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Department Of Chemistry

Publications Details

Journal Publications: 2026

1. Kavya Rajanna, Kumara Swamy Ningappa, Vedhavathi Hattna Shivarudraiah, Yashas Shivamurthy Ravindra, **Mahesh Basavaraju, Chamaraja Nelligere Arkeswaraiah**, Sanjay Ballur Prasanna, & Chung, R.-J. (2025). Rapid and selective electrochemical determination of doxycycline in human urine samples using a 2-dimensional Cu₂WS₄ nanosheet decorated polypyrrole nanotube electrocatalyst-modified pencil graphite electrode. *Inorganic Chemistry Communications*, 184, 115980–115980. <https://doi.org/10.1016/j.inoche.2025.115980> (February 2026)
2. SG, D., Shwetha, K. P., **Mahesh, B.**, & KA, V. (2026). Cobalt Ferrite and Mesoporous-Graphitic Carbon Nitride Composites: A Promising Electrode Material for Enhanced Supercapacitor Performance. *Available at SSRN 4955096*.
3. Naziya Habeeb M, N Vijendra Kumar, **Mahesh B**, Rashmi Ramesh, N D Rekha (2026). Isolation and Characterization of Phenolic Derivative (Flavonoid) from *Crassocephalum crepidioides* with Antiangiogenic, Anti-inflammatory and Antioxidant Activities . *International Journal of Pharmaceutical Sciences and Drug Research* ISSN: 0975 248X 2026;18(1):28-36. DOI: 10.25004/IJPSPDR.2026.180103
4. Lokesh, H. R., **Mahesh, B.**, Zodape, S. P., Rekha, N. D., Channe Gowda, D., & Sionkowska, A. (2026). Synthesis of Polypentapeptide of Tropoelastin and Exploration of Its Blends with Polyvinyl Alcohol for the Inhibition of α -Amylase and α -Glucosidase. *Journal of Polymers and the Environment*, 34(1), 24. <https://doi.org/10.1007/s10924-025-03760-9>
5. Marenahalli, B. L., Ningappa, K. S., Prasanna, S. B., Shivakumar, V., Sangameshwara, M. B., Basavaraju, M., ... & Fan, Y. J. (2026). Sensitive electrochemical detection based on neodymium-doped indium oxide for determination of 4-aminophenol in wastewater containing pharmaceutical residues. *Microchemical Journal*, 117204. <https://doi.org/10.1016/j.microc.2026.117204>

6. Mor, N., Bendi, A., Mahesh, B., & Raghav, N. (2026). Pectin-ester as sustained release targeted delivery of curcumin: synthesis, characterization and in-vitro simulation studies. *Discover Chemistry*, 3(1), 240. <https://doi.org/10.1007/s44371-026-00691-9>
7. Divakara S G, Jayanna B K, Mahesh B, Anil Kumar H G, Manjunath Reddy A H & Nalina Narasimhaswamy. (2026). Honey-assisted synthesis of CuFe₂O₄ nano pebbles: a sustainable approach to photocatalytic and antibacterial activity. *Journal of Experimental Nanoscience*, 21(1), 2630356. <https://doi.org/10.1080/17458080.2026.2630356>
8. Asha, S. C., B, R., B, M., Divakara, S. G., NA, C., Ravikumar, C. R., ... & TM, S. (2026). Bio-inspired synthesis of sea urchin-like hierarchical BaO nanostructures using Ocimum sanctum for enhanced UV-driven photocatalytic dye degradation and electrochemical sensing. *International Journal of Environmental Analytical Chemistry*, 1-25. <https://doi.org/10.1080/03067319.2026.2638550>
9. Srikanthamurthy, K., Prabhuswamy, V. B., Naik, C., Prakash, B. K. S., Sangameshwar, M. B., Basavaraju, M., ... & Ningappa, K. S. (2026). Unveiling Enhanced UV-Shielding and Photoluminescence Behavior in Co₂SnO₄@ GO Nanofunction-Reinforced PVA Nanocomposites. *Polymers for Advanced Technologies*, 37(7), e70665. <https://doi.org/10.1002/pat.70665>
10. Chandak, A. S., **Mahesh, B.**, & Zodape, S. P. (2026). Thermodynamic Insights into Sodium Chloride–Procainamide Hydrochloride Interactions in Aqueous Solutions: Volumetric and Compressibility Studies. *Journal of the Indian Chemical Society*, 102899. <https://doi.org/10.1016/j.jics.2026.102899>
11. Divakara S. G, Shwetha K. P, **Mahesh B** & Vishnumurthy K. A (2026). Surface area and composition-engineered CoFe₂O₄/g-C₃N₄ hybrid electrodes for high-performance supercapacitors. *Science and Technology of Advanced Materials*, (just-accepted), 2700203. <https://doi.org/10.1080/14686996.2026.2700203>
12. Roopashree, B. (2026). A Review Study on Computational Insights Into Transition Metal Complex Cytotoxicity in Neurobiology. *Developmental neurobiology*, 86(1), e23016. <https://doi.org/10.1002/dneu.23016>
13. Shashanka Rajendrachari, **Puneetha J**, Vinaykumar R, Rayappa Shrinivas Mahale, Santhy A and Hareesha Nagarajappa (2026). Recent overview on electrochemical analysis of toxic organic dyes using advanced high-entropy alloys

and carbon-based composite materials. *Journal of The Electrochemical Society*, 173(5), 057503. DOI 10.1149/1945-7111/ae4c07

14. Deepika, A. S., Kumar, S. P. B., Dhanalakshmi, B. K., Swamy, N. K., & **Chamaraja, N. A.** (2026). Visible-light-driven photocatalytic degradation of crystal violet dye using p-type CZTS quaternary chalcogenide and assessment of phytotoxicity of remediated dye sample. *Journal of Inorganic and Organometallic Polymers and Materials*, 1-17. <https://doi.org/10.1007/s10904-025-04128-1>
15. M Mahadeva Swamy, KS Shruthi, AS Sowmyashree, GK Prashanth, ND Rekha, **D Kathyayani**. Root-driven gold: characterisations and biological activities of nanoparticles synthesised using medicinal plant extracts. *J Aust Ceram Soc* (2026). <https://doi.org/10.1007/s41779-026-01346-9>
16. Dhanalakshmi, B. K., Kumar, S. P. B., Swamy, N. K., **Chamaraja, N. A.**, Veda, B. P., & Vedhavathi, H. S. (2026). Visible-light-assisted remediation of Malachite green dye using a low band gap p-type $\text{Cu}_2\text{NiSnS}_4$ semiconductor and phytotoxicity evaluation. *Chemical Papers*, 1-20. <https://doi.org/10.1007/s11696-026-04881-8>

Journal Publications: 2025

1. Shilpa, M. L., Roopashree, B., & Gayathri, V. (2025). Polymer-anchored vanadium (IV)–substituted benzimidazole: an Efficient green catalyst for aqueous oxidation of organic substrates. *Research on Chemical Intermediates*, 1-25.
2. Lokesh, H. R., **Kathyayani, D.**, Mahesh, B., Suhas, P., Prasad, C. M., Rekha, N. D., ... & Klepka, T. (2025). Examination of physicochemical characteristics of blends of synthetic elastin-mimetic polypentapeptide with Chitosan: Inhibitory potential on pancreatic α -amylase. *Materials Chemistry and Physics*, 131529.
3. Swamy, M. M., **Roopashree, B.**, Vergis, B. R., Sowmyashree, A. S., & **Kathyayani, D.** (2025). Decoding the Mechanisms of Dyes and Heavy Metals via NiO Nanoparticles: Kinetic and Isothermal Perspectives. *Topics in Catalysis*, 1-14.
4. **Puneetha, J.**, Kottam, N., Rajendrachari, S., Swarna, S., Shivaram, S. J., & Sriariyanun, M. (2025). Efficient Removal of Crystal Violet Dye Using Visible-Light-Active Mixed Phase Titanium Dioxide Nanoparticles: Synthesis, Degradation Kinetics, and Reusability Assessment. *Topics in Catalysis*, 1-25.

5. Ganesh, P., **Mahesh, B., Roopashree, B.**, Revanasiddappa, M., & Gayathri, V. (2025). Improved electromagnetic shielding, optical, electrical and structural, behaviour of Poly (methymethacrylate) composites with an Iron (III) benzimidazole complex. *Solid State Communications*, 116136.
6. Aishwarya, H. N., **Bindhu, S.**, Asha, R., Bhoomika, S., & Nagashree, S. (2025). Investigating the morphological properties of poly (lactic acid)/gadolinium oxide and poly (lactic acid)/yttrium oxide nanocomposite films for optical applications. *Discover Applied Sciences*, 7(10), 1174.
7. Prabhuswamy, V. B., Ningappa, K. S., Sangameshwar, M. B., Prakash, B. K. S., Rajanna, K., **Basavaraju, M.**, & Ankanathappa, S. M. (2025). Enhanced Optical and UV Shielding performance of CoFe₂O₄@ GONDS Embedded PVA nanocomposites. *Polymer*, 129137.
8. Martiz, R. M., Ramu, R., Nambisan, H., Suhail, A., Raish, M., Patil, S. M., ... **Basavaraju, M.**, & Tang, X. (2025). Identification and 3D modeling of bioactive peptides from Lactobacillus brevis RAMULAB49 protein hydrolysate with in silico ERK1 phosphorylation inhibition activity targeting diabetic nephropathy. *Plos one*, 20(9), e0331192.
9. Pavithra, S., **Kathyayani, D.**, Nanjundaswamy, G.S., Soundarya, T.L., Thejas, R., Gouri Mirji., Krishna, B.S., Nagaraju, G., Dr. Prashanth, B. (2025). Green-synthesized YSZ/polypyrrole nanocomposites for enhanced electrochemical and butane gas sensing applications. *Ionics*, 1-14.
10. Shende, V. S., Jain, A., **Basavaraju, M.**, & Zodape, S. P. (2025). Volumetric and Compressibility Studies of Antimycobacterial Drug in Aqueous and Aqueous d-Glucose Solutions at Various Temperatures. *Journal of Chemical & Engineering Data*, 70(5), 1918-1929.
11. Divakara, S. G., **Mahesh, B.**, Jayanna, B. K., & Anil Kumar, H. G. (2025). Photocatalytic degradation of crystal violet dye using honey mediated synthesis of NiFe₂O₄ nanoparticles. *Green Chemistry Letters and Reviews*, 18(1), 2543931.
12. Shende, V. S., **Mahesh, B.**, Patel, V., Chaudhary, R. G., & Zodape, S. P. (2025). Thermodynamic and Compressibility Studies of Naphazoline Hydrochloride in Aqueous and Aqueous L-Valine Solutions: Insights into Molecular Interactions and Solvation Behavior. *Journal of Chemical & Engineering Data*, 70(8), 3123-3139.

13. Swamy, M. M., Prashanth, G. K., Shilpa, C. D., Sowmyashree, A. S., Chougala, M., Gurushantha, K., ...**Kathyayani, D** & Prashanth, B. (2025). Eco-Friendly Synthesis of CuO Nanoparticles Using Plant Extract: Structural, Functional, and Graph Theory-Based Analysis for Advanced Applications. *Chemistry Africa*, 1-15.
14. Suhas, P., **Mahesh, B.**, Divakara, S. G., Nanjundaswamy, G. S., Mahadevaprasad, C. S., Sionkowska, A., ... & Gowda, D. C. (2025). Synergistic approaches in natural and synthetic polymer blends for biomedical applications- A review. *European Polymer Journal*, 114161.
15. Kavya, H. V., **Chamaraja, N. A.**, Rekha, N. D., Suraj urs, B. S., Sneha, C. S., & Devanoor, A. (2025). Photocatalytic application of Poly-vinyl alcohol/sodium doped zirconium oxide nanocomposites against effective removal of indigo carmine dye and its agricultural application. *Analytical Chemistry Letters*, 1-14.
16. Rajendrachari, S., Mahale, R. S., Ramkumar, R., **Puneetha, J.**, Jayaprakash, G. K., & Nagarajappa, H. (2025). Electrochemical analysis of L-Tyrosine sensor using ball-milled duplex stainless steel alloy powder. *Inorganic Chemistry Communications*, 177, 114360.
17. Pavithra, S., **Kathyayani, D.**, Rao, H. A., Soundarya, T. L., Krishna, B. S., & Nagaraju, G. (2025). Influence of Sodium lauryl sulphate as surfactant on structural, morphological, electrical, and biological properties on Polypyrrole/CeO₂ composites. *Solid State Communications*, 400, 115918.
18. Kokila, N. R., **Mahesh, B.**, Ramu, R., Divakara, S. G., Mruthunjaya, K., Raghav, N., & Boreddy Shivanandappa, T. (2025). Combined in vitro and in silico approach to define alangimarckine from Thunbergia mysorensis leaves as a potential inhibitor of α -glucosidase. *Journal of Biomolecular Structure and Dynamics*, 1-20.
19. **Roopashree, B., Mahesh, B.**, Ramu, R., Rekha, N. D., Thekkekkara, D., & Gayathri, V. (2025). Cytotoxic, antimicrobial, and angiogenesis inhibition activity of novel Cobalt (II) complexes of substituted benzimidazole: Molecular docking simulation and Inhibition kinetics. *Journal of Molecular Structure*, 1327, 141141. <https://doi.org/10.1016/j.molstruc.2024.141141>
20. **Chamaraja, N. A.**, Swamy, N. K., Shivakumar, V., Kavya, H. V., & **Basavaraju, M.** (2025). Evaluation of peroxidase mimetic properties of cobalt ferrite (CoFe₂O₄) nanoparticles and their applications in the assay of aminophenols in water samples. *Nanotechnology for Environmental Engineering*, 10(1), 15.

Journal Publications: 2024

1. **Roopashree, B., Mahesh, B.**, Ramu, R., Rekha, N. D., Manjula, S. N., Preethi, G., & Gayathri, V. (2024). An insight into the cytotoxic, antimicrobial, antioxidant, and biocontrol perspective of novel Iron (III) complexes of substituted benzimidazoles: Inhibition kinetics and molecular simulations. *Journal of Biomolecular Structure and Dynamics*, 42(21), 11538-11554.
2. Asha, S. C., Divakara, S. G., Mahesh, B., Ravikumar, C. R., & Murthy, H. A. (2024). Improved photocatalytic activity triggered by UV light, as well as electrochemical sensing characteristics of MgO nanoparticles. *International Journal of Environmental Analytical Chemistry*, 1-20.
3. Afroz, L., Khan, M. H. M., **Roopashree, B., Puneetha, J.**, & Patel, B. (2024). Adsorption and Biological Evaluation on the Malachite green dye using CuO-ZnO Nanoparticles.
4. Asha, S. C., **Mahesh, B.**, Ravikumar, C. R., **Chamaraja, N. A.**, Anand Murthy Green Synthesis of Calcium Oxide Nanoparticles using Ocimum sanctum leaves extracts: Photocatalytic and electrochemical sensor applications. *Journal of Materials Science: Materials in Electronics*, 2024, <https://doi.org/10.1007/s10854-024-13374-x>
5. **Kathyayani, D., Mahesh, B.**, Sionkowska, A., Manjula, S. N., Veeranna, S., & Vicini, S. Insights into the Physicochemical Characteristics and Miscibility of Chitosan/Polypeptide Blends: Promising Material for Wound Healing in Sprague-Dawley Rats. *ACS biomaterials science & engineering*. <https://doi.org/10.1021/acsbiomaterials.4c01123>
6. Shubha, J. P., **Roopashree, B.**, Sushma, N. V., Kiran, K., Ravikumar, R., Kuniyil, M., Mohammed Rafi Shaik, Mujeeb Khan, Adil, S. F. (2024). Photocatalytic and eco-emission applications of green synthesized ZnO-CB nanoparticles. *Journal of King Saud University-Science*, 36(9), 103373. <https://doi.org/10.1016/j.jksus.2024.103373>
7. Kavya, H. V., Sachhidananda, S., Sangamesha, M. A., Rekha, N. D., Kendagannaswamy, B. K., **Chamaraja, N. A.**, & Mallesha, L. (2024). Optical, electrical, and biological properties of PVP-PVA/Ca-doped CoO nanocomposites for opto-electronic and biological applications. *Ionics*, 1-11. <https://doi.org/10.1007/s11581-024-05746-4>
8. Manjunatha, A. S., Prakruthi, P. R., **Puneetha, J.**, Shashank, M., & Nagaraju, G. (2024). Cocos nucifera mediated green synthesis and characterization of BiOCl-

Fe₂O₃ nanocomposite for photocatalytic dye degradation and electrochemical sensing of dopamine. *Sustainable Chemistry for the Environment*, 7, 100138. <https://doi.org/10.1016/j.scenv.2024.100138>.

9. Surendra, D. M., Kumar, C. P., Nandini, C., **Chamaraja, N. A.**, Raghu, A. V., Majani, S. S., ... & Kollur, S. P. (2024). Synthesis, characterization, and assessment of anticancer potency of oxcarbazepine with folic acid conjugated Fe₂O₃ nanostructures as nano-drugs. *Journal of Molecular Structure*, 1306, 137842. <https://doi.org/10.1016/j.molstruc.2024.137842>
10. Nanjundaswamy Gumatapura Siddamallappa, **Mahesh Basavaraju**, Alina Sionkowska, Channe Gowda Dase Gowda, (2024). A review on synthetic polypeptide-based blends with other polymers: Emerging trends and advances. *European Polymer Journal*, 113225. <https://doi.org/10.1016/j.eurpolymj.2024.113225>
11. **Chamaraja, N. A.**, Khan, M.M., Hemalatha, H.N. et al. Ca-doped ZnO nanoparticles for MB dye degradation and adsorptive removal of tinidazole. *Environ Monit Assess* **196**, 710 (2024). <https://doi.org/10.1007/s10661-024-12843-4>
12. **Puneetha, J.**, Kottam, N., & Rajendrachari, S. (2024). Modern trends in carbon nanostructured material-based electrochemical biosensing systems. *Novel Nanostructured Materials for Electrochemical Bio-Sensing Applications*, book chapters, 21-36.

Journal Publications: 2023

1. Divakara, S. G., & **Mahesh B.** (2023) A comprehensive review on current trends in greener and sustainable synthesis of ferrite nanoparticles and their promising applications, *Results in Engineering*, 101702
2. **Kathyayani, D.**, **Mahesh, B.**, Gowda, D. C., Sionkowska, A., & Veeranna, S. (2023) Investigation of miscibility and physicochemical properties of synthetic polypeptide with collagen blends and their wound healing characteristics, *International Journal of Biological Macromolecules*, 125704. <https://doi.org/10.1016/j.ijbiomac.2023.125704>
3. **Mahesh, B.**, & Mruthunjaya, K Aathira, P. Suresh., Nallupillai Paramakrishnan. (2023) A Comprehensive Review on *Cardiospermum halicacabum*, *Journal of Natural Remedies*, 23(2), 284–293. <https://doi.org/10.18311/jnr/2023/29382>

4. **Mahesh, B.**, Lokesh, H. R., **Kathyayani, D.**, Sionkowska, A., Gowda, D. C., & Adamiak, K. (2023). Interaction between synthetic elastin-like polypeptide and collagen: Investigation of miscibility and physicochemical properties. *Polymer*, 272, 125833. <https://doi.org/10.1016/j.polymer.2023.125833>
5. Lakshminarayana, Shilpa Madhugiri, **Roopashree Boregowda**, and Gayathri Virupaiah. (2023). "Reusable palladium–quinolyl benzimidazole complex immobilized on a polymer for the hydrogenation of organic substrates." *Chemical Papers*, 1-13. <https://doi.org/10.1007/s11696-023-02721-7>
6. **Roopashree, B.**, **Mahesh, B.**, Ramu, R., Rekha, N. D., Manjula, S. N., Preethi, G., & Gayathri, V. (2023). An insight into the cytotoxic, antimicrobial, antioxidant, and biocontrol perspective of novel Iron (III) complexes of substituted benzimidazoles: Inhibition kinetics and molecular simulations. *Journal of Biomolecular Structure and Dynamics*, 1-17.
7. Shubha, J. P., **Roopashree, B.**, Patil, R. C., Khan, M., Shaik, M. R., Alaqarbeh, M., & Adil, S. F. (2023). Facile synthesis of ZnO/CuO/Eu heterostructure photocatalyst for the degradation of industrial effluent. *Arabian Journal of Chemistry*, 16(3), 104547. <https://doi.org/10.1016/j.arabjc.2023.104547>
8. Kokila, N. R., **Mahesh, B.**, Ramu, R., **Roopashree, B.**, & Mruthunjaya, K. (2023). α -Amylase inhibitory potential of Thunbergia mysorensis leaves extract and bioactive compounds by in vitro and computational approach. *Journal of Biomolecular Structure and Dynamics*, 1-17. <https://doi.org/10.1080/07391102.2023.2190408>
9. **Siddegowda Kathrikenahalli Somashekarappa**, **Mahesh Basavaraju**, **Chamaraja Nelligere Arakeshwaraiiah**, Roopa Kotthathi Papanna, Kumara Swamy Ningappa, Divakara Soorly Gopala, Jayaram Gowda (2023). Rapid Electrochemical Investigation of Gemfibrozil Using NiONPs/Multiwalled Carbon Nanotube Modified Carbon Paste Electrode: Analysis of Human Urine Sample and Antimicrobial Activity. *Chemistry Select*, 8(48), e202302407.
10. **Bindhu, S.**, Raj, V., Nanjundaswamy, S., Hemavathi, M., Sandeep, S., Renganathan, R. A., & Rai, V. R. (2023). Insight into the conformational analysis of 3-phenyl-N-(3-(trimethoxysilyl) propyl) prop-2-en-1-imine (PTP) as a biocidal candidate: In-silico and quantum computational approach. *Results in Chemistry*, 5, 100685.

11. Surendra, D. M., **Chamaraja, N. A.**, Yallappa, S., Bhavya, D. K., Joseph, S., Varma, R. S., & Patel, B. B. (2023). Efficacy of phytochemical-functionalized silver nanoparticles to control Flacherie and Sappe silkworm diseases in *Bombyx mori* L. larvae. *Plant Nano Biology*, 5, 100048.
12. Yaidikar, Lavanya, Pydiraju Kondrapu, Astha Mishra, Pramod Bhaskar Kumar, Arshad Ahmad, K. A. Shaima, **N. A. Chamaraja**, and Shubhangi Tripathi. (2023). "Screening and discovery of novel carbamate compounds for cancer therapy." *Journal of Cardiovascular Disease Research*, 678-697.

Journal Publications: 2022

1. Kokila, N. R., Mahesh, B., Ramu, R., Mruthunjaya, K., Bettadaiah, B. K., & Madhyastha, H. (2022). Inhibitory effect of gallic acid from *Thunbergia mysorensis* against α -glucosidase, α -amylase, aldose reductase and their interaction: Inhibition kinetics and molecular simulations. *Journal of Biomolecular Structure and Dynamics*, 1-17.
2. S.Yallappa D.M.Surendra, **N.A.Chamaraja**, S.S.Godipurge, Synthesis and functionalization of silver ferrite (AgFe_2O_3) nanoparticles with L-methionine: In vivo toxicity studies against *Drosophila melanogaster* (Diptera: Drosophilidae), Results in Chemistry, Vol-4, October-2022. <https://doi.org/10.1016/j.rechem.2022.100565>
3. K.P. Roopa, K. Keshavamurthy, **B.Mahesh**, K.P. Veena, B.S. Shankara, K. Basavaiah, Determination of Vardenafil in Pure and Dosage Forms by Spectrophotometry. *Zhurnal Prikladnoi Spektroskopii*. 2022;89(4):599. <https://doi.org/10.1007/s10812-022-01429-y>
4. **N. A. Chamaraja & B. Mahesh** Design and Development of a Novel Reagent for the Spectrophotometric Assay of Phosphate in Water and Soil Samples, *JSS Journal of Scientific studies*, Vol.1, July-2022
5. **D.Kathyayani, B. Mahesh, N.A.Chamaraja**, B.S.Madhukar & D. Channe Gowda, Synthesis and structural characterization of elastin-based polypentapeptide/hydroxypropylmethylcellulose blend films: Assessment of miscibility, thermal stability and surface characteristics, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, Vol.649, June-2022. <https://doi.org/10.1016/j.colsurfa.2022.129503>
6. **N. A. Chamaraja, B. Mahesh & N. D. Rekha**, Green synthesis of Zn/Cu oxide nanoparticles by *Vernicia fordii* seed extract: their photocatalytic activity toward industrial dye degradation and their biological activity, *Inorganic and Nano-Metal Chemistry*, May-2022. <https://doi.org/10.1080/24701556.2022.2069123>
7. Saligrama Mahesh Abhishek, Ningappa Kumara Swamy, Shivamurthy Ravindra Yashas, Harikaranahalli Puttaiah Shivaraju & **Nelligere Arkeswaraiah Chamaraja**, Soft-chemical synthesis and rational application of transition-metal

tetrachalcogenide for LED-driven photocatalytic degradation of lomefloxacin in water, Journal of Materials Science: Materials in Electronics, April-2022. <https://doi.org/10.1007/s10854-022-08193-x>

8. Kavya H. V, Nithin K. S, Sachhidananda S, Kendagannaswamy B. K., **Chamaraja N. A***, Optical, Electrical and Thermal Behaviors of CaZnO₂Nanofillers Loaded PVP-PVA Nanocomposite Thick Films, Polymer Science Series A, April,2022. <https://doi.org/10.1134/S0965545X22200068>
9. Kokila N R, **Mahesh B**, Roopa K P, Daruka Prasad B, Kalyanraj, Manjula S N, Mrutunjaya K, Ramith Ram, Thunbergia mysorensis mediated Nano Silver Oxide for Enhanced Antibacterial, Antioxidant, Anticancer potential and in vitro Hemolysis Evaluation, Journal of Molecular Structure, 1255, 132455, May 2022, <https://doi.org/10.1016/j.molstruc.2022.132455>.
10. **B.Mahesh, D.Kathyayani**, D.Channe Gowda, Alina Sionkowska, Seeram Ramakrishna, Miscibility and thermal stability of synthetic glutamic acid comprising polypeptide with polyvinyl alcohol: Fabrication of nanofibrous electrospun membranes, Materials Chemistry and Physics, Vol. 281, 125847, April 2022, <https://doi.org/10.1016/j.matchemphys.2022.125847>.
11. Nasreen Taj M; B Daruka Prasad; Rama Rao Narapareddy; H Nagabhushana ; G. Ramakrishna; **B. Mahesh**; Sunanda Damini, PANI - Molybdate Nanocomposites: Structural, Morphological and Dielectric properties for the effective EMI Shielding Applications in X-Band, Applied Surface Science Advances, February 2022, Vol. 7, Pages 100203, <https://doi.org/10.1016/j.apsadv.2021.100203>.
12. Malini, S, Roy, A, Raj, K, Raju, K, Ali, I. H, **Mahesh, B**, Lee, S. S., Sensing beyond Senses: An Overview of Outstanding Strides in Architecting Nanopolymer-Enabled Sensors for Biomedical Applications, Polymers, 14(3), January 2022, <https://doi.org/10.3390/polym14030601>.
13. Hattna Shivarudraiah Vedhavathi; Ballur Prasanna Sanjay; **Mahesh Basavaraju**; Beejaganahalli Sangameshwara Madhukar; Ningappa Kumara Swamy, Development of ciprofloxacin sensor using iron-doped graphitic carbon nitride as transducer matrix: Analysis of ciprofloxacin in blood samples, Journal of Electrochemical Science and Engineering (ISSN 1847-9286), Nov 2021, Page No.1-12, <http://dx.doi.org/10.5599/jese.1112>.

Journal Publications: 2021

1. Roopa K P, Basavaiah K, Shankar B S, S.B. **Mahesh B**, Veena K P, Determination of Solifenacin Succinate in Pure and Pharmaceutical Dosage forms by Spectrophotometry, J Anal Chem, Nov 2021, **Vol 76**, 1262–1270, <https://doi.org/10.1134/S1061934821110101>.
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