Bharathiar University

State University I "A++" Grade by NAAC I 26th Rank in MoE-NIRF
Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

Dr C VISWANATHAN

Professor
Department of Nanoscience and Technology

Bharathiar University
, 641046
Tamil Nadu

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Phone: 9952661338
Office Number: 0422-2428422

Research Area

- Thin film devices
- Nanomaterials for Electrochemical Biosensing Applications
- Nanomaterials for Electrochemical Chemical Sensors Applications
- Nanomaterials for Energy Storage and Energy Conversion Application

Courses Teaching

- Properties of Materials
- Micro and Nano Fabrications
- Electrochemical Sensors and Energy Storage System
- Thinfilm Devices
- Lithography
- Environmental Sustainability of Nanomaterials

Research Experience: 25

Teaching Experience: 17

Research Credentials (as on July 2025 – Source: Google scholar)

H-index: 47 Citations: 139 i10-index:

(as on August 2025 – Source: Google scholar)

H-index: 6885 Citations: i10-index:

Patents : Granted: 2

Publications

International Journals: 178

Career

At Bharathiar University

1. Designation : Professor

Period : January 2021 - June 2037

2. Designation : Associate Professor

Period : January 2018 - January 2021

3. Designation : Assistant Professor

Period : January 2008 - January 2018

Other Institutes

1. Designation : Post Doctoral Fellow

Institution Name : Centre for National Research Scientific (CNRS), Institute Charles Sadron (ICS), University of Louis Pasteur (ULP), Strasbourg, France.
Period : October 2005 - October 2006

2. Designation : Post Doctoral Fellow

Institution Name : Institute of Micro Electronics (IMEL), National Center for Scientific Research (NCSR), "DEMOKRITOS" Athens, Greece.
Period : November 2006 - December 2007

Education

Dr C VISWANATHAN , Professor , Department of Nanoscience and Technology

Ph. D.
Subject : Physics
Institution : BHARATHIAR UNIVERSITY
Affiliated University : BHARATHIAR UNIVERSITY
Year of Award : May 2005

M. Sc.
Subject : Physics
Institution : KONGUNADU ARTS AND SCIENCE COLLEGE, COIMBATORE
Affiliated University : BHARATHIAR UNIVERSITY
Year of Award : June 2000

B. Sc.
Subject : Physics
Institution : GOVT ARTS AND SCIENCE COLLEGE, SALEM-7
Affiliated University : MADRAS UNIVERSITY
Year of Award : June 1997

Projects
National Level
Ongoing - 2 completed - 10

Research Guidance
Completed
Ph.D. - 12 M.Phil. - 22
On Going
Ph.D. - 7

Institutional Responsibilities
Deputy Co-ordinator
Period :Mar 2019 to Till date
Nature of Responsibility :Maintenance and Purchase of Equipment of Common Instrumentaion Centre
Cheif warden
Period :May 2025 to Till date
Nature of Responsibility :Monitoring all the University hostels

Visits
1. Dept of Physics, National University of Singapore (NUS), Singapore. - 2013-08-08)
2. Institute Charles Sadron , (ICS), Strasbourg, France. - 2005-10-01)

Collaborations
1. Dept of Chemistry, University of Manchester, Manchester, United Kingdom (UK). - 2006-08-16)
2. Dept of Chemistry, University of Birmingham, Birmingham, United Kingdom (UK). - 2007-08-21)
3. Dept of Physics/Centre for Nanoscience, University of Kassel, Kassel, Germany. - 2007-08-22)
4. Institute of Physical Chemistry (IPC), NCSR "DEMOKRITOS", Athens, Greece. - 2006-11-01)

Publications

International Journals - 178

178. Revealing the role of the interlayer expansion of Ti3C2Tx and its effect after Bi2WO6 nanoparticles incorporation for energy storage application

Electrochimica Acta, 14695 (July 2025)
N Prabhakar, B Gurusami, P Nagamony, V Chinnuswamy,

Dr C VISWANATHAN , Professor , Department of Nanoscience and Technology

177. Exploring Sm2NiMnO6 as a lead-free absorber for perovskite solar cells: Insights from theoretical and experimental approaches

Solar Energy Materials and Solar Cell (May 2025)
T Sangavi, S Vasanth, C Viswanathan, N Ponpandian

176. Achieving high specific capacitance via cobalt doping over Nb4C3Tx with boron nitride composite for supercapacitor application

Fuel (April 2025)
Nikhil Prabhakar, M Lakshmi Narayanan, Haidee Mana-ay, N Ponpandian, C Viswanathan, Pin-Yi Chen

175. Deciphering oxidation mechanism of partially oxidized Ti3C2T? MXene Flakes and its electrochemical behaviour towards Estradiol Detection

Surfaces and Interfaces (April 2025)
G Bhuvaneshwari, Ponpandian Nagamony, Viswanathan Chinnuswamy

174. Effect on delamination of Nb4C3Tx MXene supported tungsten oxide for high-performance supercapacitor

Journal of Energy Storage (September 2024)
Nikhil Prabhakar, Amir Humayun, Ponpandian Nagamony, Umamaheswari Rajaji, Razan A Alshgari, Ting-Yu Liu, Viswanathan Chinnuswamy

173. [HTML] from acs.org Full View Photoelectrochemical Water Splitting: A Visible-Light-Driven CoTiO3@g-C3N4-Based Photoanode Interface Follows the Type II Heterojunction Scheme

Langmuir (July 2024)
Sathiya Bama Sundararaj, Humayun Amir, Chinnuswamy Viswanathan, Selvaraju Thangavelu

172. Pyridine appended pyrimidine bis hydrazone: Zn2+/ATP detection, bioimaging and functional properties of its dinuclear Zn (II) complex

Talanta (June 2024)
Ottoor Anitha, Sandipan Ghorai, Thangaraj Thiruppathiraja, Humayun Amir, Abinayaselvi Murugan, Ramalingam Natarajan, Senthilkumar Lakshmipathi, Chinnuswamy Viswanathan, Mathivanan Jothi, Balasubramanian Murugesapandian

171. Corn cob nanocellulose packaging for increasing the shelf life of food products

International Journal of Biological Macromolecules (May 2024)
Lakshmi Narayanan E. Cheran , C. Sharmila Rahale , P. Divyabharathi , C. Viswanathan

170. Cu encrusted RF sputtered ZnO thin film based electrochemical immunosensor for highly sensitive detection of IL-6 in human blood serum

Microchemical Journal (April 2024)
M. Lakshmi Narayanan, K. Prabhu, N. Ponpandian, C. Viswanathan

169. Non-enzymatic electrochemical detection of methylglyoxal in saliva using a polyaniline/nickel oxide nanohybrid biosensor: A noninvasive approach for diabetes diagnosis

Biosensors and Bioelectronics: X (April 2024)
Subramanian Vasanth, Humayun Amir, Nagomony Ponpandian, Chinnuswamy Viswanathan

168. Synergizing experimental and theoretical insights: Unveiling the solar potential of La2NiMnO6 double perovskite for enhanced efficiency and sustainability in photovoltaics

Chemical Engineering Journal (April 2024)
T Sangavi, S Vasanth, C Viswanathan, N Ponpandian

167. Nitrogen-enhanced carbon quantum dots mediated immunosensor for electrochemical detection of HER2 breast cancer biomarker

Bioelectrochemistry (February 2024)
Humayun Amir , Vasanth Subramanian , Sundaram Sornambikai , Nagamony Ponpandian , Chinnusamy Viswanathan

Dr C VISWANATHAN , Professor , Department of Nanoscience and Technology

166. Characterization of vacuum evaporated In-Se thin films

Ionics (February 2024)
C Viswanathan, S Gopal, D Mangalaraj, Sa K Narayandass, OF Caltun, G Rusu, Junsin Yi

165. Investigation of optical and electronic characteristics of B? site arranged Cs2NaB?Cl5 (B?= Ni, Mn, Fe) double perovskite: A theoretical and experimental study

International Journal of Hydrogen Energy (January 2024)
T. Sangavi, S. Vasanth, C. Viswanathan, N. Ponpandian

164. Cobalt–Iron Co-substituted NiV Layered Double Hydroxide as a High-Performance Electrocatalyst for Oxygen Evolution Reaction in a Neutral Saline Medium

ACS Applied Energy Materials (December 2023)
G. Srividhya, T. Sangavi, C. Viswanathan, and N. Ponpandian

163. The intriguing bifunctional effect of strong metal support interaction (SMSI) and hydrogen spillover effect (HSPE) for effective hydrogen evolution reaction

Applied Catalysis B: Environmental (December 2023)
R Rajalakshmi, G Srividhya, C Viswanathan, N Ponpandian

162. Modulating the electronic structure of MoS2/NiS2 by functionalizing it over the N-doped reduced GO to improvise the catalytic hydrogen evolution

International Journal of Hydrogen Energy (December 2023)
R Murugan, A Rebekah, D Navadeepthy, C Viswanathan, N Ponpandian

161. Novel Two-Dimensional MoC/MnSe Composites for Supercapacitors and Hydrogen Evolution Reaction

Energy & Fuels (November 2023)
Murugesan Duraisamy, Viswanathan Chinnuswamy, Prakash Sengodu, Sannasi Veeman, and Srimala Sreekantan

160. Synthesis effect on surface functionalized Ti3C2Tx MXene supported nickel oxide nanocomposites with enhanced specific capacity for supercapacitor application

Journal of Energy Storage (November 2023)
Nikhil Prabhakar, S. Vasanth, N. Ponpandian, C. Viswanathan

159. Functionalized Ketjenblack Infusion into Expanded Interlayer Spacing of Ti3C2Tx MXene Nanosheets toward High Specific Capacitance Supercapacitors

ACS Applied Electronic Materials (October 2023)
Prabhakar Nikhil, Sundaram Sornambikai, Gurusami Bhuvaneshwari, Nagamony Ponpandian, Chinnuswamy Viswanathan

158. CRISPR based biosensing: An ultrasensitive theranostic tool for the detection of early Breast Cancer biomarkers – A mini review

Biosensors and Bioelectronics: X (September 2023)
Sundaram Sornambikai, Karutha Pandian Divya, Subramanian Vasanth, Chinnuswamy Viswanathan, Nagamony Ponpandian

157. Vertically pillared ?-Fe2O3 nanorods on carbon yarn as a textile-based stable immunosensor electrode for selective electrochemical sensing of interleukin-6 cancer biomarker

Sensors and Actuators A: Physical (August 2023)
K Prabhu, M Lakshminarayanan, G Mohankumar, N Ponpandian, C Viswanathan

156. Interfacial charge separation of nickel tungstate anchored on g-C3N4 heterojunction stimulates visible-light driven direct Z-scheme photoelectrochemical hydrogen evolution

International Journal of Hydrogen Energy (August 2023)
Selvarj T Sathiya Bama Sundararaj , Humayun Amir , Viswanathan Chinnusamy

155. Interfacing NiV layered double hydroxide with sulphur-doped g-C3N4 as a novel electrocatalyst for enhanced hydrogen evolution reaction through Volmer–Heyrovský mechanism

Energy Advances (July 2023)
G Srividhya, C Viswanathan, N Ponpandian

Dr C VISWANATHAN , Professor , Department of Nanoscience and Technology

154. Hydrogen spillover effect – harnessing hydrogen evolution reaction from diverse carbon-based supports with a tungsten oxide catalyst

Journal of Materials Chemistry A (June 2023)
R Rajalakshmi, G Srividhya, Viswanathan Chinnuswamy, Nagamony Ponpandian

153. Single-step synthesis of Mn3N2, MnxON and Mn3O4 nanoparticles by thermal plasma arc discharge technique and their comparative study as electrode material for supercapacitor application

Journal of Alloys and Compounds (May 2023)
L Kumaresan, KS Harshini, H Amir, G Shanmugavelayutham, C Viswanathan

152. MXene supported biomimetic bilayer lipid membrane biosensor for zeptomole detection of BRCA1 gene

Microchimica Acta (March 2023)
Karutha Pandian Divya, Shanmuganathan Keerthana, Chinnuswamy Viswanathan, Nagamony Ponpandian

151. CeO2 Nanoparticles Modified on Graphite Sheet Electrodes for Photoelectrochemical Tobacco Wastewater Detection, Degradation, and Toxicity Measurement

ACS Applied Nano Materials (March 2023)
Humayun Amir, Nikhil Prabhakar, Govindhan Thiruppathi, Palanisamy Sundararaj, Nagomony Ponpandian, Chinnuswamy Viswanathan

150. Electrodeposition of SnO2 nanostructures onto copper substrates and their electrochemical properties

Materials Science and Technology (February 2023)
D Vasanth Raj, N Ponpandian, C Viswanathan

149. Enhanced bifunctional aspects of oxygen vacancy rich cation substituted MnCo2O4 intercalated with g-C3N4 as an oxygen evolution and supercapacitor electrode

International Journal of Hydrogen Energy (February 2023)
A Rebekah, H Amir, C Viswanathan, N Ponpandian

148. Effect of gamma-ray irradiated reduced graphene oxide (rGO) on environmental health: An in-vitro and in-vivo studies

Environmental Pollution (February 2023)
S Sivaselvam, A Mohankumar, R Narmadha, R Selvakumar, P Sundararaj, C Viswanathan, N Ponpandian

147. Bimetallic Coreshell-Hemoglobin Complex Immobilized MXene Based Voltammetric Biosensor for the Electrochemical Detection of Acrylamide

Journal of The Electrochemical Society (December 2022)
Karutha Pandian Divya, Shanmuganathan Keerthana, Chinnuswamy Viswanathan, Nagamony Ponpandian

146. Hybrid nanostructures of WS2 nanoflowers on N, B co-doped rGO for sensitive amperometric detection of Nilutamide

Materials Today Chemistry (December 2022)
S Keerthana, A Rajapriya, C Viswanathan, N Ponpandian

145. Electrochemical impedimetric immunosensor based on stabilized lipid bilayer–tethered WS2@MWCNT for the sensitive detection of carcinoembryonic antigen

Microchimica Acta (November 2022)
S Keerthana, KP Divya, A Rajapriya, C Viswanathan, N Ponpandian

144. Fluorescence quenching mechanism of P-doped carbon quantum dots as fluorescent sensor for Cu2+ ions

Colloids and Surfaces A: Physicochemical and Engineering Aspects (November 2022)
M Preethi, C Viswanathan, N Ponpandian

143. Influence on effective and ineffective delamination of MXene (Ti3C2Tx) by tightly anchoring tin oxide nanocomposite for boosting the specific capacitance of supercapacitor

Journal of Alloys and Compounds (November 2022)
Nikhil Prabhakar, A Rajapriya, N Ponpandian, C Viswanathan

Dr C VISWANATHAN , Professor , Department of Nanoscience and Technology

142. Novel palladium-decorated molybdenum carbide/polyaniline nanohybrid material as superior electrocatalyst for fuel cell application

International Journal of Hydrogen Energy (October 2022)
Murugesan Duraisamy, Elancheziyan Mari, Viswanathan Chinnuswamy, Sellappan Senthilkumar, Yuan-Chung Lin, Vinoth kumar Ponnusamy

141. Plasma assists titanium nitride and surface modified titanium nitride nanoparticles from titanium scraps for magnetic properties and supercapacitor applications

Ceramics International (October 2022)
L Kumaresan, H Amir, G Shanmugavelayutham, C Viswanathan

140. Potato starch derived N-doped carbon quantum dots as a fluorescent sensing tool for ascorbic acid

Journal of Photochemistry and Photobiology A: Chemistry (October 2022)
M Preethi, R Murugan, C Viswanathan, N Ponpandian

139. Three dimensional integrated architecture of SrFe LDH on hierarchical NiS framework as a flexible electrode for efficient energy storage and conversion applications

Journal of Energy Storage (September 2022)
A Rajapriya, S Keerthana, C Viswanathan, N Ponpandian

138. Revealing the Role of Brønsted Basicity by the Electrocatalytic Reaction via Li Insertion in the MgFe2O4 Lattice

Journal of Physical Chemistry C (July 2022)
Saravanakumar Tamilarasan, S. J. Sardhar Basha*, Sathiya Bama Sundararaj, Humayun Amir, Viswanathan Chinnusamy, and Selvaraju Thangavelu

137. systematic review on electrochemical biosensing of breast cancer miRNAs to develop alternative DCIS diagnostic tool

ECS Sensors Plus (June 2022)
S Sornambikai, H Amir, G Bhuvaneshwari, N Ponpandian, C Viswanathan

136. Diatom Frustules: A Transducer Platform for Optical Detection of Molecules

Diatom Microscopy (May 2022)
S Viji, N Ponpandian, C Viswanathan

135. Engineering the semiconducting CdS nanostructures by N-doped rGO for enhancing the adsorption sites: Promising electrocatalyst for hydrogen evolution reaction

International Journal of Hydrogen Energy (April 2022)
R Murugan, A Rebekah, JA Allen, M Preethi, C Viswanathan, N Ponpandian

134. One-step preparation of N-doped grapheme quantum dots with high quantum yield for bioimaging and highly sensitive electrochemical detection of isoniazid

Biomaterials Advances (April 2022)
S Sivaselvam, C Viswanathan, N Ponpandian

133. Waste cigarette butt derived Carbon/Magnesium oxide nanocomposite as potential adsorbent for the removal of ciprofloxacin from waste water

Materials Letters (April 2022)
S Sivaselvam, C Viswanathan, N Ponpandian

132. A metal-free, dual catalyst for the removal of Rhodamine B using novel carbon quantum dots from muskmelon peel under sunlight and ultrasonication: A green way to clean the environment

Journal of Photochemistry and Photobiology A: Chemistry (April 2022)
M Preethi, C Viswanathan, N Ponpandian

131. SnO2 nanoflakes deposited carbon yarn-based electrochemical immunosensor towards cortisol measurement

Journal of Nanostructure in Chemistry (March 2022)
sekar sriramprabha pandiraj ponpandian viswanathan

Dr C VISWANATHAN , Professor , Department of Nanoscience and Technology

130. TiO2 anchored carbon fibers as non-invasive electrochemical sensor platform for the cortisol detection

Materials Letters (February 2022)
Sekar Madhu, Sriramprabha Ramasamy, Pandiaraj Manickam, Ponpandian Nagamony, Viswanathan Chinnuswamy

129. Evolution of intrinsic 1-3D WO3 nanostructures: Tailoring their phase structure and morphology for robust hydrogen evolution reaction

Chemical Engineering Journal (January 2022)
R Rajalakshmi, A Rebekah, C Viswanathan, N Ponpandian

128. Enzyme like-colorimetric sensing of H2O2 based on intrinsic peroxidase mimic activity of WS2 nanosheets anchored reduced graphene oxide

Journal of Alloys and Compounds (December 2021)
S Keerthana, A Rajapriya, C Viswanathan, N Ponpandian

127. An environment-friendly route to explore the carbon quantum dots derived from curry berries (Murrayakoenigii L) as a fluorescent biosensor for detecting vitamin B12

Materials Letters (November 2021)
M Preethi, C Viswanathan, N Ponpandian

126. Enriched oxygen vacancy promoted heteroatoms (B, P, N, and S) doped CeO2: Challenging electrocatalysts for oxygen evolution reaction (OER) in alkaline medium

International Journal of Hydrogen Energy (October 2021)
A Rajapriya, S Keerthana, A Rebekah, C Viswanathan, N Ponpandian

125. ZnO-based electrochemical sensors for highly sensitive and selective detection of gallic acid at impact of substrate temperature

Applied Physics A (October 2021)
H Amir, D Murugesan, N Ponpandian, C Viswanathan

124. Development of RF magnetron-sputtered molybdenum oxide-modified carbon cloth thin film as a ferulic acid sensor

Applied Physics A (October 2021)
D Murugesan, H Amir, N Ponpandian, C Viswanathan

123. An electrochemical dopamine sensor based on RF magnetron sputtered TiO2/SS thin film electrode

Materials Letters (October 2021)
H Amir, N Ponpandian, C Viswanathan

122. A green path to extract carbon quantum dots by coconut water: Another fluorescent probe towards Fe3+ ions

Particuology (October 2021)
Manoharan Preethi, Chinnuswamy Viswanathan, Nagamony Ponpandian

121. Sm 3+ rare-earth doping in non-noble metal oxide–WO 3 grown on carbon cloth fibre as a bifunctional electrocatalyst for high-performance water electrolysis

Sustainable Energy & Fuels (October 2021)
R Rajalakshmi, C Viswanathan, NJSE Ponpandian

120. Investigation of morphologically tuned Sb2S3 nanostructures as an effective electrocatalyst for hydrogen evolution reaction

Colloids and Surfaces A: Physicochemical and Engineering Aspects (August 2021)
R Murugan, A Rebekah, JA Allen, C Viswanathan, N Ponpandian

119. Langmuir-Blodgett deposited Na3V2 (PO4) 3-MnO2 nanocomposite thin film electrodes for hybrid energy storage application

Materials Science and Engineering: B (August 2021)
Muthukumar Divagar, Nagamony Ponpandian, Chinnuswamy Viswanathan

Dr C VISWANATHAN , Professor , Department of Nanoscience and Technology

118. Synergetic effect of hierarchical zinc oxide (ZnO) nanostructure with enhanced adsorption and antibacterial action towards waterborne detrimental contaminants

Applied Nanoscience (July 2021)
Allen Joseph Anthuvan, Karthick Kumaravel, Viswanathan Chinnuswamy

117. Rapid one-pot synthesis of PAM-GO-Ag nanocomposite hydrogel by gamma-ray irradiation for remediation of environment pollutants and pathogen inactivation

Chemosphere (July 2021)
S Sivaselvam, R Selvakumar, C Viswanathan, N Ponpandian

116. Boosting the kinetics of oxygen and hydrogen evolution in alkaline water splitting using nickel ferrite/N-graphene nanocomposite as a bifunctional electrocatalyst

International Journal of Hydrogen Energy (June 2021)
D Navadeepthy, A Rebekah, C Viswanthan, N Ponpandian

115. WS2 hierarchical nanoflowers on rGO with enhanced electrochemical performance for sensitive and selective detection of mesalazine in real sample analysis

Colloids and Surfaces A: Physicochemical and Engineering Aspects (June 2021)
S Keerthana, A Rajapriya, S Amirthapandian, C Viswanathan, N Ponpandian

114. Highly stable and selective LaNiO3nanostructures modified glassy carbon electrode for simultaneous electrochemical detection of neurotransmiting compounds

Colloids and Surfaces A: Physicochemical and Engineering Aspects (June 2021)
S Priyatharshni, D Navadeepthy, G Srividhya, C Viswanathan, N Ponpandian

113. Removal of 1-napthylamine using magnetic graphene and magnetic graphene oxide functionalized with Chitosan

Environmental Nanotechnology, Monitoring & Management (May 2021)
A Rebekah, D Navadeepthy, G Bharath, C Viswanathan, N Ponpandian

112. Correction: NiCo2O4 nanoparticles inlaid on sulphur and nitrogen doped and co-doped rGO sheets as efficient electrocatalysts for the oxygen evolution and methanol oxidation reactions

Nanoscale Advances (May 2021)
A Rebekah, C Viswanathan, N Ponpandian

111. Direct Growth of MoS2 Hierarchical Nanoflowers on Electrospun Carbon Nanofibers as an electrode material for High-Performance Supercapacitors

Journal of Alloys and Compounds (April 2021)
A Rajapriya, S Keerthana, C Viswanathan, N Ponpandian

110. Enhanced electrochemical activities of morphologically tuned MnFe2O4 nanoneedles and nanoparticles integrated on reduced graphene oxide for highly efficient supercapacitor electrodes

Nanoscale Advances (March 2021)
R Rajalakshmi, KP Remya, C Viswanathan, N Ponpandian

109. Magnetic nanoparticle-decorated graphene oxide-chitosan composite as an efficient nanocarrier for protein delivery

Colloids and Surfaces A: Physicochemical and Engineering Aspects (February 2021)
A Rebekah, S Sivaselvam, C Viswanathan, D Prabhu, Ravi Gautam, N Ponpandian

108. NiCo 2 O 4 nanoparticles inlaid on sulphur and nitrogen doped and co-doped rGO sheets as efficient electrocatalysts for the oxygen evolution and methanol oxidation reactions

Nanoscale Advances (February 2021)
C Viswanathan, N Ponpandian

107. Fe2O3/polyaniline supramolecular nanocomposite: A receptor free sensor platform for the quantitative determination of serum creatinine

Analytica Chimica Acta (November 2020)
R Sriramprabha, M Sekar, R Revathi, C Viswanathan, J Wilson

Dr C VISWANATHAN , Professor , Department of Nanoscience and Technology

106. Substrate Temperature Induced Enhanced Selectivity and Sensitivity for Nanomolar Gallic Acid Detection on RF Magnetron Sputtered ZnO/GS Thin Film Electrode

Sensors and Actuators A: Physical (November 2020)
P. Sivasakthi, H Amir, Sornambikai S, N Ponpandian, C Viswanathan

105. Enhanced removal of emerging pharmaceutical contaminant ciprofloxacin and pathogen inactivation using morphologically tuned MgO nanostructures

Journal of Environmental Chemical Engineering (October 2020)
S Sivaselvam, P Premasudha, C Viswanathan, N Ponpandian

104. Morphologically tuned LaMnO3 as an efficient nanocatalyst for the removal of organic dye from aqueous solution under sunlight

Journal of Environmental Chemical Engineering (October 2020)
S Priyatharshni, S Rajesh Kumar, C Viswanathan, N Ponpandian

103. Magnetic graphene/chitosan nanocomposite: A promising nano-adsorbent for the removal of 2-naphthol from aqueous solution and their kinetic studies

International Journal of Biological Macromolecules (September 2020)
A Rebekah, G Bharath, Mu Naushad, C Viswanathan, N Ponpandian

102. Engineering the surface of graphene oxide with bovine serum albumin for improved biocompatibility in Caenorhabditis elegans

Nanoscale advances (September 2020)
S Sivaselvam, A Mohankumar, G Thiruppathi, P Sundararaj, C Viswanathan, N Ponpandian

101. Effect of CuO, MoO3 and ZnO nanomaterial coated absorbers for clean water production

SN Applied Science (September 2020)
T Arunkumar, D Murugesan, C Viswanathan, G Neri, David Denkenberger

100. https://doi.org/10.1016/j.ijbiomac.2020.05.113

Materials & Design (July 2020)
KP Remya, D Prabhu, R Justin Joseyphus, A Chandra Bose, C Viswanathan, N Ponpandian

99. A nanocomposite of NiFe 2 O 4–PANI as a duo active electrocatalyst toward the sensitive colorimetric and electrochemical sensing of ascorbic acid

Nanoscale Advances (June 2020)
D Navadeepthy, M Thangapandian, C Viswanathan, N Ponpandian

98. Zn-substituted MnCo2O4 nanostructure anchored over rGO for boosting the electrocatalytic performance towards methanol oxidation and oxygen evolution reaction (OER)

International Journal of Hydrogen Energy (May 2020)
N. Ponpandian A. Rebekah, Sengeni Anantharaj, C. Viswanthan

97. Towards Wearable Sensor Platforms for the Electrochemical Detection of Cortisol

Journal of The Electrochemical Society (March 2020)
M Sekar, R Sriramprabha, Praveen Kumar Sekhar, Shekhar Bhansali, N Ponpandian, Manickam Pandiaraj, C Viswanathan

96. Mesoporous nickel oxide nanostructures: influences of crystalline defects and morphological features on mediator-free electrochemical monosaccharide sensor application

Nanotechnology (March 2020)
R Sriramprabha, M Sekar, J Wilson, N Ponpandian, C Viswanathan

95. Effect of cation substitution in MnCo2O4 spinel anchored over rGO for enhancing the electrocatalytic activity towards oxygen evolution reaction (OER)

International Journal of Hydrogen Energy (February 2020)
A Rebekah, E Ashok Kumar, C Viswanathan, N Ponpandian

Dr C VISWANATHAN , Professor , Department of Nanoscience and Technology

94. ZnO nanorods integrated flexible carbon fibers for sweat cortisol detection

ACS Applied Electronic Materials (January 2020)
Sekar Madhu, Allen Joseph Anthuuvan, Sriramprabha Ramasamy, Pandiaraj Manickam, Shekhar Bhansali, Ponpandian Nagamony and Viswanathan Chinnuswamy

93. Comparative Study of Biological (Phoenix loureiroi Fruit) and Chemical Synthesis of Chitosan-Encapsulated Zinc Oxide Nanoparticles and their Biological Properties

Arabian Journal for Science and Engineering (September 2019)
Narendra Narain Murugan Rajan Allen Joseph Anthuvan Kasipandi Muniyandi Naveen Kumar Kalagatur Saravanan ShanmugamSaikumar Sathyanarayanan Viswanathan Chinnuswamy Parimelazhagan Thangaraj

92. MnCo2O4-rGO hybrid magnetic nanocomposite modified glassy carbon electrode for sensitive detection of L-tryptophan

Journal of The Electrochemical Society (June 2019)
A Rebekah, Thangavelu Kokulnathan, Tzyy-Jiann Wang, C Viswanathan, N Ponpandian

91. Two dimensional ?-MoO3 nanosheets decorated carbon cloth electrodes for high-performance supercapacitors

Colloids and Surfaces A: Physicochemical and Engineering Aspects (May 2019)
D Murugesan, S Prakash, N Ponpandian, P Manisankar, C Viswanathan

90. Synthesis and Characterization of Hexagonal Prism like Zinc Oxide for Electrochemical Determination of Gallic Acid in Wine Samples

International Journal of ELECTROCHEMICAL SCIENCE (May 2019)
Wen-Han Chang Kesavan Ganesh , Allen Joseph Anthuvan , Shen-Ming Chen , Kumuthini Rajendran , Tse-Wei Chen, Viswanathan Chinnuswamy , Shih-Yi Lee

89. ?-MoO3 nanostructure on carbon cloth substrate for dopamine detection

Nanotechnology (April 2019)
M. Murugesan, K. Movlaee, Giovanni Neri, Ponpandian N, C Viswanathan

88. Nitrogen doped carbon nanofibers loaded with hierarchical vanadium tetrasulfide for the voltammetric detection of the non-steroidal anti-prostate cancer drug nilutamide

Microchimica Acta (March 2019)
Kumuthini Rajendran, Thangavelu Kokulnathan, Shen-Ming Chen, Joseph Anthuvan Allen, Chinnuswamy Viswanathan, Helen Annal Therese

87. Effect of nano-coated CuO absorbers with PVA sponges in solar water desalting system

Applied Thermal Engineering (February 2019)
T Arunkumar, D Murugesan, Kaiwalya Raj, David Denkenberger, C Viswanathan, R Velraj

86. Design and fabrication of MEMS based intracranial pressure sensor for neurons study

Vacuum (February 2019)
N Manikandan, S Muruganand, M Divagar, C Viswanathan

85. Carbon fiber based electrochemical sensor for sweat cortisol measurement

Scientific reports (January 2019)
M Sekar, M Pandiaraj, S Bhansali, N Ponpandian, C Viswanathan

84. Circumferential growth of zinc oxide nanostructure anchored over carbon fabric and its photocatalytic performance towards p-nitrophenol

Superlattices and Microstructures (January 2019)
Joseph Anthuvan Allen, Duraisamy Murugesan, Chinnuswamy Viswanathan

83. Surface Imprinted Ag Decorated MnO2 Thin Film Electrodes for the Synergic Electrochemical Detection of Bacterial Pathogens

Journal of The Electrochemical Society (January 2019)
M Divagar, R Sriramprabha, S Sornambikai, N Ponpandian, C Viswanathan

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82. Self-assembly of nanostructured hydroxyapatite spheres for photodegradation of methylene blue dye

Materials Today: Proceedings (January 2019)
I Reeta Mary, R Leethiyal, P Sekar, D Mangalaraj, C Viswanathan, N Ponpandian

81. Effect and Safety Evaluation of Hydrothermal Synthesis on Graphene and GO/MgO Nanocomposite for Visible light Photocatalytic Activity

International Journal of Contemporary Applied Researches (November 2018)
S Krishna Moorthy, D Murugesan, N Ponpandian, C Viswanathan

80. N-Doped graphene with anchored ZnFe 2 O 4 nanostructures as an anode for lithium ion batteries with enhanced reversible capacity and cyclic performance

New Journal of Chemistry (September 2018)
Dhandapani Navadeepthy, Subramani Bhuvaneswari, Raju Prakash, Chinnusamy Viswanathan, Nagamony Ponpandian

79. Tin Oxide/Reduced Graphene Oxide Nanocomposite-Modified Electrode for Selective and Sensitive Detection of Riboflavin

Journal of The Electrochemical Society (August 2018)
R Sriramprabha, M Divagar, N Ponpandian, C Viswanathan

78. Detection of typhoid fever by diatom-based optical biosensor

Environmental Science and Pollution Research (July 2018)
Viji Selvaraj, Anbazhagi Muthukumar, Ponpandian Nagamony, C Viswanathan

77. Amine-functionalized diatom frustules: a platform for specific and sensitive detection of nitroaromatic explosive derivative

Environmental Science and Pollution Research (July 2018)
Viji Selvaraj, Neethi Thomas, Allen Joseph Anthuvan, Ponpandian Nagamony, C Viswanathan

76. Surfactant-free solvothermal synthesis of Hydroxyapatite nested bundles for the effective photodegradation of cationic dyes

Journal of Physics and Chemistry of Solids (May 2018)
I Reeta Mary, S Sonia, D Navadeepthy, D Mangalaraj, C Viswanathan, N Ponpandian

75. Self-assembled SnO2/reduced graphene oxide nanocomposites via Langmuir-Blodgett technique as anode materials for Li-ion batteries

Materials Letters (May 2018)
Sriramprabha Ramasamy, Ponpandian Nagamony, C Viswanathan

74. Trace level electrochemical determination of the neurotransmitter dopamine in biological samples based on iron oxide nanoparticle decorated graphene sheets

Inorganic Chemistry Frontiers (January 2018)
Thangavelu Kokulnathan, Allen Joseph Anthuvan, Shen-Ming Chen, C Viswanathan, Krishna Kadirvelu

73. Nanostructured SnO 2 integrated conductive fabrics as binder-free electrode for neurotransmitter detection

Sensors and Actuators A: Physical (January 2018)
Sekar Madhu, Pandiaraj Manickam, Michelle Pierre, Shekhar Bhansali, Ponpandian Nagamony, C Viswanathan

72. Facile synthesis of monodispersed 3D hierarchical Fe3O4 nanostructures decorated r-GO as the negative electrodes for Li-ion batteries

Materials Research Bulletin (January 2018)
S Rajesh Kumar, Jong Guk Kim, C Viswanathan, Won Bae Kim, R Kalai Selvan, N Ponpandian

71. N-doped Graphene/ZnFe2O4: a novel nanocomposite for intrinsic peroxidase based sensing of H2O2

Materials Research Bulletin (November 2017)
D Navadeepthy, A Rebekah, C Viswanathan, N Ponpandian

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70. Selective and low potential electrocatalytic oxidation and sensing of L-cysteine using metal impurity containing carbon black modified electrode

Analytical Methods (November 2017)
Sundaram Sornambikai, Mohammed Rafiq Abdul Kadir, Annamalai Senthil Kumar, Nagamony Ponpandian, Chinnuswamy Viswanathan

69. Textile Fiber Electrode to Monitor Uric Acid as a Marker for Assessing Wound Chronicity

ECS Transactions (October 2017)
Michelle Pierre, Sohini RoyChoudhury, Yogeswaran Umasankar, Pandiaraj Manickam, Sekar Madhu, Renny E Fernandez, Viswanathan Chinnuswamy, Norman Munroe, Shekhar Bhansali

68. Facile approach for synthesis of GO/ZnO nanocomposite for highly efficient photocatalytic degradation of organic dyes under visible light

Nano Hybrids and Composites (September 2017)
S Krishna Moorthy, C Viswanathan, N Ponpandian

67. Fabric based wearable biosensor for continuous monitoring of steroids

ECS Transactions (July 2017)
Pandiaraj Manickam, Sekar Madhu, Renny Edwin Fernandez, C Viswanathan, Shekhar Bhansali

66. LaCoO3 nanostructures modified glassy carbon electrode for simultaneous electrochemical detection of dopamine, ascorbic acid and uric acid

Journal of The Electrochemical Society (February 2017)
S Priyatharshni, A Tamilselvan, C Viswanathan, N Ponpandian

65. Effect of Yb substitution on room temperature magnetic and dielectric properties of bismuth ferrite nanoparticles

Journal of Applied Physics (October 2016)
KP Remya, S Amirthapandian, M Manivel Raja, C Viswanathan, N Ponpandian

64. Electrochemical simultaneous detection of dopamine, ascorbic acid and uric acid using LaMnO3 nanostructures

Journal of The Electrochemical Society (June 2016)
S Priyatharshni, M Divagar, C Viswanathan, D Mangalaraj, N Ponpandian

63. Exchange spring magnetic behavior in BaFe12O19/Fe3O4 nanocomposites

Journal of Magnetism and Magnetic Materials (May 2016)
KP Remya, D Prabhu, S Amirthapandian, C Viswanathan, N Ponpandian

62. Influence of supporting electrolytes on the structure of electrodeposited SnO2 thin films for energy storage applications

Ionics (April 2016)
D Vasanth Raj, N Ponpandian, C Viswanathan

61. Green Synthesis and Characterization of Bioceramic Hydroxyapatite (HAp) Nanosheets and Its Cellular Study

Advanced Science, Engineering and Medicine (March 2016)
Murugesan Manoj, Ramesh Subbiah, Palaniappan Meena, Devanesan Mangalaraj, Nagamony Ponpandian, Chinnuswamy Viswanathan, Kwideok Park

60. Novel multiform morphologies of hydroxyapatite: Synthesis and growth mechanism

Applied Surface Science (January 2016)
I Reeta Mary, S Sonia, S Viji, D Mangalaraj, C Viswanathan, N Ponpandian

59. Synthesis and characterization of MgO nanoparticles by Neem leaves through green method

Materials Today: Proceedings (November 2015)
S Krishna Moorthy, CH Ashok, K Venkateswara Rao, C Viswanathan

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58. Superhydrophobic Ag decorated ZnO nanostructured thin film as effective surface enhanced Raman scattering substrates

Applied Surface Science (November 2015)
Naidu Dhanpal Jayram, S Sonia, S Poongodi, P Suresh Kumar, Yoshitake Masuda, D Mangalaraj, N Ponpandian, C Viswanathan

57. Formulation of SnO2/graphene nanocomposite modified electrode for synergitic electrochemcial detection of dopamine

Advanced Materials Letters (November 2015)
R Sriramprabha, M Divagar, D Mangalaraj, N Ponpandian, C Viswanathan

56. Synthesis of hierarchical WO 3 nanostructured thin films with enhanced electrochromic performance for switchable smart windows

RSC advances (October 2015)
S Poongodi, P Suresh Kumar, Yoshitake Masuda, D Mangalaraj, N Ponpandian, C Viswanathan, Seeram Ramakrishna

55. Highly selective and sensitive electrochemical detection of dopamine with hydrothermally prepared ?-MnO2 nanostructures

Materials Science in Semiconductor Processing (August 2015)
Muthukumar Divagar, Ramasamy Sriramprabha, Nagamony Ponpandian, Chinnuswamy Viswanathan

54. Electrodeposition of macroporous SnO2 thin films and its electrochemical applications

Materials Focus (June 2015)
D Vasanth Raj, N Ponpandian, D Mangalaraj, C Viswanathan

53. Core shell hydroxyapatite/Mg nanostructures: surfactant free facile synthesis, characterization and their in-vitro cell viability studies against leukaemia cancer cells (K562)

RSC Advances (May 2015)
Manoj Murugesan, Mangalaraj Devanesan, Ponpandian Nagamony, Viswanathan Cinnuswamy

52. Highly monodispersed Ag embedded SiO 2 nanostructured thin film for sensitive SERS substrate: growth, characterization and detection of dye molecules

RSC advances (May 2015)
Naidu Dhanpal Jayram, S Sonia, Palaniswamy Suresh Kumar, L Marimuthu, Yoshitake Masuda, D Mangalaraj, N Ponpandian, C Viswanathan, Seeram Ramakrishna

51. Highly monodispersed Ag embedded SiO? nanostructured thin film for sensitive SERS substrate: growth, characterization and detection of dye molecules

RSC advances (May 2015)
Naidu Dhanpal Jayram, S Sonia, Palaniswamy Suresh Kumar, L Marimuthu, Yoshitake Masuda, D Mangalaraj, N Ponpandian, C Viswanathan, Seeram Ramakrishna

50. Hydrothermal synthesis of novel Zn doped CuO nanoflowers as an efficient photodegradation material for textile dyes

Materials Letters (April 2015)
Suganthiraja Sonia, I Jose Annsi, P Suresh Kumar, Devanesan Mangalaraj, Chinnuswamy Viswanathan, Nagamony Ponpandian

49. Hydrothermal synthesis of highly stable CuO nanostructures for efficient photocatalytic degradation of organic dyes

Materials Science in Semiconductor Processing (February 2015)
S Sonia, S Poongodi, P Suresh Kumar, D Mangalaraj, N Ponpandian, C Viswanathan

48. Improved microbial growth inhibition activity of bio-surfactant induced Ag–TiO2 core shell nanoparticles

Applied Surface Science (February 2015)
D Nithyadevi, P Suresh Kumar, D Mangalaraj, N Ponpandian, C Viswanathan, P Meena

47. Influence of Growth Parameters on the Formation of Hydroxyapatite (HAp) Nanostructures and Their Cell Viability Studies

Nanobiomedicine open access (January 2015)
Murugesan Manoj, Ramesh Subbiah, Devanesan Mangalaraj, Nagamony Ponpandian, Chinnuswamy Viswanathan, Kwideok Park

Dr C VISWANATHAN , Professor , Department of Nanoscience and Technology

46. [PDF] from rsc.org Edge-carboxylated graphene anchoring magnetite-hydroxyapatite nanocomposite for an efficient 4-nitrophenol sensor

RSC Advances (January 2015)
G Bharath, Vediappan Veeramani, Shen-Ming Chen, Rajesh Madhu, M Manivel Raja, A Balamurugan, D Mangalaraj, C Viswanathan, N Ponpandian

45. Enzymatic electrochemical glucose biosensors by mesoporous 1D hydroxyapatite-on-2D reduced graphene oxide

Journal of Materials Chemistry B (December 2014)
G Bharath, Rajesh Madhu, Shen-Ming Chen, Vediyappan Veeramani, A Balamurugan, D Mangalaraj, C Viswanathan, N Ponpandian

44. Quercetin conjugated superparamagnetic magnetite nanoparticles for in-vitro analysis of breast cancer cell lines for chemotherapy applications

Journal of colloid and interface science (December 2014)
S Rajesh Kumar, S Priyatharshni, VN Babu, D Mangalaraj, C Viswanathan, S Kannan, N Ponpandian

43. Facile in situ growth of Fe 3 O 4 nanoparticles on hydroxyapatite nanorods for pH dependent adsorption and controlled release of proteins

RSC Advances (October 2014)
G Bharath, D Prabhu, D Mangalaraj, C Viswanathan, N Ponpandian

42. Diatom-based label-free optical biosensor for biomolecules

Applied biochemistry and biotechnology (October 2014)
S Viji, M Anbazhagi, N Ponpandian, D Mangalaraj, S Jeyanthi, P Santhanam, A Shenbaga Devi, C Viswanathan

41. Electrochemical behavior of nanostructured SnO2 thin films in aqueous electrolyte solutions

Materials science in semiconductor processing (October 2014)
D Vasanth Raj, N Ponpandian, D Mangalaraj, C Viswanathan

40. Effect of catalyst concentration on the synthesis of MWCNT by single step pyrolysis

Advanced Materials Letters (September 2014)
B V Mohan Kumar, Rajesh Thomas, Ambily Mathew, G Mohan Rao, D Mangalaraj, N Ponpandian, C Viswanathan

39. Shape evolution and size controlled synthesis of mesoporous hydroxyapatite nanostructures and their morphology dependent Pb (II) removal from waste water

Rsc Advances (August 2014)
G Bharath, A Jagadeesh Kumar, K Karthick, D Mangalaraj, C Viswanathan, N Ponpandian

38. An in vitro analysis of H1N1 viral inhibition using polymer coated superparamagnetic Fe 3 O 4 nanoparticles

RSC Advances (March 2014)
S Rajesh Kumar, M Paulpandi, M ManivelRaja, D Mangalaraj, C Viswanathan, S Kannan, N Ponpandian

37. Rheological behavior?Electrical and thermal properties of polypyrrole/graphene oxide nanocomposites

Journal of Applied Polymer Science (March 2014)
P Manivel, S Kanagaraj, A Balamurugan, N Ponpandian, D Mangalaraj, C Viswanathan

36. Electrochemical performance of SnO2 hexagonal nanoplates

Ionics (March 2014)
D Vasanth Raj, N Ponpandian, D Mangalaraj, A Balamurugan, C Viswanathan

35. Effect of NaOH concentration on structural, surface and antibacterial activity of CuO nanorods synthesized by direct sonochemical method

Superlattices and Microstructures (February 2014)
S Sonia, Naidu Dhanpal Jayram, P Suresh Kumar, D Mangalaraj, N Ponpandian, C Viswanathan

34. Rheological behavior and electrical properties of polypyrrole/thermally reduced graphene oxide nanocomposite

Colloids and Surfaces A: Physicochemical and Engineering Aspects (January 2014)
P Manivel, S Kanagaraj, A Balamurugan, N Ponpandian, D Mangalaraj, C Viswanathan

Dr C VISWANATHAN , Professor , Department of Nanoscience and Technology

33. Hydrophilic polymer coated monodispersed Fe3O4 nanostructures and their cytotoxicity

Materials Research Express (January 2014)
S Rajesh Kumar, Lucafò Marianna, Sava Gianni, A Joseph Nathanael, SI Hong, Tae Hwan Oh, D Mangalaraj, C Viswanathan, N Ponpandian

32. Surfactant free solvothermal synthesis of monodispersed 3D hierarchical Fe3O4 microspheres

Materials Letters (November 2013)
S Rajesh Kumar, M Manivel Raja, D Mangalaraj, C Viswanathan, N Ponpandian

31. Influence of growth and photocatalytic properties of copper selenide (CuSe) nanoparticles using reflux condensation method

Applied surface science (October 2013)
S Sonia, P Suresh Kumar, D Mangalaraj, N Ponpandian, C Viswanathan

30. Enhanced photocatalytic performance of novel self-assembled floral ?-Ga2O3 nanorods

Current Applied Physics (June 2013)
K Girija, S Thirumalairajan, Astam K Patra, D Mangalaraj, N Ponpandian, C Viswanatha

29. Synthesis, morphology, optical and photocatalytic performance of nanostructured ?-Ga2O3

Materials Research Bulletin (June 2013)
K Girija, S Thirumalairajan, GS Avadhani, D Mangalaraj, N Ponpandian, C Viswanathan

28. Electrodeposition of Sno 2 nanoneedles on anodized copper substrates and its electrochemical performance

AIP Conference Proceedings (June 2013)
D Vasanth Raj, N Ponpandian, D Mangalaraj, C Viswanathan

27. A comparative analysis of green synthesis approach starch capped metal oxides (ZnO & CdO) nanoparticles and its bacterial activity

AIP Conference Proceedings (June 2013)
K Vidhya, VP Devarajan, C Viswanathan, D Nataraj, G Bhoopathi

26. Effect of annealing and electrochemical properties of sol–gel dip coated nanocrystalline V2O5 thin films

Materials Science in Semiconductor Processing (April 2013)
D Vasanth Raj, N Ponpandian, D Mangalaraj, C Viswanathan

25. Shape evolution of perovskite LaFeO 3 nanostructures: a systematic investigation of growth mechanism, properties and morphology dependent photocatalytic activities

RSC advances (March 2013)
S Thirumalairajan, K Girija, Neha Y Hebalkar, D Mangalaraj, C Viswanathan, N Ponpandian

24. Conducting polyaniline-graphene oxide fibrous nanocomposites: preparation, characterization and simultaneous electrochemical detection of ascorbic acid, dopamine and uric acid

Rsc Advances (March 2013)
P Manivel, M Dhakshnamoorthy, A Balamurugan, N Ponpandian, D Mangalaraj, C Viswanathan

23. Optical and electrochemical studies of polyaniline/SnO2 fibrous nanocomposites

Materials Research Bulletin (February 2013)
P Manivel, S Ramakrishnan, Nikhil K Kothurkar, A Balamurugan, N Ponpandian, D Mangalaraj, C Viswanathan

22. Organic additives assisted synthesis of mesoporous ?-Ga2O3 nanostructures for photocatalytic dye degradation

Semiconductor science and technology (February 2013)
K Girija, S Thirumalairajan, Astam K Patra, D Mangalaraj, N Ponpandian, C Viswanathan

21. Novel Synthesis of LaFeO3 Nanostructure Dendrites: A Systematic Investigation of Growth Mechanism, Properties, and Biosensing for Highly Selective

Crystal growth & design (November 2012)
S Thirumalairajan, K Girija, V Ganesh, D Mangalaraj, C Viswanathan, N Ponpandian

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20. Controlled synthesis of perovskite LaFeO3 microsphere composed of nanoparticles via self-assembly process and their associated photocatalytic activity

Chemical Engineering Journal (October 2012)
S Thirumalairajan, K Girija, I Ganesh, D Mangalaraj, C Viswanathan, A Balamurugan, N Ponpandian

19. Novel synthesis of silver nanoparticles using 2, 3, 5, 6-tetrakis-(morpholinomethyl) hydroquinone as reducing agent

Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (September 2012)
P Manivel, A Balamurugan, N Ponpandian, D Mangalaraj, C Viswanathan

18. Graphene nanosheets by low-temperature thermal reduction of graphene oxide using RF-CVD

Journal of Experimental Nanoscience (June 2012)
P Manivel, S Ramakrishnan, Nikhil K Kothurkar, N Ponpandian, D Mangalaraj, C Viswanathan

17. Electronic transport between Au surface and scanning tunnelling microscope tip via a multipodal cyclodextrin host–metallo?guest supramolecular system

Journal of Physical Organic Chemistry (March 2012)
Nikos Glezos Lasse E. P. Kyllönen, Viswanathan Chinuswamy, Davide Maffeo, Evangelos T. Kefalas, Johanna M. Haider, Zoe Pikramenou, Irene M. Mavridis, Konstantina Yannakopoulou

16. Self assembly of Co doped CeO2 microspheres from nanocubes by hydrothermal method and their photodegradation activity on AO7

Materials Letters (November 2011)
N Sabari Arul, D Mangalaraj, Pao Chi Chen, N Ponpandian, C Viswanathan

15. Strong quantum confinement effect in nanocrystalline cerium oxide

Materials Letters (September 2011)
N Sabari Arul, D Mangalaraj, Pao Chi Chen, N Ponpandian, C Viswanathan

14. Preparation of New Reducing Agent for the Synthesis of Silver Nanoparticles

AIP Conference Proceedings-American Institute of Physics (July 2011)
P Manivel, K Sivashanmugan, C Viswanathan, D Mangalaraj

13. Effects of the film thickness on optical constants of transparent CdS thin films deposited by chemical bath deposition

JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS (January 2009)
F Yakuphanoglu, C Viswanathan, P Peranantham, D Soundarrajan

12. Molecular nanodevices based on functionalized cyclodextrins

physica status solidi (a) (October 2008)
D Velessiotis, D Maffeo, C Millios, E Makarona, C Viswanathan, K Yannakopoulou, I Mavridis, Zoe Pikramenou, N Glezos

11. Electrical conductivity and single oscillator model properties of amorphous CuSe semiconductor thin film

Journal of non-crystalline solids (October 2007)
F Yakuphanoglu, C Viswanathan

10. The effect of annealing on vacuum-evaporated copper selenide and indium telluride thin films

Materials characterization (August 2007)
P Peranantham, YL Jeyachandran, C Viswanathan, NN Praveena, PC Chitra, D Mangalaraj, Sa K Narayandass

9. Sheathing polymer gel fibrils with nanotubules

Macromolecular Symposia (May 2007)
P. Mésini and J.-M. Guenet C. Viswanathan

8. Effect of substrate temperature on the properties of vacuum evaporated indium selenide thin films

Crystal Research and Technology: Journal of Experimental and Industrial Crystallography (May 2005)
C Viswanathan, V Senthilkumar, R Sriranjini, D Mangalaraj, Sa K Narayandass, Junsin Yi

7. Preparation and characterization of electrodeposited indium selenide thin films

Crystal Research and Technology (April 2005)
S Gopal, C Viswanathan, B Karunagaran, Sa K Narayandass, D Mangalaraj, Junsin Yi

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6. Influence of substrate temperature on the properties of vacuum evaporated InSb films

Crystal Research and Technology: Journal of Experimental and Industrial Crystallography (April 2005)
V Senthilkumar, S Venkatachalam, C Viswanathan, S Gopal, Sa K Narayandass, D Mangalaraj, KC Wilson, KP Vijayakumar

5. On the electrical characteristics of vacuum evaporated indium selenide thin films

Journal of Optoelectronics and Advanced Materials (April 2005)
C Viswanathan, GG Rusu, S Gopal, D Mangalaraj, Sa K Narayandass

4. Current Voltage studies on vacuum evaporated In70Se30 thin films

Journal of optoelectronics and advanced materials (March 2005)
J.Yi C.Viswanathan, G.G.Rusu, D.Mangalaraj, Sa.K.Narayandass

3. Space charge limited current, variable range hopping and mobility gap in thermally evaporated amorphous InSe thin films

Journal of Materials Science: Materials in Electronics (December 2004)
C Viswanathan, S Gopal, M Thamilselvan, K Premnazeer, D Mangalaraj, Sa K Narayandass, Junsin Yi, David C Ingram

2. Conduction studies on electrodeposited indium selenide thin films

Ionics (May 2004)
S Gopal, C Viswanathan, M Thamilselvan, K Premnazeer, Sa K Narayandass, D Mangalaraj

1. Optical constants of DC magnetron sputtered titanium dioxide thin films measured by spectroscopic ellipsometry

Crystal Research and Technology: Journal of Experimental and Industrial Crystallography (August 2003)
B Karunagaran, RT Rajendra Kumar, C Viswanathan, D Mangalaraj, Sa K Narayandass, G Mohan Rao

Patents

Granted - 2

1. Method for simultaneous detection and degradation of Smokeless tobacco wastewater and its by products using Photoelectrochemical Oxidation 08-2023 442144 Dr. C. Viswanathan , H.AMIR ,Dr. N. Ponpandian

2. Simultaneous Detection, Quantification, and Degradation of Cigarette Waste Water and its by-products using Photoelectrochemical Method 09-2023 453005 Dr. C. Viswanathan , H.Amir, Dr. N. Ponpandian

Projects

Completed - 10

1. Developing Ordered Assembly of Metal Oxide – Polyaniline Nano Hybrid Materials for Multiple Biomarkers Detection in Diabetes Health Monitoring Systems TANSCHE 17,71,750/- (April 2021 - April 2024)

2. A lateral flow immunoassay for the diagnosis of breast cancer biomarker based on fluorescence quenching of rare earth quantum dots Others 8,00,000/- (April 2021 - April 2022)

3. Development of electrochemical wearable biosensor in human sweat metabolomics for the detection of biomarker DST – SERB 35,00,000/- (March 2020 - March 2022)

4. Establishment of wearable sensor technology for the development of point of care devices Others 8,00,000/- (April 2019 - April 2020)

5. Fabrication of novel nanoparticle / thin film alternatively layered coatings of metal oxides CSIR 20,00,000/- (April 2017 - April 2020)

6. Au decorated WO3/Graphene nanohybrids as high efficient photoelectrochemical water splitter for hydrogen production DST – SERB 47,00,000/- (April 2017 - April 2021)

7. Synthesis and Analysis of polyamine coated ZnO nanoparticles formulations for seed priming to raise drought tolerance in radish (Raphanus sativus L.) DST 37,90,200/- (March 2021 - May 2024)

8. Controlled Growth of Single Crystalline V2O5 nanorod arrays for High Storage Capacity Li-Ion Batteries UGC-MRP 8,39,600/- (April 2009 - March 2011)

9. Langmuir Blodgett Assembly of Ordered Tin oxide / Graphene Nanocomposites film for Energy Storage Applications DST 21,00,000/- (March 2012 - March 2015)

10. Preparation and characterization of Zinc Oxide Nanorods for Ultra-Violet (UV) Sensor Applications DRDO-BU CLS Phase-II Programme 8,90,000/- (April 2010 - April 2013)

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Ongoing - 2

1. MXene Nanocomposite Modified Paper Sensing Prototypes for Electrochemical Detection of Contaminants of Emerging Concerns Others 39,69,000/- (December 2024 - March 2027)

2. External magnetic field assisted electrochemical water splitting reactor using flexible electrode of Mo2TiC2Tx and WOS nonorod hetrostructures DST – SERB 44,74,516/- (March 2024 - March 2027)