



CURRICULUM VITAE

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Number of publications: 460 (SCI- International)

Total No. Citations: 15842; h-index: 69; i10 index: 297

Google scholar: <https://scholar.google.co.in/citations?user=SaV2Es0AAAAJ&hl=en>

Research Gate: https://www.researchgate.net/profile/Arivalagan_Pugazhendhi2

Scopus Profile: <https://www.scopus.com/authid/detail.uri?authorId=57191625854>



EDUCATIONAL BACKGROUND

Qualification	Institution	Year
Ph.D in Environmental Biotechnology	Bharathidasan University, India	1/2009 - 9/2015
Master's degree in Biotechnology	KSR Institute, Tamil Nadu, India	6/2006 - 5/2008
Bachelor's degree in Biotechnology	KSR Institute, Tamil Nadu, India	5/2003 - 6/2006

RESEARCH EXPERIENCE

Position	Institution	Year
Associate Professor	Van Lang University, Vietnam	03/2022 – Till now
Visiting Faculty	Maejo University, Thailand	04/2021 – Till now
Adjutant Faculty	Asia University, Taichung, Taiwan	03/2021 – 02/2022
Assistant Professor	Ton Duc Thang University, Vietnam	05/2017 – 02/2022
Post-doctoral Researcher	Daegu University, South Korea	12/2015 - 04/2017

AWARDS AND FELLOWSHIPS

- Canadian Commonwealth Scholarship Program (CCSP), Canada (2013).
- Junior and Senior Research Fellow, University Grants Commission (UGC), Government of India (2009 to 2012)

EDITORIAL ROLE IN JOURNAL

- **Nature Scientific Reports** (<https://www.nature.com/srep/about/editors>)
- **Heliyon Environment** (<https://www.cell.com/heliyon/environment/editors>)
- **Journal of Water Process Engineering** (*Guest Editor*) - VSI: Resources from wastewater - IF 3.4 <https://www.journals.elsevier.com/journal-of-water-process-engineering/call-for-papers/novel-bioprocesses-and-technologies>
- **Chemosphere** (*Guest Editor*) - VSI: WWT-Resources - IF 5.77 <https://www.journals.elsevier.com/chemosphere/call-for-papers/environmental-technologies-effective-wastewater-treatment>
- **Fuel** (*Guest Editor*) - ICAFEE19- IF 5.57; ICETI2020; ICETI 2020 <https://www.journals.elsevier.com/fuel/call-for-papers/icafee19-the-4th-international-conference-on-alternative>
- **Environmental Science and Pollution Research** (*Managing Guest Editor*) – Recent Trends in Bioplastics (RTB 2019) - IF 2.9
- **Journal of Environmental Management** (*Guest Editor*) – VSI: Clean Technologies – IF 5.6 <https://www.journals.elsevier.com/journal-of-environmental-management/call-for-papers/call-for-papers-of-special-issue-pollution-prevention>
- **Energy Sources, Part A: Recovery, Utilization, and Environmental Effects** (*Guest Editor*) - Impact of COVID-19 on Energy Sources, Environment and Resources IF 1.2 https://think.taylorandfrancis.com/special_issues/impact-energy-sources/?utm_source=TFO&utm_medium=cms&utm_campaign=JPG15743

RESEARCH AND TEACHING INTERESTS

- Renewable Energy (Biohydrogen, Biodiesel, Bioethanol, Biobutanol)
- Wastewater Treatment, Degradation of Waste, Nanoparticles, etc.
- Environmental biotechnology: Molecular techniques, Microbiological methods
- Microbial and advanced materials for environmental remediation
- Environmental Management: Solid waste (food waste, cellulose waste) management, Environmental policies and regulations
- Removal of aromatic and emerging pollutants by advanced oxidation processes (Fenton-like reaction, photocatalysis, and UV/chlorine process) and adsorption

PROFESSIONAL MEMBERSHIPS

- Member, European Federation of Biotechnology
- Member, Asia-Pacific Chemical, Biological and Environmental Engineering Society, Hong Kong
- Member, YPARD, Italy

SELECTED PUBLICATIONS

2022

- Arun, J., Raghu, R., Hanif, S.S.M., Thilak, P., Sridhar, D., Nirmala, N., Dawn, S., Sivaramakrishnan, R., Chi, N.T.L., **Pugazhendhi, A.** 2022. A comparative review on photo and mixotrophic mode of algae cultivation: Thermochemical processing of biomass, necessity of bio-oil upgrading, challenges and future roadmaps. **Applied Energy**, 325, 119808.
- Bora, A., Mohanrasu, K., Swetha, T.A., Ananthi, V., Sindhu, R., Chi, N.T.L., **Pugazhendhi, A.**, Arun, A., Mathimani, T. 2022. Microbial electrolysis cell (MEC): Reactor configurations, recent advances and strategies in biohydrogen production. **Fuel**, 328, 125269.
- Ghate, P., Prabhu, D., Murugesan, G., Goveas, L.C., Varadavenkatesan, T., Vinayagam, R., Chi, N.T.L., **Pugazhendhi, A.**, Selvaraj, R. 2022. Synthesis of hydroxyapatite nanoparticles using *Acacia falcata* leaf extract and study of their anti-cancerous activity against cancerous mammalian cell lines. **Environmental Research**, 214, 113917.
- Karpagam, R., Jawaharraj, K., Ashokkumar, B., **Pugazhendhi, A.**, Varalakshmi, P. 2022. A cheap two-step cultivation of *Phaeodactylum tricornutum* for increased TAG production and differential expression of TAG biosynthesis associated genes. **Journal of Biotechnology**, 354, 53-62.
- Narayanan, M., Murugan, J.M., Kandasamy, G., Kandasamy, S., Nasif, O., Rajendran, M., **Pugazhendhi, A.** 2022a. The biotransformation potential of *Bacillus cereus* on β -cypermethrin to protect the earthworm (*Perionyx excavatus*) on insecticide-contaminated soil. **Archives of Agronomy and Soil Science**, 68(7), 944-955.
- Narayanan, M., **Pugazhendhi, A.**, David, S., Chi, N.T.L., Nasif, O., Alharbi, S.A., Ma, Y. 2022b. Influence of *Kosakonia* sp. on the Growth of *Arachis hypogaea* L. on Arid Soil. **Agronomy**, 12(8), 1801.

- Khunchai, J., Wongchai, A., On-Uma, R., Sabour, A., Alshiekheid, M., Narayanan, M., Karuppusamy, I., [Pugazhendhi, A.](#), Brindhadevi, K., Chi, N.T.L. 2022. [A viable bioremediation strategy for treating paper and pulp industry effluents and assessing the prospect of resulted bacterial biomass as single cell protein \(SCP\) using indigenous bacterial species.](#) **Chemosphere**, 304, 135246.
- Liu, Y., Yuan, Y., Ramya, G., Singh, S.M., Chi, N.T.L., [Pugazhendhi, A.](#), Xia, C., Mathimani, T. 2022. [A review on the promising fuel of the future–Biobutanol; the hindrances and future perspectives.](#) **Fuel**, 327, 125166.
- Madhu, J., Ramakrishnan, V.M., Santhanam, A., Natarajan, M., Palanisamy, B., Velauthapillai, D., Chi, N.T.L., [Pugazhendhi, A.](#) 2022. [Comparison of three different structures of zeolites prepared by template-free hydrothermal method and its CO₂ adsorption properties.](#) **Environmental Research**, 113949.
- Prabhu, P., Rao, M., Murugesan, G., Narasimhan, M.K., Varadavenkatesan, T., Vinayagam, R., Chi, N.T.L., [Pugazhendhi, A.](#), Selvaraj, R. 2022. [Synthesis, characterization and anticancer activity of the green-synthesized hematite nanoparticles.](#) **Environmental Research**, 214, 113864.
- Reena, R., Alphy, M.P., Reshmy, R., Thomas, D., Madhavan, A., Chaturvedi, P., [Pugazhendhi, A.](#), Awasthi, M.K., Ruiz, H., Kumar, V. 2022. [Sustainable valorization of sugarcane residues: Efficient deconstruction strategies for fuels and chemicals production.](#) **Bioresource Technology**, 127759.
- Sathiyavimal, S., Durán-Lara, E.F., Vasantharaj, S., Saravanan, M., Sabour, A., Alshiekheid, M., Chi, N.T.L., Brindhadevi, K., [Pugazhendhi, A.](#) 2022a. [Green synthesis of copper oxide nanoparticles using *Abutilon indicum* leaves extract and their evaluation of antibacterial, anticancer in human A549 lung and MDA-MB-231 breast cancer cells.](#) **Food and Chemical Toxicology**, 168, 113330.
- Sathiyavimal, S., Vasantharaj, S., Kaliannan, T., Chinnathambi, A., Alharbi, S.A., Krishnan, R., Brindhadevi, K., Chi, N.T.L., [Pugazhendhi, A.](#) 2022b. [Synthesis of HAp/CS-SA composite for effective removal of highly toxic dyes in aqueous solution.](#) **Food and Chemical Toxicology**, 113346.
- Van Nguyen, T.T., Phan, A.N., Nguyen, T.-A., Nguyen, T.K., Nguyen, S.T., [Pugazhendhi, A.](#), Phuong, H.H.K. 2022. [Valorization of agriculture waste biomass as biochar: As first-rate biosorbent for remediation of contaminated soil.](#) **Chemosphere**, 135834.
- Yuan, Y., Wu, Y., Chinnadurai, V., Saravanan, M., Chinnathambi, A., Alharbi, S.A., Brindhadevi, K., Chi, N.T.L., [Pugazhendhi, A.](#) 2022a. [In vitro analysis of green](#)

- synthesized copper nanoparticles using *Chloroxylon swietenia* leaves for dye degradation and antimicrobial application. *Food and Chemical Toxicology*, 113367.
- Yuan, Y., Wu, Y., Suganthi, N., Shanmugam, S., Brindhadevi, K., Sabour, A., Alshiekheid, M., Chi, N.T.L., Pugazhendhi, A., Shanmuganathan, R. 2022b. Biosynthesis of zirconium nanoparticles (ZrO₂ NPs) by *Phyllanthus niruri* extract: Characterization and its photocatalytic dye degradation activity. *Food and Chemical Toxicology*, 113340.
- Arun, J., Sasipraba, T., Gopinath, K., Priyadharsini, P., Nachiappan, S., Nirmala, N., Dawn, S., Chi, N.T.L., Pugazhendhi, A., 2022. Influence of biomass and nanoadditives in dark fermentation for enriched bio-hydrogen production: A detailed mechanistic review on pathway and commercialization challenges. *Fuel* 327, 125112.
- Arutselvan, C., kumar Seenivasan, H., Oscar, F.L., Ramya, G., Chi, N.T.L., Pugazhendhi, A., Thajuddin, N., 2022a. Review on wastewater treatment by microalgae in different cultivation systems and its importance in biodiesel production. *Fuel* 324, 124623.
- Arutselvan, C., Narchonai, G., Pugazhendhi, A., kumar Seenivasan, H., LewisOscar, F., Thajuddin, N., 2022b. Phycoremediation of textile and tannery industrial effluents using microalgae and their consortium for biodiesel production. *Journal of Cleaner Production*, 133100.
- Hou, J., Pugazhendhi, A., Phuong, T.N., Thanh, N.C., Brindhadevi, K., Velu, G., Chi, N.T.L., Yuan, D., 2022a. Plant resistance to disease: Using biochar to inhibit harmful microbes and absorb nutrients. *Environmental Research*, 113883.
- Hou, J., Pugazhendhi, A., Sindhu, R., Vinayak, V., Thanh, N.C., Brindhadevi, K., Chi, N.T.L., Yuan, D., 2022b. An assessment of biochar as a potential amendment to enhance plant nutrient uptake. *Environmental Research*, 113909.
- Khumchai, J., Wongchai, A., On-Uma, R., Sabour, A., Alshiekheid, M., Narayanan, M., Karuppusamy, I., Pugazhendhi, A., Brindhadevi, K., Chi, N.T.L., 2022. A viable bioremediation strategy for treating paper and pulp industry effluents and assessing the prospect of resulted bacterial biomass as single cell protein (SCP) using indigenous bacterial species. *Chemosphere* 304, 135246.
- Madhuvanathi, S., Jayanthi, S., Suresh, S., Pugazhendhi, A., 2022. Optimization of consolidated bioprocessing by response surface methodology in the conversion of corn stover to bioethanol by thermophilic *Geobacillus thermoglucosidasius*. *Chemosphere*, 135242.
- Mohanasundari, C., Anbalagan, S., Srinivasan, K., Narayanan, M., Saravanan, M., Alharbi, S.A., Salmen, S.H., Nhung, T.C., Pugazhendhi, A., 2022. Antibacterial activity potential of leaf extracts of *Blepharis maderaspatensis* and *Ziziphus oenopia* against antibiotics resistant *Pseudomonas* strains isolated from pus specimens. *Process Biochemistry* 118, 24-31.

- Narayanan, M., Karuppusamy, I., Alshiekheid, M., Sabour, A., Chi, N.T.L., **Pugazhendhi, A.**, 2022a. [Phytoremediation potential of Gossypium hirsutum on abandoned polluted chromium sludge soil with the amalgamation of Streptomyces tritici D5](#). **Chemosphere**, 135526.
- Narayanan, M., Muthusamy, M., Alshiekheid, M., Sabour, A., Chi, N.T.L., **Pugazhendhi, A.**, 2022b. [Influence of Brevibacillus borestelensis strains on phytoremediation potential and biomolecules contents of Jatropha curcas on diluted chromium sludge soil](#). **Chemosphere**, 135345.
- Narayanan, M., Priya, S., Natarajan, D., Alahmadi, T.A., Alharbi, S.A., Krishnan, R., Chi, N.T.L., **Pugazhendhi, A.**, 2022c. [Phyto-fabrication of Silver nanoparticle using leaf extracts of Aristolochia bracteolata Lam and their mosquito larvicidal potential](#). **Process Biochemistry**.
- Tan, S., Narayanan, M., Huong, D.T.T., Ito, N., Unpaprom, Y., **Pugazhendhi, A.**, Chi, N.T.L., Liu, J., 2022. [A perspective on the interaction between biochar and soil microbes: A way to regain soil eminence](#). **Environmental Research**, 113832.
- G. Sarojini, S.V. Babu, N. Rajamohan, M. Rajasimman, **A. Pugazhendhi**, [Application of a polymer-magnetic-algae based nano-composite for the removal of methylene blue- Characterization, parametric and kinetic studies](#), **Environmental Pollution** 292 (2022) 118376.
- S. Subramaniam, S. Kumarasamy, M. Narayanan, M. Ranganathan, T. Rathinavel, A. Chinnathambi, T.A. Alahmadi, I. Karuppusamy, **A. Pugazhendhi**, K. Whangchai, [Spectral and structure characterization of Ferula assafoetida fabricated silver nanoparticles and evaluation of its cytotoxic, and photocatalytic competence](#), **Environmental Research** 204 (2022) 111987.
- N. Dey, C. Kamatchi, A. Vickram, K. Anbarasu, S. Thanigaivel, J. Palanivelu, **A. Pugazhendhi**, V.K. Ponnusamy, [Role of nanomaterials in deactivating multiple drug resistance efflux pumps-A review](#), **Environmental Research** 204 (2022) 111968.
- S. Ge, **A. Pugazhendhi**, M. Sekar, C. Xia, A. Elfasakhany, K. Brindhadevi, K. Whangchai, [PM emissions-assessment of combustion energy transfer with Schizochytrium sp. algal biodiesel and blends in IC engine](#), **Science of The Total Environment** 802 (2022) 149750.
- R. Reshmy, E. Philip, A. Madhavan, **A. Pugazhendhi**, R. Sindhu, R. Sirohi, M.K. Awasthi, A. Pandey, P.J. Binod, [Nanocellulose as green material for remediation of hazardous heavy metal contaminants](#), **Journal of Hazardous Materials** 424 (2022) 127516.

- M. Sekar, V.K. Ponnusamy, **A. Pugazhendhi**, S. Nižetić, T. Praveenkumar, [Production and utilization of pyrolysis oil from solidplastic wastes: A review on pyrolysis process and influence of reactors design](#), **Environmental Research** 302 (2022) 114046.
- Aiswaria, P., Mohamed, S.N., Singaravelu, D.L., Brindhadevi, K., **Pugazhendhi, A.**, 2022. [A review on graphene/graphene oxide supported electrodes for microbial fuel cell applications: Challenges and prospects](#). **Chemosphere**, 133983.
- Annadurai, P., Gideon, D.A., Nirusimhan, V., Sivaramakrishnan, R., Dhandayuthapani, K., **Pugazhendhi, A.**, 2022. [Deciphering the pharmacological potentials of Aganosma cymosa \(Roxb.\) G. Don using in vitro and computational methods](#). *Process Biochemistry* 114, 119-133.
- Chandel, N., Ahuja, V., Gurav, R., Kumar, V., Tyagi, V.K., **Pugazhendhi, A.**, Kumar, G., Kumar, D., Yang, Y.-H., Bhatia, S.K., 2022. [Progress in microalgal mediated bioremediation systems for the removal of antibiotics and pharmaceuticals from wastewater](#). **Science of The Total Environment** 825, 153895.
- Chi, N.T.L., Veeraragavan, G.R., Brindhadevi, K., Chinnathambi, A., Salmen, S.H., Alharbi, S.A., Krishnan, R., **Pugazhendhi, A.**, 2022. [Fungi fabrication, characterization, and anticancer activity of silver nanoparticles using metals resistant Aspergillus niger](#). **Environmental Research**, 112721.
- Ge, S., Manigandan, S., Mathimani, T., Basha, S., Xia, C., Brindhadevi, K., Unpaprom, Y., Whangchai, K., **Pugazhendhi, A.**, 2022. [An assessment of agricultural waste cellulosic biofuel for improved combustion and emission characteristics](#). **Science of The Total Environment** 813, 152418.
- Guellout, Z., Francois-Lopez, E., Benguerba, Y., Dumas, C., Yadav, K.K., Fallatah, A.M., **Pugazhendhi, A.**, Ernst, B., 2022. [Dark fermentative biohydrogen production from vinicultural biomass without exogenous inoculum in a semi-batch reactor: A kinetic study](#). **Journal of environmental management** 305, 114393.
- Krishnan, V., Prakash, J.S., Manigandan, V., Venkatasubbu, G.D., **Pugazhendhi, A.**, Brindhadevi, K., Kalaivani, T., 2022. [Synthesis of mesoporous SiO₂ nanoparticles and toxicity assessment in early life stages of zebrafish](#). **Microporous and Mesoporous Materials** 330, 111573.
- Madhu, J., Ramakrishnan, V.M., Palanichamy, P., Santhanam, A., Natarajan, M., Ponnaian, P., Brindhadevi, K., **Pugazhendhi, A.**, Velauthapillai, D., 2022. [Rubik's cube shaped organic template free hydrothermal synthesis and characterization of zeolite NaA for CO₂ adsorption](#). **Fuel** 317, 123492.

- Maheswari, P., Mohan, D.R., Krishnan, A.H., Sivaramakrishnan, R., **Pugazhendhi, A.**, 2022. Impact of nano-ZnO consolidated poly (ether ether sulfone) nano filtration membrane for evacuation of hazardous metal particles. **Chemosphere** 297, 134024.
- Mani, V.M., Nivetha, S., Sabarathinam, S., Barath, S., Das, M.A., Basha, S., Elfasakhany, A., **Pugazhendhi, A.**, 2022. Multifunctionalities of mycosynthesized zinc oxide nanoparticles (ZnONPs) from *Cladosporium tenuissimum* FCBGr: Antimicrobial additives for paints coating, functionalized fabrics and biomedical properties. **Progress in Organic Coatings** 163, 106650.
- Narayanan, M., El-Sheekh, M., Ma, Y., **Pugazhendhi, A.**, Natarajan, D., Kandasamy, G., Raja, R., Kumar, R.S., Kumarasamy, S., Sathiyam, G., 2022a. Current status of microbes involved in the degradation of pharmaceutical and personal care products (PPCPs) pollutants in the aquatic ecosystem. **Environmental Pollution**, 118922.
- Narayanan, M., Kiran, A., Natarajan, D., Kandasamy, S., Shanmugam, S., Alshiekheid, M., Almoallim, H.S., **Pugazhendhi, A.**, 2022b. The pharmaceutical potential of crude ethanol leaf extract of *Pedaliu murex* (L.). **Process Biochemistry** 112, 234-240.
- Prakash, D.G., Gopinath, K.P., Prasanth, S.M., Harish, S., Rishikesh, M., Sivaramakrishnan, R., **Pugazhendhi, A.**, 2022. Extraction methodology of lignin from biomass waste influences the quality of bio-oil obtained by solvothermal depolymerization process. **Chemosphere** 293, 133473.
- Pugazhendhi, A.**, Mathimani, T., Alharbi, S.A., Chinnathambi, A., Karuppusamy, I., Brindhadevi, K., Kheawfu, K., Pikulkaew, S., 2022. In vitro efficacy of green synthesized ZnO nanoparticles against biofilm and virulence of *Serratia marcescens*. **Progress in Organic Coatings** 166, 106781.
- Raja, R.K., Hazir, S., Balasubramani, G., Sivaprakash, G., Obeth, E.S.J., Boobalan, T., **Pugazhendhi, A.**, Raj, R.H.K., Arun, A., 2022. Green nanotechnology for the environment, **Handbook of Microbial Nanotechnology**. Elsevier, pp. 461-478.
- Rajagopal, J., Gopinath, K.P., Neha, R., Aakriti, K., Jayaraman, R.S., Arun, J., **Pugazhendhi, A.**, 2022. Processing of Household Waste Via Hydrothermal Gasification and Hydrothermal Liquefaction For Bio-oil and Bio-hydrogen Production: Comparison with RSM Studies. **Journal of Environmental Chemical Engineering**, 107218.
- Rajasekar, A., Devasena, T., Suresh, S., Senthil, B., Sivaramakrishnan, R., **Pugazhendhi, A.**, 2022. Curcumin nanospheres and nanorods: Synthesis, characterization and anticancer activity. **Process Biochemistry** 112, 248-253.
- Rajkumar, S., Venkatraman, M., Balraju, P., Suguna, K., **Pugazhendhi, A.**, 2022. Performance of simple green synthesized Ag incorporated TiO₂ nanoparticles based photoanodes by

- doctor-blade coating as working electrodes for dye sensitized solar cells. **Progress in Organic Coatings** 164, 106697.
- Reshmy, R., Balakumaran, P.A., Divakar, K., Philip, E., Madhavan, A., Pugazhendhi, A., Sirohi, R., Binod, P., Awasthi, M.K., Sindhu, R., 2022. Microbial valorization of lignin: Prospects and challenges. **Bioresource Technology** 344, 126240.
- Sheng, Y., Mathimani, T., Brindhadevi, K., Basha, S., Elfasakhany, A., Xia, C., Pugazhendhi, A., 2022a. Combined effect of CO₂ concentration and low-cost urea repletion/starvation in *Chlorella vulgaris* for ameliorating growth metrics, total and non-polar lipid accumulation and fatty acid composition. **Science of The Total Environment** 808, 151969.
- Sheng, Y., Narayanan, M., Basha, S., Elfasakhany, A., Brindhadevi, K., Xia, C., Pugazhendhi, A., 2022b. In vitro and in vivo efficacy of green synthesized AgNPs against Gram negative and Gram positive bacterial pathogens. **Process Biochemistry** 112, 241-247.
- Shyamalagowri, S., Charles, P., Manjunathan, J., Kamaraj, M., Anitha, R., Pugazhendhi, A., 2022. In vitro anticancer activity of silver nanoparticles phyto-fabricated by *Hylocereus undatus* peel extracts on human liver carcinoma (HepG2) cell lines. **Process Biochemistry** 116, 17-25.
- Silambarasan, S., Logeswari, P., Sivaramakrishnan, R., Cornejo, P., Sipahutar, M.K., Pugazhendhi, A., 2022. Amelioration of aluminum phytotoxicity in *Solanum lycopersicum* by co-inoculation of plant growth promoting *Kosakonia radicincitans* strain CABV2 and *Streptomyces corchorusii* strain CASL5. **Science of The Total Environment**, 154935.
- Subha, V., Ranu, A., Shankar, A., Kirubanandan, S., Satheeshkumar, E., Suresh, S., Pugazhendhi, A., Ilangoan, R., 2022. Functionalization of spray coated cellulose nanofiber sheet with montmorillonite (MMT) and silver nanoparticles (AgNPs) to biomedical nanocomposite as wound regeneration scaffold. **Progress in Organic Coatings** 166, 106782.
- Thiyagarajan, S., Varuvel, E., Karthickeyan, V., Sonthalia, A., Kumar, G., Saravanan, C., Dhinesh, B., Pugazhendhi, A., 2022. Effect of hydrogen on compression-ignition (CI) engine fueled with vegetable oil/biodiesel from various feedstocks: A review. **International Journal of Hydrogen Energy**.
- Thomas, D., Philip, E., Sindhu, R., Ulaeto, S.B., Pugazhendhi, A., Awasthi, M.K., 2022. Developments in smart organic coatings for anticorrosion applications: a review. **Biomass Conversion and Biorefinery**, 1-17.

- Varuvel, E.G., Thiagarajan, S., Sonthalia, A., Prakash, T., Awad, S., Aloui, F., **Pugazhendhi, A.**, 2022. Some studies on reducing carbon dioxide emission from a CRDI engine with hydrogen and a carbon capture system. **International Journal of Hydrogen Energy**.
- Vikneswaran, M., Saravanan, C., Manickam, M., Sasikala, J., Josephin, J.F., **Pugazhendhi, A.**, Varuvel, E.G., 2022. A study on the feasibility of bergamot peel oil-gasoline blends for spark-ignition engines. **Journal of Cleaner Production** 339, 130515.
- Vimali, E., Gunaseelan, S., Devi, V.C., Mothil, S., Arumugam, M., Ashokkumar, B., Moorthy, I.M.G., **Pugazhendhi, A.**, Varalakshmi, P., 2022a. Comparative study of different catalysts mediated FAME conversion from macroalga *Padina tetrastromatica* biomass and hydrothermal liquefaction facilitated bio-oil production. **Chemosphere** 292, 133485.
- Vimali, E., Kumar, A.S., Vignesh, N.S., Ashokkumar, B., Dhakshinamoorthy, A., Udayan, A., Arumugam, M., **Pugazhendhi, A.**, Varalakshmi, P., 2022b. Enhancement of lipid accumulation in microalga *Desmodesmus sp. VV2*: Response Surface Methodology and artificial neural network modeling for biodiesel production. **Chemosphere**, 133477.
- Vimalkumar, K., Sangeetha, S., Oscar, F.L., Kay, P., **Pugazhendhi, A.**, 2022. A systematic review on toxicity assessment of persistent emerging pollutants (EPs) and associated microplastics (MPs) in the environment using the Hydra animal model. **Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology**, 109320.

2021

- E.R. Rene, M. Sethurajan, V.K. Ponnusamy, G. Kumar, T.N.B. Dung, K. Brindhadevi, **A. Pugazhendhi**, Electronic waste generation, recycling and resource recovery: Technological perspectives and trends, **Journal of Hazardous Materials**, (2021) 125664.
- K. Whangchai, T. Van Hung, S. Al-Rashed, M. Narayanan, S. Kandasamy, **A. Pugazhendhi**, Biodegradation competence of *Streptomyces toxytricini* D2 isolated from leaves surface of the hybrid cotton crop against β cypermethrin, **Chemosphere** (2021) 130152.
- R. Ganesan, S. Subramaniam, R. Paramasivam, J.S. Sabir, J.F. Josephin, K. Brindhadevi, **A. Pugazhendhi**, A study on biofuel produced by catalytic cracking of mustard and castor oil using porous H β and AlMCM-41 catalysts, **Science of The Total Environment** 757 (2021) 143781.
- M. Narayanan, D. Natarajan, G. Kandasamy, S. Kandasamy, R. Shanmuganathan, **A. Pugazhendhi**, Phytoremediation competence of short-term crops on magnesite mine tailing, **Chemosphere** 270 (2021) 128641.

- A. Kartik, D. Akhil, D. Lakshmi, K.P. Gopinath, J. Arun, R. Sivaramakrishnan, **A. Pugazhendhi**, A critical review on production of biopolymers from algae biomass and their applications, *Bioresource Technology* (2021) 124868.
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DECLARATION:

I hereby declare that the above details are true to my knowledge.

Date: 21-09-2022

Place: Vietnam

Thanking you,



(Arivalagan Pugazhendhi)