

Dr. BEENA MATHEW

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School of Chemical Sciences
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Academic Profile

- **Japan Society for the Promotion of Science (JSPS) Post-doctoral Fellow**, Kyushu University, Japan (1998-2000)
- **Ph.D. Chemistry** (1991), Mahatma Gandhi University, Kottayam
- **M.Sc. Polymer Chemistry** (1987), Mahatma Gandhi University, Kottayam
- **B.Sc. Chemistry** (1985), University of Kerala, Thiruvananthapuram

Research & Professional Career

- **Member of the Syndicate M.G University** (2023-2025)
- **Dean Faculty of Sciences** (2022-2025)
- **Assessor for NAAC** (2025 onwards)
- **Director-in-Charge**, DASP, Mahatma Gandhi University, Kottayam
- **University Nominee** in the Academic Council of Autonomous Colleges - Maharajas College Ernakulam; Marian College, Kuttikkanam; Nirmala College, Muvattupuzha; St.Xavier's College, Aluva
- **University Nominee** in the Governing Body of autonomous colleges –CMS College (Autonomous), Kottayam (2018 – 2020); SB College, Changanassery, UC College,; Aluva; S. H. College, Thevara
- **Director of Research**, Mahatma Gandhi University, Kottayam, (February 2017 - June 2020)
- **Member**, Governing Body, Srinivasa Ramanujan Institute for Basic Sciences (KSCSTE)
- **Member, IQAC**, Mahatma Gandhi University, Kottayam (2017 - 2025)
- **Professor & Director**, School of Chemical Sciences, Mahatma Gandhi University, Kottayam, (February 2017-March 2020)
- **Academic Faculty**, School of Chemical Sciences, Mahatma Gandhi University, Kottayam, (1993 onwards)
- **JSPS Post-doctoral Fellow** (Kyushu University, Japan, 1998-2000)
- **Research Associate** (SCTIMST, Thiruvananthapuram, 1992-1993)
- **Short-term Post-doctoral Fellow** (IISc., Bangalore, 1991-1992)

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Awards

- **Japan Society for the Promotion of Science (JSPS) Post-doctoral Fellowship**, Japan (1998)
- Research group has bagged 21 awards in various international/national conferences

Professional Association & Activities

- **Member, Board of Studies** Central University of Kerala; St. Theresa's College, Ernakulam; CMS College, Kottayam; S.H. College, Thevara (Autonomous Colleges)
- **Member, Board of Studies**, School of Chemical Sciences, Mahatma Gandhi University
- **Reviewer** of various journals published by the American Chemical Society, Royal Society of Chemistry, Wiley, Elsevier, Taylor and Francis & Springer Publishers

Research Supervision

- **Ph. D.Awarded : 42**
- **Research Supervision (Ongoing) : 08**
- **M.Phil. Supervision : 35**
- **M.Sc. Project Supervision : 104**

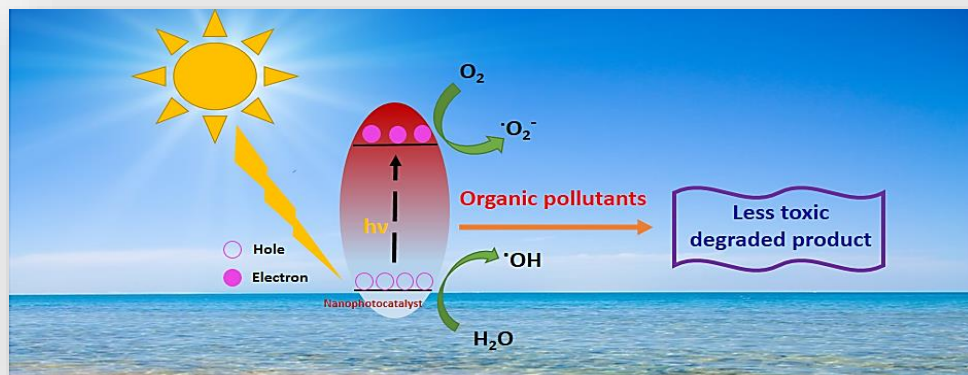
Research Highlights

- **h-index : 33**
- **i-10 index : 112**
- **Publications : 214**
- **Citations : 5474**
- **Book Edited : 1**
- **Book Chapters : 36**

RESEARCH AREAS

Photocatalysis

Advanced design and fabrication of nanophotocatalysts for wastewater remediation



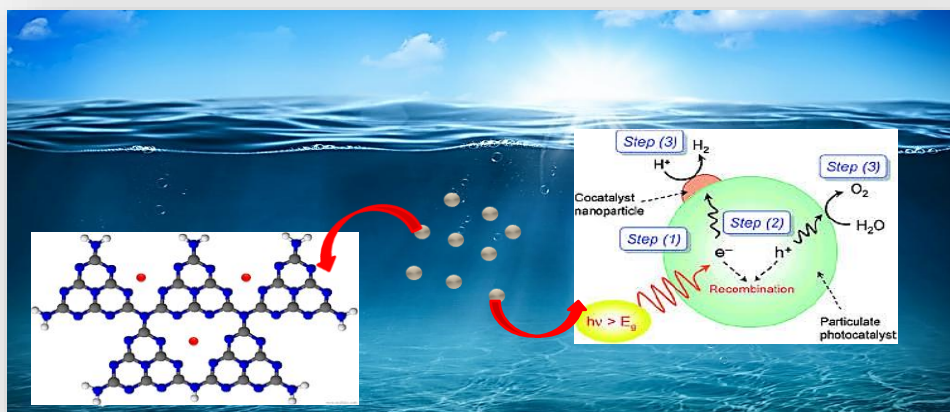
Green synthesis of nanoparticles involving microwave, hydrothermal, ultrasound, and green solvents assisted methods

Green Chemistry



Metal nanoparticles doped on photoactive supports for hydrogen generation through photocatalytic water splitting

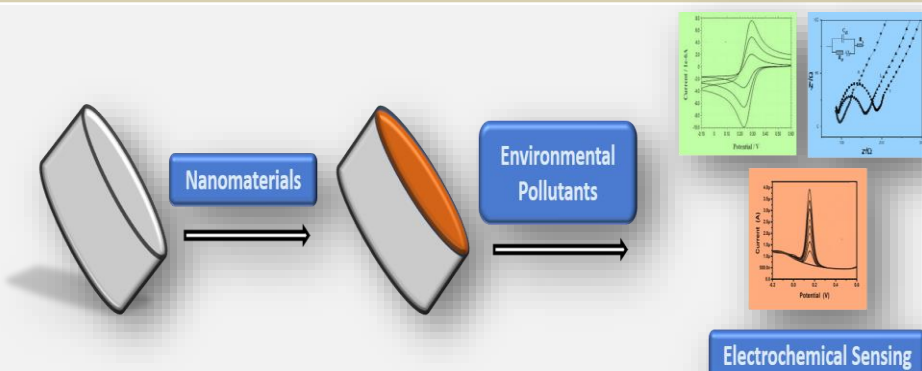
Water Splitting



RESEARCH AREAS

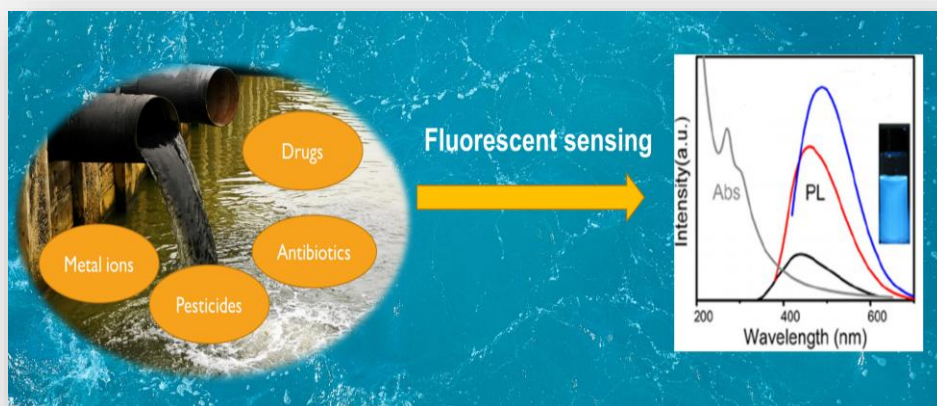
Electrochemical Sensing

Electrochemical detection of environmental pollutants such as metal ions, pesticides, dyes etc., using nanomaterial based catalysts



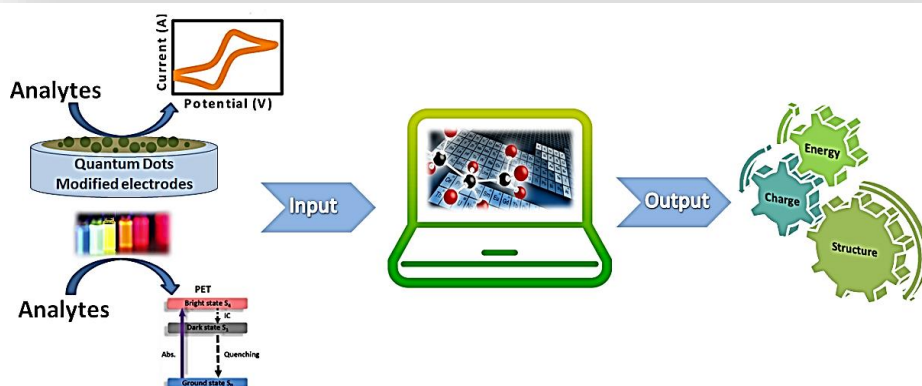
Nanomaterials based sensing of metal ions, drugs, antibiotics, pesticides etc.

Fluorescence Sensing



Computational aspects of electrochemical and fluorescence sensing applications of nanomaterials

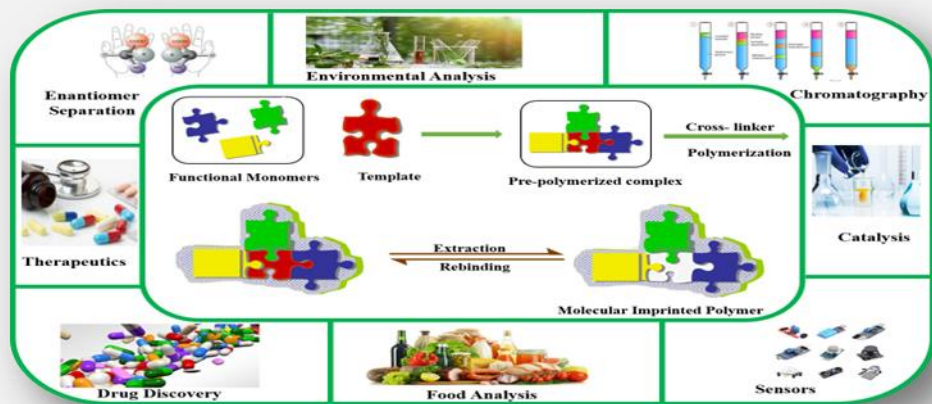
Computational Studies



RESEARCH AREAS

Self-assembled supramolecular materials for various applications

Self-assembled
supramolecular
materials



LATEST PUBLICATIONS

214. Versatile green emissive sulfur nanodots for multifaceted applications, AR Chacko, R Narayanan, R Roy, N John, J Mathew, B Mathew, Applied Materials Today 43, 102636 (2025)

213. Utilization of biomass from *Artocarpus heterophyllus* as a sustainable adsorbent for cationic dyes from water: Mechanistic insights and practical applicability, Savitha E. V, B Mathew, S John, Biomass Conversion and Biorefinery, 2025

212. Engineering of ethylenediamine-functionalized 0D carbon dots for optical bi-mode determination of Hg (II), fluorescent sand, and logic gate operations, Anu Rose Chacko, Sneha Mathew, Chinnu R Thara, Neenamol John, Jincy Mathew, Beena Mathew, Diamond and Related Materials, 151, 111806 (2025)

211. Green-Mediated Synthesis of Facile Nitrogen-Doped Carbon Quantum Dots from *Dioscorea alata* as an Effective Metal Sensing Platform, Neenu George, Jithin Joy, Ebey P Koshy, Beena Mathew, Chemistry Select (2024)

210. From seeds to sensors: *Bixa orellana* derived carbon quantum dots for efficient dual way detection of Cu (II) ion and antioxidant efficacy, Jincy Mathew, Bony K John, Sneha Mathew, Binila K Korah, Beena Mathew, Microchemical Journal, 207, 111777(2024)

LATEST PUBLICATIONS

209. Hydrogen Evolution via Photocatalytic Reforming of Biomass with Palladium Nanoparticles Decorated g-C₃N₄ Nanosheets, CR Thara, PS Walko, B Mathew, Renewable Energy, 120811(2024)

208. Alternanthera sessilis derived fluorescent carbon dots and their sensing and biological applications D. Bijimol, Jincy Mathew, Neena John Plathanam, Bini George, Beena Mathew, Microchemical Journal (2024)

207. Biomass derived carbon quantum dots as a versatile platform for fluorescent sensing, catalytic reduction, fluorescent ink, and anticancer agents, BK John, J Mathew, K Sreekanth, B Mathew, Materials Today Sustainability, 2024

206. Microwave synthesized N-doped carbon dots for dual mode detection of Hg (II) ion and degradation of malachite green dye, CR Thara, B Mathew, Talanta, 2024

205. Green mediated synthesis of silver nanoparticle using Euphorbia Maculate leaf extract and their catalytic reduction and antibacterial properties, N George, J Joy, B Mathew, EP Koshy - Materials Today: Proceedings, 2024

LATEST PUBLICATIONS

204. Fabrication of Lanthanum-mediated Carbon Quantum Dots for the Fluorescent Detection of Aniline and Enhancement in Photocatalytic Degradation Efficiency of Zirconium Oxide Nanoparticles, Journal of Photochemistry & Photobiology: A Chemistry, 115127 (2023)

203. Microwave abetted synthesis of carbon dots and its triple mode applications in tartrazine detection, manganese ion sensing and fluorescent ink, BK Korah, CR Thara, N John, BK John, S Mathew, B Mathew, Food Control 147, 109608 (2023)

202. Chitosan-co-acrylic acid microgel fabricated with green synthesized silver nanoparticles for the sensing of hydrogen peroxide, N George, J Joy, B Mathew, EP Koshy, Journal of Sol-Gel Science and Technology, 1-1 (2023)

201. Carbon dots as a sustainable nanoplatfrom, BK Korah, A Murali, BK John, N John, B Mathew, Biomass Conversion and Biorefinery, 1-22 (2023)

200. Heteroatom doped carbon dots from green sources as metal ion sensor and as fluorescent ink, S Mathew, B Mathew, Diamond and Related Materials, 110293 (2023)

LATEST PUBLICATIONS

199. Bio-derivatized and Silver Modified Carbon Dot Based Nanocomposite in Multiple Mode Detection, Catalytic Reduction, and Biocidal Applications, BK Korah, K Sreekanth, EK Radhakrishnan, B Mathew, Biochemical Engineering Journal, 109060 (2023)

198. Dual mode detection and sunlight-driven photocatalytic degradation of tetracycline with tailor-made N-doped carbon dots, CR Thara, BK Korah, S Mathew, BK John, B Mathew, Environmental Research 216, 114450

197. Biomass-derived carbon dots as a nanoswitch, logic gate operation, and electrochemical sensor for flavonoids, S Mathew, B Mathew, New Journal of Chemistry 47 (5), 2383-2395 (2023)

196. Hydrothermal synthesis of N, S-doped carbon quantum dots as a dual mode sensor for azo dye tartrazine and fluorescent ink applications, BK John, S Mathew, N John, J Mathew, B Mathew, Journal of Photochemistry and Photobiology A: Chemistry 436, 114386

195. Graphene oxide-incorporated silver-based photocatalysts for enhanced degradation of organic toxins: A review, J Mathew, N John, B Mathew, Environmental Science and Pollution Research 30 (7), 16817-16851

LATEST PUBLICATIONS

194. Bioresource-derived multifunctional carbon quantum dots as a fluorescence and electrochemical sensing platform for picric acid and noncytotoxic food storage application, BK John, CR Thara, BK Korah, N John, B Mathew, Journal of Industrial and Engineering Chemistry 126, 546-556 (2023)

193. A Review on the Synthesis, Properties, and Applications of Biomass Derived Carbon Dots S Mathew, B Mathew, Inorganic Chemistry Communications, 111223 (2023)

192. Green Synthesized Carbon Dots as Antibiotics Sensor and Fluorescent Ink S Mathew, BK John, J Mathew, BK Korah, B Mathew, Journal of Molecular Structure, 1294, 136422 (2023)

191. Solution-based carbon quantum dots as electrochemical “on-off” switch in aqueous medium: Engineering of a sustainable green sensor and its computational investigation, AR Chacko, R Narayanan, BK Korah, S Mathew, T Abraham, B Mathew, Microchemical Journal, 108853 (2023)

190. Nitrogen and sulphur co-doped carbon quantum dot integrated bismuth oxide nanocomposite for photocatalytic degradation and electrochemical sensing applications, BK John, B Mathew, Optical Materials 139, 113819 (2023)

LATEST PUBLICATIONS

189. Nitrogen and sulphur co-doped carbon quantum dots as a dual-mode sensor for mercuric ions and as efficient antimicrobial agents, BK John, BK Korah, S Mathew, C Thara, AR Chacko, B Mathew, Biomass Conversion and Biorefinery, 1-17 (2023)

188. Dual functional carbon nitride dots as electrochemical sensor and anticancer agent with chemotherapeutic and photodynamic effect, CR Thara, S Mathew, AR Chacko, B Mathew, Microchemical Journal 187, 108379 (2023)

187. Fabrication of Vinyl Functionalised Multiwalled Carbon Nanotubes for the Removal of Organic Pollutant, TR Sreelakshmi, T Sajini, B Mathew, Advanced Materials Research 1175, 63-72 (2023)

186. Sustainable carbon quantum dots from Vitex negundo leaves as a synergistic nanoplatform for triple object sensing and anticounterfeiting applications, BK Korah, B Mathew, Materials Today Sustainability 21, 100273 (2023)

185. Carbon dots from green sources as efficient sensors and as anticancer agent, S Mathew, CR Thara, N John, B Mathew, Journal of Photochemistry and Photobiology A: Chemistry 434, 114237 (2022)

LATEST PUBLICATIONS

184. Fluorescent sensor based on thiourea capped Mn doped ZnS quantum dots for the sensing of Cu^{2+} ions in water, D Bijimol, MS Punnoose, BK Korah, AR Chacko, NJ Plathanam, B Mathew, Environmental Nanotechnology, Monitoring & Management 18, 100710 (2022)

183. Dual mode detection and sunlight-driven photocatalytic degradation of tetracycline with tailor-made N-doped carbon dots, C Thara, BK Korah, S Mathew, BK John, B Mathew, Environmental Research, 114450 (2022)

182. Recent Advances in Graphitic Carbon Nitrides ($\text{g-C}_3\text{N}_4$) as Photoluminescence Sensing Probe: A Review, R Roy, AR Chacko, T Abraham, BK Korah, BK John, MS Punnoose, B Mathew, ChemistrySelect 7 (36), e202200876 (2022)

181. Green Synthesized Carbon Quantum Dot as Dual Sensor for Fe (II) ions and Rational Design of Catalyst for Visible Light Mediated Abatement of Pollutants, S Mathew, AR Chacko, BK Korah, MS Punnoose, B Mathew, Applied Surface Science, 154975 (2022)

LATEST PUBLICATIONS

180. Revathy, R., Joseph, J., Augustine, C., Sajini, T., & Mathew, B. (2022). Synthesis and catalytic applications of silver nanoparticles: a sustainable chemical approach using indigenous reducing and capping agents from *Hyptis capitata*. *Environmental Science: Advances*, 1(4), 491-505.

179. Bio-inspired novel carbon dots as fluorescence and electrochemical-based sensors and fluorescent ink, BK Korah, A Murali, AR Chacko, CR Thara, J Mathew, B George, B Mathew, *Biomass Conversion and Biorefinery*, 1-14 (2022)

178. Carbon dots as a fluorescent ink and dual-mode probe for the efficient detection of doxycycline and Hg (II) ions, BK Korah, N John, BK John, S Mathew, D Bijimol, B Mathew, *Journal of Materials Research*, 1-11 (2022)

177. Green synthesis of fluorescent carbon dots from *Annona Reticulata* leaves as a sensor for Chromium (III) ions, BK John, N John, B Mathew, *Materials Today: Proceedings* (2022)

176. Nitrogen-Doped Carbon Quantum Dots as a Highly Selective Fluorescent and Electrochemical Sensor for Tetracycline, BK John, N John, BK Korah, C Thara, T Abraham, B Mathew, *Journal of Photochemistry and Photobiology A: Chemistry*, 114060 (2022)

LATEST PUBLICATIONS

175. Fluorescent carbon quantum dots as a novel solution and paper strip-based dual sensor for the selective detection of Cr (VI) ions, BK John, N John, S Mathew, BK Korah, MS Punnoose, B Mathew, *Diamond and Related Materials*, 109138 (2022)

174. Nitrogen and Sulfur Co-Doped Carbon Quantum Dots for Sensing Applications: A Review, G Somaraj, S Mathew, T Abraham, KG Ambady, C Mohan, B Mathew, *ChemistrySelect* 7 (19), e202200473 (2022)

173. Biomass-derived carbon dots as a sensitive and selective dual detection platform for fluoroquinolones and tetracyclines, B. K Korah, AR Chacko, S Mathew, BK John, T Abraham, B Mathew, *Analytical and Bioanalytical Chemistry*, 1-17(2022)

172. Antibacterial, Cytotoxic, and Catalytic Potential of Aqueous *Amaranthus tricolor*-Mediated Green Gold Nanoparticles, MS Punnoose, S Joseph, BK John, AR Chacko, S Mathew, B Mathew, *Plasmonics*, 1-16 (2022)

171. *Curcuma amada* derived nitrogen-doped carbon dots as a dual sensor for tetracycline and mercury ions, *Diamond & Related Materials*, 125, 108980 (2022)

170. A review on carbon quantum dot based semiconductor photocatalysts for the abatement of refractory pollutants, Athulya M, Bony K John, Anu Rose Chacko, Chitra Mohan, Beena Mathew, *ChemPhysChem* (2022), <https://doi.org/10.1002/cphc.202100873>

LATEST PUBLICATIONS

169. Rational design of Ag_2CO_3 -loaded SGO heterostructure with enhanced photocatalytic abatement of organic pollutants under visible light irradiation, N. John, RN Priyanka, MS Punnoose, BK John and B. Mathew, Environmental Science and Pollution Research, 1-13(2022)

168. Polystyrene-supported bromoderivative of 2-pyrrolidone: synthesis, characterization and application in microwave-assisted bromination reactions, A Mathew, B Mathew, EP Koshy, Polymer Bulletin 79 , 905-920 (2022)

167. A Review on Characterization Techniques for Carbon Quantum Dots and Their Applications in Agrochemical Residue Detection, Bony K. John, Thomas Abraham and Beena Mathew, Journal of Fluorescence, 1-23 (2022) DOI : 10.1007/s10895- 021-02852-8

166. Recent Progress and Future Perspectives of Carbon Dots in the Detection, Degradation, and Enhancement of Drugs, Binila K Korah, Anu Rose Chacko, Thomas Abraham, Beena Mathew, Particle & Particle Systems Characterization, 2100264 (2022) <https://doi.org/10.1002/ppsc.202100264>

165. Novel $\text{La}(\text{OH})_3$ integrated sGO- $\text{Ag}_3\text{PO}_4/\text{Ag}$ Hybrid photocatalyst for sunlight driven ultra-fast degradation of industrial and agricultural pollutants, RN Priyanka, T Abraham, NJ Plathanam, S Joseph, B George, B Mathew, Materials Science in Semiconductor Processing 138, 106274 (2022)

LATEST PUBLICATIONS

164. Microwave-assisted green synthesis of Cyanthillium cinereum mediated gold nanoparticles: Evaluation of its antibacterial, anticancer and catalytic degradation efficacy, Mamatha Susan Punnoose, Beena Mathew, Research on Chemical Intermediates, 1-20, <https://doi.org/10.1007/s11164-021-04641-1> (2022)

163. Advanced Green Approaches for Metal and Metal Oxide Nanoparticles Synthesis and Their Environmental Applications, GM Nair, T Sajini, B Mathew, Talanta Open, 100080(2022)

162. Metal-Doped Titanium Dioxide for Environmental Remediation, Hydrogen Evolution and Sensing: A Review, Sneha Mathew, Bony K. John, Thomas Abraham, and Beena Mathew, ChemistrySelect, 6 (45), 12742-12751 (2022)

161. A brief overview of molecularly imprinted polymers: Highlighting computational design, nano and photo-responsive imprinting, T Sajini, B Mathew, Talanta Open 4, 100072(2022)

160. Microwave assisted green synthesis of gold nanoparticles for catalytic degradation of environmental pollutants, MS Punnoose, D Bijimol, B Mathew, Environmental Nanotechnology, Monitoring & Management 16, 100525(2021)

159. Microwave-assisted oxidative coupling of thiols using Polystyrene supported Bromoderivatives of 2-Oxazolidone, Anjaly Mathew, Beena Mathew and Ebey P. Koshy, Polymer and Polymer Composites, 29 (9_suppl), S1351-S1360(2021)

LATEST PUBLICATIONS

158. Green Synthesized Unmodified Silver Nanoparticles as Reproducible Dual Sensor for Mercuric Ions and Catalyst to Abate Environmental Pollutants, MS Punnoose, D Bijimol, T Abraham, NJ Plathanam, B Mathew, BioNanoScience 11 (3), 739- 754(2021)

157. Fabrication of zirconium ferrite doped Ag₃PO₄ composite for the degradation of refractory pollutants: Visible light assisted Z-scheme insight, T Abraham, RN Priyanka, S Joseph, AR Chacko, B Mathew, Materials Science in Semiconductor Processing 130, 105797(2021)

156. Fabrication of La₂O₃/Bi₂O₃/silver orthophosphate Heterojunction Catalyst for the Visible Light Mediated Remediation of Refractory Pollutants, T Abraham, RN Priyanka, S Joseph, AR Chacko, B Mathew, Materials Research Bulletin 140, 111299(2021)

155. A comparative study on the synthesis, characterization, and antioxidant activity of green and chemically synthesized silver nanoparticles, E Sreelekha, B George, A Shyam, N Sajina, B Mathew, BioNanoScience 11 (2), 489-496(2021)

154. Unmodified Green Silver Nanoparticles as Multisensor for Zn²⁺ and Catalyst for Environmental Remediation, MS Punnoose, B Mathew, ChemistrySelect 6 (15), 3584-3596(2021)

153. Fast and efficient degradation of water pollutant dyes and fungicide by novel sulfur doped graphene oxide-modified Ag₃PO₄ nanocomposite, RN Priyanka, T Abraham, S Joseph, JM George, NJ Plathanam, ..., Environmental Science and Pollution Research 28 (16), 20247-20260(2021)

LATEST PUBLICATIONS

152. Cyclodextrin-mediated gold nanoparticles as multisensing probe for the selective detection of hydroxychloroquine drug, JM George, B Mathew, Korean Journal of Chemical Engineering 38 (3), 624-634(2021)

151. Silver phosphate-based flower-like MoS₂/BiFeO₃ nanocomposite with enhanced activity for the detection of tetracycline, T Abraham, B Mathew, Materials Chemistry and Physics 260, 124103(2021)

150. Polystyrene-supported bromoderivative of 2-pyrrolidone: Synthesis, characterization and application in microwave-assisted bromination reactions, Anjaly Mathew, Beena Mathew and Ebey P. Koshy, Polymer Bulletin (2021) 10.1007/s00289-021-03540-0.

149. Microwave assisted green synthesis of silver nanoparticles for optical, catalytic, biological and electrochemical applications, VN Anjana, M Joseph, S Francis, A Joseph, EP Koshy, B Mathew, Artificial Cells, Nanomedicine, and Biotechnology 49 (1), 438-449(2021)

148. Flower-like MoS₂/BiFeO₃ doped silver orthophosphate catalyst for visible-light, assisted treatment of refractory organic pollutants, Abraham, RN Priyanka, S Joseph, NJ Plathanam, MG Gigimol, ..., Applied Materials Today 21, 100845(2020)

147. In-situ Fabrication of Ag₃PO₄ Based Binary Composite for the Efficient Electrochemical Sensing of Tetracycline, T Abraham, MG Gigimol, RN Priyanka, MS Punnoose, Binila K Korah, Beena Mathew, Materials Letters, 279, 128502 (2020)

LATEST PUBLICATIONS

146. A novel lanthanum and bismuth based self-cleaning nanocomposite for organic pollutants, T Abraham, S Kannan, RN Priyanka, S Joseph, MS Punnoose, ... AIP Conference Proceedings 2269 (1), 030004(**2020**)

145. Optimization of the properties of Mn doped ZnS quantum dots capped with thiourea, D Bijimol, MS Punnoose, BK Korah, B Mathew, AIP Conference Proceedings 2269 (1), 030002(**2020**)

144. Synthesis, characterization and catalytic activity of gold nanoparticles synthesized using a green route, MS Punnoose, D Bijimol, T Abraham, NJ Plathanam, B Mathew AIP Conference Proceedings 2269 (1), 030003(**2020**)

143. Green-synthesized Cu₂O nanoaggregates incorporated on beta-cyclodextrin for catalytic reduction and electrochemical sensing, JM George, B Mathew, Journal of the Iranian Chemical Society, 17, 2613-2626 (**2020**)

142. Fabrication of a Greener TiO₂@Gum Arabic-Carbon Paste Electrode for the Electrochemical Detection of Pb²⁺ Ions in Plastic Toys, SK Sivan, SS Shankar, A KandambathPadinjareveetil, R Pilankatta, ..., ACS omega 5 (39), 25390- 25399(**2020**)

141. Polystyrene supported bromoderivative of 2-oxazolidone—an efficient reagent for microwave assisted bromination reactions, A Mathew, B Mathew, EP Koshy, Journal of Polymer Research, 27, 1-8(**2020**)

LATEST PUBLICATIONS

140. Polymer supported bromoderivatives of 2-pyrrolidone: An efficient reagent for the microwave assisted conversion of trans-cinnamic acid to trans- β -bromostyrene, A Mathew, B Mathew, EP Koshy, SN Applied Sciences 2, 1-9 (2020)

139. Bimetallic Ag-Au nanoparticles as pH dependent dual sensing probe for Mn (II) ion and ciprofloxacin, JM George, RN Priyanka, B Mathew, Microchemical Journal, 155, 104686 (2020)

138. Nano layered ion imprinted polymer based electrochemical sensor and sorbent for Mn (II) ions from real samples, A Aravind, B Mathew, Journal of Macromolecular Science, Part A 57 (4), 256-265 (2020)

137. Unmodified silver nanoparticles for dual detection of dithiocarbamate fungicide and rapid degradation of water pollutants, PN Ragam, B Mathew, International Journal of Environmental Science and Technology 17 (3), 1739-1752 (2020)

136. Magnetic Fe₃O₄-reduced graphene oxide composite decorated with Ag nanoparticles as electrochemical sensor and self-cleaning material for organic pollutants, Thomas Abraham, K. R. Rejil, Jaise Mariya George, Arun Antony, Suresh C. Pillai, · Steven J. Hinder , Beena Mathew, Journal of Porous Materials, 27 (1), 303-318 (2020)

135. Rapid sunlight-driven mineralisation of dyes and fungicide in water by novel sulphur-doped graphene oxide/Ag₃VO₄ nanocomposite, RN Priyanka, S Joseph, T Abraham, NJ Plathanam, B Mathew, Environmental Science Research, 1-15 (2020)

LATEST PUBLICATIONS

134. Adsorptive Removal of Anionic Azo Dye Acid Black 194 from Aqueous Solution using NNMBA-Crosslinked Poly N-Vinyl Pyrrolidone Hydrogel, RL Jose, MG Gigimol, B Mathew, Asian Journal of Chemistry 32 (2), 311-316 (2020)

133. Novel $\text{La}(\text{OH})_3$ Integrated sGO- $\text{Ag}_3\text{VO}_4/\text{Ag}$ Nanocomposite as a Heterogeneous Photocatalyst for Fast Degradation of Agricultural and Industrial Pollutants, Ragam N. Priyanka, Subi Joseph, Thomas Abraham, Neena J. Plathanam and Beena Mathew, Catalysis Science & Technology (2020) <https://doi.org/10.1039/D0CY00104J>

132. CuNPs decorated molecular imprinted polymer on MWCNT for the electrochemical detection of L-DOPA, M.P. Sooraj, A. S. Nair, Suresh C. Pillai, Steven J. Hinder, Beena Mathew, Arabian Journal of Chemistry, (2020), <https://doi.org/10.1016/j.arabjc.2018.06.002>

131. Facile synthesis of silver nanoparticles using *Azolla caroliniana*, their cytotoxicity, catalytic, optical and antibacterial activity, VN Anjana, EP Koshy, B Mathew, Materials Today: Proceedings, 25, 163-168 (2020)

130. Green synthesis of hierarchically porous Cu-and Zn-MOFs by the combined action of hydroxy double salt and surfactant: An ultrafast method, S John, B Mathew, EP Koshy, C George, Materials Today: Proceedings, 25, 23-235 (2020)

RESEARCH GROUP

