Chandra Bose</b> , P. Thangadurai, <i>Materials Research Bulletin</i> , 90, 2017, 244-252.
114	Enhanced optical and Electrical properties of P25 Titanium Dioxide Incorporated Polycaprolactone Nanocomposit. Saravanamurthy, S. Velmathi and <b>A. Chandra Bose</b> , <i>Journal of Nanoscience and Nanotechnology</i> , 17 (2), (2017) 4677-4686.
<b>2016</b>	
113	Gd <sub>2</sub> O <sub>3</sub> :RE <sup>3+</sup> and GdAlO <sub>3</sub> :RE <sup>3+</sup> (RE=Eu, Dy) phosphor: Synthesis, characterization and bioimaging application, T. Selvalakshmi1, P.Venkatesan, Shu-Pao Wu, S. Velmathi, and <b>A. Chandra Bose</b> , <i>Journal of Nanoscience and Nanotechnology</i> 17 (2), (2016) 1178-1184.
112	High Efficiency new Visible Light Driven Ag <sub>2</sub> MoO <sub>4</sub> -Ag <sub>3</sub> PO <sub>4</sub> Composite Photocatalyst towards Degradation of Industrial Dyes, R. Dhanabal, A.

	Chithambararaj, S. Velmathi, <b>A. Chandra Bose</b> , <i>Catalysis Science &amp; Technology</i> ,6 (24), (2016) 8449-8463.
111	Band alignment and depletion zone at ZnO/CdS and ZnO/CdSehetero structures for temperature independent ammonia vapor sensing, N. RajeswaiYogamalar, R. Jayavel, <b>A. Chandra Bose</b> , <i>Physical Chemistry Chemical Physics</i> 18 (47), (2016) 32057-32071.
110	Cost-effective nebulizer sprayed ZnO thin films for enhanced ammonia gas sensing –Effect of deposition temperature, K Ravichandran, A Manivasaham, K Subha, <b>A. Chandra Bose</b> , R Mariappan, <i>Surfaces and Interfaces</i> , 1, (2016)13-20.
109	Impedance spectroscopy and photocatalysis water splitting for hydrogen production with Cerium modified SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> ferroelectrics, V Senthil, T Badapanda, A Chithambararaj, <b>A. Chandra Bose</b> , S Panigrahi, <i>Int. J. Hydrogen Energy</i> , 41 (48) (2016), 22856-22865.
108	Investigation on photoluminescence properties and defect chemistry of GdAlO <sub>3</sub> :Dy <sup>3+</sup> Ba <sup>2+</sup> phosphors, T Selvalakshmi, S Sellaiyan, AkiraUedono, Takaaki Semba and <b>A. Chandra Bose</b> , <i>Opt Mater.</i> , 58, (2016) 524-530.
107	Enhancement of dielectric and ferroelectric properties of dysprosium substituted SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> ceramics, V Senthil, T Badpanda, <b>A. Chandra Bose</b> , <i>J Mater Sci: Mater Electron</i> ,27 (2016) 1602-1608.
106	Relaxation and conduction mechanism of Dy <sup>3+</sup> substituted SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> ceramics, V. Senthil, T Badpanda, <b>A. Chandra Bose</b> , <i>J Mater Sci: Mater Electron</i> ,27 (2016) 4760-4770.
105	Structural, optical and impedance properties of SnO <sub>2</sub> nanoparticles, K. GnanaprakasamDhinakar T. Selvalakshmi, S. Meenakshi Sundar, <b>A. Chandra Bose</b> , <i>J Mater Sci: Mater Electron</i> , 27 (2016) 5818-5824.
104	PVDF Mixed Matrix Nano-filtration Membrane which integrated with 1D-PANI/TiO <sub>2</sub> NFs for Oil-water Emulsion Separation, K. Venkatesh, G. Arthanatheeswaran, <b>A. Chandra Bose</b> , <i>RSC Advances</i> ,6 (2016) 18899-18908.
103	Hydrothermally Synthesized h-MoO <sub>3</sub> and α-MoO <sub>3</sub> Nanocrystals: New Findings on Crystal, Structure Dependent Charge Transport, A. Chithambararaj, N. Rajeswari Yogamalar, <b>A. Chandra Bose</b> , <i>Crystal Growth &amp; Design</i> , 16 (2016)1984-1995.
102	Synthesis, characterization and photocatalytic activity of Ruthenium doped h-MoO <sub>3</sub> ., R. Dhanabal, Dushmanta Kumar Meher, S. Velmathi, and <b>A. Chandra Bose</b> , <i>Advanced Porous Materials</i> , (2016).
101	Study of the temperature dependent transport properties in nanocrystalline lithium lanthanum titanate for lithium ion batteries, K. P Abhilash, P. C. Selvin,

	B. Nalini, K. Somasundaram, P. Sivaraj, <b>A. Chandra Bose</b> , <i>J. Phys. Chem. Solids</i> , 91, (2016) 114-121.
100	Effect of Reaction Medium on Porosity and Electrochemical Properties of MnO <sub>2</sub> Nanoparticle, P. Muhammed Shafi and <b>A. Chandra Bose</b> , <i>Advanced Porous Materials</i> , 3 (1), (2015) 57-62.
<b>2015</b>	
99	Facile fabrication of polycaprolactone/h-MoO <sub>3</sub> nanocomposites and their structural, optical and electrical properties, Saravanamurthy, S. Velmathi and <b>A. Chandra Bose</b> , <i>RSC Advances</i> 5 (120), 99074-99083 (2015).
98	Investigation on photoluminescence, electrical and positron lifetime of Eu <sup>3+</sup> ; activated Gd <sub>2</sub> O <sub>3</sub> phosphors, T. Selvalakshmi, S. Selvakumar; A Uedono, <b>A. Chandra Bose</b> , <i>Mater. Chem. Phys.</i> 166, 73-81 (2015).
97	Visible light driven degradation of methylene blue dye using Ag <sub>3</sub> PO <sub>4</sub> , R. Dhanabal, A. Chithambararaj, S. Velmathi, <b>A. Chandra Bose</b> , <i>Journal of Environmental Chemical Engineering</i> , 3 (3), 1872-1881 (2015).
96	Impact of crystalline defects and size on X-ray line broadening: A phenomenological approach for tetragonal SnO <sub>2</sub> nanocrystals, P. Muhammed Shafi and <b>A. Chandra Bose</b> , <i>AIP Advances</i> 5, (2015) 057137.
95	Structural evolution and phase transition of [NH <sub>4</sub> ] <sub>6</sub> Mo <sub>7</sub> O <sub>24</sub> .4H <sub>2</sub> O to 2D layered MoO <sub>3</sub> x A. Chithambararaj, D, Bhagya Mathi, N, Rajeswari Yogamalar, <b>A. Chandra Bose</b> , <i>Mater. Res. Express</i> , 2 (2015) 055004.
94	Influence of Al <sup>3+</sup> on the cross relaxation process and electrical properties of Dy <sup>3+</sup> activated Gd <sub>2</sub> O <sub>3</sub> phosphor for white LED application, T. Selvalakshmi, <b>A. Chandra Bose</b> , S. Velmathi, <i>Ceramics International</i> , 41 (7) 2015, 8801-8808.
93	Quantum confined CdS inclusion in graphene oxide for improved electrical conductivity and facile charge transfer in hetero-junction solar cell, N. Rajeswari Yogamalar, R. Jayavel, <b>A. Chandra Bose</b> , <i>RSC Advances</i> , 5 (2015) 16856.
92	Effect of Eu <sup>3+</sup> and Al <sup>3+</sup> concentrations on photoluminescence of Gd <sub>2</sub> O <sub>3</sub> :Eu <sup>3+</sup> , T. Selvalakshmi, <b>A. Chandra Bose</b> , and S. Velmathi, <i>Journal of Nanoscience and Nanotechnology</i> , 15 (2015) 5760.
91	Band gap tuning of h-MoO <sub>3</sub> nanocrystals for efficient visible light photocatalytic activity against MB dye, A. Chithambararaj, B. Winston, N. S. Sanjini, S. Velmathi and <b>A. Chandra Bose</b> , <i>Journal of Nanoscience and Nanotechnology</i> , 15 (7), (2015) 4913.
<b>2014</b>	
90	Investigation on defect related photoluminescence property of multicolour emitting Gd <sub>2</sub> O <sub>3</sub> :Dy <sup>3+</sup> phosphor, Selvalakshmi, Thangaraj; Sellaiyan, Selvakumar; Uedono, Akira; Mori, Akihiro; <b>A. Chandra Bose</b> , <i>RSC Advances</i> , 4 (2015) 34257.

89	Influence of Y doping concentration on the properties of nanostructures $MxZn_{1-x}O$ (M=Y) thin film deposited by nebulizer spray pyrolysis technique, R Mariappan, V Ponnuswamy, <b>A. Chandra Bose</b> , R Suresh, M Ragavendar, <i>Journal of Physics and Chemistry of Solids</i> 75 (2014) 1033.
88	Influence of film thickness on the properties of sprayed ZnO thin films for gas sensor applications, R. Mariappan, V. Ponnuswamy, P. Suresh, N. Ashok, P. Jayamurugan, <b>A. Chandra Bose</b> , <i>Superlattices and Microstructures</i> , 71 (2014) 238.
87	Role of synthesis variables on controlled nucleation and growth of hexagonal molybdenum oxide nanocrystals: Investigation on thermal and optical properties, A. Chithambararaj and <b>A. Chandra Bose</b> , <i>Crystal Engineering Communications</i> , 16 (2014) 6175.
86	Nanocrystalline Cerium Oxide coated fiber optic gas sensor, B. Renganathan, D. Sastikumar, <b>A. Chandra Bose</b> , R. Srinivasan and A. R. Ganesan, <i>Current Applied Physics</i> , 14 (2014) 467.
85	Strain induced X-ray line broadening and morphological investigation on silver nanoparticles, T. Selvalakshmi and <b>A. Chandra Bose</b> , <i>Nanoscience and Nanotechnology Letters</i> , 6 (3), 261-267.
84	Nanostructured $Ce_x Zn_{1-x} O$ thin films: Influence of Ce doping on the structural, optical and electrical properties, R Mariappan, V Ponnuswamy, P Suresh, R Suresh, M Ragavendar, <b>A. Chandra Bose</b> , <i>Journal of Alloys Compounds</i> , 588 (2014) 170.
83	Structural, optical and electrical characterization of nebulizer-sprayed ZnO nanorods, R Mariappan, V Ponnuswamy, <b>A. Chandra Bose</b> , A Chithambararaj, R Suresh, M. Ragavendar, <i>Superlattices and Microstructures</i> , 65 (2014) 184.
82	Effect of hydrolysis time on grain size and properties of cerium oxide nanoparticle synthesized by hydrolysis assisted co-precipitation method, R. Srinivasan and <b>A. Chandra Bose</b> , <i>Nanoscience and Nano Letter</i> , 6 (2014) 94.
81	Role of substrate temperature on the properties of Na-doped ZnO thin film nanorods and performance of ammonia gas sensors using nebulizer spray pyrolysis technique, R. Mariappan, V. Ponnuswamy, R. Suresh, P. Suresh, <b>A. Chandra Bose</b> , M. Ragavendar, <i>Journal of Alloys and Compounds</i> , 582 (2014) 387.
80	Study of microwave assisted growth of meta-stable 1-D h-MoO <sub>3</sub> , A. Chithambararaj, N. Rameshbabu, <b>A. Chandra Bose</b> , <i>Science of Advanced Materials</i> , 6 (2014) 1302.
<b>2013</b>	
79	Complex impedance spectroscopy studies of PLZT (5/52/48) ceramics synthesized by sol-gel route, M. Prabhu and <b>A. Chandra Bose</b> , <i>Journal of Material Science: Materials in Electronics</i> 24 (2013) 4560.

78	Role of electrolyte chemistry on electronic and in vitro electrochemical properties of micro-arc oxidized titania films on Cp Ti, K. Venkateswarlu, N. Rameshbabu, D. Sreekanth, M. Sandhyarani, <b>A. Chandra Bose</b> , V. Muthupandi, S. Subramanian, <i>Electrochimica Acta</i> 105 (2013) 468.
77	Preparation of h-MoO <sub>3</sub> and a-MoO <sub>3</sub> nanocrystals: comparative study on photocatalytic degradation of methylene blue under visible light irradiation, A. Chithambararaj, N. S. Sanjini, S. Velmathi and <b>A. Chandra Bose</b> , <i>Physical Chemistry Chemical Physics</i> 15 (2013) 14761.
76	Flower-like hierarchical h-MoO <sub>3</sub> : A new findings of efficient visible light driven nano photocatalyst for methylene blue degradation, A. Chithambararaj, N. S. Sanjini, <b>A. Chandra Bose</b> and S. Velmathi, <i>Catalysis Science Technology</i> 3 (2013)1405.
75	Fabrication and characterization of micro arc oxidized fluoride containing titania films on Cp Ti, K. Venkateswarlu, N. Rameshbabu, D. Sreekanth, <b>A.Chandra Bose</b> , V. Muthupandi, S. Subramanian, <i>Ceramics International</i> 39 (2013) 801.
74	Synthesis, Dopant Study and Device Fabrication of Zinc Oxide Nanostructures: Mini Review, N. Rajeswari Yogamalar, and <b>A. Chandra Bose</b> , <i>Progresses in Nanotechnology and Nanomaterials</i> , 2 (2013) 1.
<b>2012</b>	
73	Microwave assisted ultra fast synthesis of 1-D molybdenum oxide nanocrystals: structural and electrical studies, A. Chithambararaj and <b>A. Chandra Bose</b> , <i>Advanced Materials Research</i> , 488-489 (2012) 940-944.
72	X-Ray Peak Profile Analysis of Nanostructured Hydroxyapatite and Fluorapatite, K. Venkateswarlu, D. Sreekanth, M. Sandhyarani, V. Muthupandi, <b>A. Chadra Bose</b> , and N. Rameshbabu, <i>Journal of Bioscience, Biochemistry and Bioinformatics</i> 2 (2012) 417.
71	Dielectric relaxation behavior and electrical conduction mechanism in polymer-ceramic composites based on Sr modified barium zirconium titanate ceramic, V. Senthil, T. Badapanda, A. Chithambararaj, <b>A. Chandra Bose</b> , A. K. Mohapatra, S. Panigrahi, <i>Journal of Polymer Research</i> 19 (2012) 9898.
70	Effect of mineralizer (KNO <sub>3</sub> ) on the structural and optical properties of h-MoO <sub>3</sub> nanocrystals, A. Chithambararaj and <b>A. Chandra Bose</b> , <i>Advanced Materials Research</i> , 585 (2012) 110.
69	Morphological and luminescence study on Eu <sup>3+</sup> doped ZnO nanoparticles prepared by hydrothermal method, M. Suganthi and <b>A. Chandra Bose</b> , <i>Advanced Materials Research</i> , 585 (2012) 129.
68	Effect of Micro Arc Oxidation Treatment Time on In-Vitro Corrosion Characteristics of Titania Films on Cp Ti, K. Venkateswarlu, J. Hari, D. Sreekanth, M. Sandhyarani, <b>A. Chandra Bose</b> and N. Rameshbabu, <i>Journal of Bioscience, Biochemistry and Bioinformatics</i> 2 (2012) 422.

67	Optical study on gadolinium oxide nanoparticles synthesized by hydrothermal method, T. Selvalakshmi and <b>A. Chandra Bose</b> , <i>Advanced Materials Research</i> , 585 (2012) 105
66	Role of Electrolyte additives on in-vitro Electrochemical Behavior of Micro Arc Oxidized Titania Films on Cp Ti, K. Venkateswarlu N. Rameshbabu; D. Sreekanth, <b>A. Chandra Bose</b> , V. Muthupandi, N. Kumareash Babu and S. Subramanian, <i>Applied Surface Science</i> 258 (2012) 6853.
65	Synthesis and characterization of Er <sup>3+</sup> doped Y <sub>2</sub> O <sub>3</sub> nanoparticles, T.Selvalakshmi, S. Philomina, R. Srinivasan and <b>A. Chandra Bose</b> , <i>Journal of Luminescence and its application</i> 12 (2012) 82.
64	ZnO-based <i>pn</i> homo- junction fabricated by spin coating method, N. Rajeswari Yogamalar, and <b>A. Chandra Bose</b> , <i>Science of Advanced Materials</i> 4 (2012) 1.
63	Impedance and electrical modulus study of microwave sintered SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> Ceramic, Senthil Venkatesan, TanmayaBadapanda, <b>A. Chandra Bose</b> and SimanchaloPanigrahi, <i>ISRN Ceramics</i> 2012 (2012) 1.
62	Dopant Induced Bandgap Narrowing in Y-Doped Zinc Oxide Nanostructures, Rajeswari Yogamalar, Pedinti S. Venkateshwaran, Mercy R. Benziger, Katsuhiko Ariga, Ajayan Vinu, and <b>A. Chandra Bose</b> , <i>Journal of Nanoscience and Nanotechnology</i> 12 1 (2012) 75.
61	Effect of electrolyte chemistry on the structural, morphological and corrosion characteristics of titania films developed on Ti-6Al-4V implant material by plasma electrolytic oxidation, K. Venkateswarlu, S. Suresh, N. Rameshbabu, <b>A. Chandra Bose</b> , S. Subramanian, <i>Key Engineering Materials</i> , 493-494 (2012) 436.
60	Fabrication of corrosion resistant, bioactive and antibacterial silver substituted hydroxyapatite/titania composite coating on Cp Ti K. Venkateswarlu. N Rameshbabu, <b>A. Chandra Bose</b> , V. Muthupandi, S. Subramanian, D. MubarakAli, N. Thajuddin, <i>Ceramics International</i> , (2012). 38, 731-740
<b>2011</b>	
59	Investigation on structural, thermal, optical and sensing properties of meta-stable hexagonal MoO <sub>3</sub> nanocrystals of onedimensional structure, A. Chithambararaj, and <b>A. Chandra Bose</b> , <i>Beilstein Journal of Nanotechnology</i> 2 (2011) 585.
58	Investigation on structural, thermal, optical properties of meta-stable hexagonal MoO <sub>3</sub> nanorod, A. Chithambararaj, and <b>A. Chandra Bose</b> , <i>International Journal of Nanotechnology and Applications</i> 5 (2011) 91.
57	Blue emission and Bandgap modification in N:ZnO Nanorods, N. Rajeswari Yogamalar, M. Ashok and <b>A. Chandra Bose</b> , <i>Functional Materials Letter</i> 4 (2011) 4 (03), 271-275.

56	Hydrothermal synthesis of Hexagonal and Orthorhombic MoO <sub>3</sub> nanoparticles, A. Chithambararaj, and <b>A. Chandra Bose</b> , <i>Journal of Alloys Compound</i> 509 (2011) 8105.
55	Absorption-Emission study of hydrothermally grown Al:ZnO nanostructure, N. Rajeswari Yogamalar, and <b>A. Chandra Bose</b> , <i>Journal of Alloys Compound</i> 509 (2011) 8493.
54	Nanocrystalline ZnO coated fiber optic sensor for ammonia gas detection, B. Renganathan, D. Sastikumar, G. Gobi, N. Rajeswari Yogamalar and <b>A. Chandra Bose</b> , <i>Optics and laser technology</i> 43 (2011) 1398.
53	Gas sensing properties of a clad modified fiber optic sensor with Ce, Li and Al doped nanocrystalline zinc oxides, B. Renganathan, D. Sastikumar, G. Gobi, N. Rajeswari Yogamalar, and <b>A. Chandra Bose</b> , <i>Sensors and actuators B</i> 156 (1), (2011) 263-270
52	Studies on development, bioactivity and corrosion behavior of nanostructured titania/hydroxyapatite composite layer on Cp Ti, K. Venkateswarlu, N. Rameshbabu, <b>A. Chandra Bose</b> , V. Muthupandi, S. Subramania, <i>Key Engineering Materials</i> , Vols. 471-472, (2011) 325-330.
51	Burstein–Moss shift and room temperature near-band-edge luminescence in lithium-doped zinc Oxide, N. Rajeswari Yogamalar, and <b>A. Chandra Bose</b> , <i>Applied Physics A</i> , 103 (2011) 33.
50	Structural and optical properties of Eu <sup>3+</sup> doped Cerium Oxide Nanophosphors, R. Srinivasan and <b>A. Chandra Bose</b> , <i>Functional Materials Letters</i> , 4 (2011), 13-16
49	Tuning the aspect ratio of hydrothermally grown ZnO by choice of precursor, N. Rajeswari Yogamalar, and <b>A. Chandra Bose</b> , <i>Journal of Solid State Chemistry</i> , 184 (2011) 12.
48	Experimental studies on heat transfer and friction factor characteristics of Al <sub>2</sub> O <sub>3</sub> /water nanofluid in a circular pipe under transition flow with wire coil inserts. M. Chandrasekar, S. Suresh, <b>A. Chandra Bose</b> , <i>Heat Transfer Engineering</i> , 32 (2011) 485.
<b>2010</b>	
47	Experimental studies on heat transfer and friction factor characteristics of Al <sub>2</sub> O <sub>3</sub> /water nanofluid in a circular pipe under transition flow with wire coil inserts. M. Chandrasekar, S. Suresh, <b>A. Chandra Bose</b> , <i>Experimental Thermal and Fluid Science</i> , 34 (2010) 122.
46	Optical fiber coated with nanocrystalline tin oxide for ammonia vapour sensing, B. Ranganathan, G. Gobi, D. Sastikumar, R. Srinivasan and <b>A. Chandra Bose</b> , <i>Sensors Letters</i> , 8 (2010) 292.
45	Experimental investigations and theoretical determination of thermal conductivity and viscosity of Al <sub>2</sub> O <sub>3</sub> /water nanofluid. M. Chandrasekar, S.

	Suresh, <b>A. Chandra Bose</b> , <i>Experimental Thermal and Fluid Science</i> , 34 (2010) 210.
44	Structural and Optical Studies of Yttrium oxide Nanoparticles Synthesized by Co-precipitation method R. Srinivasan, N. Rajeswari Yogamalar, and <b>A. Chandra Bose</b> , <i>Materials Research Bulletin</i> , 45 (2010) 1165.
43	Structural and optical properties of europium doped yttrium oxide nanoparticles for phosphor applications, R. Srinivasan, N. Rajeswari Yogamalar, J. Elanchezhian, R. Justin Joseyphus and <b>A. Chandra Bose</b> , <i>Journal of Alloys and Compounds</i> , 496 (2010) 472.
42	Effect of iron doping and annealing on structural and optical properties of cerium oxide nanocrystals, T. Dhannia, S. Jayalekshmi, M.C. Santhosh Kumar, T. Prasada Rao, <b>A. Chandra Bose</b> , <i>Journal of Physics and Chemistry of Solids</i> , 70 (2010) 1443.
41	Structural properties of Sm <sup>3+</sup> doped cerium oxide nanorods synthesized by hydrolysis assisted co-precipitation method, R. Srinivasan and <b>A. Chandra Bose</b> , <i>Materials Letter</i> , 64 (2010) 1954.
40	X-ray peak broadening studies of nanocrystalline hydroxyapatite by Williamson-Hall analysis, K. Venkateswarlu, <b>A. Chandra Bose</b> , N. Rameshbabu, <i>Physica B</i> , 405 (2010) 4256.
39	Gas Sensing Properties of Needle Shaped Ni doped SnO <sub>2</sub> Nanocrystals Prepared by a simple Sol-gel Chemical Precipitation, Rajeswari Yogamalar, V. Mahendran, R. Srinivasan, Ali Beitollabi, R. Pradeep Kumar, A. Vinu, and <b>A.Chandra Bose</b> , <i>Chemistry An Asian Journal</i> , 5 (2010) 2379.
38	Factorial design to investigate various factors affecting the grain size of SnO <sub>2</sub> nanoparticles, R. Srinivasan, M. Chandrasekar, S. Suresh and <b>A. Chandra Bose</b> , <i>International Journal of Nanomaterials and Technology</i> 1 (2010) 29.
<b>2009</b>	
37	New Analytical models to investigate thermal conductivity of nanofluids, M. Chandrasekar, S. Suresh, R. Srinivasan and <b>A. Chandra Bose</b> , <i>Journal of Nanoscience and Nanotechnology</i> 9 (2009) 533.
36	Comparative Study on the Magnetic Properties of Iron Oxide Nanoparticles Loaded on Mesoporous Silica and Carbon Materials with Different Structure, S. Alam, C. Anand, R. Logudurai, V. Balasubramanian, K. Ariga, <b>A. Chandra Bose</b> , T. Mori, P. Srinivasu, A. Vinu, <i>Microporous Mesoporous Materials</i> 121 (1) (2009) 178.
36	Multi - capping agents in size confinement of ZnO nanostructured particles, N. Rajeswari Yogamalar, R. Srinivasan and <b>A. Chandra Bose</b> , <i>Optical Materials</i> 31 (2009) 1570.
34	Estimation of Lattice strain, Stress, Energy Density and Crystallite Size of the spherical Yttrium Oxide Nanoparticles, R. Srinivasan, N. Rajeswari Yogamalar,

	R. Justin Josephus and <b>A. Chandra Bose</b> , <i>Functional Materials Letters</i> , 2 (2009) 131.
33	X-ray peak broadening analysis in ZnO nanoparticles, N. Rajeswari Yogamalar, R. Srinivasan, A. Vinu, K. Ariga and <b>A. Chandra Bose</b> , <i>Solid State Communication</i> 149 (2009) 1919.
32	Effect of aluminium doping and annealing on structural and optical properties of Cerium Oxide nanocrystals, T. Dhannia, S. Jayalekshmi, M.C. Santhosh Kumar, T. Prasada Rao, <b>A. Chandra Bose</b> , <i>Journal of Physics and Chemistry of Solids</i> 70 (2009) 1443.
31	Influence of iron dopant on structure, surface morphology and optical properties of ZnO nanoparticles, C. Esther Elizabeth, N. Rajeswari Yogamalar, R. Srinivasan and <b>A. Chandra Bose</b> , <i>Advanced Materials Research</i> 67 (2009) 245.
30	Novel Highly Acidic Nanoporous Cage Type Materials and Their Catalysis, D. P. Sawant, V. V. Balasubramanian, J. Justus, S. Halligudi, <b>A. Chandra Bose</b> , K. Ariga, T. Mori and A. Vinu, <i>Topics in Catalysis</i> 52 (2009) 111.
29	Structural and Optical Characterization of Samarium Doped Yttrium Oxide Nanoparticles, R. Srinivasan, N. Rajeswari Yogamalar, A. Vinu, K. Ariga and <b>A. Chandra Bose</b> , <i>Journal of Nanoscience and Nanotechnology</i> 9 (2009) 6747.
28	Atmospheric Microplasma-Assisted Nanofabrication: Metal and Metal-Oxide Nanostructures and Nanoarchitectures, M. Davide, <b>A. Chandra Bose</b> , O. Kostya, <i>IEEE Transactions on Plasma Science</i> 37 (2009) 1027.
27	Synthesis and Structural Studies on Nanocrystalline Yttrium Oxide, R. Srinivasan, N. Rajeswari Yogamalar and <b>A. Chandra Bose</b> , <i>Advanced Science Letters</i> , 2 (2009) 65.
26	An investigation on co-precipitation derived ZnO nanospheres, N. Rajeswari Yogamalar, S. Anitha, R. Srinivasan, A. Vinu, K. Ariga and <b>A. Chandra Bose</b> , <i>Journal of Nanoscience and Nanotechnology</i> , 9 (2009) 5966.
<b>2008</b>	
25	Monoclinic $\beta$ -MoO <sub>3</sub> nanosheets produced by atmospheric microplasma: application to lithium-ion batteries, M. Davide, <b>A. Chandra Bose</b> , O. Kostya, <i>Nanotechnology</i> , 19 (2008) 495302.
24	Convenient Size and Morphology Control of ZnO Nanoparticles through Polymer –Cationic Interaction, N. Rajeswari Yogamalar, R. Srinivasan, and <b>A. Chandra Bose</b> , <i>Metals Materials and Processes</i> , 20 (2008) 235.
23	Comparison of heat transfer and pressure drop characteristics in circular tube with water, nanofluid and twisted tape using empirical corrections, M. Chandrasekar, S. Suresh, <b>A. Chandra Bose</b> , S. Jaisankar, <i>International Journal of Nanosystems</i> , 1 (2008) 55.
<b>2006 and before</b>	

22	Development of wire spraying for direct micro-patterning via an atmospheric pressure UHF inductively coupled microplasma jet, Y. Shimizu, T. Sasaki, <b>A. Chandra Bose</b> , K. Terashima and N. Koshizaki, <i>Surface and Coating Technology</i> , 200 (2006) 4251.
21	Grain size dependent electrical studies on nanocrystalline SnO <sub>2</sub> , <b>A. Chandra Bose</b> , P. Thangadurai and S. Ramasamy, <i>Materials Chemistry and Physics</i> , 95 (2006) 72.
20	Non-linear I-V Characteristics of Nanocrystalline SnO <sub>2</sub> , <b>A. Chandra Bose</b> , S. Asokan, Vijaya Ganesan, P. Thangadurai and S. Ramasamy, <i>Nanotechnology</i> , 17 (2006) 1752.
19	High Pressure effects on electrical resistivity and dielectric properties of Nanocrystalline SnO <sub>2</sub> , P. Thangadurai, <b>A. Chandra Bose</b> , S. Ramasamy, R. Kesavamoorthy and T. R. Ravindran, <i>International Journal of Nanoscience</i> , 5 (2006) 471.
18	Flow rate effect on the structure and morphology of molybdenum oxide nanoparticles deposited by atmospheric pressure microplasma processing, <b>A. Chandra Bose</b> , Y. Shimizu, D. Mariotti, T. Sasaki, and N. Koshizaki, <i>Nanotechnology</i> , 17 (2006) 5976.
17	Development of crossflow micro-nebulizer for atmospheric pressure microplasma deposition and its application to prepare nano-carbon materials from alcohol Y. Shimizu, <b>A. Chandra Bose</b> , T. Sasaki, D. Mariotti, K. Terashima and N. Koshizaki, <i>Transactions of the Materials Society of Japan</i> , 31 (2006) 463.
16	Reactive evaporation of metal wire and microdeposition of metal oxide using atmospheric pressure reactive microplasma jet, Y. Shimizu, <b>A. Chandra Bose</b> , D. Mariotti, T. Sasaki, K. Kirihara, T. Suzuki, K. Terashima and N. Koshizaki, <i>Journal of Applied Physics</i> , 45 (2006) 8228.
15	Impedance spectroscopy and DSC studies on nanostructured SnO <sub>2</sub> , <b>A. Chandra Bose</b> , P. Thangadurai, S. Ramasamy and B. Purniah, <i>Vacuum</i> , 77 (2005) 273.
14	Pattern formation induced by Ar <sup>+</sup> sputtering on Au (111), <b>A. Chandra Bose</b> and M. Yoshitake, <i>Applied Surface Science</i> , 241 (2005) 174.
13	Fabrication of nano-pits and the measurement of their local surface potentials, M. Yoshitake, <b>A. Chandra Bose</b> and S. Yagy, <i>Applied Surface Science</i> , 241 (2005) 157.
12	Phase stabilization and structural studies of nanocrystalline La <sub>2</sub> O <sub>3</sub> -ZrO <sub>2</sub> , P. Thangadurai, <b>A. Chandra Bose</b> , S. Ramasamy, <i>Journal of Material Science</i> , 40 (2005) 3963.
11	Cylindrical metal wire surface coating with multi-walled carbon nanotubes by an atmospheric pressure microplasma CVD technique Y. Shimizu, T. Sasaki, C.

	Liang, <b>A. Chandra Bose</b> , T. Ito, K. Terashima, and N. Koshizaki, <i>Chemical Vapour Deposition</i> , 11 (2005) 244.
10	High Pressure effects on electrical resistivity and dielectric properties of Nanocrystalline SnO <sub>2</sub> , P. Thangadurai, <b>A. Chandra Bose</b> , S. Ramasamy, R. Kesavamoorthy and T. R. Ravindran, <i>Journal of Physics and Chemistry of Solids</i> , 66 (2005) 1621.
9	The effect of sputtering temperature on the surface roughness at nano-scale during Au sputter etching, Michiko Yoshitake and <b>A. Chandra Bose</b> , <i>Journal of Surface Analysis</i> , 12 (2005) 9.
8	Sputtering rate measurements of some transition metal silicides and comparison with those of elements, M. Yoshitake, Y. Yamauchi and <b>A. Chandra Bose</b> , <i>Surface and Interface Analysis</i> , 36 (2004) 801.
7	Conductivity behaviour of a cubic/tetragonal phase stabilized nanocrystalline La <sub>2</sub> O <sub>3</sub> -ZrO <sub>2</sub> . P. Thangadurai, V. Sabarinathan, <b>A. Chandra Bose</b> and S. Ramasamy, <i>Journal of Physics and Chemistry of Solids</i> , 65 (2004) 1905.
6	Grain size effect on the universality of AC conductivity in SnO <sub>2</sub> , <b>A. Chandra Bose</b> , P. Balaya, P. Thangadurai and S. Ramasamy, <i>Journal of Physics and Chemistry of Solids</i> , 64 (2003) 659.
5	Synthesis and characterization of nanocrystalline SnO <sub>2</sub> and fabrication of lithium cell Using nano-SnO <sub>2</sub> , <b>A. Chandra Bose</b> , D. Kalpana, P. Thangadurai and S. Ramasamy, <i>Journal of Power Sources</i> , 107 (2002) 138.
4	Preparation and characterization of nanostructured TiO <sub>2</sub> and TiO <sub>2</sub> -Si(Ti)O <sub>2</sub> composite systems, R. N. Viswanath, <b>A. Chandra Bose</b> and S. Ramasamy, <i>Journal of Physics and Chemistry of Solids</i> , 62 (2001) 1991.
3	Preparation and characterization of nanostructured TiO <sub>2</sub> and TiO <sub>2</sub> -Si(Ti)O <sub>2</sub> composite systems, R. N. Viswanath, <b>A. Chandra Bose</b> and S. Ramasamy, <i>Journal of Physics and Chemistry of Solids</i> , 62 (2001) 1991.
2	Synthesis and characterization of nanocrystalline RuO <sub>2</sub> -ZrO <sub>2</sub> , <b>A. Chandra Bose</b> , R. Ramamoorthy and S. Ramasamy, <i>Materials Transaction</i> 42 (2001) 1667.
1	Formability of metastable tetragonal solid solution in nanocrystalline NiO-ZrO <sub>2</sub> powder, <b>A. Chandra Bose</b> , R. Ramamoorthy and S. Ramasamy, <i>Materials Letter</i> , 44 (2000) 203.

### Papers in Journals (Proceedings)

55	Surface Nitridated Silver Direct-Growth on Carbon Cloth for Active Hydrogen Evolution Reaction Catalyst, R. Balamurugan, and <b>A. Chandra Bose</b> , AIP Conference Proceedings (2025) 3198 (1)
----	--

54	Exploration of Lanthanum-based perovskites for pseudocapacitive electrode applications, I. Ajin, and <b>A. Chandra Bose</b> , AIP Conference Proceedings (2025) 3198 (1)
53	Systematic Investigation on Electrochemical Performance of Temperature-Assisted Cobalt Metal-Organic Framework for Pseudocapacitor Electrode Application, R. Balamurugan, S. Siva Shalini, S. Velmathi, and <b>A. Chandra Bose</b> AIP Conference Proceedings 2995 (1), 2024, 020188.
52	Structural and Electrochemical Characterization of Manganese Metal-Organic Framework as an Effective Electrode for Supercapacitor Application, S. Siva Shalini, R. Balamurugan, S. Velmathi, and <b>A. Chandra Bose</b> AIP Conference Proceedings 2995 (1), 2024, 020187.
51	Investigation on SrCoO <sub>3</sub> perovskites for supercapacitor applications, I. Ajin, R. Balamurugan, S. Siva Shalini and <b>A. Chandra Bose</b> AIP Conference Proceedings 2995 (1), 2024, 020186.
50	Hydrothermally synthesized Bi <sub>2</sub> S <sub>3</sub> nanorod for supercapacitor electrode application, Nikhitha Joseph, Chitra Raj, <b>A. Chandra Bose</b> , AIP Conference Proceedings 2265 (1),2020, 030607.
49	Co-precipitation route for synthesizing CeNiO <sub>3</sub> and its application as excellent pseudocapacitor, MP Harikrishnan, <b>A. Chandra Bose</b> , AIP Conference Proceedings 2265 (1),2020, 030631.
48	LaNiO <sub>3</sub> perovskite oxides by co-precipitation method as electrode for high performance supercapacitor, M. P. Harikrishnan and <b>A. Chandra Bose</b> , AIP Conference Proceedings 2115, 2019,030129.
47	One pot synthesis of MoO <sub>3</sub> /MoS <sub>2</sub> composite and investigation on its electrochemical charge storage properties, Nikhitha Joseph, <b>A. Chandra Bose</b> , AIP Conference Proceedings 2115, 2019, 030551.
46	Comparative study of CuAlS <sub>2</sub> thin film by chemical spray pyrolysis and hydrothermal method, D Naveena, and <b>A. Chandra Bose</b> , AIP Conference Proceedings 2115, 2019,030283.
45	Pseudocapacitive performance of NiCo <sub>2</sub> O <sub>4</sub> nanostructures, A. Juliet Christina Mary, <b>A. Chandra Bose</b> , AIP Conference Proceedings 2115, 2019, 030552.
44	Perovskite Oxide LaCoO <sub>3</sub> Electrode as High Performance Pseudocapacitor, M. P. Harikrishnan and <b>A. Chandra Bose</b> , AIP Conference Proceedings 2082, (2019) 060001.
43	Influence of different synthesis approach on ZnCo <sub>2</sub> O <sub>4</sub> nanomaterial and its supercapacitor behavior, A. Juliet Christina Mary, S Thilagavathi, <b>A. Chandra Bose</b> , AIP Conference Proceedings 1942 (1), 2018, 140042.
42	High crystalline CuAlS <sub>2</sub> thin films via chemical spray pyrolysis route, D Naveena, T Logu, K Sethuraman, <b>A. Chandra Bose</b> , AIP Conference Proceedings 1942 (1), 2018, 080028.

41	A comparative investigation of electrochemical charge storage properties on $\beta$ , $\gamma$ , $\delta$ and $\lambda$ -MnO <sub>2</sub> nanoparticles, PM Shafi, C Johnson, <b>A. Chandra Bose</b> , AIP Conference Proceedings 1942 (1), 2018, 050069.
40	Facile synthesis of ZnCo <sub>2</sub> O <sub>4</sub> /rGO nanocomposite for effective supercapacitor application, A. Juliet Christina Mary, <b>A. Chandra Bose</b> , AIP Conference Proceedings, 2017, 1832 (1), 050093.
39	Synthesis and investigation on electrochemical property of $\epsilon$ -MnO <sub>2</sub> nanoparticle PM Shafi, <b>A. Chandra Bose</b> , AIP Conference Proceedings, 2017, 1832 (1), 050098.
38	Structural, morphological and electrochemical studies of MoS <sub>2</sub> prepared by hydrothermal method, Nikhitha Joseph, <b>A. Chandra Bose</b> , AIP Conference Proceedings, 2017, 1832 (1), 050118.
37	Eddy Current Thermography for RailInspection, Torane Vaibhav, Krishnan Balasubramaniam, Renil Thomas, <b>A. Chandra Bose</b> 13th Quantitative Infrared Thermography Conference, QIRT 2016 (Gdańsk, Poland), 4-8 July 2016, 10.21611/qirt.2016.138, p862-869.
36	Graphene oxide-MnO <sub>2</sub> nanocomposite for supercapacitor application, JK Vishal, P.MuhammedShafi, <b>A. Chandra Bose</b> , SPIE Nanoscience+ Engineering, (2016) 99320I-99320I-5.
35	Effect of reaction atmosphere on structural and optical properties of hexagonal molybdenum oxide (h-MoO <sub>3</sub> ), VA Doss, A Chithambararaj, <b>A. Chandra Bose</b> , DAE SOLID STATE PHYSICS Symposium 2016 1731(1), 050049AIP Conference Proceedings.
34	Photoluminescence and energy transfer process in Gd <sub>2</sub> O <sub>3</sub> : Eu <sup>3+</sup> , Tb <sup>3+</sup> . T Selvalakshmi, <b>A. Chandra Bose</b> , DAE SOLID STATE PHYSICS, symposium 2016 1731 (1), 050038, AIP Conference Proceedings.
33	Structural evolution of tetragonal MnO <sub>2</sub> and its electrochemical behaviour P Muhammed Shafi, <b>A. Chandra Bose</b> , DAE SOLID STATE PHYSICS, symposium 2016 1731 (1), 050038.
32	Visible light assisted degradation of organic dye using Ag <sub>3</sub> PO <sub>4</sub> , R Dhanabal, S Velmathi, <b>A. Chandra Bose</b> , SOLID STATE PHYSICS: Proceedings of the 59th DAE, AIP Conference Proceedings 1665 (2015) 050143.
31	Effect of reactant solvent medium on structural and electrical properties of h-MoO <sub>3</sub> nanocrystals, K Veerathangam, A Chithambararaj, <b>A. Chandra Bose</b> , SOLID STATE (2015) 110032.
30	Structural, optical and electrical properties of GdAlO <sub>3</sub> : Eu <sup>3+</sup> Ba <sup>2+</sup> , T. Selvalakshmi, STamilarasi, <b>A. Chandra Bose</b> , SOLID STATE PHYSICS: Proceedings of the 59th DAE, AIP Conference Proceedings 1665 (2015) 050067

29	Rectifying behaviour of spin coated pnhetero-junction, NR Yogamalar, <b>A. Chandra Bose</b> , SOLID STATE PHYSICS: Proceedings of the 59th DAE, AIP Conference Proceedings, 1665 (2015) 120029.
28	Synthesis and characterization of $\alpha$ -MnO <sub>2</sub> electrode for supercapacitor application, P Muhammed Shafi, <b>A. Chandra Bose</b> , SOLID STATE PHYSICS: Proceedings of the 59th DAE, AIP Conference Proceedings 1665 (2015) 050079.
27	Photoluminescence and Energy Transfer Study on Gd <sub>2</sub> O <sub>3</sub> :Eu <sup>3+</sup> , Al <sup>3+</sup> , T. Selvalakshmi, S. Anbumani and <b>A. Chandra Bose</b> , AIP Conference Proceedings, 1591 (2014) 465.
26	Structural, optical and morphological study on Gd <sub>2</sub> O <sub>3</sub> : Eu <sup>3+</sup> , T Selvalakshmi, and <b>A. Chandra Bose</b> , Advanced Nanomaterials and Emerging Engineering Technologies (ICANMEET ...), 2013, pages
25	Investigation of Strain and crystallite size on Cerium oxide Nanoparticle using broadening of X-ray powder diffraction peak profile, R Srinivasan and <b>A. Chandra Bose</b> , Proceeding of Advanced Materials: Processing, characterization and Applications, (2013) 342.
24	Structural and thermal study of hydrothermally grown h-MoO <sub>3</sub> , A. Chithambararaj, <b>A. Chandra Bose</b> , AIP Conference Proceedings 1536 (2013) 1314.
23	Effect of dopant concentration on photoluminescence properties of Gd <sub>2</sub> O <sub>3</sub> :Eu <sup>3+</sup> , T. Selvalakshmi and <b>A. Chandra Bose</b> , AIP Conference Proceedings, 1512 (2013) 340.
22	Synthesis and characterization of Er <sup>3+</sup> doped Y <sub>2</sub> O <sub>3</sub> nanoparticles, T Selvalakshmi and <b>A. Chandra Bose</b> , 2(I), (2012), 82-83.
21	Hydrothermal synthesis of molybdenum oxide microbelts, A. Chithambararaj and <b>A. Chandra Bose</b> , AIP Conference Proceedings, 1447 (2012) 311-312.
20	Annealed Ce doped ZnO coated fiber optic gas sensor, B. Renganathan, D. Sastikumar, G. Gobi, N. Rajeswari Yogamalar and <b>A. Chandra Bose</b> , AIP Conference Proceedings, 1349 (2011) 367.
19	Sol-gel synthesis of Gadolinium oxide host matrix for luminescent application, T. Selvalakshmi, and <b>A. Chandra Bose</b> , Proceedings of National Seminar on new materials Research and Nanotechnology (2012) 232.
18	Structural Characterization of ceria nanoparticle, R. Srinivasan, and <b>A. Chandra Bose</b> , AIP Conference Proceedings, 139 (2011) 447.
17	Absorption-Emission study of Zn <sub>1-x</sub> Al <sub>x</sub> O nanostructures, N. Rajeswari Yogamalar, and <b>A. Chandra Bose</b> , AIP Conference Proceedings, 1349 (Part A) (2011) pp363-364.
16	Nanocrystalline titanium dioxide coated optical fiber sensor for ammonia vapour detection, B. Renganathan, D. Sastikumar, G. Gobi, N. Rajeswari Yogamalar and

	<b>A.Chandra Bose</b> , Proceedings of SPIE – The International Society for Optical Engineering, 7764 (2010) no. 77640U.
15	55th DAE SSPS, India, Structural and optical properties of Eu <sup>3+</sup> doped Cerium Oxide, Nanophosphors, R. Srinivasan, and <b>A. Chandra Bose</b> AIP Conference Proceedings, (2010) 55.
14	54th DAE SSPS, India, Structural and optical properties of Samaria doped ceria nanoparticles for luminescence applications, R. Srinivasan, N. Rajeswari Yogamalar, A. Chithambararaj, and <b>A. Chandra Bose</b> , AIP Conference Proceedings 54 (2009) 349.
13	54th DAE SSPS, India, Structural and thermal properties of nanocrystalline molybdenum oxide by solution precipitation method, A. Chithambararaj, N. Rajeswari Yogamalar, R. Srinivasan, and <b>A. Chandra Bose</b> , AIP Conference Proceedings, 54 (2009) 351 -352.
12	54th DAE SSPS, India, Dopant effects on the structure and optical properties of ZnO nanoparticles grown under hydrothermal method, N. Rajeswari Yogamalar, R. Srinivasan, A. Chithambararaj, and <b>A. Chandra Bose</b> , AIP Conference Proceedings, 54 (2009) 355 – 356.
11	54th DAE SSPS, India, Sol-gel derived Ni doped SnO <sub>2</sub> for ethanol gas sensor, V. Mahendran, N. Rajeswari Yogamalar, R. Srinivasan, A. Chithambararaj, and <b>A.Chandra Bose</b> , AIP Conference Proceedings, 54 (2009) 147-148.
10	53rd DAE SSPS, India, Study of undoped and lead doped ZnO nanostructures, N. Rajeswari Yogamalar, R. Srinivasan, <b>A.Chandra Bose</b> , AIP Conference Proceedings, 53 (2008).
9	53rd DAE SSPS, India, Microwave synthesized ceria nanoparticles coated optical fiber for ammonia gas sensing, R. Srinivasan, N. Rajeswari Yogamalar, <b>A.Chandra Bose</b> , AIP Conference Proceedings, 53 (2008).
8	52nd DAE SSPS, India, Synthesis and Structural Studies on Nanocrystalline Yttrium oxide, R. Srinivasan, N. Rajeswari Yogamalar and <b>A.Chandra Bose</b> , AIP Conference Proceedings, 52 (2007).
7	48th DAE SSPS, India, Dielectric studies of nanocrystalline SnO <sub>2</sub> under high pressure, P. Thangadurai, <b>A.Chandra Bose</b> and S. Ramasamy, 48 (2005) 237-238.
6	47th DAE SSPS, India, Electrical conductivity studies on nanocrystalline SnO <sub>2</sub> under high pressure, P. Thangadurai, <b>A. Chandra Bose</b> and S. Ramasamy, 47 (2004) 213-214
5	47th DAE SSPS, India Dielectric relaxation studies in nanocrystalline La <sub>2</sub> O <sub>3</sub> doped ZrO <sub>2</sub> using Modulus Formalism, P. Thangadurai, K. Padmaprasad, V. Sabarinathan, <b>A. Chandra Bose</b> and S. Ramasamy, 47 (2004) 283-284.
4	The 46th DAE SSPS, 2003 “Cubic phase stabilization of Nanocrystalline ZrO <sub>2</sub> doped with La <sub>2</sub> O <sub>3</sub> and its electrical conductivity studies, P. Thangadurai, V. Sabarinathan. <b>A.Chandra Bose</b> and S. Ramasamy, 46 (2003) 173-174.

3	The 45th DAE SSPS, "Electrical Properties Studies of Nanostructured Alpha-Al <sub>2</sub> O <sub>3</sub> ". V. Sabarinathan, <b>A.Chandra Bose</b> , P. Thangadurai and S. Ramasamy, 45 (2002).
2	The 44th DAE SSPS, India, "AC Conductivity Studies on Nanocrystalline Tin Oxide". <b>A.Chandra Bose</b> , B. Palaya, P. Thangadurai and S. Ramasamy, 44 (2001) 97-98.
1	The 42nd DAE SSPS, India, "Indigenously Developed UHV Chamber -Preparation and Characterization of Nanostructured MnF <sub>2</sub> ". S. Ramasamy, B.Purniah, R.N. Viswanath, <b>A.Chandra Bose</b> , N. Ponpandian, K. Thomaskutty and A.Narayanasamy, 42 (1999).