

Paper Publications

2023 -2024

1. **Jhancy Mary S**, Julia Sebastian, Miriam Daniel, Bernaurdshaw Neppolian, Electroactive modified poly(2-aminobenzoic acid) - blend - aloevera/ GCE as an efficient dopamine sensor, Journal of Polymer Research, ISSN 1572-8935, 2023, Volume 30, pp 356.
2. **Scholastica Mary Vithiya B**, Athisa Roselyn Maheo, Augustine Arul Prasad, Mangesh VL, Tamizhdurai Perumal Wahidah H Al Qahtani, Mani Govindasamy, Cytotoxic, Antidiabetic and Antioxidant study of priogenically improvised Elsholtzia blanda and chitosan assisted zinc oxide nanoparticles, ACS Omega, ISSN 2470-1343, 2023, Volume 8, pp 10954 – 10967.
3. **Scholastica Mary Vithiya B**, Augustine Arul Prasad, Edal Queen J, Tamizhdurai P, Nadavala Siva Kumar, Ahmed Alfatesh, Janardhan Reddy Koduru, Catalytic reduction of anionic and cationic toxic dyes and evaluation of antimicronial activity using green synthesized palladium nanoparticles employing carica papaya aqueous leaf extract, Journal of Saudi Chemical Society, ISSN 1319-6103, 2023, Volume 27, pp 101759.
4. **Sugantha Kumari V**, Khaleel Basha S, Shanmuga Priya V, Sustainable removal of hexavalent chromium using graphene oxide - iron oxide reinforced pectin/ polyvinyl alcohol magnetic gel beads, International Journal of Biological Macromolecules, ISSN 0141-8130, 2023, Volume 257, pp 128542.
5. **Sugantha Kumari V**, Khaleel Basha S, Shanmuga Priya V, Kinetics and adsorption performance of biosorbent starch/poly vinyl alcohol graphene oxide nanocomposite for the removal of dyes, Journal of Umm Al-Qura University for Applied Science, ISSN 2731-6734, 2023, Volume 9, pp 529 – 547.
6. **Sugantha Kumari V**, Syed Muzammil Munawara, Dhandayuthabani Rajendirana, Khaleel Basha Sabjan, Development of pH sensitive nanopectin/insulin based nanoemulsion for oral insulin drug delivery, YMER, ISSN 0044-0477, 2024, Volume 23, pp 176 -197.
7. **Sugantha Kumari V**, Syed Muzammil Munawara, Dhandayuthabani Rajendirana, Khaleel Basha Sabjan, Probing insulin bioactivity in oral nanoemulsion produced by emulsification assisted electrostatic self assembly cross linking method, YMER, ISSN 0044-0477, 2024 Volume 23, pp 97 – 119.
8. **R. Lakshmi**, Rajan Choudhary, Fedor Senatov and Sergey Kaloshkin, Shobana Kothandam, Deepalakshmi Ponnamma, Kishor Kumar Sadasivuni, Sasikumar Swamiappan, Fabrication and bioactivity studies of wollastonite/polycaprolactone composites, International Journal of Nano and Biomaterials, ISSN: 1752- 8933, 2023, Volume 10(2), pp 88-98.
8. **Radha E**, Thandapani Gomathi, Susi S, Mohammed Mujahid Alam, Abdullag G. Al-Sehemi, Pazhanisamy P, Sekar Vijaya kumar, Copper(II) ion removal from aqueous solutions using alginate nanoparticles / carboxymethyl cellulose / polyethylene glycol ternary blend: characterisation, isotherm and kinetic studies, Journal of Polymer Testing, ISSN 0142-9418, 2024, Volume 130, pp 108321.

2024 – 2025

1. **B. Scholastica Mary Vithiya**, J. Edal Queen, Augustine Arul Prasad, P. Tamizhdurai, Ghadah Shuki Albakri, Mohammed Khalid, Maha Awjan Alreshidi and Krishna Kumar Yadav, Bio fabricated Palladium nano particles using phytochemicals from aqueous cranberry fruit extract for antibacterial, cytotoxic activities and photocatalytic degradation of anionic dyes, Royal Society of Chemistry, ISSN: 2046-2069, 2024, Volume 14, pp23730 – 23743.
2. **Scholastica Mary Vithiya** and Savitha, Food safety and human health, Journal of Indian School of Political Economy, ISSN: 0971-0396, 2024, Volume 36(03), pp 227-234.
3. **Scholastica Mary Vithiya** and Sara Grace, Role of Chemical Safety in Good Health and Well Being, Journal of Indian School of Political Economy, ISSN: 0971-0396, 2024, Volume 36(03), pp 235-248.
4. **V. Sugantha Kumari**, R. Dhandayuthbani, S. syed Muzammil and S. Khaleel Basha. Novel Choline – Alginate Hybrid Nanocarrier for Controlled Insulin Delivery, YMER, ISSN: 0044-0477, 2024, Volume 23(12), pp1099.
5. **R. Sangeetha Rani**, V. Sivakumar, Arunachalam Lakshmanan, L. Sangeetha J. Nandhagopal, G. Annadurai.S. Saravanakumar, Effect of flux and codoping on photoluminescence properties of Zn₂SiO₄: Eu³⁺ Red phosphors for blue LED Excitable white LED Applications, Journal of Fluorescence, ISSN: 1573-4994, 2024, Volume 35, pp 6887-6895.

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2024 – 2025

1. **Dr.V. Sugantha Kumari and Dr. (Sr). Switha**, “Bioactive nanocomposite bandage for self healing antimicrobial bandage”. Utility Patent, Indian Patent, dated 31.05.2025.

Patent Number: 202541004895A

2025 -2026

- 1. B. Scholastica Mary Vithiya**, T. Jayamani, A. Elakkiya Devi, T. Augustine Arul Prasad and Lawrance Richardson, Phytofabricated Pd@Ag bimetallic nanocomposites using Carica papaya leaf extract: A dual-functional platform for catalysis and antimicrobial defence, Current Research in Green and Sustainable Chemistry, ISSN: 2666-0865, 2025, Volume 11, pp100465.
- 2. B. Scholastica Mary Vithiya**, J. Edal Queen, Augustine Arul Prasad, Omalsad H. Odhah, Nadavala Siva Kumar, P. Tamizhdurai, Salwa B. Airesaidan, Praveen Kumar Basivi, Durga Prasad Pabba and Ahmed S. Al Fatesh, Optimized green synthesis of gold nanoparticles from cranberry fruit extract using response surface methodology for enhanced biomedical applications and catalytic degradation, Journal of Bioorganic Chemistry, ISSN: 1090-2120, 2025, Volume 161, 108546.
- 3. B. Scholastica Mary Vithiya**, T. Jayamani and T. Augustine Arul Prasad, Green Synthesis of Platinum@Silver (Pt@Ag) Bimetallic Nanoparticles Using Carica papaya Aqueous Leaf Extract for Catalytic Reduction of Dyes and their Antimicrobial Activity, Asian Journal of Chemistry, ISSN: 0970-7077, 2025, Volume 37(7), pp1796-1802.
- 4. B. Scholastica Mary Vithiya**, S. Iswarya, A. Dharshini, and T. Augustine Arul Prasad, Evolving smart homes to exploring space, dye-sensitized solar cells (DSSC) as a sustainable energy model for the future world – A review, Next Energy, ISSN: 2949-821X, 2025, Volume 8, pp100328.
- 5. B. Scholastica Mary Vithiya**, Phyto-engineered palladium gold bimetallic core shell nanoparticles utilizing cranberry fruit extract for photocatalytic reduction and biomedical applications. Bioorganic chemistry October 2025.
- 9. Dr. V. Sugantha Kumari**, Bio-Inspired chitosan/poly(Vinylalcohol)/ nanobioactive glass/functionalized carbon nanotube scaffold for bone tissue engineering 2026.
- 10. Dr. P. Narmdha Christy**, Bio-Inspired chitosan/ poly(Vinylalcohol)/ nanobioactive glass/functionalized carbon nanotube scaffold for bone tissue engineering 2026.
- 11. J. Rosaline Ezhilarasi**, P. Indumathy, U. Rebeccal, Eco-friendly synthesis of ZrO₂-Ag₂O nanocomposite for enhanced antibacterial and corrosion-resistant dental applications, Inorganic Chemistry Communications, 188, (2026), 116435.
- 12. Rosaline Ezhilarasi Jesudoss**, Indumathy Paneer Selvam, Rebeccal U., Green Synthesized ZrO₂-Fe₃O₄ Nanocomposite with Enhanced Violet Emission and High Colour Purity for Display Applications, YMER, 25, 2, (2026), 97-110.

Patent 2025-2026

Dr. V. Sugantha Kumari, Hybrid nanolipid-polymer nanoparticles for oral delivery of I
Insulin. Utility Patent, Indian Patent, dated 13.02.2026.

Patent Number: 202641008792A

Dr. P. Narmatha Christy, Hybrid nanolipid-polymer nanoparticles for oral delivery of I
Insulin. Utility Patent, Indian Patent, dated 13.02.2026.

Patent Number: 202641008792A