

SL N	Authors	Title	Year	Source title	Vo l	Issu e	Art. No.	DOI	Document Type
1	Patel P.K.; Pandey L.M.; Uppaluri R.V.S.	Highly effective removal of multi-heavy metals from simulated industrial effluent through an adsorption process employing carboxymethyl-chitosan composites	2024	Environmental Research	240		117502	10.1016/j.envres.2023.117502	Article
2	Patra S.; Golder A.K.; Uppaluri R.V.	Monodispersed AuNPs synthesized in a bio-based route for ultra selective colorimetric determination of Ni(II) ions	2023	Chemical Physics Impact	7		100388	10.1016/j.chphi.2023.100388	Article
3	Kumar R.; Negi R.; Singh B.; Saini G.K.; Jawed M.	Assessment of Cu(II) impact on aerobic sludge biomass and its post-exposure self-recovery potential	2023	Journal of Water Process Engineering	56		104501	10.1016/j.jwpe.2023.104501	Article
4	Koley S.; Dash S.; Khwairakpam M.; Kalamdhad A.S.	Perspectives and understanding on the occurrence, toxicity and abatement technologies of disinfection by-products in drinking water	2024	Journal of Environmental Management	351		119770	10.1016/j.jenvman.2023.119770	Review
5	Ghosh D.; De S.; Deka D.; Das G.	Amphiphilic polyphenol incorporated hydrogel derived from mucoadhesive of Dillenia indica: Potential antioxidant and adsorbent	2024	International Journal of Biological Macromolecules	254		127759	10.1016/j.ijbiomac.2023.127759	Article
6	Bag S.S.; Sinha S.; Singh S.; Golder A.K.	Greener photocatalytic route to azide-alkyne cycloaddition reactions: Role of hole/oxygen in air	2023	Tetrahedron	149		133703	10.1016/j.tet.2023.133703	Article

7	Shekhar Samanta N.; Mondal P.; Dhara S.; Bora U.; Purkait M.K.	Fabrication of LD-slag derived zeolite Y coated polysulfone (PSf) membrane for decontamination of groundwater	2023	Chemical Engineering Journal	478		147330	10.1016/j.cej.2023. 147330	Article
8	Joardar S.; Duarah P.; Purkait M.K.	Recent advances in myo-inositol recovery and purification from agricultural sources as potential dietary supplements: A review	2023	Sustainable Chemistry and Pharmacy	36		101331	10.1016/j.scp.2023 .101331	Review
9	Ravi R.; Golder A.K.	Bio-based Au Doping with Dominant Oxygen Vacancies and Ti ³⁺ Defects on Photocatalytic Functionalities of TiO ₂	2023	Industrial and Engineering Chemistry Research	62	48		10.1021/acs.iecr.3c 02850	Article
10	Bag S.S.; Sinha S.; Dutta S.; Baishya H.J.; Paul S.	Targeting the SARS-CoV-2 RNA- dependent RNA polymerase (RdRp) with synthetic/designer unnatural nucleoside analogs: an in silico study	2023	Journal of Molecular Modeling	29	12	366	10.1007/s00894- 023-05767-2	Article
11	Bhushan S.; Eshkabilov S.; Jayakrishnan U.; Prajapati S.K.; Simsek H.	A comparative analysis of growth kinetics, image analysis, and biofuel potential of different algal strains	2023	Chemosphere	336		139196	10.1016/j.chemosp here.2023.139196	Article
12	Sathyan A.; Koley S.; Khwairakpam M.; Kalamdhad A.S.	Effect of thermal pretreatments on biogas production and methane yield from anaerobic digestion of aquatic weed biomass Hydrilla verticillata	2023	Biomass Conversion and Biorefinery	13	17		10.1007/s13399- 023-04890-7	Article
13	Rajasekhar R.; Mandal D.D.; Mandal T.K.	A highly sensitive hybrid digital sensor for room temperature arsenic detection	2023	Journal of Environmental Chemical Engineering	11	5	110381	10.1016/j.jece.202 3.110381	Article

14	Bakal P.P.; Das G.	A Comparative Study of Raw vs. Activated Biochar Derived from "Ricinus communis Stem" for Preferential Removal of Cationic Dyes	2023	Water Conservation Science and Engineering	8	1	19	10.1007/s41101-023-00192-1	Article
15	Bakal, P. P., & Das, G	Biochar Derived from the Stem of Ricinus communis L. and Colocasia esculanta: Efficient Adsorbent for the Removal of Cd (II) and Pb (II) Ions from an Aqueous Environment	2023	Journal of Water Chemistry and Technology	45	3		10.3103/S1063455X23030025	Article
16	Singh T.; Uppaluri R.V.S.	Machine learning tool-based prediction and forecasting of municipal solid waste generation rate: a case study in Guwahati, Assam, India	2023	International Journal of Environmental Science and Technology	20	11		10.1007/s13762-022-04644-4	Article
17	Mazumder P.; Dash S.; Khwairakpam M.; Kalamdhad A.S.	Ecological and health risk assessment associated with translocation of heavy metals in Lycopersicum esculentum from farmland soil treated with different composts	2023	Journal of Environmental Management	344		118577	10.1016/j.jenvman.2023.118577	Article
18	Das N.M.; Prusty B.M.; Pradhan N.; Gupta A.; Carmena-Bargueño M.; Karn R.; Pérez-Sánchez H.; Kumar S.; Manna D.	Evaluation of mode of indoleamine 2,3-dioxygenase 1 inhibition by 4,7-dichloroquinolines	2023	European Journal of Medicinal Chemistry Reports	9		100110	10.1016/j.ejmcr.2023.100110	Article
19	Singh T.; Uppaluri R.V.S.	Optimizing biogas production: a novel hybrid approach using anaerobic digestion calculator and machine learning techniques on Indian biogas plant	2023	Clean Technologies and Environmental Policy	25	10		10.1007/s10098-023-02584-2	Article

20	Mishra A.; Tiwari P.; Pandey L.M.	Surface, interfacial and thermodynamic aspects of the Rhamnolipid-salt systems	2023	Journal of Molecular Liquids	384		122245	10.1016/j.molliq.2023.122245	Article
21	Patel P.K.; Pandey L.M.; Uppaluri R.V.S.	Synthesized carboxymethyl-chitosan variant composites for cyclic adsorption-desorption based removal of Fe, Pb, and Cu	2023	Chemosphere	340		139780	10.1016/j.chemosphere.2023.139780	Article
22	Mazumder P.; Dash S.; Kumar M.; Silori R.; Tiwari A.; Khwairakpam M.; Kalamdhad A.S.	Association of microplastics with heavy metals and antibiotic resistance bacteria/genes in natural ecosystems - A perspective through science mapping approach	2023	Groundwater for Sustainable Development	22		100962	10.1016/j.gsd.2023.100962	Review
23	Prusty B.M.; Karn R.; Patel A.; Mazumder P.; Kumar S.; Manna D.	Stimuli-responsive assembly and disassembly of anionic suprasomes with tunable antibacterial activity	2023	Chemical Communications	59	71		10.1039/d3cc02729e	Article
24	Patel P.K.; Pandey L.M.; Uppaluri R.V.S.	Cyclic desorption based efficacy of polyvinyl alcohol-chitosan variant resins for multi heavy-metal removal	2023	International Journal of Biological Macromolecules	242		124812	10.1016/j.ijbiomac.2023.124812	Article
25	Kumar R.; Saini G.K.; Jawed M.	Assessing recovery potential of aerobic sludge biomass stressed with amoxicillin	2023	Environmental Technology and Innovation	31		103225	10.1016/j.eti.2023.103225	Article
26	Silori R.; Shrivastava V.; Mazumder P.; Kumar M.	Antimicrobial resistance surge in the context of pollution, war, and pandemic	2023	Current Opinion in Environmental Science and Health	34		100479	10.1016/j.coesh.2023.100479	Review
27	Samanta N.S.; Anweshan; Mondal P.; Bora U.; Purkait M.K.	Synthesis of precipitated calcium carbonate from LD-slag using CO ₂	2023	Materials Today Communications	36		106588	10.1016/j.mtcomm.2023.106588	Article

28	Debnath B.; Duarah P.; Purkait M.K.	Microwave-assisted quick synthesis of microcrystalline cellulose from black tea waste (<i>Camellia sinensis</i>) and characterization	2023	International Journal of Biological Macromolecules	244		125354	10.1016/j.ijbiomac.2023.125354	Article
29	Samanta N.S.; Mondal P.; Purkait M.K.	Nanofiltration technique for the treatment of industrial wastewater	2023	Advanced Application of Nanotechnology to Industrial Wastewater				10.1007/978-981-99-3292-4_9	Book chapter
30	Dhara S.; Shekhar Samanta N.; Das P.P.; Uppaluri R.V.S.; Purkait M.K.	Ravenna Grass-Extracted Alkaline Lignin-Based Polysulfone Mixed Matrix Membrane (MMM) for Aqueous Cr(VI) Removal	2023	ACS Applied Polymer Materials	5	8		10.1021/acsapm.3c00999	Article
31	Aswani K.V.; Kalamdhad A.S.; Das C.	The advancement of membrane bioreactors (MBRs) in industrial effluent treatment	2023	Sustainable Industrial Wastewater Treatment and Pollution Control				10.1007/978-981-99-2560-5_7	Book chapter
32	Mazumder P.; Dash S.; Kumar M.; Silori R.; Tiwari A.; Khwairakpam M.; Kalamdhad A.S.	Association of microplastics with heavy metals and antibiotic resistance bacteria/genes in natural ecosystems - A perspective through science mapping approach	2023	Groundwater for Sustainable Development	22		100962	10.1016/j.gsd.2023.100962	Review
33	Shekhar Samanta N.; Das P.P.; Dhara S.; Purkait M.K.	An Overview of Precious Metal Recovery from Steel Industry Slag: Recovery Strategy and Utilization	2023	Industrial and Engineering Chemistry Research	62	23		10.1021/acs.iecr.3c00604	Review
34	Deepti; Anweshan; Dhara S.; Purkait M.K.	Membrane and disinfection technologies for industrial wastewater treatment	2023	Industrial Wastewater Reuse: Applications, Prospects and Challenges				10.1007/978-981-99-2489-9_5	Book chapter
35	Jawed A.; Golder A.K.; Pandey L.M.	Synthesis of iron oxide nanoparticles mediated by <i>Camellia sinensis</i> var. <i>Assamica</i> for Cr(VI) adsorption and detoxification	2023	Bioresource Technology	376		128816	10.1016/j.biortech.2023.128816	Article

36	Ravi R.; Golder A.K.	A tuneable bioinspired process of Pt-doping in TiO ₂ for improved photoelectrochemical and photocatalytic functionalities	2023	Colloids and Surfaces A: Physicochemical and Engineering Aspects	663		131034	10.1016/j.colsurfa.2023.131034	Article
37	Das S.; Hazarika G.; Manna D.	Guanidine-Functionalized Fluorescent sp ² Carbon-Conjugated Covalent Organic Framework for Sensing and Capture of Pd(II) and Cr(VI) Ions	2023	Chemistry - A European Journal	29	15	e202203595	10.1002/chem.202203595	Article
38	Singh T.; Uppaluri R.V.S.	Application of ANN and traditional ML algorithms in modelling compost production under different climatic conditions	2023	Neural Computing and Applications	35	18		10.1007/s00521-023-08404-4	Article
39	Das P.P.; Sontakke A.D.; Samanta N.S.; Purkait M.K.	Emerging contaminants in wastewater: Eco-toxicity and sustainability assessment	2023	Industrial Wastewater Reuse: Applications, Prospects and Challenges				10.1007/978-981-99-2489-9_4	Book chapter
40	Paul N.; Harish G.; Banerjee T.	Decontamination of enoxacin containing aqueous phase through hydrophobic deep eutectic solvents: Solvent regeneration and quantum chemical insights	2023	Journal of Molecular Liquids	374		121254	10.1016/j.molliq.2023.121254	Article
41	Patra S.; Golder A.K.; Uppaluri R.V.S.	Ultrasensitive colorimetric detection and determination of Hg(II) using bioinspired AgNPs synthesized from mature <i>Camellia sinensis</i> leaves	2023	Results in Optics	11		100411	10.1016/j.rio.2023.100411	Article
42	Dhara S.; Samanta N.S.; Uppaluri R.; Purkait M.K.	High-purity alkaline lignin extraction from <i>Saccharum ravannae</i> and optimization of lignin recovery through response surface methodology	2023	International Journal of Biological Macromolecules	234		123594	10.1016/j.ijbiomac.2023.123594	Article

43	Verma R.; Sharma S.; Kundu L.M.; Maiti S.K.; Pandey L.M.	Enhanced production of biosurfactant by Bacillus subtilis RSL2 in semicontinuous bioreactor utilizing molasses as a sole substrate	2023	Journal of Biotechnology	362			10.1016/j.jbiotec.2022.12.007	Article
44	Mazumder P.; Khwairakpam M.; Kalamdhad A.S.	Assessment of multi-metal contaminant in agricultural soil amended with organic wastes, speciation and translocation – An approach towards sustainable crop production	2023	Total Environment Research Themes	5		100025	10.1016/j.totert.2023.100025	Article
45	Devi J.P.; Mahanta C.; Barua A.	Analysis of non-parametric trend and climatic parameter homogeneity tests in a data-scarce region: a spatio-temporal perspective in the Tawang River basin, Eastern Himalayas	2023	Theoretical and Applied Climatology	151	###		10.1007/s00704-022-04320-0	Article
46	Paul N.; Harish G.; Banerjee T.	Stability Mechanism of Menthol and Fatty Acid Based Hydrophobic Eutectic Solvents: Insights from Nonbonded Interactions	2023	ACS Sustainable Chemistry and Engineering	11	8		10.1021/acssuschemeng.2c06137	Article
47	Patel P.K.; Pandey L.M.; Uppaluri R.V.S.	Adsorptive removal of Zn, Fe, and Pb from Zn dominant simulated industrial wastewater solution using polyvinyl alcohol grafted chitosan variant resins	2023	Chemical Engineering Journal	459		141563	10.1016/j.cej.2023.141563	Article
48	Parthiban A.; Sachithanandam V.; Sarangapany S.; Misra R.; Muthukrishnan P.; Jeyakumar T.C.; Purvaja R.; Ramesh R.	Green synthesis of gold nanoparticles using quercetin biomolecule from mangrove plant, Ceriops tagal: Assessment of antiproliferative properties, cellular uptake and DFT studies	2023	Journal of Molecular Structure	###		134167	10.1016/j.molstruc.2022.134167	Article

49	Samanta N.S.; P. Das P.; Sharma M.; Purkait M.K.	Recycle of water treatment plant sludge and its utilization for wastewater treatment	2023	Resource Recovery in Drinking Water Treatment				10.1016/B978-0- 323-99344- 9.00010-4	Book chapter
50	Kalita J.J.; Sharma P.; Bora U.	Recent developments in application of nucleic acid aptamer in food safety	2023	Food Control	145		109406	10.1016/j.foodcont. 2022.109406	Review
51	Ghosh D.; Basak M.; Deka D.; Das G.	Quinoxaline-probe embedded injectable fluorogenic hydrogels: Comparative detection of mesitylene in guar gum and i-carrageenan hydrogels	2023	International Journal of Biological Macromolecules	229			10.1016/j.ijbiomac. 2022.12.310	Article
52	Purkait M.K.; Mondal P.; Das P.P.; Deepti	Wastewater Treatment in Steel Industries: Case Studies, Advances, and Prospects	2023	Wastewater Treatment in Steel Industries: Case Studies, Advances, and Prospects				10.1201/97810033 66263	Book
53	Yohannan A.; Vincent S.; Divakaran N.; Pottikadavath Venugopal A.K.; Patra S.; Ashish K.; Mohanty S.	Experimental and simulation studies of hybrid MWCNT/montmorillonite reinforced FDM based PLA filaments with multifunctional properties enhancement	2023	Polymer Composites				10.1002/pc.27794	Article
54	Sontakke A.D.; Deepti; Samanta N.S.; Purkait M.K.	Smart nanomaterials in the medical industry	2023	Advances in Smart Nanomaterials and their Applications				10.1016/B978-0- 323-99546- 7.00025-2	Book chapter
55	Ghosh S.; Biswas A.	Emerging contaminants in municipal wastewater: Occurrence, characteristics, and bioremediation	2023	Current Developments in Biotechnology and Bioengineering: Bioremediation of Endocrine Disrupting Pollutants in Industrial Wastewater				10.1016/B978-0- 323-91902- 9.00001-8	Book chapter

56	Samanta N.S.; Anweshan; Purkait M.K.	Techniques in removal of organics and emerging contaminants from wastewater for water reuse application	2023	Development in Wastewater Treatment Research and Processes: Advances in Industrial Wastewater Treatment Technologies: Removal of Contaminants and Recovery of Resources				10.1016/B978-0-323-95684-0.00009-9	Book chapter
57	Katiyar V.; Bag S.S.	North East Research Conclave-2022: Toward Sustainable Science and Technology	2023	Sustainable Energy Generation and Storage: Proceedings of NERC 2022					Editorial
58	Singh T.; Uppaluri R.V.S.	Feed-forward ANN and traditional machine learning-based prediction of biogas generation rate from meteorological and organic waste parameters	2023	Journal of Supercomputing				10.1007/s11227-023-05569-6	Article
59	Purkait M.K.; Haldar D.; Debnath B.	Technological Advancements in Product Valorization of Tea Waste	2023	Technological Advancements in Product Valorization of Tea Waste				10.1016/C2021-0-03501-X	Book
60	Duarah P.; Haldar D.; Purkait M.K.	Policies of biofuel for commercialization	2023	Green Approach to Alternative Fuel for a Sustainable Future				10.1016/B978-0-12-824318-3.00005-9	Book chapter
61	Das P.P.; Samanta N.S.; Dhara S.; Purkait M.K.	Biofuel production from algal biomass	2023	Green Approach to Alternative Fuel for a Sustainable Future				10.1016/B978-0-12-824318-3.00009-6	Book chapter
62	Anweshan; Das P.P.; Dhara S.; Purkait M.K.	Nanosensors in food science and technology	2023	Advances in Smart Nanomaterials and their Applications				10.1016/B978-0-323-99546-7.00015-X	Book chapter

63	Namboodiri M.M.T.; Manikandan A.; Paul T.; Pakshirajan K.; Pugazhenth G.	Chitosan production by <i>Penicillium citrinum</i> using paper mill wastewater and rice straw hydrolysate as low-cost substrates in a continuous stirred tank reactor	2023	Environmental Technology (United Kingdom)	44	15		10.1080/09593330. 2022.2026486	Article
64	Duarah P.; Haldar D.; Singhania R.R.; Dong C.- D.; Patel A.K.; Purkait M.K.	Sustainable management of tea wastes: resource recovery and conversion techniques	2023	Critical Reviews in Biotechnology				10.1080/07388551. 2022.2157701	Review
65	Ghosh, N., Kundu, L.M.	Cyclic di-peptide in situ inhibited protein-aggregation	2023	Bioorganic and Medicinal Chemistry Letters				10.1016/j.bmcl.202 3.129379	
66	Bhattacharjee, U., Uppaluri, R.V.S.	Growth and nutritional characteristics of <i>Phaseolus vulgaris</i> and Jeevamrutha bio-fertilizer-vermicompost system	2023	Bioresource Technology Reports				10.1016/j.biteb.202 3.101416	
67	Bag, S.S., Banerjee, A., Sinha, S	Expansion of Genetic Alphabets: Designer Nucleobases and Their Applications		Synlett				10.1055/a-2219- 6680	
68	Bhattacharjee, U., Uppaluri, R.V.S.	Production and optimization of Jeevamrutha bio-fertilizer formulations for soil fertility and its role in waste minimization		Sustainable Chemistry for Climate Action				10.1016/j.scca.202 3.100025	
69	Narayani Gogoi, Mihir Kumar Purkait, and Piyal Mondal	Proceedings of the Narayani River Conclave 2023, Health Rivers: Healthy Lives		International Journal of Creative Research Thoughts					