

## DAFTAR PUSTAKA

- Ajismarto, M., Ghozali, A. A., & Prihandoko, D. (2023). Microplastic characterization of sediment in Code River, Yogyakarta City. *Aquaculture, Aquarium, Conservation & Legislation*, 16(5), 2562-2571.
- Alnory, A., & Abdalla, S. A. (2018). Statistical comparison to determine first line regimen of two anti-malarials for uncomplicated plasmodium falciparum malaria among children under 5 years. *Edelweiss Applied Science and Technology*, 29–35. <https://doi.org/10.33805/2576.8484.110>
- Al-Saleh, M. A., Yussuf, A. A., Jumaa, M. A., Hammoud, A., & Al-Shammari, T. (2019). Biopolymer solution evaluation methodology: thermal and mechanical assessment for enhanced oil recovery with high salinity brines. *Processes*, 7(6), 339. <https://doi.org/10.3390/pr7060339>
- Al-Zawaidah, H., , Ravazzolo, D., , & Friedrich, H., (2021). Macroplastics in rivers: present knowledge, issues and challenges. *Environmental science. Processes & impacts*, 23(4), 535–552. <https://doi.org/10.1039/d0em00517g>
- Andrady, A. L., & Neal, M. A. (2009). Applications and societal benefits of plastics. *Philosophical Transactions - Royal Society. Biological Sciences*, 364(1526), 1977–1984. <https://doi.org/10.1098/rstb.2008.0304>
- Anggiani, M. (2020). Potensi mikroorganisme sebagai agen bioremediasi mikroplastik. *Oseana*, 45(2), 40-49. <https://doi.org/10.14203/oseana.2020.Vol.45No.2.92>
- Arenas, Y. M., Cabrera-Pastor, A., Juciute, N., Mora-Navarro, E., & Felipe, V. (2020). Blocking glycine receptors reduces neuroinflammation and restores neurotransmission in cerebellum through ADAM17-TNFR1-NF- $\kappa$ B pathway. *Journal of Neuroinflammation*, 17(1). <https://doi.org/10.1186/s12974-020-01941-y>
- Ayuningtyas, W. C. (2019). Kelimpahan mikroplastik pada perairan di Banyuwangi, Gresik, Jawa Timur. *JFMR (Journal of Fisheries and Marine Research)*, 3(1), 41–45. <https://doi.org/10.21776/ub.jfmr.2019.003.01.5>
- Babel, S., Ta, A. T., Nguyen, T. P. L., Sembiring, E., Setiadi, T., & Sharp, A. (2022). Microplastics pollution in selected rivers from Southeast Asia. *APN Science Bulletin*, 12(1), 5–17. <https://doi.org/10.30852/sb.2022.1741>
- Bayo, J., Rojo, D., & Olmos, S. (2019). Abundance, morphology and chemical composition of microplastics in sand and sediments from a protected

coastal area: The Mar Menor lagoon (SE Spain). *Environmental Pollution*, 252, 1357–1366. <https://doi.org/10.1016/j.envpol.2019.06.024>

Bayo, J., Rojo, D., & Olmos, S. (2022). Weathering indices of microplastics along marine and coastal sediments from the harbor of Cartagena (Spain) and its adjoining urban beach. *Marine Pollution Bulletin*, 178, 113647. <https://doi.org/10.1016/j.marpolbul.2022.113647>

Bhuyan, M. S., S, V., S, S., Szabo, S., Hossain, M. M., Rashed-Un-Nabi, M., CR, P., MP, J., & Islam, M. S. (2021). Plastics in marine ecosystem: A review of their sources and pollution conduits. *Regional Studies in Marine Science*, 41, 101539. <https://doi.org/10.1016/j.rsma.2020.101539>

Blettler, M. C., Abrial, E., Khan, F. R., Sivri, N., & Espinola, L. A. (2018). Freshwater plastic pollution: Recognizing research biases and identifying knowledge gaps. *Water Research*, 143, 416–424. <https://doi.org/10.1016/j.watres.2018.06.015>

Boyle, K., & Örmeci, B. (2020). Microplastics and nanoplastics in the freshwater and terrestrial environment: a review. *Water*, 12(9), 2633. <https://doi.org/10.3390/w12092633>

Bråte, L. I., N., Eidsvoll, D. P., Constantin, C., & Thomas, K. V. (2016). Plastic ingestion by Atlantic cod (*Gadus morhua*) from the Norwegian coast. *MPB*, 112(1–2), 105–110. <https://doi.org/10.1016/j.marpolbul.2016.08.034>

Browne, M. A., Crump, P., Niven, S. J., Teuten, E., Tonkin, A., Galloway, T., & Thompson, R. (2011). Accumulation of microplastic on shorelines worldwide: sources and sinks. *Environmental Science & Technology*, 45(21), 9175–9179. <https://doi.org/10.1021/es201811s>

Budisetyorini, B., Adisudharma, D., Arsyul, D., Wulandari, W., & Prawira, M. F. A. (2022). Rancangan produk rekreasi wisata memancing Sungai Bogowonto, Kabupaten Purworejo. *Jurnal Kepariwisata: Destinasi, Hospitalitas Dan Perjalanan/Jurnal Kepariwisata*, 6(1), 119–128. <https://doi.org/10.34013/jk.v6i1.651>

Cai, X., Chen, H., Cheng, J., Huang, B., Jin, B., & Lu, J. (2023). Coupling of microplastic contamination in organisms and the environment: Evidence from the tidal flat ecosystem of Hangzhou Bay, China. *Journal of Hazardous Materials*, 457, 131838. <https://doi.org/10.1016/j.jhazmat.2023.131838>

Campanale, C., Savino, I., Massarelli, C., & Uricchio, V. F. (2023). Fourier transform infrared spectroscopy to assess the degree of alteration of artificially aged and environmentally weathered microplastics. *Polymers*, 15(4), 911. <https://doi.org/10.3390/polym15040911>

- Castillo, A. B., Al-Maslamani, I., & Obbard, J. P. (2016). Prevalence of microplastics in the marine waters of Qatar. *Marine Pollution Bulletin*, 111(1–2), 260–267. <https://doi.org/10.1016/j.marpolbul.2016.06.108>
- Chen, H. L., Gibbins, C. N., Selvam, S. B., & Ting, K. N. (2021). Spatio-temporal variation of microplastic along a rural to urban transition in a tropical river. *Environmental Pollution*, 289, 117895. <https://doi.org/10.1016/j.envpol.2021.117895>
- Chen, Q., Wang, Q., Zhang, C., Zhang, J., Dong, Z., & Xu, Q. (2021). Aging simulation of thin-film plastics in different environments to examine the formation of microplastic. *Water Research*, 202, 117462. <https://doi.org/10.1016/j.watres.2021.117462>
- Cheung, C. K. H., & Not, C. (2023). Impacts of extreme weather events on microplastic distribution in coastal environments. *Science of the Total Environment*, 904, 166723. <https://doi.org/10.1016/j.scitotenv.2023.166723>
- Choong, W. S., Hadibarata, T., & Tang, D. K. H. (2020). Abundance and distribution of microplastics in the water and riverbank sediment in Malaysia – a review. *Biointerface Research in Applied Chemistry*, 11(4), 11700–11712. <https://doi.org/10.33263/briac114.1170011712>
- Cordova, M. R., & Nurhati, I. S. (2019). Major sources and monthly variations in the release of land-derived marine debris from the Greater Jakarta area, Indonesia. *Scientific Reports*, 9(1). <https://doi.org/10.1038/s41598-019-55065-2>
- Cordova, M. R., Purwiyanto, A. I. S., & Suteja, Y. (2019). Abundance and characteristics of microplastics in the northern coastal waters of Surabaya, Indonesia. *Marine Pollution Bulletin*, 142, 183–188. <https://doi.org/10.1016/j.marpolbul.2019.03.040>
- Covernton, G. A., Pearce, C. M., Gurney-Smith, H. J., Chastain, S. G., Ross, P. S., Dower, J. F., & Dudas, S. E. (2019). Size and shape matter: A preliminary analysis of microplastic sampling technique in seawater studies with implications for ecological risk assessment. *Science of the Total Environment*, 667, 124–132. <https://doi.org/10.1016/j.scitotenv.2019.02.346>
- Cowger, W., Steinmetz, Z., Gray, A., Munno, K., Lynch, J., Hapich, H., Pimpke, S., De Frond, H., Rochman, C., & Herodotou, O. (2021). Microplastic spectral classification needs an open source community: Open SPECY to the rescue!. *Analytical Chemistry*, 93(21), 7543–7548. <https://doi.org/10.1021/acs.analchem.1c00123>
- Coyle, R., Hardiman, G., & Driscoll, K. O. (2020). Microplastics in the marine environment: A review of their sources, distribution processes, uptake

and exchange in ecosystems. Case Studies in Chemical and Environmental Engineering, 2, 100010.  
<https://doi.org/10.1016/j.cscee.2020.100010>

Crawford, C. B., & Quinn, B. (2017). Microplastics, standardisation and spatial distribution. In Elsevier eBooks (pp. 101–130).  
<https://doi.org/10.1016/b978-0-12-809406-8.00005-0>

Dehaut, A., Cassone, A., Frère, L., Hermabessiere, L., Himber, C., Rinnert, E., Rivière, G., Lambert, C., Soudant, P., Huvet, A., Duflos, G., & Paul-Pont, I. (2016). Microplastics in seafood: Benchmark protocol for their extraction and characterization. Environmental Pollution, 215, 223–233.  
<https://doi.org/10.1016/j.envpol.2016.05.018>

De-La-Torre, G. E. (2019). Microplastics: an emerging threat to food security and human health. Journal of Food Science and Technology/Journal of Food Science and Technology, 57(5), 1601–1608.  
<https://doi.org/10.1007/s13197-019-04138-1>

Dumbili, E., & Henderson, L. (2020). The challenge of plastic pollution in Nigeria. In Elsevier eBooks (pp. 569–583). <https://doi.org/10.1016/b978-0-12-817880-5.00022-0>

Echeverría-Sáenz, S., Mena, F., Pinnock, M., Ruepert, C., Solano, K., De La Cruz, E., Campos, B., Sánchez-Avila, J., Lacorte, S., & Barata, C. (2012). Environmental hazards of pesticides from pineapple crop production in the Río Jiménez watershed (Caribbean Coast, Costa Rica). Science of the Total Environment, 440, 106–114.  
<https://doi.org/10.1016/j.scitotenv.2012.07.092>

Eder, M. L., Oliva-Teles, L., Pinto, R., Carvalho, A. P., Almeida, C. M. R., Hornek-Gausterer, R., & Guimarães, L. (2021). Microplastics as a vehicle of exposure to chemical contamination in freshwater systems: Current research status and way forward. Journal of Hazardous Materials, 417, 125980. <https://doi.org/10.1016/j.jhazmat.2021.125980>

Fan, S., Yan, Z., Qiao, L., Gui, F., Li, T., Yang, Q., Zhang, X., & Ren, C. (2023). Biological effects on the migration and transformation of microplastics in the marine environment. *Marine Environmental Research*, 185(August 2022), 105875. <https://doi.org/10.1016/j.marenvres.2023.105875>

Fendall, L. S., & Sewell, M. A. (2009). Contributing to marine pollution by washing your face: Microplastics in facial cleansers. Marine Pollution Bulletin, 58(8), 1225–1228.  
<https://doi.org/10.1016/j.marpolbul.2009.04.025>

Foekema, E. M., De Gruijter, C., Mergia, M. T., Van Franeker, J. A., Murk, A. J., & Koelmans, A. A. (2013). Plastic in North Sea fish. Environmental

Science & Technology, 47(15), 8818–8824.  
<https://doi.org/10.1021/es400931b>

- Gabriel, A. D., Amparado, R. F., Lubguban, A. A., & Bacosa, H. P. (2023). Riverine microplastic pollution: Insights from Cagayan de Oro River, Philippines. *International Journal of Environmental Research and Public Health/International Journal of Environmental Research and Public Health*, 20(12), 6132. <https://doi.org/10.3390/ijerph20126132>.
- Green, R. H. (1993). Application of repeated measures designs in environmental impact and monitoring studies. *Australian Journal of Ecology*, 18(1), 81–98. <https://doi.org/10.1111/j.1442-9993.1993.tb00436.x>
- Grigore, M. E. (2017). Methods of recycling, properties and applications of recycled thermoplastic polymers. *Recycling*, 2(4), 24. <https://doi.org/10.3390/recycling2040024>
- Hakki, C. O. (2015). The comparison of the attitudes of students from different high schools within Turkish education system towards physical education and sports. *Educational Research and Reviews*, 10(24), 2919–2923. <https://doi.org/10.5897/err2015.2569>
- Hale, R. C., Seeley, M. E., La Guardia, M. J., Mai, L., & Zeng, E. Y. (2020). A global perspective on microplastics. *Journal of Geophysical Research. Oceans*, 125(1). <https://doi.org/10.1029/2018jc014719>
- Han, M., Niu, X., Tang, M., Zhang, B., Wang, G., Yue, W., Kong, X., & Zhu, J. (2020). Distribution of microplastics in surface water of the lower Yellow River near estuary. *Science of the Total Environment*, 707, 135601. <https://doi.org/10.1016/j.scitotenv.2019.135601>
- Hanke, G., Galgani, F., Werner, S., Oosterbaan, L., Nilsson, P., Fleet, D., Kinsey, S., Thompson, R., Palatinus, A., Van, F. J. A., Vlachogianni, T., Scoullou, M., Veiga, J. M., Matiddi, M., Alcaro, L., Maes, T., Korpinen, S., Budziak, A., Leslie, H., . . . Liebezeit, G. (2013). Guidance on monitoring of marine litter in European Seas. JRC Publications Repository. <https://doi.org/10.2788/99816>.
- Hitchcock, J. N. (2020). Storm events as key moments of microplastic contamination in aquatic ecosystems. *Science of the Total Environment*, 734, 139436. <https://doi.org/10.1016/j.scitotenv.2020.139436>
- Hiwari, H., Purba, N. P., Ihsan, Y. N., Yuliadi, L. P. S., & Mulyani, P. G. (2019). Kondisi sampah mikroplastik di permukaan air laut sekitar Kupang dan Rote, Provinsi Nusa Tenggara Timur. 5, 165–171. <https://doi.org/10.13057/psnmbi/m050204>



- Hoogenboom, L. (2016). Presence of microplastics and nanoplastics in food, with particular focus on seafood. *EFSA Journal*, 14(6). <https://doi.org/10.2903/j.efsa.2016.4501>
- Horton, A. A., & Dixon, S. J. (2017). Microplastics: An introduction to environmental transport processes. *WIREs. Water*, 5(2). <https://doi.org/10.1002/wat2.1268>
- Horton, A. A., Walton, A., Spurgeon, D. J., Lahive, E., & Svendsen, C. (2017). Microplastics in freshwater and terrestrial environments: Evaluating the current understanding to identify the knowledge gaps and future research priorities. *Science of the Total Environment*, 586, 127–141. <https://doi.org/10.1016/j.scitotenv.2017.01.190>
- Hossain, S., Rahman, M. A., Chowdhury, M. A., & Mohonta, S. K. (2020). Plastic pollution in Bangladesh: A review on current status emphasizing the impacts on environment and public health. *Environmental Engineering Research/Environmental Engineering Research*, 26(6), 200535–0. <https://doi.org/10.4491/eer.2020.535>
- Hosseini, R., Sayadi, M. H., Aazami, J., & Savabieasfehni, M. (2020). Accumulation and distribution of microplastics in the sediment and coastal water samples of Chabahar Bay in the Oman Sea, Iran. *Marine Pollution Bulletin*, 160, 111682. <https://doi.org/10.1016/j.marpolbul.2020.111682>
- Iskandar, M. R., Cordova, M. R., & Park, Y. G. (2022). Pathways and destinations of floating marine plastic debris from 10 major rivers in Java and Bali, Indonesia: A Lagrangian particle tracking perspective. *Marine Pollution Bulletin*, 185(PA), 114331. <https://doi.org/10.1016/j.marpolbul.2022.114331>
- Ismanto, A., Hadibarata, T., Sugianto, D. N., Zainuri, M., Kristanti, R. A., Wisha, U. J., Hernawan, U., Anindita, M. A., Gonsilou, A. P., Elshikh, M. S., Al-Mohaimeed, A. M., & Abbasi, A. M. (2023). First evidence of microplastics in the water and sediment of Surakarta city river basin, Indonesia. *Marine Pollution Bulletin*, 196, 115677. <https://doi.org/10.1016/j.marpolbul.2023.115677>
- Ismiyati, I., Utami, I., Tricahya, F. H., Pidianto, P., Rahmawati, S., Ramadhanti, A. M., & Sakti, A. D. (2023). Microplastics pollution in sediment of Serang River Kulon Yogyakarta Province. *Jurnal Rekayasa Proses*. <https://doi.org/10.22146/jrekpros.73233>
- Issac, M. N., & Kandasubramanian, B. (2021). Effect of microplastics in water and aquatic systems. *Environmental Science and Pollution Research International*, 28(16), 19544–19562. <https://doi.org/10.1007/s11356-021-13184-2>

- Kaza, S., Yao, L. C., Bhada-Tata, P., & Van Woerden, F. (2018). What a waste 2.0: A global snapshot of solid waste management to 2050. In Washington, DC: World Bank eBooks. <https://doi.org/10.1596/978-1-4648-1329-0>
- Kumar, R., Sharma, P., Manna, C., & Jain, M. (2021). Abundance, interaction, ingestion, ecological concerns, and mitigation policies of microplastic pollution in riverine ecosystem: A review. *Science of the Total Environment*, 782, 146695. <https://doi.org/10.1016/j.scitotenv.2021.146695>
- Kumar, V., Wu, R., & Lee, D. (2017). Morphological aspects of carbon nanofillers and their hybrids for actuators and sensors. *Polymer Composites*, 40(S1). <https://doi.org/10.1002/pc.24692>
- Kumar, V., Wu, R., & Lee, D. (2019). Morphological aspects of carbon nanofillers and their hybrids for actuators and sensors. *Polymer Composites*, 40(S1). <https://doi.org/10.1002/pc.24692>
- Lee, Y., Cho, J., Sohn, J., & Kim, C. (2023). Health effects of microplastic exposures: current issues and perspectives in South Korea. *Yonsei Medical Journal*, 64(5), 301. <https://doi.org/10.3349/ymj.2023.0048>
- Lewoyehu, M., Abeje, N., & Addisu, S. (2022). Assessment of the pollution load of effluents discharged from higher institutions in Ethiopia: The case of Bahir Dar University Zenzelma Campus. *International Journal of Analytical Chemistry*, 2022, 1–15. <https://doi.org/10.1155/2022/9021549>
- Li, P., Wang, X., Su, M., Zou, X., Duan, L., & Zhang, H. (2020). Characteristics of Plastic Pollution in the Environment: a review. *Bulletin of Environmental Contamination and Toxicology*, 107(4), 577–584. <https://doi.org/10.1007/s00128-020-02820-1>
- Lin, L., Zuo, L., Peng, J., Cai, L., Fok, L., Yan, Y., Li, H., & Xu, X. (2018). Occurrence and distribution of microplastics in an urban river: A case study in the Pearl River along Guangzhou City, China. *Science of the Total Environment*, 644, 375–381. <https://doi.org/10.1016/j.scitotenv.2018.06.327>
- Liu, Y., Zhang, J., Cai, C., He, Y., Chen, L., Xiong, X., Huang, H., Tao, S., & Liu, W. (2020). Occurrence and characteristics of microplastics in the Haihe River: An investigation of a seagoing river flowing through a megacity in northern China. *Environmental Pollution*, 262, 114261. <https://doi.org/10.1016/j.envpol.2020.114261>
- Lusher, A.L., Hollman, P.C.H., Mendoza-Hill, J.J. (2017). Microplastics in fisheries and aquaculture: status of knowledge on their occurrence and implications for aquatic organisms and food safety. *FAO Fisheries and Aquaculture Technical Paper*. Rome, Italy. p 615.

- Mak, C. W., Tsang, Y. Y., Leung, M. M., Fang, J. K., & Chan, K. M. (2020). Microplastics from effluents of sewage treatment works and stormwater discharging into the Victoria Harbor, Hong Kong. *Marine Pollution Bulletin*, 157, 111181. <https://doi.org/10.1016/j.marpolbul.2020.111181>
- Masura, J., Baker, J., Foster, G., Arthur, C., & Herring, C. (2015). Laboratory methods for the analysis of microplastics in the marine environment : Recommendations for quantifying synthetic particles in waters and sediments. NOAA Technical Memorandum. <https://doi.org/10.25607/obp-604>
- Mauludy, M. S., Yunanto, A., & Yona, D. (2019). Microplastic abundances in the sediment of coastal beaches in badung, Bali. *Jurnal Perikanan Universitas Gadjah Mada*, 21(2), 73. <https://doi.org/10.22146/jfs.45871>
- Mihardja, E. J., Komsiah, S., & Harmaningsih, D. (2021). Campaign “BOTAK” (Bogor without plastic bags) as an environmental communication model for reducing plastic waste in marine environment. *IOP Conference Series. Earth and Environmental Science*, 674(1), 012101. <https://doi.org/10.1088/1755-1315/674/1/012101>
- Moore, C., Lattin, G., & Zellers, A. (2011). Quantity and type of plastic debris flowing from two urban rivers to coastal waters and beaches of Southern California. *Gestão Costeira Integrada*, 11(1), 65–73. <https://doi.org/10.5894/rgci194>
- Mustafin, A. Z., Li, K., Varfolomeev, M. A., Yuan, C., Kadyrov, R. I., Glukhov, M. S., Khayrtdinov, R. K., Pu, W., Sattarov, A. I., & Statsenko, E. O. (2020). A case study of salt-tolerant functional polymer for EOR in carbonate reservoirs with ultra-high salinity (Russian). *SPE Russian Petroleum Technology Conference*. <https://doi.org/10.2118/201838-ru>
- Muthuvairavasamy, R. (2022). *Microplastics: footprints on the earth and their environmental management*. Springer Nature.
- National Oceanic and Atmosphere Administration. (2015). Drought national oceanic and atmosphere administration national weather service. (Diakses dari [www.noaa.gov](http://www.noaa.gov) pada tanggal 23 Maret 2023)
- National Oceanic and Atmospheric Administration. (2016). Marine debris impacts on coastaland benthic habitats. NOAA Marine Debris Habitat Report. (Diakses dari [www.noaa.gov](http://www.noaa.gov) pada tanggal 23 Maret 2023)
- Nikinmaa, M., & Anttila, K. (2019). Individual variation in aquatic toxicology: Not only unwanted noise. *Aquatic Toxicology*, 207, 29–33. <https://doi.org/10.1016/j.aquatox.2018.11.021>



- Nimon, K. F. (2012). Statistical assumptions of substantive analyses across the general linear model: A mini-review. *Frontiers in Psychology*, 3. <https://doi.org/10.3389/fpsyg.2012.00322>
- Oanh, D. T., Thuy, D. T., Huong, N. T. N., Quynh, H. T., Hieu, P. D., Vu, D. M., Nguyet, V. T., Quynh, L. T. P., Van Cuong, B., & Thuong, B. H. (2022). Preliminary investigation of microplastics in sediments from industrial manufacturing waste sources. *Tạp Chí Khoa Học Đại Học Quốc Gia Hà Nội: Khoa Học Tự Nhiên Và Công Nghệ (VNU Journal of Science: Natural Sciences and Technology)*. <https://doi.org/10.25073/2588-1140/vnunst.5336>
- Olarinmoye, O. M., Stock, F., Scherf, N., Whenu, O., Asenime, C., & Ganzallo, S. (2020). Microplastic presence in sediment and water of a lagoon bordering the urban agglomeration of Lagos, southwest Nigeria. *Geosciences*, 10(12), 494. <https://doi.org/10.3390/geosciences10120494>
- Osorio, E. D., Tanchuling, M. a. N., & Diola, M. B. L. D. (2021). Microplastics occurrence in surface waters and sediments in five river mouths of Manila Bay. *Frontiers in Environmental Science*, 9. <https://doi.org/10.3389/fenvs.2021.719274>
- Padervand, M., Lichtfouse, E., Robert, D., & Wang, C. (2020). Removal of microplastics from the environment. A review. *Environmental Chemistry Letters*, 18(3), 807–828. <https://doi.org/10.1007/s10311-020-00983-1>
- Paine, M. D., Skinner, M. A., Kilgour, B. W., DeBlois, E. M., & Tracy, E. (2014). Repeated-measures regression designs and analysis for environmental effects monitoring programs. *Deep-sea Research. Part 2. Topical Studies in Oceanography/Deep Sea Research. Part II, Topical Studies in Oceanography*, 110, 84–91. <https://doi.org/10.1016/j.dsr2.2014.10.017>
- Pathak, V. M., & Navneet, N. (2017). Review on the current status of polymer degradation: a microbial approach. *Bioresources and Bioprocessing*, 4(1). <https://doi.org/10.1186/s40643-017-0145-9>
- Phelan, A. A., Ross, H., Setianto, N. A., Fielding, K., & Pradipta, L. (2020). Ocean plastic crisis—mental models of plastic pollution from remote Indonesian coastal communities. *PloS One*, 15(7), e0236149. <https://doi.org/10.1371/journal.pone.0236149>
- Purwiyanto, A. I. S., Prartono, T., Riani, E., Koropitan, A. F., Naulita, Y., Takarina, N. D., & Cordova, M. R. (2022). The contribution of estuaries to the abundance of microplastics in Jakarta Bay, Indonesia. *Marine Pollution Bulletin*, 184, 114117. <https://doi.org/10.1016/j.marpolbul.2022.114117>

- Rai, P. K., Lee, J., Brown, R. J. C., & Kim, K. H. (2021). Environmental fate, ecotoxicity biomarkers, and potential health effects of micro- and nano-scale plastic contamination. *Journal of Hazardous Materials*, 403, 123910. <https://doi.org/10.1016/j.jhazmat.2020.123910>
- Riani, E., & Cordova, M. R. (2022). Microplastic ingestion by the sandfish *Holothuria scabra* in Lampung and Sumbawa, Indonesia. *Marine Pollution Bulletin*, 175, 113134. <https://doi.org/10.1016/j.marpolbul.2021.113134>
- Riskiana, R., Hariyadi, S., & Effendi, H. (2021). Abundance and distribution of microplastics in Baturusa watershed of Bangka Belitung Islands Province. *IOP Conference Series. Earth and Environmental Science*, 744(1), 012064. <https://doi.org/10.1088/1755-1315/744/1/012064>
- Rochman, C. M., Tahir, A., Williams, S. L., Baxa, D. V., Lam, R., Miller, J. T., Teh, F., Werorilangi, S., & Teh, S. J. (2015). Anthropogenic debris in seafood: Plastic debris and fibers from textiles in fish and bivalves sold for human consumption. *Scientific Reports*, 5(1). <https://doi.org/10.1038/srep14340>
- Rodrigues, D., Antunes, J., Otero, V., Sobral, P., & Costa, M. H. (2020). Distribution patterns of microplastics in seawater surface at a Portuguese estuary and marine park. *Frontiers in Environmental Science*, 8. <https://doi.org/10.3389/fenvs.2020.582217>
- Ross, A., & Willson, V. L. (2017). Paired Samples T-Test. In *SensePublishers eBooks* (pp. 17–19). [https://doi.org/10.1007/978-94-6351-086-8\\_4](https://doi.org/10.1007/978-94-6351-086-8_4)
- Sameera, N. N., & Aruna, M. (2019). Studies on plankton diversity of Ashok Sagar Lake in Telangana. *International Journal of Scientific Research in Science and Technology*, 353–357. <https://doi.org/10.32628/ijrst196154>
- Sari, D. a. A., Suryanto, N., Sudarwanto, A. S., Nugraha, S., & Utomowati, R. (2021). Reduce marine debris policy in Indonesia. *IOP Conference Series. Earth and Environmental Science*, 724(1), 012118. <https://doi.org/10.1088/1755-1315/724/1/012118>
- Silva, P. M., & Nanny, M. A. (2020). Impact of microplastic fibers from the degradation of nonwoven synthetic textiles to the Magdalena River water column and river sediments by the city of Neiva, Huila (Colombia). *Water*, 12(4), 1210. <https://doi.org/10.3390/w12041210>
- Strokal, M., Bai, Z., Franssen, W., Hofstra, N., Koelmans, A. A., Ludwig, F., Ma, L., Van Puijenbroek, P., Spanier, J. E., Vermeulen, L. C., Van Vliet, M. T. H., Van Wijnen, J., & Kroeze, C. (2021). Urbanization: an increasing source of multiple pollutants to rivers in the 21<sup>st</sup> century. *Npj Urban Sustainability*, 1(1). <https://doi.org/10.1038/s42949-021-00026-w>

- Syafina, P. R., Yudison, A. P., Sembiring, E., Irsyad, M., & Tomo, H. S. (2022). Identification of fibrous suspended atmospheric microplastics in Bandung Metropolitan Area, Indonesia. *Chemosphere*, 308, 136194. <https://doi.org/10.1016/j.chemosphere.2022.136194>
- Tan, X., Yu, X., Cai, L., Wang, J., & Peng, J. (2019). Microplastics and associated PAHs in surface water from the Feilaixia Reservoir in the Beijiang River, China. *Chemosphere*, 221, 834–840. <https://doi.org/10.1016/j.chemosphere.2019.01.022>
- Thushari, G., & Senevirathna, J. (2020). Plastic pollution in the marine environment. *Heliyon*, 6(8), e04709. <https://doi.org/10.1016/j.heliyon.2020.e04709>
- Utami, I. (2022). Temuan mikroplastik pada sedimen Sungai Progo dan Sungai Opak Kabupaten Bantul. *Jurnal Riset Daerah Kabupaten Bantul*, 22(1), 4175-4184.
- Utami, I., Pidianto, P., Tricahya, F. H., & Rahmawati, S. (2021). Initial investigation of microplastic pollution in river sediments at Yogyakarta City Indonesia. *Sustinere*, 5(3), 155–165. <https://doi.org/10.22515/sustinere.jes.v5i3.178>
- Utami, I., Rahmawati, S., Tricahya, F. H., Pidianto, P., & Sakti, A. D. (2021). The abundance and characteristics of microplastics in the sediments of The Progo River of Yogyakarta, Indonesia. *Journal of Sustainability Science and Management/Journal of Sustainability Science and Management*, 16(8), 289–306. <https://doi.org/10.46754/jssm.2021.12.021>
- Van Cauwenberghe, L., Vanreusel, A., Mees, J., & Janssen, C. R. (2013). Microplastic pollution in deep-sea sediments. *Environmental Pollution*, 182, 495–499. <https://doi.org/10.1016/j.envpol.2013.08.013>
- Van Emmerik, T., Van Klaveren, J., Meijer, L. J. J., Krooshof, J. W., Palmos, D. a. A., & Tanchuling, M. A. (2020). Manila River mouths act as temporary sinks for macroplastic pollution. *Frontiers in Marine Science*, 7. <https://doi.org/10.3389/fmars.2020.545812>
- Viršek, M. K., Palatinus, A., Koren, Š., Peterlin, M., Horvat, P., & Kržan, A. (2016). Protocol for microplastics sampling on the sea surface and sample analysis. *Journal of Visualized Experiments*, 118. <https://doi.org/10.3791/55161>
- Wagner, M., & Lambert, S. (2017). Freshwater microplastics: Emerging environmental contaminants? Springer.
- Wicaksono, E. A., Werorilangi, S., & Tahir, A. (2021). The influence of weirs on microplastic fate in the riverine environment (case study: Jeneberang

River, Makassar City, Indonesia). IOP Conference Series. Earth and Environmental Science, 763(1), 012054. <https://doi.org/10.1088/1755-1315/763/1/012054>

Wicaksono, E. A., Werorilangi, S., Galloway, T. S., & Tahir, A. (2021). Distribution and seasonal variation of microplastics in Tallo River, Makassar, eastern Indonesia. *Toxics*, 9(6), 129. <https://doi.org/10.3390/toxics9060129>

Widianarko, B., & Hantoro, I. (2018). Mikroplastik dalam seafood dari pantai Utara Jawa. Universitas Katolik Soegijapranata.

World Population Prospects 2019: Data Booklet. (2019). In statistical papers - United Nations. Series A, Population and vital statistics report. <https://doi.org/10.18356/3e9d869f-en>.

Yang, H., Chen, G., & Wang, J. (2021). Microplastics in the marine environment: sources, fates, impacts and microbial degradation. *Toxics*, 9(2), 41. <https://doi.org/10.3390/toxics9020041>

Yang, L., Zhang, Y., Kang, S., Wang, Z., & Wu, C. (2021). Microplastics in freshwater sediment: A review on methods, occurrence, and sources. *Science of the Total Environment*, 754, 141948. <https://doi.org/10.1016/j.scitotenv.2020.141948>

Yudhantari, C. I., Hendrawan, I. G., & Puspitha, N. L. P. R. (2019). Kandungan mikroplastik pada saluran pencernaan Ikan Lemuru Protolan (*Sardinella Lemuru*) hasil tangkapan di Selat Bali. *Journal of Marine Research and Technology*, 2(2), 48. <https://doi.org/10.24843/jmrt.2019.v02.i02.p10>

Zhang, B., Yang, X., Liu, L., Chen, L., Teng, J., Zhu, X., Zhao, J., & Wang, Q. (2021). Spatial and seasonal variations in biofilm formation on microplastics in coastal waters. *Science of the Total Environment*, 770, 145303. <https://doi.org/10.1016/j.scitotenv.2021.145303>

Zhou, Y., Liu, X., & Wang, J. (2019). Characterization of microplastics and the association of heavy metals with microplastics in suburban soil of central China. *Science of the Total Environment*, 694, 133798. <https://doi.org/10.1016/j.scitotenv.2019.133798>.