

## DAFTAR PUSTAKA

- Akhmetova, D., 2025, Anthropogenic impact on soil and vegetation in Turkistan region: Chemical composition and heavy metal contamination. *Journal of the Geographical Institute "Jovan Cvijić" SASA*, 75(1), 1-15.
- Armid, A., Shinjo, R., Zaeni, A., Sani, A., & Ruslan, R., 2014, The distribution of heavy metals including Pb, Cd and Cr in Kendari Bay surficial sediments. *Marine pollution bulletin*, 84(1-2), 373-378.
- Barbieri, M., 2016, The importance of enrichment factor (EF) and geoaccumulation index (Igeo) to evaluate the soil contamination. *Journal of Geology & Geophysics*, 5(1), 1-4.
- Bradl, H., 2005, *Heavy Metals in the Environment: Origin, Interaction and Remediation*, Volume 6, 1st Edition, Academic Press. London
- Budianta, W., 2021, Heavy metal pollution and mobility of sediment in Tajum River caused by artisanal gold mining in Banyumas, Central Java, Indonesia. *Environmental Science and Pollution Research*, 28(7), 8585-8593.
- Caglar, M., Canpolat, O., & Selamoglu, Z., 2019, Determination of some heavy metal levels in three freshwater fish in Keban Dam Lake (Turkey) for public consumption. *Iranian Journal of Fisheries Sciences*, 18(1), 188-198.
- Canadian Council of Ministers of the Environmental. 2001. *Canadian Sediment Quality Guidelines for the Protection of Aquatic Life*.
- Cavanagh, N., Swain, L.G., Nordin, R.N. and Pommen, L.W., 1994, *Lake and stream bottom: sediment sampling manual*. BC Ministry of Environment, Lands and Parks, Water Quality Branch.
- Çil, E.A., Uncumusaoğlu, A.A., Ergen, Ş.F. and Gürbüz, P., 2023. Evaluation of water and sediment quality of İnaltı Cave (Northern Türkiye) by using multivariate statistical methods. *Environmental monitoring and assessment*, 195(6), p.667.
- Eid, M. H., Eissa, M., Mohamed, E. A., Ramadan, H. S., Tamás, M., Kovács, A., & Szűcs, P., 2024, New approach into human health risk assessment associated with heavy metals in surface water and groundwater using Monte Carlo Method. *Scientific reports*, 14(1), 1008.
- Faraj, F. and Ortiz, J.M., 2020. An Unsupervised Clustering Approach for the Geostatistical Domaining of Univariate Data.

- Ghadimi, F., Hajati, A., & Sabzian, A., 2020, Assessment of heavy metal contamination in waters due to mineral salts company from Mighan playa/lake, Arak, Iran. *Journal of Mining and Environment*, 11(1), 171-184.
- Hakanson, L., 1980, An ecological risk index for aquatic pollution control. A sedimentological approach. *Water research*, 14(8), 975-1001.
- Hasria, H., Idrus, A. and Warmada, I.W., 2021. Geologi Pegunungan Mendoke, Lengan Tenggara Pulau Sulawesi, Indonesia. *Jurnal Geologi dan Sumberdaya Mineral*, 22(3), pp.123-131.
- Huang, Y., Liu, J., Wang, G., Bi, X., Sun, G., Wu, X., Wang, Q. and Li, Z., 2022, Concentrations, speciation, and potential release of hazardous heavy metals from the solid combustion residues of coal-fired power plants. *International Journal of Environmental Research and Public Health*, 19(19), p.12617.
- Jaskuła, J., & Sojka, M., 2022, Assessment of spatial distribution of sediment contamination with heavy metals in the two biggest rivers in Poland. *Catena*, 211, 105959.
- Jiang, P., Chen, J., Li, Y., Li, X., Qi, X., Wang, J., Chen, P., Liu, W. and Wang, R., 2023, Partitioning and Migration of Trace Elements during Coal Combustion in Two Coal-Fired Power Plants in Hefei City, Anhui Province, Eastern China. *Minerals*, 13(2), p.152.
- Jolliffe, I. T., & Cadima, J., 2016, Principal component analysis: A review and recent developments. *Philosophical Transactions of the Royal Society A*, 374(2065), 20150202.
- Kementerian Energi dan Sumber Daya Mineral, 2019, Keputusan Menteri Energi dan Sumber Daya Mineral Nomor 77 K/90/MEM/2019 Tentang Objek Vital Nasional Bidang Energi dan Sumber Daya Mineral, Jakarta.
- Khorram, F. and Morshedy, A.H., 2024. Domaining based on geological information, variogram analysis and clustering algorithms.
- Krige, D. G., 1951, A statistical approach to some basic mine valuation problems on the Witwatersrand. *Journal of the Southern African Institute of Mining and Metallurgy*, 52(6), 119-139.
- Li, C., Yang, S., Lian, E., Wang, Q., Fan, D. and Huang, X., 2017. Chemical speciation of iron in sediments from the Changjiang Estuary and East China Sea: Iron cycle and paleoenvironmental implications. *Quaternary International*, 452, pp.116-128.

- Liao, J., Chen, J., Ru, X., Chen, J., Wu, H., & Wei, C., 2017, Heavy metals in river surface sediments affected with multiple pollution sources, South China: Distribution, enrichment and source apportionment. *Journal of Geochemical Exploration*, 176, 9-19.
- Liu, A., Duodu, G. O., Goonetilleke, A., & Ayoko, G. A., 2017, Influence of land use configurations on river sediment pollution. *Environmental Pollution*, 229, 639-646.
- Liu, C. W., Lin, K. H., & Kuo, Y. M., 2003, Application of factor analysis in the assessment of groundwater quality in a blackfoot disease area in Taiwan. *Science of the total environment*, 313(1-3), 77-89.
- Luo, Y., & Jia, Q., 2021, Pollution and risk assessment of heavy metals in the sediments and soils around tiegelongnan copper deposit, Northern Tibet, China. *Journal of Chemistry*, 2021(1), 8925866.
- Łyszczarz, S., Błońska, E., & Lasota, J., 2020, The application of the geo-accumulation index and geostatistical methods to the assessment of forest soil contamination with heavy metals in the Babia Góra National Park (Poland). *Archives of Environmental Protection*, 46(3).
- Masrudin, H., Okto, A., & Irawati, M. R. M., 2022, Studi Geomorfologi Karst Formasi Tokala Daerah Watukila, Kecamatan Lasolo, Kabupaten Konawe Utara, Provinsi Sulawesi Tenggara. *Jurnal GEOSAPTA Vol*, 8(1).
- Matheron, G., 1962, *Traité de géostatistique appliquée* (No. 14). Editions Technip.
- Mu'min, R. P., Budianta, W., & Warmada, I., 2022, Heavy Metal Pollution in Sediments of Panreng River, Sidenreng Rappang Regency, South Sulawesi Province. In *International Conference on Sustainable Environment, Agriculture and Tourism (ICOSEAT 2022)* (pp. 667-673). Atlantis Press.
- Mukaka, M. M., 2012, A guide to appropriate use of correlation coefficient in medical research. *Malawi medical journal*, 24(3), 69-71.
- Ngkoimani, L. O., & Chaerul, M., 2017, Impacts of Nickel Laterite Post-Mining Activities on The Level of Heavy Metal Contamination in River Sediments. In *2nd International Conference on Education, Science, and Technology (ICEST 2017)* (pp. 240-242). Atlantis Press.
- Paundanan, M., Ikbali, I., Fachruddin, F., & Khaery, A., 2023, Studi Pencemaran Logam Berat Timbal (Pb) dan Tembaga (Cu) Berdasarkan Nilai Ambang Batas (NAB) di

Sungai Motui Kabupaten Konawe Utara. *Jurnal Ilmu Alam dan Lingkungan*, 14(1).

- Pebrianti, Saparina, T., & Saranani, S., 2023, Analisis Kadar COD, BOD, Tembaga dan Zat Besi (FE) Limbah PLTU dilaut Jetty Kawasan Industri Konawe Kabupaten Konawe Sulawesi Tenggara. *Jurnal Pharmacia Mandala Waluya*, 2(5), 264-275.
- Rajabinasab, B. and Asghari, O., 2019. Geometallurgical domaining by cluster analysis: Iron ore deposit case study. *Natural Resources Research*, 28(3), pp.665-684.
- Romary, T., Rivoirard, J., Deraisme, J., Quinones, C. and Freulon, X., 2012. Domaining by clustering multivariate geostatistical data. In *Geostatistics oslo 2012* (pp. 455-466). Dordrecht: Springer Netherlands.
- Rusmana E., Sukarna D., Haryono E., Simandjuntak T.O., et al., 1993, Geological map of Lasusua Kendari Quadrangles, Sulawesi-Scale 1: 250.000. Transverse Mercator Projection, Copy Right: Pusat Penelitian dan Pengembangan Geologi.
- Samodra, S.B., 2024. Sebaran Batuan Karbonat Di Cekungan Matarombeo, Lengan Tenggara Sulawesi. *Geosfera: Jurnal Penelitian Geografi*, 3(2), pp.130-142.
- Schroth, A.W., Crusius, J., Hoyer, I. and Campbell, R., 2014. Estuarine removal of glacial iron and implications for iron fluxes to the ocean. *Geophysical Research Letters*, 41(11), pp.3951-3958.
- Shen, X., Chi, Y., & Xiong, K., 2019, The effect of heavy metal contamination on humans and animals in the vicinity of a zinc smelting facility. *Plos one*, 14(10), e0207423.
- Simandjuntak T.O., Rusmana E., Supandjono J.B., Koswara A., Geological map of Bungku Quadrangles, Sulawesi-Scale 1: 250.000. Transverse Mercator Projection, Copy Right: Pusat Penelitian dan Pengembangan Geologi.
- Simpson, S.L.; Batley, G.E.; Chariton, A.A. Revision of the ANZECC/ARMCANZ Sediment Quality Guidelines. CSIRO; 2013-05. legacy:965. <https://doi.org/10.4225/08/5894c6184320c>
- Surono, 2013, Geologi Lengan Tenggara Sulawesi. Pusat Survei Geologi, Badan Geologi Kementerian Energi dan Sumber Daya Mineral dan LIPI Press, Menteng, Jakarta,
- Sutopo, U.M., Desfitri, E.R., Hayakawa, Y. and Kambara, S., 2021, A role of mineral oxides on trace elements behavior during pulverized coal combustion. *Minerals*, 11(11), p.1270.
- Tong, Y., Gao, J. and Ma, J., 2023, Emission characteristics, speciation, and potential environmental risks of heavy metals from coal-fired boilers: a review. *Sustainability*, 15(15), p.11653.

- U.S. Environmental Protection Agency (U.S. EPA), 1999, Field sampling guidance document #1215: Sediment sampling (Rev. 1, September 1999). U.S. EPA Region 9 Laboratory, Richmond, California.
- U.S. Environmental Protection Agency (U.S. EPA), 2001, Methods for collection, storage and manipulation of sediments for chemical and toxicological analyses: Technical manual (EPA-823-B-01-002). Office of Water, Washington, DC.
- Van de Wiel, H. J., 2003, Determination of elements by ICP-AES and ICP-MS. National Institute of Public Health and the Environment (RIVM). Bilthoven, The Netherlands, 1-19.
- Wei, Q. and Song, W., 2020, Mineralogical and chemical characteristics of coal ashes from two high-sulfur coal-fired power plants in Wuhai, Inner Mongolia, China. *Minerals*, 10(4), p.323.
- Ya'la, Z.R., Dewi, T., Husni, A., Santoso, T.J., Ndobe, S., Rosyida, E., Maemunah, M., Mappatoba, M. and Nurdin, M.S., 2025, Assessment of Heavy Metal Contaminations in Coastal Sediments due to Nickel Mining Activities in Morowali Regency, Central Sulawesi, Indonesia. *Journal of Mining and Environment*, 16(4), 1359-1373.
- Zeb, M., Khan, K., Younas, M., Farooqi, A., Cao, X., Kavil, Y. N., ... & Al-Sehemi, A. G., 2024, A review of heavy metals pollution in riverine sediment from various Asian and European countries: Distribution, sources, and environmental risk. *Marine Pollution Bulletin*, 206, 116775.
- Zhang, S., Fu, K., Gao, S., Liang, B., Lu, J., & Fu, G., 2023, Bioaccumulation of heavy metals in the water, sediment, and organisms from the sea ranching areas of Haizhou Bay in China. *Water*, 15(12), 2218.
- Zhong, L., Li, J., Yan, W., Tu, X., Huang, W. and Zhang, X., 2012, Platinum-group and other traffic-related heavy metal contamination in road sediment, Guangzhou, China. *Journal of Soils and Sediments*, 12, pp.942-951.