2021-2022

Paper No	Name	Paper Title	Authors	Journal Name, Volume, Page Number, Month & Year	DOI	IF
1.	Dr. K. Sathish Kumar	Comparative energy bandgap analysis of zinc and tin based chalcogenide quantum dots	Irshad Ahamed Mansoor Ahamed, K Sathish Kumar, A Sivaranjani	Revista Mexicana de Físic, Vol.68, 1-8, June 2022	DOI: https://doi.org/10.31349/RevMexFis.68.041601	1.702
2.		Exfoliation of nanographene from waste batteries and its application in methylene blue dye removal	K Bogeswaran, K Sathish Kumar	Journal of Chilean chemical society, Vol.66,5358-5364, December 2021	http://dx.doi.org/10.4067/s0717-97072021000405358	1.357
3.		Characteristic study of exfoliated graphene particles from waste batteries	Shreya Suresh, Vinatha Viswanathan, Malarvizhi Angamuthu, K Bogeswaran, K Sathish Kumar	Brazilian Journal of Chemical Engineering, Vol.38, 915-927, December 2021	https://doi.org/10.1007/s43153-021-00138-x	1.772
4.	Dr. R. Parthiban	Numerical Investigation of Microchannel Cooling Using Nanocomposites	G. Sudha, Chitra Boobalan, R. Parthiban	Arabian Journal f Science and Engineering ISSN 1319-	DOI: 10.1007/s13369-022-06666-z	2.087

				3025(SCI)		
5.		A review on recent advances in electrodeionization for various environmental applications	B. Senthil Rathi, P.Senthil Kumar* R. Parthiban	Chemosphere Vol. 289, pp. 133223, February 2022	https://doi.org/10.1016/j.chemosphere.2021.133223	8.943
6.		Synthesis and characterization of 4-Halobenzylidene malanonitriles for optical detection of Nickel (II) ions in aqueous solution	R. Parkavi, R. Parthiban*, P.Senthil Kumar*, A. Chandramohan, K. Dinakaran*	**Chemosphere** Vol. 290, pp. 133248, March 2022	https://doi.org/10.1016/j.chemosphere.2021.133248	8.943
7.	Dr. P. Senthil Kumar	Adsorption of Pb(II) and Cd(II) ions onto Modified Biogenic Slaughterhouse Waste: Equilibrium and Kinetic Analysis	P. Tsopbou Ngueagni, **P. Senthil Kumar***, E. Djoufac Woumfo, S. M. Prasanth	**International Journal of Environmental Analytical Chemistry** Vol. 102 (16), pp. 4344-4363, January 2022	https://doi.org/10.1080/03067319.2020.1784409	2.826
8.		Conversion of waste plastics into low emissive hydrocarbon fuel using catalyst produced from biowaste	N. Jahnavi, K. Kanmani, **P. Senthil Kumar*** Sunita Varjani	**Environmental Science and Pollution Research** Vol. 28, pp. 63638-63645, December 2021	https://doi.org/10.1007/s11356-020-11398-4	5.190
9.		Techniques and modeling of polyphenol extraction from food: A review	Adithya Sridhar, Muthamilselvi Ponnuchamy, **Ponnusamy Senthil Kumar***, Ashish Kapoor*, Dai-Viet N. Vo,	**Environmental Chemistry Letters** Vol.19, pp. 3409-3443, August 2021	https://doi.org/10.1007/s10311-021-01217-8	13.615

			Sivaraman Prabhakar			
10.		Mixed biosorbent of agro waste and bacterial biomass for the separation of Pb(II) ions from water system	A. Saravanan, **P. Senthil Kumar***, P.R. Yaashikaa, S. Karishma, S. Jeevanantham, S. Swetha	**Chemosphere** Vol. 277, pp. 130236 August 2021	https://doi.org/10.1016/j.chemosphere.2021.130236	8.943
11.		Influence of tin (Sn) doping on Co_3O_4 for enhanced photocatalytic dye degradation	SP. Keerthana, R. Yuvakkumara*, **P. Senthil Kumar***, G. Ravi, Dai-Viet N. Vo, Dhayalan Velauthapillaid	**Chemosphere** Vol. 277, pp. 130325, August 2021	https://doi.org/10.1016/j.chemosphere.2021.130325	8.943
12.		Application of adsorption process for effective removal of emerging contaminants from water and wastewater	B. Senthil Rathi, **P. Senthil Kumar***	**Environmental Pollution** Vol. 280, pp. 116995, July 2021	https://doi.org/10.1016/j.envpol.2021.116995	9.988
13.		Stimulation of Bacillus sp. by lipopeptide biosurfactant for the degradation of aromatic amine 4-Chloroaniline	Femina Carolin C, **P. Senthil Kumar***, B. Chitra, Fetcia Jackulin C, Racchana Ramamurthy	**Journal of Hazardous Materials** Vol. 415, pp. 125716, August 2021	https://doi.org/10.1016/j.jhazmat.2021.125716	14.224
14.		Microbial degradation of recalcitrant pesticides: a review	Sanchali Bose, **P. Senthil Kumar***, Dai-Viet N. Vo, N. Rajamohan, R. Saravanan	**Environmental Chemistry Letters** Vol. 19(4), pp. 3209-3228, August 2021	https://doi.org/10.1007/s10311-021-01236-5	13.615

15.		Advanced techniques to remove phosphates and nitrates from waters: a review	Velusamy Karthik, Ponnusamy Selvakumar, **Ponnusamy Senthil Kumar***, Dai-Viet Nguyen Vo, Jaisankar Sindhu, Dhanabal Sneka, Balakrishnan Subhashini	**Environmental Chemistry Letters** Vol. 19(4), pp. 3165-3180, August 2021	https://doi.org/10.1007/s10311-021-01239-2	13.615
16.		Effective water/wastewater treatment methodologies for toxic pollutants removal: Processes and applications towards sustainable development	A. Saravanan, **P. Senthil Kumar***, S. Jeevanantham, S. Karishma, B. Tajsabreen, P.R. Yaashikaa, B. Reshma	**Chemosphere** Vol. 280, pp. 130595, October 2021	https://doi.org/10.1016/j.chemosphere.2021.130595	8.943
17.		Microwave pyrolysis of coal, biomass and plastic waste: a review	Aravind Suresh, Alaguabirami Alagusundaram, **Ponnusamy Senthil Kumar***, Dai-Viet Nguyen Vo, Femina Carolin Christopher, Bharkavi Balaji, Vinatha Viswanathan, Sibi Sankar	**Environmental Chemistry Letters** Vol. 19, pp. 3609-3629, October 2021	https://doi.org/10.1007/s10311-021-01245-4	13.615
18.		Anammox bacteria in treating ammonium rich wastewater: Recent perspective and appraisal	Chanusha Weralupitiya, Rasika Wanigatunge, Sarangi Joseph, Bandunee Athapattu, Tae-Ho Lee, Jayanta Kumar Biswas,	**Bioresource Technology** Vol. 334, pp. 125240, August 2021	https://doi.org/10.1016/j.biortech.2021.125240	11.889

			Maneesha Ginige, Su Shiung Lam, **P. Senthil Kumar**, Meththika Vithanage*			
19.		Application of biomass derived products in mid-size automotive industries: a review	S.M. Prasanth, **P. Senthil Kumar***, S. Harish, M. Rishikesh, Sonil Nanda, Dai-Viet N. Vo	**Chemosphere** Vol. 280, pp. 130723, October 2021	https://doi.org/10.1016/j.chemosphere.2021.130723	8.943
20.		Biochar promotes methane production during anaerobic digestion of organic waste	Leilei Xia, Eric Lichtfouse*, **P. Senthil Kumar**, Quan Wang, Fanghua Liu	**Environmental Chemistry Letters** Vol. 19, pp. 3557-3564, October 2021	https://doi.org/10.1007/s10311-021-01251-6	13.615
21.		Bioenergy recovery potential through the treatment of the meat processing industry waste in Australia	M. Mofijur, I.M. Rizwanul Fattah , P. Senthil Kumar, Sk. Yasir Arafat Siddiki, S. M. Ashrafur Rahman, S.F. Ahmed, Hwai Chyuan Ong , Su Shiung Lam, Irfan Anjum Badruddin , T.M. Yunus Khan , T.M.I. Mahlia	**Journal of Environmental Chemical Engineering,** Volume 9, Issue 4, August 2021, 105657.	https://doi.org/10.1016/j.jece.2021.105657	7.7
22.		Annealing temperature effect on cobalt ferrite nanoparticles for photocatalytic degradation	S. Swathi, R. Yuvakkumar*, **P. Senthil Kumar***, G. Ravi, Dhayalan Velauthapillai	**Chemosphere** Vol. 281, pp. 130903, October 2021	https://doi.org/10.1016/j.chemosphere.2021.130903	8.943
23.		Micro algal biodiesel	B. Namitha,	**Fuel**	https://doi.org/10.1016	8.035

		synthesized from Monoraphidium sp., and Chlorella sorokiniana: Feasibility and emission parameter studies	Asha Sathish, **P. Senthil Kumar***, K. Nithya*, Shyam Sundar	Vol. 301, pp.121063, October 2021	/j.fuel.2021.121063	
24.		Sustainable removal of cadmium from contaminated water using green alga – Optimization, characterization and modeling studies	V. Jayakumar, S. Govindaradjane **P. Senthil Kumar,** N. Rajamohan, M. Rajasimman	**Environmental Research** Vol. 199, pp. 111364, August 2021	https://doi.org/10.1016/j.envres.2021.111364	8.431
25.		Efficient photocatalytic degradation of hazardous pollutants by homemade kitchen blender novel technique via 2D-material of few-layer MXene nanosheets	V. Thirumal, R. Yuvakkumar*, **P. Senthil Kumar***, SP. Keerthana, G. Ravi, D. Velauthapillai, B. Saravanakumar	**Chemosphere** Vol. 281, pp. 130984, October 2021	https://doi.org/10.1016/j.chemosphere.2021.130984	8.943
26.		Ethylene glycol assisted $MnCO_3$ electrocatalyst for water oxidation and hydrogen production application	S. Swathi, R. Yuvakkumar*, **P. Senthil Kumar***, G. Ravi, Dhayalan Velauthapillai, Dai-Viet N. Vo	**Fuel** Vol. 302, pp. 121151, October 2021	https://doi.org/10.1016/j.fuel.2021.121151	8.035
27.		A review on sources, identification and treatment strategies for the removal of toxic Arsenic from water system	B. Senthil Rathi, **P. Senthil Kumar***	**Journal of Hazardous Materials** Vol. 418, pp. 126299, September 2021	https://doi.org/10.1016/j.jhazmat.2021.126299	14.224
28.		The Unfurl of Corona Virus and its Thwack on Human and Environment: A Review	R. Sivaranjanee, **P. Senthil Kumar***	**Current Opinion in Environmental Science & Health**	doi: 10.1016/j.coesh.2021.100289	Scopus Indexed

				Vol. 24, pp. 100289, December 2021		
29.		Structural, Functional, Resistome and pathogenicity profiling of the Cooum river	S. Aishwarya*, K. Gunasekaran, **P. Senthil Kumar***, Arshiya Begum, Evangeline Shantha, V. Jeevith, K. Veena Gayathri	**Microbial Pathogenesis** Vol. 158, pp. 105048, September 2021	https://doi.org/10.1016/j.micpath.2021.105048	3.848
30.		Optimization strategies of alkaline thermo-chemical pretreatment for the enhancement of biogas production from de-oiled algae	C.N. Kowthaman*, V. Arul Mozhi Selvan, **P. Senthil Kumar***	**Fuel** Vol. 303, pp. 121242, November 2021	https://doi.org/10.1016/j.fuel.2021.121242	8.035
31.		Adsorptive removal of Pb(II) ions onto surface modified adsorbents derived from Cassia fistula seeds: Optimization and modelling study	R.V. Hemavathy, A. Saravanan, **P. Senthil Kumar***, Dai-Viet N. Vo*, S. Karishma, S. Jeevanantham	**Chemosphere** Vol. 283, pp. 131276, November 2021	https://doi.org/10.1016/j.chemosphere.2021.131276	8.943
32.		A review on catalytic-enzyme degradation of toxic environmental pollutants: Microbial enzymes	A. Saravanan, **P. Senthil Kumar***, Dai-Viet N. Vo, S. Jeevanantham, S. Karishma, P.R. Yaashikaa	**Journal of Hazardous Materials** Vol. 419, pp. 126451, October 2021	https://doi.org/10.1016/j.jhazmat.2021.126451	14.224
33.		Investigation of electrochemical performance of an efficient Ti_2O_3-CeO_2 nanocomposite for enhanced pollution-free energy conversion applications	S. Swathi, R. Yuvakkumar*, **P. Senthil Kumar***, G. Ravi, Dhayalan Velauthapillai	**Journal of Environmental Management** Vol. 295, pp. 113138, October 2021	https://doi.org/10.1016/j.jenvman.2021.113138	8.910
34.		Sustainable approach on	G. Pooja,	**Journal of**	https://doi.org/10.1016	8.910

		removal of toxic metals from electroplating industrial wastewater using dissolved air flotation	**P. Senthil Kumar***, G. Prasannamedha, Sunita Varjani, Dai-Viet N. Vo	**Environmental Management** Vol. 295, pp. 113147, October 2021	/j.jenvman.2021.113147	
35.		Advances in biosorbents for removal of environmental pollutants: A review on pretreatment, removal mechanism and future outlook	P. R. Yaashikaa, **P. Senthil Kumar***, A. Saravanan, Dai-Viet N. Vo	**Journal of Hazardous Materials** Vol. 420, pp. 126596, October 2021	https://doi.org/10.1016/j.jhazmat.2021.126596	14.224
36.		A review on remedial measures for effective separation of emerging contaminants from wastewater	R. Sivaranjanee, **P. Senthil Kumar***	**Environmental Technology & Innovation** Vol. 23, pp. 101741, August 2021	https://doi.org/10.1016/j.eti.2021.101741	7.758
37.		Removal of emerging pollutants from aquatic system using electrochemical treatment and adsorption: comparison and analysis	K. Grace Pavithra, V. Jaikumar*, **P. Senthil Kumar***, P. Sundarrajan	**Environmental Technology & Innovation** Vol. 23, pp. 101754, August 2021	https://doi.org/10.1016/j.eti.2021.101754	7.758
38.		Surface modified polymer-magnetic-algae nanocomposite for the removal of Chromium-Equilibrium and mechanism studies	S. Venkatesh Babu, N. Rajamohan, **P. Senthil Kumar**, M. Rajasimman, G. Sarojini*	**Environmental Research** Vol. 201, pp. 111626, October 2021	https://doi.org/10.1016/j.envres.2021.111626	8.431
39.		Analysis and microbial degradation of low-density polyethylene (LDPE) in WINOGRADSKY column	R. Sridharan, V.G. Krishnaswamy, **P. Senthil Kumar***	**Environmental Research** Vol. 201, pp. 111646, October 2021	https://doi.org/10.1016/j.envres.2021.111646	8.431
40.		A review on adsorptive	**P. Senthil Kumar***,	**Chemosphere**	https://doi.org/10.1016	8.943

		separation of toxic metals from aquatic system using biochar produced from agro-waste	R. Gayathri, B. Senthil Rathi,	Vol. 285, pp. 131438, December 2021	/j.chemosphere.2021.131438	
41.		A review on the microbial degradation of chlorpyrifos and its metabolite TCP	Sanchali Bose, **P. Senthil Kumar***, Dai-Viet N. Vo	**Chemosphere** Vol. 283, pp. 131447, November 2021	https://doi.org/10.1016/j.chemosphere.2021.131447	8.943
42.		Kinetics, equilibrium and thermodynamic investigations of methylene blue dye removal using Casuarina equisetifolia pines	H. Chandarana**,** **P. Senthil Kumar**, S. Muthulingam A.K. Madhava*	**Chemosphere** Vol. 285, pp. 131480, December 2021	https://doi.org/10.1016/j.chemosphere.2021.131480	8.943
43.		Graphene-based materials for environmental applications. A review	V. Karthik, P. Selvakumar, **P. Senthil Kumar***, Dai-Viet N. Vo, M. Gokulakrishnan, P. Keerthana, V.Tamil Elakkiya, R.Rajeswari	**Environmental Chemistry Letters** Vol. 19, pp. 3631-3644, October 2021	https://doi.org/10.1007/s10311-021-01262-3	13.615
44.		Quercetin-rGO based mercury-free electrode for the determination of Toxic Cd (II) and Pb (II) ions using DPASV technique	K. Krishna Kumar, M. Devendiran, **P. Senthil Kumar***, S. Sriman Narayanan*	**Environmental Research** Vol. 202, pp. 111707, November 2021	https://doi.org/10.1016/j.envres.2021.111707	8.431
45.		Critical review on hazardous pollutants in water environment: Occurrence, monitoring, fate, removal technologies and risk assessment	B. Senthil Rathi, **P. Senthil Kumar***, Dai-Viet N. Vo	**Science of the Total Environment** Vol. 797, pp. 149134, November 2021	https://doi.org/10.1016/j.scitotenv.2021.149134	10.753

46.		A case study of flood frequency analysis by intercomparison of Graphical linear log-regression method and Gumbel's analytical method in the Vaigai river basin of Tamil Nadu, India	M. Ramasamy*, S. Nagan, **P. Senthil Kumar***	**Chemosphere** Vol. 286, pp. 131571, January 2022	https://doi.org/10.1016/j.chemosphere.2021.131571	8.943
47.		Automating water quality analysis using ML and auto ML techniques	D. Venkata Vara Prasad, **P. Senthil Kumar***, Lokeswari Y Venkataramana, G. Prasannamedha, S. Harshana, S Jahnavi Srividya, K. Harrinei, Sravya Indraganti	**Environmental Research** Vol. 202, pp. 111720, November 2021	https://doi.org/10.1016/j.envres.2021.111720	8.431
48.		Micro-patterned graphite electrodes: An analysis and optimization of process parameters on hydrogen evolution in water electrolysis	C.N. Kowthaman*, **P. Senthil Kumar***, V. Arul Mozhi Selvan	**Fuel** Vol. 305, pp. 121542, December 2021	https://doi.org/10.1016/j.fuel.2021.121542	8.035
49.		Advantage of conductive materials on interspecies electron transfer-independent acetoclastic methanogenesis: A critical review	Leilei Xiao*, Eric Lichtfouse, **P. Senthil Kumar***	**Fuel** Vol. 305, pp. 121577, December 2021	https://doi.org/10.1016/j.fuel.2021.121577	8.035
50.		Characterization of biofilm formation and reduction of hexavalent chromium by bacteria isolated from tannery sludge	Annapurna Maurya, **P. Senthil Kumar**, Abhay Raj*	**Chemosphere** Vol. 286, pp. 131795, January 2022	https://doi.org/10.1016/j.chemosphere.2021.131795	8.943
51.		Eco-friendly pH detecting paper-based analytical	Pamula Sri Sruthi, Sivasamy	**Analytica Chimica Acta**	https://doi.org/10.1016/j.aca.2021.338953	6.911

		device: towards process intensification	Balasubramanian, **Ponnusamy Senthil Kumar***, Ashish Kapoor*, Muthamilselvi Ponnuchamy, Meenu Mariam Jacob, Sivaraman Prabhakar	Vol. 1182, pp. 338953, October 2021		
52.		Recent Advancements in Microbial Fuel Cells: A review on its Electron transfer mechanisms, Microbial community, Types of substrates and Design for bio-electrochemical treatment	S. Prathiba, **P. Senthil Kumar***, Dai-Viet N. Vo	**Chemosphere** Vol. 286, pp. 131856, January 2022	https://doi.org/10.1016/j.chemosphere.2021.131856	8.943
53.		Two-dimensional hybrid perovskite solar cells: a review	T. Marimuthu, R. Yuvakkumar*, **P. Senthil Kumar***, Dai-Viet N. Vo, Xueqing Xu*, Gang Xu	**Environmental Chemistry Letters** Vol. 20, pp. 189-210, February 2022	https://doi.org/10.1007/s10311-021-01306-8	13.615
54.		Hexamethylenetetramine concentration effect on $CaWO_4$ for electrochemical hydrogen evolution reaction activity	S. Swathi, R. Yuvakkumar*, **P. Senthil Kumar***, G. Ravi, Dhayalan Velauthapillai	**Fuel** Vol. 306, pp. 121781, December 2021	https://doi.org/10.1016/j.fuel.2021.121781	8.035
55.		Photocatalytic disinfection of micro-organisms: Mechanisms and applications	A. Saravanan, **P. Senthil Kumar***, S. Jeevanantham, S. Karishma, A.R. Kiruthika	**Environmental Technology & Innovation** Vol. 24, pp. 101909, November 2021	https://doi.org/10.1016/j.eti.2021.101909	7.758

56.		Target-receptive structural switching of ssDNA as selective and sensitive biosensor for subsequent detection of toxic Pb^{2+} and organophosphorus pesticide	K. Radhakrishnan, **P. Senthil Kumar***	**Chemosphere** Vol. 287, pp. 132163, January 2022	https://doi.org/10.1016/j.chemosphere.2021.132163	8.943
57.		A review on recent advancements in recovery of valuable and toxic metals from e-waste using bioleaching approach	P. R. Yaashikaa, B. Priyanka, **P. Senthil Kumar***, S. Karishma, S. Jeevanantham, Sravya Indraganti	**Chemosphere** Vol. 287, pp. 132230, January 2022	https://doi.org/10.1016/j.chemosphere.2021.132230	8.943
58.		Recent advancements in the removal/recovery of toxic metals from aquatic system using flotation techniques	G. Pooja, **P. Senthil Kumar***, Sravya Indraganti,	**Chemosphere** Vol. 287, pp. 132231, January 2022	https://doi.org/10.1016/j.chemosphere.2021.132231	8.943
59.		Biohythane as a high potential fuel from anaerobic digestion of organic waste: a review	Salma Aathika Abdur Rawoof, **P. Senthil Kumar***, Dai-Viet N. Vo*, Thiruselvi Devaraj, Sivanesan Subramanian*	**Renewable and Sustainable Energy Reviews** Vol.152, pp. 111700, December 2021	https://doi.org/10.1016/j.rser.2021.111700	16.799
60.		A review on recent trends in the removal of emerging contaminants from aquatic environment using low-cost adsorbents	M. Varsha, **P. Senthil Kumar***, B. Senthil Rathi	**Chemosphere** Vol. 287, pp. 132270, January 2022	https://doi.org/10.1016/j.chemosphere.2021.132270	8.943
61.		Methods for chemical conversion of plastic wastes into fuels and chemicals. A review	Fetcia Jackulin Christopher, **Ponnusamy Senthil Kumar***, Dai-Viet Nguyen Vo, Femina Carolin	**Environmental Chemistry Letters** Vol. 20, pp. 223-242, February 2022	https://doi.org/10.1007/s10311-021-01329-1	13.615

			Christopher, Lakshmipriya Jayaraman			
62.		Green technology for sustainable surface protection of steel from corrosion: A review	Fatema Said Zahir Said Al Shibli, Subrajit Bose, **P.Senthil Kumar***, M. Rajasimman, N. Rajamohan*, Dai-Viet N. Vo	**Environmental Chemistry Letters** Vol. 20, pp. 929-947, February 2022	https://doi.org/10.1007/s10311-021-01332-6	13.615
63.		Biohydrogen from organic wastes as a clean and environment-friendly energy source: Production pathways, feedstock types, and future prospects	A.Saravanan, **P.Senthil Kumar**, Kuan ShiongKhoo, Pau-LokeShow, C.Femina Carolin, C.Fetcia Jackulin, S.Jeevanantham, S.Karishma, Kuan-YeowShow, Duu-Jong Lee, Jo-Shu Chang*	**Bioresource Technology** Vol. 342, pp. 126021, December 2021	https://doi.org/10.1016/j.biortech.2021.126021	11.889
64.		Extraction, purification and applications of biosurfactants based on microbial-derived glycolipids and lipopeptides: a review	Swethaa Venkataraman, Devi Sri Rajendran, **Ponnusamy Senthil Kumar***, Dai-Viet Nguyen Vo, Vinoth Kumar Vaidyanathan*	**Environmental Chemistry Letters** Vol. 20, pp. 949-970, February 2022	https://doi.org/10.1007/s10311-021-01336-2	13.615
65.		A review on recent advancements in bioenergy production using microbial fuel cells	M. Ramya, **P. Senthil Kumar***	**Chemosphere** Vol. 288, pp. 132512, February 2022	https://doi.org/10.1016/j.chemosphere.2021.132512	8.943
66.		Lab-on-a-chip technologies for food safety, processing,	Adithya Sridhar, Ashish Kapoor*,	**Environmental Chemistry**	https://doi.org/10.1007/s10311-021-01342-4	13.615

		and packaging applications: a review	**Ponnusamy Senthil Kumar***, Muthamilselvi Ponnuchamy, Balasubramanian Sivasamy, Dai-Viet Nguyen Vo	**Letters** Vol. 20, pp. 901-927, February 2022		
67.		Valorization of agro-industrial wastes for biorefinery process and circular bioeconomy: A critical review	P.R. Yaashikaa, **P. Senthil Kumar**, Sunita Varjani	**Bioresource Technology** Vol. 343, pp. 126126, January 2022	https://doi.org/10.1016/j.biortech.2021.126126	11.889
68.		Recent advances and sustainable development of biofuels production from lignocellulosic biomass	A.Saravanan, **P.Senthil Kumar***, S. Jeevanantham, S. Karishma, Dai-Viet N.Vo	**Bioresource Technology** Vol. 344, pp. 126303, January 2022	https://doi.org/10.1016/j.biortech.2021.126203	11.889
69.		Continuous electrodeionization on the removal of toxic pollutant from aqueous solution	B. Senthil Rathi, **P. Senthil Kumar***	**Chemosphere** Vol. 291, pp. 132808, March 2022	https://doi.org/10.1016/j.chemosphere.2021.132808	8.943
70.		Identification and sequencing of bacteria from crop field: Application of bacteria – agro-waste biosorbent for rapid pesticide removal	A. Saravanan, **P.Senthil Kumar***, S. Jeevanantham, P. Harikumar, V. Bhuvaneswari, Sravya Indraganti	**Environmental Technology & Innovation** Vol. 25, pp. 102116, February 2022	https://doi.org/10.1016/j.eti.2021.102116	7.758
71.		Sustainable approach on the biodegradation of azo dyes: A short review	B. Senthil Rathi, **P.Senthil Kumar***	**Current Opinion in Green and Sustainable Chemistry** Vol. 33, pp.	https://doi.org/10.1016/j.cogsc.2021.100578	8.843

				100578, February 2022		
72.		A recent advancement on nanomaterials for electrochemical sensing of sulfamethaoxole and its futuristic approach	G. Padmalaya, K. Krishna Kumar, **P.Senthil Kumar***, BS. Sreeja, Sanchali Bose	**Chemosphere** Vol. 290, pp. 133115, March 2022	https://doi.org/10.1016/j.chemosphere.2021.133115	8.943
73.		Promotion of methane production by magnetite via increasing acetogenesis revealed by metagenome-assembled genomes	Jiafeng Yu#, Jian Liu#, **P.Senthil Kumar**#, Yunwei Wei, Meng Zhou, Dai-Viet N. Vo, Leilei Xiao*	**Bioresource Technology** Vol. 345, pp. 126521, February 2022	https://doi.org/10.1016/j.biortech.2021.126521	11.889
74.		Facile route for synthesis of $Fe^0/Fe_3C/\gamma$-Fe_2O_3 carbon composite using hydrothermal carbonization of sugarcane bagasse and its use as effective adsorbent for sulfamethoxazole removal	G. Prasannamedha, **P.Senthil Kumar***, Vignesh Shankar	**Chemosphere** Vol. 289, pp. 133214, February 2022	https://doi.org/10.1016/j.chemosphere.2021.133214	8.943
75.		A review on recent advances in electrodeionization for various environmental applications	B. Senthil Rathi, **P.Senthil Kumar*** R. Parthiban	**Chemosphere** Vol. 289, pp. 133223, February 2022	https://doi.org/10.1016/j.chemosphere.2021.133223	8.943
76.		Sustainable strategy on microbial fuel cell to treat the wastewater for the production of green energy	A. Saravanan, **P.Senthil Kumar***, S. Srinivasan, S. Jeevanantham, R. Kamalesh, S. Karishma	**Chemosphere** Vol. 290, pp. 133295, March 2022	https://doi.org/10.1016/j.chemosphere.2021.133295	8.943
77.		A comprehensive review on sources, analysis and toxicity of environmental pollutants and its removal methods from water	A.Saravanan, **P.Senthil Kumar***, R.V. Hemavathy, S. Jeevanantham, P. Harikumar,	**Science of the Total Environment** Vol. 812, pp. 152456,	https://doi.org/10.1016/j.scitotenv.2021.152456	10.753

		environment	G. Priyanka, D. Rebekah Angelina Devakirubai	March 2022		
78.		Hydrothermal carbonisation of waste sugarcane bagasse for the effective removal of emerging contaminants from aqueous solution	G. Prasannamedha, **P.Senthil Kumar***	**Adsorption Science & Technology** Vol. 2022, Article ID 8684737, pp. 1-13, January 2022	https://doi.org/10.1155/2022/8684737	4.373
79.		Recycled mesoporous magnetic composites with high surface area derived from plastic and de-oiled sludge wastes: An empirical comparison on their competitive performance for toxic Cr (VI) removal	P.N. Nirenjan Shenoy, N.M. Arjun, **P.Senthil Kumar***, A.B. Sree Hari, K. Nithya, P. Asha Sathish	**Chemosphere** Vol. 292, pp. 133375, April 2022	https://doi.org/10.1016/j.chemosphere.2021.133375	8.943
80.		V-Ag doped ZnO nanorod as high-performance electrode material for supercapacitors with enhanced specific capacitance and cycling stability	P. Nethaji, **P.Senthil Kumar***	**Chemical Engineering Research & Design** Vol. 178, pp. 356-368, February 2022	https://doi.org/10.1016/j.cherd.2021.12.039	4.119
81.		Degradation of toxic agrochemicals and pharmaceutical pollutants: Effective and alternative approaches toward photocatalysis	A. Saravanan, **P.Senthil Kumar***, S. Jeevanantham, M. Anubha, S. Jayashree	**Environmental Pollution** Vol. 298, pp. 118844, April 2022	https://doi.org/10.1016/j.envpol.2022.118844	9.988
82.		Bio-derived catalysts for production of biodiesel: A review on feedstock, oil	P.R. Yaashikaa, **P.Senthil Kumar***, S. Karishma	**Fuel** Vol. 316, pp. 123379,	https://doi.org/10.1016/j.fuel.2022.123379	8.035

		extraction methodologies, reactors and lifecycle assessment of biodiesel		May 2022		
83.		Analysis and prediction of water quality using deep learning and auto deep learning techniques	D.Venkata Vara Prasad, Lokeswari Y Venkataramana, **P.Senthil Kumar***, G. Prasannamedha, S. Harshana, S. Jahnavi Srividya, K. Harrinei, Sravya Indraganti	**Science of the Total Environment** Vol. 821, pp. 153311, May 2022	https://doi.org/10.1016/j.scitotenv.2022.153311	10.753
84.		Carbon nanomaterials and its applications in pharmaceuticals: A brief review	Rajalakshmi Sridharan, B. Monisha, **P.Senthil Kumar*** K.Veena Gayatahri*	**Chemosphere** Vol. 294, pp. 133731, May 2022	https://doi.org/10.1016/j.chemosphere.2022.133731	8.943
85.		A critical review on the two-stage biohythane production and its viability as a renewable fuel	Sasidhar KB, **P.Senthil Kumar***, Leilei Xiao	**Fuel** Vol. 317, pp. 123449, June 2022	https://doi.org/10.1016/j.fuel.2022.123449	8.035
86.		Electrochemical sensing system for the analysis of emerging contaminants in aquatic environment: A review	R. Sivaranjanee, **P.Senthil Kumar***, R. Saravanan, M. Govarthanan	**Chemosphere** Vol. 294, pp. 133779, May 2022	https://doi.org/10.1016/j.chemosphere.2022.133779	8.943
87.		Facile preparation and characterization of MXene@Platinum nanocomposite for energy conversion applications	V. Thirumal, R. Yuvakkumar*, **P.Senthil Kumar***, G. Ravi, Dhayalan Velauthapillai	**Fuel** Vol. 317, pp. 123493, June 2022	https://doi.org/10.1016/j.fuel.2022.123493	8.035
88.		A review on removal	A. Chithra, Rajaseetharama	**Chemosphere** Vol. 295, pp.	https://doi.org/10.1016	8.943

		strategies of microorganisms from water environment using nanomaterials and their behavioural characteristics	Sekar, **P.Senthil Kumar***, G. Padmalaya	133915, May 2022	/j.chemosphere.2022.133915	
89.		Process Amelioration for Production of Biohydrogen using mutated Rhodobacter M 19 and Enterobacter aerogenes co-culture: Influence of Nanoparticles	J.B. Veeramalini, **P.Senthil Kumar***, I. Abernaebenezer Selvakumari, P. Sreejith	**Fuel** Vol. 317, pp. 123558, June 2022	https://doi.org/10.1016/j.fuel.2022.123558	8.035
90.		A review on bioremediation approach for heavy metal detoxification and accumulation in plants	P. R. Yaashikaa, **P.Senthil Kumar***, S. Jeevanantham, R. Saravanan	**Environmental Pollution** Vol. 301, pp. 119035, May 2022	https://doi.org/10.1016/j.envpol.2022.119034	9.988
91.		Mycoremediation of lignocellulosic biorefinery sludge: A reinvigorating approach for organic contaminants remediation with simultaneous production of lignocellulolytic enzyme cocktail	Vinoth Kumar Vaidyanathan, Swethaa Venkataraman, **P. Senthil Kumar**, Devi Sri Rajendran, Kongkona Saikia, Abiram Karanam Rathankumar, Hubert Cabana, Sunita Varjani	**Bioresource Technology** Vol. 351, pp. 127012, May 2022	https://doi.org/10.1016/j.biortech.2022.127012	11.889
92.		A review on agro-based materials on the separation of environmental pollutants from water system	R. Sivaranjanee, **P.Senthil Kumar***, S. Mahalaxmi	**Chemical Engineering Research & Design** Vol. 181, pp. 423-457, May 2022	https://doi.org/10.1016/j.cherd.2022.04.002	4.119

93.	Dr. V. Jaikumar	Removal of emerging pollutants from aquatic system using electrochemical treatment and adsorption: Comparison and analysis	Kirubanandam Grace Pavithra, V. Jaikumar, P. Senthil Kumar, Sundar Rajan	Environmental Technology & Innovation, Vol. 23, pp.101754 Aug 2021	https://doi.org/10.1016/j.eti.2021.101754	7.758
94.		Development of electrospun PVdF polymer membrane as separator for supercapacitor applications	R.Arthi, V.Jaikumar, P.Muralidharan	Energy sources, Part A: Recovery, Utilization and Environmental Effects, 2294-2308 January 2022	https://doi.org/10.1080/15567036.2019.1649746	2.902
95.		Cleaner production on electrochemical removal of sulphonamide from wastewater using three-dimensional electrode system: characterisation and kinetics”	Kirubanandam Grace Pavithra, V. Jaikumar, P. Senthil Kumar, Sundar Rajan P	International Journal of Environmental Analytical Chemistry, Vol.102 (17) pp. 5584-5600, January 2022	https://doi.org/10.1080/03067319.2020.1800003	2.731
96.	Dr. K. Jagannathan	Potential use of biomass and coal-fine waste for making briquette for sustainable energy and environment	Ambedkar Balraj, Jagannathan Krishnan, Keerthana Selvarajan, Keertthana Sukumar	Environmental Science and Pollution Research 28, 63516-63522 December 2021	DOI: 10.1007/s11356-020-10312-2	3.05
97.		Experimental investigation of density,	Muthumari Perumal &	Environmental Science and	https://doi.org/10.1007	3.056

		viscosity, and surface tension of aqueous tetrabutylammonium-based ionic liquids	Ambedkar Balraj & Dhanalakshmi Jayaraman & Jagannathan Krishnan	Pollution Research 28, 63599–63613 December 2021	/s11356-020-11174-4	
98.	Dr. D. Gnana Prakash	Enhanced production of hydrocarbons from lignin isolated from sugarcane bagasse using formic acid induced supercritical ethanol liquefaction followed by hydrodeoxygenation	D. Gnana Prakash, K. P. Gopinath, V. Vinatha, S. Shreya, R. Sivaramakrishnan, Nguyen Thuy Lan Chi	Chemosphere, Vol. 285, 131491 December 2021	https://doi.org/10.1016/j.chemosphere.2021.131491	7.086
99.		Extraction methodology of lignin from biomass waste influences the quality of bio-oil obtained by solvothermal depolymerization process	Dhakshinamoorthy Gnana Prakash, Kannappan Panchamoorthy Gopinath, Sevalur Mahendran Prasanth, Sivakumaran Harish, Muthamilselvam Rishikesh, Ramachandran Sivaramakrishnan, Arivalagan Pugazhendhi	Chemosphere, Vol. 293, 133473 April 2022	https://doi.org/10.1016/j.chemosphere.2021.133473	7.086
100.		Oil spill remediation and valorization of oil-soaked peat sorbent to biofuel by hydrothermal liquefaction	Venkataraman Ramachandran, M. K. Shriram, E. Reon Mathew, Kaushik Ramkumar,	Biomass Conversion and Biorefinery, September 2021	https://doi.org/10.1007/s13399-021-01887-y	4.05

			Dhakshinamoorthy Gnana Prakash, Chitra Devi Venkatachalam			
101.	Dr. Nalinkanth V Ghone	Advances in 3D printing of composite scaffolds for the repairment of bone tissue associated defects	Anandhapadman, A., Venkateswaran, A., Jayaraman, H., Veerabadran Ghone, N.	Biotechnology Progress, 2022, 38(3), e3234 May 2022	10.1002/btpr.3234	2.909
102.	Dr. B. Ambedkar	Experimental investigation of microwave-assisted regeneration of carbon-rich aqueous solutions	Ambedkar Balraj*, Papitha Palaian Premalalitha, Shree Vidhya Ramamoorthy , Shriram Arumugam Mayilvahanan , Samuel Venkatesan, Logavan Annadurai, Gopinath Subramanian, Vigneswaran Srinivasan, Srinivas Vetriselvan	Chemical Engineering & Processing: Process Intensification 177 (2022) 109000 July 2022	https://doi.org/10.1016/j.cep.2022.109000	4.26
103.		Systematic review on sono-assisted CO_2 stripping, solvent recovery and energy demand aspects in solvent-based post-combustion carbon	Ambedkar Balraj*, Arun Prasad Chandra Sekaran, Nagarajan Ramamurthy,	Chem. Eng. Process. Process Intensification, 170, (2022) 108723 2022.	https://doi.org/10.1016/j.cep.2021.108723	4.26

		dioxide capture process	Ravichandar Babarao, Krishna Kumar Nagarajan, Shriram Arumugam Mayilvahanan,	January 2022		
104.	Dr. J. Dhanalakshmi	Understanding the physical and thermodynamic properties of monoethanolamine-ionic liquids for solvent screening in CO_2 capture process	Muthumari Perumal, Dhanalakshmi Jayaraman	Asia-Pacific Journal of Chemical Engineering 17(3):e2775 June 2022	doi:10.1002/apj.2775	1.77
105.		Regeneration of CO_2-rich aqueous amine-ionic liquid blends in CO_2 capture process	Muthumari Perumal, Dhanalakshmi Jayaraman	Greenhouse Gases Science and Technology 12: 118-135. February 2022	https://doi.org/10.1002/ghg.2128	2.52
106.		Amine-Ionic Liquid Blends in CO2 Capture Process for Sustainable Energy and Environment	Muthumari Perumal and Dhanalakshmi Jayaraman	Energy & Environment, 0(0). January, 2022	https://doi.org/10.1177/0958305X211070782	3.15
107.	Dr. R. Anantharaj	Desulfurization of Gasoline Using Deep Eutectic Solvents Based on Tetrabutylammonium Bromide	Vijayalakshmi Gosu, Rohitash Kumar, **Anantharaj Ramalingam**, U K Arun Kumar, Amit Kumar Kashyap, Verraboina	Journal of Chemical & Engineering Data, 2022, 67, 9, 2486–2494 July 2022	https://doi.org/10.1021/acs.jced.2c00172	3.119

			Subbaramaiah			
108.		Ethylsulphate based ionic liquids for denitification of liquid fuels	M.Parimala, **R.Anantharaj**	Petroleum Science and Technology.954-979, 40, February 2022	https://doi.org/10.1080/10916466.2021.2008970	1.695
109.	Dr. D. Balaji	A Comprehensive Review of Effective Adsorbents Used for the Removal of Dyes from Wastewater	Dhanya Vishnu; Balaji Dhandapani; Swetha Authilingam, V. Shrivigneshwar.	Current Analytical Chemistry, Volume 18,, pp. 255-268(14) Number 3, 2022	https://doi.org/10.2174/1573411016999200831111155	2.374
110.		Synthesis of tri-metallic surface engineered nanobiochar from cynodon dactylon residues in a single step - Batch and column studies for the removal of copper and lead ions	Vishnu, Dhanya, Balaji Dhandapani, G. Vaishnavi, and V. Preethi	Chemosphere, vol. 286, no. P1, p. 131572, Jan. 2022, online 21 July 2021. January 2022	doi: 10.1016/j.chemosphere.2021.131572.	7.086
111.	Dr. B. Chitra	A correlation to predict the thermal conductivity of MXene-silicone oil based nano-fluids and data driven modeling using artificial neural networks	Chitra Boobalan, Sathish Kumar Kannaiyan	International Journal of Energy Research 46(15), February 2022	https://doi.org/10.1002/er.7786	4.672
112.		Numerical Investigation of Microchannel Cooling Using	G. Sudha, Chitra Boobalan,	Arabian Journal for Science and	https://doi.org/10.1007/s13369-022-06666-z	2.807

		Nanocomposites, Arabian Journal for Science and Engineering	R. Parthiban	Engineering, February 2022		
113.	Dr.Kilaru Harsha Vardhan	Effective removal of malachite green dye from aqueous solution in hybrid system utilizing agricultural waste as particle electrodes	A Annam Renita, Kilaru Harsha Vardhan, P Senthil Kumar, P Tsopbou Ngueagni, A Abilarasu, Subi Nath, Pallavi Kumari, R Saravanan	Chemosphere 273, 129634, Publication date 2021/6/1	doi.org/10.1016/j.chemosphere.2021.129634	7.086
114.		Effective removal of naphthalene from contaminated soil using halotolerant bacterial strains and vermiremediation techniques	Reshma Bhandari, Kilaru Harsha Vardhan, P Senthil Kumar, K Veena Gayathri	International Journal of Environmental Analytical Chemistry, 1-18, Publication date 2021/1/11	https://doi.org/10.1080/03067319.2020.1863390	2.826
115.		A disposable modified screen-printed electrode using egg white/ZnO rice structured composite as practical tool electrochemical sensor for formaldehyde detection and its comparative electrochemical study with Chitosan/ZnO nanocomposite	G Padmalaya, Kilaru Harsha Vardhan, P Senthil Kumar, M Ajmal Ali, Tse-Wei Chen	Chemosphere 288, 132560, Publication date 2022/2/1	doi.org/10.1016/j.chemosphere.2021.132560	7.086

116.	Dr.K.P. Gopinath	Enhanced production of hydrocarbons from lignin isolated from sugarcane bagasse using formic acid induced supercritical ethanol liquefaction followed by hydrodeoxygenation	Dhakshinamoorthy Gnana Prakash, Kannappan Panchamoorthy Gopinath, Viswanathan Vinatha, Suresh Shreya, Ramachandran Sivaramakrishnan, Nguyen Thuy Lan Chi	Chemosphere, Vol. 285, 131491, December 2021	https://doi.org/10.1016/j.chemosphere.2021.131491	7.086
117.		Extraction methodology of lignin from biomass waste influences the quality of bio-oil obtained by solvothermal depolymerization process	Dhakshinamoorthy Gnana Prakash, Kannappan Panchamoorthy Gopinath, Sevalur Mahendran Prasanth, Sivakumaran Harish, Muthamilselvam Rishikesh, Ramachandran Sivaramakrishnan, Arivalagan Pugazhendhi	Chemosphere, Vol. 293, 133473, April 2022	https://doi.org/10.1016/j.chemosphere.2021.133473	7.086