

DAFTAR PUSTAKA

- Adhikary, S., & Kumar, R. (2022). Qualitative and Quantitative Analysis of DNA from Human Saliva Respectively through Quantitative Polymerase Chain Reaction and UV-Visible Spectrophotometer: A Review. *International Journal of Science and Research (IJSR)*, 11(4), 1265-1269.
<https://doi.org/10.21275/SR22426203348>
- Ahn, E., & Kang, H. (2018). Introduction to systematic review and meta-analysis. *Korean journal of anesthesiology*, 71(2), 103-112.
<https://doi.org/10.4097/kjae.2018.71.2.103>
- Aketo, T., Hoshikawa, Y., Nojima, D., Yabu, Y., Maeda, Y., Yoshino, T., ... & Tanaka, T. (2020). Selection and characterization of microalgae with potential for nutrient removal from municipal wastewater and simultaneous lipid production. *Journal of bioscience and bioengineering*, 129(5), 565-572.
<https://doi.org/10.1016/j.jbiosc.2019.12.004>
- Al-Shuhaib, M. B. S., & Hashim, H. O. (2023). Mastering DNA chromatogram analysis in Sanger sequencing for reliable clinical analysis. *Journal, genetic engineering & biotechnology*, 21(1), 115.
<https://doi.org/10.1186/s43141-023-00587-6>
- Alizadeh Noughabi, H. (2016). Two powerful tests for normality. *Annals of Data Science*, 3, 225-234. <https://doi.org/10.1007/s40745-016-0083-y>
- Allangawi, A., Alzaimoor, E. F., Shanaah, H. H., Mohammed, H. A., Saqer, H., El-Fattah, A. A., & Kamel, A. H. (2023). Carbon capture materials in post-combustion: adsorption and absorption-based processes. *C*, 9(1), 17.
<https://doi.org/10.3390/c9010017>
- Amjadi, T., Razeghi, J., Motafakkerazad, R., & Zareipour, R. (2024). Interaction between *Haematococcus pluvialis* microalgae and lead nitrate: lead adsorption from water. *International Journal of Phytoremediation*, 26(7), 1168-1179. <https://doi.org/10.1080/15226514.2023.2298773>
- Antane, V., Sarybayev, Y., Osserbay, A., Shatmanov, K., & Baltakhozhayev, T. (2024). Spectrophotometric method for determining the quantity and quality of DNA in animal breeding. *Scientific Horizons*, 27(2), 31-42.
<https://doi.org/10.48077/scihor2.2024.31>
- Ara, A., & Usmani, J. A. (2015). Lead toxicity: a review. *Interdisciplinary toxicology*, 8(2), 55-64. <https://doi.org/10.1515/intox-2015-0009>
- Arora, N., Gulati, K., Tripathi, S., Pruthi, V., & Poluri, K. M. (2018). Algae as a budding tool for mitigation of arsenic from aquatic systems. *Mechanisms of arsenic toxicity and tolerance in plants*, 269-297.
https://doi.org/10.1007/978-981-13-1292-2_12
- Arora, N., Gulati, K., Patel, A., Pruthi, P. A., Poluri, K. M., & Pruthi, V. (2017). A hybrid approach integrating arsenic detoxification with biodiesel production using oleaginous microalgae. *Algal Research*, 24, 29-39.
<https://doi.org/10.1016/j.algal.2017.03.012>
- Asad, N., Cregg, S., Shakya, S., Stegman, S., & Timmons, L. (2023). Sustainable

- and Cost-Effective Gel Documentation. *Methods and Protocols*, 6(2), 21. <https://doi.org/10.3390/mps6020021>
- Ashraf, U., Kanu, A. S., Mo, Z., Hussain, S., Anjum, S. A., Khan, I., ... & Tang, X. (2015). Lead toxicity in rice: effects, mechanisms, and mitigation strategies—a mini review. *Environmental Science and Pollution Research*, 22, 18318-18332. <https://doi.org/10.1007/s11356-015-5463-x>
- Attwood, T. K. (2018). A Critical Guide to BLAST. *F1000Research*, 7(1435), 1435. <https://doi.org/10.7490/f1000research.1116052.1>
- Bala, S., Garg, D., Thirumalesh, B. V., Sharma, M., Sridhar, K., Inbaraj, B. S., & Tripathi, M. (2022). Recent strategies for bioremediation of emerging pollutants: review for a green and sustainable environment. *Toxics*, 10(8), 484. <https://doi.org/10.3390/toxics10080484>
- Balzano, S., Sardo, A., Blasio, M., Chahine, T. B., Dell'Anno, F., Sansone, C., & Brunet, C. (2020). Microalgal metallothioneins and phytochelatins and their potential use in bioremediation. *Frontiers in Microbiology*, 11, 517. <https://doi.org/10.3389/fmicb.2020.00517>
- Barker, W. R., Wilton, A. D., Whitbread, G., Haegi, L., Klazenga, N., Barker, R. M., & Orchard, A. E. (2020). Don't reinvent the wheel: extended synonymies already compare taxa and names in divergent taxonomies. *Australasian Systematic Botany Society*, 27. <https://staging.anbg.gov.au/asbs/newsletter/pdf/20-sep-184.pdf#page=29>
- Bayoud, H. A. (2021). Tests of normality: new test and comparative study. *Communications in Statistics-Simulation and Computation*, 50(12), 4442-4463. <https://doi.org/10.1080/03610918.2019.1643883>
- Behera, S., & Das, S. (2023). Potential and prospects of Actinobacteria in the bioremediation of environmental pollutants: Cellular mechanisms and genetic regulations. *Microbiological Research*, 127399. <https://doi.org/10.1016/j.micres.2023.127399>
- Belghith, T., Athmouni, K., Bellassoued, K., El Feki, A., & Ayadi, H. (2016). Physiological and biochemical response of *Dunaliella salina* to cadmium pollution. *Journal of applied phycology*, 28, 991-999. <https://doi.org/10.1007/s10811-015-0630-5>
- Bellido-Pedraza, C. M., Torres, M. J., & Llamas, A. (2024). The Microalgae *Chlamydomonas* for Bioremediation and Bioproduct Production. *Cells*, 13(13), 1137. <https://doi.org/10.3390/cells13131137>
- Bevan, I. S., Rapley, R., & Walker, M. R. (1992). Sequencing of PCR-amplified DNA. *Genome Research*, 1(4), 222-228. <https://doi.org/doi:10.1101/gr.1.4.222>
- Bhatt, P., Verma, A., Gangola, S., Bhandari, G., & Chen, S. (2021). Microbial glycoconjugates in organic pollutant bioremediation: recent advances and applications. *Microbial Cell Factories*, 20(1), 1-18. <https://doi.org/10.1186/s12934-021-01556-9>
- Bhattacharjya, R., Tyagi, R., Rastogi, S., Ulmann, L., & Tiwari, A. (2024). Response of varying combined nutrients on biomass and biochemical composition of marine diatoms *Chaetoceros gracilis* and *Thalassiosira weissflogii*. *Bioresource Technology*, 394, 130274.

- <https://doi.org/10.1016/j.biortech.2023.130274>
- Biassoni, R. & Raso, A. (2020). Quantitative Real-Time PCR. In: *Methods in molecular biology*, 2, 235. <https://doi.org/10.1007/978-1-4939-9833-3>
- Boratyn, G. M., Thierry-Mieg, J., Thierry-Mieg, D., Busby, B., & Madden, T. L. (2019). Magic-BLAST, an accurate RNA-seq aligner for long and short reads. *BMC bioinformatics*, 20, 1-19. <https://doi.org/10.1186/s12859-019-2996-x>
- Borowiec, M. L., Rabeling, C., Brady, S. G., Fisher, B. L., Schultz, T. R., & Ward, P. S. (2019). Compositional heterogeneity and outgroup choice influence the internal phylogeny of the ants. *Molecular phylogenetics and evolution*, 134, 111-121. <https://doi.org/10.1016/j.ympev.2019.01.024>
- Brady, S. M., Burow, M., Busch, W., Carlborg, Ö., Denby, K. J., Glazebrook, J., ... & Kliebenstein, D. J. (2015). Reassess the t test: interact with all your data via ANOVA. *The Plant Cell*, 27(8), 2088-2094. <https://doi.org/10.1105/tpc.15.00238>
- Brzychczyk, B., Hebda, T., & Pedryc, N. (2020). The influence of artificial lighting systems on the cultivation of algae: The example of *Chlorella vulgaris*. *Energies*, 13(22), 5994. <https://doi.org/10.3390/en13225994>
- Bussard, A., Corre, E., Hubas, C., Duvernois-Berthet, E., Le Corguillé, G., Jourden, L., ... & Lopez, P. J. (2017). Physiological adjustments and transcriptome reprogramming are involved in the acclimation to salinity gradients in diatoms. *Environmental Microbiology*, 19(3), 909-925. <https://doi.org/10.1111/1462-2920.13398>
- Caamaño-Antelo, S., Fernández-No, I. C., Böhme, K., Ezzat-Alnakip, M., Quintela-Baluja, M., Barros-Velázquez, J., & Calo-Mata, P. (2015). Genetic discrimination of foodborne pathogenic and spoilage *Bacillus* spp. based on three housekeeping genes. *Food microbiology*, 46, 288-298. <https://doi.org/10.1016/j.fm.2014.08.013>
- Cadena-Herrera, D., Esparza-De Lara, J. E., Ramírez-Ibañez, N. D., López-Morales, C. A., Pérez, N. O., Flores-Ortiz, L. F., & Medina-Rivero, E. (2015). Validation of three viable-cell counting methods: Manual, semi-automated, and automated. *Biotechnology Reports*, 7, 9-16. <https://doi.org/10.1016/j.btre.2015.04.004>
- Camacho-Fernández, C., Hervás, D., Rivas-Sendra, A., Marín, M. P., & Seguí-Simarro, J. M. (2018). Comparison of six different methods to calculate cell densities. *Plant Methods*, 14, 1-15. <https://doi.org/10.1186/s13007-018-0297-4>
- Caruso, F., Mantellato, S., Palacios, M., & Flatt, R. J. (2017). ICP-OES method for the characterization of cement pore solutions and their modification by polycarboxylate-based superplasticizers. *Cement and Concrete Research*, 91, 52-60. <https://doi.org/10.1016/j.cemconres.2016.10.007>
- Cavalletti, E., Romano, G., Palma Esposito, F., Barra, L., Chiaiese, P., Balzano, S., & Sardo, A. (2022). Copper effect on microalgae: Toxicity and bioremediation strategies. *Toxics*, 10(9), 527. <https://doi.org/10.3390/toxics10090527>
- Chakravorty, M., Nanda, M., Bisht, B., Sharma, R., Kumar, S., Mishra, A., ... &

- Kumar, V. (2023). Heavy metal tolerance in microalgae: Detoxification mechanisms and applications. *Aquatic Toxicology*, 260, 106555. <https://doi.org/10.1016/j.aquatox.2023.106555>
- Chappell, P. D., Whitney, L. P., Haddock, T. L., Menden-Deuer, S., Roy, E. G., Wells, M. L., & Jenkins, B. D. (2013). *Thalassiosira* spp. community composition shifts in response to chemical and physical forcing in the northeast Pacific Ocean. *Frontiers in microbiology*, 4, 273. <https://doi.org/10.3389/fmicb.2013.00273>
- Chasapis, C. T., Peana, M., & Bekiari, V. (2022). Structural identification of metalloproteomes in marine diatoms, an efficient algae model in toxic metals bioremediation. *Molecules*, 27(2), 378. <https://doi.org/10.3390/molecules27020378>
- Chen, C. S., Shih, Y. J., & Huang, Y. H. (2015). Remediation of lead (Pb (II)) wastewater through recovery of lead carbonate in a fluidized-bed homogeneous crystallization (FBHC) system. *Chemical Engineering Journal*, 279, 120-128. <http://dx.doi.org/10.1016/j.cej.2015.05.013>
- Chen, X. H., Chang, S. H., Jiang, R., Tian, Y. Q., Jia, L. P., Liu, F. J., & Huang, X. G. (2024). Significant Alleviation of Cadmium Toxicity in *Thalassiosira weissflogii* through the Combined Effect of High Silicon and Zinc Supplementation. *Environmental Technology & Innovation*, 103809. <https://doi.org/10.1016/j.eti.2024.103809>
- Chia, M. A., Chimdirim, P. K., & Japhet, W. S. (2015). Lead induced antioxidant response and phenotypic plasticity of *Scenedesmus quadricauda* (Turp.) de Brébisson under different nitrogen concentrations. *Journal of applied phycology*, 27, 293-302. <https://doi.org/10.1007/s10811-014-0312-8>
- Chia, W. Y., Tang, D. Y. Y., Khoo, K. S., Lup, A. N. K., & Chew, K. W. (2020). Nature's fight against plastic pollution: Algae for plastic biodegradation and bioplastics production. *Environmental Science and Ecotechnology*, 4, 100065. <https://doi.org/10.1016/J.ESE.2020.100065>
- Chokshi, K., Pancha, I., Ghosh, A., & Mishra, S. (2017). Oxidative stress-induced bioprospecting of microalgae. *Systems Biology of Marine Ecosystems*, 251-276. https://doi.org/10.1007/978-3-319-62094-7_13
- Collin, M. S., Venkatraman, S. K., Vijayakumar, N., Kanimozhi, V., Arbaaz, S. M., Stacey, R. S., ... & Swamiappan, S. (2022). Bioaccumulation of lead (Pb) and its effects on human: A review. *Journal of Hazardous Materials Advances*, 7, 100094. <https://doi.org/10.1016/j.hazl.2022.100064>
- Costa, O. Y., Raaijmakers, J. M., & Kuramae, E. E. (2018). Microbial extracellular polymeric substances: ecological function and impact on soil aggregation. *Frontiers in microbiology*, 9, 1636. <https://doi.org/10.3389/fmicb.2018.01636>
- Crecca, V. D. M. T., da Silva, J. M., & de Souza, P. A. R. (2023). Technological prospecting: Patent mapping of bioremediation of soil contaminated with agrochemicals using fungi. *World Patent Information*, 73, 102196. <https://doi.org/10.1016/j.wpi.2023.102196>
- Crossley, B. M., Bai, J., Glaser, A., Maes, R., Porter, E., Killian, M. L., Clement, T., & Toohey-Kurth, K. (2020). Guidelines for Sanger sequencing and

- molecular assay monitoring. *Journal of veterinary diagnostic investigation : official publication of the American Association of Veterinary Laboratory Diagnosticians, Inc*, 32(6), 767–775.
<https://doi.org/10.1177/1040638720905833>
- Cunha, A. R. D., Ambrósio, A. D. S., Wolowski, M., Westin, T. B., Govêa, K. P., Carvalho, M., & Barbosa, S. (2020). Negative effects on photosynthesis and chloroplast pigments exposed to lead and aluminum: A meta-analysis. *Cerne*, 26(2), 232-237.
<https://doi.org/10.1590/01047760202026022711>
- Dahmen-Ben Moussa, I., Boukhriss, S., Athmouni, K., & Ayadi, H. (2022). Secondary metabolites production combined with lead bioremediation by *Halamphora* sp. marine diatom microalgae and their physiological response. *Int. J. Aquac. Fish. Sci*, 8, 25-36.
<https://dx.doi.org/10.17352/2455-8400.000075>
- Dao, L. H., & Beardall, J. (2016). Effects of lead on two green microalgae *Chlorella* and *Scenedesmus*: photosystem II activity and heterogeneity. *Algal Research*, 16, 150-159.
<https://doi.org/10.1016/j.algal.2016.03.006>
- de Almeida Moreira, B. R., Frias, Y. A., de Lima, E. W., Cruz, V. H., Lopes, P. R. M., & da Silva Viana, R. (2021). Algae-specific colorful LEDs: Biotechnological drivers to biorefinery and photobiological platforms. *Journal of Cleaner Production*, 316, 128350.
<https://doi.org/10.1016/j.jclepro.2021.128350>
- De Caroli, M., Furini, A., DalCorso, G., Rojas, M., & Di Sansebastiano, G. P. (2020). Endomembrane reorganization induced by heavy metals. *Plants*, 9(4), 482, <https://doi.org/10.3390/plants9040482F>
- Demir, S. (2022). Comparison of normality tests in terms of sample sizes under different skewness and Kurtosis coefficients. *International Journal of Assessment Tools in Education*, 9(2), 397-409.
<https://doi.org/10.21449/ijate.1101295>
- Dewi, E. R. (2022). Analisis cemaran logam berat arsen, timbal, dan merkuri pada makanan di wilayah kota surabaya dan kabupaten Sidoarjo Jawa Timur. *Jurnal Ilmu Kesehatan Masyarakat*, 18(1), 1-9.
<https://doi.org/10.19184/ikesma.v18i1.20529>
- Dewi, E. R. S., & Nuravivah, R. (2018). Potential of microalgae *Chlorella vulgaris* as bioremediation agents of heavy metal Pb (Lead) on culture media. In *E3S Web of Conferences* (Vol. 31, p. 05010). EDP Sciences.
<https://doi.org/10.1051/e3sconf/20183105010>
- DeSalle, R., Narechania, A., & Tessler, M. (2023). Multiple outgroups can cause random rooting in phylogenomics. *Molecular Phylogenetics and Evolution*, 184, 107806. <https://doi.org/10.1016/j.ympev.2023.107806>
- Ding, Z., Bourven, I., Guibaud, G., van Hullebusch, E. D., Panico, A., Pirozzi, F., & Esposito, G. (2015). Role of extracellular polymeric substances (EPS) production in bioaggregation: application to wastewater treatment. *Applied microbiology and biotechnology*, 99, 9883-9905.
<https://doi.org/10.1007/s00253-015-6964-8>

- Doyle, J. J., & Doyle, J. L. (1987). A rapid DNA isolation procedure for small quantities of fresh leaf tissue. *Phytochemical bulletin*, *19*, 11-15.
<https://worldveg.tind.io/record/33886/>
- Dubois, A., Ohler, A., & Pyron, R. A. (2021). New concepts and methods for phylogenetic taxonomy and nomenclature in zoology, exemplified by a new ranked cladonomy of recent amphibians (Lissamphibia). *Megataxa*, *5*(1), 1-738. <https://doi.org/10.11646/megataxa.5.1.1>
- Edelstein, M., & Ben-Hur, M. (2018). Heavy metals and metalloids: Sources, risks and strategies to reduce their accumulation in horticultural crops. *Scientia Horticulturae*, *234*, 431-444.
<https://doi.org/10.1016/j.scienta.2017.12.039>
- Engwa, G. A., Ferdinand, P. U., Nwalo, F. N., & Unachukwu, M. N. (2019). Mechanism and health effects of heavy metal toxicity in humans. *Poisoning in the modern world-new tricks for an old dog*, *10*, 70-90. <https://doi.org/10.5772/intechopen.82511>
- Esser, D. S., Leveau, J. H., & Meyer, K. M. (2015). Modeling microbial growth and dynamics. *Applied microbiology and biotechnology*, *99*, 8831-8846.
<https://doi.org/10.1007/s00253-015-6877-6>
- Etesami, E., Jorjani, S., & Noroozi, M. (2022). Improvement of *Thalassiosira weissflogii* as high valuable nutritional feed. *Iranian Journal of Fisheries Sciences*, *21*(1), 15-32. <https://doi.org/10.22092/ijfs.2022.125835>
- Fadlilah, I., Triwuri, N. A., & Prasadi, O. (2023). Biokonsentrasi Faktor Logam Berat Timbal (Pb) pada Ikan di Pantai Kemiren Cilacap, Jawa tengah. *Jurnal Teknologi Lingkungan Lahan Basah*, *11*(1), 094-099.
<http://dx.doi.org/10.26418/jtlb.v11i1.59490>
- Fattorini, N., & Maier, U. G. (2021). Targeting of proteins to the cell wall of the diatom *Thalassiosira pseudonana*. *Discover Materials*, *1*, 1-10.
<https://doi.org/10.1007/s43939-021-00005-z>
- Ferrari, M., Marieschi, M., Cozza, R., & Torelli, A. (2024). Phytochelatin Synthase: An In Silico Comparative Analysis in Cyanobacteria and Eukaryotic Microalgae. *Plants*, *13*(15), 2165.
<https://doi.org/10.3390/plants13152165>
- Fialova, L., Romanovska, D., & Marova, I. (2020). A Comparative Study of Some Procedures for Isolation of Fruit DNA of Sufficient Quality for PCR-Based Assays. *Molecules*, *25*(18), 4317.
<https://doi.org/10.3390/molecules25184317>
- Gabler, F., Nam, S. Z., Till, S., Mirdita, M., Steinegger, M., Söding, J., ... & Alva, V. (2020). Protein sequence analysis using the MPI bioinformatics toolkit. *Current Protocols in Bioinformatics*, *72*(1), e108.
<https://doi.org/10.1002/cpbi.108>
- Gan, T., Zhao, N., Yin, G., Chen, M., Wang, X., Liu, J., & Liu, W. (2019). Optimal chlorophyll fluorescence parameter selection for rapid and sensitive detection of lead toxicity to marine microalgae *Nitzschia closterium* based on chlorophyll fluorescence technology. *Journal of photochemistry and photobiology B: Biology*, *197*, 111551.
<https://doi.org/10.1016/j.jphotobiol.2019.111551>

- Gauthier, M. R., Senhorinho, G. N. A., & Scott, J. A. (2020). Microalgae under environmental stress as a source of antioxidants. *Algal Research*, 52, 102104. <https://doi.org/10.1016/j.algal.2020.102104>
- Gao, D., Zhao, H., Wang, L., Li, Y., Tang, T., Bai, Y., & Liang, H. (2022). Current and emerging trends in bioaugmentation of organic contaminated soils: A review. *Journal of Environmental Management*, 320, 115799. <https://doi.org/10.1016/j.jenvman.2022.115799>
- Ghaheri, M., Kahrizi, D., Yari, K., Babaie, A., Suthar, R. S., & Kazemi, E. (2016). A comparative evaluation of four DNA extraction protocols from whole blood sample. *Cellular and Molecular Biology*, 62(3), 120-124. <http://www.cellmolbiol.org/index.php/CMB/article/view/830>
- Gildantia, E., Ferniah, R. S., Budiharjo, A., Supriyadi, A., Zainuri, M., & Kusumaningrum, H. P. (2022). Identifikasi Spesies Mikroalga dari BBPBAP Jepara secara Morfologi dan Molekuler menggunakan 18S rDNA. *Buletin Oseanografi Marina Juni*, 11(2), 167-176. <https://doi.org/10.14710/buloma.v11i2.39703>
- Ginkel, J. H., van den Broek, D. A., van Kuik, J., Linders, D., de Weger, R., Willems, S. M., & Huibers, M. M. (2017). Preanalytical blood sample workup for cell-free DNA analysis using droplet digital PCR for future molecular cancer diagnostics. *Cancer medicine*, 6(10), 2297-2307. <https://doi.org/10.1002/cam4.1184>
- Godfrey, K. (2019). Comparing the means of several groups. In *Medical uses of statistics* (pp. 233-258). CRC Press. <https://www.taylorfrancis.com/chapters/edit/10.1201/9780429187445-12/comparing-means-several-groups-katherine-godfrey>
- Goncalves, D. A., de Souza, I. D., Rosa, A. C. G., Melo, E. S. P., Goncalves, A. M. B., de Oliveira, L. C. S., & do Nascimento, V. A. (2019). Multi-wavelength calibration: determination of trace toxic elements in medicine plants by ICP OES. *Microchemical Journal*, 146, 381-386. <https://doi.org/10.1016/j.microc.2019.01.021>
- González-Pech, R. A., Stephens, T. G., & Chan, C. X. (2019). Commonly misunderstood parameters of NCBI BLAST and important considerations for users. *Bioinformatics*, 35(15), 2697-2698. <https://doi.org/10.1093/bioinformatics/bty1018>
- Gojkovic, Ž., Vílchez, C., Torronteras, R., Vígara, J., Gómez-Jacinto, V., Janzer, N., ... & Garbayo, I. (2014). Effect of selenate on viability and selenomethionine accumulation of *Chlorella sorokiniana* grown in batch culture. *The Scientific World Journal*, 2014(1), 401265. <https://doi.org/10.1155/2014/401265>
- Goss, R., Volke, D., Werner, L. E., Kunz, R., Kansy, M., Hoffmann, R., & Wilhelm, C. (2023). Isolation of fucoxanthin chlorophyll protein complexes of the centric diatom *Thalassiosira pseudonana* associated with the xanthophyll cycle enzyme diadinoxanthin de-epoxidase. *IUBMB life*, 75(1), 66-76. <https://doi.org/10.1002/iub.2650>
- Goswami, R. K., Agrawal, K., Shah, M. P., & Verma, P. (2022). Bioremediation

- of heavy metals from wastewater: a current perspective on microalgae-based future. *Letters in Applied Microbiology*, 75(4), 701-717. <https://doi-org.proxy.undip.ac.id/10.1111/lam.13564>
- Green, M. R., & Sambrook, J. (2019). Analysis of DNA by agarose gel electrophoresis. *Cold Spring Harbor Protocols*, 2019(1), pdb-top100388. <https://doi.org/10.1101/pdb.top100388>
- Guiry, M. D., Guiry, G. M., Morrison, L., Rindi, F., Miranda, S. V., Mathieson, A. C., ... & Garbary, D. J. (2014). AlgaeBase: an on-line resource for algae. *Cryptogamie, Algologie*, 35(2), 105-115. <https://doi.org/10.7872/crya.v35.iss2.2014.105>
- Guo, X., Liu, J., Hao, G., Zhang, L., Mao, K., Wang, X., ... & Koch, M. A. (2017). Plastome phylogeny and early diversification of Brassicaceae. *BMC genomics*, 18, 1-9. <https://doi.org/10.1186/s12864-017-3555-3>
- Halder, S. (2014). Bioremediation of heavy metals through freshwater microalgae: a review. *Scholars Academic Journal of Biosciences*, 2(11), 825-830. <https://doi.org/10.36347/sajb.2014.v02i11.016>
- Halima, A., Nursyirwani, N., & Ambarsar, H. (2019). Potential Microalga *Chlorella vulgaris* for Bioremediation of Heavy Metal Pb. *Asian Journal of Aquatic Sciences*, 2(3), 224-234. <https://doi.org/10.31258/ajaoas.2.3.224-234>
- Hart, A. J., Ginzburg, S., Xu, M., Fisher, C. R., Rahmatpour, N., Mitton, J. B., ... & Wegrzyn, J. L. (2020). EnTAP: Bringing faster and smarter functional annotation to non-model eukaryotic transcriptomes. *Molecular ecology resources*, 20(2), 591-604. <https://doi.org/10.1111/1755-0998.13106>
- Harvey, K. L., Jarocki, V. M., Charles, I. G., & Djordjevic, S. P. (2019). The diverse functional roles of elongation factor Tu (EF-Tu) in microbial pathogenesis. *Frontiers in microbiology*, 10, 2351. <https://doi.org/10.3389/fmicb.2019.02351>
- He, M., Huang, L., Zhao, B., Chen, B., & Hu, B. (2017). Advanced functional materials in solid phase extraction for ICP-MS determination of trace elements and their species-A review. *Analytica chimica acta*, 973, 1-24. <https://doi.org/10.1016/j.aca.2017.03.047>
- Heintze, C., Formanek, P., Pohl, D., Hauptstein, J., Rellinghaus, B., & Kröger, N. (2020). An intimate view into the silica deposition vesicles of diatoms. *BMC Materials*, 2, 1-15. <https://doi.org/10.1186/s42833-020-00017-8>
- Himeoka, Y., & Kaneko, K. (2017). Theory for transitions between exponential and stationary phases: universal laws for lag time. *Physical Review X*, 7(2), 021049. <https://doi.org/10.1103/PhysRevX.7.021049>
- Horiike, T. (2016). An introduction to molecular phylogenetic analysis. *Reviews in Agricultural Science*, 4, 36-45. https://doi.org/10.7831/ras.4.0_36
- Hosken, D. J., Buss, D. L., & Hodgson, D. J. (2018). Beware the F test (or, how to compare variances). *Animal behaviour*, 136, 119-126. <https://doi.org/10.1016/j.anbehav.2017.12.014>
- Hou, X., Liu, S., & Zhang, Z. (2015). Role of extracellular polymeric substance in

- determining the high aggregation ability of anammox sludge. *Water research*, 75, 51-62. <https://doi.org/10.1016/j.watres.2015.02.031>
- Hu, F., Wang, P., Li, Y., Ling, J., Ruan, Y., Yu, J., & Zhang, L. (2023). Bioremediation of environmental organic pollutants by *Pseudomonas aeruginosa*: Mechanisms, methods and challenges. *Environmental Research*, 117211. <https://doi.org/10.1016/j.envres.2023.117211>
- Hu, G., & Kurgan, L. (2019). Sequence similarity searching. *Current protocols in protein science*, 95(1), e71. <https://doi.org/10.1002/cpps.71>
- Huihui, Z., Xin, L., Zisong, X., Yue, W., Zhiyuan, T., Meijun, A., ... & Guangyu, S. (2020). Toxic effects of heavy metals Pb and Cd on mulberry (*Morus alba* L.) seedling leaves: Photosynthetic function and reactive oxygen species (ROS) metabolism responses. *Ecotoxicology and environmental safety*, 195, 110469. <https://doi.org/10.1016/j.ecoenv.2020.110469>
- Huang, L., Jin, Y., Zhou, D., Liu, L., Huang, S., Zhao, Y., & Chen, Y. (2022). A review of the role of extracellular polymeric substances (EPS) in wastewater treatment systems. *International journal of environmental research and public health*, 19(19), 12191. <https://doi.org/10.3390/ijerph191912191>
- Hung, J. H., & Weng, Z. (2016). Sequence alignment and homology search with BLAST and ClustalW. *Cold Spring Harbor Protocols*, 2016(11), pdb-prot093088. <https://doi.org/10.1101/pdb.prot093088>
- Jaafari, J., & Yaghmaeian, K. (2019). Optimization of heavy metal biosorption onto freshwater algae (*Chlorella coloniales*) using response surface methodology (RSM). *Chemosphere*, 217, 447-455. <https://doi.org/10.1016/J.CHEMOSPHERE.2018.10.205>
- Jaishankar, J., & Srivastava, P. (2017). Molecular basis of stationary phase survival and applications. *Frontiers in microbiology*, 8, 2000. <https://doi.org/10.3389/fmicb.2017.02000>
- Jaishankar, M., Tseten, T., Anbalagan, N., Mathew, B. B., & Beeregowda, K. N. (2014). Toxicity, mechanism and health effects of some heavy metals. *Interdisciplinary toxicology*, 7(2), 60-72. <https://doi.org/10.2478/intox-2014-0009>
- Javeed, A., Salleh, S., Darif, A., & Mohammad, M. (2018). Preliminary observation of tropical diatom *Thalassiosira* spp. from Teluk Bahang, Penang. *Scripta Biologica*, 5(1), 7-11. <https://doi.org/10.20884/1.SB.2018.5.1.668>
- Jöers, A., & Tenson, T. (2016). Growth resumption from stationary phase reveals memory in *Escherichia coli* cultures. *Scientific reports*, 6(1), 24055. <https://doi.org/10.1038/srep24055>
- Jombart, T., Kendall, M., Almagro-Garcia, J., & Colijn, C. (2017). treespace: Statistical exploration of landscapes of phylogenetic trees. *Molecular ecology resources*, 17(6), 1385-1392. <https://doi.org/10.1111/1755-0998.12676>
- Joseph, A., Smith, B., & Zhang, C. (2018). *Thalassiosira weissflogii* translation elongation factor Tu (*tufA*) gene, partial cds, chloroplast. [Data sekvens]. National Center for Biotechnology Information (NCBI). Accession No.

- MH571875.1. Retrieved from
<https://www.ncbi.nlm.nih.gov/nucleotide/MH571875.1>
- Katoh, K., & Standley, D. M. (2016). A simple method to control over-alignment in the MAFFT multiple sequence alignment program. *Journal of Bioinformatics*, 32(13), 1933-1942.
<https://doi.org/10.1093/bioinformatics/btw108>
- Kaur, B., Faktorová, D., & Lukeš, J. (2018). Cell Counting using a Haemocytometer (Naeubauer cell chamber) with Fixer. *Genotoxicity-A Predictable Risk to Our Actual World*, 1-17.
<https://dx.doi.org/10.17504/protocols.io.hfxb3pn>
- Khan, M. J., Rai, A., Ahirwar, A., Sirotiya, V., Mourya, M., Mishra, S., ... & Vinayak, V. (2021). Diatom microalgae as smart nanocontainers for biosensing wastewater pollutants: recent trends and innovations. *Bioengineered*, 12(2), 9531-9549.
<https://doi.org/10.1080/21655979.2021.1996748>
- Khan, S. R., Sharma, B., Chawla, P. A., & Bhatia, R. (2022). Inductively coupled plasma optical emission spectrometry (ICP-OES): a powerful analytical technique for elemental analysis. *Food Analytical Methods*, 1-23.
<https://doi.org/10.1007/s12161-021-02148-4>
- Kim, Y. J., & Cribbie, R. A. (2018). ANOVA and the variance homogeneity assumption: Exploring a better gatekeeper. *British Journal of Mathematical and Statistical Psychology*, 71(1), 1-12.
<https://doi.org/10.1111/bmsp.12103>
- Kim, T. K. (2015). T test as a parametric statistic. *Korean journal of anesthesiology*, 68(6), 540-546. <https://doi.org/10.4097/kjae.2015.68.6.540>
- Kinuthia, G. K., Ngure, V., Beti, D., Lugalia, R., Wangila, A., & Kamau, L. (2020). Levels of heavy metals in wastewater and soil samples from open drainage channels in Nairobi, Kenya: community health implication. *Scientific reports*, 10(1), 8434.
<https://doi.org/10.1038/s41598-020-65359-5>
- Kline, P. (2015). *A handbook of test construction (psychology revivals): introduction to psychometric design*. Routledge.
<https://doi.org/10.4324/9781315695990>
- Knief, U., & Forstmeier, W. (2021). Violating the normality assumption may be the lesser of two evils. *Behavior Research Methods*, 53(6), 2576-2590.
<https://doi.org/10.3758/s13428-021-01587-5>
- Koetsier, G., & Cantor, E. (2019). A practical guide to analyzing nucleic acid concentration and purity with microvolume spectrophotometers. *New England Biolabs Inc*, 1-8.
<https://api.semanticscholar.org/CorpusID:197865789>
- Kortesmäki, E., Östman, J. R., Meierjohann, A., Brozinski, J. M., Eklund, P., & Kronberg, L. (2020). Occurrence of antibiotics in influent and effluent from 3 major wastewater-treatment plants in Finland. *Environmental Toxicology and Chemistry*, 39(9), 1774-1789.
<https://doi.org/10.1002/etc.4805>
- Kotzsch, A., Pawolski, D., Milentyev, A., Shevchenko, A., Scheffel, A., Poulsen,

- N., ... & Kröger, N. (2016). Biochemical composition and assembly of biosilica-associated insoluble organic matrices from the diatom *Thalassiosira pseudonana*. *Journal of Biological Chemistry*, 291(10), 4982-4997. <https://doi.org/10.1074/jbc.M115.706440>
- Krichen, E., Rapaport, A., Le Floc'h, E., & Fouilland, E. (2019). Demonstration of facilitation between microalgae to face environmental stress. *Scientific reports*, 9(1), 16076. <https://doi.org/10.1038/s41598-019-52450-9>
- Kumar, A., Kumar, A., MMS, C. P., Chaturvedi, A. K., Shabnam, A. A., Subrahmanyam, G., ... & Yadav, K. K. (2020). Lead toxicity: health hazards, influence on food chain, and sustainable remediation approaches. *International journal of environmental research and public health*, 17(7), 2179. <https://doi.org/10.3390/ijerph17072179>
- Kumar, L., Mohan, L., Anand, S., Bhardwaj, D., & Bharadvaja, N. (2023). Phyconanoremediation: A sustainable approach to deal with environmental pollutants heavy metals and dyes. *Vegetos*, 36(2), 332-347. <https://doi.org/10.1007/s42535-022-00399-y>
- Kurniawatinigrum, D. (2019). Uji akumulasi logam Timbal (Pb) menggunakan *Chlorella* sp. *Skripsi*. Universitas Islam Negeri Maulana Malik Ibrahim. <http://etheses.uin-malang.ac.id/id/eprint/15063>
- Kusumaningrum, H. P., Supriyadi, A., Budiharjo, A., Zainuri, M., Misbach, I., & Maulidiyah, A. (2019, May). Isolation and identification of carotenoid-producing microalgae from Demak marine waters. In *Journal of Physics: Conference Series* (Vol. 1217, No. 1, p. 012183). IOP Publishing. <https://doi.org/10.1088/1742-6596/1217/1/012183>
- Kusumaningrum, H. P., & Zainuri, M. (2016). Molecular characterization of *Dunaliella salina* and *Chlorella vulgaris* fusant using 18SrDNA gene. *Jur. Teknologi (Sc. & Eng.)*, 78(4-2), 61-68. <https://doi.org/10.11113/jt.v78.8155>
- Lakshmi, N. J., Bhattacharjya, R., & Tiwari, A. (2022). Impact of 17- β estradiol on growth and metabolism of marine diatom *Thalassiosira weissflogii*. *Environmental Advances*, 9, 100291. <https://doi.org/10.1016/j.envadv.2022.100291>
- Lasmarito, T. C., Widianingsih, W., & Endrawati, H. (2022). Kandungan Lutein Mikroalga *Chlorella vulgaris* dengan Salinitas Berbeda pada Media Kultur. *Journal of Marine Research*, 11(2), 320-326. <https://doi.org/10.14710/jmr.v11i2.33819>
- Lee, C., Park, S., & Jeong, J. (2016). Comprehensive comparison of normality tests: Empirical study using many different types of data. *Journal of the Korean Data and Information Science Society*, 27(5), 1399-1412. <https://doi.org/10.7465/jkdi.2016.27.5.1399>
- Lee, S. W. (2022). Methods for testing statistical differences between groups in medical research: statistical standard and guideline of Life Cycle Committee. *Life Cycle*, 2. <https://doi.org/10.54724/lc.2022.e1>
- Lemoine, F., Domelevo Entfellner, J. B., Wilkinson, E., Correia, D., Dávila Felipe, M., De Oliveira, T., & Gascuel, O. (2018). Renewing Felsenstein's phylogenetic bootstrap in the era of big data. *Nature*, 556(7702), 452-456.

- <https://doi.org/10.1038/s41586-018-0043-0>
- Leong, Y. K., & Chang, J. S. (2020). Bioremediation of heavy metals using microalgae: Recent advances and mechanisms. *Bioresource technology*, 303, 122886. <https://doi.org/10.1016/j.biortech.2020.122886>
- Levin, R. E., Ekezie, F. G. C., & Sun, D. W. (2018). DNA-based technique: Polymerase chain reaction (PCR). In *Modern techniques for food authentication* (pp. 527-616). Academic Press. <https://doi.org/10.1016/B978-0-12-814264-6.00014-1>
- Lu, J., Ma, Y., Xing, G., Li, W., Kong, X., Li, J., ... & Yang, J. (2019). Revelation of microalgae's lipid production and resistance mechanism to ultra-high Cd stress by integrated transcriptome and physicochemical analyses. *Environmental Pollution*, 250, 186-195. <https://doi.org/10.1016/j.envpol.2019.04.018>
- Lu, Y., Noble, W. S., & Keich, U. (2024). A BLAST from the past: revisiting blastp's E-value. *bioRxiv*, 2024-07. <https://doi.org/10.1101/2024.07.16.603405>
- Liang, Y., Bretherton, L., Brown, C. M., Passow, U., Quigg, A., Irwin, A. J., & Finkel, Z. V. (2021). Transcriptome-wide responses of aggregates of the diatom *Odontella aurita* to oil. *Marine Ecology Progress Series*, 671, 67-79. <https://doi.org/10.3354/meps13749>
- Lin, H. N., & Hsu, W. L. (2020). GSAalign: an efficient sequence alignment tool for intra-species genomes. *BMC genomics*, 21, 1-10. <https://doi.org/10.1186/s12864-020-6569-1>
- Lin, S., Li, J., Jia, L., Huang, X., & Wang, L. (2024). Different biological responses of *Skeletonema costatum* and *Prorocentrum donghaiense* to polymetallic nodules from seawaters. *Aquatic Toxicology*, 269, 106871 <https://doi.org/10.1016/j.aquatox.2024.106871>
- Li, H. (2018). Minimap2: pairwise alignment for nucleotide sequences. *Bioinformatics*, 34(18), 3094-3100. <https://doi.org/10.1093/bioinformatics/bty191>
- Li, S. F., Wang, C. C., & Taidi, B. (2023). Effective CO2 capture by the fed-batch culture of *Chlorella vulgaris*. *Journal of Environmental Chemical Engineering*, 11(5), 110889. <https://doi.org/10.1016/j.jece.2023.110889>
- Madhaiyan, M., Saravanan, V. S., & See-Too, W. S. (2020). Genome based analyses reveals the presence of heterotypic synonyms and subspecies in Bacteria and Archaea. *bioRxiv*, 2020-12. <https://doi.org/10.1101/2020.12.13.418756>
- Maharani, N. A., Dion, R., Damayanti, M. P., Dzufakar, A. B. P., Wahyuningsih, C., Zulkarnain, M. I., ... & Gopal, S. (2023, June). Bacterial diversity and physicochemical profiles in Pekalongan waters, Indonesia. In *AIP Conference Proceedings* (Vol. 2738, No. 1). AIP Publishing. <https://doi.org/10.1063/5.0140202>
- Mandelker, D., Schmidt, R. J., Ankala, A., McDonald Gibson, K., Bowser, M., Sharma, H., ... & Funke, B. (2016). Navigating highly homologous genes in a molecular diagnostic setting: a resource for clinical next-generation sequencing. *Genetics in Medicine*, 18(12), 1282-1289.

- <https://doi.org/10.1038/gim.2016.58>
- McGinnis, S., & Madden, T. L. (2004). BLAST: at the core of a powerful and diverse set of sequence analysis tools. *Nucleic acids research*, 32(suppl_2), W20-W25. <https://doi.org/10.1093/nar/gkh435>
- Miladinov, D. T. (2016). Genomic DNA from rat blood: A comparison of two extraction methods. *Biologica Nyssana*, 7(1). <https://doi.org/10.5281/Sophianzenodo.159103>
- Miller, J. T., Jolley-Rogers, G., Mishler, B. D., & Thornhill, A. H. (2018). Phylogenetic diversity is a better measure of biodiversity than taxon counting. *Journal of Systematics and Evolution*, 56(6), 663-667. <https://doi.org/10.1111/jse.12436>
- Miller, S. B., Mogk, A., & Bukau, B. (2015). Spatially organized aggregation of misfolded proteins as cellular stress defense strategy. *Journal of molecular biology*, 427(7), 1564-1574. <https://doi.org/10.1016/j.jmb.2015.02.006>
- Mishra, B., Saxena, A., & Tiwari, A. (2020). Biosynthesis of silver nanoparticles from marine diatoms *Chaetoceros* sp., *Skeletonema* sp., *Thalassiosira* sp., and their antibacterial study. *Biotechnology Reports*, 28, e00571. <https://doi.org/10.1016/j.btre.2020.e00571>
- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019a). Descriptive statistics and normality tests for statistical data. *Annals of cardiac anaesthesia*, 22(1), 67-72. https://doi.org/10.4103/aca.ACA_157_18
- Mishra, P., Singh, U., Pandey, C. M., Mishra, P., & Pandey, G. (2019b). Application of student's t-test, analysis of variance, and covariance. *Annals of cardiac anaesthesia*, 22(4), 407-411. https://doi.org/10.4103/aca.ACA_94_19
- Moeini, S., Mohebbi, A., Farahmand, B., Mehrbod, P., & Fotouhi, F. (2023). Phylogenetic analysis and docking study of neuraminidase gene of influenza A/H1N1 viruses circulating in Iran from 2010 to 2019. *Virus Research*, 334, 199182. <https://doi.org/10.1016/j.virusres.2023.199182>
- Molazadeh, P., Khanjani, N., Rahimi, M.R., & Nasiri, A. (2015). Adsorption of Lead by Microalgae *Chaetoceros* sp. and *Chlorella* sp. from Aqueous Solution. *Journal of Community Health Research*, 4(2), 114-127. <https://doaj.org/article/d496bb9b11ef4e52b2522f11bfb1fa57>
- Moore, E. R., Bullington, B. S., Weisberg, A. J., Jiang, Y., Chang, J., & Halsey, K. H. (2017). Morphological and transcriptomic evidence for ammonium induction of sexual reproduction in *Thalassiosira pseudonana* and other centric diatoms. *PLoS One*, 12(7), e0181098. <https://doi.org/10.1371/journal.pone.0181098>
- Muscolino, E., Luoto, L. M., & Brune, W. (2021). Viral induced protein aggregation: a mechanism of immune evasion. *International Journal of Molecular Sciences*, 22(17), 9624. <https://doi.org/10.3390/ijms22179624>
- Nanda, M., Jaiswal, K. K., Kumar, V., Vlaskin, M. S., Gautam, P., Bahuguna, V., & Chauhan, P. K. (2021). Micro-pollutant Pb (II) mitigation and lipid induction in oleaginous microalgae *Chlorella sorokiniana* UUIND6. *Environmental Technology & Innovation*, 23, 101613.

<https://doi.org/10.1016/j.eti.2021.101613>

- Naorbe, M. C., & Serrano Jr, A. E. (2018). Effects of heavy metals on cell density, size, specific growth rate and chlorophyll a of *Tetraselmis tetraele* under controlled laboratory conditions. *Aquaculture, Aquarium, Conservation & Legislation*, 11(3), 589-597.
<http://www.bioflux.com.ro/aac1>
- Nas, F. S., & Ali, M. (2018). The effect of lead on plants in terms of growing and biochemical parameters: a review. *MOJ Ecol. Environ. Sci*, 3(4), 265-268.
<https://doi.org/10.15406/mojes.2018.03.00098>
- Niu, B., Guo, Y., Lundholm, N., & Li, Y. (2022). Morphology and phylogeny of two new *Thalassiosira* taxa (Bacillariophyceae), with two marginal rimoportulae. *European Journal of Phycology*, 57(4), 493-506.
<https://doi.org/10.1080/09670262.2022.2029948>
- Nute, M., Saleh, E., & Warnow, T. (2019). Evaluating statistical multiple sequence alignment in comparison to other alignment methods on protein data sets. *Systematic biology*, 68(3), 396-411.
<https://doi.org/10.1093/sysbio/syy068>
- Olatunde, K., Patton, S. K., Cameron, L., Stankus, T., & Milaham, P. J. (2022). Factors affecting the quality of drinking water in the United States of America: a ten-year systematic review. *American Journal of Water Resources*, 10(1), 24-34. <https://doi.org/10.12691/ajwr-10-1-4>
- O Emmanuel, B., T Maureen, N., & Wonu, N. (2020). Detection of non-normality in data sets and comparison between different normality tests. *Asian Journal of Probability and Statistics*, 5(4), 1-20.
<https://doi.org/10.9734/ajpas/2019/v5i430149>
- Orcan, F. (2020). Parametric or non-parametric: Skewness to test normality for mean comparison. *International Journal of Assessment Tools in Education*, 7(2), 255-265. <https://doi.org/10.21449/ijate.656077>
- Paddock, M. (2019). Microalgae wastewater treatment: A brief history. *Life Sci. Microbiol. 1* (19), 1–25. <https://doi.org/10.20944/preprints201912.0377>
- Park, J. S., Jung, S. W., Ki, J. S., Guo, R., Kim, H. J., Lee, K. W., & Lee, J. H. (2017). Transfer of the small diatoms *Thalassiosira proschkiniae* and *Thalassiosira spinulata* to the genus *Minidiscus* and their taxonomic re-description. *PLoS One*, 12(9), e0181980.
<https://doi.org/10.1371/journal.pone.0181980>
- Pearson, W. R. (2016). Finding protein and nucleotide similarities with FASTA. *Current protocols in bioinformatics*, 53(1), 3-9.
<https://doi.org/10.1002/0471250953.bi0309s53>
- Permana, R., & Akbarsyah, N. (2021). Phytoplankton susceptibility towards toxic heavy metal cadmium: mechanism and its recent updates. *World News of Natural Sciences*, 38, 83-97.
<https://bibliotekanauki.pl/articles/1839870.pdf>
- Peter, A. P., Khoo, K. S., Chew, K. W., Ling, T. C., Ho, S. H., Chang, J. S., & Show, P. L. (2021). Microalgae for biofuels, wastewater treatment and environmental monitoring. *Environmental Chemistry Letters*, 19, 2891-2904. <https://doi.org/10.1007/s10311-021-01219-6>

- Peters, K. C., Swaminathan, H., Sheehan, J., Duffy, K. R., Lun, D. S., & Grgicak, C. M. (2017). Production of high-fidelity electropherograms results in improved and consistent DNA interpretation: Standardizing the forensic validation process. *Forensic Science International: Genetics*, *31*, 160-170. <https://doi.org/10.1016/j.fsigen.2017.09.005>
- Piotrowska-Niczyporuk, A., Bajguz, A., Talarek, M., Bralska, M., & Zambrzycka, E. (2015). The effect of lead on the growth, content of primary metabolites, and antioxidant response of green alga *Acutodesmus obliquus* (Chlorophyceae). *Environmental Science and Pollution Research*, *22*, 19112-19123. <https://doi.org/10.1007/s11356-015-5118-y>
- Pradhan, B., Bhuyan, P. P., Nayak, R., Patra, S., Behera, C., Ki, J. S., ... & Jena, M. (2022). Microalgal phycoremediation: A glimpse into a sustainable environment. *Toxics*, *10*(9), 525. <https://doi.org/10.3390/toxics10090525>
- Pradhan, D., Sukla, L. B., Mishra, B. B., & Devi, N. (2019). Biosorption for removal of hexavalent chromium using microalgae *Scenedesmus* sp. *Journal of Cleaner Production*, *209*, 617-629. <https://doi.org/10.1016/j.jclepro.2018.10.288>
- Priatni, S., Ratnaningrum, D., Warya, S., & Audina, E. (2018, June). Phycobiliproteins production and heavy metals reduction ability of *Porphyridium* sp. In *IOP Conference Series: Earth and Environmental Science* (Vol. 160, p. 012006). IOP Publishing. <https://doi.org/10.1088/1755-1315/160/1/012006>
- Prihardianto, M. K., Subandiyono, S., & Chilmawati, D. (2023). Pola pertumbuhan *Thalassiosira* sp. pada media walne dengan rasio N/P berbeda. *Sains Akuakultur Tropis: Indonesian Journal of Tropical Aquaculture*, *7*(2), 196-206. <https://doi.org/10.14710/sat.v7i2.17283>
- Priya, A. K., Jalil, A. A., Vadivel, S., Dutta, K., Rajendran, S., Fujii, M., & Soto-Moscoso, M. (2022). Heavy metal remediation from wastewater using microalgae: Recent advances and future trends. *Chemosphere*, *305*, 135375. <https://doi.org/10.1016/j.chemosphere.2022.135375>
- Qiu, J., Su, T., Wang, X., Jiang, L., Shang, Y., Jin, P., ... & Li, F. (2022). Comparative study of the physiological responses of *Skeletonema costatum* and *Thalassiosira weissflogii* to initial pCO₂ in batch cultures, with special reference to bloom dynamics. *Marine Environmental Research*, *175*, 105581. <https://doi.org/10.1016/j.marenvres.2022.105581>
- Rai, U. N., Singh, N. K., Upadhyay, A. K., & Verma, S. (2013). Chromate tolerance and accumulation in *Chlorella vulgaris* L.: role of antioxidant enzymes and biochemical changes in detoxification of metals. *Bioresource technology*, *136*, 604-609. <https://doi.org/10.1016/j.biortech.2013.03.043>
- Raji, Z., Karim, A., Karam, A., & Khalloufi, S. (2023, September). Adsorption of heavy metals: mechanisms, kinetics, and applications of various adsorbents in wastewater remediation—a review. In *Waste* (Vol. 1, No. 3, pp. 775-805). MDPI. <https://doi.org/10.3390/waste1030046>
- Ranitha, M., Nurlidia, M., Muhammad Rashid, S., & Yoshimitsu, U. (2016). Bioremoval of lead in industrial wastewater by microalgae. *Journal of Engineering Science and Technology*, *11*(Specia), 43-49.

- https://jestec.taylors.edu.my/Special%20Issues%20Somche%202015/somehe%202015_paper%204.pdf
- Regier, J. C., Mitter, C., Mitter, K., Cummings, M. P., Bazinet, A. L., Hallwachs, W., ... & Zwick, A. (2017). Further progress on the phylogeny of Noctuoidea (Insecta: Lepidoptera) using an expanded gene sample. *Systematic Entomology*, 42(1), 82-93.
<https://doi.org/10.1111/syen.12199>
- Rynearson, T. A., Flickinger, S. A., & Fontaine, D. N. (2020). Metabarcoding reveals temporal patterns of community composition and realized thermal niches of *Thalassiosira* spp.(Bacillariophyceae) from the Narragansett Bay long-term plankton time series. *Biology*, 9(1), 19.
<https://doi.org/10.3390/biology9010019>
- Saini, S., & Dhania, G. (2020). Cadmium as an environmental pollutant: ecotoxicological effects, health hazards, and bioremediation approaches for its detoxification from contaminated sites. *Bioremediation of industrial waste for environmental safety: Volume II: biological agents and methods for industrial waste management*, 357-387.
https://doi.org/10.1007/978-981-13-3426-9_15
- Salgueiro, J. L., Pérez, L., Sanchez, Á., Cancela, Á., & Míguez, C. (2022). Microalgal biomass quantification from the non-invasive technique of image processing through red–green–blue (RGB) analysis. *Journal of Applied Phycology*, 34(2), 871-881. <https://doi.org/10.1007/s10811-021-02634-6>
- Samal, K. C., Sahoo, J. P., Behera, L., & Dash, T. (2021). Understanding the BLAST (Basic Local Alignment Search Tool) program and a step-by-step guide for its use in life science research. *Bhartiya Krishi Anusandhan Patrika*, 36(1), 55-61. <http://dx.doi.org/10.18805/BKAP283>
- Sangapillai, K., & Marimuthu, T. (2019). Isolation and selection of growth medium for freshwater microalgae *Asterarcys quadricellulare* for maximum biomass production. *Water Science and Technology*, 80(11), 2027-2036. <https://doi.org/10.2166/wst.2020.015>
- Santiago-Martínez, M. G., Lira-Silva, E., Encalada, R., Pineda, E., Gallardo-Pérez, J. C., Zepeda-Rodríguez, A., ... & Jasso-Chávez, R. (2015). Cadmium removal by *Euglena gracilis* is enhanced under anaerobic growth conditions. *Journal of hazardous materials*, 288, 104-112.
<https://doi.org/10.1016/j.jhazmat.2015.02.027>
- Satya, A., Harimawan, A., Haryani, G. S., & Setiadi, T. (2017). Non-linear Isotherm Models, Cadmium Kinetics, and Biosorption Thermodynamics of Dried Biomass of Native *Aphanothece* sp. in a Batch System. *Journal of Engineering & Technological Sciences*, 49(5).
<https://doi.org/10.5614/j.eng.technol.sci.2017.49.5.5>
- Sauvage, T., Ballantine, D. L., Peyton, K. A., Wade, R. M., Sherwood, A. R., Keeley, S., & Smith, C. (2020). Molecular confirmation and morphological reassessment of *Udotea geppiorum* (Bryopsidales, Chlorophyta) with ecological observations of mesophotic meadows in the Main Hawaiian Islands. *European journal of phycology*, 55(2), 186-196.

<https://doi.org/10.1080/09670262.2019.1668061>

- Schiraldi, A. (2023). The growth curve of microbial cultures: a model for a visionary reappraisal. *Applied Microbiology*, 3(1), 288-296.
<https://doi.org/10.3390/applmicrobiol3010020>
- Schmidt, A. F., & Finan, C. (2018). Linear regression and the normality assumption. *Journal of clinical epidemiology*, 98, 146-151.
<https://doi.org/10.1016/j.jclinepi.2017.12.006>
- Schuler, M. S., & Relyea, R. A. (2018). A review of the combined threats of road salts and heavy metals to freshwater systems. *BioScience*, 68(5), 327-335.
<https://doi.org/10.1093/biosci/biy018>
- Sha, S., Cheng, M., Hu, K., Zhang, W., Yang, Y., & Xu, Q. (2019). Toxic effects of Pb on *Spirodela polyrhiza* (L.): Subcellular distribution, chemical forms, morphological and physiological disorders. *Ecotoxicology and Environmental Safety*, 181, 146-154.
<https://doi.org/10.1016/j.ecoenv.2019.05.085>
- Shahid, A., Malik, S., Zhu, H., Xu, J., Nawaz, M. Z., Nawaz, S., ... & Mehmood, M. A. (2020). Cultivating microalgae in wastewater for biomass production, pollutant removal, and atmospheric carbon mitigation; a review. *Science of the Total Environment*, 704, 135303.
<https://doi.org/10.1016/j.scitotenv.2019.135303>
- Shahid, M., Khalid, S., Abbas, G., Shahid, N., Nadeem, M., Sabir, M., ... & Dumat, C. (2015). Heavy metal stress and crop productivity. *Crop production and global environmental issues*, 1-25.
https://doi.org/10.1007/978-3-319-23162-4_1
- Shang, F., Carney, L. T., Weiss, E. L., Abelin, P., Vernet, M., Mendola, D., ... & Mitchell, B. G. (2024). Mass Balance of the Major Cellular Carbon Pools for the Marine Diatom *Thalassiosira pseudonana* as Regulated by Irradiance, CO₂, and Growth Phase. In *Microalgal Bioengineering* (pp. 103-126). Cham: Springer International Publishing.
https://doi.org/10.1007/978-3-031-61253-4_5
- Sharma, R., Agrawal, P. R., Kumar, R., & Gupta, G. (2021). Current scenario of heavy metal contamination in water. *Contamination of Water*, 49-64.
<https://doi.org/10.1016/B978-0-12-824058-8.00010-4>
- Shen, X. X., Salichos, L., & Rokas, A. (2016). A genome-scale investigation of how sequence, function, and tree-based gene properties influence phylogenetic inference. *Genome Biology and Evolution*, 8(8), 2565-2580.
<https://doi.org/10.1093/gbe/evw179>
- Sievers, F., Barton, G. J., & Higgins, D. G. (2020). Multiple sequence alignments. *Bioinformatics*, 227(1376), 227-250.
<https://www.perlego.com/book/2752789/bioinformatics-pdf>
- Singh, S., & Kumar, V. (2020). Mercury detoxification by absorption, mercuric ion reductase, and exopolysaccharides: a comprehensive study. *Environmental Science and Pollution Research*, 27(22), 27181-27201. <https://doi.org/10.1007/s11356-019-04974-w>
- Singh, S., Datta, S., Narayanan, K. B., & Rajnish, K. N. (2021). Bacterial exopolysaccharides in biofilms: role in antimicrobial resistance and

- treatments. *Journal of Genetic Engineering and Biotechnology*, 19, 1-19. <https://doi.org/10.1186/s43141-021-00242-y>
- Soave, D., & Sun, L. (2017). A generalized Levene's scale test for variance heterogeneity in the presence of sample correlation and group uncertainty. *Biometrics*, 73(3), 960-971. <https://doi.org/10.1111/biom.12651>
- Solomonova, E., Shoman, N., Akimov, A., & Rylkova, O. (2023). Impact of copper oxide nanoparticles on the physiology of different microalgal species. *Regional Studies in Marine Science*, 66, 103128. <https://doi.org/10.1016/j.rsma.2023.103128>
- Sonawane, J. M., Rai, A. K., Sharma, M., Tripathi, M., & Prasad, R. (2022). Microbial biofilms: Recent advances and progress in environmental bioremediation. *Science of The Total Environment*, 824, 153843. <https://doi.org/10.1016/j.scitotenv.2022.153843>
- Sophian, A. (2021). Analysis of purity and concentration of extracted DNA on salted fish processed food products. *Asian Journal of Natural Product Biochemistry*, 19(1). <https://doi.org/0.13057/biofar/f190104>
- St, L., & Wold, S. (1989). Analysis of variance (ANOVA). *Chemometrics and intelligent laboratory systems*, 6(4), 259-272. [https://doi.org/10.1016/0169-7439\(89\)80095-4](https://doi.org/10.1016/0169-7439(89)80095-4)
- Steel, M. (2016). *Phylogeny: discrete and random processes in evolution*. Society for Industrial and Applied Mathematics. Pages 111 – 145. <https://doi.org/10.1137/1.9781611974485.ch>
- Suastuti, N.G.A.M.D.A., Irdhawati., & Agatha, N.S. (2021). Kandungan Total Logam Pb dalam Air dan Sedimen serta Bioavailabilitasnya di Pantai Kedonganan Bali. *Indonesian E-Journal of Applied Chemistry*, 9(2), 91-99. <https://dx.doi.org/10.24843/JCHEM.2021.v15.i01.p06>
- Sutherland, D. L., McCauley, J., Labeeuw, L., Ray, P., Kuzhiumparambil, U., Hall, C., ... & Ralph, P. J. (2021). How microalgal biotechnology can assist with the UN Sustainable Development Goals for natural resource management. *Current Research in Environmental Sustainability*, 3, 100050. <https://doi.org/10.1016/J.CRSUST.2021.100050>
- Tahir, I. A., Lamondo, D., & Baderan, D. W. K. (2021). Analysis of lead (Pb) levels in water, sediment and mollusks in secondary irrigation channels in Gorontalo Province, Indonesia. *International Journal of Bonorowo Wetlands*, 11(1). <https://doi.org/10.13057/bonorowo/w0110101>
- Tang, J., Wu, Y., Esquivel-Elizondo, S., Sørensen, S. J., & Rittmann, B. E. (2018). How microbial aggregates protect against nanoparticle toxicity. *Trends in biotechnology*, 36(11), 1171-1182. <https://doi.org/10.1016/j.tibtech.2018.06.009>
- Tang, K. H. D., & Hadibarata, T. (2021). Microplastics removal through water treatment plants: Its feasibility, efficiency, future prospects and enhancement by proper waste management. *Environmental Challenges*, 5, 100264. <https://doi.org/10.1016/J.ENV.2021.100264>
- Teoh, M. L., & Wong, S. W. (2018). Influence of lead on growth and physiological characteristics of a freshwater green alga *Chlorella*

- sp. *Malaysian Journal of Science*, 37(2), 82-93.
<https://doi.org/10.22452/10.22452/mjs.vol37no2.1>
- Thaenkham, U., Chaisiri, K., Hui En Chan, A. (2022). PCR and DNA Sequencing: Guidelines for PCR, Primer Design, and Sequencing for Molecular Systematics and Identification. In: *Molecular Systematics of Parasitic Helminths*, pp 183–199.
https://doi.org/10.1007/978-981-19-1786-8_7
- Title, P. O., & Rabosky, D. L. (2019). Tip rates, phylogenies and diversification: what are we estimating, and how good are the estimates?. *Methods in Ecology and Evolution*, 10(6), 821-834. <https://doi.org/10.1111/2041-210X.13153>
- Tripathi, M., Singh, P., Singh, R., Bala, S., Pathak, N., Singh, S., ... & Singh, P. K. (2023). Microbial biosorbent for remediation of dyes and heavy metals pollution: A green strategy for sustainable environment. *Frontiers in Microbiology*, 14, 1168954. <https://doi.org/10.3389/fmicb.2023.1168954>
- Tripathi, S., & Poluri, K. M. (2021). Heavy metal detoxification mechanisms by microalgae: Insights from transcriptomics analysis. *Environmental Pollution*, 285, 117443. <https://doi.org/10.1016/j.envpol.2021.117443>
- Torkian, B., Hann, S., Preisner, E., & Norman, R. S. (2020). BLAST-QC: automated analysis of BLAST results. *Environmental Microbiome*, 15, 1-8. <https://doi.org/10.1186/s40793-020-00361-y>
- Tucker, C. M., Davies, T. J., Cadotte, M. W., & Pearse, W. D. (2018). On the relationship between phylogenetic diversity and trait diversity. *Ecology*, 99(6), 1473-1479. <https://doi.org/10.1002/ecy.2349>
- Vandana., Priyadarshane, M., & Das, S. (2023). Bacterial extracellular polymeric substances: Biosynthesis and interaction with environmental pollutants. *Chemosphere*, 332, 138876.
<https://doi.org/10.1016/j.chemosphere.2023.138876>
- Vardhan, K. H., Kumar, P. S., & Panda, R. C. (2019). A review on heavy metal pollution, toxicity and remedial measures: Current trends and future perspectives. *Journal of Molecular Liquids*, 290, 111197.
<https://doi.org/10.1016/j.molliq.2019.111197>
- Verma, J. P., & Abdel-Salam, A. S. G. (2019). *Testing statistical assumptions in research*. John Wiley & Sons.
<https://books.google.co.id/books?id=BuSLDwAAQBAJ&lpg=PP1&hl=id&pg=PR3#v=onepage&q&f=false>
- Verma, M., Kulshrestha, S., & Puri, A. (2017). Genome sequencing, Methods in Molecular Biology. *Bioinformatics: Volume I: Data, Sequence Analysis, and Evolution*, 3-33. https://doi.org/10.1007/978-1-4939-6622-6_1
- Vermeersch, L., Perez-Samper, G., Cerulus, B., Jariani, A., Gallone, B., Voordeckers, K., ... & Verstrepen, K. J. (2019). On the duration of the microbial lag phase. *Current genetics*, 65(3), 721-727.
<https://doi.org/10.1007/s00294-019-00938-2>
- Vieira, H. H., Bagatini, I. L., Guinart, C. M., Vieira, A. A. H., Vieira, H. H., Bagatini, I. L., ... & Vieira, A. A. H. (2016). tufA gene as molecular marker for freshwater Chlorophyceae. *Algae*, 31(2), 155-165.

- <https://doi.org/10.4490/algae.2016.31.4.14>
- Vo, H. N. P., Ngo, H. H., Guo, W., Nguyen, K. H., Chang, S. W., Nguyen, D. D., ... & Bui, X. T. (2020). Micropollutants cometabolism of microalgae for wastewater remediation: effect of carbon sources to cometabolism and degradation products. *Water research*, *183*, 115974.
<https://doi.org/10.1016/j.watres.2020.115974>
- Vona, D., Urbano, L., Bonifacio, M. A., De Giglio, E., Cometa, S., Mattioli-Belmonte, M., ... & Farinola, G. M. (2016). Data from two different culture conditions of *Thalassiosira weissflogii* diatom and from cleaning procedures for obtaining monodisperse nanostructured biosilica. *Data in brief*, *8*, 312-319. <https://doi.org/10.1016/j.dib.2016.05.033>
- Wahyu, D., Hindarti, D., & Permana, R. (2020). Cadmium toxicity towards marine diatom *Thalassiosira* sp. and its alteration on chlorophyll-a and carotenoid content. *World News of Natural Sciences*, *31*, 48-57.
<https://bibliotekanauki.pl/articles/1031551.pdf>
- Wahyuningsih, N. & Zulaika, E. (2018). Perbandingan Pertumbuhan Bakteri Selulolitik pada Media *Nutrient Broth* dan *Carboxy Methyl Cellulose*. *Jurnal Sains dan Seni ITS*, *7*(2), 36-38.
<https://doi.org/10.12962/j23373520.v7i2.36283>
- Wang, G., Huang, L., Zhuang, S., Han, F., Huang, Q., Hao, M., ... & Liang, J. (2024). Resting cell formation in the marine diatom *Thalassiosira pseudonana*. *New Phytologist*, *243*(4), p. 1347-1360.
<https://doi.org/10.1111/nph.19646>
- Wang, X., Wang, J., Zhang, S., & Li, J. (2023). Highly effective sequestration of Cd (II) from aqueous solution using marine diatom biomass: Adsorption performances and mechanism. *Frontiers in Environmental Science*, *11*, 1085277. <https://doi.org/10.3389/fenvs.2023.1085277>
- Wang, Y., Rodríguez de Gil, P., Chen, Y. H., Kromrey, J. D., Kim, E. S., Pham, T., ... & Romano, J. L. (2017). Comparing the performance of approaches for testing the homogeneity of variance assumption in one-factor ANOVA models. *Educational and psychological measurement*, *77*(2), 305-329.
<https://doi.org/10.1177/001316441664516>
- Weisman, C. M., Murray, A. W., & Eddy, S. R. (2020). Many, but not all, lineage-specific genes can be explained by homology detection failure. *PLoS biology*, *18*(11), e3000862.
<https://doi.org/10.1371/journal.pbio.3000862>
- Weissgerber, T. L., Garcia-Valencia, O., Garovic, V. D., Milic, N. M., & Winham, S. J. (2018). Why we need to report more than 'Data were Analyzed by t-tests or ANOVA'. *Elife*, *7*, e36163.
<https://doi.org/10.7554/eLife.36163>
- Widiatmono, B. R., Anugroho, F., & Munaf, F. A. T. (2018). Pengaruh Kepadatan Mikroalga *Chlorella* sp. terhadap Bioremediasi Logam Krom Pada Limbah Cair Industri Penyamakan Kulit. *Jurnal Sumberdaya Alam dan Lingkungan*, *5*(3), 6-14.
<https://jsal.ub.ac.id/index.php/jsal/article/view/289/266>
- Wittwer, C. T., & Makrigiorgos, G. M. (2018). Nucleic acid techniques.

- In *Principles and applications of molecular diagnostics* (pp. 47-86). Elsevier. <https://doi.org/10.1016/B978-0-12-816061-9.00004-7>
- Xie, J., Liu, T., Khashaveh, A., Yi, C., Liu, X., & Zhang, Y. (2021). Identification and evaluation of suitable reference genes for RT-qPCR analysis in *Hippodamia variegata* (Coleoptera: Coccinellidae) under different biotic and abiotic conditions. *Frontiers in Physiology*, *12*, 669510. <https://doi.org/10.3389/fphys.2021.669510>
- Xu, G., Zhao, S., Liu, J., & He, J. (2023). Bioremediation of organohalide pollutants: Progress, microbial ecology, and emerging computational tools. *Current Opinion in Environmental Science & Health*, 100452. <https://doi.org/10.1016/j.coesh.2023.100452>
- Yang, J., Cao, J., Xing, G., & Yuan, H. (2015). Lipid production combined with biosorption and bioaccumulation of cadmium, copper, manganese and zinc by oleaginous microalgae *Chlorella minutissima* UTEX2341. *Bioresource technology*, *175*, 537-544. <https://doi.org/10.1016/j.biortech.2014.10.124>
- Yang, O., Prabhu, S., & Ierapetritou, M. (2019). Comparison between batch and continuous monoclonal antibody production and economic analysis. *Industrial & Engineering Chemistry Research*, *58*(15), 5851-5863. <https://doi.org/10.1021/acs.iecr.8b04717>
- Ye, M., Jiang, Z., Wang, Z., Wang, Y., Fang, S., Sun, Y., ... & Ge, Y. (2022). Physiological and proteomic responses of *Chlamydomonas reinhardtii* to arsenate and lead mixtures. *Ecotoxicology and Environmental Safety*, *242*, 113856. <https://doi.org/10.1016/j.ecoenv.2022.113856>
- Yee, D. P., Hildebrand, M., & Tresguerres, M. (2020). Dynamic subcellular translocation of V-type H⁺-ATPase is essential for biomineralization of the diatom silica cell wall. *New Phytologist*, *225*(6), 2411-2422. <https://doi.org/10.1111/nph.16329>
- Yu, P., Yang, L., You, Q., Kocielek, J. P., Wang, K., Bi, Y., & Wang, Q. (2024). *Lineaperpetua* gen. nov.: a new diatom genus in the Thalassiosirales supported by morphology and molecular data. *Journal of Oceanology and Limnology*, *42*(1), 277-290. <https://doi.org/10.1007/s00343-023-2312-5>
- Yu, Y., Wang, J., Han, R., Wang, L., Zhang, L., Zhang, A. Y., ... & Xiong, Q. (2020). *Mycoplasma hyopneumoniae* evades complement activation by binding to factor H via elongation factor thermo unstable (EF-Tu). *Virulence*, *11*(1), 1059-1074. <https://doi.org/10.1080/21505594.2020.1806664>
- Zamani-Ahmadmahmoodi, R., Malekabadi, M. B., Rahimi, R., & Johari, S. A. (2020). Aquatic pollution caused by mercury, lead, and cadmium affects cell growth and pigment content of marine microalga, *Nannochloropsis oculata*. *Environmental monitoring and assessment*, *192*, 1-11. <https://doi.org/10.1007/s10661-020-8222-5>
- Zhang, M., & Chen, N. (2022). Comparative analysis of *Thalassionema* chloroplast genomes revealed hidden biodiversity. *BMC genomics*, *23*(1), 1-17. <https://doi.org/10.1186/s12864-022-08532-6>
- Zhang, X., Wang, Y., Guo, J., Yu, Y., Li, J., Guo, Y., & Liu, C. (2015).

- Comparing two functions for optical density and cell numbers in bacterial exponential growth phase. *J. Pure Appl. Microbiol*, 9(1), 299-305.
<https://api.semanticscholar.org/CorpusID:268524308>
- Zhao, Y., Song, X., Yu, L., Han, B., Li, T., & Yu, X. (2019). Influence of cadmium stress on the lipid production and cadmium bioresorption by *Monoraphidium* sp. QLY-1. *Energy Conversion and Management*, 188, 76-85. <https://doi.org/10.1016/j.enconman.2019.03.041>
- Zheng, C., Aslam, M., Liu, X., Du, H., Xie, X., Jia, H., ... & Li, P. (2020). Impact of Pb on *Chlamydomonas reinhardtii* at physiological and transcriptional levels. *Frontiers in Microbiology*, 11, 1443.
<https://doi.org/10.3389/fmicb.2020.01443>
- Zhou, Y., Cui, X., Wu, B., Wang, Z., Liu, Y., Ren, T., ... & Rittmann, B. E. (2024). Microalgal extracellular polymeric substances (EPS) and their roles in cultivation, biomass harvesting, and bioproducts extraction. *Bioresource Technology*, 131054.
<https://doi.org/10.1016/j.biortech.2024.131054>