

PUBLICATIONS 2023

JANUARY

1. Gomathi Sivakumar, Anashwara Babu, Anubhab Das, Deepti Bharti, Deblu Sahu, Anupam Pal, Shiv Patel, Biswaranjan Mohanty,, Kunal Pal and **Samarendra Maji**, Structuring of Wheat Germ Oil into Oleogels Using Rose Floral Wax via Entanglement of Needle-Like Crystal Networks: Preparation, Characterizations, and Application, *Crystal Growth & Design*, 23 (2) 769 –781, 2023 (IF:4.01)
2. S. Marimuthu, A. Shankar and **G. Maduraiveeran**, FeCoP nanosheets on NiO nanoparticles as electrocatalysts: tuning and stabilizing active sites for water splitting *Chemical Communications*, DOI <https://doi.org/10.1039/D2CC06386G>, 2023 (IF: 6.01)
3. T. K. S. Fayaz, Vasanthi Palanisamy, **Palash Sanphui**, Multicomponent solid forms of antibiotic cephalexin towards improved chemical stability, *CrystEngComm*, DOI:10.1039/d2ce01283a 2023 (IF:3.75)
4. S. Marimuthu, A. Shankar and **G. Maduraiveeran**, Porous-Structured Three-Dimensional Iron Phosphides Nanosheets for Enhanced Oxygen Evolution Reaction Energies, 16(3) 1124 <https://doi.org/10.3390/en16031124>, 2023 (IF:3.25)
5. Sanmugapriya Ravi , Silda Peters, Elumalai Varathan , Monisha Ravi , **Arockia Selvi J *** Molecular interaction and corrosion inhibition of benzophenone and its derivative on mild steel in 1 N HCl: Electrochemical, DFT and MD simulation studies, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, Volume 661 (20), 130919, 2023 (IF: 5.518)
6. Magesh Kumar Muthukumar, Muthukumar Govindaraj, Bharathi Kannan Raja and **Arockia Selvi J**, In situ synthesis of polythiophene encapsulated 2D hexagonal boron nitride nanocomposite based electrochemical transducer for detection of 5-fluorouracil with high selectivity, *RSC Advances*, <https://doi.org/10.1039/D2RA07147A>, 2023 (IF:4.036)
7. Deepak Manoharan, Megha S. N., Mangalampalli S. R. N. Kiran, **Soumyajit Ghosh** Designing the Mechanical Plasticity of Benzylidene Indanones Based Molecular Crystals by Crystal Engineering, *Crystal Growth and Design*, 23(2) 657–661, 2023 (IF: 4.01)
8. Muthukumar Govindaraj, Jerome Rajendran, Udhaya Ganesh P K, Magesh Kumar Muthukumar, and **Arockia Selvi J**, Graphitic Carbon Nitride Nanosheets Decorated with Strontium Tungstate Nanospheres as an Electrochemical Transducer for Sulfamethazine Sensing, *ACS Applied Nanomaterials*, 6 (2) 930–945, 2023 (IF: 6.14)

9. Arunjegan Amalraj and **Panneerselvam Perumal**, A dual-color fluorescent biosensing platform based on amine functionalized 3D copper Prussian blue nanocubes and exonuclease I activity for simultaneous detection of kanamycin and streptomycin, *New Journal of Chemistry*, DOI <https://doi.org/10.1039/D2NJ06360C>, 2023 (IF:3.925)
10. Chitiphon Chuaicham, Intan Nurul Rizki, **Karthikeyan Sekar** ,Sulakshana Shenoy, Assadawoot Srihaow, Jirawat Trakulmututa, Keiko Sasaki, Bio-reduced Ag nanoparticle decorated on ZnO for enhancement of photocatalytic reduction of hexavalent chromium and photocatalytic degradation of rhodamine B, *Journal of Alloys and Compounds*, 2023 (IF:6.371), <http://dx.doi.org/10.2139/ssrn.4280823>
11. Balamurugan Selvaraj, **Ganesan Shanmugam**, Santhosh Kamaraj, Vinod Mathew, Jaekook Kim, A versatile iron [1-(naphthalen-2-ylmethyl)-2-(pyridin-2-yl)-1H-benzo[d]imidazole]3 metal complex redox active material for energy conversion and storage systems, *New Journal of Chemistry* <https://doi.org/10.1039/D2NJ06016G>, 2023(IF: 3.925)
12. **Karthikeyan Sekar**, Sathya Mohan , Recent Clay-Based Photocatalysts for Wastewater Treatment Separations, <http://dx.doi.org/10.2139/ssrn.4280823>, 2023 (IF:3.344)
13. S Silambarasan, **T Maiyalagan**, Nitrogen-doped porous carbon coated on MnCo2O4 nanospheres as electrode materials for high-performance asymmetric supercapacitors *Materials Today Chemistry*, Volume 27, 101350, 2023 (IF: 7.6)
14. Silda Peters,**E. Varathan**, Renjith S. Pillai, Investigation of Guest-Induced Flexibility in Pyrazine Derivative of ALFFIVE MOF via Molecular Simulation *Langmuir*, 39, 4, 1373–1385, 2023 (IF:4.331)
15. R. Ganesan, S. P. Vinodhini, **R. Arulmozhi** & R. Muralidharan, Influence of halogen substitution in double perovskite $\text{Rb}_2\text{Sn}(\text{Br}_{0.75}\text{I}_{0.25})_6$ on the photocatalytic degradation of methylene blue dye under visible light irradiation, *Journal of Materials Science: Materials in Electronics*, 34 (151), <https://doi.org/10.1007/s10854-022-09533-7>, 2023(IF:2.779)
16. **Anjan Bedi**, Gal Schwartz, Uri Hananel,^b Amit Manor Armon,^a Israa Shioukhi,^a Gil Markovich and Ori Gidron, The effect of axial and helical chirality on circularly polarized luminescence: lessons learned from tethered twistacenes, *Chemical Communications*, DOI <https://doi.org/10.1039/D2CC07074J>, Issue 14, 2023 (IF:6.065)
17. Elaiyaperumal Vijayakumar , **A. John Bosco**, Dahlia flower like “layered $\text{E}^{\cdot-}\text{-MnO}_2/\text{B@g-C}_3\text{N}_4$ nanocomposite for visible Light “Induced photocatalytic removal of tetracycline *Optical Materials*, 2023(IF: 3.754)
18. Rahul Sakla , Amrita Ghosh , Vinod Kumar, Kanika , **Priyadip Das** , Pawan K Sharma , Rehan Khan , D Amilan Jose, Light activated simultaneous release and recognition of biological

signaling molecule carbon monoxide (CO) Methods 2023 DOI: 10.1016/j.ymeth.2023.01.003 , 2023 (IF:4.647)

19. Naresh Bhuma , Karam Chand , Måns Andréasson , James Mason, **Rabindra Nath Das** , Ankit Kumar Patel , Daniel Öhlund , Erik Chorell ,The effect of side chain variations on quinazoline-pyrimidine G-quadruplex DNA ligands, European Journal of Medicinal Chemistry, DOI: 10.1016/j.ejmech.2023.115103 2023 (IF: 7.1)
20. Pavithra Dhandapani, Prasant Kumar Nayak, **Arthanareewari Maruthapillai**, Improved electrochemical performance and charge storage Mechanism of NiMnCoO₄ by XPS study Materials Chemistry and Physics,2023 (IF:4.778)
21. DasameswaraRao Kavitapu , Nagadeep, Jaishetty , **Arthanareeswari Maruthapillai** , J N S R C Murty , Identification of Two Novel Hydroperoxide Impurities in Fluocinolone Acetonide Topical Solution by Liquid Chromatography Mass Spectrometry Journal of Chromatographic Science, 2023, DOI: 10.1093/chromsci/bmad003, 2023(IF:1.618)
22. Parthasarathy Sasikala, Thirugnanam Bavani, Manickam Selvaraj, Mani Preeyanghaa, **Bernaurdshaw Neppolian**, Sepperumal Murugesan & Jagannathan Madhava, A Z-scheme BiYO₃/g-C₃N₄ heterojunction photocatalyst for the degradation of organic pollutants under visible light irradiation,Environmental Science and Pollution Research, 2023 (IF: 5.19) <https://doi.org/10.21203/rs.3.rs-1970368/v1>
23. M.D. Dhileepan, Sandeep Kumar Lakhera, **Bernaurdshaw Neppolian**, Interface engineering of 0D-1D Cu₂NiSnS₄/TiO₂ (B) p–n heterojunction nanowires for efficient photocatalytic hydrogen evolution, Catalysis Today, DOI:10.1016/j.cattod.2023.01.013, 2023 (IF:6.562)
24. Sandeep Kumar Lakhera, Rugma T.P.,Rishi Krishna B.S., Navid Rabiee,**Neppolian Bernaurdshaw**, Pivotal role of oxygen during the synthesis of Cu (OH) 2/TiO₂ and its effect on photocatalytic hydrogen production activity, Catalysis Today, 2023(IF: 6.56)

FEBRUARY

25. Soumita Samajdar,Susmita Bera, Pradip Sekhar Das, Harry Finch,Vinod R. Dhanak, Saswata Chakraborty,**T. Maiyalagan**, K. Annapurna, Srabanti Ghosh, Exploration of 1D-2D LaFeO₃/RGO S-scheme heterojunction for photocatalytic water splitting,International Journal of Hydrogen Energy, <https://doi.org/10.1016/j.ijhydene.2023.01.271> 2023 (IF:7.1)
26. Ramya Ravichandran, Kumaresan Annamalai, Arun Annamalai, **Sundaravadivel Elumalai**, Solid state “Green construction of starch- beaded Fe₃O₄@Ag nanocomposite as superior redox catalyst, Colloids and Surfaces A: Physicochemical and Engineering Aspects, 664, 131117, 2023 (IF:5.518)

27. K. Saravanan, **B. Natarajan**, N. Nallamuthu, Muhammad Sadiq and Ganesh Munusamy Ramanujam, Evaluation of Nanomedicine Applications of Silver and Zinc Oxide Nanoparticles Using Water Extract of Fresh Turmeric, ECS Journal of Solid State Science and Technology, 12 (2), 1003 2023 (IF:2.07)
28. Marimuthu Priyadarshini,a Swaminathan Shanmugan, Chang Woo Lee and **Kumaran Vediappan**, Mo10V2@ MIL-101: Pseudo-capacitive and Redox-active Efficient Anode Material for High-rate Lithium Cluster Batteries, New Journal of Chemistry, 2023, 47, 5498-5509, 2023(IF:3.925)
29. Yang Gao, Abigail Jennifer G, **Elumalai Varathan** and Georg Schreckenbach, Understanding the Coordination Chemistry of AmIII/CmIII in the DOTA Cavity: Insights from Energetics and Electronic Structure Theory, Inorganic Chemistry, 2023, 62, 7, 3229–3237, 2023, (IF:5.436)
30. Jesni M. Jacob, Abigail Jennifer G, **Elumalai Varathan**, Mahesh Kumar Ravva, Improving the TADF in Corannulene-Based Emitters via Tuning the Strength of Donor and Acceptor Groups, Advanced Theory and Simulations, 2023 (IF: 4.015) <https://doi.org/10.1002/adts.202200850>
31. Mohanraj Kandhasamy, **Ganesan Shanmugam**, Santhosh Kamaraj, Balamurugan Selvaraj, Ahalya Gunasekaran, Anandan Sambandam, Effect of D-limonene additive in copper redox-based quasi-solid-state electrolytes on the performance of dye-sensitized solar cells, Materials Today Communications, 2023, Volume 35, 105505, 2023 (IF:3.7)
32. Prabir Kumar Gharai , Juhee Khan, Rathnam Mallesh Shubham Garg , **Abhijit Saha** , Subhajit Ghosh , Surajit Ghosh, Vanillin Benzothiazole Derivative Reduces Cellular Reactive Oxygen Species and Detects Amyloid Fibrillar Aggregates in Alzheimer’s Disease Brain ACS Chemical Neuroscience, 2023, 14(4), 773-786,2023(IF:5.78)
33. G. Naga Koti Reddy, A. Venkata sekhar, L. Pavic, A. Bafti, Jana Pisk, A. Siva Sesha Reddy, **N. Venkatramaiah**, G. Naga Raju, V. Ravi kumar, N. Veeraiah, The influence of Au2O3 on insulating character of ZnO–P2O5–SeO2 glass system: investigation by means of dielectric studies, Applied Physics A, 2023, 129, 208,2023 (IF:2.983)
34. Theerthagiri Senthil, Peethambaram Prabukanthan, **Deivanayagam Paradesi**, Kannaiyan Dinakaran, TiO2 nanoparticle enhanced high temperature proton conductivity in hyperbranched sulfonated polyarylene aliphatic ketones for proton exchange membrane fuel cell applications Journal of Applied Polymer Science, 2023, Volume140, Issue15, e53737,2023 (IF:3.125)
35. AjithKumar Arumugam, Pushbaraj Palani, Mageshwari Anandan, Venkatramaiah Nutalapati and **Gopal Chandru Senadi**, Metal-Free, Photoredox-Catalyzed Synthesis of Quinazolin-4(3H)-ones and Benzo[4,5]imidazo[1,2-c]quinazolines Using Trialkylamines as Alkyl Synthons, European Journal of Organic Chemistry, 2023, <https://doi.org/10.1002/ejoc.202300100> 2023 (IF: 3.261)

36. Tamizharasan Selvakumar, Muralidharan Rajaram, Abirami Natarajan, Leelavathi Harikrishna, Sankeetha Sasikumar, Kumarasamy Alwar & **Arulmozhi Rajaram**, Visible light-assisted photocatalytic degradation of organic contaminants using nitrogen-doped graphene quantum dots@ MnCo₂O₄ nanocomposite, Journal of Materials Science: Materials in Electronics, 2023, 34, 417, 2023 (IF:2.779)
37. Chezhiyan Sumithaa , **Mani Ganeshpandian**, Half-Sandwich Ruthenium Arene Complexes Bearing Clinically Approved Drugs as Ligands: The Importance of Metal-Drug Synergism in Metallo-drug Design, ACS Molecular Pharmaceutics, 2023, 6;20(3), 1453-1479, 2023 (IF:5.364)
38. Mariyammal Narayanan, Narendra Pal Singh **Panneerselvam Perumal**, A highly efficient metal oxide incorporated metal organic framework [Nd₂O₃-MIL(Fe)-88A] for the electrochemical detection of dichlorvos, RSC Advances, 2023, 13(8), 5565-5575, 2023 (IF:4.036)
39. **Srinivasarao Kancharla**, Keiko Sasaki, Selective extraction of precious metals from simulated automotive catalyst waste and their conversion to carbon supported Pd Pt nanoparticle catalyst Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, Volume 665, 131179 2023 (IF: 5.518)
40. B Haridevamuthu , Boopathi Seenivasan , P Snega Priya , Subramani Muthuraman , Rajendran Saravana Kumar , K Manikandan , Bader O Almutairi Mikhliid H Almutairi , Selvaraj Arokiyaraj , **Pushparathinam Gopinath** , Jesu Arockiaraj , Hepatoprotective effect of dihydroxy piperlongumine in high cholesterol-induced non-alcoholic fatty liver disease zebrafish via antioxidant activity, European Journal of Pharmacology, 2023, 22;945, 175605, 2023 (IF:5.19)
41. B. Haridevamuthu, Tamilvelan Manjunathan, , Carlton Ranjith Wilson Alphonse, Rajendran Saravana Kumar, Sundaram Thanigaivel, Somasundaram Chandra Kishore, Vickram Sundaram, **Pushparathinam Gopinath** , Jesu Arockiaraj, and Stefano Bellucci, Functionalized sulfur containing heterocyclic analogs induce sub-G1 arrest and apoptotic cell death to laryngeal carcinoma in vitro Molecules, 28(4) 1856, 2023 (IF:4.92)
42. Sai Saravanan, Anashwara Babu, Ronald Merckx, Zifu Zhong, Mageshwari Anandan, Venkatramaiah Nutalaptai, Bruno De Geest, Richard Hoogenboom, Valentin Victor Jerca and **Samarendra Maji**, Design of fluorescent polymeric thermometers based on anthrapyrazolone functionalized oligo (ethylene glycol) methacrylates, Materials Chemistry Frontiers, <https://doi.org/10.1039/D3QM00019B>, 2023 (IF:8.68)
43. Stesho Crystalin Lazuli A. R. Ranjit Thapa, **Neppolian B**, Photon driven nitrogen fixation via Ni-incorporated ZrO₂/Bi₂O₃: pn heterojunction, Catalysis Today, 114034, 2023 (IF: 6.56)

44. Jithin Rafi, Aswathy Rajan, **B. Neppolian**, Enhanced electrocatalytic performance of Aluminium Metal-organic framework towards the detection of broad-spectrum, chloramphenicol antibiotic *Electrochimica Acta*, Volume 446, 142079, 2023 (IF: 7.3)
45. Aswathy Rajan, **Bernaurdshaw Neppolian**, Masakazu Anpo, Visible Light-responsive TiO₂ Thin-film Photocatalysts for the Separate Evolution of H₂ and O₂ from Water, Wiley Online Library, <https://doi.org/10.1002/9783527837991.ch10>, 2023
46. Viswanathan Vinitha, Mani Preeyanghaa, Murugan Anbarasu, **Bernaurdshaw Neppolian**, Vajiravelu Sivamurugan Chemical Recycling of PET Polyester Textile Wastes Using Ag-Doped ZnO Nanoparticles: An Economical Solution for Circular Economy, Research Square, <https://doi.org/10.21203/rs.3.rs-2481237/v1>, 2023

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47. **Mihir Ghosh**, Ramprasad Misra, Sudeshna Bhattacharya, Koushik Majhi, Kwang-Hwan Jung, and Mordechai Sheves, Retinalâ€“Carotenoid Interactions in a Sodium-Ion-Pumping Rhodopsin: Implications on Oligomerization and Thermal Stability, *Journal of Physical Chemistry B*, 127(10): 2128–2137. 2023 (IF: 3.466)
48. Pratiksha P. Gawas, Arbacheena Bora, Rence P. Reji, Buthanapalli Ramakrishna, Praveen B. Managutti, Christian, R. Gob, Sharmarke Mohamed, Yoshiyuki Kawazoe, Surya Velappa Jayaraman, Yuvaraj Sivalingam and **Venkatramaiah Nutalapati**, Substituent Effect on Stimuli-Responsive Donorâ€“Acceptor Framework-Based 2-Thiohydantoins for Monitoring Nonanal Vapors, *Journal of Physical Chemistry C*, 2023 (IF:4.117)
49. Pandi Muthukumar, Periyappan Nantheeswaran, **Mariappan Mariappan**, Mehboobali Pannipara, Abdullah G. Al-Sehemicd and Savarimuthu Philip Anthony, Enhancing the oxygen evolution reaction of cobalt hydroxide by fabricating nanocomposites with fluorine-doped graphene oxide, *Dalton Transactions*, 52, 3877-3883, 2023 (IF:4.6)
50. Vundru Suryanarayana, Venkata Sekhar Ayyagari, Arijeta Bafti, L. Pavic, A. Siva Sesha Reddy, Naga Koti Reddy, **N. Venkaytamaiah**, V. Ravi Kumar, Nalluri Veeraiah, Dynamical behavior of Ag ions on structural and dielectric features of As₂O₃ glass ceramics containing chalcogenide oxides, *Journal of Non-Crystalline solids*, 2023, DOI: 10.1016/j.jnoncrysol.2023.122299, 2023(IF:4.458)
51. Raman Rajagopalan, Shyam Shankar S, **Natarajan Balasubramaniyan**, Ganesh D. Sharma, Simple and Efficient Acceptorâ€“Donorâ€“Acceptor-Type Non-fullerene Acceptors for a BODIPYâ€“Thiophene-Backboned Polymer Donor for High-Performance Indoor Photovoltaics. *ACS Applied Materials and Interfaces*, 15 13405-13414, 2023 (IF: 10.38)
52. Pilli Pavani Koteswari Devi, Ayyagari Venkata Sekhar , Valluri Ravi Kumar , Gnanamuthu Sahaya Baskaran, **Nutalapati Venkatramaiah**, Vandana Ravi

- Kumar, Nalluri Veeraiah Amplification of blue emission of Tm^{3+} ions in $Li_2O-HfO_2-SiO_2$ glass system by means of Au^0 metallic particles, *Luminiscence*, DOI: 10.1002/bio.4468, 2023 (IF:2.464)
53. Janani Karuppaiyan, **R. Jeyalakshmi**, S. Kiruthika, Mohammad Ahmad Wadaan, Muhammad Farooq Khan, Woog Kim, A study on the role of surface functional groups of metakaolin in the removal of methylene blue: Characterization, kinetics, modeling and RSM optimization, *Environmental Research*, 2023, Volume 226, 115604, 2023 (IF:8.431)
 54. Shilpi Sengupta, **Manab Kundu**, rGO-Wrapped Hexagonal WO_3 Nanorod as Advanced Electrode Material for Asymmetric, Electrochemical Supercapacitors, *Energy Technology*, <https://doi.org/10.1002/ente.202300078>, 2023 (IF:4.1)
 55. Preeyanghaa Mani, Chitiphon Chuaicham, Sulakshana Shenoy, Bernaurdshaw Neppolian, K. Sasaki and **Karthikeyan Sekar**, All-alike hollow nanotubes of g-C $_3$ N $_4$ Converting Photons into Fuel by Splitting Water, *Chemical Communications*, 2023 DOI <https://doi.org/10.1039/D3CC01028G>, 2023 (IF:6.065)
 56. Mani Preeyanghaa, Chitiphon Chuaicham, Sulakshana Shenoy, Balakumar Vellaichamy, Wei Li, Kamaraj Manokaran, Elumalai Varathan, Bernaurdshaw Neppolian, Bunsho Ohtani, Keiko Sasaki and **Karthikeyan Sekar**, Unveiling the influence of Fe_2O_3 nanoparticles on $CuxO-TiO_2(B)$ nanofiber for dual Z-scheme electron transfer visible light photocatalysts: investigation on local atomic structures and electronic properties, *Environmental Science: Nano* DOI <https://doi.org/10.1039/D3EN00038A>, 2023 (IF:9.473)
 57. Chitiphon Chuaicham, Yuto Noguchi, Sulakshana Shenoy Kaiqian Shu, Jirawat Trakulmututa, Assadawoot Sriksaow **Karthikeyan Sekar**, and Keiko Sasaki, Simultaneous photocatalytic sugar conversion and hydrogen production using Pd nanoparticles decorated on iron-doped hydroxyapatite, *Catalysts*, 2023,13(4),675, 2023 (IF:4.5)
 58. Ganghao Liang, **Tumpa Sadhukhan**, Samya Banerjee, Dongsheng Tang, Hanchen Zhang, Minhui Cui, Nicolás Montesdeoca, Johannes Karges, Haihua Xiao Reduction of Platinum(IV) Prodrug Hemoglobin Nanoparticles with Deeply-Penetrating Ultrasound Radiation for Tumor-Targeted Therapeutically Enhanced Anticancer Therapy, *Angewandte Chemie International Edition* <https://doi.org/10.1002/anie.202301074> 2023 (IF:16.823)
 59. Fayaz T.K.S., Parag Roy, Animesh Ghosh. Shubham Som, Deepak Chopra, **Palash Sanphui**, Polymorph Screening of the Antitumor Drug Ripretinibâ€™ Selective Preference of Dimer Synthons, Crystal Growth and Design, DOI: 10.1021/acs.cgd.2c01421, 2023 (IF:4.01)

60. Lakshmanan Kumaresan, Desai Prashant Hanamantrao, Sajan Raj S L, Dr. Senthil Chenrayan, Dr. Baskaran Rangasamy, **Kumaran VEDIAPPAN**, Spherically Structured Ce-Metal-Organic Frameworks with Rough Surfaces and Carbon-Coated Cerium Oxide as Potential Electrodes for Lithium Storage and Supercapacitors, Chemistry Select <https://doi.org/10.1002/slct.202204759>, 2023 (IF:2.307)

61. **M.Sivakami**, Lakshmi Prabha Chandrasekar, Bharani Dharan Sethuraman, Manikandan Subramani, Green synthesised ZnO nanoparticles from *Plectranthus amboinicus* plant extract: removal of Safranin- O and Malachite green dyes & antibacterial activity, International Journal of Environmental Analytical Chemistry, <https://doi.org/10.1080/03067319.2023.2190458> 2023 (IF: 2.731)

62. Thomas, S. Kamalakannan, A. Cheriyan **M. Prakash**, theoretical Studies on the Role of Water in Ionic Liquids at ZIF (IL@ZIF) Complex and its Effect on Selective CO₂ Separation, Mat. Today Sustainability, Volume 22,100376, 2023 (IF:7.244)

63. Sruthy Subash, S. Udhayakumar, Lakshmanan Kumaresan, L.N. Patro, **V. Kumaran**, E. Senthil Kumar, M. Navaneethan, Do Kyung Kim, K. Kamala Bharathi, Ordered LiFe₅O₈ Thin Films Prepared By Pulsed Laser Deposition as an Anode Material for All-Solid Thin Film Batteries, Electrochimica Acta, <https://doi.org/10.1016/j.electacta.2023.142318> 142318, 2023 (IF: 7.336)

64. Kumaresan Annamalai , Arun Annamalai , Ramya Ravichandran , **Sundaravadivel Elumalai**, Recyclable waste Dry-cell batteries derived carbon dots (CDs) for detection of Two-fold metal ions and degradation of BTB dye, Waste Management,DOI: 10.1016/j.wasman.2023.03.032 2023 (IF:8.816)

65. Akhtaruzzaman, Samim Khan, Basudeb Dutta, Tamil Selvan Kannan, **Goutam Kumar KOLE**, Mohammad Hedayetullah Mir Cococrystals for photochemical solid-state reactions: An account on crystal engineering perspective, Coordination Chemistry Reviews, Volume 483, 215095, 2023, (IF:24.83)

66. B. Haridevamuthu, David Raj, D. Kesavan, Subramani Muthuraman, Rajendran Saravana Kumar, Shahid Mahboob, Khalid Abdullah Al-Ghanim, Bader O. Almutairi,Selvaraj Arokiyaraj,**Pushparathinam Gopinath**, Jesu Arockiaraj, Trihydroxy piperlongumine protects aluminium induced neurotoxicity in zebrafish:Behavioral and biochemical approach, Comp. Biochem. Physiol. Part “ C,Volume 268, 109600, 2023 (IF:4.52)

67. Aarthi Narayanan, Muthuraj Marimuthu, Archana Mani, Gopal Vasu, Dr. **Rajeswari Subhadra**, studies on the antimicrobial activity of *ormocarpum cochinchinense* leaf extract/pva-pvp blended polymer, Chemistry select, 2023(IF:2.307) <https://doi.org/10.1002/slct.202203512>

68. Pushparaj Loganathan, Renjith S. Pillai, Abigail G. Jennifer, E. Varathan, M. Kesavan and **Swaminathan Shanmugan**, A Site-isolated Lewis Acidic Aluminum and Brønsted Basic Amine Sites in Dimeric Silsesquioxane Cage as a Reusable Homogeneous Bifunctional Catalyst for One-pot Tandem, Deacetalization/Deketalization-Knoevenagel Condensation Reactions, New Journal of Chemistry, <https://doi.org/10.1039/D3NJ00276D> 2023 (IF:3.925)
69. Chu Qin, Shijun Tian, Zhong-Jie Jiang, **Maiyalagan Thandavarayan**, Zhongqing Jiang, Low temperature plasma-assisted synthesis and modification of water splitting electrocatalysts, *Electrochimica Acta*, Volume 449142179, 2023 (IF:7.336)
70. Praveen Thangamuthu, **Paradesi Deivanayagam**, High performance bismuth oxide embedded sulfonated poly ether sulfone composite membranes for fuel cell applications, *Journal of Macromolecular Science Part A Pure and Applied Chemistry*, Volume 60, 2023 - Issue 3, 2023 (IF:2.216)
71. Nitesh Govind Joshi **Sivachandiran Loganathan**, In Situ Modification of CuO@Fe₂O₃ by Nonthermal Plasma: Insights into the CO₂-to-CH₃OH Hydrogenation Reaction, *ACS Omega*, 2023 (IF:4.132)
72. Houda Dhibi, Monia Guiza, Abdelkrim Bouzaz Aymen Amin Assadia, Abdelmottaleb Ouederni, Lina Lamaa, Laure Péruchon, Cédric Brochier, Abdeltif Amrane, **Sivachandiran Loganathan**, Sami Rtimi, Photocatalytic degradation of paracetamol mediating luminous textile: Intensification of the chemical oxidation, *Journal of Water Process Engineering*, 2023, Volume 53, 103648, 2023 (IF:7.340)
73. Kala Krishnan, Sanjeev Gupta, Venu Bhat, P. Selvam, T. **Pushpa Malini**, TiO₂ (P25) nanoparticles catalyzed C-alkylation and quinoline synthesis via borrowing hydrogen method, *New Journal of Chemistry*, DOI: 10.1039/d3nj00460k, 2023 (IF:3.925)
74. Senthil Theerthagiri, Srinivasan Krishnan, **Paradesi Deivanayagam**, Chandran Muthiah, Dinakaran Kannaiyan, TiO₂@graphene dispersed sulfonated polyphenylenesulfide sulfone nanocomposites for medium temperature PEMFCs, *Polymers for Advanced Technologies*, <https://doi.org/10.1002/pat.6047>, 2023 (IF:3.348)
75. V. Vinitha, M. Anbarasu, P. Priya, M. Preeyanghaa, **B. Neppolian**, Lavanya Prathap, K. Meenakshi Sundaram, V. Sivamurugan. Depolymerization of PET wastes catalysed by Sn and Ag doped ZnO nanoparticles and evaluation of Embryonic Toxicity using Zebra, *Research Square*, DOI: <https://doi.org/10.21203/rs.3.rs-2626685/v1>, 2023.

76. Selvam Naveenkumar, Chinnaperumal Kamaraj Chinnasamy Ragavendran Mariyappan Vaithiyalingam Vimal Sugumar Kasi Marimuthu-Gracilaria corticata red seaweed mediate biosynthesis of silver nanoparticles: larvicidal, neurotoxicity, molecular docking analysis, and ecofriendly approach-Biomass Conversion and Biorefinery- -2023- -<https://doi.org/10.1007/s13399-023-04026-x>-4.05-13.3.20238

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77. **Maduraiveeran G**, Palanisamy Kannan Carbon, Nanocomposites-Based Electrochemical Sensors and Biosensors for Biomedical Diagnostics, Current Medicinal Chemistry, DOI: 10.2174/0929867330666230425163520, 2023 (IF: 4.74)
78. Sulakshana Shenoy, Mohsen M. Farahat, Chitiphon Chuaicham, **Karthikeyan Sekar**, Boopathy Ramasamy and Keiko Sasaki , Mixed-Phase Fe₂O₃ Derived from Natural Hematite Ores/C₃N₄ Z-Scheme Photocatalyst for Ofloxacin Removal Catalysts, 2023 13(5) 792 (IF: 4.5)
79. Sohrab Nasiri, Prasanth Palanisamy, Marzieh Rabiei, Mozghan Hosseinnazhad, Arvydas Palevicius, Andrius Vilkauskas, Giedrius Janusas, **Venkatramaiah Nutalapati** Investigation of the influence of persulfurated benzene derivatives on optical and carrier mobility properties, Materials letters, Volume 342, 134323, 2023 (IF:3.574)
80. H. Leelavathi, R. Muralidharan, N. Abiramia and **R. Arulmozhi** Development of Z-scheme bimetallic tungstate-supported nitrogen deficient g-C₃N₄ heterojunction for the treatment of refractory pharmaceutical pollutants, New Journal of Chemistry, 2023 47,7774-7789, 2023 (IF: 3.925)
81. Arun Annamalai, Kumaresan Annamalai, Ramya Ravichandran, A.K. Anilkumar, Ganesh M R, **Sundaravadivel Elumalai** Simple synthesis of water-soluble ruthenium carry CDs as admirable probe for improved environment and biological applications Materials Today Chemistry, Volume 30, 101536, 2023 (IF:7.613)
82. **Tumpa Sadhukhan** Chemomechanical modification of quantum emission in monolayer WSe₂, Nature Communications, 14, 2193, 2023 (IF:17.694)
83. Subramaniam Sivagnanam, Prasenjit Mahato and **Priyadip Das**, An Overview on the Development of Different Optical Sensing Platforms for Adenosine Triphosphate (ATP) recognition Organic and Biomolecular Chemistry, 2023, (IF: 3.89)
<https://doi.org/10.1039/D3OB00209H>
84. Kayalvizhi Rajagopal , Pavithra Suresh , Arulmozhi Rajaram , **Abirami Natarajan**, A novel Co-precipitation assisted Li 1.05 Ni 0.5 Mn 1.40 Ce 0.10 O₄ spinel as an eloquent electrocatalyst for methanol oxidation, Chemical Physics Letters, Volume 823, 140518, 2023 (IF:2.719)

85. Divya Arulraj, **Tapan Kumar Mistri**, Insight into the recent progress of Ag/Au-based nanomaterials-synthesis, characterizing tools and bio-applications, European Chemical Bulletin, 2(4), 1629-1654, 2023

86. N.Aarthi, M.Muthuraj, M.Archana, V.Gopal, N.Balasubramanian, **S.Rajeswari** Wound healing activities of PVA-urea composites from Ormocarpum cochinchinense Natural Product Research, 2023(IF:2.488)

87. **Paradesi D** Design and Development of Copper Trimesic Acid Anchored sPEEK/ Polyimide Composite Membranes for Fuel Cell Applications, Chemistry Select, 2023 (IF: 2.307)

88. **Paradesi D**, Siva M, Gandhimathi S. Neoteric advancements in polybenzimidazole based polymer electrolytes for high-temperature proton exchange membrane fuel cells - A versatile review International Journal of Hydrogen Energy, 2023 (IF:7.139)

89. **M. Mariappan**, Photosynthesis of silver nanoparticles embedded paper for sensing mercury presence in environmental water Chemosphere, 2023 (IF:8.94)

90. S. Silambarasan, K. Ramkumar, **T. Maiyalagan**, Nickel-doped Co₃O₄ spinel nanospheres embedded in nitrogen-doped carbon composites derived from bimetallic NiCo metal-organic framework as a high-performance asymmetric supercapacitor, New Journal of Chemistry, 2023 (IF:3.925)

91. Abigail Jennifer G, Yang Gao*, Georg Schreckenbach, and **Elumalai Varathan**, Periodic Trends in the Stabilization of Actinyls in Their Higher Oxidation States Using Pyrrophen Ligands, ACS Publications, 62, 18, 6920–6933, 2023 (IF: 5.436)

92. Masiyappan Karuppusamy, Shyam Vinod Kumar Panneer, Abigail Jennifer G, Elumalai Varathan, Mahesh Kumar Ravva & Venkatesan Subramanian, Structure-aromaticity-spectroscopy relationship in conjugated polymers, Theoretical Chemistry Accounts ,volume 142, 51 , 2.154

93. Venugopal, Velu, Dhandapani Balaji, Mani Preeyanghaa, Cheol Joo Moon, **Bernaerdshaw Neppolian**, Govarathanan Muthusamy, Jayaraman Theerthagiri, Jagannathan Madhavan, and Myong Yong Choi. Synergistic combination of BiFeO₃ nanorods and CeVO₄ nanoparticles for enhanced visible light driven photocatalytic activity,Alexandria Engineering Journal, 2023, 72, 531-543.

MAY 2023

94. Shanmugasundaram Manoj, Kalimuthu Pandi, Gopi Kalaiyarasan, Seong-Hyeon Pyo, Rajendran Karkuzhali, **Srinivasarao Kancharla**, Gopalakrishnan Gopu, Yongtae Ahn,

- Byong-Hun Jeon, Subbaiah Muthu Prabhu Construction of high-capacitance carbonate-rich bimetallic layered (hydr) oxides onto ZIF-67-derived Co/CoO-N-carbon hybrid cubes for high-performance symmetric supercapacitors, *Journal of Energy Storage*, Volume 68, 107821, 2023, (IF: 8.907)
95. Raktim Gogoi,^a Arnab Ghosh,^a Priyamjeet Deka,^b **K. K. R. Datta** and Kalyan Raidongia, Application of lamellar nickel hydroxide membrane as a tunable platform for ionic thermoelectric studies, *Materials Horizons*, DOI <https://doi.org/10.1039/D3MH00479A>, 2023 (IF:15.717)
 96. Sridhar Priyanka , Varatharaj Rajapandian , Kandhan Palanisamy , S M Esther Rubavathy , Ramasamy Thilagavathi , Chelliah Selvam, **Muthuramalingam Prakash** Identification of indole-based natural compounds as inhibitors of PARP-1 against triple-negative breast cancer: a computational study. *J. Biomol. Struct. Dynamics*, DOI: 10.1080/07391102.2023.2208215, 2023 (IF:5.235)
 97. Nallasivam Giri Lakshman, S. M. Esther Rubavathy, S Priyanka, Kandhan Palanisamy and **Muthuramalingam Prakash** Effect of Mixture of Ionic Liquids and Water on the Structure and Stability of Insulin Dimer: A Combined DFT and MD Simulations Study *New Journal of Chemistry*, DOI <https://doi.org/10.1039/D3NJ01068F>, 2023 (IF:3.925)
 98. Aswathy Rajan, Moorthy Dhanabakialakshmi Dhileepan, Shanmugasundaram Kamalakannan, **Muthuramalingam Prakash**, Satheesh Krishnamurthy, and Bernaudshaw Neppolian, Delineating the Role of Vacancy Defects in Increasing Photocatalytic Hydrogen Production in an Amorphous Metal-Organic Framework Coordinated Graphitic Carbon Nitride *ACS Appl. Energy Mater* , <https://doi.org/10.1021/acsaem.3c00581>, 2023 (IF: 6.959)
 99. Ayyanu Ravikumar, Vishal Natraj, Adarsh Verma, Subramaniyam Sivagnanam, Yuvaraj Sivalingam, **Priyadip Das**, Velappa Jayaraman Surya, Wei Hua Han, Nan Liu Wearable sensors for real-time physiological monitoring based on self-assembled diphenylalanine peptide nanostructures *Surfaces and Interfaces*, Volume 39, 102986, 2023 (IF:6.137)
 100. Neeraja Bose , Balaganesh Danagody, **Kalaivizhi Rajappan**, Ganesh Munuswamy Ramanujam, Aswathy Karanath Anilkumar, Development and characterization of AgHNTs@SPU film loaded with letrozole as drug delivery system and its anticancer activity, *Journal of Drug Delivery Science and Technology*, Volume 85, 104557, 2023 (IF:5.062)
 101. Deepak Manoharan, Shamim Ahmad, Franziska Emmerling, Biswajit Bhattacharya and **Soumyajit Ghosh** Stress and Light Sensitive Dual Mechanical Property of Acylhydrazone Crystal *Cryst Eng Comm*, 25, 3237-3244, 2023 (IF: 3.756)

102. Tamilvelan Manjunathan, Ajay Guru,^b B. Haridevamuthu, Rambabu Dandela, Jesu Arokiaraj and **Pushparathinam Gopinath** 6-gingerol derived semisynthetic analogs mitigates oxidative stress, reverses acrylamide induced neurotoxicity in zebrafish, New journal of Chemistry, 47 10488-10492, 2023 (IF:3.95)
103. M. Sherlin Nivetha, J. Vinoth Kumar, R. Arulmozhi, **N. Abirami**, Ultrathin, 2D type-II heterojunctions ZCLDH/CN with a higher photocatalytic performance of ciprofloxacin under simulated light illumination, Optical Materials, Volume 140, 113861, 2023, (IF:3.754)
104. Velusamy Jeevananthan, Abigail Jennifer G, Elumalai Varathan, **Swaminathan Shanmugan** Supramolecular cocrystals of dispiro-P3N3-dicarboxylic acid: Synthesis, structural characterization and hirshfeld surface analysis Journal of Molecular Structure, Volume 1289, 135888, 2023 (IF:3.841)
105. Palanisamy Kannan, **Govindhan Maduraiveeran**, Metal Oxides Nanomaterials and Nanocomposite-Based Electrochemical Sensors for Healthcare Applications Biosensors, 2023, 13(5), 542, 2023 (IF:5.74)
106. B.R. Karishma, G. Manasa, Arvind K. Bhakta, **T. Maiyalagan**, Ronald J. Mascarenhas, Nagaraj P. Shetti Electrocatalytic Barium-oxide decorated MWCNT amperometric sensor for the quantification of anesthetic drug Procaine Colloids and Surfaces B: Biointerfaces, Volume 227, 113363, 2023 (IF:5.999)
107. Swetha Sathyendran, Kesavan Muthu, Karthick Govindan, Nian-Qi Chen, Wei-Yu Lin, and **Gopal Chandru Senadi** FeCl₃-Catalyzed Decyanative [4 + 2] Annulation of $\hat{\text{I}}^{\pm}$ -Aminonitriles with Alkynes: Access to 2,4-Diaryl Quinolines in Batch and Continuous-Flow Processes, Organic Letters-Nature Indexed, 25, 22, 4086–4091, 2023 (IF:6.072)
108. Gokul Sudhakaran, Ravi Rajesh, Bader O. Almutairi, Selvaraj Arokiyaraj, **Pushparathinam Gopinath**, Jesu Arockiaraj, Nimbin analogs stimulate glucose uptake and glycogen storage in the insulin signalling cascade by enhancing the IRTK, PI3K and Glut-4 mechanism in myotubes, Tissue and cell, Volume 82, 102104, 2023 (IF:2.58)
109. Aneesh Anand Nechikott and **Prasant Kumar Nayak** Electrochemical capacitance properties of pre-sodiated manganese oxide for aqueous Na-ion Supercapacitors RSC Advances, 13, 14139-14149, 2023 (IF:4.036)
110. Ankita Sarkar, Parineeta Das, Ikbal Bahar Laskar, **Sethumathavan Vadivel**, Amrit Puzari, Bappi Paul Parkia speciosa: A basic heterogeneous catalyst for production of soybean oil-based biodiesel, Fuel, Volume 348, 128537, 2023 (IF:8.035)
111. Shanmugapriya Dharani, **Sethumathavan Vadivel**, Lalitha Gnanasekaran, Saravanan Rajendran, S-scheme heterojunction photocatalysts for hydrogen production: Current progress and future prospects, Fuel, Volume 349, 128688, 2023 (IF: 8.035)

112. Sheebha, Vidhya, **Sethumathavan Vadivel**, Electrocatalytic application of graphitic carbon Nitride(gCN) in boosting the performance of copper nickle tin Sulphide(CNTS) hierarchical structure, International Journal of Hydrogen Energy, 2023, <https://doi.org/10.1016/j.ijhydene.2023.04.182> 2023, (IF:7.139)
113. **Sethumathavan Vadivel**, Bappi Paul, Harshavardhan Mohan, Core-shell structured FeOCl/Bi₅O₇Br nanocrystals for visible-light-driven photocatalyst in aqueous solution, Optical Materials, Volume 140, 2023(IF:3.754)
114. **Sethumathavan Vadivel**, Bappi Paul, Harshavardhan Mohan Rational design of high temperature processed TbVO₄/Nb₂O₅/carbon aerogel photocatalyst for prompt degradation of emerging pollutants, Diamond and Related Materials, Volume 136, 110035, 2023 (IF:3.806)
115. Rajaraman Preetha, Muniyandi Govinda Raj, Elayaperumal Vijayakumar, Moorthy Gnanasekar Narendran, Bernaurdshaw Neppolian and **Aruljothy John Bosco**, Quasi-In Situ Synthesis of Oxygen Vacancy-Enriched Strontium Iron Oxide Supported on Boron-Doped Reduced Graphene Oxide to elevate the Photocatalytic Destruction of Tetracycline ACS LANGMUIR, 39, 20, 7091–7108, 2023 (IF:4.331)
116. Rafiq Ahamed, Jayashree Venkatesh, Rakshantha Srithar,a Sudhakar Gaikwad and **Susnata Pramanik**, Carbohydrate recognition using metalâ€‘ligand assemblies Organic & Biomolecular Chemistry, DOI <https://doi.org/10.1039/D3OB00649B>, 2023(IF:3.89)
117. **Dipankar Das**, Arpita Roy, and Sagar Pal, A Polysaccharide-Based pH-Sensitive Hybrid Hydrogel as a Sustained Release Matrix for Antimicrobial Drugs, ACS Applied Polymer Materials, 5, 5, 3348–3358, 2023 (IF: 4.885)
118. M R Ganesh-Thamaraiselvi C., Srija D. Athira S.T. a, Jesudass Joseph Sahayarayan , Daoud Ali ,Saud Alarifi, Glisina Dwinoor Rembulan , Sumathi Jones , Krishna Kumar Yadav,Ganesh Munusamy Ramanujam , Soon Woong Chang , Balasubramani Ravindran-Defluoridation of potable water employed by natural polysaccharide isolated from Tamarindus indica L-Chemosphere- -2023-335
119. M R Ganesh-Maisari Utami , Shaobin Wang , Muhammad Miqdam Musawwa , Tri Esti Purbaningtias,Melinda Fitri , Indah Yuspita , Omar H. Abd-Elkader , Krishna Kumar Yadav ,Ganesh Munusamy-Ramanujam , Donggyu Bang Soon Woong Chang, Balasubramani Ravindran-Simultaneous photocatalytic removal of organic dye and heavy metal fromtextile wastewater over N-doped TiO₂ on reduced graphene oxide-Chemosphere- -2023-332
120. Vinitha, Viswanathan, Mani Preeyanghaa, Murugan Anbarasu, **Bernaurdshaw Neppolian**, and Vajiravelu Sivamurugan Chemical recycling of polyester textile wastes using silver-doped zinc oxide nanoparticles: an economical solution for circular economy

121. Rescentia Yazhini, Mithun Karayi, Paromita Chakraborty, and **Neppolian Bernaurdshaw**, Science of The Total Environment, 2023, 892, 164479. A luminous strategy for the recognition of toxic antibiotics in water via efficient energy transfer Science of The Total Environment 2023 892 164479 10.754 29-May-23
122. Mohan Kumar-Mariyappan Vaithiyalingam, Ramasamy Mohan Kumar, Chinnaperumal Kamaraj, Vimal Sugumar, [d] Nandhagopal Manivannan, Shine Kadaikunnan, and Gajanan Ghodake-Facile Synthesis of Benzimidazoles via Oxidative Cyclization of Acyclic Monoterpene Aldehyde with Diamines: Studies on Antimicrobial and in Vivo Evaluation of Zebrafish-Chemistry & Biodiversity- -2023- doi.org/10.1002/cbdv.202300315- -2.74-28.05.2023

JUNE 2023

123. Madhumathi Lakshmipathi, Aminul Islam Sk, Pintu K. Kundu, Srinu Tothadi*, and **Soumyajit Ghosh**, Mechanically Elastic and Light-Induced Bending of Acylhydrazone-Based Photoswitch Crystal, Crystal Growth and Design, 23, 7, 4939–945, 2023, (IF:4.01)
124. Gayathri Jothish Kumar, Benny Bogoslavsky, Sashi Debnath and **Anjan Bedi** Effect of Chalcogenophenes on Chiroptical Activity of Twisted Tetracenes: Computational Analysis, Synthesis and Crystal Structure There of Molecules 2023 28(13) 5074 4.6
125. Gayathri Jeevanandham, Guru Prasad Kuppuswamy, Divya Catherin Sesu, **Kumaran Vediappan**, Screen printed carbon electrode modified with WS2 nanosheet incorporated with cobalt oxide for non-enzymatic detection of lactic acid, Surfaces and Interfaces, Volume 40, 103097, 2023 (IF: 6.137)
126. R. Shanmugapriya, Monisha Ravi, Sanmugapriya Ravi, Mohankumar Ramasamy, Arthanareeswari Maruthapillai, **Arockia Selvi J**, Electrochemical and Morphological investigations of Elettaria cardamomum pod extract as a green corrosion inhibitor for Mild steel corrosion in 1 N HCl, Inorganic Chemistry Communications, Volume 154, 110958, 2023 (IF: 3.428)
127. Daliya K Shajan, Noopur Pandey, Animesh Ghosh, Hemanth Kumar Chanduluru and **Palash Sanphui**, Investigating the effect of Emtricitabine cocrystals with aromatic carboxylic acids on solubility and diffusion permeability, Crystal Growth and Design, 23, 7 5289–5300, 2023, (IF:4.010)
128. **Anantharaj Sengeni**, Suguru Noda, Electrochemical dealloying-assisted activity enhancement: The next big thing in water electrosplitting, Nano Energy, Volume 114 108624, 2023 (IF: 17.9)

129. Kasthuri Selvaraj, Prasanth Palanisamy, Buthanapalli Ramakrishna, Rajesh Pamanji, Joseph Selvin, Koigoora Srikanth, Sohrab Nasiri, Stepan Kment, **Venkatramaiah Nutalapati**, Fluoranthene-terminated terpyridine ensemble for fluorescence light up and ratiometric chemical sensor for multi toxic metals *Analytica Chimica Acta*, Volume, 1274, 341526, 2023 (IF:6.911)
130. Hashikaa Rajan, **Sengeni Anantharaj**, ORCID logo Jin-Kuk Kim, Min Jae Ko and Sung Chul Yi Strategically Designed Trimetallic Catalyst with Minimal Ru Addresses Both Water Dissociation and Hydride Poisoning Barriers in Alkaline HER, *Journal of Materials Chemistry A* <https://doi.org/10.1039/D3TA02390G> , 2023 (IF: 11.9)
131. **Karthikeyan Sekar**, Atomic-level investigation on significance of photo-reduced Pt nanoparticles over g-C₃N₄/bimetallic oxide composites, *ChemSusChem*, <https://doi.org/10.1002/cssc.202300478>, 2023, (IF:9.14)
132. Chitiphon Chuaicham Sulakshana Shenoy, Jirawat Trakulmututa, Vellaichamy Balakumar Phatchada Santawaja, Shinji Kudo, **Karthikeyan Sekar**, and Keiko Sasaki, Preparation of Iron Oxalate from Iron Ore and Its Application in Photocatalytic Rhodamine B Degradation, *Separations*, 10(7), 378, 2023 (IF:2.6)
133. **K. K. R. Datta** Exploring the Self-Cleaning Facets of Fluorinated Graphene Nanoarchitectonics: Progress and Perspectives *Chem Nano Mat* , <https://doi.org/10.1002/cnma.202300135>, 2023 (IF: 3.8)
134. Kaushik A. Palicha, . **V. Sudha** & Ms. L. Pavithra, S. Harinipriya Monte Carlo simulation and experimental validation of plant microtubules cathode in biodegradable battery, *Scientific Reports* , 13, 10393, 2023 (IF:4.997)
135. E. Gomathi, P. Maharaja, Hanumant Singh Rathore, R. Boopathy, Rames C. Panda, T. Senthilvelan & **Maruthapillai Arthanareeswari**, Treatment of textile dye consortium through Photo Electro Fenton, process using Graphite-Ti electrode system and toxicity studies, *Carbon Letters*, <https://doi.org/10.1007/s42823-023-00551-x> , 2023 (IF:3.117)
136. Siva Moorthy, Berlina Maria Mahimai and **Paradesi Deivanayagam**, Synthesis and Fabrication of Cu-Trimesic Acid MOF Anchored Sulfonated Poly(2,5-benzimidazole) Membranes for PEMFC Applications *International Journal of Hydrogen Energy*, <https://doi.org/10.1016/j.ijhydene.2023.05.362> 2023, (IF:7.139)
137. Dasameswara Rao Kavitaapu, Jayanti Naga Sri Rama Chandra Murty, **Arthanareeswari Maruthapillai**, Gopal C Senadi, Sudarshan Mahapatra, RP-LC Method Development and Validation for Dasatinib Forced, Degradation Study: Isolation and Structural characterization by NMR and HRMS, *Journal of Chromatographic Science*, 2023 (IF:1.555) <https://doi.org/10.1093/chromsci/bmad043>

138. Yuvashri Jayamkondan, Tirupathi Rao Penki, **Prasant Kumar Nayak** Recent advances and challenges in the development of advanced positive electrode materials for sustainable Na-ion batteries, Materials Today Energy, 101360, 2023 (IF:9.257)
139. VanithaN and Jeyalakshmi R The Role of Polyethylene Glycol, a Water Entrainer on Characteristics of Silico Alumino Phosphate Geopolymer to Harvest Enhanced Gel Journal of Inorganic and Organometallic Polymers and Materials,2023 <https://doi.org/10.1007/s10904-023-02715-> 2023 (IF:3.518)
140. **S.Devikala** and A.Devadharshini Bio Synthesis of Copper Doped Zinc Oxide Nanoparticles Using Murraya Koenigii For its Antibacterial Activity, Journal of Xidian University, 2023, VOLUME 17, ISSUE 6 1 3 9
141. Muthuramalingam Prakash, K. Rudharachari Maiyelvaganan, N. Giri Lakshman, Muneerah Mogren Al-Mogren, Prof. Majdi Hochla, Formation of Eigen or Zundel Features at Protonated Water Cluster-Aromatic, Interfaces, ChemPhys Chem, 2023 <https://doi.org/10.1016/j.ijhydene.2023.05.362> 2023 (IF: 3.52)
142. R. Sangavi, M. Keerthana, **T. Pushpa Malini**, Rational design of dysprosium oxide nanochains decorated on graphitic carbon nitride nanosheet for the electrochemical sensing of riboflavin in food samples, Carbon Letters, <https://doi.org/10.1007/s42823-023-00546-8>, 2023 (IF:3.117)
143. D. Barani Kumar, Wei Nie, Zhongqing Jiang, Jinwoo Lee, **T. Maiyalagan** Recent progress in transition metal carbides and nitrides based composites as bifunctional oxygen electrocatalyst for zinc air batteries, Journal of Alloys and Compounds 2023, Volume 960, 170828, 2023 (IF:6.371_
144. Sabarinathan Ravichandran, Narayanamoorthy Bhuvanendran, Shuhua Hao , Shirong Sun, **Thandavarayan Maiyalagan**, Huaneng Su and Wenli hang PANI-SnO₂ nanorods decorated with Pdx-Niy nanoparticles for improved electrooxidation of methanol with extended durability Colloids and Surfaces A: Physicochemical and Engineering Aspects Surfaces B: 2023 (IF: 5.518)
145. Yi Xiong , Zhongqing Jiang , Longxiang Gong , Xiaoning Tian , Changsheng Song , Thandavarayan Maiyalagan , Zhong-Jie Jiang Construction of Co/FeCo@Fe(Co)₃O₄ heterojunction rich in oxygen vacancies derived from metal-organic frameworks using O₂ plasma as a high-performance bifunctional catalyst for rechargeable zinc-air batteries, Journal of Colloid and Interface Science, DOI: 10.1016/j.jcis.2023.06.040 2023 (IF: 9.965)
146. **T. Maiyalagan**, Vaibhav Namdev Kale, Interface Engineering of ZIF-67 derived Heterostructured CeO₂@Co₃O₄ Polyhedron Promoted by Reduced Graphene Oxide for Enhanced Oxygen Evolution Reaction, Journal of Alloys and Compounds Volume 961, 170887, 2023 (IF:6.371)

147. Aripasanth Ramalingam, **Gopal Chandru Senadi*** Synthesis of Ni@C as a Magnetic Heterogeneous Catalyst: Application to Benzimidazoles and Quinoxalines from o-Phenylenediamines with Primary Amines, Asian Journal of Organic Chemistry, <https://doi.org/10.1002/ajoc.202300119> 2023 (IF: 3.116)
148. Maisari Utami, Shaobin Wang, Muhammad Miqdam Musawwa, Lulu' Mafruhah, Melinda Fitri, Karna Wijaya, Davidraj Johnravindar, Omar H. Abd-Elkader, Krishna Kumar Yadav, Balasubramani Ravindran, Woo jin Chung, Soon Woong Chang, Ganesh Munusamy-Ramanujam-Photocatalytic degradation of naphthol blue from Batik wastewater using functionalized TiO₂-based composites-Chemosphere- -2023-Volume 337-139224-8.94-17.06.2023

JULY 2023

149. Bharathi Kannan Raja, Abigail Philips, Sanmugapriya Ravi, Monisha Ravi, Athulya S. Palakkal, Renjith S. Pillai, Gopal Chandru Senadi, Arockia Selvi 3-Phenylquinazolin-4(3H)-one via a renewable approach as an efficient corrosion inhibitor for mild steel in acid media, Materials Chemistry and Physics, [Volume 308](#), 128238, 2023 (IF:4.6)
150. Rajendra Kumar Konidena , Minlang Yanga and Takuma Yasuda A ĩ€-extended tercarbazole-core multi-resonance delayed fluorescence emitter exhibiting efficient narrowband yellow electroluminescence Chemical Communications,2023 <https://doi.org/10.1039/D3CC03241H> , 2023 (IF:4.6)
151. Elumalai Varathan, Karthikeyan Sekar, Experimental and simulation studies of bioinspired Au-enhanced copper single atom catalysts towards real-time expeditious dopamine sensing on human neuronal cell, Chemical Engineering Journal, Volume, 471,144842, 2023 (IF: 15.1)
152. Manova Santhosh Yesupatham, Ashil Augustin, Nithish Agamendran, Brahmari H Honnappa, Mariyappan Shanmugam, Prince JJ. Sagayaraj, Karthikeyan Sekar Photocatalytic Seawater Splitting for hydrogen fuel production: Impact of Seawater Components and Accelerating Reagents on the Overall Performance, Sustainable Energy & Fuels, 2023 <https://doi.org/10.1039/D3SE00810J>, 2023 (IF:5.6)
153. Anie Shejoe Justin Jose Sheela, Siva Moorthy, Berlina Maria Mahimai, Karthikeyan Sekar, and Paradesi Deivanayagam* Sulfonated Poly Ether Sulfone Membrane Reinforced with Bismuth-Based Organic and Inorganic Additives for Fuel Cells ACS Omega,2023 8, 30 27510–27518 2023 (IF:4.1)
154. G. Naga Koti Reddy, M. Kostrzewa, A. Venkata Sekhar, A. Ingram, A. Siva, Sesha Reddy, N. Venkatramaiah, G. Naga Raju, V. Ravi Kumar, N. Veeraiah The influence of silver ions on the dielectric dispersion dipolar relaxation dynamics

and dielectric breakdown strength of zinc selenium phosphate glass system
 Physica Status Solidi A 2023, <https://doi.org/10.1002/pssa.202300282>, 2023 (IF:2)

155. Anamika Hoque; Md Sanaul Islam; Samim Khan; Basudeb Datta; Ennio Zangrando; Goutam Kumar Kole; Md. Akhtarul Alam, Crystallographic elucidation of an aluminium bound amido Schiff base chemosensor: a selective turn-on fluorescent chemosensor for Al³⁺ ions, Dalton Transactions, 2023, 52, 10145-10154, 2023 (IF:4)
156. Fredrik Edhborg, Axel Olesund, Vikrant Tripathy, Yang Wang, Tumpa Sadhukhan, Andrew H. Olsson, Niels Bisballe, Krishnan Raghavachari, Bo W. Laursen, Bo Albinsson, and Amar H. Flood Triplet States of Cyanostar and Its Anion Complexes The Journal of Physical Chemistry A 127, 28, 5841–5850, 2023 (IF2.9)
157. Manivannan Karthikeyan, Baburaj Baskar, Veerapandiyan Kandasamy, Usha Balasundaram, Glutathione elicits enhanced biosynthesis of bonducellin, a homoisoflavonoid, in Caesalpinia bonducella leaf callus, Plant Cell, Tissue and Organ Culture 2023, DOI: 10.1007/s11240-023-02551-1, 2023 (IF:3)
158. Suresh Pavithra , Murugan Komal , Arulmozhi Rajaram , Vinoth Kumar Jothi , Michael raj Sherlin Nivetha , Abirami Natarajan, Conducting polymer encrusted Cu/Mn-MOF-CNDs: A facile synthesis, characterization and its hydrogen evolution activity in alkaline media and seawater, Synthetic Metals, 2023, Volume 97, 117422, 2023 (IF:4.4)
159. Sherlin Nivetha Michael Raj, Vinoth Kumar Jothi, Arulmozhi Rajaram, Pavithra Suresh, Komal Murugan, Abirami Natarajan Rational design of $\pm$ -MnO₂/HT-GCN nanocomposite for effective photocatalytic degradation of ciprofloxacin and pernicious activity, Environmental Science and Pollution Research, 2023, DOI: 10.1007/s11356-023-28636-0 2023 (IF:5.8)
160. Mariappan M, 2-pyridylmethyl-N-palmitoylglycine micelles guided synthesis of recyclable CuO@SiO₂ nanocatalyst for hydride transfer nitro reduction in water New Journal of Chemistry 2023, DOI <https://doi.org/10.1039/D3NJ02896H>, 2023 (IF:3.3)
161. Nagaraj Murugan, Sadhasivam Thangarasu, Priyadarshini Venkatachalam, Mrunal Bhosale, Shanmugasundaram Kamalakannan, Muthuramalingam Prakash, Sol Bin Seo, Yu Rim Choi, Min Kang, Tae Hwan Oh, Yoong Ahm Kim, Holey carbon-nanotube-wrapped MXene for hydrogen evolution reactions and supercapacitor applications, Int J Hydrogen Energy, 2023, DOI: 10.1016/j.ijhydene.2023.06.175, 2023 (IF:7.139)
162. K Palanisamy, M. Prakash, Photocatalytic activities of cadmium(II) acetophenone thiosemicarbazone complex: Experimental and density functional theory based study Inorganic Chemistry Communications, 2023, Volume 155, 111064, 2023 (IF:3.428)
163. Sengeni Anantharaj*, Prince JJ Sagayaraj, Manova Santhosh Yesupatham, Roshini Arulraj, Karthik Eswaran, Karthikeyan Sekar, The Reference Electrode Dilemma in

Energy Conversion Electrocatalysis: â€œRight vs Okay vs Wrongâ€, Journal of Materials Chemistry 2023, DOI <https://doi.org/10.1039/D3TA03145D> 2023 (IF:11.9)

164. Kala Krishnan, Elavarasan Samaraj, Gupta Sanjeev, Venugopal T. Bhat, Sasidharan Manickam, Selvam Parasuraman, Pushpa Malini Thanikachalam, Titania Nanoparticle Catalysed N-Alkylation of Amines by Hydrogen Auto-Transfer Mechanisms, Chemistry Select, <https://doi.org/10.1002/slct.202300770> , 2023 (IF:2.307)
165. Shovonlal Bhowmick , Tapan Kumar Mistri , Mohammad Rizwan Khan , Pritee Chunarkar Patil , Rosa Busquets , Abu Md Ashif Ikbal , Ankita Choudhury , Dilip Kumar Roy , Partha Palit , Achintya Saha , Investigation of bio-active Amaryllidaceae alkaloidal small molecules as putative SARS-CoV-2 main protease and host TMPRSS2 inhibitors: interpretation by in-silico simulation study, Journal of Biomolecular Structure and Dynamics, DOI: 10.1080/07391102.2023.2238065, 2023 (IF:5.235)
166. Naveen Kumar M,^a Deikrisha Lyngdoh Lyngkholi,^b Sudhakar Gaikwad, ORCID logo ^c Debabrata Samanta,^d Snehadrinarayan Khatua ORCID logo ^{*b} and Susnata Pramanik, The effect of substituents on the aggregation-induced emission of 9,10-phenanthraquinone-hydrazones, New Journal of Chemistry, 2023, DOI <https://doi.org/10.1039/D3NJ02198J> , 2023 (IF:3.3)
167. S. Sankeetha , N. Abirami , H. Leelavathi , S. Tamizharasan , A. Kumarasamy , R. Arulmozhi, Interaction of BiVO₄ anchored 2D hexagonal boron nitride nanocomposite for photocatalytic water pollutants degradation and phytotoxicity assessment, Colloids and Surfaces A: Physicochemical and Engineering Aspects 2023, Volume 675, 132024, 2023 (IF:5.2)
168. Hemalatha Parangusan, , Jolly Bhadra, K. Karuppasamy, T. Maiyalagan, Zubair Ahmad, Noora Al-Thani, Engineering the structural, optical and photoelectrochemical properties of BaTiO₃-CoFe₂O₄ nanocomposite for photoelectrochemical water splitting, Electrochimica Acta, Volume 64 142849, 2023 (IF:6.6)
169. Kathalingam, Dhanasekaran Vikraman, Karuppasamy Pandian Marimuthu, , K. Karuppasamy, Hyungyil Lee, T. Maiyalagan, Hyun-Seok Kim, Characterization and application of flexible, highly conductive freestanding films of SWCNT and PMMA nanocomposite prepared by facile solution method, Surfaces and Interfaces, Volume 40, 103161, 2023 (IF:6.2)
170. P. Santhoshkumar, K. Karuppasamy, Dhanasekaran Vikraman, T. Maiyalagan, Hyun-Seok Kim Preparation and electrochemical performance of foam-like CeO₂ nanofoam as negative electrode material for rechargeable lithium-ion batteries, Surfaces and Interfaces, Volume 41 103175, 2023 (IF:6.2)

171. Palani Krishnamurthy , Thandavarayan Maiyalagan , Gasidit Panomsuwan , Zhongqing Jiang and Mostafizur Rahaman, Iron-Doped Nickel Hydroxide Nanosheets as Efficient Electrocatalysts in Electrochemical Water Splitting Catalysts,13, 1095, 2023 (IF:3.9)
172. Tingting Hu , Weiheng Chen , Yubing Liu , Longxiang Gong , Zhongqing Jiang , Dinesh Bhalothia , Thandavarayan Maiyalagan , Zhong-Jie Jiang Plasma-Induced Formation of Pt Nanoparticles with Optimized Surface Oxidation States for Methanol Oxidation and Oxygen Reduction Reactions to Achieve High-Performance DMFCs Small, 2023 DOI: [10.1002/smll.202304076](https://doi.org/10.1002/smll.202304076), 2023 (IF: 15.5)
173. Reihaneh Haghniaz, Hossein Montazerian, Atiya Rabbani Avijit Baidya Brent Usui , Yangzhi Zhu , Maryam Tavafoghi , Fazli Wahid , Han-Jun Kim , Amir Sheikhi , Ali Khademhosseini Injectable, Antibacterial, and Hemostatic Tissue Sealant Hydrogels, Advanced Healthcare Materials, 2023, DOI: [10.1002/adhm.202301551](https://doi.org/10.1002/adhm.202301551) 2023 (IF:11.09)
174. Mariyammal Narayanan and Panneerselvam Perumal, Tri-metallic (Ni–Ce–Cu)-based metal–organic framework for highly efficient electrochemical detection of L-cysteine Carbon Letters,325, 112711, 2023 (IF:4.5)

AUGUST 2023

175. Kenkera Rayappa Naveen , Rajendra Kumar Konidena , P Keerthika, Neoteric Advances in Oxygen Bridged Triaryl Boron-based Delayed Fluorescent Materials for Organic Light Emitting Diodes, The Chemical Record, DOI: [10.1002/tcr.202300208](https://doi.org/10.1002/tcr.202300208), 2023 (IF:6.6)
176. Rajakumari Jesuraj , Arunjegan Amalraj, Vinoth Kumar Vaidyanathan and Panneerselvam Perumal , Exceptional Peroxidase-Like activity of an Iron and Copper based organic framework for Consecutive Colorimetric Biosensing of Glucose and Kanamycin in Real Food Sample, Analyst, DOI <https://doi.org/10.1039/D3AN01242E>, 2023 (IF:4.2)
177. Premkumar Jayaraman and Helen Annal Therese, Flexible interdigitated symmetric solid-state micro-supercapacitors with higher energy density for wearable electronics, Journal of Power Sources, 2023, Volume 581, 233489, 2023 (IF:9.2)
178. Jeyakiruba Pal Raj, Helen Annal Therese, Synthesis of high-performance manganese oxide nanorod with ZIF67 as electrode material for lithium-ion batteries, Journal of the Chinese Chemical Society, 2023, <https://doi.org/10.1002/jccs.202300220>, 2023 (IF:1.753)
179. Jayachandran M, Helen Annal Therese, T Vijayakumar, Tailored Solution Combustion Method for Enhancing High Voltage Electrochemical Performance Li_{1.2}Ni_{0.1}Mn_{0.6}Co_{0.1}O₂ as Cathode Material for Lithium-ion Batteries Surfaces and Interfaces, Volume 42, Part A, 103339, 2023 (IF:6.137)

180. Sohrab Nasiri, Marzieh Rabiei, Arvydas Palevicius, Giedrius Janusas, Andrius Vilkauskas, Venkatramaiah Nutalapati, Ahmad Monshi, Modified Scherrer equation to calculate crystal size by XRD with high accuracy, examples Fe₂O₃, TiO₂ and V₂O₅ Nano Trends, Volume 3, 100015, 2023
181. Prince JJ Sagayaraj, Ashil Augustin, Mariyappan Shanmugam, Brahmari Honnappa, Thillai Sivakumar Natarajan, Karen Wilson, Adam F. Lee, Karthikeyan Sekar, Graphene Quantum Dots for Photocatalytic CO₂ Reduction Energy Technology, 2023 <https://doi.org/10.1002/ente.202300563>, 2023 (IF:3.8)
182. Boopathy Ramasamy, and Karthikeyan Sekar, Editorial: Special Issue on Advanced Functional Materials for Photo/Electro-Catalysts for Environmental and Energy Applications, Catalysts, 2023, 13, 1208, 2023 (IF:3.9)
183. Chitiphon Chuaicham, Jirawat Trakulmututa, Sulakshana Shenoy, Vellaichamy Balakumar, Phatchada Santawaja, Shinji Kudo, Karthikeyan Sekar, and Keiko Sasaki Enhancement of Photocatalytic Rhodamine B Degradation over Magnesium Manganese Baring Extracted Iron Oxalate from Converter Slag Separations, 2023, 10(8) 440, 2023 (IF:2.6)
184. S. Sankeetha, R. Muralidharan, N. Abirami, R. Arulmozhi The synergetic action of FeVO₄ and h-BN for decontamination of industrial wastewater pollutants and the assessment of phytotoxicity Ceramics International, 2023, <https://doi.org/10.1016/j.ceramint.2023.08.266>, 2023 (IF:5.2)
185. Vidya Sudhakaran Menon, Ananthanarayanan Krishnamoorthy, Hole Selectivity of n-Type Molybdenum Oxide Carrier Selective Layer for Commercial and Emerging Thin-Film Photovoltaics: A Critical Analysis of Interface Energetics and Ensuant Device Physics Energy Technology, <https://doi.org/10.1002/ente.202300608>, 2023 (IF:3.8)
186. Kayalvizhi Rajagopal, Murugavel Kathiresan, Arulmozhi Rajaram, Abirami Natarajan, Kumaresan Natesan, Development of robust noble-metal free lanthanum, neodymium doped Li_{1.05}Ni_{0.5}Mn_{1.5}O₄ as a bifunctional electrocatalyst for electrochemical water splitting, RSC Advances, 13, 23829-23840, 2023 (IF: 3.9)
187. Heyifei Fu, Susnata Pramanik and Ivan Aprahamian Metal and Proton Relay Controlled Hierarchical Multistep Switching Cascade Journal of the American Chemical Society, <https://doi.org/10.1021/jacs.3c02855>, 2023 (IF: 16.38)
188. Banu Kubendiran, Goutam Pramanik, Goutam Kumar Kole Two polymorphs of fluorene-9-ylidene malononitrile Journal of Molecular Structure, Volume 1294, Part 2, 136397, 2023 (IF:3.8)
189. Madhuri Basak, Kiran Das, Tarun Mahata, Dinesh Kumar, Nupur Nagar, Krishna Mohan Poluri, Pranesh Kumar, Priyadip Das, Adele Stewart, Biswanath Maity RGS7

balances acetylation/deacetylation of p65 to control chemotherapy-dependent cardiac inflammation Cellular and Molecular Life Sciences, volume 80, 255, 2023 (IF:8)

190. Pushbaraj Palani, Ajithkumar Arumugam, Dineshkumar Raja, M. Kesavan and Gopal Chandru Senadi Photoredox-Catalyzed 1,2-Oxo-Alkylation of Vinyl Arenes with 1,3-Diketones: An Approach to 1,4-Dicarbonyls via C-C Activation Chemical Communication , DOI <https://doi.org/10.1039/D3CC02366D>, 2023 (IF:4.9)
191. Desai Prashant Hanamantrao, Kumaresan La, Kavibharathy Ka, Sajan Raj S La, Saraswathi Ra, S. Kishore Babub, Baskaran Rangasamyc, Kumaran Vediappan Alpha-Ni(OH)₂ Nanoflakes Incorporated on MOF derived ZnO Hybrid Faradaic Arrays for High-performance Asymmetric Supercapacitor Materials Science & Engineering B, DOI: 10.1016/j.mseb.2023.116813, 2023 (IF:3.6)
192. Sethumathavan Vadivel, Lalitha Gnanasekaran, N. Balasubramanian Revealing the charge transfer mechanism in Er ion-doped Bi₄O₅Br₂/g-C₃N₅ nanocomposite for efficient photocatalytic degradation of antibiotic tetracycline Carbon Letters, <https://doi.org/10.1007/s42823-023-00549-5>, 2023 (IF:4.5)
193. Amala George, Manab Kundu Tailoring the Surface Morphology of a Nanostructured CuCo₂S₄ Electrode by Surfactant-Assisted Electrode position for Asymmetric Supercapacitors with High Energy and Power Density, Energy Fuels, 37, 16 12369–12380, 2023 (IF: 4.654)
194. Aswathy Karanath-Anilkumar, Ganesh Munuswamy-Ramanujam, Vinayak Soman, Shree Devi Munusamy Sampangiramulu, Sathiyarajeswaran Parameswaran-Evaluation of Cytotoxic Potential of Classical Siddha Medicine Padikara Parpam in Human Monocytic Leukemic Cell Lines (THP-1)-Ind. J. Pharm. Edu. Res., - 2023-57(3s)-s639-s643.-2.44-1.8.2023
195. Ajith P. Varghese, B. Neppolian, and Sandeep Kumar Lakhera. Pitfalls of using nessler's reagent for ammonia detection in photocatalytic nitrogen fixation studies: Leveraging 1H NMR for enhanced accuracy and precision, Industrial & Engineering Chemistry Research, 62, no. 32, 2530-12537, 2023 (IF:5.3)3
196. Sebastian, J., Daniel, M., Neppolian, B. and Samuel, J.M. Electroactive modified poly (2-aminobenzoic acid)-blend-aloe vera/GCE as an efficient dopamine sensor Journal of Polymer Research, 2023 30(9), p.356, 2023 (IF: 22.8)
197. Rugma, T.P., Neppolian, B. and Lakhera, S.K., Gas template mediated exfoliation of polymeric graphitic carbon nitride; what contributes more to hydrogen production, a higher specific surface area, or defect sites, Materials Today sustainability, 24, p.100513, 2023 (IF:7.244)

SEPTEMBER 2023

198. Gourab Karmakar, Alpa Y. Shah, Mukesh Kumar, Vishal Singh, Goutam Kumar Kole, Adish Tyagi Single source precursor mediated synthesis of phase pure digenite nanocrystals and investigation of its photo-switching behavior, *Journal of Molecular Structure* 2023 Volume 1295, Part 2, 136707 2023 (IF: 3.8)
199. Sengeni Anantharaj, Mochen Li, Roshini Arulraj, Karthik Eswaranb, Sara Fidha CM, Rajini Murugesan, Arthanareeswari Maruthapillai, and Suguru Noda, A tri-functional self-supported electrocatalyst featuring mostly NiTeO₃ perovskite for H₂ production via methanol-water coelectrolysis, *Chemical Communications*, 2023 (IF: 4.9) DOI: 10.1039/x0xx00000x
200. Achal Bhigade, Katragadda Nagamalleswari, Pranab Mandal and Vengadesh, Kumara Mangalam Ramakrishnan, Studies on PVDF/Ferrite composite films on flexible substrate for pyroelectric energy conversion, *New Journal of Chemistry*, 2023, (IF:3.3) DOI: 10.1039/D3NJ02649C
201. Yuvashri Jayamkondan and Prasant Kumar Nayak Suppressed high voltage activation and superior electrochemical performance of Co-free Li-rich Li₂TiO₃-LiNi_{0.5}Mn_{0.5}O₂ cathode materials for Li-ion batteries, *ACS Sustainable Chemistry & Engineering*, 2023, 11, 39, 14467–144808, 2023 (IF:4)
202. Abhishek A, Ramesh V, Suresh Perumal, Prasant Kumar Nayak, Structural, vibrational and electrochemical studies of bulk and nano SnSb for supercapacitor application, *Journal of Alloys and Compounds* 2023, Volume 969, 172293, 2023 (IF 6.2)
203. Barsha Rani Bora, Monotosh Mondal, Nabamallika Nath, K. K. R. Datta and Kalyan Raidongi, Sustainable electricity from gravity-driven nanofluidic flow of water through modified bio-channels of coir fibers, *Journal of Materials Chemistry A*, 2023 (IF: 11.9) DOI: 10.1039/d3ta02105j
204. Sulakshana Shenoy, Chitiphon Chuaicham,^a Keiko Sasaki, Sungkyun Park,^b Muthuchamy Nallal, Kang Hyun Park and Karthikeyan Sekar, Nitridation-free preparation of bimetallic oxide-nitride bifunctional electrocatalysts for overall water splitting *Chemical Communications*, 2023 (IF:4.9) <https://doi.org/10.1039/D3CC03452F>
205. Berlina Maria Mahimai, Siva Moorthy, Gandhimathi Sivasubramanian, and Paradesi Deivanayagam, Selective Proton-Conducting Polystyrene-Based Polyelectrolyte Membrane Containing Bi₂O₃ Nanoparticles and Graphitic Carbon Nitride Nanosheets for Fuel Cells and Supercapacitors, *ACS Applied Nano Materials*, 2023 (IF: 6.14)
206. Muthukumar Govindaraj, Udhaya Ganesh P K, Magesh Kumar Muthukumaran, Karthikeyan Sekar, Arthanareeswari Maruthapillai, J. Arockia Selvi Electrostatic Self Assembly of Metal-Free Hexagonal Boron Nitride/Protonated Carbon Nitride (h-BN/PCN) Nanohybrid: A

Synergistically Upgraded 2D/2D Sustainable Electrocatalyst for Sulfamethazine Identification
Chem Nano Mat, 2023 (IF: 3.82)

207. Ramasamy Santhosh Kumar , Muthu Austeria P, Clament Sagaya Selvam, Neethinathan S Ramakrishnan, Karthikeyan Sekar, Ae Rhan Kim, Do Hwan Kim, Pil J. Yood, Dong Jin Yoo Highly mixed high-energy d-orbital states enhance oxygen evolution reactions in spinel catalysts Applied Surface Science, 2023 (IF: 6.7)
208. Leelavathi Harikrishnan, Muralidharan Rajaram, Abirami Natarajan, Arulmozhi Rajaram Boron-Doped Exfoliated $g\text{-C}_3\text{N}_4$ Nanosheet-Based Phosphors for White Light-Emission and Photocatalytic Degradation, ACS Applied Nano Materials, 2023 (IF:6.03) DOI: 10.1021/acsanm.3c03078
209. Muthukumar Govindaraj , Ananya Srivastava , Magesh Kumar Muthukumaran , Pei-Chien Tsai ,Yuan-Chung Lin , Bharathi Kannan Raja , Jerome Rajendran , Vinoth Kumar Ponnusamy , J Arockia Selvi, Current advancements and prospects of enzymatic and non-enzymatic electrochemical glucose sensors International Journal of Biological Macromolecules, 253(Pt 2), 126680, 2023 (IF:8.2)
210. Muthukumar Govindaraj, Udhaya Ganesh P K, Magesh Kumar Muthukumaran, Karthikeyan Sekar, Arthanareeswari Maruthapillai, J. Arockia SelviElectrostatic Self Assembly of Metal-Free Hexagonal Boron Nitride/Protonated Carbon Nitride (h-BN/PCN) Nanohybrid: A Synergistically Upgraded 2D/2D Sustainable Electrocatalyst for Sulfamethazine Identification ChemNanoMat, 2023 (IF: 3.82) DOI: 10.1002/cnma.202300330
211. Carolin Mercy Enoch, Sagar Ingavale, Phiralang Marbaniang, Indrajit Patil ORCID logo and Anita Swami Molten Salt- Directed Synthesis of Strontium Manganese Perovskite Oxide: An Active Electro-Catalyst for Oxygen Reduction Reaction and Oxygen Evolution Reaction Journal of Materials Chemistry A 2023(IF: 11.9) <https://doi.org/10.1039/D3TA03808D>
212. Hajeesh Kumar Vikraman, Jeena George, Rence P. Reji, Guru Prasad Kuppuswamy, Sanjay. D. Sutar, Anita Swami, Sharmiladevi Ramamoorthy, Anandhakumar Sundaramurthy, Sumit Pramanik, Surya Velappa Jayaraman, Suresh Perumal, Yuvaraj Sivalingam, S. R. N. Kiran Mangalampall, Unprecedented Multifunctionality in Novel Monophase Micro/Nanostructured Ti-Zn AlloySmall, 2023 (IF:13.3) <https://doi.org/10.1002/sml.202305126>
213. M. Keerthana, T. Pushpa Malini, P. Kamara, ,P.A. Vivekanand,R. Arulnangai,S. John Santosh Kumar,S. Harikumar,Natarajan Arumugam,Abdulrahman I. Almansour,Karthikeyan Perumal Efficient photocatalytic degradation of water pollutant Brufen using lutetium doped cerium oxide nanoparticles synthesized by chemical precipitation method Journal of the Taiwan Institute of Chemical Engineers, 2023 (IF:5.7) <https://doi.org/10.1016/j.jtice.2023.105118>

214. Yeti Dana Rao, Ayyagari Venkata Sekhar, Vandana Ravi Kumar, Valluri Ravi Kumar, Nutalapati Venkatramaiah,, Nalluri Purnachand, Yerramreddy Gandhi, Nalluri Veeraiah, Luminescence features of Ho³⁺, Er³⁺ and Tm³⁺ ions in red lead added non-conventional antimony oxide glass system, Luminescence : the Journal of Biological and Chemical Luminescence, 2023 (IF: 2.4) <https://doi.org/10.1002/bio.4603>
215. Chu Qin , Zhong-Jie Jiang, Thandavarayan Maiyalagan , Zhongqing Jiang Rational Design of Hollow Structural Materials for Sodium-Ion Battery Anodes The Chemical Record, 2023 (IF: 6.6) DOI: [10.1002/tcr.202300206](https://doi.org/10.1002/tcr.202300206)
216. Soumita Samajdar, Srabanti Ghosh*, Maiyalagan Thandavarayan, Samar Kumar Medda, Srikrishna Manna, and Mamata Mohapatra, Construction of a 3D/2D Z-Scheme Heterojunction for Promoting Charge Separation and Augmented Photocatalytic Hydrogen Evolution, Energy and Fuels, 37, 18, 4290–14302, 2023 (IF:5.3)
217. Jayanta Samanta, Miao Tang, Mingshi Zhang, Russell P Hughes, Richard J. Staples, Chenfeng ke Tripodal Organic Cages with Unconventional CH⁺⋯O Interactions for Perchlorate Remediation in Water, Journal of American Chemical Society, 2023 (IF:1)
218. Chetan Paul Singh, Priyanka Sharma, Manzoor Ahmed, Diljeet Kumar, Yogesh Brijwashi Sharma, Jayanta Samanta, Zabeer Ahmed, Sanket Kumar Shukla, Abhijit Hazra*, and Yogesh P. Bharitkar Semisynthesis of Novel Dispiro-pyrrolizidino/thiopyrrolizidino-oxindolo/indanedione Natural Product Hybrids of Parthenin Followed by Their Cytotoxicity Evaluation ACS Omega, 8, 38, 35283–35294, 2023 (IF: 4.1)
219. Saraswathi Ganesan, ,Alagumalai Anantha ,Raman Rohith Kumar, Menon Vidya Sudhakaran, Gurusamy Thangavelu Senthil A Krishnamoorthy Ananthanarayanan A New Vinylene-Thiophene-Vinylene Linked Triphenylamine-Phenothiazine Unsymmetrical D-¹⁸O Small Molecule: Defect Passivation and Hole Transporting Interfacial Layer for Perovskite Solar Cells Energy & Fuels 2023 (IF: 4.654) DOI: [10.1021/acs.energyfuels.3c02092](https://doi.org/10.1021/acs.energyfuels.3c02092)
220. Asiya Khan , Divyam Singh , Kamran Waidha , Sandeep Sisodiya , Pushparathinam Gopinath , Showket Hussian , Pranay Tanwar , Deepshikha Pande Katare Analysis of Inhibition Potential of Nimbin and its Analogs against NF- κ B Subunits P50 and P65: A Molecular Docking and Molecular Dynamics Study, Anti-cancer Agents in Medicinal Chemistry 2023 (IF: 2.47) DOI: [10.2174/1871520623666230908101204](https://doi.org/10.2174/1871520623666230908101204)
221. RichuBagyaVarsaS, NoopurPandey, AnimeshGhosh, AnubhaSrivastava, PavanKumar Puram, Sai TejaMeka, VladimirV. Chernyshev,*and PalashSanphui, Mechanosynthesis of Stable Salt Hydrates of Allopurinol with Enhanced Dissolution, Diffusion, and Pharmacokinetics ACS Omega 8 (37), 34120-34133, 2023 (IF: 4.1)
222. Saravanan Kamalakannan,a Natarajan Balasubramaniyan, Neppolian Bernaurdshawb and Ganesh Vattikondalac, Impact of Nitrogen Doping on Triazole-Based Graphitic Carbon Nitride-TiO₂ (P25) S-scheme Heterojunction for Improved Photocatalytic Hydrogen

Production. Nanoscale Advances, 2023 (IF: 4.7) DOI <https://doi.org/10.1039/D3NA00597F>

223. Swetha Sathyendran, Gopal Chandru Senadi, Progression on Oxidative Decyanation Approaches from Secondary Nitriles to Ketones and α -Aminonitriles to Amides, Asian Journal of Organic Chemistry, 2023(IF: 2.7)
224. Ravi Uppala¹, Manivannan M², Arthanareeswari. M^{3*}, Venkatasubbaiah. B ⁴ , Development Of An LC-MS/MS Approach To Detect and Quantify Two Impurities Of Ranolazine Journal of Pharmaceutical Negative Results, Volume 14 | Special Issue 1, 2023 (IF: 0.128)
225. A. Mubharak , Nithish Agamendran , Manova Santhosh Yesupatham , Brahmari Honnappa , Karthikeyan, Sekar, Arthanareeswari Maruthapillai , Carbon quantum dots decorated Cu O composite for electrochemical hydrogen evolution Materials Today: Proceedings, 2023 (IF: 2.59) <https://doi.org/10.1016/j.matpr.2023.09.128>
226. M., Dhanalakshmi, R., Aishwarya, A., Anpo, M., Neppolian, B. and Sivamurugan, V Recent advancements in synthesis and multi-functional catalytic applications of graphitic carbon nitride, Preeyanghaa, Catalysis Reviews, pp.1-71, 2023 (IF: 13.6)
227. Pandey, S., Dhileepan, M.D., Neppolian, B. and Ramaswamy, A.P, Plasmonic Ag-nanoparticles decorated phosphorus and boron co-doped g-C₃N₄ for enhanced photocatalytic H₂ production, Materials Today: Proceedings, 2023 (IF: 2.59)
228. Daniel, M., Mathew, G., De, M. and Neppolian, B 012 facets modulated LDH composite for neurotoxicity risk assessment through direct electrochemical profiling of dopamine, Chemosphere, p.140177, 2023 (IF: 8.943)
- OCTOBER 2023A**
229. Anashwara Babu, Gomathi Sivakumar, Mageshwari Anandan, Prama Adhya..T. Akash, Titash Mondal, Venkatramaiah Nutalapati, Samarendra Maji, Design of smart polymeric sensor based on poly(N-isopropylacrylamide) and anthrapyrazolone derived fluorescent crosslinker for the detection of nitroaromatics in aqueous medium, European Polymer Journal, Volume 200, 112527 2023 (IF: 6)
230. Deepak Manoharan , Shamim Ahmad , Srinu Tothadie , Franziska Emmerling , Biswajit Bhattacharya and Soumyajit Ghosh , Linker size dependent Mechanical Properties of Di-imine based Molecular Crystals, CrystEngComm, DOI: 10.1039/D3CE00928A, 2023 (IF:3.1)
231. Theerthagiri Senthil, Ayyavu Chandramohan, Ponnusamy Senthil Kumar, Deivanayagam Paradesi and Kannaiyan Dinakaran, Proton-Exchange Membrane Fuel-Cell Studies on Composite Films of Bi₂S₃ Microrod-Loaded Random Conjugated Copolymer Containing Carbazole and Diphenyl Sulfone, Industrial & Engineering Chemistry Research, 62, 43, 17743–17754 2023 (IF:4.2)

232. Sahin Reja, Dilip Sarkar, Kaushik Sarkar, Deboshmita Mukherjee, T.K.S. Fayaz, Palash Sanphui, Rajesh Kumar Das, Functional mimic for catechol oxidase and phenoxazinone synthase: Structural, spectral, electrochemical and catalytic properties of mononuclear copper(II) complex, *Inorganica Chimica Acta* 2023, Volume 560, 121809, 2023 (IF:2.8)
233. Balaganesh Danagody, Neeraja Bose, Kalaivizhi Rajappan, Fabrication and characterization of TiO₂/ Fe₂O₃ Nano composites incorporated on novel ternary blends for effective lead removal *Polymer-Plastics Technology and Materials*, <https://doi.org/10.1080/25740881.2023.2267149> 2023 (IF: 2.7)
234. Mariyappan Shanmugam, Nithish Agamendran, Karthikeyan Sekar and Thillai Sivakumar Natarajan, Metal-Organic Frameworks (MOFs) for Energy Production, Gaseous Fuels and Electrochemical Energy Storage Applications, *Physical Chemistry Chemical Physics* 25, 30116-30144, 2023 (IF: 3.3)
235. Saraswathi Ganesan, Vidya Sudhakaran Menon, Muthukumar Venu Rajendran, Rohith Kumar Raman, Ananthan Alagumalai, Ananthanarayanan Krishnamoorthy, Small molecule with substantial latent heat of vaporization and distribution coefficient facilitates improved device performance in p-i-n perovskite solar cells, *Materials Science in Semiconductor Processing*, 2023 Volume 169, 10790, 2023 (IF:4.1)
236. Harshavardhan Mohan, Sethumathavan Vadivel, Taeho Shin Sonophotocatalytic water splitting by BaTiO₃@SrTiO₃ core shell nanowires, *Ultrasonics Sonochemistry*, Volume 101, 106650 2023 (IF:8.4)
237. Pratiksha P. Gawas , Praveenkumar Pandurangan, Marzieh Rabiei, Arvydas Palevicius, Andrius Vilkauskas, Giedrius Janusas, Mozghan Hosseinneshad, Reza Ebrahimi-Kahrizsangi, Sohrab Nasiri,*, Jean Michel Nunzi and Venkatramaiah Nutalapati, Significance of Zn Complex Concentration on Microstructure Evolution and Corrosion Behavior of Al/WS₂, *Molecules*, 2023, 28, 7290 2023 (IF:4.6)
238. N. Venkatramaiah, Shiv Kumara and Satish Patil Fluoranthene-based derivatives for multimodal anti-counterfeiting and detection of nitroaromatics – *Materials Advances*, 48, 5007-5009, 2023 (IF: 5)
239. Magesh Kumar Muthukumaran , Muthukumar Govindaraj , Bharathi Kannan Raja , Arockia Selvi J Crystal Plane Integrated Strontium Oxide/Hexagonal Boron Nitride Nanohybrid For Rapid Electrochemical Sensing of Anticancer Drug In Human Blood Serum Sample, *Analytical Methods*, 2023, 15(42), 5639-5654 2023 (IF:3.53)
240. Sohrab Nasiri, Marzieh Rabiei, Hanieh Shaki, Mozghan Hosseinneshad, Kommineni Kalyani, Arvydas Palevicius, Andrius Vilkauskas, Giedrius Janusas, Venkatramaiah Nutalapati, Stepan Kment, Jean Michel Nunzi, What is TADF (thermally activated delayed fluorescence) compared to the mechanisms of FL (fluorescence), PH (phosphorescence), and TTA (triplet-triplet annihilation) based on a novel naphthalimide sulfonylphenyl

derivative as a host? *Journal of Photochemistry & Photobiology, A: Chemistry*, Volume 47, 115289 2023 (IF:4.3)

241. Alibasha Akbar, Syamantak Khan, Tanmay Chatterjee, Mihir Ghosh, Unleashing the power of porphyrin photosensitizers: Illuminating breakthroughs in photodynamic therapy, *Journal of Photochemistry and Photobiology-B-Biology*, Volume 48 112796, 2023 (IF:5.4)
242. Iniya Prasanthi, K K R Datta, Three in One: Superoleophilic, Chemically and Mechanically Resistant ZIF-7 and ZIF-11 Percolation Networks for Selective Permeation of Oils and Chlorinated Solvents, *Inorganic Chemistry*, 2023, 62, 43, 17791–17803, 2023 (IF:4.6)
243. Tamil Selvan Kannan, Subrata Munan, Murugavel Kathiresan, Animesh Samanta, and Goutam Kumar Koley, Solid-State Photodimerization Reaction with Photosensitive Effect and Photophysical and Electrochemical Properties of N-Methylated 1-Naphthylvinyl-4-Quinoline, *Crystal Growth and Design*, 2023 (IF:3.8)
244. Ganesh Masilamani, Gamidi Rama Krishna, Sashi Debnath and Anjan Bedi, Origin of Optoelectronic Contradictions in 3,4-Cycloalkyl[c]-chalcogenophenes: A Computational Study, *Polymers*, 2023, 15(21), 4240, 2023 (IF: 5)
245. Sathish Panneer Selvam, Shanmugasundaram Kamalakanna, Rudharachari Maiyelvaganan, Muthuramalingam Prakash, Sivalingam Gopi, Hansa Mahajan, Kyusik Yun, Sungbo Cho Experimental insights and DFT analysis of metal-free DNA nanocatalyst with enhanced hydrogen evolution via phosphate-mediated proton acceptance, *Int. J. Hydrogen Energy*, <https://doi.org/10.1016/j.ijhydene.2023.09.254> 2023 (IF:7.2)
246. P. Keerthika, Rajendra Kumar Konidena, Marching Toward Long-Wavelength Narrowband Emissive Multi-Resonance Delayed Fluorescence Emitters for Organic Light Emitting Diodes, *Advanced Optical Materials* 2023, 2301732, 2023 (IF: 9)
247. Roshini Arulraj, Rajendran Prabu, C. M. Sara Fidha, Karthik Eswaran, Rajini Murugesan, Swaminathan Shanmugan, Arthanareeswari Maruthapillai and Sengeni Anantharaj, Rh for HER Electrocatalysis? A Critical Analysis of Recent Studies and Thoughts on the Same! *Journal of Materials Chemistry A*, <https://doi.org/10.1039/D3TA04720B>, 2023 (IF: 11.9)
248. Rakesh Chandrakant Prabhu, Arthanareeswari Maruthapillai, S. Devikala Gopal Chandru Senadi, S. Devikala, Use of online sequential segmented heart cutting modulation and orthogonality approach for determination of isomeric impurity profile of a drug molecule using parallel 2-dimensional mass spectroscopy, *Microchemical Journal*, Volume 195, 109543, 2023 (IF:4.8)
249. Jeyaprakash, J.S., Rajamani, M., Bianchi, C.L., Ashokkumar, M. and Neppolian, B., Highly efficient ultrasound-driven Cu-MOF/ZnWO₄ heterostructure: An efficient visible-light photocatalyst with robust stability for complete degradation of tetracycline, *Ultrasonics Sonochemistry*, 2023, 100, p.106624, 2023 (IF: 9.336)

250. Dhileepan, M.D., Rajan, A. and Neppolian, B Hydrazine-functionalized perylene diimide integrated Ti³⁺ self-doped TiO₂ heterostructure, International Journal of Hydrogen Energy, 2023 (IF: 7.139)
251. Sasikala, P., Bavani, T., Jagannathan, M., Preeyanghaa, M., Neppolian, B., Arumugam, N., Almansour, A.I. and Mahalingam, S.M., Single-step synthesis of 1D/3D-BiYO₃/BiOI direct Z-scheme heterostructure for the remediation of wastewater, Optical Materials, 145, p.114479. 2023, 3.9
252. Yazhini, C., Mathew, G., Anpo, M., Maurin, G., Choi, W. and Neppolian, B., Decoding the Mechanistic Strategies of Lanthanide-based Luminescent Metal-Organic Frameworks towards Antibiotic Detection, Advanced , Optical Materials, p.2301625, 2023, 9
253. Bajiri, M.A., Alkanad, K., Alnaggar, G., GC, S.S., Al-Maswari, B.M., Abdullah, M.M., Al-khawlani, A., Lokanath, N.K., Neppolian, B. and HS, B.N, Tailoring morphology and structure of 1D/2D isotype g-C₃N₄ for sonophotocatalytic hydrogen evolution, Surfaces and Interfaces, 42, p.103511, 2023 6.2
254. S. Sai Yeswanth kumar, S. Devikala, **Arthanareeswari Maruthapillai**, An efficient metal oxyhydroxide catalyst for electrocatalytic hydrogen evolution reaction, Materials Today: Proceedings, Volume 93, Part 2, Pages 73-78, 2023 (IF: 2.50)
255. M. Santhoshkumar, Tamilselvi Maruthapillai, **R. Mohankumar**, Comparative study of mangiferin content in Mangifera indica young and matured leaves, isolation and its characterization, Materials Today: Proceedings, 2023 (IF: 2.59)
<https://doi.org/10.1016/j.matpr.2023.10.002>
256. **R. Mohankumar**-Mariyappan Vaithiyalingam Ganesh Munuswamy-Ramanujam Ganesh Munuswamy-Ramanujam Mohankumar Ramasamy-A Novel Rapanone Derivatives Via Organocatalytic Reductive C-Alkylation, their Biological Evaluation in Antioxidant and In Vivo Zebrafish Embryo Toxicity, its Docking Studies-RSC Medicinal Chemistry--2023-DOI: 10.1039/D3MD00564J- - -

NOVEMBER 2023

257. Anubhab Das, Sindhu I. Sanakal, Deblu Sahu, Saijyoti Sahoo, Prama Adhya, Silambarasan Ravi, Sourav Chakraborty, Biswaranjan Mohanty, Kunal Pal, and **Samarendra Maji**, Effect of Cholesterol on Oral Delivery of Curcumin Using Oleogels Containing Wheat Germ Oil and Rose Floral, Wax-Crystal Growth & Design, 23, 12-9025–9034 2023 (IF:4.01)
258. Pratiksha P. Gawas, Buthanapalli Ramakrishn, Rajesh Pamanji, Joseph Selvin and **Venkatramaiah Nutalapati**, Novel triphenylamine based push-pull fluorophore bearing thiohydantoin unit for toxic Hg²⁺ ion detection: Exploring its potential for live cell imaging-Materials Advances, 2023, <https://doi.org/10.1039/D3MA00559C> - -5

259. Mozhgan Hosseinneshad , Mehdi Ghahari , Ghazal Mobarhan , Mohsen Fathi , Arvydas Palevicius, **Venkatramaiah Nutalapati** , Giedrius Janusas and Sohrab Nasiri-New Insights into Improving the Photovoltaic Performance of Dye-Sensitized Solar Cells by Removing Platinum from the Counter Electrode Using a Graphene-MoS₂ Composite or Hybrid-Micromachines, 14-2161, 2023 (IF:3.523)
260. Rohith Kumar Raman, Saraswathi Ganesan, Ananthan Alagumalai, Vidya Sudhakaran Menon, Senthil A. Gurusamy Thangavelu, and **Ananthanarayanan Krishnamoorthy**-Rational design, synthesis and structure-property relationship studies of a library of thermoplastic polyurethane films as an effective and scalable encapsulation material for perovskite solar cells-ACS Applied Materials and Interfaces, 15, 46, 53935–53950, 2023 (IF:9.5)
261. Y. Dana Rao¹, **N. Venkatramaiah**, A. Venkata Sekhar, N. Purnachand, V. Ravi Kumar , and N. Veeraiah-Impact of red lead on 0.65 and 1.3 μm emissions of Pr³⁺ ions in a non- α -conventional antimony oxide glass system for application in optical communication-J Mater Sci: Mater Electron, 34, 2174 2023 (IF:2.773)
262. Prabu Rajendran,^a Dhandapani Perumalb and **Swaminathan Shanmugan**-Covalent lindqvist polyoxometalate-cubic polyhedral oligomeric silsesquioxane hybrid material: enhancing photocatalytic antibacterial activity and hydrogen production as a heterogeneous catalyst-New Journal of Chemistry, 47, 2023 (IF:3.3)
263. Brahmari Honnappa, T. R. Naveen Kumar,^a Prince J. J. Sagayaraj, Sulakshana Shenoy,^c Chitiphon Chuaicham,^c Manova Santhosh Yesupatham, Anantharaj Sengeni, Bernaudshaw Neppolian, Keiko Sasaki and **Karthikeyan Sekar**, Unveiling the bifunctional role of morphological differences of self-supported Cu(OH)₂ in electrocatalysis-Journal of Materials Chemistry A, 11, 25854-25858, 2023 (IF: 11.9)
264. Sulakshana Shenoy, Chitiphon Chuaicham Mariyappan Shanmugam, Takamasa Okumura, Umamahesh Balijapalli, Wei Li Vellaichamy Balakumar, Keiko Sasaki and **Karthikeyan Sekar**, Tailoring Interfacial Physicochemical Properties in Cu₂O-TiO₂@rGO Heterojunction: Insights from EXAFS and Electron Trap Distribution Analysis, ACS Applied Materials & Interfaces, 15, 46, 54105–54118, 2023 (IF:9.5)
265. M. Sherlin Nivetha, **N. Abirami**, R. Arulmozhi-A novel g-C₃N₄@BiTiO₂/NiO ternary heterostructure photocatalysts for effective degradation of tetracycline under light illumination-Inorganic Chemistry Communications, [Volume 159](#), -111778, 2023 (IF:3.8)
266. K. Mohamed Yusuf Baig, **Goutam Kumar Kole**, Silver(I) coordination polymers of trans-5- styrylpyrimidine “ from structural diversity to solid-state reactivity under sunlight-CrystEngComm, 25(44) 2023 (IF:3.1)
267. Raghul Murugan , B Haridevamuthu, **Pushparathinam Gopinath** , Rajakrishnan Rajagopal , Selvaraj Arokiyaraj , Jesu Arockiaraj -Deacetylepoxyzadiradione ameliorates

- diabetes in in-vivo zebrafish larval model by influencing the level of regulatory adipokines and oxidative stress-European Journal of pharmacology, [DOI: 10.1016/j.ejphar.2023.176214](https://doi.org/10.1016/j.ejphar.2023.176214) – 2023 (IF:5)
268. Vasanthi Palanisamy, Dnyaneshwar P. Kale, Jaydeep H. Chormale, Arvind Kumar Bansal, **Palash Sanphui**-Improved tableting properties of ascorbic acid via eutectic compositions with sugars-Journal of Molecular Structure, Volume 1297, Part 2,-136969, 2023 (IF:3.8)
 269. T.K.S. Fayaz, Hemanth Kumar Chanduluru, Reem H. Obaydo, **Palash Sanphui**, Propylene carbonate as an ecofriendly solvent: Stability studies of Ripretinib in RPHPLC and sustainable evaluation using advanced tools-Sustainable Chemistry and Pharmacy, 2023-Volume 37, 101355 2023 (IF:6)
 270. Mahaan Ramalingam, Aruljothy **John Bosco A**, Irudaya Jothi-Converting Conventional Host to TADF Sensitizer and Hot- Exciton Emitter in Donor-Adamantane-Acceptor Triads for Blue OLEDs: A Computational Study-Chem Photo Chem <https://doi.org/10.1002/cptc.202300211> 2023 (IF:3.849)
 271. Mallayasamy Siva, Kiran Das, Subhabrata Guha Subhabrata Guha Subramaniyam Sivagnanam, Gaurav Das, Abhijit Saha, Adele Stewart, Biswanath Maity, and **Priyadip Das**, Liposomes Containing Zinc-Based Chemotherapeutic Drug Block Proliferation and Trigger Apoptosis in Breast Cancer Cells-ACS Applied Bio Materials, 6, 12,- 5310–5323, 2023 (IF:4.7)
 272. Ayyavu Shankar, Sundaramoorthy Marimuthu and **Govindhan Maduraiveeran**, High-Valent Iron Single-Atom Catalysts for Improved Overall Water Splitting via Reducing Energy Barrier and Stabilization of Active Center-Journal of Materials Chemistry A- <https://doi.org/10.1039/D3TA05863H>- 2023 (IF:11.9)
 273. **Govindhan Maduraiveeran**, Enzyme-Free Electrochemical Sensor Platforms Based on Transition Metal Nanostructures for Clinical Diagnostics-Analytical Methods 15(48)-6620-6630 2023 (IF:3.1)
 274. Sk Abulkalam Azad, Anirban Bera, **Jayanta Samanta**, Nayim Sepay, Rathin Jana, Chandan Kumar Pal, Mijanur Rahaman Molla, Debabrata Maiti, Shubhankar Samanta-Urea Promoted Neat Synthesis of Fused Dihydroisoquinolines and Disubstituted Pyridines: A Mechanistic Observation with Molecular Sensing Studies-Chemistryâ€“A Eur. J, <https://doi.org/10.1002/chem.202303287>- 2023 (IF:4.3)
 275. Naveen Kumar M, Deikrisha Lyngdo, Lyngkhoi, Sudhakar Gaikwad, Jayanta Samanta, Rafiq Ahamed, Snehadrinarayan Khatua and **Susnata Pramanik** -Excitation wavelength-dependent multi-coloured and white-light emissive pyrene-based hydrazones: suppression of Kasha's rule-Chem. Commun.- -2023-59, 14122-14125, 2023 (IF:4.9)

276. Aneesh Anand Nechikott, Hyun Deog Yoo, **Prasant Kumar Nayak**, A mixed dual-ion electrolyte for high rate performance and remarkable cycling stability of NaMnO₂ in hybrid supercapacitors-Journal of Power Sources, Volume 591-233825, 2023 (IF:9.2)
277. Dhatshanamoorthy Boopathi, Diptikanta Swain, **Prasant Kumar Nayak**, Improved charge storage performance of Fe-doped L-rich Ni-Mn-Co oxide Li_{1.2}Ni_{0.13}Mn_{0.54}Co_{0.13}O₂ in half and full Li-ion cells-Energy & fuels- -2023-DOI: 10.1021/acs.energyfuels.3c02900- - 2023 (IF: 5.3)
278. Rajesh Kushwaha, Virendra Singh, Silda Peters, Ashish K. Yadav, Dependu Dolui, Sukanta Saha, Sujit Sarkar, Arnab Dutta, Biplob Koch, **Tumpa Sadhukhan**, and Samya Banerjee- Density Functional Theory-Guided Photo-Trigged Anticancer Activity of Curcumin-Based Zinc(II) Complexes-J. Phys. Chem. B, 127, 48- 10266–10278, 2023 (IF:3.3)
279. Apoorva M. Pai, Mahesh M. Shanbhag, **Thandavarayan Maiyalagan**, Sondos Abdullah Alqarni, Nagaraj P. Shetti-Activated carbon synthesized from Arecanut catechu L. as a sustainable precursor intercalated TiO₂ modified electrode for the detection of fungicide Dichlorophen-Diamond and Related Materials- -2023-Volume 140, Part B-110561 (IF: 4.1)
280. P. Krishnamurthy, Anuj Kumar, Sondos Abdullah Alqarni, S. Silambarasan, **Maiyalagan**-Iron and Vanadium co-doped Ni₃S₂ flower like Nanosheets as an Efficient Electrocatalysts, for Water Splitting-Surfaces and Interfaces, Volume 44-103694- 2023 (IF: 6.2)
281. P. Vijay, M. Tamilselvi, **R. Mohankumar**-Isolation, identification and HPLC analysis of a phytochemical from Moringa oleifera leaves-Materials Today: Proceedings- <https://doi.org/10.1016/j.matpr.2023.11.019>- - 2023, (IF: 2.59)
282. Mariyappan Vaithiyalingam Ganesh Munuswamy-Ramanujam Ganesh Munuswamy-Ramanujam **Mohankumar Ramasamy** - A Novel Rapanone Derivatives Via Organocatalytic Reductive C-Alkylation, their Biological Evaluation in Antioxidant and In Vivo Zebrafish Embryo Toxicity, its Docking Studies-RSC Medicinal Chemistry DOI: 10.1039/D3MD00564J- 2023 (IF: 4.26)
283. Naveenkumar, N., Abhishek, A., Sridevi, D.V., Balu, M., Neppolian, B. and Ramesh, V., , Size-dependent structural, morphological, optical, and electrical studies of hydrothermally synthesized TiO₂ nanocorals for DSSC application, Journal of Materials Science: Materials in Electronics, Journal of Materials Science: Materials in Electronics, 34(32), p.2137, 2023 (IF: 2.8)

DECEMBER 2023

284. Ravi Uppala, **Arthanareeswari. M**, Venkatasubbaiah. B-Development of an LC-MS/MS Approach to Detect and Quantify Three Impurities of Darunavir-Journal of Chemical Health Risks, 13(6)- 570-577, 2023 (IF: 0.77)
285. Angela S. Kaloudi, Antrea M. Athinodorou Konstantinos Spyrou, Yannis V. Simos Panagiota Zygouri, Mohamed A. Hammami , **K.K.R. Datta**, Patra Vezyraki , Dimitrios Peschos , Konstantinos Tsamis, Dimitrios P. Gournis-Synthesis, characterization, and biocompatibility studies of a new lanthanum-cerium synthetic aminoclay analogue-Applied Materials Today, 35, 102006, 2023 (IF:8.3)
286. Gayathri Chellasamy, **Elumalai Varathan** , Karthikeyan Sekar b, Sada Venkateswarlu, Saravanan Govindaraju , Kyusik Yun, Single-atom catalysts for biosensing: Progress in theoretical and mechanistic understanding-Coordination Chemistry Reviews -<https://doi.org/10.1016/j.ccr.2023.215606>- 2023 (IF: 20.6)
287. Priya Rana, Abigail Jennifer G, Shanmuka Rao T, Sabyasachi Mukhopadhyay, Elumalai Varathan, and **Priyadip Das**, Polarity-Induced Morphological Transformation with Tunable Optical Output of Terpyridine-Phenanthro[9, 10-d]imidazole-Based Ligand and Its Zn (II) complexes with I-V Characteristics-ACS Omega- -2023- 8, 51-48855–48872, 2023 (IF: 4.1)
288. Subramaniam Sivagnanam, Kiran Das, Ileshita Pan,c Adele Stewart,e Atanu Barik, d Biswanath Maity and **Priyadip Das**, Engineered Triphenylphosphonium-Based, Mitochondrial-Targeted Liposomal Drug Delivery System Facilitates Cancer Cell Killing Actions of Chemotherapeutics-RSC Chemical Biology, DOI: 10.1039/D3CB00219E, 2023 (IF: 4.1)
289. Manikandan Subramani, **Sivakami Mohandos**, Hiroya Ikeda, Lakshmi Prabha Chandrasekar, BharaniDharan Sethuraman, Pandiyarasan Veluswamy*, and K. Hemkumar-New Thermoelectric Material and Devices: Naphthol[1,3]oxazine and the performance compared with Bismuth Telluride-ACS Sustainable Chemistry and Engineering, 12, 1- 645–655, 2023 (IF: 9.224)
290. Vidya Sudhakaran Menon , Saraswathi Ganesan , Rohith Kumar Raman , Ananthan Alagumalai , **Ananthanarayanan Krishnamoorthy** -Critical role of dopant in NiOx hole transport layer for mitigating redox reactivity at NiOx/absorber interface in mixed cation perovskite solar cells-Dalton Transactions, 2;53(2), 781-797, 2023 (IF:4)
291. Balaganesh Danagody, Neeraja Bose, **Kalaivizhi Rajappan**, Anwar Iqbal, Ganesh Munuswami Ramanujam, and Aswathy Karanath Anilkumar-Electrospun PAN/PEG

- Nanofibrous Membrane Embedded with a MgO/gC₃N₄ Nanocomposite for Effective Bone Regeneration-ACS Biomaterials Science & Engineering, 10, 1-468–481, 2023 (IF: 5.7)
292. Neeraja Bose, Balaganesh Danagody, **Kalaivizhi Rajappan**, Ganesh Munuswamy Ramanujam, and Aswathy Karanath Anilkumar-Sustainable Routed Mxene-Based Aminolyzed PU/PCL Film for Increased Oxidative Stress and a pH-Sensitive Drug Delivery System for Anticancer Therapy-ACS Applied Bio Materials, 7, 1- 379–393, 2023 (IF: 4.7)
293. Sundaramoorthy Marimuthu, Ayyavu Shankar, **Govindhan Maduraiveeran**-Ni(OH)₂-decorated FeCoPi nanosheets on NiO heterostructures: Tunable intrinsic electronic structures for improved overall water splitting-Chemical Communications, 59-2600-2603, 2023 (IF: 4.9)
294. Achal BhiogadeNagamalleswari KatragaddaNagamalleswari KatragaddaPranab Mandal **Vengadesh Kumara Mangalam** Ramakrishnan-Flexible multiferroic PVDF/CoFe₂O₄ composite films for pyroelectric energy conversion-Journal of Materials Science, 8(47), 2023 (IF: 4.5)
295. Arunkumar Kathiravan, Fahad Mateen, **Pushparathinam Gopinath**, Do-Yeon Hwang, Sung-Kyu Hong, Saif M.H. Qaid-Fabrication and comprehensive investigations on NBD-based luminescent-Dyes and Pigments, Volume 222-111869, 2023 (IF: 4.5)
296. Kumaresan Annamalai a, Arun Annamalai a, Ramya Ravichandran a, Anandhavalli Jeevarathinam a, Padmanaban Annamalai, Hector Valdes b and **Sundaravadivel Elumalai**, Simple devising of N-doped carbon dots (N-CDs) as a low-cost probe for selective environmental toxin detection and security applications-New Journal of Chemistry, 48-216-227, 2023 (IF: 3.925)
297. Arun Annamalai, Kumaresan Annamalai, Nagarajan Ayyanduarai, Ramya Ravichandran, Padmanaban Annamalai, Hector Valdes, **Sundaravadivel Elumalai**-Carbon Dots: A Multifunctional Nano-Sized Giant Tool for the Detection Probe and Physical Reformation of NiMoO₄ in Solid-State for Enriched Energy Storage Application-Advanced Sustainable Systems <https://doi.org/10.1002/adsu.202300419>, 2023 (IF: 7.1)
298. Ramalingam Mahaan, Aruljothy **John Bosco**-Sulfur Oxidation State and Substituents Influenced Multifunctional Organic Luminophores in BTP Core for OLEDs: A Computational study on RTP, TADF Emitter and Sensitizer-Journal of Physical Chemistry A, 8 (12) 2023 (IF: 2.944)

299. Vaibhav Namdev Kale^B, Jayasurya, R. Bhavani,^T **Maiyalagan**-Heterostructured FeSe₂-CoSe₂ Nanorods Supported on Nitrogen and Sulfur co-doped Reduced Graphene Oxide as High-Performance Electrocatalyst for Oxygen Evolution Reaction-Journal of Alloys and Compounds, [Volume 978](#)-173313, 2023 (**IF: 6.2**)
300. Donghyeok Son , Hyunmin Park , Won-Gwang Lim , Seunghyeok Baek , Seok Hun Kang , Jeong-Chan Lee , **Thandavarayan Maiyalagan** , Young-Gi Lee , Steve Park , Jinwoo Lee -Ultrathin Mixed Ionicâ€‘Electronic Conducting Interlayer via the Solution Shearing Technique for High-Performance Lithiumâ€‘Sulfur Batteries-ACS Nano, 17(24)-25507-25518, 2023 (**IF: 17.1**)
301. Ganesh Kumar Dhandabani, Palaniraja Jeyakannu, Chia-Ling Shih,Aksa Mariyam Abraham,**Gopal Chandru Senadi** and Jeh-Jeng Wang-A Regioselective [3 + 2] Cycloaddition of Alkynols and Ketones To Access Diverse 1,3-Dioxolane Scaffolds-The Journal of Organic Chemistry, 89, 1- 719–724, 2023 (**IF: 3.6**)
302. Nandha Gopal Balasubramaniyana and **Panneerselvam Perumal**-Highly Efficient Electrochemical Detection of H₂O₂ Utilizing an Innovative Copper Porphyrinic Nanosheet Decorated Bismuth Metal-Organic Framework Modified Electrode-Analytical Methods, doi: 10.1039/d3ay01804k, 2023 (**IF:3.1**)
303. Chezhiyan Sumithaa, Przemyslaw Gajda-Morszewski, Wickneswaran Ishaniya, Themmla Khamrang,d Marappan Velusamy, Nattamai Bhuvanesh,f Malgorzata Brindell, Olga Mazuryk and **Mani Ganeshpandian** -Design of an anticancer organoruthenium complex as the guest and polydiacetylene-coated fluorogenic nanocarrier as the host: engineering nanocarrier using ene-yne conjugation for sustained guest release, enhanced anticancer activity and reduced in vivo toxicity-Dalton Transactions, 53- 966-985, 2023 (**IF: 4**)
304. T. K. S. Fayaz, Hemanth Kumar Chanduluru,b Puja Lal,c Animesh Ghosh, Vladimir Chernyshev and **Palash Sanphui** -Structural Analysis of Anti-Retroviral Drug Raltegravir and its Potential Impurity C: Investigation of Solubility and Stability – CrystEngComm, DOI: 10.1039/D3CE01071F, 2023 (**IF: 3.1**)
305. Kangeyan, K.P., Hafeez, H.Y., **Neppolian, B.** and Lakhera, S.K.-Operando Construction of Nickel-Coated Amorphous 2D CaTiO₃ Nanosheets for Enhanced Photocatalytic Hydrogen Production- Surfaces and Interfaces, p.103750. I, 2023 (**IF: 6.2**)
306. Rajamani, M., Jeyaprakash, J.S., Madhavan, J. and **Neppolian B**-Turning trash to treasure: Innovative use of exhausted desiccant waste supported zinc indium sulphide for sustainable photocatalytic abatement of tetracycline, Chemosphere, p.140969, 2023 (**IF: 8.8**)

307. Mondal, S., Rajan, K.D., Rathiman, M., **Neppolian, B.** and Vattikondala, G-Enhanced photocatalytic degradation of tetracycline using NiCo–BiVO₄ nanocomposite under visible light irradiation: A noble-metal-free approach for water remediation, *J. - Chemosphere*, p.141012, 2023 (**IF: 8.8**)