

INTERNATIONAL JOURNAL PUBLICATIONS

2023

1. S. Monika, M. Mahalakshmi, M. Senthil Pandian, TiO₂/CdS/CdSe quantum dots co-sensitized solar cell with the staggered-gap (type-II) heterojunctions for the enhanced photovoltaic performance, *Ceramics International*, 49, 2023, 8820-8826. (IF: 5.532)
2. Savari R. Sahaya Prabaharan, Adamu Murtala Zungeru, Bokani Mtengi, Siluvai M. Michael , A photovoltaic system using supercapacitor energy storage for power equilibrium and voltage stability, *International Journal of Electrical and Computer Engineering*, 13, 2023, 2482-2497. (IF: 0.376)
3. V. Vijayaraj, Sasikala Ganapathy, Ilaiyaraaja Perumal, N. Priyadarshini, Santhosh Jeferson Stanley J.S, The size and defect controlled CdTe:In colloidal quantum dots via varying the InCl₃ dopant precursor concentration in aqueous medium for improving solar cell performance, *Inorganic Chemistry Communications*, 150, 2023, 110395. (IF: 3.428)

2022

1. Surya. K, Michael, M. S. Pseudocapacitive binary metal oxide NiMn₂O₄ nanoparticles as an electrode for high-powered hybrid supercapacitors, *Journal of Materials Science: Materials in Electronics*, 33, 2022, 3139-3150 (IF: 2.779).
2. Monika, S, Mahalakshmi, M. Veerathangam, K., Senthil Pandian, M., Ramasamy, P. Conductive carbon black/CuS composite counter electrode for the enhanced photovoltaic performance of CdS quantum dot sensitized solar cells, *Journal of Applied Physics A*, 128, 2022, 1-13. (IF: 2.877).
3. Monika, S., Mahalakshmi, M., Subha, N., Pandian, M. S., Ramasamy, P. Graphene quantum dots and CuSmicroflowers anchored rGO composite counter electrode for the enhanced performance of quantum dot sensitized solar cells, *Journal of Diamond and Related Materials*, 125, 2022, 109033. (IF: 3.806).
4. Priya, S., Ilaiyaraaja, P., Priyadarshini, N. Fibrous TiO₂ exhibiting efficient U (VI) adsorption from aqueous solution, *International Journal of Environmental Analytical Chemistry*, 1-15, 2022. (IF: 2.731).
5. Shree Kesavan, K., Michael, M. S., High rate capability and thermal stability of monoclinic Li₂MnSiO₄ –A promising high capacity cathode material for lithium batteries, *Journal of Solid State Electrochemistry*, 26, 2022, 1431-1443 (IF: 2.747).
6. Vijayaraj Venkatachalam, Sasikala Ganapathy, N. Priyadarshini, Ilaiyaraaja Perumal, Indium doped CdTe colloidal quantum dots stabilised in aqueous medium for white light emission, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 653, 2022, 12989. (IF: 5.518).
7. Chandrasekar Kandaswamy, Davis Presley T. P. Shabeer Ahammed, Sreekanth Anadaram Improved chromatographic performance in red chilli powder pesticide residue quantitation by retention gap introduction in gas chromatography tandem mass spectrometry, *Journal of Food science and Technology*, 59, 2022, 1692.(IF: 3.117).

8. Lipika Mirdha, Tanusree Sengupta, Hirak Chakraborty, Lipid composition dependent binding of apolipoprotein E signal peptide: Importance of membrane cholesterol in protein trafficking, *Biophysical Chemistry*, 291, 2022, 106907. (IF: 3.628)
9. Chozhanathmisra, M., Murugesan, L., Murugesan, A., Palanisamy, G., Rajavel, R. Enhancement on physical, chemical, and biological properties of HNT-PVA-ALG-HAp biocomposite coating on implant substrate for biomedical application, *Journal of Ceramics International*, 48, 2022, 16868-16876, (IF: 5.532).
10. Loganathan, M., Raj, A. S., Murugesan, A., Kumar, P. S. Effective adsorption of crystal violet onto aromatic polyimides: Journal of Kinetics and isotherm studies, *Chemosphere*, 304, 2022, 135332. (IF: 8.943).
11. N. Subha, M. Mahalakshmi, S. Monika, P. Senthilkumar, V. Preethi, G. Vaishnavi, A. Rajabhuvarneswari, Heterostructured γ -Fe₂O₃/FeTiO₃ magnetic nanocomposite: An efficient visible-light-driven photocatalyst for the degradation of organic dye, *Chemosphere*, 306, 2022, 135631. (IF: 8.943)
12. S. Sathishkumar, K. P Nithyanandam, S.I Davis Presley, Quantitative Analysis of Pesticide Residues in Okra Using Gas Chromatography Tandem Mass Spectrometry, *Pesticide Research Journal*, 34, 2022, 61-68. (IF: 2.529)
13. Reshma Patil, Niladri Sekhar Chatterjee, Narayan Kamble, Apurva Nerpagar, Nagnath Langade, Chandrasekar Kandaswamy, S. I. Davis Presley, Kaushik Banerjee, Multi residue analysis of polycyclic aromatic hydrocarbons and poly chlorinated biphenyls in poultry meat and chicken eggs by GC-MS/MS: Method development and validation, *Journal of environmental Science and Health, Part-B*, 57, 2022, 263-283 (IF: 2.506)
14. Subash Chellam Gayathri, Suchetana Gupta , Aravind Suresh , Sanjib Senapati , Tanusree Sengupta, Effect of variations in the conserved residues E371 and S359 on the structural dynamics of protein Z dependent protease inhibitor (ZPI): a molecular dynamic simulation study, *Journal of Biomolecular Structure and dynamics*, 40, 2022, 6405-6414. (IF: 5.235)

2021

1. T. Arun Luiz, Syntheses and X-ray structure characterization of dimeric copper(I) halo(X)complexes (X = Br, I) of (diisopropylamino)(morpholino)(phenyl) phosphine, Inorganic and Nano-Metal Chemistry, (Jan 2021, Vol 51, Issue 1, 101-105).
2. N. Subha, M. Mahalakshmi, S. Monika, B. Neppolian, “Novel CeO₂ and rGO decorated Bi₂S₃ nanorods for the enhanced solar hydrogen production” Materials Letters 294 (Apr 2021) 129782. (Impact factor: 3.204).
3. Sengupta T, Koklic T, Lentz BR and Majumder R, “Phosphatidylserine and phosphatidylethanolamine regulate the structure and function of FVIIa and its interaction with soluble tissue factor” Bioscience Reports, 41 (Jan 2021) BSR20204077. (TR & IF: 3.84).
4. Sengupta T, Majumder S and Majumder R. Role of vitamin D in treating COVID-19-associated coagulopathy:problems and perspectives. Molecular and Cellular Biochemistry, 476 (Feb 2021) 2421-2427. (TR & IF: 3.396).

5. A. Murugesan , M. Loganathan P. Senthilkumar and Dai-Viet N. Vo, Cobalt and Nickel Oxides Supported Activated Carbon as an Effective Photocatalysts for the Degradation Methylene Blue Dye from Aquatic Environment, Sustainable Chemistry and Pharmacy, 21, (Feb 2021), 100406. (TR & IF: 4.508).
6. Chandrasekar Kandaswamy, Sreekanth Anandaram, S. I. Davis Presley, Ahammed T. P. Shabeer. Comparative evaluation of multi-residue methods for analysis of pesticide residues in black pepper by gas chromatography tandem mass spectrometry: critical evaluation of matrix co extractives and method validation. J Food Sci Technol (March 2021) 58(3):911–920.(TR & IF:2.7)

2020

1. K. Surya K, M.S. Michael M. S, "Novel Interconnected Hierarchical porous carbon electrodes derived from Bio-waste of corn husk for supercapacitor applications" Journal of Electro Analytical Chemistry, 878 (September 2020) 114674. (TR & I.F: 3.807)
2. Chatterjee S*, Sengupta T*, Majumder S, Majumder R. "COVID 19: A Probable Role of the Anticoagulant Protein S in Managing COVID-19-Associated Coagulopathy." Aging, 12 (Aug 2020) 15954-61. (Impact factor: 4.8) (* author contributed equally)
3. Suganthi Muthusamy, Julie Charles, M.S. Michael, K. Shree Kesavan, "Enhanced specific capacitance of a novel ternary polypyrrole incorporated with prussian blue and mesoporous carbon black for high performance supercapacitor applications", Materials Research Bulletin, (Aug.2019),120, 110587. (TR &IF: 3.355)
4. K. Shree Kesavan, M. S. Michael, S. R. S. Prabaharan, "Facile Electrochemical Activity of Monoclinic Li₂MnSiO₄ as Potential Cathode for Li-Ion Batteries", ACS Appl. Mater. Interfaces (Aug, 2019) 11, 28868–28877. (TR & IF: 8.456).
5. K. Shree Kesavan, M. S. Michael, S. R. S. Prabaharan, "Battery-active Monoclinic Li₂MnSiO₄ Synthesized via Temperature Programmed Reaction" Journal of the Taiwan Institute of Chemical Engineers, 105(Oct-2019)28-38. (TR & IF: 3.83)
6. N. Subha, M. Mahalakshmi, S. Monika, B. Neppolian, "Ni (OH)₂-CuxO-TiO₂ nanocomposite for the enhanced H₂ production under solar light: The mechanistic pathway" International Journal of Hydrogen Energy, 45 (13), (March 2020), 7552-7561. (TR & IF: 4.084)
7. A. Murugesan and P. Mahendran, "High-performance Polyimides with Pendant Fluorenylidene groups: Synthesis, Characterization and Adsorption Behaviour" Journal of Polymers and the Environment, doi.org/10.1007/s10924-020-01777-w (8 June 2020) (TR & IF: 2.765).
8. V. Samynaathan, Sangeetha R Iyer, K. Shree Kesavan, M.S. Michael, "High-performance electric double-layer capacitor fabricated with nanostructured carbon black-paint pigment as an electrode" Carbon Letters, 1-10, (June 2020) DOI 10.1007/s42823-020-00159-5. (TR& I.F: 2.310)
9. C. Kandaswamy, S. Anandaram, S. I. D. Presley, and A. T. P. Shabeer, "Comparative evaluation of multi-residue methods for analysis of pesticide residues in black pepper by gas chromatography tandem mass spectrometry: critical evaluation of matrix co-

extractives and method validation," *J. Food Sci. Technol.*, June 2020, doi: 10.1007/s13197-020-04605-0. (TR & IF 1.946)

2019

1. Arukkani Murugesan, M. Divakaran, Pranav Raveendran, Nitin Nikamanth A B and Kevin J Thelly, "An Eco-friendly Porous Poly(imide-ether)s for the Efficient Removal of Methylene Blue: Adsorption Kinetics, Isotherm, Thermodynamics and Reuse Performances", *Journal of Polymers and the Environment*, (Feb-2019) 1-18. (TR & IF: 2.765)
2. N. Subha, M. Mahalakshmi, M. Myilsamy, B. Neppolian, and V. Murugesan, "The influence of n-type and p-type dopants on the interfacial charge transfer and the band structure of Bi₂MoO₆ to enhance solar H₂ production", *Journal of Photochemistry and Photobiology A: Chemistry*, 379, 150–158, (May-2019). (TR & IF: 2.891)
3. N. Priyadarshini, P. Ilaiyaraja, ""Adsorption of U(VI) and Th(IV) from simulated nuclear waste using PAMAM and DGA functionalized PAMAM dendron grafted styrene divinylbenzene chelating resins", *Chemical Papers*, 1-6, (June-2019). (TR & IF: 1.246).
4. A. Murugesan, and SwaminathanSivaram, "Understanding structure and composition of thermally rearranged polymers based on small molecule chemistry: A perspective", *Polymer International*, 219, 1649-1661(June-2019) (TR & IF: 2.433).
5. N. Subha, M. Mahalakshmi, S. Monika and B. Neppolian, "Ni(OH)₂-CuxO-TiO₂ nanocomposite for the enhanced H₂ production under solar light: The mechanistic pathway", *International Journal of Hydrogen Energy*, (June, 2019). (TR & IF: 4.084)

2018

1. A. Murugesan, M. Divakaran and P. Senthil kumar, "Enhanced Adsorption of Cu²⁺, Ni²⁺, Cd²⁺ and Zn²⁺ ions onto Physico-Chemically Modified Agricultural Waste: Kinetics, Isotherm and Thermodynamic Studies" *Desalination and Water Treatment*, 122 (Aug-2018) 176-191. (TR & IF: 1.631)
2. K.Surya, M.S.Michael, S.R.S. Prabaharan, A Review on Advancement in Non-Noble Metal based Oxides as Bifunctional Catalysts for Rechargeable Non-aqueous Li/air Battery Solid State Ionics, 317 (2018) 89-96
3. N. Subha, M. Mahalakshmi, M. Myilsamy, B. Neppolian, and V. Murugesan, "Direct Z-Scheme heterojunction nanocomposite for the enhance H₂ production", in *Applied Catalysis A: General*, Vol: 553, pp. 43-51, 2018.
4. N. Subha, M. Mahalakshmi, M. Myilsamy, N. Lakshmana Reddy, M.V. Shankar, B. Neppolian, and V. Murugesan, "Effective excitons separation on graphene supported ZrO₂/TiO₂ heterojunction for enhanced H₂ production under solar light", in *International Journal of Hydrogen Energy*, Vol: 43, pp. 3905-3919, 2018.

5. T. Arun Luiz," Cationic surfactant mediated room temperature synthesis and characterization of ZnO nanoparticles" in Inorganic and Nano-Metal Chemistry, Vol: 48, pp.81-84, 2018.
6. Kannan Ponnusamy, S. I. Davis Presley, Prakash Nagapillai, Eswaramoorthy Deivanayagam, A Novel Method for the Synthesis of Racemic Pregabalin, Baclofen and 3-Phenibut Involving Lossen Rearrangement, Indian Journal of Heterocyclic Chemistry, 28(2) (2018) 275-278.
7. K. Shree Kesavan, K. Surya, M.S. Michael, High powered hybrid supercapacitor with microporous activated carbon, Solid State Ionics, 321(2018)15-22.
8. Kannan Ponnusamy, S. I. Davis Presley, Prakash Nagapillai, Eswaramoorthy Deivanayagam, An efficient and improved process for the synthesis of itopride hydrochloride and tromethobenzamide hydrochloride, Current Organic Synthesis, 15 (2018) 572-575.

2017

1. Arun Luiz T., "Thermogravimetric, ^{31}P NMR and mass spectrometric studies of Cu(I) aminophosphine complexes", Rasayan J. Chem., 10(3), 990-996 (2017).
2. M. Myilsamy, M. Mahalakshmi, N. Subha and V.Murugesan, "MesoporousGa–TiO₂ Nanoparticles: Role of Oxygen Vacancies for the Enhanced Photocatalytic Degradation Under Visible Light", Journal of Nanoscience and Nanotechnology, (2017) Vol. 17, 1-11.
3. N. Subha, M. Mahalakshmi, M. Myilsamy, N. Lakshmana Reddy M.V Shankar, B. Neppolian and V.Murugesan, "Influence of synthesis conditions on the photocatalytic activity of mesoporous Ni doped SrTiO₃/TiO₂ heterostructure for H₂ production under solar light irradiation, Colloids and Surfaces A: Physicochemical and Engineering Aspects", (2017) Vol. 522, 193-206.

2016

1. V. Sangeetha Priya, K. Iyappan, V.S. Gayathri, S. William, L. Suguna, "Influence of pullulan hydrogel on sutureless wound healing in rats", Wound Medicine, 14, 2016, 1–5.
2. NM Suleimanov, SRS Prabaharan, SM Khantimerov, FA Nizamov, MS Michael, H Drulis, P Wisniewski," Magnetic order and electronic properties of Li₂Mn₂ (MoO₄)₃ material for lithium-ion batteries: ESR and magnetic susceptibility studies, Applied Physics A vol.122 (8), 2016, 754.
3. M. S. Michael, Ajit R. Kulkarni, S. R. S. Prabaharan, "Design of Monolayer Porous Carbon-Embedded Hybrid-LiMnPO₄ for High Energy Density Li-Ion Capacitors", *J. Nanosci. Nanotechnol.* 16, 7314-7324 (2016).
4. Mallanaicker Myilsamy, Mani Mahalakshmi, Nallasivam Subha, Ariyamuthu Rajabhuwaneswari b and Velayutham Murugesan, "Visible light responsive mesoporous

graphene–Eu₂O₃/TiO₂ nanocomposites for the efficient photocatalytic degradation of 4-chlorophenol” RSC Adv., 6, 2016, 35024.

5. Davis Presley and Bhuvaneswara Gurunathan,”Synthesis of 2E-Dehydropropafenone Hydrochloride”, Rasayan Journal of Chemistry, Vol 9, 177-179, 2016.

2015

1. K. Lakshmi , K.Yamuna, and V.S.Gayathri, “Evaluation of Common Herbs for Treating Soak Liquor of Tannery”, Applied Mechanics and Materials, Vol. 787, 2015, pp. 167-171.
2. M. S.Michael, Ajit R. Kulkarni and S.R. S.Prabaharan,” Design of Monolayer Porous Carbon-embedded Hybrid-LiMnPO₄ for High Energy Density Li-Ion capacitors, *Journal of nanoscience and nanotechnology*, vol. 15, 2015, pp.1-16.
3. S.R.S.Prabaharan, R.Anslin Star, Ajit R. Kulkarni and M. S. Michael,” Nano-composite LiMnPO₄ as new insertion electrode for electrochemical supercapacitors”, *Current Applied Physics*, vol.15, 2015, 1624-1633.
4. M.Myilsamy, V.Murugesan, and M.Mahalakshmi, “The effect of Synthesis Conditions on Mesoporous Structure and the photocatalytic Activity of TiO₂ nanoparticles”, *Journal of Nanoscience and Nanotechnology*, vol.15, 2015, pp.4664- 4675.
5. M. Myilsamy V. Murugesan and M. Mahalakshmi, “Indium and cerium co-doped mesoporous TiO₂ nanocomposites with enhanced visible light photocatalytic activity”, *Applied Catalysis A: General*, vol.492, 2015, 212-222.
6. M. Myilsamy, V. Murugesan, and M. Mahalakshmi,” Enhanced photocatalytic activity of nitrogen and indium co-doped mesoporous TiO₂nanocomposites for the degradation of 2,4-dinitrophenol under visible light, *Applied Surface Science*, vol.342, 2015, pp.1-10.
7. T. Arun Luiz “³¹P NMR Spectroscopic studies of Copper (I) aminophosphine complexes”, *Rasayan J. Chem*, Vol. 8, No.1, 2015, 13-17.
8. V. Sangeetha Priya, K. Iyappan, V.S. Gayathri, S. William, L. Suguna, “Influence of pullulan hydrogel on sutureless wound healing in rats”, *Wound Medicine*, 14, 2016, 1–5.

BOOK PUBLICATIONS

2019

1. Arun Luiz T, Mayank M Dalal, “Environmental Science”, S Chand and Company Ltd, (ISBN : 978-93-5283-589-8), First Edition, India, 2019.
2. Sunita Nair and Arun Luiz T, “Environmental Science”, (SSN College of Engineering (Autonomous) Regulations-2018), Dhanam Publications, (ISBN:978-81-89843-137) First Edition, India, 2019.
3. V.S.Gayathri, Sunita Nair and T. Arunluiz, “Engineering Chemistry” (Regulations-2017), Dhanam Publications, (ISBN978-81-89843-76-2) Fifth Edition, India, 2019.

2018

1. V.S.Gayathri, Sunita Nair and T. Arunluiz, “Engineering Chemistry” (Regulations-2017), Dhanam Publications, (ISBN978-81-89843-76-2) Fourth Edition, India, 2018.
2. V.S.Gayathri authored - Unit 12 :Organic reactions and their Mechanism in the TN state board Class XI –Chemistry Book.
3. Priyadarshini N., Rakesh K.B., Ilaiyaraja P. (2018) Actinide Speciation in Environment and Their Separation Using Functionalized Nanomaterials and Nanocomposites. In: Hussain C. (eds) Handbook of Environmental Materials Management. Springer, Cham.

2017

1. V.S.Gayathri, Sunita Nair and T. Arunluiz, “Engineering Chemistry” (Regulations-2017), Dhanam Publications, (ISBN978-81-89843-76-2) India, 2017.

2015

1. V.S.Gayathri, Sunita Nair and K.Yamuna, “Engineering Chemistry I” ,Dhanam Publications , (ISBN978-81-89843-76-2) India, 2015.
2. V.S.Gayathri, Sunita Nair and K.Yamuna, “Engineering Chemistry II “,Dhanam Publications , (ISBN978-81-89843-69-4) India, 2015.
3. Arun Luiz T, “Environmental Science and Engineering”,S.Chand Publications, (ISBN978-93-856-7603-1), India, 2015.
4. Dr. Arun Luiz T, “Engineering Chemistry II”, S.Chand Publications, (ISBN: 978-938-48-5725-7) India, 2015.